OWENS-BROCKWAY GLASS CONTAINER INC.

JOHNSON LAKE FISH TISSUE MONITORING STUDY MONITORING REPORT

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1 INTRODUCTION

Grette Associates, a division of Farallon Consulting, L.L.C., is subcontracted to Dalton, Olmsted & Fuglevand, Inc. (DOF) to conduct the Johnson Lake Fish Tissue Monitoring Study to satisfy the requirements set forth in the *Remediation Operations & Maintenance Plan, Sediment Remedial Action* (DOF 2012), hereafter "O&M Plan". The O&M Plan, along with the Record of Decision (ROD) Amendment (DEQ 2009), hereafter "ROD", describe the requirements for post-remediation monitoring of the Owens-Brockway Glass Container Inc. site, including Johnson Lake. The site is located at 5850 NE 92nd Drive in Portland, Oregon. Johnson Lake is located immediately north of the Owens-Brockway facility (Figure 1).

Figure 1. Site Location of the Johnson Lake Fish Tissue Monitoring Study.



Grette Associates conducted fish sample collection over four days (July 5-8, 2022) at Johnson Lake in accordance with the approved Sampling and Analysis Plan (SAP) (Grette Associates 2022). The objective of this study is to evaluate the concentration of polychlorinated biphenyls (PCBs), specifically PCB congener 126, in fish tissues sampled from Johnson Lake. General site photographs taken during the field effort may be found in Appendix A.

Grette Associates performed similar sample collection and reporting five years ago in 2017 (Grette Associates 2018).

The draft SAP was submitted to Oregon Department of Environmental Quality (ODEQ) on April 28, 2022, and was approved by ODEQ on May 25, 2022. An Oregon Department of Fish and Wildlife (ODFW) Scientific Taking Permit (#26458) was issued for the project on March 31, 2022.

1.1 BACKGROUND

Owens-Brockway Glass Container Inc. (Owens) owns and operates a glass manufacturing plant located at 5850 NE 92nd Drive, Portland, Oregon (the "Property"). Owens' Property is approximately 43 acres in size and located on the south shore of Johnson Lake. The Owens Property and Johnson Lake are collectively referred to as the "Site".

Sediments in Johnson Lake were previously found to contain PCBs, as described in the *Johnson Lake Investigation Work Plan* (ARCADIS 2004a) and the *Site Investigation Report* (ARCADIS 2004b). Based on the previous investigations and a Feasibility Study prepared in 2006, ODEQ selected a final remedy for the Site in the Record of Decision (October 2007) and ROD Amendment (July 2009). The final remedy for cleanup of the PCBs and other contaminants at the Site consisted of excavating surface soils from low-lying areas, constructing a stormwater bioswale, revegetating and adding clean soil to the excavated areas, and placing a thin layered cap over the sediments within a majority of Johnson Lake (Grette Associates 2022).

The Johnson Lake Fish Tissue Monitoring Study is a required component of the post-remediation monitoring described in the ROD Amendment and the O&M Plan. The study is required to evaluate the level of PCBs present in fish tissue collected in Johnson Lake to determine if levels are low enough for human consumption. In 2004, the ARCADIS mean total PCB was 200 µg/kg in the fillet and 260 µg/kg in the whole body (ARCADIS 2004b). By 2017, the mean total PCB had only dropped to 199 µg/kg in fillet samples but had dropped more significantly in whole body samples, to 106 µg/kg (Grette Associates 2018). Despite this drop, the PCB levels remained over the ROD standard. More specifically, in 2017 the PCB congener 126 levels ranged from 0.009 µg/kg in composite PF2-ES-12 to 0.135 µg/kg in composite RF1, while the ROD standard is 0.003 µg/kg.

1.2 JOHNSON LAKE

Johnson Lake extends over 18 acres and is directly connected to Whitaker Slough, which in turn is connected to the Columbia Slough and eventually connects to the Willamette River. Johnson Lake is bounded to the south by the Owens-Brockway facility and to the west and east, by other industrial facilities. Several stormwater outfalls enter the lake, draining the surrounding areas and facilities.

Johnson Lake is a relatively shallow, flat lake with a maximum depth of approximately 6 feet. The lake experiences significant algal blooms during the summer months likely due to high nutrient levels, warm water temperatures and the lengthening photoperiod (ARCADIS 2004). During the fish tissue study, brown algae was observed on and below the water surface. In addition, *Elodea* sp. (waterweed) and *Callitriche* sp. (water star-wort) were observed in many areas of the lake.

The edge of the lake is surrounded by riparian vegetation including willows (*Salix* spp.), red alder (*Alnus rubra*), black cottonwood (*Populus trichocarpa*), cattail (*Typha* spp.), yellow-flag iris (*Iris pseudacorus*) and various shrubs. Invasive vegetation was also present in the riparian zone and included Himalayan blackberry (*Rubus armeniacus*) and reed canarygrass (*Phalaris arundinacea*).

During recent years a number of homeless camps, including semi-industrial activities such as auto salvage, have occupied the shorelines of Johnson Lake and have discharged unknown substances directly into the lake and surrounding waterways, including Columbia Slough.

1.2.1 Inspection of Outfall Swales and Warning Signs

As required by the SAP, inspections of the outfall swales that empty into Johnson Lake as well as the fish consumption warning signs were to be conducted during the course of the fish sampling study. No observations of turbid or discolored water our scouring were observed near the outfall swale locations, and the swales appeared to be in good condition. An attempt was made to inspect the warning signs installed along the north side of the lake. However, due to homeless activity, it was unsafe for project biologists to access this area to inspect the signs.

DOF, the Owner's site engineer, conducts twice-yearly inspections of the outfall swales and the warning signs, as required by the O&M Plan. The results of the 2022 inspections show the swales and signs to be in good condition. The inspection reports and photographs from the recent DOF inspections are included in Appendix M.

2 METHODS

2.1 FISH SAMPLE COLLECTION

As described in the SAP, Grette Associates utilized a variety of fish sampling equipment and methods in an effort to collect as many fish as practicable from Johnson Lake for analysis. The fish sampling methods used included:

- modified Fyke net
- gill net
- beach seine
- Smith Root LR-24 backpack waveform electro-shocker
- fishing tackle.

Fish collection utilizing the electro-shocker was conducted on foot and from a small boat using a Smith Root LR-24 waveform electro-shocker and the guidelines outlined by the National Marine Fisheries Service (NMFS 2000; attached in Appendix B). This method was most successful from the boat, with which most areas of the lake were accessible. Traditional hook and line methods were also employed throughout the four-day effort when not engaged in other types of fishing, but did not prove successful in sample collection. The gill net was deployed overnight on three days in various locations throughout the lake where the algae and aquatic vegetation did not prohibit its use. The beach seine was deployed at three locations on the west, south and north shores; however dense shoreline vegetation and debris limited its effectiveness. The Fyke net was deployed on three days.

Fish collection was attempted from a variety of locations within the lake, as practicable, in an effort to represent general fish tissue concentrations lake wide (Table 1). Grette Associates used

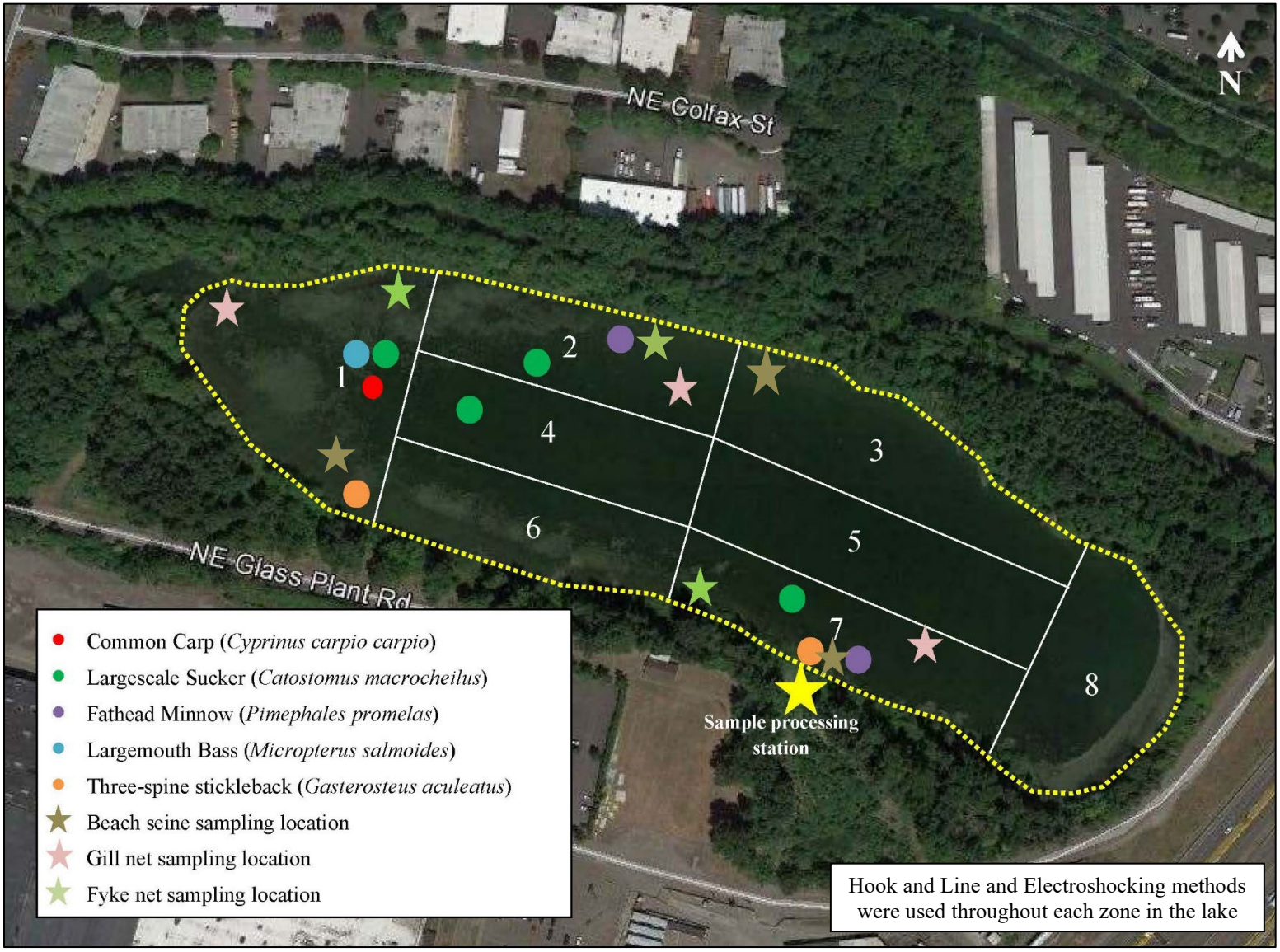
the sediment sampling zones described in the O&M Plan to identify where specimens were collected in the lake.

Table 1. Zones sampled by method and date within Johnson Lake, 2022.

Zone	Hook & Line	Electroshocking	Gill Net	Fyke Net	Beach Seine
1	7/5-7/7	7/5, 7/8	7/8	7/5	7/6
2	7/5-7/7	7/5	7/7	7/6	NA
3	7/5-7/7	7/5, 7/6	NA	N/A	7/7
4	7/5-7/7	7/8	NA	NA	NA
5	7/5-7/7	7/6, 7/8	NA	NA	NA
6	7/5-7/7	7/7	NA	NA	NA
7	7/5-7/7	7/5, 7/7	7/6	7/7	7/6
8	7/5-7/7	7/6, 7/7	NA	NA	NA

Figure 2 identifies the sections/sampling zones of Johnson Lake where sampling occurred. The locations of hook and line and electroshocking sampling are not shown on Figure 2, as those activities occurred throughout Johnson Lake.

Figure 2. Locations of Fish Captured and/or Observed during Fish Tissue Study.



Fish collection targeted the following categories of fish per the O&M Plan: game fish, pan fish, rough fish, large whole-fish and small whole-fish (DOF 2012)[1]. In order to satisfy the composite sample categories, fish of all species and sizes (age classes) were targeted for collection. The goal for each category was to collect enough fish for the lab to composite 5 samples of the same fish type and size range into a single composite sample for each category. In circumstances where there were not enough fish collected to complete two composites (5 fillets and 5 whole-body samples) for each species, the whole-body composite was prioritized. Due to the number and species of fish collected in 2022 efforts, deviations from the SAP were required when creating composites. DEQ reviewed all fish caught during 2022, and created a compositing plan which accounted for these changes[2]. The total number of non-game fish within each composite ranged from 3 to 10 (instead of the originally proposed 5 samples per composite). An additional deviation was only 1 game fish (Largemouth bass) was collected during surveying efforts – two composites (fillet and carcass) were created from this single fish. This was done so that both fillet and whole-body estimations could be made from this one fish, as it was the only largemouth bass collected (see Section 4.2.3).

Fish collected in Johnson Lake were temporarily held in a decontaminated cooler filled with site water. Once sampling activities for each location and method were completed, the cooler was brought to the processing station set up south of Johnson Lake on Owens' Property (Figure 2).

2.1.1 Sample Preparation

Fish collected at each sampling site were identified to species, categorized (pan fish, rough fish, etc.), measured, and photographed. Fish targeted for tissue analysis were euthanized via CO_2 immersion (small fish) or blunt force and pithing (large fish). Any fish not required for tissue analysis was returned to the location in the lake from which they were collected without being euthanized.

Each fish collected was assigned an alpha numeric sample ID. This ID provides information such as the composite category, the location in the lake the fish was collected, and the chronological order in which the fish was collected. For example, the first specimen collected had an ID number of SF-7-01 indicating it was a small fish (SF), collected in zone 7 (-7), and was the first fish collected during the study (01). The ID nomenclature used does not indicate what mode was used to capture each fish, but this information is included on the field datasheets in Appendix C.

Individual weights (in grams) and fork lengths (mm) of each specimen were recorded. When euthanized fish were prepared for transport to the lab, care was taken to avoid cross-contamination. Work surfaces were covered with aluminum foil, and between each sample nitrile gloves were changed and measuring boards were decontaminated. All fish retained for tissue analysis were rinsed with analyte free-ionized water, wrapped in aluminum foil, bagged, labeled, and placed in an on-site chest freezer for the duration of the field effort prior to delivery to the analytical

[1] The O&M Plan defined the Large Fish category as those fish from 125 mm to 300 mm. DEQ, in their comments on the SAP, specified that the Large Fish category be defined as all fish greater than 350 mm in length.
[2] The compositing plan created by DEQ was based on the data provided to DEQ, which included the misidentification of several fish within the samples. The misidentification was not discovered until after DEQ's approval of the compositing plan and subsequent implementation of the plan by the laboratory.

laboratory. Field datasheets and photographs of all fish sampled are in Appendices C and F respectively.

2.1.2 Chain of Custody Procedures

The field representative logged each sample sent for analysis on a chain of custody (COC) form, noting sample identification, date and time of collection, requested analysis, and comments as appropriate (Appendix E).

After concluding the four-day field effort, Grette Associates delivered the fish specimens to the ALS Environmental Laboratory in Kelso, WA. Upon delivery, the chain-of-custody forms were signed by the persons transferring custody of the samples.

2.2 LABORATORY ANALYSIS

The collected fish were delivered to ALS Environmental Laboratory in Kelso, WA on July 8, 2022. Once delivered to the lab, the fish were held in secure storage pending an approved compositing plan from DEQ. Grette Associates submitted the fish sample data to DEQ, and DEQ prepared a compositing plan that addressed the categories and species/lengths collected (Appendix G). All tissue samples were processed in accordance with the approved compositing plan, the approved SAP, and the Laboratory Standard Operating Procedures ("SOP"; Appendix F). Following DEQ's compositing plan, ALS Laboratories created composite samples for each category of fish collected (i.e., game fish, rough fish, large whole-fish, and small whole-fish). Fish tissue composites were created using roughly equal mass from each individually homogenized sample. Composite sample sizes used for laboratory analyses differed between samples (Appendices I-K).

Fish filleting, descaling, and tissue sampling occurred within in the laboratory, not in the field. All skin and belly flaps were left remaining on the fish for tissue sampling. Each composite sample was homogenized, and frozen at 4°C for future analyses. Based on discussions with the Laboratory Project Manager, deviations from the SOP did not occur during tissue sample preparation. All composites were analyzed for lipid content by the ALS Laboratory in Kelso, and then sent to the ALS Burlington, Ontario Laboratory to analyze for PCB congeners within the composite samples.

2.2.1 Testing Methods

The composited samples were analyzed for PCB congeners using EPA method 1668C, and for lipid content using NOAA Lipid. Tissue samples were stored at 4°C with a holding time of no longer than 14 days (Table 2).

Table 2. Fish sample holding time and storage criteria.

Sample Type	EPA Method	Holding Time	Temperature	Sample condition
Fish tissue	1668C	14 days until extraction	4° C	fillets (with belly flap attached); whole fish
Fish tissue (lipids)	NOAA Lipid	14 days until extraction	4° C	fillets (with belly flap attached); whole fish

2.2.2 Analytical Calculations

Total PCB

Total PCB results are calculated by summing the PCB homologue group total concentrations for each sample. Total PCB provides a measure of all PCB congeners detected in a sample.

Whole-Body PCB Concentration Estimate

To evaluate the risk to wildlife or humans consuming the whole fish or parts of the fish carcass in addition to the fillet, whole-body PCB concentration can be estimated from the fillet and carcass samples as follows (Bevelhimer et al. 1997):

$$C_{wb} = \frac{(C_f \times W_f + C_c \times W_c)}{(W_f + W_c)}$$

where: C_{wb} = whole-body concentration (µg/kg)
C_f = fillet concentration (µg/kg)
C_c = carcass concentration (µg/kg)
W_f = mass of the fillet (kg)
W_c = mass of the carcass (kg)

Lipid-Normal Total PCB

Lipid-normal total PCB is calculated using the lipid fraction from the percent lipid laboratory results, as follows:

$$C = C_t / f$$

where: C = lipid-normal total PCB concentration
C_t = total PCB concentration in fish tissue (µg/kg
f = fraction of lipid content

PCBs are hydrophobic and accumulate in the fatty tissues of fish and other organisms. Therefore, normalizing the PCB results from the fish tissue samples with the lipid content of those samples provides a means to evaluate contamination levels between species. Fish with higher lipid content are more likely to bioaccumulate higher concentrations of PCBs.

Midpoint PCB TEQ

Midpoint PCB Toxic Equivalency Quotient (TEQ) results reported by the laboratory are calculated from WHO 2005 toxic equivalency factors (TEF) for dioxin-like compounds (van den Berg, et al. 2006). TEQ is calculated by multiplying the actual grams weight of each PCB congener by its

corresponding TEF and then summing the results. This calculation can be used to compare the toxicity of the different combinations of PCB congeners within a sample to a screening level TEQ to evaluate ecological risk of the combined contaminant concentrations.

3 RESULTS

3.1 FIELD SAMPLING ACTIVITIES

3.1.1 Fish Collection

Fish Collection Effort

As described above, five different fish sampling strategies were used for this project: backpack electroshocker, modified Fyke net, gill net, beach seine, and rod and reel angling. These methods were used with varying success within Johnson Lake (Table 3).

Use of the backpack electroshocker was initially conducted on foot along the southern shoreline of the lake where water depth allowed. This sampling method was quite successful for the capture of three-spine stickleback (*Gasterosteus aculeatus*) near the shoreline. However, the water level was too high to get beyond the vegetation to shock along the entirety of the shoreline. As a result, most of the shoreline areas were accessed via a small, rowed boat with a 3-person crew.

Hook and line was primarily conducted from the skiff, but also occurred along portions of the southern shoreline of the lake where access was possible. Dense brush, wood debris and depth prevented shore angling in most locations. All portions of the lake were fished with tackle. There was less algal surface mat during 2022 sampling as compared with the previous 2017 effort. A variety of tackle was used including spinners, spoons, Powerbait, jigs, worms, and bait/bobber. However, no fish were collected using this method.

Utilizing sampling nets proved difficult due to the presence of thick shoreline vegetation. Only three beach seine sampling efforts were attempted due to the presence of submerged vegetative debris near the shoreline and unconsolidated/mucky sediment fouling the net. These sets were located in zones 1, 3 and 7, and did result in the collection of fish. Similarly, deploying and retrieving the gill net proved difficult with the submerged vegetation and debris present. However, once set the gill net was left in place either overnight or throughout the day and proved to be quite successful.

While the fyke net was deployed in four locations around the lake (zones 1, 2, 3, and 7), all locations were compromised by large woody debris and shoreline vegetation. Due to the vegetation and debris, the wings of the net were difficult to place such that fish would not be able to swim beneath them and around the net. Only one fish was captured using the fyke net (Table 3).

Sampling of all zones was attempted, and with similar levels of effort. However, as shoreline vegetation was dense and the presence of downed trees and woody material made accessing the shoreline unsafe, some areas around the perimeter of the lake were not able to be sampled as thoroughly as others. Zones 1, 2, 3, and 7 were able to be sampled with nets, while zones 4, 5, 6, and 8 were not due to obstructions.

Table 3. Fish collection effort by zone and method

Zone	Method	Effort (sets or time)[1]	# and species of fish caught
1	Electroshocking	2 hrs	4 common carp
			1 fathead minnow
			1 largescale sucker
	Hook & Line	1 hr	none
	Fyke Net	6 hrs	none
	Gill Net	11.5 hrs	3 common carp
			1 largemouth bass
	Beach Seine	1 set	2 stickleback
2	Electroshocking	1 hr	none
	Hook & Line	1.5 hrs	none
	Fyke Net	6 hrs	1 fathead minnow
	Gill Net	15 hrs	1 largescale sucker
3	Electroshocking	0.5 hr	none
	Hook & Line	1 hr	none
	Beach Seine	1 set	none
4	Electroshocking	1 hr	1 largescale sucker
	Hook & Line	2.5 hrs	none
5	Electroshocking	0.5 hr	none
	Hook & Line	1 hr	none
6	Electroshocking	1.5 hrs	none
	Hook & Line	2 hrs	none
7	Electroshocking	1.5 hrs	3 stickleback
			1 largescale sucker
	Fyke Net	10 hrs	none
	Hook & Line	1 hr	none
	Gill Net	14 hrs	7 largescale sucker
	Beach Seine	1 set	20 stickleback
8	Electroshocking	2 hrs	none
	Hook & Line	2 hrs	none

[1] All times are approximate, and may be spread over multiple days of sampling

Fish Collection Results

With the exception of pan fish, fish were collected from all of the categories described in Section 2.1. A total of 46 fish were collected for laboratory analysis. The desired number of fish representing each category could not be collected during the four-day effort. The specimens collected by category are presented in Table 4 and photographs of each specimen are presented in Appendix F.

Table 4. Number of fish collected by species and category.

Species Name	Game Fish	Rough Fish	Pan Fish	Small Whole-Fish	Large Whole-Fish	Total
Common carp (*Cyprinus carpio*)		7			1	8
Largescale Sucker (*Catostomus macrocheilus*)		2			8	10
Fathead minnow (*Pimephales promelas*)				2		2
Three-spine stickleback (*Gasterosteus aculeatus*)				25		25
Largemouth bass (*Micropterus salmoides*)	1					1
Total	**1**	**9**	**0**	**27**	**9**	**46**

The rough fish collected were common carp (*Cyprinus carpio*) and largescale sucker (*Catostomus macrocheilus*); all large whole fish collected were also common carp and largescale sucker; one game fish was collected which was a largemouth bass (*Micropterus salmoides*); and the small whole fish category consisted of 25 three-spine stickleback (*Gasterosteus aculeatus*) and two fathead minnows (*Pimephales promelas*). No pan fish were collected.

The fish were captured using a combination of electroshocking, gill netting, beach seining, and Fyke netting. The size of fish collected ranged from approximately 22mm to 618mm in length. While hook and line sampling was attempted throughout the lake, no fish were captured using this method.

All fish were collected from zones 1, 2, 4, and 7, with zones 1 and 7 containing the bulk of the sampled fish (Table 5; see Figure 2 for zone locations). Largescale sucker were sampled in zones 1, 2, 4 & 7, and three-spine stickleback were found in zones 1 and 7. All remaining species – the two fathead minnow (zones 1 and 2) and one largemouth bass (zone 1) – were found within the western portion of the lake. Although attempted, no fish were collected from zones 3, 5, 6, or 8.

During beach seining, large amounts of aquatic algae, vegetation, and mud were hauled in with the net. Large numbers of three-spine stickleback were intermixed within this debris, making it impossible to accurately count the number of fish retrieved in the seine hauls. All fish captured were kept for processing and analysis during the field collection.

Table 5. Summary of all fish collected for laboratory analysis.

Date Collected	Sample ID[1]	Species	Zone Collected[2]	Fork Length (mm)	Mass (g)	Age Class	Native (Y/N)
7/5/2022	SF-7-01	Three-spine Stickleback	7	53	3	Adult	Y
7/5/2022	SF-7-02[3]	Three-spine Stickleback	7	20	<1	Juvenile	Y
7/5/2022	SF-7-03	Three-spine Stickleback	7	50	3	Adult	Y
7/5/2022	SF-7-04[3]	Fathead Minnow	1	60	4	Adult	N
7/5/2022	RF-1-05	Common Carp	1	155	86	Juvenile	N
7/5/2022	RF-1-06[4]	Largescale Sucker	1	231	161	Juvenile	N
7/5/2022	RF-1-07	Common Carp	1	117	35	Juvenile	N
7/5/2022	RF-1-08	Common Carp	1	135	57	Juvenile	N
7/5/2022	RF-1-09	Common Carp	1	112	34	Juvenile	N
7/6/2022	LF-07-10[4]	Largescale Sucker	7	578	2490	Adult	N
7/6/2022	LF-07-11[4]	Largescale Sucker	7	420	960	Adult	N
7/6/2022	LF-07-12[4]	Largescale Sucker	7	550	2080	Adult	N
7/6/2022	LF-07-13[4]	Largescale Sucker	7	595	2680	Adult	N
7/6/2022	LF-07-14[4]	Largescale Sucker	7	520	1940	Adult	N
7/6/2022	LF-07-15[4]	Largescale Sucker	7	549	2070	Adult	N
7/6/2022	LF-07-16[4]	Largescale Sucker	7	550	2040	Adult	N
7/6/2022	SF-01-17[3]	Three-spine Stickleback	1	61	5	Adult	Y
7/6/2022	SF-01-18[3]	Three-spine Stickleback	1	50	3	Adult	Y
7/6/2022	SF-01-19	Three-spine Stickleback	7	53	3	Adult	Y
7/6/2022	SF-01-20[3]	Three-spine Stickleback	7	47	2	Adult	Y
7/6/2022	SF-01-21	Three-spine Stickleback	7	62	4	Adult	Y
7/6/2022	SF-01-22	Three-spine Stickleback	7	55	2	Adult	Y
7/6/2022	SF-01-23	Three-spine Stickleback	7	54	4	Adult	Y
7/6/2022	SF-01-24	Three-spine Stickleback	7	55	4	Adult	Y
7/6/2022	SF-01-25	Three-spine Stickleback	7	61	4	Adult	Y
7/6/2022	SF-01-26	Three-spine Stickleback	7	61	4	Adult	Y

7/6/2022	SF-01-27	Three-spine Stickleback	7	49	3	Adult	Y
7/6/2022	SF-01-28	Three-spine Stickleback	7	51	3	Adult	Y
7/6/2022	SF-01-29	Three-spine Stickleback	7	55	4	Adult	Y
7/6/2022	SF-01-30	Three-spine Stickleback	7	49	2	Adult	Y
7/6/2022	SF-01-31	Three-spine Stickleback	7	55	4	Adult	Y
7/6/2022	SF-01-32	Three-spine Stickleback	7	56	3	Adult	Y
7/6/2022	SF-01-33	Three-spine Stickleback	7	54	3	Adult	Y
7/6/2022	SF-01-34[3]	Three-spine Stickleback	7	40	1	Juvenile	Y
7/6/2022	SF-01-35	Three-spine Stickleback	7	49	2	Adult	Y
7/6/2022	SF-01-36	Three-spine Stickleback	7	48	3	Adult	Y
7/6/2022	SF-01-37	Three-spine Stickleback	7	50	3	Adult	Y
7/6/2022	SF-01-38	Three-spine Stickleback	7	49	3	Adult	Y
7/7/2022	LF-02-39[4]	Largescale Sucker	2	585	2220	Adult	N
7/7/2022	SF-02-40[3]	Fathead Minnow	2	64	4	Adult	N
7/8/2022	GF-1-41	Largemouth Bass	1	316	620	Adult	N
7/8/2022	RF-1-42	Common Carp	1	257	366	Adult	N
7/8/2022	LF-1-43	Common Carp	1	342	750	Adult	N
7/8/2022	LF-1-44	Common Carp	1	473	2030	Adult	N
7/8/2022	LF-4-45[4]	Largescale Sucker	4	580	2320	Adult	N
7/8/2022	RF-1-46	Common Carp	1	144	72	Juvenile	N

[1] Sample IDs have been corrected, per Section 4.2.1
[2] Zones are depicted on Figure 2.
[3] Specimens not included in composite analyses since they did not meet compositing requirements.
[4] Specimen originally misidentified as common carp.

3.1.2 Weather Observations

During the four-day sampling effort, Grette Associates biologists noted that the lake water level appeared to be significantly higher than during the sampling effort in 2017. Water temperature ranged from the upper-50's to low-70's during the course of field activities. The air temperature highs during the course of field monitoring ranged from the mid-70's to low-80's. A light rain fell the first day of sampling (July 5), while overcast and partly sunny conditions predominated the rest of the study. While the lower-than-normal air temperatures and mild spring likely contributed to less surface algae on the lake than during the 2017 field effort, the lake still contained a significant amount of aquatic bed vegetation, making angling, seining and gill netting impracticable throughout most areas of the lake.

3.1.3 Dissolved Oxygen, Temperature, Turbidity Readings

As per the SAP, dissolved oxygen, temperature, and turbidity readings were to be collected at sample locations. Due to the transient nature of the sampling, particularly the electroshocking and angling, samples were taken within each zone.

Due to an equipment malfunction, dissolved oxygen readings were not able to be collected at the time of sampling. Dissolved oxygen readings were collected at Johnson Lake on July 28, 2022, within all zones (Table 6). Temperature and turbidity readings did not appear to be affected, as those readings were collected from different sondes than the dissolved oxygen sonde.

Table 6. Environmental readings from Johnson Lake during sampling.

Zone Sampled	Water Depth (ft)	Sample Depth (ft)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	Temperature (C)
1	3.1	1.5	8.96	1.4	16.9
2	2.1	1.0	9.09	13.6	13.9
3	2.4	1.2	9.10	0	19.1
4	6.4	3.2	8.68	0	21.4
5	5.2	2.6	8.83	2.3	21.4
6	2.6	1.3	8.32	10.1	21.3
7	2.0	1.0	9.40	2.9	21.6
8	3.3	1.6	9.36	0	22.0

3.2 COMPOSITING SCHEME

Grette Associates collected a total of 46 fish, the majority of which were three-spine stickleback, largescale sucker, and common carp (Table 5). Only one game fish was collected (largemouth bass) and no pan fish were collected. Additionally, two fathead minnows were collected. Table 5 summarizes the fish captured for the survey, with photographs of each individual fish presented in Appendix F. Seven fish were not included within the compositing scheme due to limited mass, which were all three-spine stickleback captured in Zone 1, and the fathead minnows. The DEQ-approved compositing plan is presented in Appendix G. The compositing plan created by DEQ was predicated on fish information provided to DEQ, including species that had been misidentified, and that this misidentification was not discovered until later.

Fish were prepared and composited by ALS Environmental laboratory in Kelso, WA, according to their SOP (Appendix F) and Section 3 of the SAP (Grette 2022). The composite samples were then analyzed for percent lipid at the Kelso laboratory and for PCB congeners at ALS Environmental in Burlington, Ontario, Canada.

3.3 LABORATORY RESULTS

The results of this study are discussed relative to the categories of fish that were collected, as described in the O&M Plan (DOF 2012). The O&M Plan specified one category as "Game Fish". Since only one fish from that category was captured (the largemouth bass), it is described separately from the other fish, that represent non-game species (e.g., largescale sucker, common carp). Were a pan fish to have been captured, it would have been discussed along with the game fish. To remain consistent with the O&M Plan and previous reports, this report maintains that convention.

3.3.1 PCB Congener 126

The chemical of concern for this fish tissue study is PCB congener 126, as discussed in the 2009 ROD amendment. A primary goal of the remedial action is to prevent human consumption of fish with tissue concentrations greater than 0.003 µg/kg PCB congener 126. The laboratory results for PCB 126, presented in Table 5, were compared to this standard.

Results of the analyses for PCB congeners were received from ALS Laboratories on November 29, 2022, in addition to the lipid content (received September 30, 2022) in each sample. Table 7 presents the concentrations of PCB congener 126 in each non-game fish sample compared to the established standard, and Table 8 presents the non-game fish lipid analysis results. The largemouth bass ("Game Bass") results were received September 14, 2022, are presented in Tables 9 and 10.

Table 7. PCB 126 analysis results for non-game fish tissue samples collected at Johnson Lake in 2022. All composite samples were analyzed by ALS Laboratories.

Composite Name	Species	Analysis Method	PCB 126[1] (µg/kg)	EDL[2] (µg/kg)	ROD Standard (µg/kg)	Standard Met (Y/N)
LargeRough-WB-1	Largescale sucker	1668C	0.102	0.0099	0.003	N
LargeRough-Fillet-1	Largescale sucker	1668C	0.0264	0.0043	0.003	N
LargeRough-WB-1-DUP[3]	Largescale sucker/Common carp	1668C	0.0771	0.0057	0.003	N
MediumRough-WB-1[3]	Largescale sucker/Common carp	1668C	0.0178	0.0041	0.003	N
MediumRough-WB-J1[3]	Largescale sucker/Common carp	1668C	<0.0082	0.0040	0.003	N
MediumRough-WB-J2	Common carp	1668C	0.0103	0.0032	0.003	N
Small-WB-Stick1	Three-spine stickleback	1668C	0.014	0.0041	0.003	N
Small-WB-Stick2	Three-spine stickleback	1668C	0.0135	0.0052	0.003	N

[1] PCB 126 results from ALS Laboratories were received in pg/g (wet weight), and were converted to µg/kg (wet weight).

[2] EDL = Estimated Detection Limit. The Method Detection Limit for this analytical method is 0.00006 µg/kg. However, the EDL is calculated based on the sample mass extracted, and is specific to each sample.
[3] Due to a species identification error, largescale sucker were labeled as common carp at the time of collection and laboratory analysis. The error was rectified after the laboratory analyses were completed, and as such three of the resulting composite samples contain two different species of fish (largescale sucker and carp).

Nine of the ten composite samples had a PCB 126 concentration greater than the ROD standard of 0.003 µg/kg. Sample MediumRough-WB-J1 is listed as "<8.2 pg/g". This designation by the laboratory is indicative of a non-detect. However, as the detection limit for this sample (0.0040 µg/kg) is above the ROD standard of 0.003 µg/kg, it is unknown if this sample contains congener PCB 126 at a concentration below 0.0040 µg/kg but above the ROD standard.

All PCB results from ALS Laboratories are presented in Appendix I.

3.3.2 Lipids

Lipids were analyzed to normalize the total PCB results. Studies suggest there is a positive correlation between lipid content and the bioaccumulation of chemicals in many fish species. The higher the lipid content of an organism, the greater the bioaccumulation factor for many chemicals of concern (Schlechtriem et al. 2012). A comparison of the lipid content and total PCB concentrations for non-game fish are presented in Table 8. Lipid results from ALS Laboratories are in Appendix J.

Table 8. Lipid analysis results for non-game fish tissue samples

Composite Name	Species	Analysis Method	Percent Lipid	Detection Limit (Percent Lipid)	Total PCB (µg/kg)	Lipid-Normal Total PCB (µg/kg)
LargeRough-WB-1	Largescale sucker	NOAA Lipid	9.5	0.22	487	5126
LargeRough-Fillet-1	Largescale sucker	NOAA Lipid	3.5	0.23	109	3114
LargeRough-WB-1-DUP[1]	Largescale sucker/Common carp	NOAA Lipid	7.3	0.22	378	5178
MediumRough-WB-1[1]	Largescale sucker/Common carp	NOAA Lipid	3.8	0.24	70.4	1853
MediumRough-WB-J1[1]	Largescale sucker/Common carp	NOAA Lipid	3.2	0.23	33.6	1050
MediumRough-WB-J2	Common carp	NOAA Lipid	2.4	0.23	46.6	1942
Small-WB-Stick1	Three-spine stickleback	NOAA Lipid	4.1	0.24	48.9	1193
Small-WB-Stick2	Three-spine stickleback	NOAA Lipid	2.4	0.24	66.2	2758

[1] Due to a species identification error, several largescale sucker were labeled as common carp at the time of collection and laboratory analysis. The error was rectified after the laboratory analyses were completed, and as such three of the resulting composite samples contain two different species of fish (largescale sucker and carp).

When analyzing non-game fish, the LargeRough-WB-1 composite containing largescale sucker had the highest lipid content at 9.5 percent, and the second highest concentration of lipid-normal total PCB at 5,126 µg/kg (Table 8). The non-game fish composites with the lowest lipid content were the three-spine stickleback in Small-WB-Stick 2, and the common carp juveniles in Medium Rough-WB-J2, each at 2.4 percent (Table 7). The composite with the lowest concentration of lipid-normal total PCB was MediumRough-WB-J1 consisting of juvenile fish, at 1,050 µg/kg (Table 7). However, this composite sample contained homogenate from two different species of fish (largescale sucker and common carp).

3.3.3 Game Bass Results

Each composite for the largemouth bass exceeded the PCB congener 126 ROD standard of 0.003 µg/kg (Tables 9 and 10). Though the PCB standard was exceeded, when compared to all non-game composite samples, the game-bass fillet contained the lowest percentage of PCB congener 126 (Table 7, Table 9), and both game-bass composites contained less lipids in tissue samples (Table 8, Table 10).

While the percent lipid values for the game-bass samples are lower than the non-game species collected for this study, they are consistent with other local studies where largemouth bass percent lipid content were reported. In one study from Long Lake near Spokane, WA, percent lipid values for similarly-sized largemouth bass ranged from 0.32-0.76 percent (Ecology 2002). In another study of smallmouth bass from Osoyoos Lake, the WA State Department of Ecology reported percent lipid values ranging from 0.97-1.11 percent (Ecology 1998). These values are consistent with the percent lipid values from the largemouth bass at Johnson Lake (Table 10).

All ALS laboratories results (PCB concentrations and lipid content) for the largemouth bass are presented in Appendix K.

Table 9. PCB 126 results for the adult largemouth bass

Composite Name[1]	Species	Analysis Method[2]	PCB 126[3] (µg/kg)	EDL[4] (µg/kg)	ROD Standard (µg/kg)	Standard Met (Y/N)
Game-Bass Fillet	Largemouth bass	1668C	0.0036	0.0010	0.003	N
Game-Bass Carcass	Largemouth bass	1668C	0.038	0.0017	0.003	N
Game-Bass Whole-Body	Largemouth bass	--	0.021	--	0.003	N

[1] Only 1 Largemouth bass was collected during surveying efforts, but two composites (Game-Bass Fillet and Game-Bass Carcass) were created from the single fish.
[2] Game-Bass Whole-Body PCB 126 concentration is a calculated estimate from fillet and carcass measured concentrations (see Section 2.2.2).
[2] PCB results from ALS Environmental were received in pg/g (wet weight) and were converted to µg/kg (wet weight).
[3] EDL = Estimated Detection Limit.

Table 10. Lipid results for adult largemouth bass

Composite Name	Species	Analysis Method	Percent Lipid	Detection Limit (Percent Lipid)	Total PCB (µg/kg)	Lipid-Normal Total PCB (µg/kg)
Game-Bass Fillet	Largemouth bass	NOAA Lipid	0.29	0.24	0.0198	6.83
Game-Bass Carcass	Largemouth bass	NOAA Lipid	0.46	0.24	0.216	46.96

[1] PCB results from ALS Environmental were received in pg/g (wet weight) and were converted to µg/kg (wet weight).

Table 11 below summarizes the game fish whole-body PCB 126 and Total PCB concentration estimates.

Table 11. Whole-body PCB 126 and Total PCB concentration for largemouth bass

Composite Name	Sample Mass (kg)	PCB 126[2] (µg/kg)	Total PCB (µg/kg)	Estimated Whole-Body PCB 126 (µg/kg)	Estimated Whole-Body Total PCB (µg/kg)
Game-Bass Fillet	0.0053	0.0036	19.8	0.021	117
Game-Bass Carcass	0.0052	0.038	216		

3.3.4 Results Summary

Table 12 presents a summary of fish samples and associated results for the 2022 Johnson Lake Fish Monitoring Study.

Table 12. Summary of 2022 fish sample and composite results for game and non-game fish

Composite Name	Date Collected	Sample ID	Species	Fork Length (mm)	Mass (g)	Lipid (%)	Total PCB (µg/kg)	Midpoint PCB TEQ (µg/kg)	Lipid - Normal Total PCB (µg/kg)	PCB Congener 126 (µg/kg)
Game-Bass Fillet	7/8/2022	GF-1-41	Largemouth Bass	316	620	0.29	19.8	0.00059	6.83	0.0036
Game-Bass Carcass	7/8/2022					0.46	216	0.0066	46.96	0.038
LargeRough-WB-1 (whole-body)	7/6/2022	LF-07-13	Largescale Sucker	595	2680	9.5	487	0.0112	5126	0.102
	7/7/2022	LF-02-39	Largescale Sucker	585	2220					
	7/8/2022	LF-4-45	Largescale Sucker	580	2320					
LargeRough-Fillet-1	7/6/2022	LF-07-10	Largescale Sucker	578	2490	3.5	109	0.00287	3114	0.0264
	7/6/2022	LF-07-12	Largescale Sucker	550	2080					
	7/6/2022	LF-07-16	Largescale Sucker	550	2040					
LargeRough-WB-1-Dup[1] (whole-body)	7/6/2022	LF-07-15	Largescale Sucker	549	2070	7.3	378	0.00858	5178	0.0771
	7/6/2022	LF-07-14	Largescale Sucker	520	1940					
	7/8/2022	LF-1-44	Common Carp	473	2030					
MediumRough-WB-1[1] (whole-body)	7/6/2022	LF-07-11	Largescale Sucker	420	960	3.8	70.4	0.00188	1853	0.0178
	7/8/2022	LF-1-43	Common Carp	342	750					
	7/8/2022	RF-1-42	Common Carp	257	366					
MediumRough-WB-J1[1] (whole body)	7/5/2022	RF-1-06	Largescale Sucker	231	161	3.2	33.6	0.00088	1050	<0.0082
	7/5/2022	RF-1-05	Common Carp	155	86					
	7/8/2022	RF-1-46	Common Carp	144	72					
MediumRough-WB-J2 (whole-body)	7/5/2022	RF-1-08	Common Carp	135	57	2.4	46.6	0.00119	1942	0.0103
	7/5/2022	RF-1-07	Common Carp	117	35					
	7/5/2022	RF-1-09	Common Carp	112	34					

Small-WB-Stick1 (whole-body)	7/6/2022	SF-7-21	Three-spine Stickleback	62	4	4.1	48.9	0.00155	1193	0.014
	7/6/2022	SF-7-25	Three-spine Stickleback	61	4					
	7/6/2022	SF-7-26	Three-spine Stickleback	61	4					
	7/6/2022	SF-7-32	Three-spine Stickleback	56	3					
	7/6/2022	SF-7-22	Three-spine Stickleback	55	2					
	7/6/2022	SF-7-24	Three-spine Stickleback	55	4					
	7/6/2022	SF-7-29	Three-spine Stickleback	55	4					
	7/6/2022	SF-7-31	Three-spine Stickleback	55	4					
	7/6/2022	SF-7-23	Three-spine Stickleback	54	4					
	7/6/2022	SF-7-33	Three-spine Stickleback	54	3					
Small-WB-Stick2 (whole-body)	7/5/2022	SF-7-01	Three-spine Stickleback	53	3	2.4	66.2	0.00157	2758	0.0135
	7/6/2022	SF-7-19	Three-spine Stickleback	53	3					
	7/6/2022	SF-7-28	Three-spine Stickleback	51	3					
	7/5/2022	SF-7-03	Three-spine Stickleback	50	3					
	7/6/2022	SF-7-37	Three-spine Stickleback	50	3					
	7/6/2022	SF-7-27	Three-spine Stickleback	49	3					
	7/6/2022	SF-7-30	Three-spine Stickleback	49	2					
	7/6/2022	SF-7-35	Three-spine Stickleback	49	2					
	7/6/2022	SF-7-38	Three-spine Stickleback	49	3					
	7/6/2022	SF-01-36	Three-spine Stickleback	48	3					
Not Analyzed per DEQ	7/6/2022	SF-01-17	Three-spine Stickleback	61	5					
	7/6/2022	SF-01-18	Three-spine Stickleback	50	3					
	7/6/2022	SF-7-20	Three-spine Stickleback	47	2					
	7/6/2022	SF-7-34	Three-spine Stickleback	40	1					
	7/5/2022	SF-7-02	Three-spine Stickleback	20	<1					
Small-WB-Min1 ***(Not Analyzed per DEQ)***	7/7/2022	SF-02-40	Fathead Minnow	64	4					
	7/5/2022	SF-1-04	Fathead Minnow	60	4					

[1] Due to a species identification error, these composite samples contain homogenate from two different species.

4 DISCUSSION

4.1 2022 FISH MONITORING STUDY

Based on the results of the fish tissue analysis, all of the composited samples exceed the established PCB 126 standard of 0.003 µg/kg for human consumption in Johnson Lake (Tables 7 and 9). The LargeRough-WB-1 composite sample contained the highest concentration of PCB 126 (0.102 µg/kg) while the single largemouth bass fillet (Game-Bass Fillet) contained the lowest concentration (0.0036 µg/kg). Similarly, the highest Total PCB concentration was observed in the LargeRough-WB-1 sample (487 µg/kg), while the lowest Total PCB concentration was observed in the Game-Bass Fillet sample (19.8 µg/kg). However, when normalized against lipid content the highest lipid-normal Total PCB concentration was in the LargeRough-WB-1-Dup sample (5,178 µg/kg). The lowest lipid-normal Total PCB concentration was in the Game-Bass Fillet sample (6.83 µg/kg). The LargeRough-WB-1-Dup composite sample contained sample homogenate from both largescale sucker and common carp species.

As noted in 2017, the results presented above correlate somewhat with the life histories of the species representative of the sample categories and the age and size classes. Largescale suckers and common carp are bottom feeding species, which presents an increased risk of these fish accumulating contaminates present within the sediment. Largescale suckers (along with common carp) are also fairly long-lived, capable of living up to 15 years in the wild (Dauble 1986). Because these fish are long-lived, some of the larger largescale suckers and common carp (particularly the adults in the LargeRough composites) sampled within Johnson Lake may have been present prior to the remediation actions in 2012; therefore, potentially accumulating contaminants prior to the remediation. The lipid content within the largescale suckers was also the highest of any of the other samples (LargeRough-WB-1), which correlates with higher potential for bioaccumulation of contaminants within organisms. Conversely, the composite sample with the lowest concentration of PCB 126 (Game-Bass Fillet) also had the lowest lipid content of composites analyzed. While bass are also a long-lived species, their muscle tissue contains far less lipid, limiting the bioaccumulation potential for PCBs in bass.

Of the five categories of fish outlined in the ROD and O&M, four categories were represented in the fish captured at Johnson Lake. Over the course of the four-day sampling effort, extensive effort was made to capture Pan Fish at the site using all five methods. Over the four-day effort, the field crew were not able to capture a representative of the Pan Fish category.

4.2 DEVIATIONS FROM THE SAMPLING AND ANALYSIS PLAN

Through the course of the study and analysis, deviations from the approved SAP occurred. This section describes these deviations and why they occurred.

4.2.1 Fish Sample Names

During sample collection, several collected specimens were given sample IDs that contained an extra letter in the sample identification code. This letter was part of the identifier of the category of fish sampled. For example, fish "LF-4-45" was recorded on the datasheet as fish "LWF-4-45". This extra letter in the fish category was inadvertently inserted by the field crewmember to categorize the fish as "Large Whole Fish". While the category name was accurate, the ID code

should have been "LF" in accordance with the approved SAP. Instances of this nomenclature error have been corrected within this report, but remain in the copied of the datasheets in Appendix C.

4.2.2 Fish Species Misidentification

During the processing of the fish after collection, several specimens were misidentified as common carp when they were actually largescale sucker. This misidentification was not rectified in the field, and the misidentification was carried through to the compositing plan developed and approved by DEQ. As a result, fish of different species were processed together into single composite samples for analysis. The composite samples containing multiple species are noted in the results where applicable. the laboratory was contacted and requested to preserve the homogenate samples from each of the individual fish that were used in the multi-species composites. As such, future compositing and testing of single-species samples is possible if necessary.

4.2.3 Game Bass Sampling

As noted in Section 2.1, only one Game Fish was collected during the study. As such, DEQ requested that the largemouth bass that was collected be split into two separate composite samples by the laboratory: fillet and carcass. This was done so that both fillet and whole-body estimates could be made from the single largemouth bass collected.

4.2.4 Compositing Plan

Two deviations from the SAP occurring during development of the compositing plan for the laboratory analysis. These deviations were approved by DEQ during development of the plan, and included deviations from the number of fish to be composited in each category, and the lengths of the fish to be included within the single composite samples.

The approved SAP called for the collection and sampling of five fish per category to be homogenized into one composite sample per category. However, fish collection during the study varied by species and size, rendering this requirement impossible to meet. During development of the compositing plan, DEQ approved of this deviation to the SAP. This was done to ensure as many categories of fish were represented as possible given the number of species and size of fish collected.

DEQ also approved the deviation from the fish length requirements in the SAP. The SAP specified that individuals within any category composite and the average of the lengths (sizes) of individuals within that category composite should not exceed 10 percent. In addition, the smallest individual in a single composite should be no less than 75% of the total length of the largest individual. The approved composite plan deviated from these length requirements for composite samples MediumRough-WB-J1, MediumRough-WB-1, and LargeRough-WB-1-Dup. These deviations were approved by DEQ to provide useful information on the size class of the fish.

4.3 MIGRATION POTENTIAL OF FISH SPECIES CAPTURED AND ANALYZED AT JOHNSON LAKE

Johnson Lake has an unrestricted, permanent connection to the Whitaker/Columbia Slough system at the western end of the lake (Figure 2). Fish within the lake are free to enter the slough system and return to the lake unrestricted throughout the year and over their lifespan. This presents the potential for fish to accumulate contaminants within the slough system and then return to the lake. It is therefore possible that fish sampled during this study accumulated contaminants from the slough system rather than from within Johnson Lake.

The following sections discuss the life history strategies related to migration of the fish captured and analyzed for this study.

4.3.1 Largescale Sucker

Largescale suckers are native to the Willamette Basin and are the most widely distributed fish in the Willamette River system (Williams, Giannico, and Withrow-Robinson 2014). They are common in main river channels and sloughs, as well as lowland lakes (Page and Burr 1991). Largescale suckers have been shown to exhibit lengthy migrations during spawning, but will also migrate between preferred habitats on a daily and hourly basis (McEvoy 1998; Dauble 1986). Largescale suckers within Johnson Lake likely migrate to various areas of the Johnson Lake/Whitaker Slough system depending on spawning and foraging behaviors and habitat preferences.

4.3.2 Common Carp

Common carp are native to Eurasia, but are common throughout North America (Page and Burr 1991). They inhabit main river channels and sloughs, as well as lakes and manmade ponds. Common carp often move to productive, shallow lakes in the spring to spawn, while spending summers moving between habitats to forage. They exhibit a seasonal homing migratory strategy that is well-suited to productive and interconnected freshwater environments (Banet, Fieberg, and Sorensen 2021), and would thus be expected to seasonally migrate into and out of Johnson Lake.

4.3.3 Three-Spine Stickleback

Three-spine stickleback are native to the Willamette Basin (Williams, Giannico, and Withrow-Robinson 2014). They exhibit two main types of life history, freshwater resident and anadromous (Arai et al. 2020). Within the freshwater type, of which the stickleback at Johnson Lake belong (lacking significant armor plating), fluvial migratory behavior is common. The freshwater resident type may have originated from the anadromous type migrating upstream and becoming resident in freshwater habitats (Arai et al. 2020). As stickleback are shown to exhibit fluvial migratory behavior within freshwater habitats, it is highly plausible that some number of stickleback present in Johnson Lake migrate to and from Whitaker Slough.

4.3.4 Largemouth Bass

Largemouth bass are native to eastern and east-central North America, and were introduced to the Willamette Basin (Williams, Giannico, and Withrow-Robinson 2014). They inhabit warm,

vegetated lakes, ponds and sloughs, typically over mud and sand substrates (Page and Burr 1991). Bass typically migrate from deeper waters onshore to spawn in the late spring (WDFW 2023). They stay in shallow, productive waters with dense vegetative cover through the summer and into the fall. During winter, they move back into deeper waters. Largemouth bass prefer lakes and ponds, but will also inhabit stream backwaters (Montana Field Guide 2023). While Johnson Lake appears to provide preferred habitat for largemouth bass foraging and spawning, bass may move out of Johnson Lake in search of deeper waters in which to overwinter.

4.4 Comparisons Between Past and Current Studies

The ARCADIS *Site Investigation Report* (2004b) and the Grette Associates Johnson Lake Fish Tissue Monitoring Study Monitoring Report (2018) were reviewed to compare the results of the 2004 and 2017 studies to the 2022 results (Appendix N). Tables 13 and 14 present the available, comparable PCB data from those reports. It is important to note that the number of fillet and whole-body samples are not the same across all years, in addition to the species that were sampled and analyzed.

Table 13. Comparison of Total PCB, Lipid-Normal Total PCB, and PCB 126 concentrations from fillet samples from 2004 to 2022.

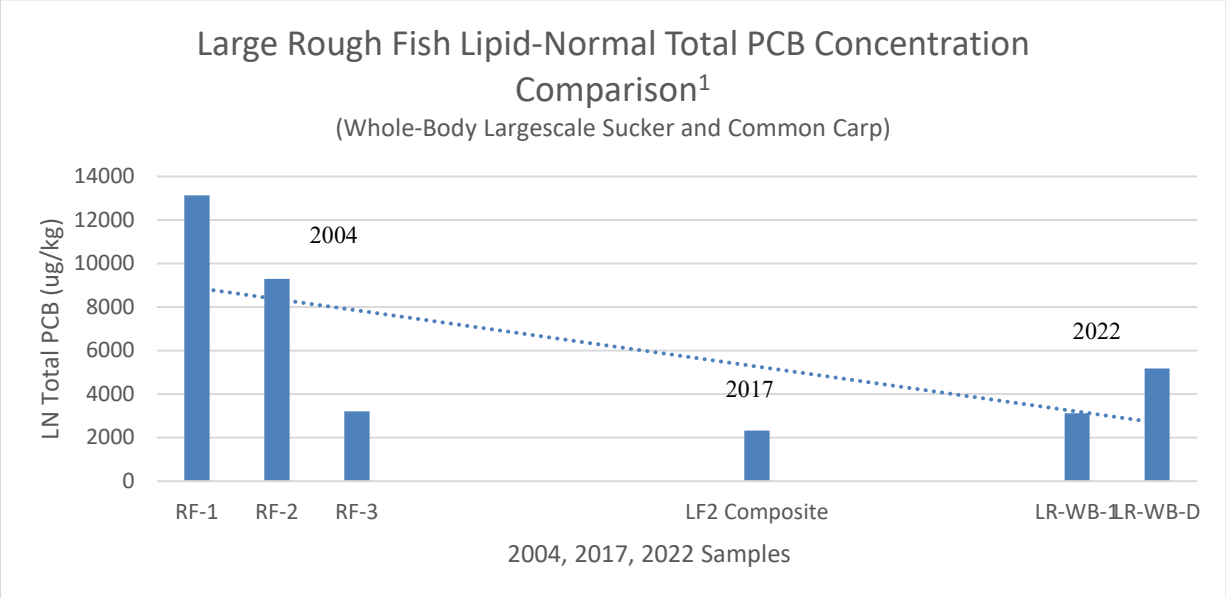
Sample ID	Species	Total PCB (µg/kg)	Lipid-Normal Total PCB (µg/kg)	PCB Congener 126 (µg/kg)
2004				
GF-1-Fillet	Largemouth Bass	92.6	7123	0.0382
RF-1-Fillet	Common Carp	389	10205	0.293
RF-2-Fillet	Largescale Sucker	148	5481	0.62
RF-3-Fillet	Largescale Sucker	148	2950	0.101
2017				
RF1,6 Composite	Largescale Sucker	484	12410	0.135
PF2-ES-12	Pumpkinseed	12.1	4033	0.009
RF1-ES-14	Largescale Sucker	102	2170	ND
2022				
Game-Bass Fillet	Largemouth Bass	19.8	6.83	0.0036
LargeRough-Fillet-1	Largescale Sucker	109	3114	0.0264

Table 14. Comparison of Total PCB, Lipid-Normal Total PCB, and PCB 126 concentrations from whole-body samples from 2004 to 2022.

Sample ID	Species	Total PCB (µg/kg)	Lipid-Normal Total PCB (µg/kg)	PCB Congener 126 (µg/kg)
2004[1]				
GF-1-FWB	Largemouth Bass	403	7531	--
RF-1-FWB	Common Carp	1208	13131	--
RF-2-FWB	Largescale Sucker	520	9293	--
RF-3-FWB	Largescale Sucker	279	3201	--
MF-1	Largescale Sucker	136	1411	0.0487
MF-2	Sculpin	266	9852	0.0561
MF-3	Common Carp	82.8	1533	0.0226
2017				
LF2 Composite	Mixed[2]	90.8	2328	0.035
SF2,6 Composite	Mixed[3]	122	5810	0.034
2022				
Game-Bass Whole-Body	Largemouth Bass	117[4]	--	0.021[4]
LargeRough-WB-1	Largescale Sucker	109	3114	0.0264
LargeRough-WB-Dup	Mixed[5]	378	5178	0.0771
MediumRough-WB-1	Mixed[5]	70.4	1853	0.0178
MediumRough-WB-J1	Mixed[5]	33.6	1050	<0.0082
MediumRough-WB-J2	Common Carp	46.6	1942	0.0103
Small-WB-Stick1	Three-spine stickleback	48.9	1193	0.014
Small-WB-Stick2	Three-spine stickleback	66.2	2758	0.0135

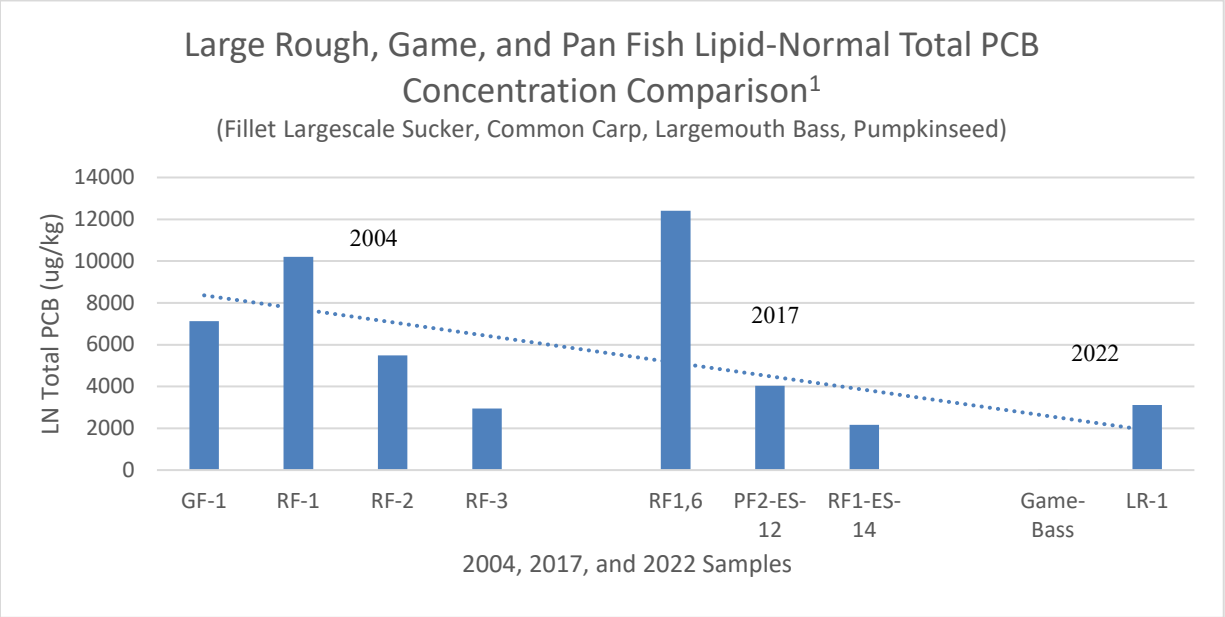
[1] Whole-body PCB congener 126 concentrations were only analyzed for samples MF-1, MF-2, and MF-3.
[2] Contains homogenate from largescale sucker and sculpin
[3] Contains homogenate from three-spine stickleback and sculpin
[4] Calculated from measured fillet and carcass concentrations
[5] Contains homogenate from largescale sucker and common carp

Figure 3. Comparison of whole-body lipid-normal Total PCB from 2004, 2017, and 2022.



[1] Linear trendline in light blue

Figure 4. Comparison of fillet lipid-normal Total PCB from 2004, 2017, and 2022.



[1] Linear trendline in light blue.

Tables 13 and 14, and Figures 3 and 4, generally show a declining trend in lipid-normal Total PCB concentrations from 2004 to 2022 in fish fillet and whole-body tissue samples. However, with a limited data set and comparisons across multiple species represented, clear trends in PCB concentration levels are difficult to evaluate.

4.5 FUTURE MONITORING EFFORTS

In an effort to further characterize long-term trends in PCB concentrations within fish populations in Johnson Lake, Owens proposes to conduct a future fish tissue sampling event. This event will include sampling of fish tissue from within Johnson Lake, as well as samples taken from outside of Johnson Lake in the Whitaker Slough/Columbia Slough system. Future sampling will be consistent with the prior sampling events and the O&M for the Owens site, and results will be compared to the prior data to make further comparisons of PCB concentration trends. It is anticipated that this future sampling effort would occur around 2027, however the timing, methods, and locations of sampling will be determined through coordination with DEQ.

5 REFERENCES

Arai, Takaomi, D. Ueno, T. Kitamura, & A. Goto. 2020. Habitat preference and diverse migration in threespine sticklebacks, *Gasteosterus aculeatus* and *G. nipponicus*. Nature - Scientific Reports. https://doi.org/10.1038/s41598-020-71400-4

ARCADIS. 2004a. Johnson Lake Investigation Work Plan, Revision 2. Prepared for Owens-Brockway Glass Container, Inc. Portland Oregon, by ARCADIS G&M, Inc., Cleveland, Ohio. January 29, 2004.

ARCADIS. 2004b. Johnson Lake Site Investigation Report. Prepared for Owens-Brockway Glass Container, Inc. Portland Oregon, by ARCADIS G&M, Inc., Cleveland, Ohio. July 15, 2004.

Banet, N. V., Fieberg, J., & Sorensen, P. W. (2021). Migration, homing and spatial ecology of common carp in interconnected lakes. *Ecology of Freshwater Fish*, 31, 164– 176. https://doi.org/10.1111/eff.12622

Bevelhimer, M.S., J.J. Beauchamp, B.E. Sample, G.R. Southworth. 1997. Estimation of Whole-Fish Contaminant Concentrations from Fillet Data. Prepared for the U.S. Department of Energy by the Risk Assessment Program, Oak Ridge National Laboratory, Oak Ridge, Tennessee. February 1997.

City of Portland. 2009. Vegetation Unit Summaries for Johnson Lake Property (JNLK). Prepared by Portland Parks and Recreation. 7/29/2009. URL: https://www.portlandoregon.gov/parks/44449?a=278452

Dalton, Olmsted & Fuglevand, Inc. (DOF). 2012. Remediation Operations & Maintenance Plan (O & M Plan): Sediment Remedial Action. Johnson Lake, Portland, Oregon. Prepared for Owens-Brockway Glass Container Inc. December 20, 2012.

Dauble, D. 1986. Life History and Ecology of the Largescale Sucker (*Catostomus macrocheilus*) in the Columbia River. *The American Midland Naturalist, 116*(2), 356-367. https://doi.org/10.2307/2425744

Grette Associates, LLC. 2022. Johnson Lake Fish Tissue Monitoring Study: Sampling and Analysis Plan. Prepared for Owens-Brockway Glass Container Inc.

Grette Associates, LLC. 2018. Johnson Lake Fish Tissue Monitoring Study Monitoring Report. Prepared for Owens-Brockway Glass Container Inc.

McEvoy, David H. 1998. Movement and habitat use of the largescale sucker (*Catostomus macrocheilus*) in the Clark Fork River Montana. Graduate Student These, Dissertations, & Professional Papers. 6723. https://scholarworks.umt.edu/etd/6723

Montana Field Guide. Largemouth Bass — *Micropterus salmoides*. Montana Natural Heritage Program and Montana Fish, Wildlife and Parks. Retrieved on January 24, 2023, from https://FieldGuide.mt.gov/speciesDetail.aspx?elcode=AFCQB12050

National Marine Fisheries Service (NMFS). 2000. Guidelines for Electrofishing Waters Containing Salmonids Listed Under the Endangered Species Act. June 2000.

Oregon Department of Environmental Quality (DEQ). 2009. Record of Decision Amendment for Remedial Action – Owens Brockway Glass Container Inc. Site, including Johnson Lake Portland, Oregon. July 2009.

Page, Lawrence M. and Brooks M. Burr. 1991. *A Field Guide to Freshwater Fishes of North America North of Mexico*. Houghton Mifflin Company. New York, NY.

Schlechtriem et al. 2012. *Determination of lipid content in fish samples from bioaccumulation studies: contributions to the revision of guideline OECD 305*. Environmental Sciences Europe. 24:13. URL: http://www.enveurope.com/content/24/1/13

Washington Department of Fish and Wildlife. Species in Washington – Largemouth Bass. Retrieved on January 20, 2023, from https://wdfw.wa.gov/species-habitats/species/micropterus-salmoides

Williams, Josh E., Guillermo R. Giannico, & Brad Withrow-Robinson. 2014. *Field Guide to Common Fish of the Willamette Valley Floodplain*. Oregon State University – Extension Service. Document No. EM 9091, June 2014.

JOHNSON LAKE FISH TISSUE MONITORING

APPENDIX A: GENERAL SITE PHOTOGRAPHS



Photo 1. Grette Associates biologists deploying a gill net

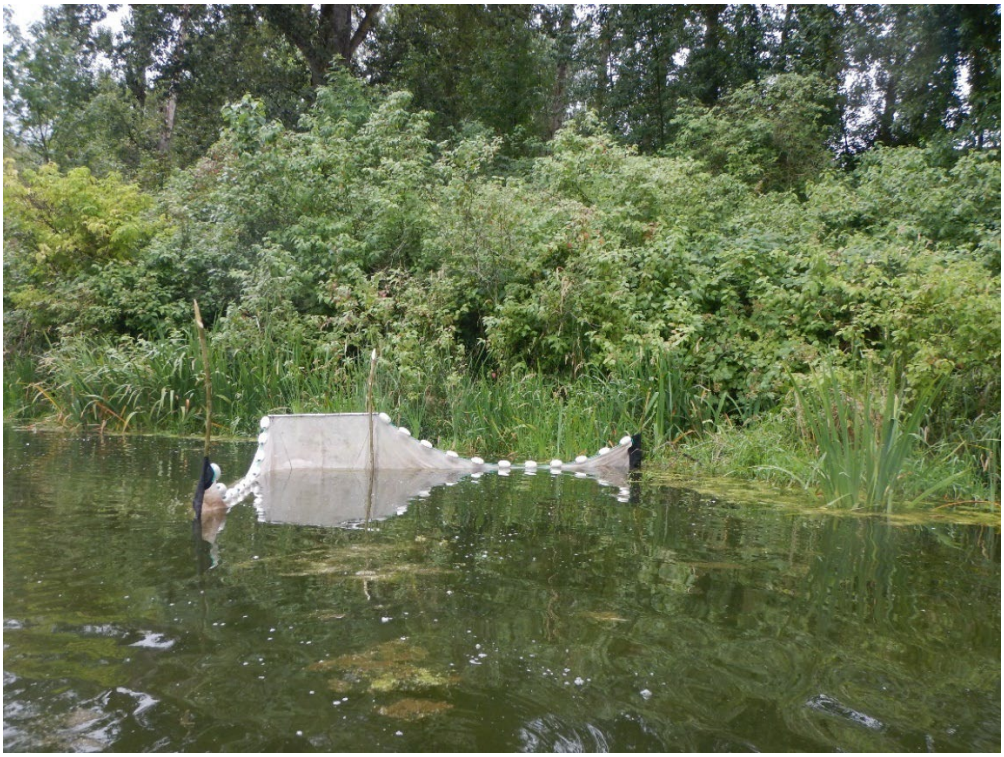


Photo 2. Fyke net deployed near shore.



Photo 3. Sample processing station set up on the south shore of Johnson Lake

APPENDIX B: NMFS ELECTROFISHING GUIDELINES (2000)

National Marine Fisheries Service

Guidelines for Electrofishing Waters Containing Salmonids Listed Under the Endangered Species Act

June 2000

Purpose and Scope

The purpose of this document is to provide guidelines for the safe use of backpack electrofishing in waters containing salmonids listed by the National Marine Fisheries Service (NMFS) under the Endangered Species Act (ESA). It is expected that these guidelines will help improve electrofishing technique in ways which will reduce fish injury and increase electrofishing efficiency. These guidelines and sampling protocol were developed from NMFS research experience and input from specialists in the electrofishing industry and fishery researchers. This document outlines electrofishing procedures and guidelines that NMFS has determined to be necessary and advisable when working in freshwater systems where threatened or endangered salmon and steelhead may be found. As such, the guidelines provide a basis for reviewing proposed electrofishing activities submitted to NMFS in the context of ESA Section 10 permit applications as well as scientific research activities proposed for coverage under an ESA Section 4(d) rule.

These guidelines specifically address the use of backpack electrofishers for sampling juvenile or adult salmon and steelhead that are *not* in spawning condition. Electrofishing in the vicinity of adult salmonids in spawning condition and electrofishing near redds are not discussed as there is no justifiable basis for permitting these activities except in very limited situations (e.g., collecting brood stock, fish rescue, etc.). The guidelines also address sampling and fish handling protocols typically employed in electrofishing studies. While the guidelines contain many specifics, they are not intended to serve as an electrofishing manual and do not eliminate the need for good judgement in the field.

Finally, it is important to note that researchers wishing to use electrofishing in waters containing listed salmon and steelhead are not necessarily precluded from using techniques or equipment not addressed in these guidelines (e.g., boat electrofishers). However, prior to authorizing the take of listed salmonids under the ESA, NMFS will require substantial proof that such techniques/equipment are clearly necessary for a particular study and that adequate safeguards will be in place to protect threatened or endangered salmonids. Additional information regarding these guidelines or other research issues dealing with salmon and steelhead listed under the ESA can be obtained from NMFS' Protected Resources Divisions in:

Washington, Oregon, and Idaho
Leslie Schaeffer
NMFS
525 NE Oregon Street, Suite 500
Portland, Oregon 97232-2737
Phone: (503) 230-5433
FAX: (503) 230-5435
Internet Address: Leslie.Schaeffer@noaa.gov

California
Dan Logan
NMFS
777 Sonoma Ave., Room 325
Santa Rosa, California 95404-6515
Phone: (707) 575-6053
FAX: (707) 578-3435
Internet Address: Dan.Logan@noaa.gov

Appropriateness of Electrofishing

Backpack electrofishing for salmonids has been a principal sampling technique for decades, however, recent ESA listings underscore the need to regulate the technique and assess its risks and benefits to listed species (Nielsen 1998). With over 25 Evolutionarily Significant Units (ESUs) of threatened or endangered salmonids now identified along the U.S. West Coast, researchers can expect to encounter one or more listed species in nearly every river basin in California, Oregon, Washington, and Idaho. There are few if any non-invasive ways to collect distribution, abundance, or morpho-physiological data on salmonids in freshwater. This is reflected in the requirement that all activities that involve intentional take of juvenile salmonids for research or enhancement of an ESA listed species require an ESA Section 10 permit from NMFS. While NMFS has not precluded the use of electrofishing in all cases, researchers must present rigorous study designs and methods for handling fish prior to NMFS authorizing electrofishing to take listed salmonids under the ESA.

NMFS believes there is ample evidence that electrofishing can cause serious harm to fish and the general agency position is to encourage researchers to seek out other less invasive ways to sample listed species. Direct observation by snorkeling is one of the least invasive ways to collect information concerning abundance and distribution, although there can be both practical (e.g., poor viability) and statistical (e.g., large numbers of fish, low observation probability) constraints to direct observation. Preliminary efforts should be directed at study designs that use less invasive methods. If such methods cannot provide the quality of data required or when the benefit exceeds potential mortality risk, then electrofishing can be considered. Electrofishing used on a limited basis to calibrate direct observations (e.g., Hankin and Reeves 1988) is commonly used and methods are currently under development that increase the use of direct observation counts (e.g., bounded counts, "multiple snorkel passes") which, in many cases, will further reduce the need for electrofishing.

Electrofishing Guidelines

Training

Field supervisors and crew members must have appropriate training and experience with electrofishing techniques. Training for field supervisors can be acquired from programs such as those offered from the U. S. Fish and Wildlife Service - National Conservation Training Center (*Principles and Techniques of Electrofishing* course) where participants are presented information concerning such topics as electric circuit and field theory, safety training, and fish injury awareness and minimization. A crew leader having at least 100 hours of electrofishing experience in the field using similar equipment must train the crew. The crew leader's experience must be documented and available for confirmation; such documentation may be in the form of a logbook. The training must occur before an inexperienced crew begins any electrofishing and should be conducted in waters that do not contain ESA-listed fish. Field crew training must include the following elements:

1. A review of these guidelines and the equipment manufacturer's recommendations, including basic gear maintenance.
2. Definitions of basic terminology (e.g. galvanotaxis, narcosis, and tetany) and an explanation of how electrofishing attracts fish.
3. A demonstration of the proper use of electrofishing equipment (including an explanation of how gear can injure fish and how to recognize signs of injury) and of the role each crew member

performs.

4. A demonstration of proper fish handling, anesthetization, and resuscitation techniques.
5. A field session where new individuals actually perform each role on the electrofishing crew.

Research Coordination

Research activities should be coordinated with fishery personnel from other agencies/parties to avoid duplication of effort, oversampling small populations, and unnecessary stress on fish. Researchers should actively seek out ways to share data on threatened and endangered species so that fish samples yield as much information as possible to the research community. NMFS believes that the state fishery agencies should play a major role in coordinating salmonid research and encourages researchers to discuss their study plans with these agencies prior to approaching NMFS for an ESA permit.

Initial Site Surveys and Equipment Settings

1. In order to avoid contact with spawning adults or active redds, researchers must conduct a careful visual survey of the area to be sampled before beginning electrofishing.
2. Prior to the start of sampling at a new location, water temperature and conductivity measurements should be taken to evaluate electroshocker settings and adjustments. **No electrofishing should occur when water temperatures are above 18°C or are expected to rise above this temperature prior to concluding the electrofishing survey. In addition, studies by NMFS scientists indicate that no electrofishing should occur in California coastal basins when conductivity is above 350 µS/cm.**
3. Whenever possible, a block net should be placed below the area being sampled to capture stunned fish that may drift downstream.
4. Equipment must be in good working condition and operators should go through the manufacturer's preseason checks, adhere to all provisions, and record major maintenance work in a logbook.
5. Each electrofishing session must start with all settings (voltage, pulse width, and pulse rate) set to the **minimums** needed to capture fish. These settings should be gradually increased only to the point where fish are immobilized and captured, and generally not allowed to exceed conductivity-based maxima (Table 1). Only direct current (DC) or pulsed direct current (PDC) should be used.

Table 1. Guidelines for initial and maximum settings for backpack electrofishing.

	Initial settings	Maximum settings	Notes
Voltage	100 V	Conductivity (µS/cm) / Max. Voltage < 100 — 1100 V 100 - 300 — 800 V > 300 — 400 V	In California coastal basins, settings should never exceed 400 volts. Also, no electrofishing should occur in these basins if conductivity is greater than 350 µS/cm.
Pulse width	500 µs	5 ms	
Pulse rate	30 Hz	70 Hz	*In general*, exceeding 40 Hz will injure more fish

Electrofishing Technique

1. Sampling should begin using straight DC. Remember that the power needs to remain on until the fish is netted when using straight DC. If fish capture is unsuccessful with initial low voltage, gradually increase voltage settings with straight DC.
2. If fish capture is not successful with the use of straight DC, then set the electrofisher to lower voltages with PDC. If fish capture is unsuccessful with low voltages, increase pulse width, voltage, and pulse frequency (duration, amplitude, and frequency).
4. Electrofishing should be performed in a manner that minimizes harm to the fish. Stream segments should be sampled systematically, moving the anode continuously in a herringbone pattern (where feasible) through the water. Care should be taken when fishing in areas with high fish concentrations, structure (e.g., wood, undercut banks) and in shallow waters where most backpack electrofishing for juvenile salmonids occurs. Voltage gradients may be high when electrodes are in shallow water where boundary layers (water surface and substrate) tend to intensify the electrical field.
5. Do not electrofish in one location for an extended period (e.g., undercut banks) and regularly check block nets for immobilized fish.
6. Fish should not make contact with the anode. Remember that the zone of potential injury for fish is 0.5 m from the anode.
7. Electrofishing crews should be generally observant of the condition of the fish and change or terminate sampling when experiencing problems with fish recovery time, banding, injury, mortality, or other indications of fish stress.
8. Netters should not allow the fish to remain in the electrical field any longer than necessary by removing stunned fish from the water immediately after netting.

Sample Processing and Recordkeeping

1. Fish should be processed as soon as possible after capture to minimize stress. This may require a larger crew size.
2. All sampling procedures must have a protocol for protecting held fish. Samplers must be aware of the conditions in the containers holding fish; air pumps, water transfers, etc., should be used as necessary to maintain safe conditions. Also, large fish should be kept separate from smaller prey-sized fish to avoid predation during containment.
3. Use of an approved anesthetic can reduce fish stress and is recommended, particularly if additional handling of fish is required (e.g., length and weight measurements, scale samples, fin clips, tagging).
4. Fish should be handled properly (e.g., wetting measuring boards, not overcrowding fish in buckets, etc.).
5. Fish should be observed for general condition and injuries (e.g., increased recovery time, dark bands, apparent spinal injuries). Each fish should be completely revived before releasing at the location of capture. A plan for achieving efficient return to appropriate habitat should be developed before each sampling session. Also, every attempt should be made to process and release ESA-listed specimens first.
8. Pertinent water quality (e.g., conductivity and temperature) and sampling notes (e.g., shocker settings, fish condition/injuries/mortalities) should be recorded in a logbook to improve technique and help train new operators. *It is important to note that records of injuries or mortalities pertain to the entire electrofishing survey, including the fish sample work-up.*

Citations and Other References

Dalbey, S. R., T. E. McMahon, and W. Fredenberg. 1996. Effect of electrofishing pulse shape and electrofishing-induced spinal injury on long-term growth and survival of wild rainbow trout. North American Journal of Fisheries Management 16:560-569.

Hankin, D. G., and G. H. Reeves. 1988. Estimating total fish abundance and total habitat area in small streams based on visual estimation methods. Canadian Journal of Fisheries and Aquatic Sciences 45:834-844.

Hollender, B. A., and R. F. Carline. 1994. Injury to wild brook trout by backpack electrofishing. North American Journal of Fisheries Management 14:643-649.

Nielsen, J. L. 1998. Electrofishing California's endangered fish populations. Fisheries 23:6-12.

Nielsen, L.A., and D.L. Johnson, editors. 1983. Fisheries techniques. American Fisheries Society, Bethesda, Maryland.

Reynolds, J. B., and A. L. Kolz. 1988. Electrofishing injury to large rainbow trout. North American Journal of Fisheries Management 8:516-518.

Sharber, N. G., and S. W. Carothers. 1988. Influence of electrofishing pulse shape on spinal injuries in adult rainbow trout. North American Journal of Fisheries Management 8:117-122.

Sharber, N. G., S. W. Carothers, J.P. Sharber, J. D. deBos, Jr., and D. A. House. 1994. Reducing electrofishing-induced injury of rainbow trout. North American Journal of Fisheries Management 14:340-346.

Schreck, C.B., and P.B. Moyle, editors. 1990. Methods for fish biology. American Fisheries Society, Bethesda, Maryland.

JOHNSON LAKE FISH TISSUE MONITORING

APPENDIX C: FIELD DATASHEETS – FISH SPECIMENS

JOHNSON LAKE
FISH TISSUE MONITORING STUDY

Grette Associates LLC
ENVIRONMENTAL CONSULTANTS

Observers: JD, JLD, CW

Datasheet: 1 of _____

Date: 7/5/22 Turbidity: — Dissolved Oxygen: (AM) see data log (PM)

Start/ End Time: 1130/ Weather: overcast Water Temp:(AM) see data log (PM)

Date/ Time Caught	Sample ID #	Species	Native / Non Native	Adult/ Juvenile (A/J)	Weight (g)	Length Total (mm)	Fork Length (mm)	Sample Set	Sample Zone #	Sample Method					Sample Category						
										Gill net	Fyke net	Beach Seine	Shocker	Angling	Game Fish	Pan Fish	Rough Fish	Large Fish	Small Fish	Fish Returned	GPS Other
07/05 1226	SWF-7-01	Stickleback	N	J	3	57	53	1	7				✓						✓		SL1
07/05 1256	SWF-7-02	Stickleback	N	J	<1g.	22	20	1	7				✓						✓		SL2
07/05 1312	SWF-703	Stickleback	N	J	3	55	50	1	7				✓						✓		SL3
07/05 1418	SWF-1-04	Fathead Minnow	N	A	4	65	60	1	1				✓						✓		SL4
07/05 1424	RF-1-05	Carp	NN	J	86	162	155	1	1				✓				✓				SL5
* 07/05 1555	RF-1-06	~~Carp~~ Sucker	NN	J	161	240	231	1	1				✓				✓				SL6
07/05 1604	RF-1-07	Carp	NN	J	35	127	117	1	1				✓				✓				SL7
07/05 1613	RF-1-08	Carp	NN	J	57	148	135	1	1				✓				✓				SL8
07/05 1625	RF-1-09	Carp	NN	J	34	120	112	1	1				✓				✓				SL9

* Row is a corrected fish species ID

Notes:

JOHNSON LAKE
FISH TISSUE MONITORING STUDY

Grette Associates
ENVIRONMENTAL CONSULTANTS

Observers: CW, JD JLD Datasheet: 2 of _____

Date: 07/06/22 Turbidity: _____ Dissolved Oxygen: (AM) _____ (PM) _____

Start/ End Time: 0808 Weather: Rain Water Temp:(AM) _____ (PM) _____

	Date/ Time Caught	Sample ID #	Species	Native / Non Native	Adult/ Juvenile (A/J)	Weight (g)	Length Total (mm)	Fork Length (mm)	Sample Set	Sample Zone #	Sample Method					Sample Category						
											Gill net	Fyke net	Beach Seine	Shocker	Angling	Game Fish	Pan Fish	Rough Fish	Large Fish	Small Fish	Fish Returned	Other GPS
*	07/06 0808	LF-07-10	Sucker ~~Carp~~	N	A	2490	604	578	2	7	✓								✓			GN 1
*	07/06 0808	LF-07-11	Sucker ~~Carp~~	N	A	960	436	420	2	7	✓								✓			GN 1
*	07/06 0808	LF-07-12	Sucker ~~Carp~~	N	A	2080	568	550	2	7	✓								✓			GN 1
*	07/06 0808	LF-07-13	sucker ~~Carp~~	N	A	2680	618	595	2	7	✓								✓			GN 1
*	07/06 0808	LF-07-14	Sucker ~~Carp~~	N	A	1940	540	520	2	7	✓								✓			GN 1
*	07/06 0808	LF-07-15	Sucker ~~Carp~~	N	A	2070	575	549	2	7	✓								✓			GN 1
*	07/06 0808	LF-07-16	Sucker ~~Carp~~	N	A	2040	574	550	2	7	✓								✓			GN 1
	07/06 1009	SF-07-17	stickleback	N	J	5	67	61	2	1			✓							✓		S-1
	07/06 1009	SF-07-18	stickleback	N	J	3	56	50	2	1			✓							✓		S-1
	07/06 1430	SF-07-19	stickleback	N	J	3	58	53	3	7			✓									S-3
	07/06 1430	SF-07-20	stickleback	N	J	2	54	47	3	7			✓									S-3

Sample Set = Times that specific zone was fished - regardless of method

Notes: * Row is a corrected fish species Id

Datasheet #3_

Date/ Time Caught	Sample ID #	Species	Native / Non Native	Adult/ Juvenile (A/J)	Weight (g)	Length Total (mm)	Fork Length (mm)	Sample Set	Sample Zone #	Sample Method					Sample Category						
										Gill net	Fyke net	Beach Seine	Shocker	Angling	Game Fish	Pan Fish	Rough Fish	Large Fish	Small Fish	Fish Returned	Other
7/6/22 1430	SF-07-21	Stickleback	Y	J	4	68	62	3	7			✓							X		SB
7/6/22 1430	SF-07-22	Stickleback	Y	J	2	60	55	3	7			✓							X		
7/6/22 1430	SF-07-23	Stickleback	Y	J	4	59	54	3	7			✓							X		
7/6/22 1430	SF-07-24	Stickleback	Y	J	4	60	55	3	7			✓							X		
7/6/22 1430	SF-07-25	Stickleback	Y	J	4	66	61	3	7			✓							X		
7/6/22 1430	SF-07-26	Stickleback	Y	J	4	66	61	3	7			✓							X		
7/6/22 1430	SF-07-27	Stickleback	Y	J	3	54	49	3	7			✓							X		
7/6/22 1430	SF-07-28	Stickleback	Y	J	3	56	51	3	7			✓							X		
7/6/22 1430	SF-07-29	Stickleback (SB)	Y	J	4	60	55	3	7			✓							X		
7/6/22 1430	SF-07-30	SB	Y	J	2	54	49	3	7			✓							X		
7/6/22 1430	SF-07-31	SB	Y	A	4	60	55	3	7			✓							X		
7/6/22 1430	SF-07-32	SB	Y	A	3	62	56	3	7			✓							X		
7/6/22 1430	SF-07-33	SB	Y	A	3	59	54	3	7			✓							X		
7/6/22 1430	SF-07-34	SB	Y	J	1	45	40	3	7			✓							X		
7/6/22 1430	SF-07-35	SB	Y	A	2	55	49	3	7			✓							X		
7/6/22 1430	SF-07-36	SB	Y	A	3	53	48	3	7			✓							X		S-3

(W) See note regarding W's 4/5
↳ <50mm = J
>50mm = A

Notes:

JOHNSON LAKE
FISH TISSUE MONITORING STUDY

Grette Associates LLC
ENVIRONMENTAL CONSULTANTS

Observers: JD, OZD, CW

Datasheet: 4 of _____

Date: 7/6/22 Turbidity: _____ Dissolved Oxygen: (AM) (PM)

Start/ End Time: 0808 Weather: _____ Water Temp:(AM) (PM)

Date/ Time Caught	Sample ID #	Species	Native / Non Native	Adult/ Juvenile (A/J)	Weight (g)	Length Total (mm)	Fork Length (mm)	Sample Set	Sample Zone #	Sample Method					Sample Category						
										Gill net	Fyke net	Beach Seine	Shocker	Angling	Game Fish	Pan Fish	Rough Fish	Large Fish	Small Fish	Fish Returned	Other
7/6/22 1430	SF-07-37	SB	N	A	3	55	50	3	7			X							X		S3
7/6/22 1430	SF-07-38	SB	N	A	3	54	49	3	7			X							X		S3

Notes: Fyke net start fishing at 1015
Fyke net stopped fishing at 1600

*Row is a corrected fish species ID

JOHNSON LAKE
FISH TISSUE MONITORING STUDY

Grette Associates
ENVIRONMENTAL CONSULTANTS

Observers: JD, JLD, CKL

Datasheet: 5 of _____

Date: 07/07/22 Turbidity: _____ Dissolved Oxygen: (AM) (PM)

Start/ End Time: 0800 Weather: _____ Water Temp:(AM) (PM)

Date/ Time Caught	Sample ID #	Species	Native / Non Native	Adult/ Juvenile (A/J)	Weight (g)	Length Total (mm)	Fork Length (mm)	Sample Set	Sample Zone #	Sample Method					Sample Category						
										Gill net	Fyke net	Beach Seine	Shocker	Angling	Game Fish	Pan Fish	Rough Fish	Large Fish	Small Fish	Fish Returned	Other
* 07/07 0800	LF-02-39	~~Sucker~~ Carp	NN	A	2220	615	585	1	2	1								✓			SL10
07-07 1110	SF-02-40	Fathead minnow	N	J	4	66	64	2	2		✓								✓		SL11

* Row is a corrected fish species ID.

Notes:

JOHNSON LAKE
FISH TISSUE MONITORING STUDY

Grette Associates LLC
ENVIRONMENTAL CONSULTANTS

Observers: JD, JLD, CW

Datasheet: 5 of _____

Date: 7/8/22 Turbidity: _____ Dissolved Oxygen: (AM) (PM)

Start/ End Time: 0745 Weather: Partly Cloudy Water Temp:(AM) (PM)

Date/ Time Caught	Sample ID #	Species	Native / Non Native	Adult/ Juvenile (A/J)	Weight (g)	Length Total (mm)	Fork Length (mm)	Sample Set	Sample Zone #	Sample Method					Sample Category						
										Gill net	Fyke net	Beach Seine	Shocker	Angling	Game Fish	Pan Fish	Rough Fish	Large Fish	Small Fish	Fish Returned	Other
7/8/22 0805	~~LF~~-1-41	Largemouth Bass	NN	A	620	334	316	3	1	X					X						GN
7/8/22 0805	RF-1-42	Carp	NN	A	366	277	257	3	1	X							X				GN
7/8/22 0805	LWF-1-43	Carp	NN	A	750	361	342	3	1	X								X			GN
7/8/22 0805	LWF-1-44	Carp	NN	A	2030	506	473	3	1	X								X			GN
~~7/8/22 0805~~		~~Carp~~	~~NN~~																		
* 7/8/22 0945	LWF-4-45	~~Sucker~~ Carp	NN	A	2320	613	580	1	4				X					X			SL12
7/8/22 1053	RF-1-46	Carp	NN	J	72	152	144	4	1				X				X				SL13

* Row is a corrected fish species ID

Notes:

APPENDIX D: ALS GLOBAL STANDARD OPERATING PROCEDURE: TISSUE SAMPLE PREPARATION

ALS Standard Operating Procedure

DOCUMENT TITLE:	TISSUE SAMPLE PREPARATION
REFERENCED METHOD:	N/A
SOP ID:	MET-TISP
REVISION NUMBER:	10
EFFECTIVE DATE:	5/29/2016



TISSUE SAMPLE PREPARATION

ALS-KELSO

SOP ID:	MET-TISP	Rev. Number:	10	Effective Date:	5/29/16

Approved By: _____ Date: 5/11/16
Department Manager/Technical Director – Jeff Coronado

Approved By: _____ Date: 5/11/16
QA Manager – Carl Degner

Approved By: _____ Date: 5/12/16
Laboratory Director – Jeff Grindstaff

Issue Date: _____	Doc Control ID#: _____	Issued To: _____

ANNUAL REVIEW

SIGNATURES BELOW INDICATE NO PROCEDURAL CHANGES HAVE BEEN MADE TO THE SOP SINCE THE APPROVAL DATE ABOVE. THIS SOP IS VALID FOR TWELVE ADDITIONAL MONTHS FROM DATE OF THE LAST SIGNATURE UNLESS INACTIVATED OR REPLACED BY SUBSEQUENT REVISIONS.

Signature	Title	Date
Signature	Title	Date
Signature	Title	Date
Signature	Title	Date

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TISSUE SAMPLE PREPARATION

1. SCOPE AND APPLICATION

1.1. This standard operating procedure describes procedures for the initial preparation of tissue samples prior to sample analysis. Customer-specific contracts or statement of works (SOWs) with alternate procedures will take precedence over this SOP.

1.2. This SOP is intended to provide guidance for the preliminary preparation of tissue samples prior to the sample aliquoting and analytical preparation described in individual analytical SOPs. The procedures described in this SOP also apply to compositing and subsampling of tissue samples for analyses to be subcontracted.

2. METHOD SUMMARY

2.1. Tissue samples are inherently heterogeneous requiring special considerations in order to obtain a truly representative sample aliquot for analysis. This SOP provides guidance for handling tissue samples prior to the sample preparation steps described in analytical SOPs. This SOP applies to samples delivered to the lab in whole body form or in the form of pre-dissected tissues.

2.2. The sample handling strategy must consider:

- what analyses are to be performed (metals, organics, or both, and VOC or non-VOC),
- how much sample is available
- are the analyses to be performed on individual samples or composite homogenates,
- are the analyses to be performed on whole body, edible portions or specific organs, and
- are any of the analyses going to be subcontracted which may require subsampling.

2.3. Proper preparation and handling of tissue samples is required to obtain a representative sample, avoid contamination, and to ensure loss of sample and target constituents is minimized.

3. DEFINITIONS

3.1. Sample: The material presented to the laboratory for analysis or testing.

3.2. Sample Aliquot: A representative part or portion of a sample for analysis which is a fraction of the whole sample. See subsampling also.

3.3. Compositing: The process by which sample aliquots from two or more samples are united to form a combined sample which is subsequently analyzed.

3.4. Subsampling: The process by which a representative portion is obtained from a whole sample.

3.5. Service Request: The service request (SR) is a document prepared at the time of sample receipt and summarizes sample analysis and reporting instructions about a customer's sample(s).

3.6. QAPP: Quality Assurance Project Plan document provided by the client specifically written for their project.

3.7. VOC Analyses: Volatile organic compounds (VOC) analyses, including halogenated and aromatic volatile organic compounds and gasoline range organics (GRO) analyses.

3.8. Non-VOC Analyses: Any analysis other than a VOC analysis.

4. INTERFERENCES

4.1. If precautions are not taken, cross-contamination can occur when handling tissue samples in large quantities. Equipment must be thoroughly cleaned as described in this SOP and related SOPs. Also, the SOP describes the use of homogenization and rinsate blanks to monitor any possible contamination.

4.2. For organics samples, polypropylene and polyethylene (plastic) surfaces, implements, and containers are a potential source of adsorption and contamination and should not be used. Gloves should be talc free and of non-contaminating materials.

5. SAFETY

5.1. All appropriate safety precautions for handling solvents, reagents and samples must be taken when performing this procedure. This includes the use of personnel protective equipment, such as, safety glasses, lab coat and the correct gloves.

5.2. Chemicals, reagents and standards must be handled as described in the ALS safety policies, approved methods and in MSDSs where available. Refer to the ALS Environmental, Health and Safety Manual and the appropriate MSDS prior to beginning this method.

6. SAMPLE COLLECTION, CONTAINERS, PRESERVATION AND STORAGE

6.1. Refer to the determinative method.

7. STANDARDS, REAGENTS, AND CONSUMABLE MATERIALS

7.1. Not applicable to this procedure.

8. APPARATUS AND EQUIPMENT

Note: Refer to the Procedure section for specific equipment used based on the determinative analysis to be performed. The use of implements and surfaces may vary depending on the analyses to be performed.

8.1. Hobart Food Chopper, or comparable device.

8.2. Tissumizer.

8.3. Waring blender, or similar device.

8.4. Freeze-drier, Labonco or equivalent.

8.5. Glass or PTFE cutting boards.

8.6. Knives and cutting implements – refer to Procedure section.

8.7. Standard laboratory glassware (beakers, scintillation vials, etc.)

8.8. VOA vial – pre-cleaned, 40ml with Teflon-lined cap.

8.9. Pre-cleaned glass jars with PTFE lined lids, various sizes.

8.10. Gloves: Should be talc free and of non-contaminating materials.

8.11. Heavy duty aluminum foil.

9. PREVENTIVE MAINTENANCE

9.1. No specific maintenance steps are needed other than normal cleaning and inspection of apparatus.

9.2. For organics samples, polypropylene and polyethylene (plastic) surfaces, implements, and containers are a potential source of adsorption and contamination and should not be used. Gloves should be talc free and of non-contaminating materials.

10. RESPONSIBILITIES

10.1. It is the responsibility of the analyst to perform the analysis according to this SOP and to complete all documentation required for data review. Analysis and interpretation of the results are performed by personnel in the laboratory who have demonstrated the ability to generate acceptable results utilizing this SOP. This demonstration is in accordance with the training program of the laboratory. Final review and sign-off of the data is performed by the department supervisor/manager or designee.

10.2. Sample custodians, together with project chemists and department supervisors, are responsible for documenting any required sample preparation (including the percent solids or percent lipids determination if required) on the service request. All personnel preparing tissue samples should be familiar with the contents of this document prior to commencing work.

10.3. Tissue sample preparation is to be performed only by lab analysts instructed in the proper handling techniques outlined in this SOP. It is the responsibility of the analyst to perform this procedure to complete all documentation required for data review.

11. PROCEDURE

11.1. Sample Login

Any special sample handling must be noted on the service request and on a label attached to the sample itself. During sample receiving, a sample custodian must follow the procedures described in Section 11.1.1.

11.1.1. Tissue Samples with Limited Quantity

An assessment of the required sample quantity should be made by the project chemist when taking delivery of the sample. This assessment must take into consideration the tests, the required detection limits and the necessary quality assurance samples. If the quantity of sample given to the laboratory is insufficient for the analyses requested, the sample custodian will, along with the project chemist estimate the total amount of sample available. A "LIMITED SAMPLE VOLUME" tag is attached to the sample on which is recorded the estimated sample quantity.

In some cases it may be beneficial to perform sample preparations as described in this SOP prior to estimating the sample amount. In this case, the analyst preparing the sample will provide the project chemist with an estimate of the amount available.

The project chemist must determine if limited sample quantity exists and set the priorities for the analyses and, if possible, estimate the quantity of sample to be *used for each test*. This information is to be documented and placed in the project file and on the service request to communicate to the laboratory staff. For example, 8081 use 10 g; metals use 1g.

NOTE. Samples that are quantity limited and require multiple analyses must be identified as soon as possible. Optimally, this should happen during sample login; however, discovery at any time should trigger appropriate actions as described in Section 11.1.1.

11.2. Sample Homogenization

This section outlines the steps for preparing homogenous samples of whole fish, edible fish (fillets), edible shellfish, worm composite homogenates, eggs, and plant tissues.

11.2.1. Samples for Organics Analyses:

Equipment used for the processing of tissue samples for organics analyses should be of stainless steel, anodized aluminum, glass or polytetrafluorethylene (PTFE). Polypropylene and polyethylene (plastic) surfaces, implements, and containers are a potential source of adsorption and contamination and should not be used. Gloves should be talc free and of non-contaminating materials. Filleting should be done on glass or PTFE cutting boards that are cleaned properly between samples or on cutting boards that are covered with heavy duty aluminum foil (hexane rinsed) that is changed between samples. Tissue should be handled with precleaned, high quality, corrosion-resistant stainless steel instruments. Fillets or homogenate should be stored in cleaned glass jars of suitable dimensions with PTFE lined lids. If the sample is to be analyzed for VOCs, the homogenization steps should be performed on sample tissue that is partially frozen or chilled. An aliquot of the homogenate should be placed in a clean 40ml voa vial and libeled "FOR VOA ANALYSIS ONLY".

Prior to handling each sample, utensils, cutting boards and containers should be washed in a detergent hot water solution and rinsed with tap water, hexane, and DI water. Pre-cleaned, certified sample containers may be used without further cleaning. If the sample is to be analyzed for VOCs, methanol is substituted for the rinsing of implements with acetone and the hexane rinsing of the aluminum foil. Exposure to solvent vapors must be minimized.

11.2.2. Samples for Metals Analyses:

Equipment used in the processing of samples for metals analyses should be of PTFE, ceramic, polypropylene or polyethylene. Filleting should be performed on PTFE cutting boards which are cleaned after each sample. Knives with titanium or high quality stainless steel blades may be used for tissue resections. Tissue should be stored in glass jars with PTFE lined lids.

Prior to sample handling, utensils, cutting boards and containers should be washed in a detergent hot water solution, rinsed with tap water, 25% HCL (except metal utensils), and DI water. Pre-cleaned, certified sample containers may be used without further cleaning.

11.2.3. Samples for both Metals and Organics Analyses:

If the sample is to be prepared for both organics and metals, care must be taken to use equipment and cleaning procedures that are non-contaminating for both. Quartz, ceramic, glass and PTFE are recommended materials for sample processing equipment. Knives with titanium or high quality stainless steel blades may be used for tissue resections. Glass or PTFE cutting boards should be used. If the sample is to be analyzed for VOC's, the homogenization steps should be performed on sample tissue that is partially frozen or chilled. An aliquot of the homogenate should be placed in a clean 40ml voa vial and labeled "FOR VOA ANALYSIS ONLY".

Prior to handling each sample, utensils, cutting boards and containers should be washed in a detergent hot water solution and rinsed with tap water, acetone, methanol, or hexane (as appropriate), and DI water. Precleaned, certified sample containers may be used without further cleaning. Non-metallic surfaces and utensils should also be rinsed with 25% HCL followed by DI water. If the sample is to be analyzed for VOCs, methanol is substituted for the rinsing of implements with acetone. Exposure to solvent vapors must be minimized.

11.2.4. Sample Preparation

Each tissue sample may be homogenized in the original glass bottle container if there is sufficient space to allow thorough mixing. If homogenization is not achievable in the original container, place the entire sample contents into a clean glass jar. Generally, liquids contained in the container are to be considered part of the sample. If the sample requires size reduction prior to homogenization, chop the sample into the 1-2" chunks using a titanium or stainless steel bladed knife. Large samples may require the use of industrial food processors such as a Hobart Food Chopper, or comparable device. Size-reduced chunks of tissue are thoroughly homogenized to a paste-like consistency using a Tissumizer, Waring blender, or similar device until it reaches a paste-like consistency. Transfer the sample paste to a glass jar for storage and freeze until ready for sample extraction. The new sample

container is labeled with the sample I.D., the word "homogenized", initialed, and dated.

11.2.4.1.Whole Fish Tissue

Samples may be frozen in the field or in the laboratory. While still partially frozen, rinse the fish with DI water to remove extraneous materials and liquids. Cut the fish into appropriate size chunks and mechanically macerate the sample using cutting tools appropriate for the size of the sample and the analysis type. If necessary, process fish tissue chunks through the Hobart Food Chopper. To ensure thorough mixing, divide the ground sample into quarters, mix opposite quarters and then mix halves. Homogenize sample using a Tissumizer or Waring blender until it reaches a paste-like consistency. Transfer the sample paste to a glass jar for storage and freeze until ready for sample extraction. The new sample container is labeled with the sample I.D., the word "homogenized", initialed, and dated.

11.2.4.2.Edible Fish Tissue

If the client or QAPP indicates that only edible tissue be analyzed, the fish must be filleted. If the sample arrives pre-filleted, the sample tissue may be frozen before processing. If the sample is not yet filleted, the sample should remain chilled until the filleting is completed. Freezing can result in the contamination of edible tissues from the bursting of internal organs. Fish having ruptured internal organs should be noted on the prep benchsheet and the Project Chemist consulted. Rinse the fish with DI water to remove extraneous materials and liquids. Remove scales from scaled fish or skin from non-scaled fish. Rinse the fish again prior to filleting. A separate or clean cutting board should be used for filleting. Gloves should be changed between samples. Carefully remove the fillets from the carcass by following the steps outlined in Appendix A. Care should be taken to avoid contaminating fillet with inadvertent puncture of internal organs. Cut the fillet tissue into appropriate size chunks and mechanically macerate the sample using cutting and grinding tools appropriate for the size of the sample and the analysis type. Proper selection of maceration equipment must consider the potential contaminants, sample size/volume and amount of tissue likely to be lost in using the equipment.

Divide the ground sample into quarters, mix opposite quarters and then mix halves. Again homogenize the sample using an appropriate blending mixer. Continue repeating this process until the sample is truly homogenous and no chunks of tissue remain. Freeze sample until ready for extraction.

11.2.4.3.Shellfish Tissue

Shellfish should be frozen as soon as possible after receipt by the laboratory unless samples can be prepared within 48 hours of sampling. Edible portions of various shellfish are described below and resection described in Appendix B. Thawing of frozen shellfish samples should be kept to a minimum during tissue removal to avoid loss of liquids. Shellfish should be rinsed with DI water prior to tissue removal to dislodge external debris. When multiple

organisms constitute a single sample, the edible tissues are collected, composited and homogenized.

11.2.4.3.1.Bivalve mollusks (oysters, clams, mussels, and scallops).

Bivalves are typically prepared by severing the adductor muscle, prying open the shell, and removing all of the soft tissue. The soft tissue includes viscera, meat, and body fluids.

11.2.4.3.2.Crabs

Edible tissue includes all leg and claw meat, back shell meat and body cavity meat. Internal organs generally are removed. If the crab is soft shelled, the entire crab is used in the sample.

11.2.4.3.3.Shrimp and Crayfish - Edible tissue includes the tail meat.

11.2.4.3.4.Lobster - Edible tissue includes the tail and claw meat.

11.2.4.4.Worms

Samples are typically supplied to the lab in sample jars containing multiple organisms. Liquid and specimens constitute the entire sample and are blended together typically in the sample container. When a worm sample containing dirt particles or significant amounts of water is encountered, the technician should contact the project chemist to seek guidance from the client.

11.2.4.5.Eggs

Avian eggs are typically removed from the shell and blended. Aquatic eggs are blended including the soft shell.

11.2.4.6.Internal Organs Extraction

Organs such as livers or kidneys must be identified and removed by an experienced sample technician following clear written resection procedures or other guidance provided by the client.

11.2.4.7.Plant Tissue

Plant tissue should be handled using the size reduction, homogenization and implement cleaning steps outlined in Sections 11.2.1, 11.2.2, 11.2.3, and 11.2.4. Where these procedures are inappropriate, specific written procedures or guidance from the client is recommended.

If drying is requested by the client or is project-specified, a subsample for mercury analysis is taken from the wet sample, and then the plant tissue is dried at 60˚C prior to homogenization.

11.2.4.8.Small Mammals and Rodents

11.2.4.8.1. There are two primary concerns in working with small mammals and rodents: safety and sample homogenization.

11.2.4.8.2. Small mammals are potential carriers of lethal viruses, such as hantavirus and rabies, and bacteria that can be contracted through inhalation or direct contact. Typically, these organisms are excreted in the feces and distributed on the air as the fecal matter dries. During the sample preparation process, tissue is typically freeze-dried in order to calculate a percent solids value and to analyze for metals. As such, it is possible to increase the potential for dispersion of the bacteria or viruses after the sample is homogenized and processed. Prior to processing, all samples should be stored frozen.

11.2.4.8.3. Prior to sample homogenization, instructions should be received from the client regarding the processing of the hide. For organics, it is recommended that the hides be left on the carcass and the entire sample be homogenized. For metals, there is a potential for accumulation in the hair. As a non-digestible portion of the rodent, inclusion of the hair may result in a high bias if the data is to be used in estimating bioaccumulation up the food chain. Skinning may be a preferred alternative when metals are the primary chemicals of concern.

11.2.4.8.4. Homogenization should be done while the carcass is still partially frozen.

11.2.4.8.5. If the hide is to be included in the homogenization, snip the feet from the animal using stainless steel scissors.

The tail should be removed if it will prevent complete homogenization of the sample (e.g., the tail of a mouse or rat may result in incomplete homogenization and should not be included with the sample). Remove seeds, grasses, and mud from the hide.

11.2.4.8.6. If the hide is to be removed from the carcass, make an incision through the skin on the back of the neck (do not cut into the muscle). In most cases, the hide can be removed by pulling the incision horizontally along the back in one direction, and over the ears, head and snout in the opposite direction. The eyes are usually lost during this procedure. Continue to skin the animal by peeling the hide over the hind legs, off the underside of the animal, and around the front legs. The hide is removed at the hind legs and the snout. Care should be taken not to tear the connective tissue under the hide. Fat should be scraped from the hide when possible and included with the sample. Rinse the skinned carcass with DI water to remove any hair or dirt that has accumulated during the skinning procedure.

11.2.4.8.7. Homogenize the sample using a stainless steel Waring blender. Select a blender cup that is sized in accordance with the amount of sample to be homogenized. That is, small samples should be homogenized using small blender cups. This will improve the overall homogenization and recovery of the sample. Continue to mix the

sample into a paste like consistency. Make sure no chunks of muscle, hide, or bone are distributed in the sample. Transfer the sample paste to a glass jar for storage and freeze. The new sample container is labeled "homogenized", initialed, and dated.

11.2.5. General Provision for Handling Large Sample Mass

In some cases, large specimens will be received by the laboratory for homogenization prior to chemical analysis. For the purpose of this SOP, 'large' is defined as requiring preliminary size reduction to allow sequential processing of the sample. Sub-samples of the whole specimen should be cut to a size appropriate for the blender, mixer, or grinder that will be used. After each individual fraction is processed, the homogenized material is added to a reservoir large enough to hold all fractions as they accumulate. The reservoir will be constructed of a material suitable for the analytical application as defined under Section 10.2.3. For very large specimens (i.e. >20 pounds), high grade stainless steel containers are used (large bowls or small drums).

Blending of the combined fractions to achieve a whole homogenous material is achieved via manual mixing. In general, this is accomplished using a high grade stainless steel paddle or spoon of appropriate size (i.e. relative to the whole homogenate). Very large specimens (i.e. >20 pounds) generally require secondary processing through the grinder, particularly when large amounts of skin, bone, and/or cartilage is present. In these cases, the Hobart grinder is generally used.

11.3. Compositing

Each sample is to be logged in and receive a lab code. Additionally, the sample composite also is assigned a lab code. The compositing process is to be performed by trained staff. It is to be performed in an area free of contamination. It is imperative that the samples are treated in a manner consistent with the requirements of the tests to be performed on the composited sample. Compositing of homogenates should be performed according to this SOP or specific instructions provided by the client.

11.3.1. Documentation (use applicable bench sheet)

The analyst preparing the composite will document

- that homogenization was done before removing an aliquot,
- the quantity of each (field or discrete) sample used for the composite,
- the date and time of compositing, and
- any other pertinent observations.

11.3.2. Tissue Samples with Limited Quantity

Samples and sample composites that are quantity limited will be handled by the same procedure as described in Section 10.1.1

11.3.3. Compositing Procedure

11.3.3.1.Each tissue sample is first homogenized as per instructions in Section 11.2.

11.3.3.2. An equal weight of sample aliquot from each of the homogenized samples is weighed into a clean glass sample bottle. The amount to be weighed of each sample will depend upon the number of analyses to be performed on the composite and if the quantity of any individual sample is limited.

11.3.3.3. The mixture of the individual sample aliquots is thoroughly homogenized in the glass container. The composite sample bottle is labeled with:

- the name of the composite,
- the lab code of the composite,
- the analyst's initials
- the date of composite preparation
- The composite sample and the remaining (individual, discrete) samples are stored frozen until analysis.

11.3.4. Tissue Samples Requiring VOC Analyses

A separate aliquot of the composite homogenate should be placed in 40ml voa vial container for later analysis by the VOA department. Each container should be labeled with the lab identifier, date, initials, and "FOR VOA ANALYSIS ONLY". To minimize losses of volatile constituents, the sample should be kept as cold as possible, the work should be completed as quickly as possible, and the VOA vial filled to the top to minimize head space.

11.4. Sub-sampling

The sample is first thoroughly homogenized as per Section 11.2. A sample aliquot is removed and placed into a clean glass container of appropriate size and labeled as follows:

- the name of the sample,
- the lab code of the sample,
- "homogenized" written on the label,
- the purpose of the sub-sample (e.g. "dioxin subsample")
- the analyst's initials
- the date.

11.5. Freeze-Drying

11.5.1. Depending on project specifications, samples may require freeze-drying. Freeze-drying may be performed on a separate portion of sample to determine % Freeze-Dried Solids, or may be done on the analytical subsample for certain tests. The analyst should obtain direction from the supervisor and/or Project Chemist.

11.5.2. Weigh 5-8 g of sample (wet weight) into a scintillation vial. Freeze the sample for at least 2 hours.

11.5.3. Remove the sample from the freezer and place in the freeze drier for at least 24 hours or longer if necessary for the particular sample matrix.

11.5.4. Record the measurements on the applicable bench sheet.

11.5.5. When freeze drying samples that require PFOA/PFOA, aluminum foil must be placed on the container before putting the lid on, after the freeze drying process and before freezing the sample.

12. QA/QC REQUIREMENTS

12.1. A rinsate blank should be prepared to accompany each batch of tissue samples. The blank is comprised of a collection of DI water rinses of cleaned equipment (knives, cutting boards and mixers/grinders) ***prior*** to the commencement of sample batch preparation. If contamination of the samples is suspected, the rinsate blank is extracted and analyzed for contaminants. The rinsate blank should be labeled with the extraction date and the associated SR numbers and stored at 4˚ C. In the event that contamination is suspected, the rinsate blank can be analyzed to confirm the presence of contaminants in the tissue preparation process.

12.2. A homogenization blank is prepared to determine if the homogenization equipment was effectively cleaned between samples. Unless a project plan specifies otherwise, the laboratory prepares two homogenization blanks with each shift of sample preparation. One is a 500 mL aliquot for Metals testing and the other is a 1000 mL aliquot for Organics testing. Any requirements other than the labs default procedure must be defined in the project plan and communicated to the laboratory.

12.2.1. Some project quality plans may require homogenization blanks between each sample. Following the blending of a tissue sample decontaminate the Hobart mixer (model HCM62) by following these steps:

- Wash the bowl, blade assembly, and lid with soap and hot water.
- Rinse all parts with deionized water.
- Move to fume hood and hexane rinse all parts.
- Allow excess hexane to evaporate.

12.2.2. Reassemble the mixer and make ready for the next sample.

12.2.3. Fill the bowl with deionized water and turn the mixer on for the approximately average time used for the type of samples being processed.

12.2.4. Aliquot the deionized water to bottles appropriate for the testing being conducted and preserve accordingly. If insufficient sample volume is produced for the required testing, repeat the procedure after the next tissue sample is homogenized.

13. DATA REDUCTION AND REPORTING

13.1. Sample handling documentation must include information about sample homogenization (was it done or not), compositing, and sub-sampling. The established and applicable data bench sheets provide a means for recording this information. Completed bench sheets listing the sample handling information are filed in the project file with the raw data.

14. CONTINGENCIES FOR HANDLING OUT-OF-CONTROL OR UNACCEPTABLE DATA

14.1. Refer to the SOP for *Non Conformance and Corrective Action (CE-QA008)* for procedures for corrective action. Personnel at all levels and positions in the laboratory are to be alert to identifying problems and nonconformities when errors, deficiencies, or out-of-control situations are detected.

14.2. Handling out-of-control or unacceptable data

14.2.1. On-the-spot corrective actions that are routinely made by analysts and result in acceptable analyses should be documented as normal operating procedures, and no specific documentation need be made other than notations in laboratory maintenance logbooks, runlogs, for example.

14.2.2. Some examples when documentation of a nonconformity is required using a Nonconformity and Corrective Action Report (NCAR):

- Quality control results outside acceptance limits for accuracy and precision
- Method blanks or continuing calibration blanks (CCBs) with target analytes above acceptable levels
- Sample holding time missed due to laboratory error or operations
- Deviations from SOPs or project requirements
- Laboratory analysis errors impacting sample or QC results
- Miscellaneous laboratory errors (spilled sample, incorrect spiking, etc)
- Sample preservation or handling discrepancies due to laboratory or operations error

15. METHOD PERFORMANCE

15.1. Refer to determinative methods.

16. POLLUTION PREVENTION AND WASTE MANAGEMENT

16.1. It is the laboratory's practice to minimize the amount of solvents, acids, and reagents used to perform this method wherever feasibly possible. Standards are prepared in volumes consistent with methodology and only the amount needed for routine laboratory use is kept on site. The threat to the environment from solvents and/or reagents used in this method can be minimized when recycled or disposed of properly.

16.2. The laboratory will comply with all Federal, State, and local regulations governing waste management, particularly the hazardous waste identification rules and land disposal restrictions as specified in the ALS Environmental Health and Safety Manual.

16.3. This method uses non-halogenated solvents and any waste generated from this solvent must be collected. The solvent will then be added to the hazardous waste storage area and disposed of in accordance with Federal and State regulations.

17. TRAINING

17.1. Training outline – Training Plan

17.1.1. Review literature (see references section). Read and understand the SOP. Also review the applicable MSDS for all reagents and standards used. Following these reviews, observe the procedure as performed by an experienced analyst at least three times.

17.1.2. The next training step is to assist in the procedure under the guidance of an experienced analyst until the supervisor feels the new employee can work independently. During this period, the analyst is expected to transition from a role of assisting, to performing the procedure with minimal oversight from an experienced analyst.

17.2. Training is documented following ADM-TRAIN, ALS-Kelso Training Procedure.

When the analyst training is documented by the supervisor on internal training documentation forms, the supervisor is acknowledging that the analyst has read and understands this SOP and that adequate training has been given to the analyst to competently perform the analysis independently.

18. METHOD MODIFICATIONS

18.1. This section is not applicable because this procedure is a laboratory developed method.

19. REFERENCES

19.1. Kateman and L. Buydens, *Quality Control in Analytical Chemistry*, Second Edition, John Wiley & Sons, Inc., New York, NY, 1993: Chapter 2 on Sampling and especially sections 2.5 (Sample Quality) and 2.7 (Handling of Samples).

19.2. *Guidance For Assessing Chemical Contaminant Data For Use In Fish Advisories;* Volume 1; Fish Sampling and Analysis, 3rd Edition; USEPA Office of Water; EPA 823-B-00-007; Nov 2000.

19.3. *Recommended Protocols for Measuring Selected Environmental Variables in Puget Sound*; Tetra Tech, Inc.; final report TC-3991-04 Recommended Guidelines for Measuring Organic Compounds in Puget Sound Sediment and Tissue Samples Revision April 1996.

19.4. *PCB's and Mirex In Fish Tissue and Clams* New York State Department of Health Wadsworth Center For Laboratories and Research; Albany, N.Y. 10/6/81

19.5. *Draft Method 1613-Tissue*; Determination of PCDDs and PCDFs in Fish and Other Tissue Using Method 1613; USEPA Office of Water June 1993.

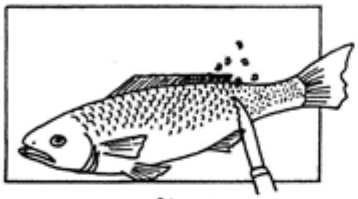
20. CHANGES SINCE THE LAST REVISION

20.1. Signature page: Updated Quality Assurance manager.
20.2. Added the sentence in Section 11.5.5.

APPENDIX A
Fish Filleting Procedure

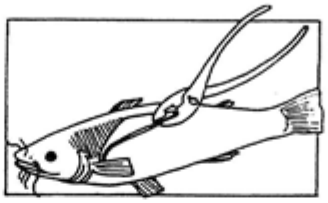
1 Scaled Fish

After removing the scales (by scraping with the edge of a knife) and rinsing the fish:



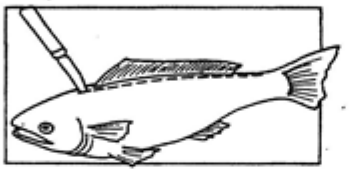
1b Scaleless Fish

Grasp the skin at the base of the head (preferably with pliers) and pull toward the tail.



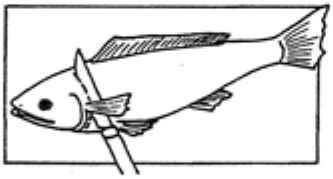
Note: This step applies only for catfish and other scaleless species.

2



Make a shallow cut through the skin (on either side of the dorsal fin) from the top of the head to the base of the tail.

3



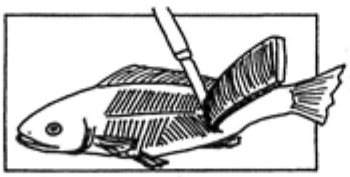
Make a cut behind the entire length of the gill cover, cutting through the skin and flesh to the bone.

4



Make a shallow cut along the belly from the base of the pectoral fin to the tail. A single cut is made from behind the gill cover to the anus and then a cut is made on both sides of the anal fin. Do not cut into the gut cavity as this may contaminate fillet tissues.

5



Remove the fillet.

Source: U.S. EPA, 1991d.

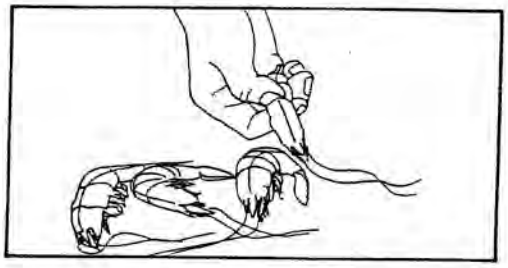
Figure 7-3. Illustration of basic fish filleting procedure.

APPENDIX B
General Procedure for Removing Edible Tissues from Shellfish

Heading, peeling and deveining shrimp

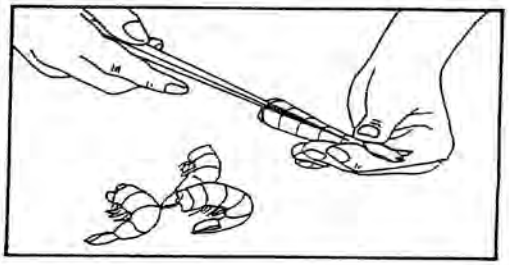
1

To head a shrimp, hold it in one hand. With your thumb behind shrimp head, push head off. Be sure to push just the head off so that you do not lose any meat.



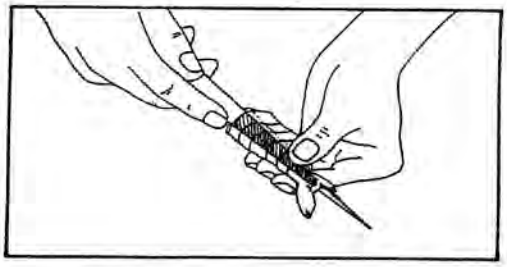
2

If using a deveiner, insert it at head end, just above the vein.



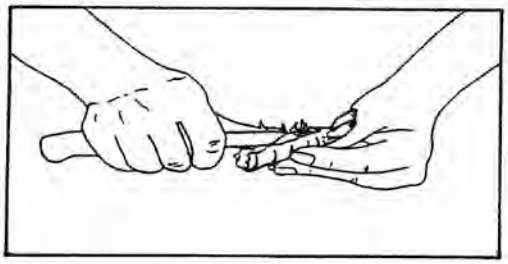
3

Push through shrimp to the tail and split and remove shell. This removes vein at the same time.



4

If you prefer to use a paring knife, shell shrimp with your fingers or knife. Then use knife to gently remove vein.



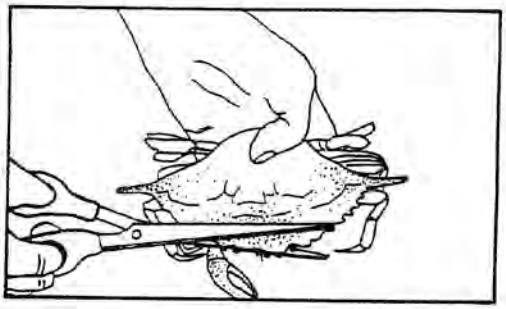
Source: UNC Sea Grant Publication UNC-SG-88-02

G-3

Cleaning soft-shell crabs

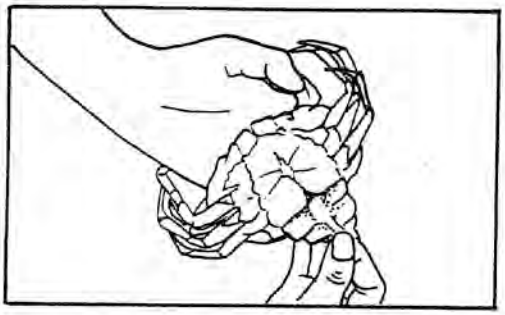
1

Hold crab in one hand and cut across body just behind eyes to remove eyes and mouth.



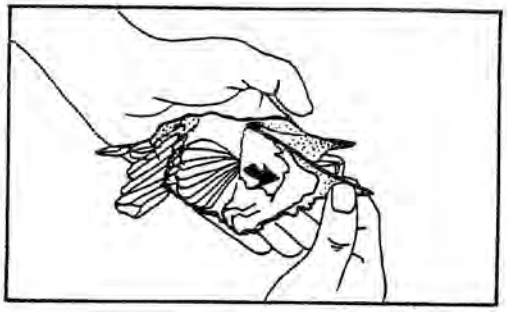
2

Turn crab on its back. Lift and remove apron and vein attached to it.



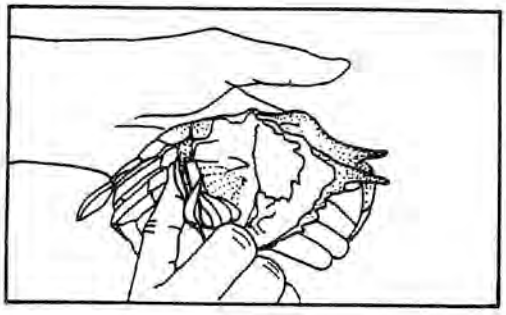
3

Turn crab over and lift one side of top shell.



4

With a small knife, scrape off grayish-feathery gills. Repeat procedure on other side.



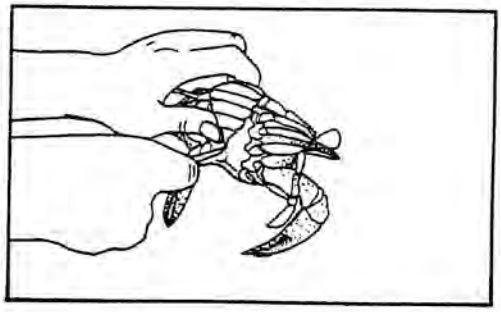
Source: UNC Sea Grant Publication UNC-SG-88-02

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Cleaning hard-shell crabs

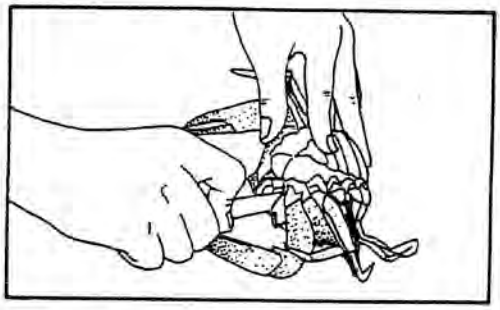
1

Hold crab in one hand. Turn crab over and stab straight down at point of apron with a knife.



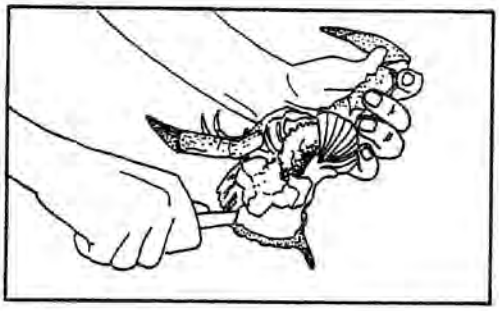
2

Make two cuts from this point to form a V-pattern that will remove mouth.



3

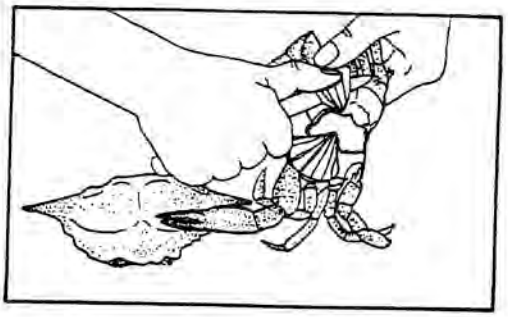
Do not remove knife after making second cut. Firmly press crab shell to cutting surface without breaking back shell. With other hand, grasp crab by legs and claws on the side where you are holding knife, and pull up. This should pull crab body free from back shell.



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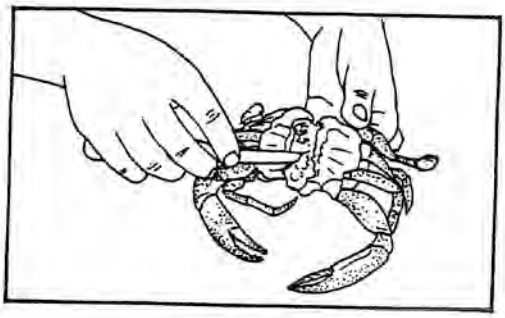
4

Remove gray, feathery gills, which are attached just above legs. Cut and scrape upward to remove gills.



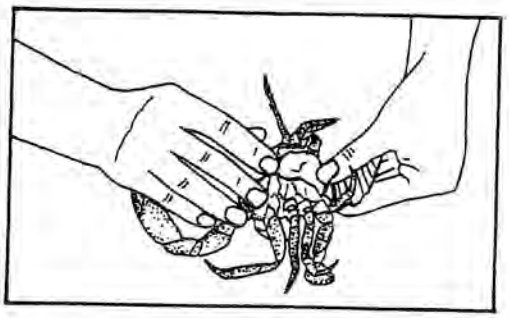
5

Remove all loose material—viscera and eggs—from body cavity.



6

If apron did not come loose with shell, remove it.



Source: UNC Sea Grant Publication UNC-SG-88-02

Shucking oysters

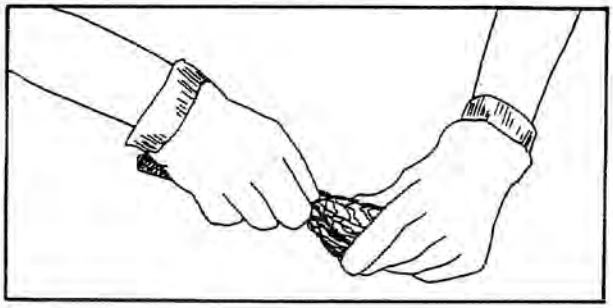
1

Oyster shells are especially sharp; be sure to wear gloves to protect your hands. Chip off a small piece of shell from the thin lip of the oyster until there is a small opening.



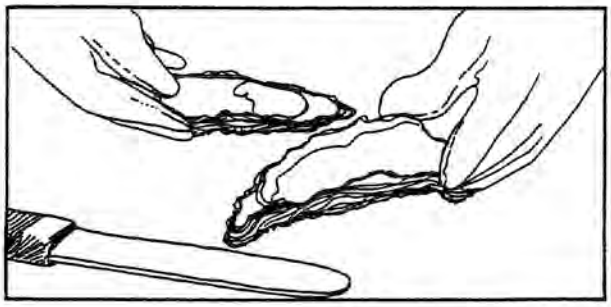
2

Insert knife blade into the opening and cut muscle free from top and bottom shells.



3

Remove oyster meat from the shell.



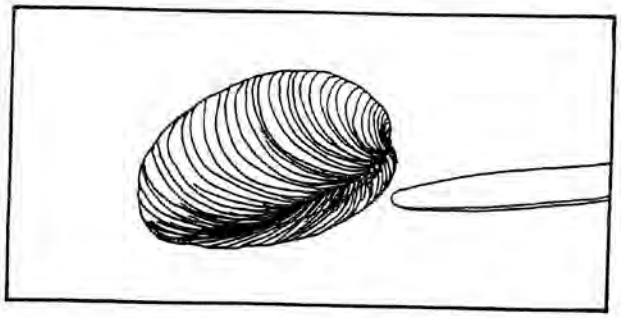
Source: UNC Sea Grant Publication UNC-SG-88-02

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Shucking clams

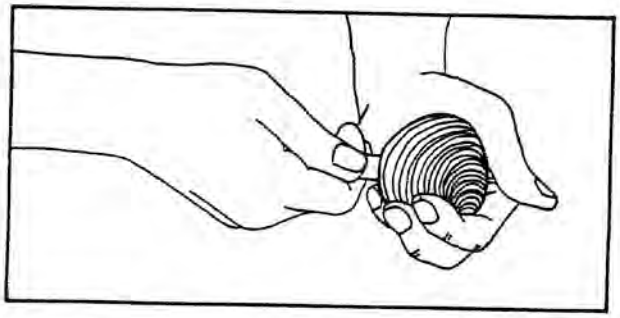
1

In the back of clam near the hinge is a black ligament. Toward the front where ligament ends is a weak spot. Insert your knife at this spot.



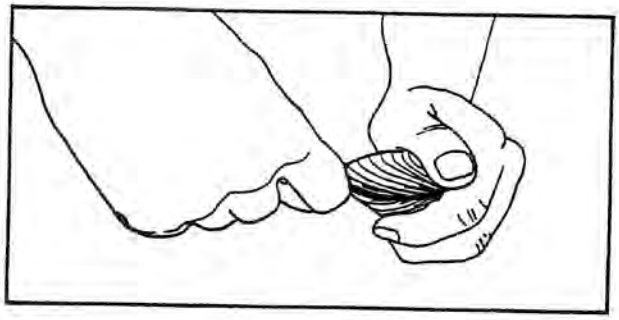
2

Inside are two muscles. Run the knife around the shell to sever both muscles.



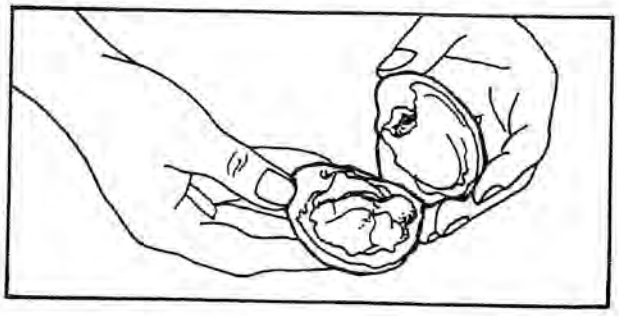
3

Now insert the knife blade into the front of the shell and separate the two shells.



4

Scrape the meat free from the top and bottom shell.



Source: UNC Sea Grant Publication UNC-SG-88-02

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APPENDIX E: CHAIN OF CUSTODY FORMS

Chain of Custody Record

Grette Associates, LLC

Grette Associates, LLC 2102 North 30th Tacoma, WA 98403 / 253-573-9300

Project: Johnson Lake Fish Tissue Monitoring Study
Number: 305.025
Client: Owens-Brockway
Samplers: CW/JLD/JD
Date: July 5-8, 2022

Sample Number	Species	Date	Time	Analysis	Notes
SWF-7-01	Stickleback	07/05/22	1226		← For Analysis
SWF-7-02	Stickleback	07/05/22	1256		List Please see
SWF-7-03	Stickleback	07/05/22	1312		Attached Quote!
SWF-1-04	Fathead Minnow	07/05/22	1418		
RF-1-05	Common Carp	07/05/22	1424		
RF-1-06	Common Carp	07/05/22	1555		
RF-1-07	Common Carp	07/05/22	1604		
RF-1-08	Common Carp	07/05/22	1613		
RF-1-09	Common Carp	07/05/22	1628		
LF-07-10	Common Carp	07/06/22	0808		
LF-07-11	Common Carp	07/06/22	0808		
LF-07-12	Common Carp	07/06/22	0808		
LF-07-13	Common Carp	07/06/22	0808		
LF-07-14	Common Carp	07/06/22	0808		
LF-07-15	Common Carp	07/06/22	0808		
LF-07-16	Common Carp	07/06/22	0808		
SF-01-17	Stickleback	07/06/22	1009		
SF-01-18	Stickleback	07/06/22	1009		
SF-07-19	Stickleback	07/06/22	1430		
SF-07-20	Stickleback	07/06/22	1430		
SF-07-21	Stickleback	07/06/22	1430		
SF-07-22	Stickleback	07/06/22	1430		
SF-07-23	Stickleback	07/06/22	1430		
SF-07-24	Stickleback	07/06/22	1430		
SF-07-25	Stickleback	07/06/22	1430		
SF-07-26	Stickleback	07/06/22	1430		
SF-07-27	Stickleback	07/06/22	1430		
SF-07-28	Stickleback	07/06/22	1430		
SF-07-29	Stickleback	07/06/22	1430		
SF-07-30	Stickleback	07/06/22	1430		

Box
Container #: 3
Airbill #:
Container ____ of ____

Quality Control
Recorder _____
Checked by _____

Custody Tracking

Relinquished	Date/Time	Received	Intact?
[signature]	7/8/22	M. Merrigan ALS 1435 7/8/22	

Chain of Custody Record

Grette Associates, LLC

Grette Associates, LLC 2102 North 30th Tacoma, WA 98403 / 253-573-9300

Project: Johnson Lake Fish Tissue Monitoring Study
Number: 305.025
Client: Owens-Brockway
Samplers: CW/JLD/JD
Date: July 5-8, 2022

Sample Number	Species	Date	Time	Analysis	Notes
SF-07-31	Stickleback	07/06/22	1430		
SF-07-32	Stickleback	07/06/22	1430		
SF-07-33	Stickleback	07/06/22	1430		
SF-07-34	Stickleback	07/06/22	1430		
SF-07-35	Stickleback	07/06/22	1430		
SF-07-36	Stickleback	07/06/22	1430		
SF-07-37	Stickleback	07/06/22	1430		
SF-07-38	Stickleback	07/06/22	1430		
LF-02-39	Common Carp	07/07/22	0800		
SF-02-40	Fathead Minnow	07/07/22	1110		
GF-01-41	Large mouth Bass	07/08/22	0805		
RF-01-42	Common Carp	07/08/22	0805		
LF-01-43	Common Carp	07/08/22	0805		
LF-01-44	Common Carp	07/08/22	0805		
LF-01-45	Common Carp	07/08/22	0945		
RF-01-46	Common Carp	07/08/22	1053		

Bag
Container #: 3
Airbill #:
Container ____ of ____

Quality Control
Recorder _____
Checked by _____

Custody Tracking

Relinquished	Date/Time	Received	Intact?

JOHNSON LAKE FISH TISSUE MONITORING

APPENDIX F: FISH SPECIMEN PHOTOGRAPHS



Photo 1. Specimen SF-7-01, three-spine stickleback

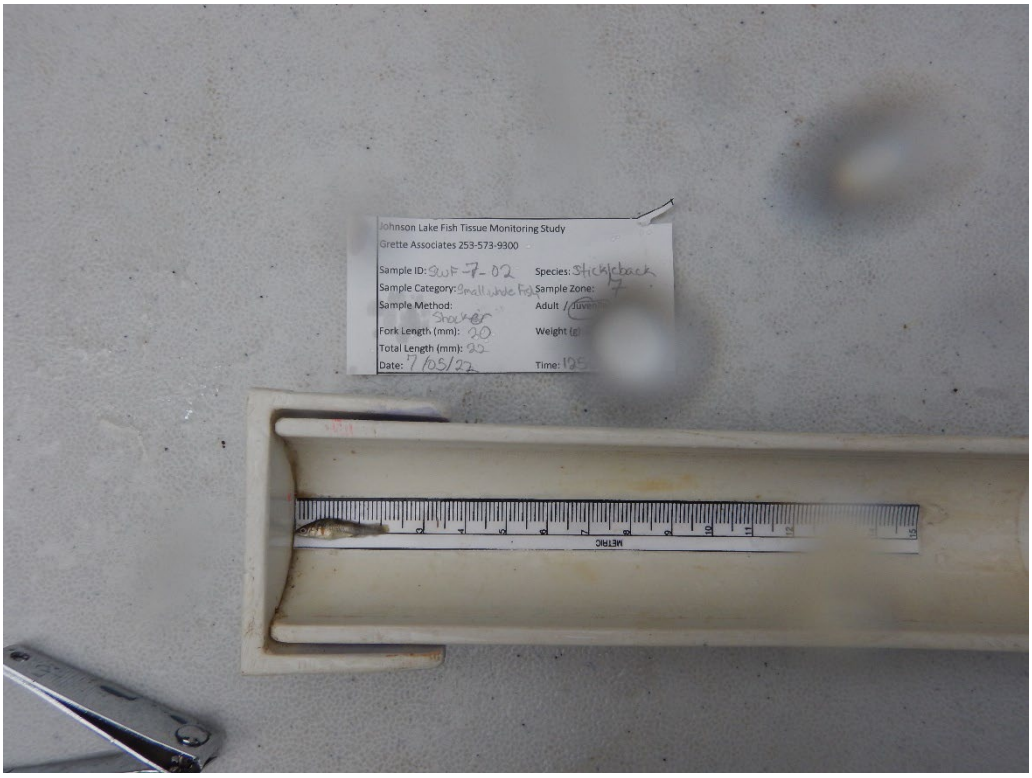


Photo 2. Specimen SF-7-02, three-spine stickleback



Photo 3. Specimen SF-7-03, three-spine stickleback



Photo 4. Specimen SWF-1-04, fathead minnow



Photo 5. Specimen RF-1-05, common carp



Photo 6. Specimen RF-1-06, largescale sucker



Photo 7. Specimen RF-1-07, common carp



Photo 8. Specimen RF-1-08, common carp



Photo 9. Specimen RF-1-09, common carp



Photo 10. Specimen LF-7-10, largescale sucker



Photo 11. Specimen LF-7-11, largescale sucker



Photo 12. Specimen LF-7-12, largescale sucker



Photo 13. Specimen LF-7-13, largescale sucker



Photo 14. Specimen LF-7-14, largescale sucker



Photo 15. Specimen LF-7-15, largescale sucker



Photo 16. Specimen LF-7-16, largescale sucker



Photo 17. Specimen SF-1-17, three-spine stickleback



Photo 18. Specimen SF-1-18, three-spine stickleback

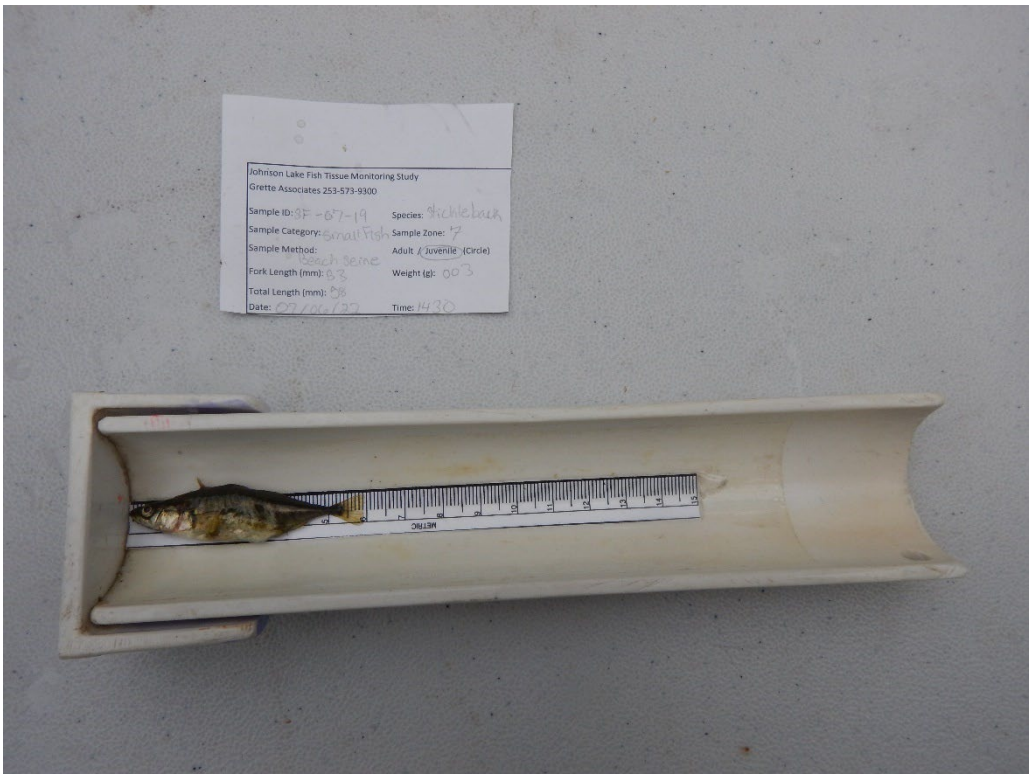


Photo 19. Specimen SF-7-19, three-spine stickleback



Photo 20. Specimen SF-7-20, three-spine stickleback



Photo 21. Specimen SF-7-21, three-spine stickleback

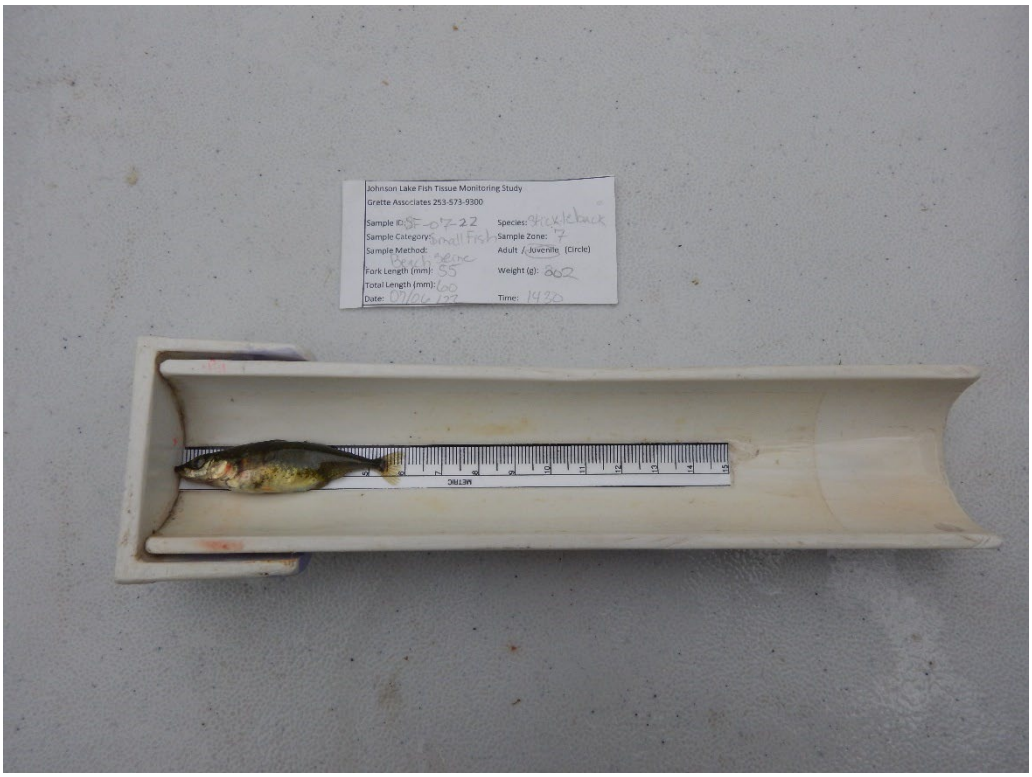


Photo 22. Specimen SF-7-22, three-spine stickleback

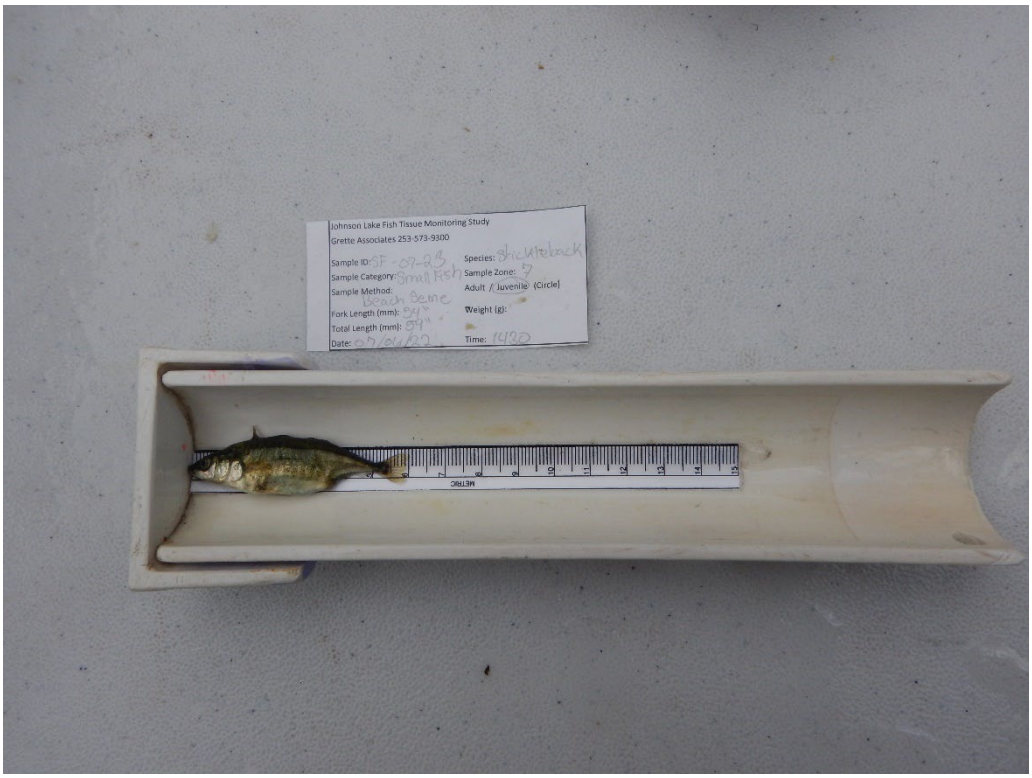


Photo 23. Specimen SF-7-23, three-spine stickleback



Photo 24. Specimen SF-7-24, three-spine stickleback

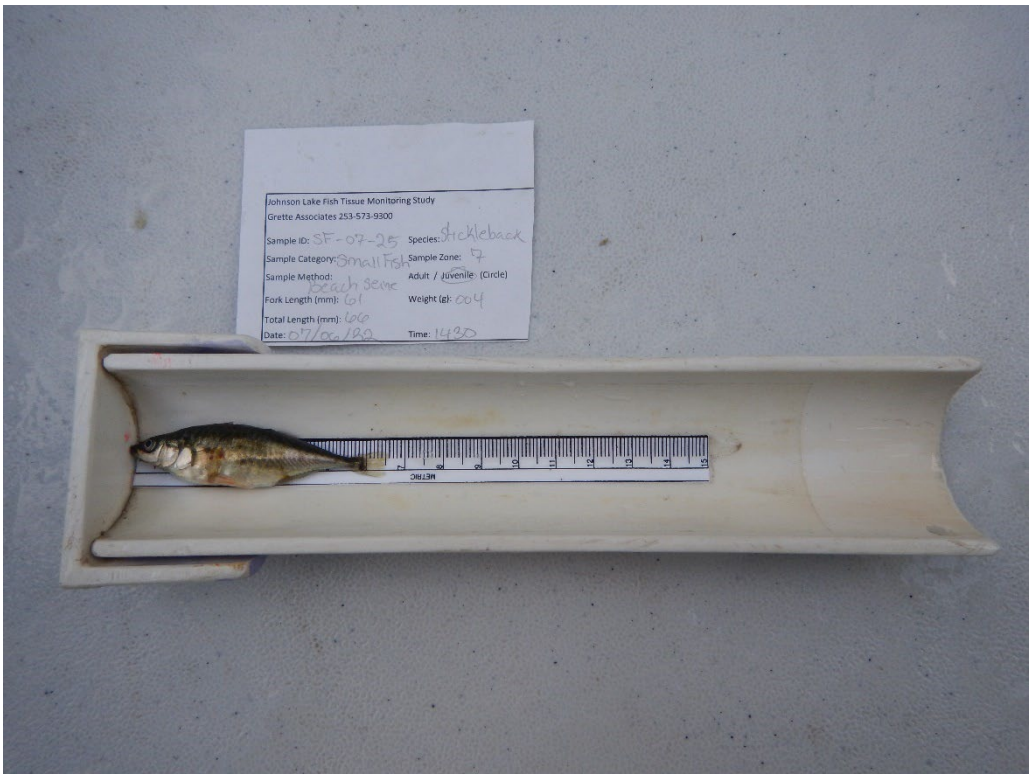


Photo 25. Specimen SF-7-25, three-spine stickleback



Photo 26. Specimen SF-7-26, three-spine stickleback



Photo 27. Specimen SF-7-27, three-spine stickleback



Photo 28. Specimen SF-7-28, three-spine stickleback



Photo 29. Specimen SF-7-29, three-spine stickleback



Photo 30. Specimen SF-7-30, three-spine stickleback

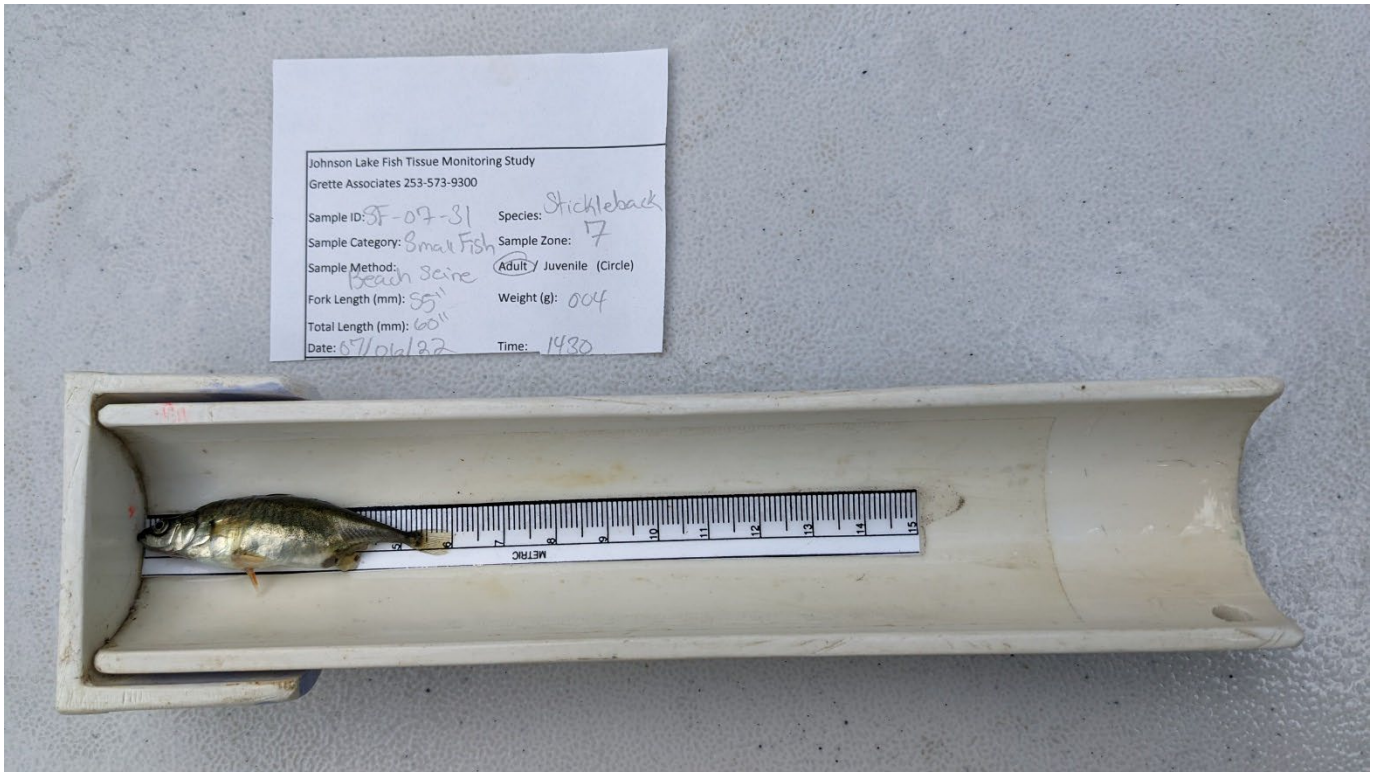


Photo 31. Specimen SF-7-31, three-spine stickleback



Photo 32. Specimen SF-7-32, three-spine stickleback



Photo 33. Specimen SF-7-33, three-spine stickleback



Photo 34. Specimen SF-7-34, three-spine stickleback



Photo 35. Specimen SF-7-35, three-spine stickleback



Photo 36. Specimen SF-7-36, three-spine stickleback



Photo 37. Specimen SF-7-37, three-spine stickleback



Photo 38. Specimen SF-7-38, three-spine stickleback



Photo 39. Specimen LF-2-39, largescale sucker



Photo 40. Specimen SF-2-40, fathead minnow



Photo 41. Specimen GF-1-41, largemouth bass



Photo 42. Specimen RF-1-42, common carp



Photo 43. Specimen LF-1-43, common carp



Photo 44. Specimen LW-1-44, common carp



Photo 45. Specimen LF-4-45, largescale sucker



Photo 46. Specimen RF-1-46, common carp

JOHNSON LAKE FISH TISSUE MONITORING

APPENDIX G: APPROVED SAMPLE COMPOSITING PLAN

Date/Time Caught	Sample ID	Zone Sampled	Species	Adult/Juvenile	Sampling Method	Fork/Total Length (mm)	Fork Length (mm)	Total Length (mm)	Mass (grams)	Composite Name	Whole/Fillet	Length 75% check	Notes
7/6/2022; 0808	LF-07-13	7	Common Carp	Adult	Gill Net	595/618	595	618	2680	LargeRough-WB-1	Whole body	0.9748	Prioritize obtaining reasonable maximum data (whole body and fillet). This is also a rough fish composite.
7/7/2022; 0800	LF-02-39	2	Common Carp	Adult	Gill Net	585/615	585	615	2220				
7/8/2022; 0945	LWF-4-45	4	Common Carp	Adult	Electroshocking	580/613	580	613	2320				
7/6/2022; 0808	LF-07-10	7	Common Carp	Adult	Gill Net	578/604	578	604	2490	LargeRough-Fillet-1	Fillet	0.9516	Prioritize obtaining reasonable maximum data (whole body and fillet)
7/6/2022; 0808	LF-07-12	7	Common Carp	Adult	Gill Net	550/568	550	568	2080				
7/6/2022; 0808	LF-07-16	7	Common Carp	Adult	Gill Net	550/574	550	574	2040				
7/6/2022; 0808	LF-07-15	7	Common Carp	Adult	Gill Net	549/575	549	575	2070	LargeRough-WB-1-Dup	Whole body	0.8616	Primary and dup are just outside the 10% criteria (~12%). However. This allows more similar lengths between large whole body and large fillet samples.
7/6/2022; 0808	LF-07-14	7	Common Carp	Adult	Gill Net	520/540	520	540	1940				
7/8/2022; 0805	LWF-1-44	1	Common Carp	Adult	Gill Net	473/506	473	506	2030				
7/6/2022; 0808	LF-07-11	7	Common Carp	Adult	Gill Net	420/436	420	436	960	MediumRough-WB-1	Whole body	0.6119	Does not meet 75% length criteria, but will provide useful information on size class
7/8/2022; 0805	LWF-1-43	1	Common Carp	Adult	Gill Net	342/361	342	361	750				
7/8/2022; 0805	RF-1-42	1	Common Carp	Adult	Gill Net	257/277	257	277	366				
7/5/2022; 1555	RF-1-06	1	Common Carp	Juvenile	Electroshocking	231/240	231	240	161	MediumRough-WB-J1	Whole body	0.6234	Does not meet 75% length criteria, but will provide useful information on size class
7/5/2022; 1424	RF-1-05	1	Common Carp	Juvenile	Electroshocking	155/162	155	162	86				
7/8/2022; 1053	RF-1-46	1	Common Carp	Juvenile	Electroshocking	144/152	144	152	72				
7/5/2022; 1613	RF-1-08	1	Common Carp	Juvenile	Electroshocking	135/148	135	148	57	MediumRough-WB-J2	Whole body	0.8296	Medium defined as 125-350mm according to Arcadis 2004 Investigation Work Plan. One fish in this composite is <125mm, but average fits the criteria for medium category.
7/5/2022; 1604	RF-1-07	1	Common Carp	Juvenile	Electroshocking	117/127	117	127	35				
7/5/2022; 1628	RF-1-09	1	Common Carp	Juvenile	Electroshocking	112/120	112	120	34				
7/7/2022; 1110	SF-02-40	2	Fathead Minnow	Adult	Fyke Net	64/66	64	66	4	Small-WB-Min1	Whole body	0.9375	Is this mass enough for lab analysis?
7/5/2022; 1418	SWF-7-04	1	Fathead Minnow	Adult	Electroshocking	60/65	60	65	4				
7/8/2022; 0805	GF-1-41	1	Largemouth Bass	Adult	Gill Net	316/334	316	334	620	Game-Bass	Fillet & Carcass	-	Only one fish (and only game fish), want as much information as possible. Fillet + carcass = whole body.
7/6/2022; 1430	SF-01-21	7	Three-Spine Stickleback	Adult	Beach Seine	62/68	62	68	4	Small-WB-Stick1	Whole body	0.8710	
7/6/2022; 1430	SF-01-25	7	Three-Spine Stickleback	Adult	Beach Seine	61/66	61	66	4				
7/6/2022; 1430	SF-01-26	7	Three-Spine Stickleback	Adult	Beach Seine	61/66	61	66	4				
7/6/2022; 1430	SF-01-32	7	Three-Spine Stickleback	Adult	Beach Seine	56/62	56	62	3				
7/6/2022; 1430	SF-01-22	7	Three-Spine Stickleback	Adult	Beach Seine	55/60	55	60	2				
7/6/2022; 1430	SF-01-24	7	Three-Spine Stickleback	Adult	Beach Seine	55/60	55	60	4				
7/6/2022; 1430	SF-01-29	7	Three-Spine Stickleback	Adult	Beach Seine	55/60	55	60	4				
7/6/2022; 1430	SF-01-31	7	Three-Spine Stickleback	Adult	Beach Seine	55/60	55	60	4				
7/6/2022; 1430	SF-01-23	7	Three-Spine Stickleback	Adult	Beach Seine	54/59	54	59	4				
7/6/2022; 1430	SF-01-33	7	Three-Spine Stickleback	Adult	Beach Seine	54/59	54	59	3				
7/5/2022; 1226	SWF-7-01	7	Three-Spine Stickleback	Adult	Electroshocking	53/57	53	57	3	Small-WB-Stick2	Whole body	0.9057	
7/6/2022; 1430	SF-01-19	7	Three-Spine Stickleback	Adult	Beach Seine	53/58	53	58	3				
7/6/2022; 1430	SF-01-28	7	Three-Spine Stickleback	Adult	Beach Seine	51/56	51	56	3				
7/5/2022; 1312	SWF-7-03	7	Three-Spine Stickleback	Adult	Electroshocking	50/55	50	55	3				
7/6/2022; 1430	SF-01-37	7	Three-Spine Stickleback	Adult	Beach Seine	50/55	50	55	3				
7/6/2022; 1430	SF-01-27	7	Three-Spine Stickleback	Adult	Beach Seine	49/54	49	54	3				
7/6/2022; 1430	SF-01-30	7	Three-Spine Stickleback	Adult	Beach Seine	49/54	49	54	2				
7/6/2022; 1430	SF-01-35	7	Three-Spine Stickleback	Adult	Beach Seine	49/55	49	55	2				
7/6/2022; 1430	SF-01-38	7	Three-Spine Stickleback	Adult	Beach Seine	49/54	49	54	3				
7/6/2022; 1430	SF-01-36	7	Three-Spine Stickleback	Adult	Beach Seine	48/53	48	53	3				
7/6/2022; 1009	SF-01-17	1	Three-Spine Stickleback	Adult	Beach Seine	61/67	61	67	5	*Not Analyzed*	Not Analyzed	-	Stickleback from Zone 1 and smallest Stickleback not included in composites
7/6/2022; 1009	SF-01-18	1	Three-Spine Stickleback	Adult	Beach Seine	50/56	50	56	3				
7/6/2022; 1430	SF-01-20	7	Three-Spine Stickleback	Adult	Beach Seine	47/54	47	54	2				
7/6/2022; 1430	SF-01-34	7	Three-Spine Stickleback	Juvenile	Beach Seine	40/45	40	45	1				
7/5/2022; 1256	SWF-7-02	7	Three-Spine Stickleback	Juvenile	Electroshocking	20/22	20	22	<1				

* Red text indicates species was misidentified (originally identified as common carp, later found to be largescale sucker)

JOHNSON LAKE FISH TISSUE MONITORING

APPENDIX H: COORDINATES FOR FISH SAMPLING AND CAPTURE LOCATIONS

Point coordinates for sample gear deployment in Johnson Lake		
Point Name	**Latitude**	**Longitude**
Fyke Net 1	45.564978540°N	122.563246304°W
Fyke Net 2	45.565968970°N	122.562192147°W
Fyke Net 3	45.566383982°N	122.564615056°W
Gill Net 1	45.564807128°N	122.561905960°W
Gill Net 2	45.565840349°N	122.562463587°W
Gill Net 3	45.566236249°N	122.566233983°W
Beach Seine[1]	45.564633898°N	122.562293994°W

[1] Only one location for beach seine deployment was documented using dGPS.

Point coordinates for Electroshocking Captures in Johnson Lake		
Point Name	**Latitude**	**Longitude**
SL 1	45.565010654°N	122.562829154°W
SL 2	45.564842086°N	122.561487850°W
SL 3	45.564855284°N	122.562373185°W
SL 4	45.566252142°N	122.565381336°W
SL 5	45.566267996°N	122.566071726°W
SL 6	45.565743813°N	122.565498037°W
SL 7	45.566175292°N	122.565881380°W
SL 8	45.566220575°N	122.566051056°W
SL 9	45.566193373°N	122.566289642°W
SL 10	45.565618132°N	122.563430156°W
SL 11	45.566348471°N	122.565713597°W
SL 12[1]	N/A	N/A
SL 13[1]	N/A	N/A

[1] GPS positions for these points were corrupted and not able to be corrected.

NOTE: Differential GPS positions were not recorded for angling (hook & line) sampling, as no fish were captured using this method and angling was conducted in all parts of Johnson Lake.

JOHNSON LAKE FISH TISSUE MONITORING

APPENDIX I: LABORATORY ANALYTICAL REPORT FOR PCB CONGENERS

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

November 29, 2022 **Analytical Report for Service Request No:** K2211392

Scott Maharry
GRETTE ASSOCIATES LLC
2102 N 30th, Ste A
Tacoma, WA 98403

RE: Johnson Lake Fish Tissue Monitoring Study / 305.025

Dear Scott,

Enclosed are the results of the sample(s) submitted to our laboratory July 08, 2022
For your reference, these analyses have been assigned our service request number **K2211392.**

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

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

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental



Luke Rahn
Project Manager

ALS Environmental
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Acronyms

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

Inorganic Data Qualifiers

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

Metals Data Qualifiers

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

Organic Data Qualifiers

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

Additional Petroleum Hydrocarbon Specific Qualifiers

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

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

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

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Case Narrative

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

ALS Environmental

Client: GRETTE ASSOCIATES LLC
Service Request: K2211392
Project: Johnson Lake Fish Tissue Monitoring Study
Date Received: 07/08/2022
Sample Matrix: Fish Tissue

CASE NARRATIVE

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

Sample Receipt:

Eight fish tissue samples were received for analysis at ALS Environmental on 07/08/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Subcontracted Analytical Parameters:

PCB Congeners by EPA Method 1668C
The analysis for PCB Congeners was performed at ALS Burlington, Ontario Laboratory. The data for this analysis is included in the corresponding section of this report.

Approved by _____ Date 11/29/2022

Chain of Custody

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

11397
KZ207713

Chain of Custody Record

Grette Associates, LLC

Grette Associates, LLC 2102 North 30th Tacoma, WA 98403 / 253-573-9300

Project: Johnson Lake Fish Tissue Monitoring Study
Client: Owens-Brockway
Date: July 5-8, 2022
Number: 305.025
Samplers: CW/JLD/JD

Sample Number	Species	Date	Time	Analysis	Notes
SWF-7-01	Stickleback	07/05/22	1226		← For Analysis
SWF-7-02	Stickleback	07/05/22	1256		List Please see
SWF-7-03	Stickleback	07/05/22	1312		Attached Quote!
SWF-1-04	Fathead Minnow	07/05/22	1418		
RF-1-05	Common Carp	07/05/22	1424		
RF-1-06	Common Carp	07/05/22	1555		
RF-1-07	Common Carp	07/05/22	1604		
RF-1-08	Common Carp	07/05/22	1613		
RF-1-09	Common Carp	07/05/22	1628		
LF-07-10	Common Carp	07/06/22	0808		
LF-07-11	Common Carp	07/06/22	0808		
LF-07-12	Common Carp	07/06/22	0808		
LF-07-13	Common Carp	07/06/22	0808		
LF-07-14	Common Carp	07/06/22	0808		
LF-07-15	Common Carp	07/06/22	0808		
LF-07-16	Common Carp	07/06/22	0808		
SF-01-17	Stickleback	07/06/22	1009		
SF-01-18	Stickleback	07/06/22	1009		
SF-01-19	Stickleback	07/06/22	1430		
SF-07-20	Stickleback	07/06/22	1430		
SF-07-21	Stickleback	07/06/22	1430		
SF-07-22	Stickleback	07/06/22	1430		
SF-07-23	Stickleback	07/06/22	1430		
SF-07-24	Stickleback	07/06/22	1430		
SF-07-25	Stickleback	07/06/22	1430		
SF-07-26	Stickleback	07/06/22	1430		
SF-07-27	Stickleback	07/06/22	1430		
SF-07-28	Stickleback	07/06/22	1430		
SF-07-29	Stickleback	07/06/22	1430		
SF-07-30	Stickleback	07/06/22	1430		

Bag 3
Container #:
Airbill #:
Container ____ of ____

Quality Control
Recorder _____
Checked by _____

Custody Tracking

Relinquished	Date/Time	Received	Intact?
	7/8/22	M. Meegan ACS 1435 7/8/22	

11397
K2207713

Chain of Custody Record

Grette Associates, LLC

Grette Associates, LLC 2102 North 30th Tacoma, WA 98403 / 253-573-9300

Project: Johnson Lake Fish Tissue Monitoring Study
Client: Owens-Brockway
Date: July 5-8, 2022
Number: 305.025
Samplers: CW/JLD/JD

Sample Number	Species	Date	Time	Analysis	Notes
SF-07-31	Stickleback	07/06/22	1430		
SF-07-32	Stickleback	07/06/22	1430		
SF-07-33	Stickleback	07/06/22	1430		
SF-07-34	Stickleback	07/06/22	1430		
SF-07-35	Stickleback	07/06/22	1430		
SF-07-36	Stickleback	07/06/22	1430		
SF-07-37	Stickleback	07/06/22	1430		
SF-07-38	Stickleback	07/06/22	1430		
LF-02-39	Common Carp	07/07/22	0800		
SF-02-40	Fathead Minnow	07/07/22	1110		
GF-01-41	Large mouth Bass	07/08/22	0805		
RF-01-42	Common Carp	07/08/22	0805		
LF-01-43	Common Carp	07/08/22	0805		
LF-01-44	Common Carp	07/08/22	0805		
LF-01-45	Common Carp	07/08/22	0945		
RF-01-46	Common Carp	07/08/22	1053		

Container #: Bag 3
Airbill #:
Container ____ of ____

Quality Control
Recorder _____
Checked by _____

Custody Tracking

Relinquished	Date/Time	Received	Intact?
		M. Mulligan 7/8/22 1435	

Page 2

11392 PM LR

Cooler Receipt and Preservation Form

Client Grette Associates Service Request K22 07713

Received: 7/8/22 Opened: 7/8/22 By: mm Unloaded: 7/8/22 By: mm

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

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp indicate with "X"	PM Notified if out of temp	Tracking Number NA	Filed
	3.7	1802					

4. Was a Temperature Blank present in cooler? NA Y N If yes, notate the temperature in the appropriate column above:
   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
5. Were samples received within the method specified temperature ranges? NA Y N
   If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. NA Y N

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

6. Packing material: *Inserts* *Baggies* *Bubble Wrap* *Gel Packs* *Wet Ice* *Dry Ice* *Sleeves* _____
7. Were custody papers properly filled out (ink, signed, etc.)? NA Y N
8. Were samples received in good condition (unbroken) NA Y N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA Y N
10. Did all sample labels and tags agree with custody papers? NA Y N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA Y N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA Y N
13. Were VOA vials received without headspace? *Indicate in the table below.* NA Y N
14. Was C12/Res negative? NA Y N
15. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? NA Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

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

Notes, Discrepancies, Resolutions: _____

1/13/22 *Page of*

Subcontract Lab Results

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

1435 Norjohn Court, Unit 1, Burlington, ON, Canada L7L 0E6

SVOC DATA PACKAGE

Client Project Information

Project ID: K2211392
Project Description:
Contact: Luke Rahn

ALSE Project Information

Project ID: ALS880
Contact: Claire Kocharakkal
Submission ID(s): L2735553

Final Package Review by: _____

Date Reviewed: 28-Nov-22

1435 Norjohn Court, Unit 1, Burlington, ON, Canada L7L 0E6

SVOC DATA PACKAGE

SECTION 1: PROJECT NARRATIVE

ALSE Project Information

Project ID: ALS880

Contact: Claire Kocharakkal
Submission ID(s): L2735553

Client Project Information

Project ID: K2211392
Project Description:
Contact: Luke Rahn

Analytical Method: PCB Congeners by EPA 1668C

ALS Sample ID	Client Sample Descriptions	Matrix	Date Sampled	Date Received	Date Extracted	Date Analyzed
L2735553-1	LARGEROUGH-WB-1	Fish Tissue	06-Jul-22	04-Oct-22	21-Oct-22	10-Nov-22
L2735553-2	LARGEROUGH-FILLET-1	Fish Tissue	06-Jul-22	04-Oct-22	21-Oct-22	10-Nov-22
L2735553-3	LARGEROUGH-WB-1-DUP	Fish Tissue	06-Jul-22	04-Oct-22	21-Oct-22	10-Nov-22
L2735553-4	MEDIUMROUGH-WB-1	Fish Tissue	06-Jul-22	04-Oct-22	21-Oct-22	10-Nov-22
L2735553-5	MEDIUMROUGH-WB-J1	Fish Tissue	05-Jul-22	04-Oct-22	21-Oct-22	10-Nov-22
L2735553-6	MEDIUMROUGH-WB-J2	Fish Tissue	05-Jul-22	04-Oct-22	21-Oct-22	10-Nov-22
L2735553-7	SMALL-WB-STICK1	Fish Tissue	06-Jul-22	04-Oct-22	21-Oct-22	10-Nov-22
L2735553-8	SMALL-WB-STICK2	Fish Tissue	05-Jul-22	04-Oct-22	21-Oct-22	10-Nov-22
WG3767228-1	Method Blank	QC	n/a	n/a	21-Oct-22	10-Nov-22
WG3767228-2	Laboratory Control Sample	QC	n/a	n/a	21-Oct-22	10-Nov-22
WG3767228-4	Matrix Spike	QC	n/a	n/a	21-Oct-22	10-Nov-22
WG3767228-5	Matrix Spike Duplicate	QC	n/a	n/a	21-Oct-22	10-Nov-22

Comments and Notes:
a) Sample Integrity:

The samples were received in good condition at 1.1 degrees C.

b) Instrumental Analysis:

All results have been reported on an as-received (wet weight) basis.

For the matrix spike and matrix spike duplicate, the results are outside the method control limits for some targets. All are cases where the parent sample value exceeds the fortification level.

Some results have been reported from the analysis of diluted extracts due to elevated target concentrations and interferences causing localized suppression.

I certify that this data package is in compliance with the terms and condition of the contract , both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this data package (hardcopy and/or electronic version) has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Steve Kennedy, Technical Supervisor

28-Nov-22
Date

1435 Norjohn Court, Unit 1, Burlington, ON, Canada L7L 0E6

SVOC DATA PACKAGE

SECTION 2: DATA SUMMARY REPORT

1435 Norjohn Court, Unit 1, Burlington, ON, Canada L7L 0E6
Phone: 905-331-3111, FAX: 905-331-4567

Certificate of Analysis

ALS Project Contact:	Claire Kocharakkal	**Client Name:**	ALS Environmental - Kelso
ALS Project ID:	ALS880	**Client Address:**	1317 South 13th Avenue
ALS WO#:	L2735553		Kelso, WA
Date of Report	28-Nov-22		98626
Date of Sample Receipt	4-Oct-22	**Client Contact:**	Luke Rahn
		Client Project ID:	K2211392

COMMENTS: **PCB Congeners by EPA 1668C**

PCB Congener Group Totals and Total PCB are a sum of detected values, including EMPC values, consistent with USEPA CLP SOW CBC1.2

All results have been reported on an as-received (wet weight) basis.

For the matrix spike and matrix spike duplicate, the results are outside the method control limits for some targets. All are cases where the parent sample value exceeds the fortification level.

Some results have been reported from the analysis of diluted extracts due to elevated target concentrations and interferences causing localized suppression.

Certified by:

Steve Kennedy
Technical Supervisor

Results in this certificate relate only to the samples as submitted to the laboratory.
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Sample Analysis Summary Report

Sample Name	LARGEROUGH-WB-1	LARGEROUGH-FILLET-1	LARGEROUGH-WB-1-DUP	MEDIUMROUGH-WB-1	MEDIUMROUGH-WB-J1	MEDIUMROUGH-WB-J2
ALS Sample ID	L2735553-1	L2735553-2	L2735553-3	L2735553-4	L2735553-5	L2735553-6
Sample Size	5.01	10	8.22	7.54	10.04	10.03
Sample size units	g wwt	g wwt	g wwt	g wwt	g wwt	g wwt
Percent Moisture	n/a	n/a	n/a	n/a	n/a	n/a
Sample Matrix	Fish tissue	Fish tissue	Fish tissue	Fish tissue	Fish tissue	Fish tissue
Sampling Date	6-Jul-22	6-Jul-22	6-Jul-22	6-Jul-22	5-Jul-22	5-Jul-22
Extraction Date	21-Oct-22	21-Oct-22	21-Oct-22	21-Oct-22	21-Oct-22	21-Oct-22
Target Analytes	**pg/g wwt**	**pg/g wwt**	**pg/g wwt**	**pg/g wwt**	**pg/g wwt**	**pg/g wwt**
PCB-001	0.852	0.648	0.577	0.341	0.439	0.653
PCB-002	8.77	4.65	7.09	5.56	7.10	6.67
PCB-003	1.23	1.01	0.909	0.517	1.53	1.30
PCB-004	4.11	2.03	2.94	1.63	1.56	0.925
PCB-010	<0.13	<0.065	<0.071	<0.081	<0.048	<0.066
PCB-009	1.76	0.834	<1.3	1.51	<0.96	1.51
PCB-007	<0.13	<0.065	<0.49	<0.081	<0.27	<0.076
PCB-006	3.35	1.47	2.86	3.00	2.05	3.72
PCB-005	<0.29	<0.069	<0.14	<0.086	<0.050	<0.070
PCB-008	14.6	6.52	13.0	14.8	8.13	22.8
PCB-014	<0.15	<0.10	<0.11	<0.14	<0.076	<0.10
PCB-011	74.6	41.3	225	222	206	248
PCB-012/013	<1.5	0.821	2.35	<2.6	<2.7	<3.1
PCB-015	2.34	<1.1	<2.8	4.10	<3.1	5.51
PCB-019	2.64	1.04	2.18	1.56	0.506	0.131
PCB-018/030	26.8	11.0	33.0	48.6	13.3	20.5
PCB-017	21.2	7.19	20.8	14.5	6.82	17.9
PCB-027	3.62	1.27	3.57	3.66	0.748	0.552
PCB-024	<0.68	0.328	0.890	1.18	0.441	1.36
PCB-016	12.1	4.93	11.1	11.2	3.16	2.09
PCB-032	10.6	3.05	10.1	12.7	2.54	5.56
PCB-034	0.529	<0.16	0.764	0.830	0.505	1.54
PCB-023	<0.21	<0.095	0.227	<0.16	<0.11	0.259
PCB-026/029	18.3	6.41	23.9	27.7	13.1	35.9
PCB-025	7.31	2.38	7.12	11.7	4.44	12.1
PCB-031	52.8	24.9	82.3	124	73.7	221
PCB-020/028	249	81.9	298	227	122	378
PCB-021/033	35.7	11.6	43.0	34.2	12.6	43.0
PCB-022	32.4	11.9	41.8	43.4	19.2	56.3
PCB-036	<0.18	<0.084	<0.10	<0.31	0.496	<0.39
PCB-039	<0.89	0.330	1.73	0.726	0.435	0.822
PCB-038	<0.52	0.223	0.877	0.380	0.194	<0.39
PCB-035	<0.21	<0.098	<0.23	0.306	<0.27	<0.20
PCB-037	10.3	5.10	13.6	15.0	12.6	28.9
PCB-054	0.331	<0.074	0.194	<0.095	<0.028	<0.023
PCB-050/053	31.5	7.17	24.1	9.97	2.14	0.778
PCB-045/051	27.6	7.81	26.7	14.4	4.34	7.58
PCB-046	7.77	1.84	5.52	2.44	0.537	<0.11
PCB-052	557	173	890	430	211	543
PCB-073	<0.043	<0.038	<0.038	<0.050	<0.020	<0.022
PCB-043	7.25	2.18	9.20	7.21	3.88	10.9
PCB-049/069	478	91.9	441	220	127	332
PCB-048	41.8	11.6	53.5	19.7	7.60	16.6
PCB-044/047/065	571	130	562	252	129	303
PCB-059/062/075	40.9	11.3	48.2	19.3	9.47	25.5
PCB-042	123	27.9	122	39.6	13.1	25.7
PCB-040/041/071	150	32.6	149	46.9	13.5	20.2
PCB-064	205	56.4	249	112	66.7	223
PCB-072	19.3	4.62	23.1	8.63	4.57	9.54
PCB-068	15.3	3.22	15.5	5.80	3.75	6.12
PCB-057	3.77	<0.83	3.43	2.01	1.10	2.95
PCB-058	<0.30	<0.097	<0.24	<0.12	<0.099	<0.16
PCB-067	6.22	2.66	7.77	5.05	3.01	4.75
PCB-063	26.6	7.50	36.5	13.1	7.33	25.4
PCB-061/070/074/076	651	198	789	477	284	908
PCB-066	718	182	809	285	167	587
PCB-055	<0.32	<0.10	<0.26	<0.13	<0.11	<0.17
PCB-056	106	34.1	128	52.4	21.4	43.1
PCB-060	79.3	25.3	112	38.7	27.0	84.3
PCB-080	<0.25	<0.083	<0.21	<0.10	<0.085	<0.14
PCB-079	28.8	6.62	28.5	5.10	2.81	2.88
PCB-078	<0.34	<0.11	<0.28	<0.14	<0.11	<0.18
PCB-081	<0.29	<0.099	<0.25	<0.13	<0.10	<0.16
PCB-077	22.9	<9.3	26.5	15.8	10.9	20.8
PCB-104	<0.061	<0.042	0.0913	<0.040	0.0283	<0.020
PCB-096	7.93	2.34	7.35	1.54	0.575	0.178
PCB-103	52.0	14.2	49.4	15.5	15.5	14.2
PCB-094	6.69	1.79	5.70	1.53	0.815	0.379
PCB-095	1970	624	1970	571	331	435
PCB-093/098/100/102	93.4	25.4	85.9	18.2	8.87	7.09

ALS Life Sciences

Sample Analysis Summary Report

Sample Name	LARGEROUGH-WB-1	LARGEROUGH-FILLET-1	LARGEROUGH-WB-1-DUP	MEDIUMROUGH-WB-1	MEDIUMROUGH-WB-J1	MEDIUMROUGH-WB-J2
ALS Sample ID	L2735553-1	L2735553-2	L2735553-3	L2735553-4	L2735553-5	L2735553-6
Sample Size	5.01	10	8.22	7.54	10.04	10.03
Sample size units	g wwt	g wwt	g wwt	g wwt	g wwt	g wwt
Percent Moisture	n/a	n/a	n/a	n/a	n/a	n/a
Sample Matrix	Fish tissue	Fish tissue	Fish tissue	Fish tissue	Fish tissue	Fish tissue
Sampling Date	6-Jul-22	6-Jul-22	6-Jul-22	6-Jul-22	5-Jul-22	5-Jul-22
Extraction Date	21-Oct-22	21-Oct-22	21-Oct-22	21-Oct-22	21-Oct-22	21-Oct-22
Target Analytes	**pg/g wwt**	**pg/g wwt**	**pg/g wwt**	**pg/g wwt**	**pg/g wwt**	**pg/g wwt**
PCB-088/091	311	82.1	329	104	78.9	102
PCB-084	290	83.9	295	108	66.6	108
PCB-089	15.8	4.13	14.9	<2.7	1.29	0.398
PCB-121	1.79	0.582	2.46	0.564	0.857	0.624
PCB-092	1520	470	1580	447	307	399
PCB-090/101/113	10800	2800	9880	2130	1350	1660
PCB-083/099	2530	623	2520	678	522	708
PCB-112	<0.073	<0.15	<0.040	<0.057	<0.10	<0.061
PCB-086/087/097/109/119/125	2410	580	2260	510	350	449
PCB-085/110/115/116/117	6380	1650	5940	1630	989	1510
PCB-082	223	54.4	241	35.2	19.2	9.87
PCB-111	13.6	3.27	12.7	2.83	<2.4	2.76
PCB-120	74.6	17.3	65.2	15.2	12.3	18.5
PCB-108/124	148	40.8	124	44.3	33.7	44.1
PCB-107	547	129	496	122	82.3	120
PCB-123	24.3	5.81	27.3	6.90	3.39	9.56
PCB-106	<0.56	<0.23	<0.56	<0.24	<0.18	<0.20
PCB-118	4170	935	3850	903	492	930
PCB-122	34.7	8.64	29.1	9.19	6.17	11.3
PCB-114	84.8	21.7	86.6	20.5	<9.9	21.2
PCB-105	849	219	935	228	153	295
PCB-127	<0.48	<0.20	<0.49	<0.21	<1.6	2.88
PCB-126	102	26.4	77.1	17.8	<8.2	10.3
PCB-155	1.54	0.741	3.06	0.289	0.260	0.132
PCB-152	<0.15	<0.098	<0.11	<0.13	<0.069	<0.056
PCB-150	30.3	7.18	23.9	4.55	2.64	2.22
PCB-136	2680	746	2330	543	236	323
PCB-145	<0.31	<0.087	<0.33	<0.12	<0.061	<0.050
PCB-148	33.0	7.56	28.5	6.18	4.54	4.37
PCB-135/151	19300	4860	15200	3180	1420	1850
PCB-154	<0.13	<0.090	<0.10	<0.12	<0.063	<0.052
PCB-144	2530	580	2000	370	165	227
PCB-147/149	34500	9330	29900	5380	2410	3300
PCB-134/143	1250	392	1150	245	107	144
PCB-139/140	210	56.4	193	34.4	<11	20.1
PCB-131	209	49.9	<170	30.0	<13	<20
PCB-142	<10	<3.5	<6.5	<3.5	<2.7	<3.1
PCB-132	7760	2080	6650	1270	613	878
PCB-133	802	218	704	130	68.8	84.1
PCB-165	118	<34	105	23.2	9.74	14.0
PCB-146	9650	2290	7750	1370	686	924
PCB-161	<7.0	<2.4	<4.5	<2.4	<1.9	<2.1
PCB-153/168	64500	14500	50700	8420	4000	5300
PCB-141	9830	2730	8870	1740	732	978
PCB-130	2070	464	1730	320	162	202
PCB-137/164	3280	840	2850	546	256	340
PCB-129/138/163	80000	17900	64700	11100	5150	6720
PCB-160	<4.3	<1.5	<2.7	<1.5	<1.2	<1.3
PCB-158	3970	836	3170	497	237	304
PCB-128/166	1480	276	998	<140	279	371
PCB-159	647	156	481	91.2	39.0	50.0
PCB-162	<160	38.0	129	<23	13.2	19.2
PCB-167	1370	304	1120	190	88.7	128
PCB-156/157	2030	463	1670	285	143	206
PCB-169	<25	5.60	<21	<3.0	<2.1	3.60
PCB-188	19.1	5.86	17.0	3.96	2.95	2.02
PCB-179	5000	1360	4110	800	341	453
PCB-184	10.3	<2.2	6.98	<1.6	<1.1	<0.91
PCB-176	1830	422	1390	230	98.3	142
PCB-186	<2.8	<1.7	<3.1	<1.7	<1.1	<0.97
PCB-178	4730	1090	3510	618	276	337
PCB-175	862	191	643	110	43.7	58.4
PCB-187	33200	6890	22800	3810	1620	2120
PCB-182	<3.6	<2.1	<3.9	<2.2	<1.4	<1.2
PCB-183	12400	2600	8880	1470	598	754
PCB-185	2350	559	1550	267	109	161
PCB-174	13900	3240	10200	2080	847	1080
PCB-177	11500	2330	8240	1440	606	708
PCB-181	38.5	8.86	32.5	<7.0	<1.9	6.01
PCB-171/173	5110	1000	3770	660	273	350
PCB-172	3570	692	2460	419	179	225

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Sample Analysis Summary Report

Sample Name	LARGEROUGH-WB-1	LARGEROUGH-FILLET-1	LARGEROUGH-WB-1-DUP	MEDIUMROUGH-WB-1	MEDIUMROUGH-WB-J1	MEDIUMROUGH-WB-J2
ALS Sample ID	L2735553-1	L2735553-2	L2735553-3	L2735553-4	L2735553-5	L2735553-6
Sample Size	5.01	10	8.22	7.54	10.04	10.03
Sample size units	g wwt	g wwt	g wwt	g wwt	g wwt	g wwt
Percent Moisture	n/a	n/a	n/a	n/a	n/a	n/a
Sample Matrix	Fish tissue	Fish tissue	Fish tissue	Fish tissue	Fish tissue	Fish tissue
Sampling Date	6-Jul-22	6-Jul-22	6-Jul-22	6-Jul-22	5-Jul-22	5-Jul-22
Extraction Date	21-Oct-22	21-Oct-22	21-Oct-22	21-Oct-22	21-Oct-22	21-Oct-22
Target Analytes	**pg/g wwt**	**pg/g wwt**	**pg/g wwt**	**pg/g wwt**	**pg/g wwt**	**pg/g wwt**
PCB-192	<3.1	<1.9	<3.4	<1.9	<1.3	<1.1
PCB-180/193	50700	9410	34200	5690	2520	3120
PCB-191	906	176	602	97.7	<40	55.1
PCB-170	16900	3000	11400	1970	866	1030
PCB-190	3670	717	2560	457	195	232
PCB-189	601	122	384	63.8	<28	37.5
PCB-202	1140	243	795	146	74.7	92.2
PCB-201	865	172	573	99.3	40.2	53.2
PCB-204	<1.7	<0.66	<1.2	<0.69	<0.63	<0.44
PCB-197	299	58.4	184	30.3	14.5	17.7
PCB-200	697	139	453	82.5	37.3	48.9
PCB-198/199	8750	1630	5510	953	422	537
PCB-196	4160	787	2560	415	179	225
PCB-203	6020	1150	3660	596	280	347
PCB-195	3560	598	2360	370	166	201
PCB-194	7220	1260	4930	777	332	396
PCB-205	389	70.1	268	41.7	16.1	20.9
PCB-208	164	38.9	149	27.3	15.5	26.4
PCB-207	138	30.6	115	20.5	10.9	<12
PCB-206	1020	194	754	130	61.7	90.3
PCB-209	50.4	16.1	64.5	<8.1	8.85	13.3
Extraction Standards	**% Rec**	**% Rec**	**% Rec**	**% Rec**	**% Rec**	**% Rec**
13C12-PCB-001	26	30	35	44	27	34
13C12-PCB-003	29	31	33	43	33	36
13C12-PCB-004	40	42	49	59	44	50
13C12-PCB-015	44	42	45	51	47	51
13C12-PCB-019	52	53	59	71	59	63
13C12-PCB-037	52	49	50	57	53	59
13C12-PCB-054	49	50	54	64	54	59
13C12-PCB-081	52	48	51	63	54	61
13C12-PCB-077	50	45	48	59	53	58
13C12-PCB-104	55	53	58	70	59	67
13C12-PCB-123	57	50	56	61	37	57
13C12-PCB-118	57	49	56	62	32	53
13C12-PCB-114	53	47	52	61	40	54
13C12-PCB-105	56	47	53	61	31	52
13C12-PCB-126	50	44	48	58	51	55
13C12-PCB-155	61	62	63	74	61	70
13C12-PCB-167	67	60	59	76	60	70
13C12-PCB-156/157	68	60	62	77	61	72
13C12-PCB-169	65	61	58	71	60	71
13C12-PCB-188	74	74	65	77	63	79
13C12-PCB-189	69	63	69	80	65	74
13C12-PCB-202	75	76	72	86	68	82
13C12-PCB-205	71	65	61	73	63	71
13C12-PCB-208	74	70	58	70	63	72
13C12-PCB-206	76	74	66	80	72	81
13C12-PCB-209	76	72	66	79	70	79
Cleanup Standards						
13C12-PCB-028	54	50	56	64	62	64
13C12-PCB-111	60	52	57	69	65	69
13C12-PCB-178	70	61	63	76	72	77

ALS Life Sciences

Sample Analysis Summary Report

Sample Name	LARGEROUGH-WB-1	LARGEROUGH-FILLET-1	LARGEROUGH-WB-1-DUP	MEDIUMROUGH-WB-1	MEDIUMROUGH-WB-J1	MEDIUMROUGH-WB-J2
ALS Sample ID	L2735553-1	L2735553-2	L2735553-3	L2735553-4	L2735553-5	L2735553-6
Sample Size	5.01	10	8.22	7.54	10.04	10.03
Sample size units	g wwt	g wwt	g wwt	g wwt	g wwt	g wwt
Percent Moisture	n/a	n/a	n/a	n/a	n/a	n/a
Sample Matrix	Fish tissue	Fish tissue	Fish tissue	Fish tissue	Fish tissue	Fish tissue
Sampling Date	6-Jul-22	6-Jul-22	6-Jul-22	6-Jul-22	5-Jul-22	5-Jul-22
Extraction Date	21-Oct-22	21-Oct-22	21-Oct-22	21-Oct-22	21-Oct-22	21-Oct-22
Target Analytes	**pg/g wwt**	**pg/g wwt**	**pg/g wwt**	**pg/g wwt**	**pg/g wwt**	**pg/g wwt**
Homologue Group Totals						
Total MonoCB	10.9	6.31	8.58	6.42	9.07	8.62
Total DiCB	103	54.1	251	250	225	286
Total TriCB	485	174	595	579	287	827
Total TetraCB	3920	1030	4560	2080	1120	3200
Total PentaCB	32700	8420	30900	7620	4850	6870
Total HexaCB	248000	59200	203000	35900	16800	22400
Total HeptaCB	167000	33800	117000	20200	8640	10900
Total OctaCB	33100	6110	21300	3510	1560	1940
Total NonaCB	1320	264	1020	178	88.1	129
DecaCB	50.4	16.1	64.5	8.10	8.85	13.3
Total PCB	487000	109000	378000	70400	33600	46600
Toxic Equivalency - (WHO 2005)						
Lower Bound PCB TEQ	10.5	2.87	7.95	1.83	0.0275	1.19
Mid Point PCB TEQ	11.2	2.87	8.58	1.88	0.880	1.19
Upper Bound PCB TEQ	11.2	2.87	8.58	1.92	0.912	1.19

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Sample Analysis Summary Report

Sample Name	SMALL-WB-STICK1	SMALL-WB-STICK2
ALS Sample ID	L2735553-7	L2735553-8
Sample Size	8.23	6.07
Sample size units	g	g
Percent Moisture	n/a	n/a
Sample Matrix	Fish tissue	Fish tissue
Sampling Date	6-Jul-22	5-Jul-22
Extraction Date	21-Oct-22	21-Oct-22
Target Analytes	**pg/g wwt**	**pg/g wwt**
PCB-001	0.422	0.479
PCB-002	5.04	2.61
PCB-003	0.816	<0.73
PCB-004	0.965	1.07
PCB-010	<0.071	<0.094
PCB-009	0.874	<0.64
PCB-007	<0.070	<0.094
PCB-006	0.640	0.739
PCB-005	0.101	<0.13
PCB-008	1.71	2.11
PCB-014	<0.12	<0.12
PCB-011	238	152
PCB-012/013	2.30	2.30
PCB-015	3.14	2.52
PCB-019	<0.28	0.356
PCB-018/030	6.49	7.02
PCB-017	2.46	3.20
PCB-027	<0.18	0.313
PCB-024	0.205	<0.22
PCB-016	1.25	1.85
PCB-032	0.357	0.560
PCB-034	<0.073	0.146
PCB-023	<0.068	<0.13
PCB-026/029	6.20	6.72
PCB-025	2.13	2.66
PCB-031	24.9	28.6
PCB-020/028	34.0	42.3
PCB-021/033	1.76	2.21
PCB-022	7.73	9.84
PCB-036	<0.43	0.312
PCB-039	<0.11	<0.13
PCB-038	<0.067	<0.13
PCB-035	<0.29	<0.22
PCB-037	5.40	5.39
PCB-054	<0.022	<0.040
PCB-050/053	1.05	1.03
PCB-045/051	2.57	3.13
PCB-046	0.416	<0.49
PCB-052	115	137
PCB-073	<0.027	<0.062
PCB-043	1.46	2.01
PCB-049/069	37.8	48.2
PCB-048	3.11	3.71
PCB-044/047/065	57.7	71.1
PCB-059/062/075	4.71	6.19
PCB-042	10.4	14.0
PCB-040/041/071	4.62	6.16
PCB-064	23.4	30.8
PCB-072	2.07	2.78
PCB-068	1.37	1.89
PCB-057	0.449	0.620
PCB-058	<0.11	<0.12
PCB-067	3.06	3.73
PCB-063	2.65	3.55
PCB-061/070/074/076	110	142
PCB-066	49.9	75.0
PCB-055	<0.12	<0.13
PCB-056	13.9	18.6
PCB-060	8.48	11.6
PCB-080	<0.099	<0.11
PCB-079	2.87	3.86
PCB-078	<0.13	<0.14
PCB-081	<0.12	<0.13
PCB-077	5.97	<7.8
PCB-104	<0.033	<0.035
PCB-096	0.714	0.797
PCB-103	9.03	12.7
PCB-094	0.683	0.840
PCB-095	335	484
PCB-093/098/100/102	9.04	<13

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Sample Analysis Summary Report

Sample Name	SMALL-WB-STICK1	SMALL-WB-STICK2
ALS Sample ID	L2735553-7	L2735553-8
Sample Size	8.23	6.07
Sample size units	g	g
Percent Moisture	n/a	n/a
Sample Matrix	Fish tissue	Fish tissue
Sampling Date	6-Jul-22	5-Jul-22
Extraction Date	21-Oct-22	21-Oct-22
Target Analytes	**pg/g wwt**	**pg/g wwt**
PCB-088/091	29.1	40.1
PCB-084	32.6	46.9
PCB-089	<0.53	0.813
PCB-121	0.256	<0.10
PCB-092	272	373
PCB-090/101/113	1410	1920
PCB-083/099	267	368
PCB-112	<0.13	<0.11
PCB-086/087/097/109/119/125	252	326
PCB-085/110/115/116/117	867	1170
PCB-082	14.0	23.6
PCB-111	1.28	<1.7
PCB-120	8.85	9.24
PCB-108/124	21.0	28.3
PCB-107	57.1	74.5
PCB-123	2.67	4.01
PCB-106	<0.13	<0.22
PCB-118	347	460
PCB-122	4.87	6.83
PCB-114	9.04	12.3
PCB-105	95.4	118
PCB-127	<0.12	<0.19
PCB-126	14.0	13.5
PCB-155	<0.14	<0.18
PCB-152	<0.060	<0.092
PCB-150	3.03	3.90
PCB-136	426	618
PCB-145	<0.054	<0.082
PCB-148	4.15	5.60
PCB-135/151	2680	3720
PCB-154	<0.055	<0.084
PCB-144	261	347
PCB-147/149	4220	5520
PCB-134/143	191	274
PCB-139/140	<23	32.2
PCB-131	22.6	34.3
PCB-142	<4.6	<5.8
PCB-132	922	1220
PCB-133	97.5	126
PCB-165	16.0	19.9
PCB-146	1010	1340
PCB-161	<3.2	<4.0
PCB-153/168	6420	8760
PCB-141	1370	1820
PCB-130	242	309
PCB-137/164	435	525
PCB-129/138/163	8540	11100
PCB-160	<1.9	<2.4
PCB-158	387	501
PCB-128/166	108	503
PCB-159	64.6	82.4
PCB-162	14.3	17.7
PCB-167	125	165
PCB-156/157	196	252
PCB-169	<4.0	6.16
PCB-188	<2.4	<1.7
PCB-179	620	860
PCB-184	<1.3	<1.9
PCB-176	164	218
PCB-186	<1.4	<2.1
PCB-178	474	654
PCB-175	64.7	94.5
PCB-187	2730	3780
PCB-182	<1.8	<2.6
PCB-183	906	1280
PCB-185	188	261
PCB-174	1420	1790
PCB-177	1070	1450
PCB-181	<4.4	<3.2
PCB-171/173	422	578
PCB-172	284	393

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Sample Analysis Summary Report

Sample Name	SMALL-WB-STICK1	SMALL-WB-STICK2
ALS Sample ID	L2735553-7	L2735553-8
Sample Size	8.23	6.07
Sample size units	g	g
Percent Moisture	n/a	n/a
Sample Matrix	Fish tissue	Fish tissue
Sampling Date	6-Jul-22	5-Jul-22
Extraction Date	21-Oct-22	21-Oct-22
Target Analytes	**pg/g wwt**	**pg/g wwt**
PCB-192	<1.6	<2.3
PCB-180/193	3680	5270
PCB-191	70.9	97.8
PCB-170	1450	1970
PCB-190	326	432
PCB-189	47.3	70.5
PCB-202	101	153
PCB-201	53.5	88.1
PCB-204	<0.70	<0.73
PCB-197	15.4	26.8
PCB-200	57.0	73.4
PCB-198/199	622	888
PCB-196	240	354
PCB-203	347	450
PCB-195	302	379
PCB-194	516	733
PCB-205	<27	47.4
PCB-208	13.4	<15
PCB-207	<6.7	13.1
PCB-206	60.1	90.5
PCB-209	<2.0	<4.7
Extraction Standards	**% Rec**	**% Rec**
13C12-PCB-001	26	30
13C12-PCB-003	32	34
13C12-PCB-004	42	44
13C12-PCB-015	46	45
13C12-PCB-019	57	57
13C12-PCB-037	53	50
13C12-PCB-054	55	55
13C12-PCB-081	56	51
13C12-PCB-077	54	50
13C12-PCB-104	61	58
13C12-PCB-123	59	53
13C12-PCB-118	60	55
13C12-PCB-114	54	50
13C12-PCB-105	60	55
13C12-PCB-126	55	52
13C12-PCB-155	66	63
13C12-PCB-167	66	74
13C12-PCB-156/157	66	72
13C12-PCB-169	66	68
13C12-PCB-188	70	77
13C12-PCB-189	75	78
13C12-PCB-202	71	78
13C12-PCB-205	67	73
13C12-PCB-208	66	71
13C12-PCB-206	72	73
13C12-PCB-209	68	75
Cleanup Standards		
13C12-PCB-028	55	54
13C12-PCB-111	61	58
13C12-PCB-178	69	65

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Sample Analysis Summary Report

Sample Name	SMALL-WB-STICK1	SMALL-WB-STICK2
ALS Sample ID	L2735553-7	L2735553-8
Sample Size	8.23	6.07
Sample size units	g	g
Percent Moisture	n/a	n/a
Sample Matrix	Fish tissue	Fish tissue
Sampling Date	6-Jul-22	5-Jul-22
Extraction Date	21-Oct-22	21-Oct-22
Target Analytes	**pg/g wwt**	**pg/g wwt**
Homologue Group Totals		
Total MonoCB	6.28	3.82
Total DiCB	248	162
Total TriCB	94.2	112
Total TetraCB	463	595
Total PentaCB	4060	5510
Total HexaCB	27800	37300
Total HeptaCB	13900	19200
Total OctaCB	2280	3190
Total NonaCB	80.2	119
DecaCB	2.00	4.70
Total PCB	48900	66200
Toxic Equivalency - (WHO 2005)		
Lower Bound PCB TEQ	1.43	1.57
Mid Point PCB TEQ	1.55	1.57
Upper Bound PCB TEQ	1.55	1.57

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Quality Control Summary Report

Sample Name	Method Blank
ALS Sample ID	WG3767228-1
Sample Size	10.41
Sample size units	g wwt
Percent Moisture	n/a
Sample Matrix	QC
Sampling Date	n/a
Extraction Date	21-Oct-22

Target Analytes	pg/g wwt
PCB-001	<0.062
PCB-002	<0.15
PCB-003	<0.21
PCB-004	<0.19
PCB-010	<0.12
PCB-009	<0.28
PCB-007	<0.12
PCB-006	<0.12
PCB-005	<0.12
PCB-008	<0.39
PCB-014	<0.12
PCB-011	<1.5
PCB-012/013	<0.12
PCB-015	<0.21
PCB-019	<0.067
PCB-018/030	0.169
PCB-017	<0.059
PCB-027	<0.044
PCB-024	<0.046
PCB-016	<0.062
PCB-032	<0.038
PCB-034	<0.058
PCB-023	<0.054
PCB-026/029	<0.054
PCB-025	<0.054
PCB-031	0.247
PCB-020/028	0.363
PCB-021/033	<0.18
PCB-022	<0.11
PCB-036	<0.048
PCB-039	<0.056
PCB-038	<0.053
PCB-035	<0.056
PCB-037	<0.045
PCB-054	<0.030
PCB-050/053	<0.039
PCB-045/051	<0.040
PCB-046	<0.046
PCB-052	0.269
PCB-073	<0.027
PCB-043	<0.050
PCB-049/069	<0.14
PCB-048	0.0548
PCB-044/047/065	0.406
PCB-059/062/075	<0.034
PCB-042	<0.069
PCB-040/041/071	<0.11
PCB-064	<0.12
PCB-072	<0.047
PCB-068	<0.045
PCB-057	<0.048
PCB-058	<0.046
PCB-067	<0.042
PCB-063	<0.046
PCB-061/070/074/076	0.298
PCB-066	0.144
PCB-055	<0.049
PCB-056	<0.050
PCB-060	<0.047
PCB-080	<0.040
PCB-079	<0.040
PCB-078	<0.053
PCB-081	<0.042
PCB-077	<0.045
PCB-104	<0.022
PCB-096	<0.029
PCB-103	<0.047
PCB-094	<0.048
PCB-095	<0.097
PCB-093/098/100/102	<0.066

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Quality Control Summary Report

Sample Name	Method Blank
ALS Sample ID	WG3767228-1
Sample Size	10.41
Sample size units	g wwt
Percent Moisture	n/a
Sample Matrix	QC
Sampling Date	n/a
Extraction Date	21-Oct-22

Target Analytes	pg/g wwt
PCB-088/091	<0.048
PCB-084	<0.055
PCB-089	<0.059
PCB-121	<0.032
PCB-092	<0.071
PCB-090/101/113	<0.48
PCB-083/099	0.184
PCB-112	<0.033
PCB-086/087/097/109/119/125	<0.21
PCB-085/110/115/116/117	0.498
PCB-082	<0.060
PCB-111	<0.031
PCB-120	<0.031
PCB-108/124	<0.025
PCB-107	<0.023
PCB-123	<0.024
PCB-106	<0.028
PCB-118	0.381
PCB-122	<0.034
PCB-114	<0.025
PCB-105	0.107
PCB-127	<0.024
PCB-126	<0.026
PCB-155	<0.025
PCB-152	<0.043
PCB-150	<0.035
PCB-136	<0.042
PCB-145	<0.039
PCB-148	<0.054
PCB-135/151	0.216
PCB-154	<0.040
PCB-144	<0.055
PCB-147/149	0.438
PCB-134/143	<0.062
PCB-139/140	<0.048
PCB-131	<0.064
PCB-142	<0.060
PCB-132	0.168
PCB-133	<0.054
PCB-165	<0.040
PCB-146	<0.15
PCB-161	<0.037
PCB-153/168	1.09
PCB-141	<0.15
PCB-130	<0.055
PCB-137/164	<0.094
PCB-129/138/163	1.48
PCB-160	<0.028
PCB-158	0.0971
PCB-128/166	<0.069
PCB-159	<0.034
PCB-162	<0.036
PCB-167	<0.063
PCB-156/157	<0.13
PCB-169	<0.040
PCB-188	<0.023
PCB-179	<0.026
PCB-184	<0.025
PCB-176	<0.026
PCB-186	<0.027
PCB-178	0.0441
PCB-175	<0.034
PCB-187	0.267
PCB-182	<0.033
PCB-183	<0.089
PCB-185	<0.035
PCB-174	<0.18
PCB-177	0.113
PCB-181	<0.034
PCB-171/173	<0.063
PCB-172	<0.044

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Quality Control Summary Report

Sample Name	Method Blank
ALS Sample ID	WG3767228-1
Sample Size	10.41
Sample size units	g wwt
Percent Moisture	n/a
Sample Matrix	QC
Sampling Date	n/a
Extraction Date	21-Oct-22

Target Analytes	pg/g wwt
PCB-192	<0.030
PCB-180/193	0.826
PCB-191	<0.027
PCB-170	<0.28
PCB-190	0.0931
PCB-189	<0.024
PCB-202	<0.029
PCB-201	<0.014
PCB-204	<0.014
PCB-197	<0.014
PCB-200	<0.015
PCB-198/199	<0.045
PCB-196	<0.052
PCB-203	<0.055
PCB-195	<0.041
PCB-194	<0.18
PCB-205	<0.028
PCB-208	<0.055
PCB-207	<0.059
PCB-206	<0.082
PCB-209	0.107
Extraction Standards	**% Rec**
13C12-PCB-001	14
13C12-PCB-003	16
13C12-PCB-004	22
13C12-PCB-015	25
13C12-PCB-019	32
13C12-PCB-037	42
13C12-PCB-054	34
13C12-PCB-081	53
13C12-PCB-077	55
13C12-PCB-104	47
13C12-PCB-123	58
13C12-PCB-118	60
13C12-PCB-114	55
13C12-PCB-105	60
13C12-PCB-126	56
13C12-PCB-155	61
13C12-PCB-167	66
13C12-PCB-156/157	64
13C12-PCB-169	60
13C12-PCB-188	70
13C12-PCB-189	59
13C12-PCB-202	77
13C12-PCB-205	72
13C12-PCB-208	65
13C12-PCB-206	76
13C12-PCB-209	70
Cleanup Standards	
13C12-PCB-028	56
13C12-PCB-111	69
13C12-PCB-178	78

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Quality Control Summary Report

Sample Name	Method Blank
ALS Sample ID	WG3767228-1
Sample Size	10.41
Sample size units	g wwt
Percent Moisture	n/a
Sample Matrix	QC
Sampling Date	n/a
Extraction Date	21-Oct-22

Target Analytes	pg/g wwt
Homologue Group Totals	
Total MonoCB	0.360
Total DiCB	2.38
Total TriCB	1.07
Total TetraCB	1.64
Total PentaCB	2.08
Total HexaCB	4.15
Total HeptaCB	2.00
Total OctaCB	0.402
Total NonaCB	<0.055
DecaCB	0.107
Total PCB	14.2
Toxic Equivalency - (WHO 2005)	
Lower Bound PCB TEQ	0.0000146
Mid Point PCB TEQ	0.00193
Upper Bound PCB TEQ	0.00384

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Sample Analysis Summary Report

Sample Name	Laboratory Control Sample	Matrix Spike	LARGEROUGH-WB-1 MS	Matrix Spike Duplicate	LARGEROUGH-WB-1 MS
ALS Sample ID	WG3767228-2	WG3767228-4	L2735553-1	WG3767228-5	L2735553-1
Sample Size	1	5	5.01	5.06	5.01
Sample size units	n/a	n/a	g wwt	n/a	g wwt
Percent Moisture	n/a	n/a	n/a	n/a	n/a
Sample Matrix	QC	QC	Fish tissue	QC	Fish tissue
Sampling Date	n/a	n/a	6-Jul-22	n/a	6-Jul-22
Extraction Date	21-Oct-22	21-Oct-22	21-Oct-22	21-Oct-22	21-Oct-22
Target Analytes	**% Rec**	**% Rec**	**Parent pg/g wwt**	**% Rec**	**Parent pg/g wwt**
PCB-001	134	109	0.852	108	0.852
PCB-003	120	102	1.23	103	1.23
PCB-004	118	99	4.11	99	4.11
PCB-015	111	101	2.34	99	2.34
PCB-019	112	98	2.64	96	2.64
PCB-037	110	105	10.3	105	10.3
PCB-054	111	99	0.331	98	0.331
PCB-081	100	100	<0.29	98	<0.29
PCB-077	97	121	22.9	123	22.9
PCB-104	97	89	<0.061	88	<0.061
PCB-123	101	109	24.3	105	24.3
PCB-118	99	231	4170	397	4170
PCB-114	106	109	84.8	113	84.8
PCB-105	96	156	849	169	849
PCB-126	97	115	102	121	102
PCB-155	98	93	1.54	92	1.54
PCB-167	92	155	1370	170	1370
PCB-156/157	92	138	2030	150	2030
PCB-169	95	99	<25	99	<25
PCB-188	93	91	19.1	91	19.1
PCB-189	103	145	601	138	601
PCB-202	100	152	1140	158	1140
PCB-205	95	113	389	115	389
PCB-208	95	102	164	106	164
PCB-206	94	143	1020	160	1020
PCB-209	113	116	50.4	117	50.4
Extraction Standards	**% Rec**	**% Rec**	**% Rec**	**% Rec**	**% Rec**
13C12-PCB-001	9	19	26	34	26
13C12-PCB-003	11	24	29	36	29
13C12-PCB-004	15	37	40	47	40
13C12-PCB-015	24	46	44	49	44
13C12-PCB-019	25	52	52	59	52
13C12-PCB-037	42	55	52	56	52
13C12-PCB-054	29	53	49	54	49
13C12-PCB-081	53	56	52	56	52
13C12-PCB-077	55	54	50	53	50
13C12-PCB-104	44	59	55	59	55
13C12-PCB-123	60	62	57	59	57
13C12-PCB-118	61	62	57	59	57
13C12-PCB-114	57	56	53	56	53
13C12-PCB-105	63	60	56	58	56
13C12-PCB-126	62	54	50	53	50
13C12-PCB-155	58	64	61	66	61
13C12-PCB-167	71	65	67	64	67
13C12-PCB-156/157	70	62	68	61	68
13C12-PCB-169	65	57	65	57	65
13C12-PCB-188	68	69	74	67	74
13C12-PCB-189	63	56	69	56	69
13C12-PCB-202	78	71	75	70	75
13C12-PCB-205	76	65	71	64	71
13C12-PCB-208	74	59	74	57	74
13C12-PCB-206	80	67	76	66	76
13C12-PCB-209	74	61	76	62	76
Cleanup Standards					
13C12-PCB-028	55	56	54	57	54
13C12-PCB-111	70	61	60	60	60
13C12-PCB-178	80	70	70	68	70

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Sample Analysis Summary Report

Sample Name	CCV	CCV	CCV	CCV	CCV	CCV
ALS Sample ID	H5-22-RS1-005	H5-22-CCV-974	H5-22-CCV-976	H5-22-CCV-982	H5-22-CCV-984	H9-22-CCV-632
Sample Size	1	1	1	1	1	1
Sample size units	n/a	n/a	n/a	n/a	n/a	n/a
Percent Moisture	n/a	n/a	n/a	n/a	n/a	n/a
Sample Matrix	QC	QC	QC	QC	QC	QC
Sampling Date	n/a	n/a	n/a	n/a	n/a	n/a
Extraction Date	n/a	n/a	n/a	n/a	n/a	n/a
Target Analytes	**% Rec**	**% Rec**	**% Rec**	**% Rec**	**% Rec**	**% Rec**
PCB-001	100	101	101	102	101	91
PCB-003	98	101	94	102	101	90
PCB-004	103	91	91	91	91	100
PCB-015	100	100	98	100	99	101
PCB-019	103	90	91	91	92	95
PCB-037	102	102	100	102	102	107
PCB-054	102	93	89	93	93	98
PCB-081	94	102	102	103	103	103
PCB-077	94	102	103	103	104	103
PCB-104	90	96	93	96	95	96
PCB-123	96	100	99	101	101	106
PCB-118	93	102	99	101	100	106
PCB-114	96	103	100	101	101	106
PCB-105	93	101	101	101	100	107
PCB-126	93	102	101	101	102	104
PCB-155	94	96	95	97	97	99
PCB-167	95	97	98	98	98	99
PCB-156/157	94	97	97	96	96	98
PCB-169	96	98	97	97	97	96
PCB-188	93	97	97	98	98	98
PCB-189	98	104	103	103	104	102
PCB-202	98	97	97	98	97	96
PCB-205	92	101	101	101	100	98
PCB-208	91	100	100	101	100	95
PCB-206	91	100	99	100	100	94
PCB-209	107	103	103	103	104	102
Extraction Standards	**% Rec**	**% Rec**	**% Rec**	**% Rec**	**% Rec**	**% Rec**
13C12-PCB-001	104	85	94	87	88	92
13C12-PCB-003	104	83	84	85	86	94
13C12-PCB-004	103	104	106	108	108	96
13C12-PCB-015	103	84	76	87	89	88
13C12-PCB-019	103	119	127	120	121	98
13C12-PCB-037	102	92	78	90	91	72
13C12-PCB-054	105	114	117	116	115	101
13C12-PCB-081	102	91	89	89	91	87
13C12-PCB-077	102	90	88	89	91	87
13C12-PCB-104	104	110	106	113	113	106
13C12-PCB-123	101	94	102	93	94	86
13C12-PCB-118	101	95	109	96	98	88
13C12-PCB-114	101	95	109	96	96	89
13C12-PCB-105	101	95	109	94	96	87
13C12-PCB-126	101	95	115	90	93	89
13C12-PCB-155	102	114	118	115	114	103
13C12-PCB-167	103	100	105	99	100	104
13C12-PCB-156/157	101	98	111	99	101	107
13C12-PCB-169	100	92	122	96	95	115
13C12-PCB-188	102	107	99	110	108	108
13C12-PCB-189	101	89	126	93	91	117
13C12-PCB-202	101	119	127	122	121	121
13C12-PCB-205	103	102	105	100	102	105
13C12-PCB-208	104	106	93	110	111	106
13C12-PCB-206	102	108	116	106	106	117
13C12-PCB-209	102	100	113	98	98	115
Cleanup Standards						
13C12-PCB-028	103	103	103	103	104	86
13C12-PCB-111	102	102	104	101	102	103
13C12-PCB-178	102	112	111	112	111	109

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Sample Analysis Summary Report

Sample Name	**CCV**
ALS Sample ID	H9-22-CCV-634
Sample Size	1
Sample size units	n/a
Percent Moisture	n/a
Sample Matrix	QC
Sampling Date	n/a
Extraction Date	n/a
Target Analytes	**% Rec**
PCB-001	92
PCB-003	90
PCB-004	98
PCB-015	101
PCB-019	95
PCB-037	100
PCB-054	98
PCB-081	101
PCB-077	99
PCB-104	100
PCB-123	105
PCB-118	100
PCB-114	100
PCB-105	104
PCB-126	102
PCB-155	101
PCB-167	99
PCB-156/157	99
PCB-169	100
PCB-188	98
PCB-189	97
PCB-202	94
PCB-205	98
PCB-208	95
PCB-206	96
PCB-209	98
Extraction Standards	**% Rec**
13C12-PCB-001	95
13C12-PCB-003	94
13C12-PCB-004	102
13C12-PCB-015	86
13C12-PCB-019	102
13C12-PCB-037	76
13C12-PCB-054	109
13C12-PCB-081	86
13C12-PCB-077	85
13C12-PCB-104	104
13C12-PCB-123	87
13C12-PCB-118	90
13C12-PCB-114	91
13C12-PCB-105	88
13C12-PCB-126	88
13C12-PCB-155	102
13C12-PCB-167	102
13C12-PCB-156/157	104
13C12-PCB-169	108
13C12-PCB-188	109
13C12-PCB-189	113
13C12-PCB-202	122
13C12-PCB-205	103
13C12-PCB-208	103
13C12-PCB-206	112
13C12-PCB-209	110
Cleanup Standards	
13C12-PCB-028	92
13C12-PCB-111	100
13C12-PCB-178	111

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Sample Analysis Report

Sample Name	**LARGEROUGH-WB-1**	Sampling Date	6-Jul-22		Approved:
ALS Sample ID	L2735553-1	Extraction Date	21-Oct-22		*A. Kuol*
Analysis Method	EPA 1668C	Sample Size	5.01	g wwt	--e-signature--
Analysis Type	Sample	Percent Moisture	n/a		23-Nov-2022
Sample Matrix	Fish tissue	Split Ratio	1		

Run Information	**Run 1**	**Run 2**
Filename	5-221109A24	9-221117A21
Run Date	10-Nov-22 08:14	18-Nov-22 03:53
Final Volume	25 ul	25 uL
Dilution Factor	1	20
Analysis Units	pg/g wwt	pg/g wwt
Instrument - Column	HRMS-5 SPBOCTYL271790-03	HRMS-9 SPBOCTYL273027-01

Target Analytes	**TEF (WHO 2005)**	**Ret. Time**	**Conc. g/g wwt**	**EDL /g wwt**	**Flags**	**EMPC 'g wwt**	**LQL**	**Ret. Time**	**Conc. g/g wwt**	**EDL /g wwt**	**Flags**	**EMPC 'g wwt**	**LQL**
PCB-001		8.98	0.852	0.083	J		5.0						
PCB-002		10.37	8.77	0.086			5.0						
PCB-003		10.49	1.23	0.084	J		5.0						
PCB-004		10.68	4.11	0.22	J		5.0						
PCB-010		NotFnd	<0.13	0.13	U		5.0						
PCB-009		11.91	1.76	0.14	J		5.0						
PCB-007		NotFnd	<0.13	0.13	U		5.0						
PCB-006		12.18	3.35	0.14	J		5.0						
PCB-005		12.39	<0.29	0.14	M,J,R	0.29	5.0						
PCB-008		12.46	14.6	0.13	M		5.0						
PCB-014		NotFnd	<0.15	0.15	U		5.0						
PCB-011		13.93	74.6	0.15			5.0						
PCB-012/013		14.09	<1.5	0.15	J,R	1.5	5.0						
PCB-015		14.31	2.34	0.13	J		5.0						
PCB-019		12.65	2.64	0.076	J		5.0						
PCB-018/030		13.75	26.8	0.086			5.0						
PCB-017		13.99	21.2	0.10			5.0						
PCB-027		14.12	3.62	0.077	J		5.0						
PCB-024		14.20	<0.68	0.080	J,R	0.68	5.0						
PCB-016		14.29	12.1	0.11			5.0						
PCB-032		14.57	10.6	0.067			5.0						
PCB-034		15.24	0.529	0.22	J		5.0						
PCB-023		15.34	<0.21	0.21	U		5.0						
PCB-026/029		15.52	18.3	0.21			5.0						
PCB-025		15.65	7.31	0.21			5.0						
PCB-031		15.84	52.8	0.19			5.0						
PCB-020/028		16.01	249	0.21			5.0						
PCB-021/033		16.15	35.7	0.20			5.0						
PCB-022		16.39	32.4	0.21			5.0						
PCB-036		NotFnd	<0.18	0.18	U		5.0						
PCB-039		17.44	<0.89	0.21	J,R	0.89	5.0						
PCB-038		17.75	<0.52	0.20	J,R	0.52	5.0						
PCB-035		18.00	<0.21	0.21	U	0.066	5.0						
PCB-037		18.25	10.3	0.19			5.0						
PCB-054		14.51	0.331	0.046	J		5.0						
PCB-050/053		15.69	31.5	0.062			5.0						
PCB-045/051		16.10	27.6	0.064			5.0						
PCB-046		16.28	7.77	0.072			5.0						
PCB-052		17.01	557	0.067			5.0						
PCB-073		NotFnd	<0.043	0.043	U		5.0						
PCB-043		17.13	7.25	0.079			5.0						
PCB-049/069		17.27	478	0.053			5.0						
PCB-048		17.43	41.8	0.059			5.0						
PCB-044/047/065		17.57	571	0.060			5.0						
PCB-059/062/075		17.74	40.9	0.047			5.0						
PCB-042		17.87	123	0.071			5.0						
PCB-040/041/071		18.13	150	0.063			5.0						
PCB-064		18.25	205	0.049			5.0						
PCB-072		18.64	19.3	0.30			5.0						
PCB-068		18.79	15.3	0.29			5.0						
PCB-057		19.03	3.77	0.31	J		5.0						
PCB-058		NotFnd	<0.30	0.30	U		5.0						
PCB-067		19.26	6.22	0.27			5.0						
PCB-063		19.40	26.6	0.29			5.0						
PCB-061/070/074/076		19.61	651	0.31			5.0						
PCB-066		19.77	718	0.29			5.0						
PCB-055		NotFnd	<0.32	0.32	U		5.0						
PCB-056		20.15	106	0.32			5.0						
PCB-060		20.27	79.3	0.30			5.0						
PCB-080		NotFnd	<0.25	0.25	U		5.0						
PCB-079		21.25	28.8	0.26			5.0						
PCB-078		NotFnd	<0.34	0.34	U		5.0						
PCB-081	0.0003	NotFnd	<0.29	0.29	U		5.0						
PCB-077	0.0001	22.12	22.9	0.32			5.0						
PCB-104		17.52	<0.061	0.035	J,R	0.061	5.0						
PCB-096		17.79	7.93	0.050			5.0						
PCB-103		18.74	52.0	0.10			5.0						
PCB-094		18.89	6.69	0.11			5.0						
PCB-095		19.14	1970	0.050			5.0						
PCB-093/098/100/102		19.31	93.4	0.15	M		5.0						

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Sample Analysis Report

Sample Name	**LARGEROUGH-WB-1**	Sampling Date	6-Jul-22		Approved:
ALS Sample ID	L2735553-1	Extraction Date	21-Oct-22		*A. Kuol*
Analysis Method	EPA 1668C	Sample Size	5.01	g wwt	--e-signature--
Analysis Type	Sample	Percent Moisture	n/a		23-Nov-2022
Sample Matrix	Fish tissue	Split Ratio	1		

Run Information	**Run 1**	**Run 2**
Filename	5-221109A24	9-221117A21
Run Date	10-Nov-22 08:14	18-Nov-22 03:53
Final Volume	25 ul	25 uL
Dilution Factor	1	20
Analysis Units	pg/g wwt	pg/g wwt
Instrument - Column	HRMS-5 SPBOCTYL271790-03	HRMS-9 SPBOCTYL273027-01

Target Analytes	**TEF (WHO 2005)**	**Ret. Time**	**Conc. g/g wwt**	**EDL /g wwt**	**Flags**	**EMPC 'g wwt**	**LQL**	**Ret. Time**	**Conc. g/g wwt**	**EDL /g wwt**	**Flags**	**EMPC 'g wwt**	**LQL**
PCB-088/091		19.60	311	0.11			5.0						
PCB-084		19.75	290	0.11			5.0						
PCB-089		20.00	15.8	0.13			5.0						
PCB-121		20.11	1.79	0.072	J		5.0						
PCB-092		20.34	1520	0.12			5.0						
PCB-090/101/113		20.65	10800	0.090			5.0						
PCB-083/099		20.96	2530	0.11			5.0						
PCB-112		NotFnd	<0.073	0.073	U		5.0						
PCB-086/087/097/109/119/125		21.32	2410	0.088	M		5.0						
PCB-085/110/115/116/117		21.73	6380	0.083	M		5.0						
PCB-082		21.93	223	0.13			5.0						
PCB-111		22.02	13.6	0.070			5.0						
PCB-120		22.25	74.6	0.070	M		5.0						
PCB-108/124		22.89	148	0.50			5.0						
PCB-107		23.03	547	0.45	M		5.0						
PCB-123	0.00003	23.10	24.3	0.48	M		5.0						
PCB-106		NotFnd	<0.56	0.56	U		5.0						
PCB-118	0.00003	23.26	4170	0.46			5.0						
PCB-122		23.47	34.7	0.69			5.0						
PCB-114	0.00003	23.55	84.8	0.52			5.0						
PCB-105	0.00003	23.92	849	0.49	M		5.0						
PCB-127		NotFnd	<0.48	0.48	U		5.0						
PCB-126	0.1							25.64	102	9.9			100
PCB-155		20.49	1.54	0.079	J		5.0						
PCB-152		NotFnd	<0.15	0.15	U		5.0						
PCB-150		20.74	30.3	0.12			5.0						
PCB-136		20.99	2680	0.14			5.0						
PCB-145		21.11	<0.31	0.13	J,R	0.31	5.0						
PCB-148		21.82	33.0	0.18			5.0						
PCB-135/151		22.18	19300	0.19			5.0						
PCB-154		NotFnd	<0.13	0.13	U		5.0						
PCB-144		22.46	2530	0.18			5.0						
PCB-147/149								22.76	34500	8.1			100
PCB-134/143								22.91	1250	10			100
PCB-139/140								23.08	210	8.1			100
PCB-131								23.22	209	11			100
PCB-142								NotFnd	<10	10	U		100
PCB-132								23.48	7760	9.2			100
PCB-133								23.63	802	9.5			100
PCB-165								23.84	118	6.9			100
PCB-146								23.97	9650	7.7			100
PCB-161								NotFnd	<7.0	7.0	U		100
PCB-153/168								24.29	64500	6.8			100
PCB-141								24.43	9830	8.8			100
PCB-130								24.65	2070	9.6			100
PCB-137/164								24.82	3280	7.5			100
PCB-129/138/163								24.99	80000	12			100
PCB-160								NotFnd	<4.3	4.3	U		100
PCB-158								25.18	3970	6.1			100
PCB-128/166								25.64	1480	7.4			100
PCB-159								26.12	647	6.2			100
PCB-162								26.26	<160	6.5	R	160	100
PCB-167	0.00003							26.50	1370	6.1			100
PCB-156/157	0.00003							27.14	2030	9.7			200
PCB-169	0.03							28.82	<25	8.2	M,J,R	25	100
PCB-188								23.60	19.1	2.3	J		100
PCB-179								23.83	5000	2.8			100
PCB-184								24.03	10.3	2.6	J		100
PCB-176								24.29	1830	2.8			100
PCB-186								24.47	<2.8	2.8	U	0.61	100
PCB-178								25.17	4730	4.0			100
PCB-175								25.49	862	3.7			100
PCB-187								25.64	33200	3.4			100
PCB-182								NotFnd	<3.6	3.6	U		100
PCB-183								25.95	12400	3.4			100
PCB-185								26.05	2350	3.7			100
PCB-174								26.12	13900	3.7			100
PCB-177								26.35	11500	3.7			100
PCB-181								26.55	38.5	3.7	J		100
PCB-171/173								26.68	5110	3.9			100
PCB-172								27.46	3570	3.7			100

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Sample Analysis Report

Sample Name	**LARGEROUGH-WB-1**	Sampling Date	6-Jul-22		Approved:
ALS Sample ID	L2735553-1	Extraction Date	21-Oct-22		*A. Kuol*
Analysis Method	EPA 1668C	Sample Size	5.01	g wwt	--e-signature--
Analysis Type	Sample	Percent Moisture	n/a		23-Nov-2022
Sample Matrix	Fish tissue	Split Ratio	1		

Run Information	**Run 1**	**Run 2**
Filename	5-221109A24	9-221117A21
Run Date	10-Nov-22 08:14	18-Nov-22 03:53
Final Volume	25 ul	25 uL
Dilution Factor	1	20
Analysis Units	pg/g wwt	pg/g wwt
Instrument - Column	HRMS-5 SPBOCTYL271790-03	HRMS-9 SPBOCTYL273027-01

Target Analytes	**TEF (WHO 2005)**	**Ret. Time**	**Conc. g/g wwt**	**EDL /g wwt**	**Flags**	**EMPC 'g wwt**	**LQL**	**Ret. Time**	**Conc. g/g wwt**	**EDL /g wwt**	**Flags**	**EMPC 'g wwt**	**LQL**
PCB-192								NotFnd	<3.1	3.1	U		100
PCB-180/193								27.80	50700	3.4			100
PCB-191								27.98	906	3.0			100
PCB-170								28.51	16900	4.0			100
PCB-190								28.78	3670	2.6			100
PCB-189	0.00003							30.10	601	3.8			100
PCB-202								26.38	1140	1.0			100
PCB-201								26.85	865	1.1			100
PCB-204								27.17	<1.7	1.1	J,R	1.7	100
PCB-197								27.31	299	1.1			100
PCB-200								27.42	697	1.2			100
PCB-198/199								28.82	8750	1.6			100
PCB-196								29.16	4160	1.6			100
PCB-203								29.25	6020	1.6			100
PCB-195								29.99	3560	3.7			100
PCB-194								31.23	7220	3.6			100
PCB-205								31.52	389	3.2			100
PCB-208								29.81	164	3.0			100
PCB-207								30.30	138	3.8			100
PCB-206								32.61	1020	5.6			100
PCB-209								33.76	50.4	1.1	J		100

Extraction Standards	**pg**	**Time**	**% Rec**	**Limits**	**Time**	**% Rec**	**Limits**
13C12-PCB-001	2000	8.98	26	5-145			
13C12-PCB-003	2000	10.49	29	5-145			
13C12-PCB-004	2000	10.66	40	5-145			
13C12-PCB-015	2000	14.31	44	5-145			
13C12-PCB-019	2000	12.64	52	5-145			
13C12-PCB-037	2000	18.24	52	5-145			
13C12-PCB-054	2000	14.49	49	5-145			
13C12-PCB-081	2000	21.80	52	10-145			
13C12-PCB-077	2000	22.10	50	10-145			
13C12-PCB-104	2000	17.51	55	10-145			
13C12-PCB-123	2000	23.07	57	10-145			
13C12-PCB-118	2000	23.24	57	10-145			
13C12-PCB-114	2000	23.55	53	10-145			
13C12-PCB-105	2000	23.91	56	10-145			
13C12-PCB-126	2000	25.49	50	10-145			
13C12-PCB-155	2000	20.48	61	10-145			
13C12-PCB-167	2000				26.50	67	10-145
13C12-PCB-156/157	4000				27.15	68	10-145
13C12-PCB-169	2000				28.80	65	10-145
13C12-PCB-188	2000				23.57	74	10-145
13C12-PCB-189	2000				30.08	69	10-145
13C12-PCB-202	2000				26.36	75	10-145
13C12-PCB-205	2000				31.50	71	10-145
13C12-PCB-208	2000				29.80	74	10-145
13C12-PCB-206	2000				32.60	76	10-145
13C12-PCB-209	2000				33.73	76	10-145
Cleanup Standards							
13C12-PCB-028	2000	16.00	54	5-145			
13C12-PCB-111	2000	22.01	60	10-145			
13C12-PCB-178	2000	25.06	70	10-145			

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Sample Analysis Report

Sample Name	**LARGEROUGH-WB-1**	Sampling Date	6-Jul-22		Approved:
ALS Sample ID	L2735553-1	Extraction Date	21-Oct-22		*A. Kuol*
Analysis Method	EPA 1668C	Sample Size	5.01	g wwt	--e-signature--
Analysis Type	Sample	Percent Moisture	n/a		23-Nov-2022
Sample Matrix	Fish tissue	Split Ratio	1		

Run Information	**Run 1**	**Run 2**
Filename	5-221109A24	9-221117A21
Run Date	10-Nov-22 08:14	18-Nov-22 03:53
Final Volume	25 ul	25 uL
Dilution Factor	1	20
Analysis Units	pg/g wwt	pg/g wwt
Instrument - Column	HRMS-5 SPBOCTYL271790-03	HRMS-9 SPBOCTYL273027-01

Target Analytes	**TEF (WHO 2005)**	**Ret. Time**	**Conc. g/g wwt**	**EDL /g wwt**	**Flags**	**EMPC 'g wwt**	**LQL**	**Ret. Time**	**Conc. g/g wwt**	**EDL /g wwt**	**Flags**	**EMPC 'g wwt**	**LQL**
Homologue Group Totals													
Total MonoCB			10.9	0.083	J		20						
Total DiCB			103	0.13	J		40						
Total TriCB			485	0.067	J		40						
Total TetraCB			3920	0.043	J		80						
Total PentaCB			32700	0.035	J		80						
Total HexaCB			248000	0.079	J		80						
Total HeptaCB			167000	2.3	J		40						
Total OctaCB			33100	1.0	J		40						
Total NonaCB			1320	3.0	J		20						
DecaCB			50.4	1.1	J		20						
Total PCB			487000		J		160						
Toxic Equivalency - (WHO 2005)													
Lower Bound PCB TEQ			10.5										
Mid Point PCB TEQ			11.2										
Upper Bound PCB TEQ			11.2										

EDL	Indicates the Estimated Detection Limit, based on the measured background noise for this target in this sample.
TEF	Indicates the Toxic Equivalency Factor TEQ Indicates the Toxic Equivalency
LQL	Lower Quantification Limit, based on the lowest calibration level corrected for sample size, splits and dilutions.
M	Indicates that a peak has been manually integrated.
U	Indicates that this compound was not detected above the EDL.
E	Indicates that this compound was detected above the calibrated range.
J	Indicates that the analyte was positively identifed. The associated numerical result is an estimate.
R	Indicates that the ion abundance ratio for this analyte did not meet the control limit. The reported value represents an estimated concentration.
EMPC	Estimated Maximum Possible Concentration – elevated detection limit due to interference or positive id criterion failure

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Sample Analysis Report

Sample Name	**LARGEROUGH-FILLET-1**	Sampling Date	6-Jul-22		
ALS Sample ID	L2735553-2	Extraction Date	21-Oct-22		Approved:
Analysis Method	EPA 1668C	Sample Size	10	g wwt	*A. Kuol*
Analysis Type	Sample	Percent Moisture	n/a		--e-signature--
Sample Matrix	Fish tissue	Split Ratio	1		23-Nov-2022

Run Information	**Run 1**	**Run 2**
Filename	5-221109A25	9-221117A22
Run Date	10-Nov-22 08:56	18-Nov-22 04:35
Final Volume	25 ul	25 uL
Dilution Factor	1	20
Analysis Units	pg/g wwt	pg/g wwt
Instrument - Column	HRMS-5 SPBOCTYL271790-03	HRMS-9 SPBOCTYL273027-01

Target Analytes	**TEF (WHO 2005)**	**Ret. Time**	**Conc. g/g wwt**	**EDL /g wwt**	**Flags**	**EMPC 'g wwt**	**LQL**	**Ret. Time**	**Conc. g/g wwt**	**EDL /g wwt**	**Flags**	**EMPC 'g wwt**	**LQL**
PCB-001		8.98	0.648	0.044	J		2.5						
PCB-002		10.37	4.65	0.047			2.5						
PCB-003		10.49	1.01	0.048	J		2.5						
PCB-004		10.66	2.03	0.10	J		2.5						
PCB-010		NotFnd	<0.065	0.065	U		2.5						
PCB-009		11.90	0.834	0.067	J		2.5						
PCB-007		NotFnd	<0.065	0.065	U		2.5						
PCB-006		12.16	1.47	0.068	J		2.5						
PCB-005		NotFnd	<0.069	0.069	U		2.5						
PCB-008		12.44	6.52	0.062			2.5						
PCB-014		NotFnd	<0.10	0.10	U		2.5						
PCB-011		13.92	41.3	0.10			2.5						
PCB-012/013		14.10	0.821	0.10	M,J		2.5						
PCB-015		14.30	<1.1	0.093	J,R	1.1	2.5						
PCB-019		12.65	1.04	0.040	J		2.5						
PCB-018/030		13.73	11.0	0.047			2.5						
PCB-017		13.98	7.19	0.056			2.5						
PCB-027		14.11	1.27	0.042	J		2.5						
PCB-024		14.20	0.328	0.044	J		2.5						
PCB-016		14.28	4.93	0.059			2.5						
PCB-032		14.56	3.05	0.037			2.5						
PCB-034		15.24	<0.16	0.10	J,R	0.16	2.5						
PCB-023		15.33	<0.095	0.095	U	0.073	2.5						
PCB-026/029		15.51	6.41	0.095			2.5						
PCB-025		15.64	2.38	0.095	J		2.5						
PCB-031		15.83	24.9	0.090			2.5						
PCB-020/028		16.00	81.9	0.096			2.5						
PCB-021/033		16.14	11.6	0.094			2.5						
PCB-022		16.38	11.9	0.098			2.5						
PCB-036		NotFnd	<0.084	0.084	U		2.5						
PCB-039		17.43	0.330	0.098	J		2.5						
PCB-038		17.73	0.223	0.094	J		2.5						
PCB-035		18.00	<0.098	0.098	U	0.085	2.5						
PCB-037		18.24	5.10	0.093			2.5						
PCB-054		14.50	<0.074	0.030	J,R	0.074	2.5						
PCB-050/053		15.68	7.17	0.055			2.5						
PCB-045/051		16.09	7.81	0.056			2.5						
PCB-046		16.27	1.84	0.064	J		2.5						
PCB-052		16.99	173	0.060			2.5						
PCB-073		NotFnd	<0.038	0.038	U		2.5						
PCB-043		17.12	2.18	0.070	J		2.5						
PCB-049/069		17.26	91.9	0.047			2.5						
PCB-048		17.42	11.6	0.052			2.5						
PCB-044/047/065		17.56	130	0.053			2.5						
PCB-059/062/075		17.73	11.3	0.042			2.5						
PCB-042		17.86	27.9	0.063			2.5						
PCB-040/041/071		18.12	32.6	0.056			2.5						
PCB-064		18.24	56.4	0.044			2.5						
PCB-072		18.63	4.62	0.099			2.5						
PCB-068		18.78	3.22	0.095			2.5						
PCB-057		19.02	<0.83	0.10	J,R	0.83	2.5						
PCB-058		NotFnd	<0.097	0.097	U		2.5						
PCB-067		19.25	2.66	0.088			2.5						
PCB-063		19.39	7.50	0.097			2.5						
PCB-061/070/074/076		19.59	198	0.10			2.5						
PCB-066		19.76	182	0.096			2.5						
PCB-055		NotFnd	<0.10	0.10	U		2.5						
PCB-056		20.14	34.1	0.11			2.5						
PCB-060		20.26	25.3	0.10			2.5						
PCB-080		NotFnd	<0.083	0.083	U		2.5						
PCB-079		21.24	6.62	0.085			2.5						
PCB-078		NotFnd	<0.11	0.11	U		2.5						
PCB-081	0.0003	NotFnd	<0.099	0.099	U		2.5						
PCB-077	0.0001	22.10	<9.3	0.11	R	9.3	2.5						
PCB-104		17.52	<0.042	0.030	J,R	0.042	2.5						
PCB-096		17.78	2.34	0.048	J		2.5						
PCB-103		18.73	14.2	0.22			2.5						
PCB-094		18.88	1.79	0.22	J		2.5						
PCB-095		19.14	624	0.11			2.5						
PCB-093/098/100/102		19.30	25.4	0.31	M		2.5						

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Sample Analysis Report

Sample Name	**LARGEROUGH-FILLET-1**	Sampling Date	6-Jul-22		
ALS Sample ID	L2735553-2	Extraction Date	21-Oct-22		Approved:
Analysis Method	EPA 1668C	Sample Size	10	g wwt	*A. Kuol*
Analysis Type	Sample	Percent Moisture	n/a		--e-signature--
Sample Matrix	Fish tissue	Split Ratio	1		23-Nov-2022

Run Information	**Run 1**	**Run 2**
Filename	5-221109A25	9-221117A22
Run Date	10-Nov-22 08:56	18-Nov-22 04:35
Final Volume	25 ul	25 uL
Dilution Factor	1	20
Analysis Units	pg/g wwt	pg/g wwt
Instrument - Column	HRMS-5 SPBOCTYL271790-03	HRMS-9 SPBOCTYL273027-01

Target Analytes	**TEF (WHO 2005)**	**Run 1 Ret. Time**	**Conc. pg/g wwt**	**EDL pg/g wwt**	**Flags**	**EMPC pg/g wwt**	**LQL**	**Run 2 Ret. Time**	**Conc. pg/g wwt**	**EDL pg/g wwt**	**Flags**	**EMPC pg/g wwt**	**LQL**
PCB-088/091		19.59	82.1	0.22			2.5						
PCB-084		19.75	83.9	0.24			2.5						
PCB-089		20.00	4.13	0.27			2.5						
PCB-121		20.09	0.582	0.15	J		2.5						
PCB-092		20.33	470	0.25			2.5						
PCB-090/101/113		20.63	2800	0.19			2.5						
PCB-083/099		20.95	623	0.22			2.5						
PCB-112		NotFnd	<0.15	0.15	U		2.5						
PCB-086/087/097/109/119/125		21.31	580	0.18	M		2.5						
PCB-085/110/115/116/117		21.72	1650	0.17	M		2.5						
PCB-082		21.92	54.4	0.28			2.5						
PCB-111		22.01	3.27	0.15			2.5						
PCB-120		22.24	17.3	0.15	M		2.5						
PCB-108/124		22.89	40.8	0.20			2.5						
PCB-107		23.01	129	0.18	M		2.5						
PCB-123	0.00003	23.09	5.81	0.20	M		2.5						
PCB-106		NotFnd	<0.23	0.23	U		2.5						
PCB-118	0.00003	23.26	935	0.20			2.5						
PCB-122		23.46	8.64	0.28			2.5						
PCB-114	0.00003	23.55	21.7	0.21			2.5						
PCB-105	0.00003	23.91	219	0.21	M		2.5						
PCB-127		NotFnd	<0.20	0.20	U		2.5						
PCB-126	0.1							25.64	26.4	4.3	M,J		50
PCB-155		20.49	0.741	0.048	J		2.5						
PCB-152		NotFnd	<0.098	0.098	U		2.5						
PCB-150		20.74	7.18	0.080			2.5						
PCB-136		20.98	746	0.094			2.5						
PCB-145		21.10	<0.087	0.087	U	0.082	2.5						
PCB-148		21.81	7.56	0.12			2.5						
PCB-135/151		22.16	4860	0.13			2.5						
PCB-154		NotFnd	<0.090	0.090	U		2.5						
PCB-144		22.46	580	0.12			2.5						
PCB-147/149								22.76	9330	2.8			50
PCB-134/143								22.91	392	3.6			50
PCB-139/140								23.08	56.4	2.8			50
PCB-131								23.22	49.9	3.9	J		50
PCB-142								NotFnd	<3.5	3.5	U		50
PCB-132								23.48	2080	3.2			50
PCB-133								23.63	218	3.3			50
PCB-165								23.84	<34	2.4	J,R	34	50
PCB-146								23.96	2290	2.7			50
PCB-161								NotFnd	<2.4	2.4	U		50
PCB-153/168								24.29	14500	2.4			50
PCB-141								24.43	2730	3.1			50
PCB-130								24.65	464	3.3			50
PCB-137/164								24.82	840	2.6			50
PCB-129/138/163								24.99	17900	4.3			50
PCB-160								NotFnd	<1.5	1.5	U		50
PCB-158								25.18	836	2.1			50
PCB-128/166								25.64	276	2.6			50
PCB-159								26.12	156	2.1			50
PCB-162								26.25	38.0	2.3	J		50
PCB-167	0.00003							26.50	304	2.2			50
PCB-156/157	0.00003							27.13	463	3.7			100
PCB-169	0.03							28.82	5.60	3.0	M,J		50
PCB-188								23.58	5.86	1.3	J		50
PCB-179								23.83	1360	1.7			50
PCB-184								24.03	<2.2	1.6	J,R	2.2	50
PCB-176								24.27	422	1.7			50
PCB-186								NotFnd	<1.7	1.7	U		50
PCB-178								25.17	1090	2.4			50
PCB-175								25.49	191	2.2			50
PCB-187								25.64	6890	2.0			50
PCB-182								NotFnd	<2.1	2.1	U		50
PCB-183								25.94	2600	2.0			50
PCB-185								26.04	559	2.2			50
PCB-174								26.12	3240	2.2			50
PCB-177								26.35	2330	2.2			50
PCB-181								26.55	8.86	2.2	J		50
PCB-171/173								26.68	1000	2.3			50
PCB-172								27.46	692	2.2			50

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Sample Analysis Report

Sample Name	**LARGEROUGH-FILLET-1**	Sampling Date	6-Jul-22		Approved:
ALS Sample ID	L2735553-2	Extraction Date	21-Oct-22		*A. Kuol*
Analysis Method	EPA 1668C	Sample Size	10	g wwt	--e-signature--
Analysis Type	Sample	Percent Moisture	n/a		23-Nov-2022
Sample Matrix	Fish tissue	Split Ratio	1		

Run Information	**Run 1**	**Run 2**
Filename	5-221109A25	9-221117A22
Run Date	10-Nov-22 08:56	18-Nov-22 04:35
Final Volume	25 ul	25 uL
Dilution Factor	1	20
Analysis Units	pg/g wwt	pg/g wwt
Instrument - Column	HRMS-5 SPBOCTYL271790-03	HRMS-9 SPBOCTYL273027-01

Target Analytes	**TEF (WHO 2005)**	**Ret. Time**	**Conc. g/g wwt**	**EDL /g wwt**	**Flags**	**EMPC 'g wwt**	**LQL**	**Ret. Time**	**Conc. g/g wwt**	**EDL /g wwt**	**Flags**	**EMPC 'g wwt**	**LQL**
PCB-192								NotFnd	<1.9	1.9	U		50
PCB-180/193								27.80	9410	2.1			50
PCB-191								27.98	176	1.8			50
PCB-170								28.50	3000	2.4			50
PCB-190								28.77	717	1.6			50
PCB-189	0.00003							30.10	122	1.7			50
PCB-202								26.38	243	0.60			50
PCB-201								26.85	172	0.64			50
PCB-204								NotFnd	<0.66	0.66	U		50
PCB-197								27.31	58.4	0.67			50
PCB-200								27.42	139	0.69			50
PCB-198/199								28.82	1630	0.95			50
PCB-196								29.14	787	0.95			50
PCB-203								29.25	1150	0.92			50
PCB-195								29.99	598	1.5			50
PCB-194								31.23	1260	1.4			50
PCB-205								31.52	70.1	1.3			50
PCB-208								29.81	38.9	1.4	J		50
PCB-207								30.29	30.6	1.8	J		50
PCB-206								32.61	194	2.7			50
PCB-209								33.75	16.1	0.64	J		50

Extraction Standards	**pg**	**Time**	**% Rec**	**Limits**	**Time**	**% Rec**	**Limits**
13C12-PCB-001	2000	8.97	30	5-145			
13C12-PCB-003	2000	10.48	31	5-145			
13C12-PCB-004	2000	10.65	42	5-145			
13C12-PCB-015	2000	14.30	42	5-145			
13C12-PCB-019	2000	12.64	53	5-145			
13C12-PCB-037	2000	18.23	49	5-145			
13C12-PCB-054	2000	14.48	50	5-145			
13C12-PCB-081	2000	21.79	48	10-145			
13C12-PCB-077	2000	22.09	45	10-145			
13C12-PCB-104	2000	17.50	53	10-145			
13C12-PCB-123	2000	23.06	50	10-145			
13C12-PCB-118	2000	23.23	49	10-145			
13C12-PCB-114	2000	23.55	47	10-145			
13C12-PCB-105	2000	23.90	47	10-145			
13C12-PCB-126	2000	25.48	44	10-145			
13C12-PCB-155	2000	20.47	62	10-145			
13C12-PCB-167	2000				26.48	60	10-145
13C12-PCB-156/157	4000				27.13	60	10-145
13C12-PCB-169	2000				28.80	61	10-145
13C12-PCB-188	2000				23.57	74	10-145
13C12-PCB-189	2000				30.08	63	10-145
13C12-PCB-202	2000				26.36	76	10-145
13C12-PCB-205	2000				31.49	65	10-145
13C12-PCB-208	2000				29.80	70	10-145
13C12-PCB-206	2000				32.59	74	10-145
13C12-PCB-209	2000				33.73	72	10-145
Cleanup Standards							
13C12-PCB-028	2000	15.99	50	5-145			
13C12-PCB-111	2000	22.00	52	10-145			
13C12-PCB-178	2000	25.04	61	10-145			

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Sample Analysis Report

Sample Name	**LARGEROUGH-FILLET-1**	Sampling Date	6-Jul-22		Approved:
ALS Sample ID	L2735553-2	Extraction Date	21-Oct-22		*A. Kuol*
Analysis Method	EPA 1668C	Sample Size	10	g wwt	--e-signature--
Analysis Type	Sample	Percent Moisture	n/a		23-Nov-2022
Sample Matrix	Fish tissue	Split Ratio	1		

Run Information	**Run 1**	**Run 2**
Filename	5-221109A25	9-221117A22
Run Date	10-Nov-22 08:56	18-Nov-22 04:35
Final Volume	25 ul	25 uL
Dilution Factor	1	20
Analysis Units	pg/g wwt	pg/g wwt
Instrument - Column	HRMS-5 SPBOCTYL271790-03	HRMS-9 SPBOCTYL273027-01

Target Analytes	**TEF (WHO 2005)**	**Ret. Time**	**Conc. g/g wwt**	**EDL /g wwt**	**Flags**	**EMPC 'g wwt**	**LQL**	**Ret. Time**	**Conc. g/g wwt**	**EDL /g wwt**	**Flags**	**EMPC 'g wwt**	**LQL**
Homologue Group Totals													
Total MonoCB			6.31	0.044	J		10						
Total DiCB			54.1	0.062	J		20						
Total TriCB			174	0.037	J		20						
Total TetraCB			1030	0.030	J		40						
Total PentaCB			8420	0.030	J		40						
Total HexaCB			59200	0.048	J		40						
Total HeptaCB			33800	1.3	J		20						
Total OctaCB			6110	0.60	J		20						
Total NonaCB			264	1.4	J		10						
DecaCB			16.1	0.64	J		10						
Total PCB			109000		J		80						
Toxic Equivalency - (WHO 2005)													
Lower Bound PCB TEQ			2.87										
Mid Point PCB TEQ			2.87										
Upper Bound PCB TEQ			2.87										

EDL	Indicates the Estimated Detection Limit, based on the measured background noise for this target in this sample.
TEF	Indicates the Toxic Equivalency Factor TEQ Indicates the Toxic Equivalency
LQL	Lower Quantification Limit, based on the lowest calibration level corrected for sample size, splits and dilutions.
M	Indicates that a peak has been manually integrated.
U	Indicates that this compound was not detected above the EDL.
J	Indicates that the analyte was positively identifed. The associated numerical result is an estimate.
R	Indicates that the ion abundance ratio for this analyte did not meet the control limit. The reported value represents an estimated concentration.
EMPC	Estimated Maximum Possible Concentration – elevated detection limit due to interference or positive id criterion failure

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Sample Analysis Report

Sample Name	**LARGEROUGH-WB-1-DUP**	Sampling Date	6-Jul-22		Approved:
ALS Sample ID	L2735553-3	Extraction Date	21-Oct-22		*A. Kuol*
Analysis Method	EPA 1668C	Sample Size	8.22	g wwt	--e-signature--
Analysis Type	Sample	Percent Moisture	n/a		23-Nov-2022
Sample Matrix	Fish tissue	Split Ratio	1		

Run Information	**Run 1**	**Run 2**
Filename	5-221109A26	9-221117A23
Run Date	10-Nov-22 09:39	18-Nov-22 05:18
Final Volume	25 ul	25 uL
Dilution Factor	1	20
Analysis Units	pg/g wwt	pg/g wwt
Instrument - Column	HRMS-5 SPBOCTYL271790-03	HRMS-9 SPBOCTYL273027-01

Target Analytes	**TEF (WHO 2005)**	**Ret. Time**	**Conc. g/g wwt**	**EDL /g wwt**	**Flags**	**EMPC 'g wwt**	**LQL**	**Ret. Time**	**Conc. g/g wwt**	**EDL /g wwt**	**Flags**	**EMPC 'g wwt**	**LQL**
PCB-001		8.97	0.577	0.041	J		3.0						
PCB-002		10.37	7.09	0.046			3.0						
PCB-003		10.48	0.909	0.048	J		3.0						
PCB-004		10.66	2.94	0.10	J		3.0						
PCB-010		NotFnd	<0.071	0.071	U		3.0						
PCB-009		11.90	<1.3	0.072	J,R	1.3	3.0						
PCB-007		12.01	<0.49	0.070	M,J,R	0.49	3.0						
PCB-006		12.16	2.86	0.074	J		3.0						
PCB-005		12.37	<0.14	0.075	M,J,R	0.14	3.0						
PCB-008		12.44	13.0	0.067	M		3.0						
PCB-014		NotFnd	<0.11	0.11	U		3.0						
PCB-011		13.92	225	0.11	M		3.0						
PCB-012/013		14.11	2.35	0.11	M,J		3.0						
PCB-015		14.31	<2.8	0.10	J,R	2.8	3.0						
PCB-019		12.65	2.18	0.044	J		3.0						
PCB-018/030		13.74	33.0	0.054			3.0						
PCB-017		13.98	20.8	0.065			3.0						
PCB-027		14.11	3.57	0.049			3.0						
PCB-024		14.20	0.890	0.050	J		3.0						
PCB-016		14.28	11.1	0.068			3.0						
PCB-032		14.56	10.1	0.042			3.0						
PCB-034		15.24	0.764	0.12	J		3.0						
PCB-023		15.34	0.227	0.11	J		3.0						
PCB-026/029		15.52	23.9	0.11			3.0						
PCB-025		15.65	7.12	0.11			3.0						
PCB-031		15.83	82.3	0.11			3.0						
PCB-020/028		16.00	298	0.12			3.0						
PCB-021/033		16.15	43.0	0.11			3.0						
PCB-022		16.38	41.8	0.12			3.0						
PCB-036		NotFnd	<0.10	0.10	U		3.0						
PCB-039		17.43	1.73	0.12	J		3.0						
PCB-038		17.74	0.877	0.11	J		3.0						
PCB-035		18.00	<0.23	0.12	J,R	0.23	3.0						
PCB-037		18.25	13.6	0.11			3.0						
PCB-054		14.49	0.194	0.031	J		3.0						
PCB-050/053		15.69	24.1	0.055			3.0						
PCB-045/051		16.09	26.7	0.057			3.0						
PCB-046		16.27	5.52	0.065			3.0						
PCB-052		17.00	890	0.060			3.0						
PCB-073		NotFnd	<0.038	0.038	U		3.0						
PCB-043		17.13	9.20	0.071			3.0						
PCB-049/069		17.26	441	0.048			3.0						
PCB-048		17.42	53.5	0.053			3.0						
PCB-044/047/065		17.56	562	0.054			3.0						
PCB-059/062/075		17.74	48.2	0.042			3.0						
PCB-042		17.86	122	0.064			3.0						
PCB-040/041/071		18.12	149	0.057			3.0						
PCB-064		18.25	249	0.044			3.0						
PCB-072		18.63	23.1	0.25			3.0						
PCB-068		18.78	15.5	0.24			3.0						
PCB-057		19.03	3.43	0.25			3.0						
PCB-058		NotFnd	<0.24	0.24	U		3.0						
PCB-067		19.25	7.77	0.22			3.0						
PCB-063		19.39	36.5	0.24			3.0						
PCB-061/070/074/076		19.61	789	0.25			3.0						
PCB-066		19.76	809	0.24			3.0						
PCB-055		NotFnd	<0.26	0.26	U		3.0						
PCB-056		20.15	128	0.26			3.0						
PCB-060		20.26	112	0.25			3.0						
PCB-080		NotFnd	<0.21	0.21	U		3.0						
PCB-079		21.24	28.5	0.21			3.0						
PCB-078		NotFnd	<0.28	0.28	U		3.0						
PCB-081	0.0003	NotFnd	<0.25	0.25	U		3.0						
PCB-077	0.0001	22.10	26.5	0.28			3.0						
PCB-104		17.52	0.0913	0.041	J		3.0						
PCB-096		17.78	7.35	0.061			3.0						
PCB-103		18.73	49.4	0.057			3.0						
PCB-094		18.89	5.70	0.058			3.0						
PCB-095		19.14	1970	0.027			3.0						
PCB-093/098/100/102		19.30	85.9	0.079			3.0						

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Sample Analysis Report

Sample Name	**LARGEROUGH-WB-1-DUP**	Sampling Date	6-Jul-22		
ALS Sample ID	L2735553-3	Extraction Date	21-Oct-22		Approved:
Analysis Method	EPA 1668C	Sample Size	8.22	g wwt	*A. Kuol*
Analysis Type	Sample	Percent Moisture	n/a		--e-signature--
Sample Matrix	Fish tissue	Split Ratio	1		23-Nov-2022

Run Information	**Run 1**	**Run 2**
Filename	5-221109A26	9-221117A23
Run Date	10-Nov-22 09:39	18-Nov-22 05:18
Final Volume	25 ul	25 uL
Dilution Factor	1	20
Analysis Units	pg/g wwt	pg/g wwt
Instrument - Column	HRMS-5 SPBOCTYL271790-03	HRMS-9 SPBOCTYL273027-01

	TEF	Ret.	Conc.	EDL		EMPC		Ret.	Conc.	EDL		EMPC	
Target Analytes	**(WHO 2005)**	**Time**	**g/g wwt**	**/g wwt**	**Flags**	**'g wwt**	**LQL**	**Time**	**g/g wwt**	**/g wwt**	**Flags**	**'g wwt**	**LQL**
PCB-088/091		19.59	329	0.058			3.0						
PCB-084		19.75	295	0.063			3.0						
PCB-089		20.00	14.9	0.071			3.0						
PCB-121		20.10	2.46	0.039	J		3.0						
PCB-092		20.34	1580	0.064			3.0						
PCB-090/101/113		20.64	9880	0.049			3.0						
PCB-083/099		20.95	2520	0.058			3.0						
PCB-112		NotFnd	<0.040	0.040	U		3.0						
PCB-086/087/097/109/119/125		21.31	2260	0.048	M		3.0						
PCB-085/110/115/116/117		21.72	5940	0.045	M		3.0						
PCB-082		21.93	241	0.072			3.0						
PCB-111		22.01	12.7	0.038			3.0						
PCB-120		22.24	65.2	0.038	M		3.0						
PCB-108/124		22.89	124	0.51			3.0						
PCB-107		23.01	496	0.46	M		3.0						
PCB-123	0.00003	23.09	27.3	0.51	M		3.0						
PCB-106		NotFnd	<0.56	0.56	U		3.0						
PCB-118	0.00003	23.26	3850	0.48			3.0						
PCB-122		23.46	29.1	0.69			3.0						
PCB-114	0.00003	23.55	86.6	0.53			3.0						
PCB-105	0.00003	23.91	935	0.52	M		3.0						
PCB-127		NotFnd	<0.49	0.49	U		3.0						
PCB-126	0.1							25.64	77.1	5.7	M		61
PCB-155		20.49	3.06	0.057			3.0						
PCB-152		NotFnd	<0.11	0.11	U		3.0						
PCB-150		20.74	23.9	0.091			3.0						
PCB-136		20.99	2330	0.11			3.0						
PCB-145		21.11	<0.33	0.099	J,R	0.33	3.0						
PCB-148		21.82	28.5	0.14			3.0						
PCB-135/151		22.17	15200	0.15			3.0						
PCB-154		NotFnd	<0.10	0.10	U		3.0						
PCB-144		22.46	2000	0.14			3.0						
PCB-147/149								22.76	29900	5.2			61
PCB-134/143								22.91	1150	6.6			61
PCB-139/140								23.06	193	5.2			61
PCB-131								23.21	<170	7.2	R	170	61
PCB-142								NotFnd	<6.5	6.5	U		61
PCB-132								23.48	6650	5.9			61
PCB-133								23.62	704	6.1			61
PCB-165								23.83	105	4.5			61
PCB-146								23.96	7750	4.9			61
PCB-161								NotFnd	<4.5	4.5	U		61
PCB-153/168								24.27	50700	4.4			61
PCB-141								24.42	8870	5.7			61
PCB-130								24.65	1730	6.2			61
PCB-137/164								24.82	2850	4.8	M		61
PCB-129/138/163								24.97	64700	8.0			61
PCB-160								NotFnd	<2.7	2.7	U		61
PCB-158								25.17	3170	3.9			61
PCB-128/166								25.64	998	4.8			61
PCB-159								26.12	481	4.0			61
PCB-162								26.24	129	4.2			61
PCB-167	0.00003							26.50	1120	4.0			61
PCB-156/157	0.00003							27.13	1670	6.2			120
PCB-169	0.03							28.80	<21	5.3	M,J,R	21	61
PCB-188								23.58	17.0	2.7	J		61
PCB-179								23.83	4110	3.0			61
PCB-184								24.03	6.98	2.9	J		61
PCB-176								24.27	1390	3.1			61
PCB-186								NotFnd	<3.1	3.1	U		61
PCB-178								25.17	3510	4.3			61
PCB-175								25.49	643	4.0			61
PCB-187								25.63	22800	3.7			61
PCB-182								NotFnd	<3.9	3.9	U		61
PCB-183								25.94	8880	3.7			61
PCB-185								26.04	1550	4.0			61
PCB-174								26.12	10200	4.0			61
PCB-177								26.35	8240	4.1			61
PCB-181								26.53	32.5	4.0	J		61
PCB-171/173								26.68	3770	4.3			61
PCB-172								27.45	2460	4.0			61

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Sample Analysis Report

Sample Name	**LARGEROUGH-WB-1-DUP**	Sampling Date	6-Jul-22		Approved:
ALS Sample ID	L2735553-3	Extraction Date	21-Oct-22		*A. Kuol*
Analysis Method	EPA 1668C	Sample Size	8.22	g wwt	--e-signature--
Analysis Type	Sample	Percent Moisture	n/a		23-Nov-2022
Sample Matrix	Fish tissue	Split Ratio	1		

Run Information	**Run 1**	**Run 2**
Filename	5-221109A26	9-221117A23
Run Date	10-Nov-22 09:39	18-Nov-22 05:18
Final Volume	25 ul	25 uL
Dilution Factor	1	20
Analysis Units	pg/g wwt	pg/g wwt
Instrument - Column	HRMS-5 SPBOCTYL271790-03	HRMS-9 SPBOCTYL273027-01

Target Analytes	**TEF (WHO 2005)**	**Ret. Time**	**Conc. g/g wwt**	**EDL /g wwt**	**Flags**	**EMPC 'g wwt**	**LQL**	**Ret. Time**	**Conc. g/g wwt**	**EDL /g wwt**	**Flags**	**EMPC 'g wwt**	**LQL**
PCB-192								27.61	<3.4	3.4	U	1.6	61
PCB-180/193								27.79	34200	3.7			61
PCB-191								27.98	602	3.2			61
PCB-170								28.50	11400	4.4			61
PCB-190								28.77	2560	2.9			61
PCB-189	0.00003							30.08	384	2.4			61
PCB-202								26.36	795	0.85			61
PCB-201								26.83	573	0.88			61
PCB-204								27.16	<1.2	0.90	J,R	1.2	61
PCB-197								27.29	184	0.91			61
PCB-200								27.42	453	0.94			61
PCB-198/199								28.80	5510	1.3			61
PCB-196								29.14	2560	1.3			61
PCB-203								29.24	3660	1.3			61
PCB-195								29.99	2360	2.1			61
PCB-194								31.22	4930	2.0			61
PCB-205								31.50	268	1.7			61
PCB-208								29.81	149	2.2			61
PCB-207								30.29	115	2.7			61
PCB-206								32.60	754	3.7			61
PCB-209								33.75	64.5	0.80			61

Extraction Standards	**pg**	**Time**	**% Rec**	**Limits**	**Time**	**% Rec**	**Limits**
13C12-PCB-001	2000	8.97	35	5-145			
13C12-PCB-003	2000	10.48	33	5-145			
13C12-PCB-004	2000	10.65	49	5-145			
13C12-PCB-015	2000	14.30	45	5-145			
13C12-PCB-019	2000	12.64	59	5-145			
13C12-PCB-037	2000	18.23	50	5-145			
13C12-PCB-054	2000	14.49	54	5-145			
13C12-PCB-081	2000	21.79	51	10-145			
13C12-PCB-077	2000	22.09	48	10-145			
13C12-PCB-104	2000	17.51	58	10-145			
13C12-PCB-123	2000	23.07	56	10-145			
13C12-PCB-118	2000	23.23	56	10-145			
13C12-PCB-114	2000	23.55	52	10-145			
13C12-PCB-105	2000	23.90	53	10-145			
13C12-PCB-126	2000	25.48	48	10-145			
13C12-PCB-155	2000	20.48	63	10-145			
13C12-PCB-167	2000				26.48	59	10-145
13C12-PCB-156/157	4000				27.14	62	10-145
13C12-PCB-169	2000				28.80	58	10-145
13C12-PCB-188	2000				23.57	65	10-145
13C12-PCB-189	2000				30.07	69	10-145
13C12-PCB-202	2000				26.35	72	10-145
13C12-PCB-205	2000				31.49	61	10-145
13C12-PCB-208	2000				29.79	58	10-145
13C12-PCB-206	2000				32.59	66	10-145
13C12-PCB-209	2000				33.73	66	10-145
Cleanup Standards							
13C12-PCB-028	2000	15.99	56	5-145			
13C12-PCB-111	2000	22.00	57	10-145			
13C12-PCB-178	2000	25.04	63	10-145			

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Sample Analysis Report

Sample Name	**LARGEROUGH-WB-1-DUP**	Sampling Date	6-Jul-22		Approved:
ALS Sample ID	L2735553-3	Extraction Date	21-Oct-22		*A. Kuol*
Analysis Method	EPA 1668C	Sample Size	8.22	g wwt	--e-signature--
Analysis Type	Sample	Percent Moisture	n/a		23-Nov-2022
Sample Matrix	Fish tissue	Split Ratio	1		

Run Information	**Run 1**	**Run 2**
Filename	5-221109A26	9-221117A23
Run Date	10-Nov-22 09:39	18-Nov-22 05:18
Final Volume	25 ul	25 uL
Dilution Factor	1	20
Analysis Units	pg/g wwt	pg/g wwt
Instrument - Column	HRMS-5 SPBOCTYL271790-03	HRMS-9 SPBOCTYL273027-01

Target Analytes	**TEF (WHO 2005)**	**Ret. Time**	**Conc. g/g wwt**	**EDL /g wwt**	**Flags**	**EMPC 'g wwt**	**LQL**	**Ret. Time**	**Conc. g/g wwt**	**EDL /g wwt**	**Flags**	**EMPC 'g wwt**	**LQL**
Homologue Group Totals													
Total MonoCB			8.58	0.041	J		12						
Total DiCB			251	0.067	J		24						
Total TriCB			595	0.042	J		24						
Total TetraCB			4560	0.031	J		49						
Total PentaCB			30900	0.027	J		49						
Total HexaCB			203000	0.057	J		49						
Total HeptaCB			117000	2.4	J		24						
Total OctaCB			21300	0.85	J		24						
Total NonaCB			1020	2.2	J		12						
DecaCB			64.5	0.80	J		12						
Total PCB			378000		J		97						
Toxic Equivalency - (WHO 2005)													
Lower Bound PCB TEQ			7.95										
Mid Point PCB TEQ			8.58										
Upper Bound PCB TEQ			8.58										

EDL	Indicates the Estimated Detection Limit, based on the measured background noise for this target in this sample.
TEF	Indicates the Toxic Equivalency Factor TEQ Indicates the Toxic Equivalency
LQL	Lower Quantification Limit, based on the lowest calibration level corrected for sample size, splits and dilutions.
M	Indicates that a peak has been manually integrated.
U	Indicates that this compound was not detected above the EDL.
J	Indicates that the analyte was positively identifed. The associated numerical result is an estimate.
R	Indicates that the ion abundance ratio for this analyte did not meet the control limit. The reported value represents an estimated concentration.
EMPC	Estimated Maximum Possible Concentration – elevated detection limit due to interference or positive id criterion failure

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Sample Analysis Report

Sample Name	**MEDIUMROUGH-WB-1**	Sampling Date	6-Jul-22		
ALS Sample ID	L2735553-4	Extraction Date	21-Oct-22		Approved:
Analysis Method	EPA 1668C	Sample Size	7.54	g wwt	*A. Kuol*
Analysis Type	Sample	Percent Moisture	n/a		--e-signature--
Sample Matrix	Fish tissue	Split Ratio	1		23-Nov-2022

Run Information	**Run 1**	**Run 2**
Filename	5-221109A27	9-221117A24
Run Date	10-Nov-22 10:21	18-Nov-22 06:00
Final Volume	25 ul	25 uL
Dilution Factor	1	20
Analysis Units	pg/g wwt	pg/g wwt
Instrument - Column	HRMS-5 SPBOCTYL271790-03	HRMS-9 SPBOCTYL273027-01

Target Analytes	**TEF (WHO 2005)**	**Ret. Time**	**Conc. g/g wwt**	**EDL /g wwt**	**Flags**	**EMPC 'g wwt**	**LQL**	**Ret. Time**	**Conc. g/g wwt**	**EDL /g wwt**	**Flags**	**EMPC 'g wwt**	**LQL**
PCB-001		8.98	0.341	0.039	J		3.3						
PCB-002		10.37	5.56	0.043			3.3						
PCB-003		10.49	0.517	0.044	J		3.3						
PCB-004		10.66	1.63	0.11	J		3.3						
PCB-010		NotFnd	<0.081	0.081	U		3.3						
PCB-009		11.91	1.51	0.083	J		3.3						
PCB-007		NotFnd	<0.081	0.081	U		3.3						
PCB-006		12.18	3.00	0.085	J		3.3						
PCB-005		NotFnd	<0.086	0.086	U		3.3						
PCB-008		12.44	14.8	0.077	M		3.3						
PCB-014		NotFnd	<0.14	0.14	U		3.3						
PCB-011		13.93	222	0.14	M		3.3						
PCB-012/013		14.11	<2.6	0.14	M,J,R	2.6	3.3						
PCB-015		14.31	4.10	0.14			3.3						
PCB-019		12.65	1.56	0.052	J		3.3						
PCB-018/030		13.74	48.6	0.056			3.3						
PCB-017		13.99	14.5	0.067			3.3						
PCB-027		14.12	3.66	0.050			3.3						
PCB-024		14.20	1.18	0.052	J		3.3						
PCB-016		14.29	11.2	0.071			3.3						
PCB-032		14.56	12.7	0.044			3.3						
PCB-034		15.25	0.830	0.17	J		3.3						
PCB-023		NotFnd	<0.16	0.16	U		3.3						
PCB-026/029		15.52	27.7	0.16			3.3						
PCB-025		15.65	11.7	0.16			3.3						
PCB-031		15.84	124	0.15			3.3						
PCB-020/028		16.01	227	0.16			3.3						
PCB-021/033		16.15	34.2	0.16			3.3						
PCB-022		16.39	43.4	0.16			3.3						
PCB-036		17.20	<0.31	0.14	J,R	0.31	3.3						
PCB-039		17.43	0.726	0.16	J		3.3						
PCB-038		17.75	0.380	0.16	J		3.3						
PCB-035		18.01	0.306	0.16	J		3.3						
PCB-037		18.25	15.0	0.16			3.3						
PCB-054		14.50	<0.095	0.033	J,R	0.095	3.3						
PCB-050/053		15.69	9.97	0.072			3.3						
PCB-045/051		16.09	14.4	0.074			3.3						
PCB-046		16.28	2.44	0.084	J		3.3						
PCB-052		17.01	430	0.078			3.3						
PCB-073		NotFnd	<0.050	0.050	U		3.3						
PCB-043		17.14	7.21	0.092			3.3						
PCB-049/069		17.27	220	0.062			3.3						
PCB-048		17.43	19.7	0.069			3.3						
PCB-044/047/065		17.57	252	0.070			3.3						
PCB-059/062/075		17.74	19.3	0.055			3.3						
PCB-042		17.87	39.6	0.083			3.3						
PCB-040/041/071		18.13	46.9	0.073			3.3						
PCB-064		18.25	112	0.058			3.3						
PCB-072		18.64	8.63	0.12			3.3						
PCB-068		18.80	5.80	0.12			3.3						
PCB-057		19.03	2.01	0.13	J		3.3						
PCB-058		NotFnd	<0.12	0.12	U		3.3						
PCB-067		19.26	5.05	0.11			3.3						
PCB-063		19.40	13.1	0.12			3.3						
PCB-061/070/074/076		19.60	477	0.13			3.3						
PCB-066		19.77	285	0.12			3.3						
PCB-055		NotFnd	<0.13	0.13	U		3.3						
PCB-056		20.16	52.4	0.13			3.3						
PCB-060		20.28	38.7	0.13			3.3						
PCB-080		NotFnd	<0.10	0.10	U		3.3						
PCB-079		21.25	5.10	0.11			3.3						
PCB-078		NotFnd	<0.14	0.14	U		3.3						
PCB-081	0.0003	NotFnd	<0.13	0.13	U		3.3						
PCB-077	0.0001	22.12	15.8	0.14			3.3						
PCB-104		NotFnd	<0.040	0.040	U		3.3						
PCB-096		17.79	1.54	0.065	J		3.3						
PCB-103		18.74	15.5	0.082			3.3						
PCB-094		18.89	1.53	0.083	J		3.3						
PCB-095		19.14	571	0.039			3.3						
PCB-093/098/100/102		19.31	18.2	0.11	M		3.3						

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Sample Analysis Report

Sample Name	**MEDIUMROUGH-WB-1**	Sampling Date	6-Jul-22		
ALS Sample ID	L2735553-4	Extraction Date	21-Oct-22		Approved:
Analysis Method	EPA 1668C	Sample Size	7.54	g wwt	*A. Kuol*
Analysis Type	Sample	Percent Moisture	n/a		--e-signature--
Sample Matrix	Fish tissue	Split Ratio	1		23-Nov-2022

Run Information	**Run 1**	**Run 2**
Filename	5-221109A27	9-221117A24
Run Date	10-Nov-22 10:21	18-Nov-22 06:00
Final Volume	25 ul	25 uL
Dilution Factor	1	20
Analysis Units	pg/g wwt	pg/g wwt
Instrument - Column	HRMS-5 SPBOCTYL271790-03	HRMS-9 SPBOCTYL273027-01

Target Analytes	**TEF (WHO 2005)**	**Ret. Time**	**Conc. g/g wwt**	**EDL /g wwt**	**Flags**	**EMPC 'g wwt**	**LQL**	**Ret. Time**	**Conc. g/g wwt**	**EDL /g wwt**	**Flags**	**EMPC 'g wwt**	**LQL**
PCB-088/091		19.60	104	0.083			3.3						
PCB-084		19.75	108	0.089			3.3						
PCB-089		20.00	<2.7	0.10	J,R	2.7	3.3						
PCB-121		20.10	0.564	0.056	J		3.3						
PCB-092		20.34	447	0.092			3.3						
PCB-090/101/113		20.65	2130	0.070			3.3						
PCB-083/099		20.96	678	0.084			3.3						
PCB-112		NotFnd	<0.057	0.057	U		3.3						
PCB-086/087/097/109/119/125		21.32	510	0.068	M		3.3						
PCB-085/110/115/116/117		21.73	1630	0.064	M		3.3						
PCB-082		21.94	35.2	0.10			3.3						
PCB-111		22.02	2.83	0.054	J		3.3						
PCB-120		22.25	15.2	0.054	M		3.3						
PCB-108/124		22.89	44.3	0.22			3.3						
PCB-107		23.03	122	0.19	M		3.3						
PCB-123	0.00003	23.10	6.90	0.22	M		3.3						
PCB-106		NotFnd	<0.24	0.24	U		3.3						
PCB-118	0.00003	23.26	903	0.21			3.3						
PCB-122		23.47	9.19	0.29			3.3						
PCB-114	0.00003	23.56	20.5	0.22			3.3						
PCB-105	0.00003	23.92	228	0.22	M		3.3						
PCB-127		NotFnd	<0.21	0.21	U		3.3						
PCB-126	0.1							25.65	17.8	4.1	J		66
PCB-155		20.50	0.289	0.068	J		3.3						
PCB-152		NotFnd	<0.13	0.13	U		3.3						
PCB-150		20.74	4.55	0.11			3.3						
PCB-136		20.99	543	0.13			3.3						
PCB-145		NotFnd	<0.12	0.12	U		3.3						
PCB-148		21.83	6.18	0.16			3.3						
PCB-135/151		22.18	3180	0.18			3.3						
PCB-154		NotFnd	<0.12	0.12	U		3.3						
PCB-144		22.46	370	0.17			3.3						
PCB-147/149								22.76	5380	2.8			66
PCB-134/143								22.91	245	3.5			66
PCB-139/140								23.06	34.4	2.8	J		66
PCB-131								23.21	30.0	3.9	J		66
PCB-142								NotFnd	<3.5	3.5	U		66
PCB-132								23.48	1270	3.2			66
PCB-133								23.63	130	3.3			66
PCB-165								23.83	23.2	2.4	J		66
PCB-146								23.96	1370	2.6			66
PCB-161								NotFnd	<2.4	2.4	U		66
PCB-153/168								24.27	8420	2.4			66
PCB-141								24.42	1740	3.0			66
PCB-130								24.65	320	3.3			66
PCB-137/164								24.82	546	2.6			66
PCB-129/138/163								24.97	11100	4.3			66
PCB-160								NotFnd	<1.5	1.5	U		66
PCB-158								25.18	497	2.1			66
PCB-128/166								25.64	<140	2.6	R	140	66
PCB-159								26.12	91.2	2.1			66
PCB-162								26.24	<23	2.2	J,R	23	66
PCB-167	0.00003							26.50	190	2.1			66
PCB-156/157	0.00003							27.13	285	3.2			130
PCB-169	0.03							28.82	<3.0	3.0	M,U	2.6	66
PCB-188								23.58	3.96	1.5	J		66
PCB-179								23.83	800	1.7			66
PCB-184								NotFnd	<1.6	1.6	U		66
PCB-176								24.27	230	1.8			66
PCB-186								NotFnd	<1.7	1.7	U		66
PCB-178								25.17	618	2.4			66
PCB-175								25.49	110	2.3			66
PCB-187								25.63	3810	2.1			66
PCB-182								NotFnd	<2.2	2.2	U		66
PCB-183								25.94	1470	2.1			66
PCB-185								26.04	267	2.3			66
PCB-174								26.12	2080	2.3			66
PCB-177								26.35	1440	2.3			66
PCB-181								26.55	<7.0	2.3	J,R	7.0	66
PCB-171/173								26.68	660	2.4			66
PCB-172								27.46	419	2.3			66

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Sample Analysis Report

Sample Name	**MEDIUMROUGH-WB-1**	Sampling Date	6-Jul-22		Approved:
ALS Sample ID	L2735553-4	Extraction Date	21-Oct-22		*A. Kuol*
Analysis Method	EPA 1668C	Sample Size	7.54	g wwt	--e-signature--
Analysis Type	Sample	Percent Moisture	n/a		23-Nov-2022
Sample Matrix	Fish tissue	Split Ratio	1		

Run Information	**Run 1**	**Run 2**
Filename	5-221109A27	9-221117A24
Run Date	10-Nov-22 10:21	18-Nov-22 06:00
Final Volume	25 ul	25 uL
Dilution Factor	1	20
Analysis Units	pg/g wwt	pg/g wwt
Instrument - Column	HRMS-5 SPBOCTYL271790-03	HRMS-9 SPBOCTYL273027-01

Target Analytes	**TEF (WHO 2005)**	**Ret. Time**	**Conc. g/g wwt**	**EDL /g wwt**	**Flags**	**EMPC 'g wwt**	**LQL**	**Ret. Time**	**Conc. g/g wwt**	**EDL /g wwt**	**Flags**	**EMPC 'g wwt**	**LQL**
PCB-192								NotFnd	<1.9	1.9	U		66
PCB-180/193								27.80	5690	2.1			66
PCB-191								27.98	97.7	1.8			66
PCB-170								28.50	1970	2.5			66
PCB-190								28.77	457	1.6			66
PCB-189	0.00003							30.08	63.8	1.8	J		66
PCB-202								26.38	146	0.65			66
PCB-201								26.85	99.3	0.67			66
PCB-204								27.20	<0.69	0.69	U	0.46	66
PCB-197								27.29	30.3	0.70	J		66
PCB-200								27.42	82.5	0.72			66
PCB-198/199								28.80	953	0.99			66
PCB-196								29.14	415	1.0			66
PCB-203								29.25	596	0.96			66
PCB-195								29.99	370	1.4			66
PCB-194								31.22	777	1.4			66
PCB-205								31.50	41.7	1.2	J		66
PCB-208								29.81	27.3	2.0	J		66
PCB-207								30.29	20.5	2.5	J		66
PCB-206								32.60	130	3.4			66
PCB-209								33.76	<8.1	0.70	J,R	8.1	66

Extraction Standards	**pg**	**Time**	**% Rec**	**Limits**	**Time**	**% Rec**	**Limits**
13C12-PCB-001	2000	8.97	44	5-145			
13C12-PCB-003	2000	10.48	43	5-145			
13C12-PCB-004	2000	10.65	59	5-145			
13C12-PCB-015	2000	14.31	51	5-145			
13C12-PCB-019	2000	12.64	71	5-145			
13C12-PCB-037	2000	18.24	57	5-145			
13C12-PCB-054	2000	14.49	64	5-145			
13C12-PCB-081	2000	21.80	63	10-145			
13C12-PCB-077	2000	22.10	59	10-145			
13C12-PCB-104	2000	17.51	70	10-145			
13C12-PCB-123	2000	23.07	61	10-145			
13C12-PCB-118	2000	23.24	62	10-145			
13C12-PCB-114	2000	23.56	61	10-145			
13C12-PCB-105	2000	23.91	61	10-145			
13C12-PCB-126	2000	25.49	58	10-145			
13C12-PCB-155	2000	20.49	74	10-145			
13C12-PCB-167	2000				26.48	76	10-145
13C12-PCB-156/157	4000				27.14	77	10-145
13C12-PCB-169	2000				28.80	71	10-145
13C12-PCB-188	2000				23.57	77	10-145
13C12-PCB-189	2000				30.08	80	10-145
13C12-PCB-202	2000				26.36	86	10-145
13C12-PCB-205	2000				31.49	73	10-145
13C12-PCB-208	2000				29.80	70	10-145
13C12-PCB-206	2000				32.58	80	10-145
13C12-PCB-209	2000				33.73	79	10-145
Cleanup Standards							
13C12-PCB-028	2000	16.00	64	5-145			
13C12-PCB-111	2000	22.01	69	10-145			
13C12-PCB-178	2000	25.06	76	10-145			

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Sample Analysis Report

Sample Name	**MEDIUMROUGH-WB-1**	Sampling Date	6-Jul-22		Approved:
ALS Sample ID	L2735553-4	Extraction Date	21-Oct-22		*A. Kuol*
Analysis Method	EPA 1668C	Sample Size	7.54	g wwt	--e-signature--
Analysis Type	Sample	Percent Moisture	n/a		23-Nov-2022
Sample Matrix	Fish tissue	Split Ratio	1		

Run Information	**Run 1**	**Run 2**
Filename	5-221109A27	9-221117A24
Run Date	10-Nov-22 10:21	18-Nov-22 06:00
Final Volume	25 ul	25 uL
Dilution Factor	1	20
Analysis Units	pg/g wwt	pg/g wwt
Instrument - Column	HRMS-5 SPBOCTYL271790-03	HRMS-9 SPBOCTYL273027-01

Target Analytes	**TEF (WHO 2005)**	**Ret. Time**	**Conc. g/g wwt**	**EDL /g wwt**	**Flags**	**EMPC 'g wwt**	**LQL**	**Ret. Time**	**Conc. g/g wwt**	**EDL /g wwt**	**Flags**	**EMPC 'g wwt**	**LQL**
Homologue Group Totals													
Total MonoCB			6.42	0.039	J		13						
Total DiCB			250	0.077	J		27						
Total TriCB			579	0.044	J		27						
Total TetraCB			2080	0.033	J		53						
Total PentaCB			7620	0.039	J		53						
Total HexaCB			35900	0.068	J		53						
Total HeptaCB			20200	1.5	J		27						
Total OctaCB			3510	0.65	J		27						
Total NonaCB			178	2.0	J		13						
DecaCB			8.10	0.70	J		13						
Total PCB			70400		J		110						
Toxic Equivalency - (WHO 2005)													
Lower Bound PCB TEQ			1.83										
Mid Point PCB TEQ			1.88										
Upper Bound PCB TEQ			1.92										

EDL	Indicates the Estimated Detection Limit, based on the measured background noise for this target in this sample.
TEF	Indicates the Toxic Equivalency Factor TEQ Indicates the Toxic Equivalency
LQL	Lower Quantification Limit, based on the lowest calibration level corrected for sample size, splits and dilutions.
M	Indicates that a peak has been manually integrated.
U	Indicates that this compound was not detected above the EDL.
J	Indicates that the analyte was positively identifed. The associated numerical result is an estimate.
R	Indicates that the ion abundance ratio for this analyte did not meet the control limit. The reported value represents an estimated concentration.
EMPC	Estimated Maximum Possible Concentration – elevated detection limit due to interference or positive id criterion failure

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Sample Analysis Report

Sample Name	**MEDIUMROUGH-WB-J1**	Sampling Date	5-Jul-22		
ALS Sample ID	L2735553-5	Extraction Date	21-Oct-22		Approved:
Analysis Method	EPA 1668C	Sample Size	10.04	g wwt	*A. Kuol*
Analysis Type	Sample	Percent Moisture	n/a		--e-signature--
Sample Matrix	Fish tissue	Split Ratio	1		23-Nov-2022

Run Information	**Run 1**	**Run 2**
Filename	5-221109A28	9-221117A25
Run Date	10-Nov-22 11:03	18-Nov-22 06:42
Final Volume	25 ul	25 uL
Dilution Factor	1	20
Analysis Units	pg/g wwt	pg/g wwt
Instrument - Column	HRMS-5 SPBOCTYL271790-03	HRMS-9 SPBOCTYL273027-01

Target Analytes	**TEF (WHO 2005)**	**Ret. Time**	**Conc. g/g wwt**	**EDL /g wwt**	**Flags**	**EMPC 'g wwt**	**LQL**	**Ret. Time**	**Conc. g/g wwt**	**EDL /g wwt**	**Flags**	**EMPC 'g wwt**	**LQL**
PCB-001		8.98	0.439	0.040	J		2.5						
PCB-002		10.38	7.10	0.038			2.5						
PCB-003		10.51	1.53	0.035	J		2.5						
PCB-004		10.68	1.56	0.077	J		2.5						
PCB-010		NotFnd	<0.048	0.048	U		2.5						
PCB-009		11.92	<0.96	0.049	J,R	0.96	2.5						
PCB-007		12.02	<0.27	0.048	M,J,R	0.27	2.5						
PCB-006		12.19	2.05	0.050	J		2.5						
PCB-005		NotFnd	<0.050	0.050	U		2.5						
PCB-008		12.46	8.13	0.045			2.5						
PCB-014		NotFnd	<0.076	0.076	U		2.5						
PCB-011		13.94	206	0.076			2.5						
PCB-012/013		14.10	<2.7	0.072	R	2.7	2.5						
PCB-015		14.32	<3.1	0.066	R	3.1	2.5						
PCB-019		12.67	0.506	0.033	J		2.5						
PCB-018/030		13.76	13.3	0.033			2.5						
PCB-017		14.00	6.82	0.040			2.5						
PCB-027		14.13	0.748	0.030	J		2.5						
PCB-024		14.21	0.441	0.031	J		2.5						
PCB-016		14.30	3.16	0.042			2.5						
PCB-032		14.57	2.54	0.026			2.5						
PCB-034		15.26	0.505	0.078	J		2.5						
PCB-023		15.35	<0.11	0.073	J,R	0.11	2.5						
PCB-026/029		15.53	13.1	0.073			2.5						
PCB-025		15.66	4.44	0.072			2.5						
PCB-031		15.85	73.7	0.069			2.5						
PCB-020/028		16.02	122	0.073			2.5						
PCB-021/033		16.16	12.6	0.071			2.5						
PCB-022		16.40	19.2	0.074			2.5						
PCB-036		17.21	0.496	0.064	M,J		2.5						
PCB-039		17.44	0.435	0.074	J		2.5						
PCB-038		17.76	0.194	0.071	J		2.5						
PCB-035		18.02	<0.27	0.074	J,R	0.27	2.5						
PCB-037		18.26	12.6	0.071			2.5						
PCB-054		14.53	<0.028	0.028	M,U	0.026	2.5						
PCB-050/053		15.70	2.14	0.029	J		2.5						
PCB-045/051		16.10	4.34	0.029			2.5						
PCB-046		16.29	0.537	0.033	J		2.5						
PCB-052		17.01	211	0.031			2.5						
PCB-073		NotFnd	<0.020	0.020	U		2.5						
PCB-043		17.14	3.88	0.037			2.5						
PCB-049/069		17.28	127	0.025			2.5						
PCB-048		17.44	7.60	0.027			2.5						
PCB-044/047/065		17.58	129	0.028			2.5						
PCB-059/062/075		17.75	9.47	0.022			2.5						
PCB-042		17.88	13.1	0.033			2.5						
PCB-040/041/071		18.14	13.5	0.029			2.5						
PCB-064		18.26	66.7	0.023			2.5						
PCB-072		18.65	4.57	0.10			2.5						
PCB-068		18.80	3.75	0.097			2.5						
PCB-057		19.04	1.10	0.10	J		2.5						
PCB-058		NotFnd	<0.099	0.099	U		2.5						
PCB-067		19.26	3.01	0.090			2.5						
PCB-063		19.41	7.33	0.099			2.5						
PCB-061/070/074/076		19.61	284	0.11			2.5						
PCB-066		19.78	167	0.099	M		2.5						
PCB-055		NotFnd	<0.11	0.11	U		2.5						
PCB-056		20.17	21.4	0.11			2.5						
PCB-060		20.28	27.0	0.10			2.5						
PCB-080		NotFnd	<0.085	0.085	U		2.5						
PCB-079		21.26	2.81	0.087			2.5						
PCB-078		NotFnd	<0.11	0.11	U		2.5						
PCB-081	0.0003	NotFnd	<0.10	0.10	U		2.5						
PCB-077	0.0001	22.13	10.9	0.12	M		2.5						
PCB-104		17.53	0.0283	0.028	J		2.5						
PCB-096		17.80	0.575	0.058	J		2.5						
PCB-103		18.75	15.5	0.14			2.5						
PCB-094		18.90	0.815	0.14	J		2.5						
PCB-095		19.15	331	0.068			2.5						
PCB-093/098/100/102		19.32	8.87	0.20			2.5						

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Sample Analysis Report

Sample Name	**MEDIUMROUGH-WB-J1**	Sampling Date	5-Jul-22		
ALS Sample ID	L2735553-5	Extraction Date	21-Oct-22		Approved:
Analysis Method	EPA 1668C	Sample Size	10.04	g wwt	*A. Kuol*
Analysis Type	Sample	Percent Moisture	n/a		--e-signature--
Sample Matrix	Fish tissue	Split Ratio	1		23-Nov-2022

Run Information	**Run 1**	**Run 2**
Filename	5-221109A28	9-221117A25
Run Date	10-Nov-22 11:03	18-Nov-22 06:42
Final Volume	25 ul	25 uL
Dilution Factor	1	20
Analysis Units	pg/g wwt	pg/g wwt
Instrument - Column	HRMS-5 SPBOCTYL271790-03	HRMS-9 SPBOCTYL273027-01

	TEF	Ret.	Conc.	EDL		EMPC		Ret.	Conc.	EDL		EMPC	
Target Analytes	**(WHO 2005)**	**Time**	**g/g wwt**	**/g wwt**	**Flags**	**'g wwt**	**LQL**	**Time**	**g/g wwt**	**/g wwt**	**Flags**	**'g wwt**	**LQL**
PCB-088/091		19.61	78.9	0.14			2.5						
PCB-084		19.76	66.6	0.16			2.5						
PCB-089		20.01	1.29	0.18	J		2.5						
PCB-121		20.12	0.857	0.097	J		2.5						
PCB-092		20.36	307	0.16			2.5						
PCB-090/101/113		20.66	1350	0.12			2.5						
PCB-083/099		20.97	522	0.15			2.5						
PCB-112		NotFnd	<0.10	0.10	U		2.5						
PCB-086/087/097/109/119/125		21.33	350	0.12	M		2.5						
PCB-085/110/115/116/117		21.74	989	0.11	M		2.5						
PCB-082		21.95	19.2	0.18			2.5						
PCB-111		22.04	<2.4	0.095	J,R	2.4	2.5						
PCB-120		22.26	12.3	0.095	M		2.5						
PCB-108/124		22.91	33.7	0.17			2.5						
PCB-107		23.04	82.3	0.15	M		2.5						
PCB-123	0.00003	23.11	3.39	0.19	M		2.5						
PCB-106		NotFnd	<0.18	0.18	U		2.5						
PCB-118	0.00003	23.27	492	0.21			2.5						
PCB-122		23.49	6.17	0.23			2.5						
PCB-114	0.00003	23.57	<9.9	0.17	R	9.9	2.5						
PCB-105	0.00003	23.96	153	0.28	M		2.5						
PCB-127		24.68	<1.6	0.16	J,R	1.6	2.5						
PCB-126	0.1							25.61	<8.2	4.0	M,J,R	8.2	50
PCB-155		20.50	0.260	0.037	J		2.5						
PCB-152		NotFnd	<0.069	0.069	U		2.5						
PCB-150		20.75	2.64	0.056			2.5						
PCB-136		21.00	236	0.066			2.5						
PCB-145		NotFnd	<0.061	0.061	U		2.5						
PCB-148		21.84	4.54	0.085			2.5						
PCB-135/151		22.19	1420	0.091			2.5						
PCB-154		NotFnd	<0.063	0.063	U		2.5						
PCB-144		22.48	165	0.088			2.5						
PCB-147/149								22.75	2410	2.2			50
PCB-134/143								22.90	107	2.8			50
PCB-139/140								23.05	<11	2.2	J,R	11	50
PCB-131								23.21	<13	3.1	J,R	13	50
PCB-142								NotFnd	<2.7	2.7	U		50
PCB-132								23.46	613	2.5			50
PCB-133								23.62	68.8	2.6			50
PCB-165								23.83	9.74	1.9	J		50
PCB-146								23.95	686	2.1			50
PCB-161								NotFnd	<1.9	1.9	U		50
PCB-153/168								24.27	4000	1.9			50
PCB-141								24.42	732	2.4			50
PCB-130								24.64	162	2.6			50
PCB-137/164								24.81	256	2.1	M		50
PCB-129/138/163								24.97	5150	3.4			50
PCB-160								NotFnd	<1.2	1.2	U		50
PCB-158								25.17	237	1.7			50
PCB-128/166								25.68	279	2.0			50
PCB-159								26.11	39.0	1.7	J		50
PCB-162								26.24	13.2	1.8	J		50
PCB-167	0.00003							26.48	88.7	1.7			50
PCB-156/157	0.00003							27.13	143	2.7			100
PCB-169	0.03							28.79	<2.1	2.1	M,U	1.6	50
PCB-188								23.57	2.95	0.99	J		50
PCB-179								23.81	341	1.1			50
PCB-184								NotFnd	<1.1	1.1	U		50
PCB-176								24.27	98.3	1.2			50
PCB-186								NotFnd	<1.1	1.1	U		50
PCB-178								25.16	276	1.6			50
PCB-175								25.48	43.7	1.5	J		50
PCB-187								25.63	1620	1.4			50
PCB-182								NotFnd	<1.4	1.4	U		50
PCB-183								25.93	598	1.4			50
PCB-185								26.04	109	1.5			50
PCB-174								26.11	847	1.5			50
PCB-177								26.34	606	1.5			50
PCB-181								26.53	<1.9	1.5	J,R	1.9	50
PCB-171/173								26.67	273	1.6			50
PCB-172								27.45	179	1.5			50

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Sample Analysis Report

Sample Name	**MEDIUMROUGH-WB-J1**	Sampling Date	5-Jul-22		Approved:
ALS Sample ID	L2735553-5	Extraction Date	21-Oct-22		*A. Kuol*
Analysis Method	EPA 1668C	Sample Size	10.04	g wwt	--e-signature--
Analysis Type	Sample	Percent Moisture	n/a		23-Nov-2022
Sample Matrix	Fish tissue	Split Ratio	1		

Run Information	**Run 1**	**Run 2**
Filename	5-221109A28	9-221117A25
Run Date	10-Nov-22 11:03	18-Nov-22 06:42
Final Volume	25 ul	25 uL
Dilution Factor	1	20
Analysis Units	pg/g wwt	pg/g wwt
Instrument - Column	HRMS-5 SPBOCTYL271790-03	HRMS-9 SPBOCTYL273027-01

Target Analytes	**TEF (WHO 2005)**	**Ret. Time**	**Conc. g/g wwt**	**EDL /g wwt**	**Flags**	**EMPC 'g wwt**	**LQL**	**Ret. Time**	**Conc. g/g wwt**	**EDL /g wwt**	**Flags**	**EMPC 'g wwt**	**LQL**
PCB-192								NotFnd	<1.3	1.3	U		50
PCB-180/193								27.79	2520	1.4			50
PCB-191								27.97	<40	1.2	J,R	40	50
PCB-170								28.49	866	1.6			50
PCB-190								28.76	195	1.1			50
PCB-189	0.00003							30.09	<28	1.3	J,R	28	50
PCB-202								26.36	74.7	0.59			50
PCB-201								26.84	40.2	0.61	J		50
PCB-204								NotFnd	<0.63	0.63	U		50
PCB-197								27.29	14.5	0.63	J		50
PCB-200								27.40	37.3	0.66	J		50
PCB-198/199								28.80	422	0.90			50
PCB-196								29.13	179	0.91			50
PCB-203								29.24	280	0.87			50
PCB-195								29.98	166	1.2			50
PCB-194								31.22	332	1.1			50
PCB-205								31.50	16.1	0.98	J		50
PCB-208								29.80	15.5	1.9	J		50
PCB-207								30.27	10.9	2.3	J		50
PCB-206								32.60	61.7	3.4			50
PCB-209								33.73	8.85	0.59	J		50

Extraction Standards	**pg**	**Time**	**% Rec**	**Limits**	**Time**	**% Rec**	**Limits**
13C12-PCB-001	2000	8.98	27	5-145			
13C12-PCB-003	2000	10.49	33	5-145			
13C12-PCB-004	2000	10.66	44	5-145			
13C12-PCB-015	2000	14.31	47	5-145			
13C12-PCB-019	2000	12.65	59	5-145			
13C12-PCB-037	2000	18.25	53	5-145			
13C12-PCB-054	2000	14.50	54	5-145			
13C12-PCB-081	2000	21.81	54	10-145			
13C12-PCB-077	2000	22.11	53	10-145			
13C12-PCB-104	2000	17.52	59	10-145			
13C12-PCB-123	2000	23.09	37	10-145			
13C12-PCB-118	2000	23.26	32	10-145			
13C12-PCB-114	2000	23.57	40	10-145			
13C12-PCB-105	2000	23.93	31	10-145			
13C12-PCB-126	2000	25.53	51	10-145			
13C12-PCB-155	2000	20.49	61	10-145			
13C12-PCB-167	2000				26.47	60	10-145
13C12-PCB-156/157	4000				27.11	61	10-145
13C12-PCB-169	2000				28.79	60	10-145
13C12-PCB-188	2000				23.56	63	10-145
13C12-PCB-189	2000				30.07	65	10-145
13C12-PCB-202	2000				26.35	68	10-145
13C12-PCB-205	2000				31.48	63	10-145
13C12-PCB-208	2000				29.79	63	10-145
13C12-PCB-206	2000				32.57	72	10-145
13C12-PCB-209	2000				33.73	70	10-145
Cleanup Standards							
13C12-PCB-028	2000	16.01	62	5-145			
13C12-PCB-111	2000	22.02	65	10-145			
13C12-PCB-178	2000	25.08	72	10-145			

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Sample Analysis Report

Sample Name	**MEDIUMROUGH-WB-J1**	Sampling Date	5-Jul-22		
ALS Sample ID	L2735553-5	Extraction Date	21-Oct-22		Approved:
Analysis Method	EPA 1668C	Sample Size	10.04	g wwt	*A. Kuol*
Analysis Type	Sample	Percent Moisture	n/a		--e-signature--
Sample Matrix	Fish tissue	Split Ratio	1		23-Nov-2022

Run Information	**Run 1**	**Run 2**
Filename	5-221109A28	9-221117A25
Run Date	10-Nov-22 11:03	18-Nov-22 06:42
Final Volume	25 ul	25 uL
Dilution Factor	1	20
Analysis Units	pg/g wwt	pg/g wwt
Instrument - Column	HRMS-5 SPBOCTYL271790-03	HRMS-9 SPBOCTYL273027-01

Target Analytes	**TEF (WHO 2005)**	**Ret. Time**	**Conc. g/g wwt**	**EDL /g wwt**	**Flags**	**EMPC 'g wwt**	**LQL**	**Ret. Time**	**Conc. g/g wwt**	**EDL /g wwt**	**Flags**	**EMPC 'g wwt**	**LQL**
Homologue Group Totals													
Total MonoCB			9.07	0.035	J		10						
Total DiCB			225	0.045	J		20						
Total TriCB			287	0.026	J		20						
Total TetraCB			1120	0.020	J		40						
Total PentaCB			4850	0.028	J		40						
Total HexaCB			16800	0.037	J		40						
Total HeptaCB			8640	0.99	J		20						
Total OctaCB			1560	0.59	J		20						
Total NonaCB			88.1	1.9	J		10						
DecaCB			8.85	0.59	J		10						
Total PCB			33600		J		80						
Toxic Equivalency - (WHO 2005)													
Lower Bound PCB TEQ			0.0275										
Mid Point PCB TEQ			0.880										
Upper Bound PCB TEQ			0.912										

EDL	Indicates the Estimated Detection Limit, based on the measured background noise for this target in this sample.
TEF	Indicates the Toxic Equivalency Factor TEQ Indicates the Toxic Equivalency
LQL	Lower Quantification Limit, based on the lowest calibration level corrected for sample size, splits and dilutions.
M	Indicates that a peak has been manually integrated.
U	Indicates that this compound was not detected above the EDL.
J	Indicates that the analyte was positively identifed. The associated numerical result is an estimate.
R	Indicates that the ion abundance ratio for this analyte did not meet the control limit. The reported value represents an estimated concentration.
EMPC	Estimated Maximum Possible Concentration – elevated detection limit due to interference or positive id criterion failure

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Sample Analysis Report

Sample Name	**MEDIUMROUGH-WB-J2**	Sampling Date	5-Jul-22		
ALS Sample ID	L2735553-6	Extraction Date	21-Oct-22		Approved:
Analysis Method	EPA 1668C	Sample Size	10.03	g wwt	*A. Kuol*
Analysis Type	Sample	Percent Moisture	n/a		--e-signature--
Sample Matrix	Fish tissue	Split Ratio	1		23-Nov-2022

Run Information	**Run 1**	**Run 2**
Filename	5-221109A29	9-221117A26
Run Date	10-Nov-22 11:45	18-Nov-22 07:24
Final Volume	25 ul	25 uL
Dilution Factor	1	20
Analysis Units	pg/g wwt	pg/g wwt
Instrument - Column	HRMS-5 SPBOCTYL271790-03	HRMS-9 SPBOCTYL273027-01

Target Analytes	**TEF (WHO 2005)**	**Ret. Time**	**Conc. g/g wwt**	**EDL /g wwt**	**Flags**	**EMPC 'g wwt**	**LQL**	**Ret. Time**	**Conc. g/g wwt**	**EDL /g wwt**	**Flags**	**EMPC 'g wwt**	**LQL**
PCB-001		8.98	0.653	0.029	J		2.5						
PCB-002		10.37	6.67	0.030			2.5						
PCB-003		10.49	1.30	0.030	J		2.5						
PCB-004		10.66	0.925	0.10	J		2.5						
PCB-010		NotFnd	<0.066	0.066	U		2.5						
PCB-009		11.91	1.51	0.067	J		2.5						
PCB-007		12.01	<0.076	0.066	J,R	0.076	2.5						
PCB-006		12.18	3.72	0.069			2.5						
PCB-005		NotFnd	<0.070	0.070	U		2.5						
PCB-008		12.46	22.8	0.063			2.5						
PCB-014		NotFnd	<0.10	0.10	U		2.5						
PCB-011		13.93	248	0.10	M		2.5						
PCB-012/013		14.09	<3.1	0.098	M,R	3.1	2.5						
PCB-015		14.31	5.51	0.090			2.5						
PCB-019		12.65	0.131	0.030	J		2.5						
PCB-018/030		13.75	20.5	0.033			2.5						
PCB-017		13.99	17.9	0.040			2.5						
PCB-027		14.12	0.552	0.030	J		2.5						
PCB-024		14.21	1.36	0.031	J		2.5						
PCB-016		14.29	2.09	0.042	J		2.5						
PCB-032		14.57	5.56	0.026			2.5						
PCB-034		15.25	1.54	0.13	J		2.5						
PCB-023		15.34	0.259	0.12	J		2.5						
PCB-026/029		15.53	35.9	0.12			2.5						
PCB-025		15.66	12.1	0.12			2.5						
PCB-031		15.84	221	0.11			2.5						
PCB-020/028		16.01	378	0.12			2.5						
PCB-021/033		16.15	43.0	0.12			2.5						
PCB-022		16.39	56.3	0.12			2.5						
PCB-036		17.20	<0.39	0.11	M,J,R	0.39	2.5						
PCB-039		17.43	0.822	0.12	J		2.5						
PCB-038		17.75	<0.39	0.12	J,R	0.39	2.5						
PCB-035		18.01	<0.20	0.12	J,R	0.20	2.5						
PCB-037		18.25	28.9	0.11			2.5						
PCB-054		NotFnd	<0.023	0.023	U		2.5						
PCB-050/053		15.69	0.778	0.032	J		2.5						
PCB-045/051		16.09	7.58	0.033			2.5						
PCB-046		16.28	<0.11	0.037	J,R	0.11	2.5						
PCB-052		17.01	543	0.034			2.5						
PCB-073		NotFnd	<0.022	0.022	U		2.5						
PCB-043		17.14	10.9	0.040			2.5						
PCB-049/069		17.27	332	0.027			2.5						
PCB-048		17.43	16.6	0.030			2.5						
PCB-044/047/065		17.57	303	0.031			2.5						
PCB-059/062/075		17.75	25.5	0.024			2.5						
PCB-042		17.87	25.7	0.037			2.5						
PCB-040/041/071		18.14	20.2	0.032			2.5						
PCB-064		18.26	223	0.025			2.5						
PCB-072		18.64	9.54	0.16			2.5						
PCB-068		18.80	6.12	0.16			2.5						
PCB-057		19.04	2.95	0.16			2.5						
PCB-058		NotFnd	<0.16	0.16	U		2.5						
PCB-067		19.26	4.75	0.14			2.5						
PCB-063		19.40	25.4	0.16			2.5						
PCB-061/070/074/076		19.60	908	0.17			2.5						
PCB-066		19.77	587	0.16			2.5						
PCB-055		NotFnd	<0.17	0.17	U		2.5						
PCB-056		20.16	43.1	0.17			2.5						
PCB-060		20.28	84.3	0.16	M		2.5						
PCB-080		NotFnd	<0.14	0.14	U		2.5						
PCB-079		21.26	2.88	0.14	M		2.5						
PCB-078		NotFnd	<0.18	0.18	U		2.5						
PCB-081	0.0003	NotFnd	<0.16	0.16	U		2.5						
PCB-077	0.0001	22.12	20.8	0.18	M		2.5						
PCB-104		NotFnd	<0.020	0.020	U		2.5						
PCB-096		17.79	0.178	0.034	J		2.5						
PCB-103		18.74	14.2	0.087			2.5						
PCB-094		18.89	0.379	0.088	J		2.5						
PCB-095		19.14	435	0.041			2.5						
PCB-093/098/100/102		19.27	7.09	0.12	M		2.5						

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Sample Analysis Report

Sample Name	**MEDIUMROUGH-WB-J2**	Sampling Date	5-Jul-22		
ALS Sample ID	L2735553-6	Extraction Date	21-Oct-22		Approved:
Analysis Method	EPA 1668C	Sample Size	10.03	g wwt	*A. Kuol*
Analysis Type	Sample	Percent Moisture	n/a		--e-signature--
Sample Matrix	Fish tissue	Split Ratio	1		23-Nov-2022

Run Information	**Run 1**	**Run 2**
Filename	5-221109A29	9-221117A26
Run Date	10-Nov-22 11:45	18-Nov-22 07:24
Final Volume	25 ul	25 uL
Dilution Factor	1	20
Analysis Units	pg/g wwt	pg/g wwt
Instrument - Column	HRMS-5 SPBOCTYL271790-03	HRMS-9 SPBOCTYL273027-01

Target Analytes	**TEF (WHO 2005)**	**Ret. Time**	**Conc. g/g wwt**	**EDL /g wwt**	**Flags**	**EMPC 'g wwt**	**LQL**	**Ret. Time**	**Conc. g/g wwt**	**EDL /g wwt**	**Flags**	**EMPC 'g wwt**	**LQL**
PCB-088/091		19.60	102	0.088			2.5						
PCB-084		19.76	108	0.095			2.5						
PCB-089		20.00	0.398	0.11	J		2.5						
PCB-121		20.11	0.624	0.059	J		2.5						
PCB-092		20.35	399	0.097			2.5						
PCB-090/101/113		20.65	1660	0.074			2.5						
PCB-083/099		20.96	708	0.089			2.5						
PCB-112		NotFnd	<0.061	0.061	U		2.5						
PCB-086/087/097/109/119/125		21.32	449	0.072	M		2.5						
PCB-085/110/115/116/117		21.73	1510	0.068	M		2.5						
PCB-082		21.94	9.87	0.11			2.5						
PCB-111		22.03	2.76	0.057			2.5						
PCB-120		22.26	18.5	0.058			2.5						
PCB-108/124		22.91	44.1	0.18			2.5						
PCB-107		23.03	120	0.16	M		2.5						
PCB-123	0.00003	23.10	9.56	0.18	M		2.5						
PCB-106		NotFnd	<0.20	0.20	U		2.5						
PCB-118	0.00003	23.27	930	0.18			2.5						
PCB-122		23.47	11.3	0.24			2.5						
PCB-114	0.00003	23.57	21.2	0.19			2.5						
PCB-105	0.00003	23.93	295	0.20	M		2.5						
PCB-127		24.66	2.88	0.17			2.5						
PCB-126	0.1							25.64	10.3	3.2	M,J		50
PCB-155		20.50	0.132	0.029	J		2.5						
PCB-152		NotFnd	<0.056	0.056	U		2.5						
PCB-150		20.74	2.22	0.046	J		2.5						
PCB-136		20.99	323	0.054			2.5						
PCB-145		NotFnd	<0.050	0.050	U		2.5						
PCB-148		21.83	4.37	0.069			2.5						
PCB-135/151		22.18	1850	0.074			2.5						
PCB-154		NotFnd	<0.052	0.052	U		2.5						
PCB-144		22.47	227	0.072			2.5						
PCB-147/149								22.76	3300	2.5			50
PCB-134/143								22.91	144	3.1			50
PCB-139/140								23.06	20.1	2.5	J		50
PCB-131								23.21	<20	3.4	J,R	20	50
PCB-142								NotFnd	<3.1	3.1	U		50
PCB-132								23.48	878	2.8			50
PCB-133								23.63	84.1	2.9			50
PCB-165								23.84	14.0	2.1	J		50
PCB-146								23.97	924	2.3			50
PCB-161								NotFnd	<2.1	2.1	U		50
PCB-153/168								24.29	5300	2.1			50
PCB-141								24.43	978	2.7			50
PCB-130								24.65	202	2.9			50
PCB-137/164								24.82	340	2.3	M		50
PCB-129/138/163								24.99	6720	3.8			50
PCB-160								NotFnd	<1.3	1.3	U		50
PCB-158								25.18	304	1.8			50
PCB-128/166								25.70	371	2.3			50
PCB-159								26.12	50.0	1.9			50
PCB-162								26.25	19.2	2.0	J		50
PCB-167	0.00003							26.50	128	1.9			50
PCB-156/157	0.00003							27.14	206	3.0			100
PCB-169	0.03							28.82	3.60	2.4	M,J		50
PCB-188								23.58	2.02	0.84	J		50
PCB-179								23.83	453	0.96			50
PCB-184								NotFnd	<0.91	0.91	U		50
PCB-176								24.29	142	0.99			50
PCB-186								NotFnd	<0.97	0.97	U		50
PCB-178								25.17	337	1.4			50
PCB-175								25.49	58.4	1.3			50
PCB-187								25.64	2120	1.2			50
PCB-182								NotFnd	<1.2	1.2	U		50
PCB-183								25.95	754	1.2			50
PCB-185								26.05	161	1.3			50
PCB-174								26.12	1080	1.3			50
PCB-177								26.35	708	1.3			50
PCB-181								26.55	6.01	1.3	J		50
PCB-171/173								26.68	350	1.4			50
PCB-172								27.46	225	1.3			50

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Sample Analysis Report

Sample Name	**MEDIUMROUGH-WB-J2**	Sampling Date	5-Jul-22		
ALS Sample ID	L2735553-6	Extraction Date	21-Oct-22		Approved:
Analysis Method	EPA 1668C	Sample Size	10.03	g wwt	*A. Kuol*
Analysis Type	Sample	Percent Moisture	n/a		--e-signature--
Sample Matrix	Fish tissue	Split Ratio	1		23-Nov-2022

Run Information	**Run 1**	**Run 2**
Filename	5-221109A29	9-221117A26
Run Date	10-Nov-22 11:45	18-Nov-22 07:24
Final Volume	25 ul	25 uL
Dilution Factor	1	20
Analysis Units	pg/g wwt	pg/g wwt
Instrument - Column	HRMS-5 SPBOCTYL271790-03	HRMS-9 SPBOCTYL273027-01

Target Analytes	**TEF (WHO 2005)**	**Ret. Time**	**Conc. g/g wwt**	**EDL /g wwt**	**Flags**	**EMPC 'g wwt**	**LQL**	**Ret. Time**	**Conc. g/g wwt**	**EDL /g wwt**	**Flags**	**EMPC 'g wwt**	**LQL**
PCB-192								NotFnd	<1.1	1.1	U		50
PCB-180/193								27.80	3120	1.2			50
PCB-191								27.98	55.1	1.0			50
PCB-170								28.50	1030	1.4			50
PCB-190								28.77	232	0.92			50
PCB-189	0.00003							30.10	37.5	1.2	J		50
PCB-202								26.38	92.2	0.42			50
PCB-201								26.85	53.2	0.43			50
PCB-204								NotFnd	<0.44	0.44	U		50
PCB-197								27.31	17.7	0.45	J		50
PCB-200								27.42	48.9	0.46	J		50
PCB-198/199								28.82	537	0.63			50
PCB-196								29.16	225	0.64			50
PCB-203								29.25	347	0.62			50
PCB-195								29.99	201	1.1			50
PCB-194								31.23	396	1.0			50
PCB-205								31.52	20.9	0.88	J		50
PCB-208								29.81	26.4	1.5	J		50
PCB-207								30.29	<12	1.8	J,R	12	50
PCB-206								32.61	90.3	2.6			50
PCB-209								33.75	13.3	0.51	J		50

Extraction Standards	**pg**	**Time**	**% Rec**	**Limits**	**Time**	**% Rec**	**Limits**
13C12-PCB-001	2000	8.98	34	5-145			
13C12-PCB-003	2000	10.49	36	5-145			
13C12-PCB-004	2000	10.66	50	5-145			
13C12-PCB-015	2000	14.31	51	5-145			
13C12-PCB-019	2000	12.64	63	5-145			
13C12-PCB-037	2000	18.24	59	5-145			
13C12-PCB-054	2000	14.50	59	5-145			
13C12-PCB-081	2000	21.80	61	10-145			
13C12-PCB-077	2000	22.10	58	10-145			
13C12-PCB-104	2000	17.52	67	10-145			
13C12-PCB-123	2000	23.09	57	10-145			
13C12-PCB-118	2000	23.26	53	10-145			
13C12-PCB-114	2000	23.56	54	10-145			
13C12-PCB-105	2000	23.92	52	10-145			
13C12-PCB-126	2000	25.50	55	10-145			
13C12-PCB-155	2000	20.49	70	10-145			
13C12-PCB-167	2000				26.48	70	10-145
13C12-PCB-156/157	4000				27.14	72	10-145
13C12-PCB-169	2000				28.80	71	10-145
13C12-PCB-188	2000				23.57	79	10-145
13C12-PCB-189	2000				30.08	74	10-145
13C12-PCB-202	2000				26.36	82	10-145
13C12-PCB-205	2000				31.50	71	10-145
13C12-PCB-208	2000				29.80	72	10-145
13C12-PCB-206	2000				32.60	81	10-145
13C12-PCB-209	2000				33.73	79	10-145
Cleanup Standards							
13C12-PCB-028	2000	16.00	64	5-145			
13C12-PCB-111	2000	22.01	69	10-145			
13C12-PCB-178	2000	25.06	77	10-145			

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Sample Analysis Report

Sample Name	**MEDIUMROUGH-WB-J2**	Sampling Date	5-Jul-22		
ALS Sample ID	L2735553-6	Extraction Date	21-Oct-22		Approved:
Analysis Method	EPA 1668C	Sample Size	10.03	g wwt	*A. Kuol*
Analysis Type	Sample	Percent Moisture	n/a		--e-signature--
Sample Matrix	Fish tissue	Split Ratio	1		23-Nov-2022

Run Information	**Run 1**	**Run 2**
Filename	5-221109A29	9-221117A26
Run Date	10-Nov-22 11:45	18-Nov-22 07:24
Final Volume	25 ul	25 uL
Dilution Factor	1	20
Analysis Units	pg/g wwt	pg/g wwt
Instrument - Column	HRMS-5 SPBOCTYL271790-03	HRMS-9 SPBOCTYL273027-01

Target Analytes	**TEF (WHO 2005)**	**Ret. Time**	**Conc. g/g wwt**	**EDL /g wwt**	**Flags**	**EMPC 'g wwt**	**LQL**	**Ret. Time**	**Conc. g/g wwt**	**EDL /g wwt**	**Flags**	**EMPC 'g wwt**	**LQL**
Homologue Group Totals													
Total MonoCB			8.62	0.029	J		10						
Total DiCB			286	0.063	J		20						
Total TriCB			827	0.026	J		20						
Total TetraCB			3200	0.022	J		40						
Total PentaCB			6870	0.020	J		40						
Total HexaCB			22400	0.029	J		40						
Total HeptaCB			10900	0.84	J		20						
Total OctaCB			1940	0.42	J		20						
Total NonaCB			129	1.5	J		10						
DecaCB			13.3	0.51	J		10						
Total PCB			46600		J		80						
Toxic Equivalency - (WHO 2005)													
Lower Bound PCB TEQ			1.19										
Mid Point PCB TEQ			1.19										
Upper Bound PCB TEQ			1.19										

EDL	Indicates the Estimated Detection Limit, based on the measured background noise for this target in this sample.
TEF	Indicates the Toxic Equivalency Factor TEQ Indicates the Toxic Equivalency
LQL	Lower Quantification Limit, based on the lowest calibration level corrected for sample size, splits and dilutions.
M	Indicates that a peak has been manually integrated.
U	Indicates that this compound was not detected above the EDL.
J	Indicates that the analyte was positively identifed. The associated numerical result is an estimate.
R	Indicates that the ion abundance ratio for this analyte did not meet the control limit. The reported value represents an estimated concentration.
EMPC	Estimated Maximum Possible Concentration – elevated detection limit due to interference or positive id criterion failure

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Sample Analysis Report

Sample Name	**SMALL-WB-STICK1**	Sampling Date	6-Jul-22	
ALS Sample ID	L2735553-7	Extraction Date	21-Oct-22	Approved:
Analysis Method	EPA 1668C	Sample Size	8.23 g	*A. Kuol*
Analysis Type	Sample	Percent Moisture	n/a	--e-signature--
Sample Matrix	Fish tissue	Split Ratio	1	23-Nov-2022

Run Information	**Run 1**	**Run 2**
Filename	5-221109A30	9-221117A27
Run Date	10-Nov-22 12:27	18-Nov-22 08:07
Final Volume	25 ul	25 uL
Dilution Factor	1	20
Analysis Units	pg/g wwt	pg/g wwt
Instrument - Column	HRMS-5 SPBOCTYL271790-03	HRMS-9 SPBOCTYL273027-01

Target Analytes	**TEF (WHO 2005)**	**Ret. Time**	**Conc. g/g wwt**	**EDL /g wwt**	**Flags**	**EMPC 'g wwt**	**LQL**	**Ret. Time**	**Conc. g/g wwt**	**EDL /g wwt**	**Flags**	**EMPC 'g wwt**	**LQL**
PCB-001		8.98	0.422	0.046	J		3.0						
PCB-002		10.37	5.04	0.044			3.0						
PCB-003		10.49	0.816	0.041	J		3.0						
PCB-004		10.68	0.965	0.11	J		3.0						
PCB-010		NotFnd	<0.071	0.071	U		3.0						
PCB-009		11.90	0.874	0.072	M,J		3.0						
PCB-007		NotFnd	<0.070	0.070	U		3.0						
PCB-006		12.18	0.640	0.073	J		3.0						
PCB-005		12.39	0.101	0.074	M,J		3.0						
PCB-008		12.46	1.71	0.067	M,J		3.0						
PCB-014		NotFnd	<0.12	0.12	U		3.0						
PCB-011		13.93	238	0.12	M		3.0						
PCB-012/013		14.13	2.30	0.11	M,J		3.0						
PCB-015		14.31	3.14	0.10			3.0						
PCB-019		12.65	<0.28	0.040	J,R	0.28	3.0						
PCB-018/030		13.75	6.49	0.044			3.0						
PCB-017		13.99	2.46	0.052	J		3.0						
PCB-027		14.12	<0.18	0.039	J,R	0.18	3.0						
PCB-024		14.20	0.205	0.040	J		3.0						
PCB-016		14.29	1.25	0.055	J		3.0						
PCB-032		14.57	0.357	0.034	J		3.0						
PCB-034		NotFnd	<0.073	0.073	U		3.0						
PCB-023		NotFnd	<0.068	0.068	U		3.0						
PCB-026/029		15.53	6.20	0.068			3.0						
PCB-025		15.66	2.13	0.068	J		3.0						
PCB-031		15.84	24.9	0.064			3.0						
PCB-020/028		16.01	34.0	0.069			3.0						
PCB-021/033		16.15	1.76	0.067	J		3.0						
PCB-022		16.39	7.73	0.070			3.0						
PCB-036		17.20	<0.43	0.060	J,R	0.43	3.0						
PCB-039		17.43	<0.11	0.070	J,R	0.11	3.0						
PCB-038		17.75	<0.067	0.067	U	0.063	3.0						
PCB-035		18.01	<0.29	0.070	J,R	0.29	3.0						
PCB-037		18.25	5.40	0.065			3.0						
PCB-054		NotFnd	<0.022	0.022	U		3.0						
PCB-050/053		15.70	1.05	0.039	J		3.0						
PCB-045/051		16.10	2.57	0.040	J		3.0						
PCB-046		16.28	0.416	0.045	J		3.0						
PCB-052		17.01	115	0.042			3.0						
PCB-073		NotFnd	<0.027	0.027	U		3.0						
PCB-043		17.14	1.46	0.050	J		3.0						
PCB-049/069		17.27	37.8	0.034			3.0						
PCB-048		17.43	3.11	0.037			3.0						
PCB-044/047/065		17.57	57.7	0.038			3.0						
PCB-059/062/075		17.75	4.71	0.030			3.0						
PCB-042		17.87	10.4	0.045			3.0						
PCB-040/041/071		18.16	4.62	0.040			3.0						
PCB-064		18.26	23.4	0.031			3.0						
PCB-072		18.64	2.07	0.12	J		3.0						
PCB-068		18.80	1.37	0.11	J		3.0						
PCB-057		19.04	0.449	0.12	J		3.0						
PCB-058		NotFnd	<0.11	0.11	U		3.0						
PCB-067		19.26	3.06	0.10			3.0						
PCB-063		19.41	2.65	0.11	J		3.0						
PCB-061/070/074/076		19.60	110	0.12			3.0						
PCB-066		19.77	49.9	0.11			3.0						
PCB-055		NotFnd	<0.12	0.12	U		3.0						
PCB-056		20.16	13.9	0.13			3.0						
PCB-060		20.28	8.48	0.12			3.0						
PCB-080		NotFnd	<0.099	0.099	U		3.0						
PCB-079		21.26	2.87	0.10	J		3.0						
PCB-078		NotFnd	<0.13	0.13	U		3.0						
PCB-081	0.0003	NotFnd	<0.12	0.12	U		3.0						
PCB-077	0.0001	22.12	5.97	0.13			3.0						
PCB-104		NotFnd	<0.033	0.033	U		3.0						
PCB-096		17.79	0.714	0.050	J		3.0						
PCB-103		18.74	9.03	0.18			3.0						
PCB-094		18.89	0.683	0.18	J		3.0						
PCB-095		19.14	335	0.086			3.0						
PCB-093/098/100/102		19.31	9.04	0.25			3.0						

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Sample Analysis Report

Sample Name	**SMALL-WB-STICK1**	Sampling Date	6-Jul-22	
ALS Sample ID	L2735553-7	Extraction Date	21-Oct-22	Approved:
Analysis Method	EPA 1668C	Sample Size	8.23 g	*A. Kuol*
Analysis Type	Sample	Percent Moisture	n/a	--e-signature--
Sample Matrix	Fish tissue	Split Ratio	1	23-Nov-2022

Run Information	**Run 1**	**Run 2**
Filename	5-221109A30	9-221117A27
Run Date	10-Nov-22 12:27	18-Nov-22 08:07
Final Volume	25 ul	25 uL
Dilution Factor	1	20
Analysis Units	pg/g wwt	pg/g wwt
Instrument - Column	HRMS-5 SPBOCTYL271790-03	HRMS-9 SPBOCTYL273027-01

Target Analytes	TEF (WHO 2005)	Ret. Time	Conc. g/g wwt	EDL /g wwt	Flags	EMPC 'g wwt	LQL	Ret. Time	Conc. g/g wwt	EDL /g wwt	Flags	EMPC 'g wwt	LQL
PCB-088/091		19.61	29.1	0.18			3.0						
PCB-084		19.76	32.6	0.20			3.0						
PCB-089		20.00	<0.53	0.22	J,R	0.53	3.0						
PCB-121		20.11	0.256	0.12	J		3.0						
PCB-092		20.35	272	0.20			3.0						
PCB-090/101/113		20.65	1410	0.15			3.0						
PCB-083/099		20.96	267	0.18			3.0						
PCB-112		NotFnd	<0.13	0.13	U		3.0						
PCB-086/087/097/109/119/125		21.32	252	0.15	M		3.0						
PCB-085/110/115/116/117		21.73	867	0.14	M		3.0						
PCB-082		21.94	14.0	0.23			3.0						
PCB-111		22.02	1.28	0.12	J		3.0						
PCB-120		22.25	8.85	0.12	M		3.0						
PCB-108/124		22.91	21.0	0.12			3.0						
PCB-107		23.03	57.1	0.11	M		3.0						
PCB-123	0.00003	23.10	2.67	0.12	M,J		3.0						
PCB-106		NotFnd	<0.13	0.13	U		3.0						
PCB-118	0.00003	23.26	347	0.11			3.0						
PCB-122		23.47	4.87	0.17			3.0						
PCB-114	0.00003	23.56	9.04	0.13			3.0						
PCB-105	0.00003	23.92	95.4	0.11	M		3.0						
PCB-127		NotFnd	<0.12	0.12	U		3.0						
PCB-126	0.1							25.63	14.0	4.1	M,J		61
PCB-155		20.50	<0.14	0.031	J,R	0.14	3.0						
PCB-152		NotFnd	<0.060	0.060	U		3.0						
PCB-150		20.74	3.03	0.049	J		3.0						
PCB-136		20.99	426	0.058			3.0						
PCB-145		NotFnd	<0.054	0.054	U		3.0						
PCB-148		21.83	4.15	0.074			3.0						
PCB-135/151		22.18	2680	0.080			3.0						
PCB-154		NotFnd	<0.055	0.055	U		3.0						
PCB-144		22.47	261	0.077			3.0						
PCB-147/149								22.75	4220	3.7			61
PCB-134/143								22.90	191	4.7			61
PCB-139/140								23.06	<23	3.7	J,R	23	61
PCB-131								23.20	22.6	5.1	J		61
PCB-142								NotFnd	<4.6	4.6	U		61
PCB-132								23.46	922	4.2			61
PCB-133								23.62	97.5	4.4			61
PCB-165								23.83	16.0	3.2	J		61
PCB-146								23.95	1010	3.5			61
PCB-161								NotFnd	<3.2	3.2	U		61
PCB-153/168								24.27	6420	3.1			61
PCB-141								24.42	1370	4.0			61
PCB-130								24.64	242	4.4			61
PCB-137/164								24.80	435	3.4	M		61
PCB-129/138/163								24.97	8540	5.7			61
PCB-160								NotFnd	<1.9	1.9	U		61
PCB-158								25.17	387	2.8			61
PCB-128/166								25.63	108	3.4			61
PCB-159								26.11	64.6	2.8			61
PCB-162								26.23	14.3	3.0	J		61
PCB-167	0.00003							26.48	125	2.8			61
PCB-156/157	0.00003							27.11	196	4.5			120
PCB-169	0.03							28.78	<4.0	3.5	M,J,R	4.0	61
PCB-188								23.57	<2.4	1.3	J,R	2.4	61
PCB-179								23.81	620	1.4			61
PCB-184								NotFnd	<1.3	1.3	U		61
PCB-176								24.26	164	1.4			61
PCB-186								NotFnd	<1.4	1.4	U		61
PCB-178								25.16	474	2.0			61
PCB-175								25.48	64.7	1.8			61
PCB-187								25.61	2730	1.7			61
PCB-182								NotFnd	<1.8	1.8	U		61
PCB-183								25.93	906	1.7			61
PCB-185								26.03	188	1.9			61
PCB-174								26.11	1420	1.8			61
PCB-177								26.34	1070	1.9			61
PCB-181								26.52	<4.4	1.9	J,R	4.4	61
PCB-171/173								26.67	422	2.0			61
PCB-172								27.45	284	1.8			61

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Sample Analysis Report

Sample Name	**SMALL-WB-STICK1**	Sampling Date	6-Jul-22	
ALS Sample ID	L2735553-7	Extraction Date	21-Oct-22	Approved:
Analysis Method	EPA 1668C	Sample Size	8.23 g	*A. Kuol*
Analysis Type	Sample	Percent Moisture	n/a	--e-signature--
Sample Matrix	Fish tissue	Split Ratio	1	23-Nov-2022

Run Information	**Run 1**	**Run 2**
Filename	5-221109A30	9-221117A27
Run Date	10-Nov-22 12:27	18-Nov-22 08:07
Final Volume	25 ul	25 uL
Dilution Factor	1	20
Analysis Units	pg/g wwt	pg/g wwt
Instrument - Column	HRMS-5 SPBOCTYL271790-03	HRMS-9 SPBOCTYL273027-01

Target Analytes	**TEF (WHO 2005)**	**Ret. Time**	**Conc. g/g wwt**	**EDL /g wwt**	**Flags**	**EMPC 'g wwt**	**LQL**	**Ret. Time**	**Conc. g/g wwt**	**EDL /g wwt**	**Flags**	**EMPC 'g wwt**	**LQL**
PCB-192								NotFnd	<1.6	1.6	U		61
PCB-180/193								27.79	3680	1.7			61
PCB-191								27.97	70.9	1.5			61
PCB-170								28.49	1450	2.0			61
PCB-190								28.76	326	1.3			61
PCB-189	0.00003							30.08	47.3	1.6	J		61
PCB-202								26.36	101	0.69			61
PCB-201								26.83	53.5	0.69	J		61
PCB-204								NotFnd	<0.70	0.70	U		61
PCB-197								27.29	15.4	0.71	J		61
PCB-200								27.40	57.0	0.74	J		61
PCB-198/199								28.80	622	1.0			61
PCB-196								29.13	240	1.0			61
PCB-203								29.24	347	0.98			61
PCB-195								29.98	302	1.9			61
PCB-194								31.22	516	1.8			61
PCB-205								31.50	<27	1.4	J,R	27	61
PCB-208								29.80	13.4	1.9	J		61
PCB-207								30.28	<6.7	2.4	M,J,R	6.7	61
PCB-206								32.60	60.1	3.5	J		61
PCB-209								33.73	<2.0	0.76	M,J,R	2.0	61

Extraction Standards	**pg**	**Time**	**% Rec**	**Limits**	**Time**	**% Rec**	**Limits**
13C12-PCB-001	2000	8.98	26	5-145			
13C12-PCB-003	2000	10.49	32	5-145			
13C12-PCB-004	2000	10.66	42	5-145			
13C12-PCB-015	2000	14.31	46	5-145			
13C12-PCB-019	2000	12.64	57	5-145			
13C12-PCB-037	2000	18.24	53	5-145			
13C12-PCB-054	2000	14.50	55	5-145			
13C12-PCB-081	2000	21.80	56	10-145			
13C12-PCB-077	2000	22.10	54	10-145			
13C12-PCB-104	2000	17.51	61	10-145			
13C12-PCB-123	2000	23.07	59	10-145			
13C12-PCB-118	2000	23.24	60	10-145			
13C12-PCB-114	2000	23.56	54	10-145			
13C12-PCB-105	2000	23.91	60	10-145			
13C12-PCB-126	2000	25.49	55	10-145			
13C12-PCB-155	2000	20.49	66	10-145			
13C12-PCB-167	2000				26.47	66	10-145
13C12-PCB-156/157	4000				27.13	66	10-145
13C12-PCB-169	2000				28.79	66	10-145
13C12-PCB-188	2000				23.56	70	10-145
13C12-PCB-189	2000				30.07	75	10-145
13C12-PCB-202	2000				26.35	71	10-145
13C12-PCB-205	2000				31.49	67	10-145
13C12-PCB-208	2000				29.79	66	10-145
13C12-PCB-206	2000				32.59	72	10-145
13C12-PCB-209	2000				33.72	68	10-145
Cleanup Standards							
13C12-PCB-028	2000	16.00	55	5-145			
13C12-PCB-111	2000	22.01	61	10-145			
13C12-PCB-178	2000	25.06	69	10-145			

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Sample Analysis Report

Sample Name	**SMALL-WB-STICK1**	Sampling Date	6-Jul-22	
ALS Sample ID	L2735553-7	Extraction Date	21-Oct-22	Approved:
Analysis Method	EPA 1668C	Sample Size	8.23 g	*A. Kuol*
Analysis Type	Sample	Percent Moisture	n/a	--e-signature--
Sample Matrix	Fish tissue	Split Ratio	1	23-Nov-2022

Run Information	**Run 1**	**Run 2**
Filename	5-221109A30	9-221117A27
Run Date	10-Nov-22 12:27	18-Nov-22 08:07
Final Volume	25 ul	25 uL
Dilution Factor	1	20
Analysis Units	pg/g wwt	pg/g wwt
Instrument - Column	HRMS-5 SPBOCTYL271790-03	HRMS-9 SPBOCTYL273027-01

Target Analytes	**TEF (WHO 2005)**	**Ret. Time**	**Conc. g/g wwt**	**EDL /g wwt**	**Flags**	**EMPC 'g wwt**	**LQL**	**Ret. Time**	**Conc. g/g wwt**	**EDL /g wwt**	**Flags**	**EMPC 'g wwt**	**LQL**
Homologue Group Totals													
Total MonoCB			6.28	0.041	J		12						
Total DiCB			248	0.067	J		24						
Total TriCB			94.2	0.034	J		24						
Total TetraCB			463	0.022	J		49						
Total PentaCB			4060	0.033	J		49						
Total HexaCB			27800	0.031	J		49						
Total HeptaCB			13900	1.3	J		24						
Total OctaCB			2280	0.69	J		24						
Total NonaCB			80.2	1.9	J		12						
DecaCB			2.00	0.76	J		12						
Total PCB			48900		J		97						
Toxic Equivalency - (WHO 2005)													
Lower Bound PCB TEQ			1.43										
Mid Point PCB TEQ			1.55										
Upper Bound PCB TEQ			1.55										

EDL	Indicates the Estimated Detection Limit, based on the measured background noise for this target in this sample.
TEF	Indicates the Toxic Equivalency Factor TEQ Indicates the Toxic Equivalency
LQL	Lower Quantification Limit, based on the lowest calibration level corrected for sample size, splits and dilutions.
M	Indicates that a peak has been manually integrated.
U	Indicates that this compound was not detected above the EDL.
J	Indicates that the analyte was positively identifed. The associated numerical result is an estimate.
R	Indicates that the ion abundance ratio for this analyte did not meet the control limit. The reported value represents an estimated concentration.
EMPC	Estimated Maximum Possible Concentration – elevated detection limit due to interference or positive id criterion failure

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Sample Analysis Report

Sample Name	**SMALL-WB-STICK2**	Sampling Date	5-Jul-22	
ALS Sample ID	L2735553-8	Extraction Date	21-Oct-22	Approved:
Analysis Method	EPA 1668C	Sample Size	6.07 g	*A. Kuol*
Analysis Type	Sample	Percent Moisture	n/a	--e-signature--
Sample Matrix	Fish tissue	Split Ratio	1	23-Nov-2022

Run Information	**Run 1**	**Run 2**
Filename	5-221109A31	9-221117A28
Run Date	10-Nov-22 13:10	18-Nov-22 08:49
Final Volume	25 ul	25 uL
Dilution Factor	1	20
Analysis Units	pg/g wwt	pg/g wwt
Instrument - Column	HRMS-5 SPBOCTYL271790-03	HRMS-9 SPBOCTYL273027-01

Target Analytes	**TEF (WHO 2005)**	**Ret. Time**	**Conc. g/g wwt**	**EDL /g wwt**	**Flags**	**EMPC 'g wwt**	**LQL**	**Ret. Time**	**Conc. g/g wwt**	**EDL /g wwt**	**Flags**	**EMPC 'g wwt**	**LQL**
PCB-001		8.99	0.479	0.063	J		4.1						
PCB-002		10.38	2.61	0.063	J		4.1						
PCB-003		10.51	<0.73	0.061	J,R	0.73	4.1						
PCB-004		10.68	1.07	0.15	J		4.1						
PCB-010		10.79	<0.094	0.094	U	0.076	4.1						
PCB-009		11.91	<0.64	0.096	J,R	0.64	4.1						
PCB-007		NotFnd	<0.094	0.094	U		4.1						
PCB-006		12.19	0.739	0.098	J		4.1						
PCB-005		12.40	<0.13	0.099	M,J,R	0.13	4.1						
PCB-008		12.46	2.11	0.090	M,J		4.1						
PCB-014		NotFnd	<0.12	0.12	U		4.1						
PCB-011		13.95	152	0.12			4.1						
PCB-012/013		14.12	2.30	0.11	M,J		4.1						
PCB-015		14.32	2.52	0.10	J		4.1						
PCB-019		12.67	0.356	0.058	J		4.1						
PCB-018/030		13.76	7.02	0.076			4.1						
PCB-017		14.00	3.20	0.092	J		4.1						
PCB-027		14.12	0.313	0.069	J		4.1						
PCB-024		14.21	<0.22	0.071	J,R	0.22	4.1						
PCB-016		14.31	1.85	0.097	J		4.1						
PCB-032		14.58	0.560	0.060	J		4.1						
PCB-034		15.26	0.146	0.14	J		4.1						
PCB-023		NotFnd	<0.13	0.13	U		4.1						
PCB-026/029		15.54	6.72	0.13			4.1						
PCB-025		15.67	2.66	0.13	J		4.1						
PCB-031		15.85	28.6	0.12			4.1						
PCB-020/028		16.02	42.3	0.13			4.1						
PCB-021/033		16.17	2.21	0.13	J		4.1						
PCB-022		16.40	9.84	0.14			4.1						
PCB-036		17.22	0.312	0.12	J		4.1						
PCB-039		17.45	<0.13	0.13	U	0.084	4.1						
PCB-038		17.77	<0.13	0.13	U	0.11	4.1						
PCB-035		18.01	<0.22	0.14	J,R	0.22	4.1						
PCB-037		18.26	5.39	0.13			4.1						
PCB-054		NotFnd	<0.040	0.040	U		4.1						
PCB-050/053		15.71	1.03	0.089	J		4.1						
PCB-045/051		16.11	3.13	0.092	J		4.1						
PCB-046		16.30	<0.49	0.10	J,R	0.49	4.1						
PCB-052		17.01	137	0.097			4.1						
PCB-073		NotFnd	<0.062	0.062	U		4.1						
PCB-043		17.15	2.01	0.11	J		4.1						
PCB-049/069		17.28	48.2	0.078			4.1						
PCB-048		17.44	3.71	0.086	J		4.1						
PCB-044/047/065		17.58	71.1	0.087			4.1						
PCB-059/062/075		17.76	6.19	0.068			4.1						
PCB-042		17.88	14.0	0.10			4.1						
PCB-040/041/071		18.17	6.16	0.091			4.1						
PCB-064		18.27	30.8	0.072			4.1						
PCB-072		18.65	2.78	0.13	J		4.1						
PCB-068		18.81	1.89	0.12	J		4.1						
PCB-057		19.05	0.620	0.13	J		4.1						
PCB-058		NotFnd	<0.12	0.12	U		4.1						
PCB-067		19.26	3.73	0.11	J		4.1						
PCB-063		19.42	3.55	0.12	J		4.1						
PCB-061/070/074/076		19.61	142	0.13			4.1						
PCB-066		19.78	75.0	0.12			4.1						
PCB-055		NotFnd	<0.13	0.13	U		4.1						
PCB-056		20.17	18.6	0.14			4.1						
PCB-060		20.29	11.6	0.13			4.1						
PCB-080		NotFnd	<0.11	0.11	U		4.1						
PCB-079		21.27	3.86	0.11	J		4.1						
PCB-078		NotFnd	<0.14	0.14	U		4.1						
PCB-081	0.0003	NotFnd	<0.13	0.13	U		4.1						
PCB-077	0.0001	22.13	<7.8	0.14	R	7.8	4.1						
PCB-104		NotFnd	<0.035	0.035	U		4.1						
PCB-096		17.81	0.797	0.056	J		4.1						
PCB-103		18.75	12.7	0.15			4.1						
PCB-094		18.90	0.840	0.15	J		4.1						
PCB-095		19.15	484	0.073			4.1						
PCB-093/098/100/102		19.33	<13	0.21	R	13	4.1						

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Sample Analysis Report

Sample Name	**SMALL-WB-STICK2**	Sampling Date	5-Jul-22		
ALS Sample ID	L2735553-8	Extraction Date	21-Oct-22		Approved:
Analysis Method	EPA 1668C	Sample Size	6.07	g	*A. Kuol*
Analysis Type	Sample	Percent Moisture	n/a		--e-signature--
Sample Matrix	Fish tissue	Split Ratio	1		23-Nov-2022

Run Information	**Run 1**	**Run 2**
Filename	5-221109A31	9-221117A28
Run Date	10-Nov-22 13:10	18-Nov-22 08:49
Final Volume	25 ul	25 uL
Dilution Factor	1	20
Analysis Units	pg/g wwt	pg/g wwt
Instrument - Column	HRMS-5 SPBOCTYL271790-03	HRMS-9 SPBOCTYL273027-01

Target Analytes	**TEF (WHO 2005)**	**Ret. Time**	**Conc. g/g wwt**	**EDL /g wwt**	**Flags**	**EMPC 'g wwt**	**LQL**	**Ret. Time**	**Conc. g/g wwt**	**EDL /g wwt**	**Flags**	**EMPC 'g wwt**	**LQL**
PCB-088/091		19.62	40.1	0.15			4.1						
PCB-084		19.77	46.9	0.17			4.1						
PCB-089		20.01	0.813	0.19	J		4.1						
PCB-121		NotFnd	<0.10	0.10	U		4.1						
PCB-092		20.36	373	0.17			4.1						
PCB-090/101/113		20.66	1920	0.13			4.1						
PCB-083/099		20.97	368	0.16			4.1						
PCB-112		NotFnd	<0.11	0.11	U		4.1						
PCB-086/087/097/109/119/125		21.33	326	0.13	M		4.1						
PCB-085/110/115/116/117		21.74	1170	0.12	M		4.1						
PCB-082		21.95	23.6	0.19			4.1						
PCB-111		22.04	<1.7	0.10	J,R	1.7	4.1						
PCB-120		22.27	9.24	0.10	M		4.1						
PCB-108/124		22.92	28.3	0.20			4.1						
PCB-107		23.04	74.5	0.18	M		4.1						
PCB-123	0.00003	23.11	4.01	0.20	M,J		4.1						
PCB-106		NotFnd	<0.22	0.22	U		4.1						
PCB-118	0.00003	23.27	460	0.18			4.1						
PCB-122		23.49	6.83	0.27			4.1						
PCB-114	0.00003	23.56	12.3	0.21			4.1						
PCB-105	0.00003	23.93	118	0.19	M		4.1						
PCB-127		NotFnd	<0.19	0.19	U		4.1						
PCB-126	0.1							25.63	13.5	5.2	M,J		82
PCB-155		20.50	<0.18	0.047	J,R	0.18	4.1						
PCB-152		NotFnd	<0.092	0.092	U		4.1						
PCB-150		20.75	3.90	0.075	J		4.1						
PCB-136		21.00	618	0.088			4.1						
PCB-145		NotFnd	<0.082	0.082	U		4.1						
PCB-148		21.84	5.60	0.11			4.1						
PCB-135/151		22.19	3720	0.12			4.1						
PCB-154		NotFnd	<0.084	0.084	U		4.1						
PCB-144		22.48	347	0.12			4.1						
PCB-147/149								22.76	5520	4.6			82
PCB-134/143								22.90	274	5.9			82
PCB-139/140								23.06	32.2	4.6	J		82
PCB-131								23.21	34.3	6.4	J		82
PCB-142								NotFnd	<5.8	5.8	U		82
PCB-132								23.48	1220	5.3			82
PCB-133								23.63	126	5.5			82
PCB-165								23.83	19.9	4.0	J		82
PCB-146								23.96	1340	4.4			82
PCB-161								NotFnd	<4.0	4.0	U		82
PCB-153/168								24.27	8760	3.9			82
PCB-141								24.42	1820	5.1			82
PCB-130								24.65	309	5.5			82
PCB-137/164								24.82	525	4.3			82
PCB-129/138/163								24.97	11100	7.1			82
PCB-160								NotFnd	<2.4	2.4	U		82
PCB-158								25.17	501	3.5			82
PCB-128/166								25.69	503	4.3			82
PCB-159								26.12	82.4	3.5			82
PCB-162								26.24	17.7	3.7	J		82
PCB-167	0.00003							26.50	165	3.3			82
PCB-156/157	0.00003							27.13	252	5.4			160
PCB-169	0.03							28.79	6.16	4.8	M,J		82
PCB-188								NotFnd	<1.7	1.7	U		82
PCB-179								23.83	860	2.0			82
PCB-184								NotFnd	<1.9	1.9	U		82
PCB-176								24.27	218	2.1			82
PCB-186								NotFnd	<2.1	2.1	U		82
PCB-178								25.17	654	2.9			82
PCB-175								25.48	94.5	2.7			82
PCB-187								25.63	3780	2.5			82
PCB-182								NotFnd	<2.6	2.6	U		82
PCB-183								25.94	1280	2.5			82
PCB-185								26.04	261	2.7			82
PCB-174								26.12	1790	2.7			82
PCB-177								26.35	1450	2.7			82
PCB-181								26.55	<3.2	2.7	J,R	3.2	82
PCB-171/173								26.68	578	2.9			82
PCB-172								27.45	393	2.7			82

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Sample Analysis Report

Sample Name	**SMALL-WB-STICK2**	Sampling Date	5-Jul-22	
ALS Sample ID	L2735553-8	Extraction Date	21-Oct-22	Approved:
Analysis Method	EPA 1668C	Sample Size	6.07 g	*A. Kuol*
Analysis Type	Sample	Percent Moisture	n/a	--e-signature--
Sample Matrix	Fish tissue	Split Ratio	1	23-Nov-2022

Run Information	**Run 1**	**Run 2**
Filename	5-221109A31	9-221117A28
Run Date	10-Nov-22 13:10	18-Nov-22 08:49
Final Volume	25 ul	25 uL
Dilution Factor	1	20
Analysis Units	pg/g wwt	pg/g wwt
Instrument - Column	HRMS-5 SPBOCTYL271790-03	HRMS-9 SPBOCTYL273027-01

Target Analytes	**TEF (WHO 2005)**	**Ret. Time**	**Conc. g/g wwt**	**EDL /g wwt**	**Flags**	**EMPC 'g wwt**	**LQL**	**Ret. Time**	**Conc. g/g wwt**	**EDL /g wwt**	**Flags**	**EMPC 'g wwt**	**LQL**
PCB-192								NotFnd	<2.3	2.3	U		82
PCB-180/193								27.79	5270	2.5			82
PCB-191								27.98	97.8	2.2			82
PCB-170								28.50	1970	2.9			82
PCB-190								28.77	432	1.9			82
PCB-189	0.00003							30.10	70.5	2.0	J		82
PCB-202								26.36	153	0.70			82
PCB-201								26.83	88.1	0.72			82
PCB-204								NotFnd	<0.73	0.73	U		82
PCB-197								27.29	26.8	0.74	J		82
PCB-200								27.42	73.4	0.77	J		82
PCB-198/199								28.80	888	1.1			82
PCB-196								29.14	354	1.1			82
PCB-203								29.24	450	1.0			82
PCB-195								29.99	379	2.3			82
PCB-194								31.23	733	2.2			82
PCB-205								31.50	47.4	1.9	J		82
PCB-208								29.81	<15	2.4	J,R	15	82
PCB-207								30.29	13.1	3.1	J		82
PCB-206								32.61	90.5	4.6			82
PCB-209								33.76	<4.7	0.88	J,R	4.7	82

Extraction Standards	**pg**	**Time**	**% Rec**	**Limits**	**Time**	**% Rec**	**Limits**
13C12-PCB-001	2000	8.98	30	5-145			
13C12-PCB-003	2000	10.49	34	5-145			
13C12-PCB-004	2000	10.66	44	5-145			
13C12-PCB-015	2000	14.31	45	5-145			
13C12-PCB-019	2000	12.65	57	5-145			
13C12-PCB-037	2000	18.25	50	5-145			
13C12-PCB-054	2000	14.51	55	5-145			
13C12-PCB-081	2000	21.82	51	10-145			
13C12-PCB-077	2000	22.12	50	10-145			
13C12-PCB-104	2000	17.53	58	10-145			
13C12-PCB-123	2000	23.09	53	10-145			
13C12-PCB-118	2000	23.26	55	10-145			
13C12-PCB-114	2000	23.57	50	10-145			
13C12-PCB-105	2000	23.92	55	10-145			
13C12-PCB-126	2000	25.50	52	10-145			
13C12-PCB-155	2000	20.49	63	10-145			
13C12-PCB-167	2000				26.48	74	10-145
13C12-PCB-156/157	4000				27.13	72	10-145
13C12-PCB-169	2000				28.80	68	10-145
13C12-PCB-188	2000				23.57	77	10-145
13C12-PCB-189	2000				30.07	78	10-145
13C12-PCB-202	2000				26.35	78	10-145
13C12-PCB-205	2000				31.49	73	10-145
13C12-PCB-208	2000				29.80	71	10-145
13C12-PCB-206	2000				32.60	73	10-145
13C12-PCB-209	2000				33.73	75	10-145
Cleanup Standards							
13C12-PCB-028	2000	16.01	54	5-145			
13C12-PCB-111	2000	22.02	58	10-145			
13C12-PCB-178	2000	25.07	65	10-145			

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Sample Analysis Report

Sample Name	**SMALL-WB-STICK2**	Sampling Date	5-Jul-22	
ALS Sample ID	L2735553-8	Extraction Date	21-Oct-22	Approved:
Analysis Method	EPA 1668C	Sample Size	6.07 g	*A. Kuol*
Analysis Type	Sample	Percent Moisture	n/a	--e-signature--
Sample Matrix	Fish tissue	Split Ratio	1	23-Nov-2022

Run Information	**Run 1**	**Run 2**
Filename	5-221109A31	9-221117A28
Run Date	10-Nov-22 13:10	18-Nov-22 08:49
Final Volume	25 ul	25 uL
Dilution Factor	1	20
Analysis Units	pg/g wwt	pg/g wwt
Instrument - Column	HRMS-5 SPBOCTYL271790-03	HRMS-9 SPBOCTYL273027-01

Target Analytes	**TEF (WHO 2005)**	**Ret. Time**	**Conc. g/g wwt**	**EDL /g wwt**	**Flags**	**EMPC 'g wwt**	**LQL**	**Ret. Time**	**Conc. g/g wwt**	**EDL /g wwt**	**Flags**	**EMPC 'g wwt**	**LQL**
Homologue Group Totals													
Total MonoCB			3.82	0.061	J		16						
Total DiCB			162	0.090	J		33						
Total TriCB			112	0.058	J		33						
Total TetraCB			595	0.040	J		66						
Total PentaCB			5510	0.035	J		66						
Total HexaCB			37300	0.047	J		66						
Total HeptaCB			19200	1.7	J		33						
Total OctaCB			3190	0.70	J		33						
Total NonaCB			119	2.4	J		16						
DecaCB			4.70	0.88	J		16						
Total PCB			66200		J		130						
Toxic Equivalency - (WHO 2005)													
Lower Bound PCB TEQ			1.57										
Mid Point PCB TEQ			1.57										
Upper Bound PCB TEQ			1.57										

EDL	Indicates the Estimated Detection Limit, based on the measured background noise for this target in this sample.
TEF	Indicates the Toxic Equivalency Factor TEQ Indicates the Toxic Equivalency
LQL	Lower Quantification Limit, based on the lowest calibration level corrected for sample size, splits and dilutions.
M	Indicates that a peak has been manually integrated.
U	Indicates that this compound was not detected above the EDL.
J	Indicates that the analyte was positively identifed. The associated numerical result is an estimate.
R	Indicates that the ion abundance ratio for this analyte did not meet the control limit. The reported value represents an estimated concentration.
EMPC	Estimated Maximum Possible Concentration – elevated detection limit due to interference or positive id criterion failure

ALS Life Sciences
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SVOC DATA PACKAGE

SECTION 3: METHOD SUMMARY

PCB METHOD SUMMARY
Method 1668

Introduction:

This summary is to provide ALSE Burlington PCB method details in order to provide persons reviewing or validating this data package sufficient information to re-construct the sample calculation, data verification and review. It incorporates the analysis of PCBs via the following reference methods:

US EPA Office of Water, Method 1668A
US EPA Office of Water, Method 1668C

Any deviations to what is listed herein would be listed in the project narrative.

To avoid the confusion and conflicting nomenclature within the methods, we have defined the labeled standards in terms relating to the time of addition to the sample or extract. Therefore;

The Field or Sampling Standards are added prior to field sampling
The Extraction Standards are added prior to extraction
The Clean-up Standards are added prior to extract clean-up
The Injection Standards are added prior to extract injection.

Calibration Standard Levels:

Six levels of standard are available for calibration as listed in Table 1. The low point (the CS0) is below method requirements and therefore is optional.

Table 1. Concentration of CB congeners in calibration and calibration verification standards
Solution concentration (ng/mL)

CB congener	IUPAC [1]	CS-0.2 (Hi sens)2	CS-1	CS-2	CS-3 (VER)	CS-4	CS-5
Native Toxics/LOC							
2-MoCB	1	0.2	1	5	50	400	2000
4-MoCB	3	0.2	1	5	50	400	2000
2,2'-DiCB	4	0.2	1	5	50	400	2000
4,4'-DiCB	15	0.2	1	5	50	400	2000
2,2',6'-TrCB	19	0.2	1	5	50	400	2000
3,4,4'-TrCB	37	0.2	1	5	50	400	2000
2,2',6,6'-TeCB	54	0.2	1	5	50	400	2000
3,3',4,4'-TeCB	77	0.2	1	5	50	400	2000
3,4,4',5-TeCB	81	0.2	1	5	50	400	2000
2,2',4,6,6'-PeCB	104	0.2	1	5	50	400	2000
2,3,3',4,4'-PeCB	105	0.2	1	5	50	400	2000
2,3,4,4',5-PeCB	114	0.2	1	5	50	400	2000
2,3',4,4',5-PeCB	118	0.2	1	5	50	400	2000
2',3,4,4',5-PeCB	123	0.2	1	5	50	400	2000
3,3',4,4',5-PeCB	126	0.2	1	5	50	400	2000
2,2',4,4',6,6'-HxCB	155	0.2	1	5	50	400	2000
2,3,3',4,4',5-HxCB	156	0.2	1	5	50	400	2000
2,3,3',4,4',5'-HxCB	157	0.2	1	5	50	400	2000
2,3',4,4',5,5'-HxCB	167	0.2	1	5	50	400	2000
3,3',4,4',5,5'-HxCB	169	0.2	1	5	50	400	2000
2,2',3,4',5,6,6'-HpCB	188	0.2	1	5	50	400	2000
2,3,3',4,4',5,5'-HpCB	189	0.2	1	5	50	400	2000
2,2',3,3',5,5',6,6'-OcCB	202	0.2	1	5	50	400	2000
2,3,3',4,4',5,5',6-OcCB	205	0.2	1	5	50	400	2000
2,2',3,3',4,4',5,5',6-NoCB	206	0.2	1	5	50	400	2000
2,2',3,3',4,4',5,5',6,6'-NoCB	208	0.2	1	5	50	400	2000
DeCB 209	209	0.2	1	5	50	400	2000
Labelled Toxics/LOC/window-defining							
13C12-2-MoCB	1L	100	100	100	100	100	100
13C12-4-MoCB	3L	100	100	100	100	100	100
13C12-2,2'-DiCB	4L	100	100	100	100	100	100
13C12-4,4'-DiCB	15L	100	100	100	100	100	100
13C12-2,2',6'-TrCB	19L	100	100	100	100	100	100
13C12-3,4,4'-TrCB	37L	100	100	100	100	100	100
13C12-2,2',6,6'-TeCB	54L	100	100	100	100	100	100
13C12-3,3',4,4'-TeCB	77L	100	100	100	100	100	100
13C12-3,4,4',5-TeCB	81L	100	100	100	100	100	100
13C12-2,2',4,6,6'-PeCB	104L	100	100	100	100	100	100
13C12-2,3,3',4,4'-PeCB	105L	100	100	100	100	100	100
13C12-2,3,4,4',5-PeCB	114L	100	100	100	100	100	100
13C12-2,3',4,4',5-PeCB	118L	100	100	100	100	100	100
13C12-2',3,4,4',5-PeCB	123L	100	100	100	100	100	100
13C12-3,3',4,4',5-PeCB	126L	100	100	100	100	100	100
13C12-2,2',4,4',6,6'-HxCB	155L	100	100	100	100	100	100
13C12-2,3,3',4,4',5-HxCB	156L	100	100	100	100	100	100
13C12-2,3,3',4,4',5'-HxCB	157L	100	100	100	100	100	100
13C12-2,3',4,4',5,5'-HxCB	167L	100	100	100	100	100	100
13C12-3,3',4,4',5,5'-HxCB	169L	100	100	100	100	100	100
13C12-2,2',3,4',5,6,6'-HpCB	188L	100	100	100	100	100	100
13C12-2,3,3',4,4',5,5'-HpCB	189L	100	100	100	100	100	100
13C12-2,2',3,3',5,5',6,6'-OcCB	202L	100	100	100	100	100	100
13C12-2,3,3',4,4',5,5',6-OcCB	205L	100	100	100	100	100	100
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L	100	100	100	100	100	100
13C12-2,2',3,3',4',5,5',6,6'-NoCB	208L	100	100	100	100	100	100
13C12-DeCB 209L	209L	100	100	100	100	100	100
Labelled clean-up							
13C12-2,4,4'-TrCB	28L	100	100	100	100	100	100
13C12-2,3,3',5,5'-PeCB	111L	100	100	100	100	100	100
13C12-2,2',3,3',5,5',6-HpCB	178L	100	100	100	100	100	100
Labelled injection internal							
13C12-2,5-DiCB	9L	100	100	100	100	100	100
13C12-2,2',5,5'-TeCB	52L	100	100	100	100	100	100
13C12-2,2',4',5,5'-PeCB	101L	100	100	100	100	100	100
13C12-2,2',3',4,4',5'-HxCB	138L	100	100	100	100	100	100
13C12-2,2',3,3',4,4',5,5'-OcCB	194L	100	100	100	100	100	100

Method Control Limits for 1668A

The initial and continuing calibration control limits for both methods are presented in Table 2 below. For the initial calibration CS1 and for each calibration verification CS3, the signal to noise ratio for each quantification ion for labelled and non-labelled analytes must be greater than or equal to 10:1

Table 2A. QC acceptance crtiteria for chlorinated biphenyls in VER, IPR, OPR, and samples [1]

Congener	IUPAC Number [2]	Test conc (ng/mL)	VER (%)	IPR		OPR (%)	Labelled compound recovery in samples (%)
				RSD (%)	X (%)		
2-MoCB	1	50	70-130	40	60-140	50-150	
4-MoCB	3	50	70-130	40	60-140	50-150	
2,2'-DiCB	4	50	70-130	40	60-140	50-150	
4,4'-DiCB	15	50	70-130	40	60-140	50-150	
2,2'6-TrCB	19	50	70-130	40	60-140	50-150	
3,4,4'-TrCB	37	50	70-130	40	60-140	50-150	
2,2'6,6'TeCB	54	50	70-130	40	60-140	50-150	
3,3',4,4'-TeCB	77	50	70-130	40	60-140	50-150	
3,4,4',5-TeCB	81	50	70-130	40	60-140	50-150	
2,2',4,6,6'-PeCB	104	50	70-130	40	60-140	50-150	
2,3,3',4,4'-PeCB	105	50	70-130	40	60-140	50-150	
2,3,4,4',5-PeCB	114	50	70-130	40	60-140	50-150	
2,3',4,4',5-PeCB	118	50	70-130	40	60-140	50-150	
2',3,4,4',5-PeCB	123	50	70-130	40	60-140	50-150	
3,3',4,4',5-PeCB	126	50	70-130	40	60-140	50-150	
2,2',4,4',6,6'-HxCB	155	50	70-130	40	60-140	50-150	
2,3,3',4,4',5-HxCB [3]	156	50	70-130	40	60-140	50-150	
2,3,3',4,4',5'-HxCB [3]	157	50	70-130	40	60-140	50-150	
2,3',4,4',5,5'-HxCB	167	50	70-130	40	60-140	50-150	
3,3',4,4',5,5'-HxCB	169	50	70-130	40	60-140	50-150	
2,2',3,4',5,6,6'-HpCB	188	50	70-130	40	60-140	50-150	
2,3,3',4,4',5,5'-HpCB	189	50	70-130	40	60-140	50-150	
2,2',3,3',5,5',6,6'-OcCB	202	50	70-130	40	60-140	50-150	
2,3,3',4,4',5,5',6-OcCB	205	50	70-130	40	60-140	50-150	
2,2',3,3',4,4',5,5',6-NoCB	206	50	70-130	40	60-140	50-150	
2,2',3,3,'4,5,5',6,6'-NoCB	208	50	70-130	40	60-140	50-150	
DeCB	209	50	70-130	40	60-140	50-150	
13C12-2-MoCB	1L	100	50-150	50	35-135	30-140	25-150
13C12-4-MoCB	3L	100	50-150	50	35-135	30-140	25-150
13C12-2,2'-DiCB	4L	100	50-150	50	35-135	30-140	25-150
13C12-4,4'-DiCB	15L	100	50-150	50	35-135	30-140	25-150
13C12-2,2',6-TrCB	19L	100	50-150	50	35-135	30-140	25-150
13C12-3,4,4'-TrCB	37L	100	50-150	50	35-135	30-140	25-150
13C12-2,2',6,6'-TeCB	54L	100	50-150	50	35-135	30-140	25-150
13C12-3,3',4,4'-TCB	77L	100	50-150	50	35-135	30-140	25-150
13C12-3,4,4',5-TeCB	81L	100	50-150	50	35-135	30-140	25-150
13C12-2,2',4,6,6'-PeCB	104L	100	50-150	50	35-135	30-140	25-150
13C12-2,3,3',4,4'-PeCB	105L	100	50-150	50	35-135	30-140	25-150
13C12-2,3,4,4',5-PeCB	114L	100	50-150	50	35-135	30-140	25-150
13C12-2,3',4,4',5-PeCB	118L	100	50-150	50	35-135	30-140	25-150
13C12-2',3,4,4',5-PeCB	123L	100	50-150	50	35-135	30-140	25-150
13C12-3,3',4,4',5-PeCB	126L	100	50-150	50	35-135	30-140	25-150
13C12-2,2',4,4',6,6'-HxCB	155L	100	50-150	50	35-135	30-140	25-150
13C12-2,3,3',4,4',5 –HxCB [3]	156L	100	50-150	50	35-135	30-140	25-150
13C12-2,3,3',4,4',5'-HxCB [3]	157L	100	50-150	50	35-135	30-140	25-150
13C12-2,3',4,4',5,5'-HxCB	167L	100	50-150	50	35-135	30-140	25-150
13C12-3,3',4,4',5,5'-HxCB	169L	100	50-150	50	35-135	30-140	25-150
13C12-2,2',3,4',5,6,6'-HpCB	188L	100	50-150	50	35-135	30-140	25-150
13C12-2',3,3',4,4',5,5'-HpCB	189L	100	50-150	50	35-135	30-140	25-150
13C12-2,2',3,3',5,5',6,6'-OcCB	202L	100	50-150	50	35-135	30-140	25-150
13C12-2,3,3',4,4',5,5',6-OcCB	205L	100	50-150	50	35-135	30-140	25-150
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L	100	50-150	50	35-135	30-140	25-150
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L	100	50-150	50	35-135	30-140	25-150
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L	100	50-150	50	35-135	30-140	25-150
Cleanup standard							
13C12-2,4,4'-TrCB	28L	100	60-130	45	45-120	40-125	30-135
13C12-2,3,3',5,5'-PeCB	111L	100	60-130	45	45-120	40-125	30-135
13C12-2,2',3,3',5,5',6-HpCB	178L	100	60-130	45	45-120	40-125	30-135

1. QC acceptance criteria for IPR, OPR, and samples based on a 20 ul extract final volume
2. Suffix "L" indicates labelled compound.
3. PCBs 156 and 157 are tested as the sum of two concentrations

Method Control Limits for 1668C

The initial and continuing calibration control limits for both methods are presented in Table 2 below. For the initial calibration CS1 and for each calibration verification CS3, the signal to noise ratio for each quantification ion for labelled and non-labelled analytes must be greater than or equal to 10:1

Table 2A. QC acceptance crtiteria for chlorinated biphenyls in VER, IPR, OPR, and samples [1]

Congener	IUPAC Number [2]	Test conc (ng/mL)	VER (%)	IPR		OPR (%)	Labelled compound recovery in samples (%)
				RSD (%)	X (%)		
2-MoCB	1	50	75 - 125	25	70 - 130	60 - 135	
4-MoCB	3	50	75 - 125	25	70 - 130	60 - 135	
2,2'-DiCB	4	50	75 - 125	25	70 - 130	60 - 135	
4,4'-DiCB	15	50	75 - 125	25	70 - 130	60 - 135	
2,2'6-TrCB	19	50	75 - 125	25	70 - 130	60 - 135	
3,4,4'-TrCB	37	50	75 - 125	25	70 - 130	60 - 135	
2,2'6,6'TeCB	54	50	75 - 125	25	70 - 130	60 - 135	
3,3',4,4'-TeCB	77	50	75 - 125	25	70 - 130	60 - 135	
3,4,4',5-TeCB	81	50	75 - 125	25	70 - 130	60 - 135	
2,2',4,6,6'-PeCB	104	50	75 - 125	25	70 - 130	60 - 135	
2,3,3',4,4'-PeCB	105	50	75 - 125	25	70 - 130	60 - 135	
2,3,4,4',5-PeCB	114	50	75 - 125	25	70 - 130	60 - 135	
2,3',4,4',5-PeCB	118	50	75 - 125	25	70 - 130	60 - 135	
2',3,4,4',5-PeCB	123	50	75 - 125	25	70 - 130	60 - 135	
3,3',4,4',5-PeCB	126	50	75 - 125	25	70 - 130	60 - 135	
2,2',4,4',6,6'-HxCB	155	50	75 - 125	25	70 - 130	60 - 135	
2,3,3',4,4',5-HxCB [3]	156	50	75 - 125	25	70 - 130	60 - 135	
2,3,3',4,4',5'-HxCB [3]	157	50	75 - 125	25	70 - 130	60 - 135	
2,3',4,4',5,5'-HxCB	167	50	75 - 125	25	70 - 130	60 - 135	
3,3',4,4',5,5'-HxCB	169	50	75 - 125	25	70 - 130	60 - 135	
2,2',3,4',5,6,6'-HpCB	188	50	75 - 125	25	70 - 130	60 - 135	
2,3,3',4,4',5,5'-HpCB	189	50	75 - 125	25	70 - 130	60 - 135	
2,2',3,3',5,5',6,6'-OcCB	202	50	75 - 125	25	70 - 130	60 - 135	
2,3,3',4,4',5,5',6-OcCB	205	50	75 - 125	25	70 - 130	60 - 135	
2,2',3,3',4,4',5,5',6-NoCB	206	50	75 - 125	25	70 - 130	60 - 135	
2,2',3,3','4,5,5',6,6'-NoCB	208	50	75 - 125	25	70 - 130	60 - 135	
DeCB	209	50	75 - 125	25	70 - 130	60 - 135	
13C12-2-MoCB	1L	100	50 - 145	70	20 - 135	5 - 145	5 - 145
13C12-4-MoCB	3L	100	50 - 145	70	20 - 135	5 - 145	5 - 145
13C12-2,2'-DiCB	4L	100	50 - 145	70	20 - 135	5 - 145	5 - 145
13C12-4,4'-DiCB	15L	100	50 - 145	70	20 - 135	5 - 145	5 - 145
13C12-2,2',6-TrCB	19L	100	50 - 145	70	20 - 135	5 - 145	5 - 145
13C12-3,4,4'-TrCB	37L	100	50 - 145	70	20 - 135	5 - 145	5 - 145
13C12-2,2',6,6'-TeCB	54L	100	50 - 145	70	20 - 135	5 - 145	5 - 145
13C12-3,3',4,4'-TeCB	77L	100	50 - 145	50	45 - 135	10 - 145	10 - 145
13C12-3,4,4',5-TeCB	81L	100	50 - 145	50	45 - 135	10 - 145	10 - 145
13C12-2,2',4,6,6'-PeCB	104L	100	50 - 145	50	45 - 135	10 - 145	10 - 145
13C12-2,3,3',4,4'-PeCB	105L	100	50 - 145	50	45 - 135	10 - 145	10 - 145
13C12-2,3,4,4',5-PeCB	114L	100	50 - 145	50	45 - 135	10 - 145	10 - 145
13C12-2,3',4,4',5-PeCB	118L	100	50 - 145	50	45 - 135	10 - 145	10 - 145
13C12-2',3,4,4',5-PeCB	123L	100	50 - 145	50	45 - 135	10 - 145	10 - 145
13C12-3,3',4,4',5-PeCB	126L	100	50 - 145	50	45 - 135	10 - 145	10 - 145
13C12-2,2',4,4',6,6'-HxCB	155L	100	50 - 145	50	45 - 135	10 - 145	10 - 145
13C12-2,3,3',4,4',5 -HxCB [3]	156L	100	50 - 145	50	45 - 135	10 - 145	10 - 145
13C12-2,3,3',4,4',5'-HxCB [3]	157L	100	50 - 145	50	45 - 135	10 - 145	10 - 145
13C12-2,3',4,4',5,5'-HxCB	167L	100	50 - 145	50	45 - 135	10 - 145	10 - 145
13C12-3,3',4,4',5,5'-HxCB	169L	100	50 - 145	50	45 - 135	10 - 145	10 - 145
13C12-2,2',3,4',5,6,6'-HpCB	188L	100	50 - 145	50	45 - 135	10 - 145	10 - 145
13C12-2',3,3',4,4',5,5'-HpCB	189L	100	50 - 145	50	45 - 135	10 - 145	10 - 145
13C12-2,2',3,3',5,5',6,6'-OcCB	202L	100	50 - 145	50	45 - 135	10 - 145	10 - 145
13C12-2,3,3',4,4',5,5',6-OcCB	205L	100	50 - 145	50	45 - 135	10 - 145	10 - 145
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L	100	50 - 145	50	45 - 135	10 - 145	10 - 145
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L	100	50 - 145	50	45 - 135	10 - 145	10 - 145
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L	100	50 - 145	50	45 - 135	10 - 145	10 - 145
Cleanup standards							
13C12-2,4,4'-TrCB	28L	100	65 - 135	70	20 - 135	5 - 145	5 - 145
13C12-2,3,3',5,5'-PeCB	111L	100	75 - 125	50	45 - 135	10 - 145	10 - 145
13C12-2,2',3,3',5,5',6-HpCB	178L	100	75 - 125	50	45 - 135	10 - 145	10 - 145

1. QC acceptance criteria for IPR, OPR, and samples based on a 20-µL extract final volume
2. Suffix “L” indicates labeled compound.
3. CBs 156/157 and 156L/157L are tested as the sum of the two congeners

Reporting Limits:

Unless indicated in the otherwise, the PCB results are reported down to 2.5:1 signal to noise for each isomer grouping for each extract injection. This is consistent to SW846 8290 defined protocols (i.e. EDL or Estimated Detection Limit) and is commonly applied throughout the industry to any or all the HRMS performance based methods applicable to this method summary.

Method Blank:

The Method Blank must be below the EMLs published in the required method, 1668A or 1668C.

MS/MSD:

The % relative difference between the MS and MSD spike recoveries should be less than or equal to 20%.

Instrument/Run Performance Criteria:

1 Elution windows must be defined by a 'Window Performance Mix' at the beginning of each 12-hour run sequence

2 GC performance criteria of 40% maximum valley between PCB-34/PCB-23, and PCB-187/PCB-182 (Octyl Column).

3 At the beginning of and just following the end of each 12 hour run sequence, the instrument must be checked to demonstrate a resolution of 10,000 within each quantification window (8,000 minimum across the window).

4 The relative retention times (RRT) of the compounds in the daily 209 congener mix must fall into the ranges presented in Table 4.

5 The RT in the daily CS3 verification standards must be within 15 seconds of the CS3 in the initial calibration run.

6 The maximum time between scans within a descriptor is 1 second.

7 Lock mass deviations to the average response must be less than or equal 20%.

Laboratory Duplicates:

The % relative difference between duplicates should be less than or equal to 25% but only where the response is greater than the low calibration standard.

Analyte Identification Criteria:

1 Ion ratio must be within 15% of theoretical or within 10% of the most recent CS3.

2 The retention time (RT) of the peak maxima for each pair of quantification ions must be no more than 2 seconds (i.e. 2 scans) difference.

3 The retention time (RT) of the peak maxima of all native analytes for which a labeled analogue is used must be within -1 to +3 seconds of the RT of corresponding $^{13}C_{12}$-labelled isomer of that injection run.

4 For those native analytes without a corresponding labelled isomer, the relative retention time (RRT) must be within 0.005 of the relative retention time observed in the daily 209 congener run.

DEVIATIONS AND CLARIFICATIONS FROM THE PRIMARY REFERENCES

The reference methods applicable to this document are:
US EPA Office of Water, Method 1668A
US EPA Office of Water, Method 1668C

These methods are referred-to herein as Method 1668

The following changes and clarifications apply:

1) As stated in method 1668, alternate columns and column systems are allowable changes to the method. In the context of the method, it is clear that Table 2 of this method (including retention times, relative retention times, and quantitation references) is specific to the Octyl GC column if used exactly as suggested in the method.

As a performance based method, changes in the internal standard references could be considered an improvement even when using the SPB-Octyl column. However when using an alternate column system (which may or may not include use of the Octyl column), optimization of the quantitation references can be an important part of optimizing the method. Consider that the MS acquisition method must be divided into mass descriptors or 'functions', each one defining the masses that are monitored during that time range. When monitoring for all 209 PCB congeners, there are large chromatographic regions where elution of target compounds is nearly continuous with little separation between peaks. In addition, there is a slight acquisition "gap" that occurs at each function change (for Water's instruments 1-2 seconds, for Thermo instruments 6-8 seconds), and also the likelihood of slight retention time shifts from one run to another. Consequently, choosing the exact location of each function boundary can be challenging. For a 1668 method, there are typically between 5 and 8 functions dependent upon the column, the GC conditions, the instrument and the choice of the function boundaries by the laboratory. Each function can have 1 to as many as 4 chlorination levels. When optimizing the quantification model in the case where RT and elution patterns have changed – even slightly - the best choice of internal standard references can and should change dependent upon target retention times and placement of function boundaries. For example, the best quantification is achieved using an internal standard reference that elutes at close to the same retention time. Another consideration is that it is best practice where possible (i.e. generally allows for more accurate target determinations) to have the internal standard reference within the same function rather than quantify a target relative to an internal standard from an outside function.

The quantification references used in this analysis are detailed in Table 3.

2) The absolute retention time criterion for decachlorobiphenyl of 55 minutes is not generally followed and is an unnecessary restriction since method 1668 was developed without the use of electronic pressure control on the GC injection system, and there are GC performance criteria that can be met without this restriction. As a result, the RRT criteria of 1668 may not be applicable.

3) Although not clearly stated in method 1668, we maintain that each and every individual clean-up procedure is, by definition, performance-based and optional. There is not an expectation within the industry to follow exactly the descriptions of clean-ups in reference methods. Adaptations which meet or exceed the required performance criteria are therefore acceptable within the scope of each reference method. The reference method descriptions are intended as guidelines or templates available to help the laboratory to define effective in-house clean-up methods. The objective within the laboratory is to provide quality clean extracts to the instrument for analysis. Each individual clean-up is part of the laboratory's available tools in order to achieve this objective.

4) There are differences within the individual reference methods as to the precise spiking protocols for adding extraction standards and native spikes (for LCS, MS and MSD). To ensure consistency within the laboratory between HRMS methods, the PCB preparative method requires solid samples (including stack and ambient sorbants/filters) to be spiked in the soxhlet extractor from a nonane solution and waters are spiked before filtering from an acetone solution. .

5) Sub-sampling of solids and pre-extraction processing is done in a manner that minimizes potential for cross-contamination. These processes are designed around SW846 protocols rather than 1668 protocols. Solids are sub-sampled directly from the bottle as submitted to the laboratory wherever practical. If the sample is submitted such that homogenization in the bottle is impractical (eg. the bottle is too full or lumps cannot be broken down), then transferring the sample to a tray or another bottle maybe in order.

6) The concentration of labelled and native spiking solutions are not consistent with those listed in all of the reference methods. These concentrations are prepared at levels convenient and expedient for accurate laboratory processing.

7) Extraction and injection standard concentrations differ from 1668, in order to aid precise measurement and standardise volumes with other reference methods such as PCDD/F by 1613B.

8) Method 1668C recognizes the option to use the 209 congener mix as the daily calibration verification solution rather than the CS3. This document acknowledges and allows either calibration option for both 1668A and 1668C analytical approaches.

9) For method 1668C analysis, the OPR labelled recovery limits are the same as for the sample recovery limits in method 1668C. This represents a broader acceptance range for the OPR than is currently listed in method 1668C. However, the control of the native (i.e. non-labelled) recovery limits is the key item to demonstrate/monitor in the OPR. Furthermore, in the OPR performance, it is important to demonstrate these native controls are maintained within the same range of labelled recoveries as is observed in the sample data.

Table 3: Quantitation References for Native and Labeled CBs

Cl No.[1]	Congener No.[2,3]	RT Ref[4]	Quantitation Reference[5]
Native Compounds			
1	1	1L	1L
1	2	3L	1L/3L
1	3	3L	3L
2	4	4L	4L
2	10	4L	4L/15L
2	9	4L	4L/15L
2	7	4L	4L/15L
2	6	4L	4L/15L
2	5	4L	4L/15L
2	8	4L	4L/15L
2	14	15L	4L/15L
2	11	15L	4L/15L
2	13/12	15L	4L/15L
2	15	15L	15L
3	19	19L	19L
3	30/18	19L	19L/37L
3	17	19L	19L/37L
3	27	19L	19L/37L
3	24	19L	19L/37L
3	16	19L	19L/37L
3	32	19L	19L/37L
3	34	19L	19L/37L
3	23	19L	19L/37L
3	26/29	19L	19L/37L
3	25	37L	19L/37L
3	31	37L	19L/37L
3	28/20	37L	19L/37L
3	21/33	37L	19L/37L
3	22	37L	19L/37L
3	36	37L	19L/37L
3	39	37L	19L/37L
3	38	37L	19L/37L
3	35	37L	19L/37L
3	37	37L	37L
4	54	54L	54L
4	50/53	54L	54L/81L/77L
4	45/51	54L	54L/81L/77L
4	46	54L	54L/81L/77L
4	52	54L	54L/81L/77L
4	73	54L	54L/81L/77L
4	43	54L	54L/81L/77L
4	69/49	54L	54L/81L/77L
4	48	54L	54L/81L/77L
4	44/47/65	54L	54L/81L/77L
4	59/62/75	54L	54L/81L/77L
4	42	54L	54L/81L/77L
4	41/40/71	54L	54L/81L/77L
4	64	54L	54L/81L/77L
4	72	81L	54L/81L/77L
4	68	81L	54L/81L/77L

Cl No. [1]	Congener No. [2,3]	RT Ref [4]	Quantitation Reference [5]
4	57	81L	54L/81L/77L
4	58	81L	54L/81L/77L
4	67	81L	54L/81L/77L
4	63	81L	54L/81L/77L
4	61/70/74/76	81L	54L/81L/77L
4	66	81L	54L/81L/77L
4	55	81L	54L/81L/77L
4	56	81L	54L/81L/77L
4	60	81L	54L/81L/77L
4	80	81L	54L/81L/77L
4	79	81L	54L/81L/77L
4	78	81L	54L/81L/77L
4	81	81L	81L
4	77	77L	77L
5	104	104L	104L
5	96	104L	104L/123L/114L/118L
5	103	104L	104L/123L/114L/118L
5	94	104L	104L/123L/114L/118L
5	95	104L	104L/123L/114L/118L
5	95/100/93/102/98	104L	104L/123L/114L/118L
5	88/91	104L	104L/123L/114L/118L
5	84	104L	104L/123L/114L/118L
5	89	104L	104L/123L/114L/118L
5	121	104L	104L/123L/114L/118L
5	92	123L	104L/123L/114L/118L
5	113/90/101	104L	104L/123L/114L/118L
5	83/99	104L	104L/123L/114L/118L
5	112	104L	104L/123L/114L/118L
5	108/119/86/97/125/87	104L	104L/123L/114L/118L
5	117/116/85/110/115	104L	104L/123L/114L/118L
5	82	104L	104L/123L/114L/118L
5	111	104L	104L/123L/114L/118L
5	120	104L	104L/123L/114L/118L
5	107/124	104L	104L/123L/114L/118L
5	109	104L	104L/123L/114L/118L
5	123	123L	123L
5	106	123L	104L/123L/114L/118L
5	118	118L	118L
5	122	118L	104L/123L/114L/118L
5	114	114L	114L
5	105	105L	105L
5	127	105L	104L/123L/114L/118L
5	126	126L	126L
6	155	155L	155L
6	152	155L	155L/156L/157L/167L
6	150	155L	155L/156L/157L/167L
6	136	155L	155L/156L/157L/167L
6	145	155L	155L/156L/157L/167L
6	148	155L	155L/156L/157L/167L
6	151/135	135L	155L/156L/157L/167L
6	154	155L	155L/156L/157L/167L
6	144	155L	155L/156L/157L/167L
6	147/149	155L	155L/156L/157L/167L
6	134/143	155L	155L/156L/157L/167L

Cl No. [1]	Congener No. [2,3]	RT Ref [4]	Quantitation Reference [5]
6	139/140	155L	155L/156L/157L/167L
6	131	155L	155L/156L/157L/167L
6	142	155L	155L/156L/157L/167L
6	132	155L	155L/156L/157L/167L
6	133	155L	155L/156L/157L/167L
6	165	167L	155L/156L/157L/167L
6	146	167L	155L/156L/157L/167L
6	161	167L	155L/156L/157L/167L
6	153/168	167L	155L/156L/157L/167L
6	141	167L	155L/156L/157L/167L
6	130	167L	155L/156L/157L/167L
6	137/164	167L	155L/156L/157L/167L
6	138/163/129	167L	155L/156L/157L/167L
6	160	167L	155L/156L/157L/167L
6	158	167L	155L/156L/157L/167L
6	128/166	167L	155L/156L/157L/167L
6	159	167L	155L/156L/157L/167L
6	162	167L	155L/156L/157L/167L
6	167	167L	155L/156L/157L/167L
6	156/157	156L/157L	156L/157L
6	169	169L	169L
7	188	188L	188L
7	179	188L	188L/189L
7	184	188L	188L/189L
7	176	188L	188L/189L
7	186	188L	188L/189L
7	178	188L	188L/189L
7	175	188L	188L/189L
7	187	188L	188L/189L
7	182	188L	188L/189L
7	183	188L	188L/189L
7	185	188L	188L/189L
7	174	188L	188L/189L
7	177	188L	188L/189L
7	181	188L	188L/189L
7	171/173	188L	188L/189L
7	172	189L	188L/189L
7	192	189L	188L/189L
7	180/193	189L	188L/189L
7	191	189L	188L/189L
7	170	189L	188L/189L
7	190	189L	188L/189L
7	189	189L	189L
8	202	202L	202L
8	201	202L	202L/205L
8	204	202L	202L/205L
8	197	202L	202L/205L
8	200	202L	202L/205L
8	198/199	202L	202L/205L
8	196	205L	202L/205L
8	203	205L	202L/205L
8	195	205L	202L/205L
8	194	205L	202L/205L
8	205	205L	205L
9	208	208L	208L
9	207	208L	208L/206L
9	206	206L	206L
10	209	209L	209L

Cl No. [1]	Congener No. [2,3]	RT Ref [4]	Quantitation Reference [5]
Labelled Extraction Standards			
1	1L	9L	9L
1	3L	9L	9L
2	4L	9L	9L
2	15L	9L	9L
3	19L	9L	9L
3	37L	52L	52L
4	54L	52L	52L
4	81L	101L	101L
4	77L	101L	101L
5	104L	101L	101L
5	123L	101L	101L
5	118L	101L	101L
5	114L	101L	101L
5	105L	101L	101L
5	126L	101L	101L
6	155L	101L	101L
6	167L	138L	138L
6	156L/157L	157L	138L
6	169L	138L	138L
7	188L	138L	138L
7	189L	138L	138L
8	202L	138L	138L
8	205L	194L	194L
9	208L	194L	194L
9	206L	194L	194L
10	209L	194L	194L
Labelled clean-up standards			
3	28L	52L	52L
5	111L	101L	101L
7	178L	138L	138L
Labelled injection internal standards			
2	9L	138L	138L
4	52L	138L	138L
5	101L	138L	138L
6	138L	138L	
8	194L	138L	138L

1. Number of chlorines on congener.

2. Suffix "L" indicates labelled compound.

3. Multiple congeners in a box indicates a group of congeners that co-elute or may not be adequately resolved on a 30-m SPBOctyl column. Congeners included in the group are listed as the last entry in the box.

4. Retention time reference that is used to locate target congener.

5. Labelled congeners that form the quantitation reference. Areas from the exact m/z's of the congeners listed in the quantitation

Table 5: HRMS Instrumental Descriptor Parameters

Function and chlorine level	m/z	m/z type	m/z formula	Substance
	180.9888	QC	C4F7	PFK
Fn-1; Cl-1	188.0393	M	12C12 H9 35Cl	Cl-1 CB
	190.0363	M+2	12C12 H9 37Cl	Cl-1 CB
	200.0795	M	13C12 H9 35Cl	13C12 Cl-1 CB
	202.0766	M+2	13C12 H9 37Cl	13C12 Cl-1 CB
	204.9983	QC	C6F7	PFK
	218.9856	lock	C4 F9	PFK
	230.9850	QC	C5F9	PFK
	204.9883	QC	C6F7	PFK
	218.9856	QC	C4F9	PFK
Fn-2; Cl-2,3	222.0003	M	12C12 H8 35Cl2	Cl-2 PCB
	223.9974	M+2	12C12 H8 35Cl 37Cl	Cl-2 PCB
	225.9944	M+4	12C12 H8 37Cl2	Cl-2 PCB
	234.0406	M	13C12 H8 35Cl2	13C12 Cl-2 PCB
	236.0376	M+2	13C12 H8 35Cl 37 Cl	13C12 Cl-2 PCB
	242.9856	lock	C6 F9	PFK
	255.9613	M	12C12 H7 35Cl3	Cl-3 PCB
	257.9584	M+2	12C12 H7 35Cl2 37Cl	Cl-3 PCB
	268.0016	M	13C12 H7 35Cl3	13C12 Cl-3 PCB
	269.9986	M+2	13C12 H7 35Cl2 37Cl 13C12	13C12 Cl-3 PCB
Fn-3	255.9613	M	12C12 H7 35Cl3	Cl-3 PCB
Cl-3,4,5	257.9584	M+2	12C12 H7 35Cl2 37Cl	Cl-3 PCB
	268.0016	M	13C12 H7 35Cl3	13C12 Cl-3 PCB
	269.9986	M+2	13C12 H7 35Cl2 37Cl 13C12	13C12 Cl-3 PCB
	280.9825	lock	C6 F11	PFK
	289.9224	M	12C12 H6 35Cl4	Cl-4 PCB
	291.9194	M+2	12C12 H6 35Cl3 37Cl	Cl-4 PCB
	301.9626	M	13C12 H6 35Cl4	13C12 Cl-4 PCB
	303.9597	M+2	13C12 H6 35Cl3 37Cl	13C12 Cl-4 PCB
	323.8834	M	12C12 H5 35Cl5	Cl-5 PCB
	325.8804	M+2 1	2C12 H5 35Cl4 37Cl	Cl-5 PCB
	327.8775	M+4	12C12 H5 35Cl3 37Cl2	Cl-5 PCB
	337.9207	M+2	13C12 H5 35Cl4 37Cl	13C12 Cl-5 PCB
	339.9178	M+4	13C12 H5 35Cl3 37Cl2	13C12 Cl-5 PCB
	280.9824		C6 F11	PFK
Fn-4	289.9224	M	12C12 H6 35Cl4	Cl-4 PCB
Cl-4,5,6	291.9194	M+2	12C12 H6 35Cl3 37Cl	Cl-4 PCB
	293.9165	M+4	12C12 H6 35Cl2 37Cl2	Cl-4 PCB
	301.9626	M+2	13C12 H6 35Cl3 37Cl	13C12 Cl-4 PCB
	303.9597	M+4	13C12 H6 35Cl2	13C12 Cl-4 PCB
	323.8834	M	12C12 H5 35Cl5	Cl-5 PCB
	325.8804	M+2	12C12 H5 35Cl4 37Cl	Cl-5 PCB
	327.8775	M+4	12C12 H5 35Cl3 37Cl2	Cl-5 PCB
	330.9792	lock	C7 F15	PFK
	337.9207	M+2	13C12 H5 35Cl4 37Cl 13C12	Cl-5 PCB
	339.9178	M+4	13C12 H5 35Cl3 37Cl2	13C12 Cl-5 PCB
	359.8415	M+2	13C12 H4 35Cl5 37Cl	Cl-6 PCB
	361.8385	M+4	13C12 H4 35Cl4 37Cl2	Cl-6 PCB
	363.8356	M+6	13C12 H4 35Cl3 37Cl2	Cl-6 PCB
	371.8817	M+2	13C12 H4 35Cl5 37Cl	13C12 Cl-6 PCB
	373.8788	M+4	13C12 H4 35Cl4 37Cl2	13C12 Cl-6 PCB

Function and chlorine level	m/z	m/z type	m/z formula	Substance
Fn-5	323.8834	M	12C12 H5 35Cl5	Cl-5 PCB
Cl-5,6,7	325.8804	M+2	12C12 H5 35Cl4 37Cl	Cl-5 PCB
	327.8775	M+4	12C12 H5 35Cl3 37Cl2	Cl-5 PCB
	337.9207	M+2	13C12 H5 35Cl4 37Cl	13C12 Cl-5 PCB
	339.9178	M+4	13C12 H5 35Cl3 37Cl2	13C12 Cl-5 PCB
	354.9792	lock	C9 F13	PFK
	359.8415	M+2	12C12 H4 35Cl5 37Cl	Cl-6 PCB
	361.8385	M+4	12C12 H4 35Cl4 37Cl2	Cl-6 PCB
	363.8356	M+6	12C12 H4 35Cl3 37Cl3	Cl-6 PCB
	371.8817	M+2	13C12 H4 35Cl5 37Cl	13C12 Cl-6 PCB
	373.8788	M+4	13C12 H4 35Cl4 37Cl2	13C12 Cl-6 PCB
	393.8025	M+2	12C12 H3 35Cl6 37Cl	Cl-7 PCB
	395.7995	M+4	12C12 H3 35Cl5 37Cl2	Cl-7 PCB
	397.7966	M+6	12C12 H3 35Cl4 37Cl3	Cl-7 PCB
	405.8428	M+2	13C12 H3 35Cl6 37Cl	13C12 Cl-7 PCB
	407.8398	M+4	13C12 H3 35Cl5 37Cl2	13C12 Cl-7 PCB
	427.7635	M+2	12C12 H2 35Cl7 37Cl	Cl-8 PCB
	429.7606	M+4	12C12 H2 35Cl6 37Cl2	Cl-8 PCB
	431.7576	M+6	12C12 H2 35Cl5 37Cl3	Cl-8 PCB
	439.8038	M+2	13C12 H2 35Cl7 37Cl	13C12 Cl-8 PCB
	441.8008	M+4	13C12 H2 35Cl6 37Cl2	13C12 Cl-8 PCB
Fn-6	393.8025	M+2	12C12 H3 35Cl6 37Cl	Cl-7 PCB
Cl-7,8,9,10	395.7995	M+4	12C12 H3 35Cl5 37Cl2	Cl-7 PCB
	397.7966	M+6	12C12 H3 35Cl4 37Cl3	Cl-7 PCB
	405.8428	M+2	13C12 H3 35Cl6 37Cl 13C12	Cl-7 PCB
	407.8398	M+4	13C12 H3 35Cl5 37Cl2	13C12 Cl-7 PCB
	427.7635	M+2	12C12 H2 35Cl7 37Cl	Cl-8 PCB
	429.7606	M+4	12C12 H2 35Cl6 37Cl2	Cl-8 PCB
	431.7576	M+6	12C12 H2 35Cl5 37Cl3	Cl-8 PCB
	439.8038	M+2	13C12 H2 35Cl7 37Cl	13C12 Cl-8 PCB
	441.8008	M+4	13C12 H2 35Cl6 37Cl2	13C12 Cl-8 PCB
	442.9728	QC	C10 F13	PFK
	454.9728	lock	C11 F13	PFK
	461.7246	M+2	12C12 H1 35Cl8 37Cl	Cl-9 PCB
	463.7216	M+4	12C12 H1 35Cl7 37Cl2	Cl-9 PCB
	465.7187	M+6	12C12 H1 35Cl6 37Cl3	Cl-9 PCB
	473.7648	M+2	13C12 H1 35Cl8 37Cl	13C12 Cl-9 PCB
	475.7619	M+4	13C12 H1 35Cl7 37Cl2	13C12 Cl-9 PCB
	495.6856	M+2	13C12 H4 35Cl9 37Cl	Cl-10 PCB
Fn-7	497.6826	M+4	12C12 35Cl8 37Cl2	Cl-10 PCB
	499.6797	M+6	12C12 35Cl7 37Cl3	Cl-10 PCB
	509.7229	M+4	13C12 H4 35Cl8 37Cl2	13C12 Cl-10 PCB
	511.7199	M+6	13C12 H4 35Cl8 37Cl4	13C12 Cl-10 PCB
	516.9697	lock	C13F19	PFK

Data Calculations:

a) Analyte Concentrations:

The relative response factor of each target relative to the standard against which it is to be calculated is determined using the area responses of both quantification ions via equation 9.1.
In cases where a native target is calculated against an exact labelled analogue, the quantification will be considered to be by isotope dilution. In other cases, the quantification will be considered to be by internal standard.

$$RRF = \frac{(A1_t + A2_t)\ C_s}{(A1_s + A2_s)\ C_t} \qquad \text{Equ. 9.1}$$

Where,
$A1_t + A2_t$ = The areas of the two quantification ions for the target analyte
$A1_s + A2_s$ = The areas of the two quantification ions for the labelled compound against which the target analyte will be calculated.
C_t = The concentration in the calibration standard of the target analyte.
C_s = The concentration in the calibration standard of the labelled compound against which the target will be calculated.

For all analytes to be quantified and from the initial calibration series of standard injections, a table of RRFs is prepared. The relative standard deviation (%RSD, or the coefficient of variance) is checked to confirm that the appropriate method criteria has been met as listed in Table 3. The average of the five or six levels of standard for each analyte, RRF_{av} is applied for quantification of samples according to Equations 9.2 and 9.3 below.

$$\text{Amount in sample (pg)} = \frac{(A1_n + A2_n)\ Q_l}{(A1_l + A2_l)\ (RRF_{av})} \qquad \text{Equ. 9.2}$$

$$\text{Concentration in sample (pg/g or pg/l)} = \frac{(A1_n + A2_n)\ Q_l}{(A1_l + A2_l)\ (RRF_{av})\ (W_s)} \qquad \text{Equ. 9.3}$$

Where,

Q_l = The amount (pg) of labelled compound added to the sample
W_s = The weight (g) or volume (l) of sample

b) Extraction, Clean-up, and Sampling Standard Recovery Calculation:

The extraction, clean-up, and sampling standard recoveries are determined by Equation 9.4 below.

% Recovery = (Amount in sample)/(Amount added to sample) X 100 Equ. 9.4

c) Estimated Detection Limit

$$EDL = \frac{2.5\ x\ H_x\ x\ Q_{es}}{H_{es}\ x\ W\ x\ RFF_{av}} \qquad \text{Equ. 9.5}$$

Where,
EDL = estimated detection limit for homologous PCB
H_x = sum of the height of the noise level for each quantification ions for the unlabelled PCB.
H_{es} = Sum of the heights of responses of both quantification ions for the labelled extraction standard.
W = weight of volume of sample
RRF_{av} = average relative response factor
Q_{es} = Amount of extraction standard added

Chromatogram Annotation Codes

All manually integrated peaks are expanded and reprinted with the following annotations:

* Analyst Initials	AA
* Date	YYMMDD
* integration code	CC

The Syntax is:	Example:
AAYYMMDDCC	SK111220MB

Code	Mnemonic	Description
MB	Manual Baseline	The peak was manually integrated because the initial baseline was determined incorrectly by the software
MS	Manual Split	The peak was manually integrated because the peak was incorrectly or not split by the software
MJ/MC	Manual Join/Manual Combine	The peak was manually integrated because the peak was split by the software and the peak should be integrated as a single peak
MA	Manual Add	The peak was manually integrated because the signal:noise ratio was judged to be >2.5
MD	Manual Delete	The peak was excluded because the signal:noise ratio was judged to be <2.5
MX	Manual Exclude	The peak was excluded due to an interference
NH	Noise Height	The noise height for Estimated Detection Limit calculation was chosen by the analyst (automated noise height not appropriate)
MT	Manual Time	The peak retention time was manually chosen

The following explanatory annotation codes may appear on the chromatograms of peaks that have been reviewed:

Code	Mnemonic	Description
+	Detected Peak	A peak was detected at this mass and retention time that was above 2.5:1 signal to noise
<	Below Detection Limit	The signal at this mass and retention time was below 2.5:1 signal to noise
EMPC	Estimated Maximum Possible Concentration	The signal at this mass and retention time is an interference such that the target compound could not be confirmed
X-RT	Not Detected due to Retention Time non-conformance	The signal at this retention time could not be used to positively identify the target compound because of retention time non-conformance (apex of quantification and confirmation ions do not maximize within the same two seconds, or the retention time of the peak does not fall within the expected range with respect to its labeled analogue)
X-LOC	Not Detected due to interference from a higher level of chlorination	The signal at this retention time is attributable to a fragment from a co-eluting compound at a higher level of chlorination, and cannot be used to positively identify the target. The result is expressed as an Estimated Maximum Possible Concentration (EMPC)
X-DPE	Not Detected due to diphenyl ether interference	The signal at this retention time is attributable to interference from a chlorinated diphenyl ether, and cannot be used to positively identify the target. The result is expressed as an Estimated Maximum Possible Concentration (EMPC)
X-IF	Not Detected due to interference	The signal at this retention time is attributable to a co-eluting interference, and cannot be used to positively identify the target. The result is expressed as an Estimated Maximum Possible Concentration (EMPC)

1435 Norjohn Court, Unit 1, Burlington, ON, Canada L7L 0E6

SVOC DATA PACKAGE

SECTION 4: CALIBRATION DATA

Including:

for Multi-Point Calibration(s)

- Multi-Point Calibration Tables
- Individual Quantitation Reports

for Continuing Calibration(s)

- Individual Quantitation Reports

ALS Life Sciences

Calibration Summary Report

Calibration Level	Filename	Run Date
CS-1	5-221020A01	20-Oct-2022 17:33
CS-2	5-221020A04	20-Oct-2022 19:38
CS-3	5-221020A03	20-Oct-2022 18:55
CS-4	5-221020A06	20-Oct-2022 21:02
CS-5	5-221020A05	20-Oct-2022 20:20

Approved: *A. Kuol*
--e-signature--
23-Nov-2022

	Relative Response Factors						
Target Analytes	**CS-1**	**CS-2**	**CS-3**	**CS-4**	**CS-5**	**Mean**	**% RSD**
PCB-001	1.086	1.095	1.030	1.088		1.075	3%
PCB-003	1.145	1.142	1.064	1.125		1.119	3%
PCB-004	0.948	0.950	0.906	0.941	0.941	0.937	2%
PCB-015	1.201	1.205	1.167	1.165	1.126	1.173	3%
PCB-019	1.241	1.283	1.226	1.251	1.273	1.255	2%
PCB-037	1.206	1.220	1.186	1.171	1.166	1.190	2%
PCB-054	1.115	1.140	1.110	1.108	1.125	1.120	1%
PCB-081	1.248	1.282	1.256	1.223	1.235	1.249	2%
PCB-077	1.246	1.221	1.196	1.178	1.194	1.207	2%
PCB-104	1.258	1.247	1.241	1.217	1.232	1.239	1%
PCB-123	1.209	1.150	1.149	1.120	1.143	1.154	3%
PCB-118	1.397	1.388	1.344	1.303	1.320	1.350	3%
PCB-114	1.171	1.204	1.178	1.136	1.149	1.168	2%
PCB-105	1.264	1.264	1.230	1.220	1.222	1.240	2%
PCB-126	1.239	1.234	1.224	1.190	1.192	1.216	2%
PCB-155	1.173	1.185	1.174	1.139	1.159	1.166	2%
PCB-167	1.267	1.328	1.282	1.254	1.264	1.279	2%
PCB-156/157	1.354	1.346	1.305	1.268	1.274	1.309	3%
PCB-169	1.276	1.268	1.264	1.219	1.232	1.252	2%
PCB-188	1.079	1.096	1.081	1.054	1.072	1.076	1%
PCB-189	1.050	1.066	1.063	1.040	1.042	1.052	1%
PCB-202	1.131	1.165	1.163	1.122	1.135	1.143	2%
PCB-205	0.946	0.976	0.969	0.936	0.942	0.954	2%
PCB-208	1.168	1.159	1.163	1.122	1.133	1.149	2%
PCB-206	1.160	1.147	1.160	1.123	1.127	1.143	2%
PCB-209	0.979	0.993	0.984	0.970	0.966	0.978	1%
Extraction Standards							
13C12-PCB-001	1.006	1.064	1.040	1.111	1.084	1.061	4%
13C12-PCB-003	0.948	1.009	0.947	1.054	1.057	1.003	5%
13C12-PCB-004	0.629	0.658	0.651	0.680	0.668	0.657	3%
13C12-PCB-015	0.832	0.872	0.854	0.938	0.964	0.892	6%
13C12-PCB-019	0.409	0.424	0.430	0.447	0.428	0.428	3%
13C12-PCB-037	1.426	1.493	1.456	1.593	1.677	1.529	7%
13C12-PCB-054	1.346	1.397	1.343	1.468	1.367	1.384	4%
13C12-PCB-081	1.400	1.448	1.458	1.543	1.610	1.492	6%
13C12-PCB-077	1.413	1.458	1.453	1.558	1.633	1.503	6%
13C12-PCB-104	1.346	1.403	1.334	1.482	1.456	1.404	5%
13C12-PCB-123	1.284	1.328	1.411	1.406	1.462	1.378	5%
13C12-PCB-118	1.163	1.210	1.278	1.285	1.352	1.258	6%
13C12-PCB-114	1.293	1.332	1.425	1.438	1.519	1.401	6%
13C12-PCB-105	1.236	1.254	1.368	1.335	1.411	1.321	6%
13C12-PCB-126	1.277	1.282	1.428	1.353	1.450	1.358	6%
13C12-PCB-155	1.423	1.479	1.496	1.557	1.551	1.501	4%
13C12-PCB-167	1.200	1.253	1.298	1.293	1.297	1.268	3%
13C12-PCB-156/157	1.168	1.208	1.270	1.264	1.274	1.237	4%
13C12-PCB-169	1.186	1.237	1.346	1.307	1.297	1.275	5%
13C12-PCB-188	1.250	1.325	1.301	1.406	1.376	1.332	5%
13C12-PCB-189	1.240	1.295	1.442	1.351	1.307	1.327	6%
13C12-PCB-202	1.073	1.125	1.184	1.164	1.158	1.141	4%
13C12-PCB-205	1.229	1.281	1.282	1.345	1.289	1.285	3%
13C12-PCB-208	1.033	1.085	1.055	1.120	1.073	1.073	3%
13C12-PCB-206	0.702	0.732	0.750	0.761	0.731	0.735	3%
13C12-PCB-209	1.102	1.136	1.197	1.173	1.131	1.148	3%
Cleanup Standards							
13C12-PCB-028	1.654	1.725	1.703	1.738	1.706	1.705	2%
13C12-PCB-111	1.194	1.213	1.294	1.249	1.248	1.240	3%
13C12-PCB-178	0.916	0.940	0.969	0.944	0.919	0.938	2%

ALS Life Sciences

Calibration Report

ALS Sample ID **H5-22-CS1-005**
Analysis Method EPA 1668C
Analysis Type Calibration

Filename	Inst #	Column	Run Date	Approved:	*A. Kuol*
5-221020A01	HRMS-5	SPBOCTYL271290-03	20-Oct-2022 17:33		--e-signature--
					23-Nov-2022

Target Analytes	Ret. Time	Ion Ratio	Concentration ng/mL	Response	RRF
PCB-001	8.9	3.21	1.00	4.08E+04	1.086
PCB-003	10.42	3.20	1.00	4.05E+04	1.145
PCB-004	10.61	1.50	1.00	2.23E+04	0.948
PCB-015	14.27	1.58	1.00	3.73E+04	1.201
PCB-019	12.61	1.09	1.00	1.90E+04	1.241
PCB-037	18.22	1.03	1.00	3.07E+04	1.206
PCB-054	14.46	0.83	1.00	2.68E+04	1.115
PCB-081	21.81	0.79	1.00	2.81E+04	1.248
PCB-077	22.11	0.79	1.00	2.83E+04	1.246
PCB-104	17.53	1.55	1.00	2.72E+04	1.258
PCB-123	23.11	1.72	1.00	2.49E+04	1.209
PCB-118	23.29	1.53	1.00	2.61E+04	1.397
PCB-114	23.58	1.60	1.00	2.43E+04	1.171
PCB-105	23.93	1.62	1.00	2.51E+04	1.264
PCB-126	25.52	1.74	1.00	2.54E+04	1.239
PCB-155	20.54	1.22	1.00	2.68E+04	1.173
PCB-167	26.43	1.25	1.00	2.64E+04	1.267
PCB-156/157	27.06	1.24	2.00	5.49E+04	1.354
PCB-169	28.71	1.27	1.00	2.63E+04	1.276
PCB-188	23.53	1.02	1.00	2.34E+04	1.079
PCB-189	30	1.06	1.00	2.26E+04	1.050
PCB-202	26.31	0.99	1.00	2.11E+04	1.131
PCB-205	31.39	0.86	1.00	1.81E+04	0.946
PCB-208	29.73	0.76	1.00	1.88E+04	1.168
PCB-206	32.47	0.78	1.00	1.27E+04	1.160
PCB-209	33.61	1.22	1.00	1.68E+04	0.979
Extraction Standards					
13C12-PCB-001	8.9	2.95	100.00	3.76E+06	1.006
13C12-PCB-003	10.42	2.94	100.00	3.54E+06	0.948
13C12-PCB-004	10.59	1.56	100.00	2.35E+06	0.629
13C12-PCB-015	14.26	1.57	100.00	3.11E+06	0.832
13C12-PCB-019	12.6	1.06	100.00	1.53E+06	0.409
13C12-PCB-037	18.21	1.07	100.00	2.55E+06	1.426
13C12-PCB-054	14.45	0.79	100.00	2.40E+06	1.346
13C12-PCB-081	21.8	0.78	100.00	2.25E+06	1.400
13C12-PCB-077	22.09	0.78	100.00	2.27E+06	1.413
13C12-PCB-104	17.51	1.58	100.00	2.16E+06	1.346
13C12-PCB-123	23.1	1.57	100.00	2.06E+06	1.284
13C12-PCB-118	23.27	1.60	100.00	1.87E+06	1.163
13C12-PCB-114	23.57	1.61	100.00	2.08E+06	1.293
13C12-PCB-105	23.92	1.60	100.00	1.98E+06	1.236
13C12-PCB-126	25.5	1.59	100.00	2.05E+06	1.277
13C12-PCB-155	20.52	1.25	100.00	2.28E+06	1.423
13C12-PCB-167	26.42	1.29	100.00	2.08E+06	1.200
13C12-PCB-156/157	27.05	1.30	200.00	4.06E+06	1.168
13C12-PCB-169	28.69	1.29	100.00	2.06E+06	1.186
13C12-PCB-188	23.52	1.05	100.00	2.17E+06	1.250
13C12-PCB-189	29.99	1.07	100.00	2.15E+06	1.240
13C12-PCB-202	26.3	0.90	100.00	1.86E+06	1.073
13C12-PCB-205	31.37	0.89	100.00	1.91E+06	1.229
13C12-PCB-208	29.72	0.78	100.00	1.61E+06	1.033
13C12-PCB-206	32.45	0.78	100.00	1.09E+06	0.702
13C12-PCB-209	33.58	1.19	100.00	1.71E+06	1.102
Cleanup Standards					
13C12-PCB-028	15.98	1.06	100.00	2.95E+06	1.654
13C12-PCB-111	22.04	1.55	100.00	1.92E+06	1.194
13C12-PCB-178	25.09	1.05	100.00	1.59E+06	0.916
Injection Standards					
13C12-PCB-9	11.85	1.56	100.00	3.73E+06	-
13C12-PCB-52	16.98	0.80	100.00	1.79E+06	-
13C12-PCB-101	20.65	1.56	100.00	1.61E+06	-
13C12-PCB-138	24.89	1.32	100.00	1.74E+06	-
13C12-PCB-194	31.1	0.89	100.00	1.55E+06	-

ALS Life Sciences

Calibration Report

ALS Sample ID **H5-22-CS2-005**
Analysis Method EPA 1668C
Analysis Type Calibration

Filename	Inst #	Column	Run Date	Approved:	
5-221020A04	HRMS-5	SPBOCTYL271290-03	20-Oct-2022 19:38		*A. Kuol* --e-signature-- 23-Nov-2022

Target Analytes	Ret. Time	Ion Ratio	Concentration ng/mL	Response	RRF
PCB-001	8.88	3.21	5.00	2.12E+05	1.095
PCB-003	10.41	3.26	5.00	2.09E+05	1.142
PCB-004	10.58	1.50	5.00	1.14E+05	0.950
PCB-015	14.25	1.57	5.00	1.91E+05	1.205
PCB-019	12.58	1.12	5.00	9.87E+04	1.283
PCB-037	18.2	1.07	5.00	1.58E+05	1.220
PCB-054	14.44	0.80	5.00	1.39E+05	1.140
PCB-081	21.79	0.78	5.00	1.45E+05	1.282
PCB-077	22.09	0.77	5.00	1.39E+05	1.221
PCB-104	17.51	1.57	5.00	1.36E+05	1.247
PCB-123	23.1	1.57	5.00	1.19E+05	1.150
PCB-118	23.27	1.62	5.00	1.31E+05	1.388
PCB-114	23.56	1.56	5.00	1.25E+05	1.204
PCB-105	23.91	1.59	5.00	1.24E+05	1.264
PCB-126	25.5	1.58	5.00	1.23E+05	1.234
PCB-155	20.52	1.30	5.00	1.37E+05	1.185
PCB-167	26.41	1.20	5.00	1.37E+05	1.328
PCB-156/157	27.04	1.25	10.00	2.68E+05	1.346
PCB-169	28.69	1.26	5.00	1.29E+05	1.268
PCB-188	23.52	1.03	5.00	1.19E+05	1.096
PCB-189	29.97	1.01	5.00	1.14E+05	1.066
PCB-202	26.29	0.90	5.00	1.08E+05	1.165
PCB-205	31.37	0.90	5.00	9.21E+04	0.976
PCB-208	29.72	0.79	5.00	9.27E+04	1.159
PCB-206	32.44	0.78	5.00	6.19E+04	1.147
PCB-209	33.58	1.18	5.00	8.31E+04	0.993
Extraction Standards					
13C12-PCB-001	8.87	2.93	100.00	3.86E+06	1.064
13C12-PCB-003	10.4	2.95	100.00	3.66E+06	1.009
13C12-PCB-004	10.56	1.55	100.00	2.39E+06	0.658
13C12-PCB-015	14.23	1.56	100.00	3.17E+06	0.872
13C12-PCB-019	12.57	1.05	100.00	1.54E+06	0.424
13C12-PCB-037	18.19	1.06	100.00	2.60E+06	1.493
13C12-PCB-054	14.43	0.79	100.00	2.43E+06	1.397
13C12-PCB-081	21.77	0.78	100.00	2.26E+06	1.448
13C12-PCB-077	22.08	0.78	100.00	2.27E+06	1.458
13C12-PCB-104	17.49	1.57	100.00	2.19E+06	1.403
13C12-PCB-123	23.09	1.59	100.00	2.07E+06	1.328
13C12-PCB-118	23.26	1.59	100.00	1.89E+06	1.210
13C12-PCB-114	23.55	1.60	100.00	2.08E+06	1.332
13C12-PCB-105	23.9	1.62	100.00	1.96E+06	1.254
13C12-PCB-126	25.49	1.59	100.00	2.00E+06	1.282
13C12-PCB-155	20.5	1.27	100.00	2.30E+06	1.479
13C12-PCB-167	26.4	1.30	100.00	2.06E+06	1.253
13C12-PCB-156/157	27.03	1.31	200.00	3.97E+06	1.208
13C12-PCB-169	28.68	1.29	100.00	2.04E+06	1.237
13C12-PCB-188	23.51	1.06	100.00	2.18E+06	1.325
13C12-PCB-189	29.96	1.07	100.00	2.13E+06	1.295
13C12-PCB-202	26.28	0.91	100.00	1.85E+06	1.125
13C12-PCB-205	31.35	0.89	100.00	1.89E+06	1.281
13C12-PCB-208	29.71	0.79	100.00	1.60E+06	1.085
13C12-PCB-206	32.43	0.78	100.00	1.08E+06	0.732
13C12-PCB-209	33.55	1.20	100.00	1.67E+06	1.136
Cleanup Standards					
13C12-PCB-028	15.95	1.08	100.00	3.00E+06	1.725
13C12-PCB-111	22.02	1.56	100.00	1.89E+06	1.213
13C12-PCB-178	25.08	1.05	100.00	1.55E+06	0.940
Injection Standards					
13C12-PCB-9	11.83	1.58	100.00	3.63E+06	-
13C12-PCB-52	16.96	0.81	100.00	1.74E+06	-
13C12-PCB-101	20.63	1.56	100.00	1.56E+06	-
13C12-PCB-138	24.88	1.29	100.00	1.64E+06	-
13C12-PCB-194	31.07	0.89	100.00	1.47E+06	-

ALS Life Sciences

Calibration Report

ALS Sample ID **H5-22-CS3-005**
Analysis Method EPA 1668C
Analysis Type Calibration

Filename	Inst #	Column	Run Date	Approved:	*A. Kuol*
5-221020A03	HRMS-5	SPBOCTYL271290-03	20-Oct-2022 18:55		--e-signature--
					23-Nov-2022

Target Analytes	Ret. Time	Ion Ratio	Concentration ng/mL	Response	RRF
PCB-001	8.88	3.21	50.00	8.83E+05	1.030
PCB-003	10.41	3.29	50.00	8.31E+05	1.064
PCB-004	10.59	1.54	50.00	4.86E+05	0.906
PCB-015	14.26	1.57	50.00	8.22E+05	1.167
PCB-019	12.6	1.08	50.00	4.35E+05	1.226
PCB-037	18.21	1.03	50.00	7.43E+05	1.186
PCB-054	14.45	0.79	50.00	6.41E+05	1.110
PCB-081	21.8	0.79	50.00	7.60E+05	1.256
PCB-077	22.1	0.79	50.00	7.21E+05	1.196
PCB-104	17.52	1.57	50.00	6.87E+05	1.241
PCB-123	23.11	1.58	50.00	6.73E+05	1.149
PCB-118	23.28	1.61	50.00	7.13E+05	1.344
PCB-114	23.58	1.59	50.00	6.97E+05	1.178
PCB-105	23.92	1.57	50.00	6.98E+05	1.230
PCB-126	25.52	1.60	50.00	7.25E+05	1.224
PCB-155	20.53	1.27	50.00	7.29E+05	1.174
PCB-167	26.42	1.24	50.00	8.16E+05	1.282
PCB-156/157	27.05	1.24	100.00	1.62E+06	1.305
PCB-169	28.71	1.24	50.00	8.34E+05	1.264
PCB-188	23.53	1.02	50.00	6.89E+05	1.081
PCB-189	29.99	1.05	50.00	7.51E+05	1.063
PCB-202	26.3	0.89	50.00	6.75E+05	1.163
PCB-205	31.38	0.88	50.00	6.34E+05	0.969
PCB-208	29.73	0.80	50.00	6.27E+05	1.163
PCB-206	32.45	0.81	50.00	4.44E+05	1.160
PCB-209	33.6	1.17	50.00	6.01E+05	0.984
Extraction Standards					
13C12-PCB-001	8.87	2.97	100.00	1.72E+06	1.040
13C12-PCB-003	10.41	2.91	100.00	1.56E+06	0.947
13C12-PCB-004	10.58	1.56	100.00	1.07E+06	0.651
13C12-PCB-015	14.25	1.56	100.00	1.41E+06	0.854
13C12-PCB-019	12.58	1.04	100.00	7.10E+05	0.430
13C12-PCB-037	18.2	1.08	100.00	1.25E+06	1.456
13C12-PCB-054	14.44	0.80	100.00	1.16E+06	1.343
13C12-PCB-081	21.79	0.78	100.00	1.21E+06	1.458
13C12-PCB-077	22.09	0.78	100.00	1.21E+06	1.453
13C12-PCB-104	17.51	1.61	100.00	1.11E+06	1.334
13C12-PCB-123	23.1	1.62	100.00	1.17E+06	1.411
13C12-PCB-118	23.27	1.62	100.00	1.06E+06	1.278
13C12-PCB-114	23.57	1.63	100.00	1.18E+06	1.425
13C12-PCB-105	23.91	1.62	100.00	1.14E+06	1.368
13C12-PCB-126	25.5	1.61	100.00	1.18E+06	1.428
13C12-PCB-155	20.52	1.27	100.00	1.24E+06	1.496
13C12-PCB-167	26.41	1.30	100.00	1.27E+06	1.298
13C12-PCB-156/157	27.04	1.29	200.00	2.49E+06	1.270
13C12-PCB-169	28.69	1.30	100.00	1.32E+06	1.346
13C12-PCB-188	23.52	1.04	100.00	1.27E+06	1.301
13C12-PCB-189	29.97	1.06	100.00	1.41E+06	1.442
13C12-PCB-202	26.29	0.91	100.00	1.16E+06	1.184
13C12-PCB-205	31.37	0.89	100.00	1.31E+06	1.282
13C12-PCB-208	29.72	0.79	100.00	1.08E+06	1.055
13C12-PCB-206	32.44	0.78	100.00	7.66E+05	0.750
13C12-PCB-209	33.57	1.20	100.00	1.22E+06	1.197
Cleanup Standards					
13C12-PCB-028	15.97	1.07	100.00	1.47E+06	1.703
13C12-PCB-111	22.04	1.56	100.00	1.07E+06	1.294
13C12-PCB-178	25.09	1.03	100.00	9.50E+05	0.969
Injection Standards					
13C12-PCB-9	11.84	1.58	100.00	1.65E+06	-
13C12-PCB-52	16.97	0.80	100.00	8.60E+05	-
13C12-PCB-101	20.64	1.58	100.00	8.30E+05	-
13C12-PCB-138	24.89	1.29	100.00	9.80E+05	-
13C12-PCB-194	31.09	0.89	100.00	1.02E+06	-

ALS Life Sciences

Calibration Report

ALS Sample ID **H5-22-CS4-005**
Analysis Method EPA 1668C
Analysis Type Calibration

Filename	Inst #	Column	Run Date	Approved:	*A. Kuol*
5-221020A06	HRMS-5	SPBOCTYL271290-03	20-Oct-2022 21:02		--e-signature--
					23-Nov-2022

Target Analytes	Ret. Time	Ion Ratio	Concentration ng/mL	Response	RRF
PCB-001	8.88	3.22	400.00	1.75E+07	1.088
PCB-003	10.41	3.23	400.00	1.72E+07	1.125
PCB-004	10.58	1.52	400.00	9.27E+06	0.941
PCB-015	14.25	1.58	400.00	1.58E+07	1.165
PCB-019	12.58	1.08	400.00	8.09E+06	1.251
PCB-037	18.2	1.04	400.00	1.30E+07	1.171
PCB-054	14.44	0.78	400.00	1.13E+07	1.108
PCB-081	21.79	0.79	400.00	1.17E+07	1.223
PCB-077	22.09	0.79	400.00	1.13E+07	1.178
PCB-104	17.51	1.57	400.00	1.11E+07	1.217
PCB-123	23.1	1.58	400.00	9.73E+06	1.120
PCB-118	23.27	1.59	400.00	1.03E+07	1.303
PCB-114	23.57	1.59	400.00	1.01E+07	1.136
PCB-105	23.92	1.59	400.00	1.01E+07	1.220
PCB-126	25.5	1.59	400.00	9.94E+06	1.190
PCB-155	20.52	1.26	400.00	1.10E+07	1.139
PCB-167	26.42	1.25	400.00	1.06E+07	1.254
PCB-156/157	27.04	1.25	800.00	2.09E+07	1.268
PCB-169	28.69	1.25	400.00	1.04E+07	1.219
PCB-188	23.52	1.02	400.00	9.66E+06	1.054
PCB-189	29.99	1.04	400.00	9.16E+06	1.040
PCB-202	26.3	0.89	400.00	8.52E+06	1.122
PCB-205	31.37	0.88	400.00	7.27E+06	0.936
PCB-208	29.72	0.80	400.00	7.26E+06	1.122
PCB-206	32.45	0.80	400.00	4.93E+06	1.123
PCB-209	33.58	1.18	400.00	6.57E+06	0.970
Extraction Standards					
13C12-PCB-001	8.88	2.96	100.00	4.02E+06	1.111
13C12-PCB-003	10.4	2.90	100.00	3.82E+06	1.054
13C12-PCB-004	10.58	1.56	100.00	2.46E+06	0.680
13C12-PCB-015	14.24	1.56	100.00	3.40E+06	0.938
13C12-PCB-019	12.57	1.05	100.00	1.62E+06	0.447
13C12-PCB-037	18.19	1.06	100.00	2.77E+06	1.593
13C12-PCB-054	14.43	0.79	100.00	2.55E+06	1.468
13C12-PCB-081	21.78	0.78	100.00	2.38E+06	1.543
13C12-PCB-077	22.08	0.78	100.00	2.41E+06	1.558
13C12-PCB-104	17.5	1.57	100.00	2.29E+06	1.482
13C12-PCB-123	23.09	1.58	100.00	2.17E+06	1.406
13C12-PCB-118	23.26	1.60	100.00	1.98E+06	1.285
13C12-PCB-114	23.56	1.61	100.00	2.22E+06	1.438
13C12-PCB-105	23.91	1.60	100.00	2.06E+06	1.335
13C12-PCB-126	25.49	1.59	100.00	2.09E+06	1.353
13C12-PCB-155	20.5	1.25	100.00	2.40E+06	1.557
13C12-PCB-167	26.41	1.29	100.00	2.11E+06	1.293
13C12-PCB-156/157	27.03	1.30	200.00	4.12E+06	1.264
13C12-PCB-169	28.68	1.30	100.00	2.13E+06	1.307
13C12-PCB-188	23.51	1.04	100.00	2.29E+06	1.406
13C12-PCB-189	29.97	1.07	100.00	2.20E+06	1.351
13C12-PCB-202	26.29	0.90	100.00	1.90E+06	1.164
13C12-PCB-205	31.35	0.89	100.00	1.94E+06	1.345
13C12-PCB-208	29.71	0.79	100.00	1.62E+06	1.120
13C12-PCB-206	32.43	0.79	100.00	1.10E+06	0.761
13C12-PCB-209	33.57	1.20	100.00	1.69E+06	1.173
Cleanup Standards					
13C12-PCB-028	15.96	1.06	100.00	3.02E+06	1.738
13C12-PCB-111	22.02	1.58	100.00	1.93E+06	1.249
13C12-PCB-178	25.08	1.04	100.00	1.54E+06	0.944
Injection Standards					
13C12-PCB-9	11.84	1.57	100.00	3.62E+06	-
13C12-PCB-52	16.96	0.80	100.00	1.74E+06	-
13C12-PCB-101	20.63	1.56	100.00	1.54E+06	-
13C12-PCB-138	24.88	1.28	100.00	1.63E+06	-
13C12-PCB-194	31.09	0.89	100.00	1.44E+06	-

ALS Life Sciences

Calibration Report

ALS Sample ID **H5-22-CS5-005**
Analysis Method EPA 1668C
Analysis Type Calibration

Filename	Inst #	Column	Run Date	Approved:	*A. Kuol*
5-221020A05	HRMS-5	SPBOCTYL271290-03	20-Oct-2022 20:20		--e-signature--
					23-Nov-2022

Target Analytes	Ret. Time	Ion Ratio	Concentration ng/mL	Response	RRF
PCB-001					
PCB-003					
PCB-004	10.58	1.54	2000.00	4.69E+07	0.941
PCB-015	14.25	1.46	2000.00	8.11E+07	1.126
PCB-019	12.58	1.08	2000.00	4.07E+07	1.273
PCB-037	18.2	1.05	2000.00	7.20E+07	1.166
PCB-054	14.44	0.78	2000.00	5.66E+07	1.125
PCB-081	21.79	0.80	2000.00	6.54E+07	1.235
PCB-077	22.09	0.80	2000.00	6.41E+07	1.194
PCB-104	17.51	1.58	2000.00	5.90E+07	1.232
PCB-123	23.1	1.59	2000.00	5.50E+07	1.143
PCB-118	23.27	1.60	2000.00	5.88E+07	1.320
PCB-114	23.57	1.59	2000.00	5.74E+07	1.149
PCB-105	23.92	1.58	2000.00	5.68E+07	1.222
PCB-126	25.5	1.59	2000.00	5.69E+07	1.192
PCB-155	20.52	1.27	2000.00	5.91E+07	1.159
PCB-167	26.42	1.25	2000.00	5.89E+07	1.264
PCB-156/157	27.04	1.25	4000.00	1.17E+08	1.274
PCB-169	28.69	1.25	2000.00	5.75E+07	1.232
PCB-188	23.52	1.03	2000.00	5.31E+07	1.072
PCB-189	29.99	1.04	2000.00	4.90E+07	1.042
PCB-202	26.3	0.89	2000.00	4.73E+07	1.135
PCB-205	31.38	0.87	2000.00	3.87E+07	0.942
PCB-208	29.72	0.80	2000.00	3.87E+07	1.133
PCB-206	32.45	0.80	2000.00	2.62E+07	1.127
PCB-209	33.58	1.19	2000.00	3.48E+07	0.966
Extraction Standards					
13C12-PCB-001	8.88	2.92	100.00	4.05E+06	1.084
13C12-PCB-003	10.4	2.88	100.00	3.95E+06	1.057
13C12-PCB-004	10.58	1.57	100.00	2.49E+06	0.668
13C12-PCB-015	14.24	1.56	100.00	3.60E+06	0.964
13C12-PCB-019	12.57	1.05	100.00	1.60E+06	0.428
13C12-PCB-037	18.19	1.06	100.00	3.09E+06	1.677
13C12-PCB-054	14.43	0.79	100.00	2.52E+06	1.367
13C12-PCB-081	21.78	0.78	100.00	2.65E+06	1.610
13C12-PCB-077	22.08	0.78	100.00	2.69E+06	1.633
13C12-PCB-104	17.5	1.57	100.00	2.40E+06	1.456
13C12-PCB-123	23.09	1.59	100.00	2.41E+06	1.462
13C12-PCB-118	23.26	1.59	100.00	2.23E+06	1.352
13C12-PCB-114	23.56	1.60	100.00	2.50E+06	1.519
13C12-PCB-105	23.91	1.60	100.00	2.32E+06	1.411
13C12-PCB-126	25.49	1.60	100.00	2.39E+06	1.450
13C12-PCB-155	20.51	1.25	100.00	2.55E+06	1.551
13C12-PCB-167	26.41	1.29	100.00	2.33E+06	1.297
13C12-PCB-156/157	27.03	1.30	200.00	4.58E+06	1.274
13C12-PCB-169	28.68	1.29	100.00	2.33E+06	1.297
13C12-PCB-188	23.51	1.05	100.00	2.47E+06	1.376
13C12-PCB-189	29.97	1.06	100.00	2.35E+06	1.307
13C12-PCB-202	26.29	0.92	100.00	2.08E+06	1.158
13C12-PCB-205	31.35	0.90	100.00	2.05E+06	1.289
13C12-PCB-208	29.71	0.79	100.00	1.71E+06	1.073
13C12-PCB-206	32.43	0.79	100.00	1.16E+06	0.731
13C12-PCB-209	33.57	1.20	100.00	1.80E+06	1.131
Cleanup Standards					
13C12-PCB-028	15.96	1.06	100.00	3.14E+06	1.706
13C12-PCB-111	22.03	1.55	100.00	2.05E+06	1.248
13C12-PCB-178	25.08	1.04	100.00	1.65E+06	0.919
Injection Standards					
13C12-PCB-9	11.84	1.55	100.00	3.73E+06	-
13C12-PCB-52	16.96	0.80	100.00	1.84E+06	-
13C12-PCB-101	20.63	1.56	100.00	1.65E+06	-
13C12-PCB-138	24.88	1.30	100.00	1.80E+06	-
13C12-PCB-194	31.07	0.89	100.00	1.59E+06	-

Sample Name: 5-221109A17 Sample ID: H5-22-WDM-975

INSTRUMENT 209 PCB CALIBRATION REPORT

	Target Analyte	#Hom	Resp	Ra	Ra fail=YES	RT	Conc.	H/A	ical RRF	User RF	%Rec	Mod.Date	Mod.Comment	Code Comments	Noise 1	Noise 2	Ion1 Ht	Ion2 Ht	Ion1 s/n	Ion2 s/n	Ion1 Area	Ion2 Area	RRT	RT LCL	RT UCL	Acq.Date	Acq.Time	ID	Spl Size
1	* PCB-1		1807921.5	3.201	NO	8.99	24.63262	20.733		1.075	98.5				2341	1018	28561172	8973946	12199	8811.8	1377542	430379.4	1	8.96	9.03	10-Nov-22	3:21:22	H5-22-WDM-975	1
2	PCB-2		1758898.8	3.263	NO	10.38	25	19.384	1.066		100				2341	1018	26096094	8036328	11146.2	7891.2	1346278	412621	0.988	10.35	10.42	10-Nov-22	3:21:22	H5-22-WDM-975	1
3	PCB-3		1820273.8	3.247	NO	10.51	25.51083	19.042		1.119	102				2341	1018	26499426	8248253	11318.4	8099.3	1391635	428638.9	1	10.47	10.54	10-Nov-22	3:21:22	H5-22-WDM-975	1
4	*PCB-4		1078040.2	1.496	NO	10.68	21.81011	19.368		0.937	87.2				880	3690	12514775	8440631	14225.4	2287.3	646144.9	431895.3	1	10.64	10.71	10-Nov-22	3:21:22	H5-22-WDM-975	1
5	PCB-10		1709530	1.522	NO	10.79	25	19.634	1.296		100				880	3690	20255092	13306785	23023.7	3605.9	1031633	677897.4	1.0105	10.76	10.82	10-Nov-22	3:21:22	H5-22-WDM-975	1
6	PCB-9		1678446.1	1.511	NO	11.92	25	19.425	1.273		100				880	3690	19618266	12948122	22299.8	3508.8	1009929	668517.2	1.1168	11.89	11.96	10-Nov-22	3:21:22	H5-22-WDM-975	1
7	PCB-7		1716940.6	1.511	NO	12.02	25	18.04	1.302		100				880	3690	18639202	12441084	21186.9	3371.4	1033222	683719	1.126	11.99	12.06	10-Nov-22	3:21:22	H5-22-WDM-975	1
8	PCB-6		1643815.2	1.516	NO	12.19	25	18.356	1.246		100				880	3690	18182378	12028028	20667.6	3259.4	990532.4	653282.8	1.1418	12.16	12.22	10-Nov-22	3:21:22	H5-22-WDM-975	1
9	PCB-5		1621917.6	1.496	NO	12.39	25	18.231	1.23		100				880	3690	17722318	11912176	20144.7	3228	972105.1	649812.5	1.1602	12.35	12.42	10-Nov-22	3:21:22	H5-22-WDM-975	1
10	PCB-8		1800557.4	1.506	NO	12.46	25	17.533	1.365		100				880	3690	18972786	12820188	21566.1	3474.1	1082094	718463.5	1.1667	12.42	12.49	10-Nov-22	3:21:22	H5-22-WDM-975	1
11	* PCB-14		1679442.6	1.595	NO	13.42	25	20.12	1.144		100				4919	6501	20769094	12908374	4221.8	1985.7	1032263	647179.3	0.9376	13.39	13.45	10-Nov-22	3:21:22	H5-22-WDM-975	1
12	PCB-11		1679606.5	1.581	NO	13.94	25	18.542	1.144		100				4919	6501	19074976	12256785	3877.5	1885.5	1028758	650848.9	0.9736	13.9	13.97	10-Nov-22	3:21:22	H5-22-WDM-975	1
13	PCB-13/12		3504965	1.59	NO	14.14	50	14.33	1.193		100				4919	6501	30838426	19533666	6268.7	3004.9	2151968	1352997	0.9878	14.11	14.17	10-Nov-22	3:21:22	H5-22-WDM-975	1
14	PCB-15		1777294.8	1.569	NO	14.32	25.79516	17.666		1.173	103.2				4919	6501	19173796	12252888	3897.5	1884.9	1085347	691948	1.0006	14.29	14.36	10-Nov-22	3:21:22	H5-22-WDM-975	1
15	* PCB-19		1105621.6	1.075	NO	12.67	22.6315	18.389		1.255	90.5				750	552	10535217	9903566	14043.3	17927.8	572895.9	532725.6	1.0011	12.63	12.7	10-Nov-22	3:21:22	H5-22-WDM-975	1
16	* PCB-30/18		2584641.6	1.098	NO	13.71	50	11.832	1.162		100	17-Nov-22	AK221117MJ		2813	2042	16002728	14636989	5688	7168.8	1352471	1232171	1.0833	13.67	13.74	10-Nov-22	3:21:22	H5-22-WDM-975	1
17	PCB-17		1075081.1	1.106	NO	14	25	20.428	0.967		100				2813	2042	11533427	10428334	4099.4	5107.5	564581.4	510499.7	1.1066	13.97	14.04	10-Nov-22	3:21:22	H5-22-WDM-975	1
18	PCB-27		1432238.1	1.091	NO	14.14	25	20.178	1.288		100				2813	2042	15076392	13821565	5358.7	6769.4	747177.7	685060.4	1.1175	14.11	14.17	10-Nov-22	3:21:22	H5-22-WDM-975	1
19	PCB-24		1391155.5	1.098	NO	14.22	25	20.01	1.251		100				2813	2042	14568588	13288935	5178.2	6508.6	728074.6	663080.9	1.1241	14.19	14.26	10-Nov-22	3:21:22	H5-22-WDM-975	1
20	PCB-16		1020318.4	1.103	NO	14.31	25	18.641	0.918		100				2813	2042	9974716	9075067	3545.4	4444.7	535088.2	485230.3	1.1306	14.27	14.34	10-Nov-22	3:21:22	H5-22-WDM-975	1
21	PCB-32		1648686.3	1.102	NO	14.58	25	19.043	1.483		100				2813	2042	16462312	14936158	5851.3	7315.3	864480.1	784206.1	1.1525	14.55	14.62	10-Nov-22	3:21:22	H5-22-WDM-975	1
22	* PCB-34		1539540.4	1.054	NO	15.26	25	19.853	1.231		100				3850	6445	15682067	14859666	4073	2305.8	789922.9	749617.5	0.8364	15.23	15.3	10-Nov-22	3:21:22	H5-22-WDM-975	1
23	PCB-23		1643524.5	1.039	NO	15.35	25	18.633	1.314		100				3850	6445	15602906	15199000	4052.4	2358.4	837374.4	806150.1	0.8412	15.32	15.38	10-Nov-22	3:21:22	H5-22-WDM-975	1
24	PCB-29/26		3287622.6	1.046	NO	15.54	50	18.087	1.315		100				3850	6445	30405136	29113646	7896.9	4517.5	1681025	1606598	0.8514	15.5	15.57	10-Nov-22	3:21:22	H5-22-WDM-975	1
25	PCB-25		1647230.6	1.064	NO	15.67	25	16.05	1.317		100				3850	6445	13630451	12669683	3540.1	1965.9	849266.6	797964	0.8589	15.64	15.71	10-Nov-22	3:21:22	H5-22-WDM-975	1
26	PCB-31		1739409.9	1.048	NO	15.85	25	18.735	1.391		100				3850	6445	16672001	15909119	4330.1	2468.6	889899.5	849510.4	0.8686	15.82	15.88	10-Nov-22	3:21:22	H5-22-WDM-975	1
27	PCB-28/20		3255299.8	1.079	NO	16.04	50	11.775	1.302		100				3850	6445	19890806	19027782	5166.1	2952.5	1689273	1566027	0.8788	16	16.07	10-Nov-22	3:21:22	H5-22-WDM-975	1
28	PCB-21/33		3348399	1.017	NO	16.15	50	14.799	1.339		100				3850	6445	24982632	23682024	6488.6	3674.7	1688115	1660284	0.8852	16.12	16.19	10-Nov-22	3:21:22	H5-22-WDM-975	1
29	PCB-22		1602382.1	1.055	NO	16.4	25	17.476	1.282		100				3850	6445	14374874	13750432	3733.5	2133.6	822554.9	779827.2	0.8986	16.36	16.43	10-Nov-22	3:21:22	H5-22-WDM-975	1
30	PCB-36		1865752.2	1.051	NO	17.21	25	15.51	1.492		100				3850	6445	14829929	13990306	3851.7	2170.9	956159.8	909592.4	0.9431	17.18	17.24	10-Nov-22	3:21:22	H5-22-WDM-975	1
31	PCB-39		1606665.6	1.048	NO	17.43	25	16.912	1.285		100				3850	6445	13906650	13188596	3611.9	2046.5	822303.6	784362	0.9549	17.39	17.46	10-Nov-22	3:21:22	H5-22-WDM-975	1
32	PCB-38		1672423.5	1.051	NO	17.76	25	17.412	1.338		100				3850	6445	14925077	14267396	3876.4	2213.9	857177.4	815246.1	0.9732	17.73	17.79	10-Nov-22	3:21:22	H5-22-WDM-975	1
33	PCB-35		1601667.5	1.054	NO	18.02	25	15.161	1.281		100				3850	6445	12462694	11812108	3236.8	1832.9	821996.8	779670.8	0.9877	17.99	18.06	10-Nov-22	3:21:22	H5-22-WDM-975	1
34	PCB-37		1569963.9	1.054	NO	18.27	26.37947	15.667		1.19	105.5				3850	6445	12618344	12152463	3277.3	1885.7	805416.5	764547.4	1.0011	18.23	18.3	10-Nov-22	3:21:22	H5-22-WDM-975	1
35	* PCB-54		3084224.3	0.775	NO	14.52	49.50323	19.782		1.119	99				979	902	26642618	34783408	27220	38554.8	1346781	1737443	1.0006	14.48	14.55	10-Nov-22	3:21:22	H5-22-WDM-975	1
36	* PCB-50/53		4415760.6	0.777	NO	15.7	100	18.544	0.921		100				2397	3020	35811668	46426612	14937.9	15375.1	1931156	2484605	1.0824	15.67	15.74	10-Nov-22	3:21:22	H5-22-WDM-975	1
37	PCB-45/51		4278383.1	0.771	NO	16.11	100	17.083	0.892		100				2397	3020	31829282	41388804	13276.8	13706.8	1863224	2415159	1.1107	16.08	16.15	10-Nov-22	3:21:22	H5-22-WDM-975	1
38	PCB-46		1894324.4	0.772	NO	16.29	50	18.026	0.79		100				2397	3020	14878860	19413788	6206.3	6429.3	825396.9	1068928	1.1228	16.26	16.32	10-Nov-22	3:21:22	H5-22-WDM-975	1
39	PCB-52		2025444.5	0.772	NO	17.01	50	20.337	0.845		100				2397	3020	17941038	23077322	7483.6	7642.5	882195.3	1143249	1.1728	16.98	17.05	10-Nov-22	3:21:22	H5-22-WDM-975	1
40	PCB-73		3194147.4	0.773	NO	17.08	50	18.699	1.332		100				2397	3020	26037230	33614036	10860.8	11132	1392407	1801740	1.1775	17.05	17.12	10-Nov-22	3:21:22	H5-22-WDM-975	1
41	PCB-43		1721293.3	0.774	NO	17.15	50	19.927	0.718		100				2397	3020	14962247	19325924	6241.1	6400.2	750853.7	970439.6	1.1822	17.12	17.19	10-Nov-22	3:21:22	H5-22-WDM-975	1
42	PCB-69/49		5088787.5	0.775	NO	17.24	100	10.538	1.061		100	17-Nov-22	AK221117MJ		2397	3020	23413114	30283450	9766.2	10029	2221714	2867073	1.1883	17.21	17.27	10-Nov-22	3:21:22	H5-22-WDM-975	1
43	PCB-48		2303874.1	0.773	NO	17.45	50	18.208	0.961		100				2397	3020	18291602	23597612	7629.9	7814.8	1004583	1299292	1.2024	17.41	17.48	10-Nov-22	3:21:22	H5-22-WDM-975	1
44	PCB-44/47/65		6837863.5	0.773	NO	17.58	150	18.266	0.951		100				2397	3020	54440964	70561680	22708.6	23368	2980459	3857405	1.2119	17.55	17.62	10-Nov-22	3:21:22	H5-22-WDM-975	1
45	PCB-59/62/75		8693789.3	0.772	NO	17.75	150	16.287	1.209		100				2397	3020	61698212	80011248	25735.8	26497.4	3788290	4905499	1.2234	17.72	17.78	10-Nov-22	3:21:22	H5-22-WDM-975	1
46	PCB-42		1905516.4	0.777	NO	17.88	50	17.702	0.795		100				2397	3020	14754708	19121206	6154.5	6332.4	833509.9	1072007	1.2321	17.84	17.91	10-Nov-22	3:21:22	H5-22-WDM-975	1
47	PCB-41/71/40		6502617.5	0.774	NO	18.15	150	10.652	0.904		100				2397	3020	30212302	38943132	12602.3	12896.8	2836178	3666439	1.251	18.12	18.18	10-Nov-22	3:21:22	H5-22-WDM-975	1
48	PCB-64		2756067.3	0.779	NO	18.27	50	17.906	1.15		100				2397	3020	21614244	27685362	9015.8	9168.6	1207113	1548954	1.2591	18.23	18.3	10-Nov-22	0.139838	H5-22-WDM-975	1
49	* PCB-72		2704245.9	0.768	NO	18.65	50	19.098	1.227		100				3971	18160	22440272	28460864	5651.4	1567.2	1174994	1529252	0.855	18.61	18.68	10-Nov-22	0.139838	H5-22-WDM-975	1
50	PCB-68		2816795.1	0.718	NO	18.81	50	19.164	1.278		100				3971	18160	22553776	29267292	5680	1611.6	1176905	1639891	0.8626	18.78	18.84	10-Nov-22	0.139838	H5-22-WDM-975	1
51	PCB-57		2664177	0.779	NO	19.05	50	18.789	1.209		100				3971	18160	21926756	27932446	5522.1	1538.1	1166982	1497195	0.8736	19.02	19.09	10-Nov-22	0.139838	H5-22-WDM-975	1
52	PCB-58		2753933.1	0.773	NO	19.19	50	19.056	1.25		100				3971	18160	22874916	29105670	5760.9	1602.7	1200409	1553524	0.88	19.16	19.22	10-Nov-22	3:21:22	H5-22-WDM-975	1
53	PCB-67		3030041	0.766	NO	19.27	50	17.16	1.375		100				3971	18160	22548228	29068020	5678.6	1600.6	1314014	1716027	0.8838	19.24	19.31	10-Nov-22	3:21:22	H5-22-WDM-975	1
54	PCB-63		2763613.6	0.753	NO	19.42	50	18.124	1.254		100				3971	18160	21521274	27790092	5420	1530.3	1187426	1576188	0.8906	19.39	19.46	10-Nov-22	3:21:22	H5-22-WDM-975	1
55	PCB-61/70/74/76		10399562.5	0.767	NO	19.62	200	11.818	1.18		100				3971	18160	53344436	68972272	13434.4	3798	4513690	5885873	0.8995	19.58	19.65	10-Nov-22	3:21:22	H5-22-WDM-975	1
56	PCB-66		2768515.4	0.739	NO	19.78	50	18.254	1.256		100				3971	18160	21468462	28089502	5406.7	1546.8	1176090	1592425	0.9071	19.75	19.82	10-Nov-22	3:21:22	H5-22-WDM-975	1
57	PCB-55		2583259.1	0.729	NO	19.9	50	18.291	1.172		100				3971	18160	19929908	25995266	5019.2	1431.4	1089604	1493656	0.9126	19.87	19.94	10-Nov-22	3:21:22	H5-22-WDM-975	1
58	PCB-56		2520969.9	0.762	NO	20.17	50	18.124	1.144		100				3971	18160	19757754	25337290	4975.8	1395.2	1090164	1430806	0.9249	20.14	20.2	10-Nov-22	3:21:22	H5-22-WDM-975	1
59	PCB-60		2677132	0.767	NO	20.29	50	18.384	1.215		100				3971	18160	21367046	27466810	5381.1	1512.5	1162256	1514876	0.9304	20.26	20.32	10-Nov-22	3:21:22	H5-22-WDM-975	1
60	PCB-80		3204161	0.773	NO	20.41	50	17.206	1.454		100				3971	18160	24031312	30436900	6052.1	1676	1396649	1807512	0.936	20.38	20.45	10-Nov-22	3:21:22	H5-22-WDM-975	1
61	PCB-79		3143506.8	0.775	NO	21.26	50	16.462	1.426		100				3971	18160	22599626	28817410	5691.5	1586.8	1372844	1770663	0.975	21.23	21.3	10-Nov-22	3:21:22	H5-22-WDM-975	1
62	PCB-78		2409261.9	0.774	NO	21.58	50	17.873	1.093		100				3971	18160	18785574	23868688	4731	1314.3	1051063	1358199	0.9894	21.54	21.61	10-Nov-22	3:21:22	H5-22-WDM-975	1
63	PCB-81		2350879.3	0.731	NO	21.83	42.53182	17.372		1.249	85.1				3971	18160	17240924	22428078	4342	1235	992428.1	1358451	1.0008	21.79	21.86	10-Nov-22	3:21:22	H5-22-WDM-975	1
64	PCB-77		2438968.3	0.723	NO	22.13	46.03236	17.772		1.207	92.1				3971	18160	18181118	23850802	4578.8	1313.4	1023006	1415963	1.0004	22.1	22.17	10-Nov-22	3:21:22	H5-22-WDM-975	1
65	* PCB-104		2798663.8	1.564	NO	17.54	45.34503	18.948		1.239	90.7				3028	826	32348496	20547624	10682.8	24869.3	1707219	1091445	1.0006	17.51	17.58	10-Nov-22	3:21:22	H5-22-WDM-975	1
66	PCB-96		2262726.6	1.539	NO	17.8	50	18.579	0.908		100				3028	826	25484016	16486315	8415.9	19953.8	1371680	891046.7	1.0151	17.76	17.83	10-Nov-22	3:21:22	H5-22-WDM-975	1
67	* PCB-103		1774664.8	1.624	NO	18.75	50	18.682	0.813		100				10491	3976	20520440	12734532	1955.9	3202.7	1098414	676250.4	1.0692	18.71	18.78	10-Nov-22	3:21:22	H5-22-WDM-975	1
68	PCB-94		1750828	1.621	NO	18.9	50	18.882	0.802		100				10491	3976	20448238	12493893	1949.1	3142.2	1082928	667900.1	1.0781	18.87	18.94	10-Nov-22	3:21:22	H5-22-WDM-975	1
69	PCB-95		3702472.4	0.325	YES	19.16	50	21.104	1.697		100	17-Nov-22	AK221117MJ		10491	3976	19156080	15884624	1825.9	3994.9	907700.4	2794772	1.0929	19.13	19.2	10-Nov-22	3:21:22	H5-22-WDM-975	1
70	PCB-100/93/102/98		5095782.4	8.066	YES	19.21	200	5.636	0.584		100	17-Nov-22	AK221117MJ		10491	3976	25550746	11655677	2435.4	2931.4	4533689	562093.4	1.0956	19.18	19.24	10-Nov-22	3:21:22	H5-22-WDM-975	1
71	PCB-88/91		3501567	1.636	NO	19.61	100	11.252	0.802		100				10491	3976	24453364	14998485	2330.8	3772.1	2173280	1328287	1.1182	19.57	19.64	10-Nov-22	3:21:22	H5-22-WDM-975	1
72	PCB-84		1618296.2	1.629	NO	19.77	50	18.437	0.742		100				10491	3976	18488410	11292624	1762.3	2840.1	1002811	615485.4	1.1277	19.74	19.81	10-Nov-22	3:21:22	H5-22-WDM-975	1
73	PCB-89		1419441.4	1.624	NO	20.01	50	19.182	0.65		100				10491	3976	16851080	10410961	1606.2	2618.3	878467.4	540973.9	1.1414	19.98	20.05	10-Nov-22	3:21:22	H5-22-WDM-975	1
74	PCB-121		2599646.5	1.623	NO	20.12	50	18.695	1.191		100				10491	3976	30070742	18578832	2866.2	4672.5	1608528	991118.9	1.1473	20.08	20.15	10-Nov-22	3:21:22	H5-22-WDM-975	1
75	PCB-92		1577530.8	1.627	NO	20.36	50	19.11	0.723		100				10491	3976	18669696	11350983	1779.5	2854.7	976971.5	600559.3	1.161	20.32	20.39	10-Nov-22	3:21:22	H5-22-WDM-975	1
76	PCB-113/90/101		6233166	1.626	NO	20.65	150	16.14	0.952		100				10491	3976	62293824	38280808	5937.6	9627.5	3859684	2373483	1.1778	20.62	20.69	10-Nov-22	3:21:22	H5-22-WDM-975	1
77	PCB-83/99		3464121.8	1.624	NO	20.96	100	16.834	0.794		100				10491	3976	36091748	22302942	3440.1	5609.1	2143929	1320193	0.9078	20.92	20.99	10-Nov-22	3:21:22	H5-22-WDM-975	1
78	PCB-112		2538629.6	1.627	NO	21.06	50	18.006	1.163		100				10491	3976	28312404	17433078	2698.6	4384.4	1572353	966276.9	0.9122	21.03	21.09	10-Nov-22	3:21:22	H5-22-WDM-975	1
79	PCB-109/119/86/97/125/87		12767663	1.614	NO	21.23	300	7.973	0.975		100	17-Nov-22	AK221117MJ		10491	3976	62850156	38635956	5990.7	9716.8	7882736	4884928	0.9198	21.2	21.27	10-Nov-22	3:21:22	H5-22-WDM-975	1
80	PCB-117/116/85/110/115		11266754.5	1.619	NO	21.66	250	6.811	1.033		100	17-Nov-22	AK221117MJ		10491	3976	47441024	29464512	4521.9	7410.2	6965030	4301725	0.9382	21.63	21.69	10-Nov-22	3:21:22	H5-22-WDM-975	1
81	PCB-82		1401790.1	1.624	NO	21.95	50	19.751	0.642		100				10491	3976	17134488	10467866	1633.2	2632.6	867539.8	534250.4	0.9506	21.91	21.98	10-Nov-22	3:21:22	H5-22-WDM-975	1
82	PCB-111		2678626.9	1.632	NO	22.04	50	18.012	1.227		100				10491	3976	29917552	18341356	2851.6	4612.8	1661014	1017613	0.9546	22.01	22.07	10-Nov-22	3:21:22	H5-22-WDM-975	1
83	PCB-120		2662673.7	1.641	NO	22.28	50	16.945	1.22		100				10491	3976	28036486	17138034	2672.3	4310.2	1654511	1008163	0.9651	22.25	22.31	10-Nov-22	3:21:22	H5-22-WDM-975	1
84	* PCB-108/124		5001724.6	1.584	NO	22.92	100	16.459	1.146		100				4719	3798	50465668	31846684	10694.2	8384.2	3066210	1935515	0.9927	22.88	22.95	10-Nov-22	3:21:22	H5-22-WDM-975	1
85	PCB-107		2785932.9	1.6	NO	23.04	50	16.776	1.277		100				4719	3798	28762906	18034562	6095.1	4747.9	1714486	1071447	0.9979	23.01	23.07	10-Nov-22	3:21:22	H5-22-WDM-975	1
86	PCB-123		2302266.6	1.61	NO	23.1	47.3334	17.689		1.154	94.7				4719	3798	25120788	15690908	5323.3	4130.9	1420121	882145.6	1.0005	23.07	23.13	10-Nov-22	3:21:22	H5-22-WDM-975	1
87	PCB-106		2259669	1.621	NO	23.18	50	17.203	1.035		100				4719	3798	24042640	14744860	5094.9	3881.8	1397601	862068.1	0.9969	23.15	23.22	10-Nov-22	3:21:22	H5-22-WDM-975	1
88	PCB-118		2534058.3	1.604	NO	23.27	47.77075	16.953		1.351	95.5				4719	3798	26464854	16725989	5608.2	4403.4	1561079	972979.4	1.0005	23.23	23.3	10-Nov-22	3:21:22	H5-22-WDM-975	1
89	PCB-122		1836582.6	1.604	NO	23.49	50	17.619	0.842		100				4719	3798	19932172	12381053	4223.8	3259.5	1131319	705263.4	0.9969	23.45	23.52	10-Nov-22	3:21:22	H5-22-WDM-975	1
90	PCB-114		2808596.3	1.584	NO	23.57	55.46035	16.168		1.168	110.9				4719	3798	27838466	17726364	5899.2	4666.8	1721815	1086782	1.0005	23.54	23.6	10-Nov-22	3:21:22	H5-22-WDM-975	1
91	PCB-105		2351238.8	1.611	NO	23.93	46.7758	16.219		1.24	93.6				4719	3798	23531812	14589929	4986.6	3841	1450842	900396.7	1.0005	23.9	23.97	10-Nov-22	3:21:22	H5-22-WDM-975	1
92	PCB-127		2601652.4	1.617	NO	24.63	50	15.049	1.192		100				4719	3798	24193568	15007977	5126.9	3951.1	1607642	994010.9	1.0298	24.6	24.67	10-Nov-22	3:21:22	H5-22-WDM-975	1
93	PCB-126		2449885.8	1.616	NO	25.52	48.77196	14.599		1.216	97.5				4719	3798	22091774	13651710	4681.5	3594	1513249	936636.4	1.0005	25.48	25.55	10-Nov-22	3:21:22	H5-22-WDM-975	1
94	* PCB-155		2725151.6	1.248	NO	20.5	42.66945	19.005		1.166	85.3				2045	972	28750498	23108304	14059.7	23785.5	1512807	1212344	1.0005	20.47	20.54	10-Nov-22	3:21:22	H5-22-WDM-975	1
95	PCB-152		2407734.9	1.238	NO	20.71	50	20.327	0.879		100				2045	972	27070774	21829120	13238.2	22468.8	1331779	1075956	1.0104	20.67	20.74	10-Nov-22	3:21:22	H5-22-WDM-975	1
96	PCB-150		2958423.6	1.26	NO	20.75	50	18.784	1.08		100				2045	972	30984444	24870082	15

167	13C-PCB-111	3989918.9	1.563	NO	22.02	101.3749	18.818		1.24	101.4	4056	2729	45789576	29426536	11289.2	10782.1	2433243	1556676	1.0663	21.99	22.05	10-Nov-22	3:21:22	H5-22-WDM-975	1
168	13C-PCB-178	3609233.5	1.041	NO	25.06	114.0351	17.366		0.938	114	2671	2532	31967766	30775940	11969.2	12155.5	1840773	1768460	1.0078	25.02	25.09	10-Nov-22	3:21:22	H5-22-WDM-975	1
169	13C-PCB-1	6827480.4	2.932	NO	8.99	87.23942	20.37		1.061	87.2	3237	19403	1.04E+08	35531848	32032.4	1831.2	5091006	1736475	0.7552	8.96	9.03	10-Nov-22	3:21:22	H5-22-WDM-975	1
170	13C-PCB-3	6376495.6	2.939	NO	10.51	86.1884	18.642		1.003	86.2	3237	19403	88691616	29981078	27396	1545.1	4757732	1618764	0.8823	10.47	10.54	10-Nov-22	3:21:22	H5-22-WDM-975	1
171	13C-PCB-4	5275183.8	1.539	NO	10.68	108.8529	19.461		0.657	108.9	6183	2715	62229564	39963884	10065	14720.5	3197651	2077533	0.8964	10.64	10.71	10-Nov-22	3:21:22	H5-22-WDM-975	1
172	13C-PCB-15	5873854.8	1.603	NO	14.31	89.27421	18.335		0.892	89.3	10673	5812	66331756	41901904	6214.7	7209.9	3617670	2256185	1.2019	14.28	14.35	10-Nov-22	3:21:22	H5-22-WDM-975	1
173	13C-PCB-19	3892687.1	1.036	NO	12.65	123.5917	18.246		0.427	123.6	20420	8985	36146244	34820632	1770.1	3875.6	1981051	1911636	1.0624	12.62	12.69	10-Nov-22	3:21:22	H5-22-WDM-975	1
174	13C-PCB-37	5001228.5	1.056	NO	18.25	95.03018	16.213		1.529	95	24964	11097	41638684	39236704	1667.9	3535.8	2568196	2433032	1.0731	18.21	18.28	10-Nov-22	3:21:22	H5-22-WDM-975	1
175	13C-PCB-54	5567783	0.785	NO	14.51	116.8796	19.844		1.384	116.9	3304	1892	48572916	61633544	14701.1	32575.6	2447678	3120106	0.8532	14.48	14.54	10-Nov-22	3:21:22	H5-22-WDM-975	1
176	13C-PCB-81	4425413.9	0.79	NO	21.81	93.44864	17.059		1.492	93.4	4625	3829	33324712	42389552	7206	11071.1	1953472	2471942	1.056	21.77	21.84	10-Nov-22	3:21:22	H5-22-WDM-975	1
177	13C-PCB-77	4389708	0.78	NO	22.12	92.01626	16.39		1.503	92	4625	3829	31538278	39990496	6819.7	10444.6	1924225	2465483	1.0712	22.09	22.16	10-Nov-22	3:21:22	H5-22-WDM-975	1
178	13C-PCB-104	4981380.6	1.556	NO	17.53	111.7817	18.668		1.404	111.8	1401	1724	56602232	36704268	40408.9	21295.4	3032088	1949293	1.0311	17.5	17.57	10-Nov-22	3:21:22	H5-22-WDM-975	1
179	13C-PCB-123	4214849.9	1.583	NO	23.09	96.36533	17.234		1.378	96.4	5196	4374	44522272	28165738	8568.9	6438.7	2583337	1631513	1.1179	23.05	23.12	10-Nov-22	3:21:22	H5-22-WDM-975	1
180	13C-PCB-118	3926442.3	1.617	NO	23.26	98.33463	16.996		1.258	98.3	5196	4374	41236356	25601704	7936.5	5852.6	2426286	1500157	1.1261	23.22	23.29	10-Nov-22	3:21:22	H5-22-WDM-975	1
181	13C-PCB-114	4335746.3	1.61	NO	23.56	97.50202	16.736		1.401	97.5	5196	4374	44764396	28176094	8615.5	6441.1	2674780	1660966	0.9475	23.52	23.59	10-Nov-22	3:21:22	H5-22-WDM-975	1
182	13C-PCB-105	4053720.6	1.589	NO	23.92	96.6805	17.087		1.321	96.7	5196	4374	42514664	26813574	8182.5	6129.6	2488059	1565662	0.9621	23.89	23.95	10-Nov-22	3:21:22	H5-22-WDM-975	1
183	13C-PCB-126	4130874.9	1.601	NO	25.5	95.83633	15.843		1.358	95.8	5196	4374	40286920	25146634	7753.7	5748.5	2542872	1588003	1.0258	25.47	25.54	10-Nov-22	3:21:22	H5-22-WDM-975	1
184	13C-PCB-155	5477407.3	1.237	NO	20.49	114.9694	19.216		1.501	115	3731	1560	58212468	46692104	15602.4	29923.9	3029379	2448029	0.9924	20.46	20.53	10-Nov-22	3:21:22	H5-22-WDM-975	1
185	13C-PCB-167	4391099.9	1.293	NO	26.39	102.6314	17.268		1.268	102.6	4182	4298	42756056	32972096	10222.7	7671.9	2476007	1915093	1.0612	26.35	26.42	10-Nov-22	3:21:22	H5-22-WDM-975	1
186	13C-PCB-156/157	8458449.5	1.293	NO	27.03	202.6504	12.158		1.237	101.3	4182	4298	57978616	44678932	13862.3	10395.8	4768896	3689554	1.087	26.99	27.06	10-Nov-22	3:21:22	H5-22-WDM-975	1
187	13C-PCB-169	4113866.3	1.293	NO	28.68	95.62387	15.136		1.275	95.6	4182	4298	35111252	26918386	8394.9	6263.3	2319767	1794099	1.1536	28.65	28.72	10-Nov-22	3:21:22	H5-22-WDM-975	1
188	13C-PCB-188	4951587.5	1.04	NO	23.49	110.1708	17.801		1.332	110.2	2671	2532	44939336	43505608	16826	17183.3	2524532	2427056	0.9446	23.45	23.52	10-Nov-22	3:21:22	H5-22-WDM-975	1
189	13C-PCB-189	4104479.3	1.069	NO	29.94	91.6671	15.66		1.327	91.7	3141	2887	33203004	31029792	10572.2	10747.5	2120259	1984221	0.9649	29.91	29.98	10-Nov-22	3:21:22	H5-22-WDM-975	1
190	13C-PCB-202	4715924	0.896	NO	26.26	122.4919	17.284		1.141	122.5	2114	1795	38520780	42871656	18221	23882.3	2228741	2487184	1.0564	26.23	26.3	10-Nov-22	3:21:22	H5-22-WDM-975	1
191	13C-PCB-205	3577299.6	0.891	NO	31.31	103.932	14.709		1.285	103.9	2330	3672	24795518	27687652	10641.2	7539.8	1685720	1891580	1.009	31.28	31.34	10-Nov-22	3:21:22	H5-22-WDM-975	1
192	13C-PCB-208	3112765.5	0.788	NO	29.67	108.3038	16.983		1.073	108.3	2160	2403	23294064	29558444	10784	12298.9	1371637	1741129	0.9559	29.63	29.7	10-Nov-22	3:21:22	H5-22-WDM-975	1
193	13C-PCB-206	2165226.9	0.781	NO	32.36	109.9799	13.683		0.735	110	2160	2403	12990762	16691349	6014.1	6945	949412.9	1215814	1.0427	32.32	32.39	10-Nov-22	3:21:22	H5-22-WDM-975	1
194	13C-PCB-209	3152485.1	1.197	NO	33.47	102.5199	12.538		1.148	102.5	436	392	21537814	17904742	49425.3	45690	1717814	1434671	1.0784	33.43	33.5	10-Nov-22	3:21:22	H5-22-WDM-975	1
195	13C-PCB-9	7376194	1.541	NO	11.91	100	18.935	73761.94		100	6183	2715	84709760	54946064	13700.9	20239.1	4473824	2902371	0.479	11.88	11.94	10-Nov-22	3:21:22	H5-22-WDM-975	1
196	13C-PCB-52	3441974.8	0.803	NO	17.01	100	18.248	34419.75		100	3282	3278	27964210	34794616	8519.3	10614.8	1532440	1909535	0.684	16.97	17.04	10-Nov-22	3:21:22	H5-22-WDM-975	1
197	13C-PCB-101	3174037.8	1.56	NO	20.65	100	18.49	31740.38		100	4056	2729	35764084	23040144	8817.4	8442.1	1934253	1239784	0.8306	20.62	20.69	10-Nov-22	3:21:22	H5-22-WDM-975	1
198	13C-PCB-138	3374222	1.276	NO	24.86	100	17.05	33742.22		100	4182	4298	32249408	25331706	7710.6	5894.2	1891453	1482769	0	24.83	24.9	10-Nov-22	3:21:22	H5-22-WDM-975	1
199	13C-PCB-194	2678569.6	0.889	NO	31.03	100	15.411	26785.7		100	2330	3672	19430714	21798550	8338.9	5936.1	1260858	1417712	1.2481	31	31.07	10-Nov-22	3:21:22	H5-22-WDM-975	1

Sample Name: 5-221111A02 Sample ID: H5-22-WDM-983

INSTRUMENT 209 PCB CALIBRATION REPORT

	Target Analyte	#Hom	Resp	Ra	Ra fail=YES	RT	Conc.	H/A	ical RRF	User RF	%Rec	Mod.Date	Mod.Comment	Code Comments	Noise 1	Noise 2	Ion1 Ht	Ion2 Ht	Ion1 s/n	Ion2 s/n	Ion1 Area	Ion2 Area	RRT	RT LCL	RT UCL	Acq.Date	Acq.Time	ID	Spl Size
1	* PCB-1		2292956.1	3.21	NO	9.01	25.13157	21.109		1.075	100.5				1675	1317	36903388	11475002	22026.2	8716.1	1748249	544707.6	1.0016	8.98	9.04	11-Nov-22	14:56:50	H5-22-WDM-983	1
2	PCB-2		2205059.9	3.251	NO	10.4	25	19.381	1.074		100				1675	1317	32684178	9986614	19507.9	7585.5	1686398	518661.8	0.9893	10.36	10.43	11-Nov-22	14:56:50	H5-22-WDM-983	1
3	PCB-3		2305023.5	3.245	NO	10.52	25.96633	18.563		1.119	103.9				1675	1317	32707816	10034944	19522	7622.2	1761997	543026.1	1.0013	10.49	10.56	11-Nov-22	14:56:50	H5-22-WDM-983	1
4	*PCB-4		1384890.1	1.515	NO	10.69	22.27773	19.987		0.937	89.1				829	2829	16675846	10994024	20124.6	3886.1	834323.6	550566.5	1.0013	10.66	10.72	11-Nov-22	14:56:50	H5-22-WDM-983	1
5	PCB-10		2139106.1	1.514	NO	10.8	25	18.691	1.29		100				829	2829	24080024	16002991	29060	5656.7	1288315	850791.6	1.0118	10.77	10.84	11-Nov-22	14:56:50	H5-22-WDM-983	1
6	PCB-9		2091088.3	1.52	NO	11.92	25	18.724	1.261		100				829	2829	23617350	15664742	28501.6	5537.1	1261323	829765	1.1168	11.89	11.96	11-Nov-22	14:56:50	H5-22-WDM-983	1
7	PCB-7		2174236.3	1.521	NO	12.04	25	18.382	1.311		100				829	2829	24112448	15863617	29099.1	5607.4	1311733	862503.4	1.1274	12	12.07	11-Nov-22	14:56:50	H5-22-WDM-983	1
8	PCB-6		2054863.3	1.512	NO	12.19	25	17.488	1.239		100				829	2829	21629302	14430475	26102.4	5100.8	1236823	818040.3	1.1418	12.16	12.22	11-Nov-22	14:56:50	H5-22-WDM-983	1
9	PCB-5		1885915.7	1.513	NO	12.4	25	20.502	1.137		100				829	2829	23280736	15237037	28095.4	5385.9	1135514	750402.2	1.1615	12.37	12.43	11-Nov-22	14:56:50	H5-22-WDM-983	1
10	PCB-8		2381384.1	1.515	NO	12.47	25	16.995	1.436		100				829	2829	24378198	16257404	29419.8	5746.6	1434472	946911.9	1.168	12.44	12.5	11-Nov-22	14:56:50	H5-22-WDM-983	1
11	* PCB-14		2121590.3	1.585	NO	13.42	25	19.661	1.167		100				6183	5051	25577428	15941334	4136.7	3155.8	1300896	820694.3	0.937	13.39	13.45	11-Nov-22	14:56:50	H5-22-WDM-983	1
12	PCB-11		2129876.1	1.602	NO	13.95	25	18.809	1.172		100				6183	5051	24661622	15370326	3988.5	3042.8	1311165	818711	0.9736	13.91	13.98	11-Nov-22	14:56:50	H5-22-WDM-983	1
13	PCB-13/12		4403907.8	1.578	NO	14.15	50	14.011	1.211		100				6183	5051	37769080	24038006	6108.4	4758.7	2695653	1708255	0.9878	14.12	14.18	11-Nov-22	14:56:50	H5-22-WDM-983	1
14	PCB-15		2236061.9	1.555	NO	14.33	26.21666	17.704		1.173	104.9				6183	5051	24092756	15219273	3896.5	3012.9	1360883	875179	1.0006	14.3	14.37	11-Nov-22	14:56:50	H5-22-WDM-983	1
15	* PCB-19		1384328.4	1.065	NO	12.68	22.48745	18.264		1.255	89.9				972	527	13037556	12213303	13415.4	23168.2	713839.1	670489.3	1.0011	12.65	12.71	11-Nov-22	14:56:50	H5-22-WDM-983	1
16	* PCB-30/18		1411809.6	1.117	NO	13.76	50	20.807	0.51		100				2523	1561	15496202	13988422	6141.8	8962.7	744775	667034.6	1.0865	13.73	13.8	11-Nov-22	14:56:50	H5-22-WDM-983	1
17	PCB-17		1347591.8	1.107	NO	14.01	25	20.541	0.974		100				2523	1561	14542715	13138065	5763.9	8417.9	707997.8	639594	1.1061	13.98	14.04	11-Nov-22	14:56:50	H5-22-WDM-983	1
18	PCB-27		1835360.2	1.092	NO	14.14	25	20.38	1.326		100				2523	1561	19522974	17914880	7737.8	11478.5	957953.5	877406.7	1.1163	14.11	14.17	11-Nov-22	14:56:50	H5-22-WDM-983	1
19	PCB-24		1730405.2	1.096	NO	14.22	25	20.559	1.25		100				2523	1561	18598610	17070542	7371.4	10937.5	904659.2	825746	1.1229	14.19	14.26	11-Nov-22	14:56:50	H5-22-WDM-983	1
20	PCB-16		1255879.6	1.102	NO	14.31	25	18.895	0.907		100				2523	1561	12441227	11454176	4931	7339	658444.4	597435.2	1.1294	14.27	14.34	11-Nov-22	14:56:50	H5-22-WDM-983	1
21	PCB-32		2059059.9	1.101	NO	14.58	25	18.839	1.488		100				2523	1561	20327420	18598300	8056.6	11916.4	1079034	980025.6	1.1512	14.55	14.62	11-Nov-22	14:56:50	H5-22-WDM-983	1
22	* PCB-34		1900283.3	1.046	NO	15.27	25	19.704	1.233		100				8366	4496	19146758	18350898	2288.5	4082	971704.7	928578.6	0.8365	15.24	15.31	11-Nov-22	14:56:50	H5-22-WDM-983	1
23	PCB-23		2083922.9	1.052	NO	15.36	25	18.726	1.352		100				8366	4496	20004466	19088080	2391	4246	1068247	1015676	0.8413	15.33	15.39	11-Nov-22	14:56:50	H5-22-WDM-983	1
24	PCB-29/26		4083342.3	1.046	NO	15.55	50	18.266	1.324		100				8366	4496	38130304	36346460	4557.5	8085	2087555	1995787	0.8515	15.51	15.58	11-Nov-22	14:56:50	H5-22-WDM-983	1
25	PCB-25		2073631.5	1.055	NO	15.67	25	15.915	1.345		100				8366	4496	16944526	16017691	2025.3	3563	1064717	1008915	0.8585	15.64	15.71	11-Nov-22	14:56:50	H5-22-WDM-983	1
26	PCB-31		2183870.3	1.046	NO	15.86	25	18.711	1.417		100				8366	4496	20888726	19944426	2496.7	4436.5	1116410	1067461	0.8687	15.83	15.89	11-Nov-22	14:56:50	H5-22-WDM-983	1
27	PCB-28/20		4050054.9	1.046	NO	16.05	50	12.002	1.314		100				8366	4496	24851118	23657426	2970.3	5262.4	2070551	1979504	0.8788	16.01	16.08	11-Nov-22	14:56:50	H5-22-WDM-983	1
28	PCB-21/33		4186404.6	1.051	NO	16.16	50	14.651	1.358		100				8366	4496	31432542	30106558	3757	6697	2145386	2041019	0.8853	16.13	16.2	11-Nov-22	14:56:50	H5-22-WDM-983	1
29	PCB-22		2003927.1	1.066	NO	16.41	25	17.851	1.3		100				8366	4496	18453304	17548786	2205.6	3903.6	1033765	970162.1	0.8987	16.37	16.44	11-Nov-22	14:56:50	H5-22-WDM-983	1
30	PCB-36		2322893.4	1.048	NO	17.22	25	15.246	1.507		100				8366	4496	18119682	17317046	2165.8	3852	1188482	1134411	0.9432	17.19	17.25	11-Nov-22	14:56:50	H5-22-WDM-983	1
31	PCB-39		1985955.3	1.056	NO	17.44	25	16.726	1.288		100				8366	4496	17062414	16136694	2039.4	3589.5	1020107	965848.6	0.955	17.4	17.47	11-Nov-22	14:56:50	H5-22-WDM-983	1
32	PCB-38		2064080.1	1.056	NO	17.77	25	17.316	1.339		100				8366	4496	18359882	17472214	2194.5	3886.6	1060270	1003810	0.9732	17.74	17.8	11-Nov-22	14:56:50	H5-22-WDM-983	1
33	PCB-35		1950410.6	1.051	NO	18.03	25	15.424	1.265		100				8366	4496	15417320	14597692	1842.8	3247.1	999573	950837.6	0.9877	18	18.07	11-Nov-22	14:56:50	H5-22-WDM-983	1
34	PCB-37		1934410.4	1.046	NO	18.27	26.36087	16.247		1.19	105.4				8366	4496	16065786	15324196	1920.3	3408.7	988833	945577.4	1.0005	18.23	18.3	11-Nov-22	14:56:50	H5-22-WDM-983	1
35	* PCB-54		3885059.4	0.773	NO	14.53	49.84603	20.094		1.119	99.7				431	841	34025716	43903668	78920	52187	1693355	2191704	1.0006	14.49	14.56	11-Nov-22	14:56:50	H5-22-WDM-983	1
36	* PCB-50/53		5557753.5	0.772	NO	15.71	100	19.219	0.95		100				3165	4302	46540660	59980784	14705.8	13944.1	2421538	3136216	1.0823	15.68	15.75	11-Nov-22	14:56:50	H5-22-WDM-983	1
37	PCB-45/51		5393317.3	0.772	NO	16.12	100	17.631	0.922		100				3165	4302	41425084	53651656	13089.4	12472.7	2349522	3043796	1.1107	16.09	16.16	11-Nov-22	14:56:50	H5-22-WDM-983	1
38	PCB-46		2368622.3	0.772	NO	16.3	50	18.633	0.81		100				3165	4302	19231198	25099166	6076.6	5835	1032128	1336495	1.1228	16.27	16.33	11-Nov-22	14:56:50	H5-22-WDM-983	1
39	PCB-52		2394607.5	0.768	NO	17.01	50	21.19	0.819		100				3165	4302	22043488	28639988	6965.3	6658.1	1040297	1354311	1.172	16.98	17.05	11-Nov-22	14:56:50	H5-22-WDM-983	1
40	PCB-73		4012257.1	0.779	NO	17.08	50	18.848	1.371		100				3165	4302	33111136	42483764	10462.4	9876.5	1756711	2255546	1.1767	17.05	17.12	11-Nov-22	14:56:50	H5-22-WDM-983	1
41	PCB-43		2182841.7	0.781	NO	17.15	50	19.076	0.746		100				3165	4302	18262630	23684302	5770.6	5506	957378.6	1225463	1.1814	17.12	17.19	11-Nov-22	14:56:50	H5-22-WDM-983	1
42	PCB-69/49		3064174.1	0.642	YES	17.28	100	23.481	0.524		100				3165	4302	28137422	36004764	8890.8	8370.3	1198322	1865852	1.1902	17.25	17.31	11-Nov-22	14:56:50	H5-22-WDM-983	1
43	PCB-48		2860879.1	0.775	NO	17.45	50	18.988	0.978		100				3165	4302	23714724	30591662	7493.3	7111.8	1248937	1611942	1.2017	17.41	17.48	11-Nov-22	14:56:50	H5-22-WDM-983	1
44	PCB-44/47/65		8552445	0.776	NO	17.59	150	18.599	0.974		100				3165	4302	69488888	89267728	21957	20752.6	3736199	4816246	1.2118	17.56	17.63	11-Nov-22	14:56:50	H5-22-WDM-983	1
45	PCB-59/62/75		10837054.5	0.774	NO	17.75	150	16.31	1.235		100				3165	4302	77140472	99988224	24374.7	23244.9	4729737	6107318	1.2226	17.72	17.78	11-Nov-22	14:56:50	H5-22-WDM-983	1
46	PCB-42		2382335.9	0.774	NO	17.89	50	17.525	0.814		100				3165	4302	18216600	23656100	5756	5499.5	1039469	1342867	1.232	17.85	17.92	11-Nov-22	14:56:50	H5-22-WDM-983	1
47	PCB-41/71/40		8019218	0.773	NO	18.15	150	10.944	0.914		100				3165	4302	38256516	49334564	12088.2	11469.1	3495636	4523582	1.2502	18.12	18.18	11-Nov-22	14:56:50	H5-22-WDM-983	1
48	PCB-64		3468024	0.768	NO	18.27	50	17.883	1.185		100				3165	4302	26947588	35007132	8514.8	8138.3	1506908	1961116	1.2583	18.23	18.3	11-Nov-22	0.622801	H5-22-WDM-983	1
49	* PCB-72		3359247.3	0.771	NO	18.65	50	19.174	1.269		100				1	1	28035448	35446296	28035448	35446296	1462170	1897078	0.855	18.62	18.69	11-Nov-22	0.622801	H5-22-WDM-983	1
50	PCB-68		3511595.3	0.727	NO	18.81	50	19.018	1.327		100				1	1	28111534	36416712	28111534	36416712	1478193	2033402	0.8622	18.78	18.84	11-Nov-22	0.622801	H5-22-WDM-983	1
51	PCB-57		3285829.5	0.776	NO	19.05	50	18.478	1.241		100				1	1	26535072	33937916	26535072	33937916	1436025	1849804	0.8733	19.02	19.09	11-Nov-22	0.622801	H5-22-WDM-983	1
52	PCB-58		3567960	0.783	NO	19.2	50	18.099	1.348		100				1	1	28353926	35613896	28353926	35613896	1566632	2001328	0.88	19.17	19.23	11-Nov-22	14:56:50	H5-22-WDM-983	1
53	PCB-67		3722734.9	0.779	NO	19.27	50	17.54	1.406		100				1	1	28595824	36377772	28595824	36377772	1630358	2092377	0.8834	19.24	19.31	11-Nov-22	14:56:50	H5-22-WDM-983	1
54	PCB-63		3409031.5	0.77	NO	19.42	50	18.084	1.288		100				1	1	26820736	33766148	26820736	33766148	1483083	1925949	0.8902	19.39	19.46	11-Nov-22	14:56:50	H5-22-WDM-983	1
55	PCB-61/70/74/76		12951698	0.775	NO	19.63	200	11.815	1.223		100				1	1	66811528	85560680	66811528	85560680	5654806	7296892	0.8995	19.59	19.66	11-Nov-22	14:56:50	H5-22-WDM-983	1
56	PCB-66		3402487.8	0.752	NO	19.79	50	18.669	1.285		100				1	1	27261924	35169668	27261924	35169668	1460301	1942187	0.9072	19.76	19.83	11-Nov-22	14:56:50	H5-22-WDM-983	1
57	PCB-55		3203600	0.745	NO	19.9	50	18.181	1.21		100				1	1	24862554	32346850	24862554	32346850	1367491	1836109	0.9122	19.87	19.94	11-Nov-22	14:56:50	H5-22-WDM-983	1
58	PCB-56		3095664.5	0.776	NO	20.18	50	17.938	1.169		100				1	1	24267156	31055000	24267156	31055000	1352814	1742851	0.925	20.15	20.21	11-Nov-22	14:56:50	H5-22-WDM-983	1
59	PCB-60		3329499.6	0.788	NO	20.3	50	17.718	1.258		100				1	1	25989664	32691040	25989664	32691040	1466848	1862652	0.9305	20.27	20.33	11-Nov-22	14:56:50	H5-22-WDM-983	1
60	PCB-80		3901708.6	0.792	NO	20.41	50	17.504	1.474		100				1	1	30177830	38144980	30177830	38144980	1724062	2177647	0.9356	20.38	20.44	11-Nov-22	14:56:50	H5-22-WDM-983	1
61	PCB-79		3822898.5	0.797	NO	21.27	50	16.428	1.444		100				1	1	27861622	34207228	27861622	34207228	1695988	2126911	0.975	21.24	21.31	11-Nov-22	14:56:50	H5-22-WDM-983	1
62	PCB-78		3025817.6	0.828	NO	21.58	50	16.556	1.143		100				1	1	22688778	28728712	22688778	28728712	1370453	1655365	0.989	21.54	21.61	11-Nov-22	14:56:50	H5-22-WDM-983	1
63	PCB-81		2845292.3	0.738	NO	21.83	42.72699	17.556		1.249	85.5				1	1	21206452	27094318	21206452	27094318	1207950	1637342	1.0004	21.79	21.86	11-Nov-22	14:56:50	H5-22-WDM-983	1
64	PCB-77		2936212.9	0.743	NO	22.14	46.27707	17.52		1.207	92.6				1	1	21931656	28067696	21931656	28067696	1251803	1684410	1.0008	22.11	22.17	11-Nov-22	14:56:50	H5-22-WDM-983	1
65	* PCB-104		3488166	1.572	NO	17.55	45.311	18.721		1.239	90.6				1069	1144	39914736	25514952	37327.7	22295.9	2132072	1356094	1.0011	17.52	17.59	11-Nov-22	14:56:50	H5-22-WDM-983	1
66	PCB-96		2802474.8	1.571	NO	17.81	50	18.951	0.902		100				1069	1144	32450538	20556940	30347.3	17963.4	1712338	1090137	1.0156	17.77	17.84	11-Nov-22	14:56:50	H5-22-WDM-983	1
67	* PCB-103		2226804.2	1.617	NO	18.76	50	19.247	0.839		100				2052	1	26482982	16426721	12902.9	16426721	1375923	850881.7	1.0697	18.72	18.79	11-Nov-22	14:56:50	H5-22-WDM-983	1
68	PCB-94		2170762.3	1.609	NO	18.91	50	18.482	0.818		100				2052	1	24743250	15470275	12055.3	15470275	1338774	831987.9	1.0787	18.88	18.95	11-Nov-22	14:56:50	H5-22-WDM-983	1
69	PCB-95		1672780.6	1.63	NO	19.16	50	23.511	0.63		100				2052	1	24377168	14797366	11876.9	14797366	1036839	635941.8	1.0929	19.13	19.2	11-Nov-22	14:56:50	H5-22-WDM-983	1
70	PCB-100/93/102/98		4293965.4	1.62	NO	19.32	200	11.897	0.404		100				2052	1	31586214	19394404	15389.3	19394404	2655022	1638943	1.1019	19.29	19.35	11-Nov-22	14:56:50	H5-22-WDM-983	1
71	PCB-88/91		4348475.3	1.631	NO	19.62	100	11.517	0.819		100				2052	1	31044668	18936582	15125.4	18936582	2695639	1652836	1.1188	19.58	19.65	11-Nov-22	14:56:50	H5-22-WDM-983	1
72	PCB-84		1998668.4	1.627	NO	19.77	50	18.205	0.753		100				2052	1	22532528	13876562	10978.2	13876562	1237703	760965.8	1.1277	19.74	19.81	11-Nov-22	14:56:50	H5-22-WDM-983	1
73	PCB-89		1772505.3	1.632	NO	20.02	50	19.137	0.668		100				2052	1	21031792	12926779	10247	12926779	1099028	673477.4	1.142	19.99	20.06	11-Nov-22	14:56:50	H5-22-WDM-983	1
74	PCB-121		3165924.5	1.622	NO	20.12	50	18.483	1.192		100				2052	1	36198056	22546278	17636.2	22546278	1958446	1207479	1.1473	20.08	20.15	11-Nov-22	14:56:50	H5-22-WDM-983	1
75	PCB-92		1933870.6	1.623	NO	20.36	50	18.649	0.728		100				2052	1	22316122	13963901	10872.7	13963901	1196642	737228.3	1.161	20.32	20.39	11-Nov-22	14:56:50	H5-22-WDM-983	1
76	PCB-113/90/101		7710444.8	1.615	NO	20.66	150	16.263	0.968		100				2052	1	77445216	48084604	37732.5	48084604	4761955	2948490	1.1784	20.63	20.69	11-Nov-22	14:56:50	H5-22-WDM-983	1
77	PCB-83/99		4168325.1	1.614	NO	20.97	100	17.411	0.785		100				2052	1	44807808	27811460	21831	27811460	2573503	1594822	0.9077	20.93	21	11-Nov-22	14:56:50	H5-22-WDM-983	1
78	PCB-112		3146563.5	1.614	NO	21.06	50	17.73	1.185		100				2052	1	34447072	21381098	16783.1	21381098	1942863	1203701	0.9117	21.03	21.09	11-Nov-22	14:56:50	H5-22-WDM-983	1
79	PCB-109/119/86/97/125/87		9095266.5	1.627	NO	21.28	300	12.873	0.571		100				2052	1	72506608	44613180	35326.3	44613180	5632447	3462820	0.9213	21.25	21.31	11-Nov-22	14:56:50	H5-22-WDM-983	1
80	PCB-117/116/85/110/115		4974554.9	1.621	NO	21.67	250	18.818	0.375		100				2052	1	57893312	35572820	28206.5	35572820	3076443	1898112	0.9381	21.64	21.7	11-Nov-22	14:56:50	H5-22-WDM-983	1
81	PCB-82		1729952.9	1.603	NO	21.96	50	18.879	0.652		100				2052	1	20110986	12364730	9798.4	12364730	1065283	664670.4	0.9505	21.92	21.99	11-Nov-22	14:56:50	H5-22-WDM-983	1
82	PCB-111		3191976.1	1.613	NO	22.04	50	18.672	1.202		100				2052	1	36788828	22840602	17924.1	22840602	1970241	1221735	0.9541	22.01	22.07	11-Nov-22	14:56:50	H5-22-WDM-983	1
83	PCB-120		3209213.4	1.606	NO	22.28	50	17.241	1.209		100				2052	1	34101584	21095214	16614.8	21095214	1977881	1231333	0.9645	22.25	22.31	11-Nov-22	14:56:50	H5-22-WDM-983	1
84	* PCB-108/124		6089318.5	1.592	NO	22.92	100	16.398	1.147		100				6573	4283	61337736	38489116	9332.3	8985.6	3740511	2348807	0.9922	22.88	22.95	11-Nov-22	14:56:50	H5-22-WDM-983	1
85	PCB-107		3072940.6	1.593	NO	23.05	50	17.866	1.157		100				6573	4283	33725560	20971202	5131.2	4895.9	1887730	1185211	0.9979	23.02	23.08	11-Nov-22	14:56:50	H5-22-WDM-983	1
86	PCB-123		2842476.8	1.61	NO	23.11	48.05294	17.233		1.154	96.1				6573	4283	30213132	18770300	4596.8	4382.1	1753186	1089291	1.0005	23.08	23.14	11-Nov-22	14:56:50	H5-22-WDM-983	1
87	PCB-106		2781637.6	1.603	NO	23.18	50	16.942	1.048		100				6573	4283	29020640	18198598	4415.4	4248.6	1712909	1068729	0.9964	23.15	23.22	11-Nov-22	14:56:50	H5-22-WDM-983	1
88	PCB-118		3148352.6	1.609	NO	23.28	49.53829	17.036		1.351	99.1				6573	4283	33077424	20688870	5032.6	4830	1941667	1206686	1.0005	23.25	23.31	11-Nov-22	14:56:50	H5-22-WDM-983	1
89	PCB-122		2241278.9	1.605	NO	23.49	50	17.388	0.844		100				6573	4283	24012448	15001835	3653.4	3502.3	1380955	860324.4	0.9964	23.45	23.52	11-Nov-22	14:56:50	H5-22-WDM-983	1
90	PCB-114		3257177.8	1.604	NO	23.58	53.67412	16.991		1.168	107.3				6573	4283	34088724	21249868	5186.5	4961	2006258	1250920	1.0005	23.55	23.62	11-Nov-22	14:56:50	H5-22-WDM-983	1
91	PCB-105		2754692.5	1.609	NO	23.94	46.07922	16.15		1.24	92.2				6573	4283	27433470	16962824	4173.9	3960.1	1698697	1055996	1.0005	23.91	23.98	11-Nov-22	14:56:50	H5-22-WDM-983	1
92	PCB-127		3049907	1.599	NO	24.63	50	15.112	1.149		100				6573	4283	28357070	17787966	4314.4	4152.8	1876490	1173418	1.0293	24.6	24.67	11-Nov-22	14:56:50	H5-22-WDM-983	1
93	PCB-126		2877978.9	1.641	NO	25.53	49.33725	14.427		1.216	98.7				6573	4283	25796240	15918409	3924.8	3716.3	1788076	1089903	1.0005	25.49	25.56	11-Nov-22	14:56:50	H5-22-WDM-983	1
94	* PCB-155		3371257.4	1.258	NO	20.51	43.02297	19.279		1.166	86				1073	1614	36211972	28831732	33743.4	17860.6	1878276	1492982	1.0009	20.48	20.55	11-Nov-22	14:56:50	H5-22-WDM-983	1
95	PCB-152		2693465.3	1.24	NO	20.71	50	22.8	0.802		100				1073	1614	33991128	27226310	31673.9	16866.1	1490811	1202655	1.0104	20.67	20.74	11-Nov-22	14:56:50	H5-22-WDM-983	1
96	PCB-150		3910580.5	1.271	NO	20.76	50	17.345	1.164		100				1073	1614	37959832	30356028	35372.1	18804.9	2188515	1722066	1.0131	20.73	20.8	11-Nov-22	14:56:50	H5-22-WDM-983	1
97	PCB-136		3065156.6	1.283	NO	21.01	50	18.645	0.912		100				1073	1614	32113366	25124922	29924.2	15564.3	1722318	1342839	1.0253	20.98	21.05	11-Nov-22	14:56:50	H

167	13C-PCB-111	4834394	1.561	NO	22.03	99.31028	18.35		1.24	99.3	3498	3081	54075104	34667684	15460.7	11252.9	2946943	1887451	1.0667	22	22.06	11-Nov-22	14:56:50	H5-22-WDM-983	1
168	13C-PCB-178	4349086.8	1.034	NO	25.07	113.5695	17.816		0.938	113.6	2795	2633	39382252	38223684	14092.2	14516.4	2210469	2138618	1.0078	25.04	25.1	11-Nov-22	14:56:50	H5-22-WDM-983	1
169	13C-PCB-1	8487262	2.92	NO	8.99	85.76559	20.645		1.061	85.8	3439	13376	1.31E+08	45123352	37955.5	3373.5	6322035	2165228	0.7543	8.96	9.03	11-Nov-22	14:56:50	H5-22-WDM-983	1
170	13C-PCB-3	7932950.8	2.87	NO	10.51	84.79977	19.376		1.003	84.8	3439	13376	1.14E+08	39919212	33151	2984.4	5883285	2049666	0.8813	10.47	10.54	11-Nov-22	14:56:50	H5-22-WDM-983	1
171	13C-PCB-4	6634448.8	1.55	NO	10.68	108.2681	19.751		0.657	108.3	6259	2583	79650648	51469800	12726.2	19927.7	4032815	2601634	0.8954	10.64	10.71	11-Nov-22	14:56:50	H5-22-WDM-983	1
172	13C-PCB-15	7271239.8	1.53	NO	14.32	87.39859	18.249		0.892	87.4	8860	5078	80251544	51685520	9057.8	10178.1	4397631	2873609	1.2013	14.29	14.36	11-Nov-22	14:56:50	H5-22-WDM-983	1
173	13C-PCB-19	4905183.8	1.029	NO	12.67	123.1653	18.44		0.427	123.2	19351	7701	45863272	44553636	2370.1	5785.6	2487187	2417997	1.0623	12.63	12.7	11-Nov-22	14:56:50	H5-22-WDM-983	1
174	13C-PCB-37	6166544.8	1.06	NO	18.26	93.93799	16.365		1.529	93.9	22520	9705	51919184	48467872	2305.5	4993.9	3172506	2994039	1.0737	18.22	18.29	11-Nov-22	14:56:50	H5-22-WDM-983	1
175	13C-PCB-54	6965255	0.781	NO	14.52	117.2216	19.468		1.384	117.2	3743	1187	59460436	76058688	15887.4	64075.1	3054299	3910956	0.8537	14.48	14.55	11-Nov-22	14:56:50	H5-22-WDM-983	1
176	13C-PCB-81	5331656.8	0.79	NO	21.82	91.02637	17.359		1.492	91	4300	3084	40842780	51716644	9498.2	16771	2352811	2978846	1.0564	21.78	21.85	11-Nov-22	14:56:50	H5-22-WDM-983	1
177	13C-PCB-77	5256714.5	0.785	NO	22.12	89.09006	16.32		1.503	89.1	4300	3084	37732600	48066268	8774.9	15587.2	2311990	2944725	1.0712	22.09	22.16	11-Nov-22	14:56:50	H5-22-WDM-983	1
178	13C-PCB-104	6213298	1.552	NO	17.53	112.7273	19.082		1.404	112.7	2006	2295	72111672	46791040	35947.1	20385.9	3779004	2434294	1.0311	17.5	17.57	11-Nov-22	14:56:50	H5-22-WDM-983	1
179	13C-PCB-123	5125912.1	1.575	NO	23.1	94.75361	17.391		1.378	94.8	6487	5102	54525692	34519944	8405.3	6766.6	3135208	1990704	1.1185	23.07	23.13	11-Nov-22	14:56:50	H5-22-WDM-983	1
180	13C-PCB-118	4704213.6	1.577	NO	23.27	95.25335	17.355		1.258	95.3	6487	5102	49954876	31388308	7700.7	6152.7	2878402	1825812	1.1267	23.23	23.3	11-Nov-22	14:56:50	H5-22-WDM-983	1
181	13C-PCB-114	5195576	1.578	NO	23.57	94.46467	17.277		1.401	94.5	6487	5102	54950496	34311996	8470.8	6725.9	3180516	2015060	0.9475	23.54	23.6	11-Nov-22	14:56:50	H5-22-WDM-983	1
182	13C-PCB-105	4821102.4	1.609	NO	23.93	92.96455	16.634		1.321	93	6487	5102	49449916	30613798	7622.9	6000.9	2972887	1848216	0.9621	23.9	23.97	11-Nov-22	14:56:50	H5-22-WDM-983	1
183	13C-PCB-126	4797103.9	1.587	NO	25.52	89.98149	15.579		1.358	90	6487	5102	45850192	28826664	7068	5650.6	2943011	1854093	1.0257	25.48	25.55	11-Nov-22	14:56:50	H5-22-WDM-983	1
184	13C-PCB-155	6720367.3	1.235	NO	20.49	114.0476	18.979		1.501	114	2376	2680	70474248	57560588	29661.3	21476.4	3713363	3007005	0.9924	20.46	20.53	11-Nov-22	14:56:50	H5-22-WDM-983	1
185	13C-PCB-167	5180065	1.282	NO	26.39	100.0651	17.058		1.268	100.1	5384	4102	49642104	38819312	9220.6	9463	2910190	2269875	1.0607	26.35	26.42	11-Nov-22	14:56:50	H5-22-WDM-983	1
186	13C-PCB-156/157	10133674	1.301	NO	27.04	200.6614	11.943		1.237	100.3	5384	4102	68420008	52426896	12708.5	12780.2	5728912	4404762	1.087	27	27.07	11-Nov-22	14:56:50	H5-22-WDM-983	1
187	13C-PCB-169	5058727	1.303	NO	28.68	97.18464	14.71		1.275	97.2	5384	4102	42102084	32546436	7820.1	7933.9	2862153	2196574	1.153	28.65	28.72	11-Nov-22	14:56:50	H5-22-WDM-983	1
188	13C-PCB-188	6052509	1.047	NO	23.5	111.3007	17.965		1.332	111.3	2795	2633	55611176	52902444	19899.5	20091.1	3095536	2956973	0.9446	23.46	23.53	11-Nov-22	14:56:50	H5-22-WDM-983	1
189	13C-PCB-189	5058213	1.068	NO	29.94	93.36686	15.954		1.327	93.4	2880	3456	41669748	39074824	14466.5	11305.2	2611941	2446272	0.9649	29.91	29.98	11-Nov-22	14:56:50	H5-22-WDM-983	1
190	13C-PCB-202	5827809.5	0.905	NO	26.26	125.1083	17.916		1.141	125.1	968	1735	49598216	54682412	51217.8	31525.1	2768307	3059502	1.0559	26.23	26.3	11-Nov-22	14:56:50	H5-22-WDM-983	1
191	13C-PCB-205	4464847.5	0.889	NO	31.31	101.7943	14.771		1.285	101.8	2423	2198	31041314	34966172	12812.1	15908.9	2101472	2363376	1.009	31.28	31.34	11-Nov-22	14:56:50	H5-22-WDM-983	1
192	13C-PCB-208	4081937.4	0.78	NO	29.68	111.4517	16.3		1.073	111.5	1592	1505	29164414	37550008	18319	24942.1	1789203	2292734	0.9564	29.65	29.71	11-Nov-22	14:56:50	H5-22-WDM-983	1
193	13C-PCB-206	2733438.6	0.783	NO	32.37	108.9537	13.482		0.735	109	1592	1505	16177608	20690086	10161.6	13743.1	1199938	1533501	1.0432	32.34	32.4	11-Nov-22	14:56:50	H5-22-WDM-983	1
194	13C-PCB-209	3954231.5	1.191	NO	33.47	100.9114	12.724		1.148	100.9	389	406	27355368	22870096	70273.3	56309.8	2149889	1804343	1.0784	33.43	33.5	11-Nov-22	14:56:50	H5-22-WDM-983	1
195	13C-PCB-9	9326939.5	1.525	NO	11.92	100	18.465	93269.4		100	6259	2583	1.04E+08	67530544	16618.4	26146	5632825	3694115	0.4794	11.89	11.96	11-Nov-22	14:56:50	H5-22-WDM-983	1
196	13C-PCB-52	4293318.6	0.797	NO	17.01	100	18.781	42933.19		100	3172	3965	35753364	44838064	11273	11307.8	1903723	2389595	0.6836	16.97	17.04	11-Nov-22	14:56:50	H5-22-WDM-983	1
197	13C-PCB-101	3925781.8	1.551	NO	20.65	100	19.097	39257.82		100	3498	3081	45577280	29398324	13031.1	9542.5	2386587	1539195	0.8302	20.62	20.69	11-Nov-22	14:56:50	H5-22-WDM-983	1
198	13C-PCB-138	4082568	1.287	NO	24.88	100	17.7	40825.68		100	5384	4102	40663772	31492104	7553	7676.9	2297407	1785161	0	24.84	24.91	11-Nov-22	14:56:50	H5-22-WDM-983	1
199	13C-PCB-194	3413343.6	0.887	NO	31.03	100	14.728	34133.44		100	2423	2198	23623684	26841408	9750.6	12212.3	1603969	1809375	1.2475	31	31.07	11-Nov-22	14:56:50	H5-22-WDM-983	1

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Continuing Calibration Report

Sample Name	**CCV**	Sampling Date	n/a		
ALS Sample ID	H5-22-RS1-005	Extraction Date	n/a		Approved:
Analysis Method	EPA 1668C	Sample Size	1	n/a	*A. Kuol*
Analysis Type	CCV	Percent Moisture	n/a		--e-signature--
Sample Matrix	QC	Split Ratio	1		23-Nov-2022

Run Information	**Run 1**
Filename	5-221020A07
Run Date	20-Oct-22 21:44
Final Volume	25 ul
Dilution Factor	1
Analysis Units	%
Instrument - Column	HRMS-5 SPBOCTYL271790-03

Target Analytes	**pg/uL**	**Ret. Time**	**% Rec**	**Limits**	**Flags**
PCB-001	50	8.88	100	75-125	
PCB-003	50	10.40	98	75-125	
PCB-004	50	10.58	103	75-125	
PCB-015	50	14.24	100	75-125	
PCB-019	50	12.58	103	75-125	
PCB-037	50	18.19	102	75-125	
PCB-054	50	14.43	102	75-125	
PCB-081	50	21.78	94	75-125	
PCB-077	50	22.09	94	75-125	
PCB-104	50	17.50	90	75-125	
PCB-123	50	23.09	96	75-125	
PCB-118	50	23.26	93	75-125	
PCB-114	50	23.56	96	75-125	
PCB-105	50	23.91	93	75-125	
PCB-126	50	25.49	93	75-125	
PCB-155	50	20.51	94	75-125	
PCB-167	50	26.41	95	75-125	
PCB-156/157	100	27.04	94	75-125	
PCB-169	50	28.68	96	75-125	
PCB-188	50	23.51	93	75-125	
PCB-189	50	29.97	98	75-125	
PCB-202	50	26.29	98	75-125	
PCB-205	50	31.37	92	75-125	
PCB-208	50	29.72	91	75-125	
PCB-206	50	32.44	91	75-125	
PCB-209	50	33.57	107	75-125	
Extraction Standards		**Time**	**% Rec**	**Limits**	
13C12-PCB-001	100	8.87	104	50-145	
13C12-PCB-003	100	10.40	104	50-145	
13C12-PCB-004	100	10.56	103	50-145	
13C12-PCB-015	100	14.23	103	50-145	
13C12-PCB-019	100	12.57	103	50-145	
13C12-PCB-037	100	18.18	102	50-145	
13C12-PCB-054	100	14.43	105	50-145	
13C12-PCB-081	100	21.77	102	50-145	
13C12-PCB-077	100	22.07	102	50-145	
13C12-PCB-104	100	17.49	104	50-145	
13C12-PCB-123	100	23.07	101	50-145	
13C12-PCB-118	100	23.24	101	50-145	
13C12-PCB-114	100	23.55	101	50-145	
13C12-PCB-105	100	23.90	101	50-145	
13C12-PCB-126	100	25.48	101	50-145	
13C12-PCB-155	100	20.49	102	50-145	
13C12-PCB-167	100	26.40	103	50-145	
13C12-PCB-156/157	200	27.03	101	50-145	
13C12-PCB-169	100	28.67	100	50-145	
13C12-PCB-188	100	23.50	102	50-145	
13C12-PCB-189	100	29.96	101	50-145	
13C12-PCB-202	100	26.28	101	50-145	
13C12-PCB-205	100	31.34	103	50-145	
13C12-PCB-208	100	29.71	104	50-145	
13C12-PCB-206	100	32.41	102	50-145	
13C12-PCB-209	100	33.55	102	50-145	
Cleanup Standards					
13C12-PCB-028	100	15.95	103	65-135	
13C12-PCB-111	100	22.01	102	75-125	
13C12-PCB-178	100	25.07	102	75-125	

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Continuing Calibration Report

Sample Name	**CCV**	Sampling Date	n/a		
ALS Sample ID	H5-22-CCV-974	Extraction Date	n/a		Approved:
Analysis Method	EPA 1668C	Sample Size	1	n/a	*A. Kuol*
Analysis Type	CCV	Percent Moisture	n/a		--e-signature--
Sample Matrix	QC	Split Ratio	1		23-Nov-2022

Run Information	**Run 1**
Filename	5-221109A16
Run Date	10-Nov-22 02:27
Final Volume	25 ul
Dilution Factor	1
Analysis Units	%
Instrument - Column	HRMS-5 SPBOCTYL271790-03

Target Analytes	**pg/uL**	**Ret. Time**	**% Rec**	**Limits**	**Flags**
PCB-001	50	8.99	101	75-125	
PCB-003	50	10.51	101	75-125	
PCB-004	50	10.68	91	75-125	
PCB-015	50	14.32	100	75-125	
PCB-019	50	12.67	90	75-125	
PCB-037	50	18.27	102	75-125	
PCB-054	50	14.52	93	75-125	
PCB-081	50	21.83	102	75-125	
PCB-077	50	22.13	102	75-125	
PCB-104	50	17.54	96	75-125	
PCB-123	50	23.11	100	75-125	
PCB-118	50	23.28	102	75-125	
PCB-114	50	23.58	103	75-125	
PCB-105	50	23.93	101	75-125	
PCB-126	50	25.52	102	75-125	
PCB-155	50	20.50	96	75-125	
PCB-167	50	26.40	97	75-125	
PCB-156/157	100	27.04	97	75-125	
PCB-169	50	28.69	98	75-125	
PCB-188	50	23.50	97	75-125	
PCB-189	50	29.96	104	75-125	
PCB-202	50	26.28	97	75-125	
PCB-205	50	31.33	101	75-125	
PCB-208	50	29.68	100	75-125	
PCB-206	50	32.39	100	75-125	
PCB-209	50	33.48	103	75-125	
Extraction Standards		**Time**	**% Rec**	**Limits**	
13C12-PCB-001	100	8.99	85	50-145	
13C12-PCB-003	100	10.49	83	50-145	
13C12-PCB-004	100	10.66	104	50-145	
13C12-PCB-015	100	14.31	84	50-145	
13C12-PCB-019	100	12.65	119	50-145	
13C12-PCB-037	100	18.26	92	50-145	
13C12-PCB-054	100	14.51	114	50-145	
13C12-PCB-081	100	21.82	91	50-145	
13C12-PCB-077	100	22.12	90	50-145	
13C12-PCB-104	100	17.53	110	50-145	
13C12-PCB-123	100	23.10	94	50-145	
13C12-PCB-118	100	23.27	95	50-145	
13C12-PCB-114	100	23.57	95	50-145	
13C12-PCB-105	100	23.92	95	50-145	
13C12-PCB-126	100	25.50	95	50-145	
13C12-PCB-155	100	20.49	114	50-145	
13C12-PCB-167	100	26.39	100	50-145	
13C12-PCB-156/157	200	27.03	98	50-145	
13C12-PCB-169	100	28.68	92	50-145	
13C12-PCB-188	100	23.49	107	50-145	
13C12-PCB-189	100	29.94	89	50-145	
13C12-PCB-202	100	26.26	119	50-145	
13C12-PCB-205	100	31.31	102	50-145	
13C12-PCB-208	100	29.66	106	50-145	
13C12-PCB-206	100	32.36	108	50-145	
13C12-PCB-209	100	33.47	100	50-145	
Cleanup Standards					
13C12-PCB-028	100	16.01	103	65-135	
13C12-PCB-111	100	22.02	102	75-125	
13C12-PCB-178	100	25.07	112	75-125	

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Continuing Calibration Report

Sample Name	**CCV**	Sampling Date	n/a		
ALS Sample ID	H5-22-CCV-976	Extraction Date	n/a		Approved:
Analysis Method	EPA 1668C	Sample Size	1	n/a	*A. Kuol*
Analysis Type	CCV	Percent Moisture	n/a		--e-signature--
Sample Matrix	QC	Split Ratio	1		23-Nov-2022

Run Information	**Run 1**
Filename	5-221109A32
Run Date	10-Nov-22 13:52
Final Volume	25 ul
Dilution Factor	1
Analysis Units	%
Instrument - Column	HRMS-5 SPBOCTYL271790-03

Target Analytes	**pg/uL**	**Ret. Time**	**% Rec**	**Limits**	**Flags**
PCB-001	50	8.99	101	75-125	
PCB-003	50	10.51	94	75-125	
PCB-004	50	10.68	91	75-125	
PCB-015	50	14.38	98	75-125	
PCB-019	50	12.68	91	75-125	
PCB-037	50	18.31	100	75-125	
PCB-054	50	14.53	89	75-125	
PCB-081	50	21.85	102	75-125	
PCB-077	50	22.16	103	75-125	
PCB-104	50	17.55	93	75-125	
PCB-123	50	23.12	99	75-125	
PCB-118	50	23.29	99	75-125	
PCB-114	50	23.59	100	75-125	
PCB-105	50	23.94	101	75-125	
PCB-126	50	25.54	101	75-125	
PCB-155	50	20.51	95	75-125	
PCB-167	50	26.41	98	75-125	
PCB-156/157	100	27.05	97	75-125	
PCB-169	50	28.71	97	75-125	
PCB-188	50	23.51	97	75-125	
PCB-189	50	29.96	103	75-125	
PCB-202	50	26.28	97	75-125	
PCB-205	50	31.33	101	75-125	
PCB-208	50	29.68	100	75-125	
PCB-206	50	32.39	99	75-125	
PCB-209	50	33.48	103	75-125	
Extraction Standards		**Time**	**% Rec**	**Limits**	
13C12-PCB-001	100	8.98	94	50-145	
13C12-PCB-003	100	10.51	84	50-145	
13C12-PCB-004	100	10.68	106	50-145	
13C12-PCB-015	100	14.37	76	50-145	
13C12-PCB-019	100	12.67	127	50-145	
13C12-PCB-037	100	18.30	78	50-145	
13C12-PCB-054	100	14.51	117	50-145	
13C12-PCB-081	100	21.84	89	50-145	
13C12-PCB-077	100	22.14	88	50-145	
13C12-PCB-104	100	17.54	106	50-145	
13C12-PCB-123	100	23.11	102	50-145	
13C12-PCB-118	100	23.28	109	50-145	
13C12-PCB-114	100	23.58	109	50-145	
13C12-PCB-105	100	23.93	109	50-145	
13C12-PCB-126	100	25.53	115	50-145	
13C12-PCB-155	100	20.50	118	50-145	
13C12-PCB-167	100	26.40	105	50-145	
13C12-PCB-156/157	200	27.04	111	50-145	
13C12-PCB-169	100	28.69	122	50-145	
13C12-PCB-188	100	23.50	99	50-145	
13C12-PCB-189	100	29.94	126	50-145	
13C12-PCB-202	100	26.26	127	50-145	
13C12-PCB-205	100	31.31	105	50-145	
13C12-PCB-208	100	29.67	93	50-145	
13C12-PCB-206	100	32.37	116	50-145	
13C12-PCB-209	100	33.47	113	50-145	
Cleanup Standards					
13C12-PCB-028	100	16.05	103	65-135	
13C12-PCB-111	100	22.03	104	75-125	
13C12-PCB-178	100	25.07	111	75-125	

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Continuing Calibration Report

Sample Name	**CCV**	Sampling Date	n/a		
ALS Sample ID	H5-22-CCV-982	Extraction Date	n/a		Approved:
Analysis Method	EPA 1668C	Sample Size	1	n/a	*A. Kuol*
Analysis Type	CCV	Percent Moisture	n/a		--e-signature--
Sample Matrix	QC	Split Ratio	1		23-Nov-2022

Run Information	**Run 1**
Filename	5-221111A01
Run Date	11-Nov-22 14:13
Final Volume	25 ul
Dilution Factor	1
Analysis Units	%
Instrument - Column	HRMS-5 SPBOCTYL271790-03

Target Analytes	**pg/uL**	**Ret. Time**	**% Rec**	**Limits**	**Flags**
PCB-001	50	9.02	102	75-125	
PCB-003	50	10.54	102	75-125	
PCB-004	50	10.70	91	75-125	
PCB-015	50	14.35	100	75-125	
PCB-019	50	12.69	91	75-125	
PCB-037	50	18.29	102	75-125	
PCB-054	50	14.54	93	75-125	
PCB-081	50	21.85	103	75-125	
PCB-077	50	22.16	103	75-125	
PCB-104	50	17.56	96	75-125	
PCB-123	50	23.12	101	75-125	
PCB-118	50	23.29	101	75-125	
PCB-114	50	23.59	101	75-125	
PCB-105	50	23.96	101	75-125	
PCB-126	50	25.54	101	75-125	
PCB-155	50	20.52	97	75-125	
PCB-167	50	26.41	98	75-125	
PCB-156/157	100	27.05	96	75-125	
PCB-169	50	28.71	97	75-125	
PCB-188	50	23.52	98	75-125	
PCB-189	50	29.97	103	75-125	
PCB-202	50	26.29	98	75-125	
PCB-205	50	31.34	101	75-125	
PCB-208	50	29.69	101	75-125	
PCB-206	50	32.39	100	75-125	
PCB-209	50	33.49	103	75-125	
Extraction Standards		**Time**	**% Rec**	**Limits**	
13C12-PCB-001	100	9.01	87	50-145	
13C12-PCB-003	100	10.52	85	50-145	
13C12-PCB-004	100	10.69	108	50-145	
13C12-PCB-015	100	14.34	87	50-145	
13C12-PCB-019	100	12.68	120	50-145	
13C12-PCB-037	100	18.28	90	50-145	
13C12-PCB-054	100	14.53	116	50-145	
13C12-PCB-081	100	21.84	89	50-145	
13C12-PCB-077	100	22.14	89	50-145	
13C12-PCB-104	100	17.55	113	50-145	
13C12-PCB-123	100	23.11	93	50-145	
13C12-PCB-118	100	23.28	96	50-145	
13C12-PCB-114	100	23.58	96	50-145	
13C12-PCB-105	100	23.94	94	50-145	
13C12-PCB-126	100	25.53	90	50-145	
13C12-PCB-155	100	20.51	115	50-145	
13C12-PCB-167	100	26.40	99	50-145	
13C12-PCB-156/157	200	27.04	99	50-145	
13C12-PCB-169	100	28.69	96	50-145	
13C12-PCB-188	100	23.51	110	50-145	
13C12-PCB-189	100	29.96	93	50-145	
13C12-PCB-202	100	26.28	122	50-145	
13C12-PCB-205	100	31.33	100	50-145	
13C12-PCB-208	100	29.68	110	50-145	
13C12-PCB-206	100	32.37	106	50-145	
13C12-PCB-209	100	33.48	98	50-145	
Cleanup Standards					
13C12-PCB-028	100	16.03	103	65-135	
13C12-PCB-111	100	22.04	101	75-125	
13C12-PCB-178	100	25.08	112	75-125	

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Continuing Calibration Report

Sample Name	**CCV**	Sampling Date	n/a		
ALS Sample ID	H5-22-CCV-984	Extraction Date	n/a		Approved:
Analysis Method	EPA 1668C	Sample Size	1	n/a	*A. Kuol*
Analysis Type	CCV	Percent Moisture	n/a		--e-signature--
Sample Matrix	QC	Split Ratio	1		23-Nov-2022

Run Information	**Run 1**
Filename	5-221111A13
Run Date	11-Nov-22 22:39
Final Volume	25 ul
Dilution Factor	1
Analysis Units	%
Instrument - Column	HRMS-5 SPBOCTYL271790-03

Target Analytes	**pg/uL**	**Ret. Time**	**% Rec**	**Limits**	**Flags**
PCB-001	50	8.99	101	75-125	
PCB-003	50	10.51	101	75-125	
PCB-004	50	10.68	91	75-125	
PCB-015	50	14.32	99	75-125	
PCB-019	50	12.67	92	75-125	
PCB-037	50	18.27	102	75-125	
PCB-054	50	14.52	93	75-125	
PCB-081	50	21.83	103	75-125	
PCB-077	50	22.13	104	75-125	
PCB-104	50	17.54	95	75-125	
PCB-123	50	23.10	101	75-125	
PCB-118	50	23.27	100	75-125	
PCB-114	50	23.57	101	75-125	
PCB-105	50	23.93	100	75-125	
PCB-126	50	25.52	102	75-125	
PCB-155	50	20.50	97	75-125	
PCB-167	50	26.40	98	75-125	
PCB-156/157	100	27.04	96	75-125	
PCB-169	50	28.69	97	75-125	
PCB-188	50	23.50	98	75-125	
PCB-189	50	29.94	104	75-125	
PCB-202	50	26.26	97	75-125	
PCB-205	50	31.33	100	75-125	
PCB-208	50	29.68	100	75-125	
PCB-206	50	32.37	100	75-125	
PCB-209	50	33.47	104	75-125	
Extraction Standards		**Time**	**% Rec**	**Limits**	
13C12-PCB-001	100	8.99	88	50-145	
13C12-PCB-003	100	10.49	86	50-145	
13C12-PCB-004	100	10.68	108	50-145	
13C12-PCB-015	100	14.31	89	50-145	
13C12-PCB-019	100	12.65	121	50-145	
13C12-PCB-037	100	18.26	91	50-145	
13C12-PCB-054	100	14.50	115	50-145	
13C12-PCB-081	100	21.82	91	50-145	
13C12-PCB-077	100	22.12	91	50-145	
13C12-PCB-104	100	17.52	113	50-145	
13C12-PCB-123	100	23.09	94	50-145	
13C12-PCB-118	100	23.26	98	50-145	
13C12-PCB-114	100	23.56	96	50-145	
13C12-PCB-105	100	23.92	96	50-145	
13C12-PCB-126	100	25.50	93	50-145	
13C12-PCB-155	100	20.49	114	50-145	
13C12-PCB-167	100	26.39	100	50-145	
13C12-PCB-156/157	200	27.03	101	50-145	
13C12-PCB-169	100	28.68	95	50-145	
13C12-PCB-188	100	23.49	108	50-145	
13C12-PCB-189	100	29.93	91	50-145	
13C12-PCB-202	100	26.25	121	50-145	
13C12-PCB-205	100	31.30	102	50-145	
13C12-PCB-208	100	29.67	111	50-145	
13C12-PCB-206	100	32.36	106	50-145	
13C12-PCB-209	100	33.45	98	50-145	
Cleanup Standards					
13C12-PCB-028	100	16.01	104	65-135	
13C12-PCB-111	100	22.02	102	75-125	
13C12-PCB-178	100	25.06	111	75-125	

ALS Life Sciences

Continuing Calibration Report

Sample Name	**CCV**	Sampling Date	n/a		
ALS Sample ID	H9-22-CCV-632	Extraction Date	n/a		Approved:
Analysis Method	EPA 1668C	Sample Size	1	n/a	*A. Kuol*
Analysis Type	CCV	Percent Moisture	n/a		--e-signature--
Sample Matrix	QC	Split Ratio	1		23-Nov-2022

Run Information	**Run 1**
Filename	9-221117A18
Run Date	18-Nov-22 01:36
Final Volume	25 ul
Dilution Factor	1
Analysis Units	%
Instrument - Column	HRMS-9 SPBOCTYL273027-01

Target Analytes	**pg/uL**	**Ret. Time**	**% Rec**	**Limits**	**Flags**
PCB-001	50	9.01	91	75-125	
PCB-003	50	10.54	90	75-125	
PCB-004	50	10.72	100	75-125	
PCB-015	50	14.40	101	75-125	
PCB-019	50	12.73	95	75-125	
PCB-037	50	18.35	107	75-125	
PCB-054	50	14.59	98	75-125	
PCB-081	50	21.91	103	75-125	
PCB-077	50	22.23	103	75-125	
PCB-104	50	17.63	96	75-125	
PCB-123	50	23.20	106	75-125	
PCB-118	50	23.37	106	75-125	
PCB-114	50	23.67	106	75-125	
PCB-105	50	24.03	107	75-125	
PCB-126	50	25.63	104	75-125	
PCB-155	50	20.59	99	75-125	
PCB-167	50	26.51	99	75-125	
PCB-156/157	100	27.15	98	75-125	
PCB-169	50	28.82	96	75-125	
PCB-188	50	23.60	98	75-125	
PCB-189	50	30.10	102	75-125	
PCB-202	50	26.38	96	75-125	
PCB-205	50	31.52	98	75-125	
PCB-208	50	29.81	95	75-125	
PCB-206	50	32.61	94	75-125	
PCB-209	50	33.76	102	75-125	
Extraction Standards		**Time**	**% Rec**	**Limits**	
13C12-PCB-001	100	8.99	92	50-145	
13C12-PCB-003	100	10.53	94	50-145	
13C12-PCB-004	100	10.70	96	50-145	
13C12-PCB-015	100	14.39	88	50-145	
13C12-PCB-019	100	12.71	98	50-145	
13C12-PCB-037	100	18.34	72	50-145	
13C12-PCB-054	100	14.58	101	50-145	
13C12-PCB-081	100	21.90	87	50-145	
13C12-PCB-077	100	22.22	87	50-145	
13C12-PCB-104	100	17.61	106	50-145	
13C12-PCB-123	100	23.19	86	50-145	
13C12-PCB-118	100	23.35	88	50-145	
13C12-PCB-114	100	23.66	89	50-145	
13C12-PCB-105	100	24.02	87	50-145	
13C12-PCB-126	100	25.61	89	50-145	
13C12-PCB-155	100	20.57	103	50-145	
13C12-PCB-167	100	26.48	104	50-145	
13C12-PCB-156/157	200	27.14	107	50-145	
13C12-PCB-169	100	28.81	115	50-145	
13C12-PCB-188	100	23.58	108	50-145	
13C12-PCB-189	100	30.09	117	50-145	
13C12-PCB-202	100	26.36	121	50-145	
13C12-PCB-205	100	31.50	105	50-145	
13C12-PCB-208	100	29.80	106	50-145	
13C12-PCB-206	100	32.60	117	50-145	
13C12-PCB-209	100	33.73	115	50-145	
Cleanup Standards					
13C12-PCB-028	100	16.08	86	65-135	
13C12-PCB-111	100	22.10	103	75-125	
13C12-PCB-178	100	25.16	109	75-125	

ALS Life Sciences

Continuing Calibration Report

Sample Name	**CCV**	Sampling Date	n/a		
ALS Sample ID	H9-22-CCV-634	Extraction Date	n/a		Approved:
Analysis Method	EPA 1668C	Sample Size	1	n/a	*A. Kuol*
Analysis Type	CCV	Percent Moisture	n/a		--e-signature--
Sample Matrix	QC	Split Ratio	1		23-Nov-2022

Run Information	**Run 1**
Filename	9-221117A32
Run Date	18-Nov-22 11:38
Final Volume	25 ul
Dilution Factor	1
Analysis Units	%
Instrument - Column	HRMS-9 SPBOCTYL273027-01

Target Analytes	**pg/uL**	**Ret. Time**	**% Rec**	**Limits**	**Flags**
PCB-001	50	9.01	92	75-125	
PCB-003	50	10.54	90	75-125	
PCB-004	50	10.72	98	75-125	
PCB-015	50	14.40	101	75-125	
PCB-019	50	12.73	95	75-125	
PCB-037	50	18.35	100	75-125	
PCB-054	50	14.60	98	75-125	
PCB-081	50	21.92	101	75-125	
PCB-077	50	22.23	99	75-125	
PCB-104	50	17.63	100	75-125	
PCB-123	50	23.20	105	75-125	
PCB-118	50	23.37	100	75-125	
PCB-114	50	23.67	100	75-125	
PCB-105	50	24.03	104	75-125	
PCB-126	50	25.63	102	75-125	
PCB-155	50	20.59	101	75-125	
PCB-167	50	26.51	99	75-125	
PCB-156/157	100	27.15	99	75-125	
PCB-169	50	28.82	100	75-125	
PCB-188	50	23.60	98	75-125	
PCB-189	50	30.10	97	75-125	
PCB-202	50	26.38	94	75-125	
PCB-205	50	31.52	98	75-125	
PCB-208	50	29.83	95	75-125	
PCB-206	50	32.62	96	75-125	
PCB-209	50	33.78	98	75-125	
Extraction Standards		**Time**	**% Rec**	**Limits**	
13C12-PCB-001	100	9.01	95	50-145	
13C12-PCB-003	100	10.53	94	50-145	
13C12-PCB-004	100	10.70	102	50-145	
13C12-PCB-015	100	14.39	86	50-145	
13C12-PCB-019	100	12.71	102	50-145	
13C12-PCB-037	100	18.34	76	50-145	
13C12-PCB-054	100	14.58	109	50-145	
13C12-PCB-081	100	21.90	86	50-145	
13C12-PCB-077	100	22.22	85	50-145	
13C12-PCB-104	100	17.61	104	50-145	
13C12-PCB-123	100	23.19	87	50-145	
13C12-PCB-118	100	23.35	90	50-145	
13C12-PCB-114	100	23.66	91	50-145	
13C12-PCB-105	100	24.02	88	50-145	
13C12-PCB-126	100	25.61	88	50-145	
13C12-PCB-155	100	20.58	102	50-145	
13C12-PCB-167	100	26.50	102	50-145	
13C12-PCB-156/157	200	27.15	104	50-145	
13C12-PCB-169	100	28.80	108	50-145	
13C12-PCB-188	100	23.58	109	50-145	
13C12-PCB-189	100	30.08	113	50-145	
13C12-PCB-202	100	26.36	122	50-145	
13C12-PCB-205	100	31.50	103	50-145	
13C12-PCB-208	100	29.81	103	50-145	
13C12-PCB-206	100	32.61	112	50-145	
13C12-PCB-209	100	33.75	110	50-145	
Cleanup Standards					
13C12-PCB-028	100	16.08	92	65-135	
13C12-PCB-111	100	22.10	100	75-125	
13C12-PCB-178	100	25.17	111	75-125	

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SVOC DATA PACKAGE

SECTION 5: QC SAMPLE DATA

Including:

- Laboratory Method Blank Analysis Reports
- Laboratory Control Sample Analysis Reports
- Matrix Spike Analysis Reports
- Other QC Sample Analysis Reports (where applicable)

ALS Life Sciences

Laboratory Method Blank Analysis Report

Sample Name	**Method Blank**	Sampling Date	n/a		
ALS Sample ID	WG3767228-1	Extraction Date	21-Oct-22		Approved:
Analysis Method	EPA 1668C	Sample Size	10.41	g wwt	*A. Kuol*
Analysis Type	Blank	Percent Moisture	n/a		--e-signature--
Sample Matrix	QC	Split Ratio	1		23-Nov-2022

Run Information	**Run 1**
Filename	5-221109A23
Run Date	10-Nov-22 07:32
Final Volume	25 ul
Dilution Factor	1
Analysis Units	pg/g wwt
Instrument - Column	HRMS-5 SPBOCTYL271790-03

Target Analytes	**TEF (WHO 2005)**	**Ret. Time**	**Conc. g/g wwt**	**EDL /g wwt**	**Flags**	**EMPC 'g wwt**	**LQL**
PCB-001		NotFnd	<0.062	0.062	U		2.4
PCB-002		10.37	<0.15	0.063	J,R	0.15	2.4
PCB-003		10.49	<0.21	0.060	J,R	0.21	2.4
PCB-004		NotFnd	<0.19	0.19	U		2.4
PCB-010		NotFnd	<0.12	0.12	U		2.4
PCB-009		11.88	<0.28	0.12	J,R	0.28	2.4
PCB-007		NotFnd	<0.12	0.12	U		2.4
PCB-006		NotFnd	<0.12	0.12	U		2.4
PCB-005		NotFnd	<0.12	0.12	U		2.4
PCB-008		12.46	<0.39	0.11	J,R	0.39	2.4
PCB-014		NotFnd	<0.12	0.12	U		2.4
PCB-011		13.94	<1.5	0.12	J,R	1.5	2.4
PCB-012/013		NotFnd	<0.12	0.12	U		2.4
PCB-015		14.32	<0.21	0.11	M,J,R	0.21	2.4
PCB-019		NotFnd	<0.067	0.067	U		2.4
PCB-018/030		13.75	0.169	0.049	J		2.4
PCB-017		NotFnd	<0.059	0.059	U		2.4
PCB-027		NotFnd	<0.044	0.044	U		2.4
PCB-024		NotFnd	<0.046	0.046	U		2.4
PCB-016		14.29	<0.062	0.062	M,U	0.054	2.4
PCB-032		14.58	<0.038	0.038	U	0.032	2.4
PCB-034		NotFnd	<0.058	0.058	U		2.4
PCB-023		NotFnd	<0.054	0.054	U		2.4
PCB-026/029		NotFnd	<0.054	0.054	U		2.4
PCB-025		NotFnd	<0.054	0.054	U		2.4
PCB-031		15.85	0.247	0.051	J		2.4
PCB-020/028		16.02	0.363	0.055	J		2.4
PCB-021/033		16.16	<0.18	0.053	J,R	0.18	2.4
PCB-022		16.41	<0.11	0.056	J,R	0.11	2.4
PCB-036		NotFnd	<0.048	0.048	U		2.4
PCB-039		NotFnd	<0.056	0.056	U		2.4
PCB-038		NotFnd	<0.053	0.053	U		2.4
PCB-035		NotFnd	<0.056	0.056	U		2.4
PCB-037		NotFnd	<0.045	0.045	U		2.4
PCB-054		NotFnd	<0.030	0.030	U		2.4
PCB-050/053		NotFnd	<0.039	0.039	U		2.4
PCB-045/051		NotFnd	<0.040	0.040	U		2.4
PCB-046		NotFnd	<0.046	0.046	U		2.4
PCB-052		17.01	0.269	0.043	J		2.4
PCB-073		NotFnd	<0.027	0.027	U		2.4
PCB-043		NotFnd	<0.050	0.050	U		2.4
PCB-049/069		17.28	<0.14	0.034	J,R	0.14	2.4
PCB-048		17.44	0.0548	0.037	J		2.4
PCB-044/047/065		17.57	0.406	0.038	J		2.4
PCB-059/062/075		17.76	<0.034	0.030	J,R	0.034	2.4
PCB-042		17.88	<0.069	0.045	M,J,R	0.069	2.4
PCB-040/041/071		18.12	<0.11	0.040	J,R	0.11	2.4
PCB-064		18.25	<0.12	0.031	J,R	0.12	2.4
PCB-072		NotFnd	<0.047	0.047	U		2.4
PCB-068		NotFnd	<0.045	0.045	U		2.4
PCB-057		NotFnd	<0.048	0.048	U		2.4
PCB-058		NotFnd	<0.046	0.046	U		2.4
PCB-067		NotFnd	<0.042	0.042	U		2.4
PCB-063		NotFnd	<0.046	0.046	U		2.4
PCB-061/070/074/076		19.61	0.298	0.049	J		2.4
PCB-066		19.77	0.144	0.046	J		2.4
PCB-055		NotFnd	<0.049	0.049	U		2.4
PCB-056		NotFnd	<0.050	0.050	U		2.4
PCB-060		NotFnd	<0.047	0.047	U		2.4
PCB-080		NotFnd	<0.040	0.040	U		2.4
PCB-079		NotFnd	<0.040	0.040	U		2.4
PCB-078		NotFnd	<0.053	0.053	U		2.4
PCB-081	0.0003	NotFnd	<0.042	0.042	U		2.4
PCB-077	0.0001	NotFnd	<0.045	0.045	U		2.4
PCB-104		NotFnd	<0.022	0.022	U		2.4
PCB-096		NotFnd	<0.029	0.029	U		2.4
PCB-103		NotFnd	<0.047	0.047	U		2.4
PCB-094		NotFnd	<0.048	0.048	U		2.4
PCB-095		19.14	<0.097	0.023	J,R	0.097	2.4
PCB-093/098/100/102		NotFnd	<0.066	0.066	U		2.4

ALS Life Sciences

Laboratory Method Blank Analysis Report

Sample Name	**Method Blank**	Sampling Date	n/a		
ALS Sample ID	WG3767228-1	Extraction Date	21-Oct-22		Approved:
Analysis Method	EPA 1668C	Sample Size	10.41	g wwt	*A. Kuol*
Analysis Type	Blank	Percent Moisture	n/a		--e-signature--
Sample Matrix	QC	Split Ratio	1		23-Nov-2022

Run Information	**Run 1**
Filename	5-221109A23
Run Date	10-Nov-22 07:32
Final Volume	25 ul
Dilution Factor	1
Analysis Units	pg/g wwt
Instrument - Column	HRMS-5 SPBOCTYL271790-03

Target Analytes	**TEF (WHO 2005)**	**Ret. Time**	**Conc. g/g wwt**	**EDL /g wwt**	**Flags**	**EMPC 'g wwt**	**LQL**
PCB-088/091		19.61	<0.048	0.048	U	0.022	2.4
PCB-084		19.77	<0.055	0.052	J,R	0.055	2.4
PCB-089		NotFnd	<0.059	0.059	U		2.4
PCB-121		NotFnd	<0.032	0.032	U		2.4
PCB-092		20.35	<0.071	0.053	J,R	0.071	2.4
PCB-090/101/113		20.65	<0.48	0.040	M,J,R	0.48	2.4
PCB-083/099		20.96	0.184	0.048	J		2.4
PCB-112		NotFnd	<0.033	0.033	U		2.4
PCB-086/087/097/109/119/125		21.33	<0.21	0.039	M,J,R	0.21	2.4
PCB-085/110/115/116/117		21.73	0.498	0.037	M,J		2.4
PCB-082		21.94	<0.060	0.060	U	0.056	2.4
PCB-111		NotFnd	<0.031	0.031	U		2.4
PCB-120		22.27	<0.031	0.031	U	0.012	2.4
PCB-108/124		NotFnd	<0.025	0.025	U		2.4
PCB-107		23.04	<0.023	0.023	U	0.019	2.4
PCB-123	0.00003	NotFnd	<0.024	0.024	U		2.4
PCB-106		NotFnd	<0.028	0.028	U		2.4
PCB-118	0.00003	23.27	0.381	0.022	J		2.4
PCB-122		NotFnd	<0.034	0.034	U		2.4
PCB-114	0.00003	NotFnd	<0.025	0.025	U		2.4
PCB-105	0.00003	23.91	0.107	0.023	J		2.4
PCB-127		NotFnd	<0.024	0.024	U		2.4
PCB-126	0.1	NotFnd	<0.026	0.026	U		2.4
PCB-155		NotFnd	<0.025	0.025	U		2.4
PCB-152		NotFnd	<0.043	0.043	U		2.4
PCB-150		NotFnd	<0.035	0.035	U		2.4
PCB-136		NotFnd	<0.042	0.042	U		2.4
PCB-145		NotFnd	<0.039	0.039	U		2.4
PCB-148		NotFnd	<0.054	0.054	U		2.4
PCB-135/151		22.18	0.216	0.057	M,J		2.4
PCB-154		NotFnd	<0.040	0.040	U		2.4
PCB-144		NotFnd	<0.055	0.055	U		2.4
PCB-147/149		22.66	0.438	0.048	J		2.4
PCB-134/143		NotFnd	<0.062	0.062	U		2.4
PCB-139/140		NotFnd	<0.048	0.048	U		2.4
PCB-131		NotFnd	<0.064	0.064	U		2.4
PCB-142		NotFnd	<0.060	0.060	U		2.4
PCB-132		23.36	0.168	0.054	J		2.4
PCB-133		23.52	<0.054	0.054	U		2.4
PCB-165		NotFnd	<0.040	0.040	U		2.4
PCB-146		23.86	<0.15	0.047	J,R	0.15	2.4
PCB-161		NotFnd	<0.037	0.037	U		2.4
PCB-153/168		24.19	1.09	0.039	J		2.4
PCB-141		24.32	<0.15	0.050	J,R	0.15	2.4
PCB-130		24.54	<0.055	0.055	M,U		2.4
PCB-137/164		24.71	<0.094	0.043	M,J,R	0.094	2.4
PCB-129/138/163		24.88	1.48	0.061	J		2.4
PCB-160		NotFnd	<0.028	0.028	U		2.4
PCB-158		25.07	0.0971	0.034	J		2.4
PCB-128/166		25.56	<0.069	0.041	J,R	0.069	2.4
PCB-159		26.01	<0.034	0.034	U	0.0096	2.4
PCB-162		NotFnd	<0.036	0.036	U		2.4
PCB-167	0.00003	26.40	<0.063	0.032	J,R	0.063	2.4
PCB-156/157	0.00003	27.00	<0.13	0.049	J,R	0.13	4.8
PCB-169	0.03	NotFnd	<0.040	0.040	U		2.4
PCB-188		NotFnd	<0.023	0.023	U		2.4
PCB-179		23.72	<0.026	0.026	U	0.022	2.4
PCB-184		NotFnd	<0.025	0.025	U		2.4
PCB-176		NotFnd	<0.026	0.026	U		2.4
PCB-186		NotFnd	<0.027	0.027	U		2.4
PCB-178		25.08	0.0441	0.036	J		2.4
PCB-175		NotFnd	<0.034	0.034	U		2.4
PCB-187		25.53	0.267	0.031	J		2.4
PCB-182		NotFnd	<0.033	0.033	U		2.4
PCB-183		25.83	<0.089	0.032	J,R	0.089	2.4
PCB-185		NotFnd	<0.035	0.035	U		2.4
PCB-174		26.01	<0.18	0.033	J,R	0.18	2.4
PCB-177		26.24	0.113	0.034	J		2.4
PCB-181		NotFnd	<0.034	0.034	U		2.4
PCB-171/173		26.57	<0.063	0.037	J,R	0.063	2.4
PCB-172		27.35	<0.044	0.034	J,R	0.044	2.4

ALS Life Sciences

Laboratory Method Blank Analysis Report

Sample Name	**Method Blank**	Sampling Date	n/a		
ALS Sample ID	WG3767228-1	Extraction Date	21-Oct-22		Approved:
Analysis Method	EPA 1668C	Sample Size	10.41	g wwt	*A. Kuol*
Analysis Type	Blank	Percent Moisture	n/a		--e-signature--
Sample Matrix	QC	Split Ratio	1		23-Nov-2022

Run Information	**Run 1**
Filename	5-221109A23
Run Date	10-Nov-22 07:32
Final Volume	25 ul
Dilution Factor	1
Analysis Units	pg/g wwt
Instrument - Column	HRMS-5 SPBOCTYL271790-03

Target Analytes	**TEF (WHO 2005)**	**Ret. Time**	**Conc. g/g wwt**	**EDL /g wwt**	**Flags**	**EMPC 'g wwt**	**LQL**
PCB-192		NotFnd	<0.030	0.030	U		2.4
PCB-180/193		27.68	0.826	0.032	J		2.4
PCB-191		27.88	<0.027	0.027	U	0.023	2.4
PCB-170		28.38	<0.28	0.038	J,R	0.28	2.4
PCB-190		28.62	0.0931	0.025	M,J		2.4
PCB-189	0.00003	NotFnd	<0.024	0.024	U		2.4
PCB-202		26.24	<0.029	0.013	J,R	0.029	2.4
PCB-201		NotFnd	<0.014	0.014	U		2.4
PCB-204		NotFnd	<0.014	0.014	U		2.4
PCB-197		NotFnd	<0.014	0.014	U		2.4
PCB-200		NotFnd	<0.015	0.015	U		2.4
PCB-198/199		28.68	<0.045	0.021	J,R	0.045	2.4
PCB-196		29.01	<0.052	0.021	J,R	0.052	2.4
PCB-203		29.10	<0.055	0.020	J,R	0.055	2.4
PCB-195		29.85	<0.041	0.034	J,R	0.041	2.4
PCB-194		31.05	<0.18	0.032	J,R	0.18	2.4
PCB-205		NotFnd	<0.028	0.028	U		2.4
PCB-208		NotFnd	<0.055	0.055	U		2.4
PCB-207		NotFnd	<0.059	0.059	U		2.4
PCB-206		NotFnd	<0.082	0.082	U		2.4
PCB-209		33.48	0.107	0.039	M,J		2.4

Extraction Standards	**pg**	**Time**	**% Rec**	**Limits**
13C12-PCB-001	2000	8.98	14	5-145
13C12-PCB-003	2000	10.49	16	5-145
13C12-PCB-004	2000	10.66	22	5-145
13C12-PCB-015	2000	14.31	25	5-145
13C12-PCB-019	2000	12.65	32	5-145
13C12-PCB-037	2000	18.25	42	5-145
13C12-PCB-054	2000	14.50	34	5-145
13C12-PCB-081	2000	21.81	53	10-145
13C12-PCB-077	2000	22.11	55	10-145
13C12-PCB-104	2000	17.52	47	10-145
13C12-PCB-123	2000	23.09	58	10-145
13C12-PCB-118	2000	23.26	60	10-145
13C12-PCB-114	2000	23.56	55	10-145
13C12-PCB-105	2000	23.91	60	10-145
13C12-PCB-126	2000	25.49	56	10-145
13C12-PCB-155	2000	20.49	61	10-145
13C12-PCB-167	2000	26.37	66	10-145
13C12-PCB-156/157	4000	27.01	64	10-145
13C12-PCB-169	2000	28.67	60	10-145
13C12-PCB-188	2000	23.47	70	10-145
13C12-PCB-189	2000	29.93	59	10-145
13C12-PCB-202	2000	26.25	77	10-145
13C12-PCB-205	2000	31.30	72	10-145
13C12-PCB-208	2000	29.65	65	10-145
13C12-PCB-206	2000	32.34	76	10-145
13C12-PCB-209	2000	33.44	70	10-145
Cleanup Standards				
13C12-PCB-028	2000	16.00	56	5-145
13C12-PCB-111	2000	22.01	69	10-145
13C12-PCB-178	2000	25.06	78	10-145

ALS Life Sciences

Laboratory Method Blank Analysis Report

Sample Name	**Method Blank**	Sampling Date	n/a		
ALS Sample ID	WG3767228-1	Extraction Date	21-Oct-22		Approved:
Analysis Method	EPA 1668C	Sample Size	10.41	g wwt	*A. Kuol*
Analysis Type	Blank	Percent Moisture	n/a		--e-signature--
Sample Matrix	QC	Split Ratio	1		23-Nov-2022

Run Information	**Run 1**
Filename	5-221109A23
Run Date	10-Nov-22 07:32
Final Volume	25 ul
Dilution Factor	1
Analysis Units	pg/g wwt
Instrument - Column	HRMS-5 SPBOCTYL271790-03

Target Analytes	**TEF (WHO 2005)**	**Ret. Time**	**Conc. g/g wwt**	**EDL /g wwt**	**Flags**	**EMPC 'g wwt**	**LQL**
Homologue Group Totals							
Total MonoCB			0.360	0.060	J		9.6
Total DiCB			2.38	0.11	J		19
Total TriCB			1.07	0.038	J		19
Total TetraCB			1.64	0.027	J		38
Total PentaCB			2.08	0.022	J		38
Total HexaCB			4.15	0.025	J		38
Total HeptaCB			2.00	0.023	J		19
Total OctaCB			0.402	0.013	J		19
Total NonaCB			<0.055	0.055	U		9.6
DecaCB			0.107	0.039	J		9.6
Total PCB			14.2		J		77
Toxic Equivalency - (WHO 2005)							
Lower Bound PCB TEQ			0.0000146				
Mid Point PCB TEQ			0.00193				
Upper Bound PCB TEQ			0.00384				

EDL	Indicates the Estimated Detection Limit, based on the measured background noise for this target in this sample.
TEF	Indicates the Toxic Equivalency Factor TEQ Indicates the Toxic Equivalency
LQL	Lower Quantification Limit, based on the lowest calibration level corrected for sample size, splits and dilutions.
M	Indicates that a peak has been manually integrated.
U	Indicates that this compound was not detected above the EDL.
J	Indicates that the analyte was positively identifed. The associated numerical result is an estimate.
R	Indicates that the ion abundance ratio for this analyte did not meet the control limit. The reported value represents an estimated concentration.
EMPC	Estimated Maximum Possible Concentration – elevated detection limit due to interference or positive id criterion failure

ALS Life Sciences

Laboratory Control Sample Analysis Report

Sample Name	**Laboratory Control Sample**	Sampling Date	n/a		
ALS Sample ID	WG3767228-2	Extraction Date	21-Oct-22		Approved:
Analysis Method	EPA 1668C	Sample Size	1	n/a	*A. Kuol*
Analysis Type	LCS	Percent Moisture	n/a		--e-signature--
Sample Matrix	QC	Split Ratio	1		23-Nov-2022

Run Information	**Run 1**
Filename	5-221109A18
Run Date	10-Nov-22 04:01
Final Volume	25 ul
Dilution Factor	1
Analysis Units	% Rec
Instrument - Column	HRMS-5 SPBOCTYL271790-03

Target Analytes	**pg**	**Ret. Time**	**% Rec**	**Limits**	**Flags**
PCB-001	1000	8.98	134	60-135	
PCB-003	1000	10.49	120	60-135	
PCB-004	1000	10.68	118	60-135	
PCB-015	1000	14.32	111	60-135	
PCB-019	1000	12.65	112	60-135	
PCB-037	1000	18.26	110	60-135	
PCB-054	1000	14.51	111	60-135	
PCB-081	1000	21.82	100	60-135	
PCB-077	1000	22.12	97	60-135	
PCB-104	1000	17.53	97	60-135	
PCB-123	1000	23.10	101	60-135	
PCB-118	1000	23.27	99	60-135	
PCB-114	1000	23.57	106	60-135	
PCB-105	1000	23.93	96	60-135	
PCB-126	1000	25.52	97	60-135	
PCB-155	1000	20.50	98	60-135	
PCB-167	1000	26.39	92	60-135	
PCB-156/157	2000	27.03	92	60-135	
PCB-169	1000	28.68	95	60-135	
PCB-188	1000	23.50	93	60-135	
PCB-189	1000	29.94	103	60-135	
PCB-202	1000	26.26	100	60-135	
PCB-205	1000	31.31	95	60-135	
PCB-208	1000	29.68	95	60-135	
PCB-206	1000	32.37	94	60-135	
PCB-209	1000	33.47	113	60-135	
Extraction Standards		**Time**	**% Rec**	**Limits**	
13C12-PCB-001	2000	8.98	9	15-145	
13C12-PCB-003	2000	10.49	11	15-145	
13C12-PCB-004	2000	10.66	15	15-145	
13C12-PCB-015	2000	14.31	24	15-145	
13C12-PCB-019	2000	12.65	25	15-145	
13C12-PCB-037	2000	18.25	42	15-145	
13C12-PCB-054	2000	14.50	29	15-145	
13C12-PCB-081	2000	21.81	53	40-145	
13C12-PCB-077	2000	22.11	55	40-145	
13C12-PCB-104	2000	17.52	44	40-145	
13C12-PCB-123	2000	23.09	60	40-145	
13C12-PCB-118	2000	23.26	61	40-145	
13C12-PCB-114	2000	23.56	57	40-145	
13C12-PCB-105	2000	23.91	63	40-145	
13C12-PCB-126	2000	25.50	62	40-145	
13C12-PCB-155	2000	20.49	58	40-145	
13C12-PCB-167	2000	26.37	71	40-145	
13C12-PCB-156/157	4000	27.03	70	40-145	
13C12-PCB-169	2000	28.67	65	40-145	
13C12-PCB-188	2000	23.49	68	40-145	
13C12-PCB-189	2000	29.93	63	40-145	
13C12-PCB-202	2000	26.25	78	40-145	
13C12-PCB-205	2000	31.30	76	40-145	
13C12-PCB-208	2000	29.67	74	40-145	
13C12-PCB-206	2000	32.36	80	40-145	
13C12-PCB-209	2000	33.45	74	40-145	
Cleanup Standards					
13C12-PCB-028	2000	16.00	55	15-145	
13C12-PCB-111	2000	22.01	70	40-145	
13C12-PCB-178	2000	25.06	80	40-145	

ALS Life Sciences

Matrix Spike Sample Analysis Report

Sample Name	**Matrix Spike**	Sampling Date	n/a		
ALS Sample ID	WG3767228-4	Extraction Date	21-Oct-22		Approved:
Analysis Method	EPA 1668C	Sample Size	5	n/a	*A. Kuol*
Analysis Type	LCS	Percent Moisture	n/a		--e-signature--
Sample Matrix	QC	Split Ratio	1		23-Nov-2022

Run Information	**Run 1**
Filename	5-221109A19
Run Date	10-Nov-22 04:43
Final Volume	25 ul
Dilution Factor	1
Analysis Units	% Rec
Instrument - Column	HRMS-5 SPBOCTYL271790-03

Target Analytes	**pg**	**Ret. Time**	**% Rec**	**Limits**	**Flags**
PCB-001	1000	8.98	109	60-135	
PCB-003	1000	10.49	102	60-135	
PCB-004	1000	10.66	99	60-135	
PCB-015	1000	14.31	101	60-135	
PCB-019	1000	12.65	98	60-135	
PCB-037	1000	18.24	105	60-135	
PCB-054	1000	14.50	99	60-135	
PCB-081	1000	21.81	100	60-135	
PCB-077	1000	22.11	121	60-135	R
PCB-104	1000	17.52	89	60-135	
PCB-123	1000	23.09	109	60-135	
PCB-118	1000	23.26	231	60-135	
PCB-114	1000	23.56	109	60-135	
PCB-105	1000	23.92	156	60-135	M
PCB-126	1000	25.52	115	60-135	R
PCB-155	1000	20.49	93	60-135	
PCB-167	1000	26.39	155	60-135	
PCB-156/157	2000	27.00	138	60-135	
PCB-169	1000	28.67	99	60-135	
PCB-188	1000	23.49	91	60-135	
PCB-189	1000	29.94	145	60-135	
PCB-202	1000	26.26	152	60-135	
PCB-205	1000	31.31	113	60-135	
PCB-208	1000	29.67	102	60-135	
PCB-206	1000	32.36	143	60-135	
PCB-209	1000	33.47	116	60-135	
Extraction Standards		**Time**	**% Rec**	**Limits**	
13C12-PCB-001	2000	8.97	19	15-145	
13C12-PCB-003	2000	10.48	24	15-145	
13C12-PCB-004	2000	10.65	37	15-145	
13C12-PCB-015	2000	14.30	46	15-145	
13C12-PCB-019	2000	12.64	52	15-145	
13C12-PCB-037	2000	18.23	55	15-145	
13C12-PCB-054	2000	14.49	53	15-145	
13C12-PCB-081	2000	21.79	56	40-145	
13C12-PCB-077	2000	22.09	54	40-145	
13C12-PCB-104	2000	17.51	59	40-145	
13C12-PCB-123	2000	23.07	62	40-145	
13C12-PCB-118	2000	23.24	62	40-145	
13C12-PCB-114	2000	23.55	56	40-145	
13C12-PCB-105	2000	23.91	60	40-145	
13C12-PCB-126	2000	25.49	54	40-145	
13C12-PCB-155	2000	20.48	64	40-145	
13C12-PCB-167	2000	26.37	65	40-145	
13C12-PCB-156/157	4000	27.01	62	40-145	
13C12-PCB-169	2000	28.66	57	40-145	
13C12-PCB-188	2000	23.47	69	40-145	
13C12-PCB-189	2000	29.93	56	40-145	
13C12-PCB-202	2000	26.25	71	40-145	
13C12-PCB-205	2000	31.30	65	40-145	
13C12-PCB-208	2000	29.65	59	40-145	
13C12-PCB-206	2000	32.34	67	40-145	
13C12-PCB-209	2000	33.45	61	40-145	
Cleanup Standards					
13C12-PCB-028	2000	15.99	56	15-145	
13C12-PCB-111	2000	22.00	61	40-145	
13C12-PCB-178	2000	25.04	70	40-145	

M	Indicates that a peak has been manually integrated.
R	Indicates that the ion abundance ratio for this analyte did not meet the control limit. The reported value represents an estimated concentration.

ALS Life Sciences

Matrix Spike Sample Analysis Report

Sample Name	**Matrix Spike Duplicate**	Sampling Date	n/a		
ALS Sample ID	WG3767228-5	Extraction Date	21-Oct-22		Approved:
Analysis Method	EPA 1668C	Sample Size	5.06	n/a	*A. Kuol*
Analysis Type	LCS	Percent Moisture	n/a		--e-signature--
Sample Matrix	QC	Split Ratio	1		23-Nov-2022

Run Information	**Run 1**
Filename	5-221109A20
Run Date	10-Nov-22 05:25
Final Volume	25 ul
Dilution Factor	1
Analysis Units	% Rec
Instrument - Column	HRMS-5 SPBOCTYL271790-03

Target Analytes	**pg**	**Ret. Time**	**% Rec**	**Limits**	**Flags**
PCB-001	1000	8.99	108	60-135	
PCB-003	1000	10.49	103	60-135	
PCB-004	1000	10.68	99	60-135	
PCB-015	1000	14.31	99	60-135	
PCB-019	1000	12.65	96	60-135	
PCB-037	1000	18.25	105	60-135	
PCB-054	1000	14.51	98	60-135	
PCB-081	1000	21.81	98	60-135	
PCB-077	1000	22.12	123	60-135	R
PCB-104	1000	17.53	88	60-135	
PCB-123	1000	23.09	105	60-135	
PCB-118	1000	23.27	397	60-135	
PCB-114	1000	23.56	113	60-135	
PCB-105	1000	23.92	169	60-135	M
PCB-126	1000	25.53	121	60-135	R
PCB-155	1000	20.49	92	60-135	
PCB-167	1000	26.39	170	60-135	
PCB-156/157	2000	27.01	150	60-135	
PCB-169	1000	28.68	99	60-135	
PCB-188	1000	23.50	91	60-135	
PCB-189	1000	29.94	138	60-135	
PCB-202	1000	26.26	158	60-135	
PCB-205	1000	31.31	115	60-135	
PCB-208	1000	29.68	106	60-135	
PCB-206	1000	32.37	160	60-135	
PCB-209	1000	33.47	117	60-135	
Extraction Standards		**Time**	**% Rec**	**Limits**	
13C12-PCB-001	2000	8.98	34	15-145	
13C12-PCB-003	2000	10.49	36	15-145	
13C12-PCB-004	2000	10.66	47	15-145	
13C12-PCB-015	2000	14.31	49	15-145	
13C12-PCB-019	2000	12.65	59	15-145	
13C12-PCB-037	2000	18.24	56	15-145	
13C12-PCB-054	2000	14.50	54	15-145	
13C12-PCB-081	2000	21.80	56	40-145	
13C12-PCB-077	2000	22.10	53	40-145	
13C12-PCB-104	2000	17.52	59	40-145	
13C12-PCB-123	2000	23.09	59	40-145	
13C12-PCB-118	2000	23.26	59	40-145	
13C12-PCB-114	2000	23.56	56	40-145	
13C12-PCB-105	2000	23.91	58	40-145	
13C12-PCB-126	2000	25.49	53	40-145	
13C12-PCB-155	2000	20.49	66	40-145	
13C12-PCB-167	2000	26.37	64	40-145	
13C12-PCB-156/157	4000	27.01	61	40-145	
13C12-PCB-169	2000	28.67	57	40-145	
13C12-PCB-188	2000	23.49	67	40-145	
13C12-PCB-189	2000	29.93	56	40-145	
13C12-PCB-202	2000	26.25	70	40-145	
13C12-PCB-205	2000	31.30	64	40-145	
13C12-PCB-208	2000	29.66	57	40-145	
13C12-PCB-206	2000	32.36	66	40-145	
13C12-PCB-209	2000	33.45	62	40-145	
Cleanup Standards					
13C12-PCB-028	2000	16.00	57	15-145	
13C12-PCB-111	2000	22.01	60	40-145	
13C12-PCB-178	2000	25.06	68	40-145	

M	Indicates that a peak has been manually integrated.
R	Indicates that the ion abundance ratio for this analyte did not meet the control limit. The reported value represents an estimated concentration.

1435 Norjohn Court, Unit 1, Burlington, ON, Canada L7L 0E6

SVOC DATA PACKAGE

SECTION 6: INTERNAL RECORDS

Including:

- Prep Logs
- Independent calculation checks
- Others as listed below:

Extraction Workup Sheet

Tray #9 (12)

Batch ID:	WG3767228	Analysis:	Tissues - 1668A (HR)

Prep Procedure: BU-TM-1110 Overall HR Prep

Analyst:	Amish Bhavsar	Date:	21-October-2022

SUBSAMPLING

	Sample I.D.	Client I.D.	Wet Sub-sample (g)
	WG3767228-1	Method Blank	10.41
	WG3767228-2	Laboratory Control Sample	10.33
	WG3767228-3	Extraction and Injection STD.	—
*	L2735553-1	LARGEROUGH-WB-1	5.01
	WG3767228-4	Matrix Spike (L2735553-1)	5.00
	WG3767228-5	Matrix Spike Duplicate (WG3767228-4)	5.06
	L2735553-2	LARGEROUGH-FILLET-1	10.00
*	L2735553-3	LARGEROUGH-WB-1-DUP	8.22
*	L2735553-4	MEDIUMROUGH-WB-1	7.54
	L2735553-5	MEDIUMROUGH-WB-J1	10.04
	L2735553-6	MEDIUMROUGH-WB-J2	10.03
*	L2735553-7	SMALL-WB-STICK1	8.23
*	L2735553-8	SMALL-WB-STICK2	6.07

BATCH TRACKING

	Chemist's Initials
Subsampling:	AB
Balance ID:	395
Client Labels Checked:	AB
Samples Spiked:	21-Oct-2022 CC
Soxhlet Start Time:	21-Oct-2022 2:33PM CC
Soxhlets Reflux Properly:	21-Oct-2022 3:30 CC
Soxhlet End Time:	22-Oct-22 7:50am WL
Roto-Vap Reduction:	22 Oct 22 S.S
Acid Silica Column:	22 Oct 22 S.S
Solvent Exchange:	27 Oct 22 T.P.
Alumina Column:	27 Oct 22 T.P.
Micro-Vialing:	27 Oct 22 T.P.

* due to low quantity, sample is taken 2/3 portion.

Batch ID:	WG3767228

PCB Extraction Standard:

Sample I.D.	Volume (ul)	Spiked (Checkmark)
WG3767228-1	20	✓
WG3767228-2	20	✓
WG3767228-3	20	✓
L2735553-1	20	✓
WG3767228-4	20	✓
WG3767228-5	20	✓
L2735553-2	20	✓
L2735553-3	20	✓
L2735553-4	20	✓
L2735553-5	20	✓
L2735553-6	20	✓
L2735553-7	20	✓
L2735553-8	20	✓

Syringe ID: 404

Standard: 1668A-ES#2-085C

Spike Date: 21-Oct-2022

Spike Witnessing

Chemist: (Chemist's Initials) CC

Witness: (Witness's Initials) KB

Correct Syringe Obtained: (Witness's Initials) KB

Correct Standard Obtained: (Witness's Initials) KB

Correct Technique Followed: (Witness's Initials) KB

PCB Native Standard:

Sample I.D.	Volume (ul)	Spiked (Checkmark)
WG3767228-2	20	✓
WG3767228-3	20	✓
WG3767228-4	20	✓
WG3767228-5	20	✓

Syringe Used: 403

Standard: 1668A-NS#1-051A

Date & Initials: 21-Oct-2022 CC

Batch ID:	WG3767228

PCB Cleanup Standard:

Sample I.D.	Volume (ul)	(Checkmark) Spiked
WG3767228-1	20	✓
WG3767228-2	20	✓
WG3767228-3	20	N/A
L2735553-1	20	✓
WG3767228-4	20	✓
WG3767228-5	20	✓
L2735553-2	20	✓
L2735553-3	20	✓
L2735553-4	20	✓
L2735553-5	20	✓
L2735553-6	20	✓
L2735553-7	20	✓
L2735553-8	20	✓

Syringe Used: 0438

Standard: 1668A-CL#2- 048A

Date & Initials: 22 oct 22 S.S

Chemist's Initials

Correct Syringe Obtained: S.S

Chemist's Initials

Correct Standard Obtained: S.S

Chemist's Initials

Correct Technique Followed: S.S

PCB Injection Standard:

Sample I.D.	Volume (ul)	(Checkmark) Spiked
WG3767228-1	5	✓
WG3767228-2	5	✓
WG3767228-3	5	✓
L2735553-1	5	✓
WG3767228-4	5	✓
WG3767228-5	5	✓
L2735553-2	5	✓
L2735553-3	5	✓
L2735553-4	5	✓
L2735553-5	5	✓
L2735553-6	5	✓
L2735553-7	5	✓
L2735553-8	5	✓

Syringe Used: 432

Standard: 1668A-IS#2- 020C

Date & Initials: 27-oct-22 T.P.

Chemist's Initials

Correct Syringe Obtained: T.P.

Chemist's Initials

Correct Standard Obtained: T.P.

Chemist's Initials

Correct Technique Followed: T.P.

Batch ID:	WG3767228

Reagent Lot Numbers:

Reagent	Lot#	Comment
Acetone	106905	
Hexane	107190	
DCM	107168	
Toluene	107077	
Acid Silica	11288	
Neutral Silica	2995	
Sand	–	
Sodium Sulphate	3049	
Nonane	–	
Alumina	369	
1:1 DCM:Hexane	–	
Copper	–	
Thimbles	–	

Batch ID:	WG3767228

Procedure:

Extraction:

- Subsample size =10g or 2/3 of sample
- Mix with sodium sulfate until a free flowing mixture has been achieved
- Spike Extraction and Native Standards.
- Soxhlet Extract in DCM for 16hours

- Roto-vap down to ~2ml
-Transfer to a C-tube with 3x2mL Hexane rinses
-Reduce to 1mL
- Spike Samples with Cleanup Standards

- Load the extract on to the **Acid Silica** column with 3x1ml Hexane rinses. (column is pre-rinsed with ~30ml Hexane)
- Elute to 50ml with Hexane.

- Solvent exchange: Reduce to ~50uL, bulk up with 1mL of Hexane

- Perform Alumina Column:

- Pre-elute the Alumina Column with 7ml Hexane
- Place F1 c-tube under the column, then load the sample with 3x 1ml Hexane Rinses
- F1 1mL of Hexane
- F2 (PCB) 14**ml** 1:1 DCM:Hexane

- Blow down to ~1/2ml
- Vortex **very** well.
- Transfer every last drop to a micro-vial (no rinses).
- Blow down to the mark. (Micro-vial should contain 20ul Nonane, and the level should be marked.)
- Spike Injection Standard. Cap and Vortex **FV = 25ul**

Approval of Deviation from Standard Method

☐ Procedure does not deviate from Standard Method. **(Batch Writer):** _____

☐ Procedure does deviate from Standard Method. **Approved (Supervisor/Manager):** _____

Comments:

The MB and LCS was blown down less than 1ml, maybe 1/2 or less than 1/2ml. S.S.

- Label and save all columns.

ALS Life Sciences

Sample Calculation Report

Approved: *A. Kuol* --e-signature-- 23-Nov-2022

CS3 RRF Check

$$RRF = \frac{\text{Response of PCB-118}}{\text{Response of 13C12-PCB-118}} \times \frac{\text{Concentration of 13C12-PCB-118}}{\text{Concentration of PCB-118}}$$

		Calculated Value	Value from TargetLynx
RRF	$= \frac{\mathbf{713101.30}}{\mathbf{1060849.80}} \times \frac{\mathbf{100}}{\mathbf{50}}$	**1.344**	**1.344**

Calculation of PCB-118 amount in L2735553-4

$$pg/g\ wwt = \frac{\text{Response of PCB-118}}{\text{Response of 13C12-PCB-118}} \times \frac{\text{pg of 13C12-PCB-118 spiked}}{\text{Mean RRF} * \text{Sample Size}}$$

pg/g wwt	$= \frac{\mathbf{5413766}}{\mathbf{1177349.1}} \times \frac{\mathbf{2000}}{\mathbf{1.350} * \mathbf{7.54}}$	**903**

Calculation of 13C12-PCB-118 Recovery in L2735553-4

$$\%\ Recovery = \frac{\text{Response of 13C12-PCB-118}}{\text{Response of 13C12-PCB-101}} \times \frac{\text{pg of 13C12-PCB-101 spiked} * 100}{\text{Mean RRF} * \text{pg 13C12-PCB-118 Spiked}}$$

% Recovery	$= \frac{\mathbf{1177349.1}}{\mathbf{1513864.1}} \times \frac{\mathbf{2000} * \mathbf{100}}{\mathbf{1.258} * \mathbf{2000}}$	**62**	**62** **%**

1435 Norjohn Court, Unit 1, Burlington, ON, Canada L7L 0E6

SVOC DATA PACKAGE

SECTION 7: SHIPPING/RECEIVING DOCUMENTS

Including:

- Airbills
- Chain-of-Custody Records
- Sample Log-in Sheet(s) - where applicable
- Others as listed below:

ALS Environmental Chain of Custody

1317 South 13th Avenue • Kelso, WA 98626 • 1-360-577-7222 • FAX 1-360-636-1068

ALS Contact: Luke Rahn

Project Number: K2211392
Project Manager: Luke Rahn
QAP: LAB QAP

Lab Code	Sample ID	# of Cont.	Matrix	Sample Date	Sample Time	Lab ID	Cl Biphen Cong 1668C
K2211392-001	LargeRough-WB-1	20g	Fish Tissue	7/6/22		Burlington ALS	X
K2211392-002	LargeRough-Fillet-1		Fish Tissue	7/6/22	0808	Burlington ALS	X
K2211392-003	LargeRough-WB-1-DUP		Fish Tissue	7/6/22		Burlington ALS	X
K2211392-004	MediumRough-WB-1		Fish Tissue	7/6/22		Burlington ALS	X
K2211392-005	MediumRough-WB-J1		Fish Tissue	7/5/22		Burlington ALS	X
K2211392-006	MediumRough-WB-J2		Fish Tissue	7/5/22		Burlington ALS	X
K2211392-007	Small-WB-Stick1	18g	Fish Tissue	7/6/22	1430	Burlington ALS	X
K2211392-008	Small-WB-Stick2	13g	Fish Tissue	7/5/22		Burlington ALS	X



10/31/22

Special Instructions/Comments
Please provide the electronic (PDF and EDD) report to the following e-mail address: ALKLS.Data@alsglobal.com.

Base EPD

H - Test is On Hold

P - Test is Authorized for Prep Only

Turnaround Requirements
____ **RUSH** (Surcharges Apply)
PLEASE CIRCLE WORK DAYS
1 2 3 4 5
X **STANDARD**
Requested FAX Date: _____
Requested Report Date: ~~11/04/22~~

Report Requirements
____ I. Results Only
____ II. Results + QC Summaries
____ III. Results + QC and Calibration Summaries
X IV. Data Validation Report with Raw Data
PQL/MDL/J Y
EDD N

Invoice Information
PO# 51K2211392
Bill to

Relinquished By: A Pederson Tsk 10/31/22
Received By: Aaron Burton
Airbill Number:

 4-OCT-2022 14:30 1.1°C

Service Request Number(s): K2207713

ALS Inc.

Analysis for:
1668C/Cl Biphen Cong

ALIQUOT DATA

Service Request #		Wet Wt. (g)		Tare Wt. (g)		Matrix
K2207713-4		20.040		210.671		Fish
4DUP		20.245		211.323		
4MS		20.227		213.882		
4MSD		20.301		210.390		
8		20.073		212.413		
12		20.349		211.915		
16		20.351		209.791		
20		20.686		212.762		
24		20.538		207.881		
39		17.534		209.659		
50		13.388		209.886		

CC 8/29

L2735553-COFC

Comments: 20g 8oz DUP/MS/MSD per 10

Balance ID: 53 Date Balance Checked: 8/29/22 9/2 8/22

Analyst: Date: 8/29/22 9/2 8/22

Reviewed: Date:

R:\ICP\MISC\Document Control\TISSUE Aliquot Bench Sheets

Sample Receiving Log

Date/Time Received	Client ID	Number/Description of Containers	Temp. on Receipt*	Condition of Samples, Courier & Tracking Information	Receiver's Initials	Date/Time Login Completed	Submission ID	Sample ID Range
4-OCT-2021 14:30	ALS KELSO	48 x jars of soil 11 x jars of tissue 7 x 1L amber bottles	2.8°C 5.2°C 1.1°C	Good FedEx 5325 5611 9831 5325 5611 7603	NJ	5-OCT-21 11:30	L2735549 -1-16 L2735550 -1,2 L2735554 -1-9 L2735555 -1-9	L2735557 -1-10 L2735559 -1-14 L2735553 -1-8

NJ

*Temperatures were recorded using :

☑ VWR Traceable dedicated I.R. gun (model 36934-178 SN 192108143)

☐ Other (specify): _____

1435 Norjohn Court, Unit 1, Burlington, ON, Canada L7L 0E6

SVOC DATA PACKAGE

APPENDIX 1: INSTRUMENT OUTPUT DOCUMENTS

Including For Each Analytical Sequence::

- The scanned instrument runlogs

- Instrument output (SICP chromatograms) indicating the integrations used for quantification including:
  - GC chromatographic resolution checks, where appropriate
  - SICPs for the run
  - SICP chromatograms indicating both the automated and manual peak integrati where this has been edited

- Reference peak profiles indicating the mass resolution
  - Pre-run mass calibration check printouts
  - Post-run mass calibration check printouts

	File Name	Sample ID	File Text	MS File	Inlet File	Bottle	Inject Vol
1	5-221020A01	H5-22-CS1-005	1668A-CS1-023	1668_octyl_1	1668_octyl_1	Tray1:4	1.000000
2	5-221020A02	H5-22-CS0-005	1668A-CS0-023	1668_octyl_1	1668_octyl_1	Tray1:5	1.000000
3	5-221020A03	H5-22-CS3-005	1668A-CS3-023	1668_octyl_1	1668_octyl_1	Tray1:6	1.000000
4	5-221020A04	H5-22-CS2-005	1668A-CS2-023	1668_octyl_1	1668_octyl_1	Tray1:7	1.000000
5	5-221020A05	H5-22-CS5-005	1668A-CS5-023	1668_octyl_1	1668_octyl_1	Tray1:8	1.000000
6	5-221020A06	H5-22-CS4-005	1668A-CS4-023	1668_octyl_1	1668_octyl_1	Tray1:9	1.000000
7	5-221020A07	H5-22-RS1-005	1668A-RS1-023	1668_octyl_1	1668_octyl_1	Tray1:10	1.000000
8	5-221020A08	H5-22-CCV-745	1668A-CS3-023	1668_octyl_1	1668_octyl_1	Tray1:1	1.000000
9	5-221020A09	H5-22-WDM-894	1668A-CS7-023	1668_octyl_1	1668_octyl_1	Tray1:23	1.000000
10	5-221020A10	H5-22-WDM-895	1668A-CS7-020D	1668_octyl_1	1668_octyl_1	Tray1:2	1.000000
11	5-221020A11	WG3764944-2	LCS	1668_octyl_1	1668_octyl_1	Tray1:11	1.000000
12	5-221020A12	WG3766219-2	LCS	1668_octyl_1	1668_octyl_1	Tray1:17	1.000000
13	5-221020A13	TOL	IB	1668_octyl_1	1668_octyl_1	Tray1:3	1.000000
14	5-221020A14	WG3764944-1	MB	1668_octyl_1	1668_octyl_1	Tray1:12	1.000000
15	5-221020A15	WG3766219-1	MB	1668_octyl_1	1668_octyl_1	Tray1:18	1.000000
16	5-221020A16	L2735053-3	SAMPLE	1668_octyl_1	1668_octyl_1	Tray1:13	1.000000
17	5-221020A17	L2735053-4	SAMPLE	1668_octyl_1	1668_octyl_1	Tray1:14	1.000000
18	5-221020A18	L2735055-3	SAMPLE	1668_octyl_1	1668_octyl_1	Tray1:19	1.000000
19	5-221020A19	L2735055-4	SAMPLE	1668_octyl_1	1668_octyl_1	Tray1:20	1.000000
20	5-221020A20	L2735053-1	SAMPLE	1668_octyl_1	1668_octyl_1	Tray1:15	1.000000
21	5-221020A21	L2735053-2	SAMPLE	1668_octyl_1	1668_octyl_1	Tray1:16	1.000000
22	5-221020A22	L2735055-1	SAMPLE	1668_octyl_1	1668_octyl_1	Tray1:21	1.000000
23	5-221020A23	L2735055-2	SAMPLE	1668_octyl_1	1668_octyl_1	Tray1:22	1.000000
24	5-221020A24	H5-22-WDM-895	1668A-CS3-023	1668_octyl_1	1668_octyl_1	Tray1:1	1.000000
25	5-221020A25	STANDBY	Standby	STANDBY	STANDBY	Tray1:3	1.000000
26	---	---	---	---	---	---	0.000000
27	SPBOCTYL271790-03	AK	370	---	---	---	0.000000

A1

A2

Vpr AK Oct 21

MBL
Wind
Chrom
IS

OCL

A2 MB A14 PCB-11
Rec A17 cutpoint
CCS

LMC

	File Name	Sample ID	File Text	Sample Type	Na Conc A	Na Conc B	Na Conc C	Na Conc D	Na Conc E	Na Conc F	Na Conc G	Na Conc H	FS Conc	CS Conc	ES Conc 1	ES Conc 2	IS Conc	Sample Size
1	5-221020A01	H5-22-CS1-005	1668A-CS1-023	Standard	1	1	1	2	---	---	---	---	100	100	100	200	100	1.000
2	5-221020A04	H5-22-CS2-005	1668A-CS2-023	Standard	5	5	5	10	---	---	---	---	100	100	100	200	100	1.000
3	5-221020A03	H5-22-CS3-005	1668A-CS3-023	Standard	50	50	50	100	---	---	---	---	100	100	100	200	100	1.000
4	5-221020A06	H5-22-CS4-005	1668A-CS4-023	Standard	400	400	400	800	---	---	---	---	100	100	100	200	100	1.000
5	5-221020A05	H5-22-CS5-005	1668A-CS5-023	Standard	2000	2000	2000	4000	---	---	---	---	100	100	100	200	100	1.000
6	5-221020A07	H5-22-RS1-005	1668A-RS1-023	QC	50	50	50	100	---	---	---	---	100	100	100	200	100	1.000

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221020A-PCB-ICAL.qld

Last Altered: Friday, October 21, 2022 09:44:03 Eastern Daylight Time
Printed: Tuesday, November 15, 2022 13:55:07 Eastern Standard Time

Method: C:\MassLynx\PCB.PRO\MethDB\1668_OCTYL_ICAL-0401.mdb 09 Jun 2022 14:25:01
Calibration: C:\MassLynx\PCB.PRO\CurveDB\5-221020A-ICAL.cdb 21 Oct 2022 10:44:03

Name: 5-221020A01, Date: 20-Oct-2022, Time: 17:33:11, ID: H5-22-CS1-005, Description: 1668A-CS1-023, Vial: Tray1:4

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
1	PCB-1		40796	31100	9696	3.21	NO	8.90	1.00	8.86	8.93	1.01026	101.0		760	694
2	PCB-3		40523	30884	9638	3.20	NO	10.42	1.00	10.39	10.46	1.02332	102.3		760	694
3	PCB-4		22272	13352	8920	1.50	NO	10.61	1.00	10.57	10.64	1.01190	101.2		677	2957
4	PCB-15		37319	22865	14454	1.58	NO	14.27	1.00	14.24	14.30	1.02414	102.4		1070	2458
5	PCB-19		18952	9896	9056	1.09	NO	12.61	1.00	12.58	12.64	0.98920	98.9		847	481
6	PCB-37		30723	15570	15154	1.03	NO	18.22	1.00	18.19	18.25	1.01387	101.4		1510	872
7	PCB-54		26785	12116	14669	0.83	NO	14.46	1.00	14.43	14.50	0.99567	99.6		629	1090
8	PCB-81		28067	12346	15721	0.79	NO	21.81	1.00	21.77	21.84	0.99979	100.0		1378	1731
9	PCB-77		28284	12455	15829	0.79	NO	22.11	1.00	22.08	22.15	1.03248	103.2		1378	1731
10	PCB-104		27192	16529	10663	1.55	NO	17.53	1.00	17.50	17.57	1.01512	101.5		550	486
11	PCB-123		24913	15740	9174	1.72	NO	23.11	1.00	23.08	23.14	1.04716	104.7		738	961
12	PCB-118		26091	15785	10306	1.53	NO	23.29	1.00	23.26	23.33	1.03467	103.5		738	961
13	PCB-114		24325	14984	9341	1.60	NO	23.58	1.00	23.55	23.62	1.00298	100.3		738	961
14	PCB-105		25075	15487	9589	1.62	NO	23.93	1.00	23.90	23.97	1.01906	101.9		738	961
15	PCB-126		25405	16122	9284	1.74	NO	25.52	1.00	25.48	25.55	1.01908	101.9		738	961
16	PCB-155		26789	14743	12045	1.22	NO	20.54	1.00	20.51	20.57	1.00585	100.6		437	450
17	PCB-167		26412	14664	11749	1.25	NO	26.43	1.00	26.40	26.47	0.99096	99.1		1140	650
18	PCB-156/157		54934	30426	24508	1.24	NO	27.06	1.00	27.03	27.10	2.06838	103.4		1140	650
19	PCB-169		26284	14693	11591	1.27	NO	28.71	1.00	28.67	28.74	1.01903	101.9		1140	650
20	PCB-188		23431	11824	11607	1.02	NO	23.53	1.00	23.50	23.57	1.00223	100.2		578	521
21	PCB-189		22612	11636	10976	1.06	NO	30.00	1.00	29.97	30.03	0.99784	99.8		623	526
22	PCB-202		21068	10488	10580	0.99	NO	26.31	1.00	26.28	26.35	0.98927	98.9		480	497
23	PCB-205		18078	8339	9739	0.86	NO	31.39	1.00	31.36	31.43	0.99200	99.2		379	372
24	PCB-208		18767	8114	10653	0.76	NO	29.73	1.00	29.70	29.77	1.01684	101.7		867	1936
25	PCB-206		12653	5560	7093	0.78	NO	32.47	1.00	32.44	32.50	1.01454	101.5		867	1936
26	PCB-209		16782	9212	7570	1.22	NO	33.61	1.00	33.58	33.64	1.00110	100.1		188	197
27	13C-PCB-31		2704880	1389505	1315375	1.06	NO	15.80	0.87	15.77	15.83	101.10113	101.1		22926	9536
28	13C-PCB-95		1774719	1080824	693895	1.56	NO	19.13	1.09	19.09	19.16	102.70841	102.7		2199	1271
29	13C-PCB-153		1904420	1076839	827582	1.30	NO	24.21	1.18	24.18	24.24	102.09250	102.1		3073	2228
30	13C-PCB-28		2954720	1522606	1432114	1.06	NO	15.98	0.94	15.94	16.01	97.02708	97.0		22926	9536
31	13C-PCB-111		1918114	1166123	751991	1.55	NO	22.04	1.07	22.01	22.07	96.33264	96.3		2199	1271
32	13C-PCB-178		1590418	815835	774583	1.05	NO	25.09	1.01	25.06	25.13	97.66897	97.7		3246	2863
33	13C-PCB-1		3757566	2806433	951134	2.95	NO	8.90	0.75	8.86	8.93	94.85310	94.9		2503	12197
34	13C-PCB-3		3538486	2641237	897249	2.94	NO	10.42	0.88	10.39	10.46	94.49022	94.5		2503	12197

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221020A-PCB-ICAL.qld

Last Altered: Friday, October 21, 2022 09:44:03 Eastern Daylight Time
Printed: Tuesday, November 15, 2022 13:55:07 Eastern Standard Time

Name: 5-221020A01, Date: 20-Oct-2022, Time: 17:33:11, ID: H5-22-CS1-005, Description: 1668A-CS1-023, Vial: Tray1:4

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
35	13C-PCB-4		2349004	1431267	917737	1.56	NO	10.59	0.89	10.56	10.63	95.69488	95.7		7738	2928
36	13C-PCB-15		3107308	1896474	1210834	1.57	NO	14.26	1.20	14.23	14.29	93.30009	93.3		16596	4618
37	13C-PCB-19		1526903	785009	741894	1.06	NO	12.60	1.06	12.56	12.63	95.65498	95.7		15591	7492
38	13C-PCB-37		2546933	1316718	1230216	1.07	NO	18.21	1.07	18.18	18.24	93.26755	93.3		22926	9536
39	13C-PCB-54		2403188	1060151	1343036	0.79	NO	14.45	0.85	14.42	14.49	97.20699	97.2		2858	1623
40	13C-PCB-81		2248188	983000	1265188	0.78	NO	21.80	1.06	21.77	21.83	93.83943	93.8		3043	1743
41	13C-PCB-77		2269491	995785	1273706	0.78	NO	22.09	1.07	22.06	22.13	94.02010	94.0		3043	1743
42	13C-PCB-104		2162275	1324343	837932	1.58	NO	17.51	1.03	17.48	17.55	95.87225	95.9		574	982
43	13C-PCB-123		2061242	1259767	801475	1.57	NO	23.10	1.12	23.07	23.13	93.14227	93.1		2778	2396
44	13C-PCB-118		1867063	1149144	717919	1.60	NO	23.27	1.13	23.23	23.30	92.45004	92.5		2778	2396
45	13C-PCB-114		2077186	1282675	794511	1.61	NO	23.57	0.95	23.54	23.60	92.30207	92.3		2778	2396
46	13C-PCB-105		1984409	1220193	764216	1.60	NO	23.92	0.96	23.89	23.95	93.54953	93.5		2778	2396
47	13C-PCB-126		2050351	1260022	790329	1.59	NO	25.50	1.02	25.47	25.54	94.02768	94.0		2778	2396
48	13C-PCB-155		2284706	1267861	1016845	1.25	NO	20.52	0.99	20.49	20.56	94.78156	94.8		1463	1470
49	13C-PCB-167		2083935	1174779	909156	1.29	NO	26.42	1.06	26.39	26.46	94.61366	94.6		3073	2228
50	13C-PCB-156/157		4056661	2293983	1762678	1.30	NO	27.05	1.09	27.02	27.08	188.83924	94.4		3073	2228
51	13C-PCB-169		2060536	1160115	900421	1.29	NO	28.69	1.15	28.66	28.73	93.06241	93.1		3073	2228
52	13C-PCB-188		2171584	1113482	1058103	1.05	NO	23.52	0.95	23.49	23.56	93.88750	93.9		3246	2863
53	13C-PCB-189		2153326	1112890	1040436	1.07	NO	29.99	0.96	29.95	30.02	93.43157	93.4		3521	3234
54	13C-PCB-202		1862857	882999	979858	0.90	NO	26.30	1.06	26.27	26.33	94.02979	94.0		1797	1573
55	13C-PCB-205		1910720	897835	1012886	0.89	NO	31.37	1.01	31.33	31.40	95.63077	95.6		2255	2301
56	13C-PCB-208		1606087	704016	902071	0.78	NO	29.72	0.96	29.69	29.75	96.26503	96.3		1009	1649
57	13C-PCB-206		1090733	476221	614512	0.77	NO	32.45	1.04	32.42	32.49	95.46068	95.5		1009	1649
58	13C-PCB-209		1713389	931739	781650	1.19	NO	33.58	1.08	33.55	33.62	96.03212	96.0		315	419
59	13C-PCB-9		3734305	2274620	1459685	1.56	NO	11.85	0.48	11.82	11.89	114.05591	114.1		7738	2928
60	13C-PCB-52		1785892	793296	992596	0.80	NO	16.98	0.68	16.94	17.01	112.10643	112.1		2095	1392
61	13C-PCB-101		1605913	979091	626823	1.56	NO	20.65	0.83	20.62	20.69	111.76758	111.8		2199	1271
62	13C-PCB-138		1736924	987514	749410	1.32	NO	24.89	0.00	24.85	24.92	111.48483	111.5		3073	2228
63	13C-PCB-194		1554509	730413	824096	0.89	NO	31.10	1.25	31.07	31.14	109.70893	109.7		2255	2301
64	Total MoCB-F1	4		65490								4359.05941			760	
65	Total DiCB-F1	1		13352								1.01190			677	
66	Total DiCB-F2	1		22865								1.02414			1070	
67	Total TrCB-F1	1		9896								0.98920			847	
68	Total TrCB-F3	6		47678								52440.23316			1510	
69	Total TeCB-F2	1		12116								0.99567			629	
70	Total TeCB-F4	8		27552								5380.14685			1378	
71	Total PeCB-F3	1		16529								1.01512			550	

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221020A-PCB-ICAL.qld

Last Altered: Friday, October 21, 2022 09:44:03 Eastern Daylight Time
Printed: Tuesday, November 15, 2022 13:55:07 Eastern Standard Time

Name: 5-221020A01, Date: 20-Oct-2022, Time: 17:33:11, ID: H5-22-CS1-005, Description: 1668A-CS1-023, Vial: Tray1:4

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
72	Total PeCB-F5	10		81970								5198.36082			738	
73	Total HxCB-F4	1		14743								1.00585			437	
74	Total HxCB-F5	12		65209								7833.99289			1140	
75	Total HpCB-F5	6		48281								66852.37358			578	
76	Total HpCB-F6	4		12998								2597.49633			623	
77	Total OcCB-F5	1		10488								0.98927			480	
78	Total OcCB-F6	4		9875								3367.89376			379	
79	Total NoCB-F6	2		13675								2.03139			867	
80	Total DeCB-F7	1		9212								1.00110			188	
81	Total 13C-MoCB-F1	5		5488686								55351.25725			2503	
82	Total 13C-DiCB-F1	4		3720247								211.17603			7738	
83	Total 13C-DiCB-F2	2		3735101								3377361.747...			16596	
84	Total 13C-TrCB-F1	2		838711								139800.24248			15591	
85	Total 13C-TrCB-F3	7		4263073								40340.54775			22926	
86	Total 13C-TeCB-F2	1		1060151								97.20699			2858	
87	Total 13C-TeCB-F3	5		825536								116.65357			2095	
88	Total 13C-TeCB-F4	10		2029647								68983.37455			3043	
89	Total 13C-PeCB-F3	2		1324753								570.60464			574	
90	Total 13C-PeCB-F4	9		3246246								317.72929			2199	
91	Total 13C-PeCB-F5	13		6443162								326296.37666			2778	
92	Total 13C-HxCB-F4	2		1274652								8237.16825			1463	
93	Total 13C-HxCB-F5	13		6780647								636.69718			3073	
94	Total 13C-HpCB-F5	12		1985138								99610.24141			3246	
95	Total 13C-HpCB-F6	9		1285404								268823.15771			3521	
96	Total 13C-OcCB-F5	4		886534								6828.15320			1797	
97	Total 13C-OcCB-F6	4		1722956								234.25620			2255	
98	Total 13C-NoCB-F6	3		1180946								2173.06591			1009	
99	Total 13C-DeCB-F7	1		931739								96.03212			315	
100	Lockmass F1			0											98243	
101	Lockmass F2			0											102468	
102	Lockmass F3			0											141574	
103	Lockmass F4			0											118083	
104	Lockmass F5			0											49509	
105	Lockmass F6			0											27151	
106	Lockmass F7			0											10867	

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221020A-PCB-ICAL.qld

Last Altered: Friday, October 21, 2022 09:44:03 Eastern Daylight Time
Printed: Tuesday, November 15, 2022 13:55:07 Eastern Standard Time

Name: 5-221020A04, Date: 20-Oct-2022, Time: 19:38:01, ID: H5-22-CS2-005, Description: 1668A-CS2-023, Vial: Tray1:7

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
1	PCB-1		211568	161342	50226	3.21	NO	8.88	1.00	8.85	8.92	5.09635	101.9		876	983
2	PCB-3		209218	160062	49156	3.26	NO	10.41	1.00	10.38	10.44	5.10226	102.0		876	983
3	PCB-4		113505	68117	45388	1.50	NO	10.58	1.00	10.55	10.61	5.06771	101.4		797	2524
4	PCB-15		190758	116585	74173	1.57	NO	14.25	1.00	14.22	14.28	5.13884	102.8		1224	3931
5	PCB-19		98674	52027	46647	1.12	NO	12.58	1.00	12.55	12.62	5.11078	102.2		915	621
6	PCB-37		158457	82019	76438	1.07	NO	18.20	1.00	18.17	18.23	5.12678	102.5		1354	1398
7	PCB-54		138516	61360	77156	0.80	NO	14.44	1.00	14.41	14.48	5.08997	101.8		691	955
8	PCB-81		144684	63194	81491	0.78	NO	21.79	1.00	21.76	21.82	5.13267	102.7		768	1721
9	PCB-77		138798	60522	78277	0.77	NO	22.09	1.00	22.05	22.12	5.05946	101.2		768	1721
10	PCB-104		136350	83278	53072	1.57	NO	17.51	1.00	17.48	17.55	5.03237	100.6		347	581
11	PCB-123		119028	72639	46390	1.57	NO	23.10	1.00	23.07	23.13	4.98138	99.6		914	769
12	PCB-118		130856	80974	49882	1.62	NO	23.27	1.00	23.23	23.30	5.13894	102.8		914	769
13	PCB-114		124937	76158	48779	1.56	NO	23.56	1.00	23.52	23.59	5.15489	103.1		914	769
14	PCB-105		123557	75838	47719	1.59	NO	23.91	1.00	23.88	23.94	5.09669	101.9		914	769
15	PCB-126		123249	75454	47796	1.58	NO	25.50	1.00	25.47	25.54	5.07492	101.5		914	769
16	PCB-155		136551	77251	59300	1.30	NO	20.52	1.00	20.49	20.56	5.08234	101.6		332	352
17	PCB-167		136849	74534	62315	1.20	NO	26.41	1.00	26.38	26.44	5.19266	103.9		529	690
18	PCB-156/157		267524	148768	118756	1.25	NO	27.04	1.00	27.00	27.07	10.28217	102.8		529	690
19	PCB-169		129028	71987	57041	1.26	NO	28.69	1.00	28.66	28.73	5.06466	101.3		529	690
20	PCB-188		119486	60695	58791	1.03	NO	23.52	1.00	23.49	23.56	5.09227	101.8		627	468
21	PCB-189		113508	57100	56408	1.01	NO	29.97	1.00	29.94	30.01	5.06387	101.3		662	415
22	PCB-202		107798	51111	56687	0.90	NO	26.29	1.00	26.26	26.32	5.09720	101.9		363	438
23	PCB-205		92129	43572	48557	0.90	NO	31.37	1.00	31.33	31.40	5.11739	102.3		416	430
24	PCB-208		92679	40900	51779	0.79	NO	29.72	1.00	29.69	29.75	5.04218	100.8		784	2104
25	PCB-206		61870	27109	34761	0.78	NO	32.44	1.00	32.41	32.47	5.01686	100.3		784	2104
26	PCB-209		83113	44910	38203	1.18	NO	33.58	1.00	33.55	33.62	5.07378	101.5		155	147
27	13C-PCB-31		2769687	1426578	1343109	1.06	NO	15.78	0.87	15.75	15.82	101.95546	102.0		20753	8045
28	13C-PCB-95		1807616	1097742	709874	1.55	NO	19.10	1.09	19.06	19.13	103.96717	104.0		3211	1761
29	13C-PCB-153		1882360	1061870	820490	1.29	NO	24.20	1.18	24.17	24.23	101.74981	101.7		2043	2161
30	13C-PCB-28		3000908	1554618	1446290	1.07	NO	15.95	0.94	15.91	15.98	101.15247	101.2		20753	8045
31	13C-PCB-111		1891220	1151624	739595	1.56	NO	22.02	1.07	21.99	22.05	97.86622	97.9		3211	1761
32	13C-PCB-178		1545520	791442	754078	1.05	NO	25.08	1.01	25.05	25.11	100.22756	100.2		1738	1030
33	13C-PCB-1		3862941	2880900	982041	2.93	NO	8.87	0.75	8.84	8.90	100.27810	100.3		1823	14909
34	13C-PCB-3		3664125	2737378	926747	2.95	NO	10.40	0.88	10.36	10.43	100.61963	100.6		1823	14909
35	13C-PCB-4		2390369	1454089	936280	1.55	NO	10.56	0.89	10.53	10.60	100.14124	100.1		11295	3442
36	13C-PCB-15		3165390	1930136	1235254	1.56	NO	14.23	1.20	14.20	14.27	97.73906	97.7		14342	4020
37	13C-PCB-19		1538743	787922	750822	1.05	NO	12.57	1.06	12.54	12.60	99.13010	99.1		14882	8284

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221020A-PCB-ICAL.qld

Last Altered: Friday, October 21, 2022 09:44:03 Eastern Daylight Time
Printed: Tuesday, November 15, 2022 13:55:07 Eastern Standard Time

Name: 5-221020A04, Date: 20-Oct-2022, Time: 19:38:01, ID: H5-22-CS2-005, Description: 1668A-CS2-023, Vial: Tray1:7

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
38	13C-PCB-37		2597745	1338214	1259531	1.06	NO	18.19	1.07	18.16	18.22	97.64653	97.6		20753	8045
39	13C-PCB-54		2431039	1074645	1356394	0.79	NO	14.43	0.85	14.39	14.46	100.93665	100.9		2551	1378
40	13C-PCB-81		2257499	990921	1266578	0.78	NO	21.77	1.06	21.74	21.80	97.08948	97.1		2920	2858
41	13C-PCB-77		2272751	993304	1279447	0.78	NO	22.08	1.07	22.04	22.11	97.01436	97.0		2920	2858
42	13C-PCB-104		2187129	1337007	850122	1.57	NO	17.49	1.03	17.46	17.53	99.91902	99.9		988	743
43	13C-PCB-123		2070186	1271752	798434	1.59	NO	23.09	1.12	23.05	23.12	96.38712	96.4		3176	2332
44	13C-PCB-118		1885353	1158231	727122	1.59	NO	23.26	1.13	23.22	23.29	96.19056	96.2		3176	2332
45	13C-PCB-114		2075773	1278038	797735	1.60	NO	23.55	0.95	23.51	23.58	95.04030	95.0		3176	2332
46	13C-PCB-105		1955055	1209154	745901	1.62	NO	23.90	0.96	23.86	23.93	94.96448	95.0		3176	2332
47	13C-PCB-126		1997414	1227369	770046	1.59	NO	25.49	1.02	25.46	25.52	94.38164	94.4		3176	2332
48	13C-PCB-155		2304858	1290942	1013916	1.27	NO	20.50	0.99	20.47	20.54	98.52115	98.5		838	1062
49	13C-PCB-167		2060550	1163718	896832	1.30	NO	26.40	1.06	26.36	26.43	98.79162	98.8		2043	2161
50	13C-PCB-156/157		3974083	2251855	1722228	1.31	NO	27.03	1.09	26.99	27.06	195.35643	97.7		2043	2161
51	13C-PCB-169		2035244	1145393	889851	1.29	NO	28.68	1.15	28.65	28.72	97.06843	97.1		2043	2161
52	13C-PCB-188		2179480	1119645	1059835	1.06	NO	23.51	0.95	23.48	23.54	99.50645	99.5		1738	1030
53	13C-PCB-189		2129953	1098893	1031060	1.07	NO	29.96	0.96	29.92	29.99	97.59357	97.6		2491	1558
54	13C-PCB-202		1849895	879206	970689	0.91	NO	26.28	1.06	26.24	26.31	98.60529	98.6		787	1015
55	13C-PCB-205		1887557	886742	1000815	0.89	NO	31.35	1.01	31.32	31.39	99.64463	99.6		1807	1876
56	13C-PCB-208		1599563	703201	896363	0.78	NO	29.71	0.96	29.67	29.74	101.12399	101.1		1431	1263
57	13C-PCB-206		1078550	472238	606312	0.78	NO	32.43	1.04	32.39	32.46	99.56341	99.6		1431	1263
58	13C-PCB-209		1674246	913459	760788	1.20	NO	33.55	1.08	33.52	33.59	98.97673	99.0		273	245
59	13C-PCB-9		3631338	2224432	1406906	1.58	NO	11.83	0.48	11.79	11.86	110.91101	110.9		11295	3442
60	13C-PCB-52		1739835	777024	962811	0.81	NO	16.96	0.68	16.92	16.99	109.21525	109.2		3351	1524
61	13C-PCB-101		1558584	950409	608175	1.56	NO	20.63	0.83	20.60	20.67	108.47360	108.5		3211	1761
62	13C-PCB-138		1644801	925694	719107	1.29	NO	24.88	0.00	24.84	24.91	105.57194	105.6		2043	2161
63	13C-PCB-194		1473805	695775	778030	0.89	NO	31.07	1.25	31.04	31.11	104.01324	104.0		1807	1876
64	Total MoCB-F1	4		328281								8473.86900			876	
65	Total DiCB-F1	2		71318								5544.46256			797	
66	Total DiCB-F2	1		116585								5.13884			1224	
67	Total TrCB-F1	1		52027								5.11078			915	
68	Total TrCB-F3	5		251286								276983.69317			1354	
69	Total TeCB-F2	1		61360								5.08997			691	
70	Total TeCB-F4	4		125105								2124.19586			768	
71	Total PeCB-F3	1		83278								5.03237			347	
72	Total PeCB-F5	13		397757								21958.52119			914	
73	Total HxCB-F4	1		77251								5.08234			332	
74	Total HxCB-F5	12		315734								29661.70732			529	

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221020A-PCB-ICAL.qld

Last Altered: Friday, October 21, 2022 09:44:03 Eastern Daylight Time
Printed: Tuesday, November 15, 2022 13:55:07 Eastern Standard Time

Name: 5-221020A04, Date: 20-Oct-2022, Time: 19:38:01, ID: H5-22-CS2-005, Description: 1668A-CS2-023, Vial: Tray1:7

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
75	Total HpCB-F5	7		245886								337832.74947			627	
76	Total HpCB-F6	4		63130								10934.66736			662	
77	Total OcCB-F5	1		51111								5.09720			363	
78	Total OcCB-F6	4		50247								14644.43154			416	
79	Total NoCB-F6	2		68009								10.05904			784	
80	Total DeCB-F7	1		44910								5.07378			155	
81	Total 13C-MoCB-F1	4		5652621								45765.74288			1823	
82	Total 13C-DiCB-F1	3		3690315								212.29301			11295	
83	Total 13C-DiCB-F2	4		3826833								3480662.086...			14342	
84	Total 13C-TrCB-F1	1		787922								99.13010			14882	
85	Total 13C-TrCB-F3	8		4356933								44282.37896			20753	
86	Total 13C-TeCB-F2	1		1074645								100.93665			2551	
87	Total 13C-TeCB-F3	5		810809								113.97764			3351	
88	Total 13C-TeCB-F4	9		2036764								69941.72340			2920	
89	Total 13C-PeCB-F3	1		1337007								99.91902			988	
90	Total 13C-PeCB-F4	9		3220397								317.38691			3211	
91	Total 13C-PeCB-F5	13		6429841								342364.05688			3176	
92	Total 13C-HxCB-F4	2		1296843								7358.79546			838	
93	Total 13C-HxCB-F5	13		6643861								649.46659			2043	
94	Total 13C-HpCB-F5	10		1968805								97015.60138			1738	
95	Total 13C-HpCB-F6	5		1266889								229297.83451			2491	
96	Total 13C-OcCB-F5	4		883059								7265.74906			787	
97	Total 13C-OcCB-F6	5		1690255								235.91896			1807	
98	Total 13C-NoCB-F6	3		1176144								2091.67143			1431	
99	Total 13C-DeCB-F7	1		913459								98.97673			273	
100	Lockmass F1			0											105656	
101	Lockmass F2			0											94784	
102	Lockmass F3			0											150082	
103	Lockmass F4			0											110799	
104	Lockmass F5			0											55830	
105	Lockmass F6			0											39138	
106	Lockmass F7			0											11182	

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221020A-PCB-ICAL.qld

Last Altered: Friday, October 21, 2022 09:44:03 Eastern Daylight Time
Printed: Tuesday, November 15, 2022 13:55:07 Eastern Standard Time

Name: 5-221020A03, Date: 20-Oct-2022, Time: 18:55:50, ID: H5-22-CS3-005, Description: 1668A-CS3-023, Vial: Tray1:6

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
1	PCB-1		883087	673277	209810	3.21	NO	8.88	1.00	8.85	8.92	47.90549	95.8		853	961
2	PCB-3		831160	637505	193655	3.29	NO	10.41	1.00	10.38	10.44	47.54824	95.1		853	961
3	PCB-4		486336	295022	191314	1.54	NO	10.59	1.00	10.56	10.63	48.32205	96.6		777	2873
4	PCB-15		821557	501381	320176	1.57	NO	14.26	1.00	14.23	14.29	49.73713	99.5		1899	4166
5	PCB-19		434818	226223	208594	1.08	NO	12.60	1.00	12.56	12.63	48.83652	97.7		1038	618
6	PCB-37		742906	376416	366490	1.03	NO	18.21	1.00	18.18	18.24	49.85263	99.7		1603	1410
7	PCB-54		641434	283153	358281	0.79	NO	14.45	1.00	14.42	14.49	49.58578	99.2		603	938
8	PCB-81		759663	335015	424648	0.79	NO	21.80	1.00	21.77	21.83	50.28459	100.6		1774	2070
9	PCB-77		721167	318558	402609	0.79	NO	22.10	1.00	22.07	22.14	49.52871	99.1		1774	2070
10	PCB-104		687088	420103	266984	1.57	NO	17.52	1.00	17.49	17.56	50.08061	100.2		283	500
11	PCB-123		672813	411570	261243	1.58	NO	23.11	1.00	23.08	23.14	49.78412	99.6		1254	1402
12	PCB-118		713101	439913	273188	1.61	NO	23.28	1.00	23.25	23.31	49.77036	99.5		1254	1402
13	PCB-114		696687	427534	269153	1.59	NO	23.58	1.00	23.55	23.62	50.44547	100.9		1254	1402
14	PCB-105		698174	426735	271439	1.57	NO	23.92	1.00	23.89	23.95	49.57917	99.2		1254	1402
15	PCB-126		725153	446454	278700	1.60	NO	25.52	1.00	25.48	25.55	50.33251	100.7		1254	1402
16	PCB-155		728552	407933	320620	1.27	NO	20.53	1.00	20.50	20.57	50.33783	100.7		677	585
17	PCB-167		815817	451800	364018	1.24	NO	26.42	1.00	26.39	26.46	50.12289	100.2		1037	1135
18	PCB-156/157		1624067	899670	724397	1.24	NO	27.05	1.00	27.02	27.08	99.65689	99.7		1037	1135
19	PCB-169		833734	461968	371767	1.24	NO	28.71	1.00	28.67	28.74	50.49352	101.0		1037	1135
20	PCB-188		689149	348038	341111	1.02	NO	23.53	1.00	23.50	23.57	50.21310	100.4		703	570
21	PCB-189		751497	384659	366839	1.05	NO	29.99	1.00	29.95	30.02	50.52427	101.0		1161	947
22	PCB-202		674720	318457	356263	0.89	NO	26.30	1.00	26.27	26.33	50.84767	101.7		448	446
23	PCB-205		634268	296359	337909	0.88	NO	31.38	1.00	31.35	31.41	50.81242	101.6		696	604
24	PCB-208		626533	277649	348885	0.80	NO	29.73	1.00	29.70	29.77	50.61857	101.2		969	1660
25	PCB-206		443971	198820	245151	0.81	NO	32.45	1.00	32.42	32.49	50.70672	101.4		969	1660
26	PCB-209		601160	324508	276652	1.17	NO	33.60	1.00	33.56	33.63	50.29244	100.6		191	259
27	13C-PCB-31		1358408	701737	656671	1.07	NO	15.80	0.87	15.77	15.83	105.41971	105.4		18355	9258
28	13C-PCB-95		953553	578364	375189	1.54	NO	19.12	1.09	19.08	19.15	99.67575	99.7		1674	1105
29	13C-PCB-153		1117351	634226	483124	1.31	NO	24.21	1.18	24.18	24.24	99.76587	99.8		2317	1340
30	13C-PCB-28		1465230	758092	707139	1.07	NO	15.97	0.94	15.93	16.00	99.89164	99.9		18355	9258
31	13C-PCB-111		1074332	654878	419454	1.56	NO	22.04	1.07	22.01	22.07	104.39613	104.4		1674	1105
32	13C-PCB-178		949965	481170	468796	1.03	NO	25.09	1.01	25.06	25.13	103.37637	103.4		1800	938
33	13C-PCB-1		1715317	1282956	432361	2.97	NO	8.87	0.75	8.84	8.90	98.02018	98.0		1842	11799
34	13C-PCB-3		1562013	1162221	399792	2.91	NO	10.41	0.88	10.38	10.44	94.42348	94.4		1842	11799
35	13C-PCB-4		1074124	654218	419907	1.56	NO	10.58	0.89	10.55	10.61	99.05707	99.1		7938	2713
36	13C-PCB-15		1408536	857867	550669	1.56	NO	14.25	1.20	14.22	14.28	95.73966	95.7		13812	4150
37	13C-PCB-19		709599	361427	348172	1.04	NO	12.58	1.06	12.55	12.62	100.63184	100.6		15611	6711

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221020A-PCB-ICAL.qld

Last Altered: Friday, October 21, 2022 09:44:03 Eastern Daylight Time
Printed: Tuesday, November 15, 2022 13:55:07 Eastern Standard Time

Name: 5-221020A03, Date: 20-Oct-2022, Time: 18:55:50, ID: H5-22-CS3-005, Description: 1668A-CS3-023, Vial: Tray1:6

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
38	13C-PCB-37		1252495	650079	602417	1.08	NO	18.20	1.07	18.17	18.23	95.22164	95.2		18355	9258
39	13C-PCB-54		1155589	513825	641764	0.80	NO	14.44	0.85	14.41	14.48	97.04203	97.0		3373	1500
40	13C-PCB-81		1209861	528153	681708	0.77	NO	21.79	1.06	21.76	21.82	97.70912	97.7		3010	3045
41	13C-PCB-77		1206287	528823	677464	0.78	NO	22.09	1.07	22.06	22.13	96.69184	96.7		3010	3045
42	13C-PCB-104		1107477	683045	424432	1.61	NO	17.51	1.03	17.48	17.55	95.00880	95.0		1078	632
43	13C-PCB-123		1170879	724323	446557	1.62	NO	23.10	1.12	23.07	23.13	102.37101	102.4		2481	1883
44	13C-PCB-118		1060850	655324	405526	1.62	NO	23.27	1.13	23.23	23.30	101.63632	101.6		2481	1883
45	13C-PCB-114		1182839	733255	449583	1.63	NO	23.57	0.95	23.54	23.60	101.69708	101.7		2481	1883
46	13C-PCB-105		1135650	701829	433822	1.62	NO	23.91	0.96	23.88	23.94	103.58619	103.6		2481	1883
47	13C-PCB-126		1184934	730255	454679	1.61	NO	25.50	1.02	25.47	25.54	105.14020	105.1		2481	1883
48	13C-PCB-155		1241594	694394	547200	1.27	NO	20.52	0.99	20.49	20.56	99.65983	99.7		887	987
49	13C-PCB-167		1272591	719007	553584	1.30	NO	26.41	1.06	26.38	26.44	102.38276	102.4		2317	1340
50	13C-PCB-156/157		2489175	1401527	1087649	1.29	NO	27.04	1.09	27.00	27.07	205.32760	102.7		2317	1340
51	13C-PCB-169		1319090	745786	573304	1.30	NO	28.69	1.15	28.66	28.73	105.56915	105.6		2317	1340
52	13C-PCB-188		1274803	649892	624911	1.04	NO	23.52	0.95	23.49	23.56	97.66576	97.7		1800	938
53	13C-PCB-189		1413366	727006	686360	1.06	NO	29.97	0.96	29.94	30.01	108.66931	108.7		1979	2526
54	13C-PCB-202		1160699	552697	608002	0.91	NO	26.29	1.06	26.26	26.32	103.81832	103.8		607	1014
55	13C-PCB-205		1308742	616272	692470	0.89	NO	31.37	1.01	31.33	31.40	99.72576	99.7		1476	2188
56	13C-PCB-208		1077137	475459	601678	0.79	NO	29.72	0.96	29.69	29.75	98.29312	98.3		1197	1374
57	13C-PCB-206		765740	335399	430342	0.78	NO	32.44	1.04	32.41	32.47	102.03292	102.0		1197	1374
58	13C-PCB-209		1221713	665394	556319	1.20	NO	33.57	1.08	33.53	33.60	104.25150	104.3		246	250
59	13C-PCB-9		1649619	1010357	639262	1.58	NO	11.84	0.48	11.81	11.87	50.38389	50.4		7938	2713
60	13C-PCB-52		860218	383261	476957	0.80	NO	16.97	0.68	16.93	17.00	53.99878	54.0		2859	1466
61	13C-PCB-101		829994	508069	321926	1.58	NO	20.64	0.83	20.61	20.68	57.76555	57.8		1674	1105
62	13C-PCB-138		980195	552448	427747	1.29	NO	24.89	0.00	24.85	24.92	62.91402	62.9		2317	1340
63	13C-PCB-194		1021035	480925	540110	0.89	NO	31.09	1.25	31.05	31.12	72.05917	72.1		1476	2188
64	Total MoCB-F1	4		1324592								17611.51476			853	
65	Total DiCB-F1	2		309205								25122.72092			777	
66	Total DiCB-F2	3		504926								4435.90605			1899	
67	Total TrCB-F1	1		226223								48.83652			1038	
68	Total TrCB-F3	5		1159532								1282462.564...			1603	
69	Total TeCB-F2	1		283153								49.58578			603	
70	Total TeCB-F4	6		662294								15366.76348			1774	
71	Total PeCB-F3	1		420103								50.08061			283	
72	Total PeCB-F5	14		2253992								132625.90941			1254	
73	Total HxCB-F4	1		407933								50.33783			677	
74	Total HxCB-F5	13		1937993								175240.90257			1037	

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221020A-PCB-ICAL.qld

Last Altered: Friday, October 21, 2022 09:44:03 Eastern Daylight Time
Printed: Tuesday, November 15, 2022 13:55:07 Eastern Standard Time

Name: 5-221020A03, Date: 20-Oct-2022, Time: 18:55:50, ID: H5-22-CS3-005, Description: 1668A-CS3-023, Vial: Tray1:6

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
75	Total HpCB-F5	10		1512448								2134511.051...			703	
76	Total HpCB-F6	4		426262								74075.38479			1161	
77	Total OcCB-F5	6		322253								7180.13525			448	
78	Total OcCB-F6	4		340710								99759.49383			696	
79	Total NoCB-F6	3		477133								1191.53009			969	
80	Total DeCB-F7	1		324508								50.29244			191	
81	Total 13C-MoCB-F1	3		2454941								11431.61056			1842	
82	Total 13C-DiCB-F1	3		1669722								149.95120			7938	
83	Total 13C-DiCB-F2	2		1723355								1583836.900...			13812	
84	Total 13C-TrCB-F1	2		388114								72788.43674			15611	
85	Total 13C-TrCB-F3	6		2126954								17079.85261			18355	
86	Total 13C-TeCB-F2	1		513825								97.04203			3373	
87	Total 13C-TeCB-F3	5		399452								56.27950			2859	
88	Total 13C-TeCB-F4	10		1086570								39702.53135			3010	
89	Total 13C-PeCB-F3	1		683045								95.00880			1078	
90	Total 13C-PeCB-F4	9		1753185								266.00008			1674	
91	Total 13C-PeCB-F5	13		3714270								203550.64645			2481	
92	Total 13C-HxCB-F4	2		697791								4501.26507			887	
93	Total 13C-HxCB-F5	11		4108699								605.42622			2317	
94	Total 13C-HpCB-F5	8		1164545								57906.62657			1800	
95	Total 13C-HpCB-F6	5		840051								156254.54439			1979	
96	Total 13C-OcCB-F5	5		555459								4910.02130			607	
97	Total 13C-OcCB-F6	4		1169950								193.50075			1476	
98	Total 13C-NoCB-F6	3		811486								1881.42759			1197	
99	Total 13C-DeCB-F7	1		665394								104.25150			246	
100	Lockmass F1			0											107355	
101	Lockmass F2			0											105696	
102	Lockmass F3			0											166294	
103	Lockmass F4			0											100624	
104	Lockmass F5			0											50495	
105	Lockmass F6			0											60266	
106	Lockmass F7			0											11373	

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221020A-PCB-ICAL.qld

Last Altered: Friday, October 21, 2022 09:44:03 Eastern Daylight Time
Printed: Tuesday, November 15, 2022 13:55:07 Eastern Standard Time

Name: 5-221020A06, Date: 20-Oct-2022, Time: 21:02:27, ID: H5-22-CS4-005, Description: 1668A-CS4-023, Vial: Tray1:9

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
1	PCB-1		17500227	13353080	4147147	3.22	NO	8.88	1.00	8.85	8.92	404.94547	101.2		1922	1193
2	PCB-3		17172335	13108116	4064219	3.23	NO	10.41	1.00	10.38	10.44	402.10361	100.5		1922	1193
3	PCB-4		9273506	5586596	3686911	1.52	NO	10.58	1.00	10.55	10.61	401.69255	100.4		1445	2660
4	PCB-15		15816937	9683210	6133727	1.58	NO	14.25	1.00	14.22	14.28	397.21274	99.3		1648	3503
5	PCB-19		8090973	4191783	3899190	1.08	NO	12.58	1.00	12.55	12.62	398.82783	99.7		1317	927
6	PCB-37		12954893	6592079	6362814	1.04	NO	18.20	1.00	18.17	18.23	393.53880	98.4		3413	2354
7	PCB-54		11304320	4959774	6344547	0.78	NO	14.44	1.00	14.41	14.48	396.02435	99.0		1096	1038
8	PCB-81		11656645	5152145	6504500	0.79	NO	21.79	1.00	21.76	21.82	391.69056	97.9		1345	2754
9	PCB-77		11340941	5019231	6321710	0.79	NO	22.09	1.00	22.06	22.13	390.49119	97.6		1345	2754
10	PCB-104		11138737	6805295	4333442	1.57	NO	17.51	1.00	17.48	17.55	392.88352	98.2		1146	1188
11	PCB-123		9725920	5959708	3766213	1.58	NO	23.10	1.00	23.07	23.13	388.23807	97.1		3751	3217
12	PCB-118		10339535	6353374	3986161	1.59	NO	23.27	1.00	23.23	23.30	385.79532	96.4		3751	3217
13	PCB-114		10089835	6200760	3889076	1.59	NO	23.57	1.00	23.54	23.60	389.25895	97.3		3751	3217
14	PCB-105		10064921	6176230	3888691	1.59	NO	23.92	1.00	23.89	23.95	393.70365	98.4		3751	3217
15	PCB-126		9944467	6111493	3832975	1.59	NO	25.50	1.00	25.47	25.54	391.47077	97.9		3751	3217
16	PCB-155		10952404	6104851	4847553	1.26	NO	20.52	1.00	20.49	20.56	390.82054	97.7		1309	889
17	PCB-167		10569334	5876080	4693254	1.25	NO	26.42	1.00	26.39	26.46	392.06349	98.0		3401	3868
18	PCB-156/157		20899745	11590773	9308972	1.25	NO	27.04	1.00	27.00	27.07	774.62166	96.8		3401	3868
19	PCB-169		10392909	5778701	4614208	1.25	NO	28.69	1.00	28.66	28.73	389.62319	97.4		3401	3868
20	PCB-188		9664811	4887575	4777236	1.02	NO	23.52	1.00	23.49	23.56	391.58857	97.9		1881	1698
21	PCB-189		9162061	4664296	4497765	1.04	NO	29.99	1.00	29.95	30.02	395.38938	98.8		3231	3386
22	PCB-202		8515261	3999703	4515558	0.89	NO	26.30	1.00	26.27	26.33	392.58462	98.1		986	978
23	PCB-205		7269000	3399775	3869226	0.88	NO	31.37	1.00	31.33	31.40	392.41078	98.1		3541	2421
24	PCB-208		7255412	3224091	4031321	0.80	NO	29.72	1.00	29.69	29.75	390.56676	97.6		2020	3949
25	PCB-206		4932226	2189151	2743076	0.80	NO	32.45	1.00	32.42	32.49	392.76477	98.2		2020	3949
26	PCB-209		6569025	3559493	3009532	1.18	NO	33.58	1.00	33.55	33.62	396.49785	99.1		407	362
27	13C-PCB-31		2803163	1448363	1354799	1.07	NO	15.78	0.87	15.75	15.82	97.37019	97.4		24636	6720
28	13C-PCB-95		1835984	1118609	717375	1.56	NO	19.11	1.09	19.07	19.14	100.17590	100.2		2845	994
29	13C-PCB-153		1909297	1079176	830121	1.30	NO	24.20	1.18	24.17	24.23	99.46306	99.5		1943	1758
30	13C-PCB-28		3018109	1550478	1467631	1.06	NO	15.96	0.94	15.92	15.99	101.90362	101.9		24636	6720
31	13C-PCB-111		1928681	1181072	747609	1.58	NO	22.02	1.07	21.99	22.05	100.73297	100.7		2845	994
32	13C-PCB-178		1538448	784704	753743	1.04	NO	25.08	1.01	25.05	25.11	100.66375	100.7		1724	896
33	13C-PCB-1		4021363	3005521	1015842	2.96	NO	8.88	0.75	8.85	8.92	104.68490	104.7		1874	14866
34	13C-PCB-3		3816153	2838346	977807	2.90	NO	10.40	0.88	10.36	10.43	105.08990	105.1		1874	14866
35	13C-PCB-4		2463844	1499638	964207	1.56	NO	10.58	0.89	10.55	10.61	103.51043	103.5		9288	3293
36	13C-PCB-15		3395549	2067425	1328123	1.56	NO	14.24	1.20	14.21	14.27	105.14138	105.1		15417	3875
37	13C-PCB-19		1616836	826083	790753	1.04	NO	12.57	1.06	12.54	12.60	104.45472	104.5		15023	7539

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221020A-PCB-ICAL.qld

Last Altered: Friday, October 21, 2022 09:44:03 Eastern Daylight Time
Printed: Tuesday, November 15, 2022 13:55:07 Eastern Standard Time

Name: 5-221020A06, Date: 20-Oct-2022, Time: 21:02:27, ID: H5-22-CS4-005, Description: 1668A-CS4-023, Vial: Tray1:9

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
38	13C-PCB-37		2766794	1424688	1342106	1.06	NO	18.19	1.07	18.16	18.22	104.17603	104.2		24636	6720
39	13C-PCB-54		2549948	1125383	1424564	0.79	NO	14.43	0.85	14.40	14.47	106.05206	106.1		3346	2074
40	13C-PCB-81		2383307	1045504	1337803	0.78	NO	21.78	1.06	21.75	21.81	103.45341	103.5		2719	2103
41	13C-PCB-77		2406078	1056874	1349204	0.78	NO	22.08	1.07	22.04	22.11	103.66070	103.7		2719	2103
42	13C-PCB-104		2288572	1397048	891524	1.57	NO	17.50	1.03	17.47	17.54	105.52582	105.5		808	544
43	13C-PCB-123		2170406	1328720	841686	1.58	NO	23.09	1.12	23.05	23.12	101.99315	102.0		3127	1859
44	13C-PCB-118		1984347	1220520	763827	1.60	NO	23.26	1.13	23.22	23.29	102.18281	102.2		3127	1859
45	13C-PCB-114		2220011	1368574	851437	1.61	NO	23.56	0.95	23.52	23.59	102.58962	102.6		3127	1859
46	13C-PCB-105		2061679	1269421	792258	1.60	NO	23.91	0.96	23.88	23.94	101.07495	101.1		3127	1859
47	13C-PCB-126		2089273	1281726	807547	1.59	NO	25.49	1.02	25.46	25.52	99.64026	99.6		3127	1859
48	13C-PCB-155		2404061	1334574	1069486	1.25	NO	20.50	0.99	20.47	20.54	103.71728	103.7		946	744
49	13C-PCB-167		2107770	1187561	920209	1.29	NO	26.41	1.06	26.38	26.44	101.96192	102.0		1943	1758
50	13C-PCB-156/157		4121073	2326922	1794151	1.30	NO	27.03	1.09	26.99	27.06	204.39909	102.2		1943	1758
51	13C-PCB-169		2130958	1202706	928252	1.30	NO	28.68	1.15	28.65	28.72	102.54492	102.5		1943	1758
52	13C-PCB-188		2292505	1169979	1122525	1.04	NO	23.51	0.95	23.48	23.54	105.60547	105.6		1724	896
53	13C-PCB-189		2201889	1139549	1062341	1.07	NO	29.97	0.96	29.94	30.01	101.79455	101.8		3614	2246
54	13C-PCB-202		1897283	899857	997425	0.90	NO	26.29	1.06	26.26	26.32	102.03828	102.0		608	752
55	13C-PCB-205		1942160	915387	1026774	0.89	NO	31.35	1.01	31.32	31.39	104.67712	104.7		2084	2596
56	13C-PCB-208		1616604	711089	905515	0.79	NO	29.71	0.96	29.67	29.74	104.34441	104.3		1110	1369
57	13C-PCB-206		1098255	483952	614303	0.79	NO	32.43	1.04	32.39	32.46	103.50838	103.5		1110	1369
58	13C-PCB-209		1693332	922971	770361	1.20	NO	33.57	1.08	33.53	33.60	102.20421	102.2		323	267
59	13C-PCB-9		3621128	2209863	1411266	1.57	NO	11.84	0.48	11.81	11.87	110.59918	110.6		9288	3293
60	13C-PCB-52		1736909	770042	966867	0.80	NO	16.96	0.68	16.92	16.99	109.03162	109.0		2809	1627
61	13C-PCB-101		1544223	940445	603778	1.56	NO	20.63	0.83	20.60	20.67	107.47407	107.5		2845	994
62	13C-PCB-138		1630180	915642	714538	1.28	NO	24.88	0.00	24.84	24.91	104.63346	104.6		1943	1758
63	13C-PCB-194		1443534	678728	764806	0.89	NO	31.09	1.25	31.05	31.12	101.87691	101.9		2084	2596
64	Total MoCB-F1	5		26775279								379565.70292			1922	
65	Total DiCB-F1	3		5891273								539195.09829			1445	
66	Total DiCB-F2	3		9715186								41248.47297			1648	
67	Total TrCB-F1	1		4191783								398.82783			1317	
68	Total TrCB-F3	7		20334753								22613682.74...			3413	
69	Total TeCB-F2	1		4959774								396.02435			1096	
70	Total TeCB-F4	10		10313669								239366.34774			1345	
71	Total PeCB-F3	1		6805295								392.88352			1146	
72	Total PeCB-F5	17		32081813								1665549.928...			3751	
73	Total HxCB-F4	5		6110751								9528.98173			1309	
74	Total HxCB-F5	20		24934870								2375908.630...			3401	

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221020A-PCB-ICAL.qld

Last Altered: Friday, October 21, 2022 09:44:03 Eastern Daylight Time
Printed: Tuesday, November 15, 2022 13:55:07 Eastern Standard Time

Name: 5-221020A06, Date: 20-Oct-2022, Time: 21:02:27, ID: H5-22-CS4-005, Description: 1668A-CS4-023, Vial: Tray1:9

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
75	Total HpCB-F5	16		19570802								26952340.31...			1881	
76	Total HpCB-F6	5		5163254								891560.96419			3231	
77	Total OcCB-F5	7		4040193								76189.55896			986	
78	Total OcCB-F6	6		3935889								1194341.527...			3541	
79	Total NoCB-F6	4		5418801								11464.09728			2020	
80	Total DeCB-F7	1		3559493								396.49785			407	
81	Total 13C-MoCB-F1	4		5876324								45178.18570			1874	
82	Total 13C-DiCB-F1	4		3722721								215.43276			9288	
83	Total 13C-DiCB-F2	3		3981179								3514988.916...			15417	
84	Total 13C-TrCB-F1	2		844632								47443.28511			15023	
85	Total 13C-TrCB-F3	6		4457091								36888.13483			24636	
86	Total 13C-TeCB-F2	1		1125383								106.05206			3346	
87	Total 13C-TeCB-F3	5		805133								113.88737			2809	
88	Total 13C-TeCB-F4	10		2155637								71812.90447			2719	
89	Total 13C-PeCB-F3	2		1397595								652.90831			808	
90	Total 13C-PeCB-F4	8		3261314								315.89299			2845	
91	Total 13C-PeCB-F5	13		6742026								325795.35296			3127	
92	Total 13C-HxCB-F4	2		1341267								7870.83003			946	
93	Total 13C-HxCB-F5	11		6807339								664.20648			1943	
94	Total 13C-HpCB-F5	9		2009319								94073.69976			1724	
95	Total 13C-HpCB-F6	5		1306638								233870.96563			3614	
96	Total 13C-OcCB-F5	6		904655								9005.13773			608	
97	Total 13C-OcCB-F6	5		1703053								239.01431			2084	
98	Total 13C-NoCB-F6	6		1196919								4131.13461			1110	
99	Total 13C-DeCB-F7	1		922971								102.20421			323	
100	Lockmass F1			0											121436	
101	Lockmass F2			0											107060	
102	Lockmass F3			0											142596	
103	Lockmass F4			0											99246	
104	Lockmass F5			0											51267	
105	Lockmass F6			0											38469	
106	Lockmass F7			0											10645	

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221020A-PCB-ICAL.qld

Last Altered: Friday, October 21, 2022 09:44:03 Eastern Daylight Time
Printed: Tuesday, November 15, 2022 13:55:07 Eastern Standard Time

Name: 5-221020A05, Date: 20-Oct-2022, Time: 20:20:13, ID: H5-22-CS5-005, Description: 1668A-CS5-023, Vial: Tray1:8

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
1	PCB-1				20818774	0.00	YES								2600	3294
2	PCB-3				20995916	0.00	YES								2600	3294
3	PCB-4		46913980	28416930	18497050	1.54	NO	10.58	1.00	10.55	10.61	2007.77263	100.4		1202	3558
4	PCB-15		81069376	48102748	32966628	1.46	NO	14.25	1.00	14.22	14.28	1920.62815	96.0		3590	3243
5	PCB-19		40701904	21093532	19608372	1.08	NO	12.58	1.00	12.55	12.62	2029.67702	101.5		1061	726
6	PCB-37		72048268	36913068	35135200	1.05	NO	18.20	1.00	18.17	18.23	1959.74534	98.0		4542	6200
7	PCB-54		56648380	24845278	31803102	0.78	NO	14.44	1.00	14.41	14.48	2009.12830	100.5		1049	1778
8	PCB-81		65408580	28986152	36422428	0.80	NO	21.79	1.00	21.76	21.82	1977.50966	98.9		2119	3194
9	PCB-77		64125636	28449584	35676052	0.80	NO	22.09	1.00	22.06	22.13	1977.65963	98.9		2119	3194
10	PCB-104		59037682	36145932	22891750	1.58	NO	17.51	1.00	17.48	17.55	1989.16596	99.5		1984	1957
11	PCB-123		55000916	33751688	21249228	1.59	NO	23.10	1.00	23.07	23.13	1980.57803	99.0		6283	7751
12	PCB-118		58765742	36130368	22635374	1.60	NO	23.27	1.00	23.23	23.30	1955.29465	97.8		6283	7751
13	PCB-114		57417738	35273352	22144386	1.59	NO	23.57	1.00	23.54	23.60	1967.96145	98.4		6283	7751
14	PCB-105		56760588	34776068	21984520	1.58	NO	23.92	1.00	23.89	23.95	1971.52639	98.6		6283	7751
15	PCB-126		56906112	34969652	21936460	1.59	NO	25.50	1.00	25.47	25.54	1961.20994	98.1		6283	7751
16	PCB-155		59129374	33024230	26105144	1.26	NO	20.52	1.00	20.49	20.56	1987.75359	99.4		1301	903
17	PCB-167		58908380	32741984	26166396	1.25	NO	26.42	1.00	26.39	26.46	1975.79193	98.8		9258	5135
18	PCB-156/157		116729900	64819092	51910808	1.25	NO	27.04	1.00	27.00	27.07	3890.98604	97.3		9258	5135
19	PCB-169		57454768	31946670	25508098	1.25	NO	28.69	1.00	28.66	28.73	1968.21527	98.4		9258	5135
20	PCB-188		53060046	26860584	26199462	1.03	NO	23.52	1.00	23.49	23.56	1992.16276	99.6		3035	2443
21	PCB-189		48988934	24984410	24004524	1.04	NO	29.99	1.00	29.95	30.02	1980.84466	99.0		8858	5174
22	PCB-202		47255102	22196222	25058880	0.89	NO	26.30	1.00	26.27	26.33	1985.75817	99.3		1741	1707
23	PCB-205		38654452	17980960	20673492	0.87	NO	31.38	1.00	31.35	31.41	1974.49994	98.7		3081	7920
24	PCB-208		38701228	17182456	21518772	0.80	NO	29.72	1.00	29.69	29.75	1971.86461	98.6		3431	6743
25	PCB-206		26233813	11672863	14560950	0.80	NO	32.45	1.00	32.42	32.49	1972.07534	98.6		3431	6743
26	PCB-209		34771237	18863966	15907271	1.19	NO	33.58	1.00	33.55	33.62	1974.10826	98.7		420	393
27	13C-PCB-31		2898884	1497568	1401316	1.07	NO	15.79	0.87	15.76	15.82	94.15351	94.2		16965	8762
28	13C-PCB-95		1883695	1152989	730706	1.58	NO	19.11	1.09	19.07	19.14	93.47277	93.5		1597	2081
29	13C-PCB-153		2032283	1147667	884616	1.30	NO	24.20	1.18	24.17	24.23	96.92875	96.9		1410	1849
30	13C-PCB-28		3142245	1616601	1525644	1.06	NO	15.96	0.94	15.92	15.99	100.02519	100.0		16965	8762
31	13C-PCB-111		2053867	1248981	804886	1.55	NO	22.03	1.07	22.00	22.06	100.67204	100.7		1597	2081
32	13C-PCB-178		1652858	843098	809760	1.04	NO	25.08	1.01	25.05	25.11	98.06334	98.1		1726	1189
33	13C-PCB-1		4046964	3014930	1032034	2.92	NO	8.88	0.75	8.85	8.92	102.16372	102.2		1771	12228
34	13C-PCB-3		3945964	2929957	1016007	2.88	NO	10.40	0.88	10.36	10.43	105.37677	105.4		1771	12228
35	13C-PCB-4		2493738	1523670	970068	1.57	NO	10.58	0.89	10.55	10.61	101.59638	101.6		11678	3087
36	13C-PCB-15		3599352	2194660	1404691	1.56	NO	14.24	1.20	14.21	14.27	108.07981	108.1		15728	3871
37	13C-PCB-19		1598227	817409	780818	1.05	NO	12.57	1.06	12.54	12.60	100.12837	100.1		16472	7995

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221020A-PCB-ICAL.qld

Last Altered: Friday, October 21, 2022 09:44:03 Eastern Daylight Time
Printed: Tuesday, November 15, 2022 13:55:07 Eastern Standard Time

Name: 5-221020A05, Date: 20-Oct-2022, Time: 20:20:13, ID: H5-22-CS5-005, Description: 1668A-CS5-023, Vial: Tray1:8

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
38	13C-PCB-37		3089971	1589067	1500904	1.06	NO	18.19	1.07	18.16	18.22	109.68825	109.7		16965	8762
39	13C-PCB-54		2518770	1115011	1403759	0.79	NO	14.43	0.85	14.40	14.47	98.76227	98.8		3036	1830
40	13C-PCB-81		2648900	1161204	1487696	0.78	NO	21.78	1.06	21.75	21.81	107.90855	107.9		3166	2257
41	13C-PCB-77		2686284	1180531	1505753	0.78	NO	22.08	1.07	22.04	22.11	108.61300	108.6		3166	2257
42	13C-PCB-104		2395801	1464306	931495	1.57	NO	17.50	1.03	17.47	17.54	103.67410	103.7		514	603
43	13C-PCB-123		2405949	1476644	929305	1.59	NO	23.09	1.12	23.05	23.12	106.10645	106.1		3034	2272
44	13C-PCB-118		2225285	1364614	860671	1.59	NO	23.26	1.13	23.22	23.29	107.54028	107.5		3034	2272
45	13C-PCB-114		2498844	1538155	960689	1.60	NO	23.56	0.95	23.52	23.59	108.37093	108.4		3034	2272
46	13C-PCB-105		2321798	1429264	892533	1.60	NO	23.91	0.96	23.88	23.94	106.82485	106.8		3034	2272
47	13C-PCB-126		2386425	1468772	917653	1.60	NO	25.49	1.02	25.46	25.52	106.81023	106.8		3034	2272
48	13C-PCB-155		2551844	1418148	1133696	1.25	NO	20.51	0.99	20.48	20.55	103.32018	103.3		543	849
49	13C-PCB-167		2331137	1312927	1018210	1.29	NO	26.41	1.06	26.38	26.44	102.25004	102.3		1410	1849
50	13C-PCB-156/157		4582278	2591941	1990337	1.30	NO	27.03	1.09	26.99	27.06	206.07764	103.0		1410	1849
51	13C-PCB-169		2332040	1314579	1017461	1.29	NO	28.68	1.15	28.65	28.72	101.75509	101.8		1410	1849
52	13C-PCB-188		2473943	1266864	1207079	1.05	NO	23.51	0.95	23.48	23.54	103.33482	103.3		1726	1189
53	13C-PCB-189		2350038	1211271	1138767	1.06	NO	29.97	0.96	29.94	30.01	98.51100	98.5		2571	2142
54	13C-PCB-202		2081564	996751	1084813	0.92	NO	26.29	1.06	26.26	26.32	101.50832	101.5		1268	837
55	13C-PCB-205		2052550	969919	1082631	0.90	NO	31.35	1.01	31.32	31.39	100.32173	100.3		2791	1808
56	13C-PCB-208		1707986	751287	956699	0.79	NO	29.71	0.96	29.67	29.74	99.97344	100.0		1457	1708
57	13C-PCB-206		1163405	512094	651311	0.79	NO	32.43	1.04	32.39	32.46	99.43461	99.4		1457	1708
58	13C-PCB-209		1800244	980559	819685	1.20	NO	33.57	1.08	33.53	33.60	98.53545	98.5		255	212
59	13C-PCB-9		3734112	2267515	1466597	1.55	NO	11.84	0.48	11.81	11.87	114.05001	114.1		11678	3087
60	13C-PCB-52		1842309	817360	1024949	0.80	NO	16.96	0.68	16.92	16.99	115.64791	115.6		4223	1409
61	13C-PCB-101		1645449	1001699	643751	1.56	NO	20.63	0.83	20.60	20.67	114.51920	114.5		1597	2081
62	13C-PCB-138		1797855	1015109	782747	1.30	NO	24.88	0.00	24.84	24.91	115.39575	115.4		1410	1849
63	13C-PCB-194		1591815	751297	840518	0.89	NO	31.07	1.25	31.04	31.11	112.34175	112.3		2791	1808
64	Total MoCB-F1			0											2600	
65	Total DiCB-F1	6		30037129								2884692.751...			1202	
66	Total DiCB-F2	4		48283212								234909.66188			3590	
67	Total TrCB-F1	4		21099804								11709.89678			1061	
68	Total TrCB-F3	12		110827786								121527419.8...			4542	
69	Total TeCB-F2	2		24847840								6433.49355			1049	
70	Total TeCB-F4	15		58213726								1300246.514...			2119	
71	Total PeCB-F3	4		36152904								13195.73440			1984	
72	Total PeCB-F5	18		180784863								7651082.603...			6283	
73	Total HxCB-F4	8		33060407								58702.84827			1301	
74	Total HxCB-F5	27		138035057								12050356.80...			9258	

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221020A-PCB-ICAL.qld

Last Altered: Friday, October 21, 2022 09:44:03 Eastern Daylight Time
Printed: Tuesday, November 15, 2022 13:55:07 Eastern Standard Time

Name: 5-221020A05, Date: 20-Oct-2022, Time: 20:20:13, ID: H5-22-CS5-005, Description: 1668A-CS5-023, Vial: Tray1:8

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
75	Total HpCB-F5	23		108300574								149369962.7...			3035	
76	Total HpCB-F6	8		27419278								4300819.206...			8858	
77	Total OcCB-F5	18		22433264								439923.02041			1741	
78	Total OcCB-F6	11		20519505								5644905.018...			3081	
79	Total NoCB-F6	6		28878570								50292.82019			3431	
80	Total DeCB-F7	1		18863966								1974.10826			420	
81	Total 13C-MoCB-F1	5		5980822								54241.09027			1771	
82	Total 13C-DiCB-F1	3		3802903								216.80660			11678	
83	Total 13C-DiCB-F2	3		4132488								3557089.735...			15728	
84	Total 13C-TrCB-F1	2		836347								47703.16215			16472	
85	Total 13C-TrCB-F3	10		4770203								72660.58767			16965	
86	Total 13C-TeCB-F2	2		1116931								3164.27519			3036	
87	Total 13C-TeCB-F3	8		859857								121.51513			4223	
88	Total 13C-TeCB-F4	9		2396657								74072.44220			3166	
89	Total 13C-PeCB-F3	5		1470886								9243.44286			514	
90	Total 13C-PeCB-F4	11		3427100								316.96473			1597	
91	Total 13C-PeCB-F5	15		7536964								310340.73119			3034	
92	Total 13C-HxCB-F4	4		1427790								11657.39920			543	
93	Total 13C-HxCB-F5	18		7490725								682.30708			1410	
94	Total 13C-HpCB-F5	17		2185251								127840.16577			1726	
95	Total 13C-HpCB-F6	6		1376047								227407.59336			2571	
96	Total 13C-OcCB-F5	16		1013851								28776.99291			1268	
97	Total 13C-OcCB-F6	6		1824691								243.24432			2791	
98	Total 13C-NoCB-F6	5		1265698								5581.40319			1457	
99	Total 13C-DeCB-F7	1		980559								98.53545			255	
100	Lockmass F1			0											121130	
101	Lockmass F2			0											109619	
102	Lockmass F3			0											166982	
103	Lockmass F4			0											94772	
104	Lockmass F5			0											53516	
105	Lockmass F6			0											31075	
106	Lockmass F7			0											11993	

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221020A-PCB-ICAL.qld

Last Altered: Friday, October 21, 2022 09:44:03 Eastern Daylight Time
Printed: Tuesday, November 15, 2022 13:55:07 Eastern Standard Time

Name: 5-221020A07, Date: 20-Oct-2022, Time: 21:44:39, ID: H5-22-RS1-005, Description: 1668A-RS1-023, Vial: Tray1:10

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
1	PCB-1		2112206	1611526	500680	3.22	NO	8.88	1.00	8.85	8.92	49.98955	100.0		1144	1003
2	PCB-3		2041562	1558147	483416	3.22	NO	10.40	1.00	10.36	10.43	49.13680	98.3		1144	1003
3	PCB-4		1157008	698949	458060	1.53	NO	10.58	1.00	10.55	10.61	51.30813	102.6		903	2971
4	PCB-15		1905994	1163142	742852	1.57	NO	14.24	1.00	14.21	14.27	49.93719	99.9		1722	3731
5	PCB-19		1007201	521543	485658	1.07	NO	12.58	1.00	12.55	12.62	51.53187	103.1		1114	561
6	PCB-37		1606176	817075	789101	1.04	NO	18.19	1.00	18.16	18.22	50.95793	101.9		1107	1193
7	PCB-54		1401325	614135	787190	0.78	NO	14.43	1.00	14.40	14.47	50.75380	101.5		698	1350
8	PCB-81		1363402	601250	762152	0.79	NO	21.78	1.00	21.75	21.81	47.16145	94.3		1564	1625
9	PCB-77		1308269	576100	732169	0.79	NO	22.09	1.00	22.05	22.12	46.77332	93.5		1564	1625
10	PCB-104		1240076	760693	479384	1.59	NO	17.50	1.00	17.47	17.54	45.21718	90.4		961	765
11	PCB-123		1161690	711604	450086	1.58	NO	23.09	1.00	23.05	23.12	47.90126	95.8		2300	1462
12	PCB-118		1210536	738853	471684	1.57	NO	23.26	1.00	23.22	23.29	46.72310	93.4		2300	1462
13	PCB-114		1203966	738323	465643	1.59	NO	23.56	1.00	23.52	23.59	48.17312	96.3		2300	1462
14	PCB-105		1166815	714533	452281	1.58	NO	23.91	1.00	23.88	23.94	46.69396	93.4		2300	1462
15	PCB-126		1182844	728633	454211	1.60	NO	25.49	1.00	25.46	25.52	46.62876	93.3		2300	1462
16	PCB-155		1262399	703549	558850	1.26	NO	20.51	1.00	20.48	20.55	46.88092	93.8		979	707
17	PCB-167		1286081	712119	573962	1.24	NO	26.41	1.00	26.38	26.44	47.43218	94.9		1567	1385
18	PCB-156/157		2507444	1391943	1115501	1.25	NO	27.04	1.00	27.00	27.07	93.88653	93.9		1567	1385
19	PCB-169		1248484	692079	556404	1.24	NO	28.68	1.00	28.65	28.72	47.85067	95.7		1567	1385
20	PCB-188		1107795	562953	544841	1.03	NO	23.51	1.00	23.48	23.54	46.73150	93.5		684	831
21	PCB-189		1121715	570420	551295	1.03	NO	29.97	1.00	29.94	30.01	48.80747	97.6		1798	1504
22	PCB-202		1053773	496685	557089	0.89	NO	26.29	1.00	26.26	26.32	49.19706	98.4		608	862
23	PCB-205		842668	394235	448433	0.88	NO	31.37	1.00	31.33	31.40	46.24778	92.5		1081	1087
24	PCB-208		840156	372270	467886	0.80	NO	29.72	1.00	29.69	29.75	45.62420	91.2		1627	2097
25	PCB-206		560845	247634	313210	0.79	NO	32.44	1.00	32.41	32.47	45.33739	90.7		1627	2097
26	PCB-209		880529	476917	403612	1.18	NO	33.57	1.00	33.53	33.60	53.67271	107.3		227	280
27	13C-PCB-31		2804863	1447149	1357714	1.07	NO	15.78	0.87	15.75	15.82	101.52204	101.5		20238	8842
28	13C-PCB-95		1819152	1106751	712402	1.55	NO	19.10	1.09	19.06	19.13	102.69010	102.7		1108	1888
29	13C-PCB-153		1923136	1082461	840675	1.29	NO	24.19	1.18	24.15	24.22	101.93279	101.9		2959	2030
30	13C-PCB-28		3002048	1542059	1459989	1.06	NO	15.95	0.94	15.91	15.98	103.27694	103.3		20238	8842
31	13C-PCB-111		1923098	1172362	750737	1.56	NO	22.01	1.07	21.98	22.05	102.39590	102.4		1108	1888
32	13C-PCB-178		1561105	793662	767442	1.03	NO	25.07	1.01	25.04	25.10	102.31988	102.3		1845	1925
33	13C-PCB-1		3931725	2938592	993133	2.96	NO	8.87	0.75	8.84	8.90	104.36737	104.4		1586	11194
34	13C-PCB-3		3712703	2760002	952701	2.90	NO	10.40	0.88	10.36	10.43	104.25485	104.3		1586	11194
35	13C-PCB-4		2406652	1468344	938309	1.56	NO	10.56	0.89	10.53	10.60	103.09915	103.1		10492	2410
36	13C-PCB-15		3254678	1981693	1272985	1.56	NO	14.23	1.20	14.20	14.27	102.76439	102.8		10168	4651
37	13C-PCB-19		1557725	798279	759447	1.05	NO	12.57	1.06	12.54	12.60	102.61806	102.6		18163	9240

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221020A-PCB-ICAL.qld

Last Altered: Friday, October 21, 2022 09:44:03 Eastern Daylight Time
Printed: Tuesday, November 15, 2022 13:55:07 Eastern Standard Time

Name: 5-221020A07, Date: 20-Oct-2022, Time: 21:44:39, ID: H5-22-RS1-005, Description: 1668A-RS1-023, Vial: Tray1:10

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
38	13C-PCB-37		2649182	1360506	1288677	1.06	NO	18.18	1.07	18.15	18.21	101.63281	101.6		20238	8842
39	13C-PCB-54		2466487	1089025	1377462	0.79	NO	14.43	0.85	14.39	14.46	104.51960	104.5		2707	2539
40	13C-PCB-81		2315188	1012783	1302405	0.78	NO	21.77	1.06	21.74	21.80	102.45214	102.5		3311	2379
41	13C-PCB-77		2317237	1018759	1298479	0.78	NO	22.07	1.07	22.03	22.10	101.77589	101.8		3311	2379
42	13C-PCB-104		2213795	1358200	855595	1.59	NO	17.49	1.03	17.46	17.53	104.06422	104.1		680	847
43	13C-PCB-123		2101124	1292691	808433	1.60	NO	23.07	1.12	23.04	23.11	100.65876	100.7		2804	2430
44	13C-PCB-118		1918314	1179038	739276	1.59	NO	23.24	1.13	23.21	23.28	100.70471	100.7		2804	2430
45	13C-PCB-114		2140520	1320012	820508	1.61	NO	23.55	0.95	23.51	23.58	100.84104	100.8		2804	2430
46	13C-PCB-105		2015214	1240337	774877	1.60	NO	23.90	0.96	23.86	23.93	100.71953	100.7		2804	2430
47	13C-PCB-126		2086347	1287882	798464	1.61	NO	25.48	1.02	25.45	25.51	101.43693	101.4		2804	2430
48	13C-PCB-155		2310010	1286110	1023901	1.26	NO	20.49	0.99	20.46	20.53	101.59901	101.6		986	1160
49	13C-PCB-167		2119958	1195171	924787	1.29	NO	26.40	1.06	26.36	26.43	102.72585	102.7		2959	2030
50	13C-PCB-156/157		4079311	2301914	1777398	1.30	NO	27.03	1.09	26.99	27.06	202.67171	101.3		2959	2030
51	13C-PCB-169		2084383	1172850	911533	1.29	NO	28.67	1.15	28.64	28.70	100.47416	100.5		2959	2030
52	13C-PCB-188		2201894	1134179	1067715	1.06	NO	23.50	0.95	23.46	23.53	101.60387	101.6		1845	1925
53	13C-PCB-189		2183853	1125385	1058468	1.06	NO	29.96	0.96	29.92	29.99	101.13235	101.1		3586	2220
54	13C-PCB-202		1873593	890539	983054	0.91	NO	26.28	1.06	26.24	26.31	100.93552	100.9		957	1285
55	13C-PCB-205		1910368	900413	1009955	0.89	NO	31.34	1.01	31.31	31.37	103.38283	103.4		2554	2935
56	13C-PCB-208		1602513	701678	900835	0.78	NO	29.71	0.96	29.67	29.74	103.85609	103.9		1520	1389
57	13C-PCB-206		1081880	476442	605438	0.79	NO	32.41	1.04	32.38	32.45	102.38022	102.4		1520	1389
58	13C-PCB-209		1676765	912483	764281	1.19	NO	33.55	1.08	33.52	33.59	101.61632	101.6		284	192
59	13C-PCB-9		3551183	2162441	1388742	1.56	NO	11.83	0.48	11.79	11.86	108.46285	108.5		10492	2410
60	13C-PCB-52		1704693	756855	947838	0.80	NO	16.95	0.68	16.91	16.98	107.00928	107.0		2417	1814
61	13C-PCB-101		1514747	919559	595188	1.54	NO	20.62	0.83	20.59	20.66	105.42262	105.4		1108	1888
62	13C-PCB-138		1627414	912680	714734	1.28	NO	24.86	0.00	24.83	24.90	104.45590	104.5		2959	2030
63	13C-PCB-194		1437680	675752	761928	0.89	NO	31.07	1.25	31.04	31.11	101.46377	101.5		2554	2935
64	Total MoCB-F1	4		3206920								44342.02386			1144	
65	Total DiCB-F1	3		740608								72809.81507			903	
66	Total DiCB-F2	3		1178365								20664.60740			1722	
67	Total TrCB-F1	1		521543								51.53187			1114	
68	Total TrCB-F3	7		824272								11319.94916			1107	
69	Total TeCB-F2	1		614135								50.75380			698	
70	Total TeCB-F4	11		1193620								27040.94615			1564	
71	Total PeCB-F3	1		760693								45.21718			961	
72	Total PeCB-F5	10		3755419								163149.51929			2300	
73	Total HxCB-F4	2		703815								473.87776			979	
74	Total HxCB-F5	8		2825393								40258.90958			1567	

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221020A-PCB-ICAL.qld

Last Altered: Friday, October 21, 2022 09:44:03 Eastern Daylight Time
Printed: Tuesday, November 15, 2022 13:55:07 Eastern Standard Time

Name: 5-221020A07, Date: 20-Oct-2022, Time: 21:44:39, ID: H5-22-RS1-005, Description: 1668A-RS1-023, Vial: Tray1:10

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
75	Total HpCB-F5	10		599420								65434.09819			684	
76	Total HpCB-F6	4		627396								102199.60826			1798	
77	Total OcCB-F5	3		498055								2250.68906			608	
78	Total OcCB-F6	4		453142								133360.28962			1081	
79	Total NoCB-F6	2		619905								90.96159			1627	
80	Total DeCB-F7	1		476917								53.67271			227	
81	Total 13C-MoCB-F1	4		5736365								48933.52298			1586	
82	Total 13C-DiCB-F1	4		3655598								213.60397			10492	
83	Total 13C-DiCB-F2	4		3915180								3543832.828...			10168	
84	Total 13C-TrCB-F1	2		814928								44067.32250			18163	
85	Total 13C-TrCB-F3	7		4389930								44640.66754			20238	
86	Total 13C-TeCB-F2	1		1089025								104.51960			2707	
87	Total 13C-TeCB-F3	5		792995								111.99398			2417	
88	Total 13C-TeCB-F4	9		2084368								69354.92788			3311	
89	Total 13C-PeCB-F3	1		1358200								104.06422			680	
90	Total 13C-PeCB-F4	9		3219440								317.80436			1108	
91	Total 13C-PeCB-F5	14		6597009								334462.05928			2804	
92	Total 13C-HxCB-F4	2		1293168								7968.21990			986	
93	Total 13C-HxCB-F5	11		6755752								660.77006			2959	
94	Total 13C-HpCB-F5	10		1983554								94402.50910			1845	
95	Total 13C-HpCB-F6	7		1302517								244529.73815			3586	
96	Total 13C-OcCB-F5	5		894040								6731.21885			957	
97	Total 13C-OcCB-F6	10		1692624								239.34962			2554	
98	Total 13C-NoCB-F6	3		1178828								2039.84563			1520	
99	Total 13C-DeCB-F7	1		912483								101.61632			284	
100	Lockmass F1			0											105702	
101	Lockmass F2			0											103464	
102	Lockmass F3			0											134151	
103	Lockmass F4			0											95340	
104	Lockmass F5			0											57599	
105	Lockmass F6			0											38350	
106	Lockmass F7			0											11497	

Quantify Audit Report MassLynx V4.2 SCN1012

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221020A-PCB-ICAL.qld

Last Altered: Friday, October 21, 2022 09:44:03 Eastern Daylight Time
Printed: Tuesday, November 15, 2022 13:55:07 Eastern Standard Time

Date	Time	Event	Details	Comments
21-Oct-22	09:42:18	Process Extract		
21-Oct-22	09:42:19	Process Integrate		
21-Oct-22	09:42:19	Process Calibrate		
21-Oct-22	09:42:19	Process Quantify		
21-Oct-22	09:42:19	Dataset Created		
21-Oct-22	09:44:02	Peak deleted	Sample:5-221020A05, Compound:MoCB-F1, RT:12.597	
21-Oct-22	09:44:02	Peak deleted	Sample:5-221020A05, Compound:MoCB-F1, RT:12.078	
21-Oct-22	09:44:02	Peak deleted	Sample:5-221020A05, Compound:MoCB-F1, RT:11.587	
21-Oct-22	09:44:02	Peak deleted	Sample:5-221020A05, Compound:MoCB-F1, RT:10.592	
21-Oct-22	09:44:02	Peak deleted	Sample:5-221020A05, Compound:MoCB-F1, RT:10.410	
21-Oct-22	09:44:02	Peak deleted	Sample:5-221020A05, Compound:MoCB-F1, RT:10.284	
21-Oct-22	09:44:02	Peak deleted	Sample:5-221020A05, Compound:MoCB-F1, RT:10.088	
21-Oct-22	09:44:02	Peak deleted	Sample:5-221020A05, Compound:MoCB-F1, RT:8.882	
21-Oct-22	09:44:29	Dataset Saved	Saved to 'I:\Organics Instrument\HIGHRES GCMS Complete...	
21-Oct-22	10:01:15	Calibration Saved	Saved to 'C:\MassLynx\PCB.PRO\CurveDB\5-221020A-ICAL....	
21-Oct-22	10:02:35	Dataset Saved	Saved to 'I:\Organics Instrument\HIGHRES GCMS Complete...	

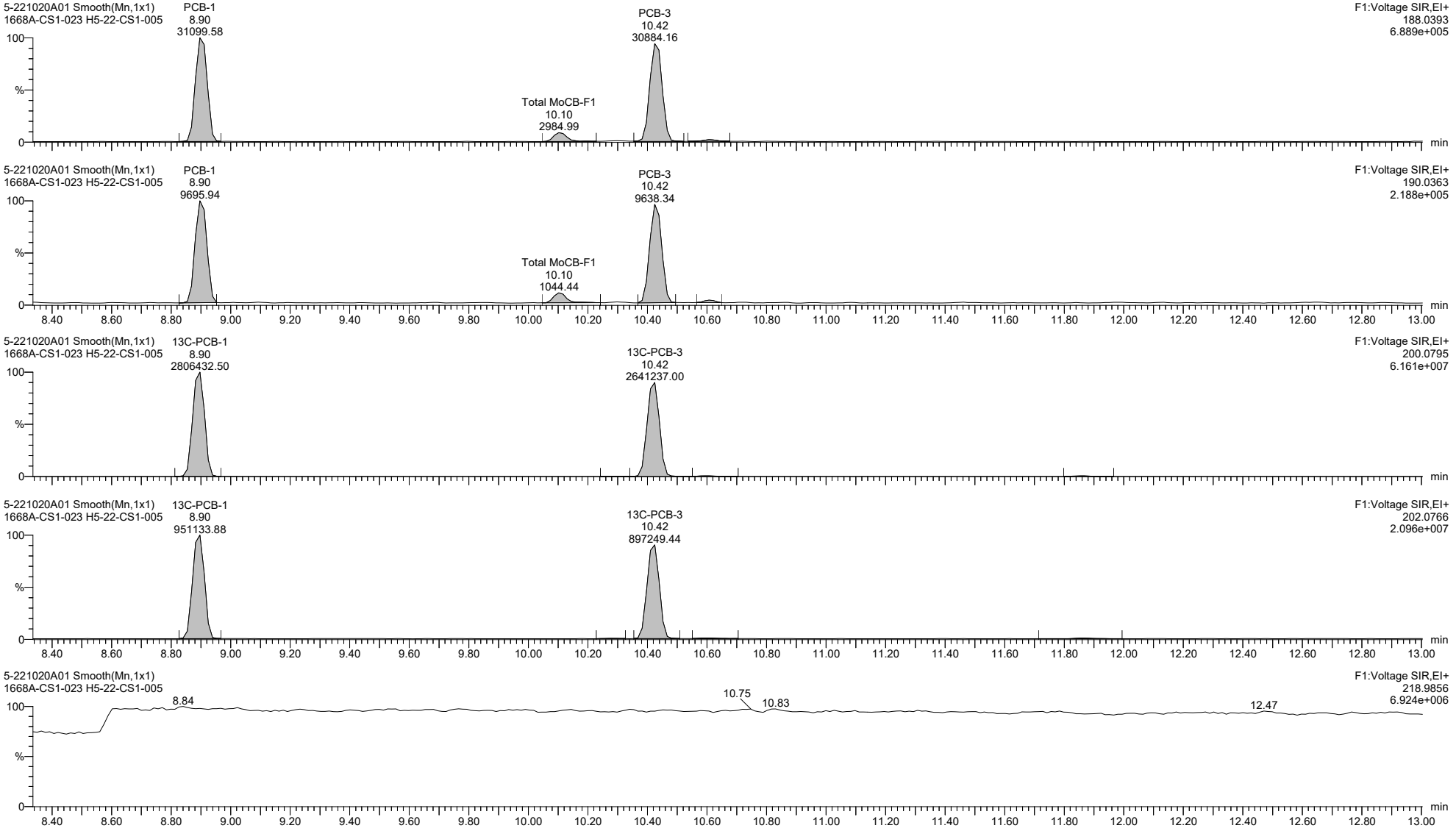
Quantify Sample Template Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221020A-PCB-ICAL.qld

Last Altered: Friday, October 21, 2022 09:44:03 Eastern Daylight Time
Printed: Tuesday, November 15, 2022 13:55:07 Eastern Standard Time

Method: C:\MassLynx\PCB.PRO\MethDB\1668_OCTYL_ICAL-0401.mdb 09 Jun 2022 14:25:01
Calibration: C:\MassLynx\PCB.PRO\CurveDB\5-221020A-ICAL.cdb 21 Oct 2022 10:44:03

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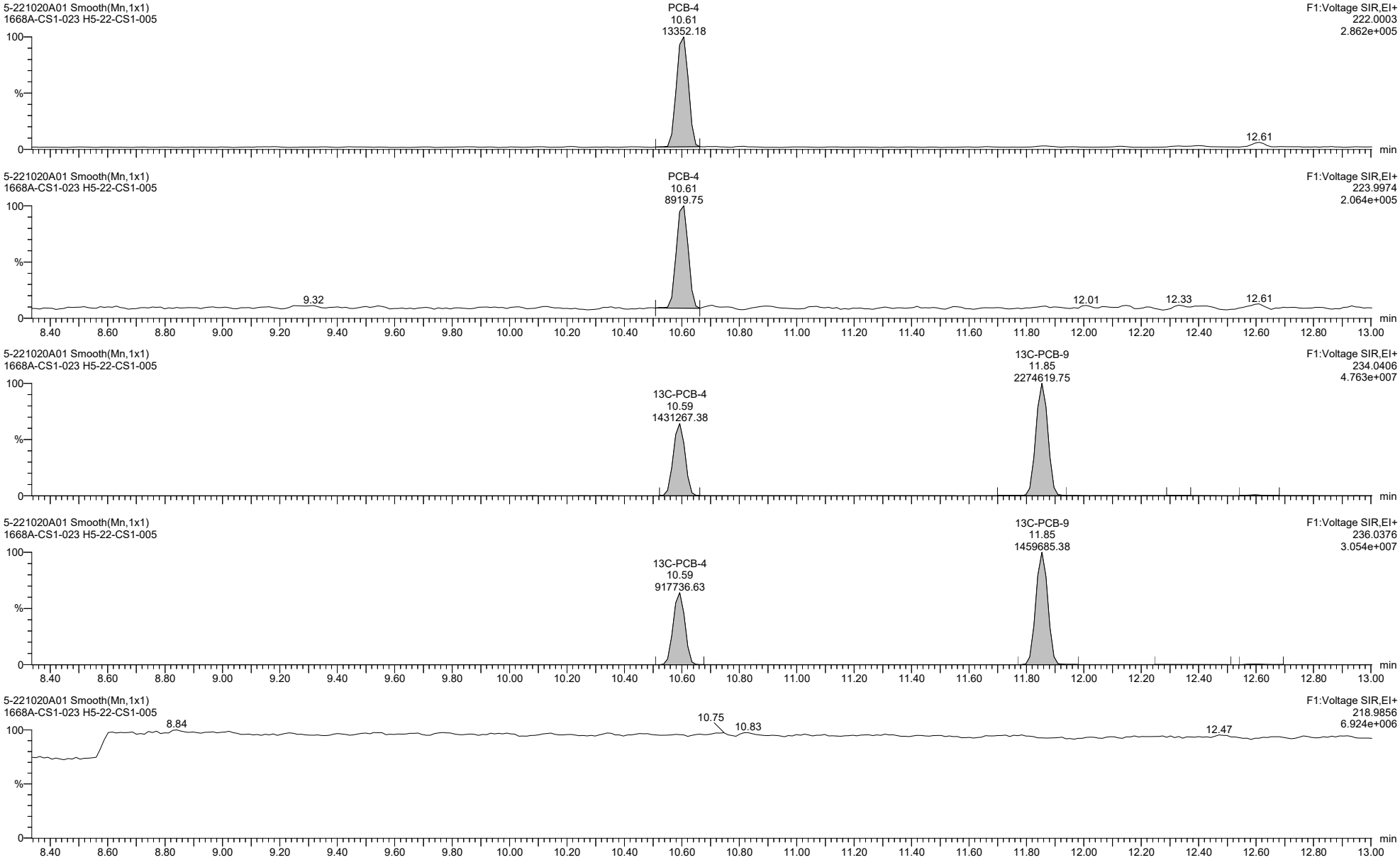


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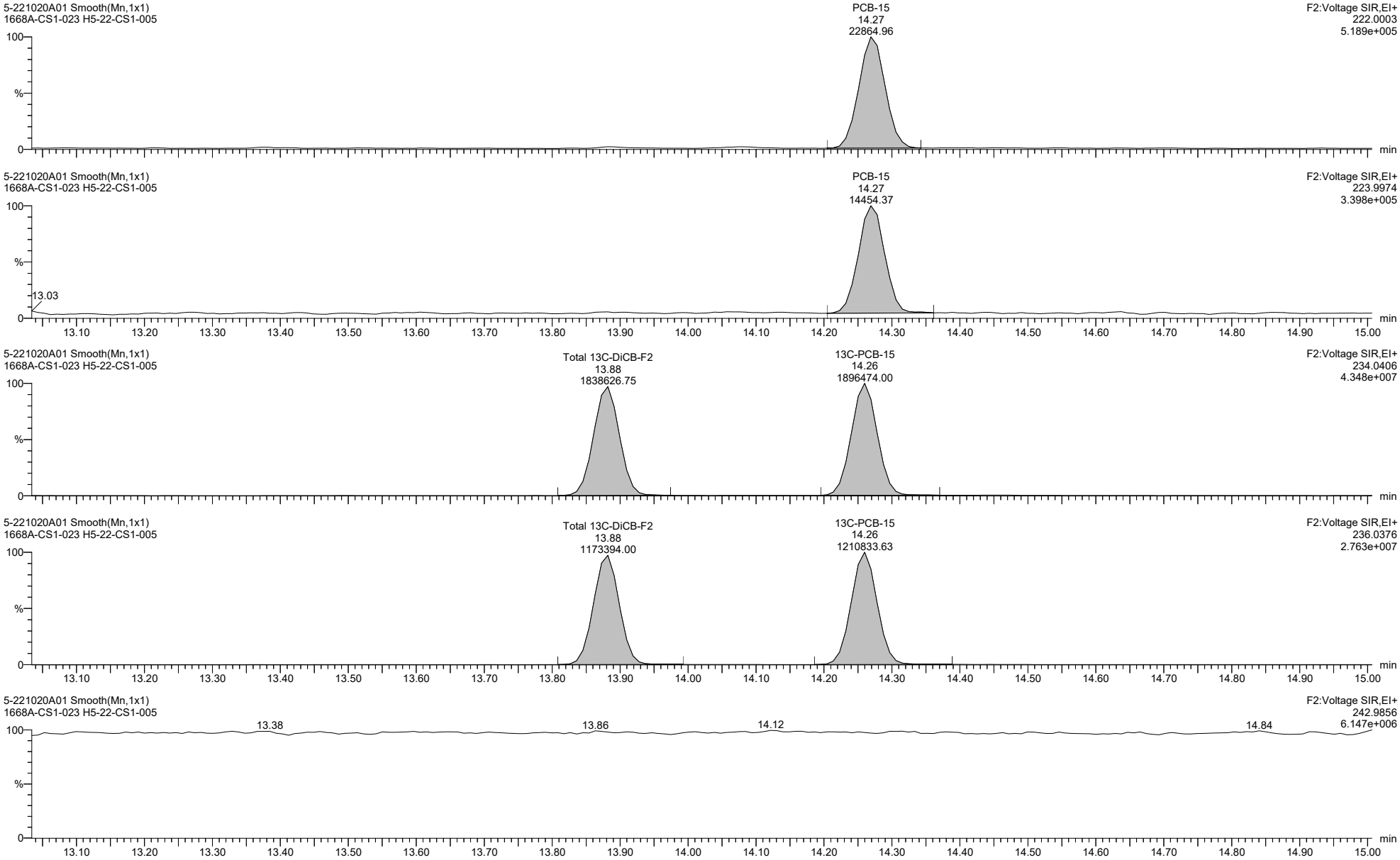
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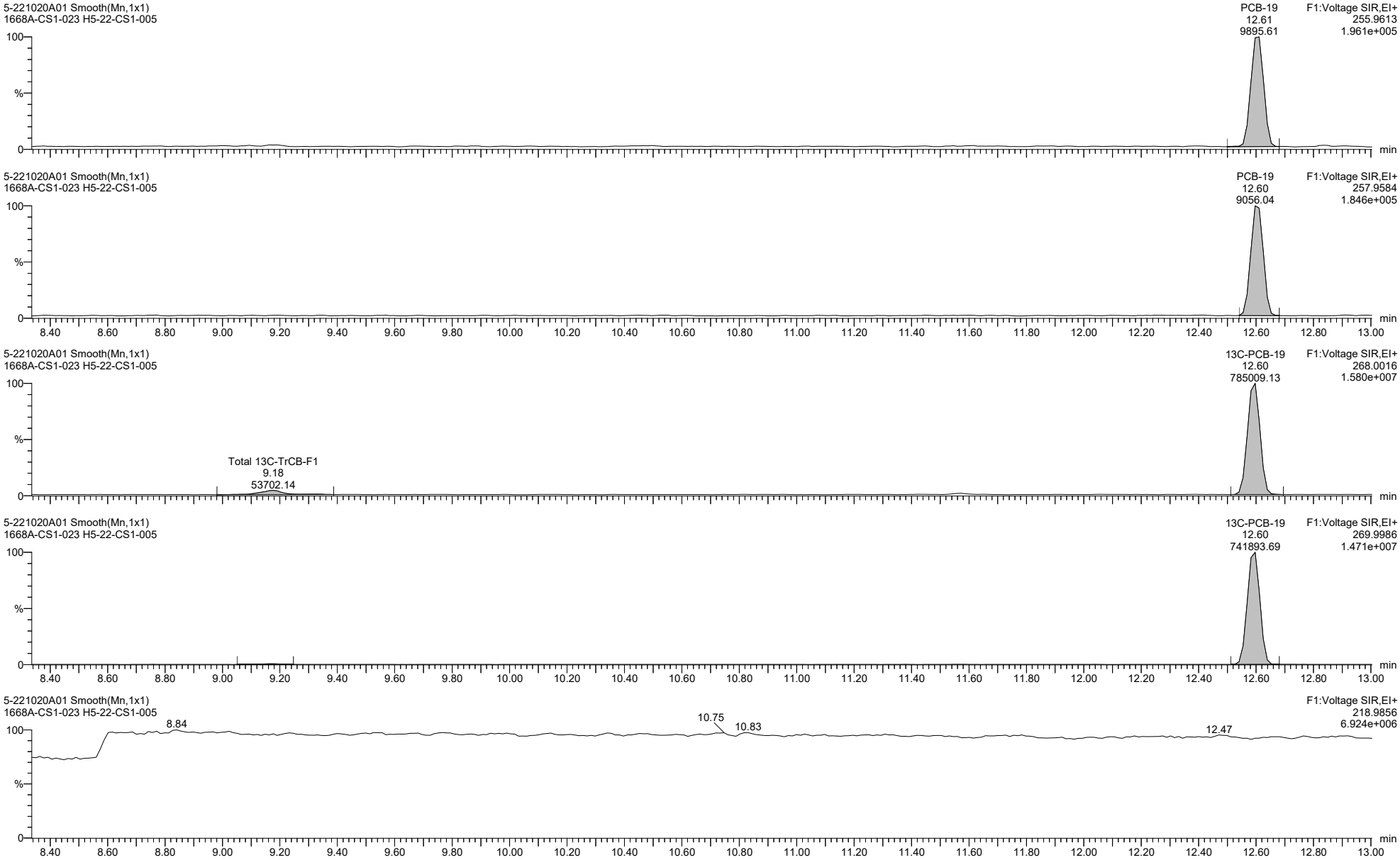
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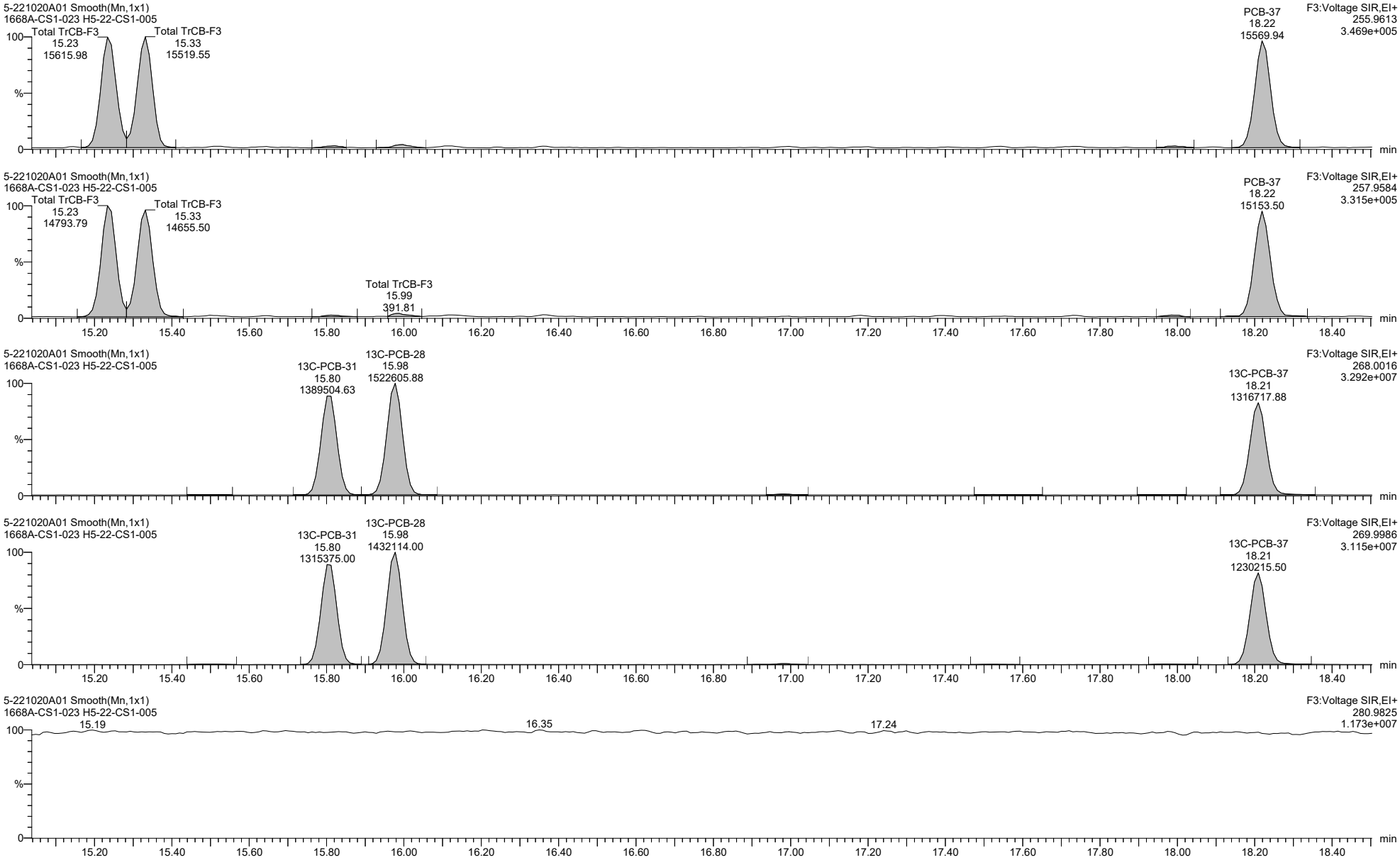


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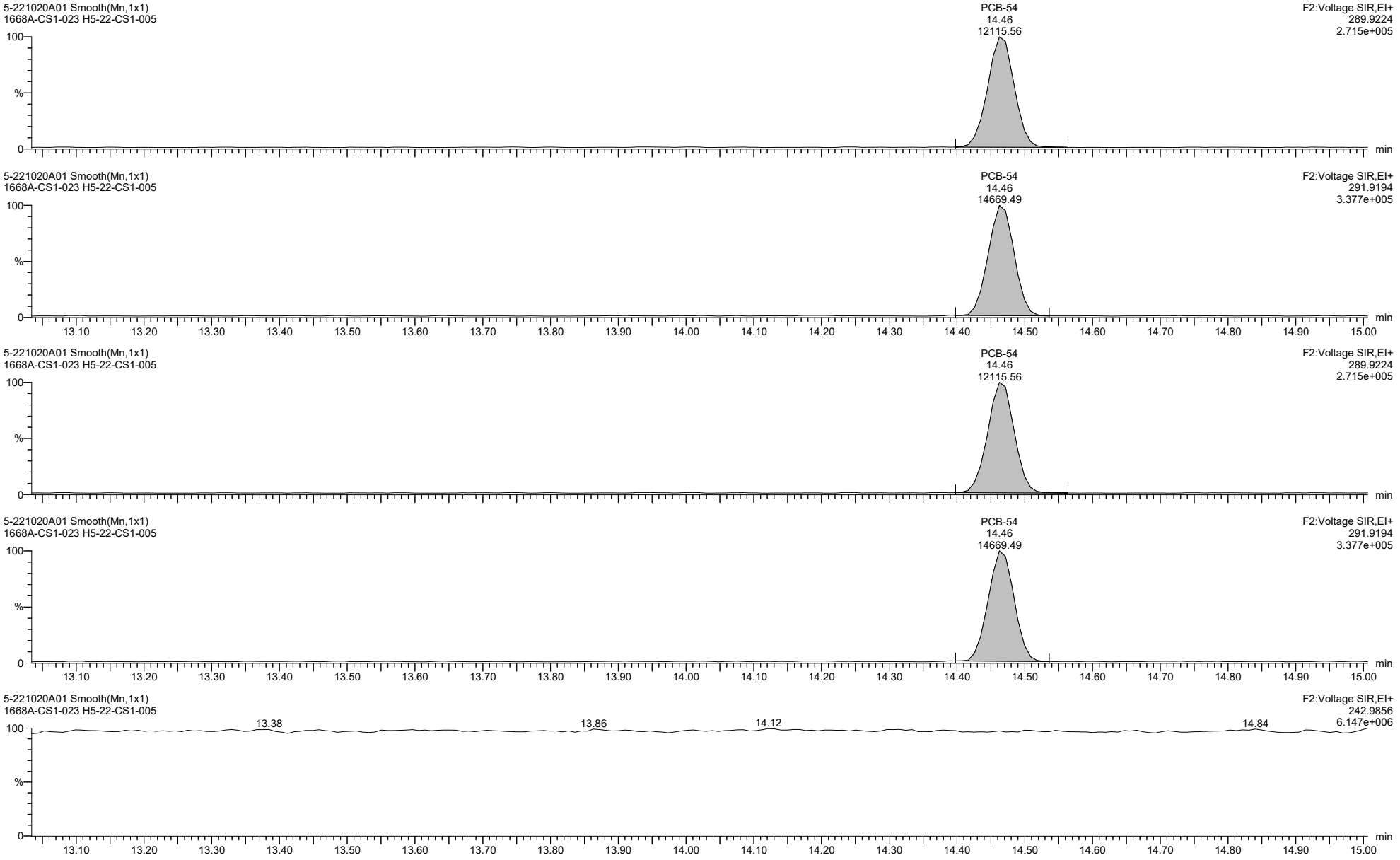
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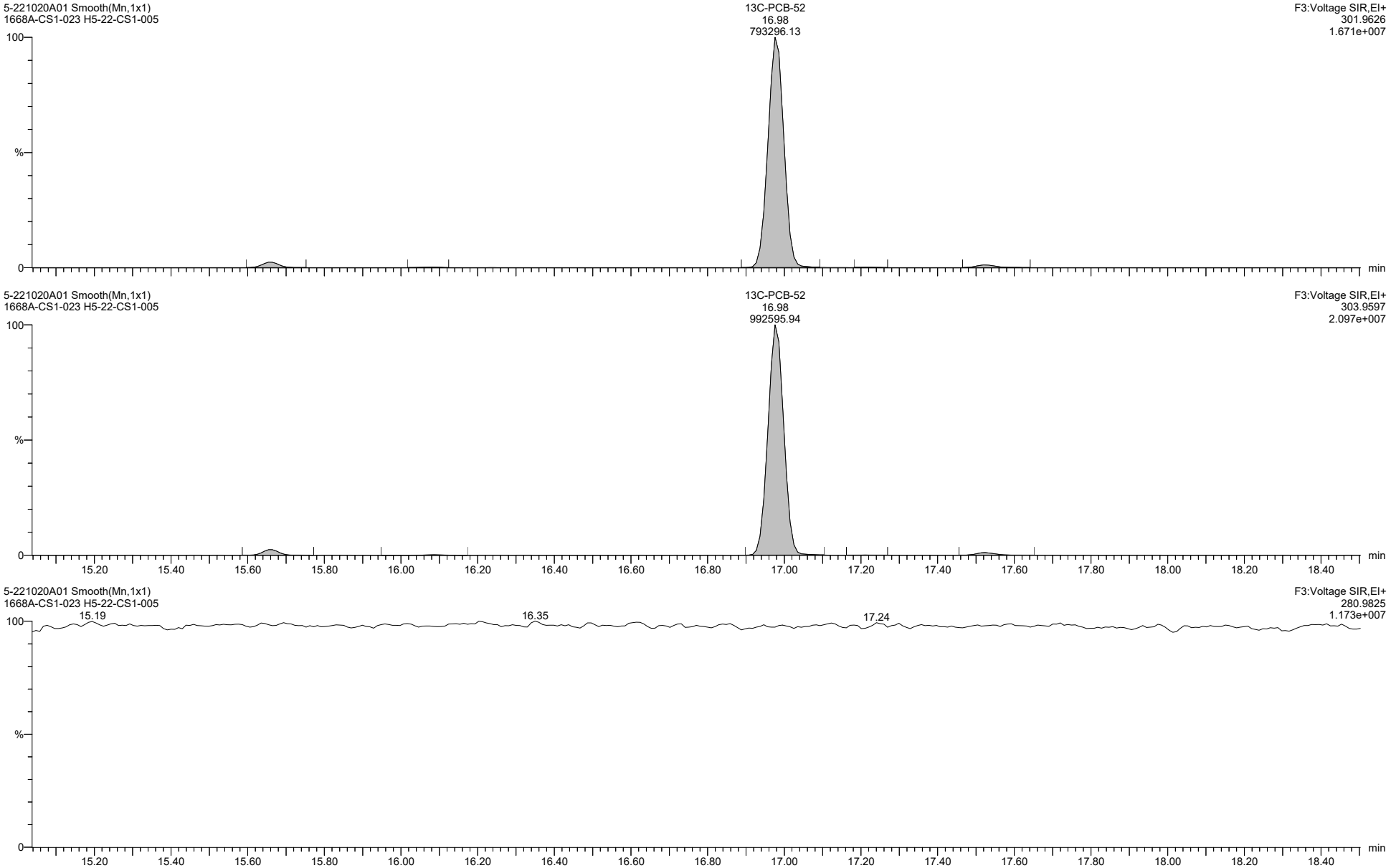
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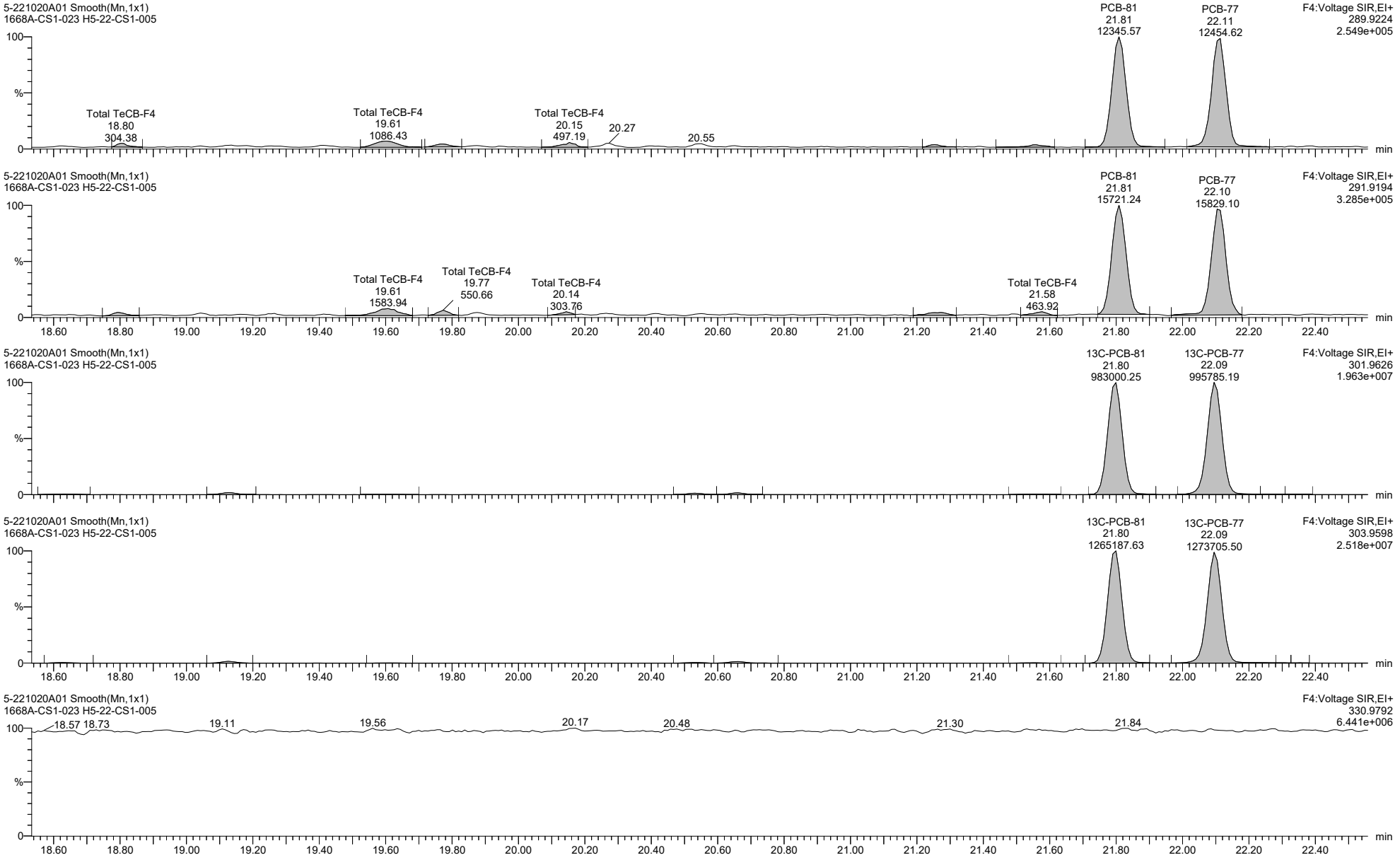
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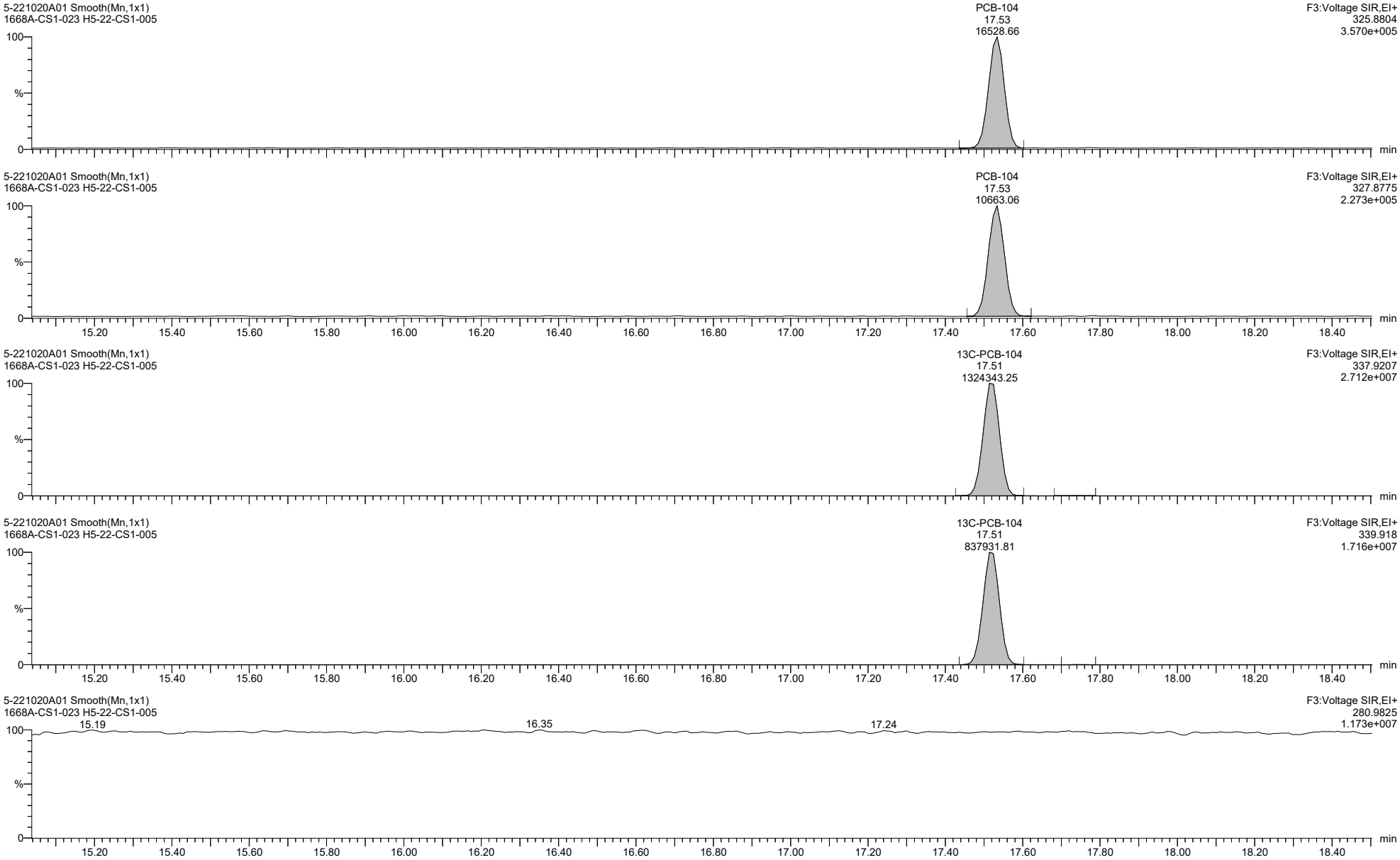


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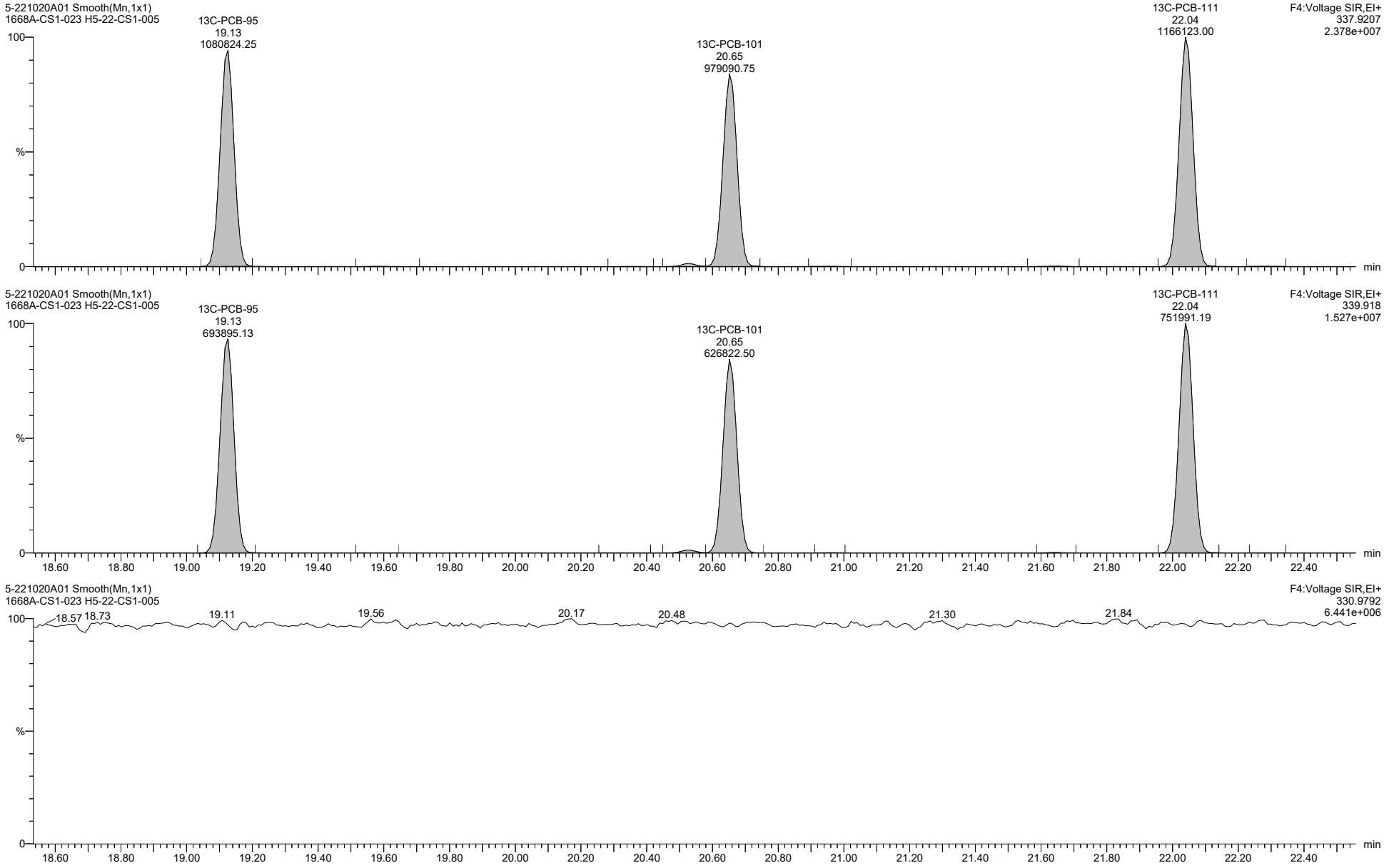
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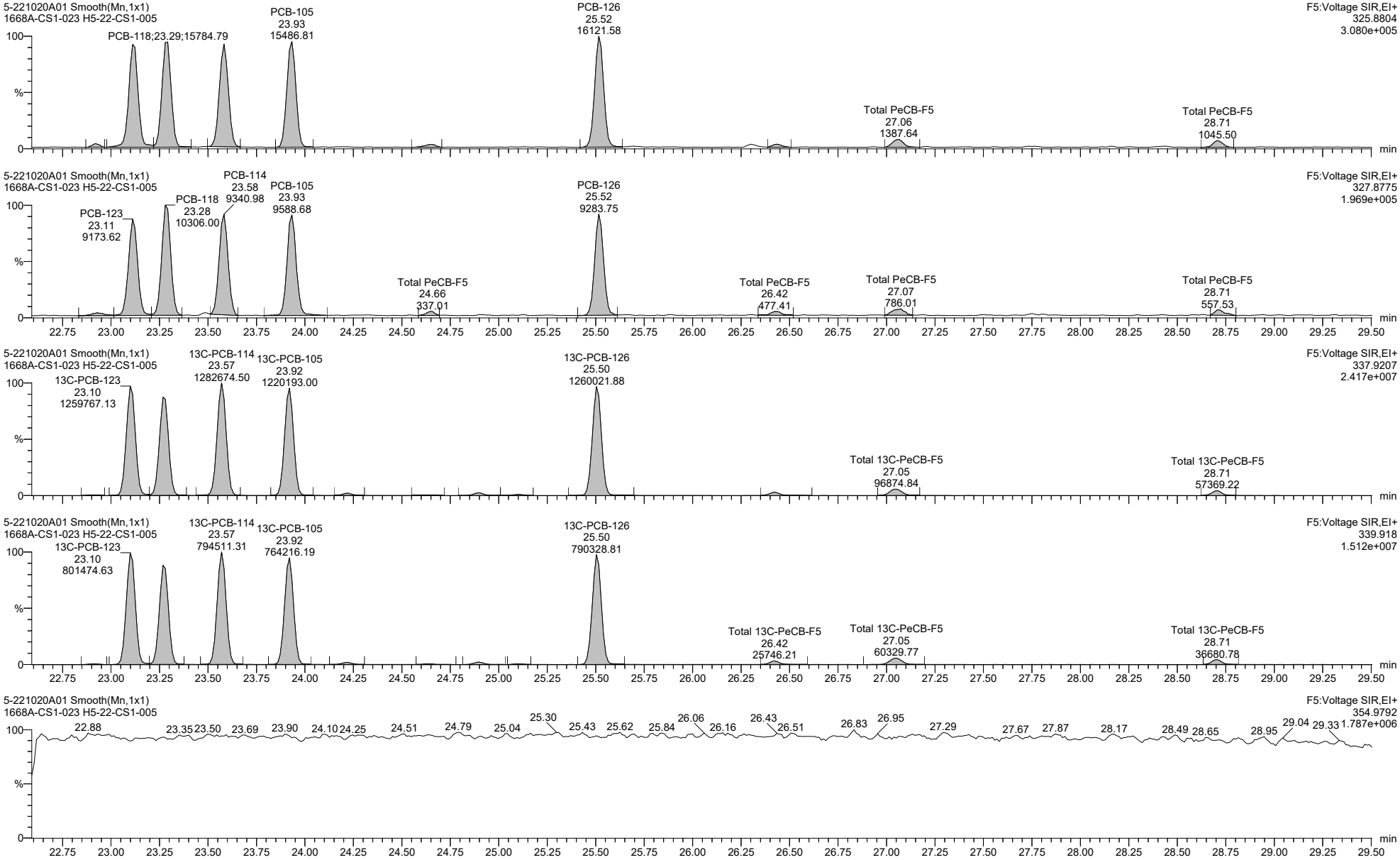


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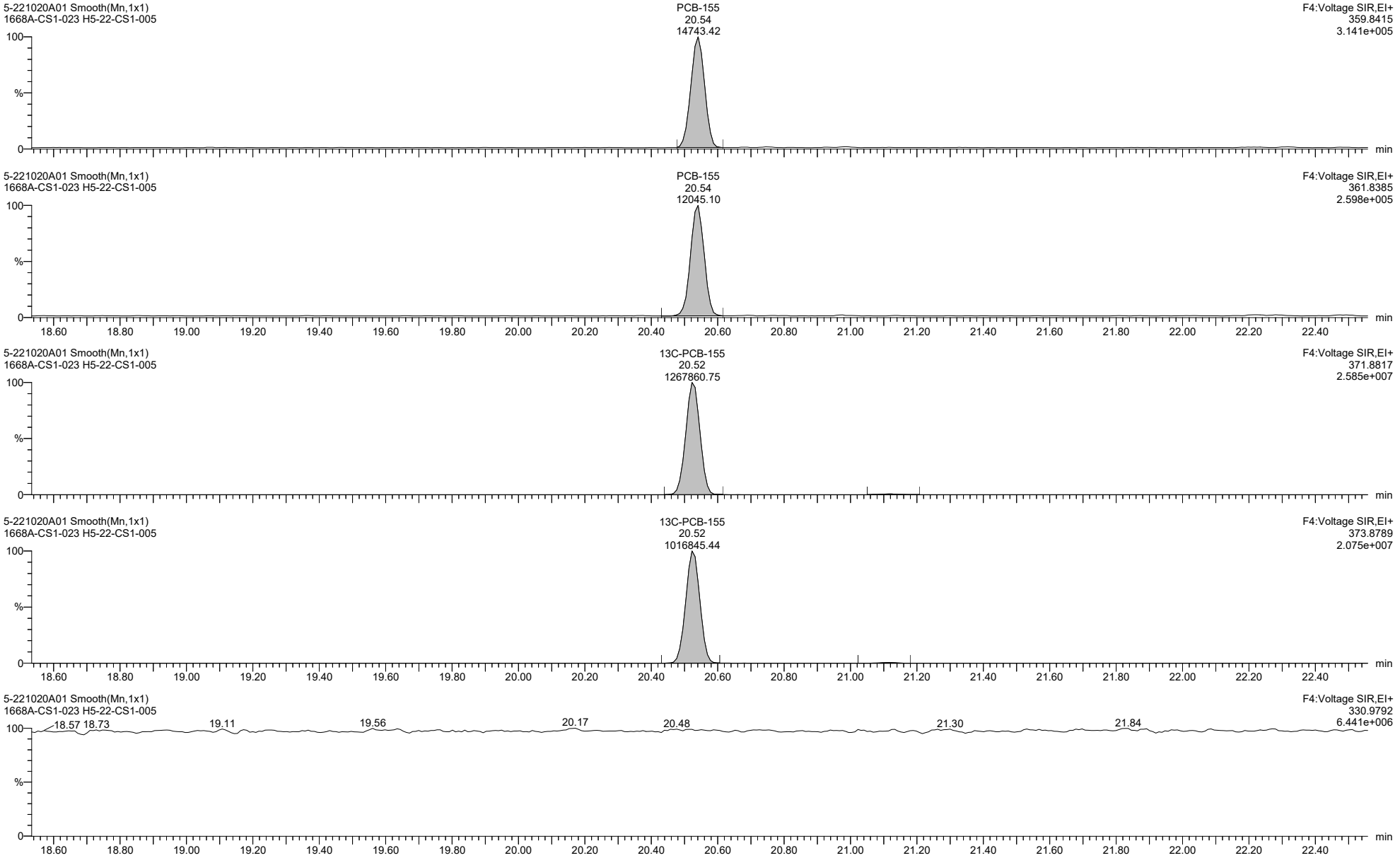


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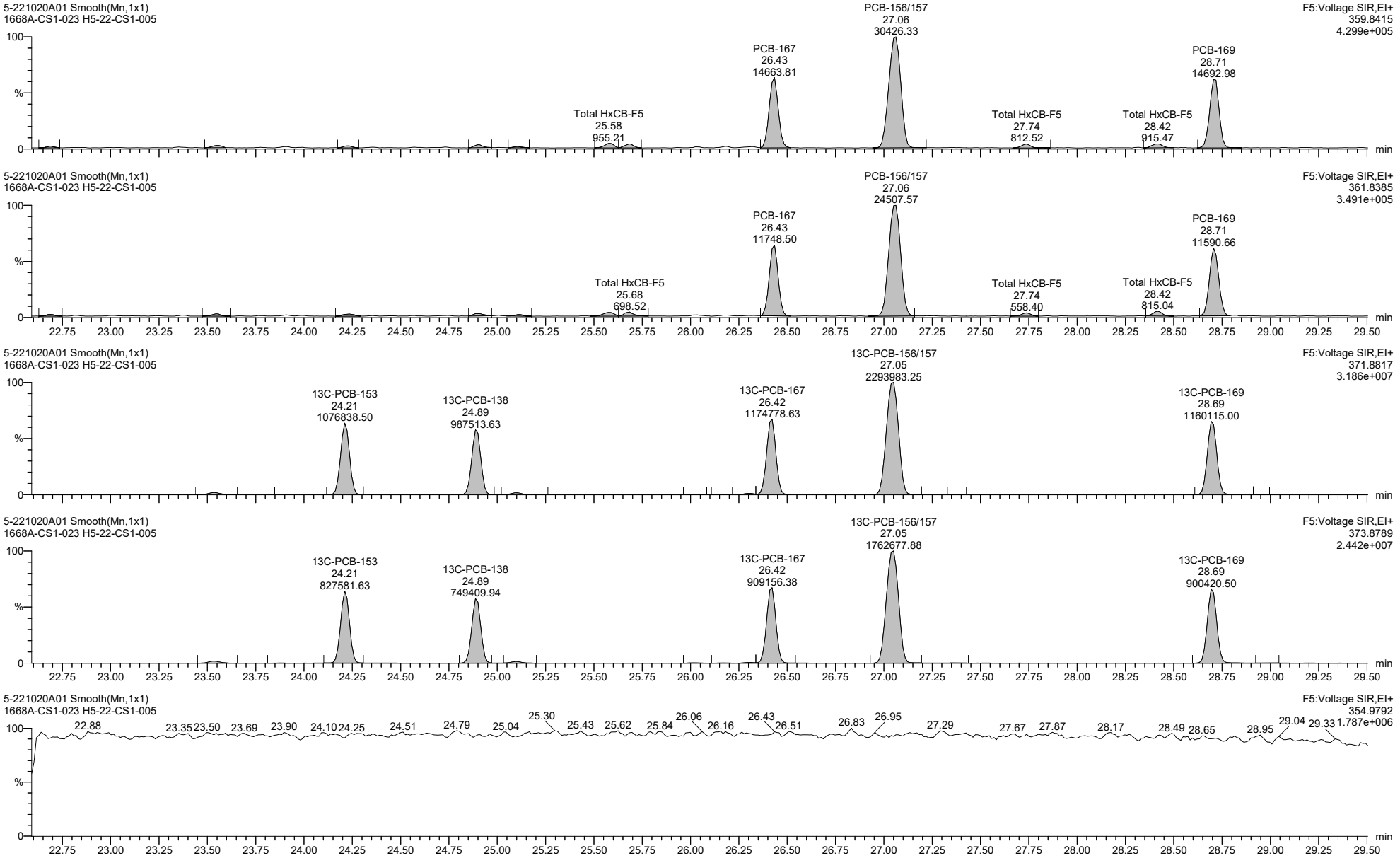
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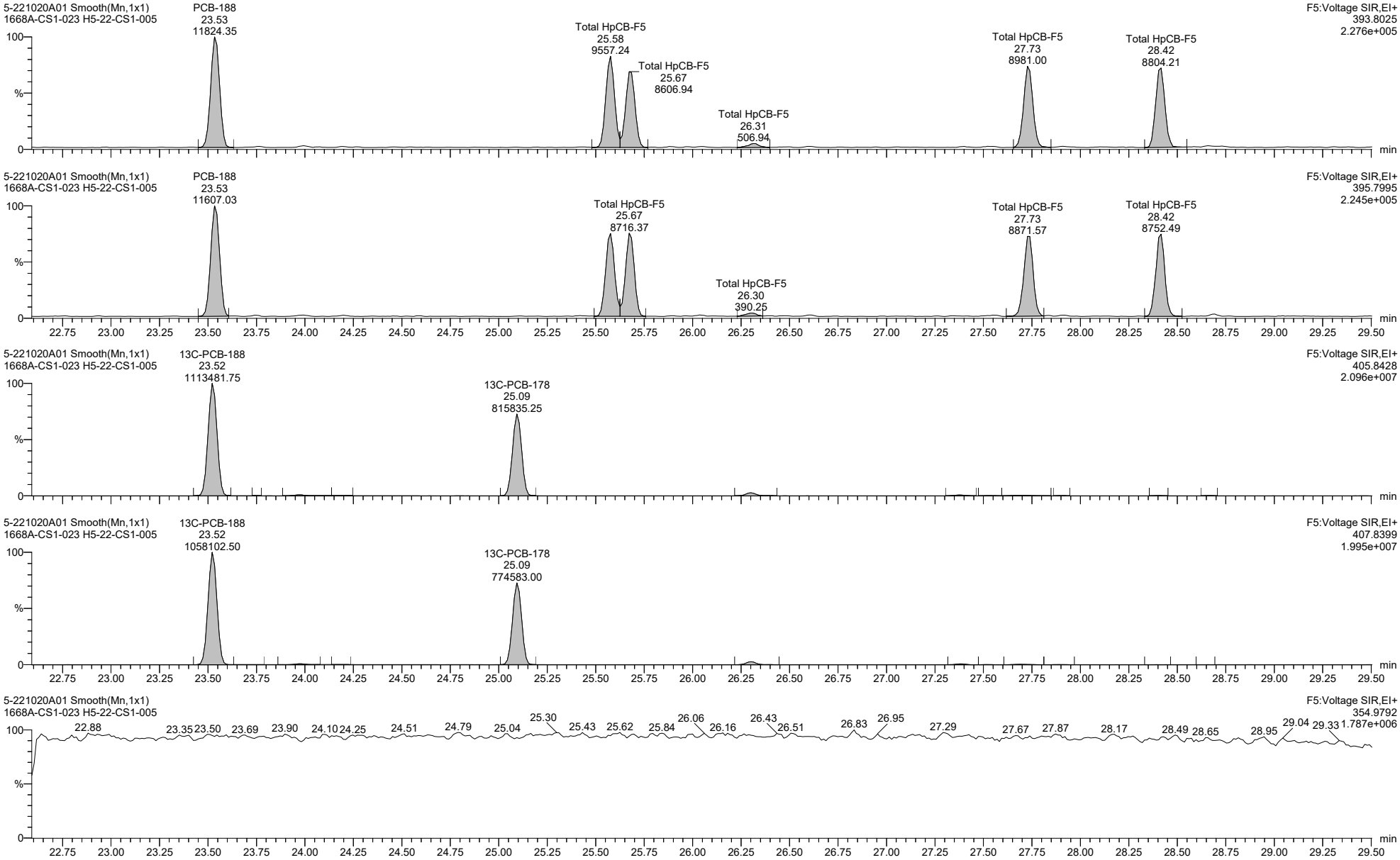


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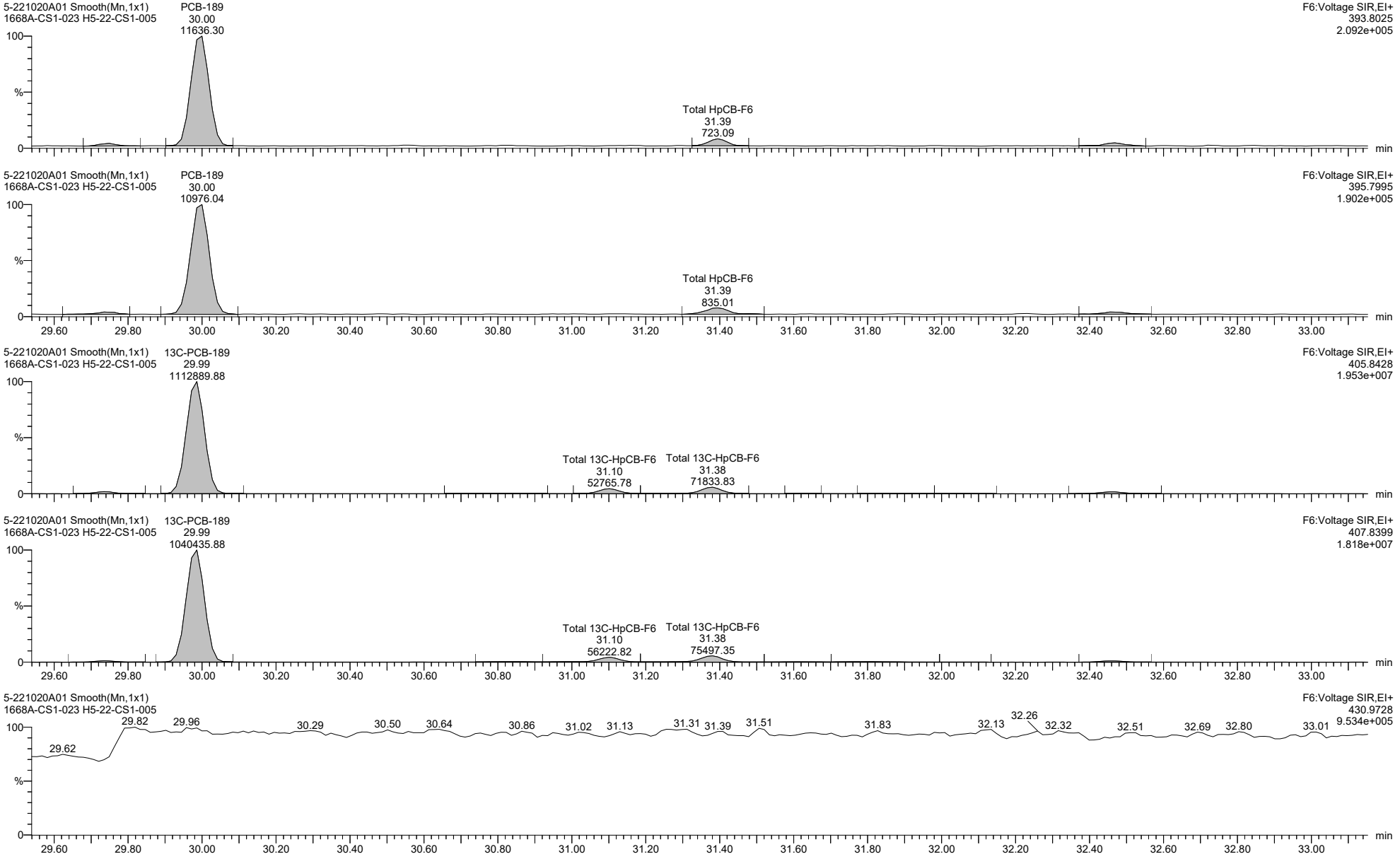


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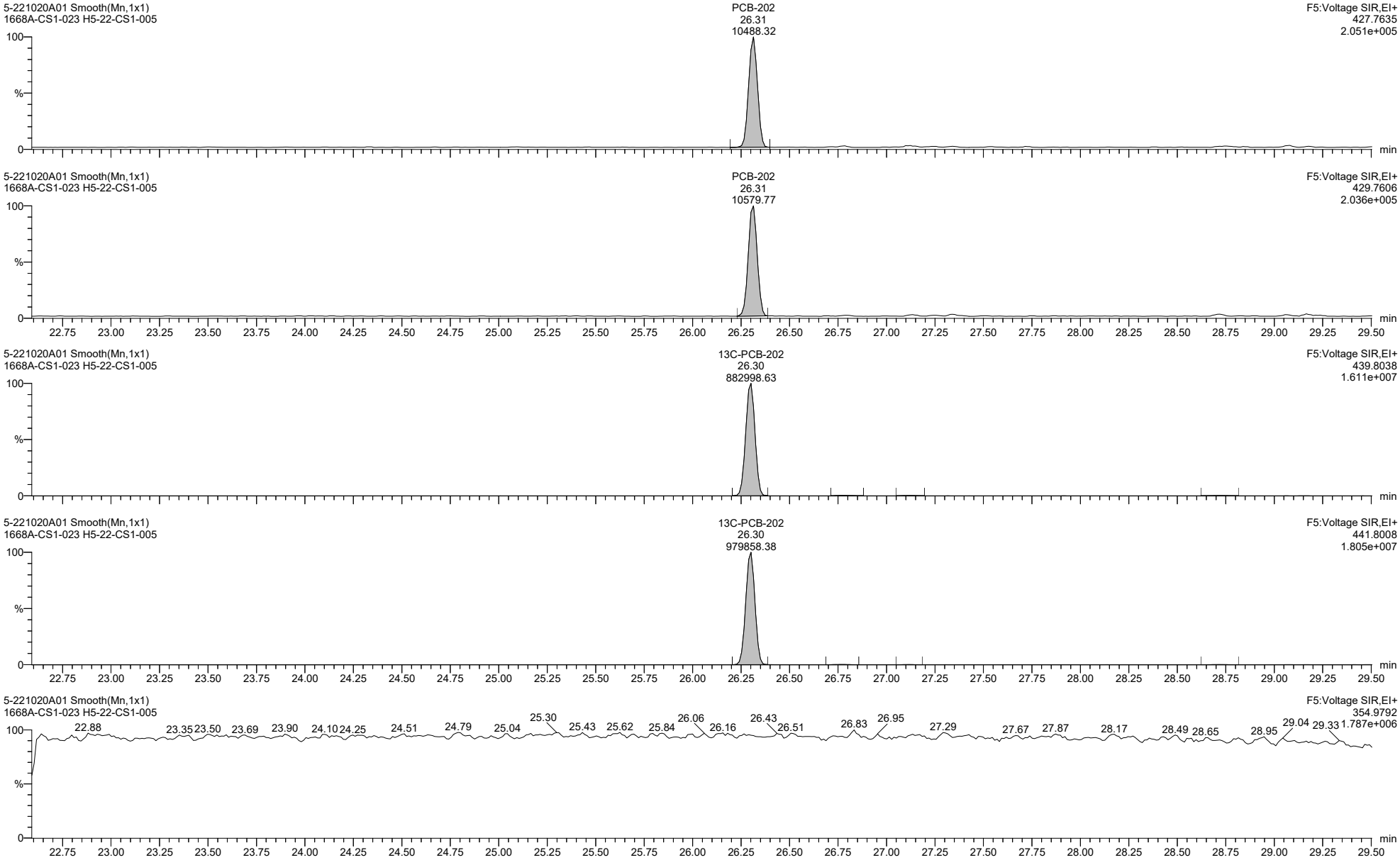
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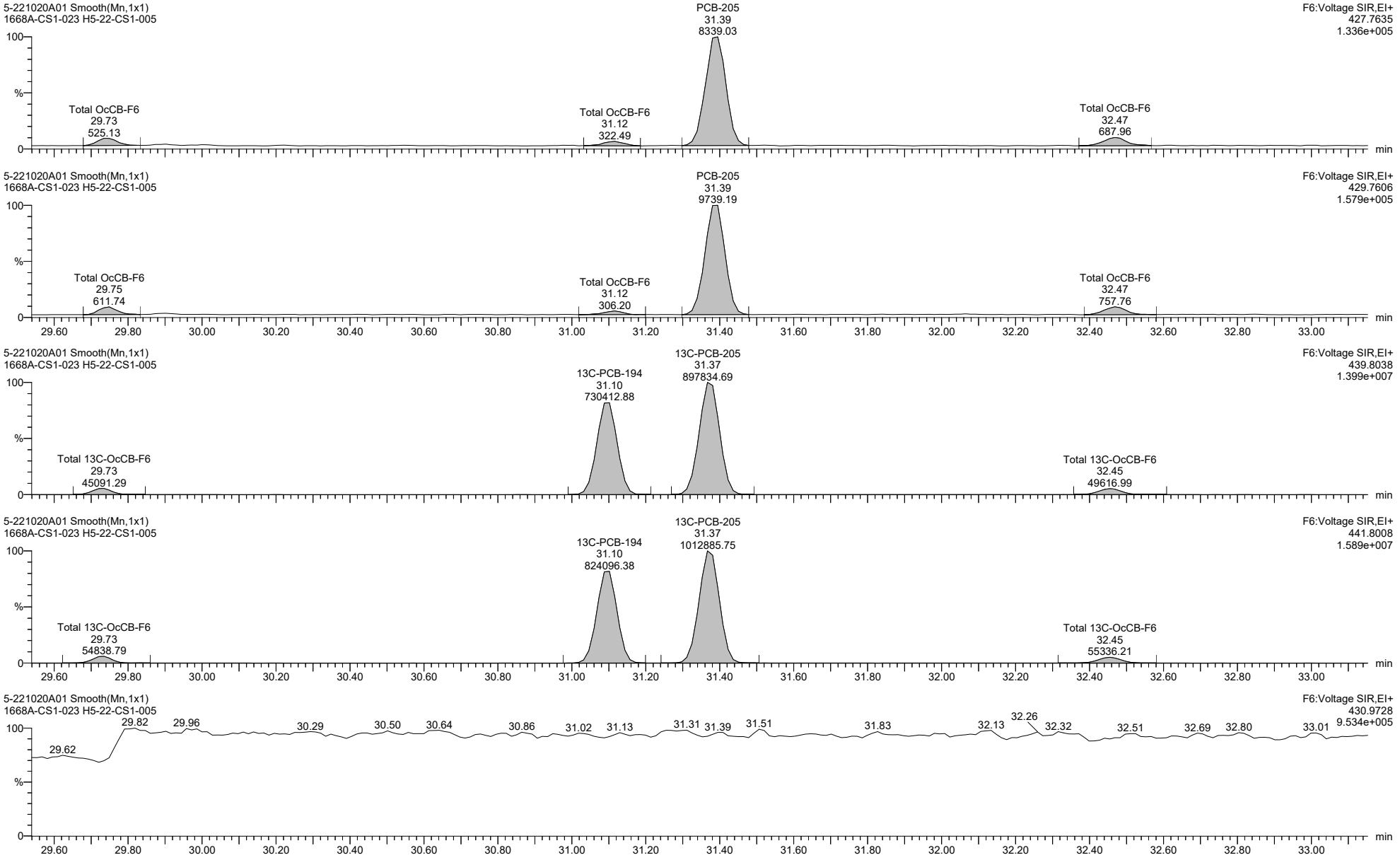
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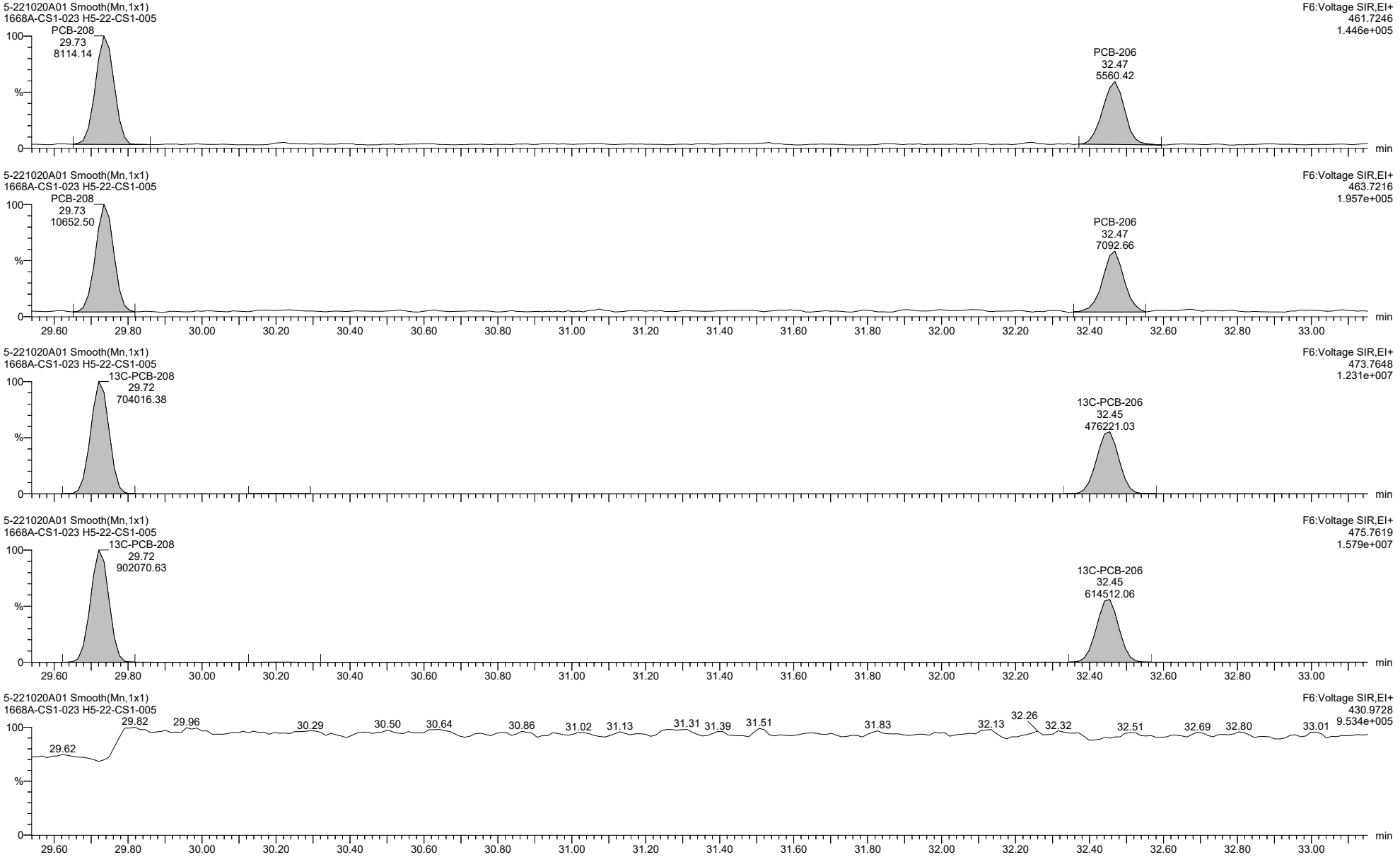


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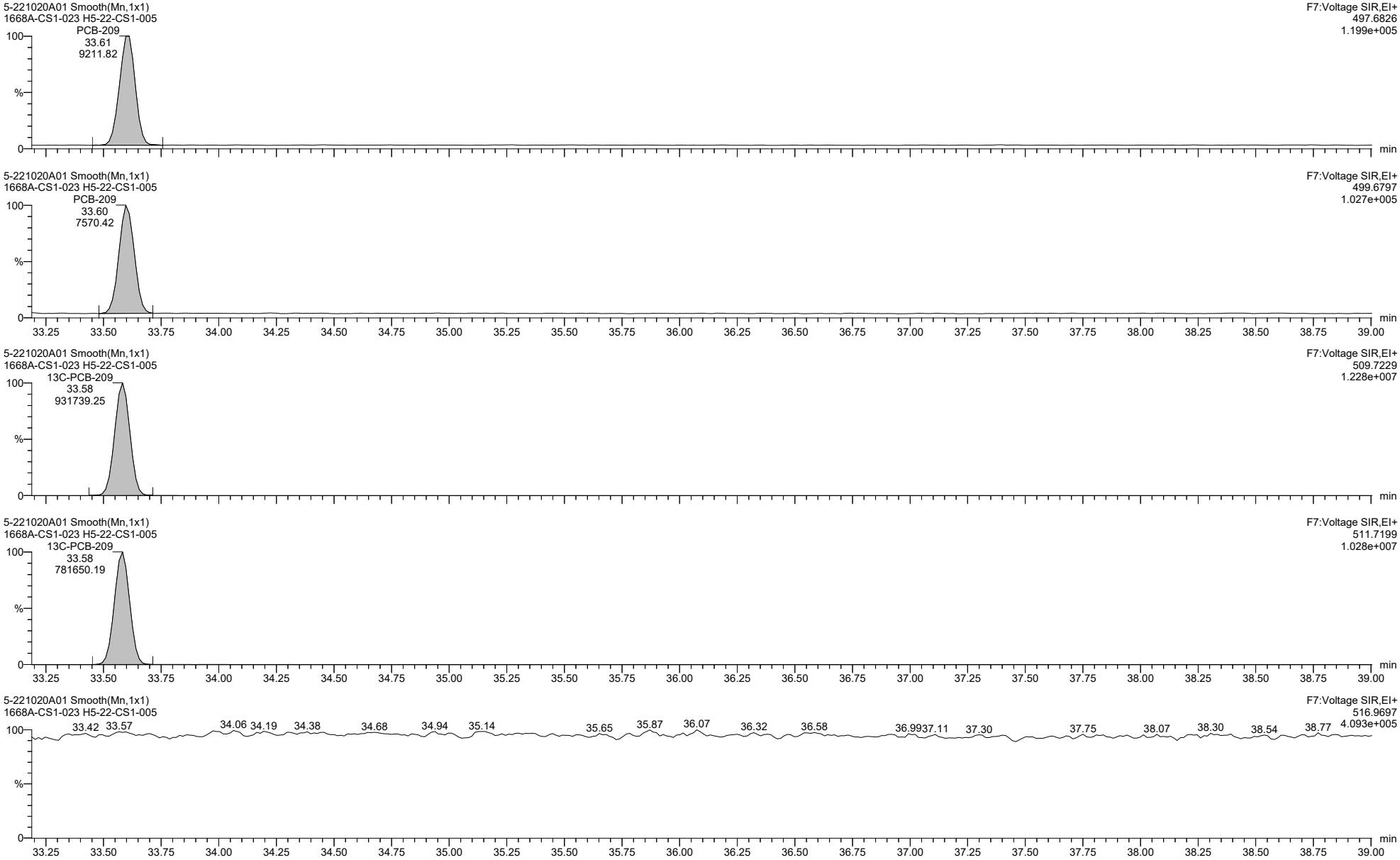
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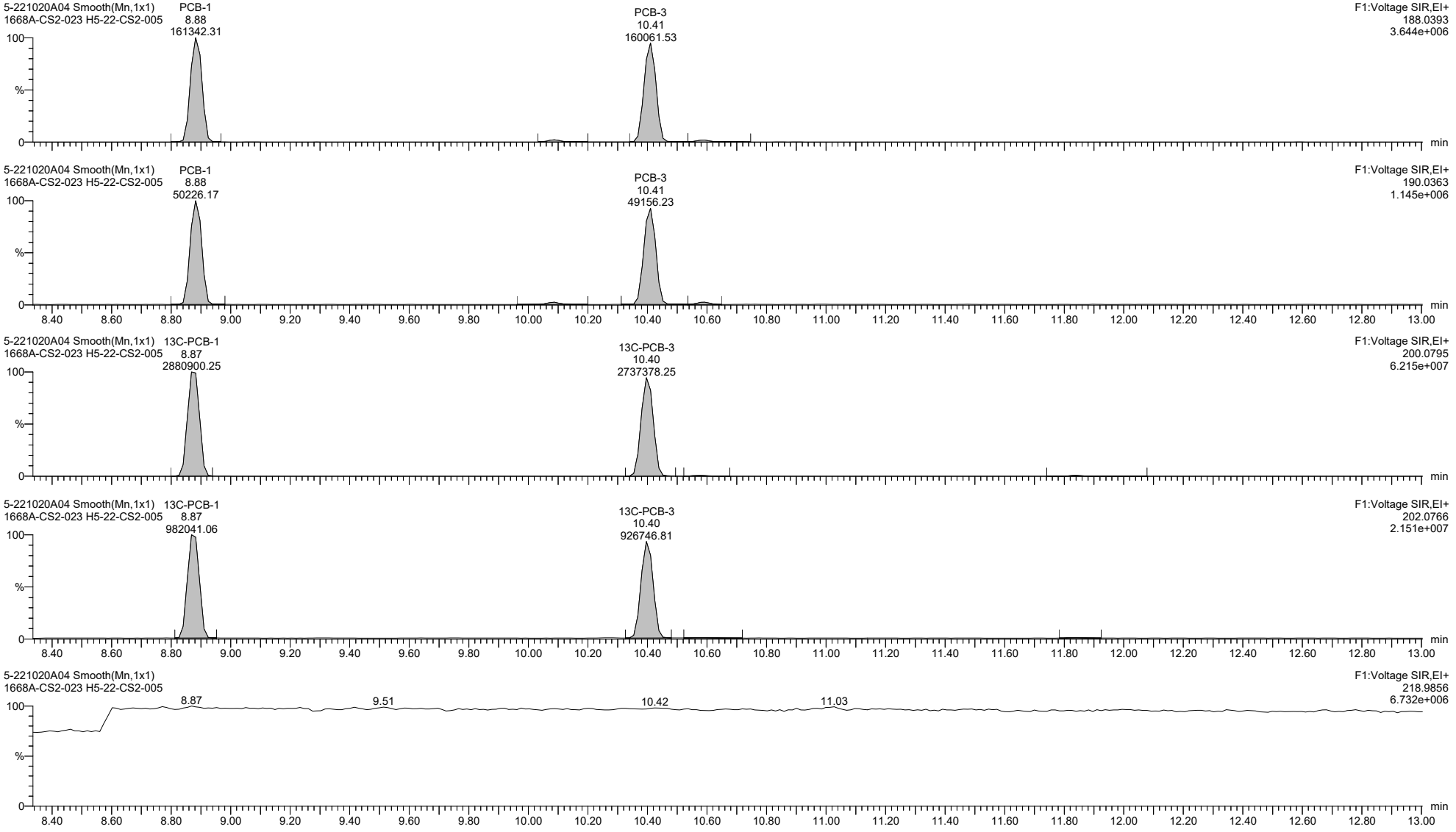
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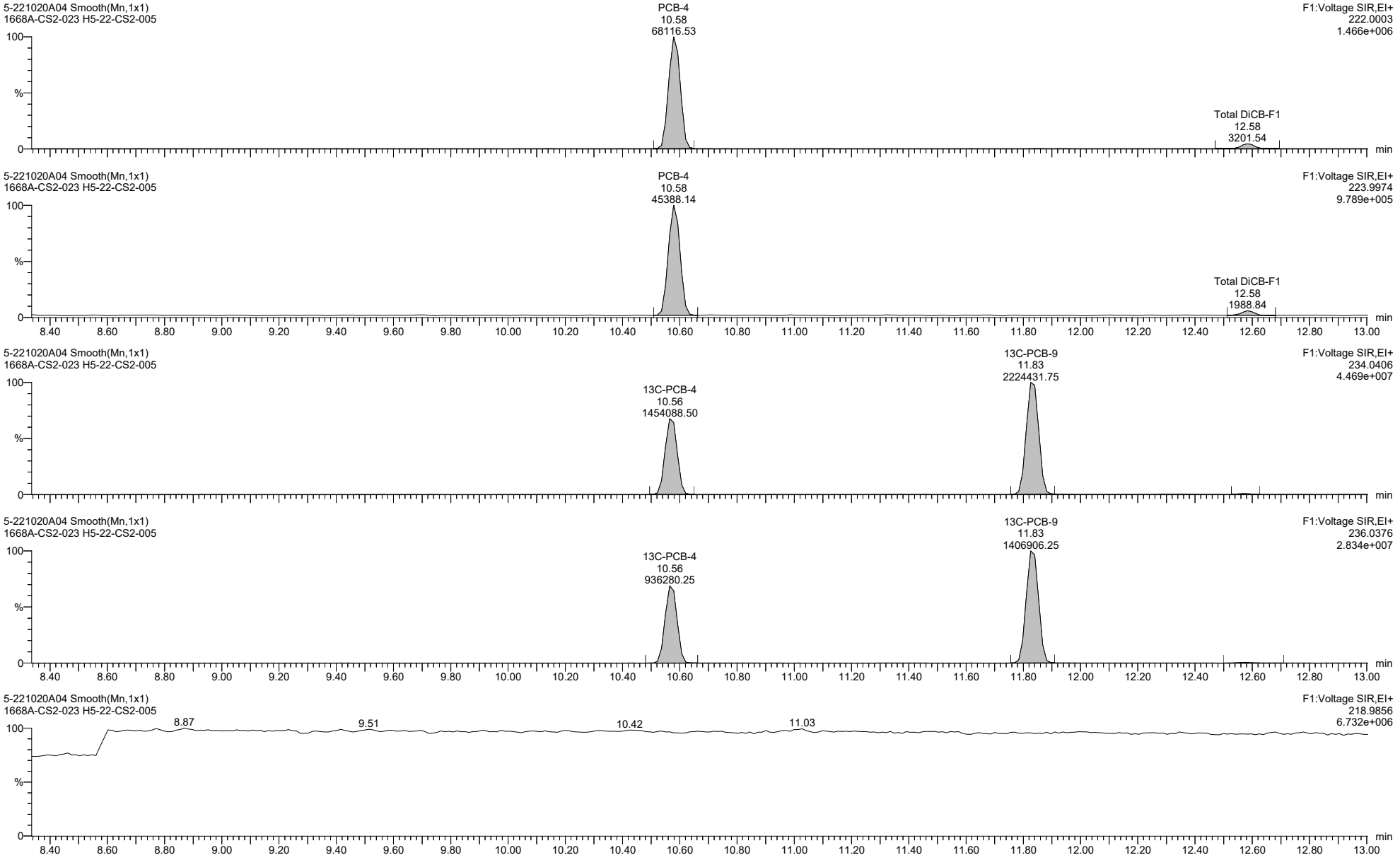
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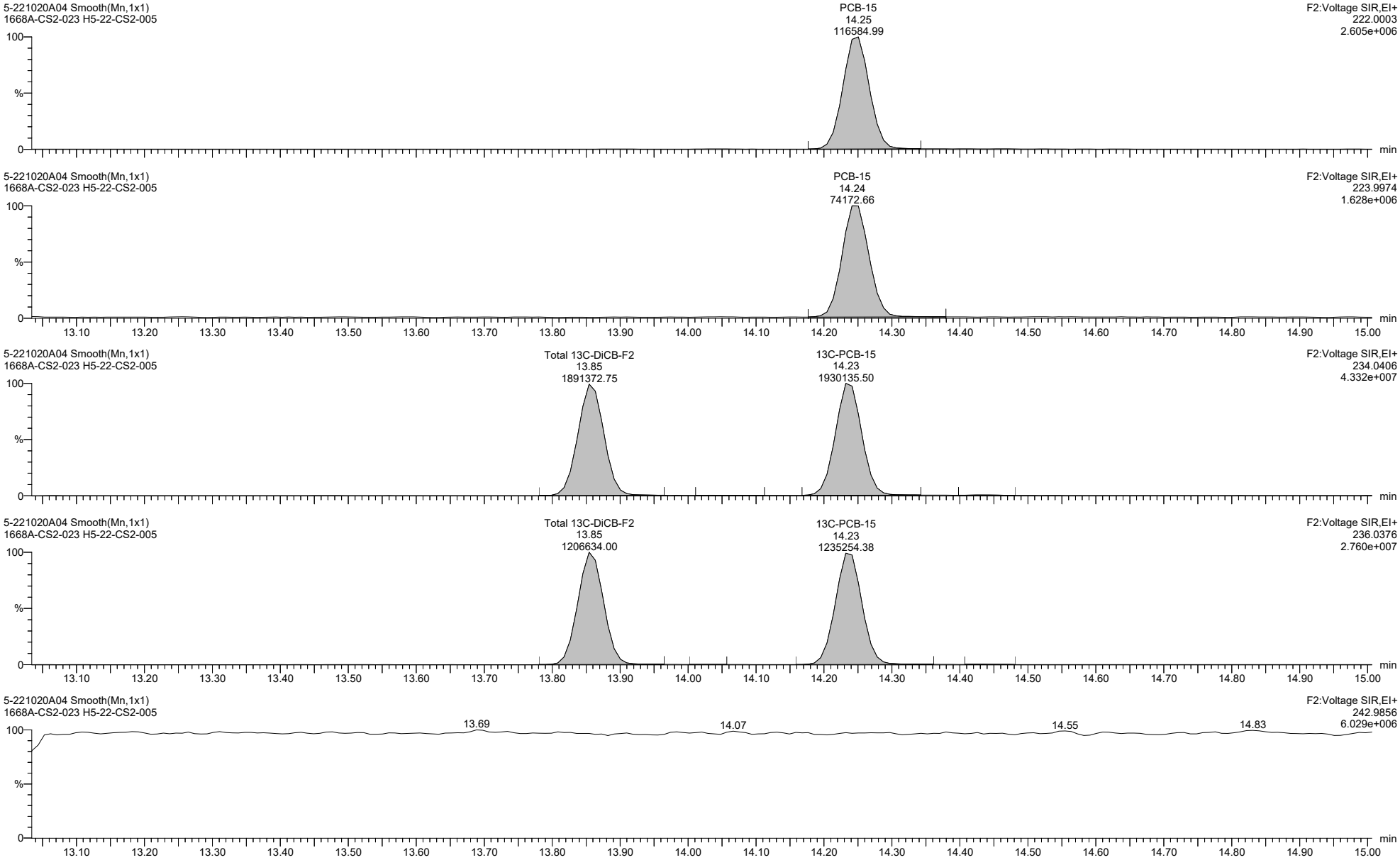
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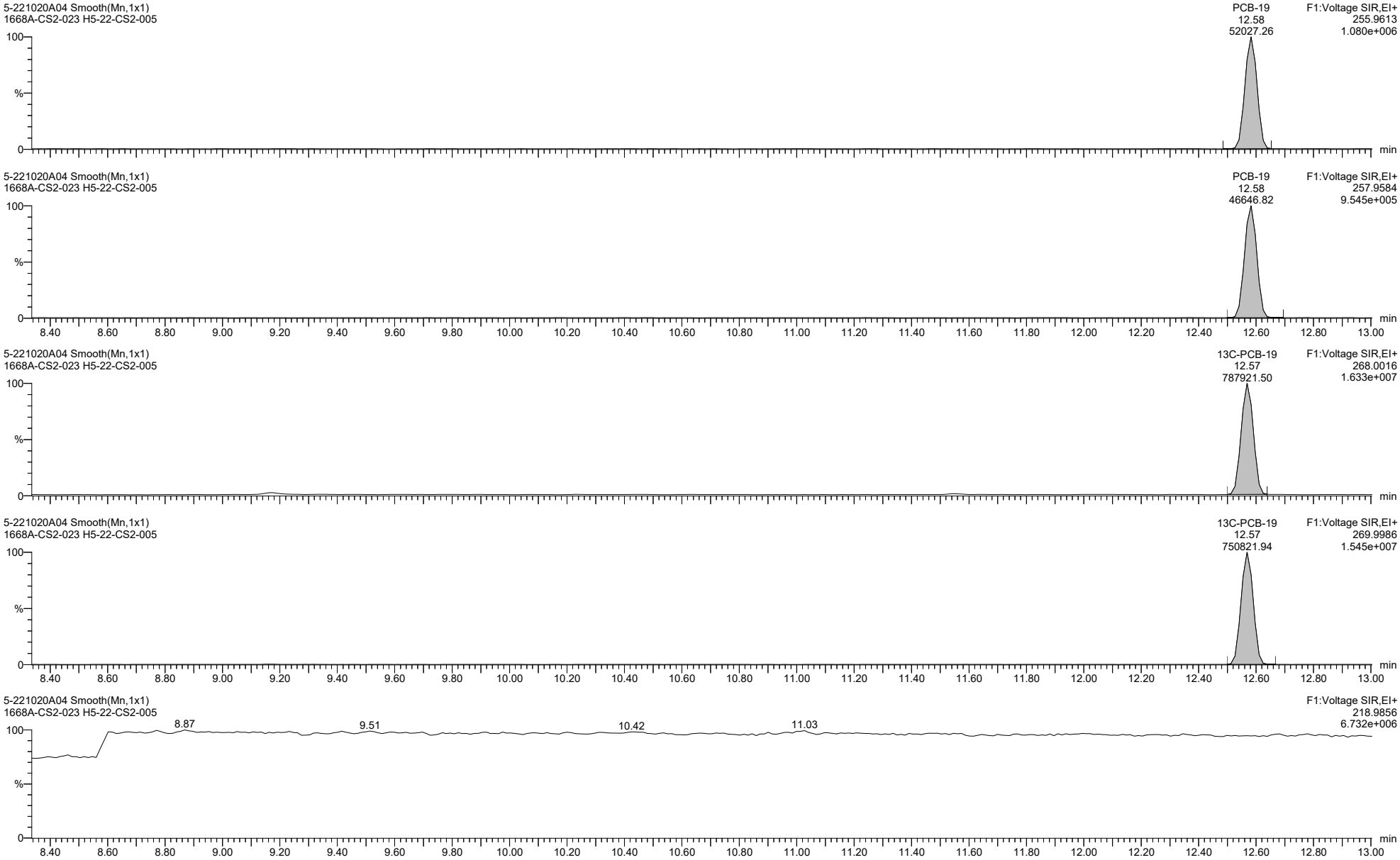
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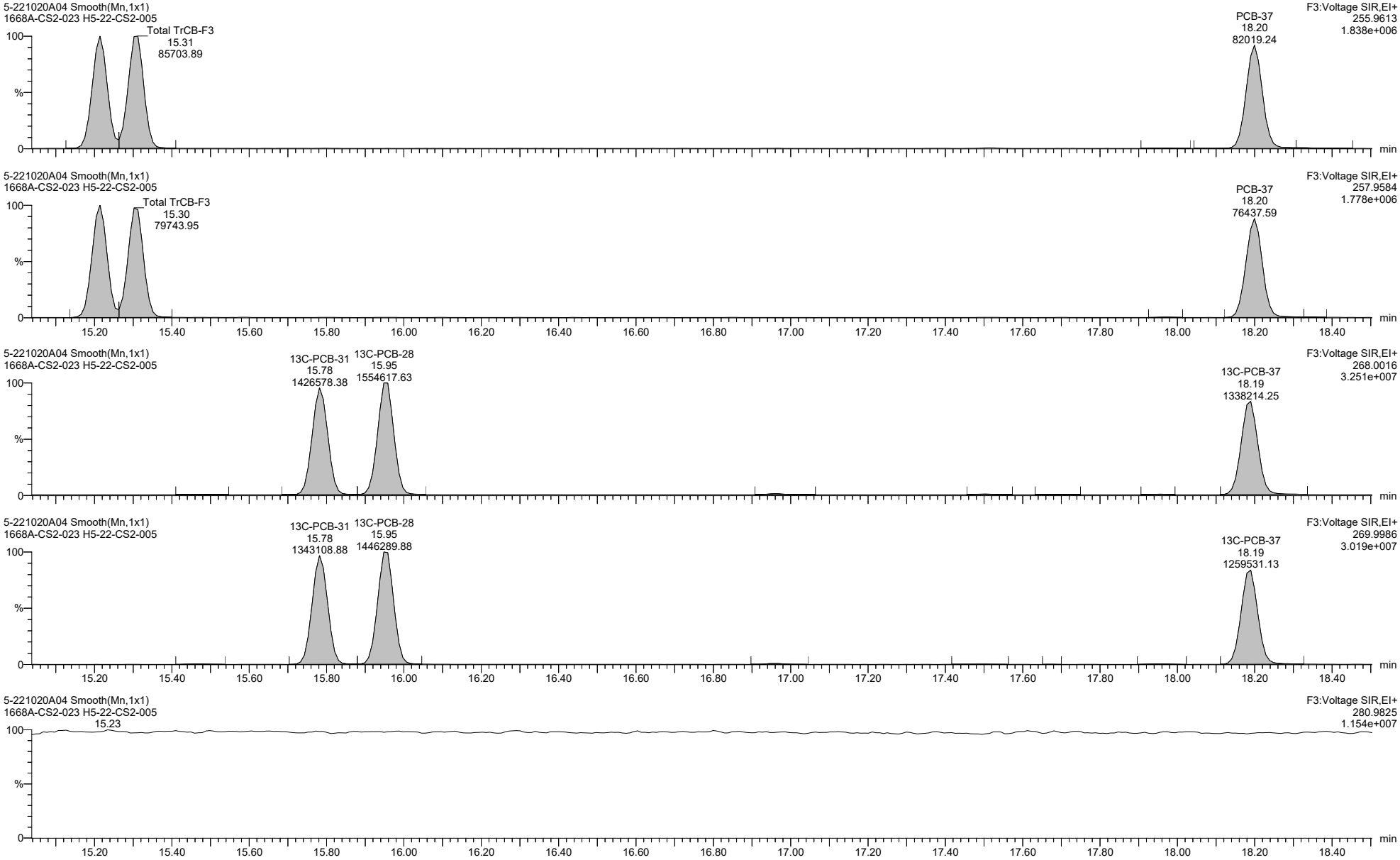


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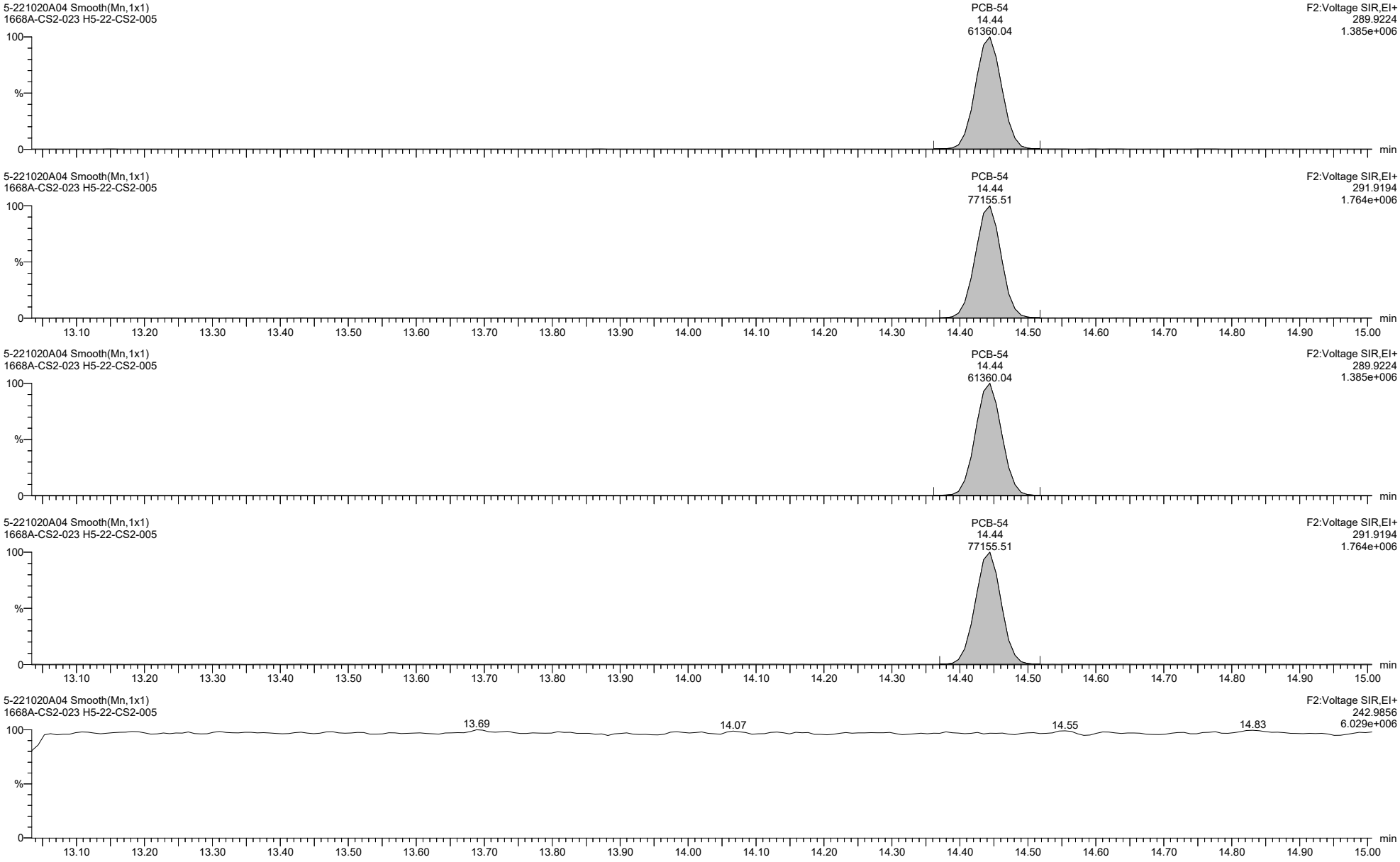
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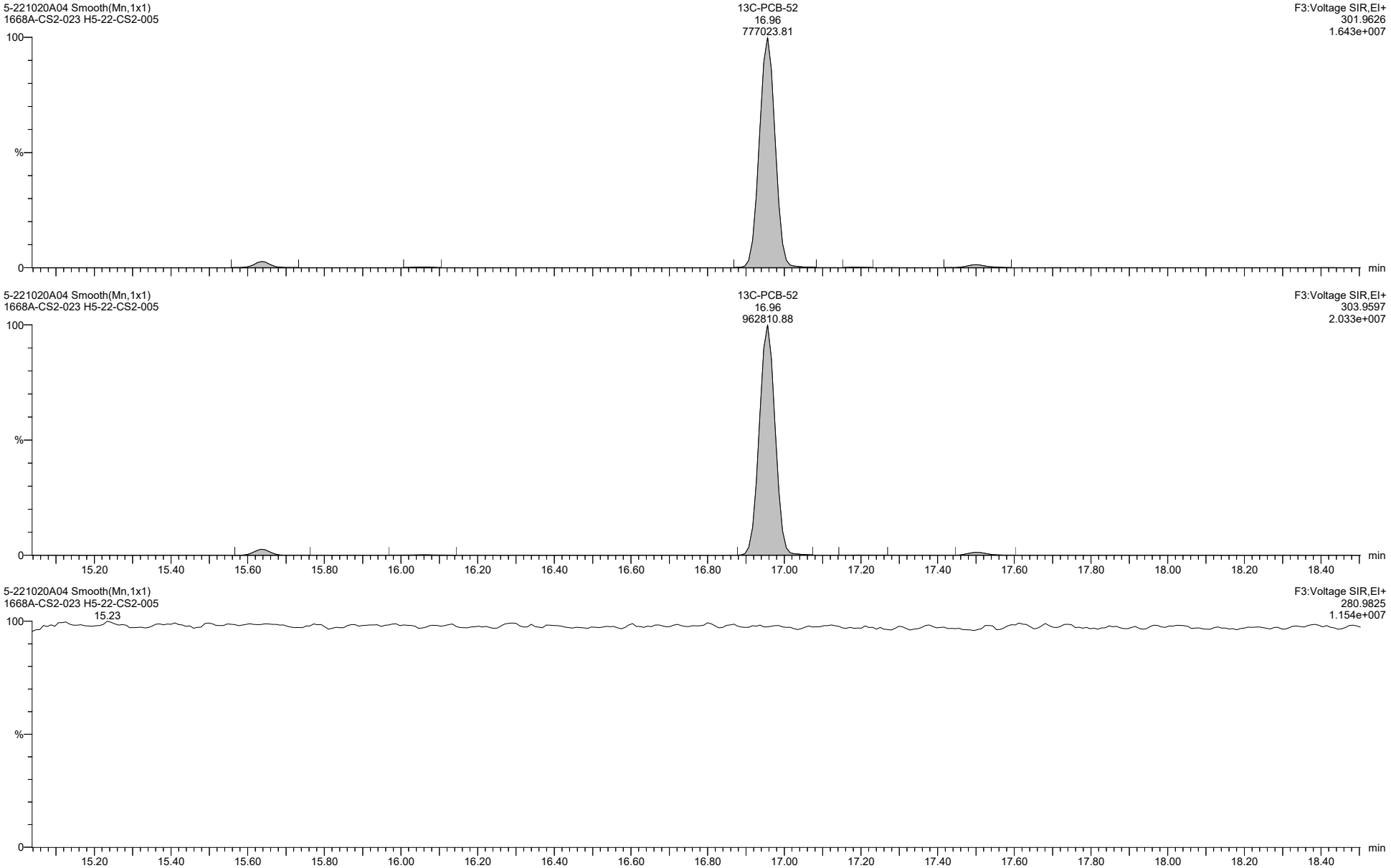
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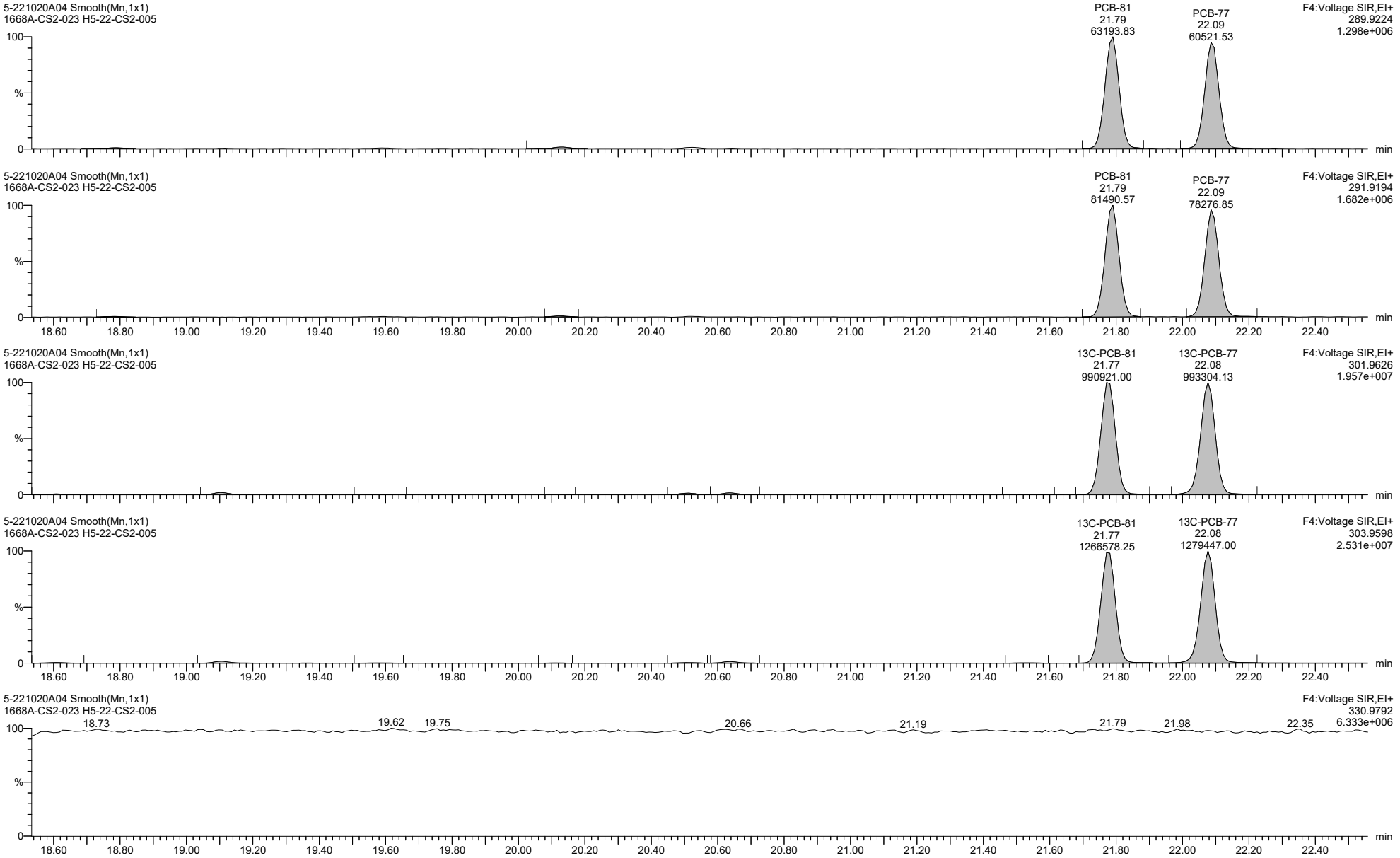
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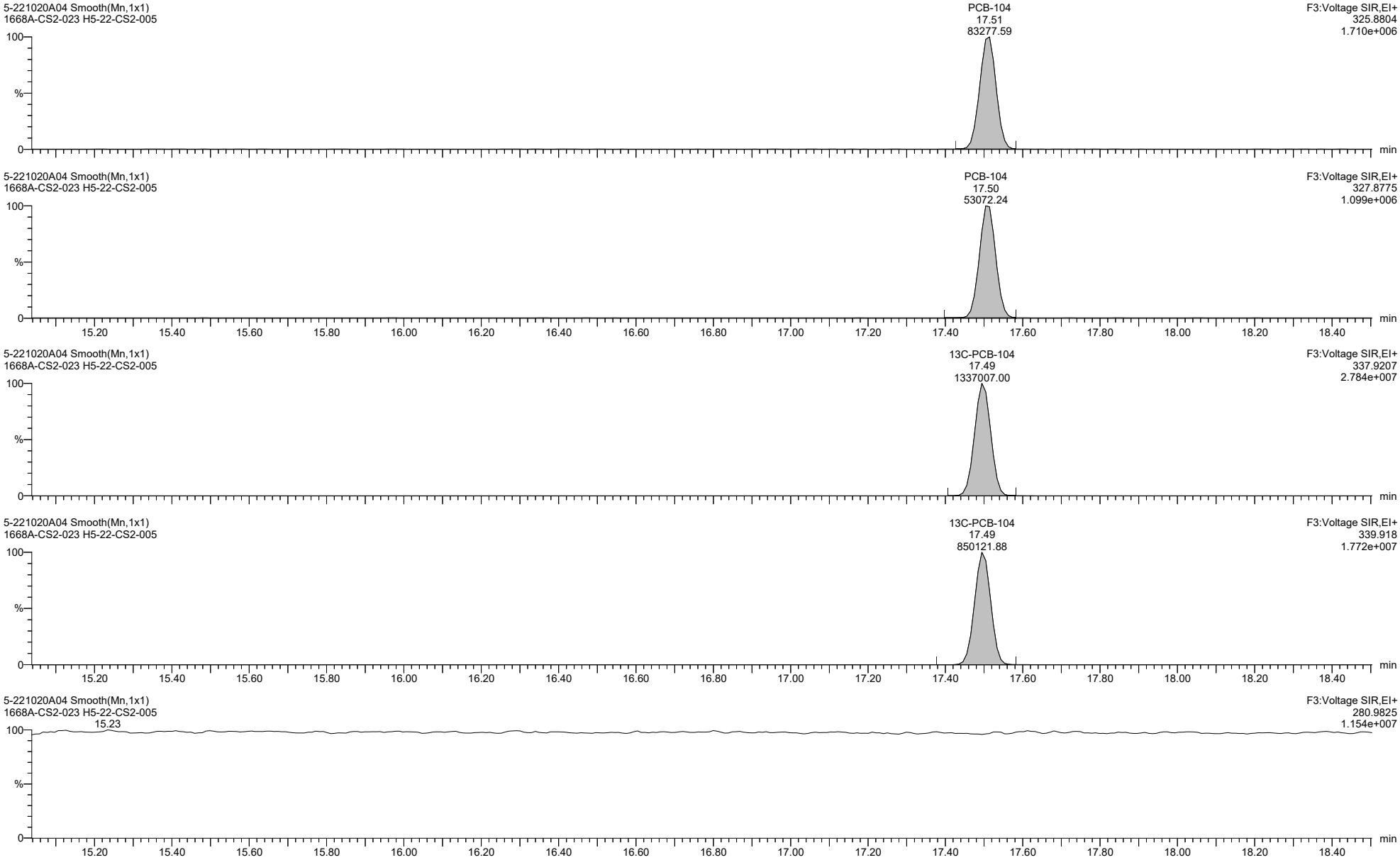


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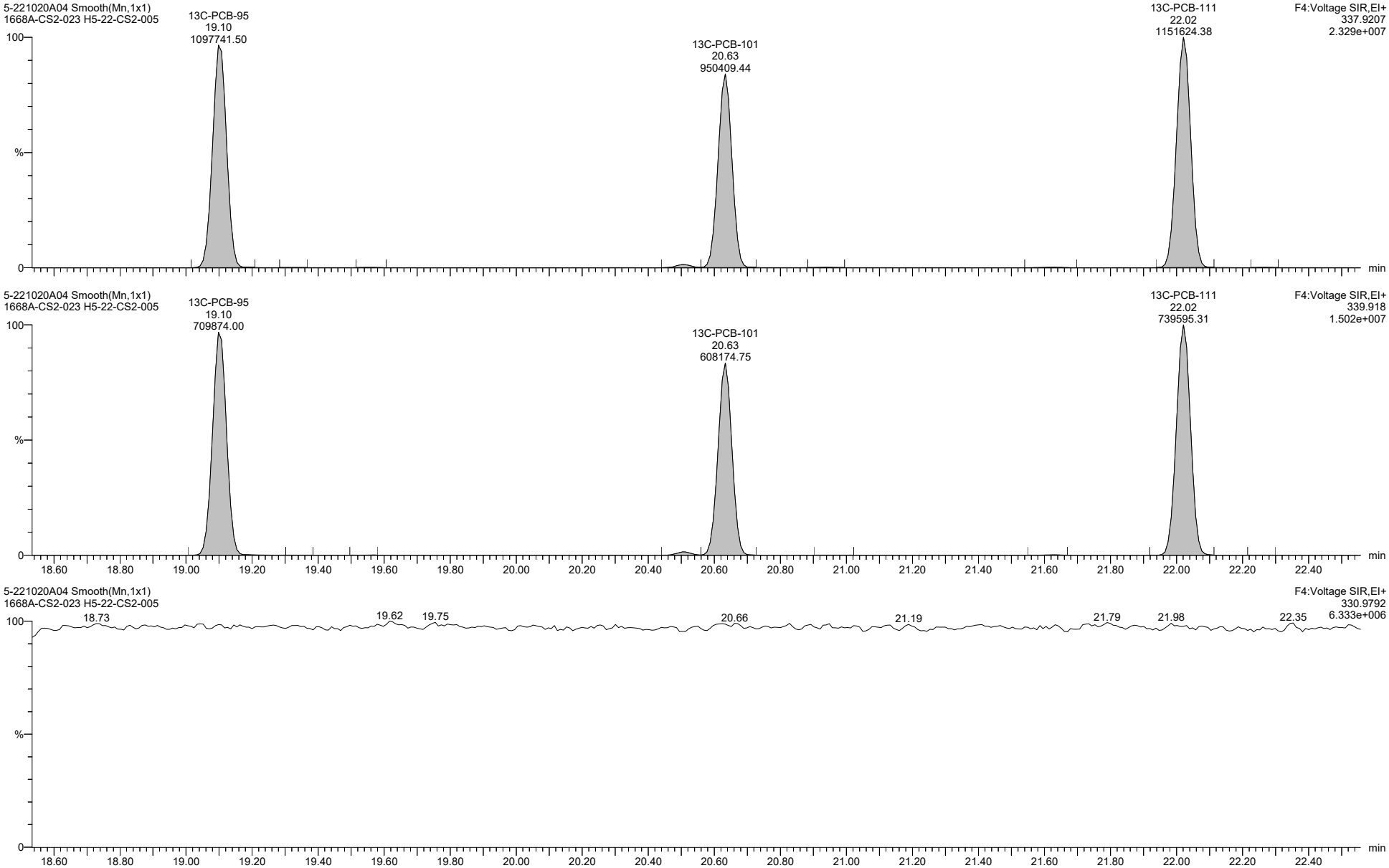


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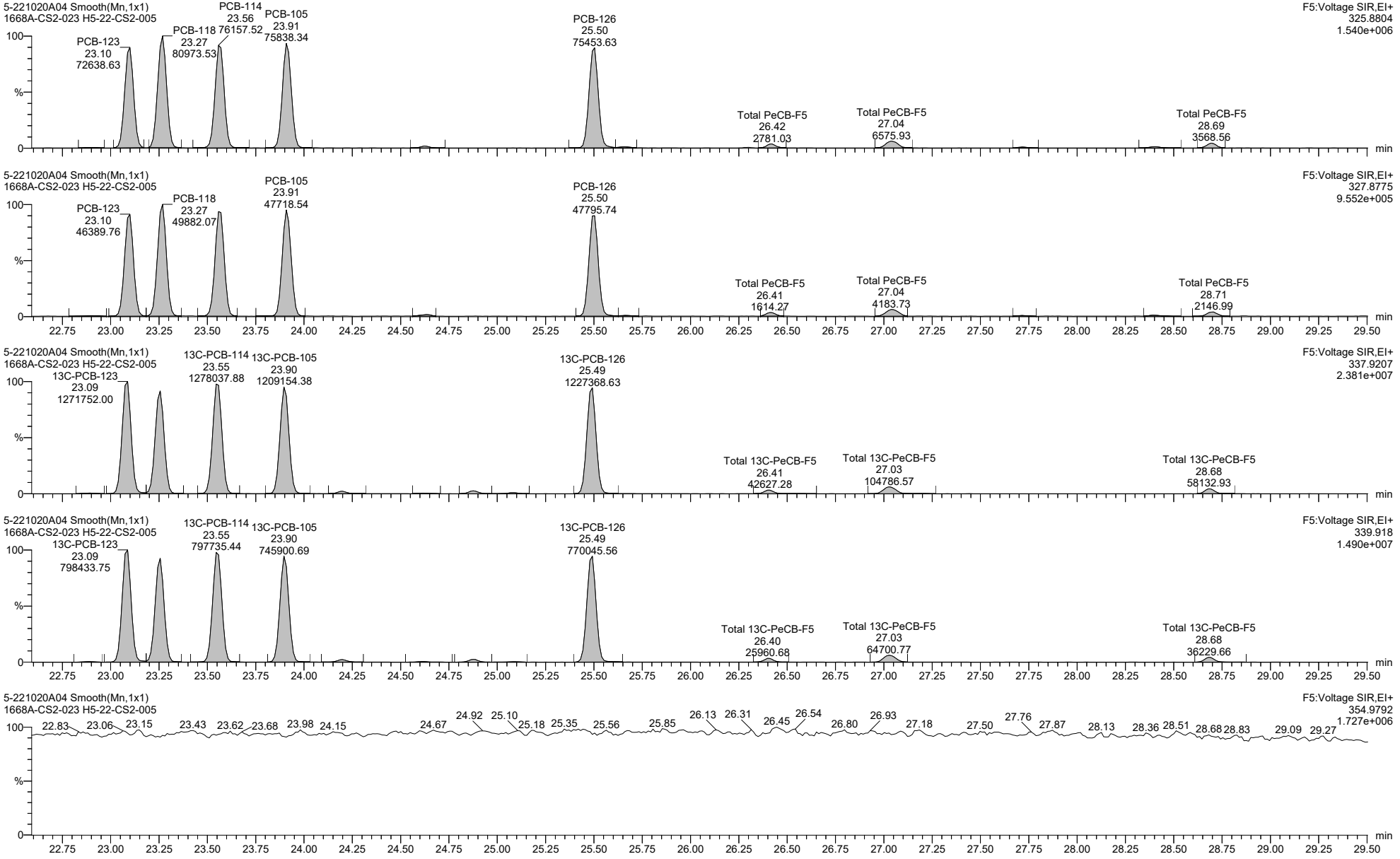


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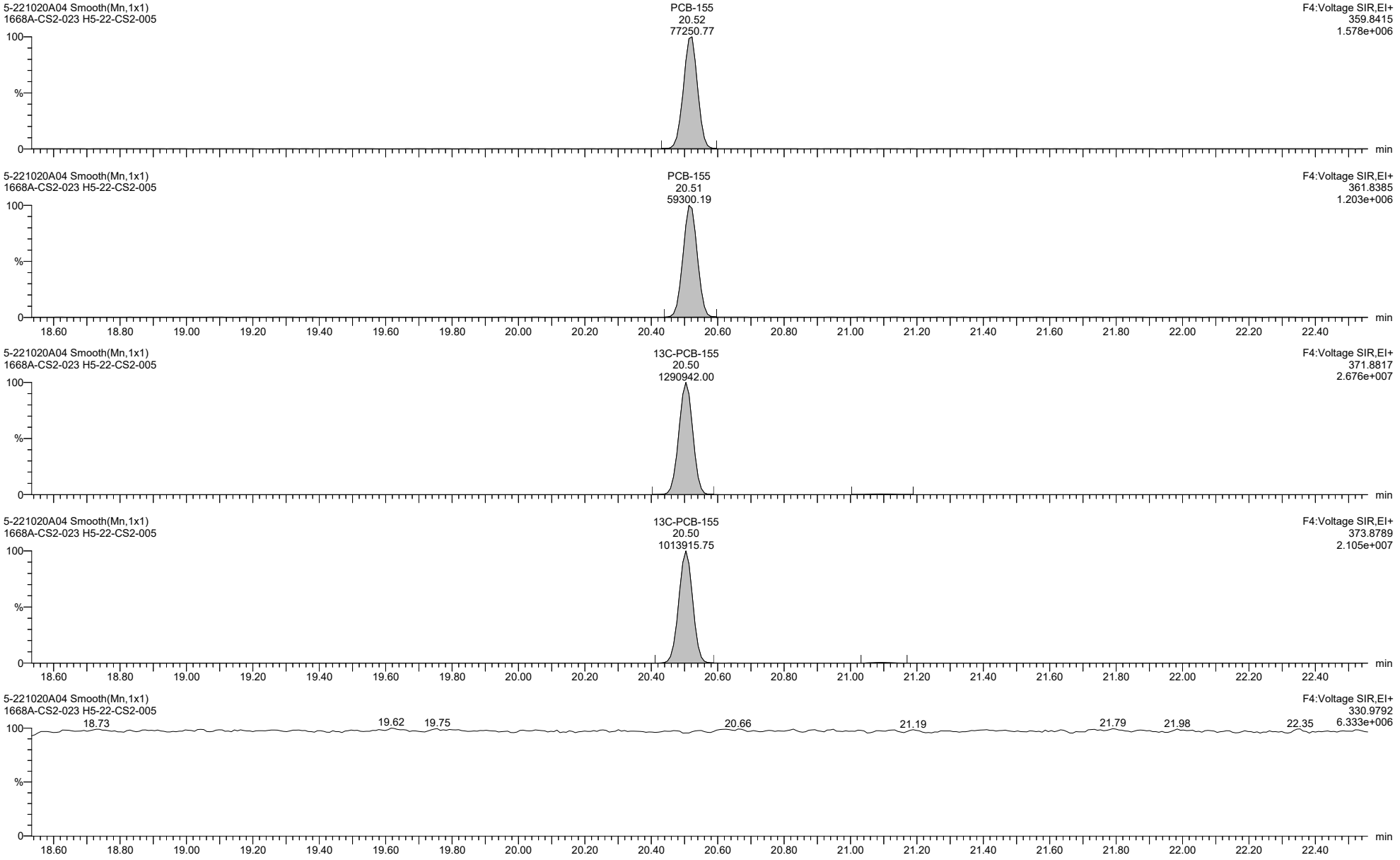


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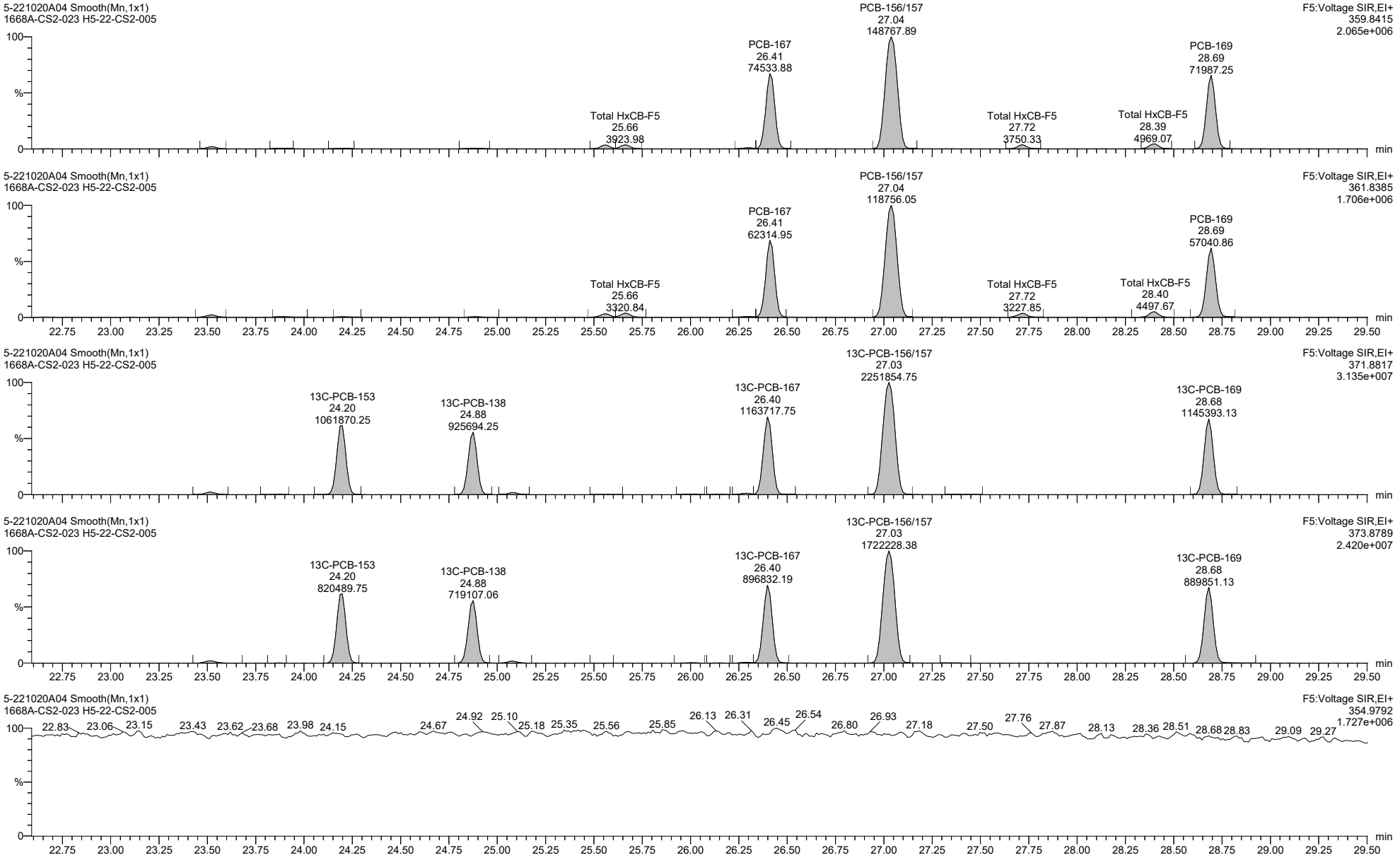
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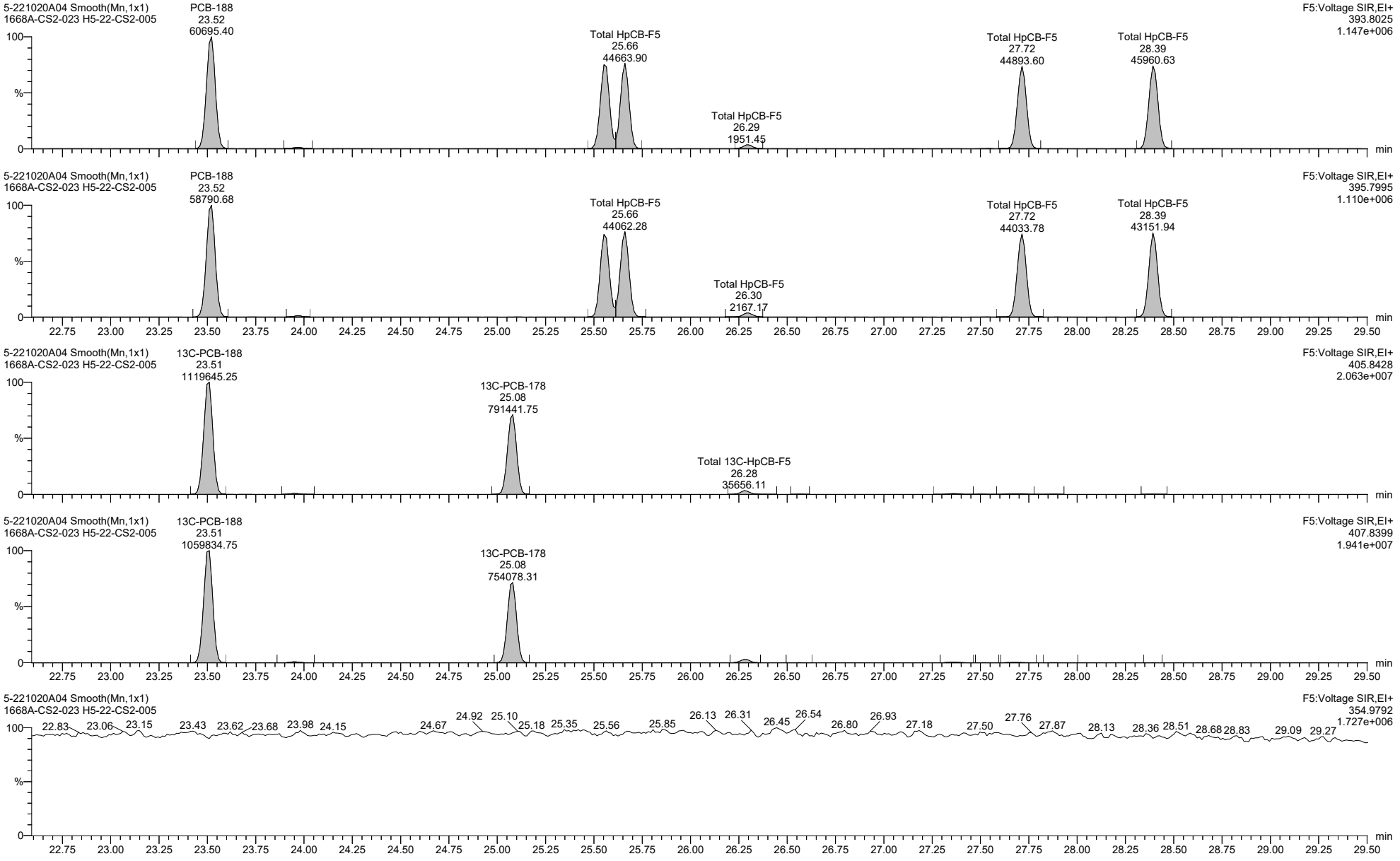


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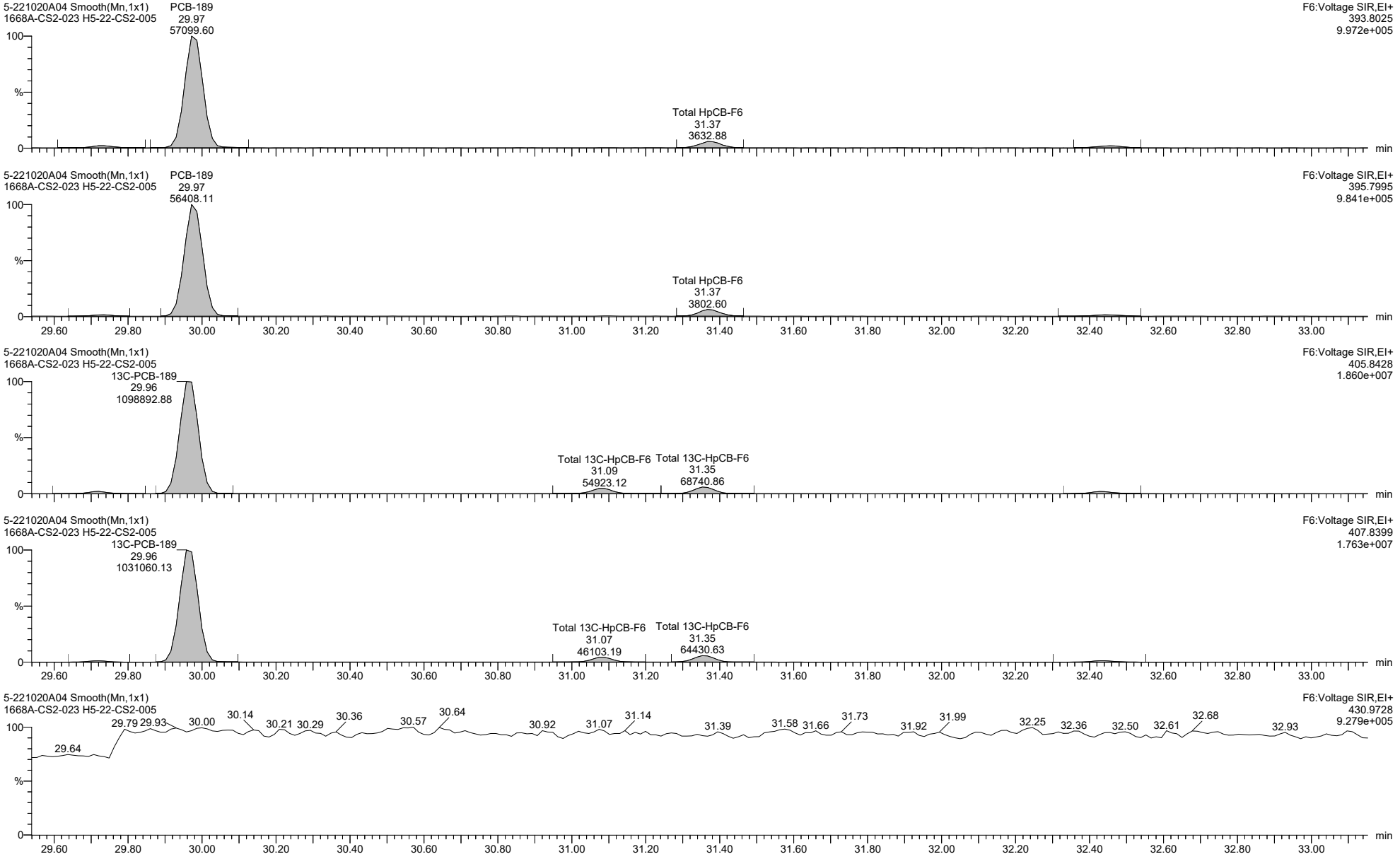
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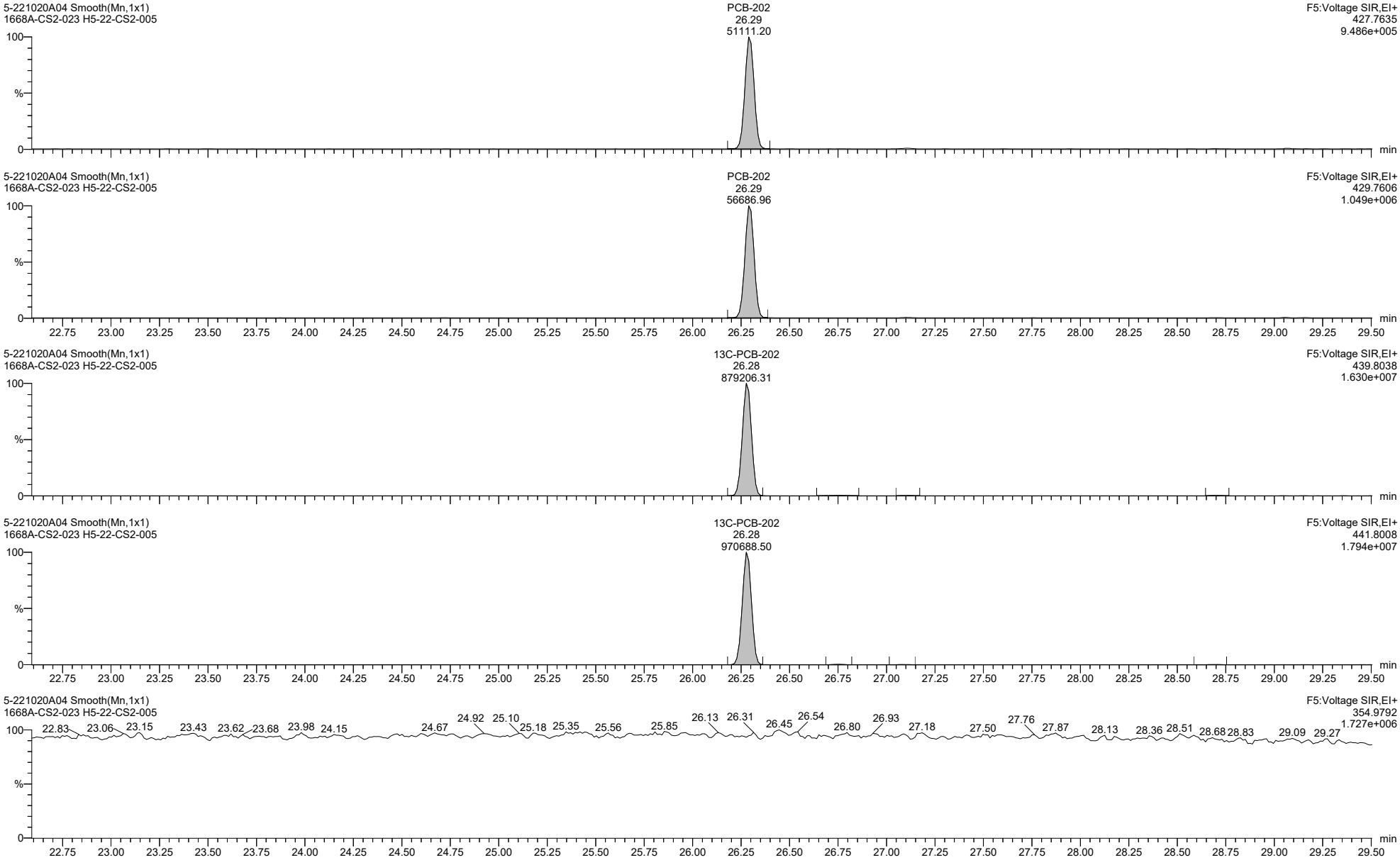
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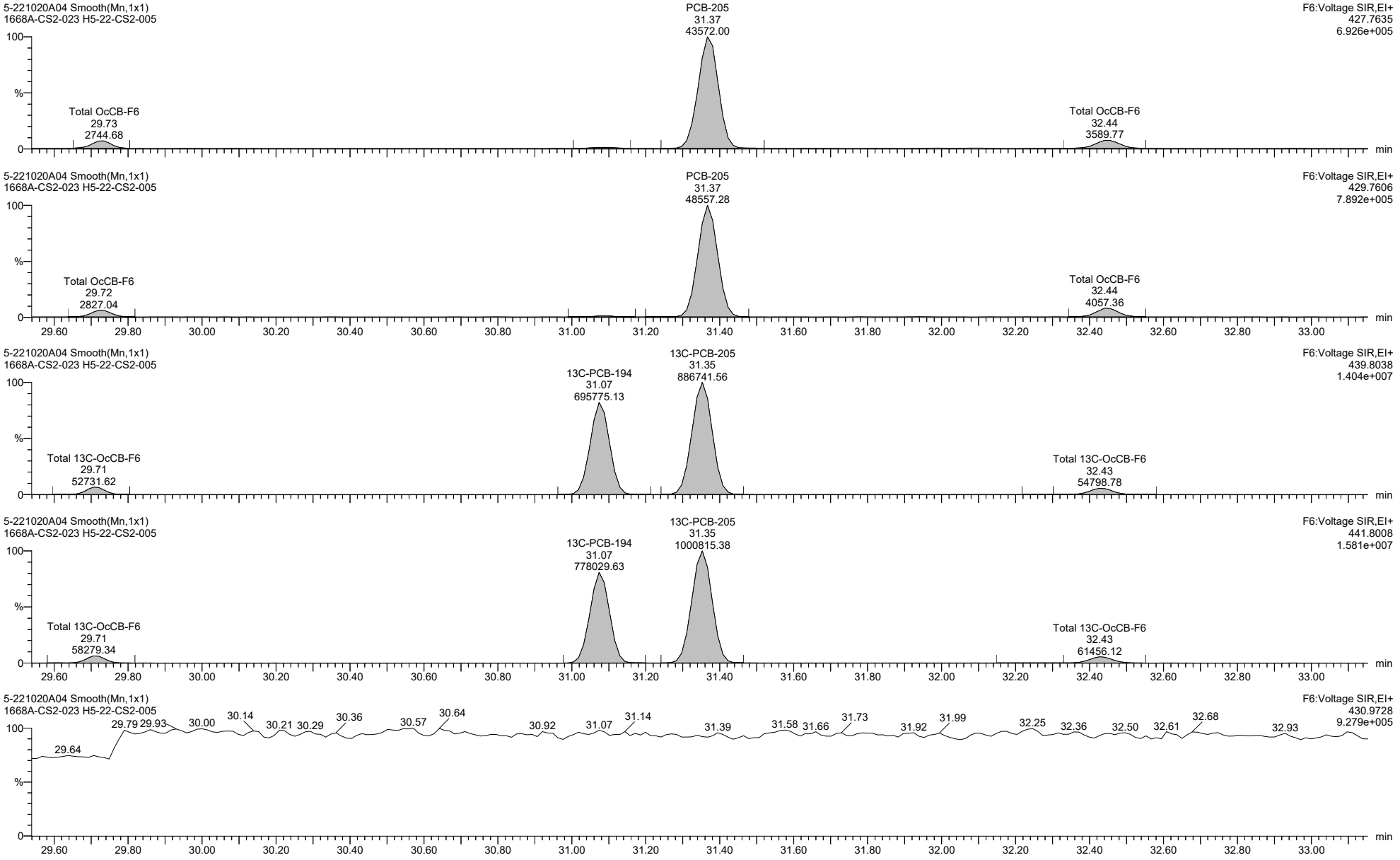


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

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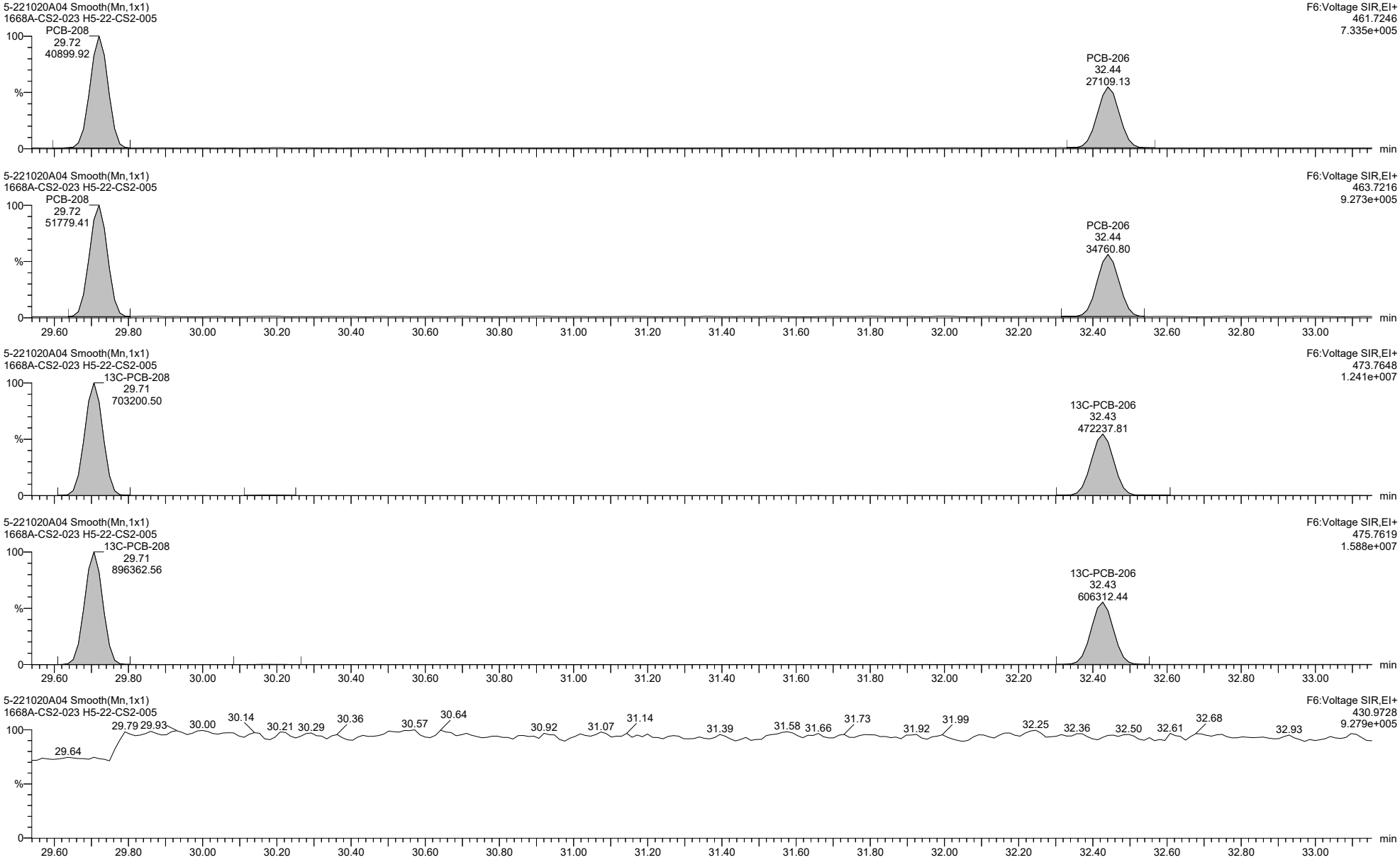


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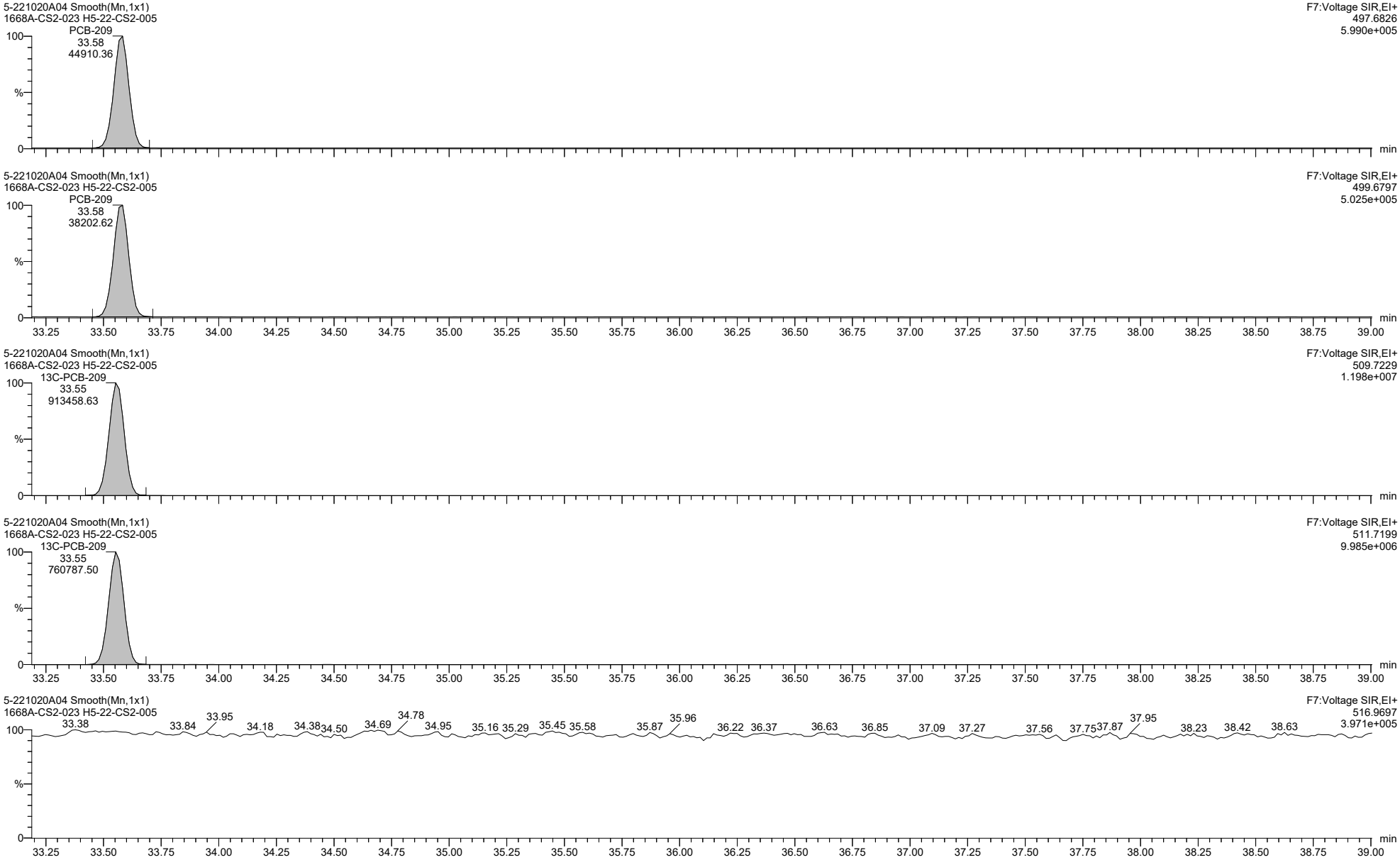
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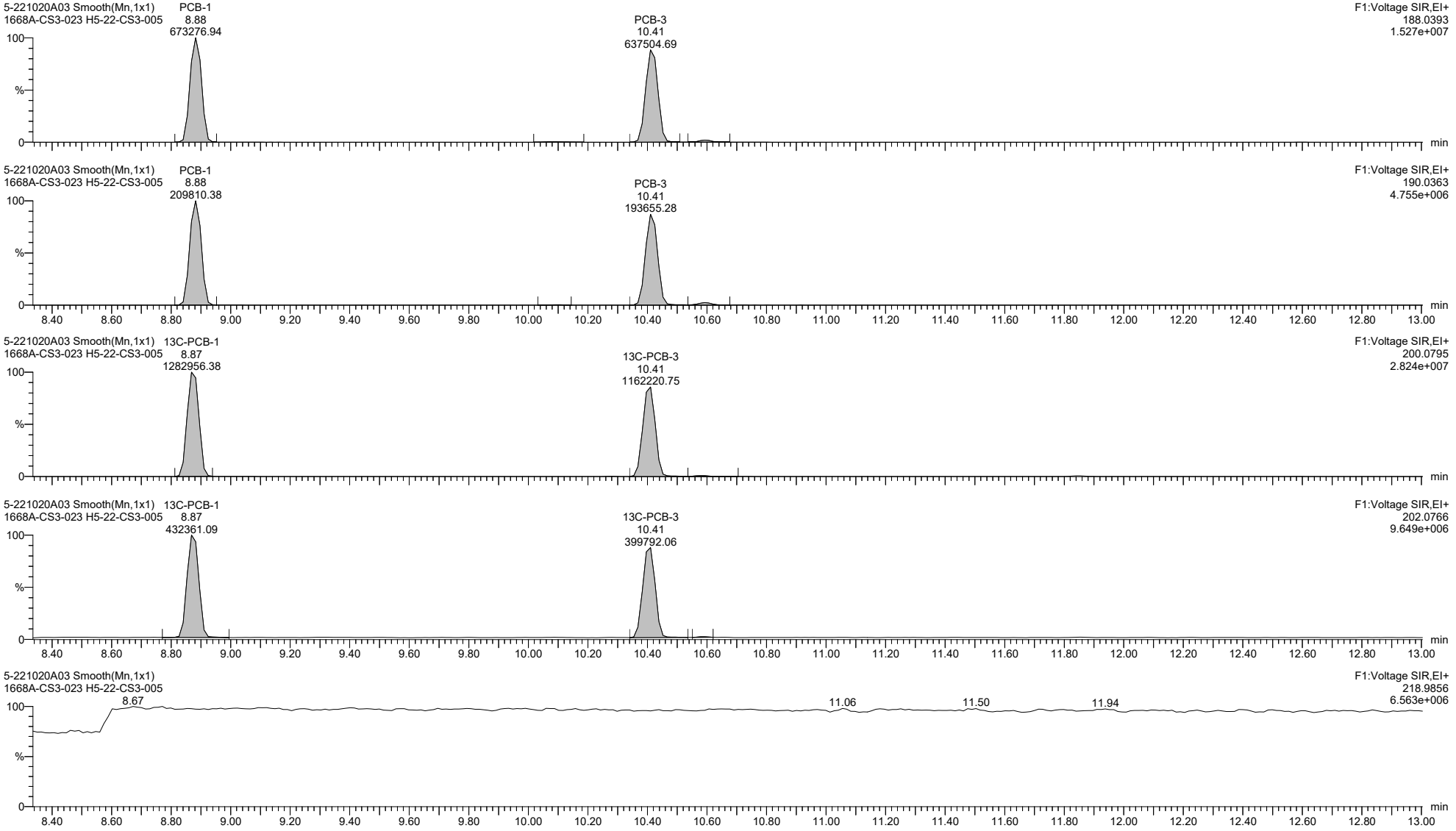
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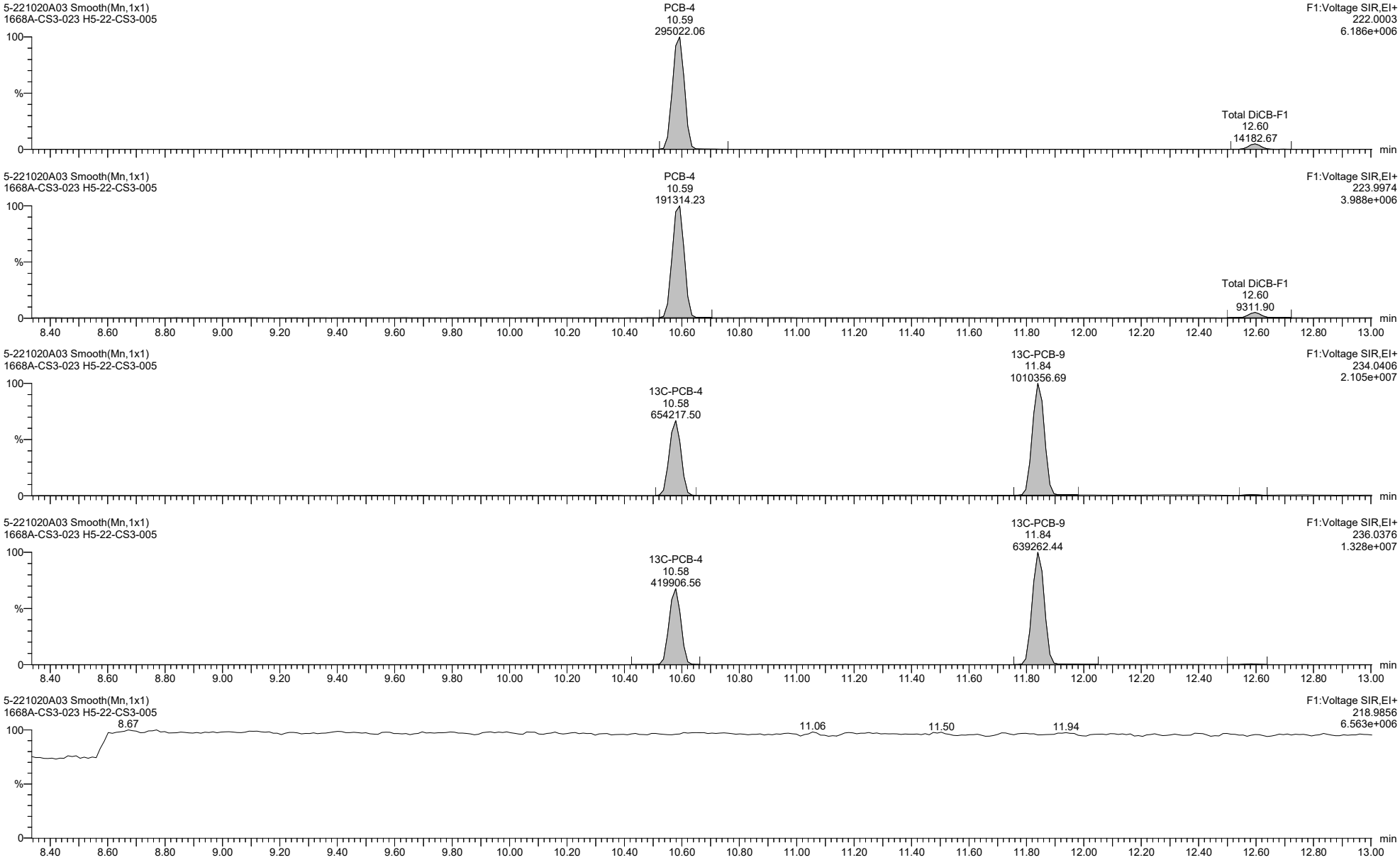
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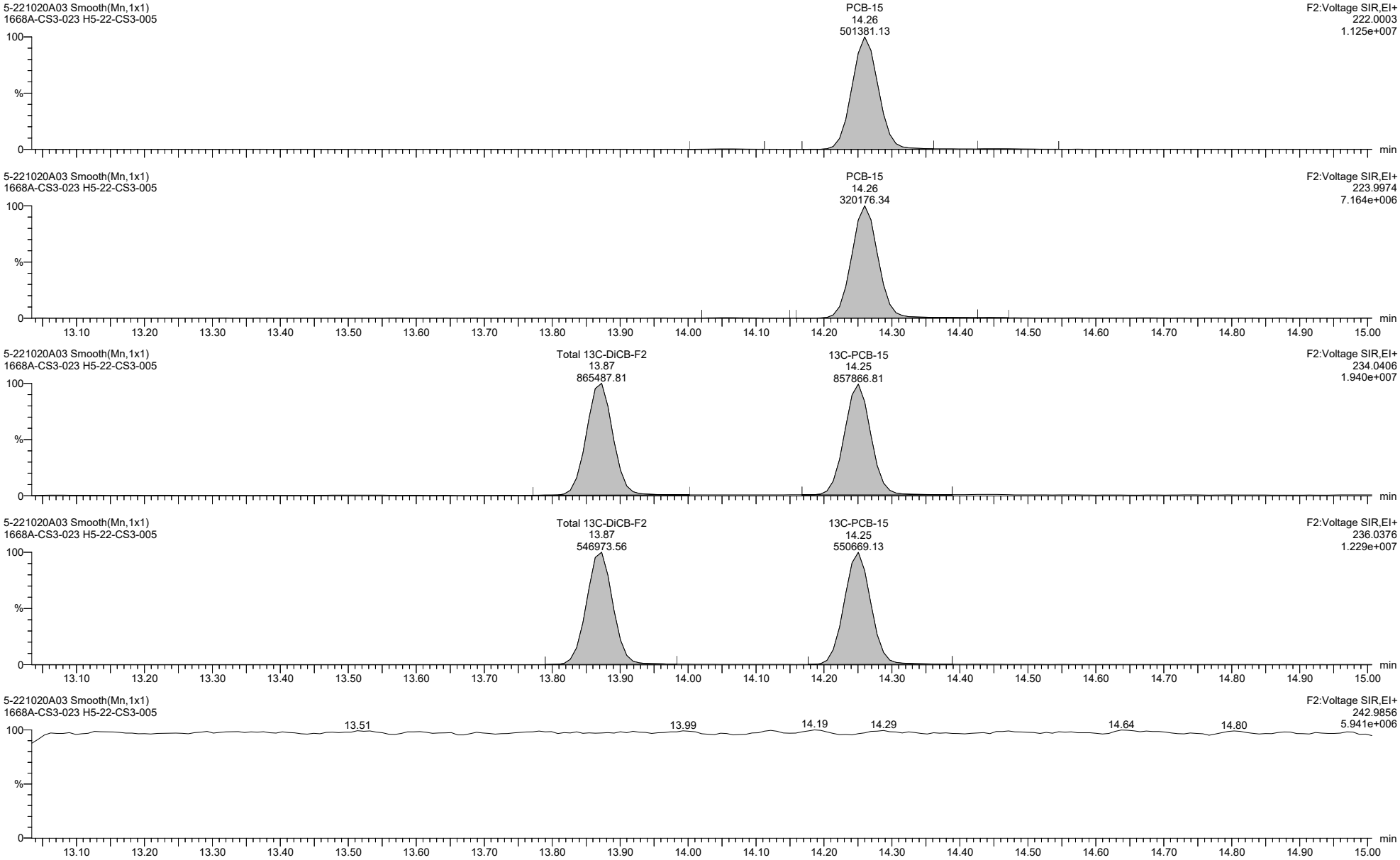
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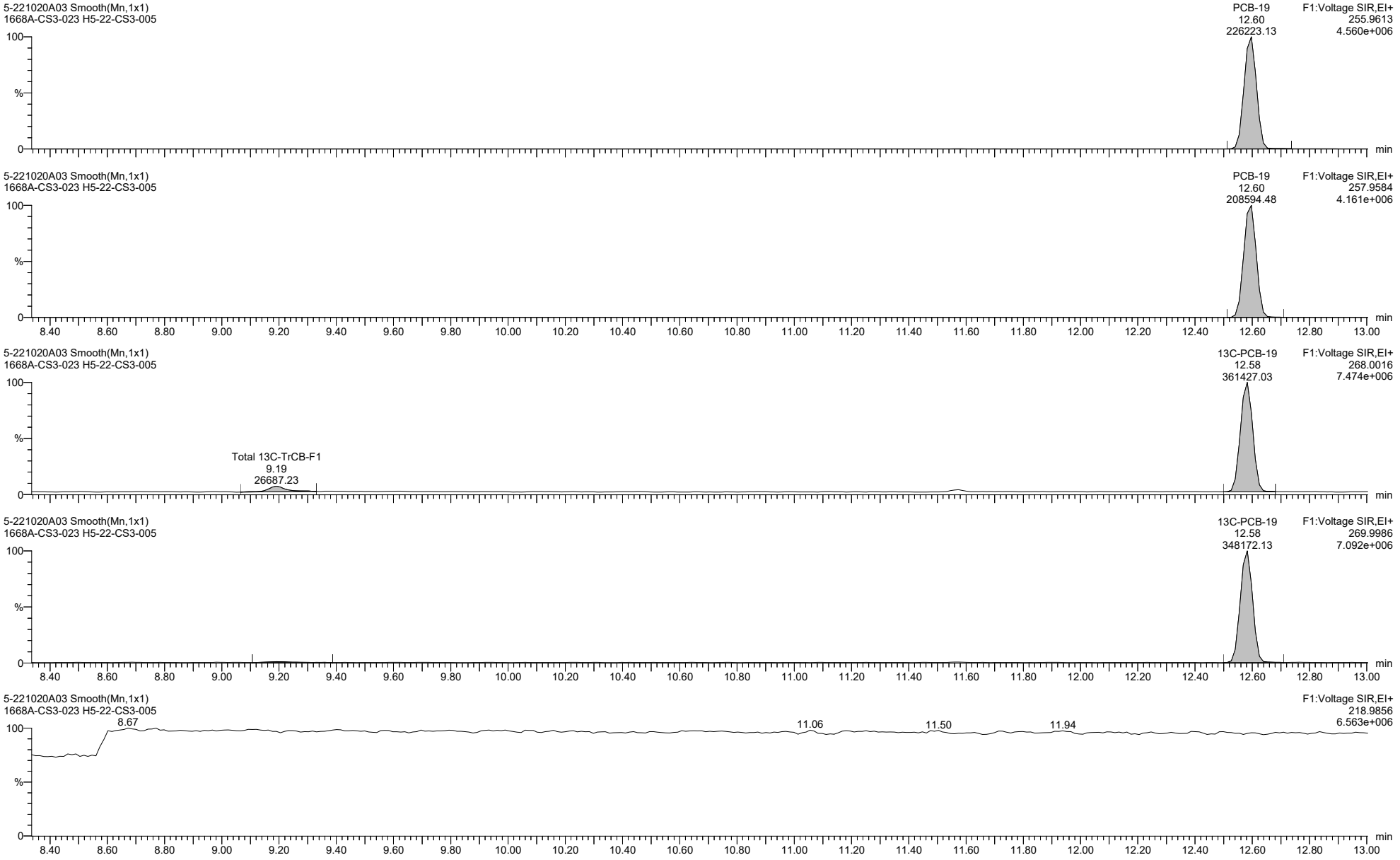
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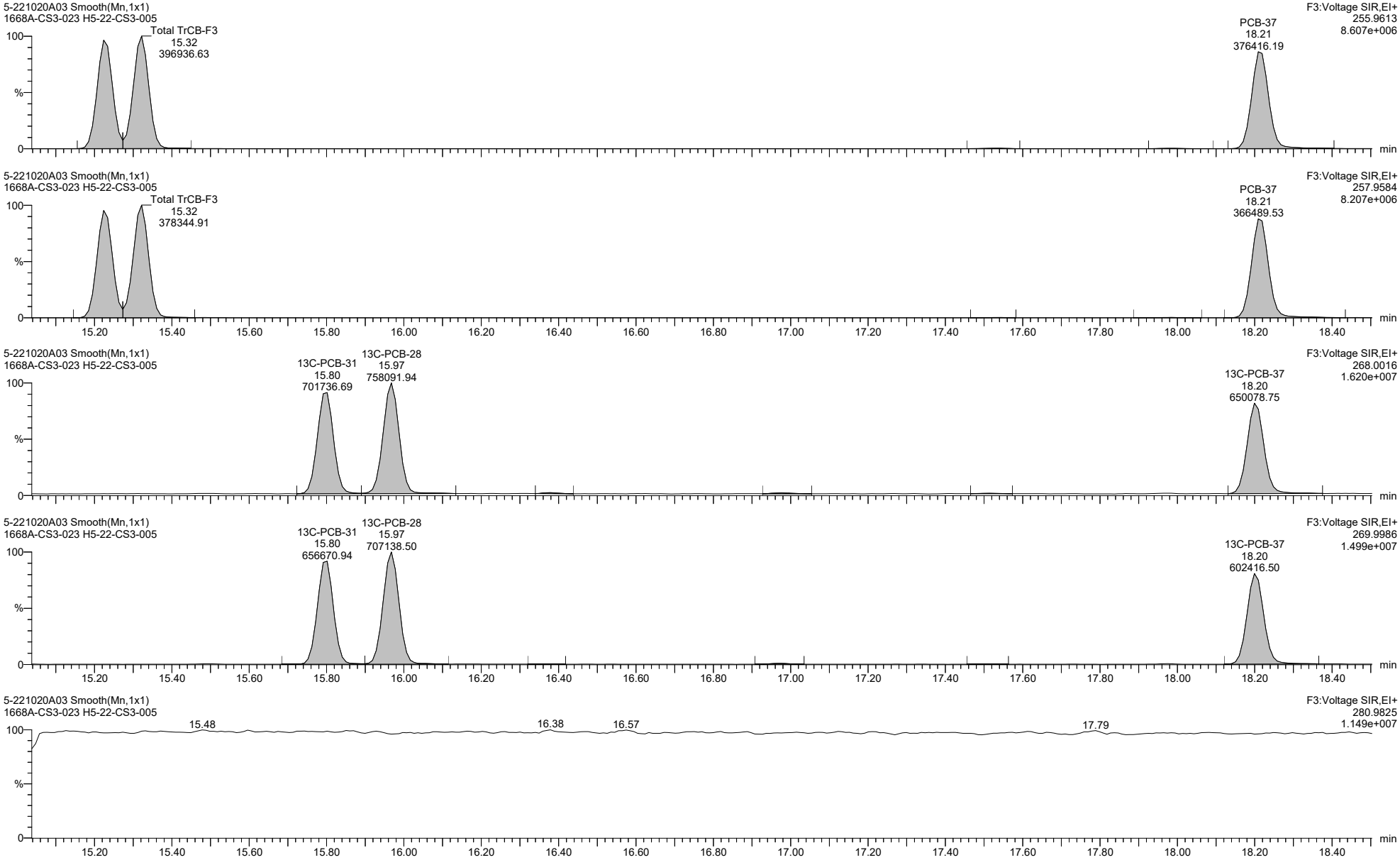
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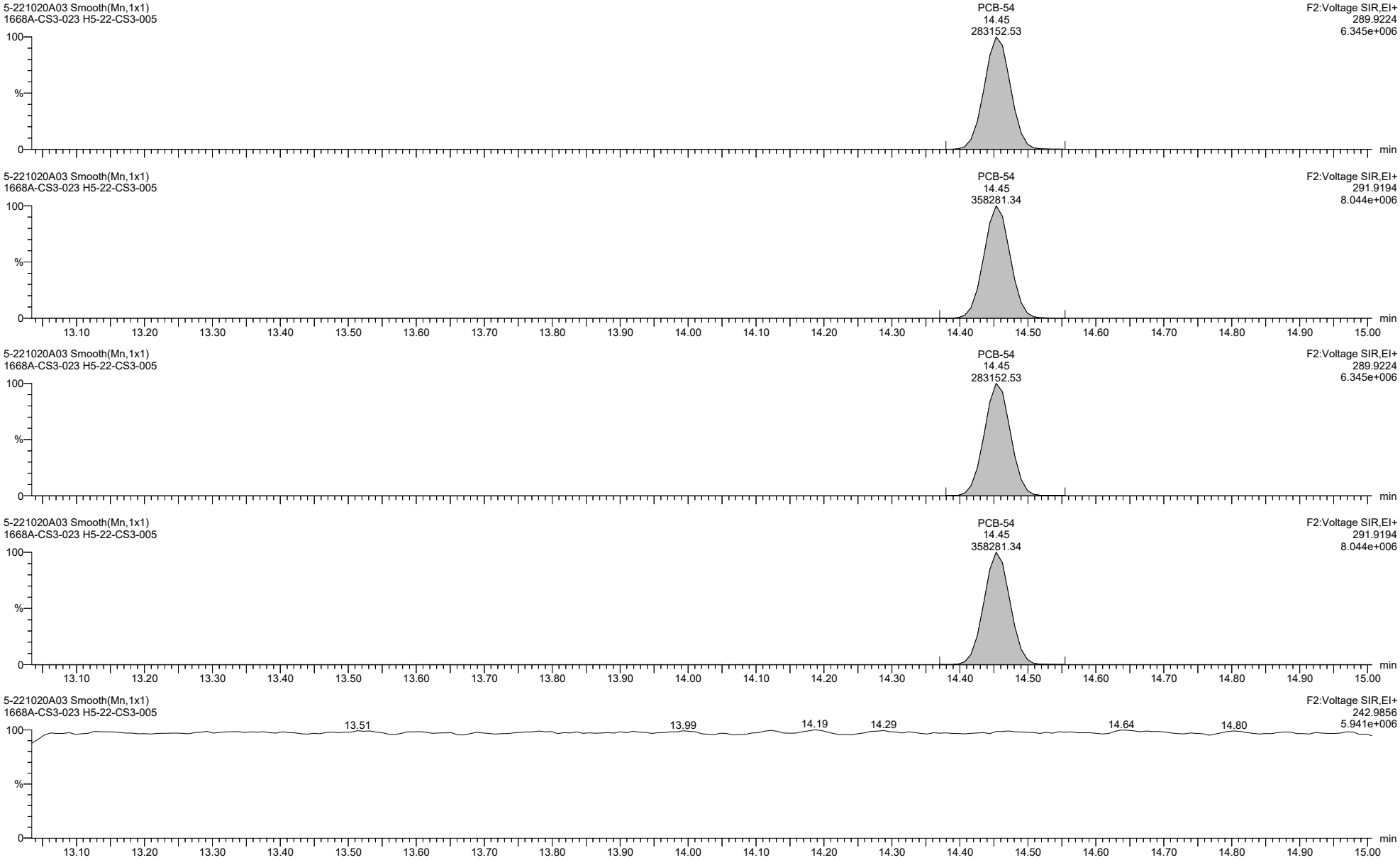


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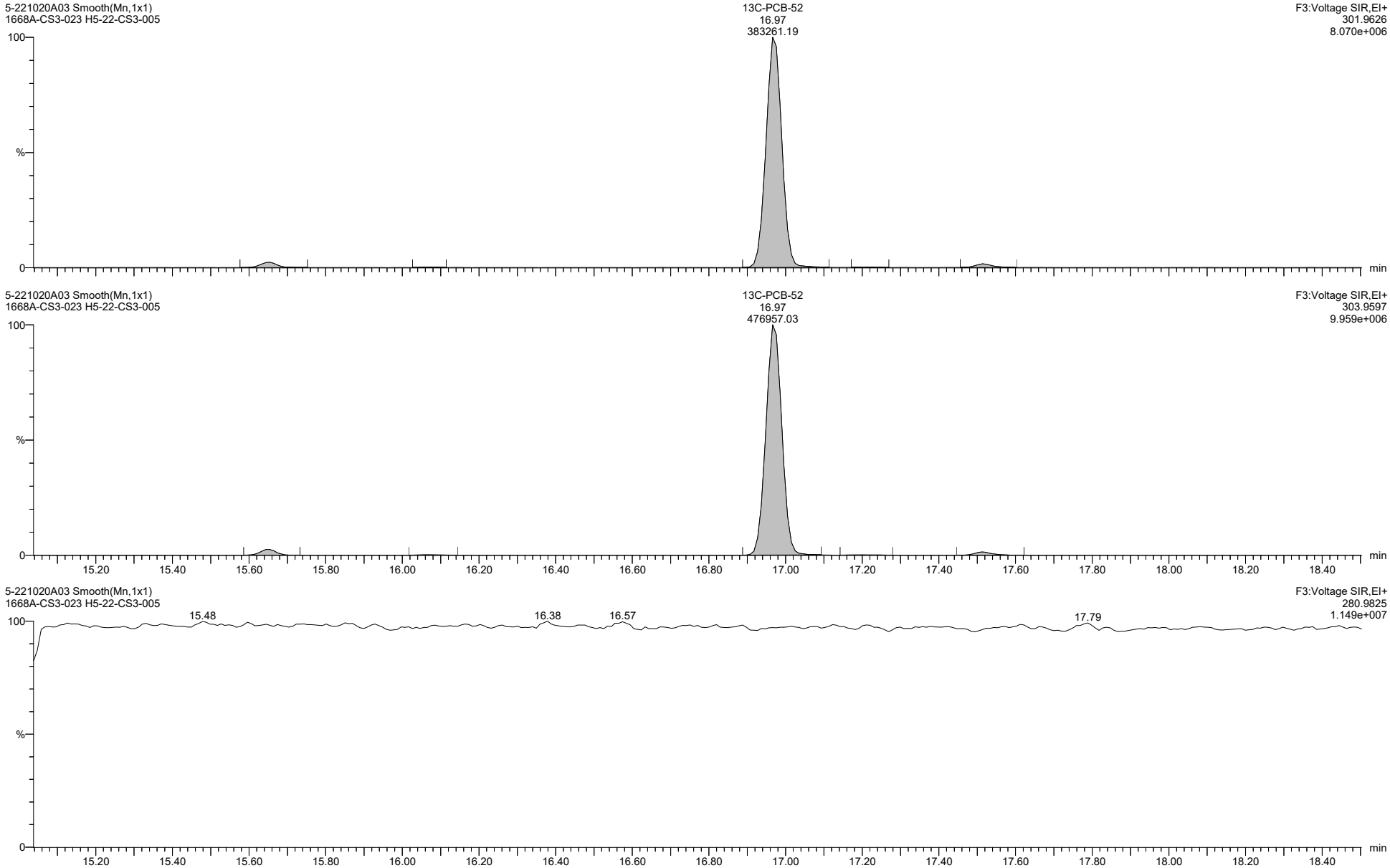


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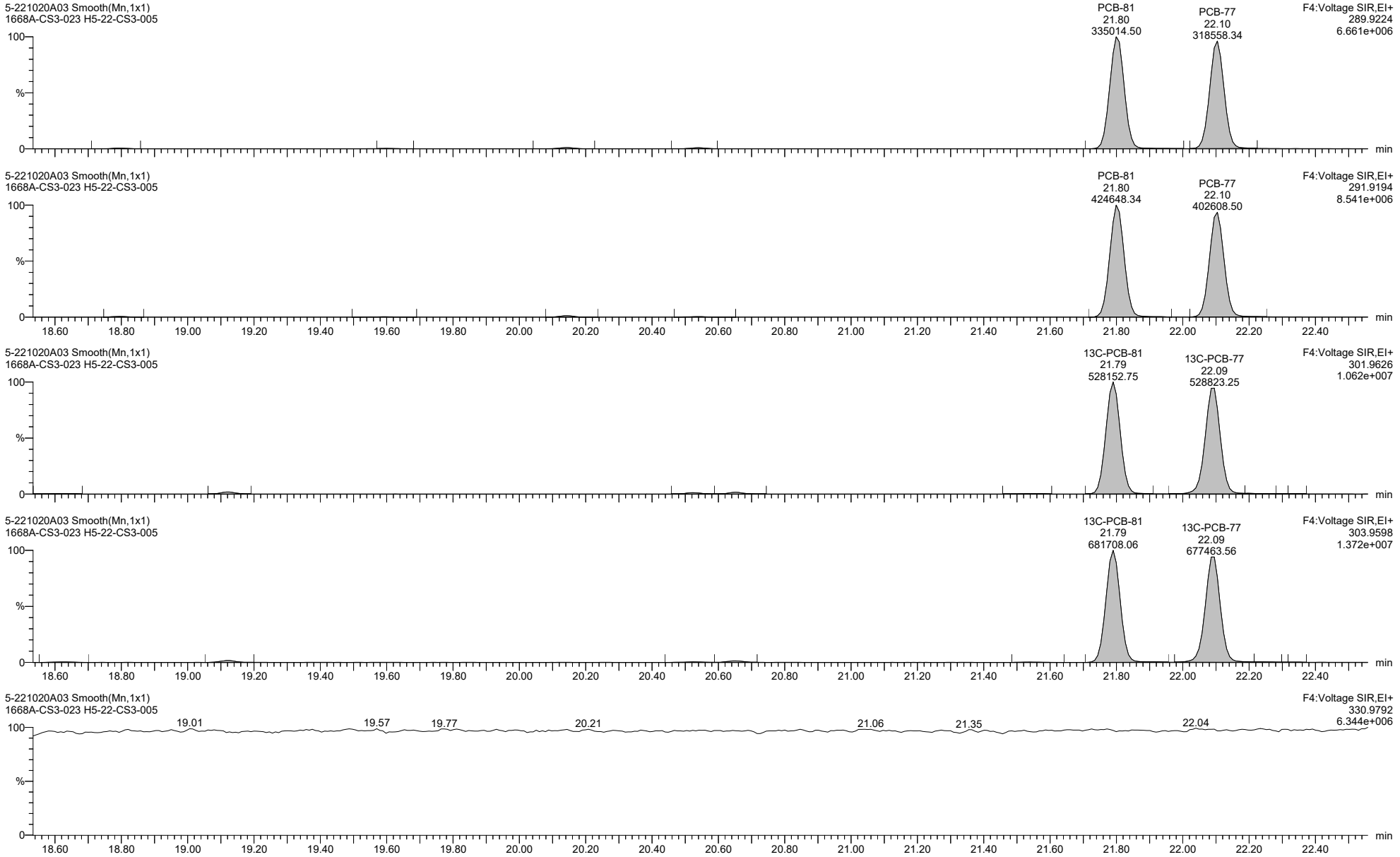


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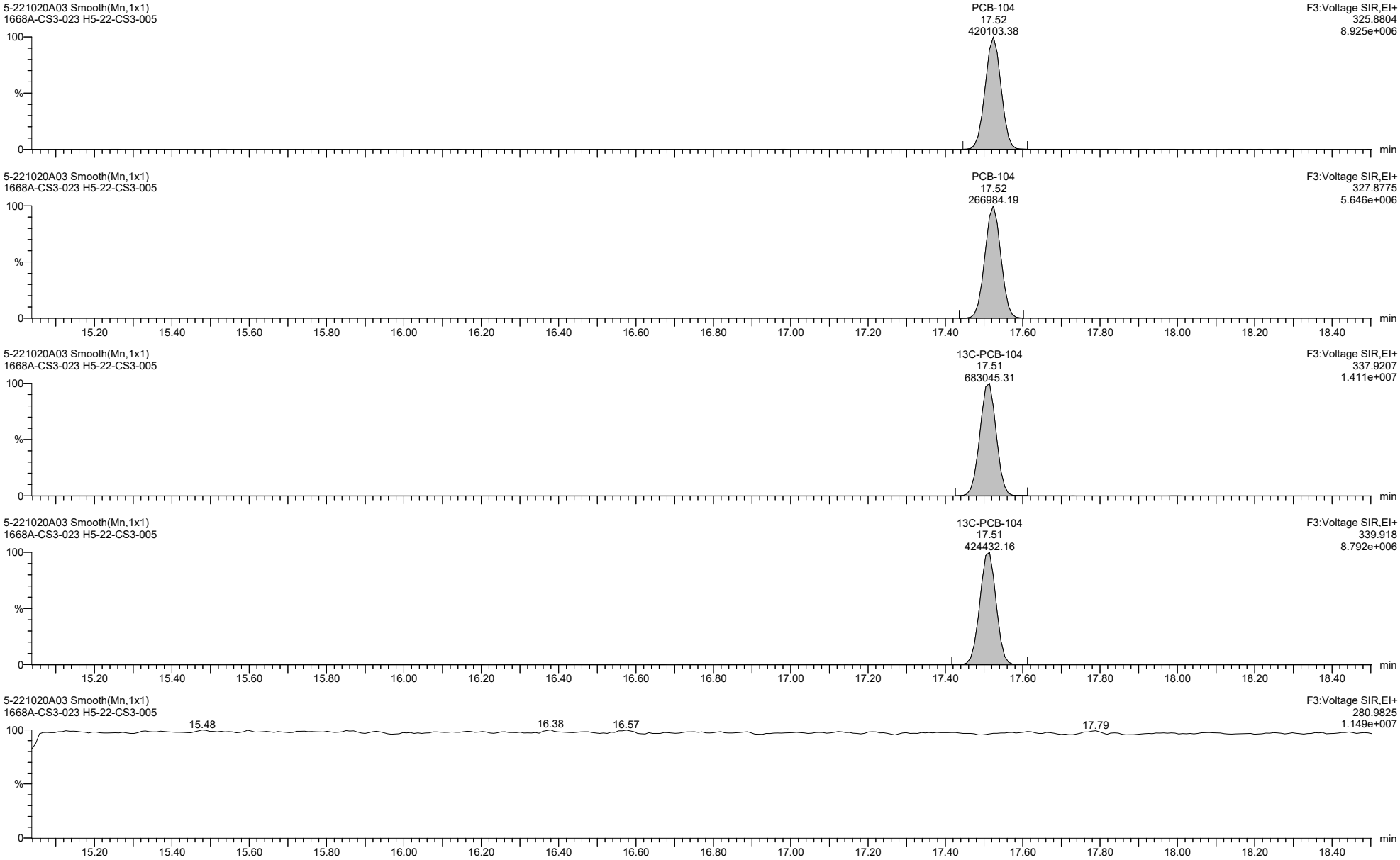
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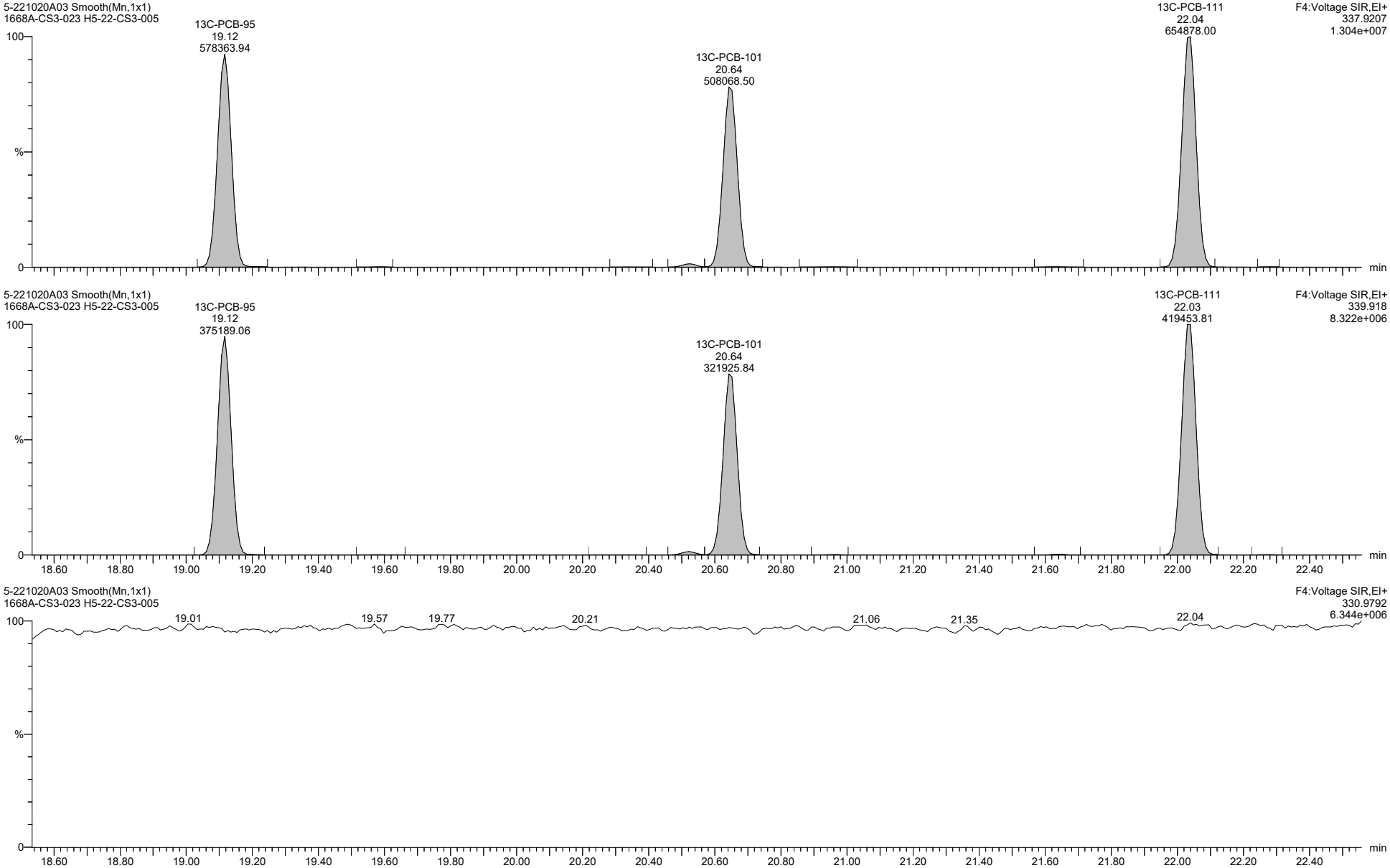
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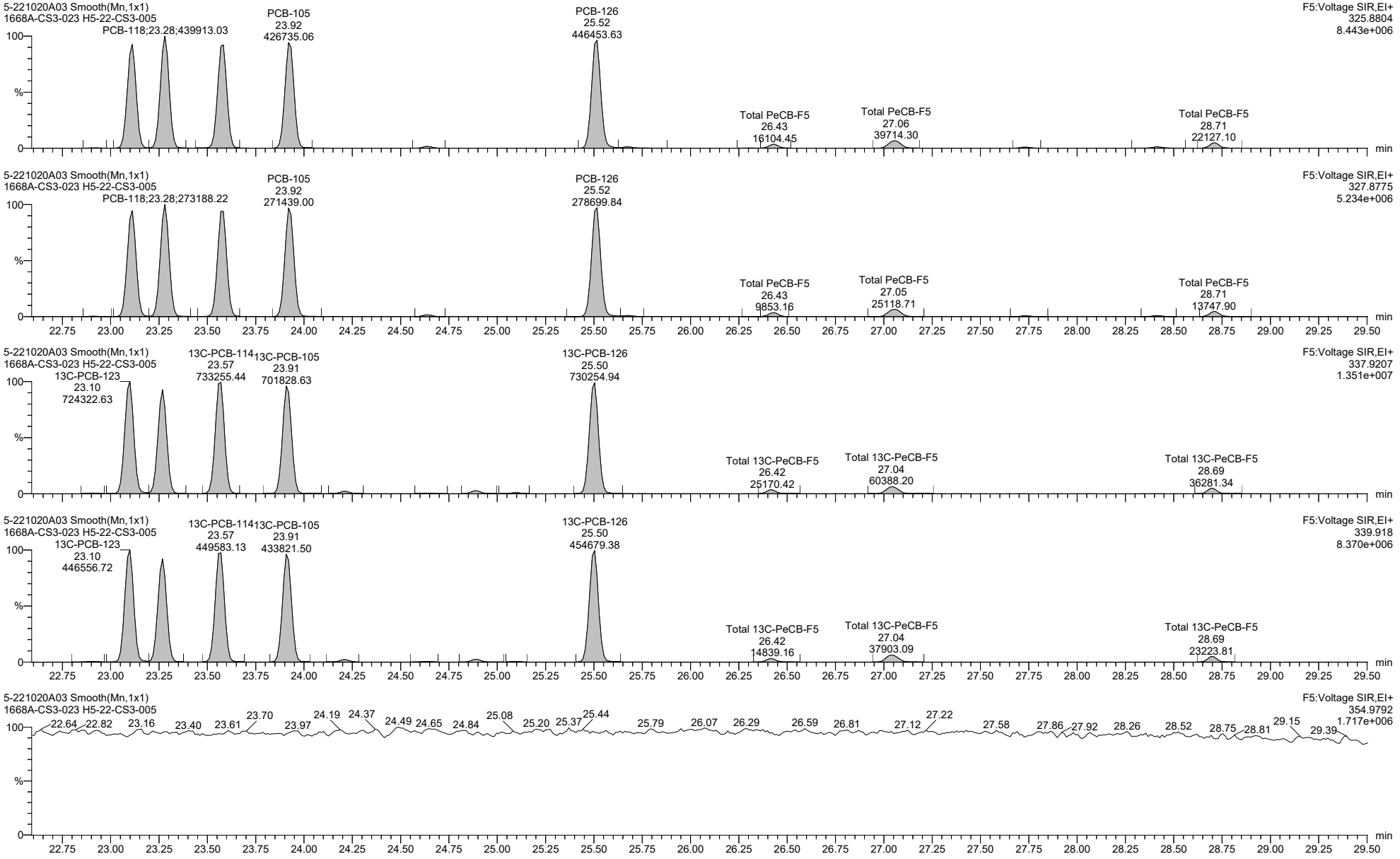
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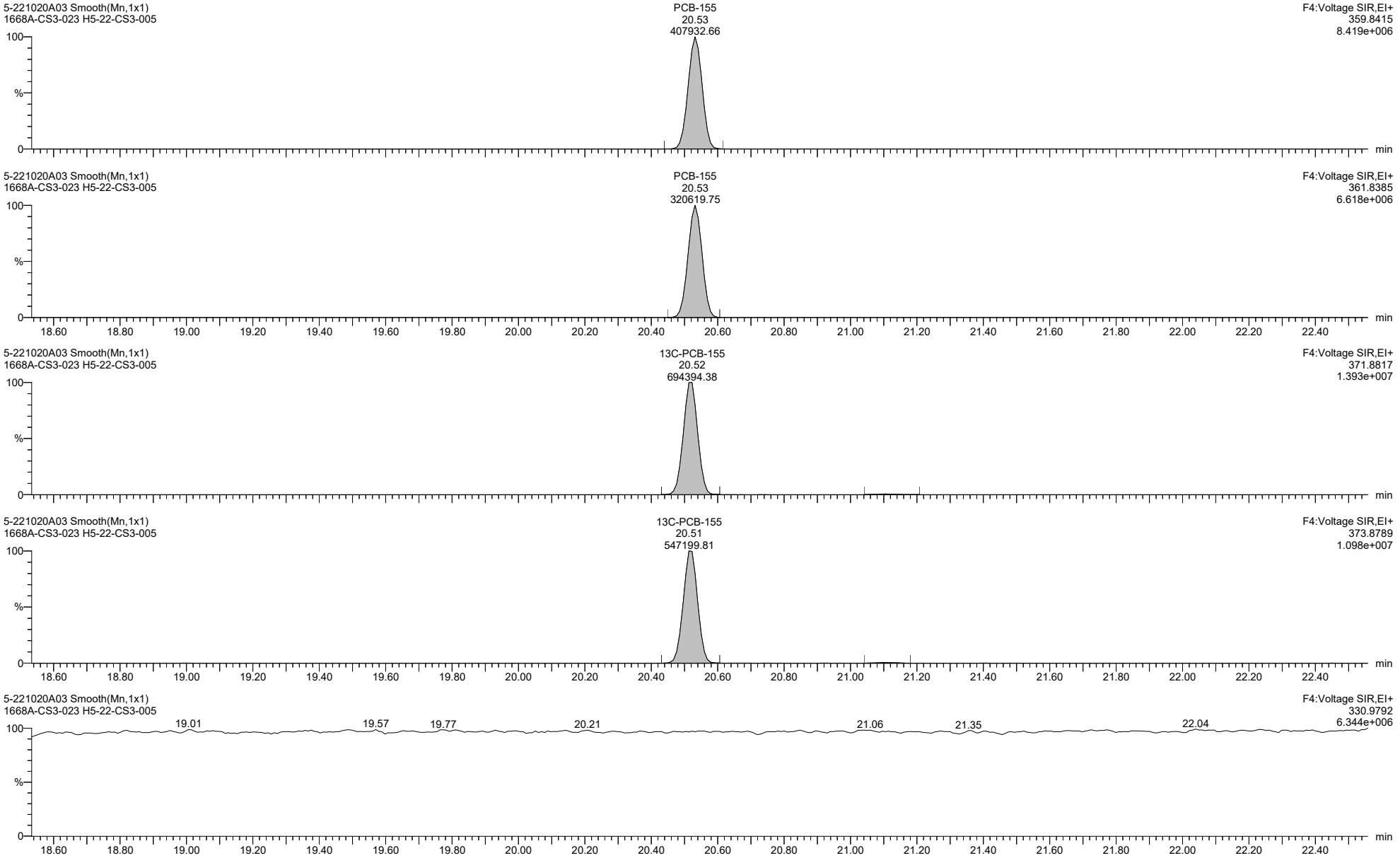


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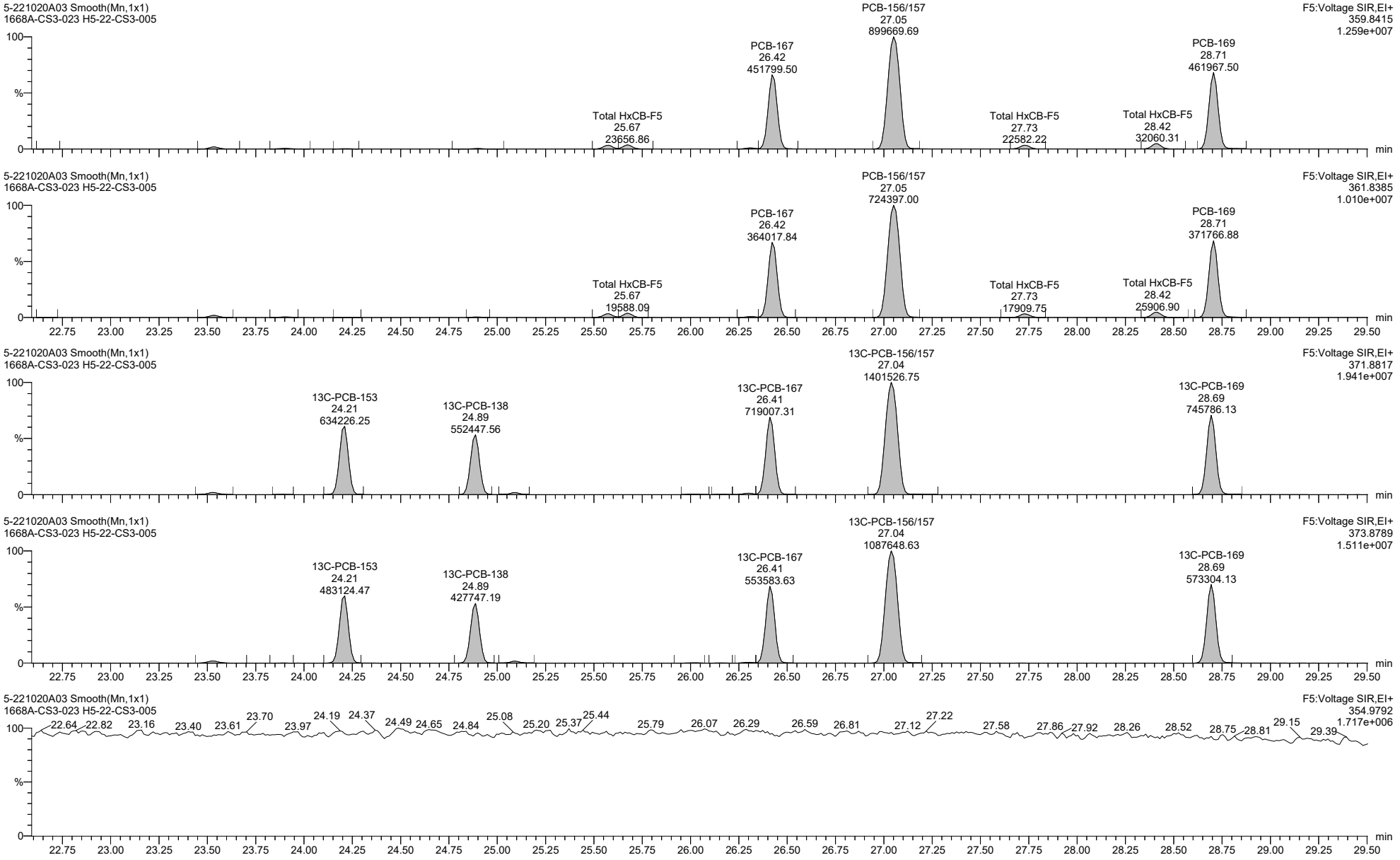
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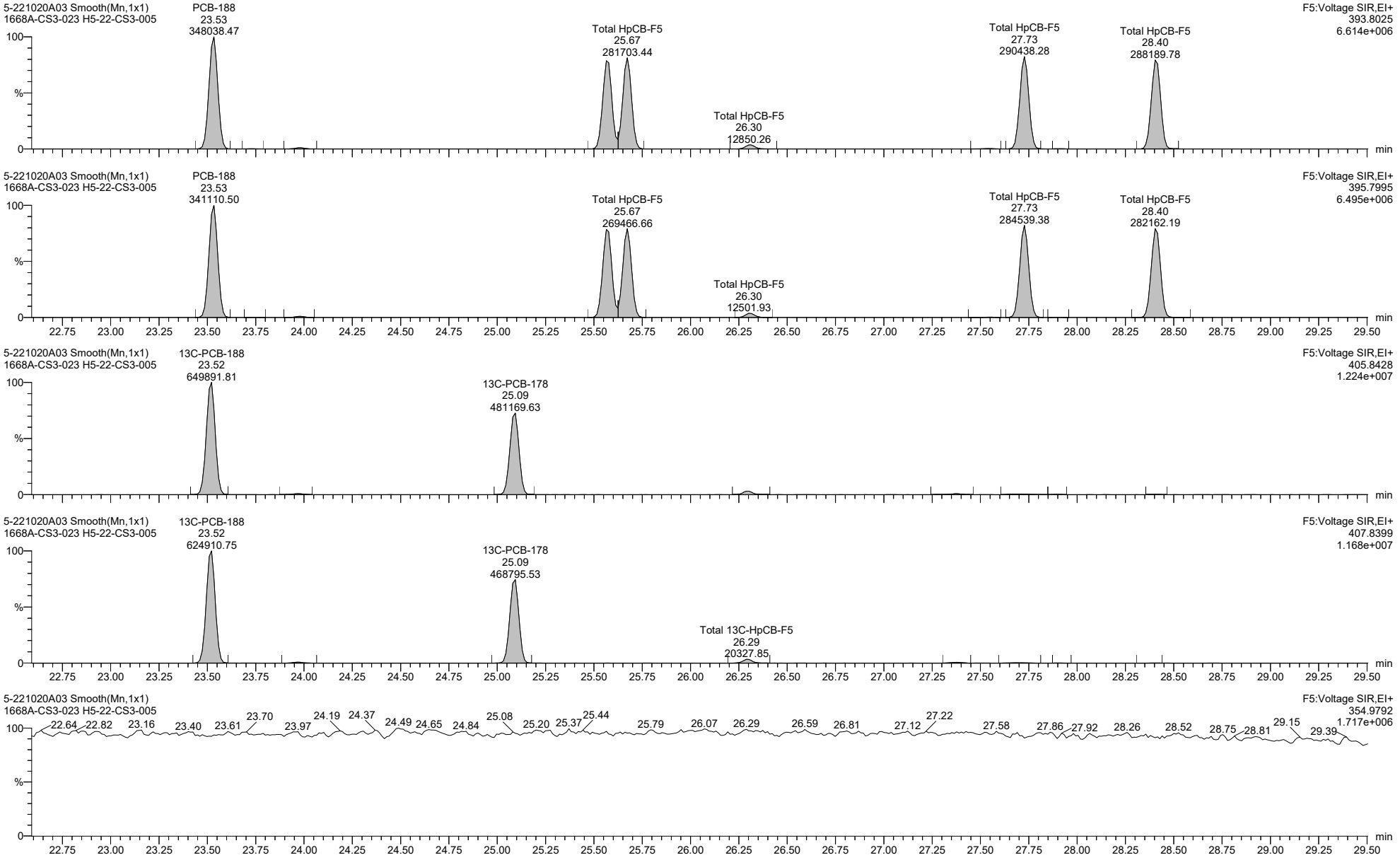
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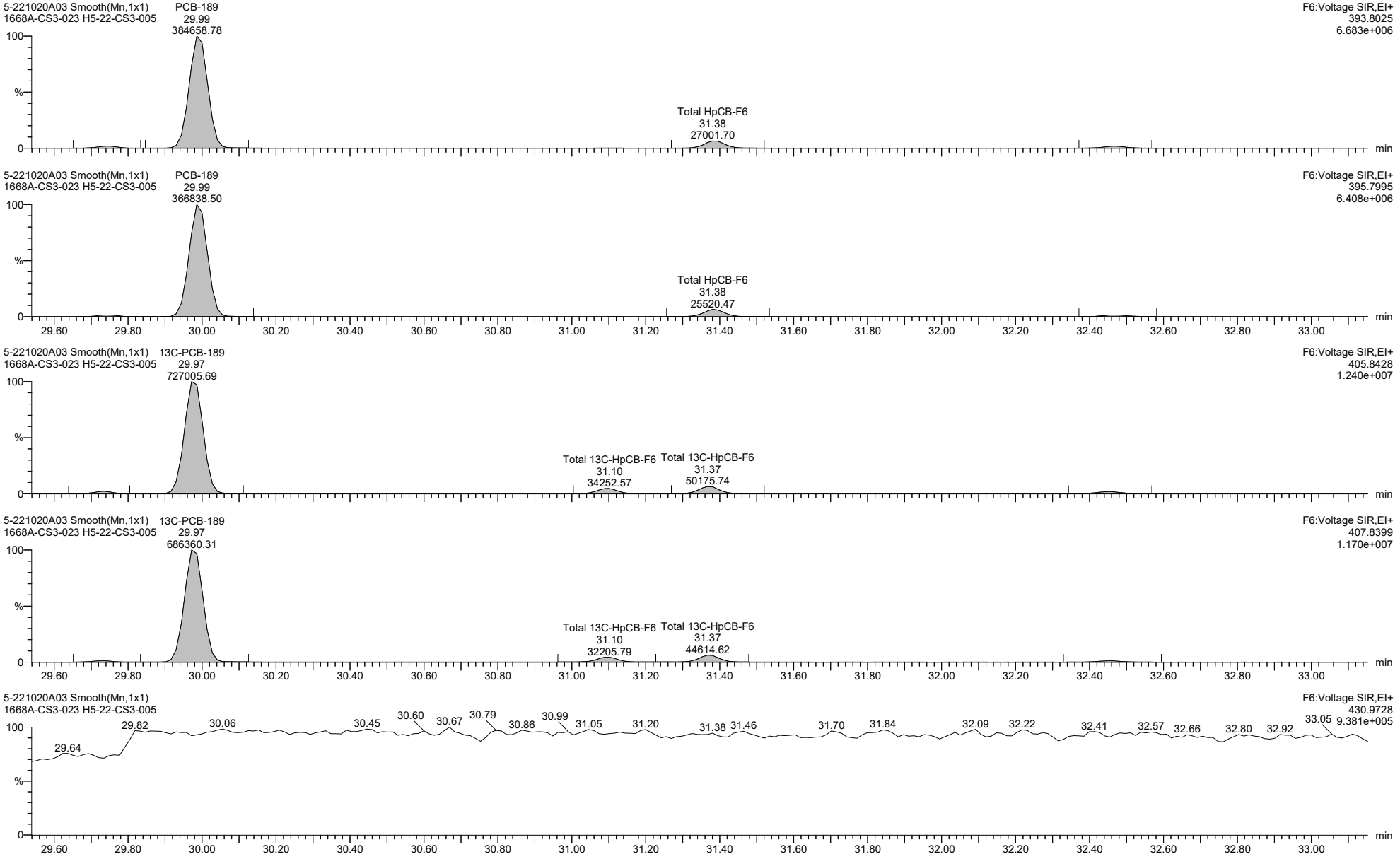


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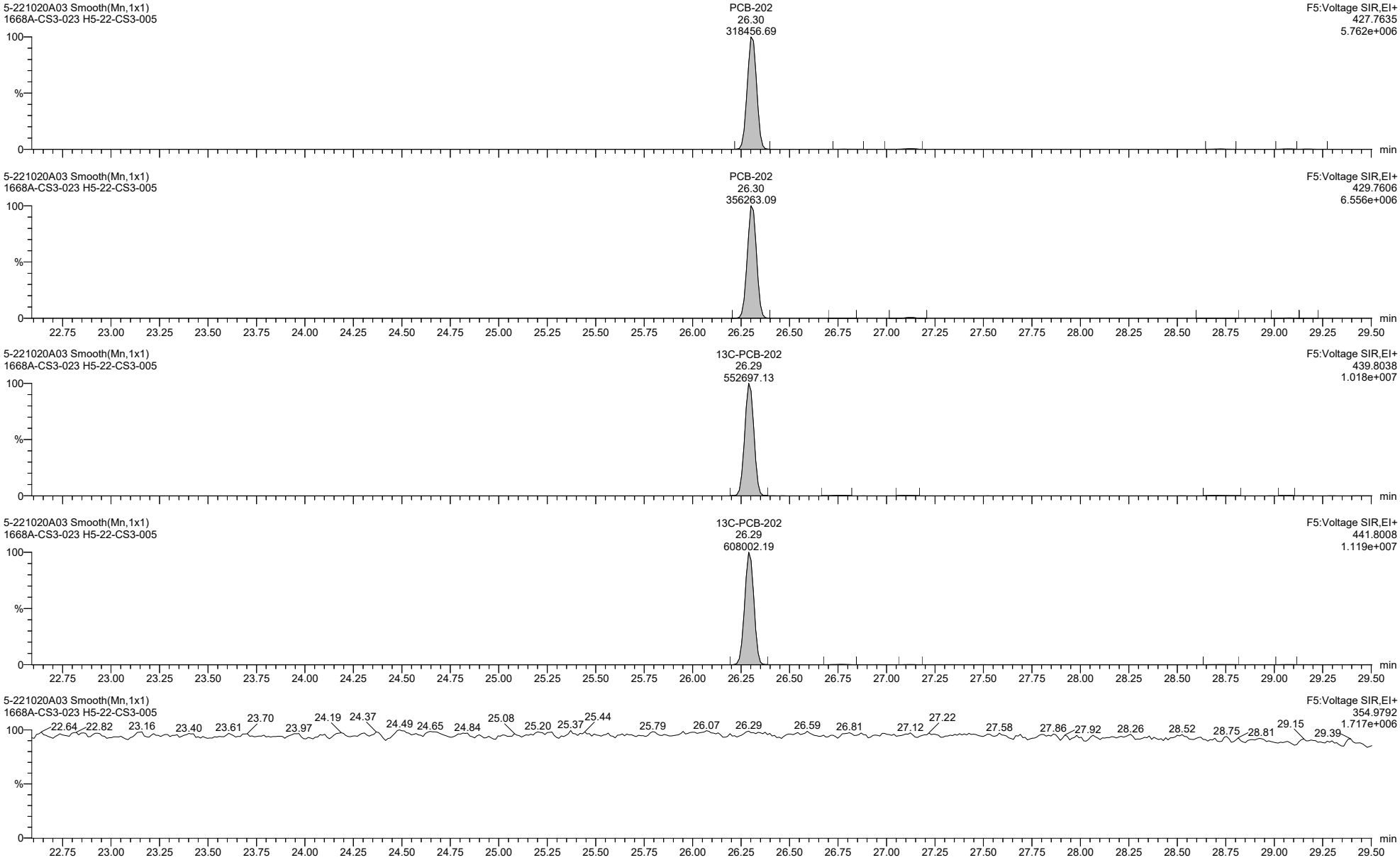


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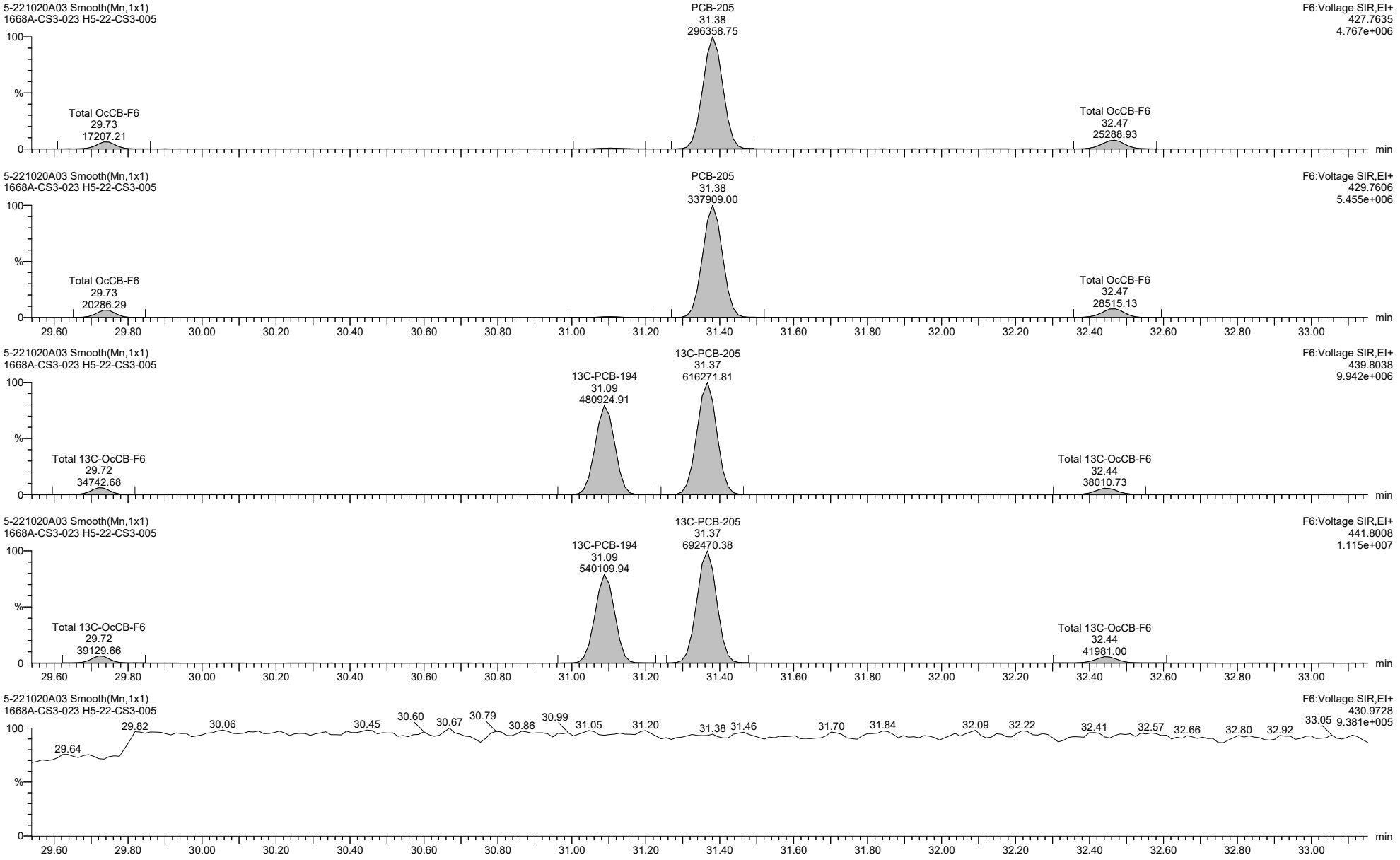


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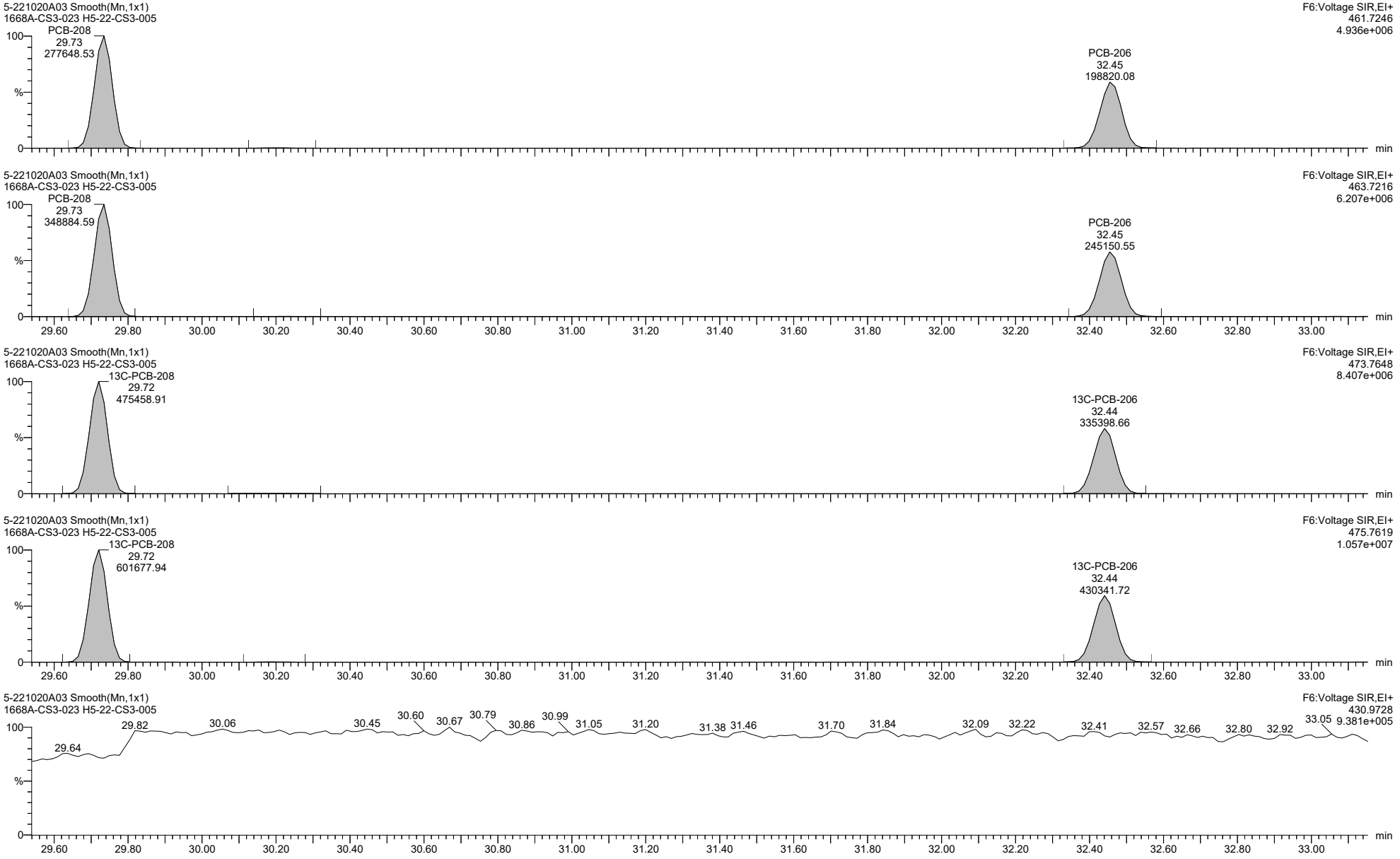


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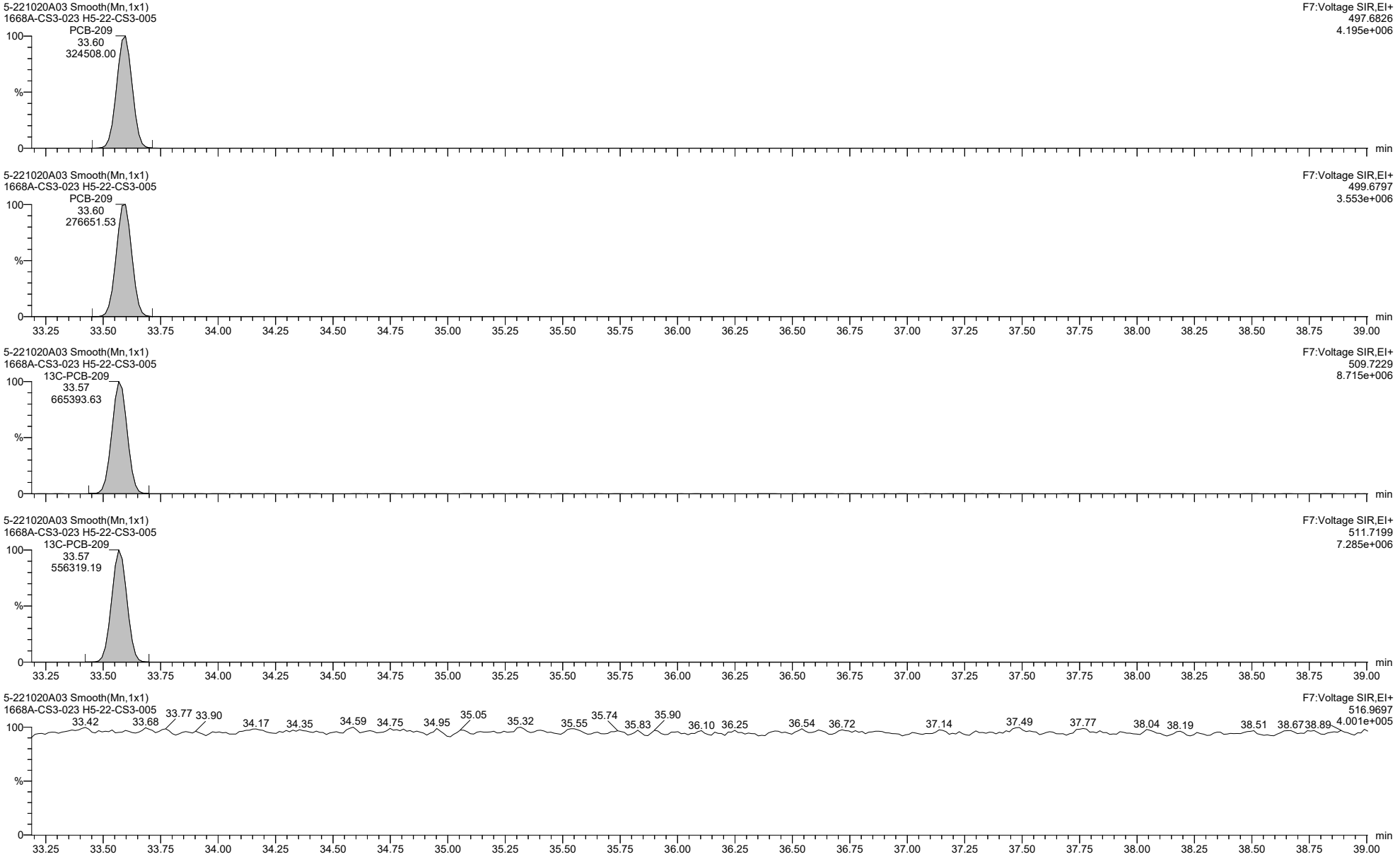
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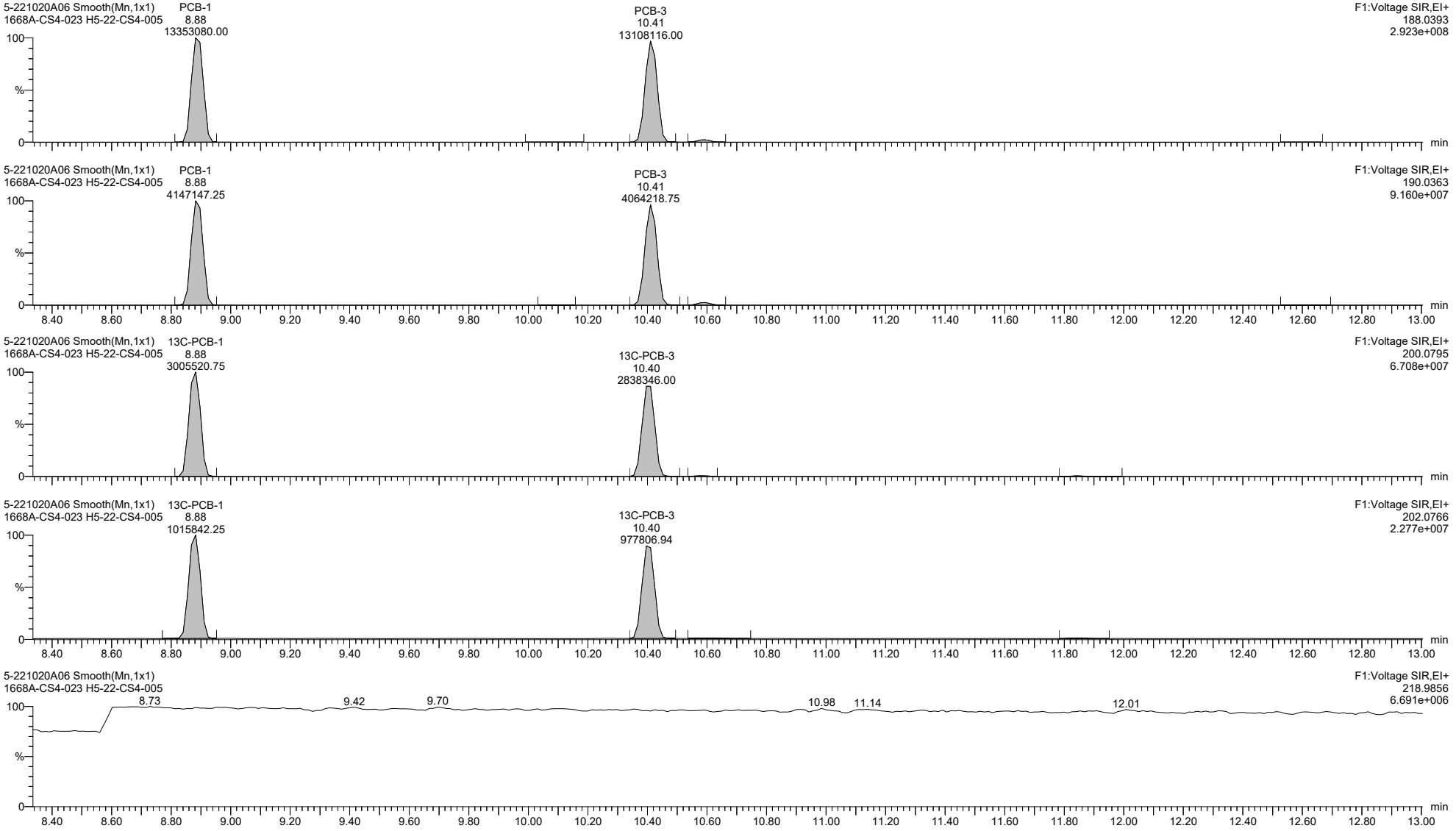


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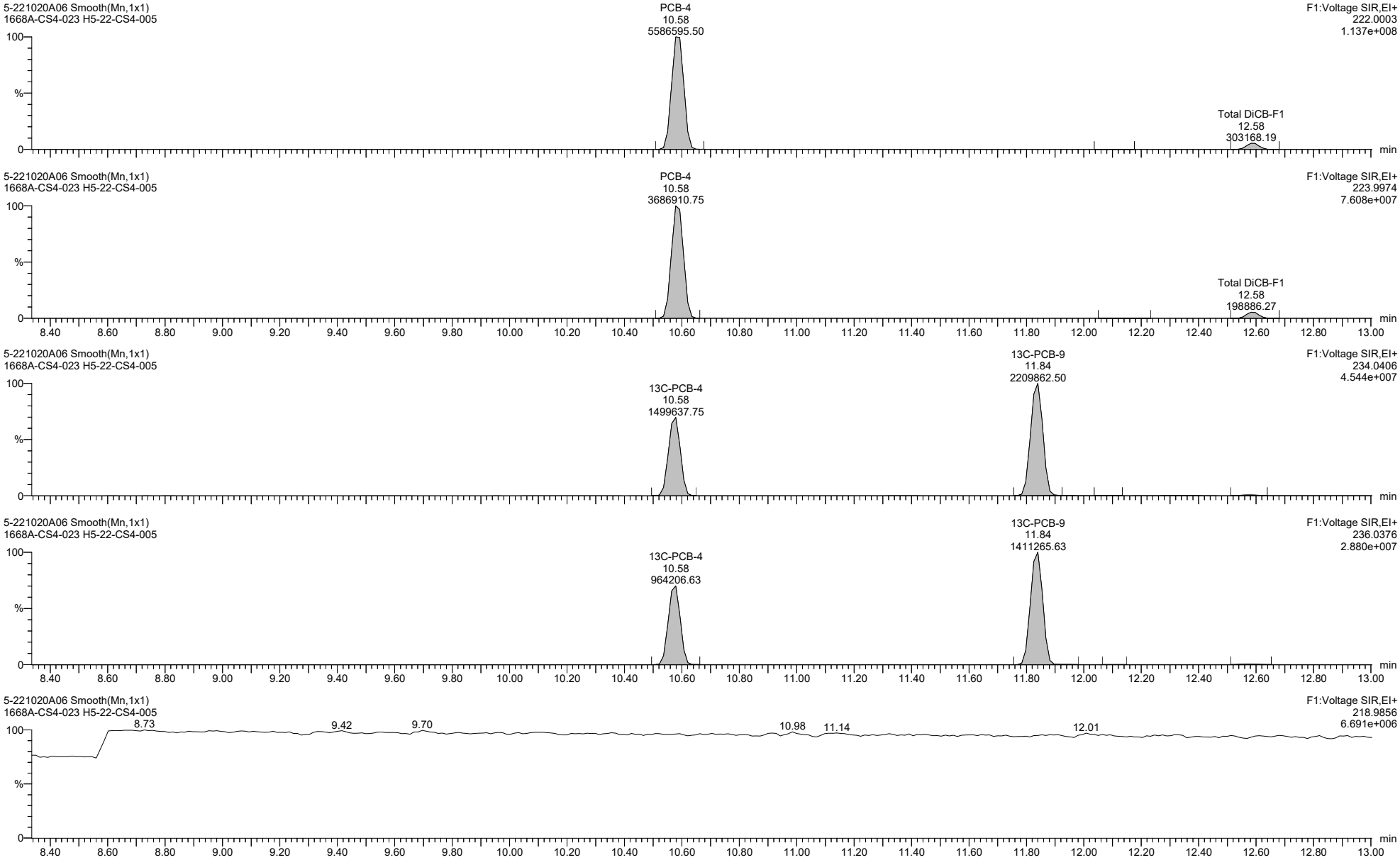


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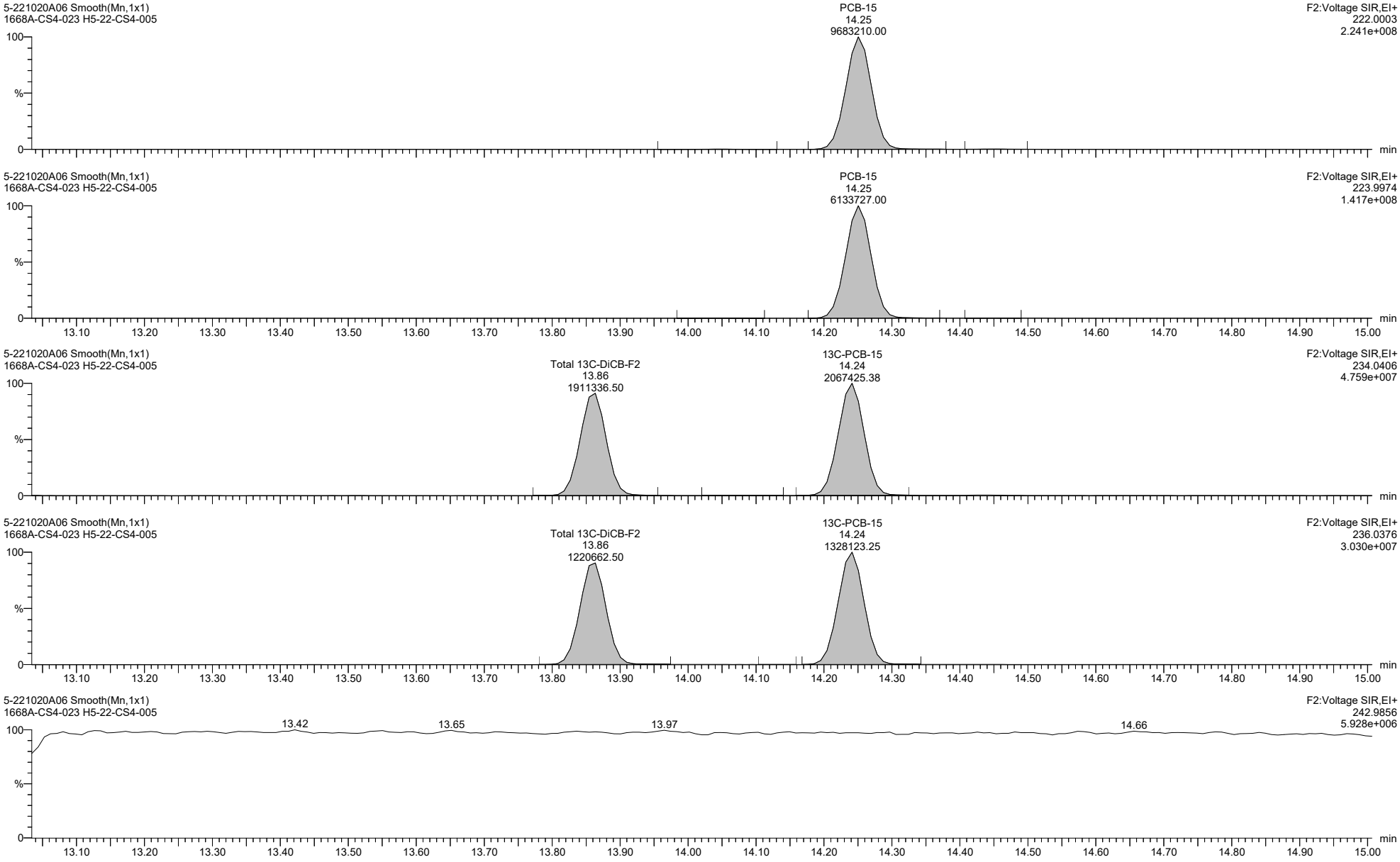
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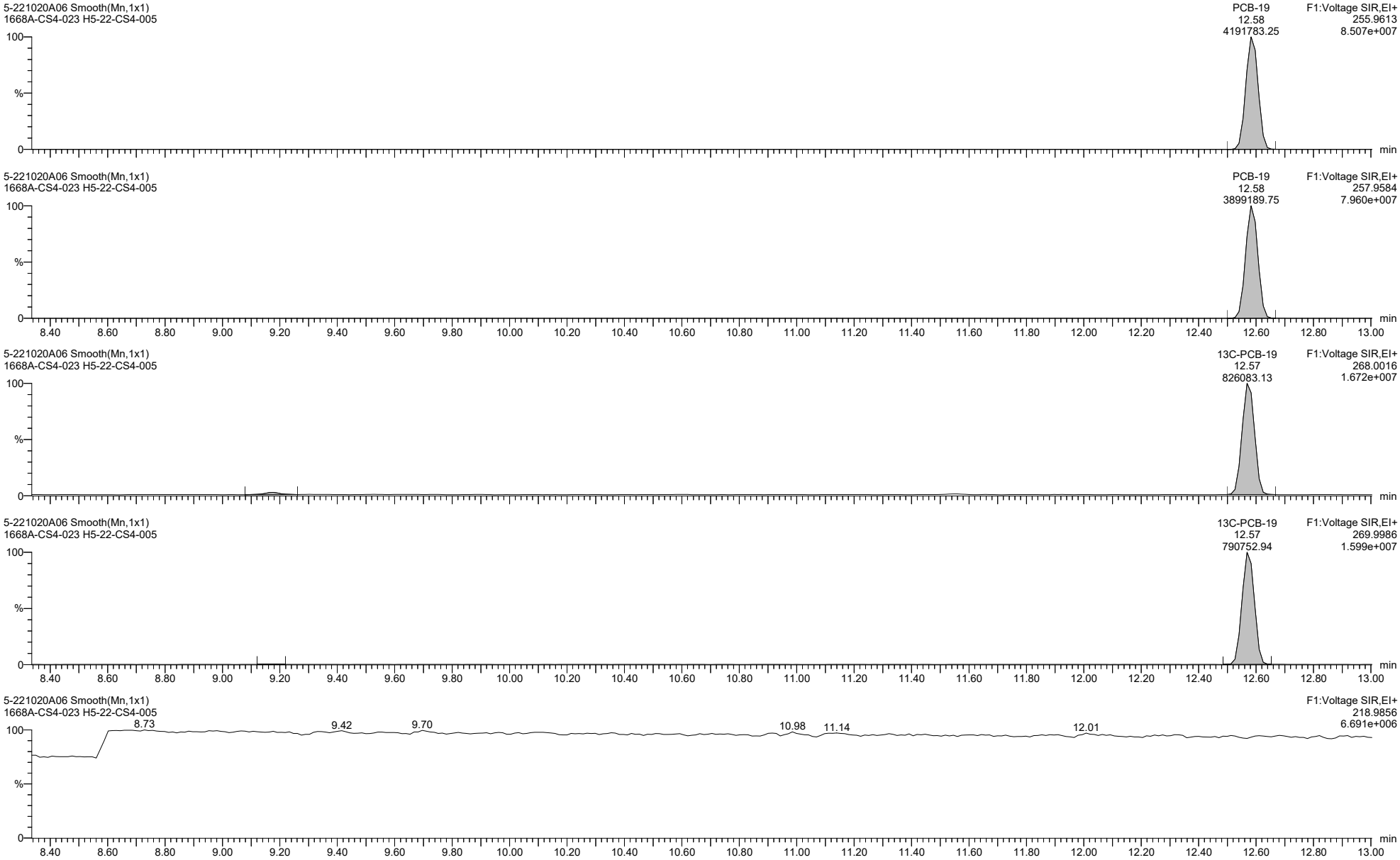
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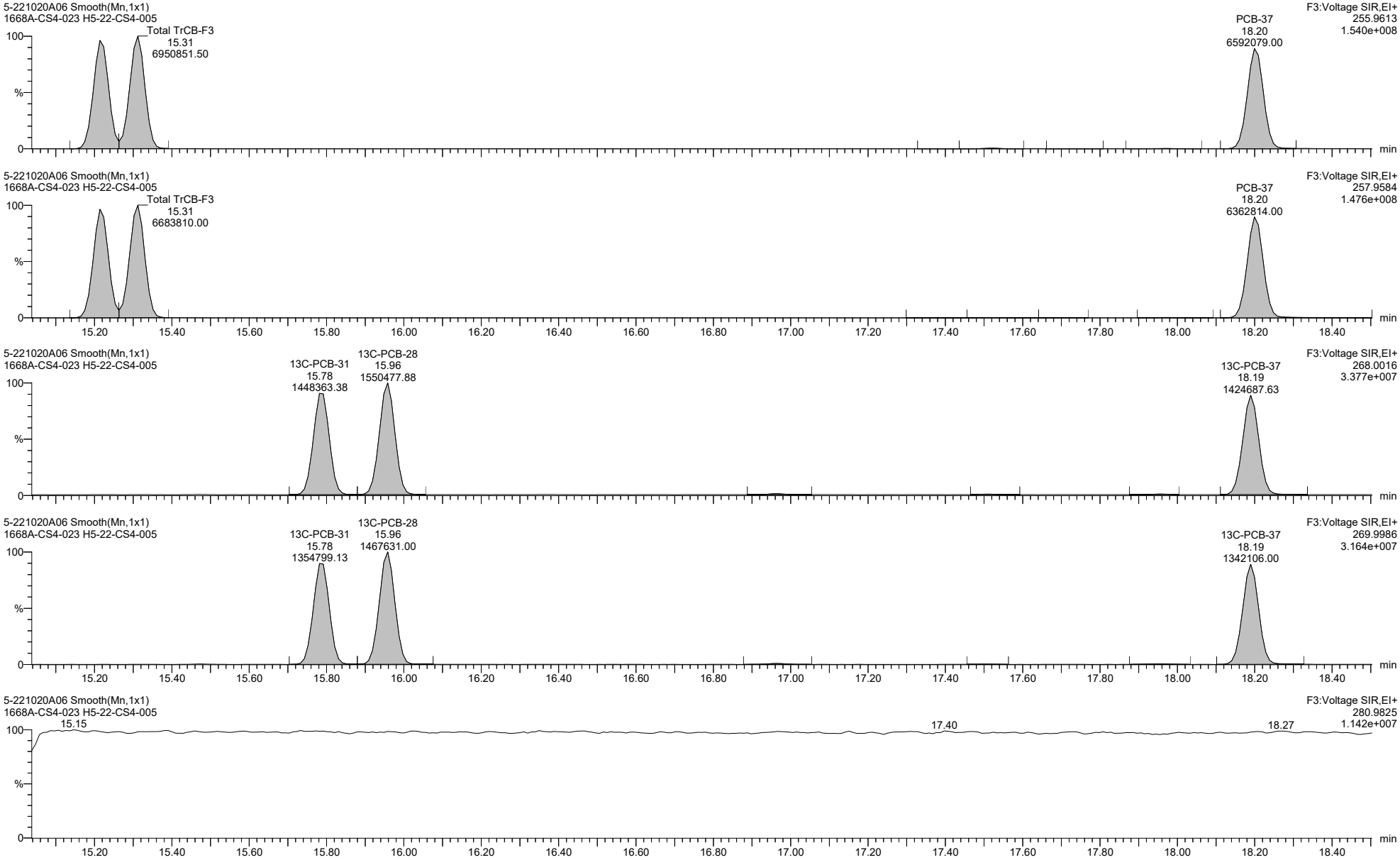
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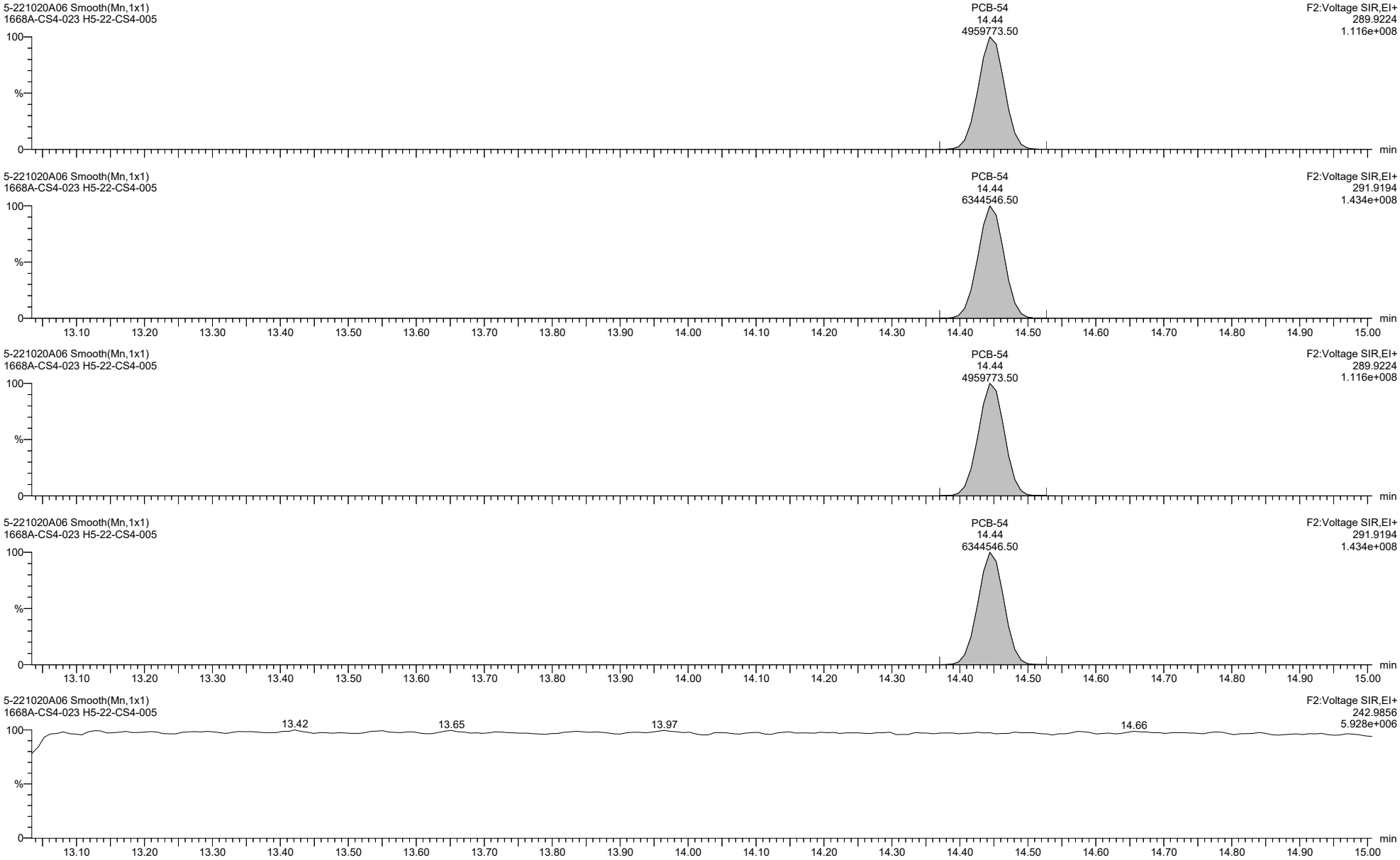
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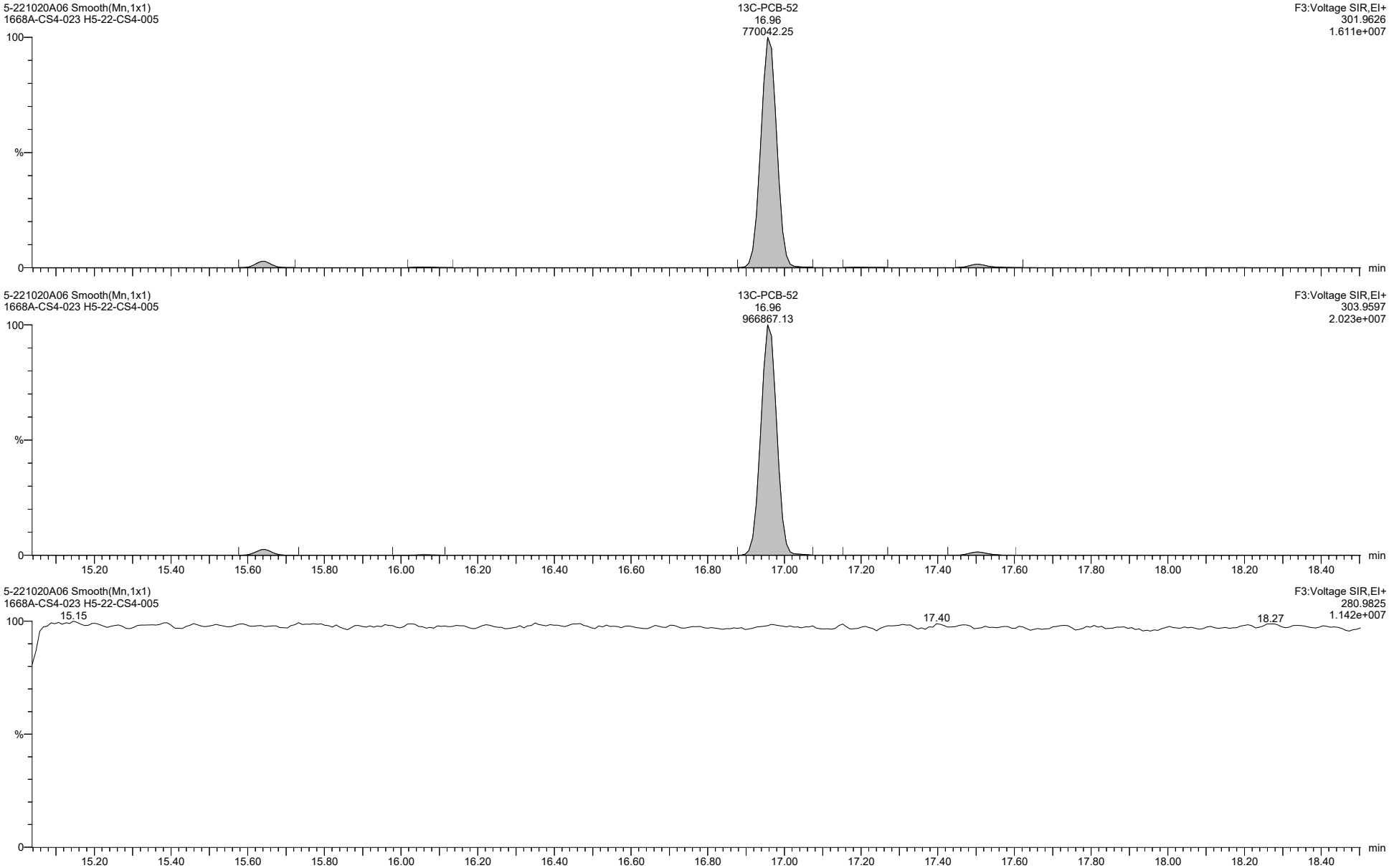


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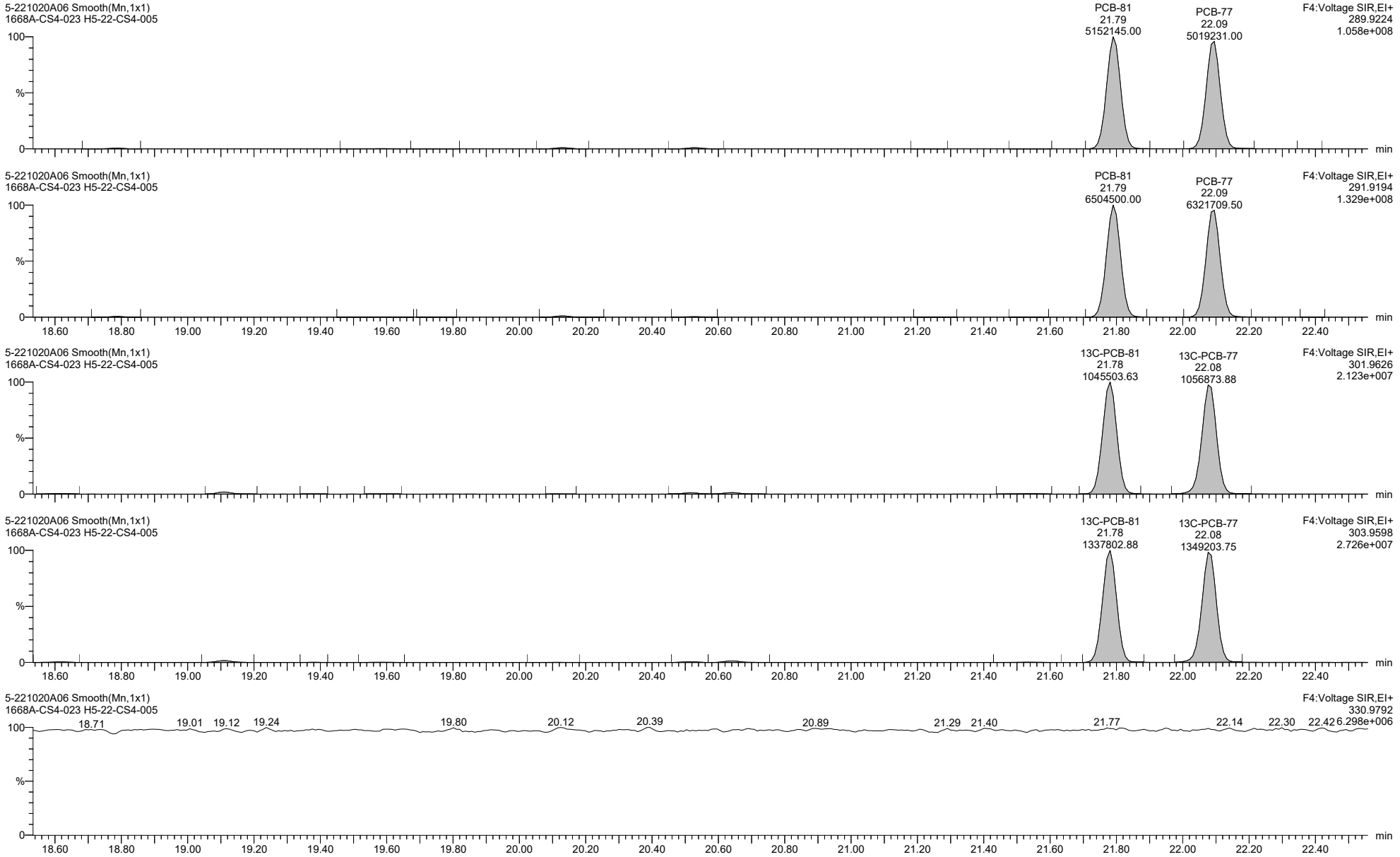
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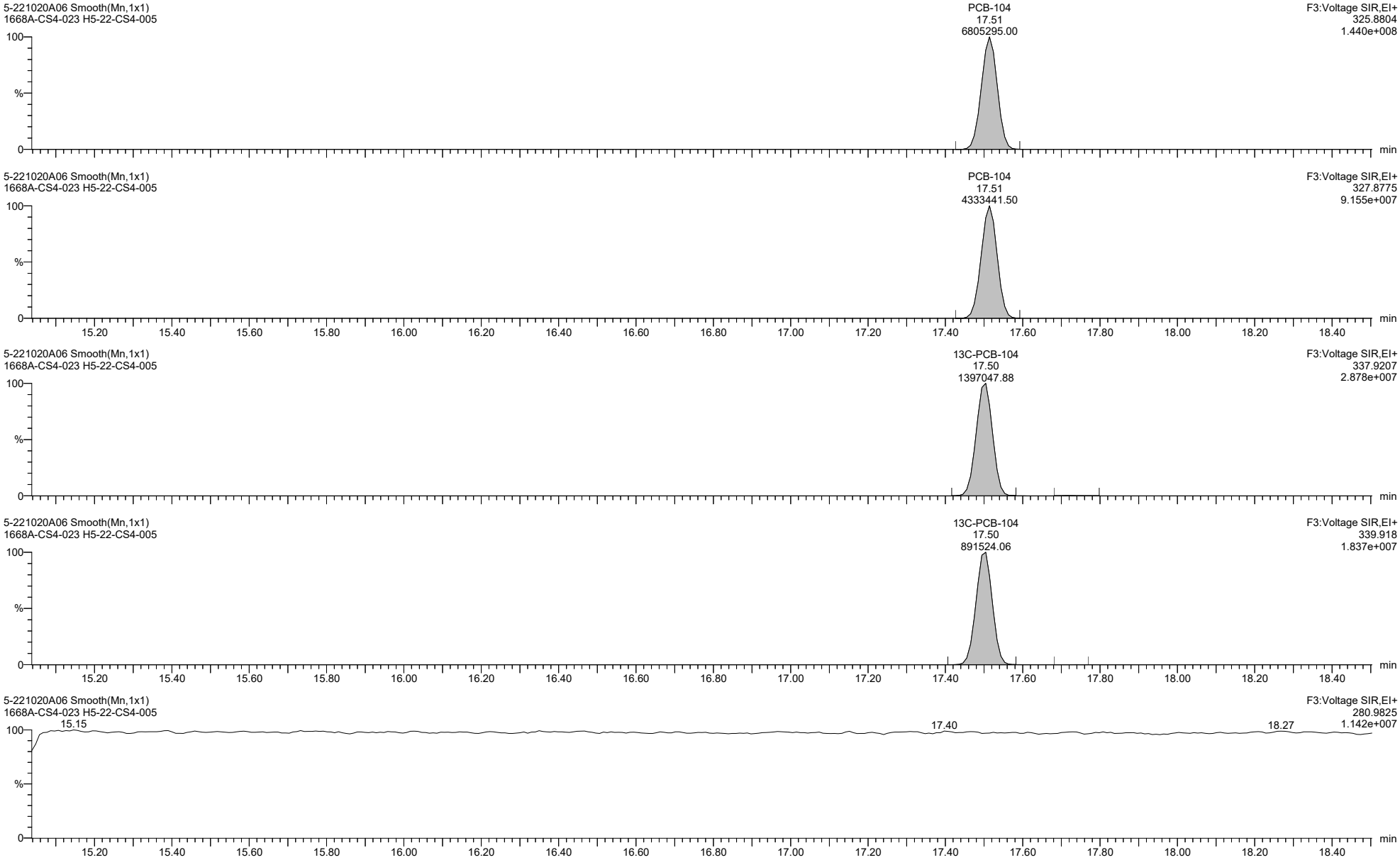
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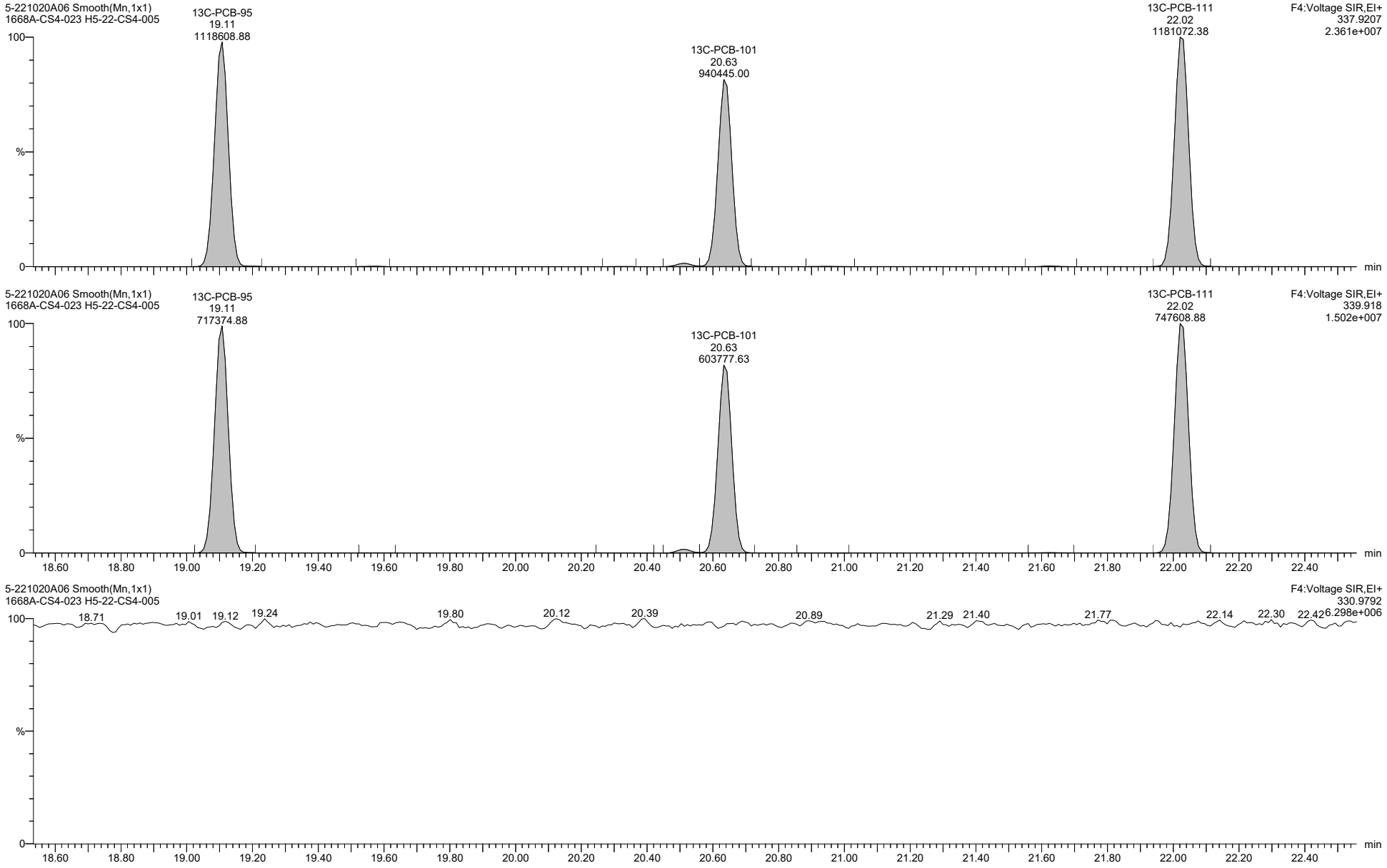


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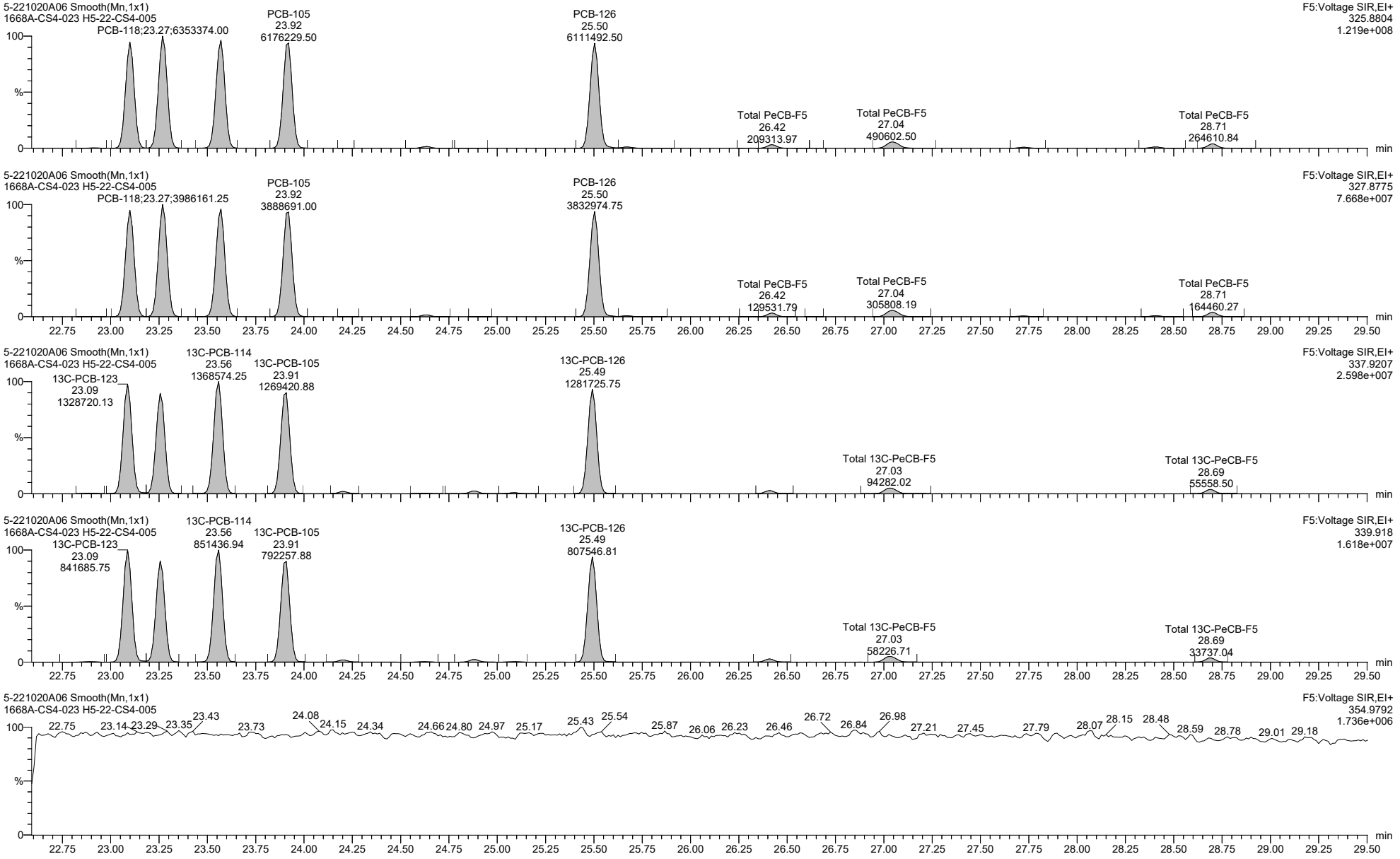


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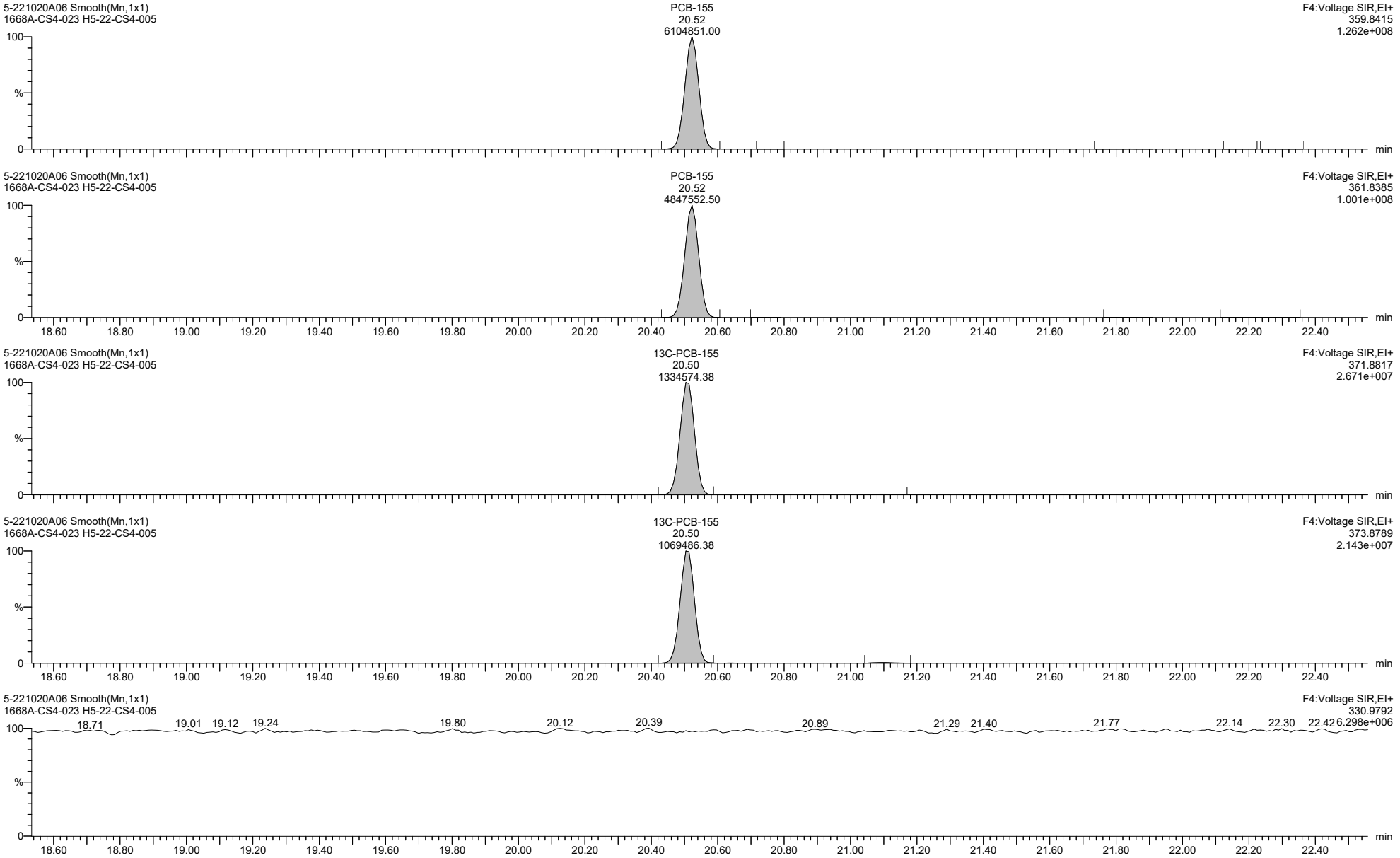
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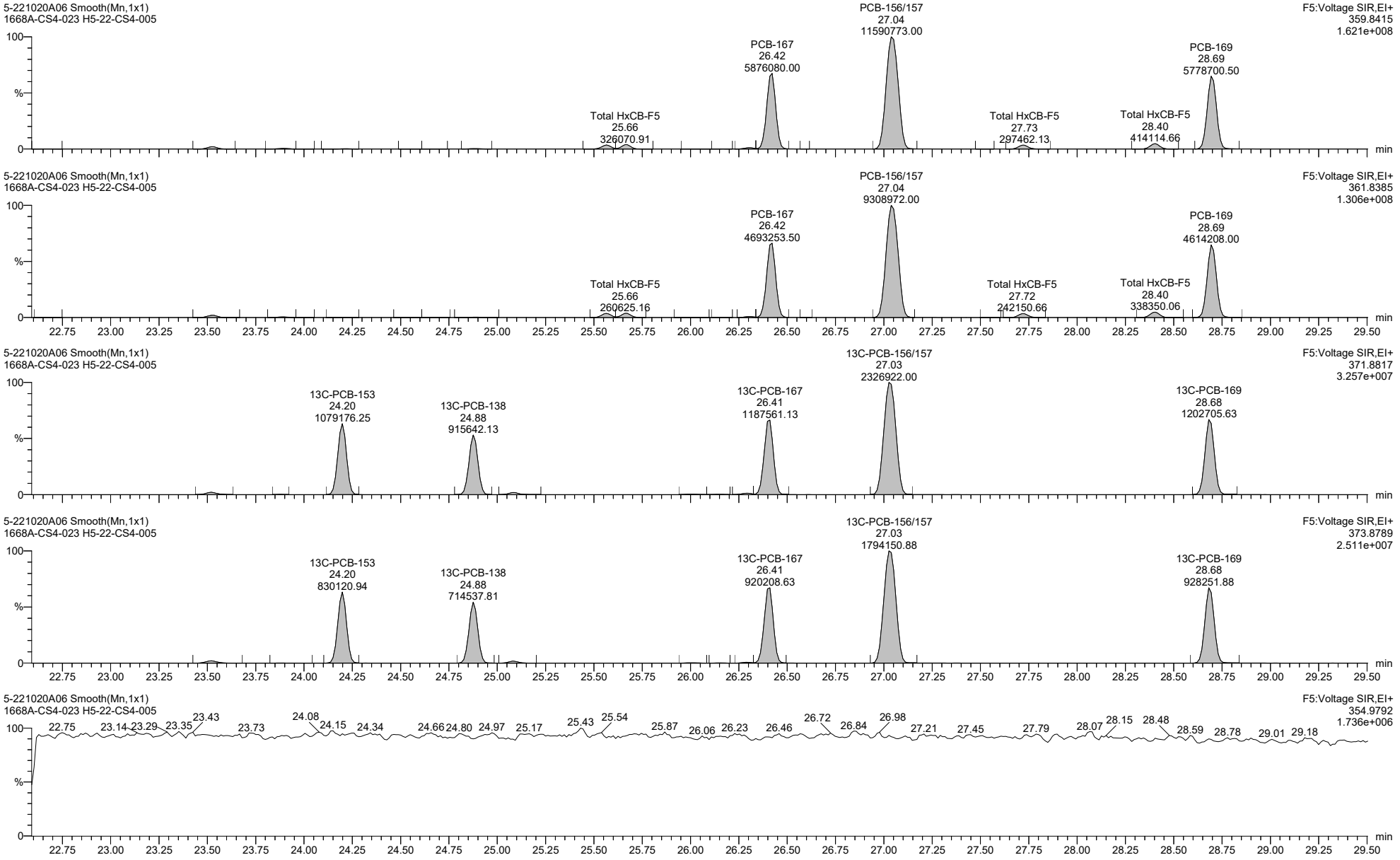


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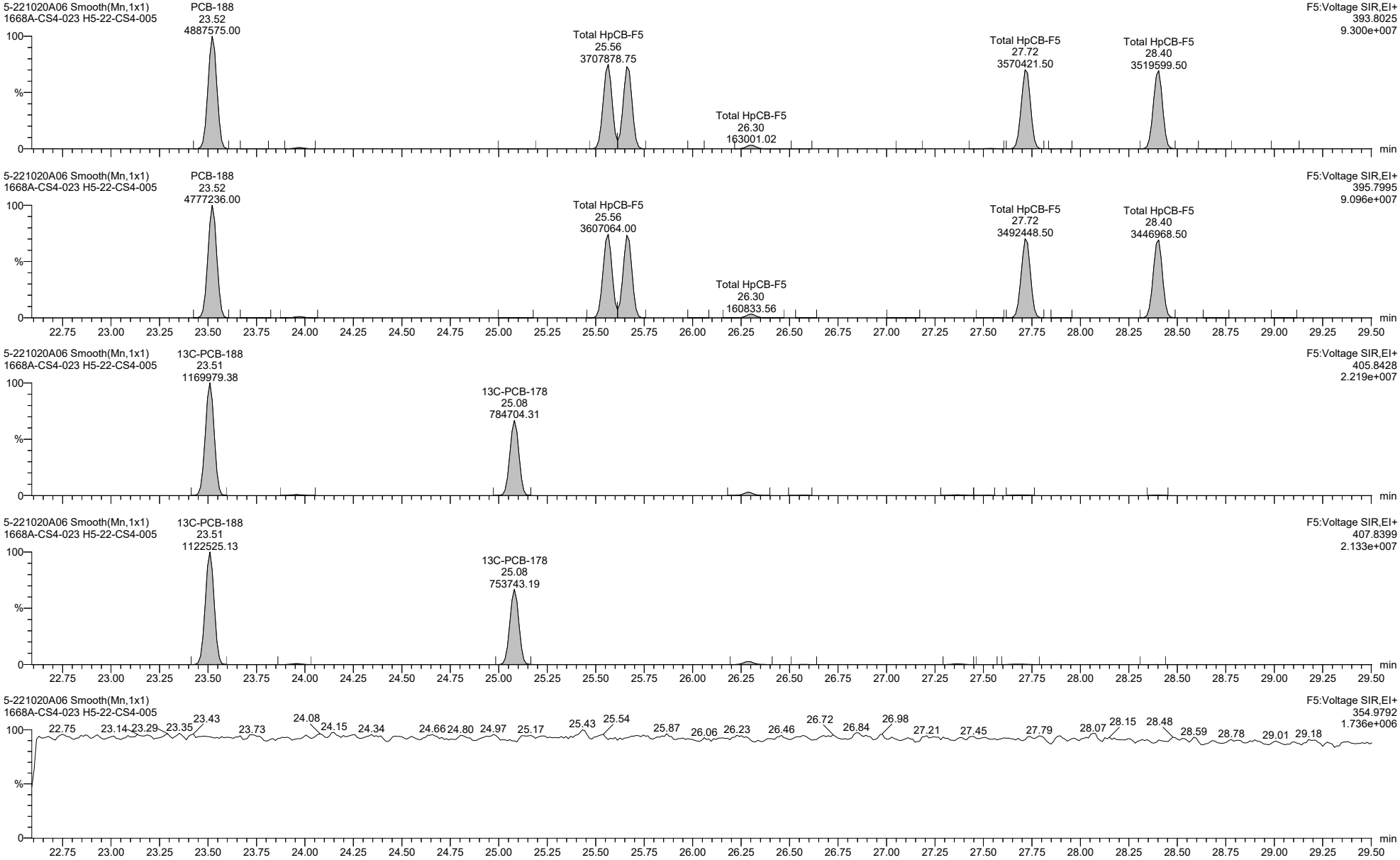


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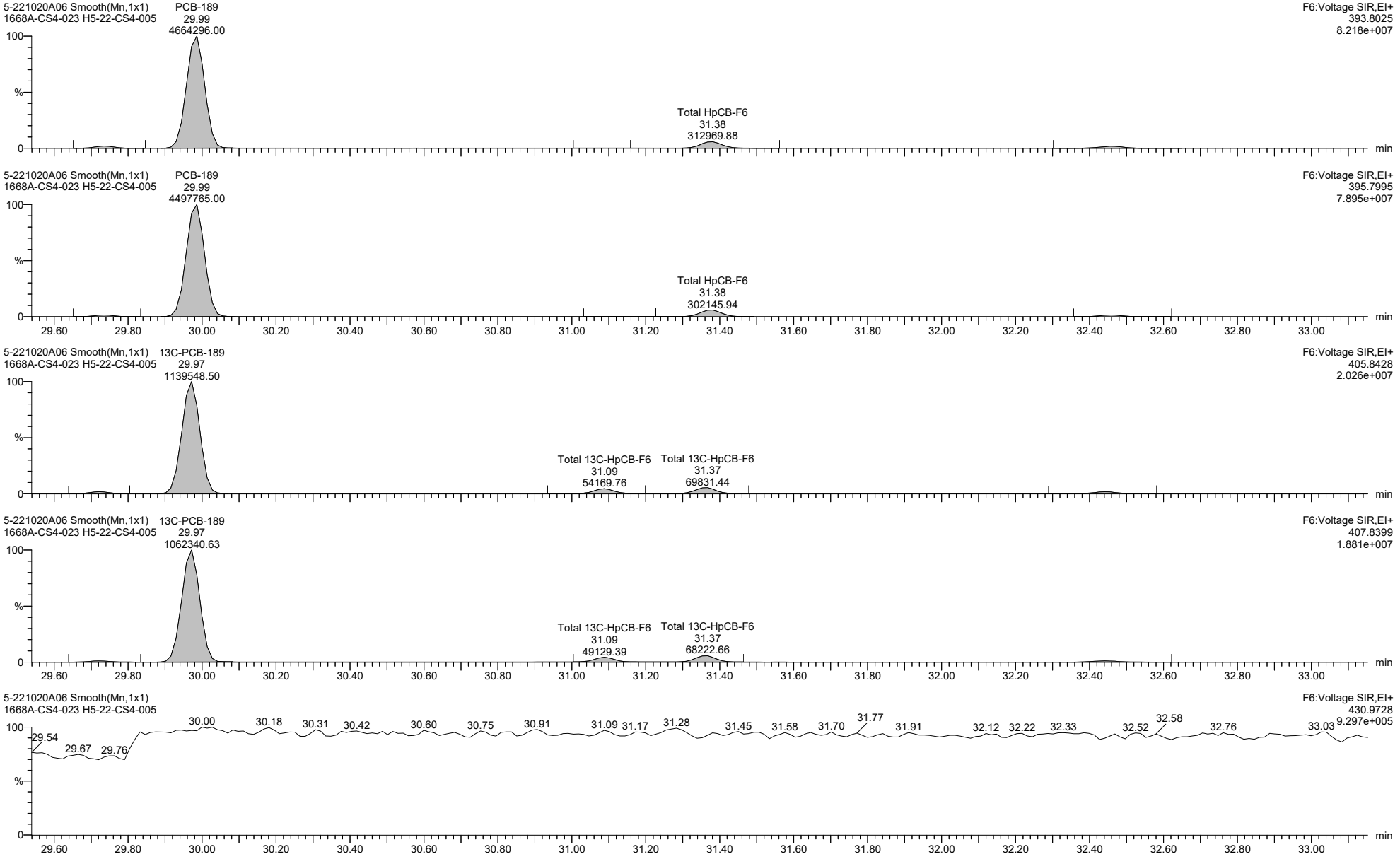


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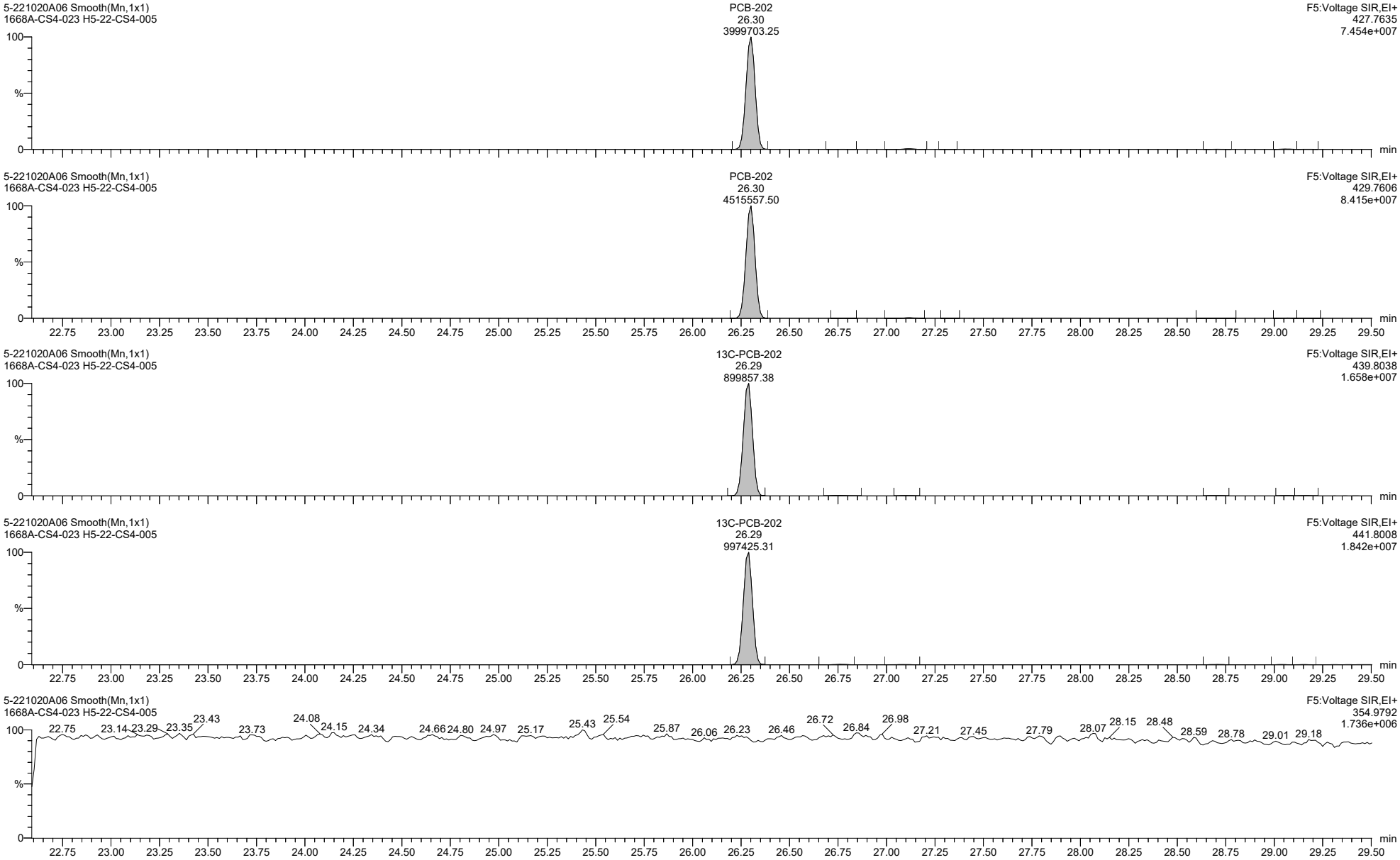


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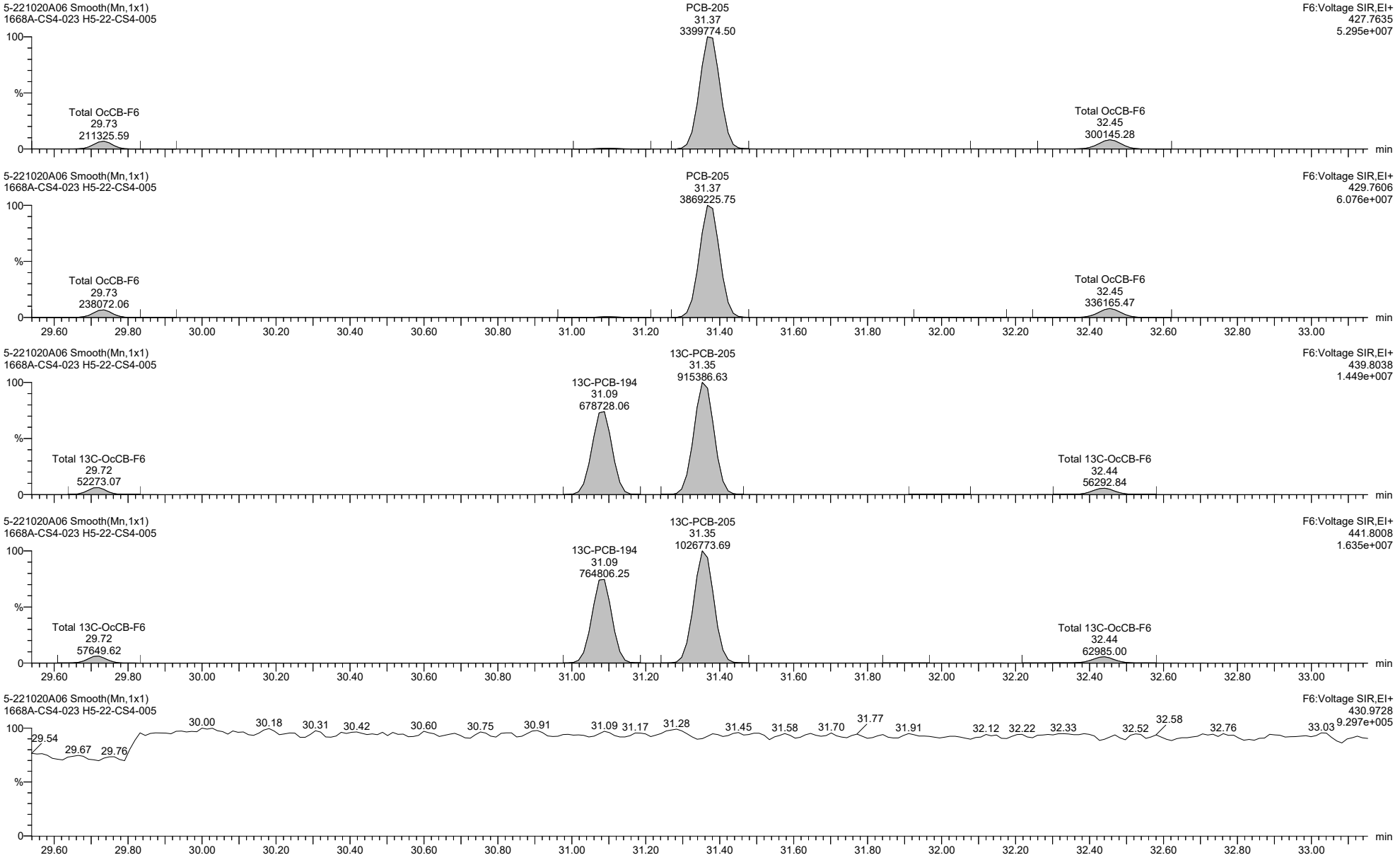


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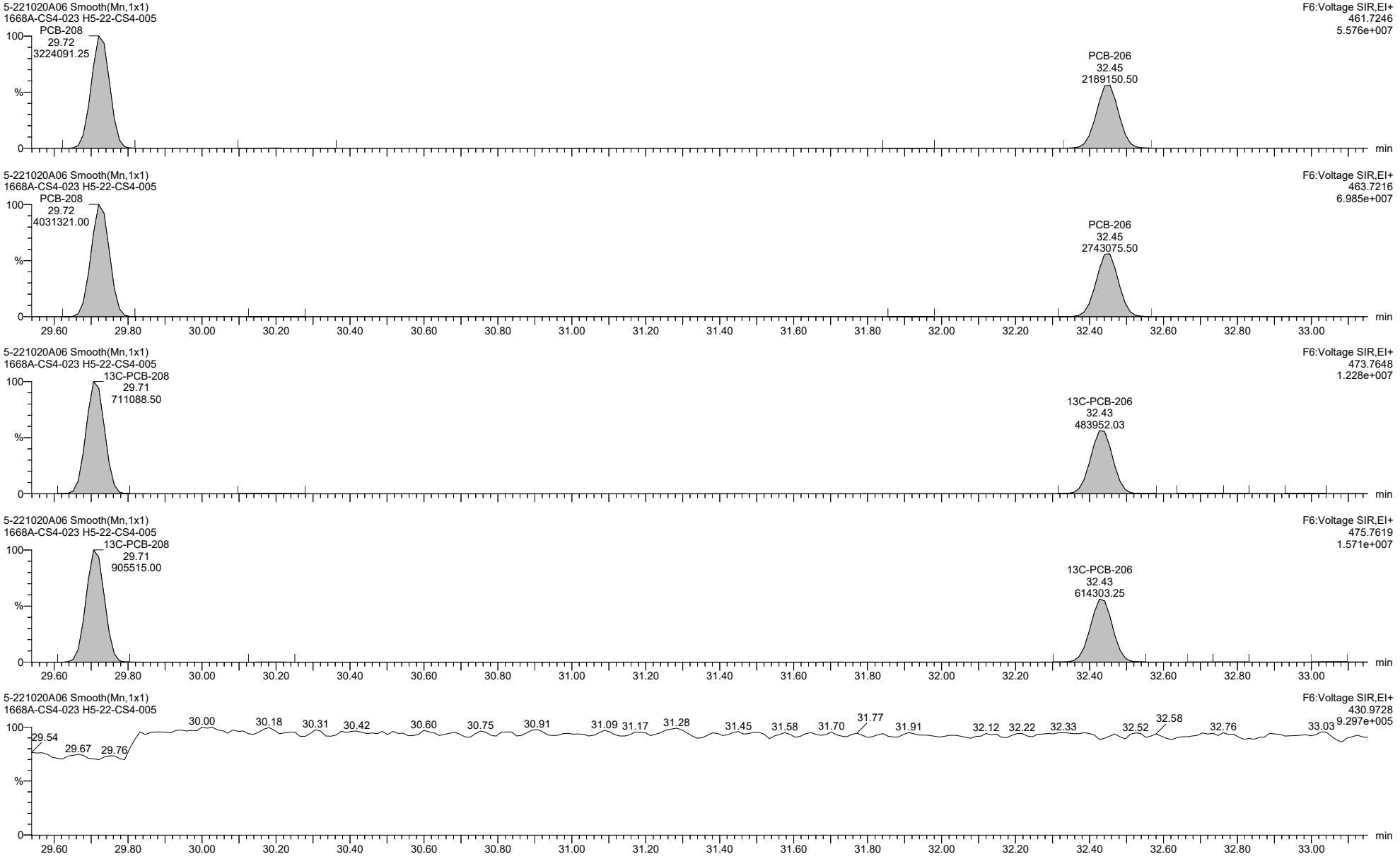


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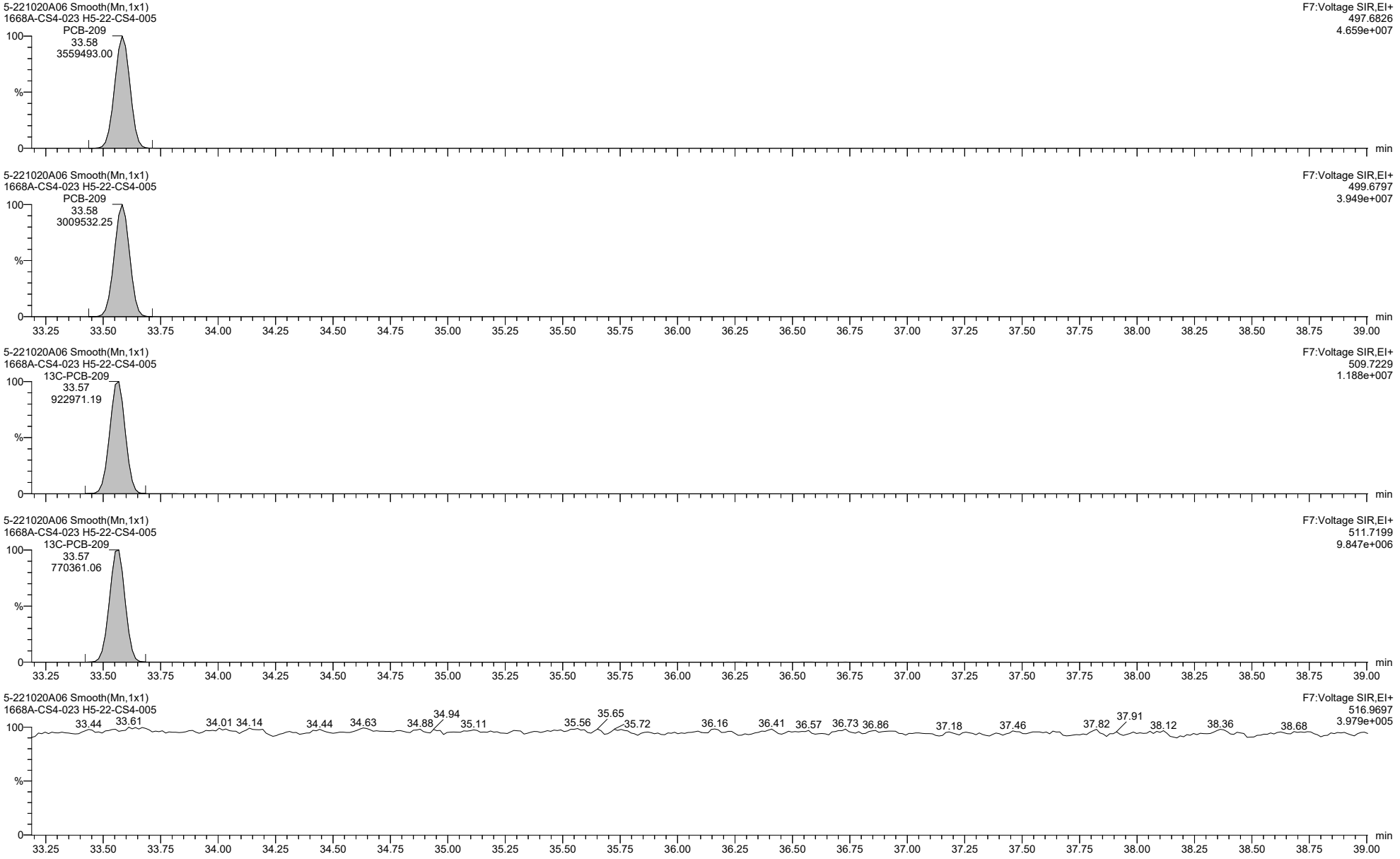
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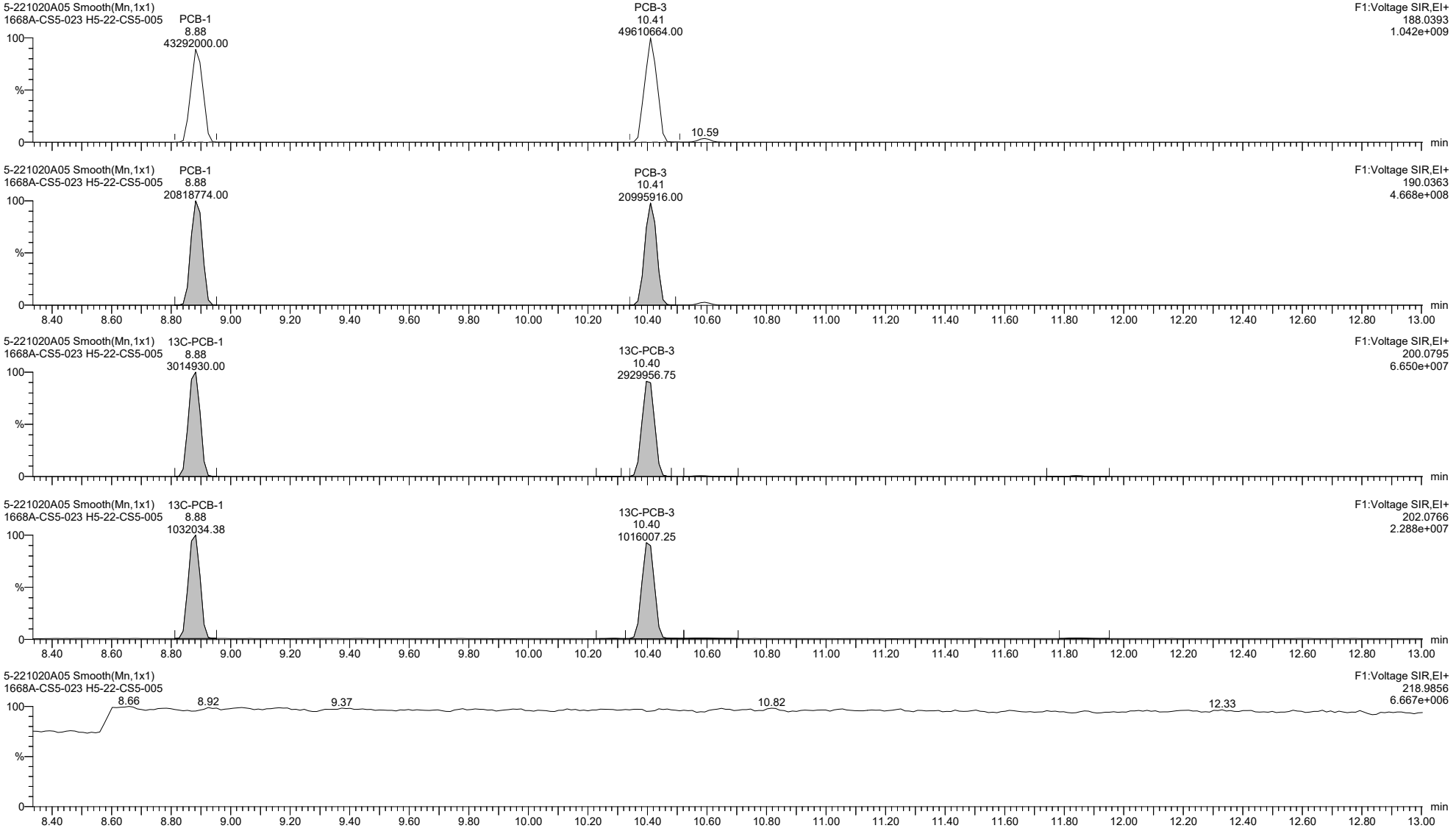
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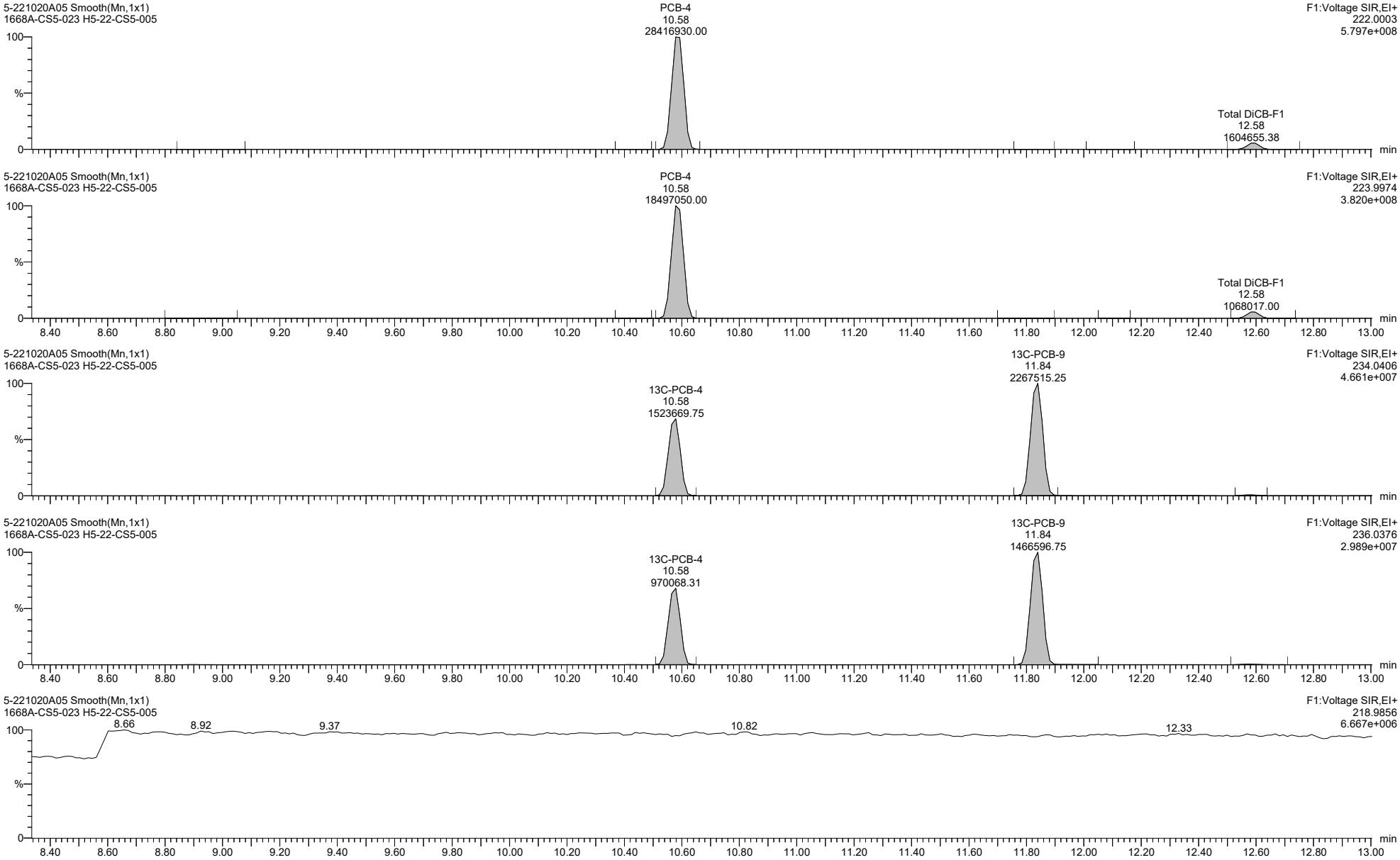


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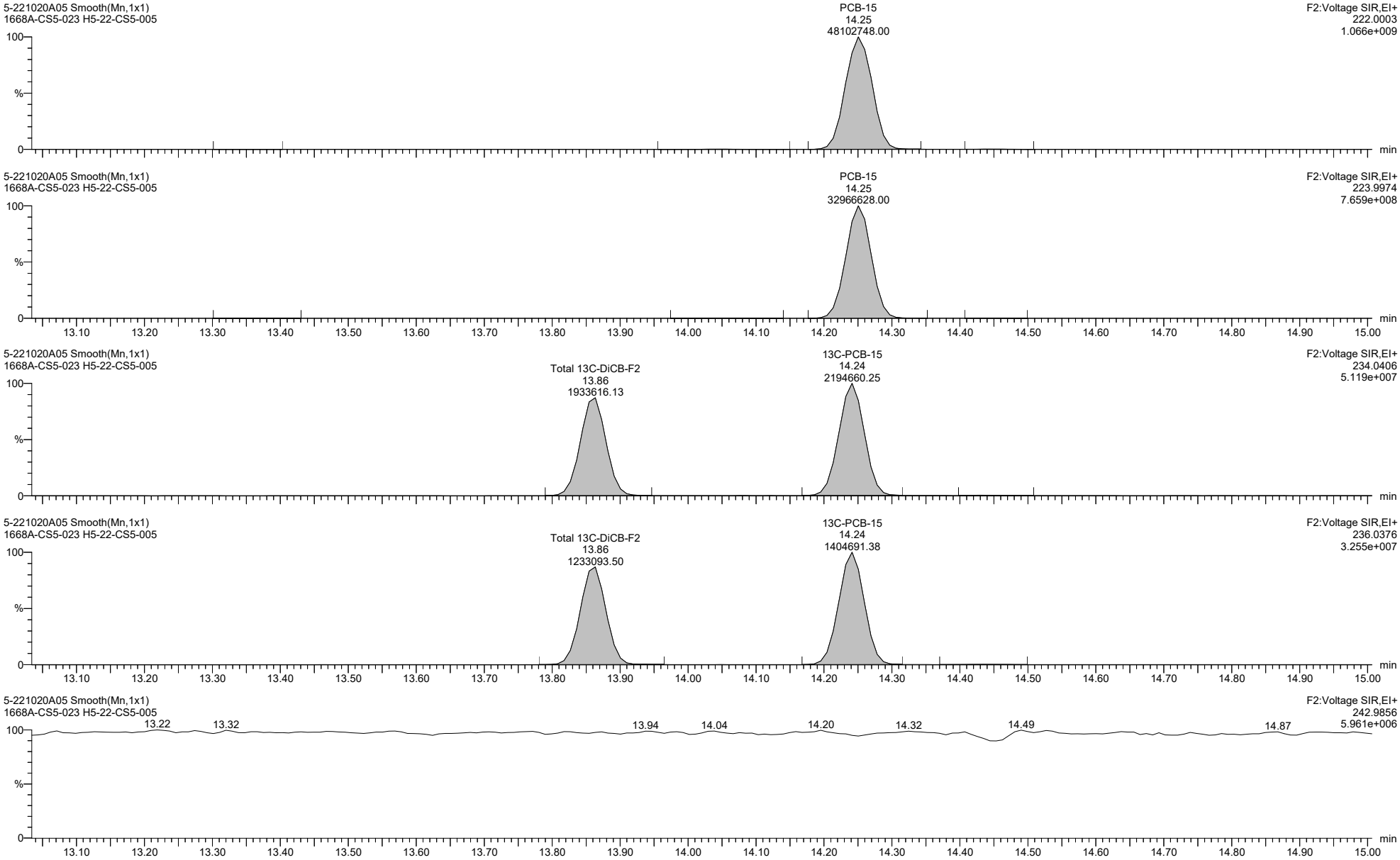
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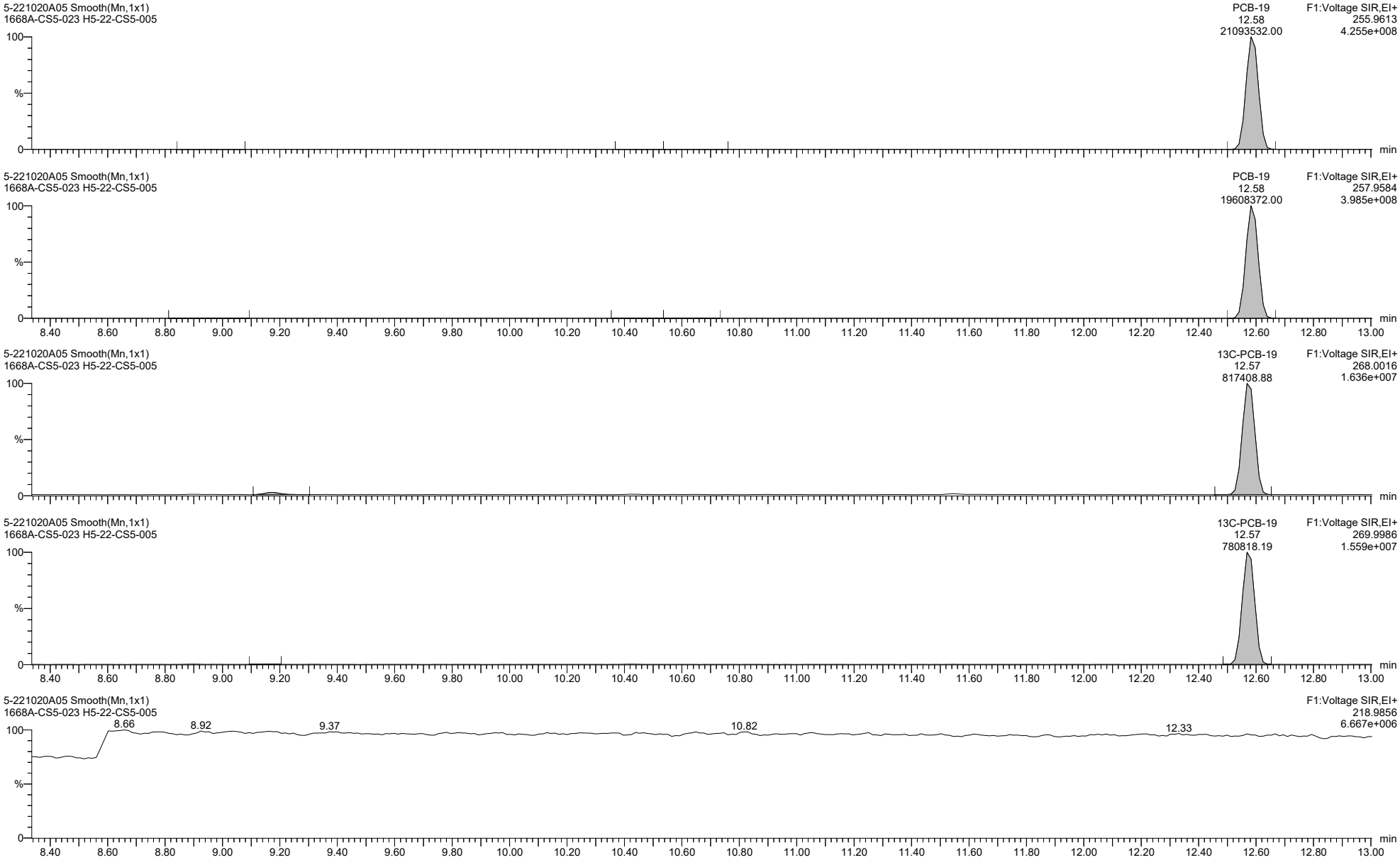
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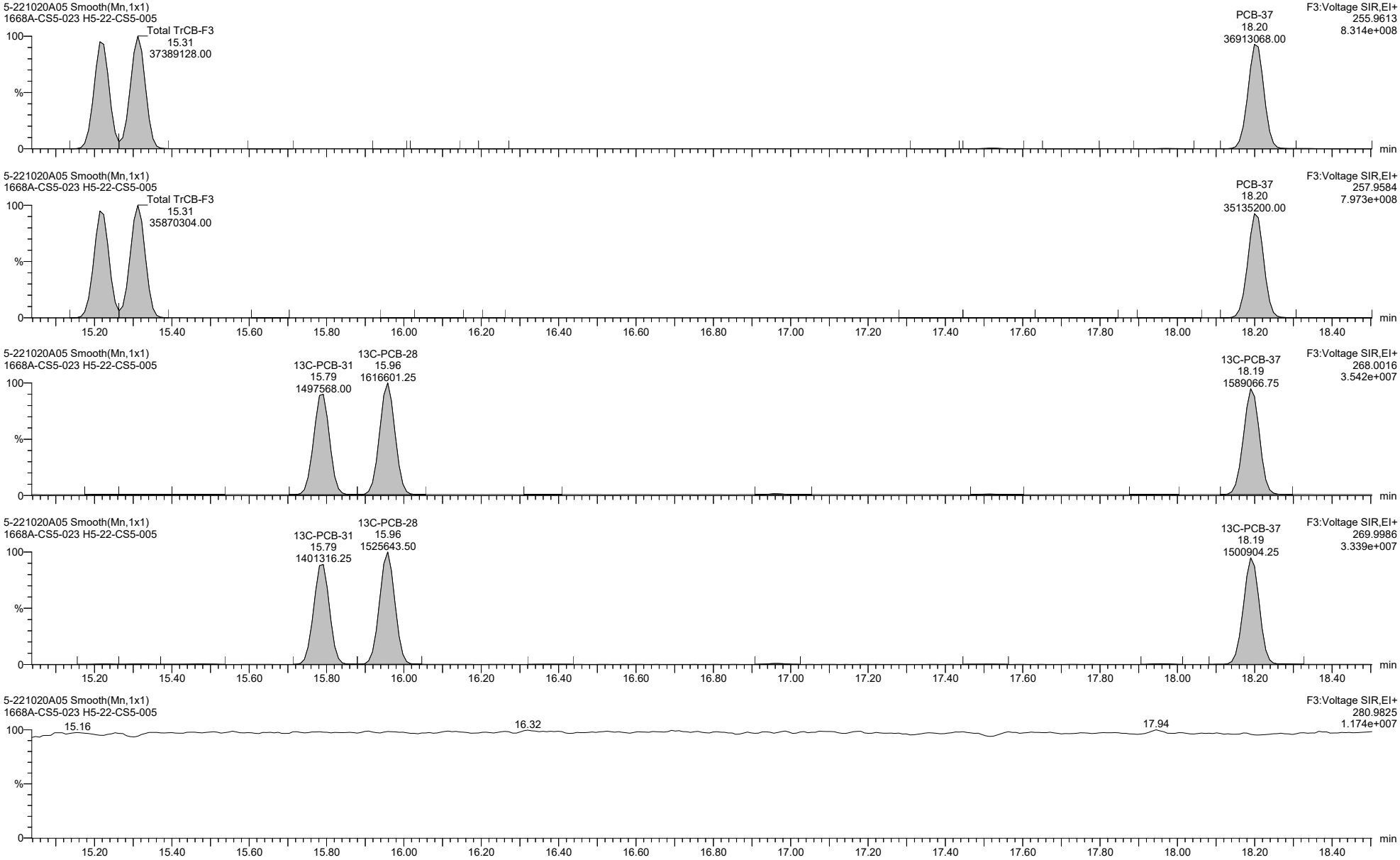
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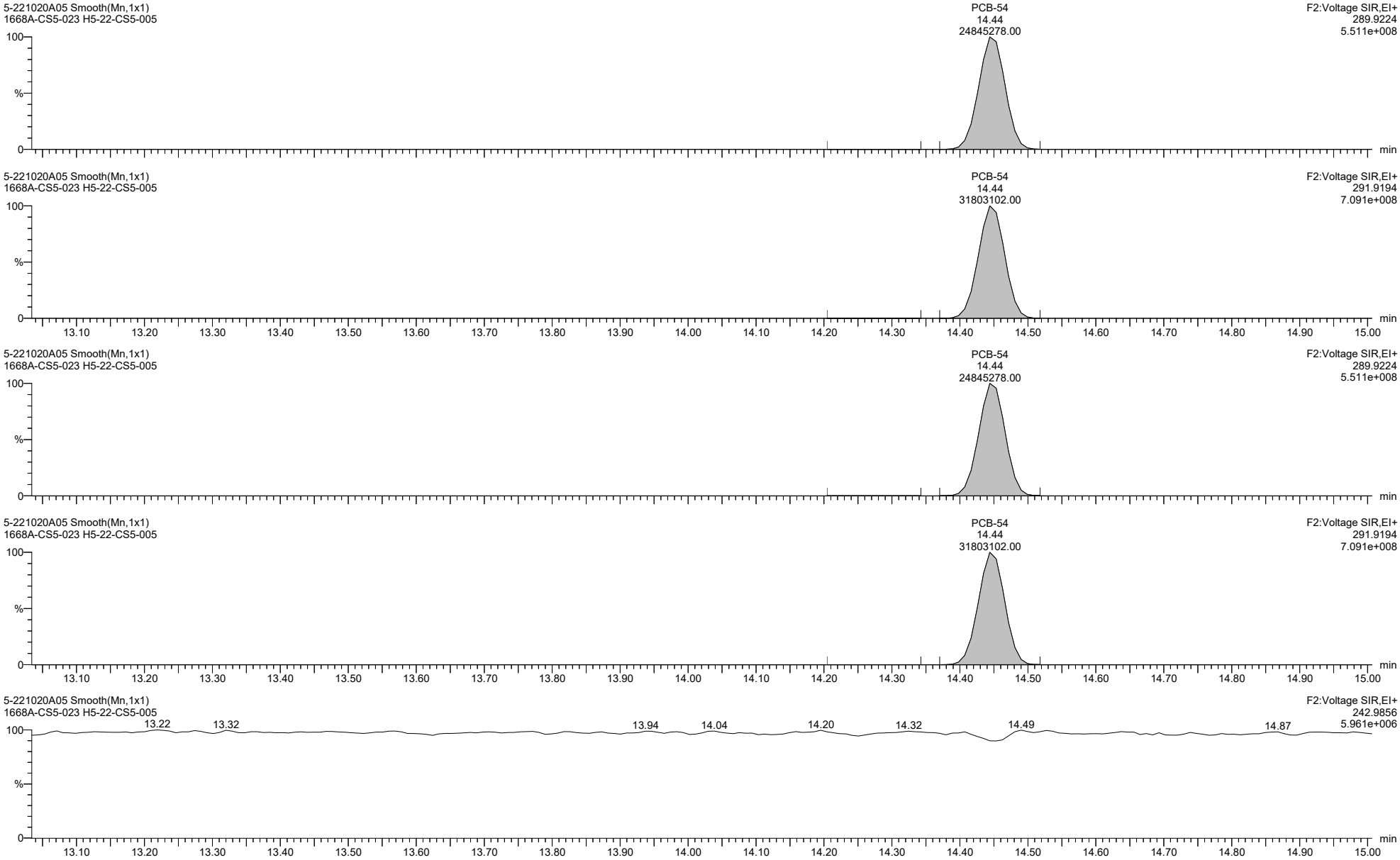
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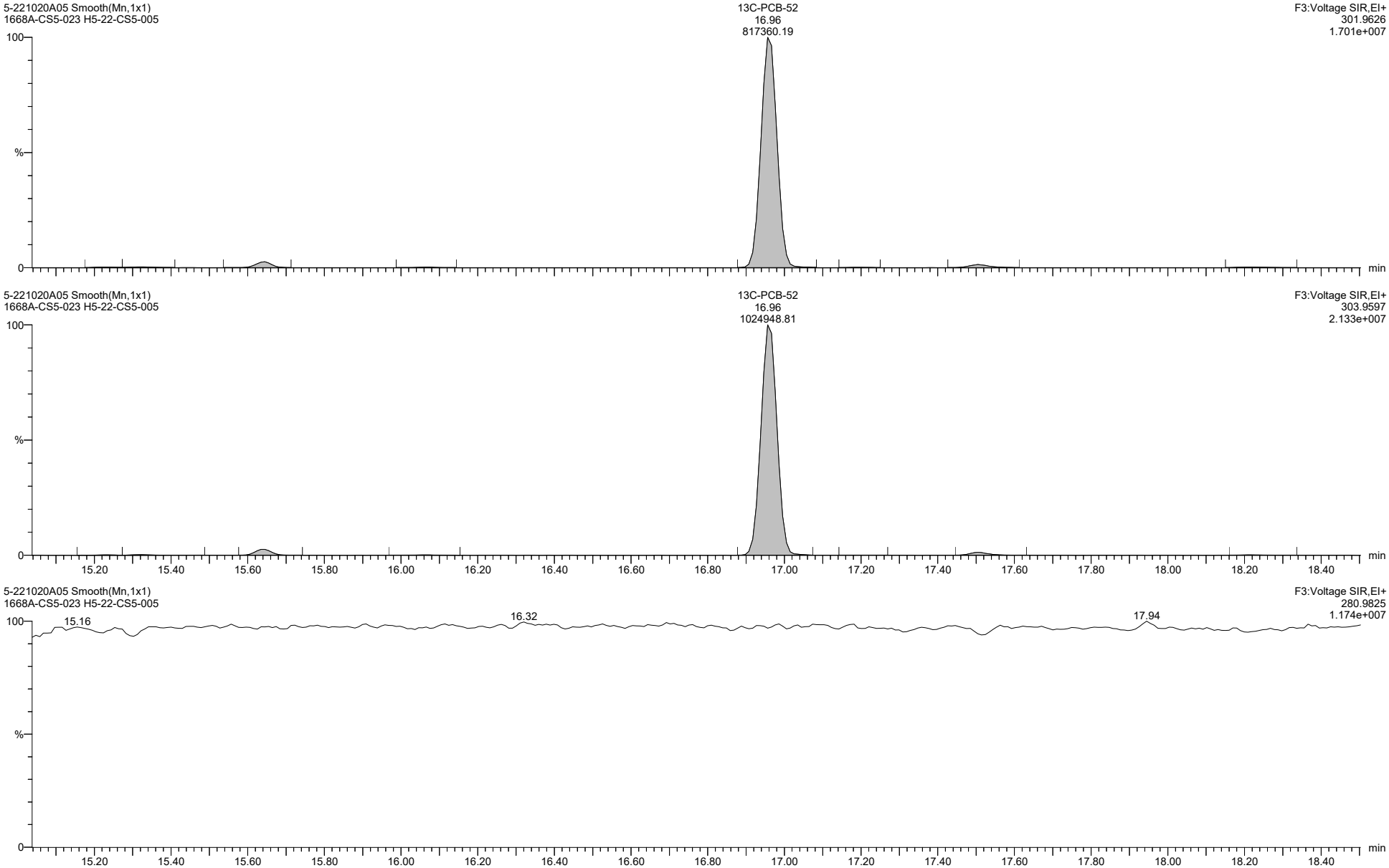


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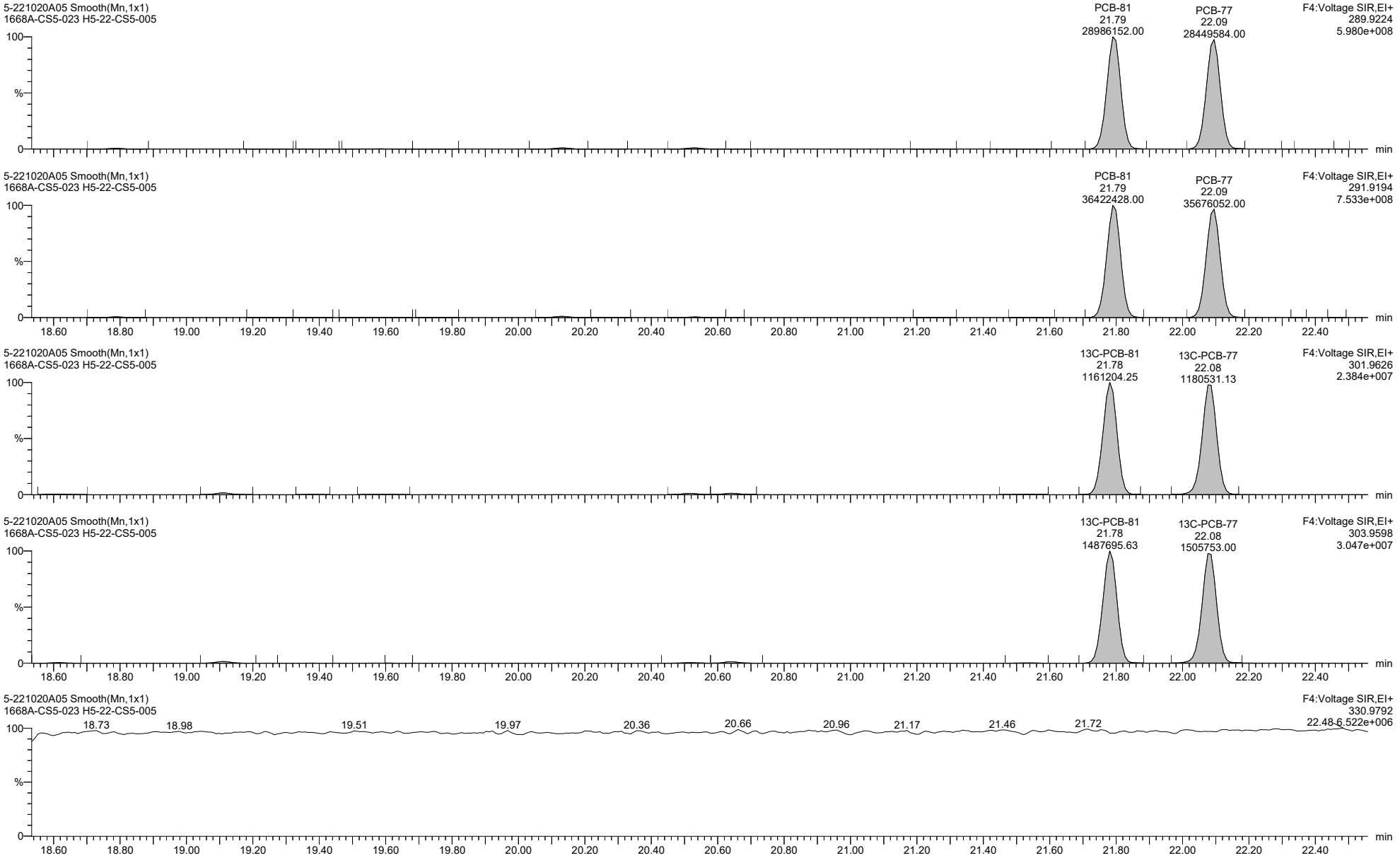
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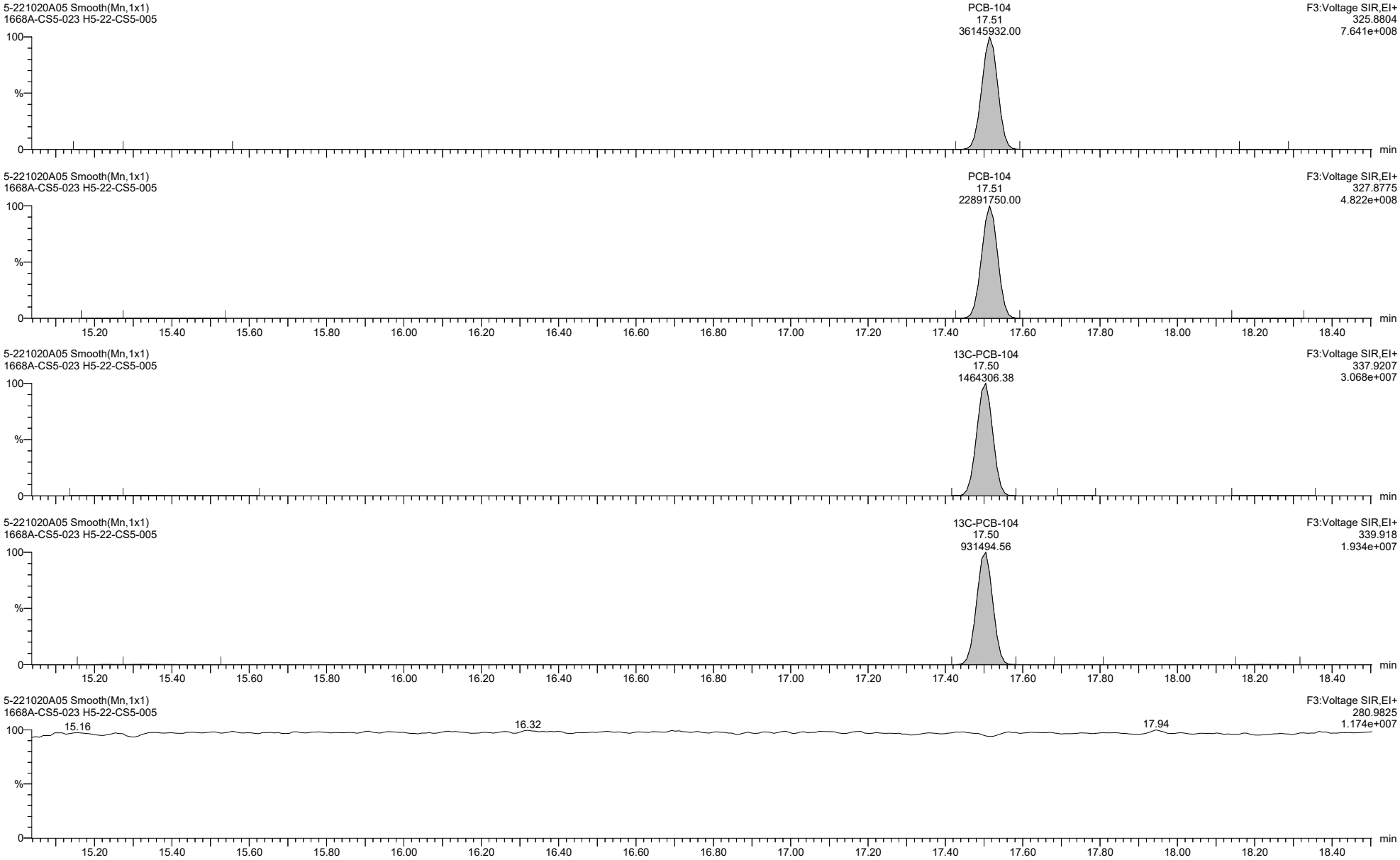


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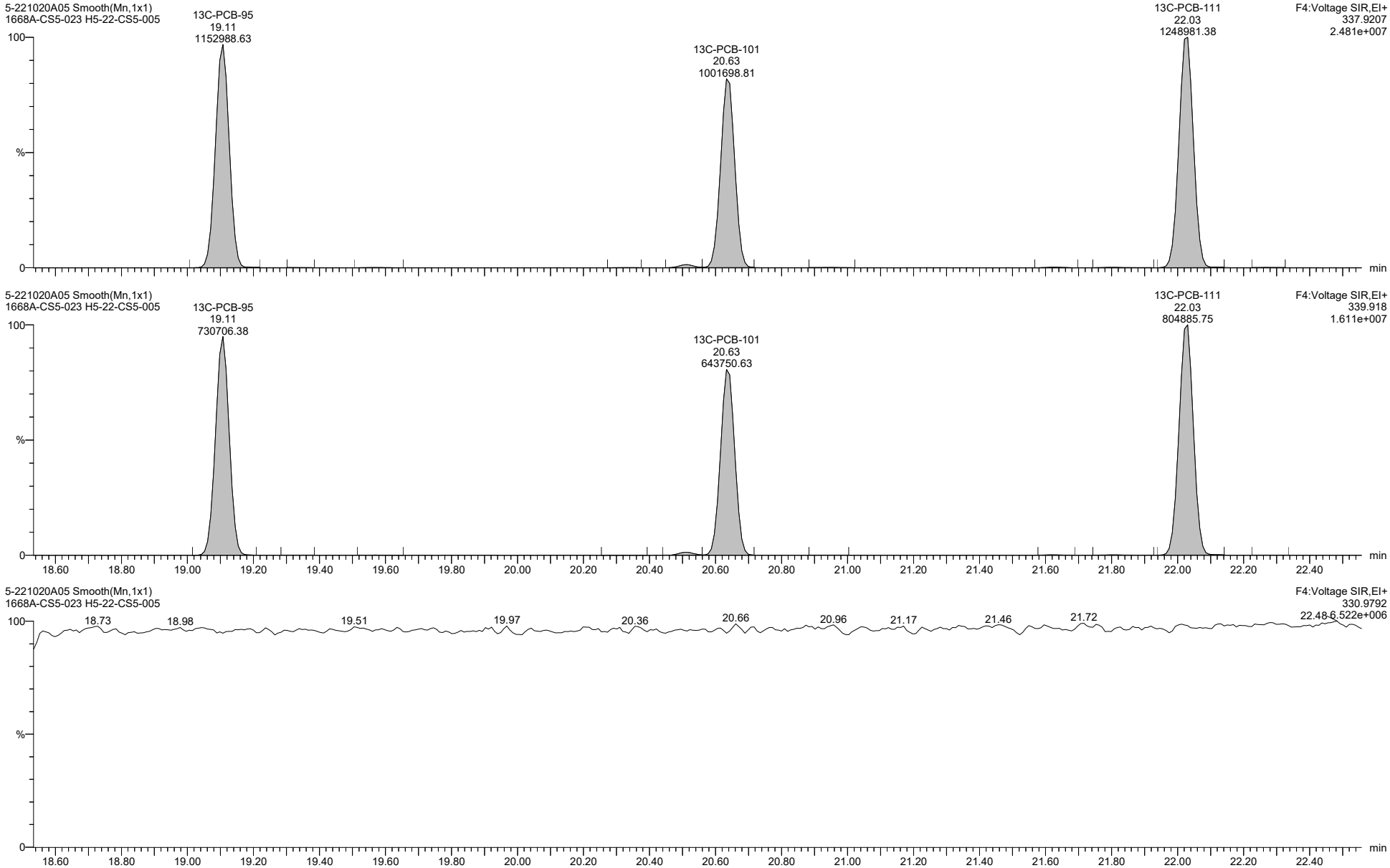


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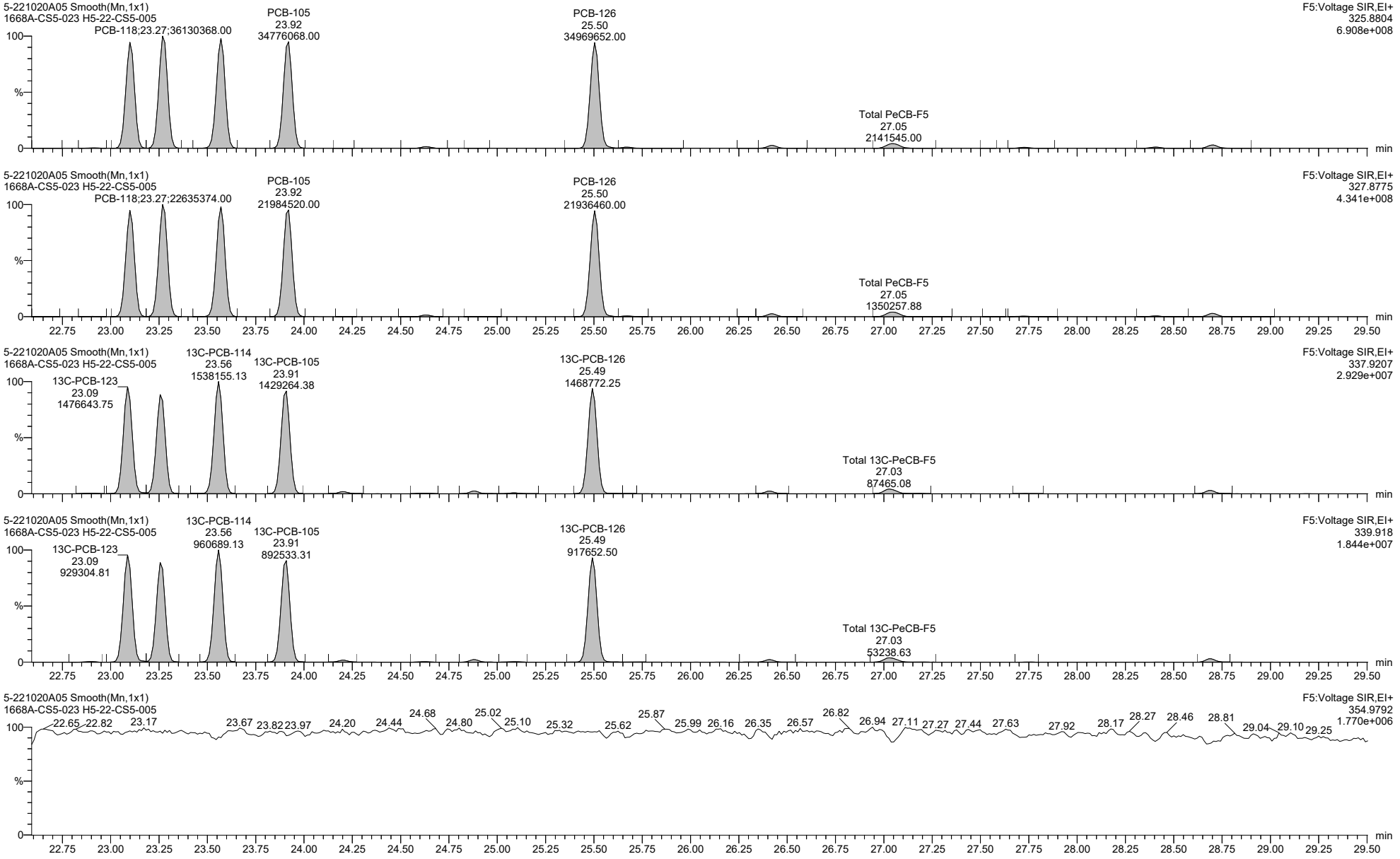


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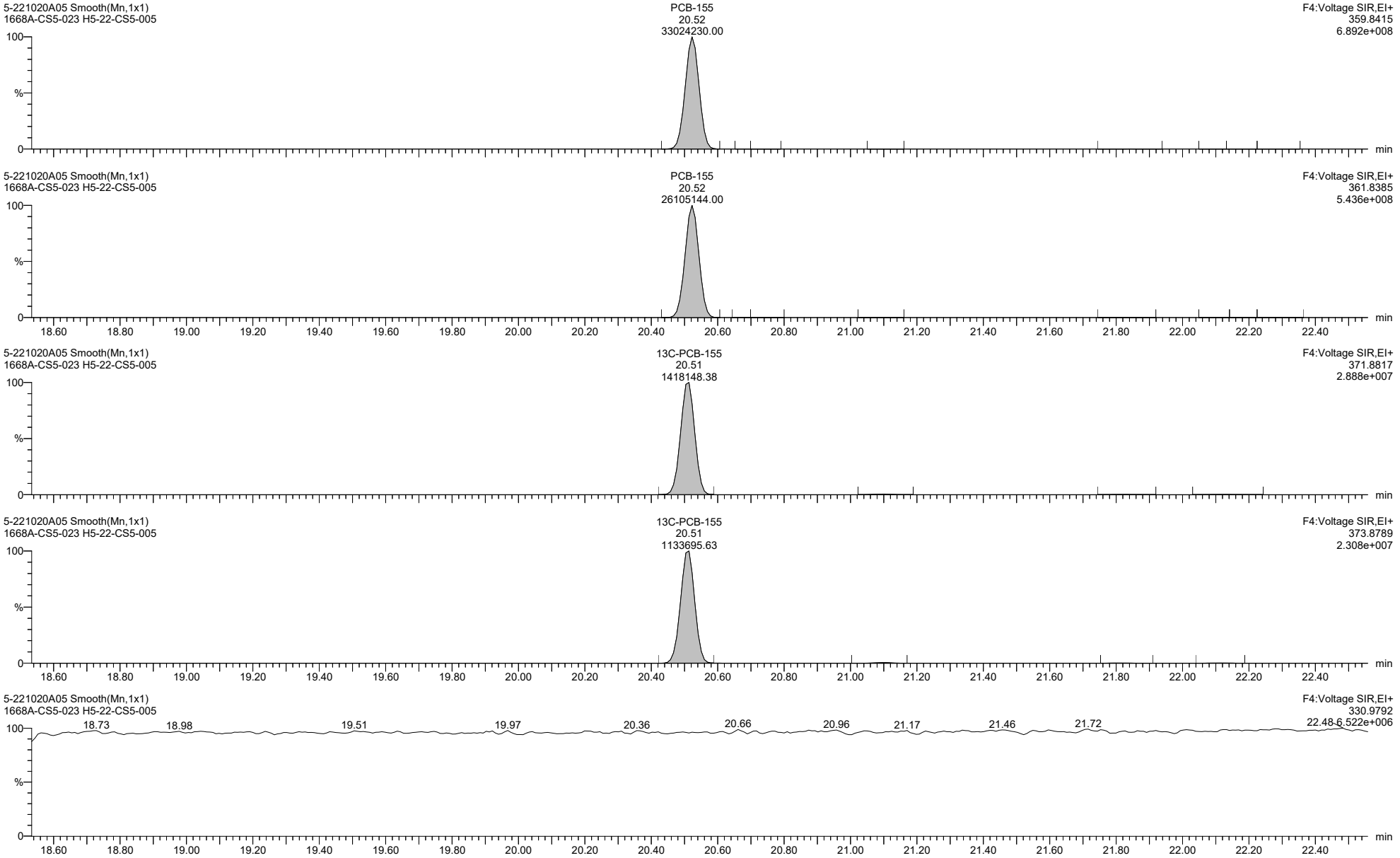


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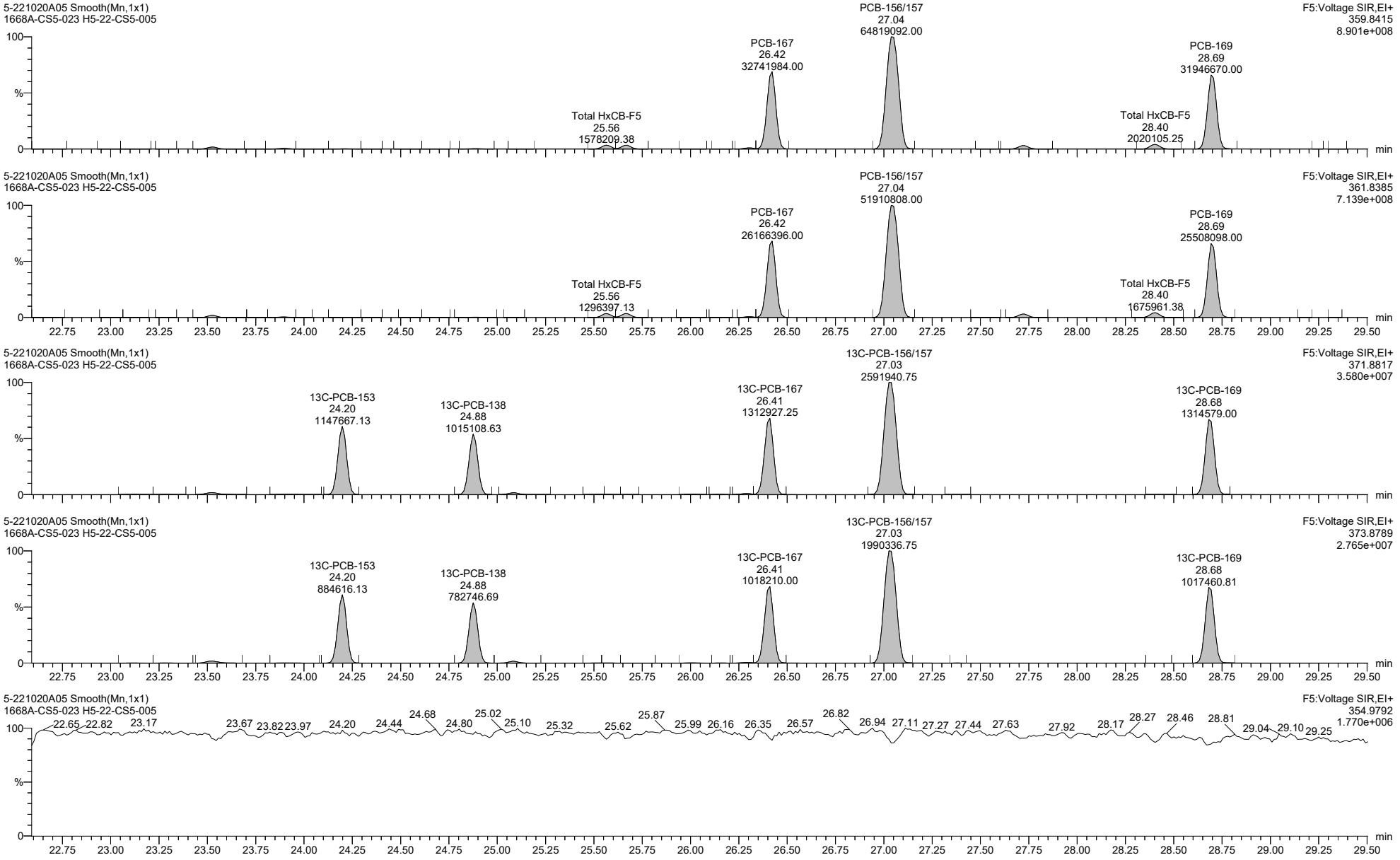


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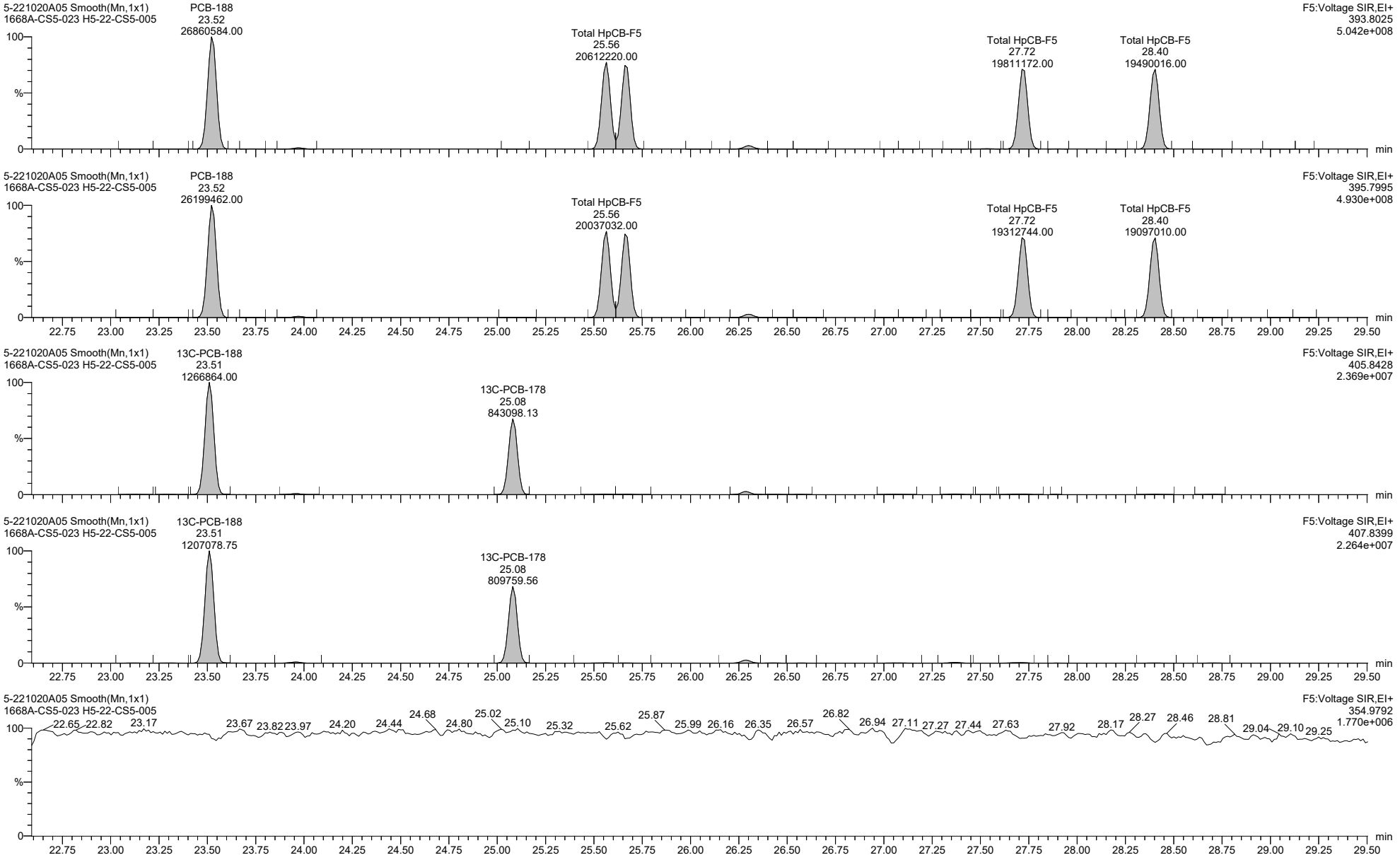


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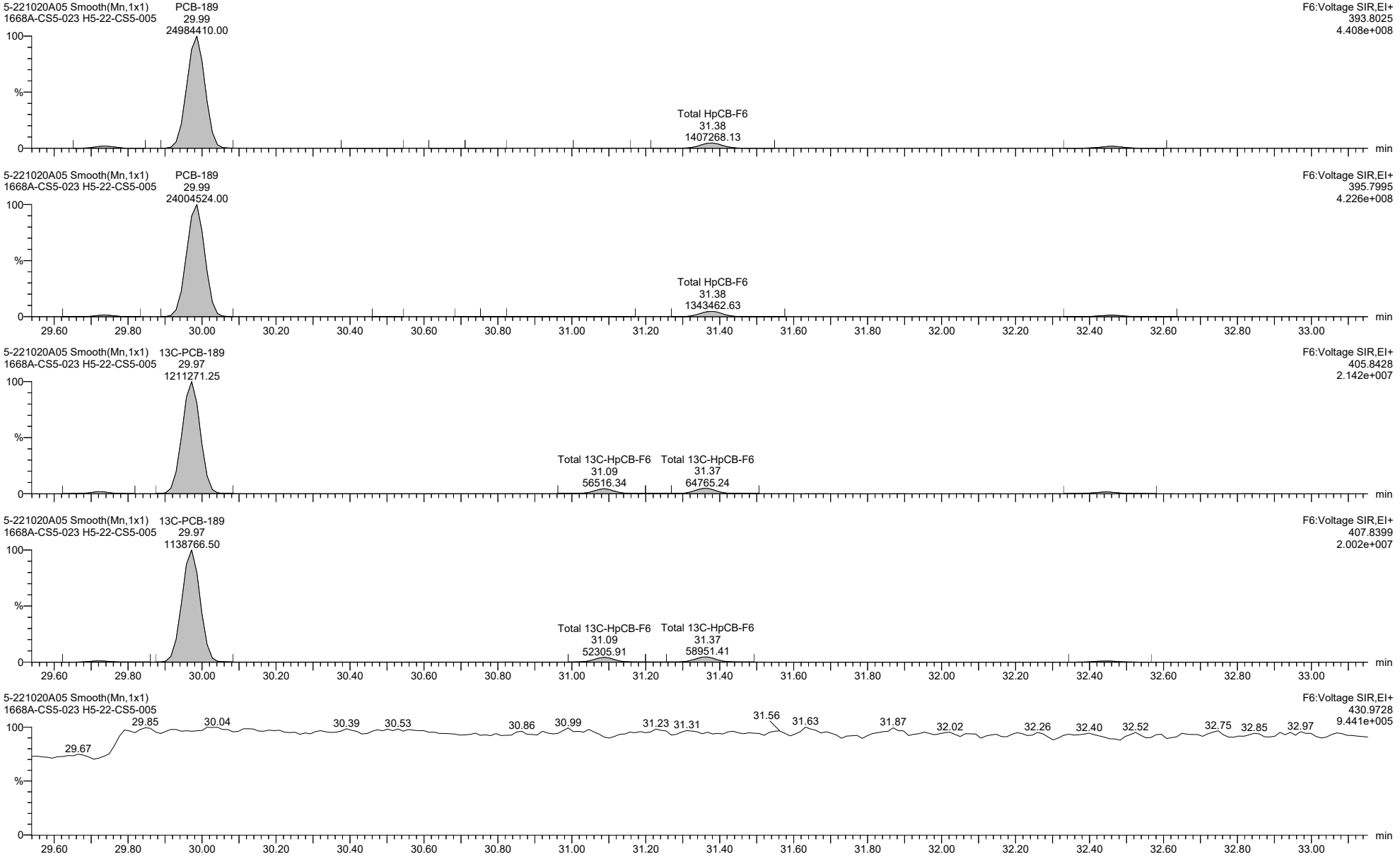
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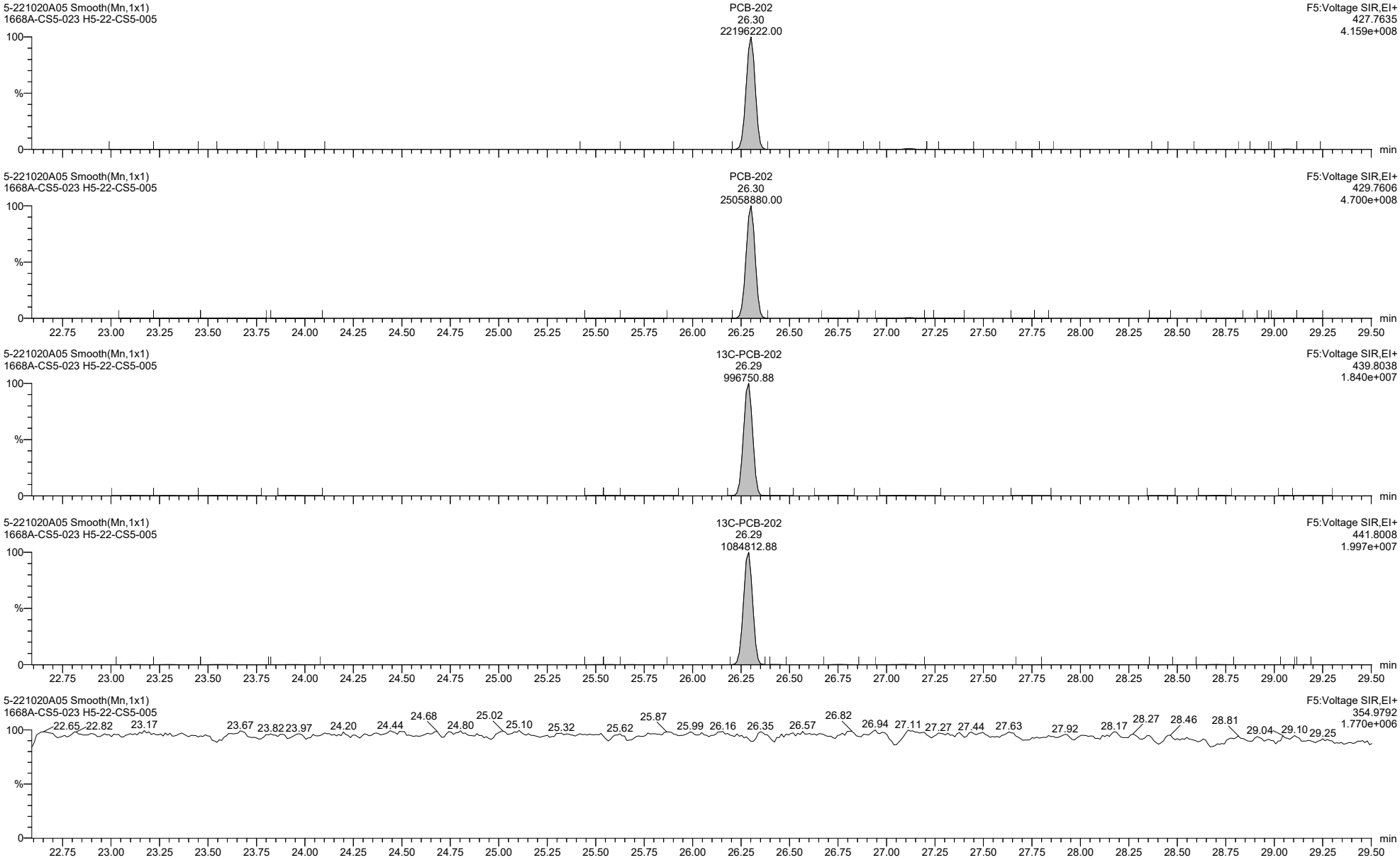
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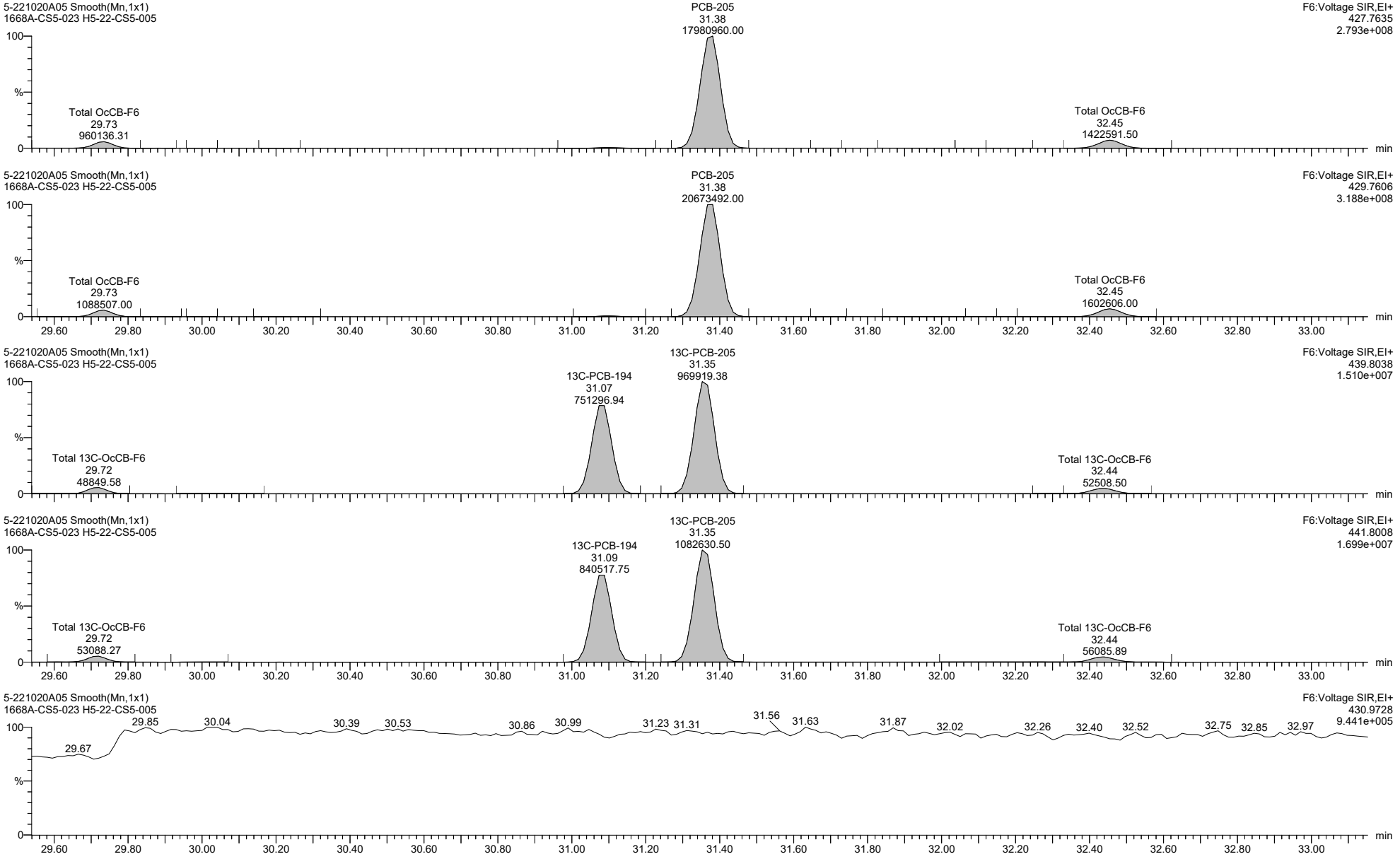


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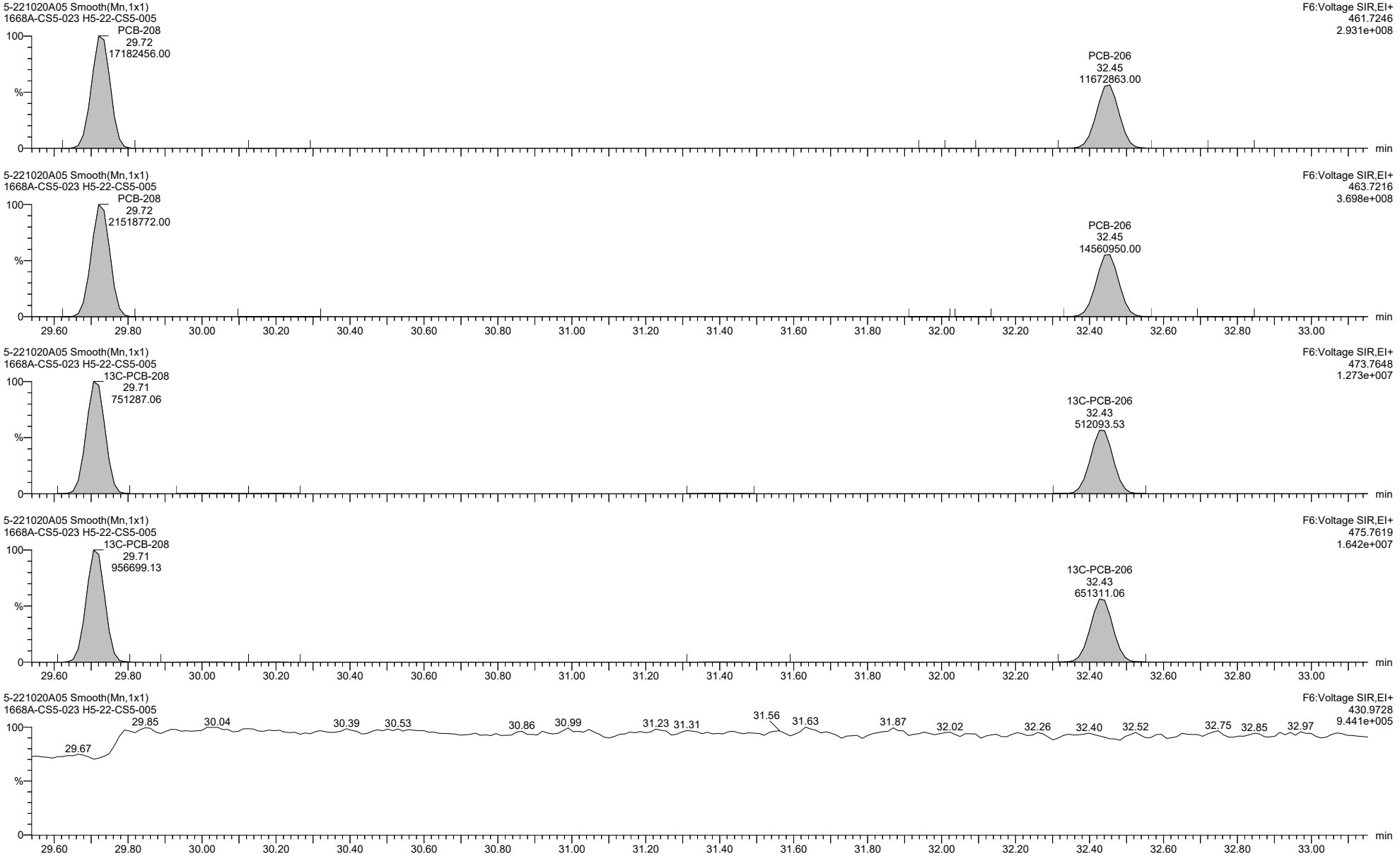


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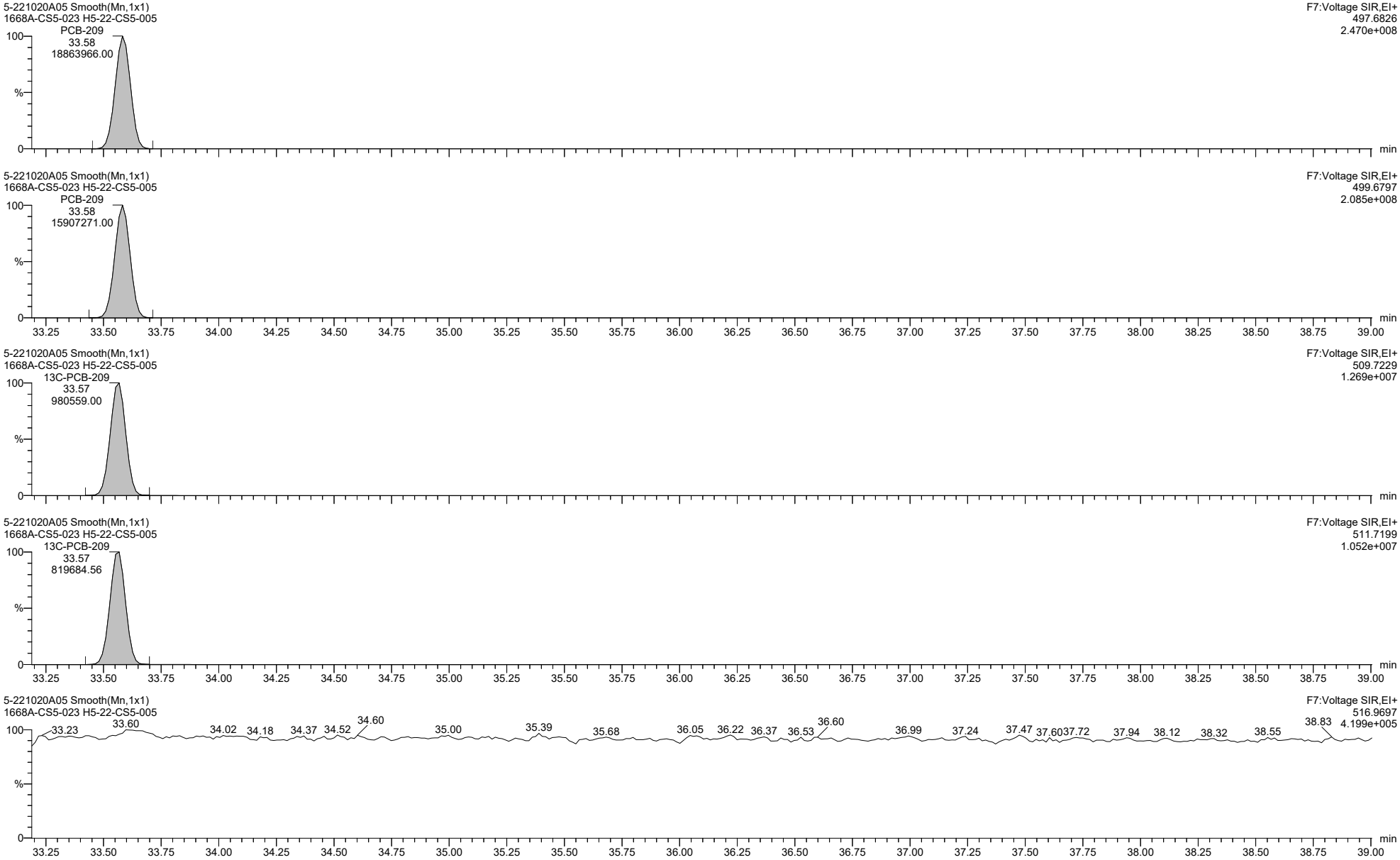


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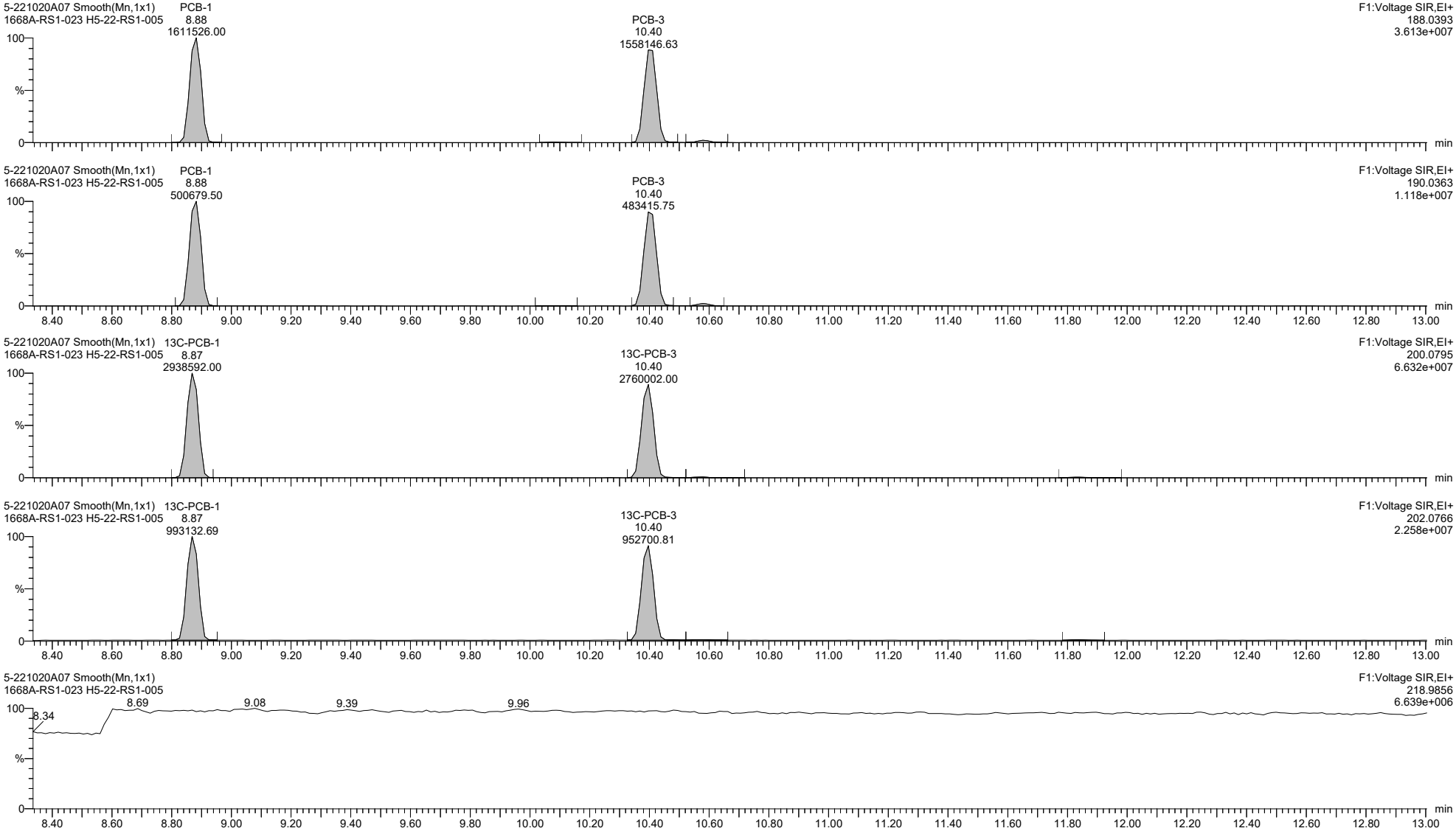


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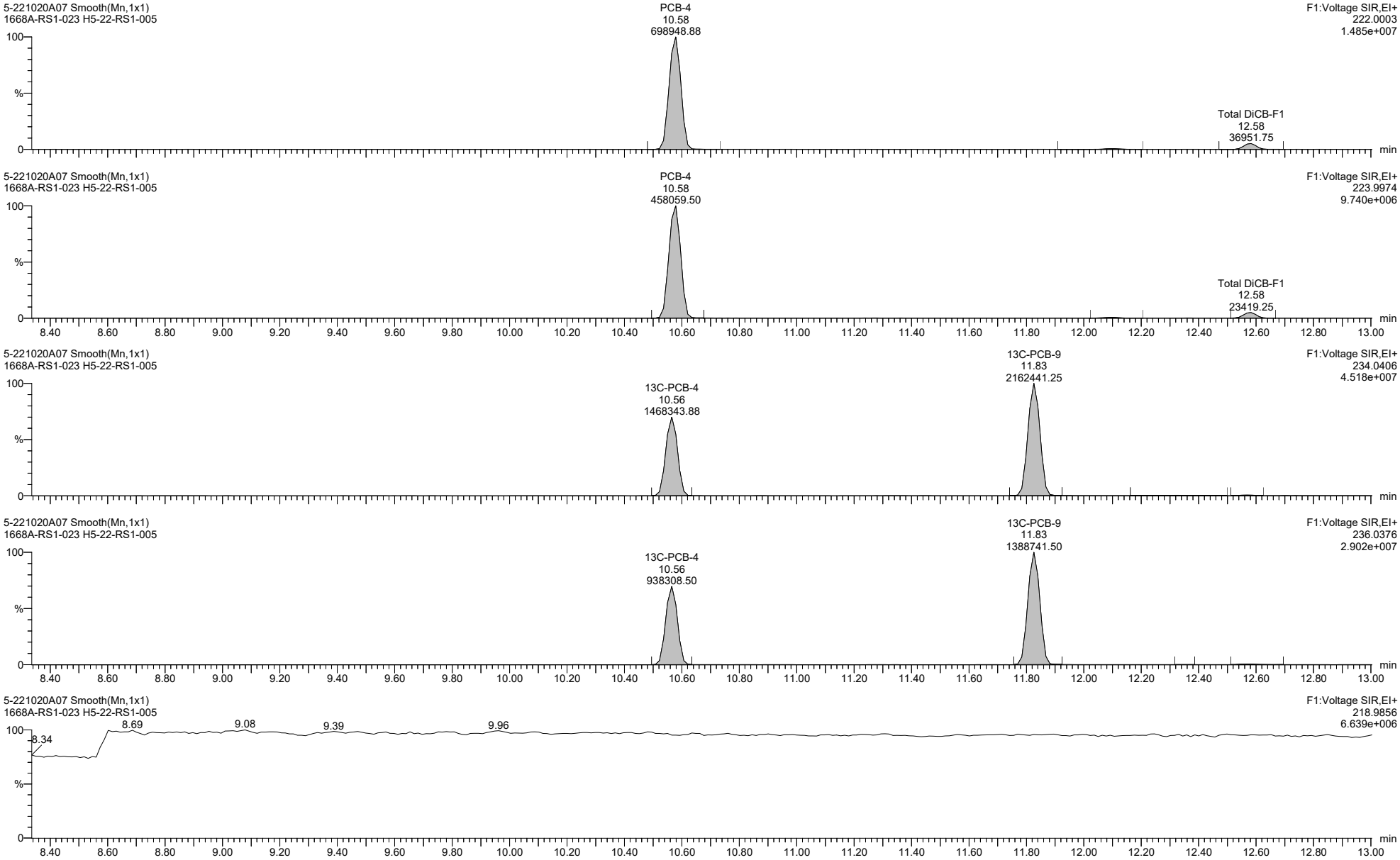


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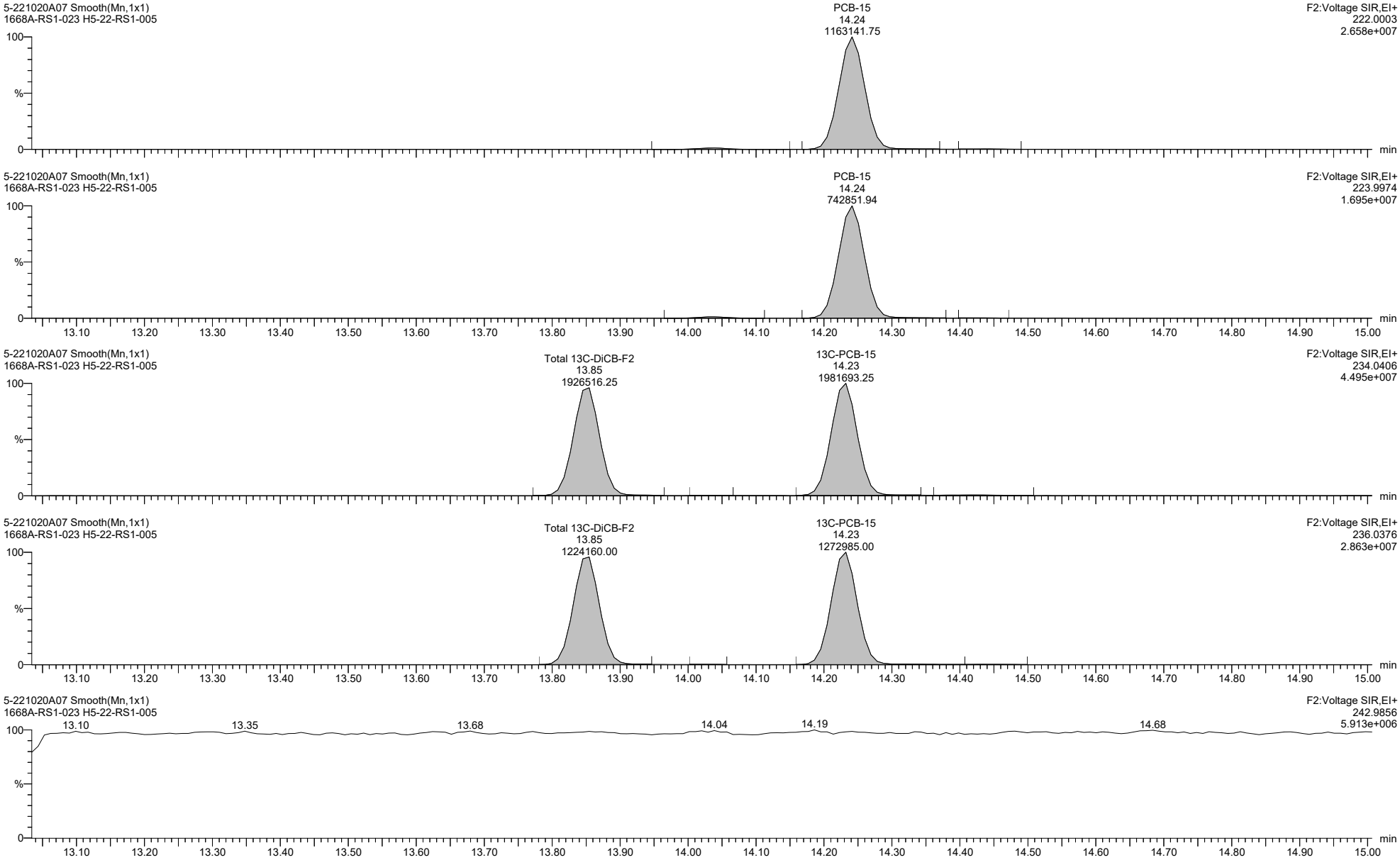
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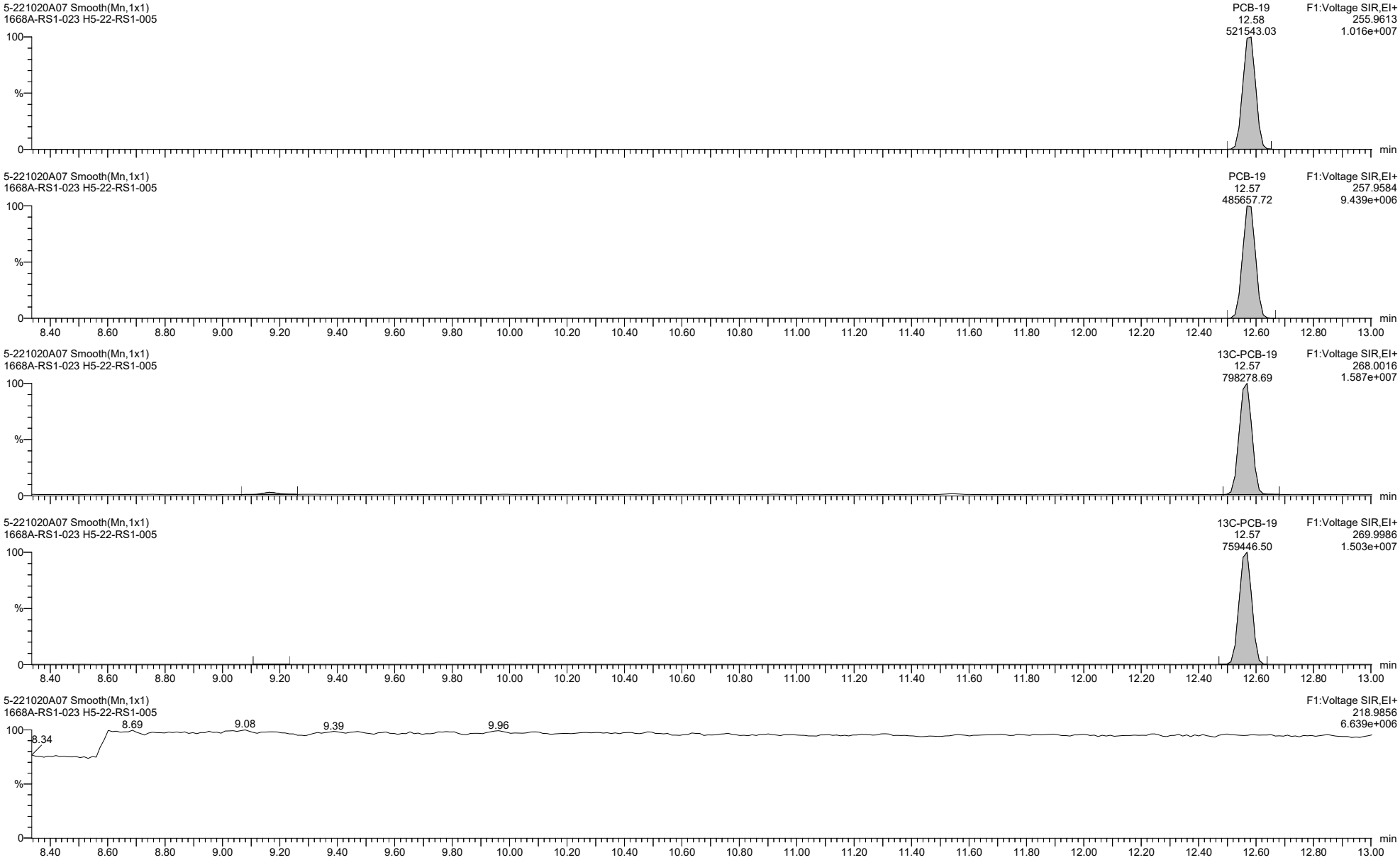


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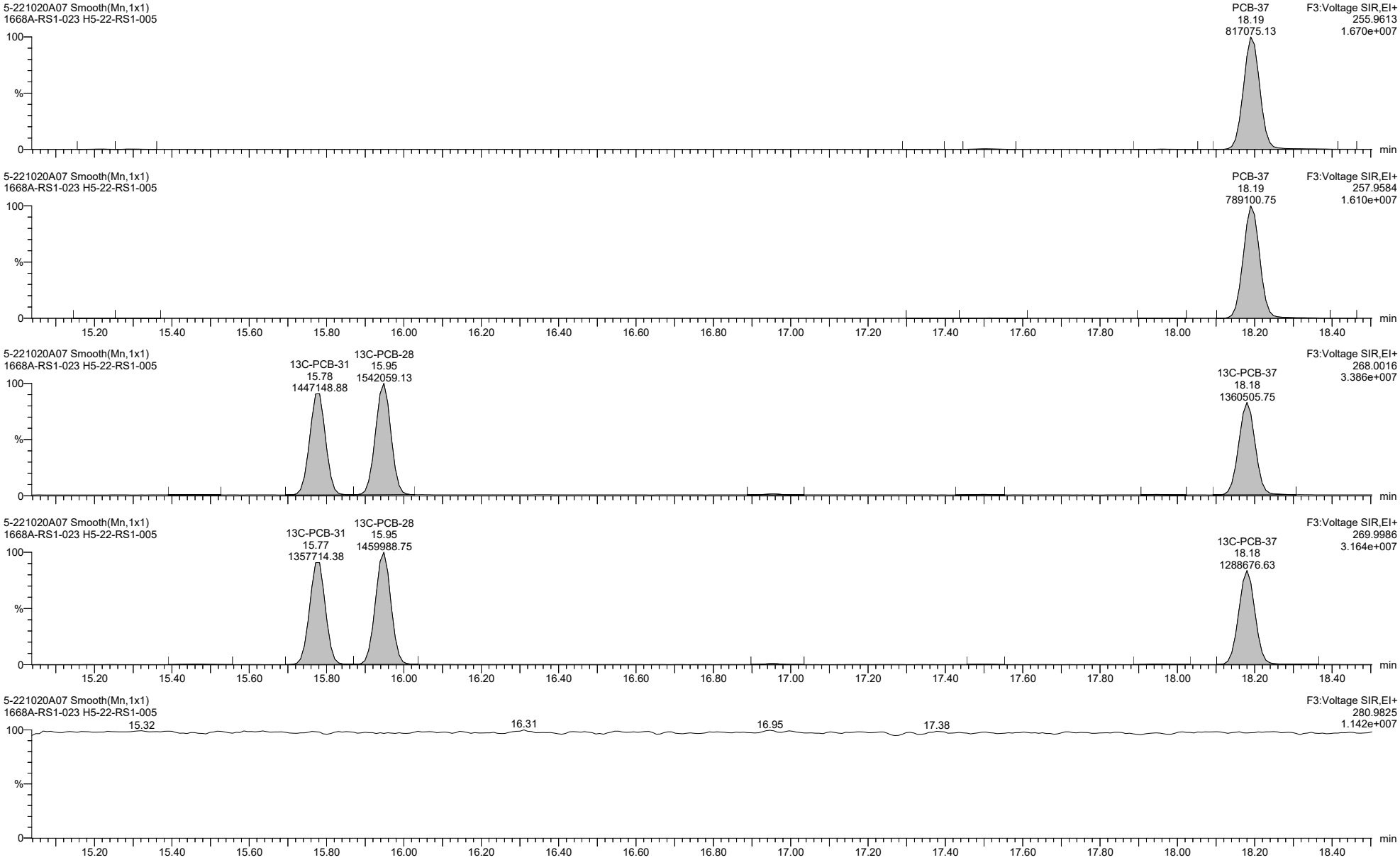
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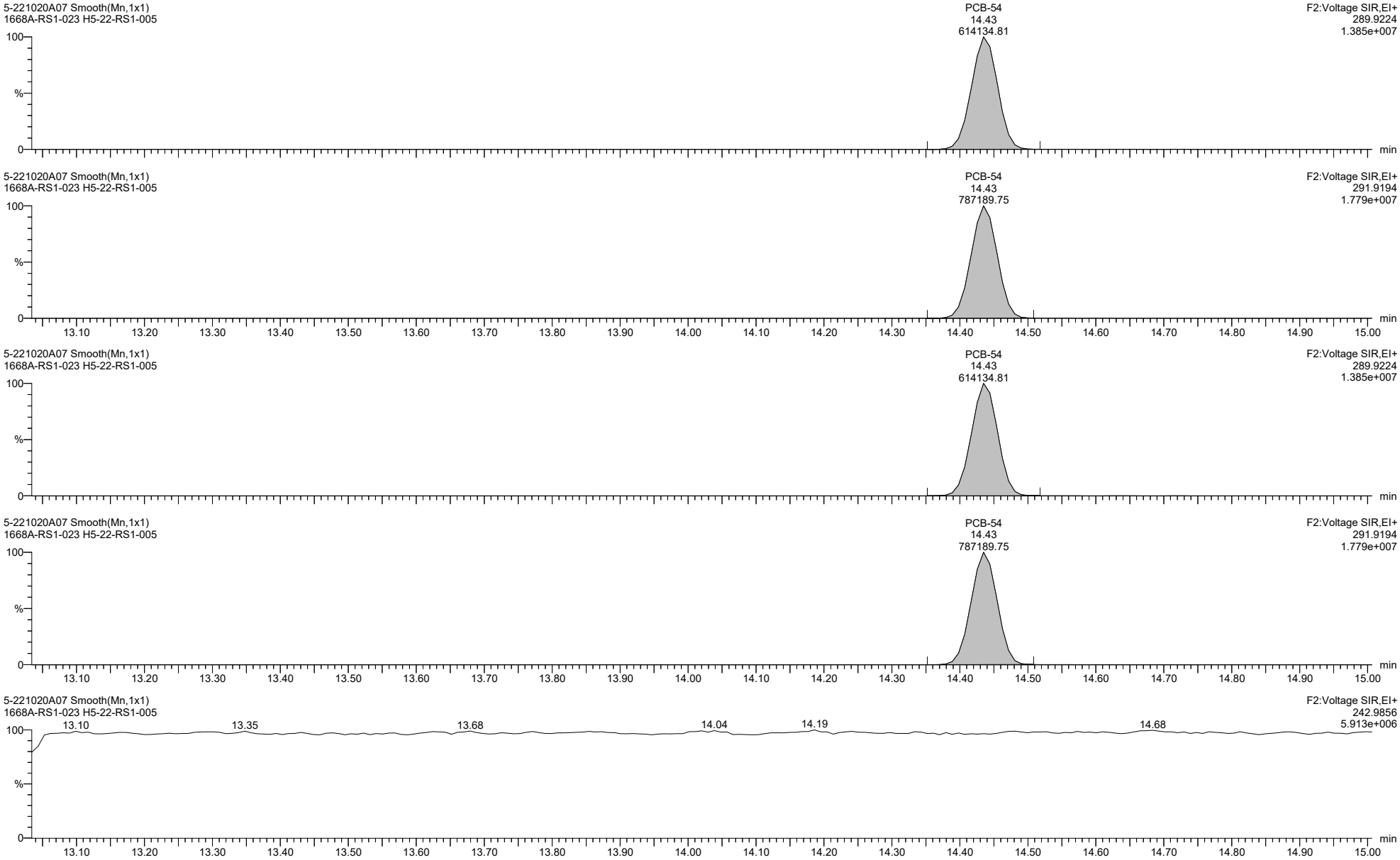


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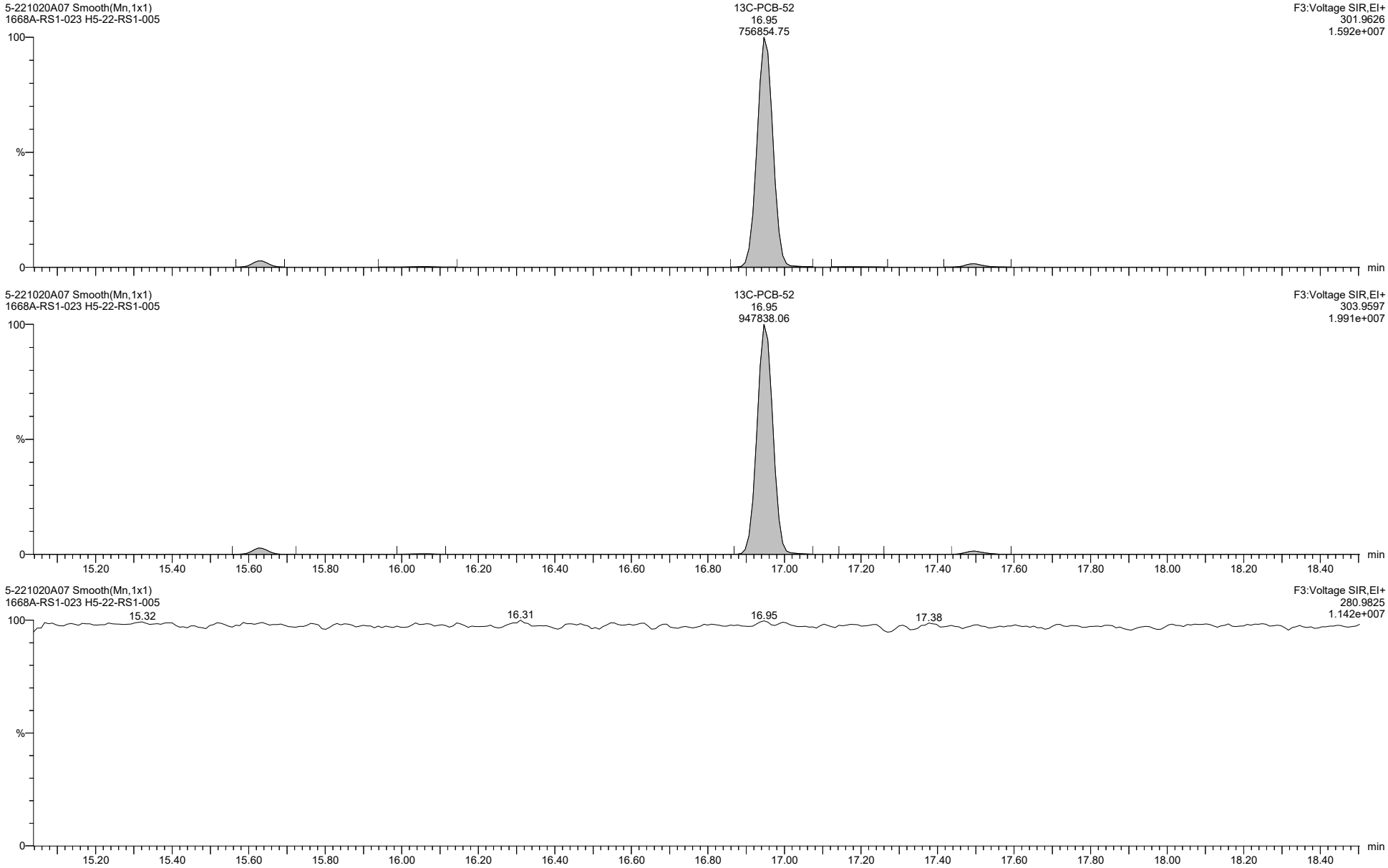
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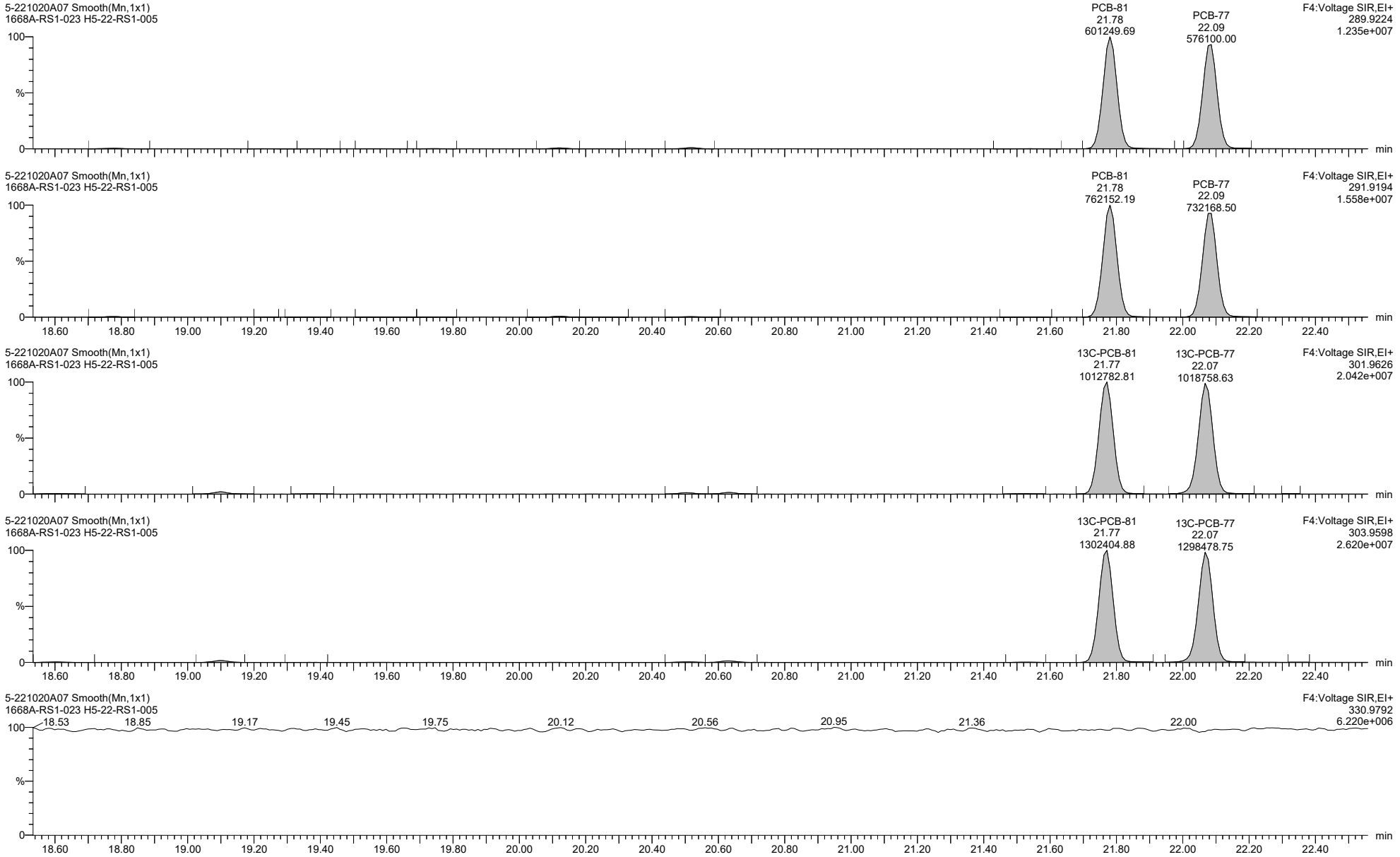


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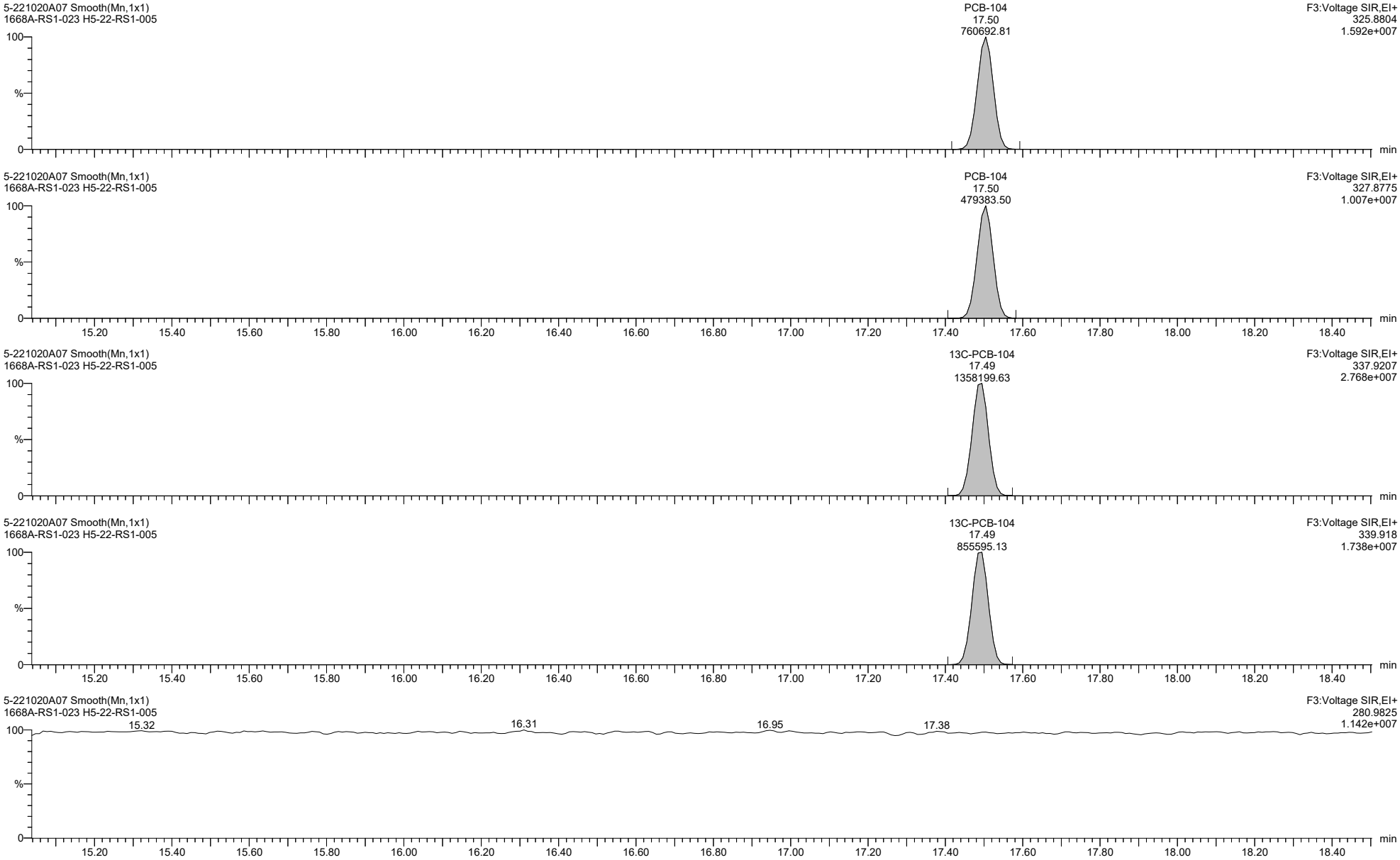


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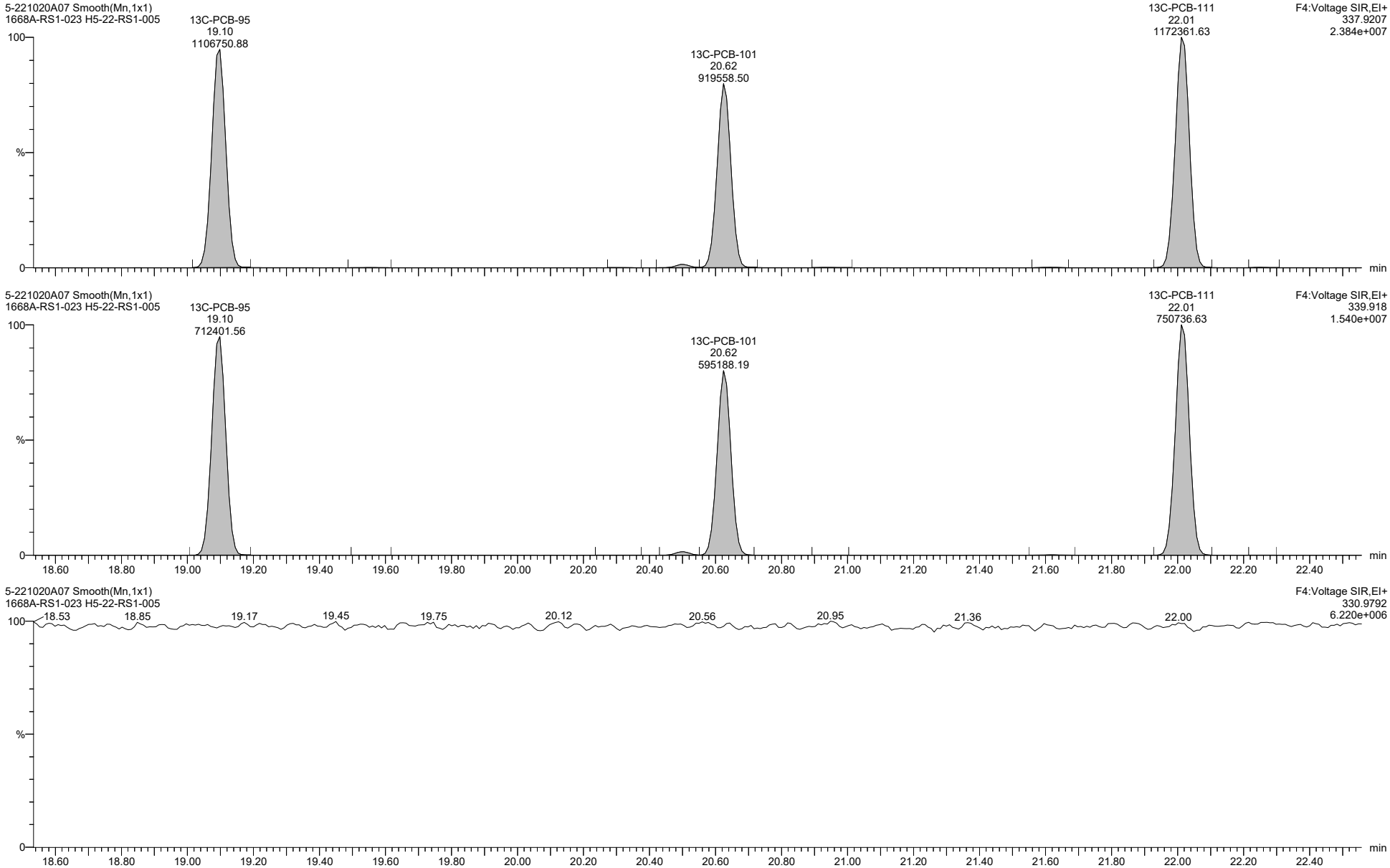
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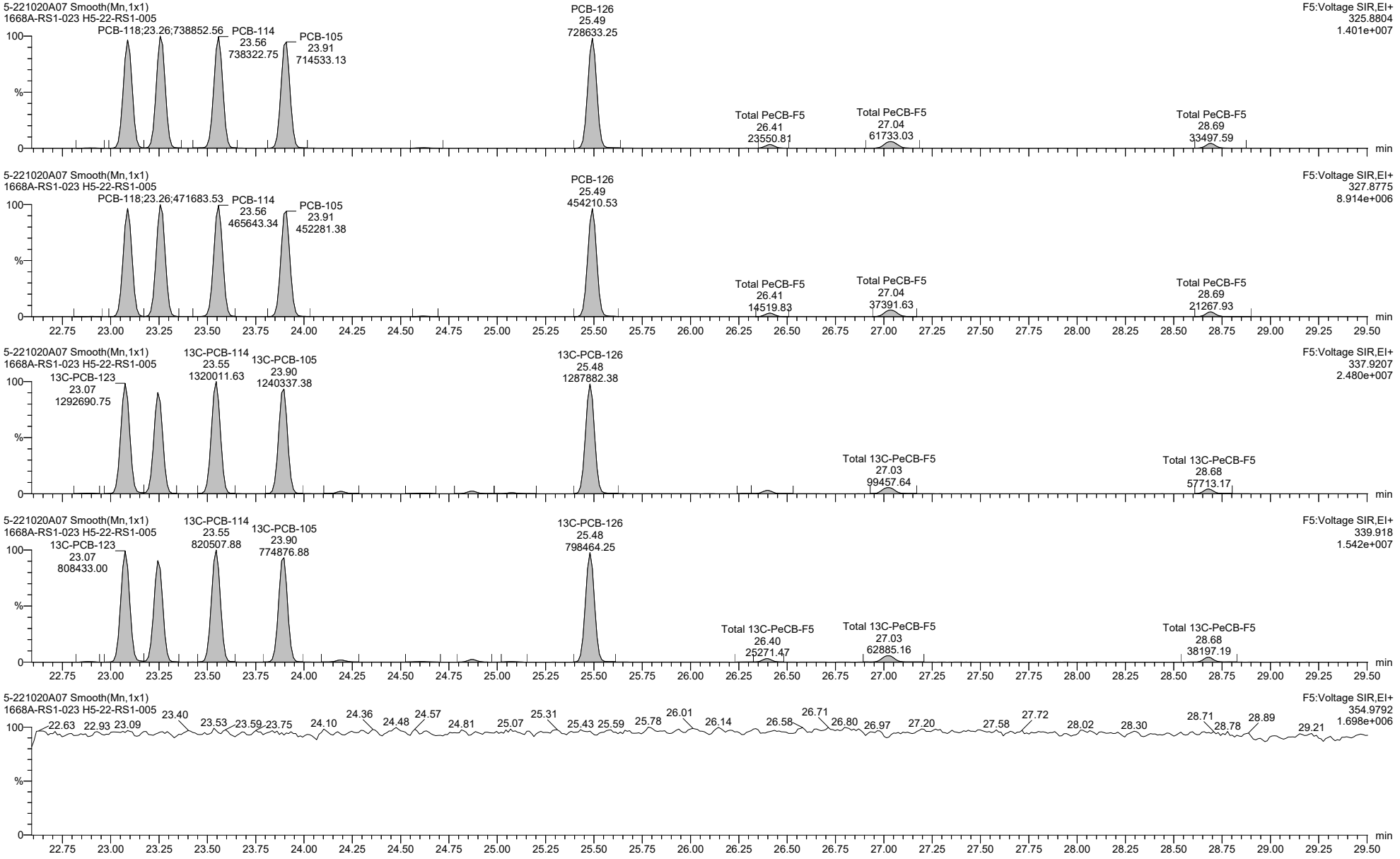


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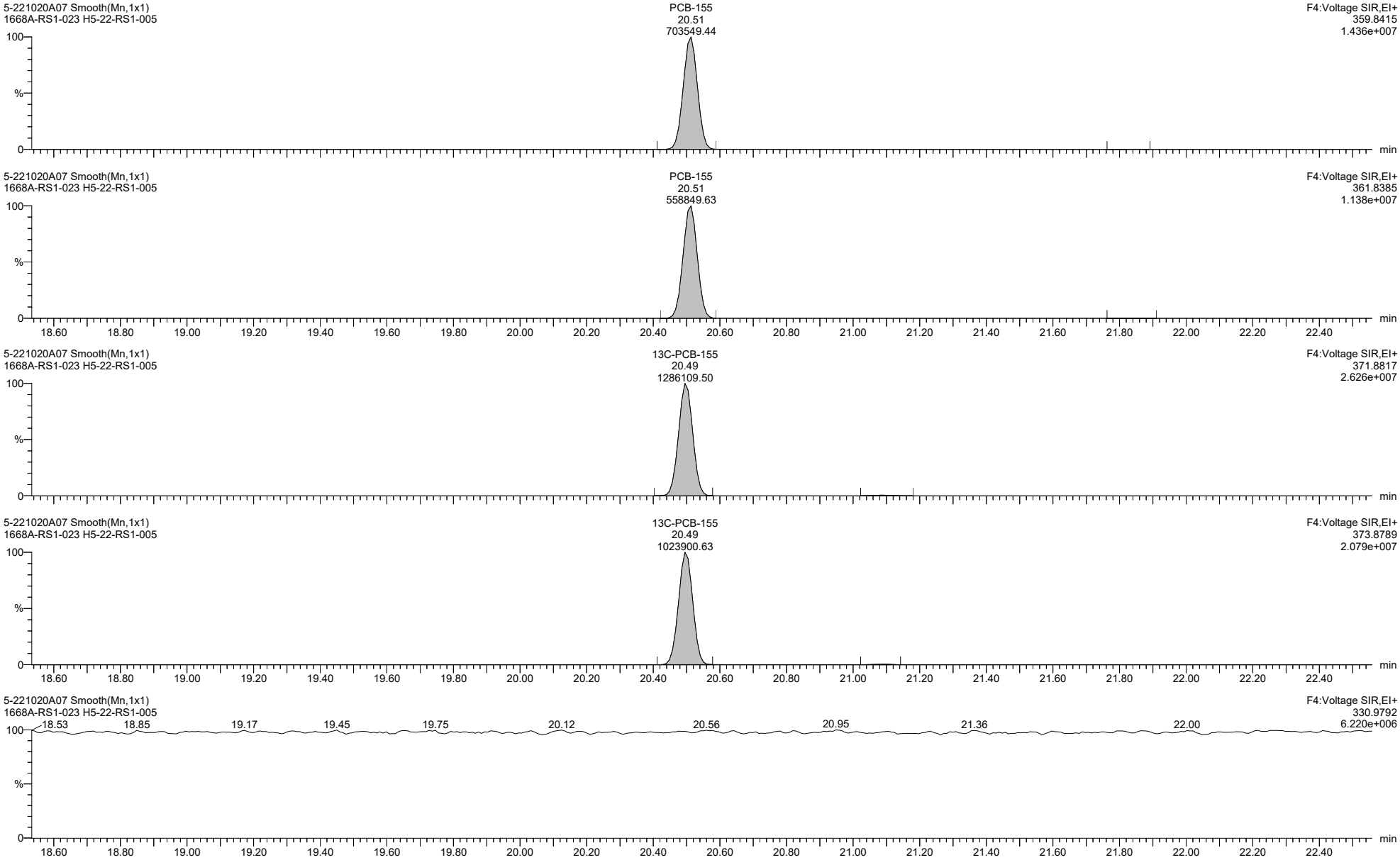


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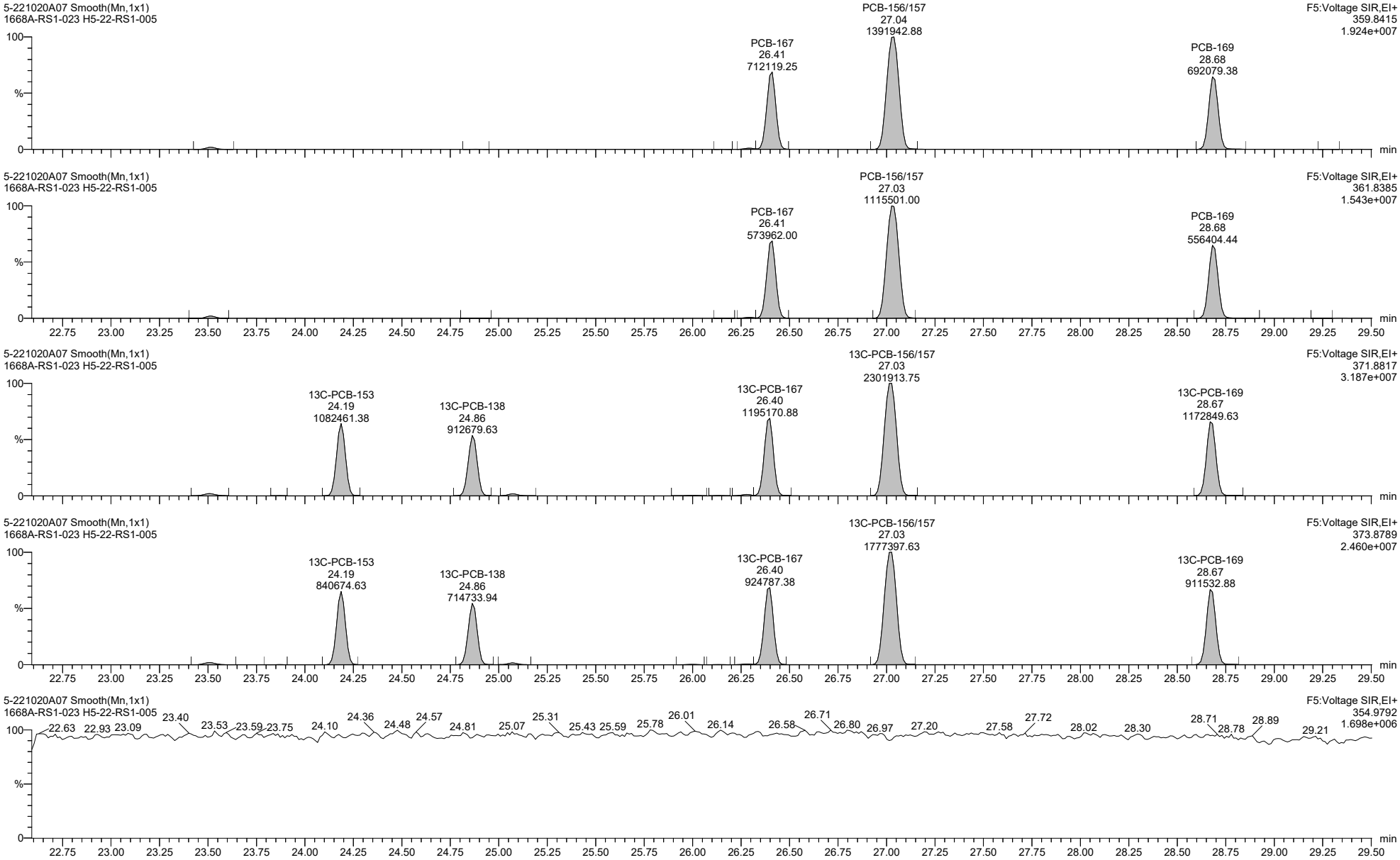


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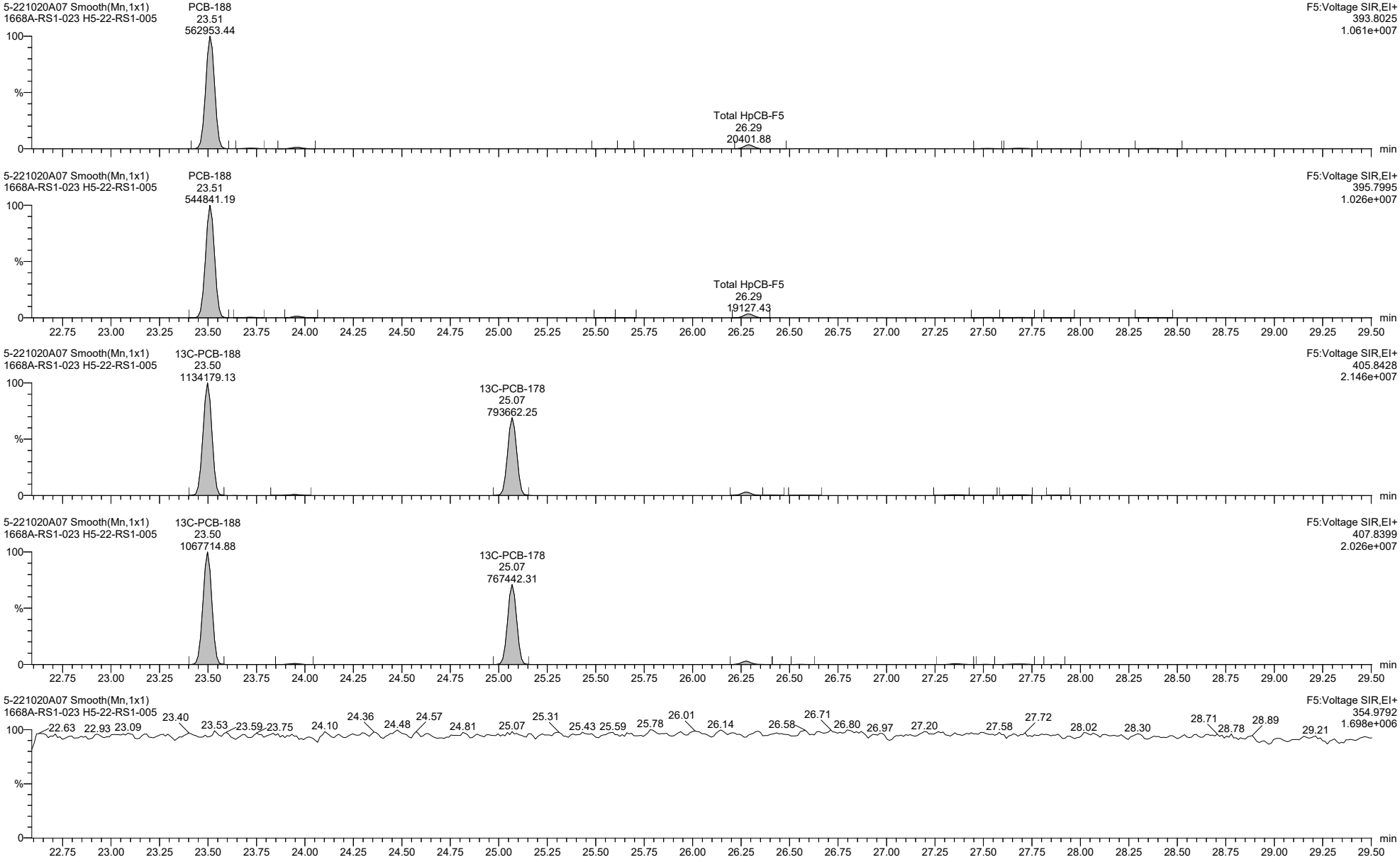
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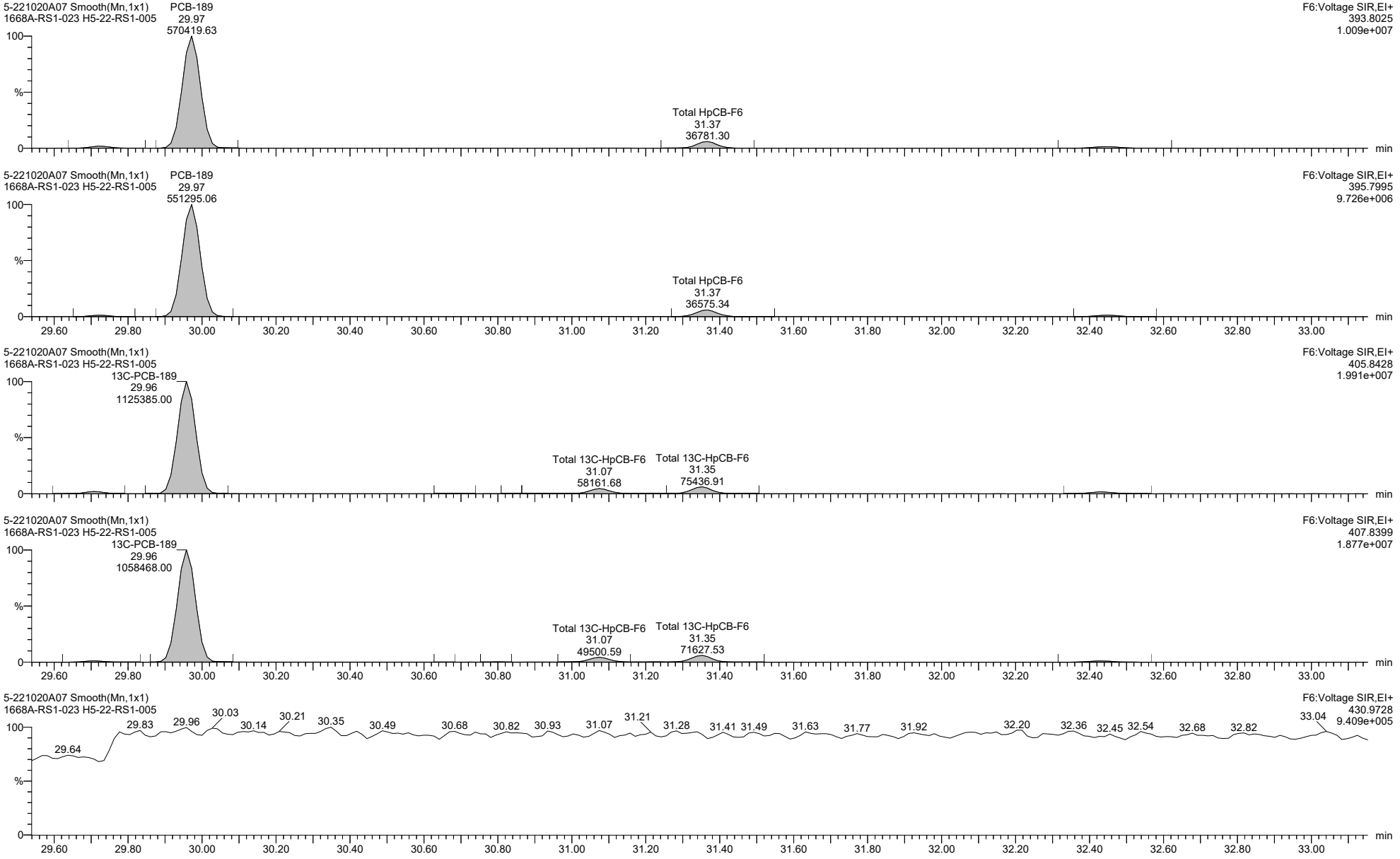
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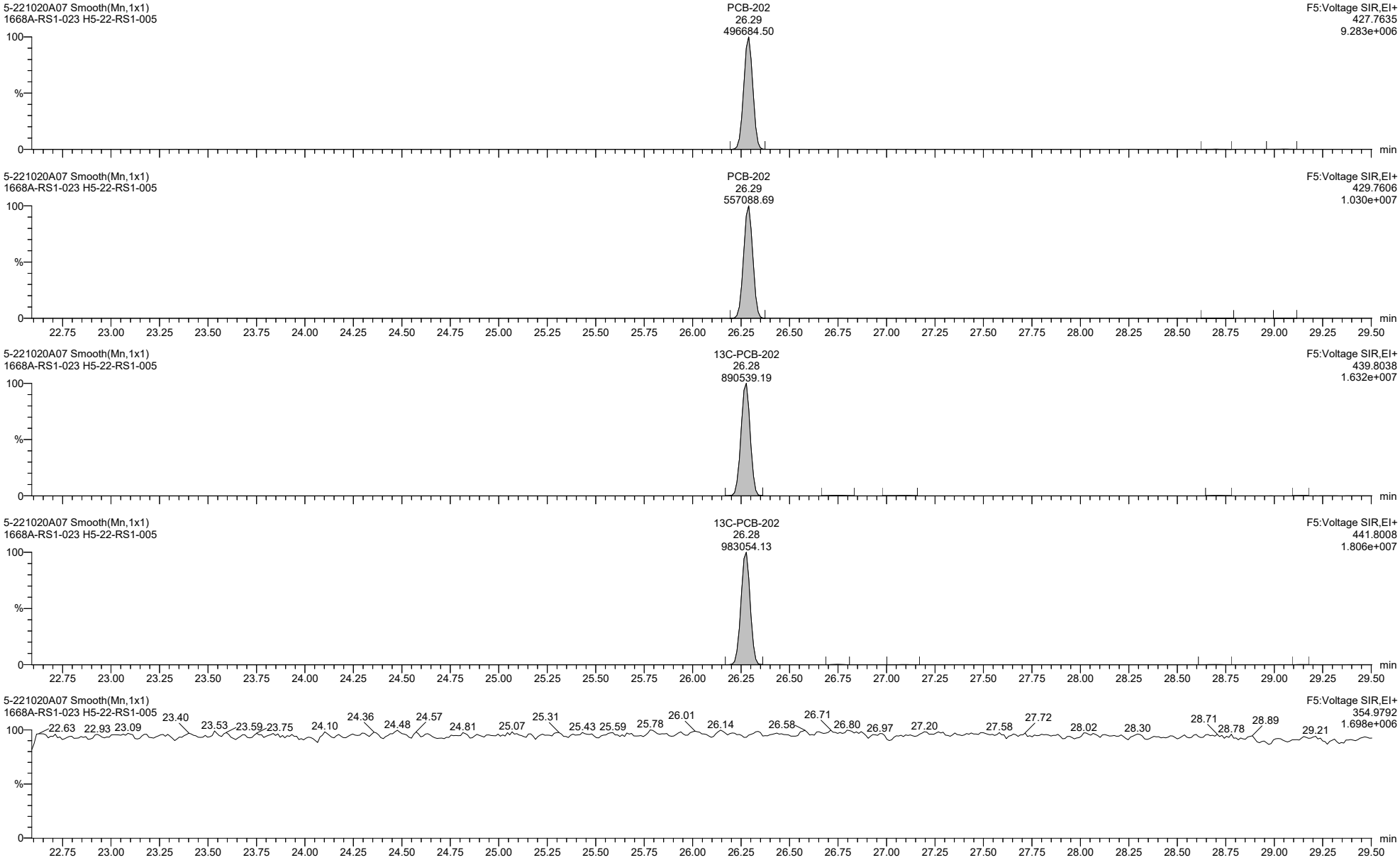


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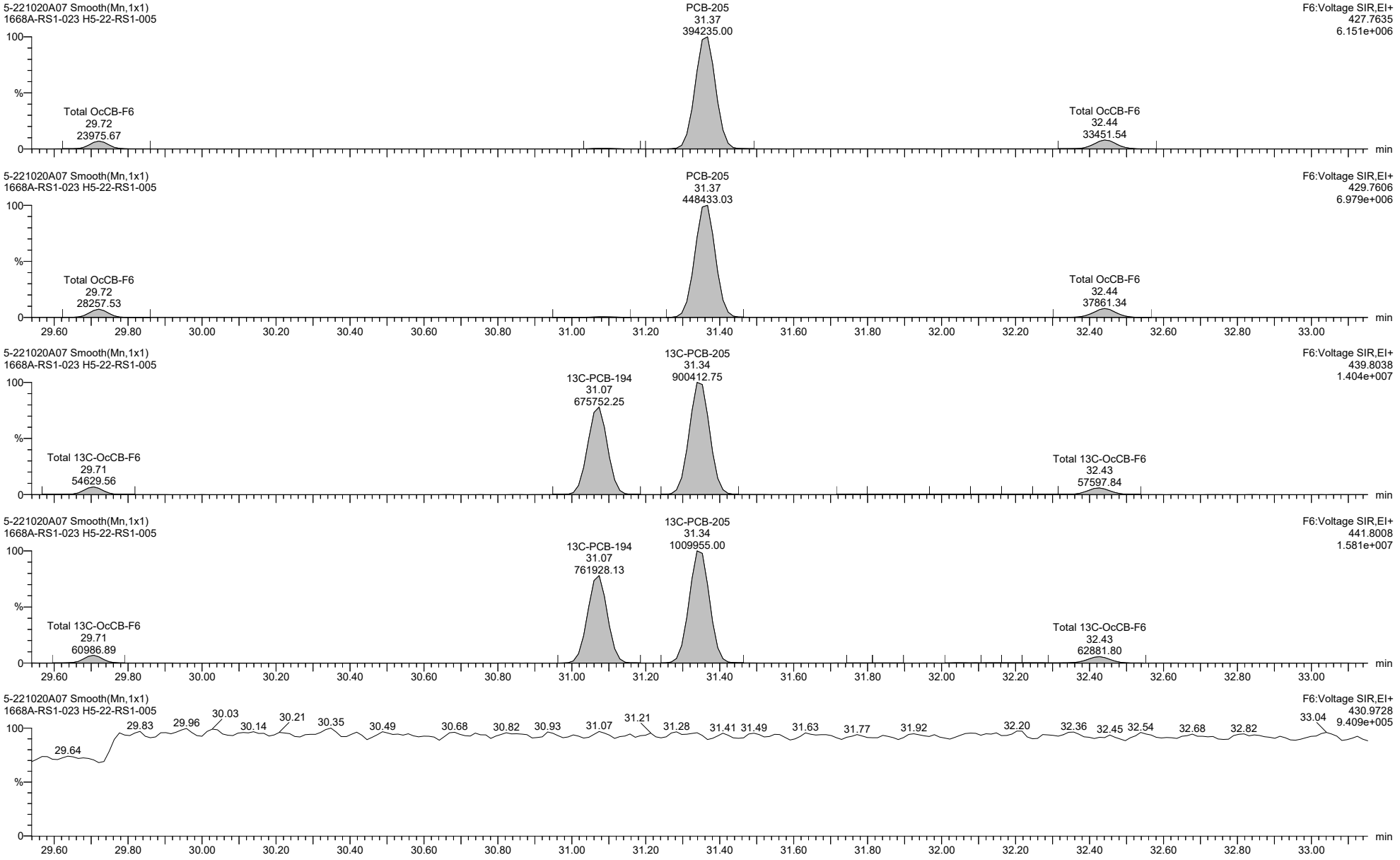
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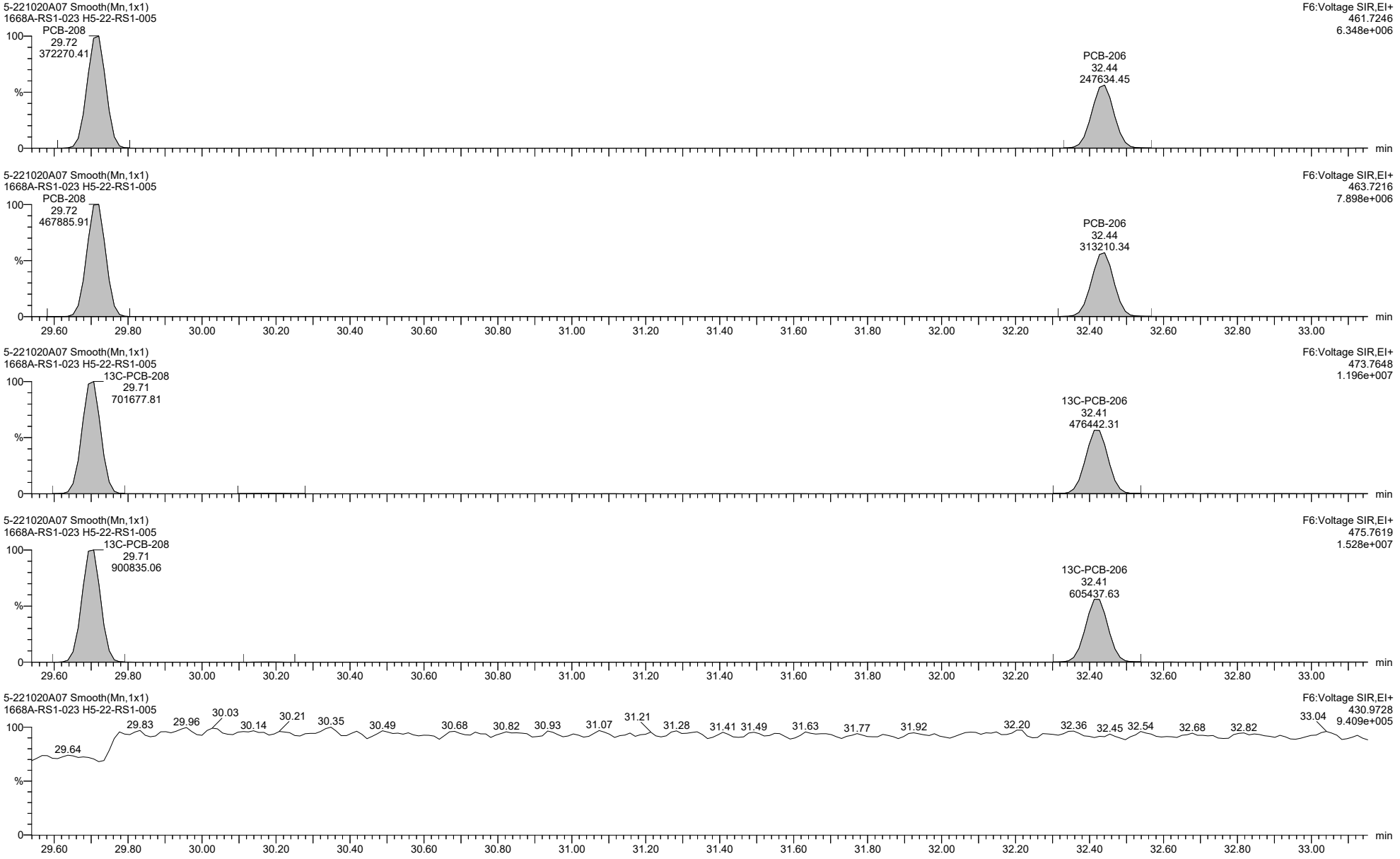
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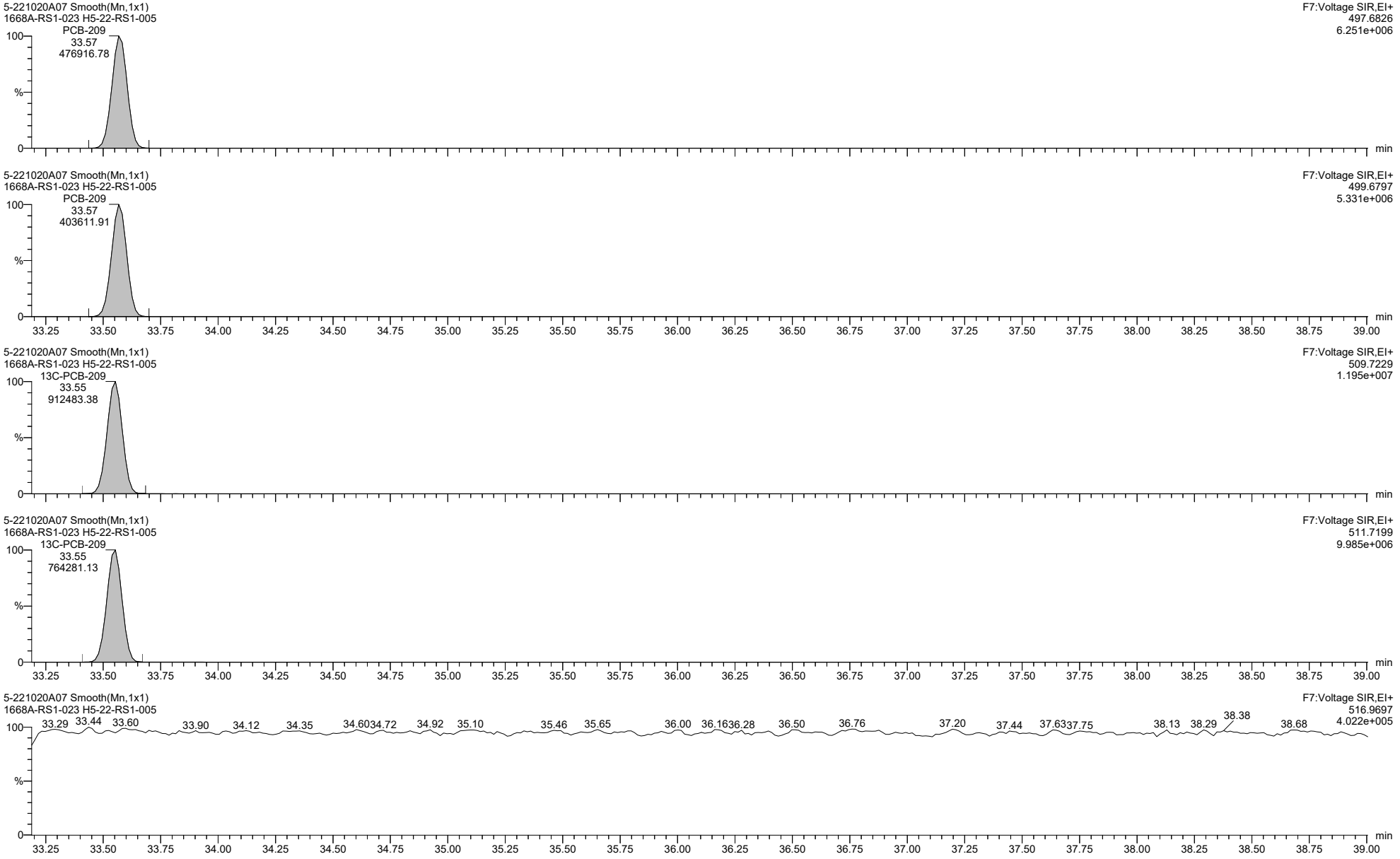


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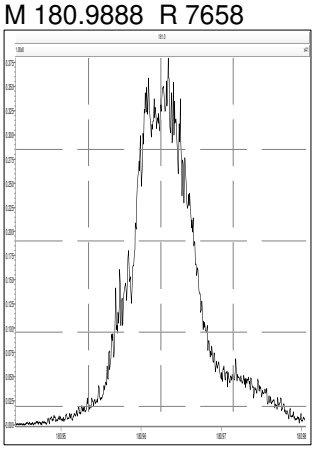
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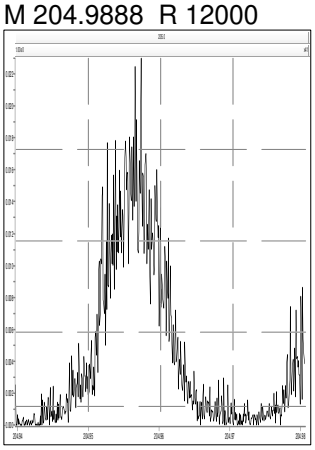


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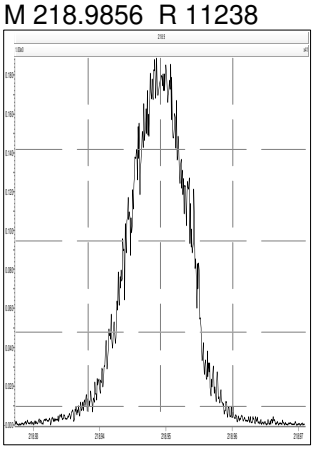
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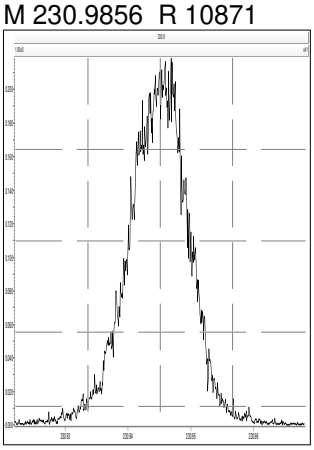
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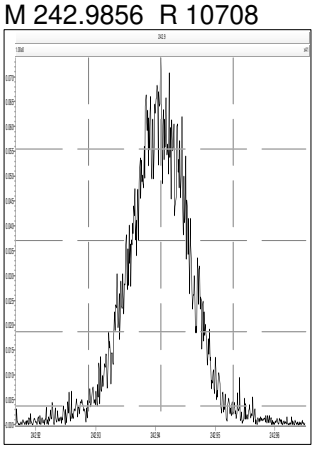
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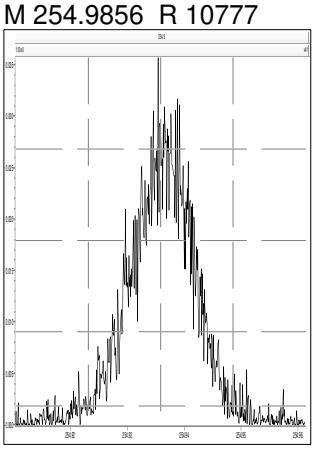
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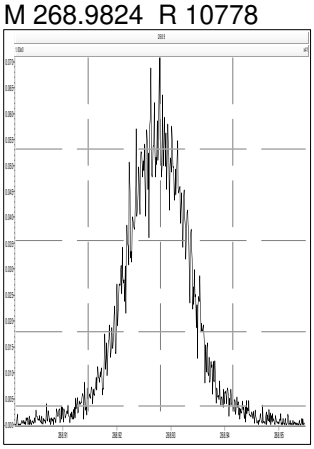
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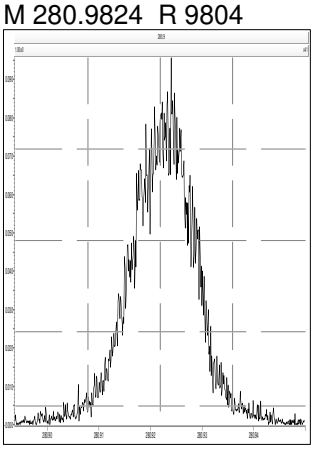
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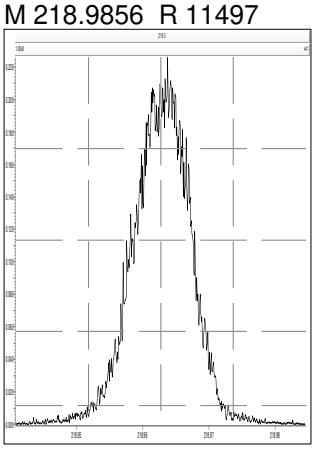
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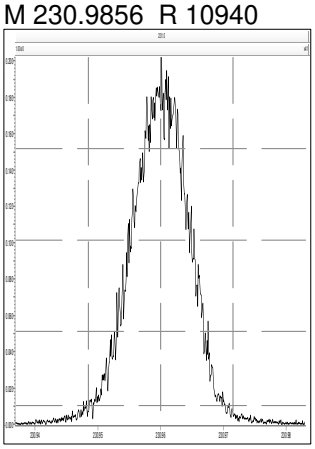
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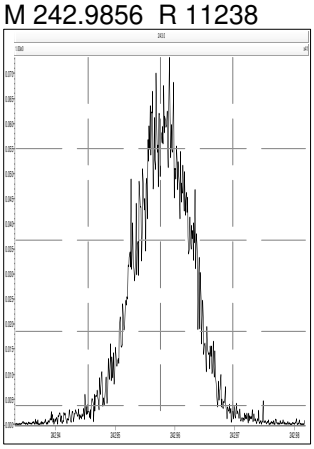
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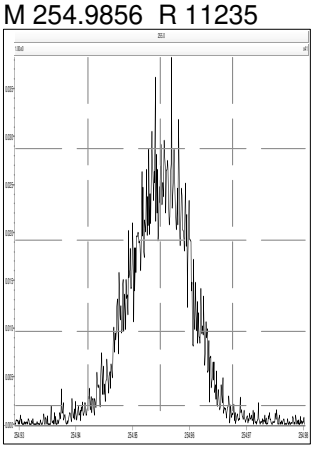
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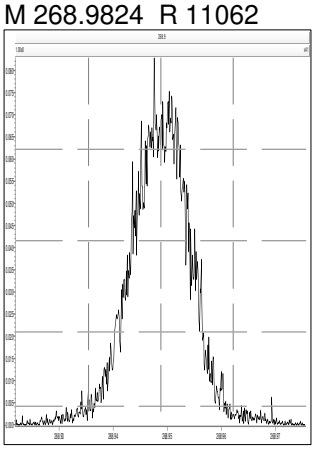
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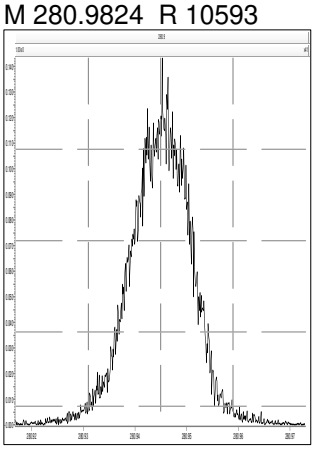
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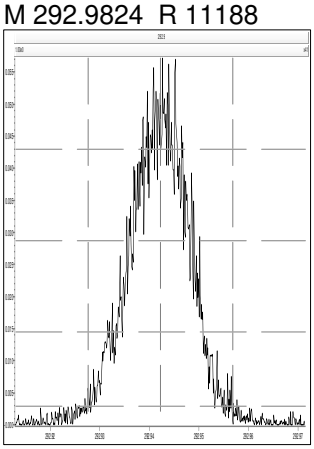
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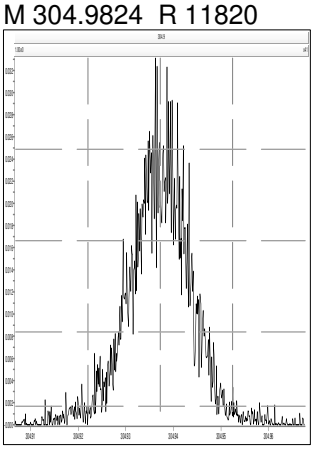
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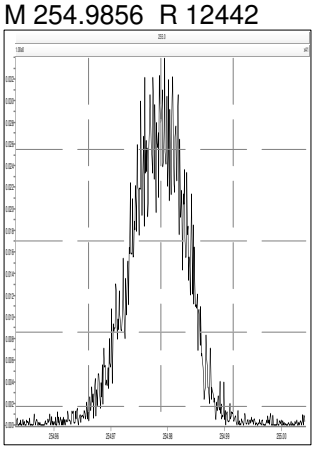
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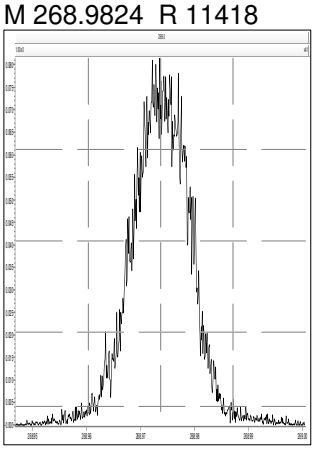
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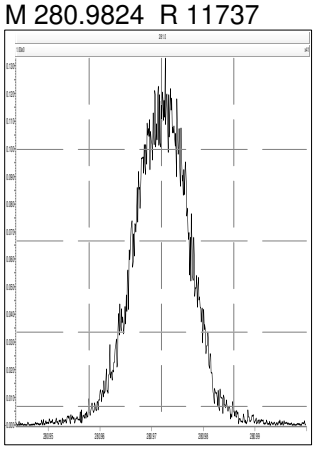
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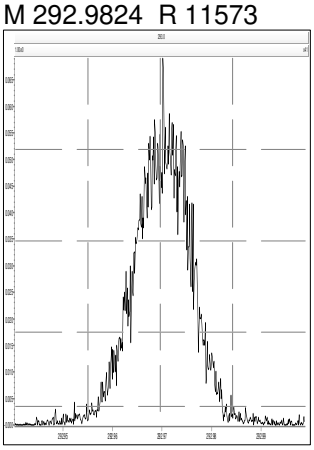
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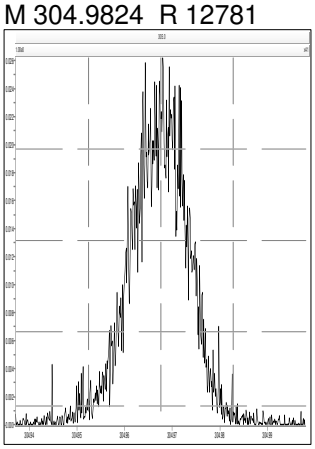
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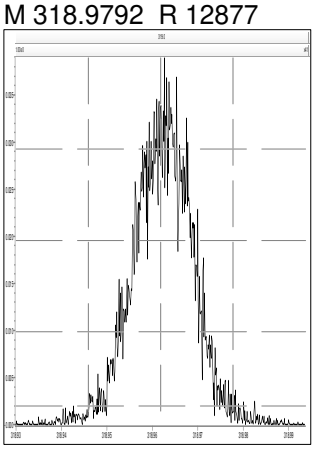
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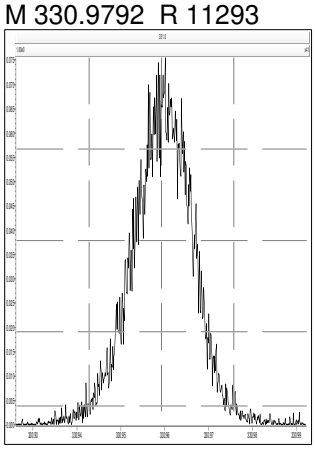
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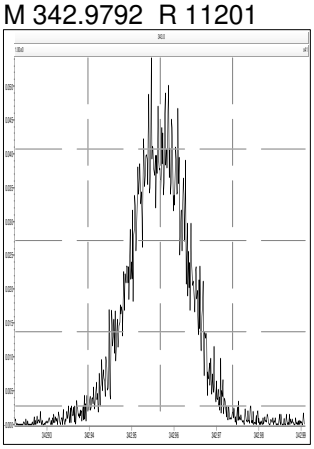
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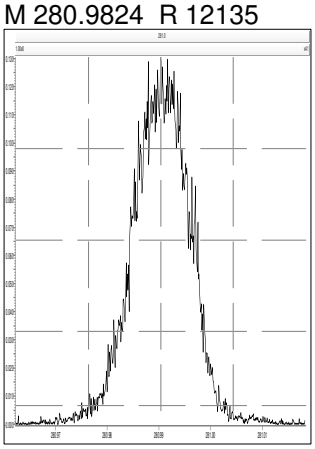
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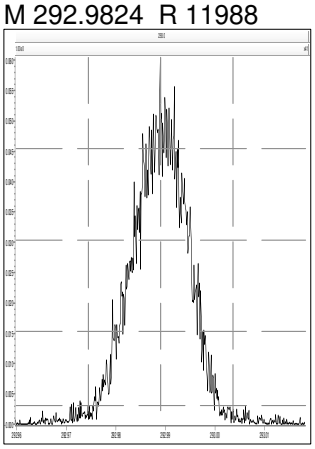
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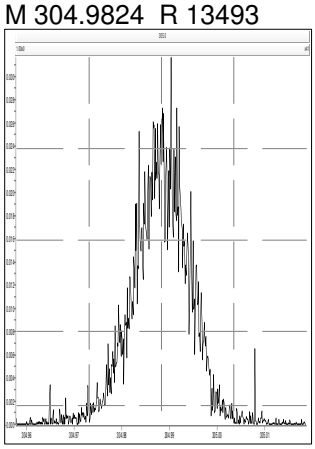
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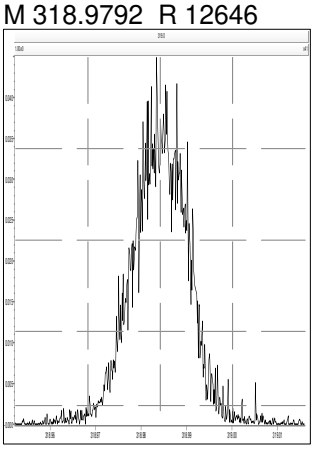
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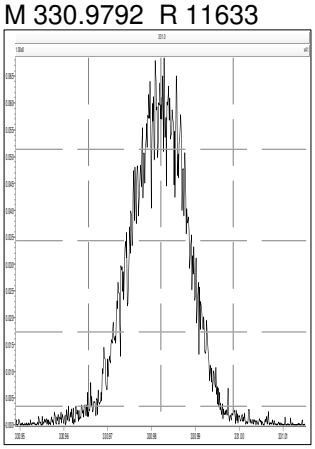
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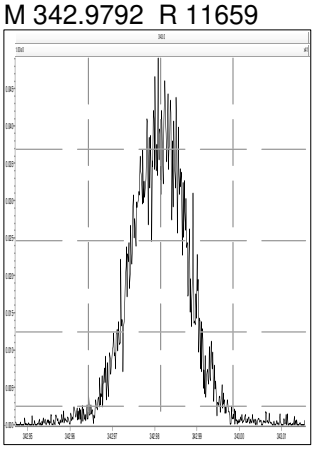
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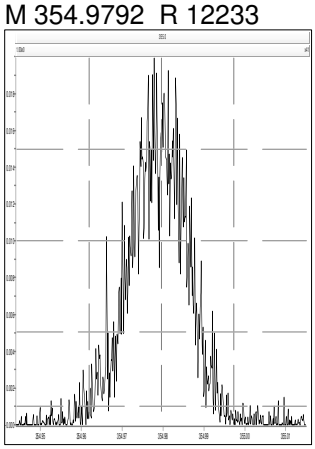
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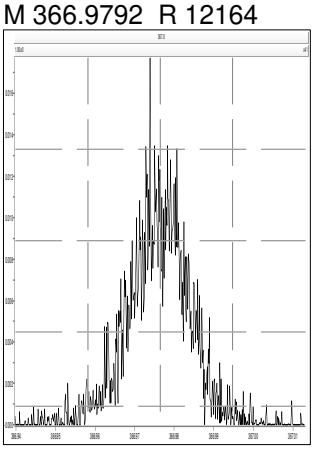
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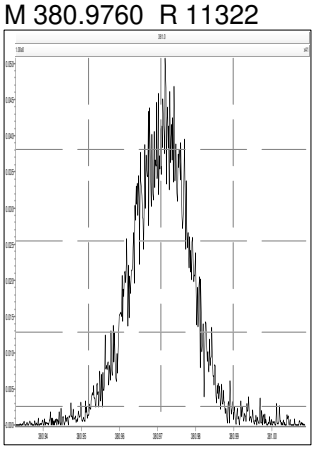
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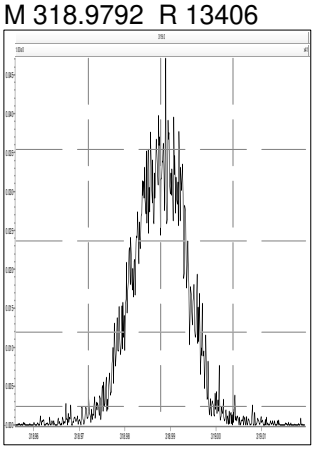
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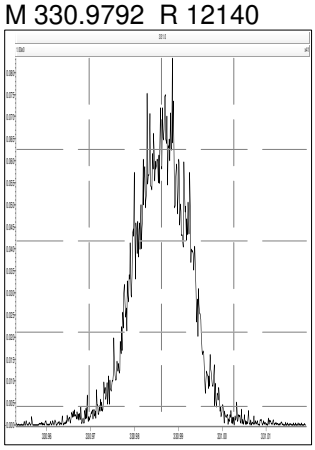
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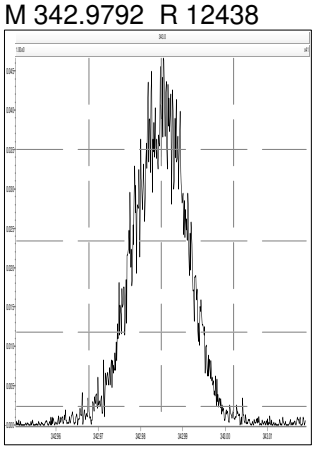
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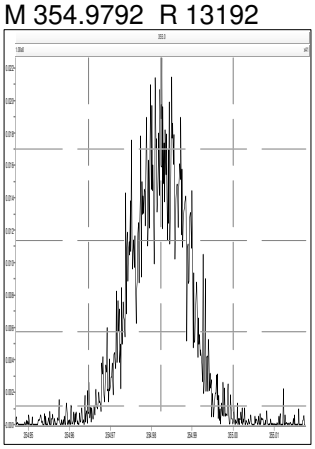
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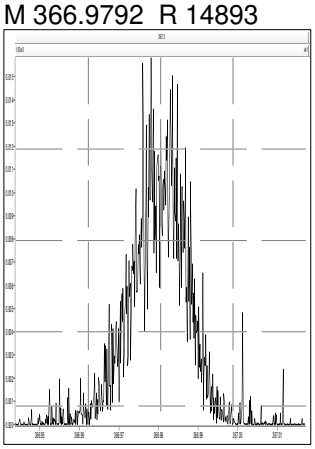
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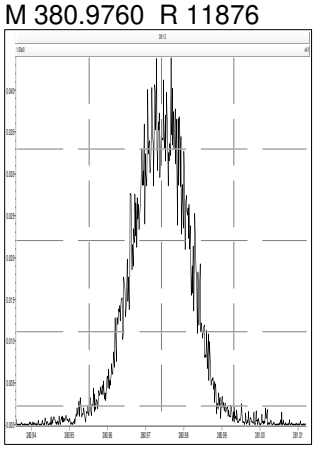
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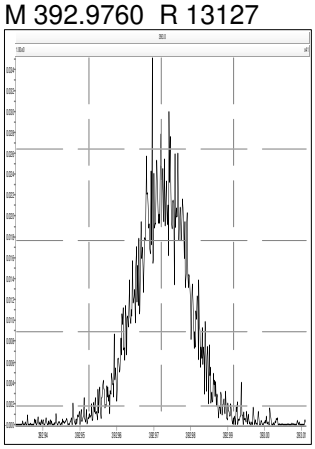
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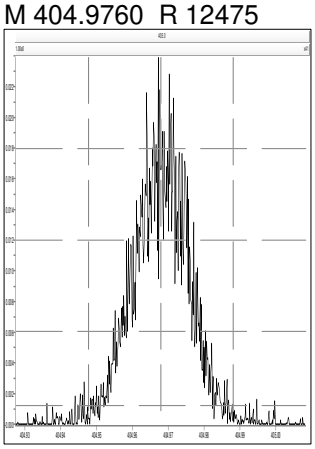
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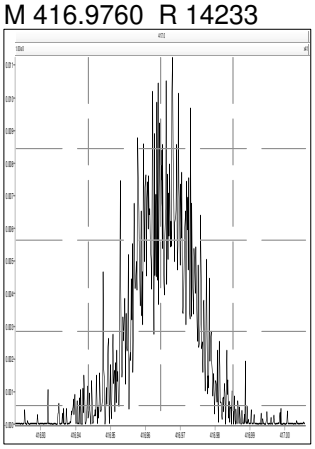
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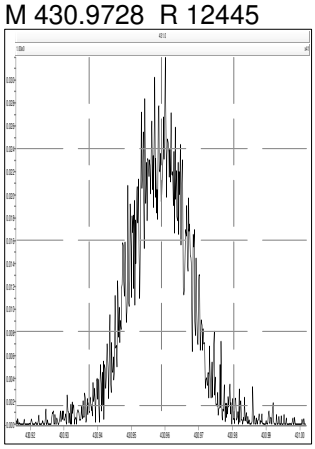
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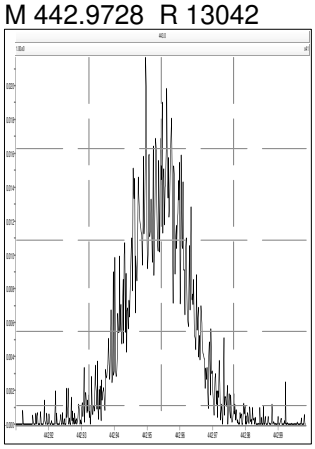
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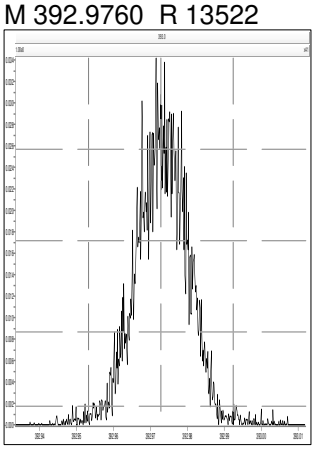
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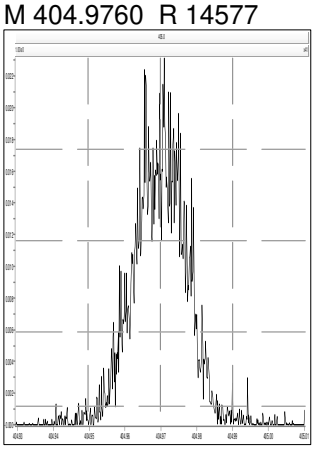
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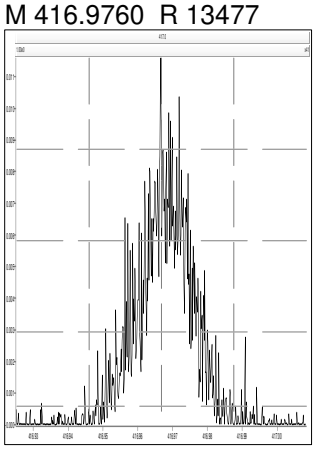
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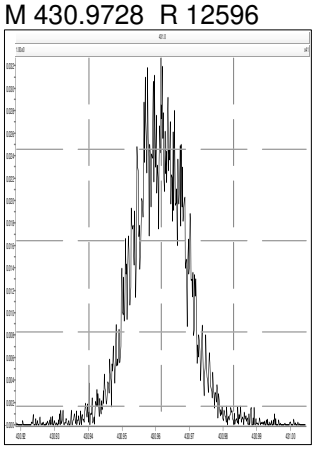
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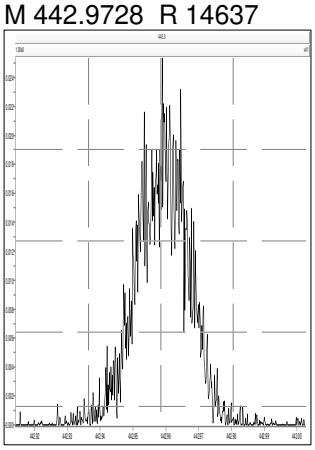
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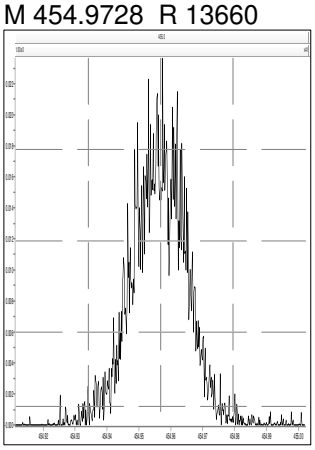
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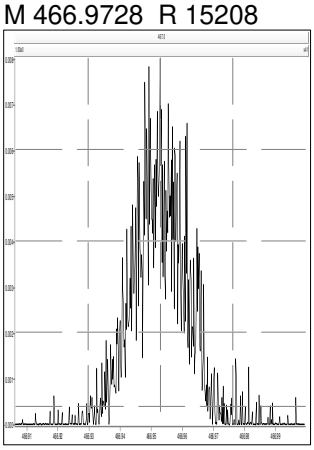
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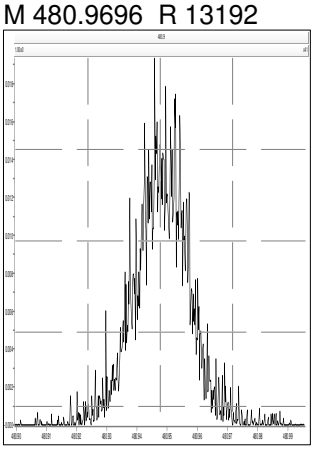
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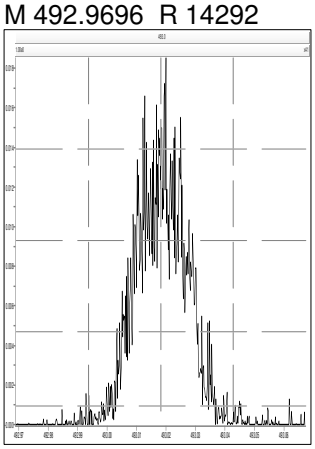
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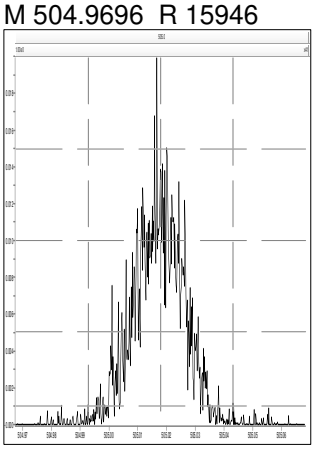
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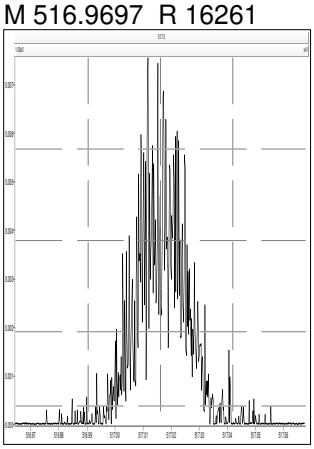
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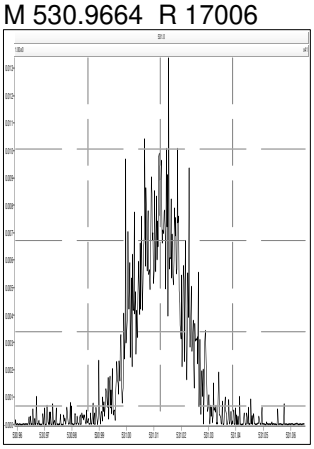
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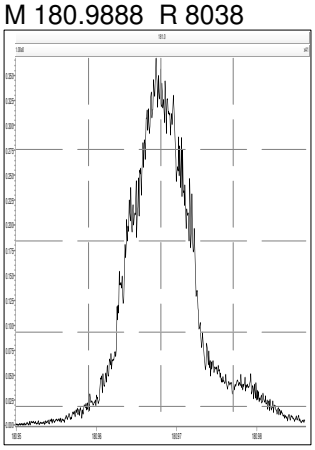


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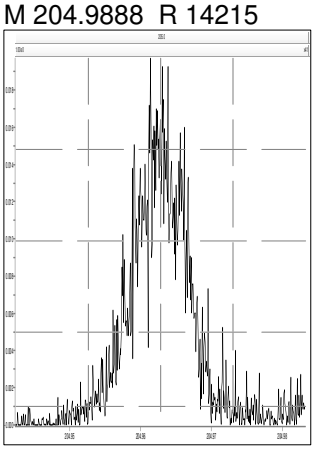


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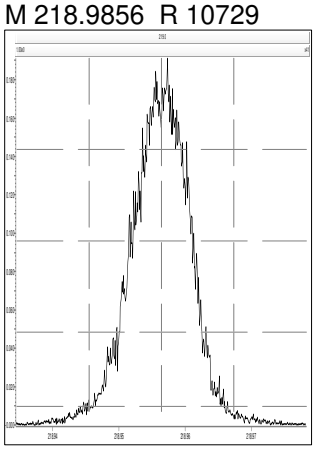
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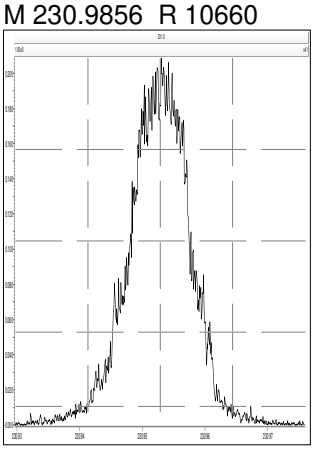
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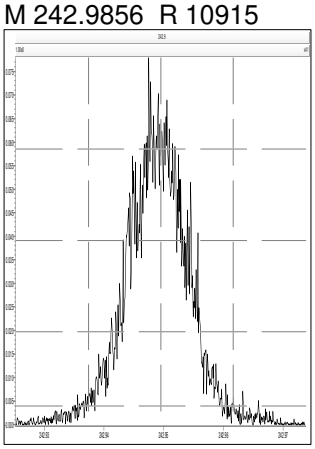
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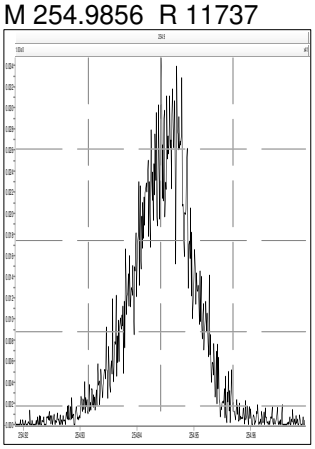
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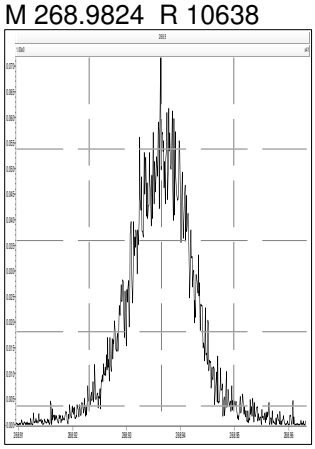
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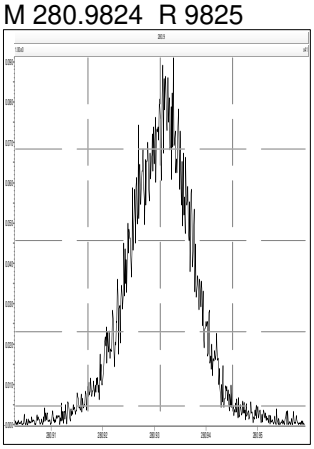
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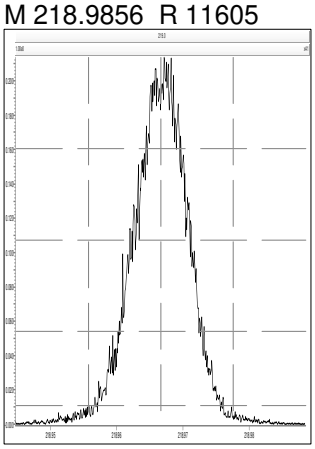
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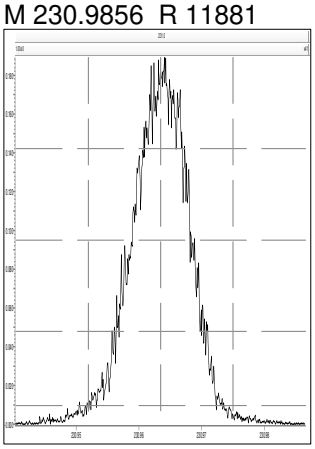
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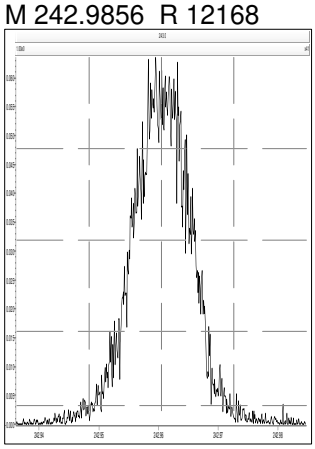
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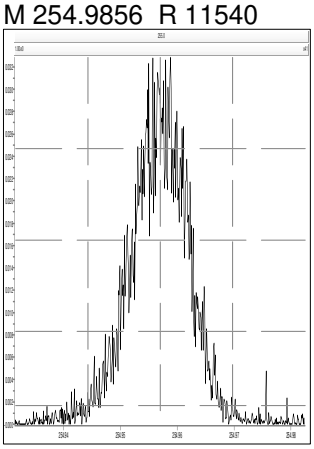
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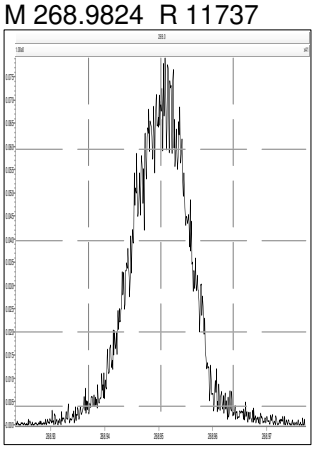
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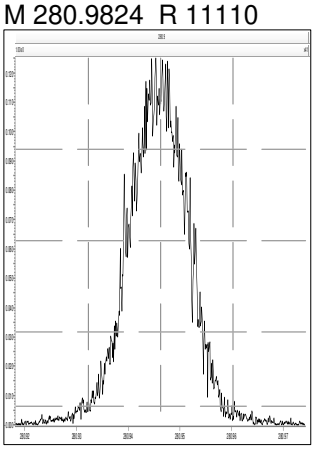
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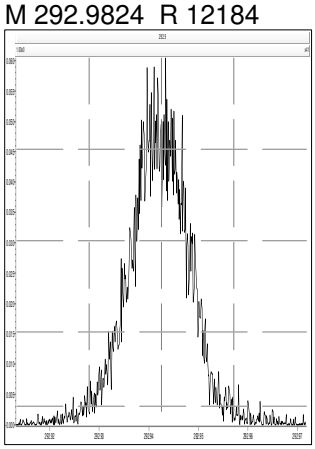
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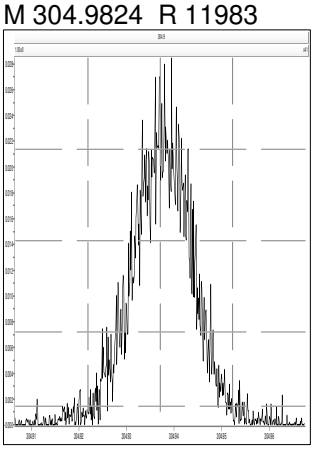
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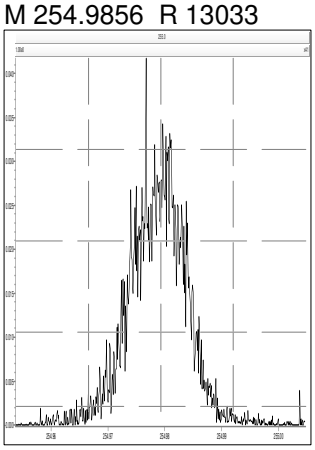
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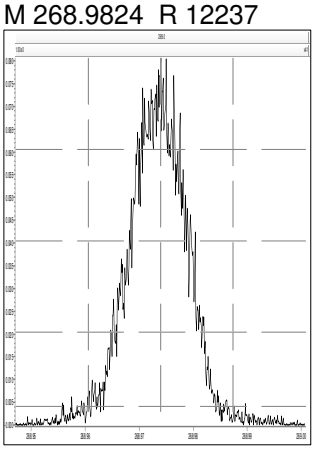
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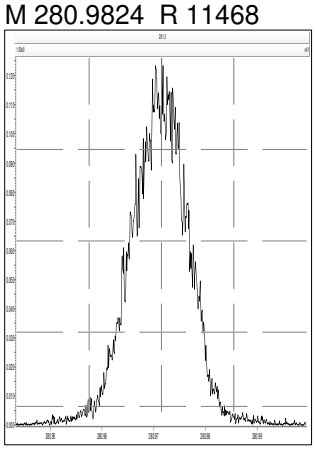
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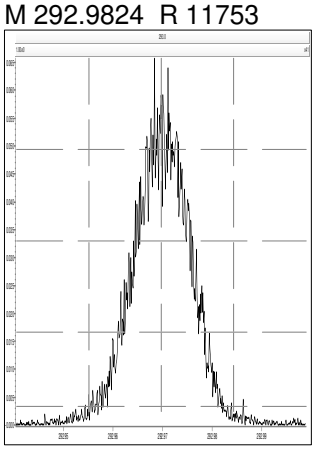
M 268.9824 R 12237



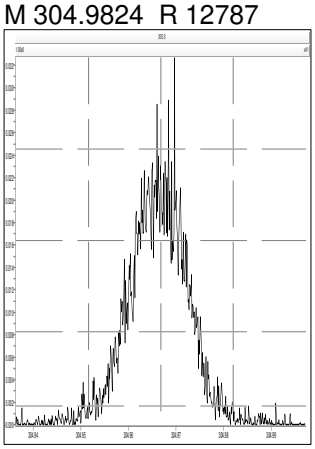
M 280.9824 R 11468



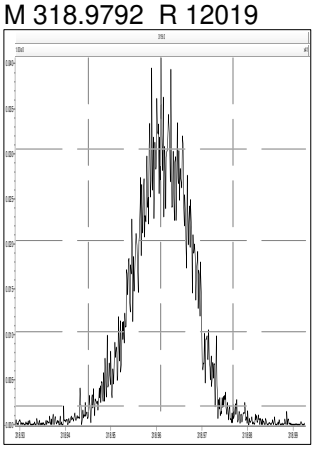
M 292.9824 R 11753



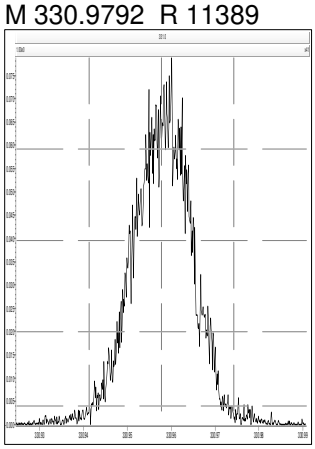
M 304.9824 R 12787



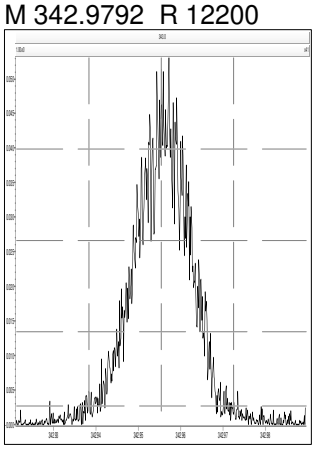
M 318.9792 R 12019



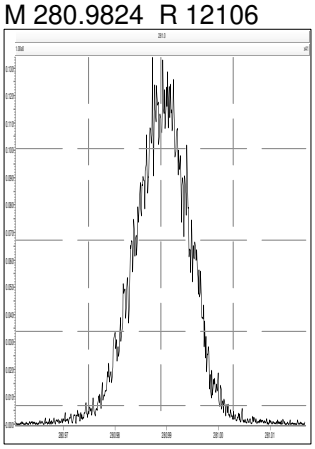
M 330.9792 R 11389



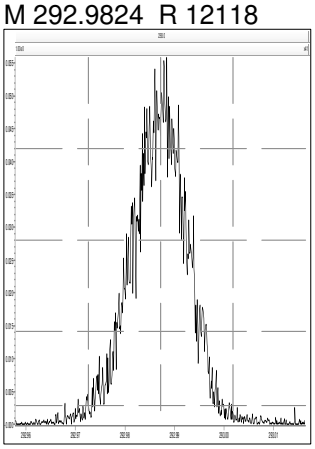
M 342.9792 R 12200



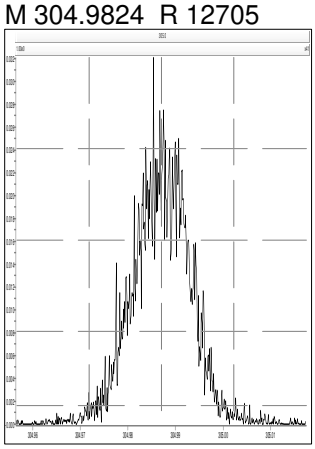
M 280.9824 R 12106



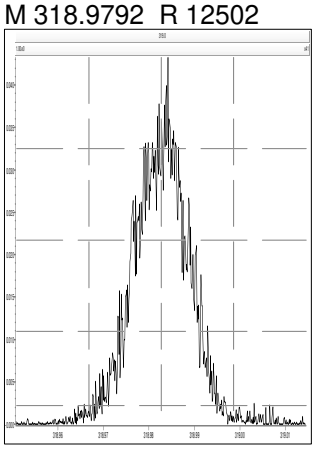
M 292.9824 R 12118



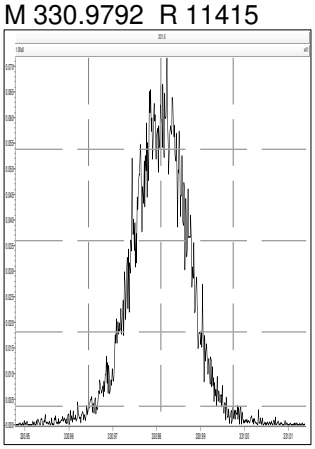
M 304.9824 R 12705



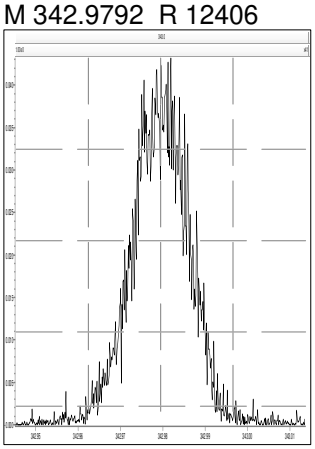
M 318.9792 R 12502



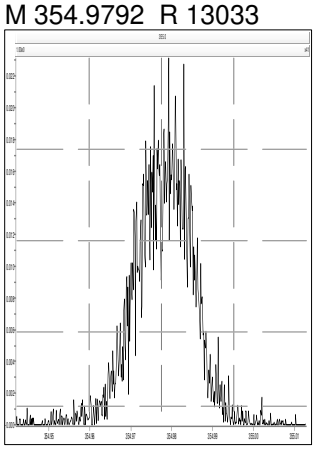
M 330.9792 R 11415



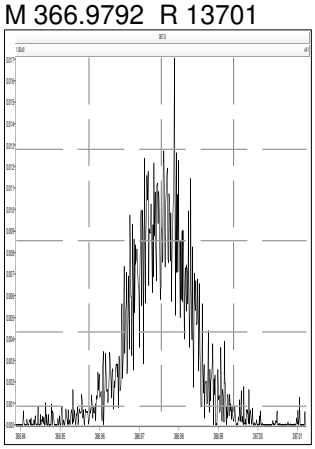
M 342.9792 R 12406



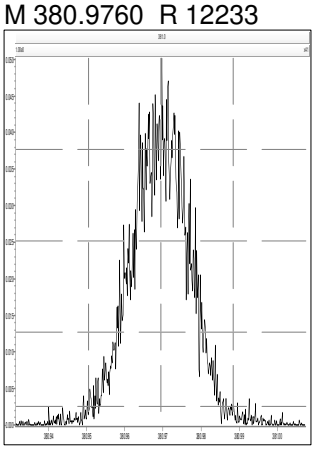
M 354.9792 R 13033



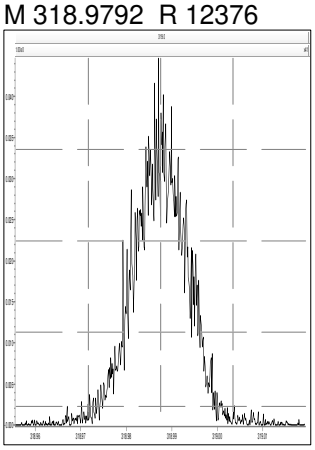
M 366.9792 R 13701



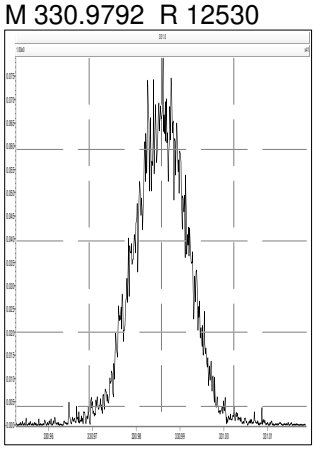
M 380.9760 R 12233



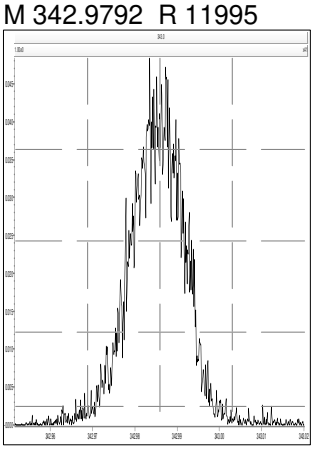
M 318.9792 R 12376



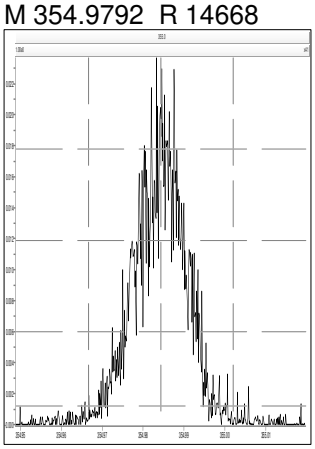
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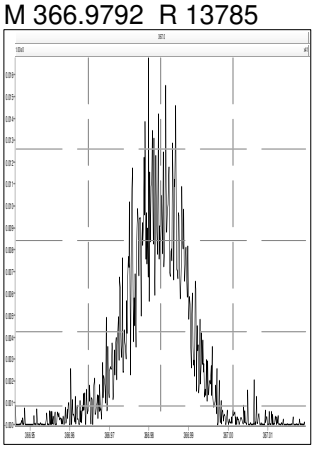
M 342.9792 R 11995



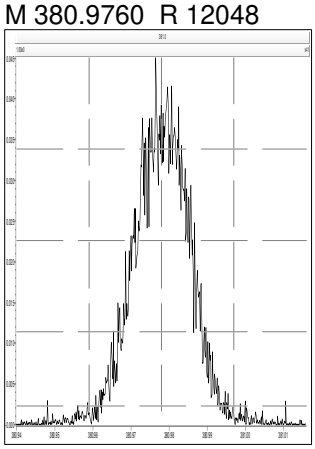
M 354.9792 R 14668



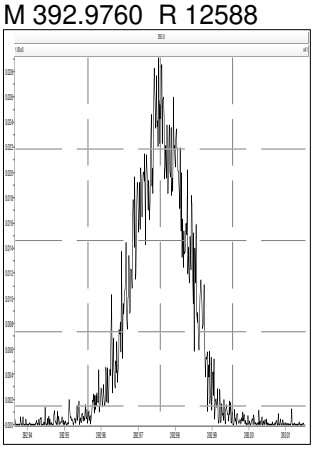
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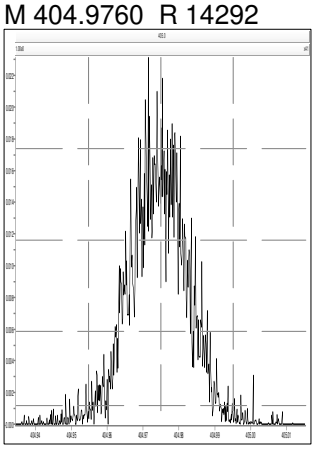
M 380.9760 R 12048



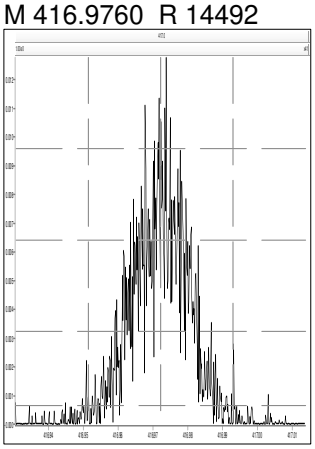
M 392.9760 R 12588



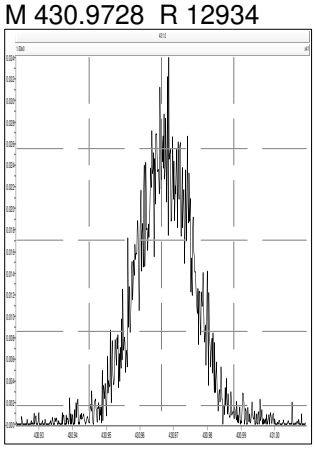
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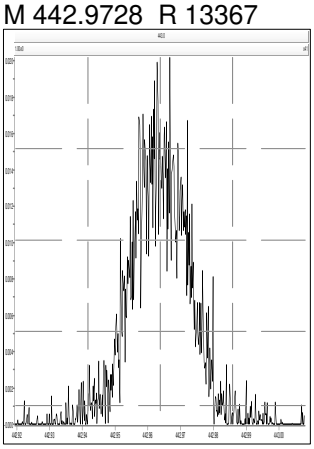
M 416.9760 R 14492



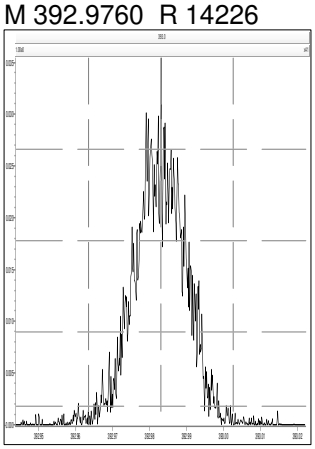
M 430.9728 R 12934



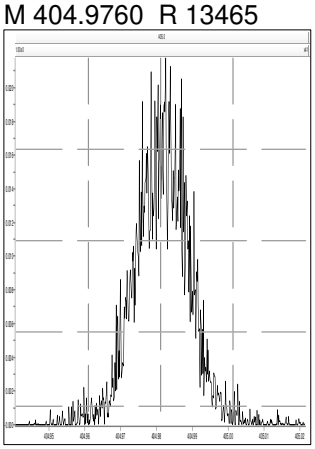
M 442.9728 R 13367



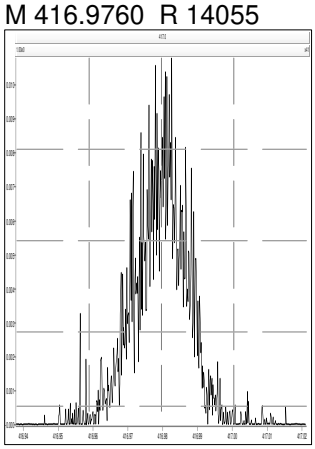
M 392.9760 R 14226



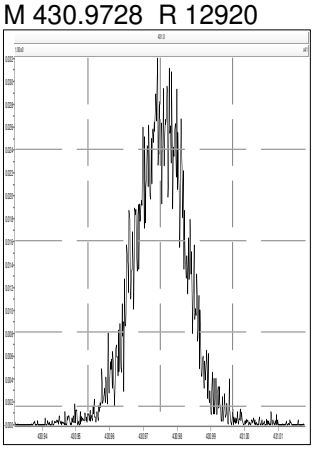
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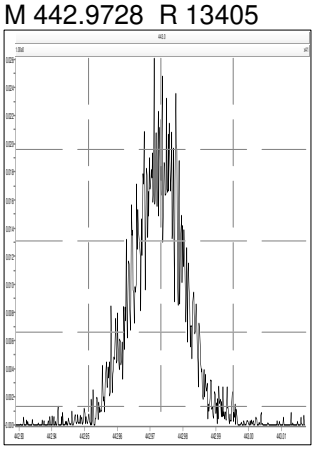
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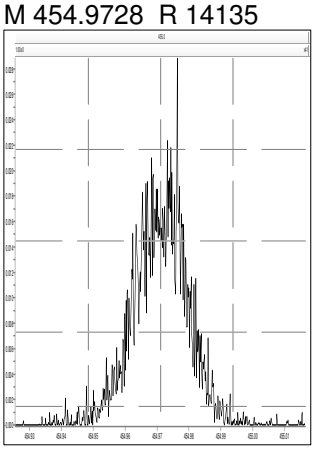
M 430.9728 R 12920



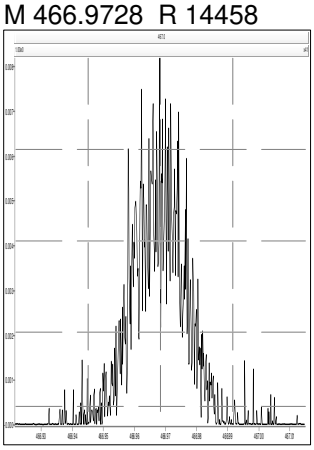
M 442.9728 R 13405



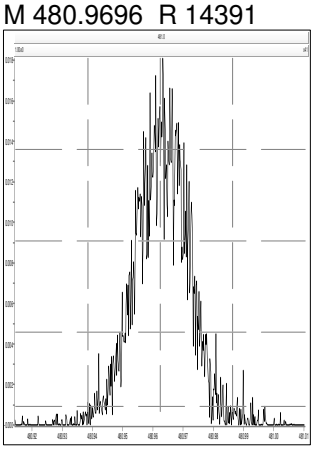
M 454.9728 R 14135



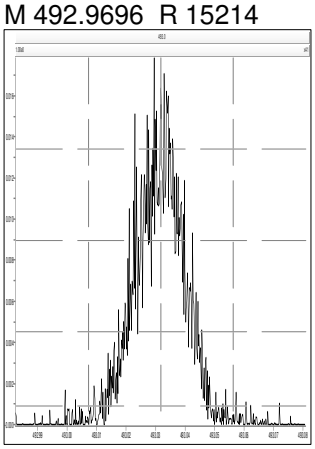
M 466.9728 R 14458



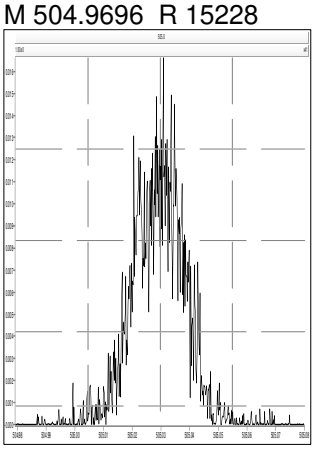
M 480.9696 R 14391



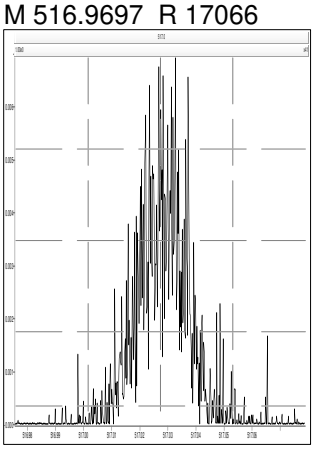
M 492.9696 R 15214



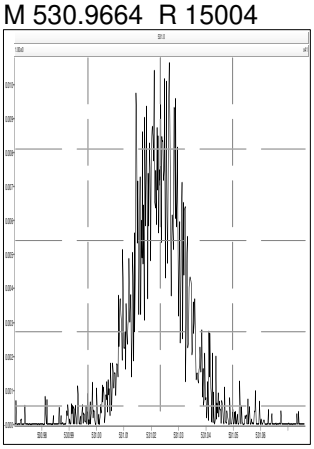
M 504.9696 R 15228



M 516.9697 R 17066



M 530.9664 R 15004



	File Name	Sample ID	File Text	MS File	Inlet File	Bottle	Inject Vol
1	5-221109A01	H5-22-CCV-972	1668A-CS3-023	1668_octyl_1	1668_octyl_1	Tray1:1	1.000000
2	5-221109A02	H5-22-WDM-973	1668A-CS7-023	1668_octyl_1	1668_octyl_1	Tray1:2	1.000000
3	5-221109A03	TOL	iB	1668_octyl_1	1668_octyl_1	Tray1:3	1.000000
4	5-221109A04	TOL1	iB	1668_octyl_1	1668_octyl_1	Tray1:3	1.000000
5	5-221109A05	L2736746-12	SAMPLE RR CO	1668_octyl_1	1668_octyl_1	Tray1:10	1.000000
6	5-221109A06	L2737546-1	SAMPLE RR 10X	1668_octyl_1	1668_octyl_1	Tray1:11	1.000000
7	5-221109A07	L2734122-22	SAMPLE RR CO	1668_octyl_1	1668_octyl_1	Tray1:12	1.000000
8	5-221109A08	L2736565-12	SAMPLE	1668_octyl_1	1668_octyl_1	Tray1:4	1.000000
9	5-221109A09	L2736565-13	SAMPLE	1668_octyl_1	1668_octyl_1	Tray1:5	1.000000
10	5-221109A10	L2736565-14	SAMPLE	1668_octyl_1	1668_octyl_1	Tray1:6	1.000000
11	5-221109A11	L2736565-15	SAMPLE	1668_octyl_1	1668_octyl_1	Tray1:7	1.000000
12	5-221109A12	L2736565-16	SAMPLE	1668_octyl_1	1668_octyl_1	Tray1:8	1.000000
13	5-221109A13	L2736565-17	SAMPLE	1668_octyl_1	1668_octyl_1	Tray1:9	1.000000
14	5-221109A14	L2734550-11	SAMPLE 20x DIL RR	1668_octyl_1	1668_octyl_1	Tray1:13	1.000000
15	5-221109A15	L2734550-12	SAMPLE 50x DIL RR	1668_octyl_1	1668_octyl_1	Tray1:14	1.000000
16	5-221109A16	H5-22-CCV-974	1668A-CS3-023	1668_octyl_1	1668_octyl_1	Tray1:1	1.000000
17	5-221109A17	H5-22-WDM-975	1668A-CS7-023	1668_octyl_1	1668_octyl_1	Tray1:2	1.000000
18	5-221109A18	WG3767228-2	LCS	1668_octyl_1	1668_octyl_1	Tray1:15	1.000000
19	5-221109A19	WG3767228-4	MS(L2735553-1)	1668_octyl_1	1668_octyl_1	Tray1:16	1.000000
20	5-221109A20	WG3767228-5	MSD	1668_octyl_1	1668_octyl_1	Tray1:17	1.000000
21	5-221109A21	TOL	iB	1668_octyl_1	1668_octyl_1	Tray1:3	1.000000
22	5-221109A22	TOL1	iB	1668_octyl_1	1668_octyl_1	Tray1:3	1.000000
23	5-221109A23	WG3767228-1	MB	1668_octyl_1	1668_octyl_1	Tray1:18	1.000000
24	5-221109A24	L2735553-1	SAMPLE	1668_octyl_1	1668_octyl_1	Tray1:19	1.000000
25	5-221109A25	L2735553-2	SAMPLE	1668_octyl_1	1668_octyl_1	Tray1:20	1.000000
26	5-221109A26	L2735553-3	SAMPLE	1668_octyl_1	1668_octyl_1	Tray1:21	1.000000
27	5-221109A27	L2735553-4	SAMPLE	1668_octyl_1	1668_octyl_1	Tray1:22	1.000000
28	5-221109A28	L2735553-5	SAMPLE	1668_octyl_1	1668_octyl_1	Tray1:23	1.000000
29	5-221109A29	L2735553-6	SAMPLE	1668_octyl_1	1668_octyl_1	Tray1:24	1.000000
30	5-221109A30	L2735553-7	SAMPLE	1668_octyl_1	1668_octyl_1	Tray1:25	1.000000
31	5-221109A31	L2735553-8	SAMPLE	1668_octyl_1	1668_octyl_1	Tray1:26	1.000000
32	5-221109A32	H5-22-CCV-976	1668A-CS7-023	1668_octyl_1	1668_octyl_1	Tray1:1	1.000000
33	5-221109A33	STANDBY1	Standby	STANDBY	STANDBY	Tray1:3	1.000000
34	---	---	---	---	---	---	0.000000
35	SPBOCTYL271790-03	AK	370	---	---	---	0.000000

dilute 20X

Vp ✓ AK NOV 10
MB ✓
Wind ✓
Chrom ✓
TOL ✓ 2nd bracket ✓
IS ✓

QC ✓
QC Dup ✓

L2735553-8) high
Dilute 20X.

A1 MB
Rec
CSS

A2 MB ✓
Rec ✓

CSS dilute all 20X.

In A28 Fr 5

	File Name	Sample ID	File Text	Sample Type	Na Conc A	Na Conc B	Na Conc C	Na Conc D	Na Conc E	Na Conc F	Na Conc G	Na Conc H	FS Conc	CS Conc	ES Conc 1	ES Conc 2	IS Conc	Sample Size
1	5-221109A01	H5-22-CCV-972	1668A-CS3-023	QC	50	50	50	100	---	---	---	---	100	100	100	200	100	1.000
2	5-221109A02	H5-22-WDM-973	1668A-CS7-023	Standard	25	50	75	100	150	200	250	300	100	100	100	200	100	1.000
3	5-221109A05	L2736746-12	SAMPLE RR CO	Analyte	---	---	---	---	---	---	---	---	2000	4000	2000	4000	4000	1.000
4	5-221109A06	L2737546-1	SAMPLE RR 10X	Analyte	---	---	---	---	---	---	---	---	2000	2000	2000	4000	2000	1.000
5	5-221109A07	L2734122-22	SAMPLE RR CO	Analyte	---	---	---	---	---	---	---	---	2000	2000	2000	4000	2000	1.000
6	5-221109A08	L2736565-12	SAMPLE	Analyte	---	---	---	---	---	---	---	---	2000	4000	2000	4000	4000	1.000
7	5-221109A09	L2736565-13	SAMPLE	Analyte	---	---	---	---	---	---	---	---	2000	4000	2000	4000	4000	1.000
8	5-221109A10	L2736565-14	SAMPLE	Analyte	---	---	---	---	---	---	---	---	2000	4000	2000	4000	4000	1.000
9	5-221109A11	L2736565-15	SAMPLE	Analyte	---	---	---	---	---	---	---	---	2000	4000	2000	4000	4000	1.000
10	5-221109A12	L2736565-16	SAMPLE	Analyte	---	---	---	---	---	---	---	---	2000	4000	2000	4000	4000	1.000
11	5-221109A13	L2736565-17	SAMPLE	Analyte	---	---	---	---	---	---	---	---	2000	4000	2000	4000	4000	1.000
12	5-221109A14	L2734550-11	SAMPLE 20x DIL RR	Analyte	---	---	---	---	---	---	---	---	2000	2000	2000	4000	2000	1.000
13	5-221109A15	L2734550-12	SAMPLE 50x DIL RR	Analyte	---	---	---	---	---	---	---	---	2000	2000	2000	4000	2000	1.000
14	5-221109A16	H5-22-CCV-974	1668A-CS3-023	QC	50	50	50	100	---	---	---	---	100	100	100	200	100	1.000
15	5-221109A17	H5-22-WDM-975	1668A-CS7-023	Standard	25	50	75	100	150	200	250	300	100	100	100	200	100	1.000
16	5-221109A18	WG3767228-2	LCS	Analyte	1000	1000	1000	2000	---	---	---	---	2000	2000	2000	4000	2000	1.000
17	5-221109A19	WG3767228-4	MS(L2735553-1)	Analyte	---	---	---	---	---	---	---	---	2000	2000	2000	4000	2000	1.000
18	5-221109A20	WG3767228-5	MSD	Analyte	---	---	---	---	---	---	---	---	2000	2000	2000	4000	2000	1.000
19	5-221109A23	WG3767228-1	MB	Analyte	---	---	---	---	---	---	---	---	2000	2000	2000	4000	2000	1.000
20	5-221109A24	L2735553-1	SAMPLE	Analyte	---	---	---	---	---	---	---	---	2000	2000	2000	4000	2000	1.000
21	5-221109A25	L2735553-2	SAMPLE	Analyte	---	---	---	---	---	---	---	---	2000	2000	2000	4000	2000	1.000
22	5-221109A26	L2735553-3	SAMPLE	Analyte	---	---	---	---	---	---	---	---	2000	2000	2000	4000	2000	1.000
23	5-221109A27	L2735553-4	SAMPLE	Analyte	---	---	---	---	---	---	---	---	2000	2000	2000	4000	2000	1.000
24	5-221109A28	L2735553-5	SAMPLE	Analyte	---	---	---	---	---	---	---	---	2000	2000	2000	4000	2000	1.000
25	5-221109A29	L2735553-6	SAMPLE	Analyte	---	---	---	---	---	---	---	---	2000	2000	2000	4000	2000	1.000
26	5-221109A30	L2735553-7	SAMPLE	Analyte	---	---	---	---	---	---	---	---	2000	2000	2000	4000	2000	1.000
27	5-221109A31	L2735553-8	SAMPLE	Analyte	---	---	---	---	---	---	---	---	2000	2000	2000	4000	2000	1.000
28	5-221109A32	H5-22-CCV-976	1668A-CS7-023	QC	50	50	50	100	---	---	---	---	100	100	100	200	100	1.000

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221109A-QC.qld

Last Altered: Wednesday, November 23, 2022 17:30:50 Eastern Standard Time
Printed: Thursday, November 24, 2022 09:42:18 Eastern Standard Time

Method: C:\MassLynx\PCB.PRO\MethDB\1668_OCTYL_ICAL-0401.mdb 09 Jun 2022 13:25:01
Calibration: C:\MassLynx\PCB.PRO\CurveDB\5-221020A-ICAL.cdb 21 Oct 2022 09:44:03

Name: 5-221109A16, Date: 10-Nov-2022, Time: 02:27:36, ID: H5-22-CCV-974, Description: 1668A-CS3-023, Vial: Tray1:1

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
1	PCB-1		3238574	2472086	766489	3.23	NO	8.99	1.00	8.96	9.03	50.34954	100.7		1842	1661
2	PCB-3		3148585	2406906	741679	3.25	NO	10.51	1.00	10.47	10.54	50.63355	101.3		1842	1661
3	PCB-4		1934519	1163897	770622	1.51	NO	10.68	1.00	10.64	10.71	45.36751	90.7		918	3209
4	PCB-15		2955367	1814187	1141180	1.59	NO	14.32	1.00	14.29	14.36	50.24368	100.5		3082	3324
5	PCB-19		1919339	988352	930987	1.06	NO	12.67	1.00	12.63	12.70	45.08581	90.2		1018	542
6	PCB-37		2574854	1316664	1258191	1.05	NO	18.27	1.00	18.23	18.30	50.97289	101.9		2810	3528
7	PCB-54		2470586	1084243	1386344	0.78	NO	14.52	1.00	14.48	14.55	46.48428	93.0		1398	1218
8	PCB-81		2421352	1064322	1357029	0.78	NO	21.83	1.00	21.79	21.86	51.07807	102.2		1240	1821
9	PCB-77		2321768	1026468	1295300	0.79	NO	22.13	1.00	22.10	22.17	50.76570	101.5		1240	1821
10	PCB-104		2556700	1558479	998221	1.56	NO	17.54	1.00	17.51	17.58	47.76403	95.5		1299	1030
11	PCB-123		2101780	1291745	810035	1.59	NO	23.11	1.00	23.08	23.14	50.04467	100.1		3215	2371
12	PCB-118		2308796	1422243	886553	1.60	NO	23.28	1.00	23.25	23.31	50.91442	101.8		3215	2371
13	PCB-114		2247464	1389190	858274	1.62	NO	23.58	1.00	23.55	23.62	51.69013	103.4		3215	2371
14	PCB-105		2206719	1350624	856094	1.58	NO	23.93	1.00	23.90	23.97	50.60799	101.2		3215	2371
15	PCB-126		2229982	1380543	849439	1.63	NO	25.52	1.00	25.48	25.55	50.86984	101.7		3215	2371
16	PCB-155		2683827	1487492	1196335	1.24	NO	20.50	1.00	20.47	20.54	48.00523	96.0		815	1062
17	PCB-167		2381881	1304698	1077183	1.21	NO	26.40	1.00	26.36	26.43	48.55496	97.1		1855	1648
18	PCB-156/157		4612482	2549601	2062881	1.24	NO	27.04	1.00	27.00	27.07	96.61474	96.6		1855	1648
19	PCB-169		2170562	1205440	965122	1.25	NO	28.69	1.00	28.66	28.73	48.98495	98.0		1855	1648
20	PCB-188		2242850	1135314	1107536	1.03	NO	23.50	1.00	23.46	23.53	48.56910	97.1		1969	1274
21	PCB-189		1951345	997322	954023	1.05	NO	29.96	1.00	29.92	29.99	52.04875	104.1		1653	2198
22	PCB-202		2281852	1069182	1212670	0.88	NO	26.28	1.00	26.24	26.31	48.72695	97.5		1037	837
23	PCB-205		1490224	697095	793129	0.88	NO	31.33	1.00	31.29	31.36	50.40139	100.8		1072	1686
24	PCB-208		1546141	685778	860363	0.80	NO	29.68	1.00	29.65	29.71	49.91533	99.8		1118	1916
25	PCB-206		1072551	475136	597415	0.80	NO	32.39	1.00	32.35	32.42	49.98458	100.0		1118	1916
26	PCB-209		1377716	748355	629360	1.19	NO	33.48	1.00	33.45	33.51	51.68602	103.4		400	384
27	13C-PCB-31		4658516	2399358	2259159	1.06	NO	15.84	0.87	15.81	15.87	92.86503	92.9		27502	9766
28	13C-PCB-95		3290789	2010207	1280583	1.57	NO	19.14	1.09	19.11	19.18	103.42037	103.4		3681	2726
29	13C-PCB-153		3566865	2008850	1558015	1.29	NO	24.17	1.18	24.14	24.21	102.24094	102.2		4738	4451
30	13C-PCB-28		5262700	2714950	2547750	1.07	NO	16.01	0.94	15.97	16.04	102.53729	102.5		27502	9766
31	13C-PCB-111		3535214	2161465	1373749	1.57	NO	22.02	1.07	21.99	22.05	101.52451	101.5		3681	2726
32	13C-PCB-178		3149183	1598732	1550451	1.03	NO	25.07	1.01	25.04	25.10	111.60250	111.6		2769	2508
33	13C-PCB-1		5985280	4475440	1509841	2.96	NO	8.99	0.76	8.96	9.03	84.76318	84.8		3029	14290
34	13C-PCB-3		5556629	4137370	1419259	2.92	NO	10.49	0.88	10.46	10.53	83.24509	83.2		3029	14290

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221109A-QC.qld

Last Altered: Wednesday, November 23, 2022 17:30:50 Eastern Standard Time
Printed: Thursday, November 24, 2022 09:42:18 Eastern Standard Time

Name: 5-221109A16, Date: 10-Nov-2022, Time: 02:27:36, ID: H5-22-CCV-974, Description: 1668A-CS3-023, Vial: Tray1:1

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
35	13C-PCB-4		4550835	2756598	1794237	1.54	NO	10.66	0.90	10.63	10.70	104.00972	104.0		8246	2353
36	13C-PCB-15		5015806	3041841	1973965	1.54	NO	14.31	1.20	14.28	14.35	84.49217	84.5		11996	3805
37	13C-PCB-19		3392833	1728653	1664180	1.04	NO	12.65	1.06	12.62	12.69	119.24402	119.2		22213	9869
38	13C-PCB-37		4245647	2184807	2060840	1.06	NO	18.26	1.07	18.22	18.29	92.24725	92.2		27502	9766
39	13C-PCB-54		4747911	2086353	2661558	0.78	NO	14.51	0.85	14.48	14.54	113.94858	113.9		2926	3557
40	13C-PCB-81		3796408	1679026	2117382	0.79	NO	21.82	1.06	21.78	21.85	90.61118	90.6		4647	3251
41	13C-PCB-77		3788962	1666839	2122123	0.79	NO	22.12	1.07	22.09	22.16	89.75708	89.8		4647	3251
42	13C-PCB-104		4320871	2631855	1689016	1.56	NO	17.53	1.03	17.50	17.57	109.54926	109.5		1496	2595
43	13C-PCB-123		3638629	2229161	1409468	1.58	NO	23.10	1.12	23.07	23.13	94.01818	94.0		4847	3857
44	13C-PCB-118		3357517	2060964	1296553	1.59	NO	23.27	1.13	23.23	23.30	95.06539	95.1		4847	3857
45	13C-PCB-114		3723873	2287025	1436848	1.59	NO	23.57	0.95	23.54	23.60	94.62091	94.6		4847	3857
46	13C-PCB-105		3516479	2179308	1337171	1.63	NO	23.92	0.96	23.89	23.95	94.79262	94.8		4847	3857
47	13C-PCB-126		3605403	2217104	1388299	1.60	NO	25.50	1.03	25.47	25.54	94.54478	94.5		4847	3857
48	13C-PCB-155		4796001	2648040	2147962	1.23	NO	20.49	0.99	20.46	20.53	113.77031	113.8		2539	2180
49	13C-PCB-167		3835469	2165080	1670388	1.30	NO	26.39	1.06	26.35	26.42	100.48908	100.5		4738	4451
50	13C-PCB-156/157		7292061	4119742	3172319	1.30	NO	27.03	1.09	26.99	27.06	195.88654	97.9		4738	4451
51	13C-PCB-169		3539908	1988779	1551129	1.28	NO	28.68	1.15	28.65	28.72	92.26073	92.3		4738	4451
52	13C-PCB-188		4289306	2184277	2105029	1.04	NO	23.49	0.94	23.45	23.52	107.01603	107.0		2769	2508
53	13C-PCB-189		3562469	1832613	1729856	1.06	NO	29.94	0.96	29.91	29.98	89.20018	89.2		4773	4196
54	13C-PCB-202		4096242	1945955	2150287	0.90	NO	26.26	1.06	26.23	26.30	119.31701	119.3		1543	887
55	13C-PCB-205		3099991	1449375	1650616	0.88	NO	31.31	1.01	31.28	31.34	101.59999	101.6		2074	2762
56	13C-PCB-208		2695578	1181538	1514040	0.78	NO	29.66	0.96	29.63	29.70	105.79961	105.8		2803	2396
57	13C-PCB-206		1876613	826552	1050061	0.79	NO	32.36	1.04	32.32	32.39	107.55074	107.6		2803	2396
58	13C-PCB-209		2724385	1485922	1238464	1.20	NO	33.47	1.08	33.43	33.50	99.99118	100.0		418	427
59	13C-PCB-9		6656285	4026903	2629382	1.53	NO	11.91	0.48	11.88	11.94	203.30118	203.3		8246	2353
60	13C-PCB-52		3009946	1338398	1671548	0.80	NO	17.01	0.68	16.97	17.04	188.94438	188.9		4200	4899
61	13C-PCB-101		2808445	1716444	1092001	1.57	NO	20.65	0.83	20.62	20.69	195.46081	195.5		3681	2726
62	13C-PCB-138		3009885	1693824	1316061	1.29	NO	24.88	0.00	24.84	24.91	193.19015	193.2		4738	4451
63	13C-PCB-194		2373890	1116659	1257231	0.89	NO	31.03	1.25	31.00	31.07	167.53641	167.5		2074	2762
64	Total MoCB-F1	4		4973271								112891.80825			1842	
65	Total DiCB-F1	2		1216031								91692.44759			918	
66	Total DiCB-F2	4		1826399								14427.12452			3082	
67	Total TrCB-F1	1		988352								45.08581			1018	
68	Total TrCB-F3	5		4131231								4628073.028...			2810	
69	Total TeCB-F2	3		1087195								5441.77142			1398	
70	Total TeCB-F4	8		2116386								44873.82903			1240	
71	Total PeCB-F3	4		1560927								3536.08160			1299	

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Name: 5-221109A16, Date: 10-Nov-2022, Time: 02:27:36, ID: H5-22-CCV-974, Description: 1668A-CS3-023, Vial: Tray1:1

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
72	Total PeCB-F5	12		7046879								276081.98081			3215	
73	Total HxCB-F4	4		1489256								2769.17907			815	
74	Total HxCB-F5	17		5368897								437010.37608			1855	
75	Total HpCB-F5	11		4645594								6450996.777...			1969	
76	Total HpCB-F6	4		1077130								137767.86443			1653	
77	Total OcCB-F5	8		1087501								27876.54721			1037	
78	Total OcCB-F6	4		781704								184566.62581			1072	
79	Total NoCB-F6	3		1162326								2966.32387			1118	
80	Total DeCB-F7	1		748355								51.68602			400	
81	Total 13C-MoCB-F1	4		8716680								134692.69955			3029	
82	Total 13C-DiCB-F1	5		6837295								312.81906			8246	
83	Total 13C-DiCB-F2	2		6077968								5576278.174...			11996	
84	Total 13C-TrCB-F1	3		1797827								184578.86054			22213	
85	Total 13C-TrCB-F3	6		7344170								54701.50133			27502	
86	Total 13C-TeCB-F2	2		2087858								2398.58079			2926	
87	Total 13C-TeCB-F3	4		1395279								196.87711			4200	
88	Total 13C-TeCB-F4	9		3458202								157361.28269			4647	
89	Total 13C-PeCB-F3	3		2633033								2133.14626			1496	
90	Total 13C-PeCB-F4	9		5926663								414.44343			3681	
91	Total 13C-PeCB-F5	14		11382308								481236.71809			4847	
92	Total 13C-HxCB-F4	8		2669564								25243.49066			2539	
93	Total 13C-HxCB-F5	11		12140375								771.40521			4738	
94	Total 13C-HpCB-F5	12		3883660								170661.93400			2769	
95	Total 13C-HpCB-F6	7		2047966								303291.69089			4773	
96	Total 13C-OcCB-F5	7		1957672								19603.72565			1543	
97	Total 13C-OcCB-F6	6		2705106								309.61617			2074	
98	Total 13C-NoCB-F6	3		2009784								4242.59426			2803	
99	Total 13C-DeCB-F7	1		1485922								99.99118			418	
100	Lockmass F1			0											161189	
101	Lockmass F2			0											123540	
102	Lockmass F3			0											213778	
103	Lockmass F4			0											138385	
104	Lockmass F5			0											69657	
105	Lockmass F6			0											43368	
106	Lockmass F7			0											11905	

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Last Altered: Wednesday, November 23, 2022 17:30:50 Eastern Standard Time
Printed: Thursday, November 24, 2022 09:42:18 Eastern Standard Time

Name: 5-221109A18, Date: 10-Nov-2022, Time: 04:01:50, ID: WG3767228-2, Description: LCS, Vial: Tray1:15

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
1	PCB-1		239760	183129	56630	3.23	NO	8.98	1.00	8.95	9.01	1344.43807	134.4		1031	1204
2	PCB-3		277322	212521	64801	3.28	NO	10.49	1.00	10.46	10.53	1201.35446	120.1		1031	1204
3	PCB-4		200136	119632	80504	1.49	NO	10.68	1.00	10.64	10.71	1181.26936	118.1		777	2999
4	PCB-15		507691	312499	195192	1.60	NO	14.32	1.00	14.29	14.36	1112.18569	111.2		1381	3354
5	PCB-19		270595	140146	130448	1.07	NO	12.65	1.00	12.62	12.69	1123.69187	112.4		1037	937
6	PCB-37		747076	381050	366026	1.04	NO	18.26	1.00	18.22	18.29	1102.96948	110.3		1037	1028
7	PCB-54		451796	197228	254568	0.77	NO	14.51	1.00	14.48	14.54	1106.33794	110.6		489	851
8	PCB-81		815980	357870	458110	0.78	NO	21.82	1.00	21.78	21.85	997.91241	99.8		1824	2160
9	PCB-77		805822	352323	453499	0.78	NO	22.12	1.00	22.09	22.16	968.92469	96.9		1824	2160
10	PCB-104		607007	370855	236152	1.57	NO	17.53	1.00	17.50	17.57	968.74561	96.9		800	746
11	PCB-123		794214	490192	304022	1.61	NO	23.10	1.00	23.07	23.13	1006.00028	100.6		1898	1523
12	PCB-118		857837	528674	329162	1.61	NO	23.27	1.00	23.23	23.30	994.36604	99.4		1898	1523
13	PCB-114		814295	505771	308524	1.64	NO	23.57	1.00	23.54	23.60	1061.04739	106.1		1898	1523
14	PCB-105		820244	504530	315714	1.60	NO	23.93	1.00	23.90	23.97	955.10412	95.5		1898	1523
15	PCB-126		824522	511353	313169	1.63	NO	25.52	1.00	25.48	25.55	968.26394	96.8		1898	1523
16	PCB-155		825895	459148	366748	1.25	NO	20.50	1.00	20.47	20.54	984.51773	98.5		599	693
17	PCB-167		939439	520237	419203	1.24	NO	26.39	1.00	26.35	26.42	922.85908	92.3		1826	1381
18	PCB-156/157		1825475	1002500	822975	1.22	NO	27.03	1.00	26.99	27.06	1836.83225	91.8		1826	1381
19	PCB-169		872245	479900	392345	1.22	NO	28.68	1.00	28.65	28.72	950.82470	95.1		1826	1381
20	PCB-188		798916	404605	394311	1.03	NO	23.50	1.00	23.46	23.53	928.11173	92.8		764	505
21	PCB-189		792165	401543	390621	1.03	NO	29.94	1.00	29.91	29.98	1026.18796	102.6		1496	1151
22	PCB-202		900150	422964	477186	0.89	NO	26.26	1.00	26.23	26.30	1001.09711	100.1		546	802
23	PCB-205		576953	271649	305304	0.89	NO	31.31	1.00	31.28	31.34	949.90767	95.0		1049	873
24	PCB-208		563335	249633	313702	0.80	NO	29.68	1.00	29.65	29.71	953.11662	95.3		824	1777
25	PCB-206		408340	180523	227817	0.79	NO	32.37	1.00	32.34	32.40	940.24236	94.0		824	1777
26	PCB-209		605114	328430	276684	1.19	NO	33.47	1.00	33.43	33.50	1129.08806	112.9		266	243
27	13C-PCB-31						YES								30305	8227
28	13C-PCB-95		736	293	444	0.66	YES	19.14	1.09	19.10	19.17	1.39994	0.1		1254	1724
29	13C-PCB-153		4561	2495	2066	1.21	NO	24.17	1.18	24.14	24.21	6.87581	0.3		2896	2701
30	13C-PCB-28		1672287	853343	818944	1.04	NO	16.00	0.94	15.96	16.03	1093.83677	54.7		30305	8227
31	13C-PCB-111		1436299	879038	557262	1.58	NO	22.01	1.07	21.98	22.05	1401.21747	70.1		1254	1724
32	13C-PCB-178		1324336	676581	647755	1.04	NO	25.06	1.01	25.02	25.09	1605.51905	80.3		1976	1381
33	13C-PCB-1		331888	246856	85032	2.90	NO	8.98	0.75	8.95	9.01	172.28069	8.6		1966	14722
34	13C-PCB-3		412551	300770	111781	2.69	NO	10.49	0.88	10.46	10.53	226.54127	11.3		1966	14722
35	13C-PCB-4		361635	218750	142885	1.53	NO	10.66	0.90	10.63	10.70	302.95290	15.1		6019	3012
36	13C-PCB-15		778507	480230	298278	1.61	NO	14.31	1.20	14.27	14.34	480.68508	24.0		9048	2936
37	13C-PCB-19		383842	195758	188084	1.04	NO	12.65	1.06	12.62	12.69	494.48058	24.7		17047	8021

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221109A-QC.qld

Last Altered: Wednesday, November 23, 2022 17:30:50 Eastern Standard Time
Printed: Thursday, November 24, 2022 09:42:18 Eastern Standard Time

Name: 5-221109A18, Date: 10-Nov-2022, Time: 04:01:50, ID: WG3767228-2, Description: LCS, Vial: Tray1:15

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
38	13C-PCB-37		1138575	590329	548246	1.08	NO	18.25	1.07	18.21	18.28	830.50022	41.5		30305	8227
39	13C-PCB-54		729614	315708	413906	0.76	NO	14.50	0.85	14.47	14.53	587.85244	29.4		2681	2038
40	13C-PCB-81		1309685	578836	730848	0.79	NO	21.81	1.06	21.77	21.84	1061.89368	53.1		3276	2603
41	13C-PCB-77		1378006	601236	776770	0.77	NO	22.11	1.07	22.08	22.15	1108.93214	55.4		3276	2603
42	13C-PCB-104		1011595	619285	392309	1.58	NO	17.52	1.03	17.49	17.56	871.26465	43.6		745	898
43	13C-PCB-123		1367974	844147	523827	1.61	NO	23.09	1.12	23.05	23.12	1200.76314	60.0		3053	3400
44	13C-PCB-118		1277503	788155	489348	1.61	NO	23.26	1.13	23.22	23.29	1228.77262	61.4		3053	3400
45	13C-PCB-114		1314579	814966	499613	1.63	NO	23.56	0.95	23.52	23.59	1134.70823	56.7		3053	3400
46	13C-PCB-105		1385168	852928	532240	1.60	NO	23.91	0.96	23.88	23.94	1268.45263	63.4		3053	3400
47	13C-PCB-126		1400719	866505	534214	1.62	NO	25.50	1.03	25.47	25.54	1247.78651	62.4		3053	3400
48	13C-PCB-155		1439279	796400	642878	1.24	NO	20.49	0.99	20.45	20.52	1159.84504	58.0		1258	1488
49	13C-PCB-167		1591825	897507	694318	1.29	NO	26.37	1.06	26.34	26.41	1426.71435	71.3		2896	2701
50	13C-PCB-156/157		3035955	1710652	1325304	1.29	NO	27.03	1.09	26.99	27.06	2789.91510	69.7		2896	2701
51	13C-PCB-169		1465718	824991	640726	1.29	NO	28.67	1.15	28.64	28.70	1306.82256	65.3		2896	2701
52	13C-PCB-188		1599108	809988	789120	1.03	NO	23.49	0.94	23.45	23.52	1364.83730	68.2		1976	1381
53	13C-PCB-189		1467053	756683	710370	1.07	NO	29.93	0.96	29.90	29.96	1256.61401	62.8		2888	2700
54	13C-PCB-202		1573026	747785	825241	0.91	NO	26.25	1.06	26.22	26.29	1567.45111	78.4		957	1261
55	13C-PCB-205		1273621	594654	678967	0.88	NO	31.30	1.01	31.26	31.33	1526.23092	76.3		1924	1594
56	13C-PCB-208		1028697	449958	578739	0.78	NO	29.67	0.96	29.63	29.70	1476.27224	73.8		1084	952
57	13C-PCB-206		759635	333695	425940	0.78	NO	32.36	1.04	32.32	32.39	1591.80771	79.6		1084	952
58	13C-PCB-209		1095522	596606	498916	1.20	NO	33.45	1.08	33.42	33.48	1470.14877	73.5		320	316
59	13C-PCB-9		3631948	2199895	1432053	1.54	NO	11.90	0.48	11.86	11.93	110.92964	5.5		6019	3012
60	13C-PCB-52		1793165	794241	998924	0.80	NO	17.00	0.68	16.96	17.03	112.56295	5.6		3043	1460
61	13C-PCB-101		1653448	1009768	643680	1.57	NO	20.64	0.83	20.61	20.68	115.07587	5.8		1254	1724
62	13C-PCB-138		1759700	992166	767534	1.29	NO	24.86	0.00	24.83	24.90	112.94673	5.6		2896	2701
63	13C-PCB-194		1298505	608585	689921	0.88	NO	31.03	1.25	31.00	31.07	91.64153	4.6		1924	1594
64	Total MoCB-F1	4		402812								11159.40286			1031	
65	Total DiCB-F1	5		129800								20617.47554			777	
66	Total DiCB-F2	4		326808								19102.28062			1381	
67	Total TrCB-F1	1		140146								1123.69187			1037	
68	Total TrCB-F3	10		390516								15648.31225			1037	
69	Total TeCB-F2	1		197228								1106.33794			489	
70	Total TeCB-F4	12		725212								28554.83358			1824	
71	Total PeCB-F3	1		370855								968.74561			800	
72	Total PeCB-F5	11		2618282								107791.54195			1898	
73	Total HxCB-F4	2		460124								2140.46486			599	
74	Total HxCB-F5	21		2034304								47776.26369			1826	

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Last Altered: Wednesday, November 23, 2022 17:30:50 Eastern Standard Time
Printed: Thursday, November 24, 2022 09:42:18 Eastern Standard Time

Name: 5-221109A18, Date: 10-Nov-2022, Time: 04:01:50, ID: WG3767228-2, Description: LCS, Vial: Tray1:15

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
75	Total HpCB-F5	14		432561								52345.76908			764	
76	Total HpCB-F6	4		432340								55981.06690			1496	
77	Total OcCB-F5	7		426062								6440.41821			546	
78	Total OcCB-F6	4		306102								76843.30917			1049	
79	Total NoCB-F6	3		430653								2747.09660			824	
80	Total DeCB-F7	1		328430								1129.08806			266	
81	Total 13C-MoCB-F1	3		562125								19852.64774			1966	
82	Total 13C-DiCB-F1	3		2421523								414.15563			6019	
83	Total 13C-DiCB-F2	1		480230								480.68508			9048	
84	Total 13C-TrCB-F1	3		2152635								5117053.557...			17047	
85	Total 13C-TrCB-F3	6		1857492								316046.90255			30305	
86	Total 13C-TeCB-F2	2		315921								972.61020			2681	
87	Total 13C-TeCB-F3	5		800789								113.45714			3043	
88	Total 13C-TeCB-F4	7		1214641								52772.02131			3276	
89	Total 13C-PeCB-F3	1		619285								871.26465			745	
90	Total 13C-PeCB-F4	6		1900013								1521.39367			1254	
91	Total 13C-PeCB-F5	12		4326362								195458.40718			3053	
92	Total 13C-HxCB-F4	3		801140								6902.60403			1258	
93	Total 13C-HxCB-F5	14		4503507								5684.10495			2896	
94	Total 13C-HpCB-F5	9		1529460								76692.51921			1976	
95	Total 13C-HpCB-F6	7		857306								144092.70253			2888	
96	Total 13C-OcCB-F5	7		752565								10374.19249			957	
97	Total 13C-OcCB-F6	4		1261451								1635.27792			1924	
98	Total 13C-NoCB-F6	3		784449								5009.37676			1084	
99	Total 13C-DeCB-F7	1		596606								1470.14877			320	
100	Lockmass F1			0											269242	
101	Lockmass F2			0											86503	
102	Lockmass F3			0											184173	
103	Lockmass F4			0											188182	
104	Lockmass F5			0											60431	
105	Lockmass F6			0											44386	
106	Lockmass F7			0											12905	

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221109A-QC.qld

Last Altered: Wednesday, November 23, 2022 17:30:50 Eastern Standard Time
Printed: Thursday, November 24, 2022 09:42:18 Eastern Standard Time

Name: 5-221109A19, Date: 10-Nov-2022, Time: 04:43:54, ID: WG3767228-4, Description: MS(L2735553-1), Vial: Tray1:16

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
1	PCB-1		471405	359391	112014	3.21	NO	8.98	1.00	8.95	9.01	1089.68131	109.0		1976	1081
2	PCB-3		548575	419136	129440	3.24	NO	10.49	1.00	10.46	10.53	1025.34119	102.5		1976	1081
3	PCB-4		449637	272866	176770	1.54	NO	10.66	1.00	10.63	10.70	1008.46499	100.8		665	2977
4	PCB-15		984337	606125	378213	1.60	NO	14.31	1.00	14.27	14.34	1025.29685	102.5		2758	3860
5	PCB-19		550669	284680	265989	1.07	NO	12.65	1.00	12.62	12.69	993.46435	99.3		926	676
6	PCB-37		1051810	538075	513735	1.05	NO	18.24	1.00	18.21	18.27	1105.99921	110.6		3576	4054
7	PCB-54		761181	334862	426319	0.79	NO	14.50	1.00	14.47	14.53	988.85194	98.9		895	760
8	PCB-81		939522	412530	526993	0.78	NO	21.81	1.00	21.77	21.84	997.04658	99.7		3701	3766
9	PCB-77		1163772	422898	740874	0.57	YES	22.11	1.00	22.08	22.15	1326.64465	132.7		3701	3766
10	PCB-104		823148	501061	322087	1.56	NO	17.52	1.00	17.49	17.56	891.00746	89.1		878	527
11	PCB-123		1100814	678500	422314	1.61	NO	23.09	1.00	23.05	23.12	1246.91321	124.7		10583	8180
12	PCB-118		22053369	13578303	8475066	1.60	NO	23.26	1.00	23.22	23.29	23194.35737	2319.4		10583	8180
13	PCB-114		1245818	770384	475435	1.62	NO	23.56	1.00	23.52	23.59	1519.16681	151.9		10583	8180
14	PCB-105		5117979	3152270	1965709	1.60	NO	23.92	1.00	23.89	23.95	5747.42872	574.7	AK221123MB	10583	8180
15	PCB-126		2388870	1566299	822571	1.90	YES	25.52	1.00	25.48	25.55	2943.63953	294.4		10583	8180
16	PCB-155		957388	533145	424242	1.26	NO	20.49	1.00	20.46	20.53	942.32444	94.2		2098	1064
17	PCB-167		8001093	4418644	3582449	1.23	NO	26.39	1.00	26.35	26.42	8474.91932	847.5		11176	16037
18	PCB-156/157		11647973	6440962	5207011	1.24	NO	27.00	1.00	26.97	27.04	12958.63409	647.9		11176	16037
19	PCB-169		1983783	1129470	854313	1.32	NO	28.67	1.00	28.64	28.70	2415.89155	241.6		11176	16037
20	PCB-188		899041	452598	446443	1.01	NO	23.49	1.00	23.45	23.52	1009.89351	101.0		3842	2167
21	PCB-189		3163561	1614257	1549304	1.04	NO	29.94	1.00	29.91	29.98	4505.74287	450.6		3937	3070
22	PCB-202		5690992	2675165	3015828	0.89	NO	26.26	1.00	26.23	26.30	6823.98564	682.4		962	1084
23	PCB-205		1698604	794984	903620	0.88	NO	31.31	1.00	31.28	31.34	3115.32310	311.5		2098	3096
24	PCB-208		946585	425091	521494	0.82	NO	29.67	1.00	29.63	29.70	1901.76726	190.2		873	1442
25	PCB-206		2606498	1157148	1449350	0.80	NO	32.36	1.00	32.32	32.39	6738.56704	673.9		873	1442
26	PCB-209		680916	369251	311666	1.18	NO	33.47	1.00	33.43	33.50	1433.28341	143.3		262	286
27	13C-PCB-31						YES								28176	10969
28	13C-PCB-95		861	266	595	0.45	YES	19.13	1.09	19.09	19.16	1.39515	0.1		1195	963
29	13C-PCB-153		40337	23990	16347	1.47	YES	24.17	1.18	24.14	24.21	61.94827	3.1		2584	1674
30	13C-PCB-28		1792798	921682	871115	1.06	NO	15.99	0.94	15.95	16.02	1112.31067	55.6		28176	10969
31	13C-PCB-111		1371589	842961	528628	1.59	NO	22.00	1.07	21.97	22.04	1226.47221	61.3		1195	963
32	13C-PCB-178		1177077	601315	575762	1.04	NO	25.04	1.01	25.01	25.08	1396.70259	69.8		2301	1478
33	13C-PCB-1		805102	601879	203223	2.96	NO	8.97	0.75	8.93	9.00	383.04863	19.2		1604	19038
34	13C-PCB-3		956163	710895	245268	2.90	NO	10.48	0.88	10.45	10.51	481.23764	24.1		1604	19038
35	13C-PCB-4		951687	579724	371962	1.56	NO	10.65	0.90	10.62	10.68	730.73028	36.5		7071	2143
36	13C-PCB-15		1637326	1007096	630230	1.60	NO	14.30	1.20	14.26	14.33	926.59744	46.3		10728	3772
37	13C-PCB-19		883525	448606	434919	1.03	NO	12.64	1.06	12.61	12.67	1043.21390	52.2		24216	8857

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221109A-QC.qld

Last Altered: Wednesday, November 23, 2022 17:30:50 Eastern Standard Time
Printed: Thursday, November 24, 2022 09:42:18 Eastern Standard Time

Name: 5-221109A19, Date: 10-Nov-2022, Time: 04:43:54, ID: WG3767228-4, Description: MS(L2735553-1), Vial: Tray1:16

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
38	13C-PCB-37		1598611	823604	775007	1.06	NO	18.23	1.07	18.20	18.26	1106.04817	55.3		28176	10969
39	13C-PCB-54		1375293	606803	768490	0.79	NO	14.49	0.85	14.46	14.52	1051.04948	52.6		3202	1622
40	13C-PCB-81		1509285	670750	838534	0.80	NO	21.79	1.06	21.76	21.82	1121.65286	56.1		3810	1903
41	13C-PCB-77		1453500	643160	810340	0.79	NO	22.09	1.07	22.06	22.13	1072.11628	53.6		3810	1903
42	13C-PCB-104		1491486	913602	577883	1.58	NO	17.51	1.03	17.48	17.55	1177.43148	58.9		615	1316
43	13C-PCB-123		1529734	938393	591341	1.59	NO	23.07	1.12	23.04	23.11	1230.74596	61.5		3289	2242
44	13C-PCB-118		1407979	871602	536377	1.63	NO	23.24	1.13	23.21	23.28	1241.30581	62.1		3289	2242
45	13C-PCB-114		1404717	872319	532398	1.64	NO	23.55	0.95	23.51	23.58	1111.37234	55.6		3289	2242
46	13C-PCB-105		1436266	886435	549832	1.61	NO	23.91	0.96	23.88	23.94	1205.53533	60.3		3289	2242
47	13C-PCB-126		1334907	818923	515983	1.59	NO	25.49	1.03	25.46	25.52	1089.96616	54.5		3289	2242
48	13C-PCB-155		1743134	966357	776777	1.24	NO	20.48	0.99	20.44	20.51	1287.53464	64.4		1230	1119
49	13C-PCB-167		1476304	836407	639897	1.31	NO	26.37	1.06	26.34	26.41	1295.08745	64.8		2584	1674
50	13C-PCB-156/157		2745871	1553115	1192755	1.30	NO	27.01	1.09	26.98	27.05	2469.77442	61.7		2584	1674
51	13C-PCB-169		1311986	738530	573456	1.29	NO	28.66	1.15	28.62	28.69	1144.92508	57.2		2584	1674
52	13C-PCB-188		1653791	844843	808947	1.04	NO	23.47	0.94	23.44	23.51	1381.54589	69.1		2301	1478
53	13C-PCB-189		1334342	688058	646283	1.06	NO	29.93	0.96	29.90	29.96	1118.67699	55.9		2902	1978
54	13C-PCB-202		1458973	689777	769196	0.90	NO	26.25	1.06	26.22	26.29	1422.94103	71.1		1560	1505
55	13C-PCB-205		1143327	541906	601421	0.90	NO	31.30	1.01	31.26	31.33	1291.51542	64.6		2041	1899
56	13C-PCB-208		866301	382390	483912	0.79	NO	29.65	0.96	29.62	29.68	1171.91838	58.6		1007	1127
57	13C-PCB-206		676570	295572	380998	0.78	NO	32.34	1.04	32.31	32.38	1336.43418	66.8		1007	1127
58	13C-PCB-209		971122	528978	442144	1.20	NO	33.45	1.08	33.42	33.48	1228.46564	61.4		303	318
59	13C-PCB-9		3962613	2399633	1562980	1.54	NO	11.90	0.48	11.86	11.93	121.02906	6.1		7071	2143
60	13C-PCB-52		1890458	840716	1049743	0.80	NO	16.99	0.68	16.95	17.02	118.67038	5.9		3467	2320
61	13C-PCB-101		1803921	1100861	703060	1.57	NO	20.63	0.83	20.60	20.67	125.54842	6.3		1195	963
62	13C-PCB-138		1797865	1007142	790723	1.27	NO	24.85	0.00	24.82	24.88	115.39634	5.8		2584	1674
63	13C-PCB-194		1377509	648097	729412	0.89	NO	31.02	1.25	30.98	31.05	97.21721	4.9		2041	1899
64	Total MoCB-F1	4		813275								43589.40000			1976	
65	Total DiCB-F1	8		339876								121466.37891			665	
66	Total DiCB-F2	5		858452								348337.49136			2758	
67	Total TrCB-F1	1		284680								993.46435			926	
68	Total TrCB-F3	16		1782339								2065612.035...			3576	
69	Total TeCB-F2	1		334862								988.85194			895	
70	Total TeCB-F4	22		6063927								9722958.229...			3701	
71	Total PeCB-F3	3		522869								31008.92350			878	
72	Total PeCB-F5	37		47485551								35516050.92...			10583	
73	Total HxCB-F4	8		47476381								72360972.50...			2098	
74	Total HxCB-F5	33		329069182								466843248.7...			11176	

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221109A-QC.qld

Last Altered: Wednesday, November 23, 2022 17:30:50 Eastern Standard Time
Printed: Thursday, November 24, 2022 09:42:18 Eastern Standard Time

Name: 5-221109A19, Date: 10-Nov-2022, Time: 04:43:54, ID: WG3767228-4, Description: MS(L2735553-1), Vial: Tray1:16

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
75	Total HpCB-F5	27		270396576								497570727.0...			3842	
76	Total HpCB-F6	10		2974455								2508145.306...			3937	
77	Total OcCB-F5	19		32645120								55908112.59...			962	
78	Total OcCB-F6	8		12563153								26361343.46...			2098	
79	Total NoCB-F6	3		1749355								337554.23071			873	
80	Total DeCB-F7	1		369251								1433.28341			262	
81	Total 13C-MoCB-F1	4		1339230								41109.17037			1604	
82	Total 13C-DiCB-F1	3		2986602								852.48793			7071	
83	Total 13C-DiCB-F2	1		1007096								926.59744			10728	
84	Total 13C-TrCB-F1	3		2411775								5149673.730...			24216	
85	Total 13C-TrCB-F3	5		2159049								319770.63796			28176	
86	Total 13C-TeCB-F2	2		607083								1410.89817			3202	
87	Total 13C-TeCB-F3	5		851488								120.08441			3467	
88	Total 13C-TeCB-F4	8		1348612								49670.30792			3810	
89	Total 13C-PeCB-F3	2		913968								1591.88902			615	
90	Total 13C-PeCB-F4	7		1956957								1357.81728			1195	
91	Total 13C-PeCB-F5	16		4540502								189387.86450			3289	
92	Total 13C-HxCB-F4	3		974069								10050.13921			1230	
93	Total 13C-HxCB-F5	18		4238590								5129.41881			2584	
94	Total 13C-HpCB-F5	20		1531845								140107.64656			2301	
95	Total 13C-HpCB-F6	6		780938								133419.93407			2902	
96	Total 13C-OcCB-F5	19		714475								43532.36682			1560	
97	Total 13C-OcCB-F6	7		1241548								1404.22714			2041	
98	Total 13C-NoCB-F6	4		686294								22477.19774			1007	
99	Total 13C-DeCB-F7	2		575780								72151.42154			303	
100	Lockmass F1			0											162283	
101	Lockmass F2			0											108852	
102	Lockmass F3			0											195811	
103	Lockmass F4			0											182210	
104	Lockmass F5			0											65327	
105	Lockmass F6			0											52490	
106	Lockmass F7			0											9460	

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221109A-QC.qld

Last Altered: Wednesday, November 23, 2022 17:30:50 Eastern Standard Time
Printed: Thursday, November 24, 2022 09:42:18 Eastern Standard Time

Name: 5-221109A20, Date: 10-Nov-2022, Time: 05:25:59, ID: WG3767228-5, Description: MSD, Vial: Tray1:17

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
1	PCB-1		841674	641347	200326	3.20	NO	8.99	1.00	8.96	9.03	1087.80346	108.8		1026	1175
2	PCB-3		829190	632709	196481	3.22	NO	10.49	1.00	10.46	10.53	1034.99812	103.5		1026	1175
3	PCB-4		580656	348545	232111	1.50	NO	10.68	1.00	10.64	10.71	1009.07906	100.9		1109	3508
4	PCB-15		1021046	626028	395018	1.58	NO	14.31	1.00	14.28	14.35	1006.06350	100.6		2132	2669
5	PCB-19		609256	311331	297925	1.04	NO	12.65	1.00	12.62	12.69	975.61430	97.6		1211	854
6	PCB-37		1047980	539308	508672	1.06	NO	18.25	1.00	18.21	18.28	1101.15942	110.1		2440	2584
7	PCB-54		763169	334768	428401	0.78	NO	14.51	1.00	14.48	14.54	981.62194	98.2		814	895
8	PCB-81		912508	404663	507844	0.80	NO	21.81	1.00	21.77	21.84	983.69839	98.4		3411	6266
9	PCB-77		1148894	428565	720329	0.60	YES	22.12	1.00	22.09	22.16	1349.57520	135.0		3411	6266
10	PCB-104		804538	491735	312803	1.57	NO	17.53	1.00	17.50	17.57	884.77427	88.5		1172	1058
11	PCB-123		1008703	619739	388965	1.59	NO	23.09	1.00	23.05	23.12	1209.71670	121.0		6690	16775
12	PCB-118		21965948	13491284	8474664	1.59	NO	23.27	1.00	23.23	23.30	24853.94796	2485.4		6690	16775
13	PCB-114		1255780	771715	484065	1.59	NO	23.56	1.00	23.52	23.59	1553.46904	155.3		6690	16775
14	PCB-105		4906388	2995899	1910489	1.57	NO	23.92	1.00	23.89	23.95	5878.01736	587.8	AK221123MB	6690	16775
15	PCB-126		2311763	1516713	795050	1.91	YES	25.53	1.00	25.49	25.56	3004.12698	300.4		6690	16775
16	PCB-155		950825	530150	420675	1.26	NO	20.49	1.00	20.46	20.53	928.96446	92.9		1588	1457
17	PCB-167		7910689	4371570	3539120	1.24	NO	26.39	1.00	26.35	26.42	8624.71172	862.5		11911	7911
18	PCB-156/157		11555046	6403979	5151067	1.24	NO	27.01	1.00	26.98	27.05	13187.35441	659.4		11911	7911
19	PCB-169		1927953	1108568	819385	1.35	NO	28.68	1.00	28.65	28.72	2406.75716	240.7		11911	7911
20	PCB-188		858929	433941	424988	1.02	NO	23.50	1.00	23.46	23.53	1014.16822	101.4		5998	7317
21	PCB-189		3077193	1572626	1504566	1.05	NO	29.94	1.00	29.91	29.98	4438.01673	443.8		3102	3884
22	PCB-202		5597866	2639512	2958354	0.89	NO	26.26	1.00	26.23	26.30	6876.05184	687.6		1175	1625
23	PCB-205		1705182	799617	905565	0.88	NO	31.31	1.00	31.28	31.34	3136.90319	313.7		1809	2394
24	PCB-208		946403	422765	523637	0.81	NO	29.68	1.00	29.65	29.71	1939.76133	194.0		837	1890
25	PCB-206		2657613	1183598	1474015	0.80	NO	32.37	1.00	32.34	32.40	6902.23350	690.2		837	1890
26	PCB-209		694572	376725	317847	1.19	NO	33.47	1.00	33.43	33.50	1447.09188	144.7		192	305
27	13C-PCB-31						YES								22954	9054
28	13C-PCB-95		1471	989	482	2.05	YES	19.18	1.09	19.15	19.21	2.48118	0.1		1203	1448
29	13C-PCB-153		39991	23328	16663	1.40	NO	24.19	1.18	24.15	24.22	62.43059	3.1		2591	2019
30	13C-PCB-28		1813128	931183	881946	1.06	NO	16.00	0.94	15.96	16.03	1143.84883	57.2		22954	9054
31	13C-PCB-111		1317043	804598	512445	1.57	NO	22.01	1.07	21.98	22.05	1200.24737	60.0		1203	1448
32	13C-PCB-178		1130497	578996	551502	1.05	NO	25.06	1.01	25.02	25.09	1359.25676	68.0		1943	1344
33	13C-PCB-1		1439957	1076750	363207	2.96	NO	8.98	0.75	8.95	9.01	682.32853	34.1		1934	17368
34	13C-PCB-3		1431789	1063501	368288	2.89	NO	10.49	0.88	10.46	10.53	717.70728	35.9		1934	17368
35	13C-PCB-4		1228249	750851	477399	1.57	NO	10.66	0.90	10.63	10.70	939.27020	47.0		7743	2720
36	13C-PCB-15		1730855	1059137	671718	1.58	NO	14.31	1.20	14.27	14.34	975.56843	48.8		10447	4189
37	13C-PCB-19		995411	506720	488690	1.04	NO	12.65	1.06	12.62	12.69	1170.57048	58.5		26071	10605

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221109A-QC.qld

Last Altered: Wednesday, November 23, 2022 17:30:50 Eastern Standard Time
Printed: Thursday, November 24, 2022 09:42:18 Eastern Standard Time

Name: 5-221109A20, Date: 10-Nov-2022, Time: 05:25:59, ID: WG3767228-5, Description: MSD, Vial: Tray1:17

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
38	13C-PCB-37		1599790	822943	776848	1.06	NO	18.24	1.07	18.21	18.27	1125.48468	56.3		22954	9054
39	13C-PCB-54		1389042	610936	778107	0.79	NO	14.50	0.85	14.47	14.53	1079.41571	54.0		4618	2724
40	13C-PCB-81		1485778	655889	829889	0.79	NO	21.80	1.06	21.77	21.83	1125.32679	56.3		3380	2147
41	13C-PCB-77		1410538	620007	790530	0.78	NO	22.10	1.07	22.07	22.14	1060.34943	53.0		3380	2147
42	13C-PCB-104		1468036	899543	568494	1.58	NO	17.52	1.03	17.49	17.56	1181.11095	59.1		924	813
43	13C-PCB-123		1444835	892920	551915	1.62	NO	23.09	1.12	23.05	23.12	1184.69900	59.2		3060	2017
44	13C-PCB-118		1308754	799002	509752	1.57	NO	23.26	1.13	23.22	23.29	1175.92092	58.8		3060	2017
45	13C-PCB-114		1384684	852807	531877	1.60	NO	23.56	0.95	23.52	23.59	1116.49969	55.8		3060	2017
46	13C-PCB-105		1346298	834232	512066	1.63	NO	23.91	0.96	23.88	23.94	1151.65763	57.6		3060	2017
47	13C-PCB-126		1265808	780329	485480	1.61	NO	25.49	1.03	25.46	25.52	1053.33725	52.7		3060	2017
48	13C-PCB-155		1756082	971828	784254	1.24	NO	20.49	0.99	20.45	20.52	1321.93543	66.1		1171	722
49	13C-PCB-167		1434273	809213	625060	1.29	NO	26.37	1.06	26.34	26.41	1274.93515	63.7		2591	2019
50	13C-PCB-156/157		2676720	1512630	1164090	1.30	NO	27.01	1.09	26.98	27.05	2439.56927	61.0		2591	2019
51	13C-PCB-169		1279902	724063	555839	1.30	NO	28.67	1.15	28.64	28.70	1131.76860	56.6		2591	2019
52	13C-PCB-188		1573346	802621	770725	1.04	NO	23.49	0.94	23.45	23.52	1331.80892	66.6		1943	1344
53	13C-PCB-189		1317720	683891	633829	1.08	NO	29.93	0.96	29.90	29.96	1119.42149	56.0		2233	2000
54	13C-PCB-202		1424232	675659	748573	0.90	NO	26.25	1.06	26.22	26.29	1407.51601	70.4		1437	1178
55	13C-PCB-205		1139858	537627	602231	0.89	NO	31.30	1.01	31.26	31.33	1283.03617	64.2		1822	1512
56	13C-PCB-208		849169	373526	475644	0.79	NO	29.66	0.96	29.63	29.70	1144.67267	57.2		1045	1202
57	13C-PCB-206		673480	292412	381069	0.77	NO	32.36	1.04	32.32	32.39	1325.61815	66.3		1045	1202
58	13C-PCB-209		981145	532971	448173	1.19	NO	33.45	1.08	33.42	33.48	1236.74737	61.8		321	287
59	13C-PCB-9		3978695	2411680	1567015	1.54	NO	11.90	0.48	11.86	11.93	121.52025	6.1		7743	2720
60	13C-PCB-52		1859181	827229	1031952	0.80	NO	16.99	0.68	16.95	17.02	116.70703	5.8		2885	2368
61	13C-PCB-101		1770028	1079372	690656	1.56	NO	20.63	0.83	20.60	20.67	123.18956	6.2		1203	1448
62	13C-PCB-138		1774287	1001824	772463	1.30	NO	24.86	0.00	24.83	24.90	113.88304	5.7		2591	2019
63	13C-PCB-194		1382407	650671	731735	0.89	NO	31.03	1.25	31.00	31.07	97.56285	4.9		1822	1512
64	Total MoCB-F1	4		1322823								60057.78752			1026	
65	Total DiCB-F1	9		429162								146852.16431			1109	
66	Total DiCB-F2	5		907811								391233.72218			2132	
67	Total TrCB-F1	1		311331								975.61430			1211	
68	Total TrCB-F3	18		1928220								2287181.094...			2440	
69	Total TeCB-F2	1		334768								981.62194			814	
70	Total TeCB-F4	21		6341063								10194076.77...			3411	
71	Total PeCB-F3	3		513139								30178.86397			1172	
72	Total PeCB-F5	36		46145742								34246754.24...			6690	
73	Total HxCB-F4	9		46029841								70269012.12...			1588	
74	Total HxCB-F5	33		326661206								463024839.1...			11911	

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Printed: Thursday, November 24, 2022 09:42:18 Eastern Standard Time

Name: 5-221109A20, Date: 10-Nov-2022, Time: 05:25:59, ID: WG3767228-5, Description: MSD, Vial: Tray1:17

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
75	Total HpCB-F5	26		266129388								489303505.6...			5998	
76	Total HpCB-F6	7		2914952								2498181.866...			3102	
77	Total OcCB-F5	20		32628925								55912011.43...			1175	
78	Total OcCB-F6	7		12575303								26418932.03...			1809	
79	Total NoCB-F6	3		1783405								354096.69126			837	
80	Total DeCB-F7	1		376725								1447.09188			192	
81	Total 13C-MoCB-F1	4		2172981								49748.08961			1934	
82	Total 13C-DiCB-F1	3		3170914								1061.55042			7743	
83	Total 13C-DiCB-F2	1		1059137								975.56843			10447	
84	Total 13C-TrCB-F1	3		2453583								5104911.864...			26071	
85	Total 13C-TrCB-F3	5		2177020								325825.74142			22954	
86	Total 13C-TeCB-F2	1		610936								1079.41571			4618	
87	Total 13C-TeCB-F3	4		837231								118.07560			2885	
88	Total 13C-TeCB-F4	7		1309907								49868.03935			3380	
89	Total 13C-PeCB-F3	1		899543								1181.11095			924	
90	Total 13C-PeCB-F4	7		1896608								1329.79890			1203	
91	Total 13C-PeCB-F5	15		4302305								178691.31987			3060	
92	Total 13C-HxCB-F4	5		980555								10868.64588			1171	
93	Total 13C-HxCB-F5	17		4141315								5062.06096			2591	
94	Total 13C-HpCB-F5	18		1466197								138482.19449			1943	
95	Total 13C-HpCB-F6	5		771533								123803.25830			2233	
96	Total 13C-OcCB-F5	19		699422								42859.72892			1437	
97	Total 13C-OcCB-F6	5		1235091								1394.82925			1822	
98	Total 13C-NoCB-F6	3		666532								3797.97635			1045	
99	Total 13C-DeCB-F7	1		532971								1236.74737			321	
100	Lockmass F1			0											132146	
101	Lockmass F2			0											134277	
102	Lockmass F3			0											188712	
103	Lockmass F4			0											176431	
104	Lockmass F5			0											66433	
105	Lockmass F6			0											41641	
106	Lockmass F7			0											14334	

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Printed: Thursday, November 24, 2022 09:42:18 Eastern Standard Time

Name: 5-221109A32, Date: 10-Nov-2022, Time: 13:52:20, ID: H5-22-CCV-976, Description: 1668A-CS7-023, Vial: Tray1:1

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
1	PCB-1		520357	398285	122072	3.26	NO	8.99	1.00	8.96	9.03	50.42020	100.8		6164	1397
2	PCB-3		423417	325836	97581	3.34	NO	10.51	1.00	10.47	10.54	46.87504	93.8		6164	1397
3	PCB-4		284142	171405	112737	1.52	NO	10.68	1.00	10.64	10.71	45.35368	90.7		725	3182
4	PCB-15		375042	234759	140283	1.67	NO	14.38	1.00	14.35	14.41	48.96921	97.9		2503	2663
5	PCB-19		297752	152747	145005	1.05	NO	12.68	1.00	12.65	12.71	45.47397	90.9		745	475
6	PCB-37		327153	166199	160954	1.03	NO	18.31	1.00	18.27	18.34	49.82994	99.7		2433	2229
7	PCB-54		371075	161762	209313	0.77	NO	14.53	1.00	14.49	14.56	44.33401	88.7		649	1106
8	PCB-81		391214	172822	218392	0.79	NO	21.85	1.00	21.81	21.88	51.21682	102.4		1119	1728
9	PCB-77		379636	171156	208480	0.82	NO	22.16	1.00	22.13	22.19	51.51875	103.0		1119	1728
10	PCB-104		394411	239387	155025	1.54	NO	17.55	1.00	17.52	17.59	46.46187	92.9		866	1100
11	PCB-123		373278	231387	141892	1.63	NO	23.12	1.00	23.09	23.16	49.72604	99.5		2542	1632
12	PCB-118		420930	259387	161543	1.61	NO	23.29	1.00	23.26	23.33	49.38543	98.8		2542	1632
13	PCB-114		414204	256136	158068	1.62	NO	23.59	1.00	23.56	23.63	50.14745	100.3		2542	1632
14	PCB-105		414102	255253	158849	1.61	NO	23.94	1.00	23.91	23.98	50.32802	100.7		2542	1632
15	PCB-126		443572	275507	168065	1.64	NO	25.54	1.00	25.51	25.57	50.72895	101.5		2542	1632
16	PCB-155		454509	252980	201528	1.26	NO	20.51	1.00	20.48	20.55	47.65068	95.3		1333	1070
17	PCB-167		500979	277657	223322	1.24	NO	26.41	1.00	26.38	26.44	48.89534	97.8		2376	1863
18	PCB-156/157		1053818	585020	468797	1.25	NO	27.05	1.00	27.02	27.08	97.16156	97.2		2376	1863
19	PCB-169		569996	315839	254157	1.24	NO	28.71	1.00	28.67	28.74	48.65827	97.3		2376	1863
20	PCB-188		415479	210266	205213	1.02	NO	23.51	1.00	23.48	23.54	48.54195	97.1		1508	1339
21	PCB-189		546832	279034	267798	1.04	NO	29.96	1.00	29.92	29.99	51.50130	103.0		1846	1396
22	PCB-202		484599	229731	254868	0.90	NO	26.28	1.00	26.24	26.31	48.58009	97.2		871	590
23	PCB-205		459385	215828	243557	0.89	NO	31.33	1.00	31.29	31.36	50.51920	101.0		776	1152
24	PCB-208		402877	179786	223092	0.81	NO	29.68	1.00	29.65	29.71	49.75635	99.5		924	1774
25	PCB-206		343079	154144	188935	0.82	NO	32.39	1.00	32.35	32.42	49.47797	99.0		924	1774
26	PCB-209		463929	252685	211244	1.20	NO	33.48	1.00	33.45	33.51	51.44879	102.9		221	346
27	13C-PCB-31		657852	337063	320790	1.05	NO	15.88	0.87	15.85	15.91	93.29840	93.3		24669	9347
28	13C-PCB-95		530975	325251	205725	1.58	NO	19.16	1.09	19.13	19.20	93.85894	93.9		2973	2192
29	13C-PCB-153		694227	391915	302312	1.30	NO	24.19	1.18	24.15	24.22	93.02695	93.0		3436	2558
30	13C-PCB-28		808785	410508	398277	1.03	NO	16.05	0.94	16.01	16.08	102.76746	102.8		24669	9347
31	13C-PCB-111		597393	367157	230236	1.59	NO	22.03	1.07	22.00	22.06	104.40546	104.4		2973	2192
32	13C-PCB-178		628444	316475	311969	1.01	NO	25.07	1.01	25.04	25.10	111.47550	111.5		1900	1415
33	13C-PCB-1		960335	720294	240041	3.00	NO	8.98	0.75	8.95	9.01	94.40013	94.4		2116	14839
34	13C-PCB-3		807163	604079	203085	2.97	NO	10.51	0.88	10.47	10.54	83.93362	83.9		2116	14839
35	13C-PCB-4		668630	406937	261694	1.55	NO	10.68	0.90	10.64	10.71	106.07089	106.1		6869	2701
36	13C-PCB-15		653082	399957	253125	1.58	NO	14.37	1.21	14.34	14.40	76.36085	76.4		9710	4719
37	13C-PCB-19		521846	263461	258385	1.02	NO	12.67	1.06	12.63	12.70	127.30455	127.3		19476	9331

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221109A-QC.qld

Last Altered: Wednesday, November 23, 2022 17:30:50 Eastern Standard Time
Printed: Thursday, November 24, 2022 09:42:18 Eastern Standard Time

Name: 5-221109A32, Date: 10-Nov-2022, Time: 13:52:20, ID: H5-22-CCV-976, Description: 1668A-CS7-023, Vial: Tray1:1

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
38	13C-PCB-37		551812	286122	265689	1.08	NO	18.30	1.07	18.26	18.33	78.18968	78.2		24669	9347
39	13C-PCB-54		747709	327247	420462	0.78	NO	14.51	0.85	14.48	14.54	117.02760	117.0		4779	2125
40	13C-PCB-81		611718	270630	341089	0.79	NO	21.84	1.06	21.80	21.87	88.85226	88.9		3011	1918
41	13C-PCB-77		610484	267786	342698	0.78	NO	22.14	1.07	22.11	22.17	88.00974	88.0		3011	1918
42	13C-PCB-104		685244	418298	266946	1.57	NO	17.54	1.03	17.51	17.58	105.72831	105.7		3050	1909
43	13C-PCB-123		650365	403339	247026	1.63	NO	23.11	1.12	23.08	23.14	102.26797	102.3		3114	2889
44	13C-PCB-118		631080	392381	238699	1.64	NO	23.28	1.13	23.25	23.31	108.74184	108.7		3114	2889
45	13C-PCB-114		707416	437498	269917	1.62	NO	23.58	0.95	23.55	23.62	109.38935	109.4		3114	2889
46	13C-PCB-105		663556	410596	252959	1.62	NO	23.93	0.96	23.90	23.97	108.85594	108.9		3114	2889
47	13C-PCB-126		719153	443524	275629	1.61	NO	25.53	1.03	25.49	25.56	114.76596	114.8		3114	2889
48	13C-PCB-155		818251	453800	364451	1.25	NO	20.50	0.99	20.47	20.54	118.12565	118.1		1409	953
49	13C-PCB-167		801094	455698	345396	1.32	NO	26.40	1.06	26.36	26.43	105.05600	105.1		3436	2558
50	13C-PCB-156/157		1656647	937354	719293	1.30	NO	27.04	1.09	27.00	27.07	222.75172	111.4		3436	2558
51	13C-PCB-169		935832	530680	405152	1.31	NO	28.69	1.15	28.66	28.73	122.08428	122.1		3436	2558
52	13C-PCB-188		795022	408967	386055	1.06	NO	23.50	0.94	23.46	23.53	99.28366	99.3		1900	1415
53	13C-PCB-189		1008934	519452	489482	1.06	NO	29.94	0.96	29.91	29.98	126.44864	126.4		2706	2110
54	13C-PCB-202		872552	417617	454935	0.92	NO	26.26	1.06	26.23	26.30	127.21690	127.2		1127	630
55	13C-PCB-205		953393	451594	501799	0.90	NO	31.31	1.01	31.28	31.34	104.67328	104.7		1819	2021
56	13C-PCB-208		704630	310467	394162	0.79	NO	29.67	0.96	29.63	29.70	92.64542	92.6		1376	1489
57	13C-PCB-206		606422	265298	341124	0.78	NO	32.37	1.04	32.34	32.40	116.42449	116.4		1376	1489
58	13C-PCB-209		921634	502420	419214	1.20	NO	33.47	1.08	33.43	33.50	113.31366	113.3		387	263
59	13C-PCB-9		958969	583845	375125	1.56	NO	11.92	0.48	11.89	11.96	29.28955	29.3		6869	2701
60	13C-PCB-52		461540	201169	260371	0.77	NO	17.02	0.68	16.99	17.06	28.97243	29.0		3142	1782
61	13C-PCB-101		461485	284131	177355	1.60	NO	20.66	0.83	20.63	20.69	32.11822	32.1		2973	2192
62	13C-PCB-138		601330	338455	262876	1.29	NO	24.88	0.00	24.84	24.91	38.59652	38.6		3436	2558
63	13C-PCB-194		708647	331354	377293	0.88	NO	31.05	1.25	31.01	31.08	50.01248	50.0		1819	2021
64	Total MoCB-F1	4		749799								29361.41568			6164	
65	Total DiCB-F1	2		178802								13232.37943			725	
66	Total DiCB-F2	1		234759								48.96921			2503	
67	Total TrCB-F1	1		152747								45.47397			745	
68	Total TrCB-F3	4		593307								701121.30008			2433	
69	Total TeCB-F2	4		165875								7831.42922			649	
70	Total TeCB-F4	6		349124								8139.44164			1119	
71	Total PeCB-F3	4		242952								3611.13932			866	
72	Total PeCB-F5	15		1332037								69165.72731			2542	
73	Total HxCB-F4	3		253819								1489.07875			1333	
74	Total HxCB-F5	21		1262426								117989.23769			2376	

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221109A-QC.qld

Last Altered: Wednesday, November 23, 2022 17:30:50 Eastern Standard Time
Printed: Thursday, November 24, 2022 09:42:18 Eastern Standard Time

Name: 5-221109A32, Date: 10-Nov-2022, Time: 13:52:20, ID: H5-22-CCV-976, Description: 1668A-CS7-023, Vial: Tray1:1

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
75	Total HpCB-F5	15		990286								1439325.147...			1508	
76	Total HpCB-F6	4		302752								41107.16126			1846	
77	Total OcCB-F5	6		232845								5894.08547			871	
78	Total OcCB-F6	5		239831								54171.32350			776	
79	Total NoCB-F6	3		334445								1123.67271			924	
80	Total DeCB-F7	1		252685								51.44879			221	
81	Total 13C-MoCB-F1	2		1324373								178.33376			2116	
82	Total 13C-DiCB-F1	3		997328								135.89349			6869	
83	Total 13C-DiCB-F2	2		803081								738597.61723			9710	
84	Total 13C-TrCB-F1	2		278699								40371.04006			19476	
85	Total 13C-TrCB-F3	3		1033693								274.25554			24669	
86	Total 13C-TeCB-F2	1		327247								117.02760			4779	
87	Total 13C-TeCB-F3	3		208697								30.02980			3142	
88	Total 13C-TeCB-F4	8		565008								37427.46496			3011	
89	Total 13C-PeCB-F3	5		422726								4927.66256			3050	
90	Total 13C-PeCB-F4	4		980488								231.78887			2973	
91	Total 13C-PeCB-F5	19		2185073								115808.00517			3114	
92	Total 13C-HxCB-F4	4		457431								4206.50639			1409	
93	Total 13C-HxCB-F5	18		2705036								607.64306			3436	
94	Total 13C-HpCB-F5	8		745615								36081.26447			1900	
95	Total 13C-HpCB-F6	6		581760								85362.38511			2706	
96	Total 13C-OcCB-F5	6		421983								7496.99438			1127	
97	Total 13C-OcCB-F6	5		820770								165.79876			1819	
98	Total 13C-NoCB-F6	3		576223								1258.53983			1376	
99	Total 13C-DeCB-F7	1		502420								113.31366			387	
100	Lockmass F1			0											134667	
101	Lockmass F2			0											79991	
102	Lockmass F3			0											174277	
103	Lockmass F4			0											114416	
104	Lockmass F5			0											56862	
105	Lockmass F6			0											36970	
106	Lockmass F7			0											13361	

Quantify Audit Report MassLynx V4.2 SCN1012

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221109A-QC.qld

Last Altered: Wednesday, November 23, 2022 17:30:50 Eastern Standard Time
Printed: Thursday, November 24, 2022 09:42:18 Eastern Standard Time

Date	Time	Event	Details	Comments
23-Nov-22	17:28:55	Pre modification peak	Sample:5-221109A19, Compound:PeCB-F5, RT:23.909	
23-Nov-22	17:28:55	Peak modified	Sample:5-221109A19, Compound:PeCB-F5, RT:23.909	AK221123Mb
23-Nov-22	17:28:55	Pre modification peak	Sample:5-221109A19, Compound:PeCB-F5, RT:23.921	
23-Nov-22	17:28:55	Peak modified	Sample:5-221109A19, Compound:PeCB-F5, RT:23.921	AK221123Mb
23-Nov-22	17:28:55	Peak added	Sample:5-221109A19, Compound:PeCB-F5, RT:22.591	AK221123Mb
23-Nov-22	17:29:14	Peak modified	Sample:5-221109A19, Compound:PeCB-F5, RT:23.909	AK221123MB
23-Nov-22	17:29:14	Peak modified	Sample:5-221109A19, Compound:PeCB-F5, RT:23.921	AK221123MB
23-Nov-22	17:30:48	Pre modification peak	Sample:5-221109A20, Compound:PeCB-F5, RT:23.921	
23-Nov-22	17:30:48	Peak modified	Sample:5-221109A20, Compound:PeCB-F5, RT:23.921	AK221123MB
23-Nov-22	17:30:48	Pre modification peak	Sample:5-221109A20, Compound:PeCB-F5, RT:23.921	
23-Nov-22	17:30:48	Peak modified	Sample:5-221109A20, Compound:PeCB-F5, RT:23.921	AK221123MB
23-Nov-22	17:34:10	Dataset Saved	Saved to 'I:\Organics Instrument\HIGHRES GCMS Complete...	
10-Nov-22	17:10:04	Process Extract		
10-Nov-22	17:10:05	Process Integrate		
10-Nov-22	17:10:05	Process Quantify		
10-Nov-22	17:10:05	Dataset Created		
10-Nov-22	17:11:56	Dataset Saved	Saved to 'I:\Organics Instrument\HIGHRES GCMS Complete...	

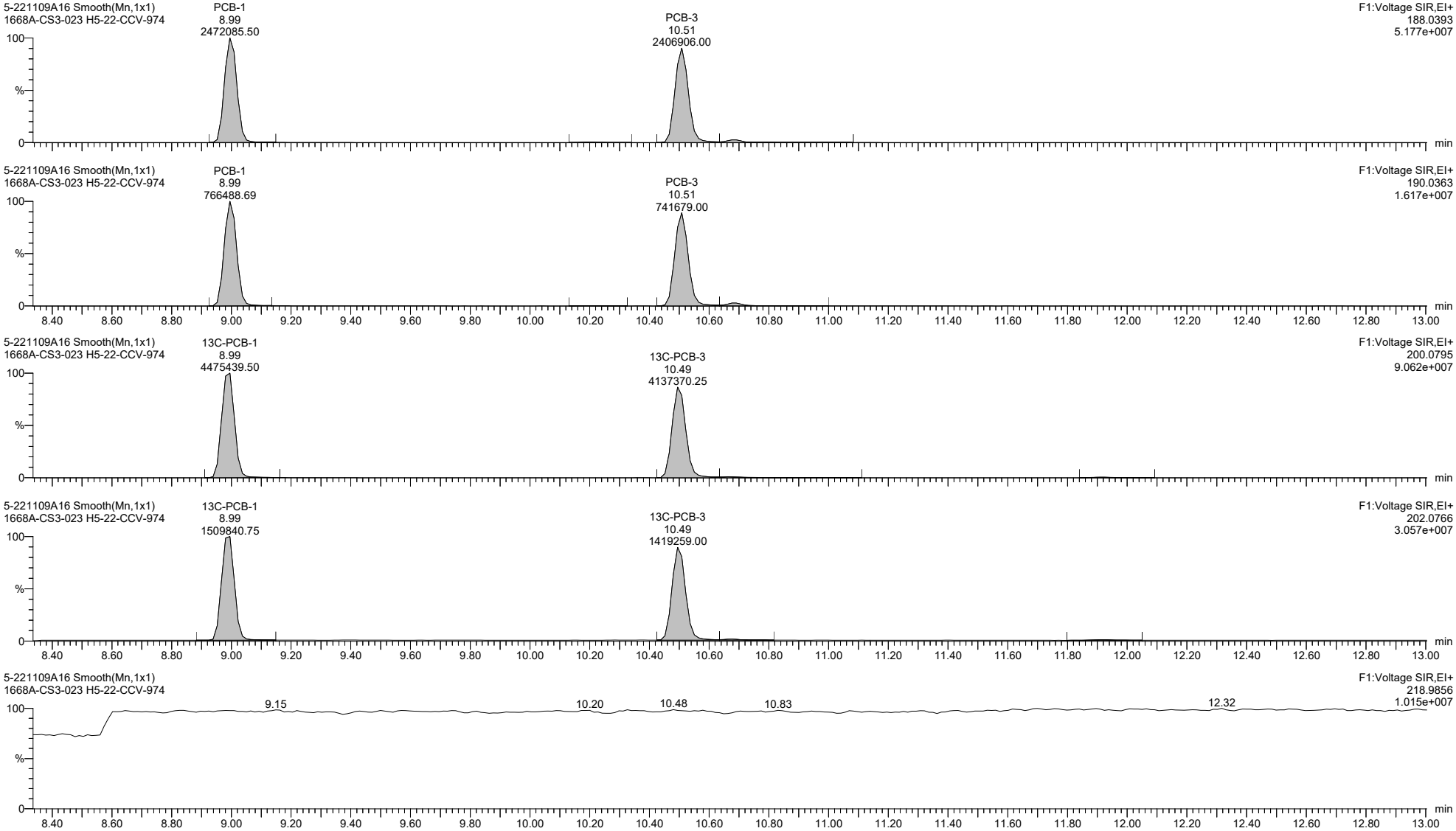
Quantify Sample Template Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221109A-QC.qld

Last Altered: Wednesday, November 23, 2022 17:30:50 Eastern Standard Time
Printed: Thursday, November 24, 2022 09:42:18 Eastern Standard Time

Method: C:\MassLynx\PCB.PRO\MethDB\1668_OCTYL_ICAL-0401.mdb 09 Jun 2022 13:25:01
Calibration: C:\MassLynx\PCB.PRO\CurveDB\5-221020A-ICAL.cdb 21 Oct 2022 09:44:03

Name: 5-221109A16, Date: 10-Nov-2022, Time: 02:27:36, ID: H5-22-CCV-974, Description: 1668A-CS3-023, Vial: Tray1:1

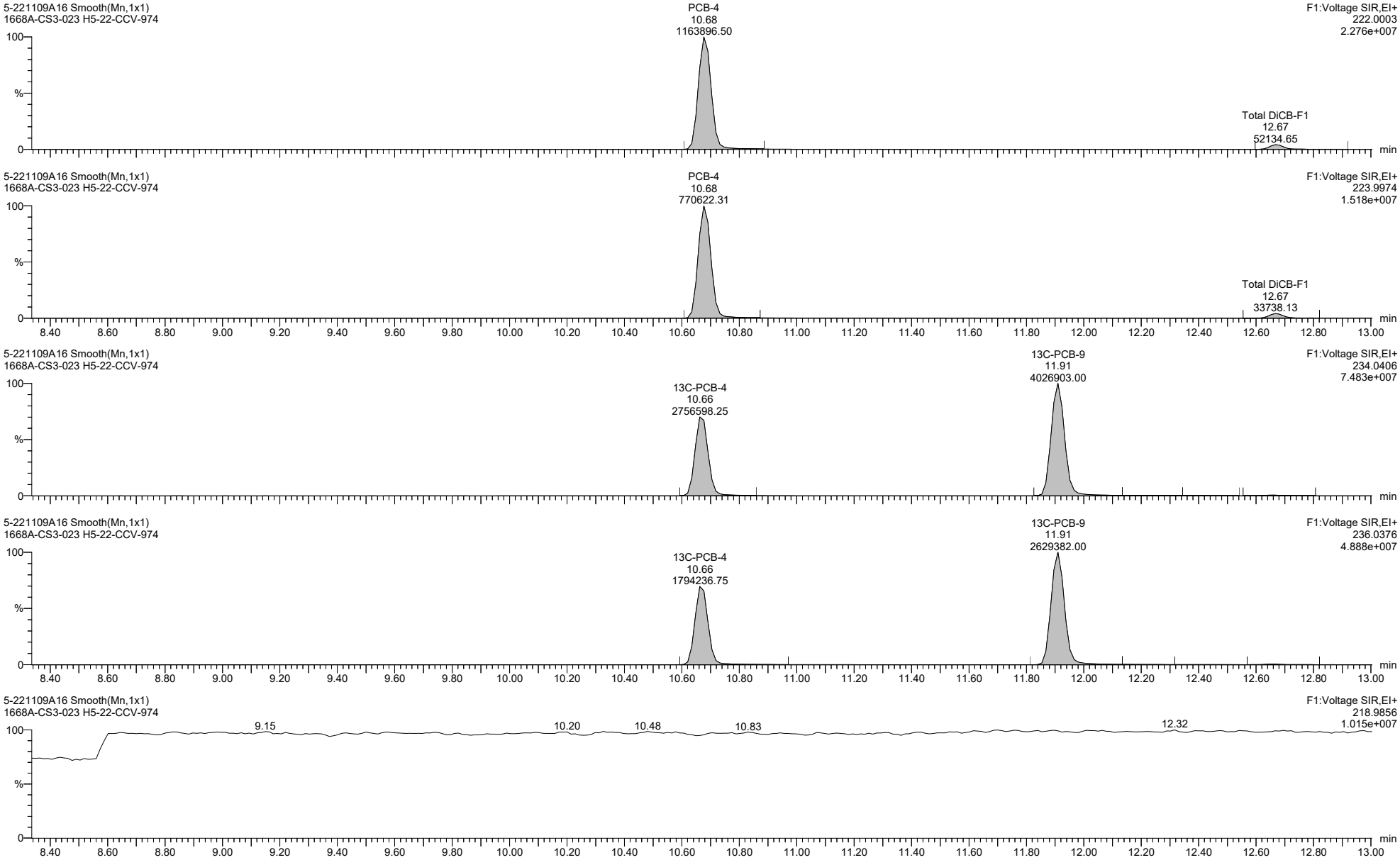


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

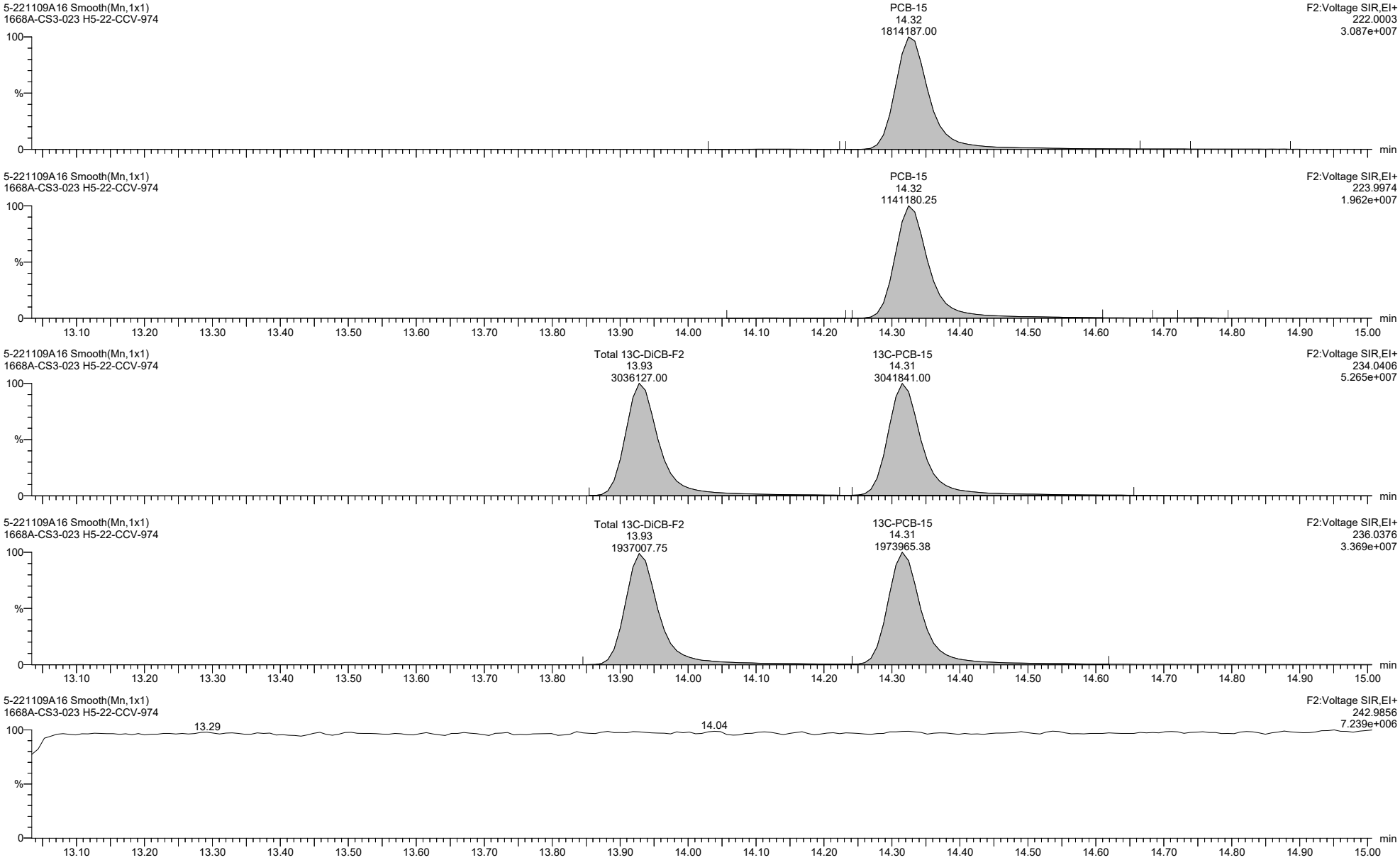
Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221109A-QC.qld

Last Altered: Wednesday, November 23, 2022 17:30:50 Eastern Standard Time
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Name: 5-221109A16, Date: 10-Nov-2022, Time: 02:27:36, ID: H5-22-CCV-974, Description: 1668A-CS3-023, Vial: Tray1:1



Name: 5-221109A16, Date: 10-Nov-2022, Time: 02:27:36, ID: H5-22-CCV-974, Description: 1668A-CS3-023, Vial: Tray1:1

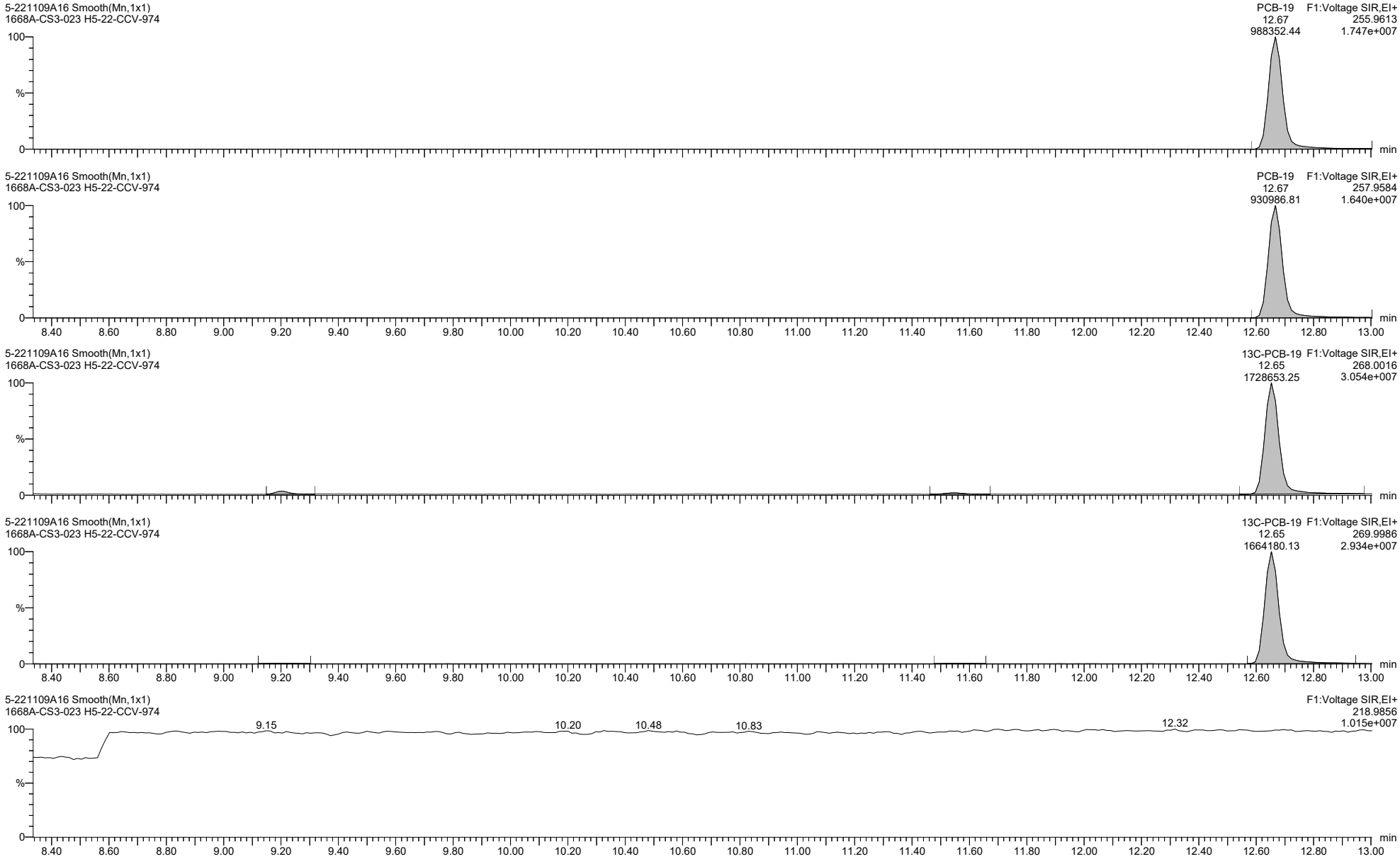


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Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221109A-QC.qld

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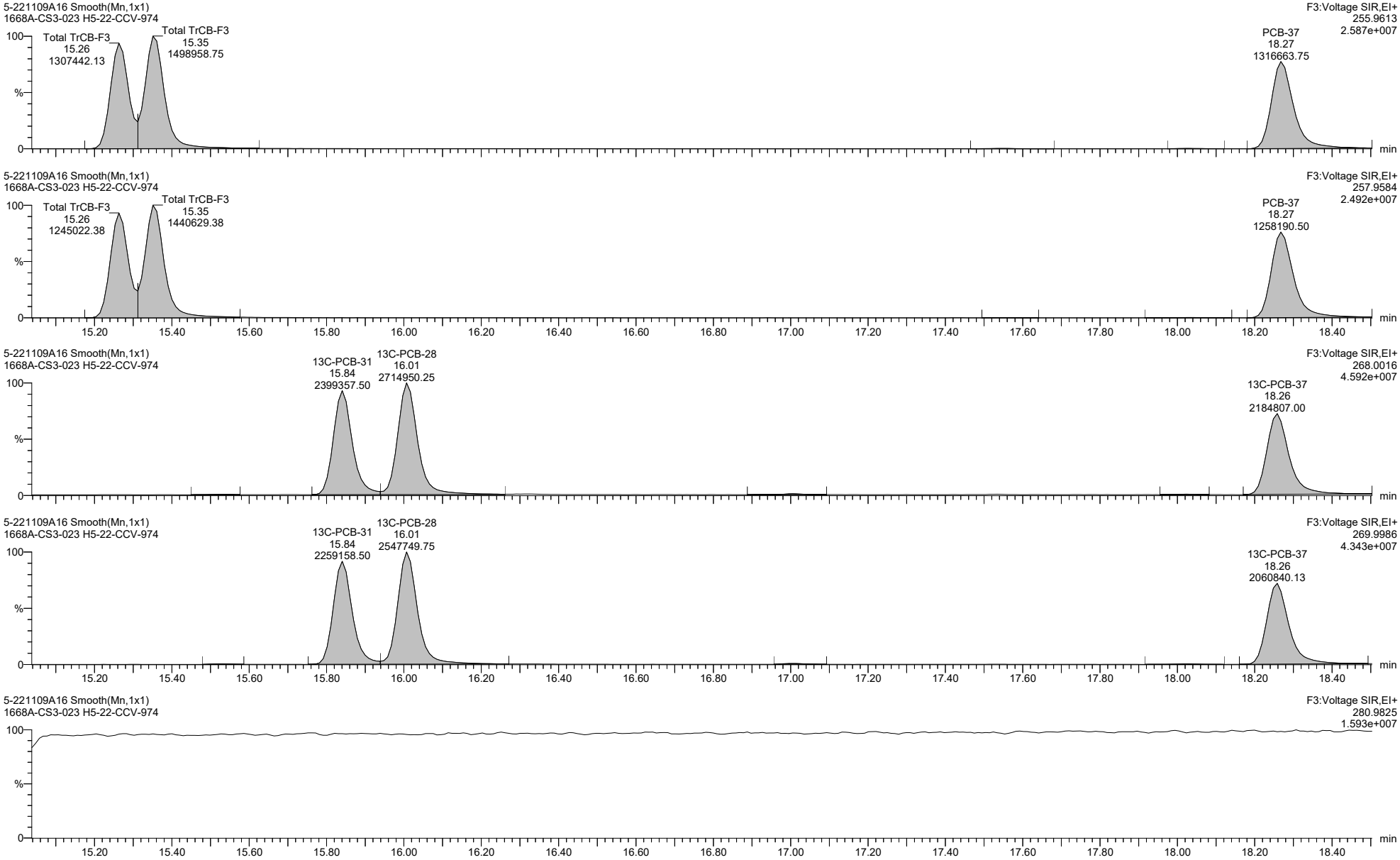


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

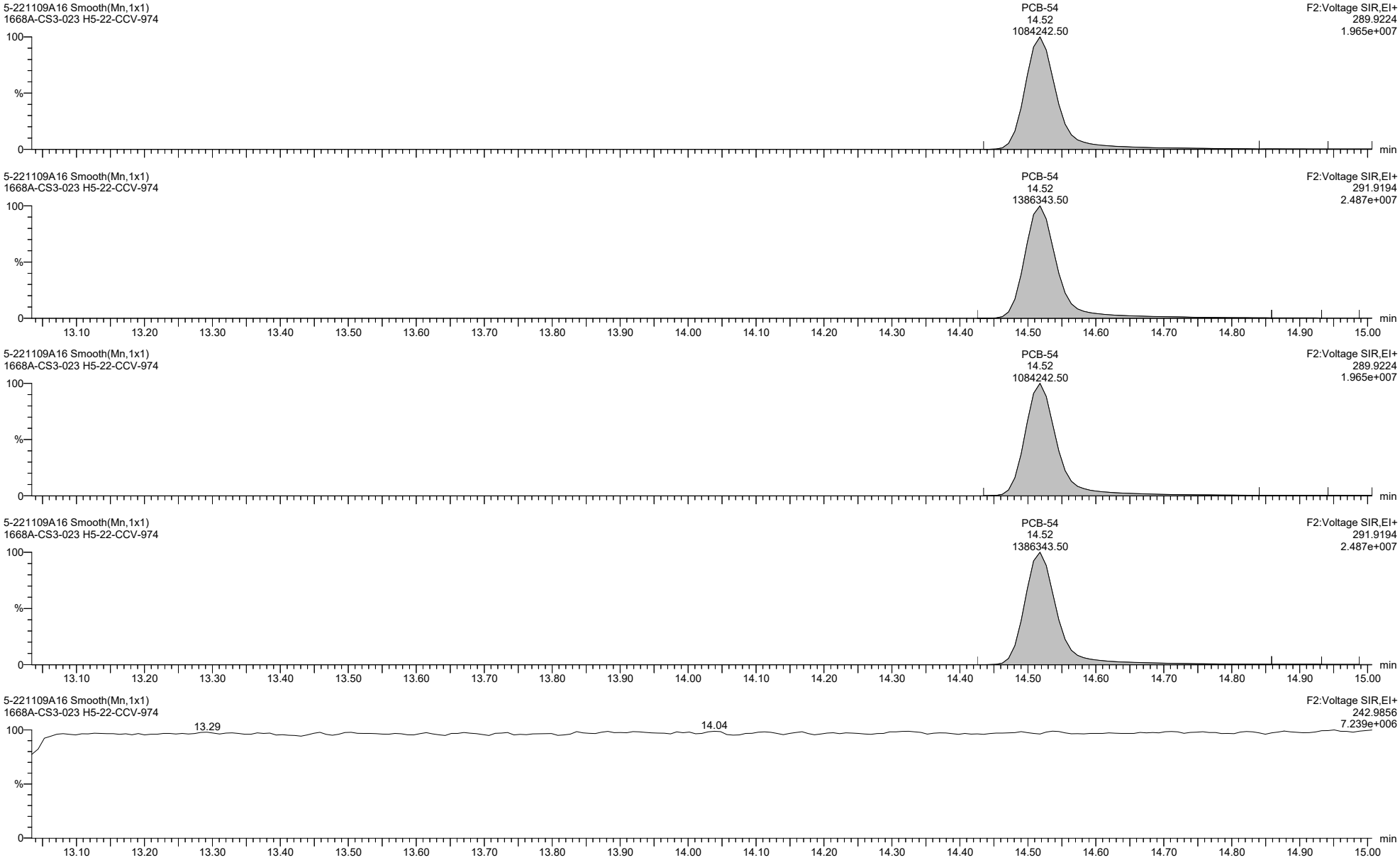
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Name: 5-221109A16, Date: 10-Nov-2022, Time: 02:27:36, ID: H5-22-CCV-974, Description: 1668A-CS3-023, Vial: Tray1:1



Name: 5-221109A16, Date: 10-Nov-2022, Time: 02:27:36, ID: H5-22-CCV-974, Description: 1668A-CS3-023, Vial: Tray1:1

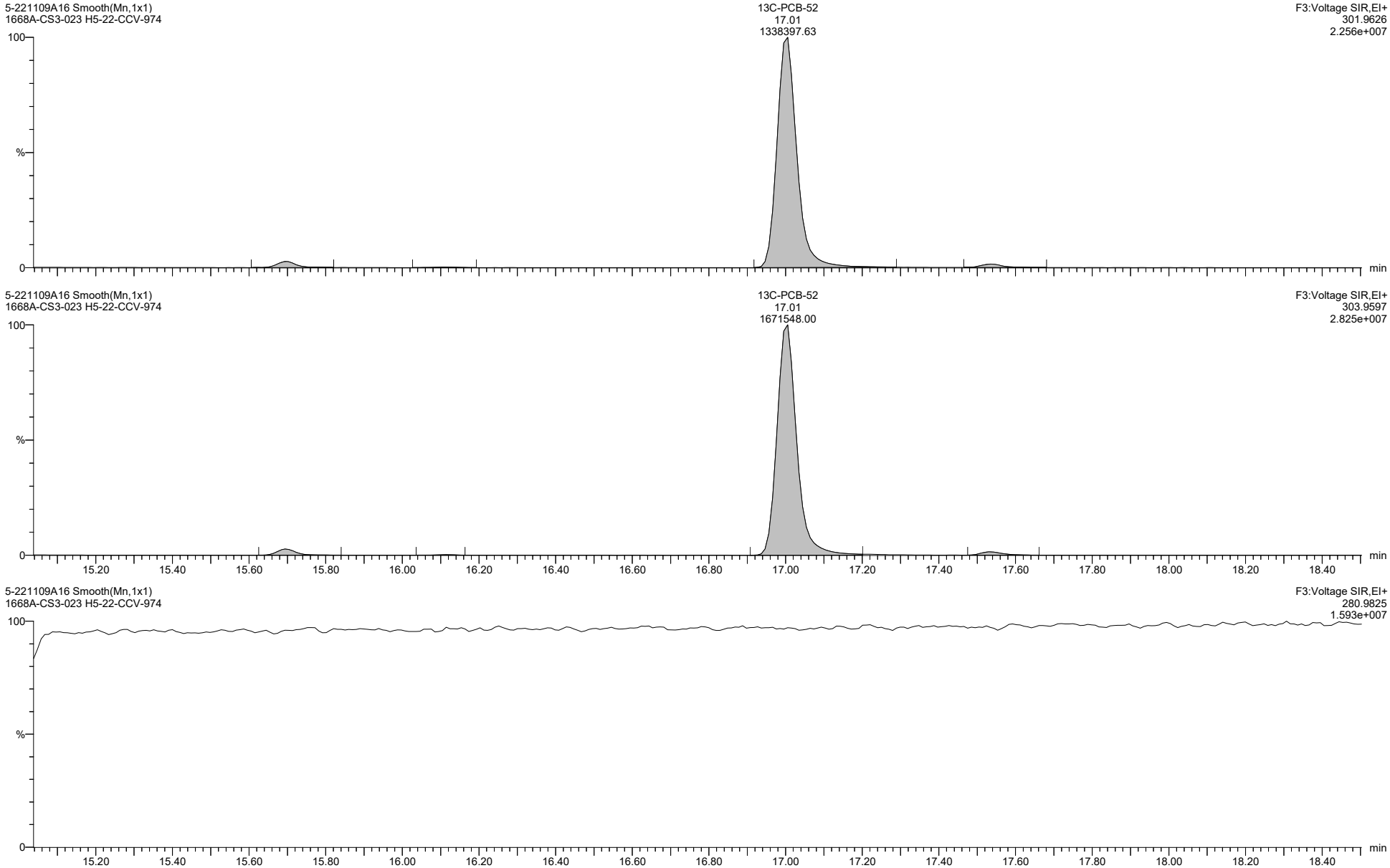


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Name: 5-221109A16, Date: 10-Nov-2022, Time: 02:27:36, ID: H5-22-CCV-974, Description: 1668A-CS3-023, Vial: Tray1:1

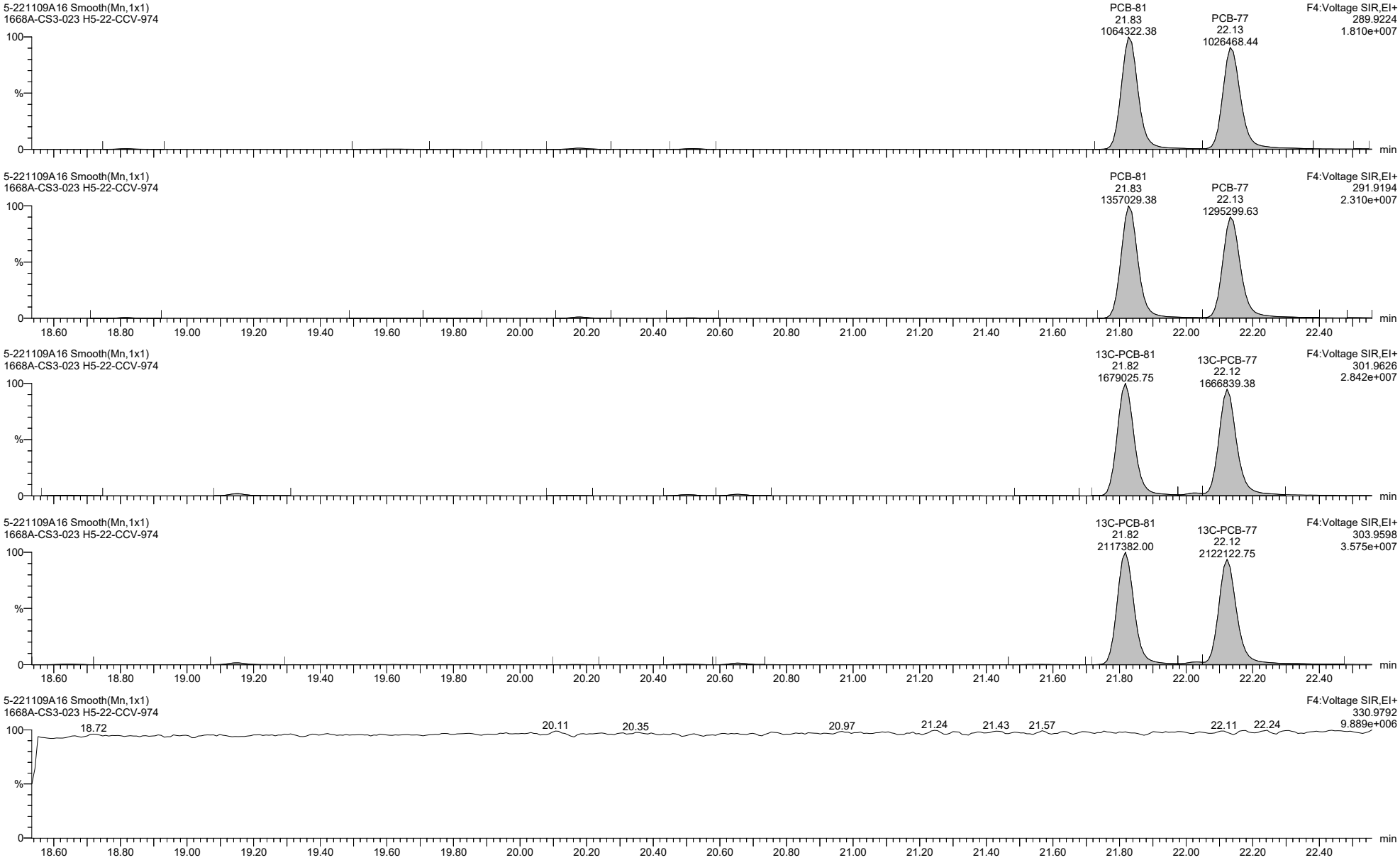


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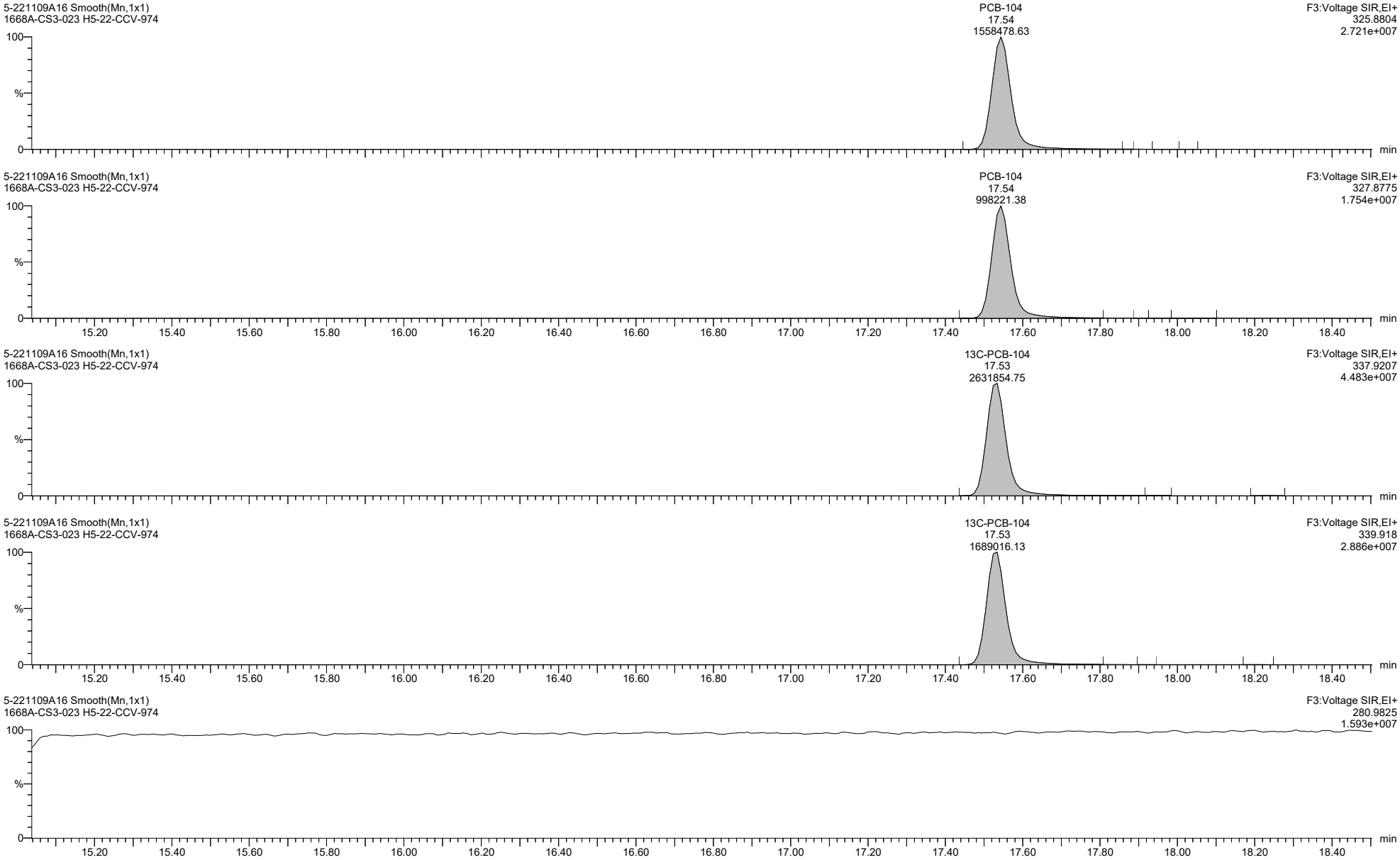
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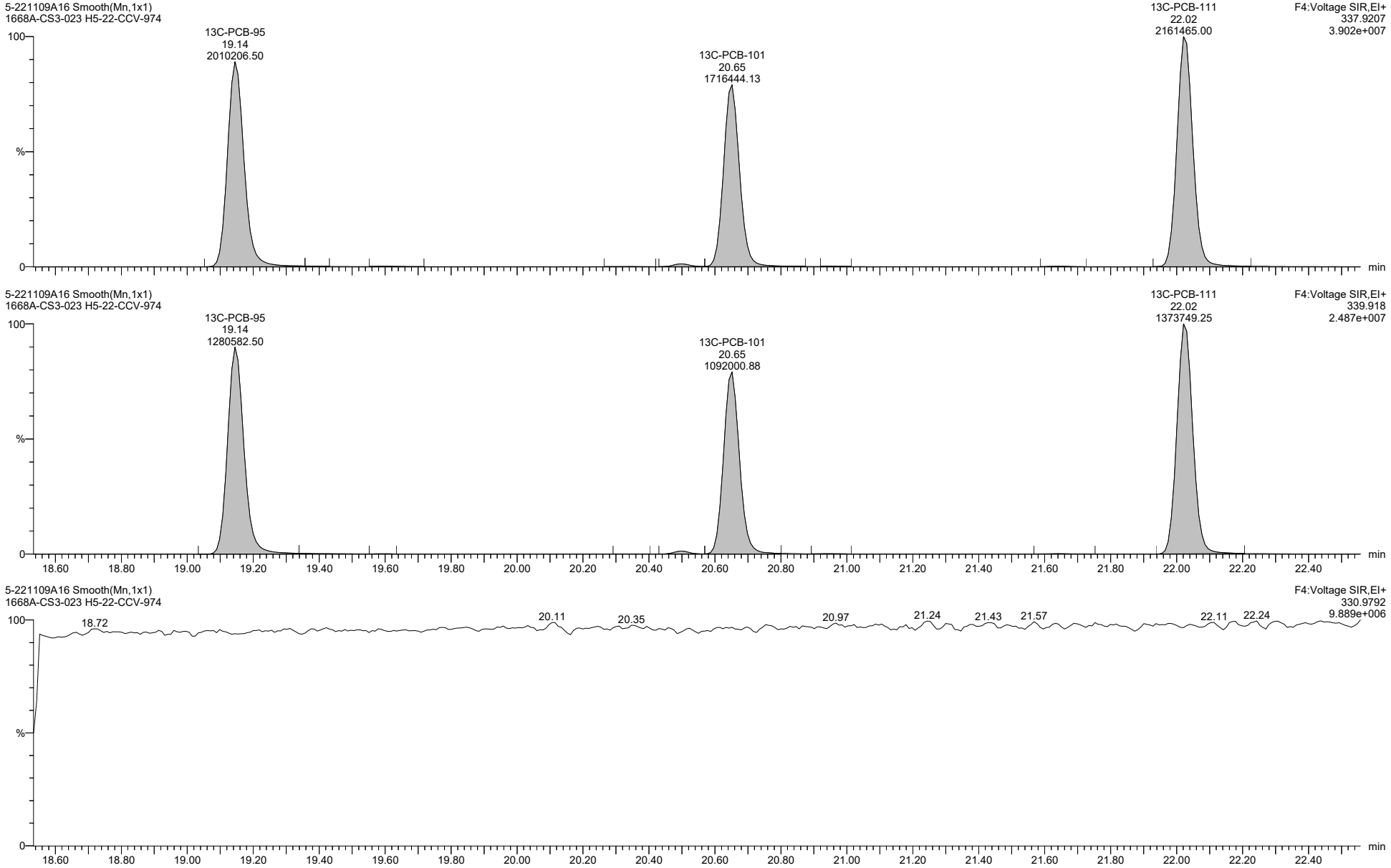
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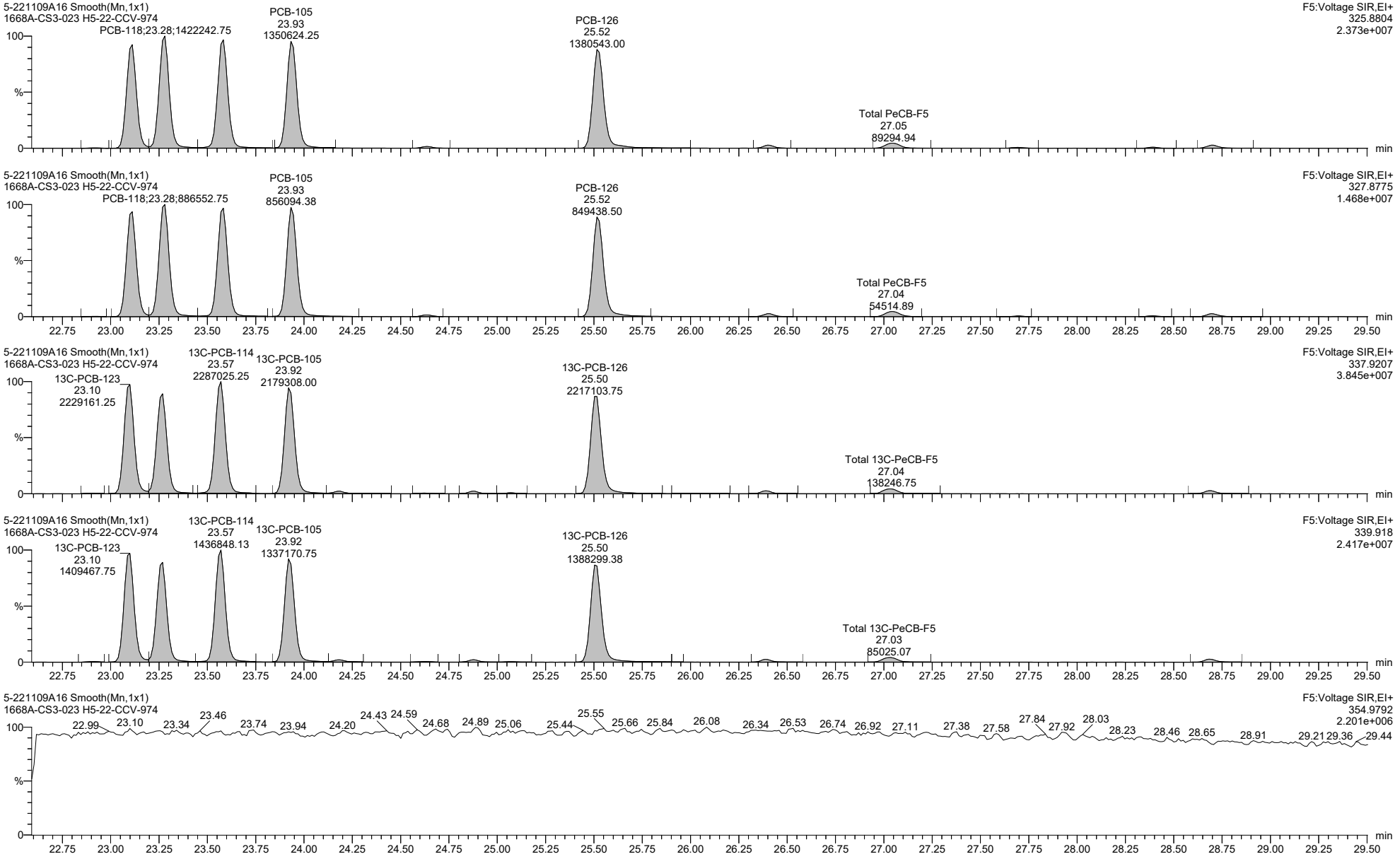


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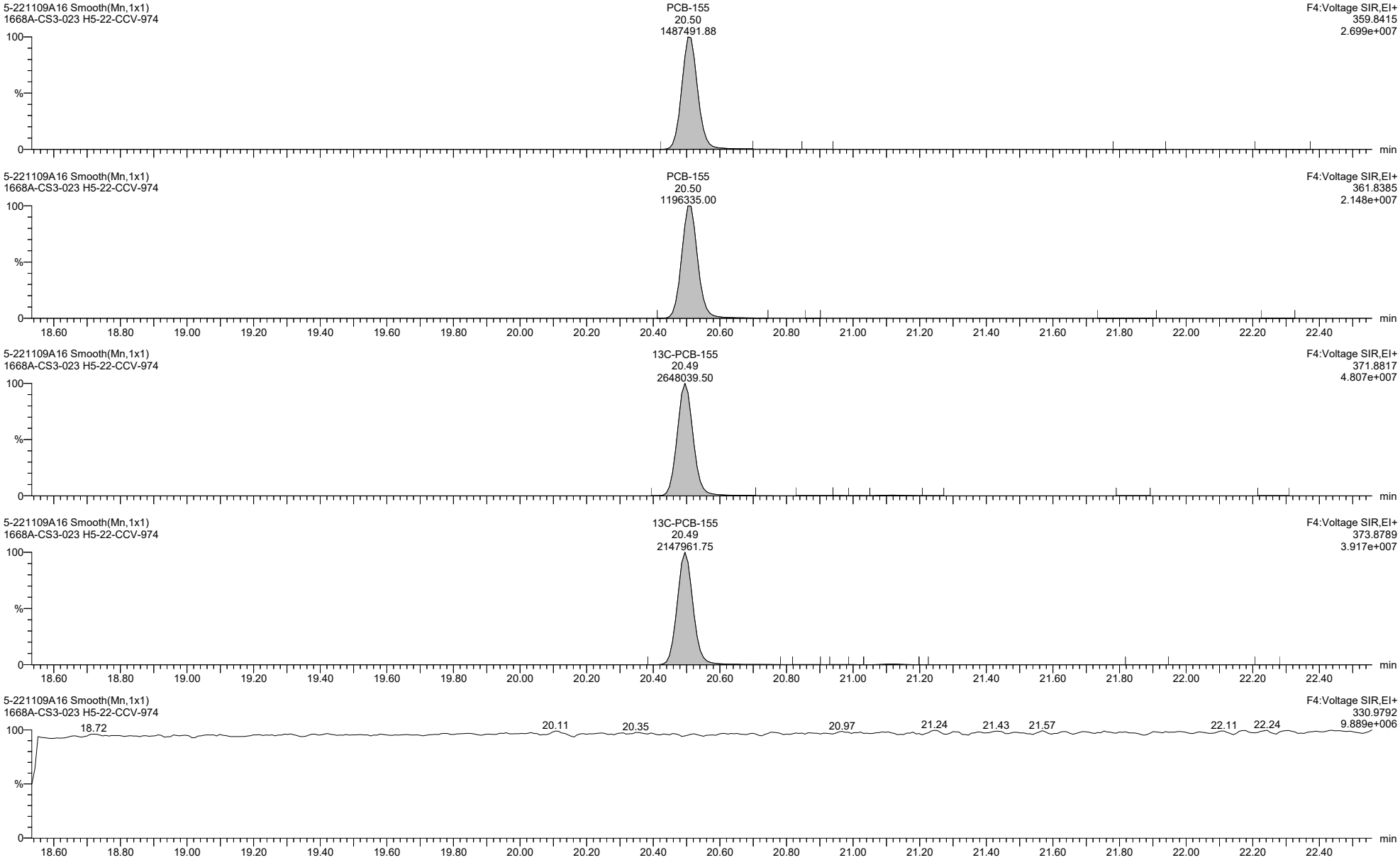


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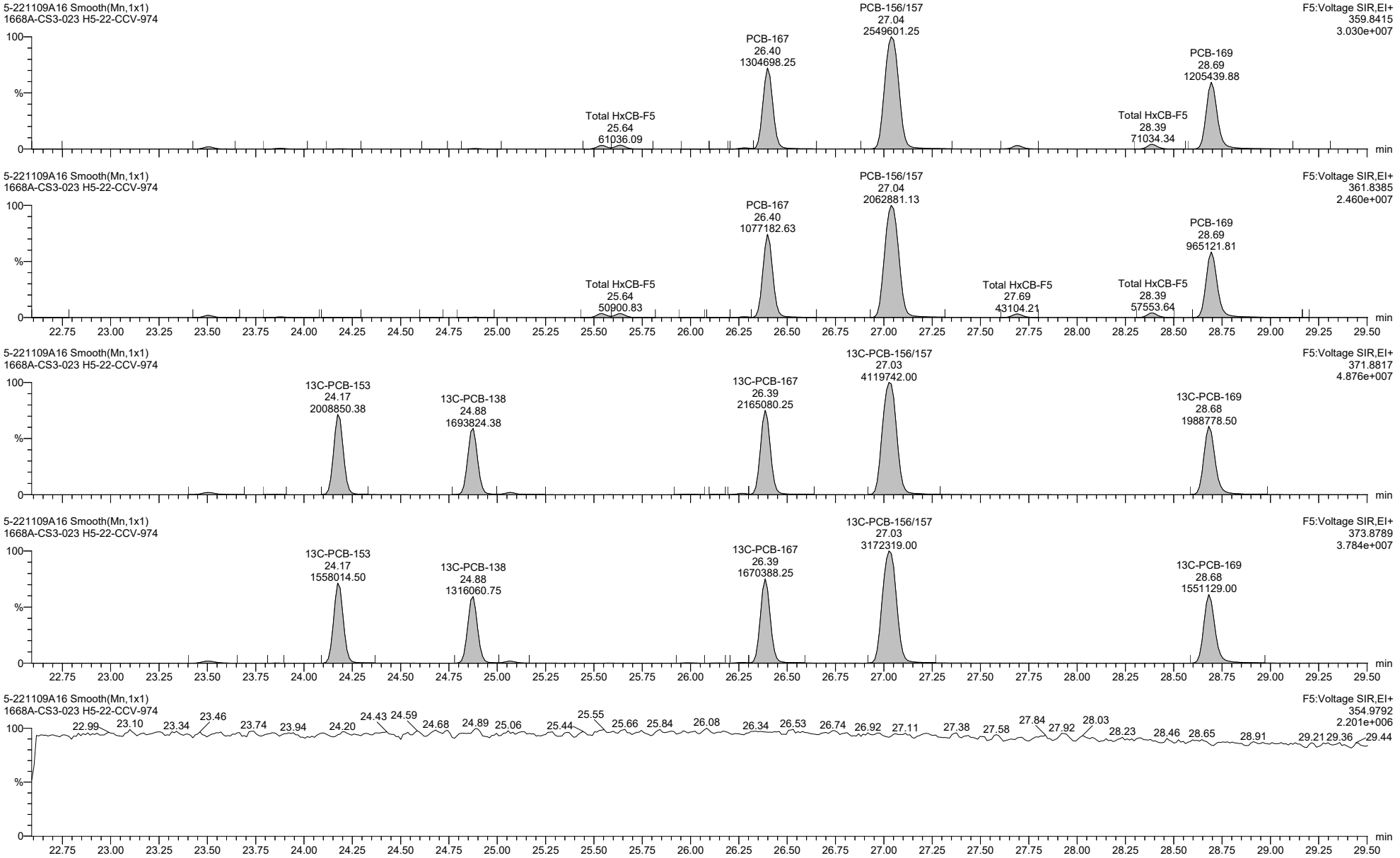
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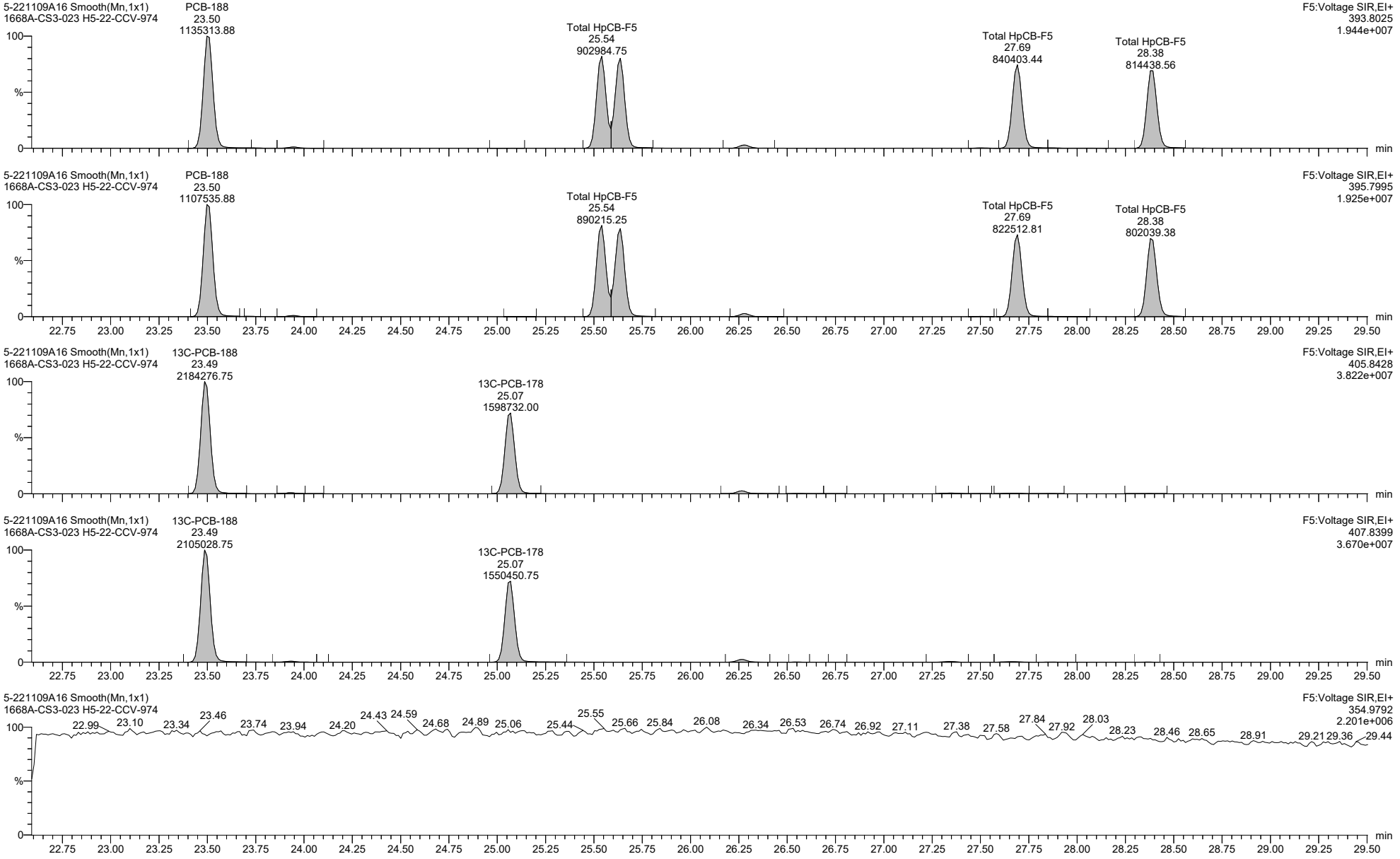


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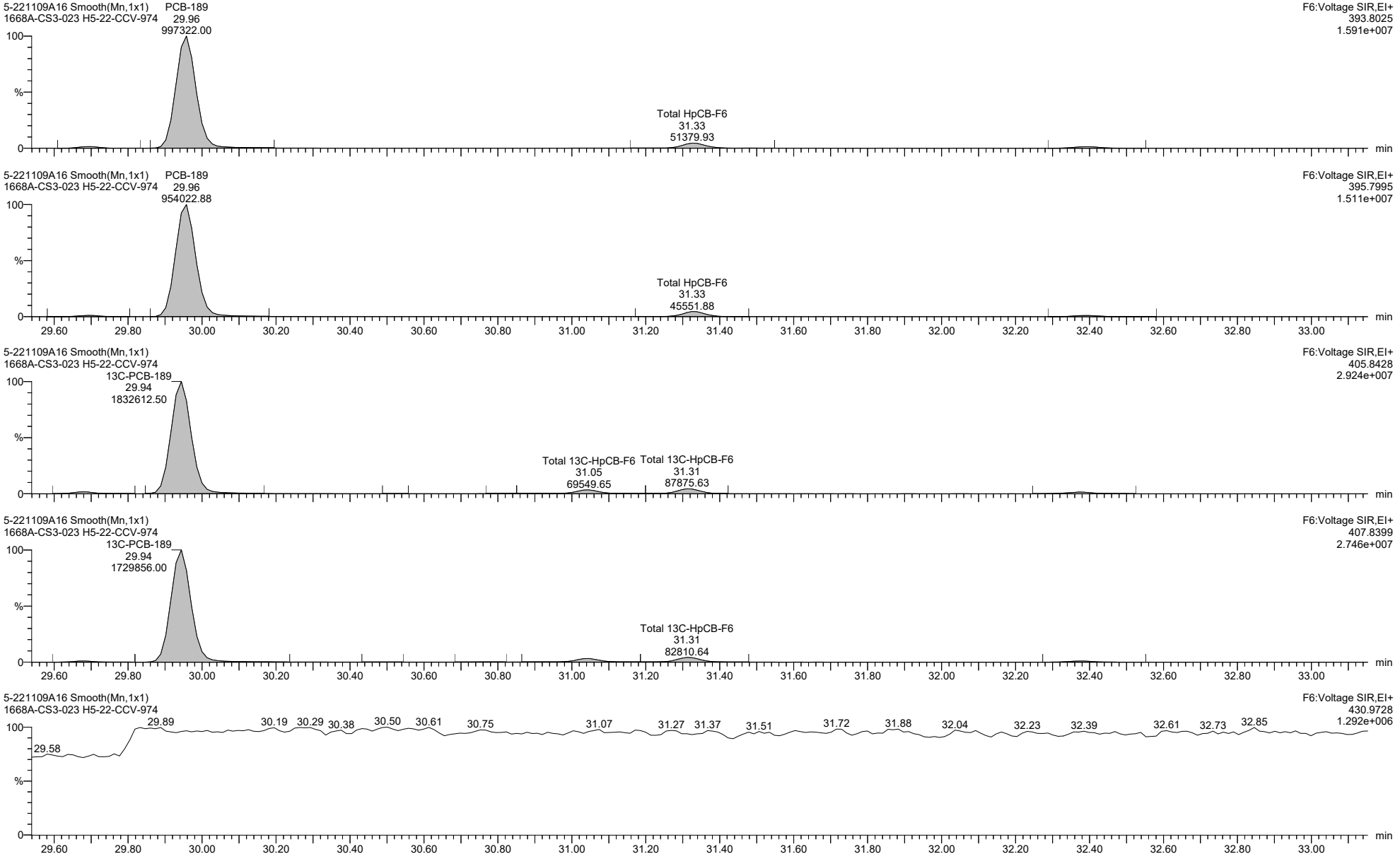
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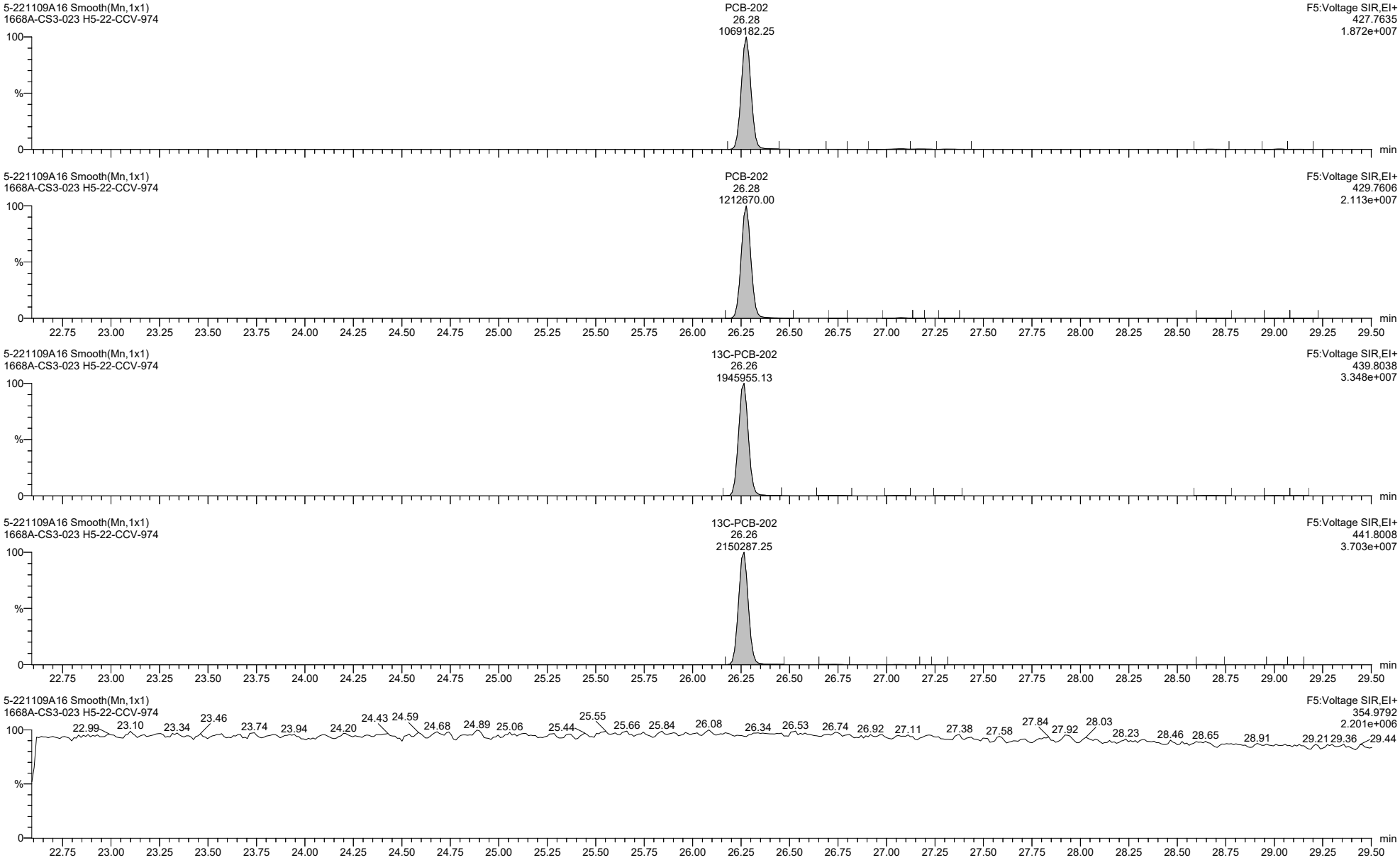


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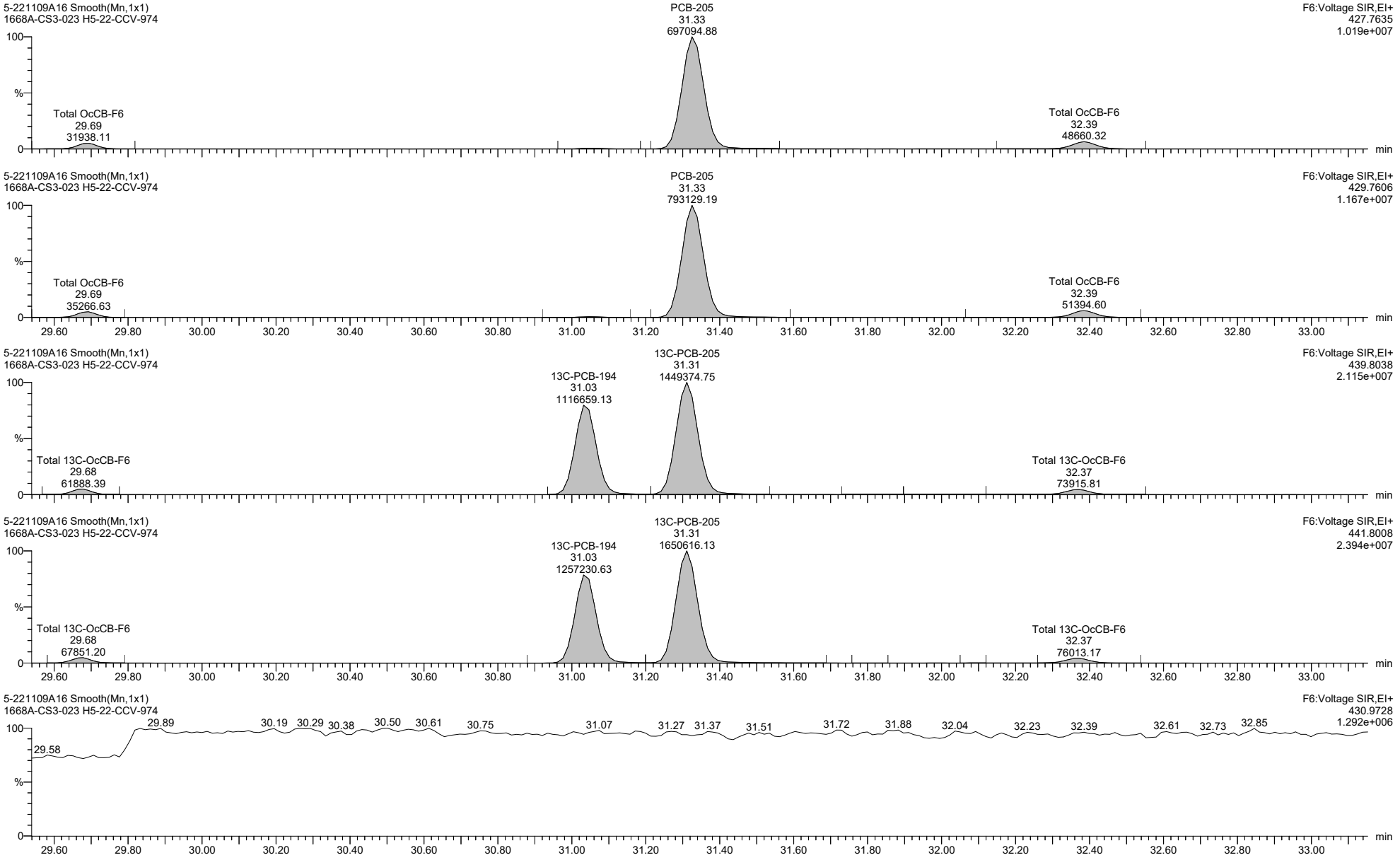


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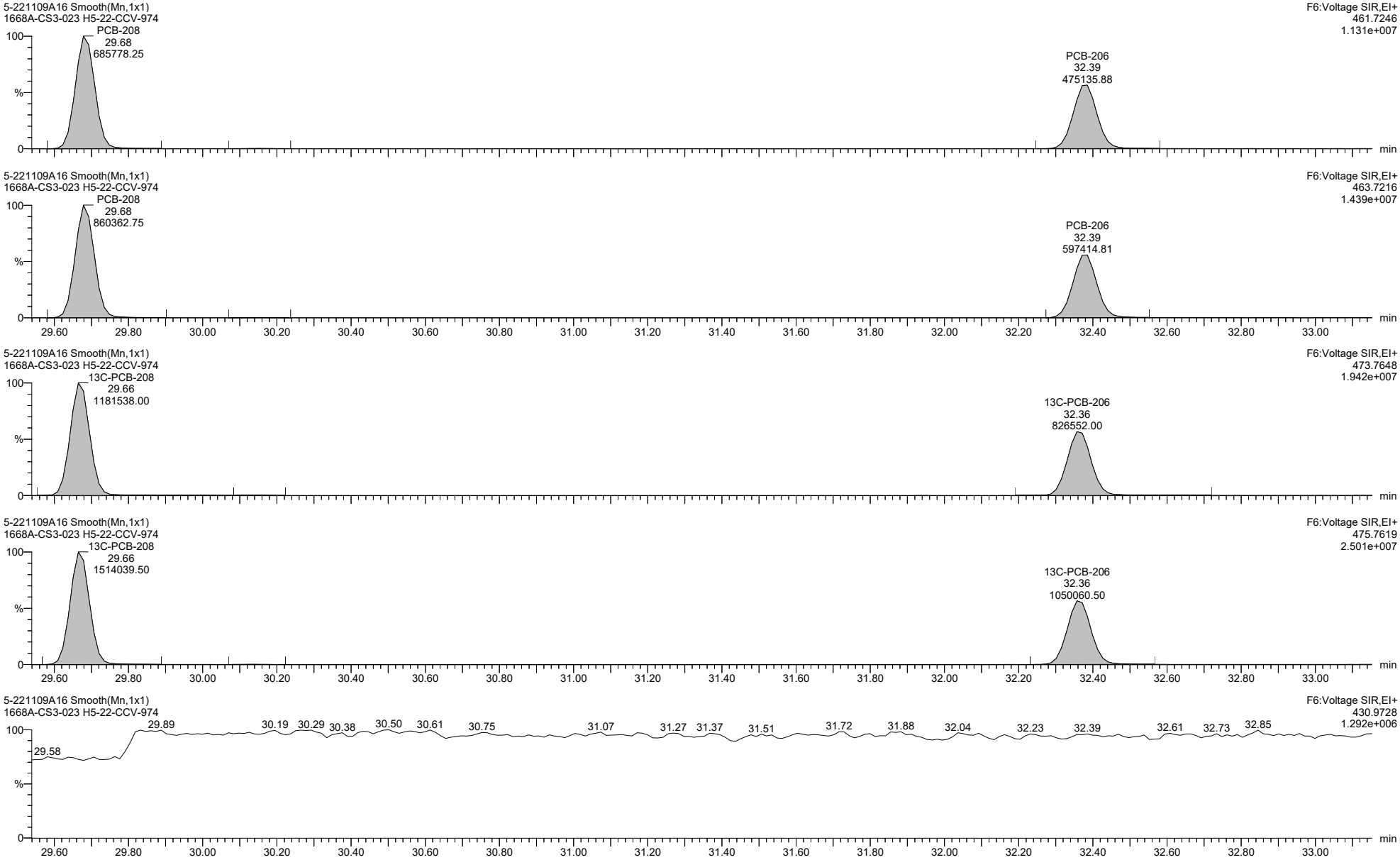


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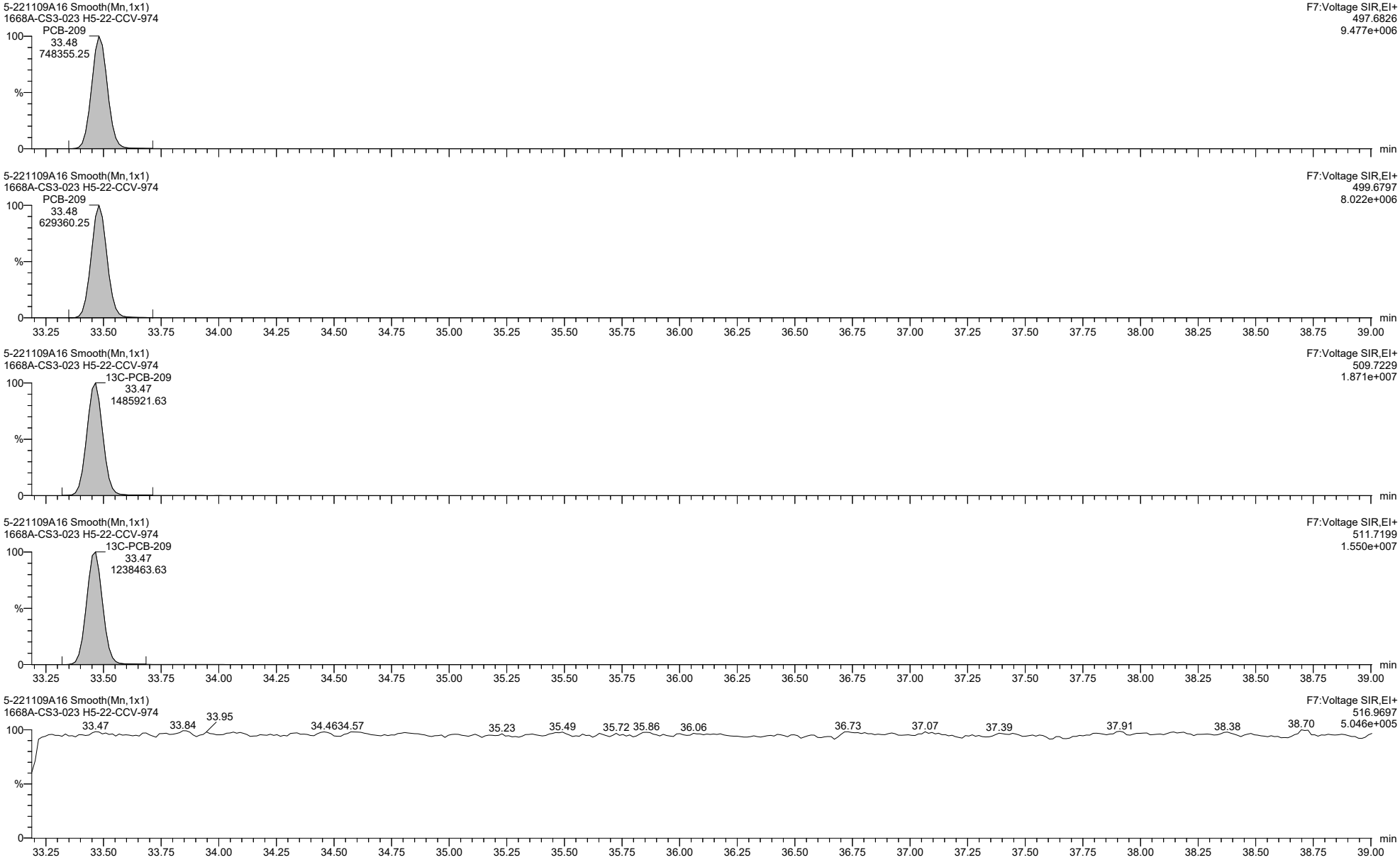


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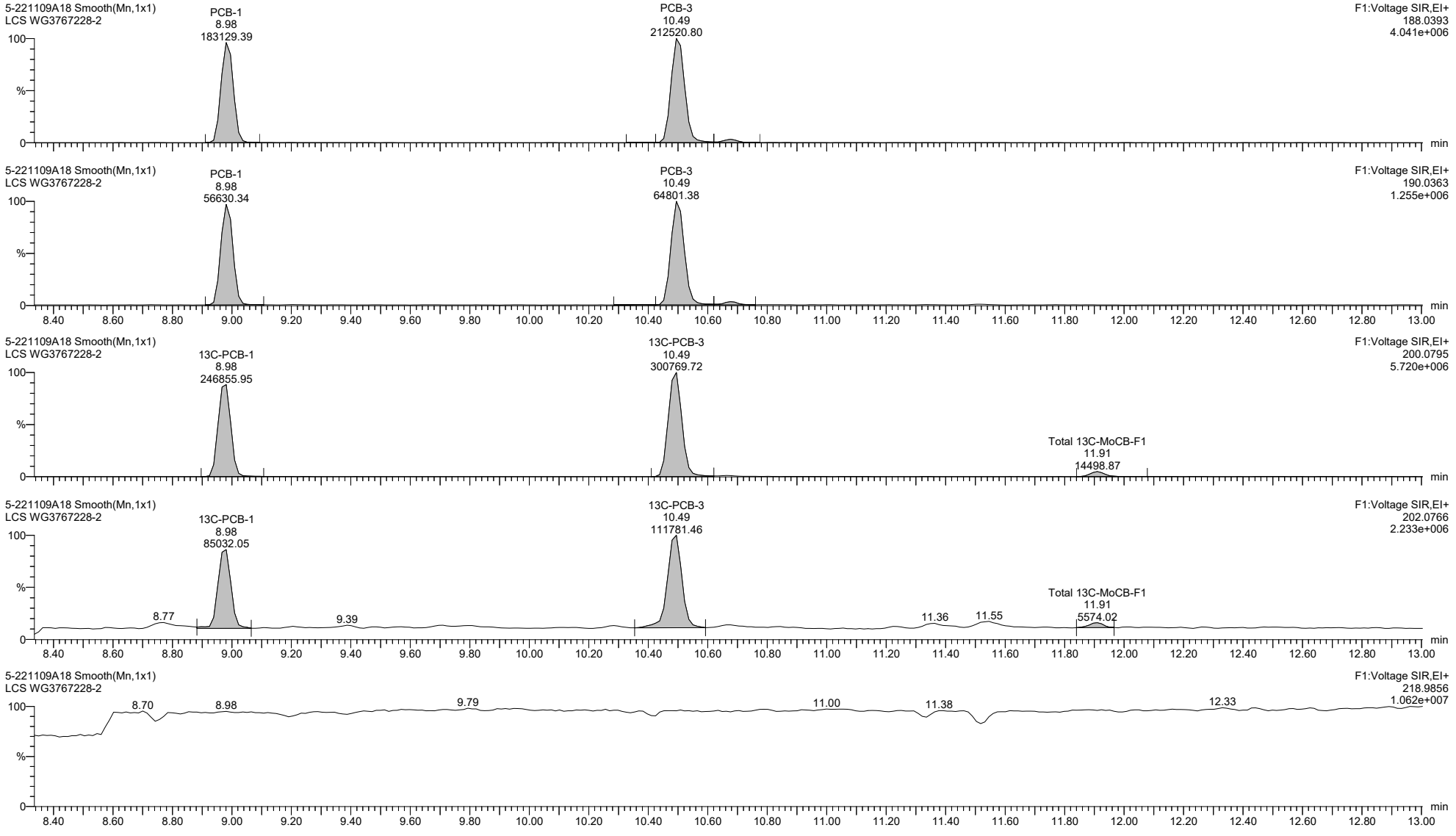
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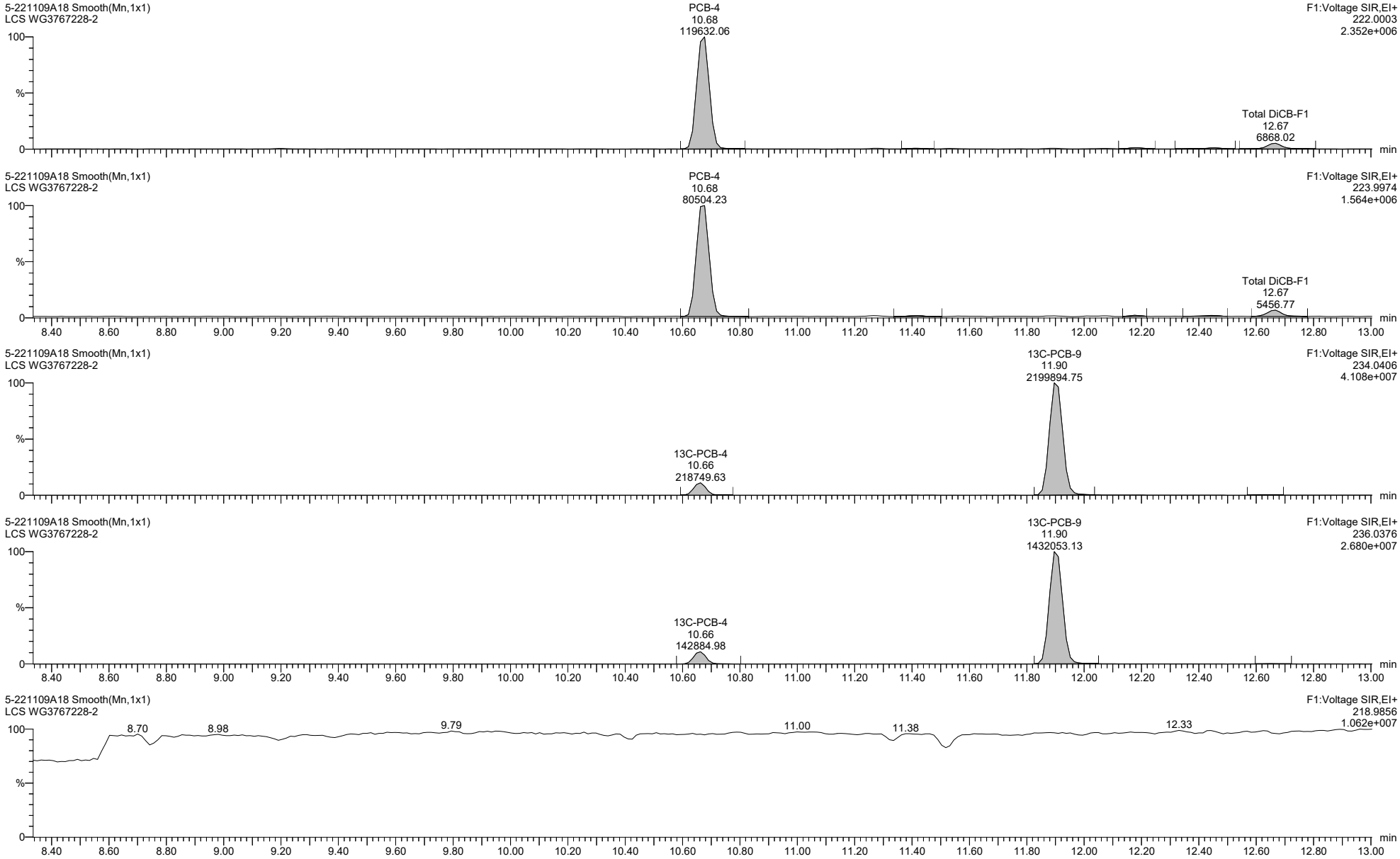


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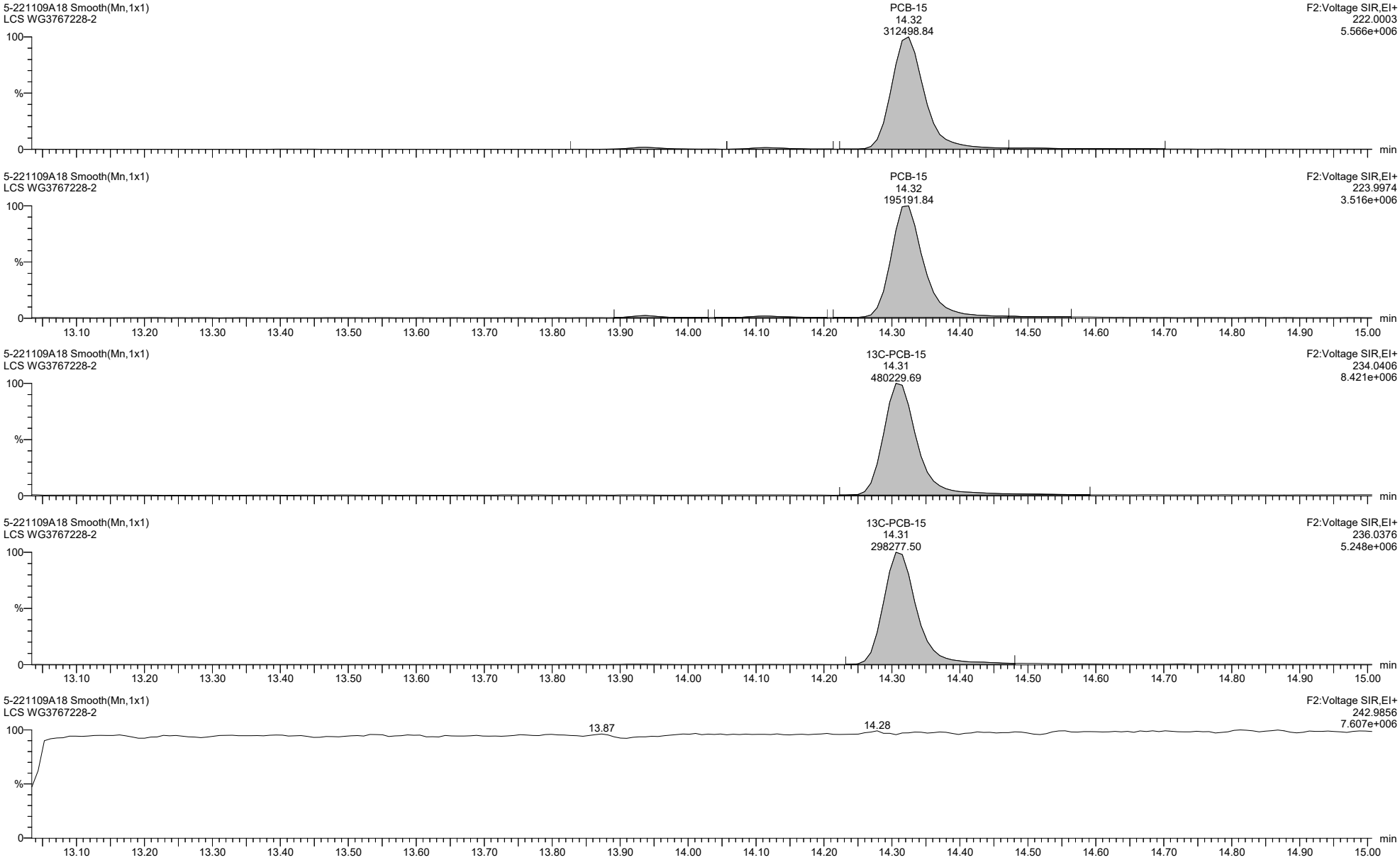


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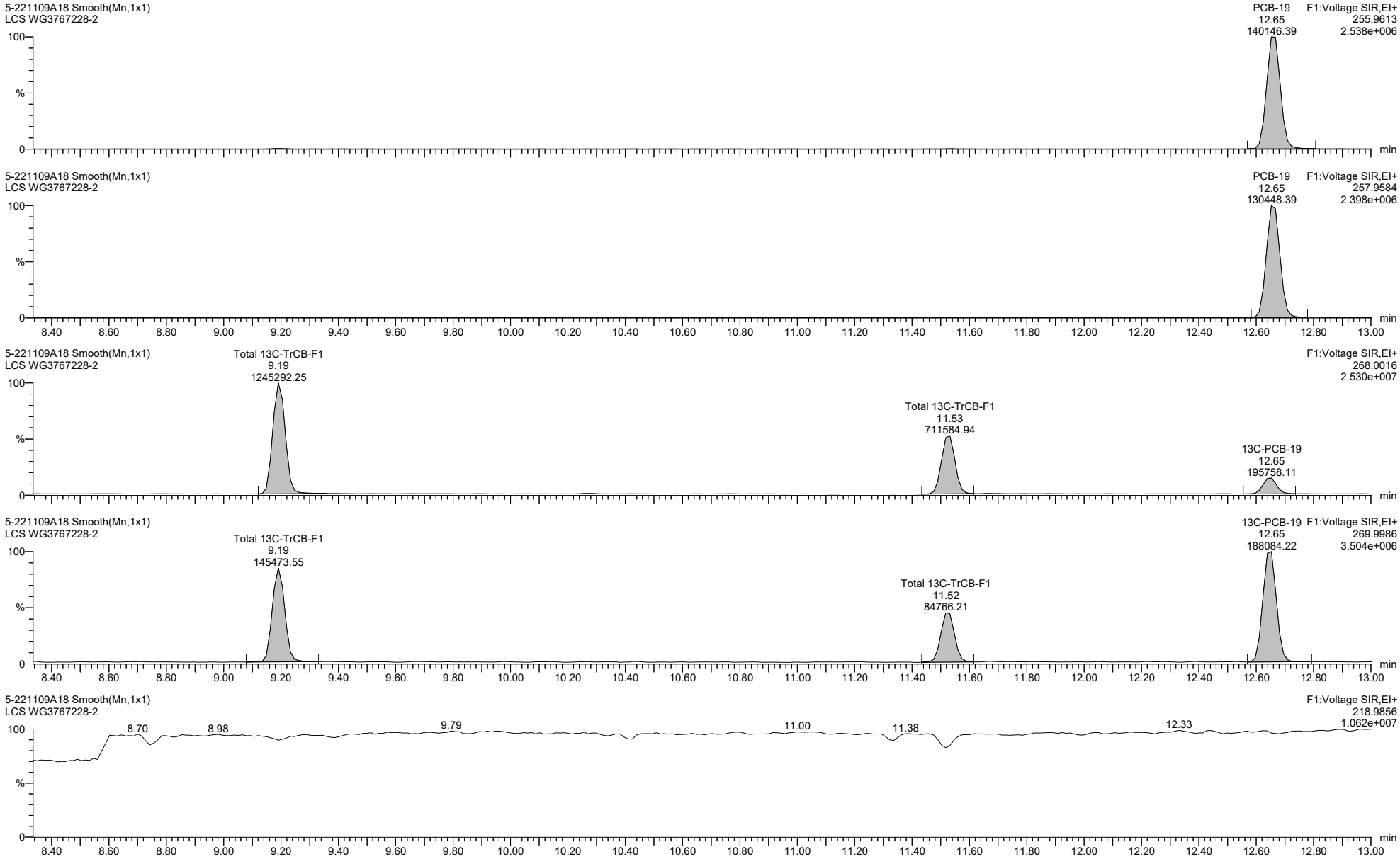


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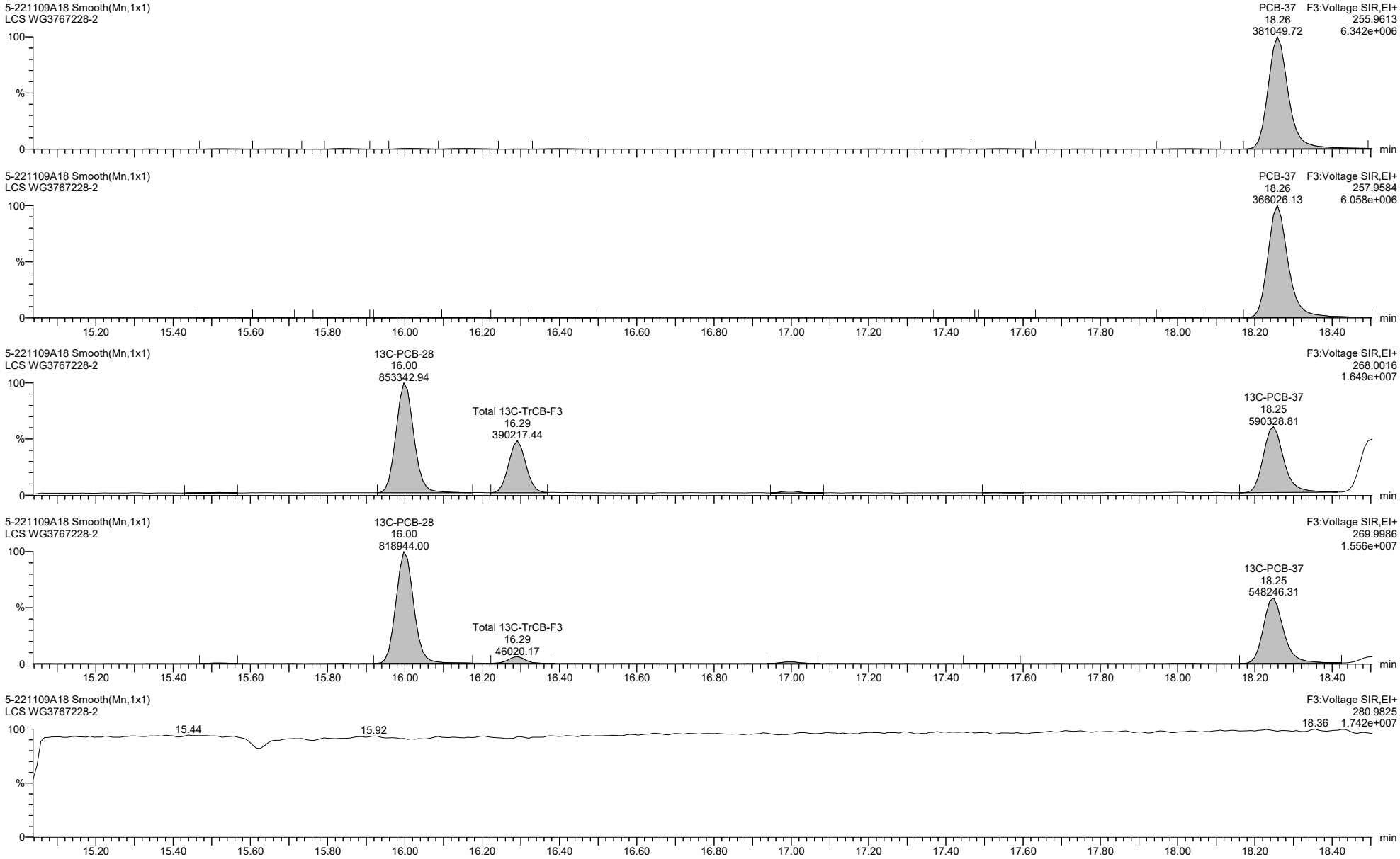


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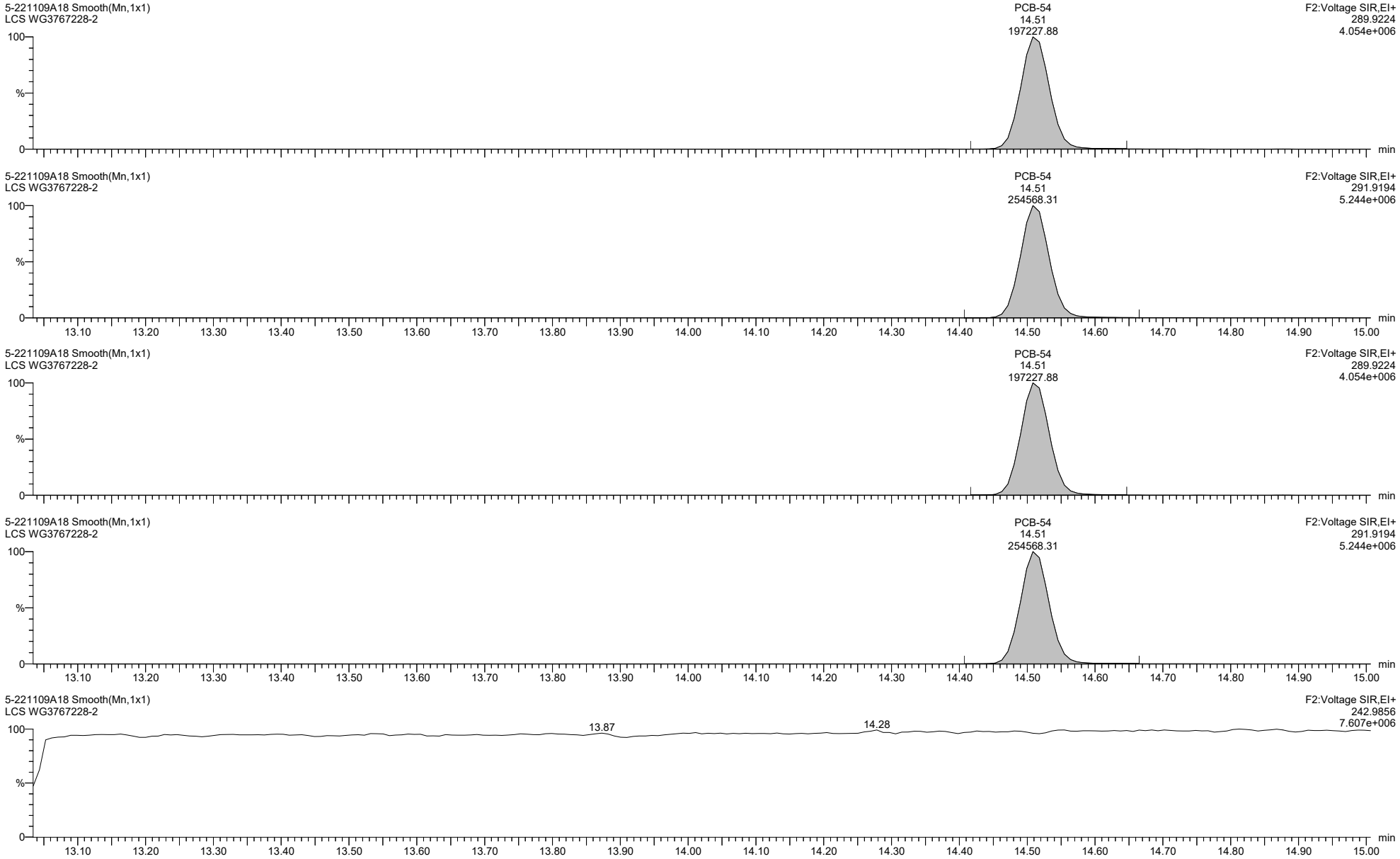


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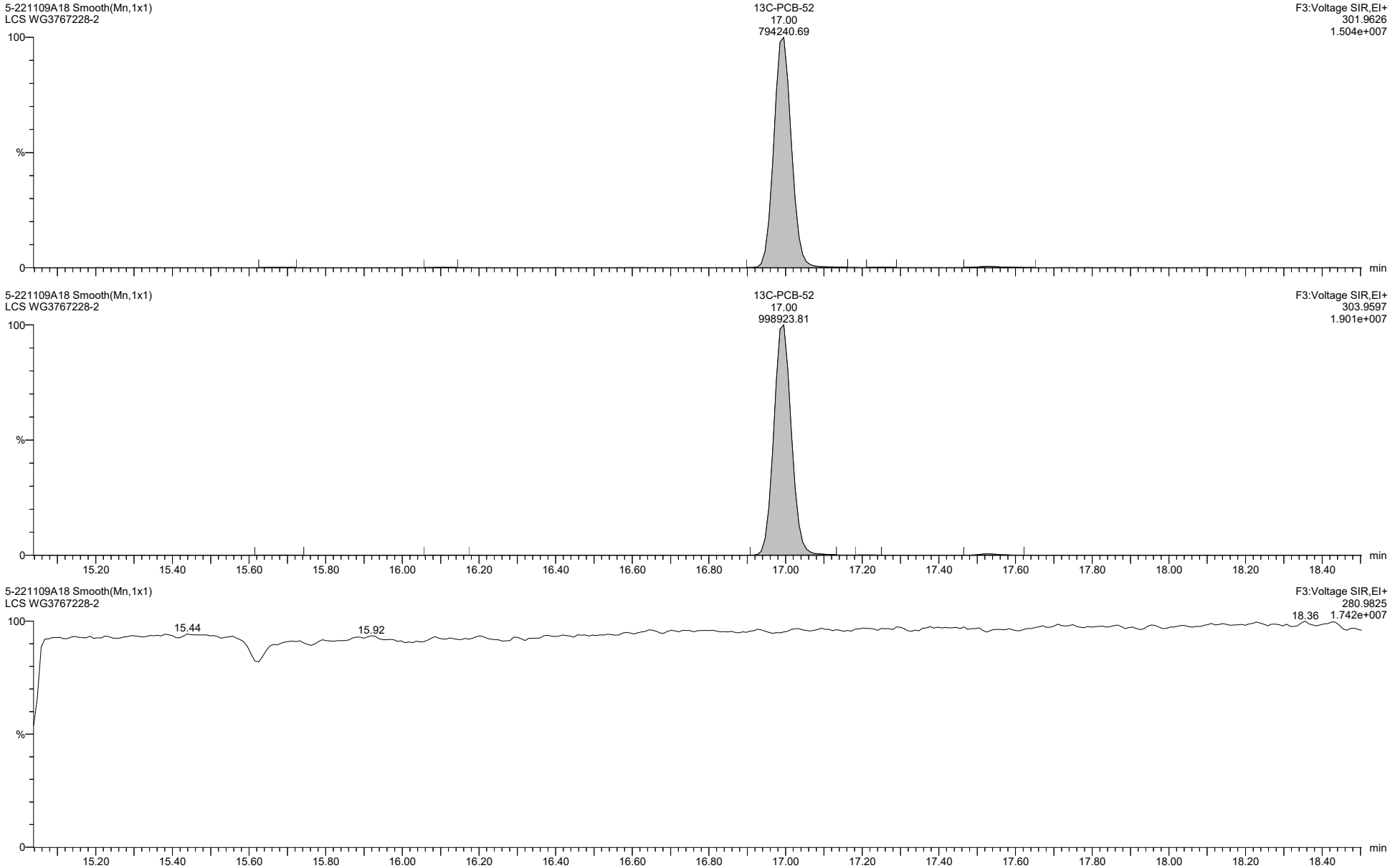


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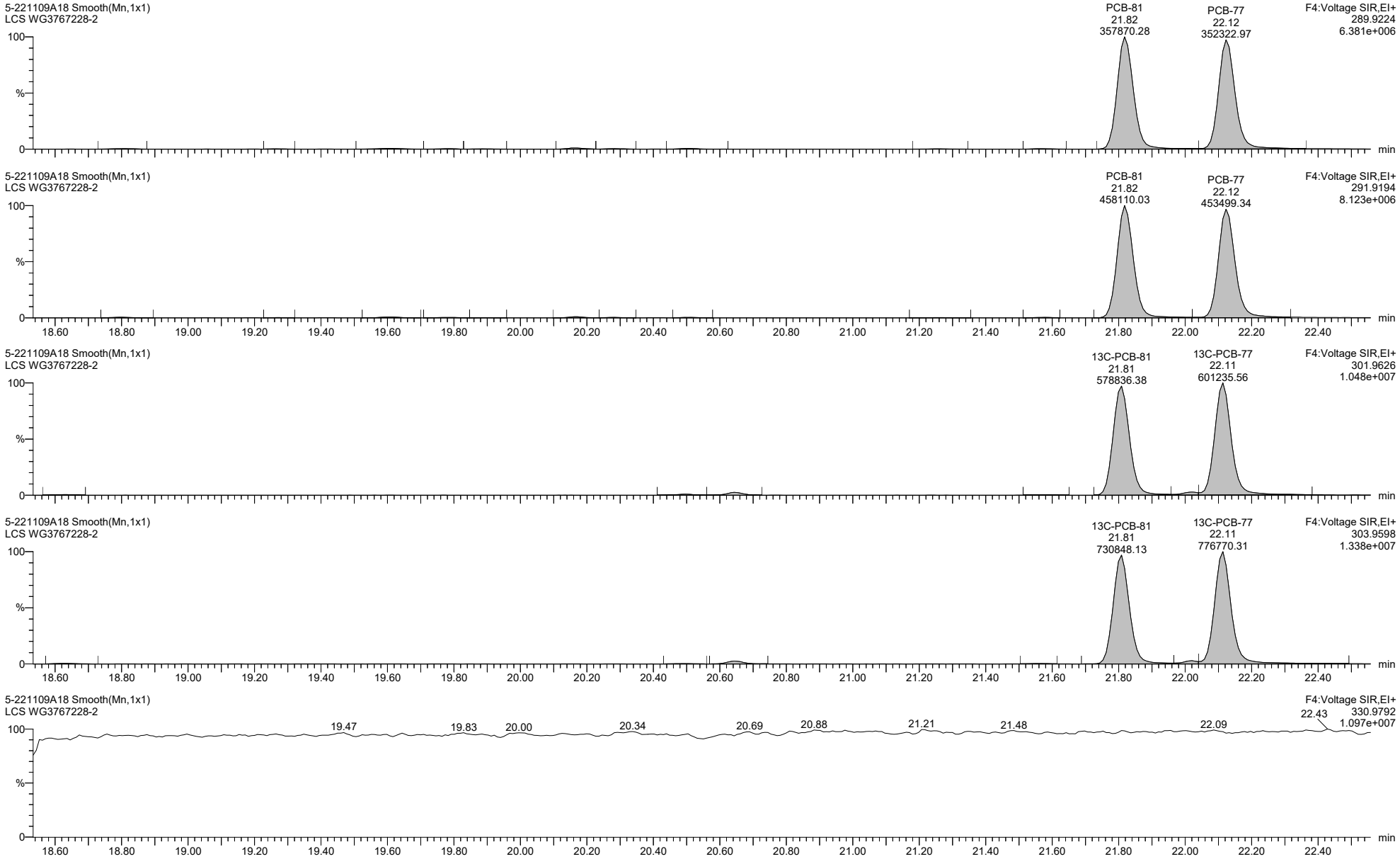


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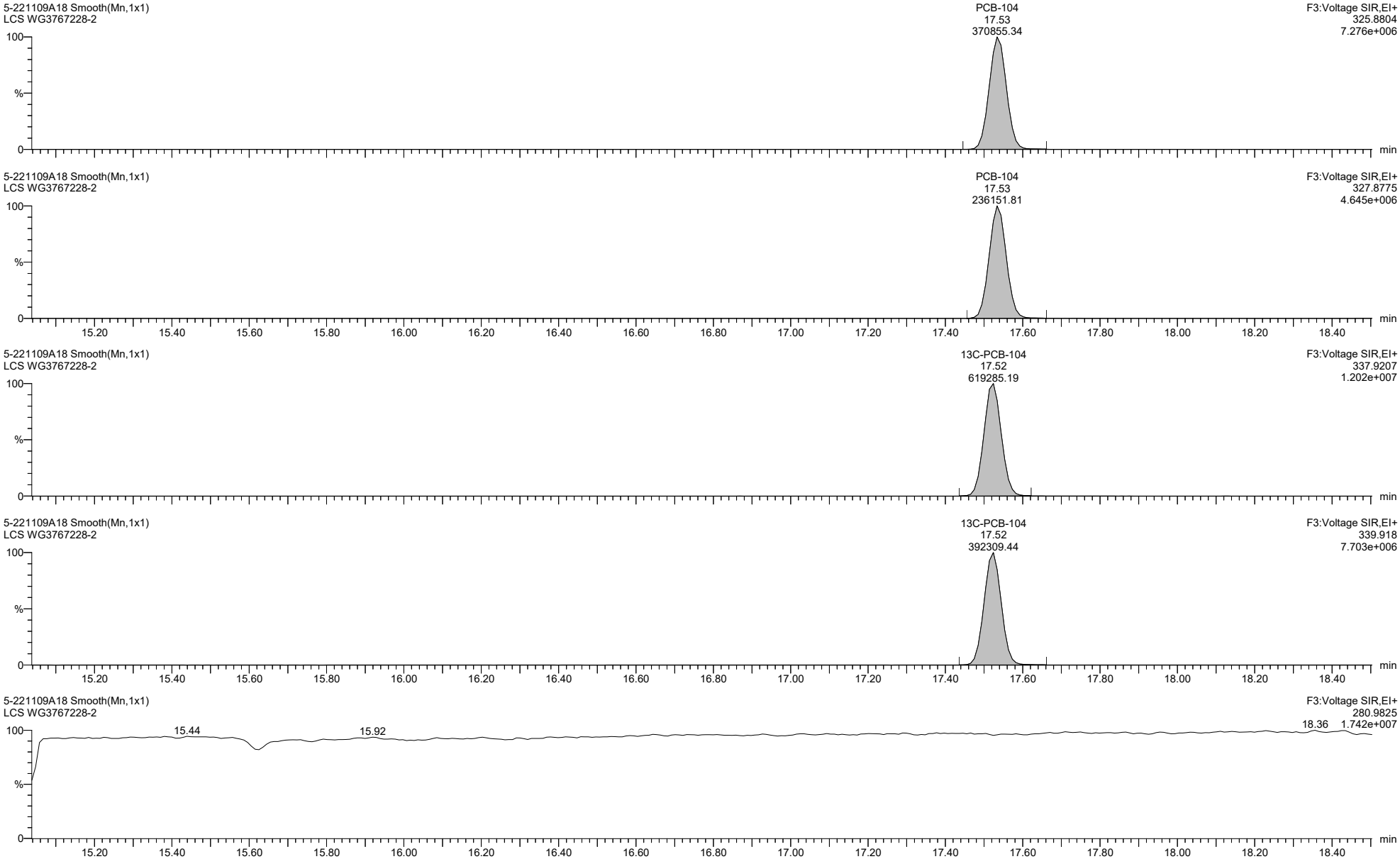


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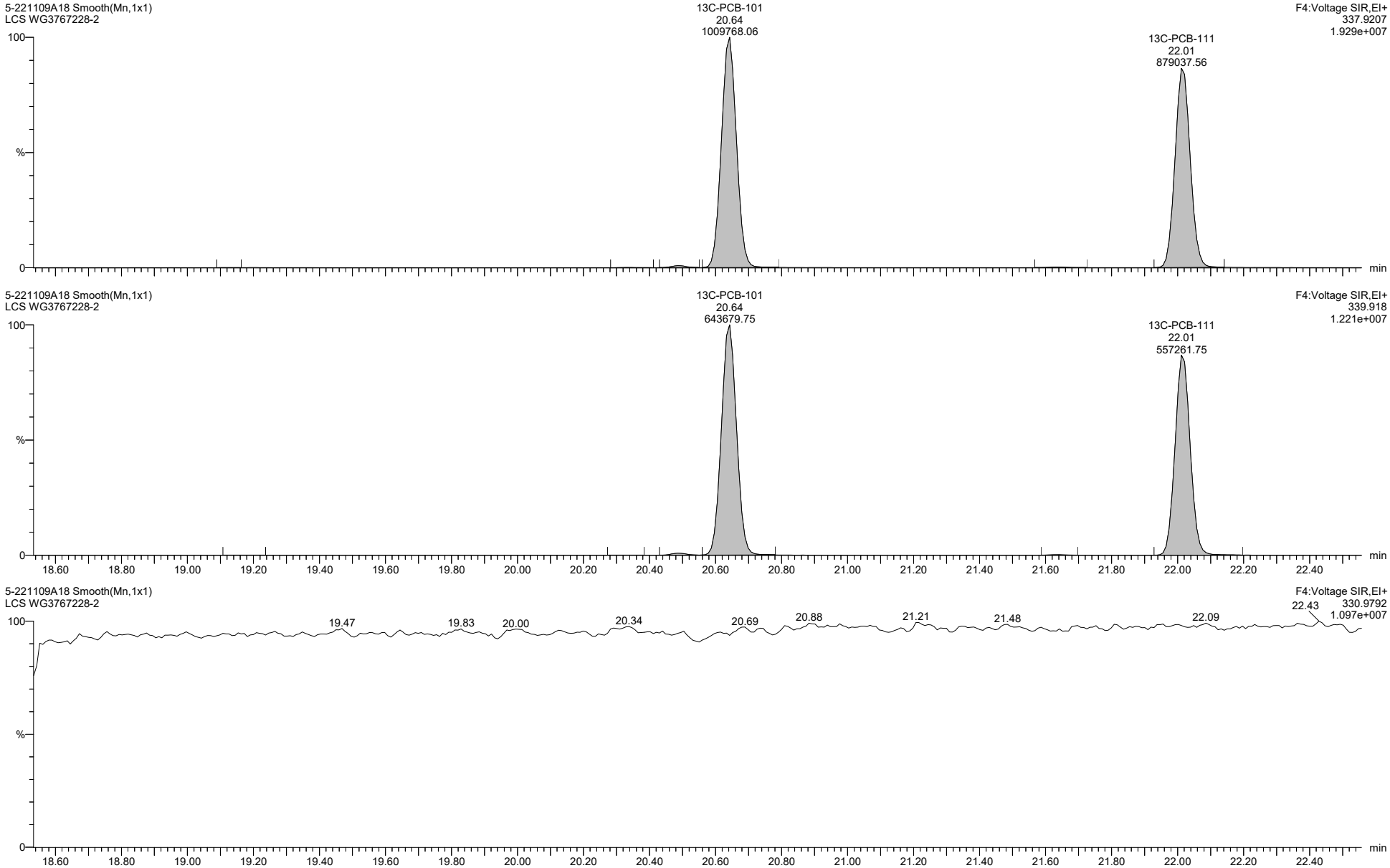


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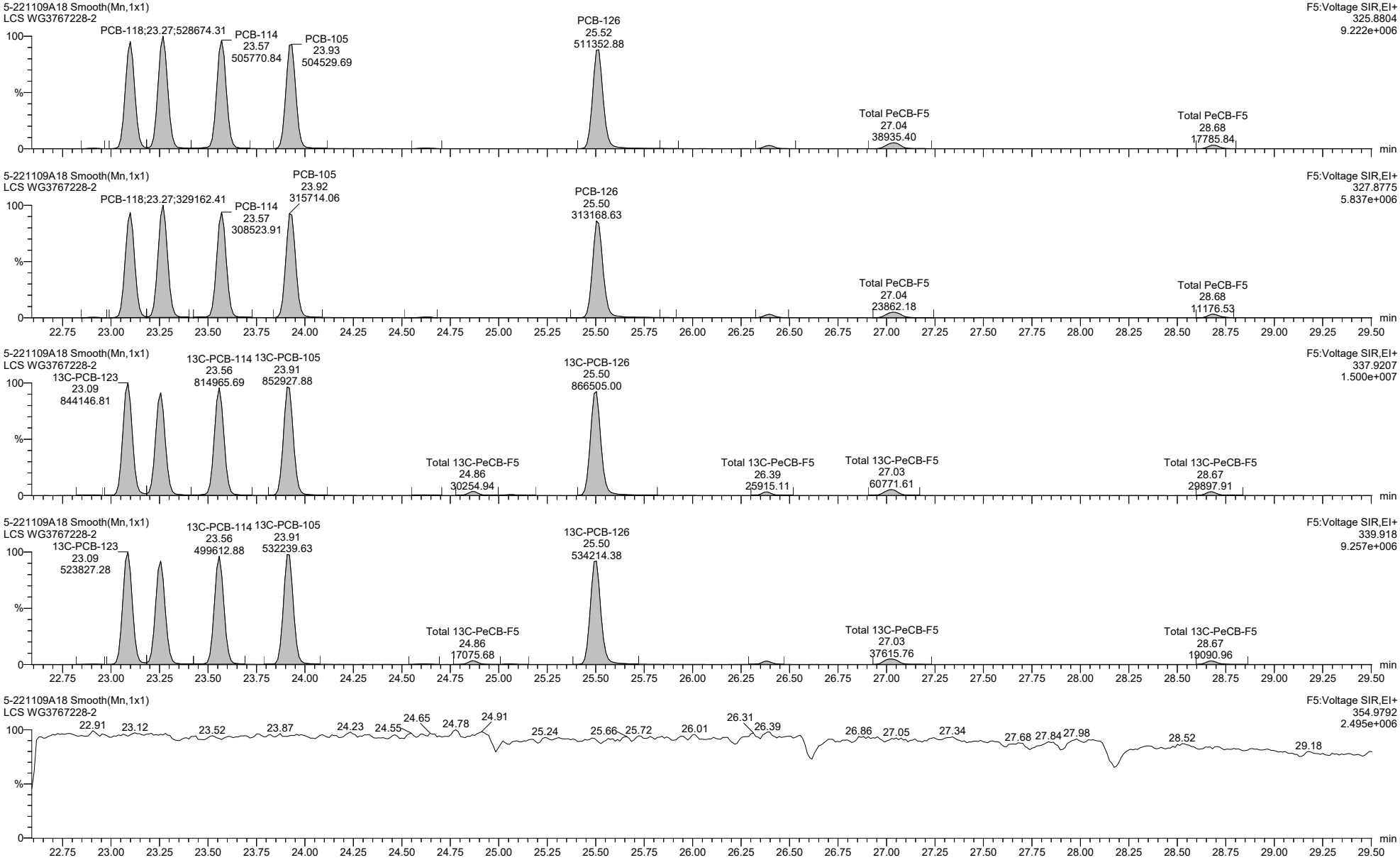


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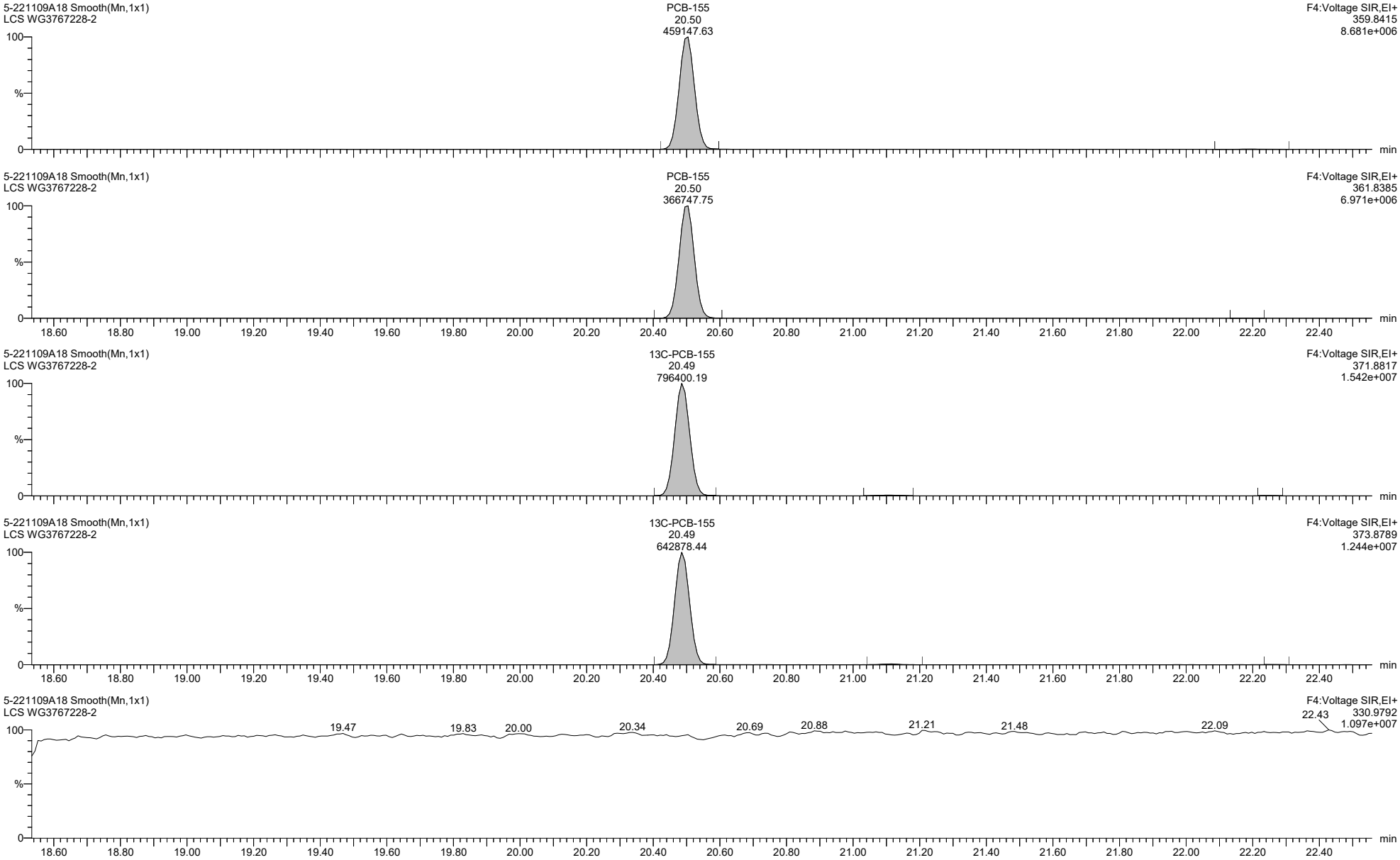


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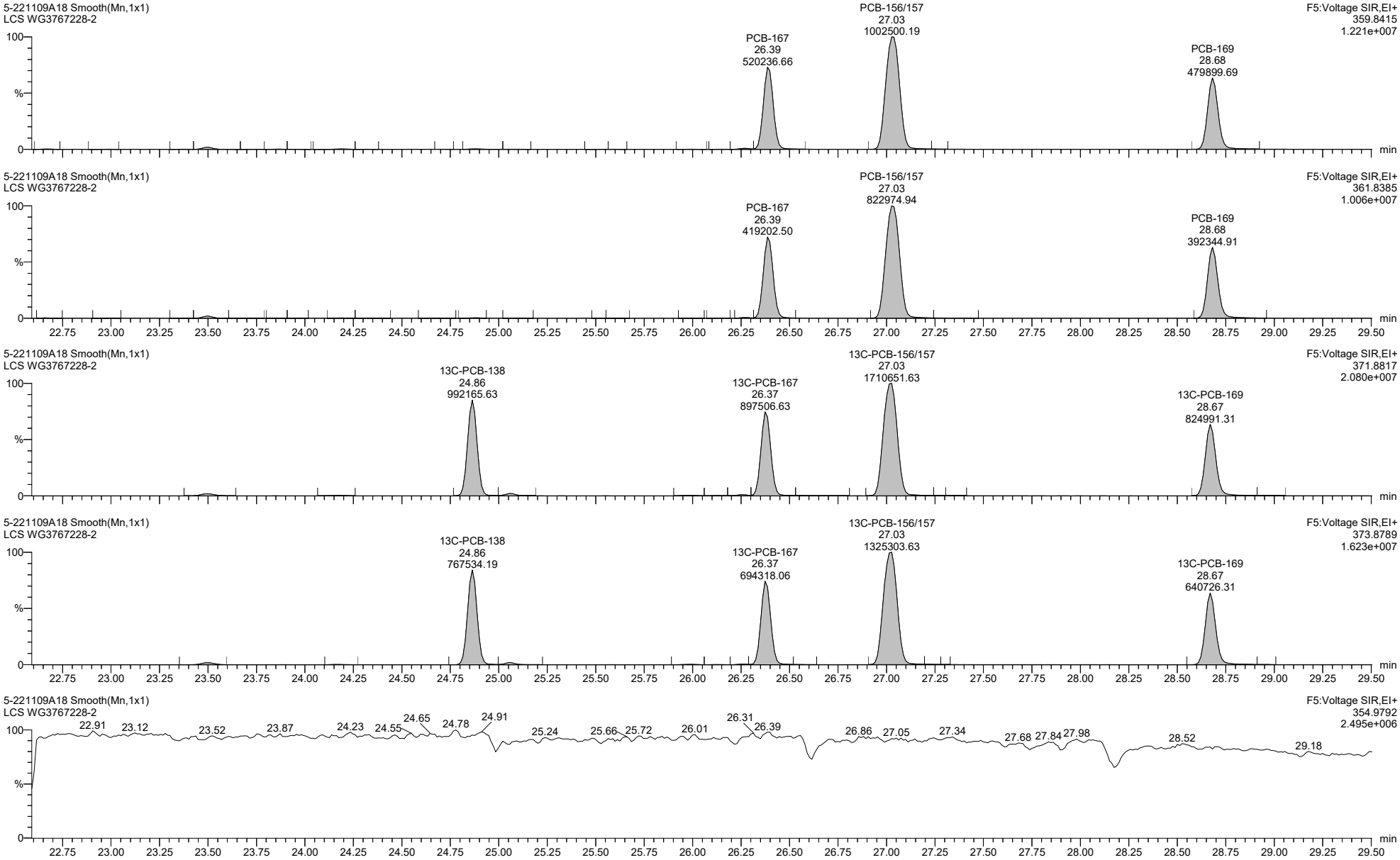


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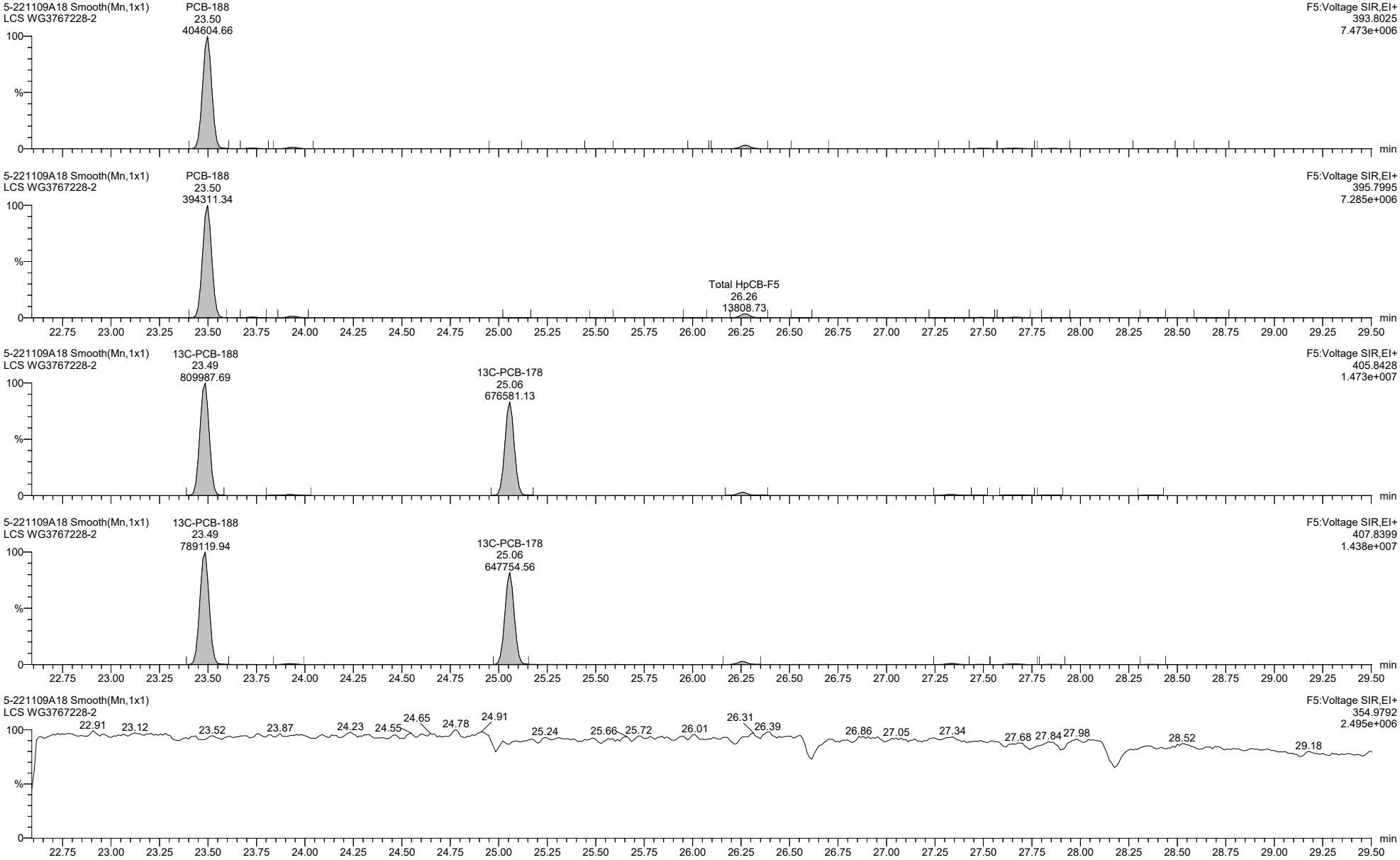


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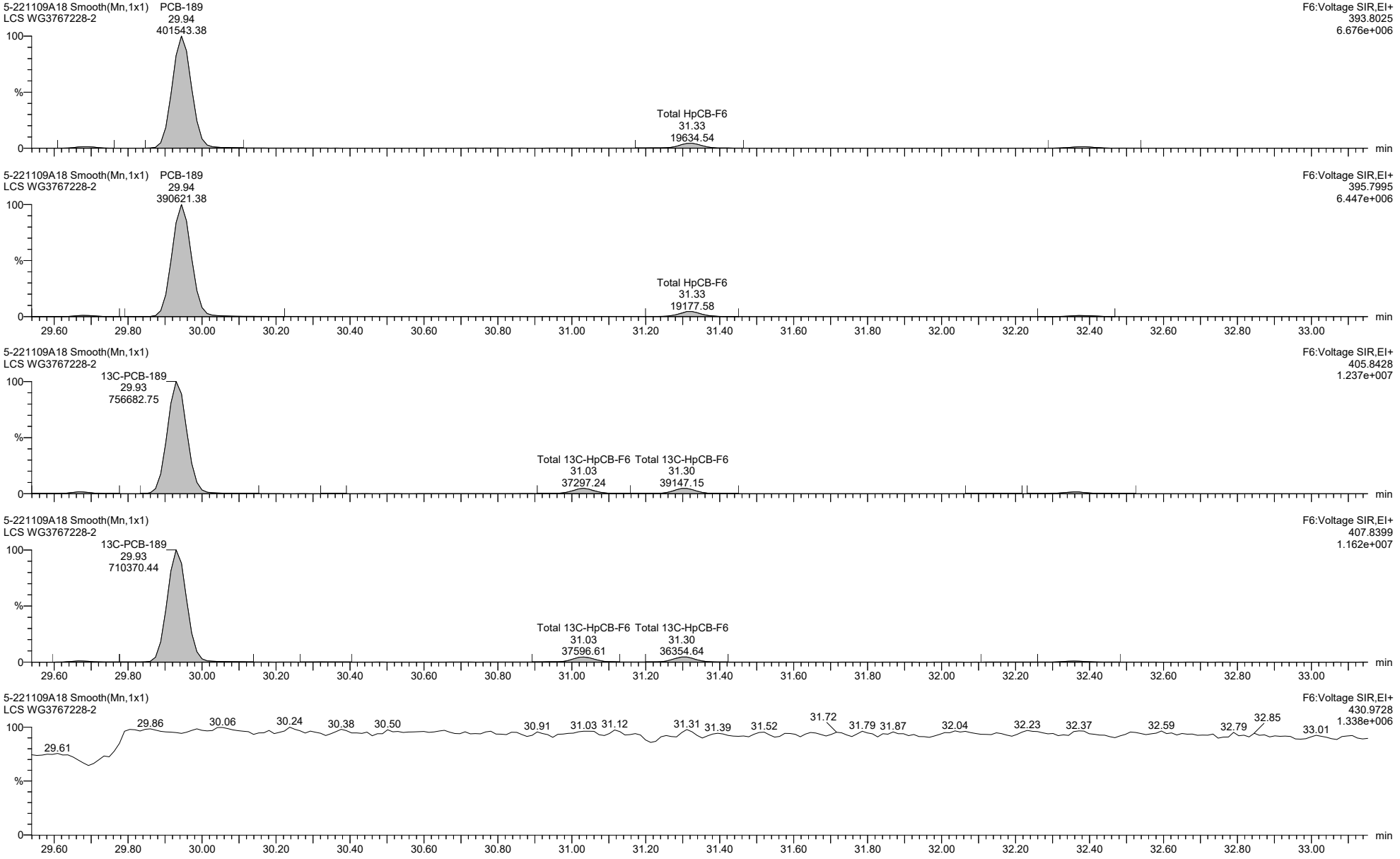


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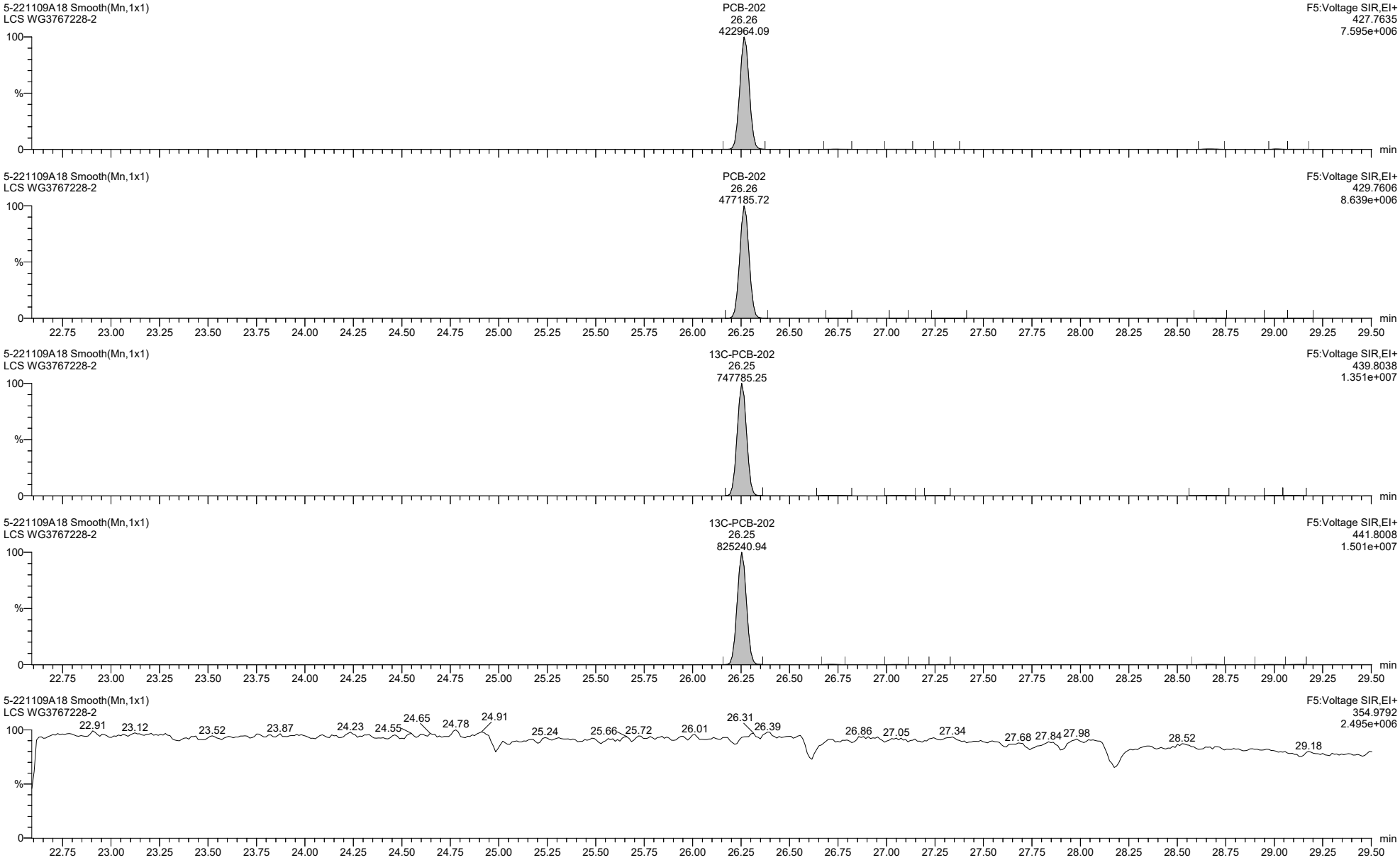


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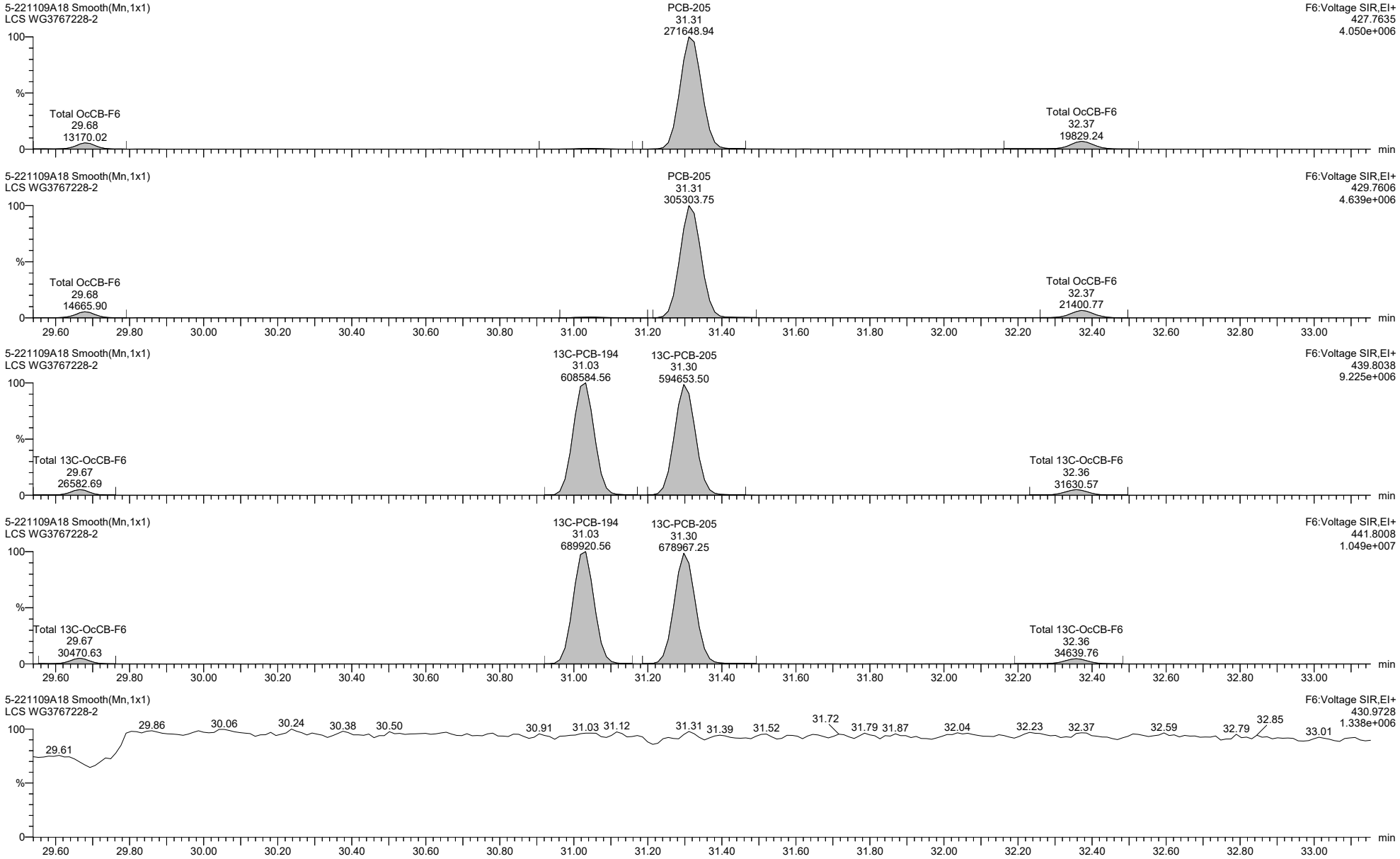


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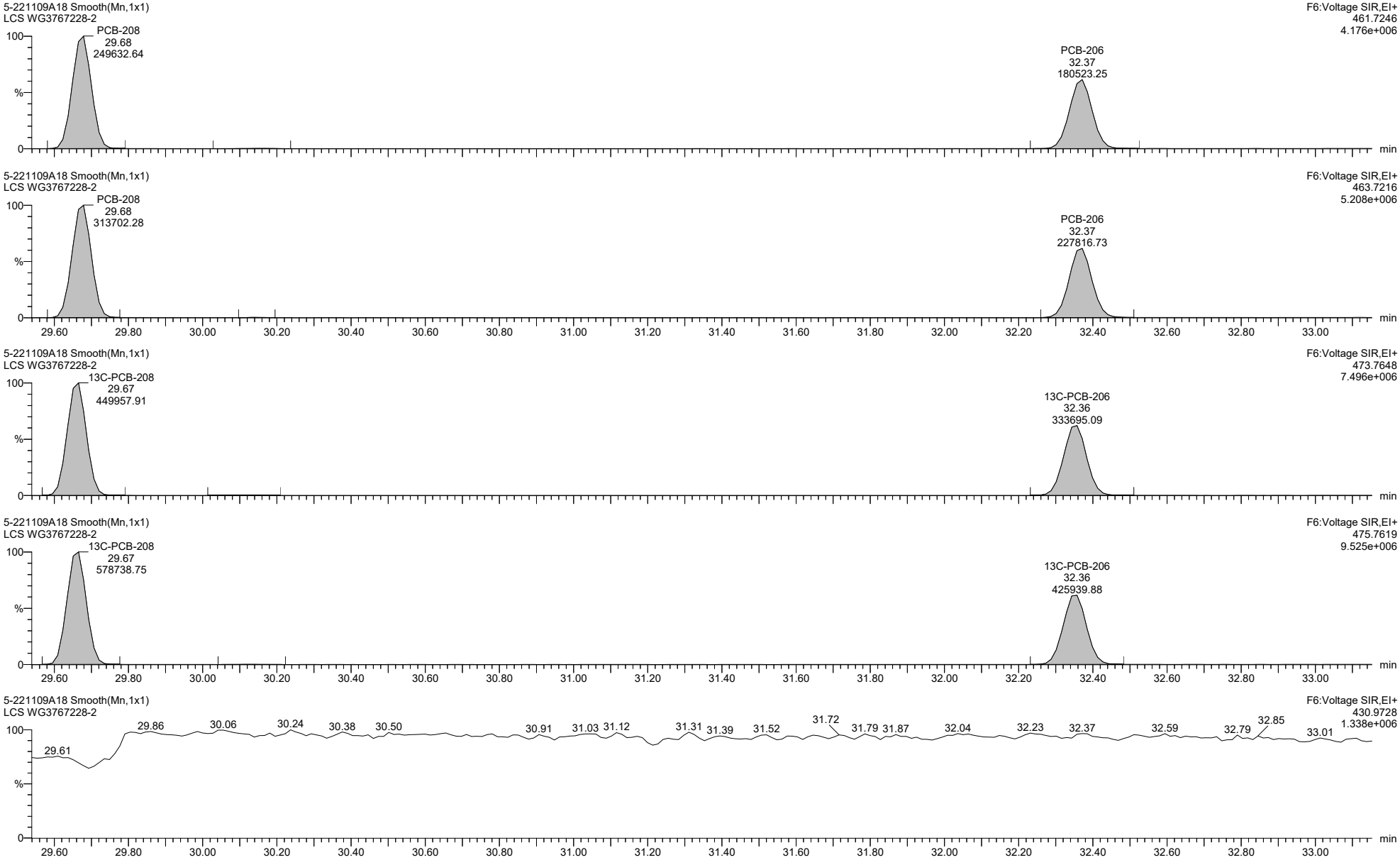


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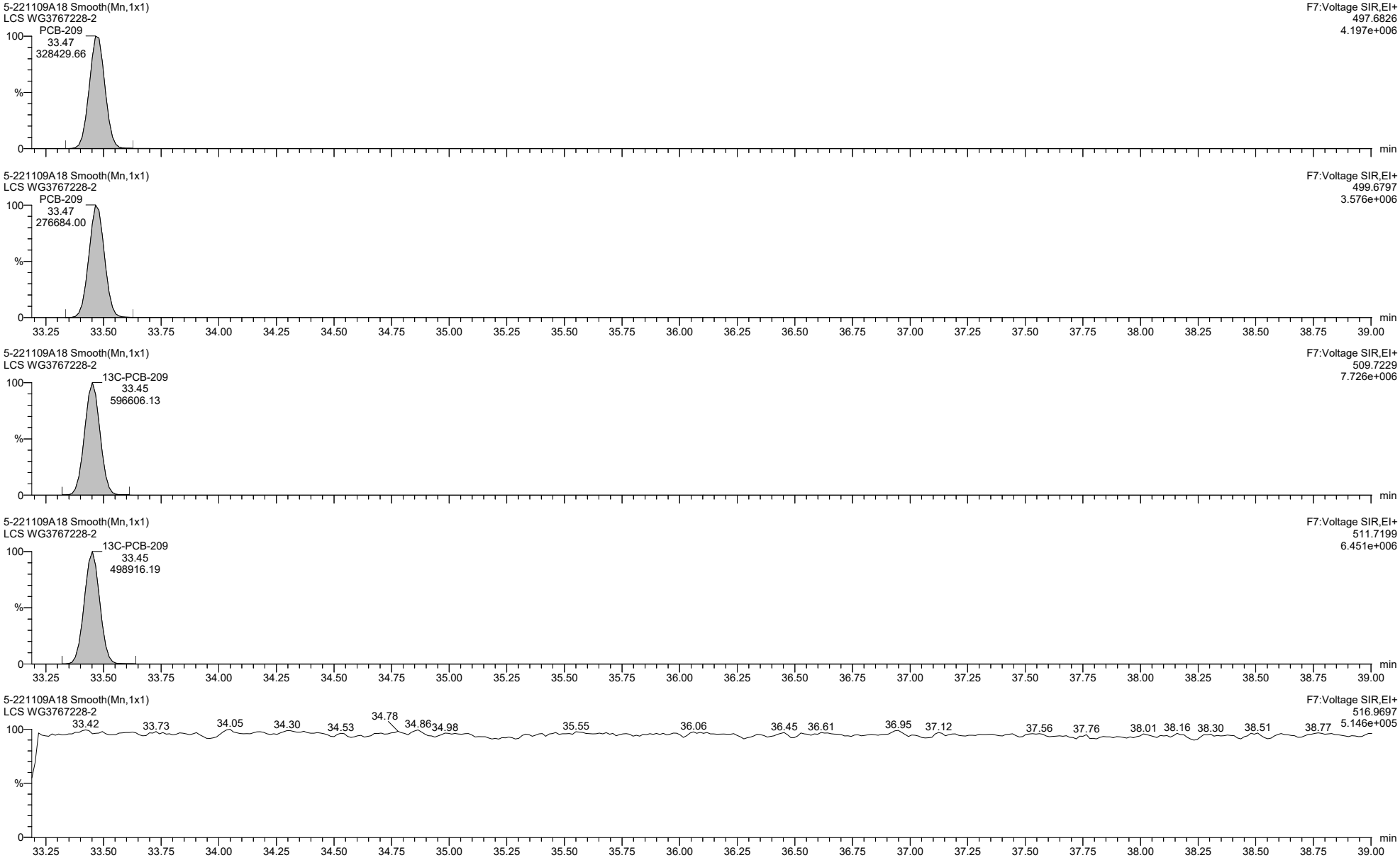


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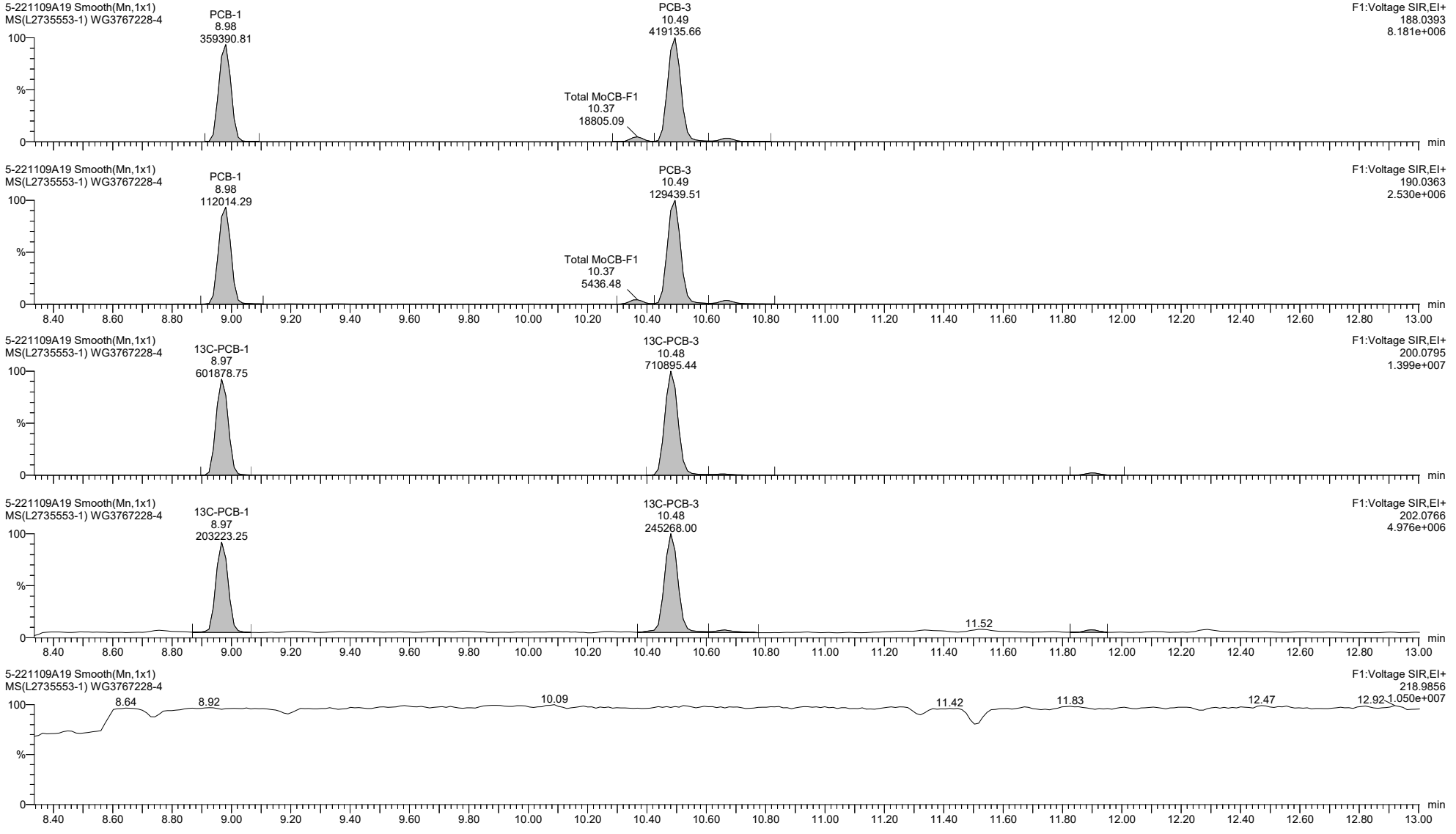
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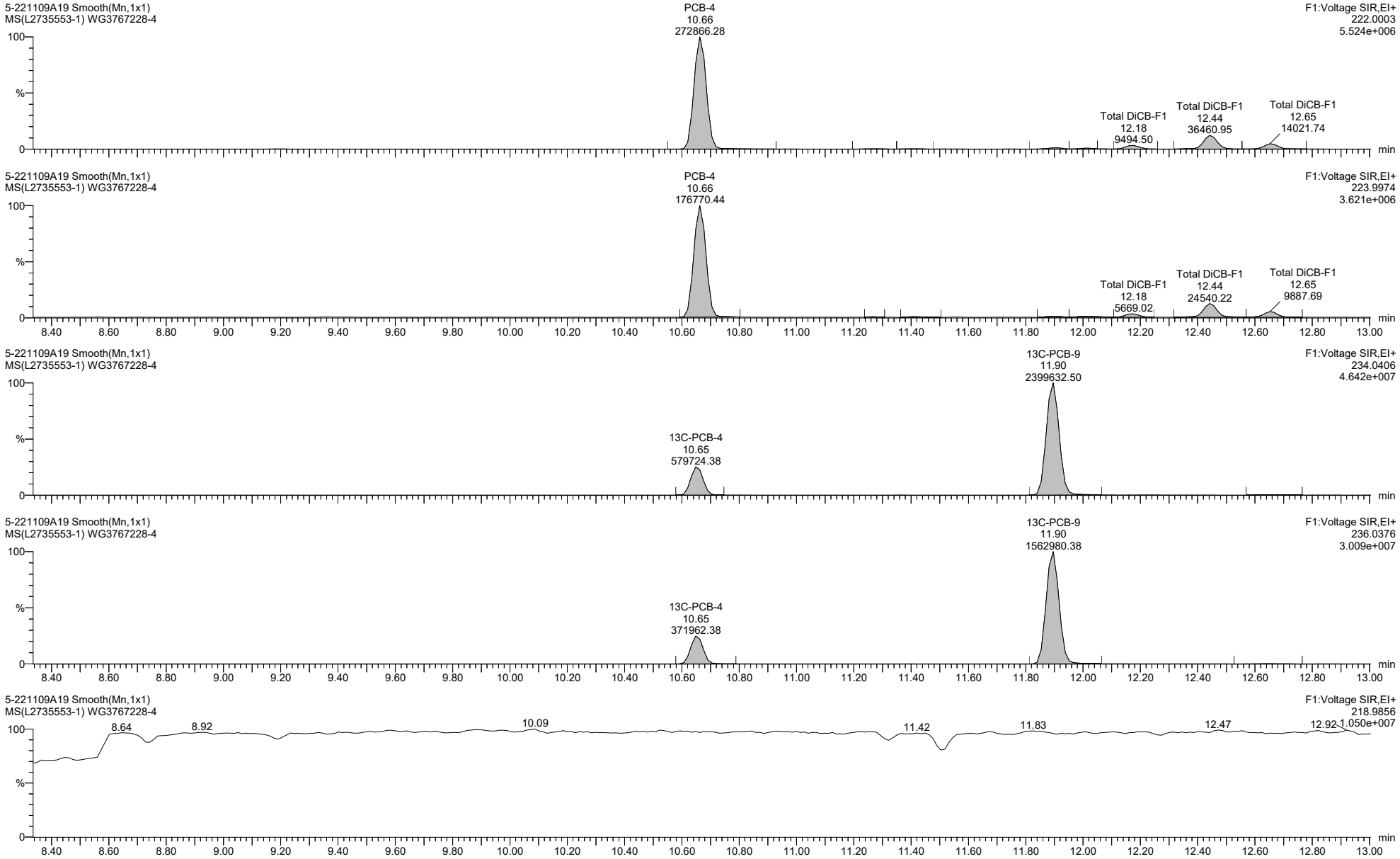
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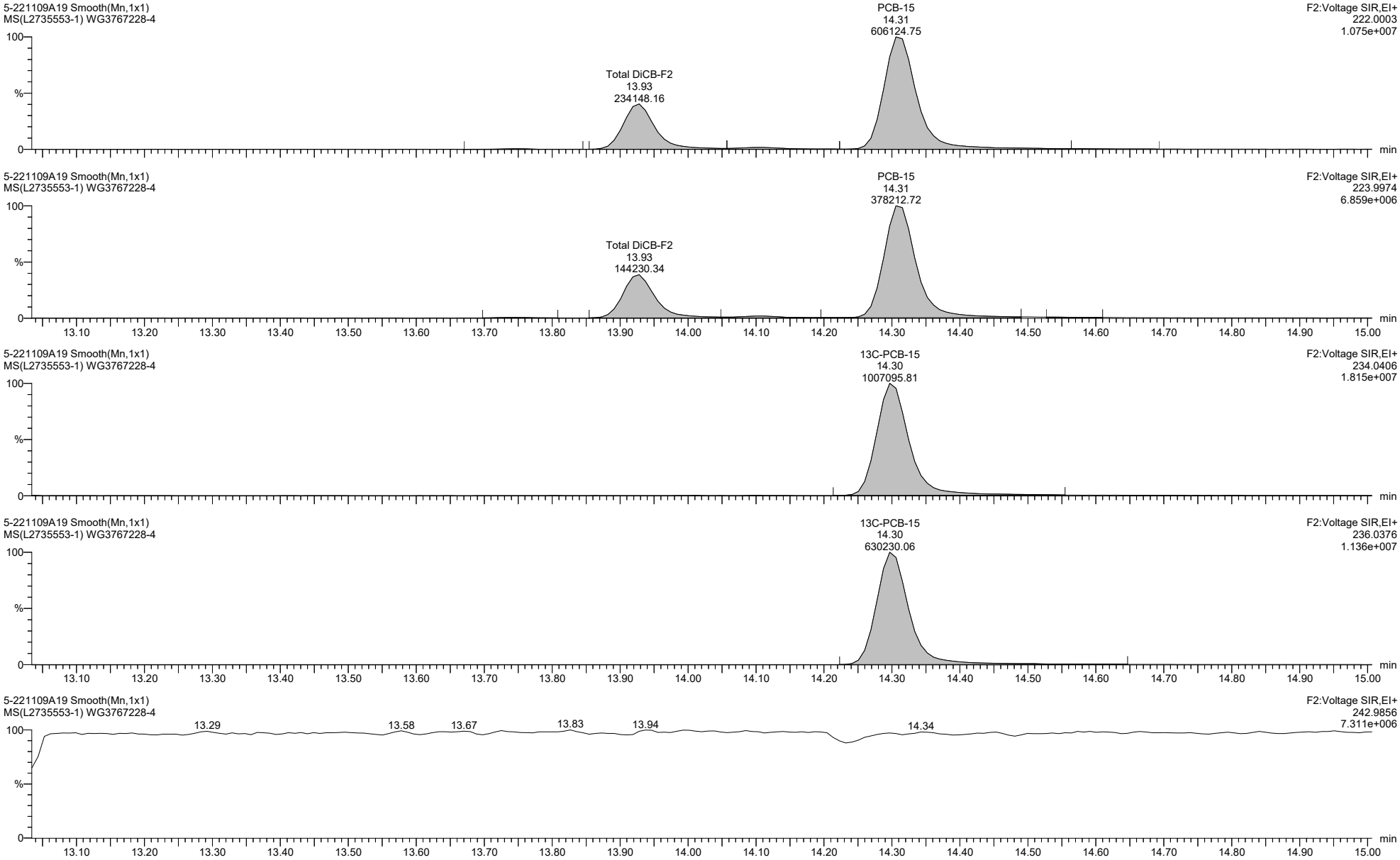
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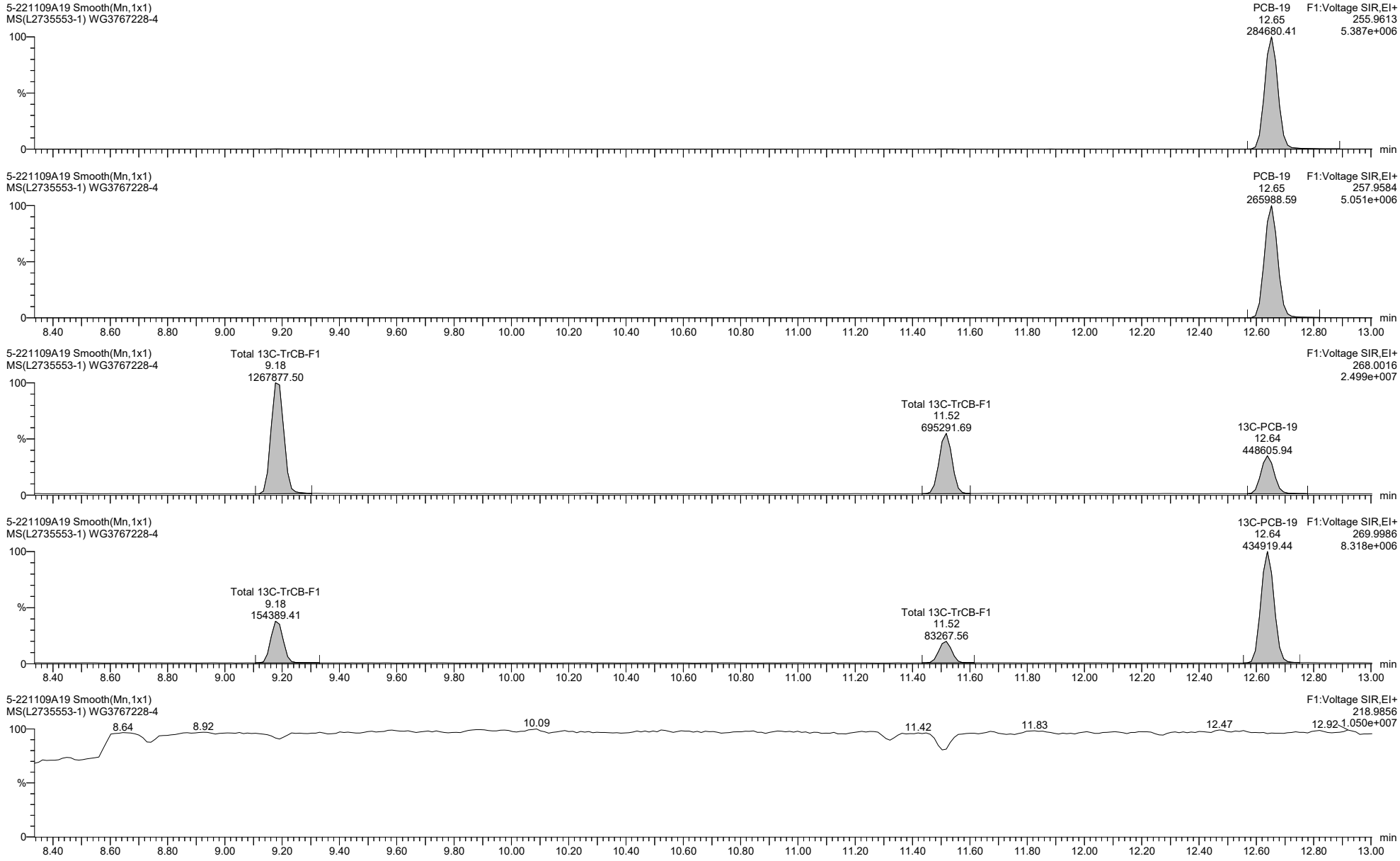
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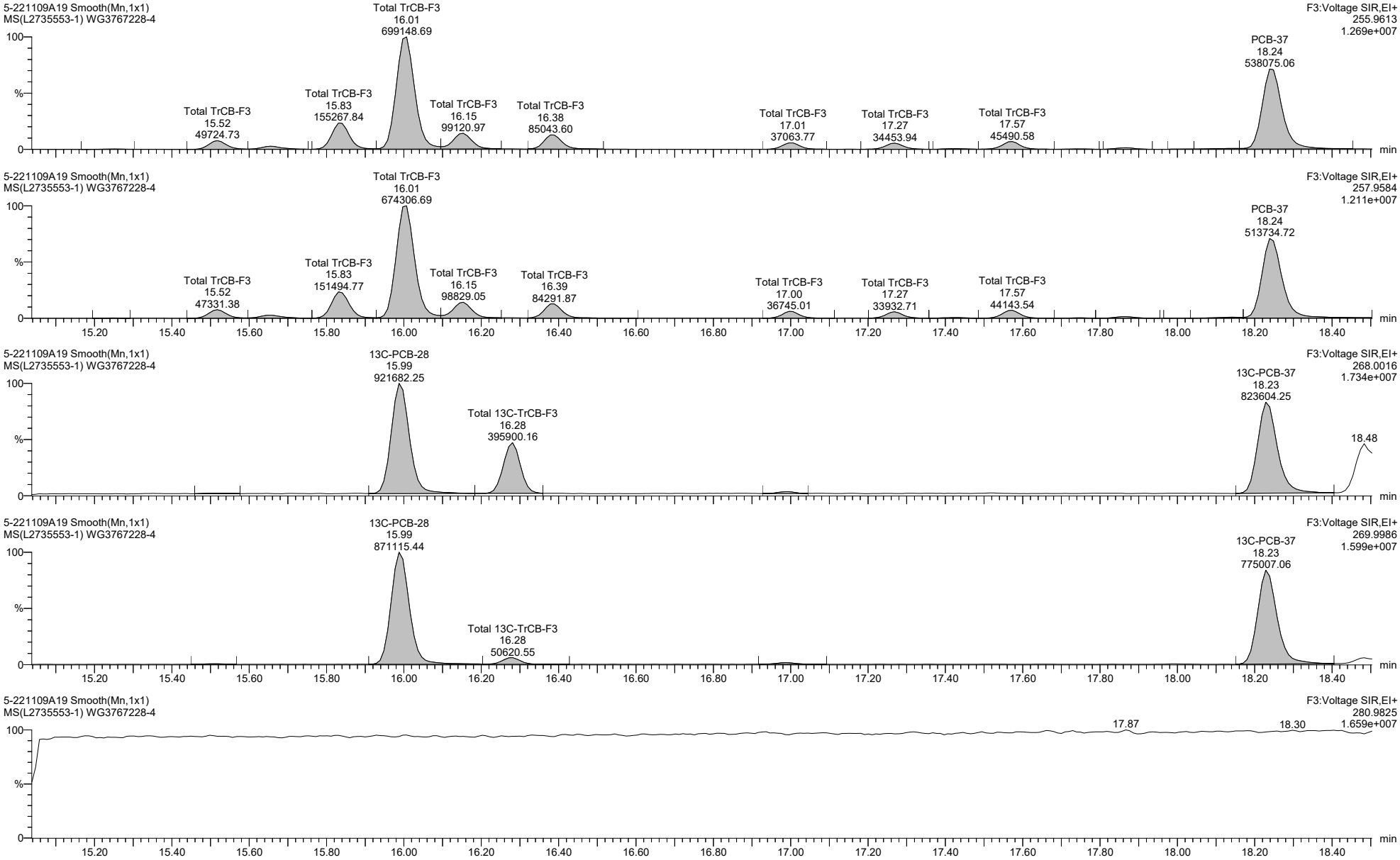


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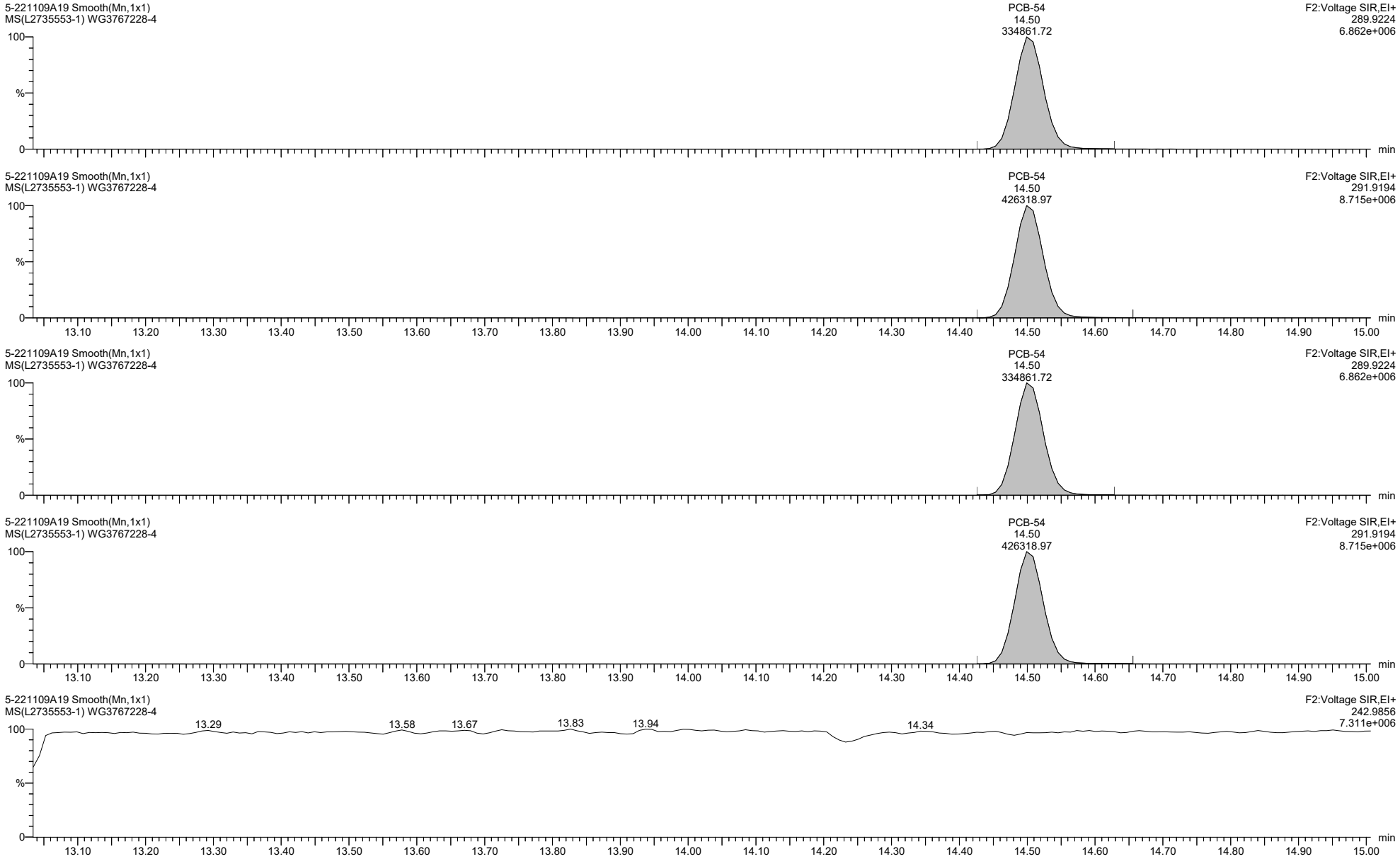


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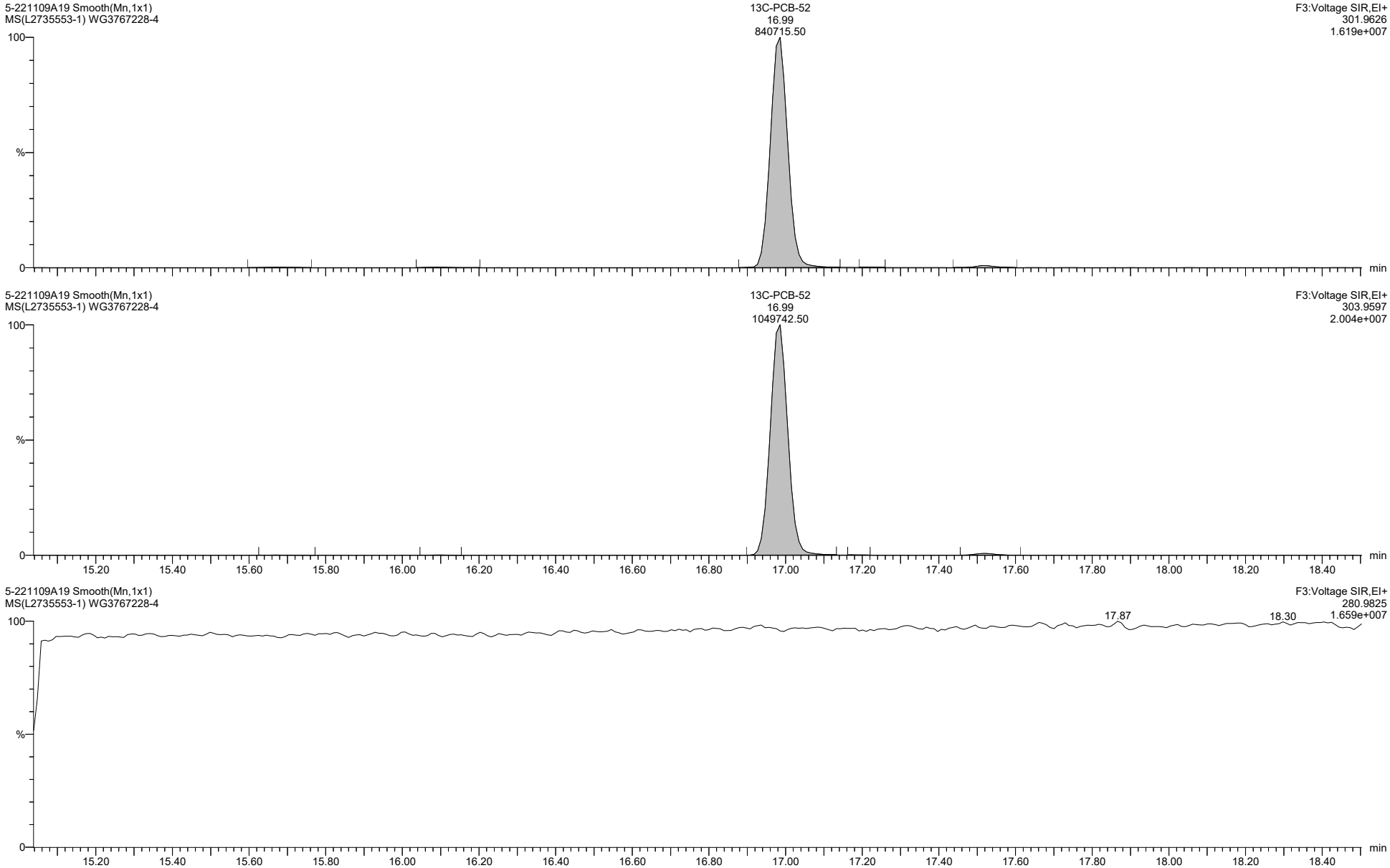


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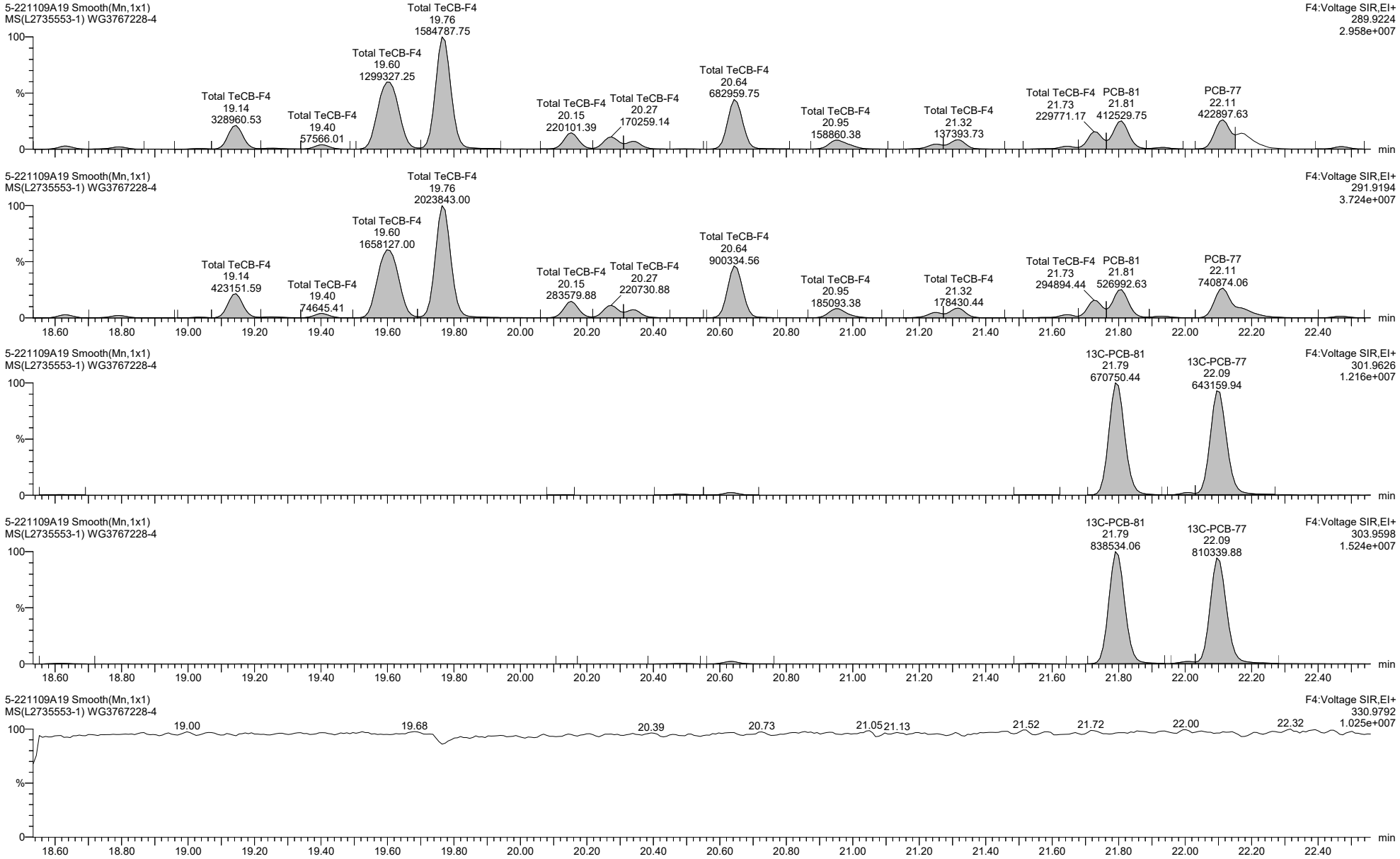


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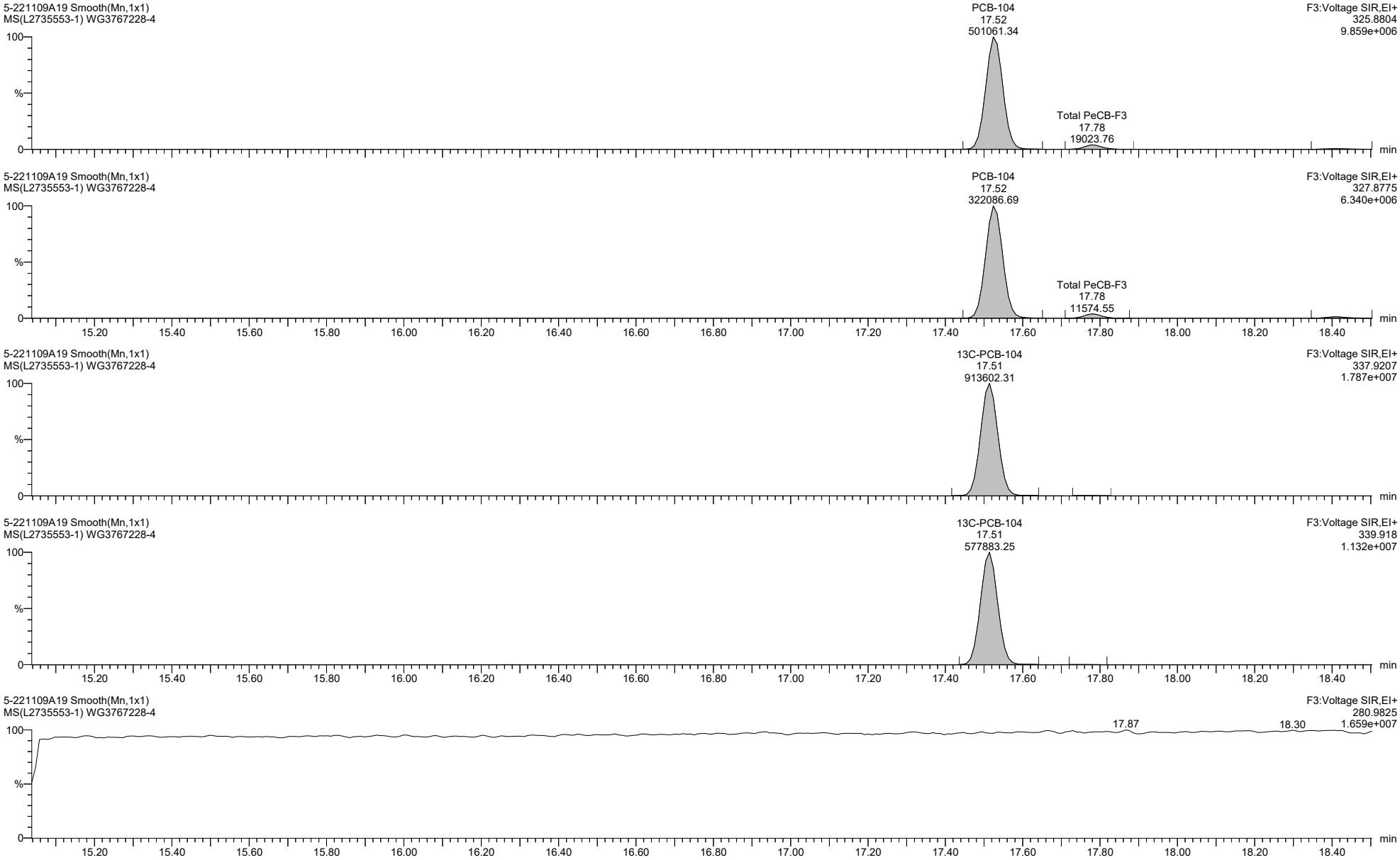


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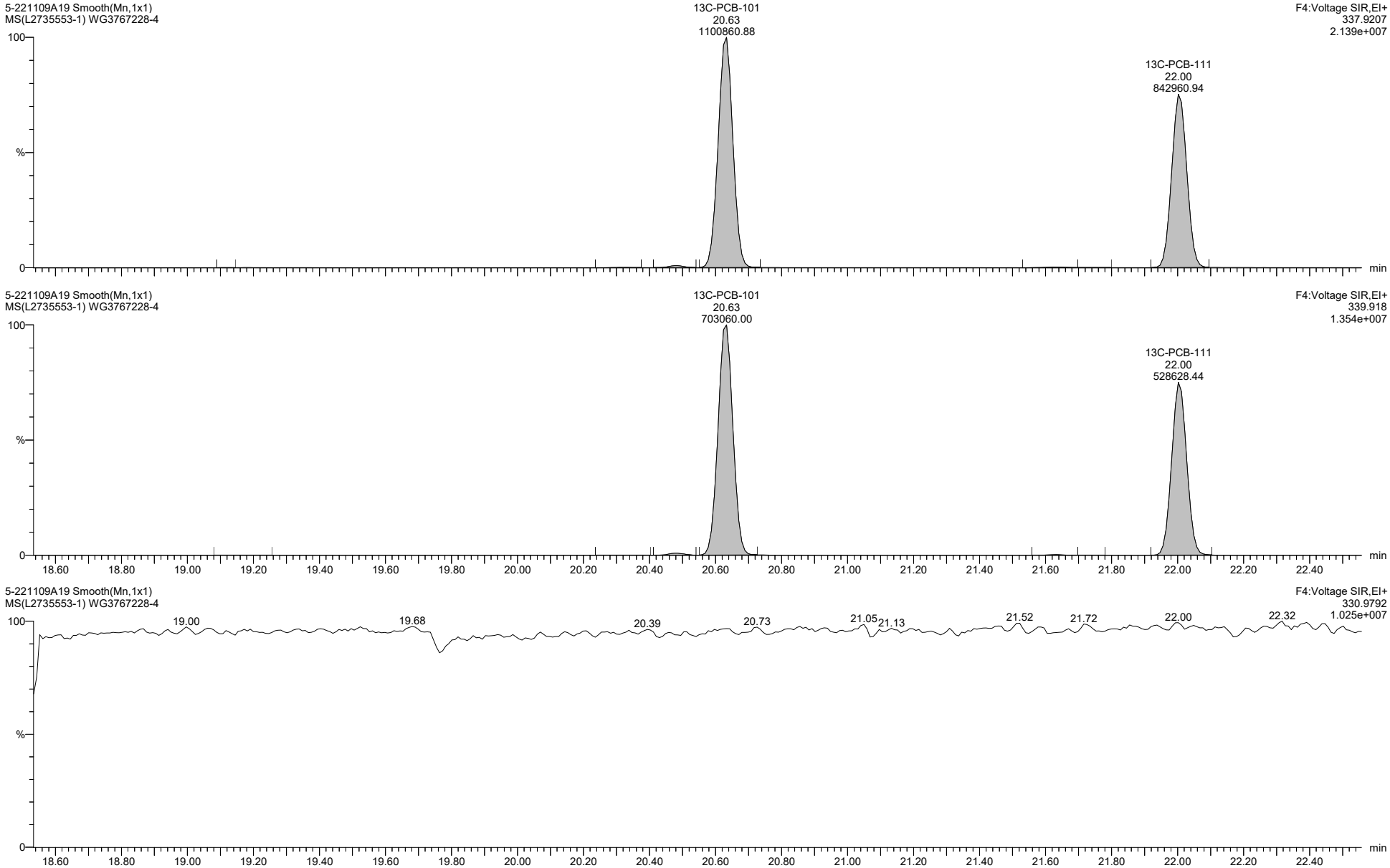
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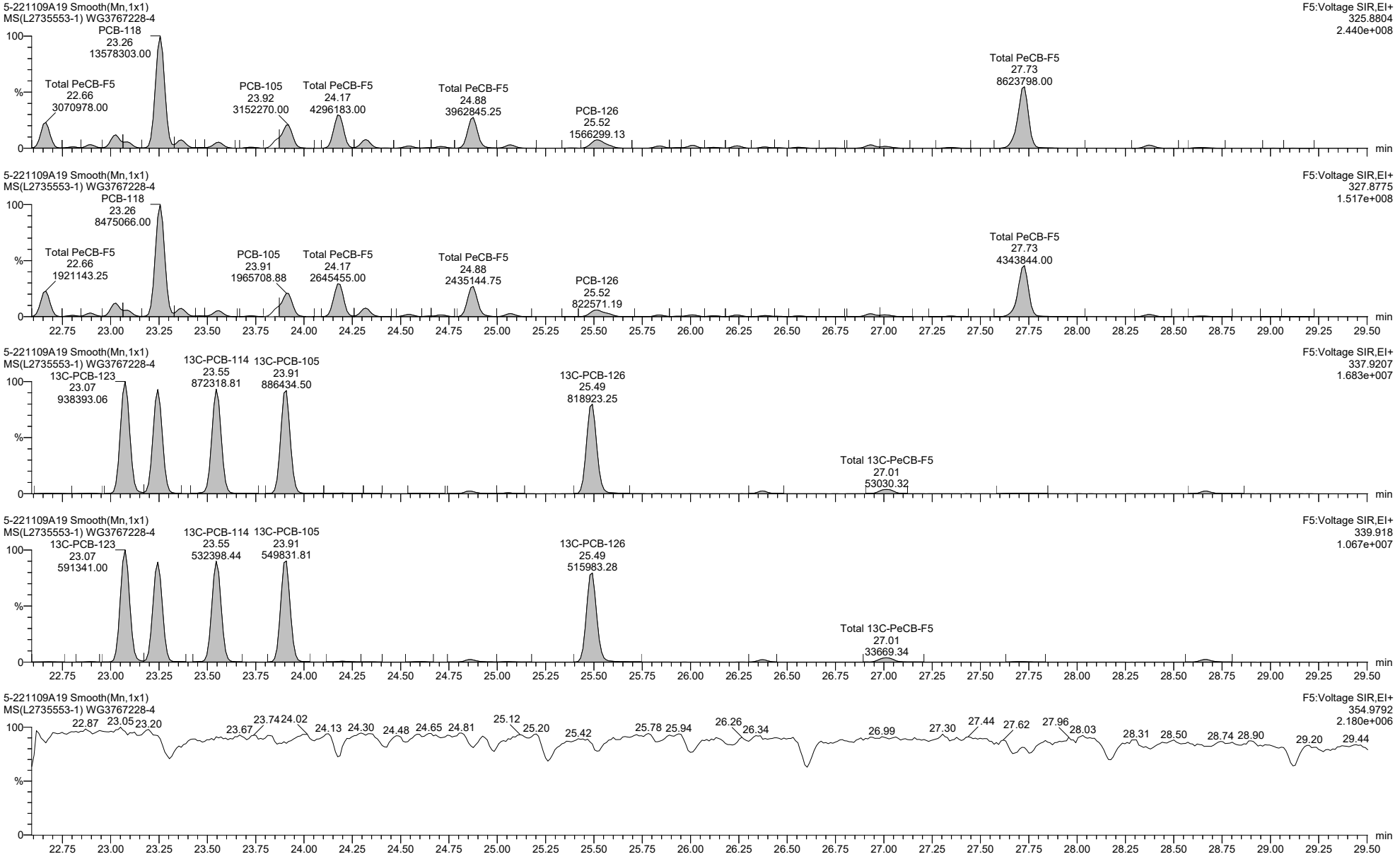


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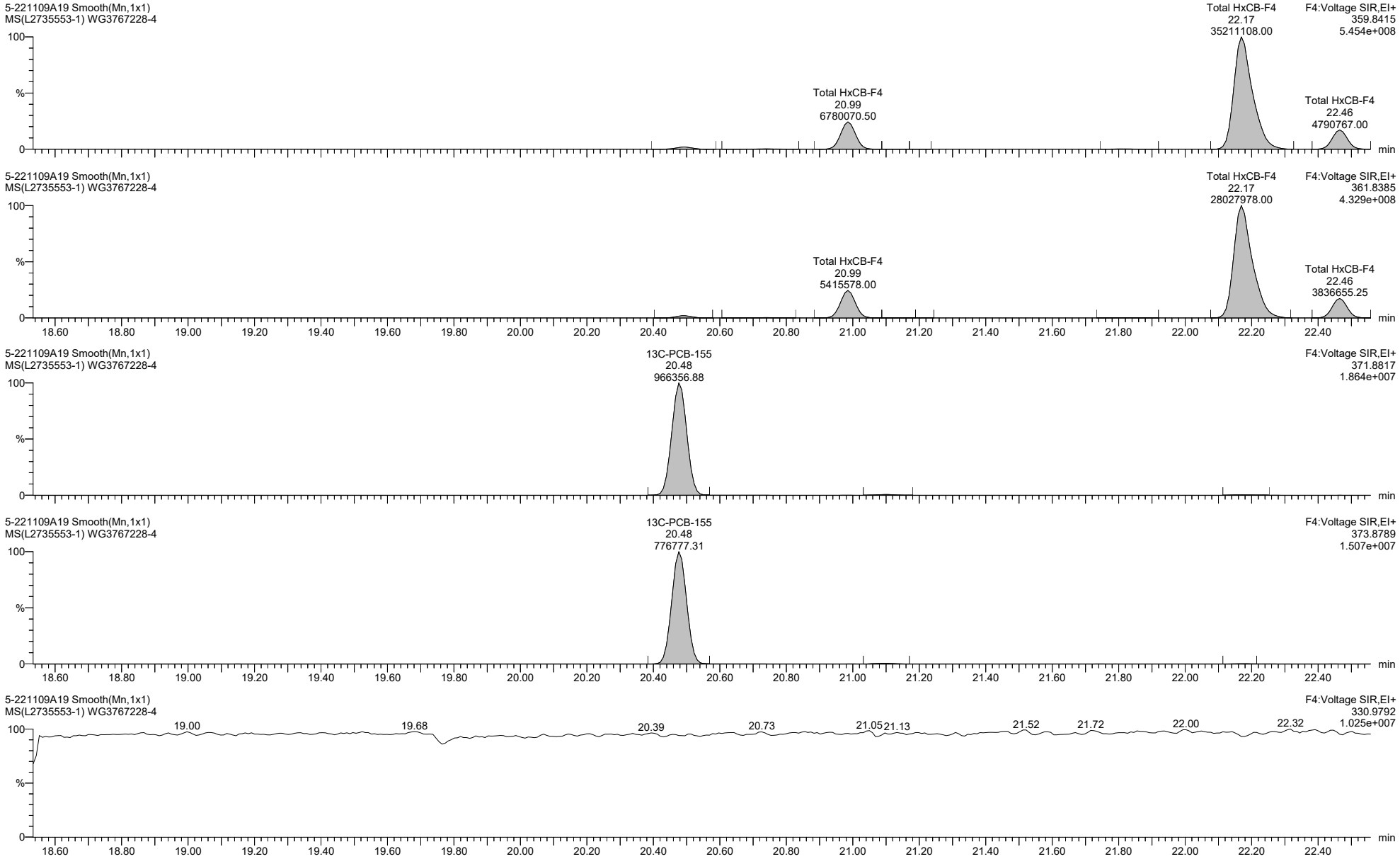
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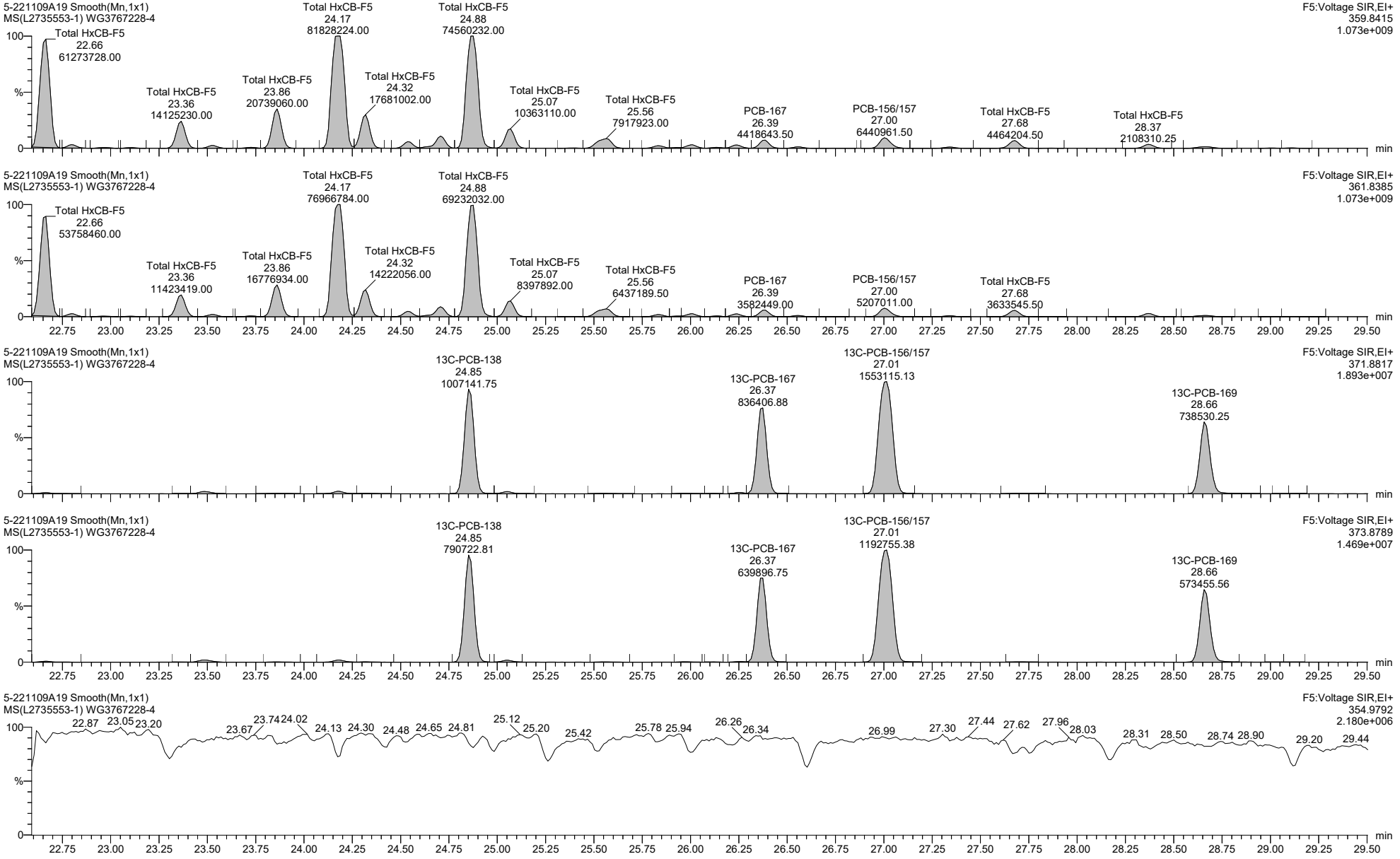


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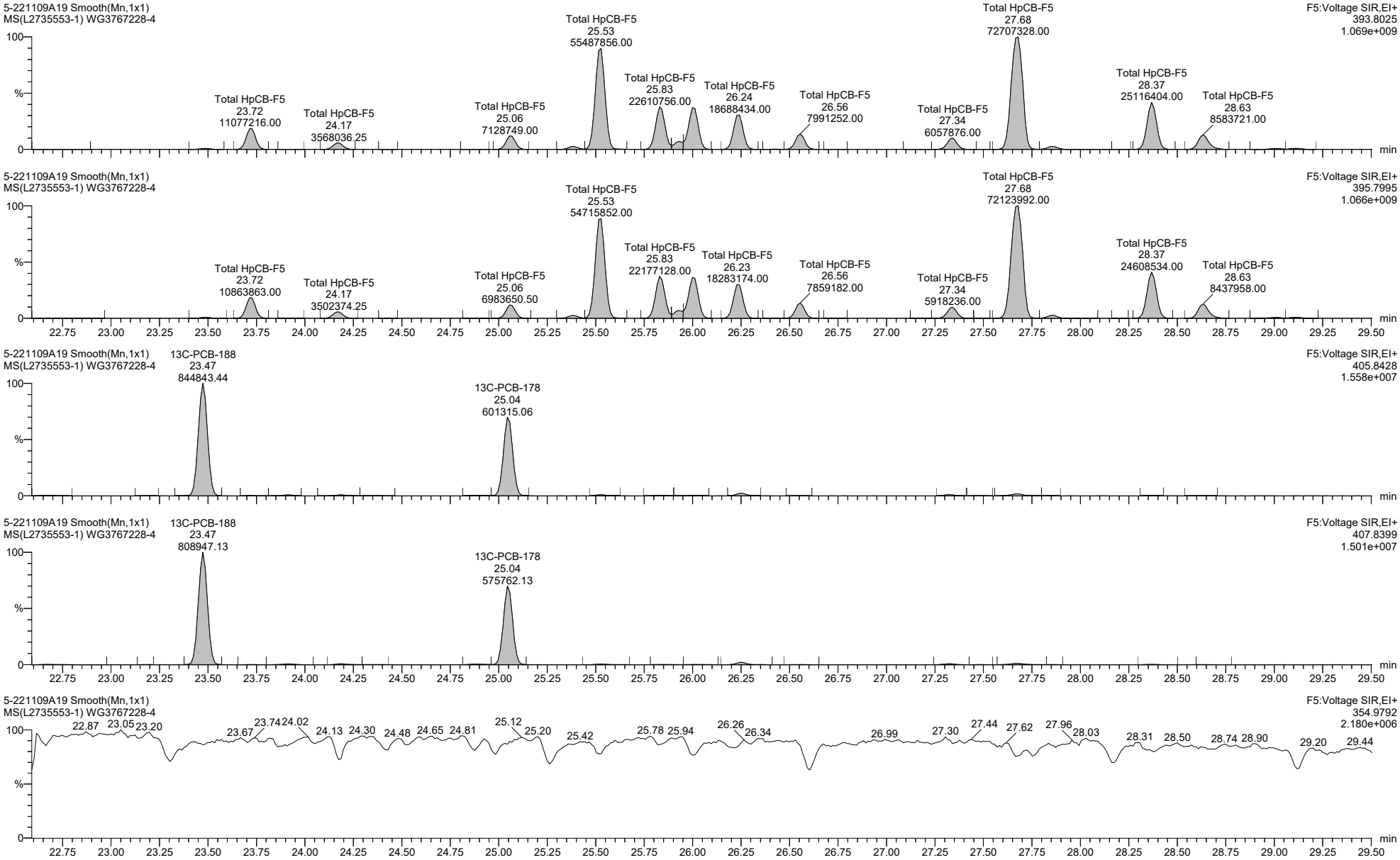
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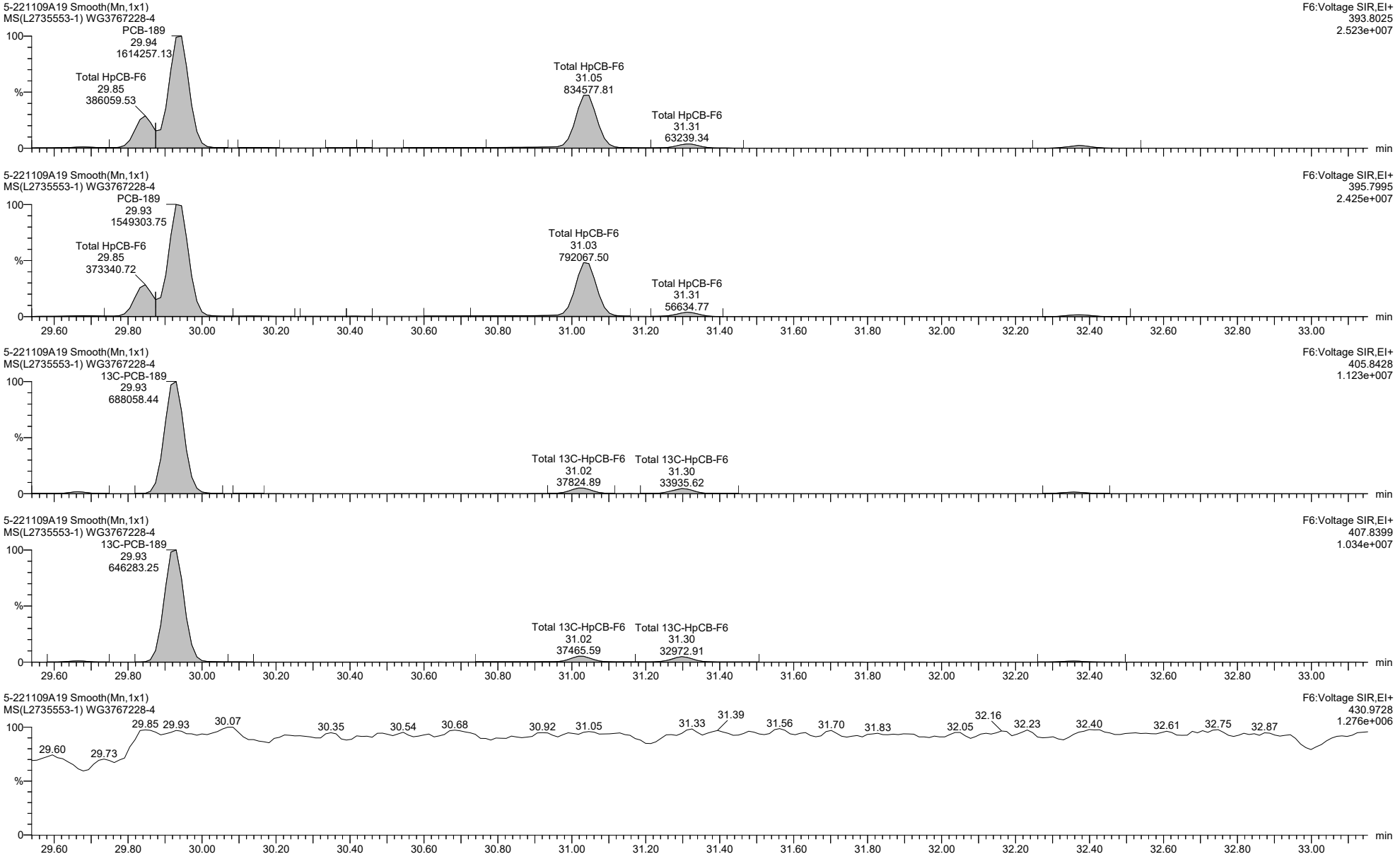
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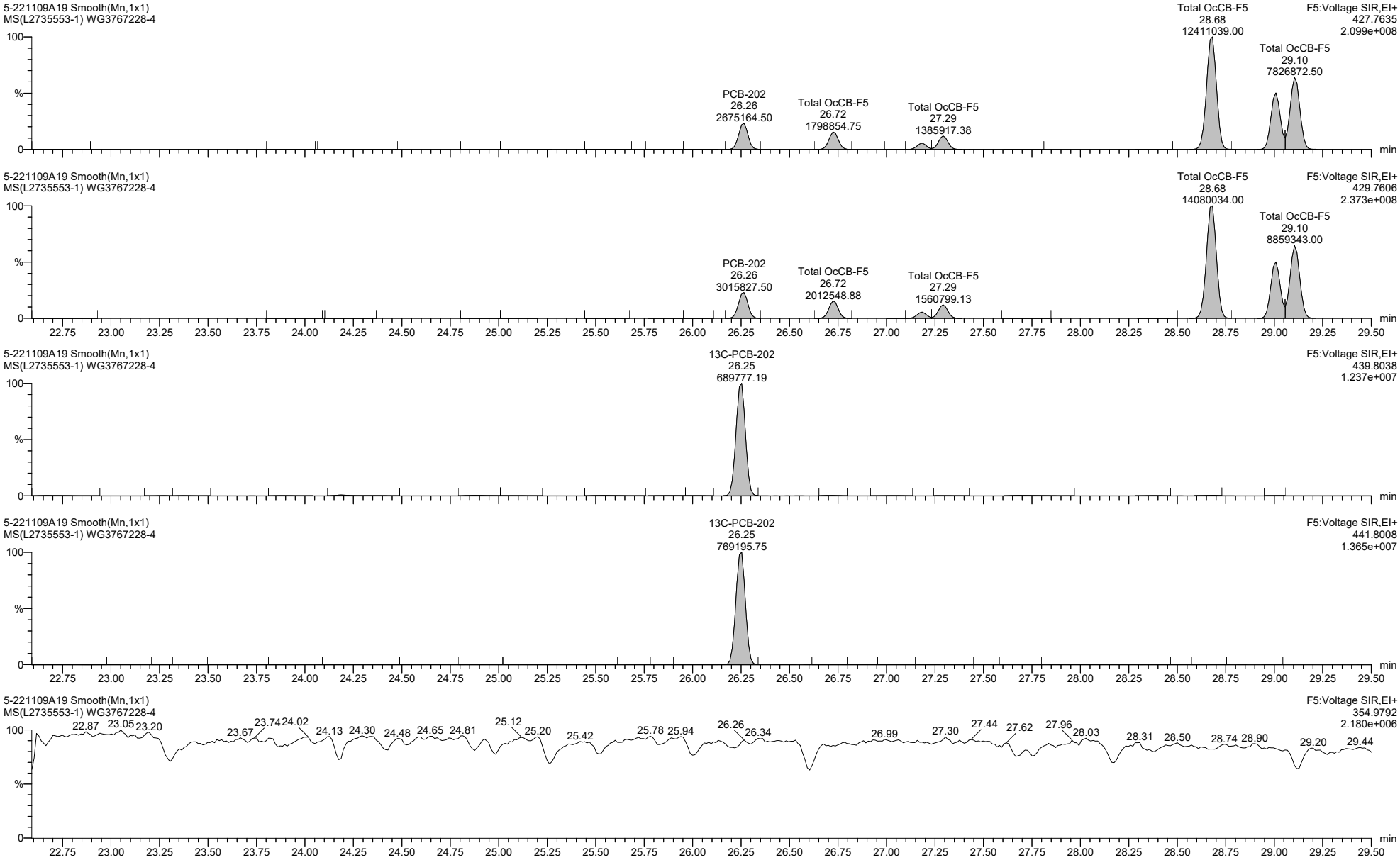


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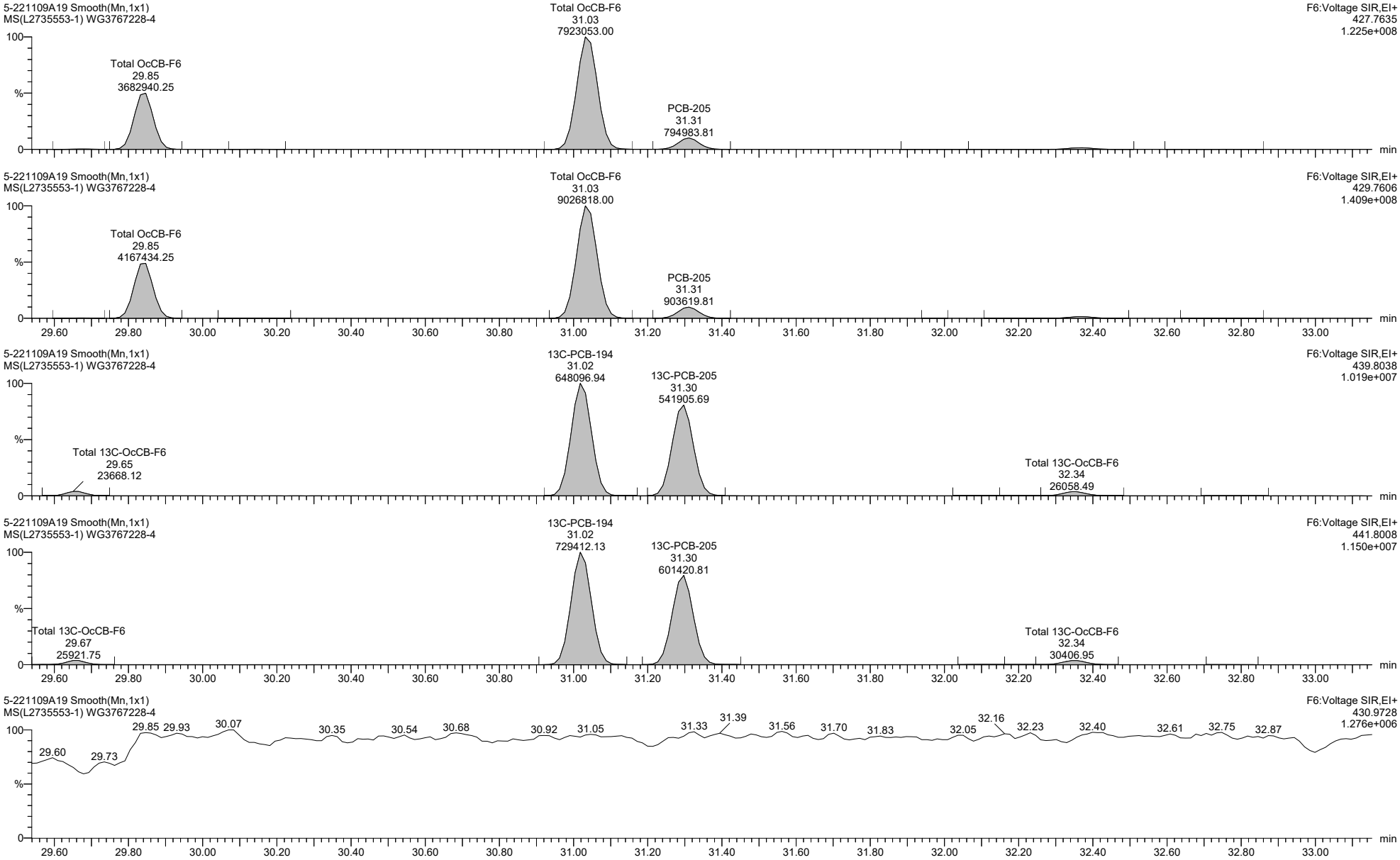
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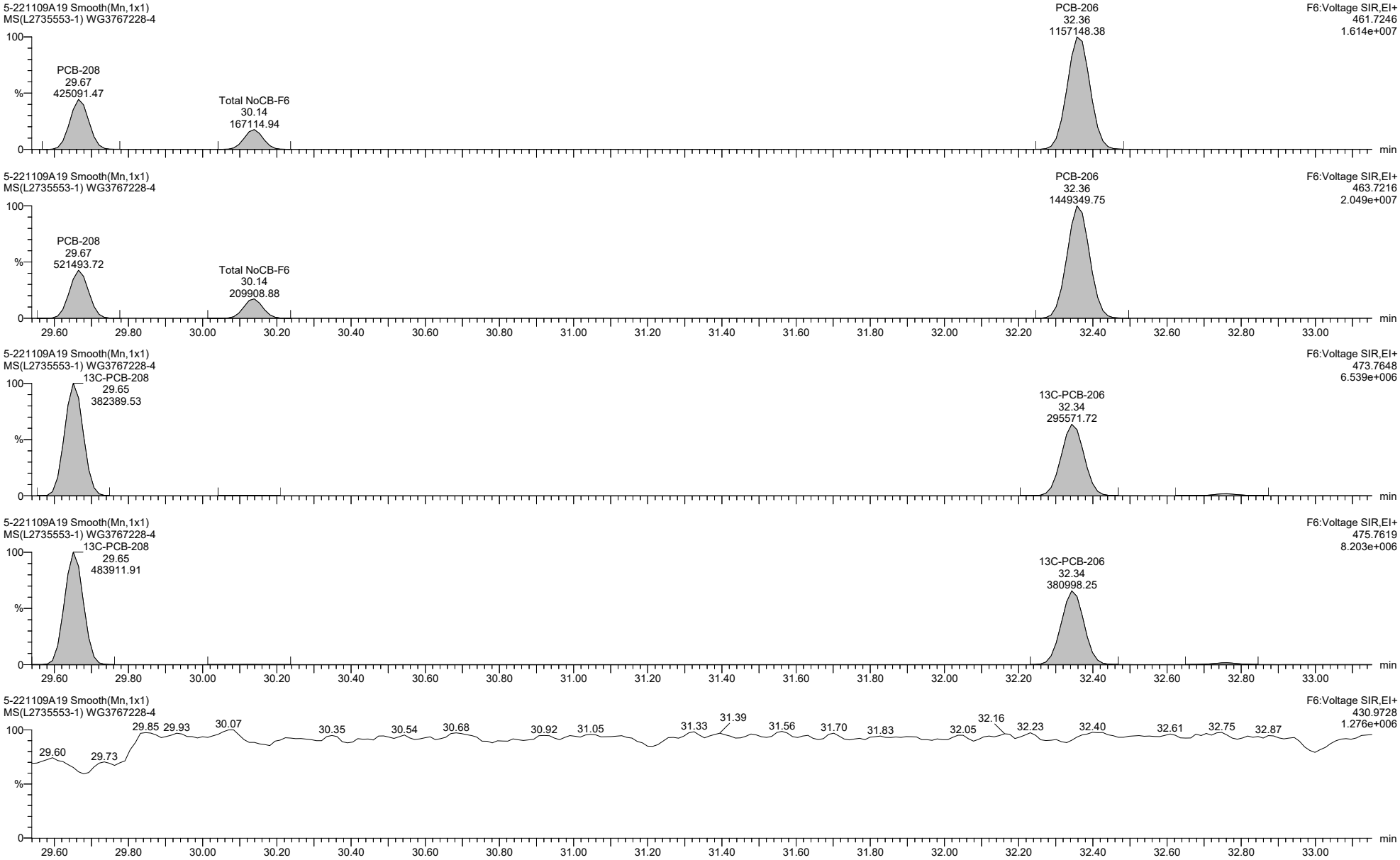


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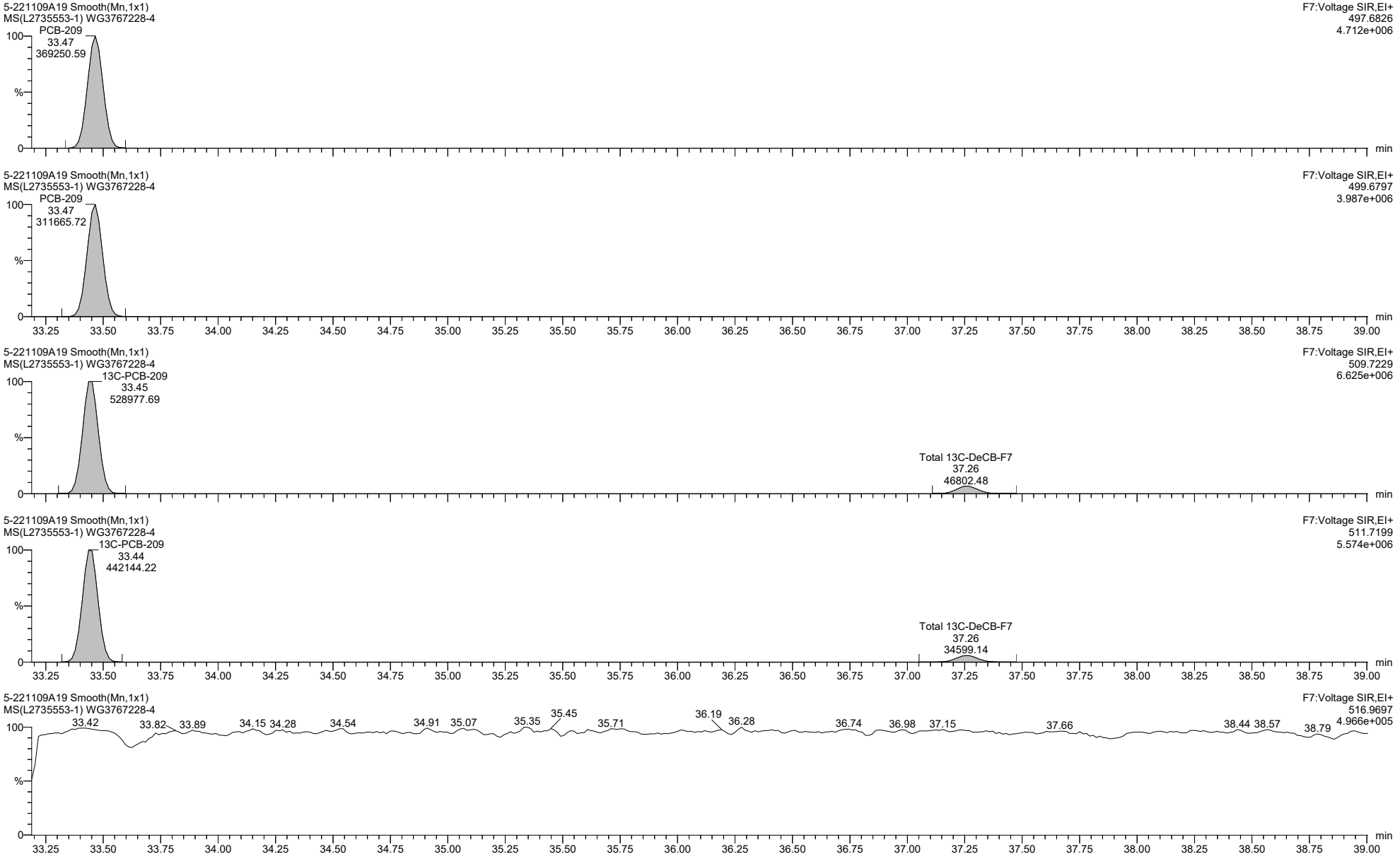


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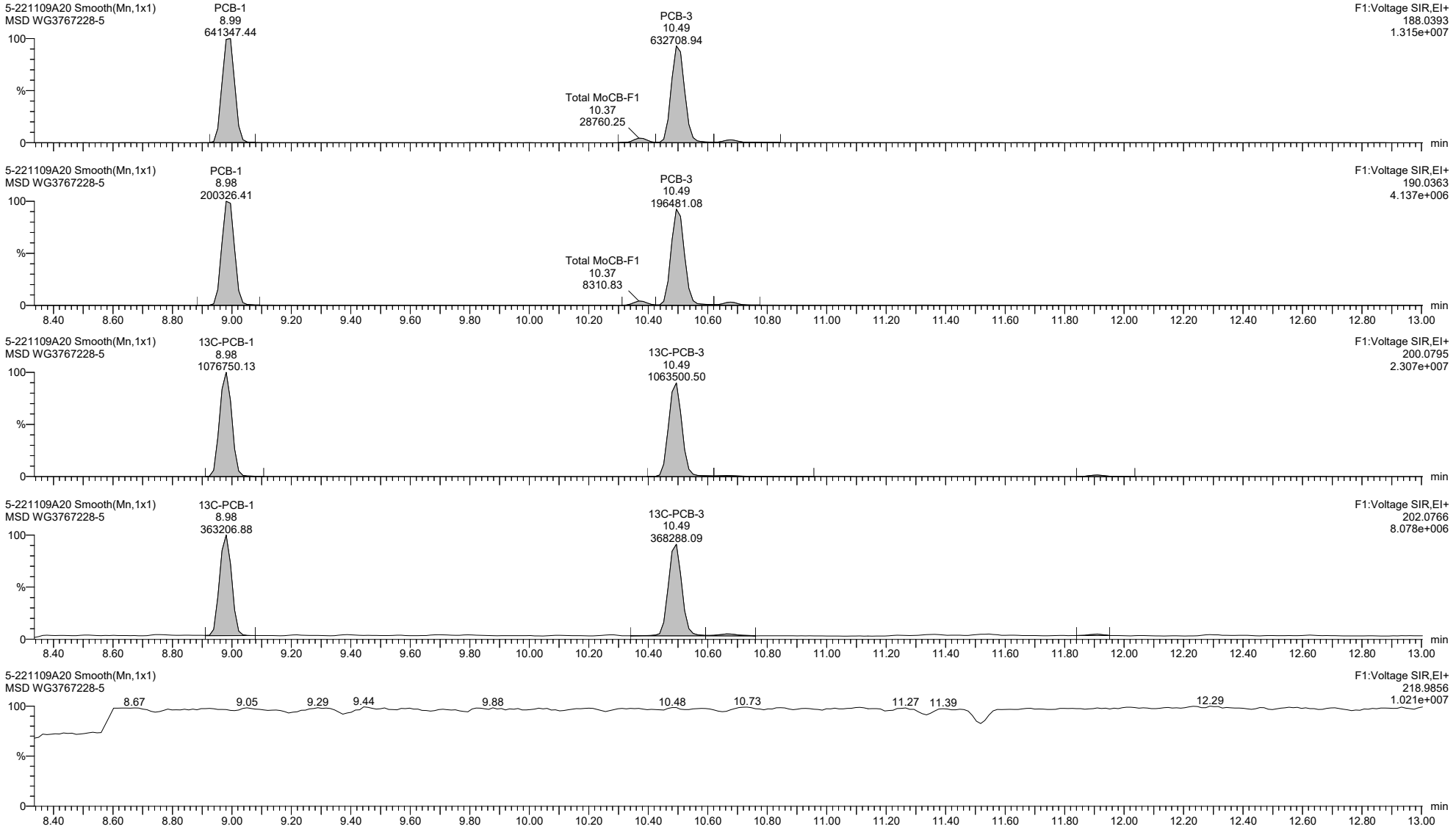
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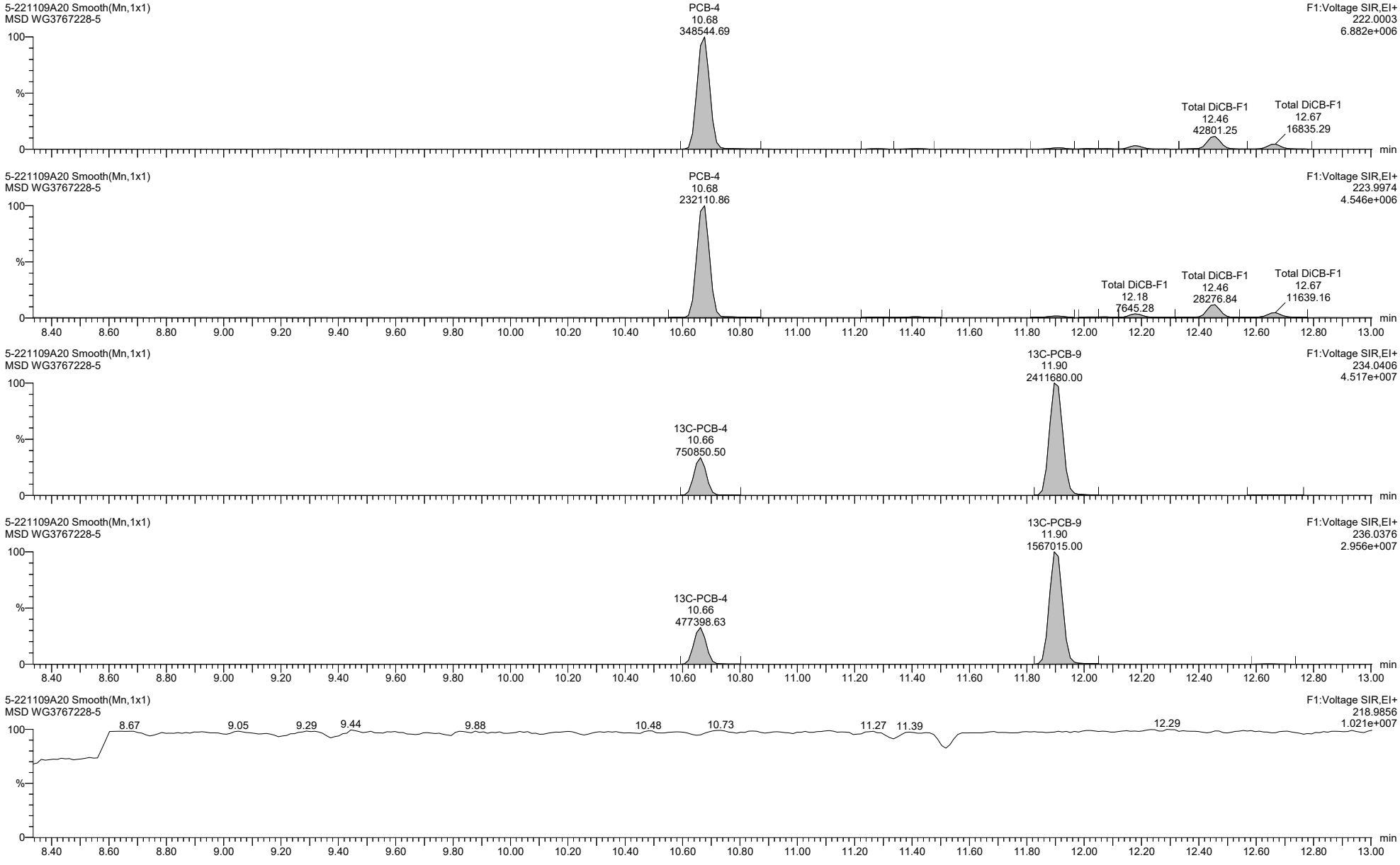


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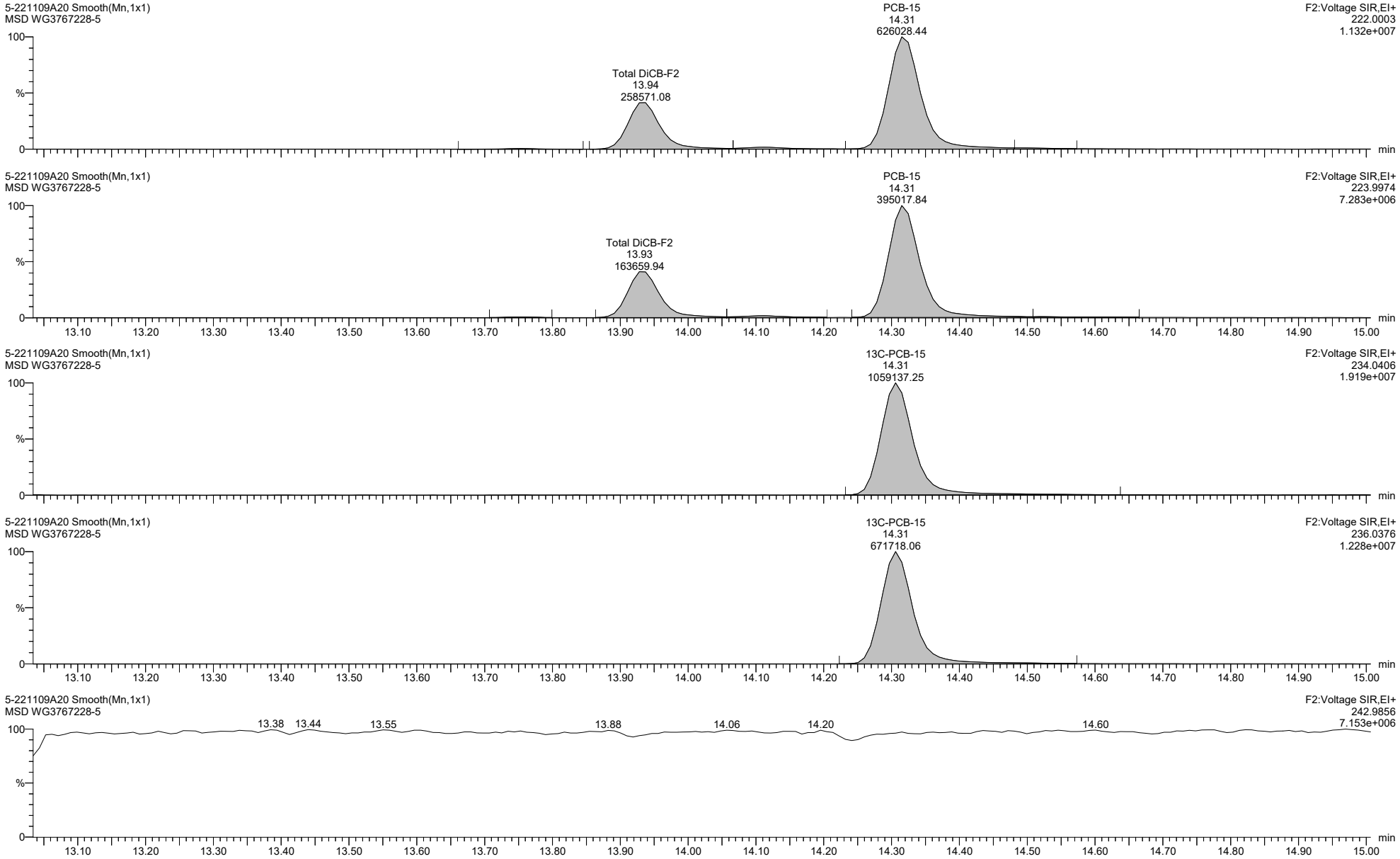
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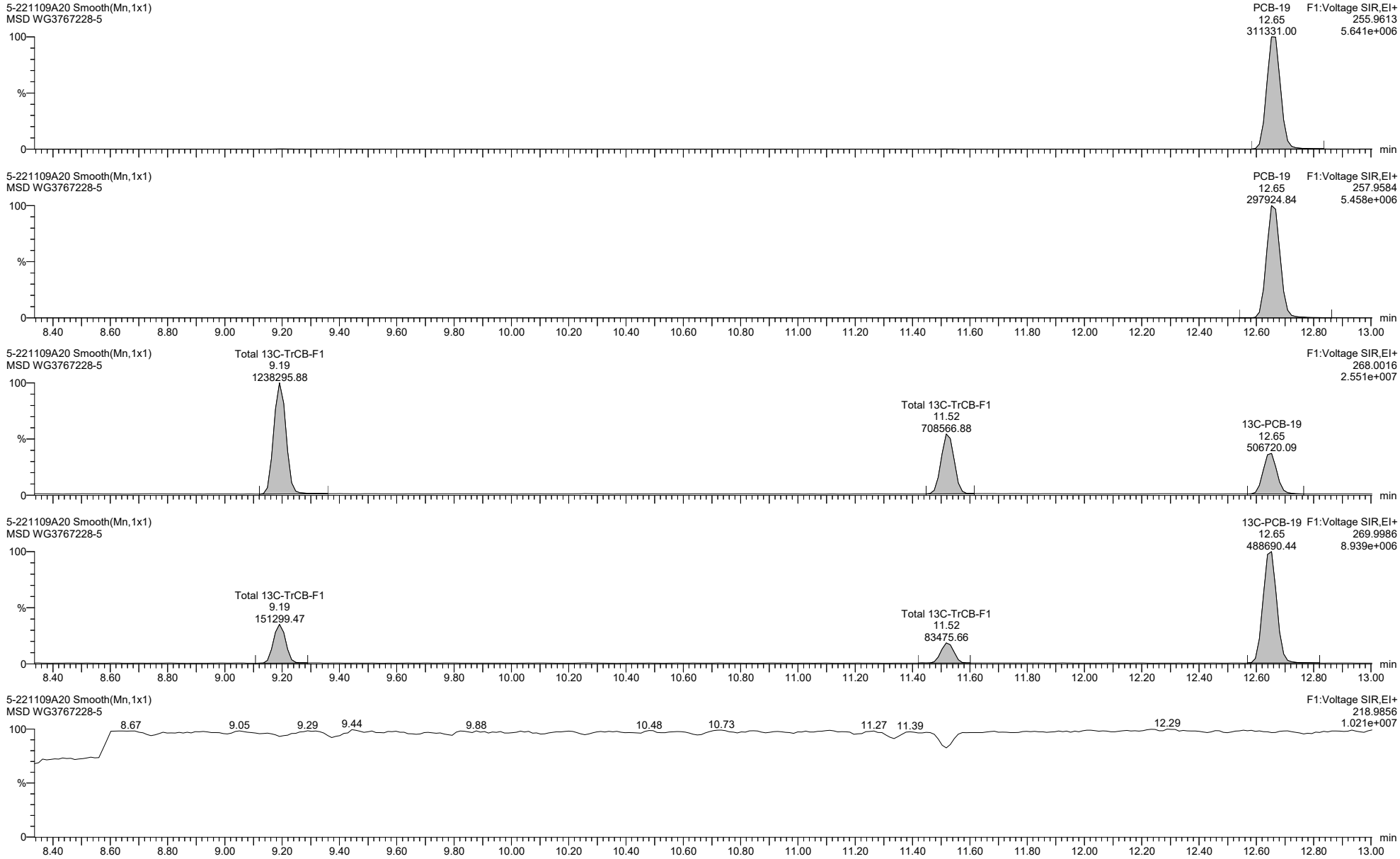
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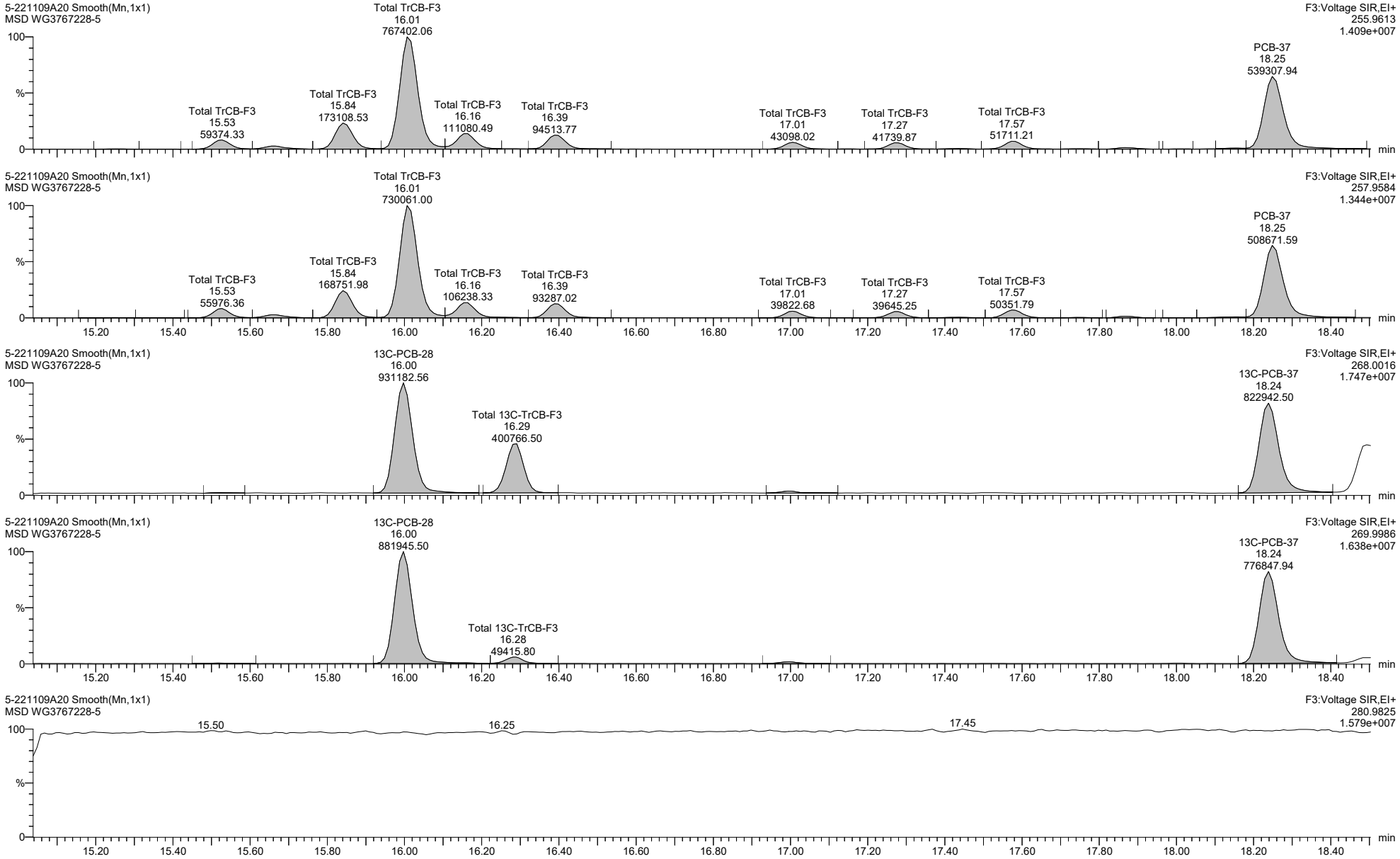


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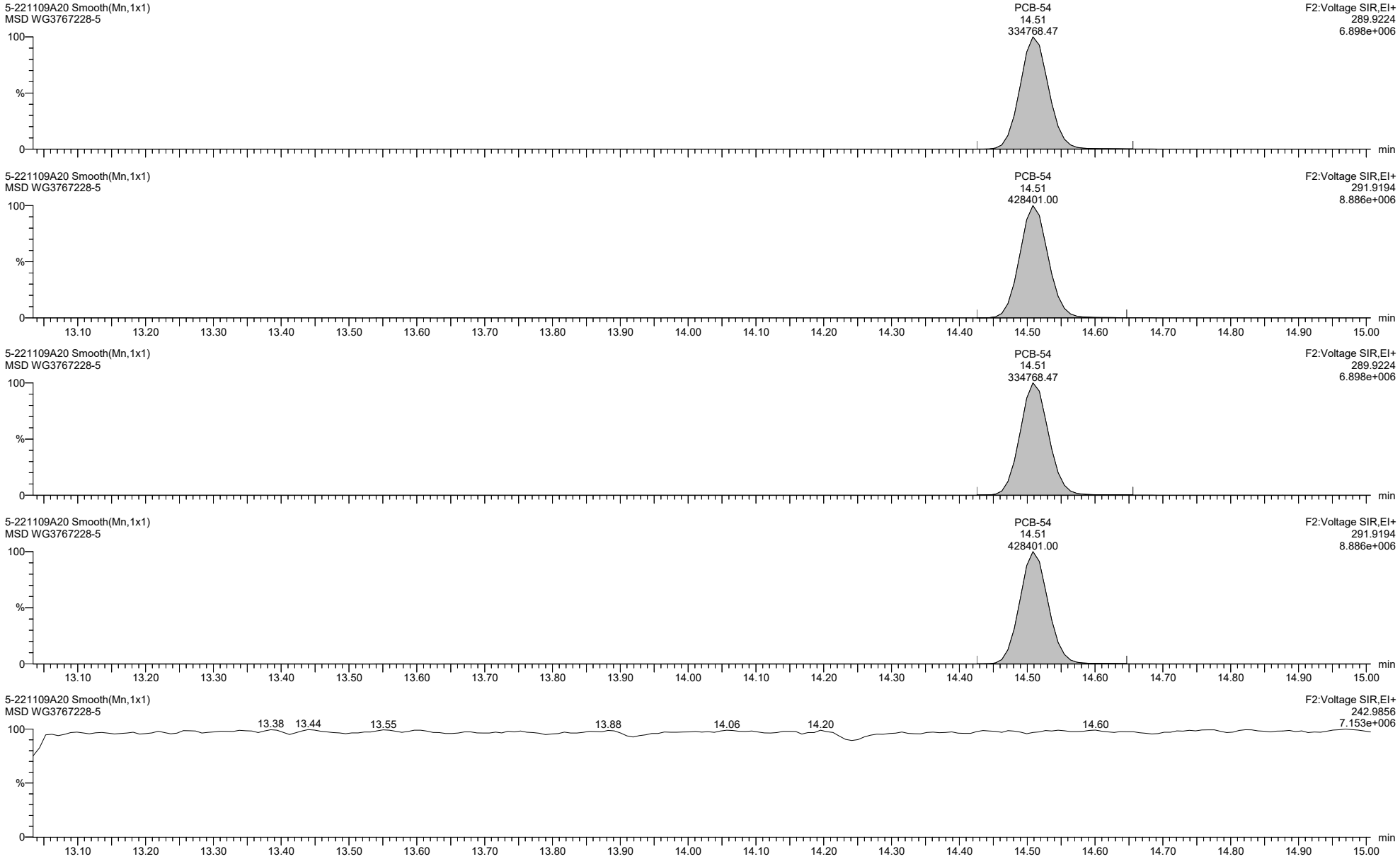


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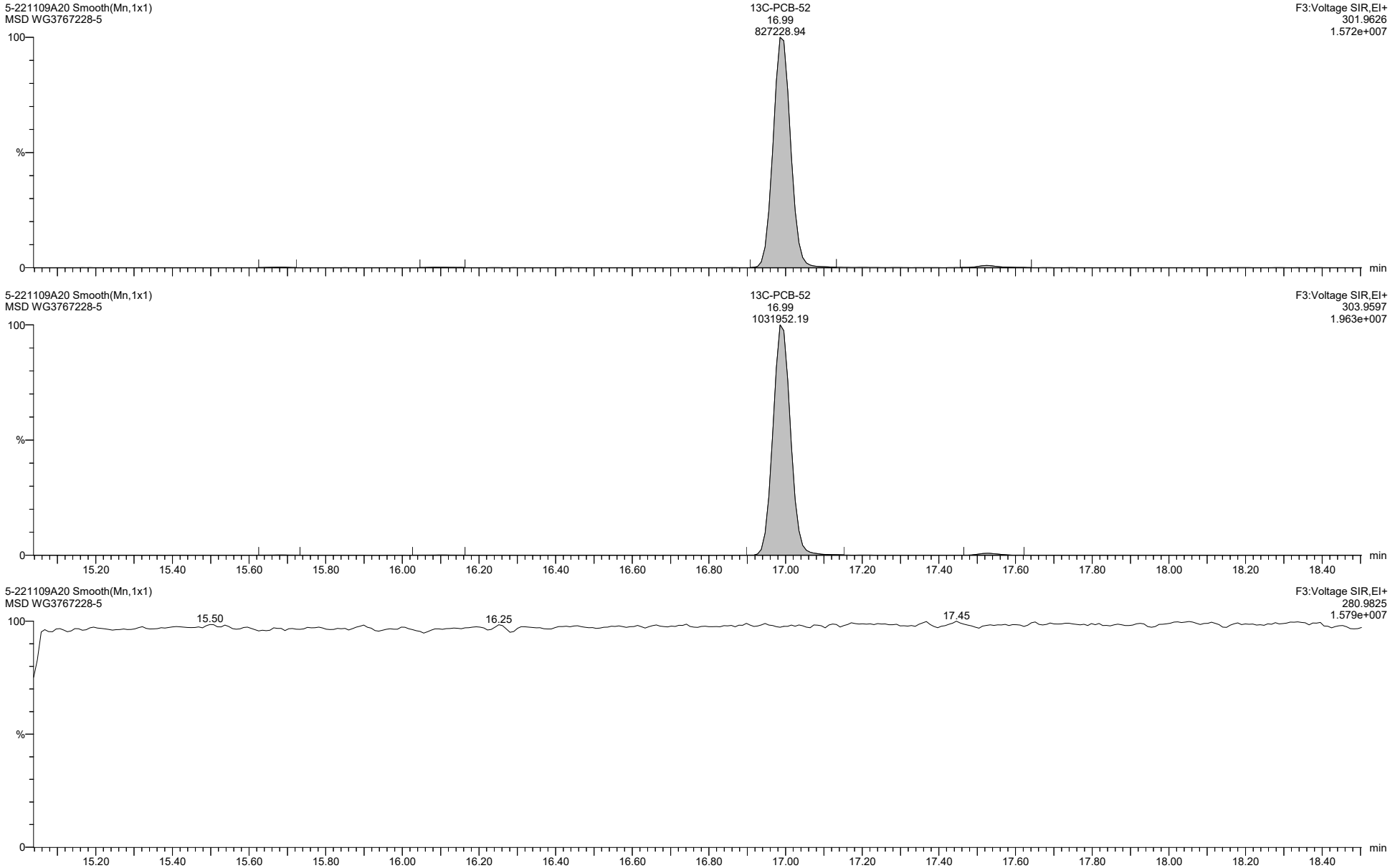


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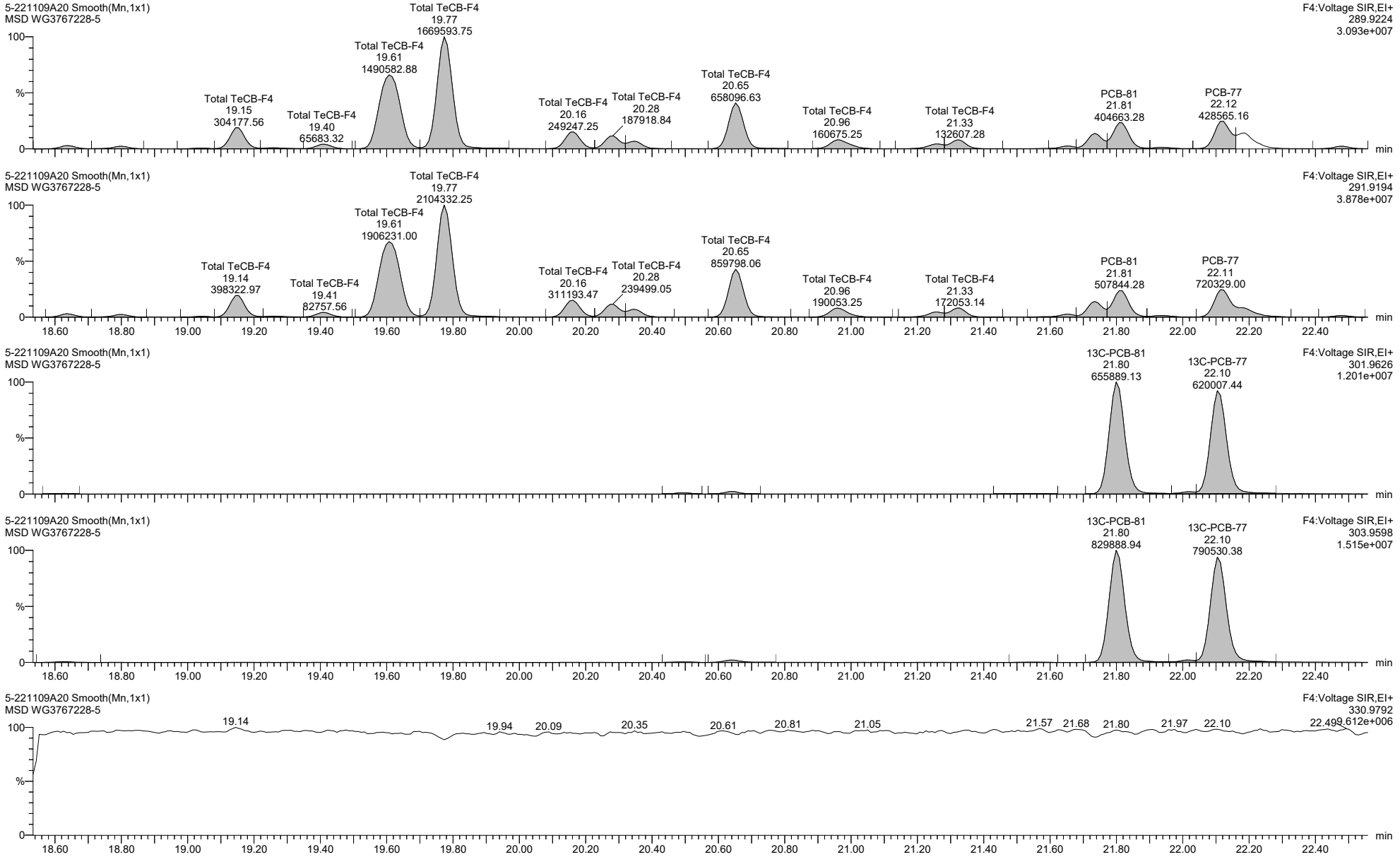


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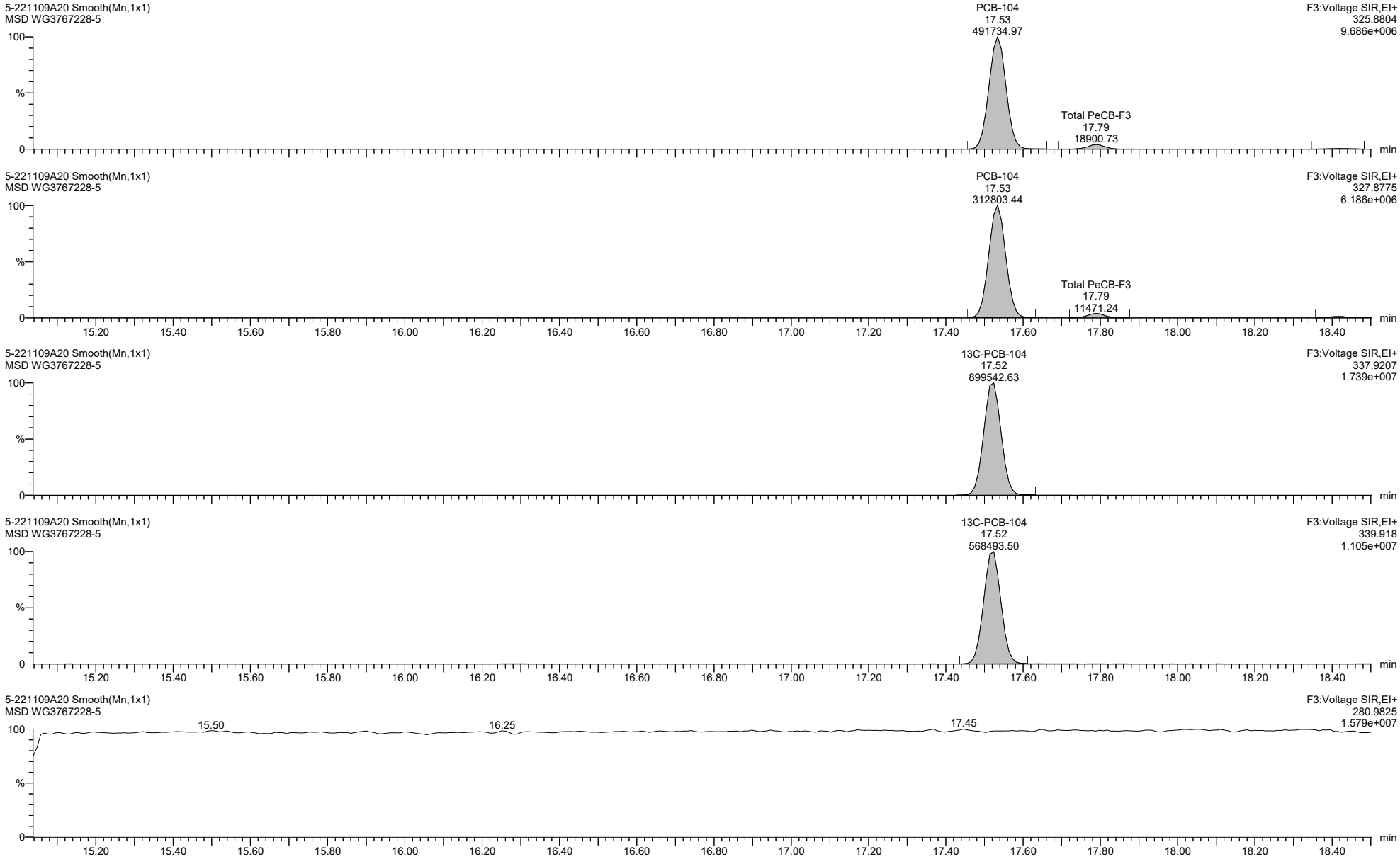


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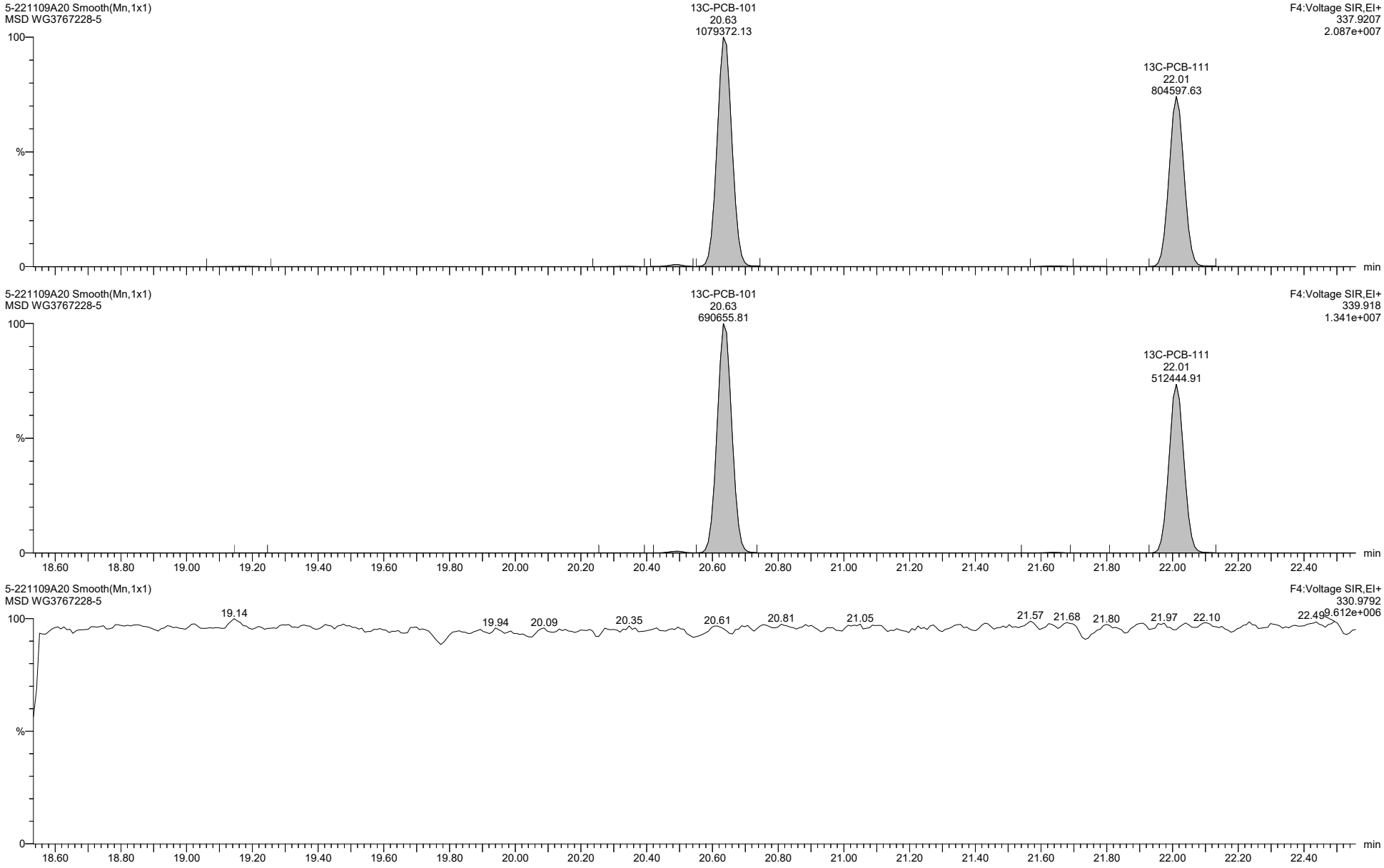
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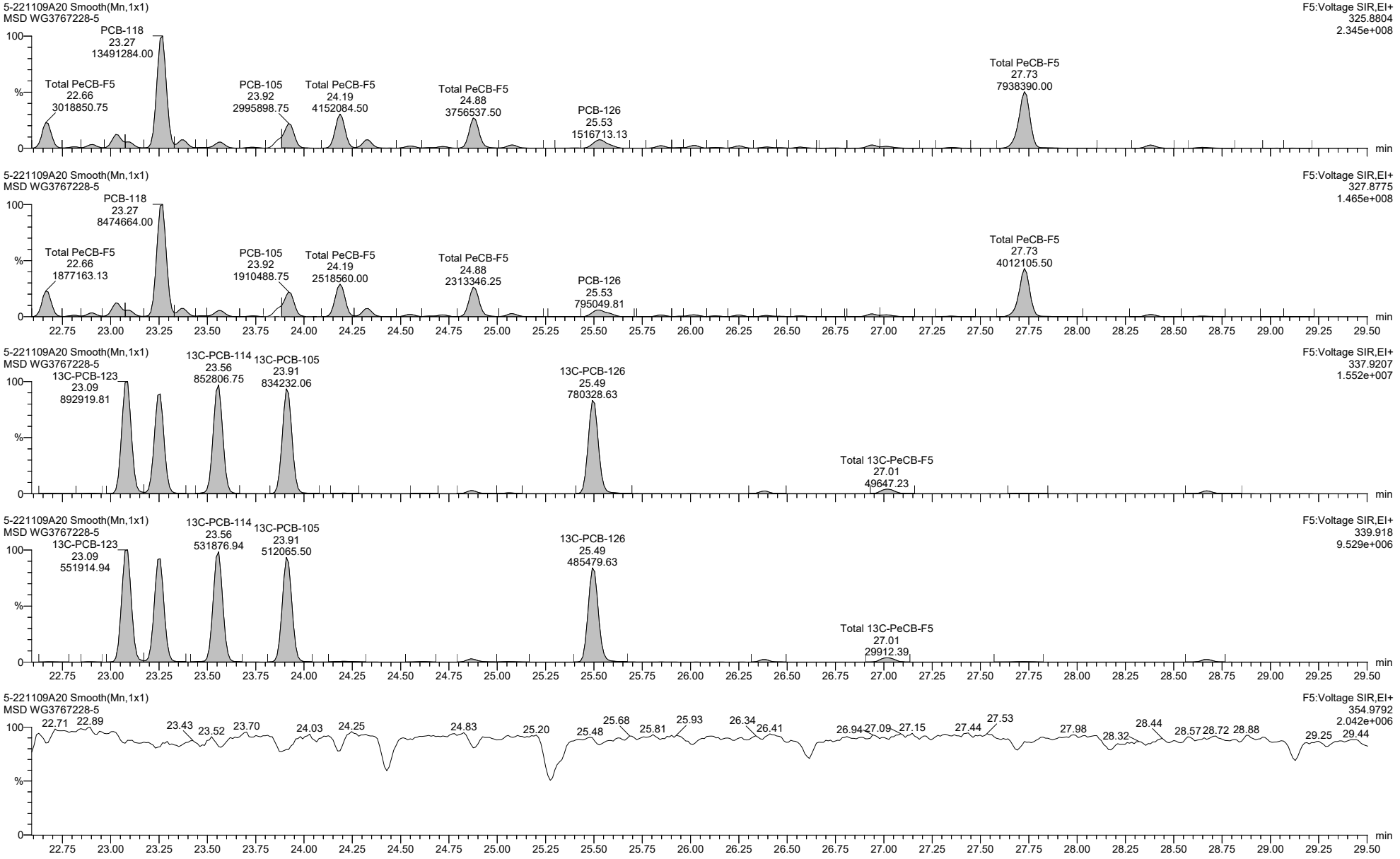


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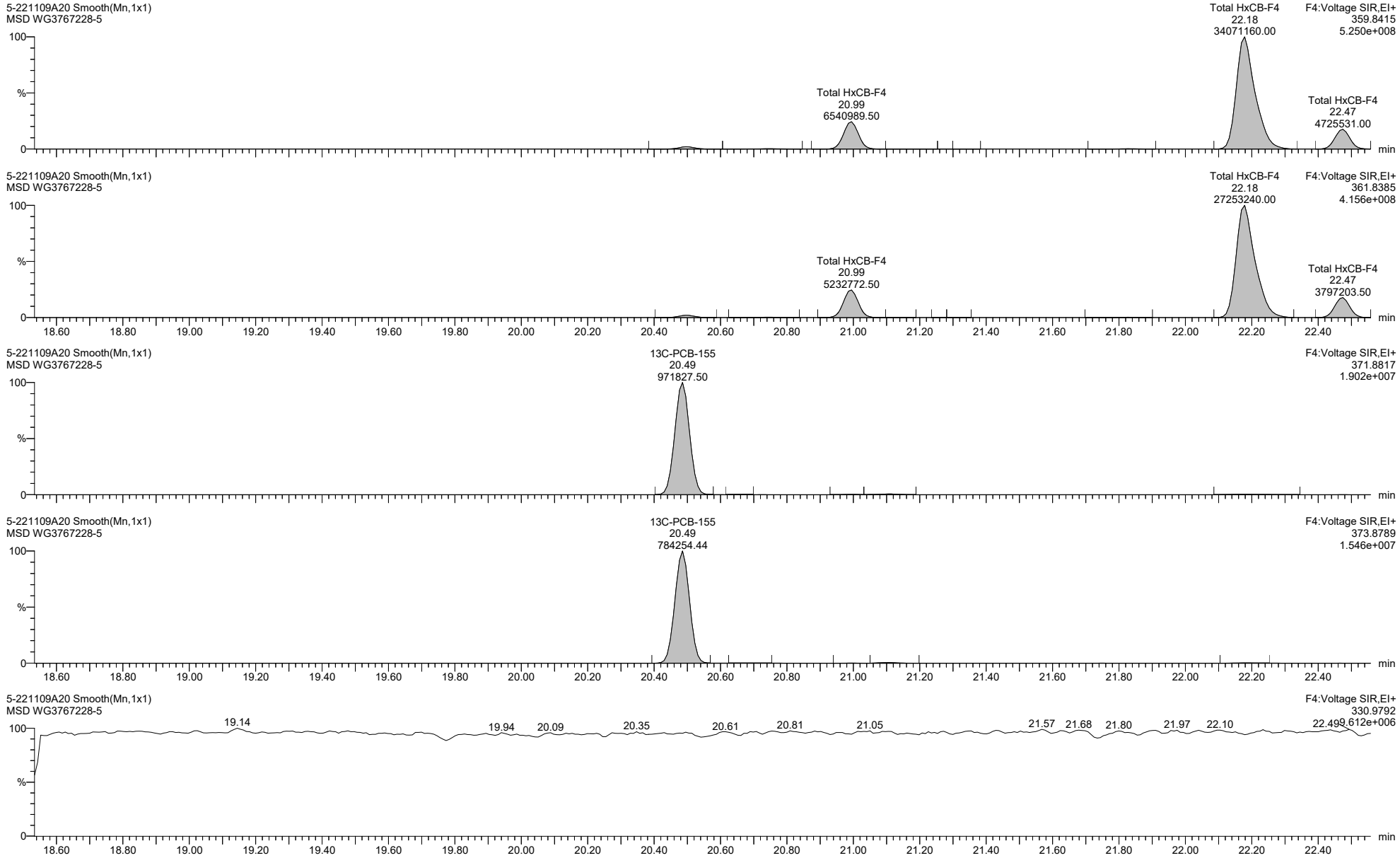


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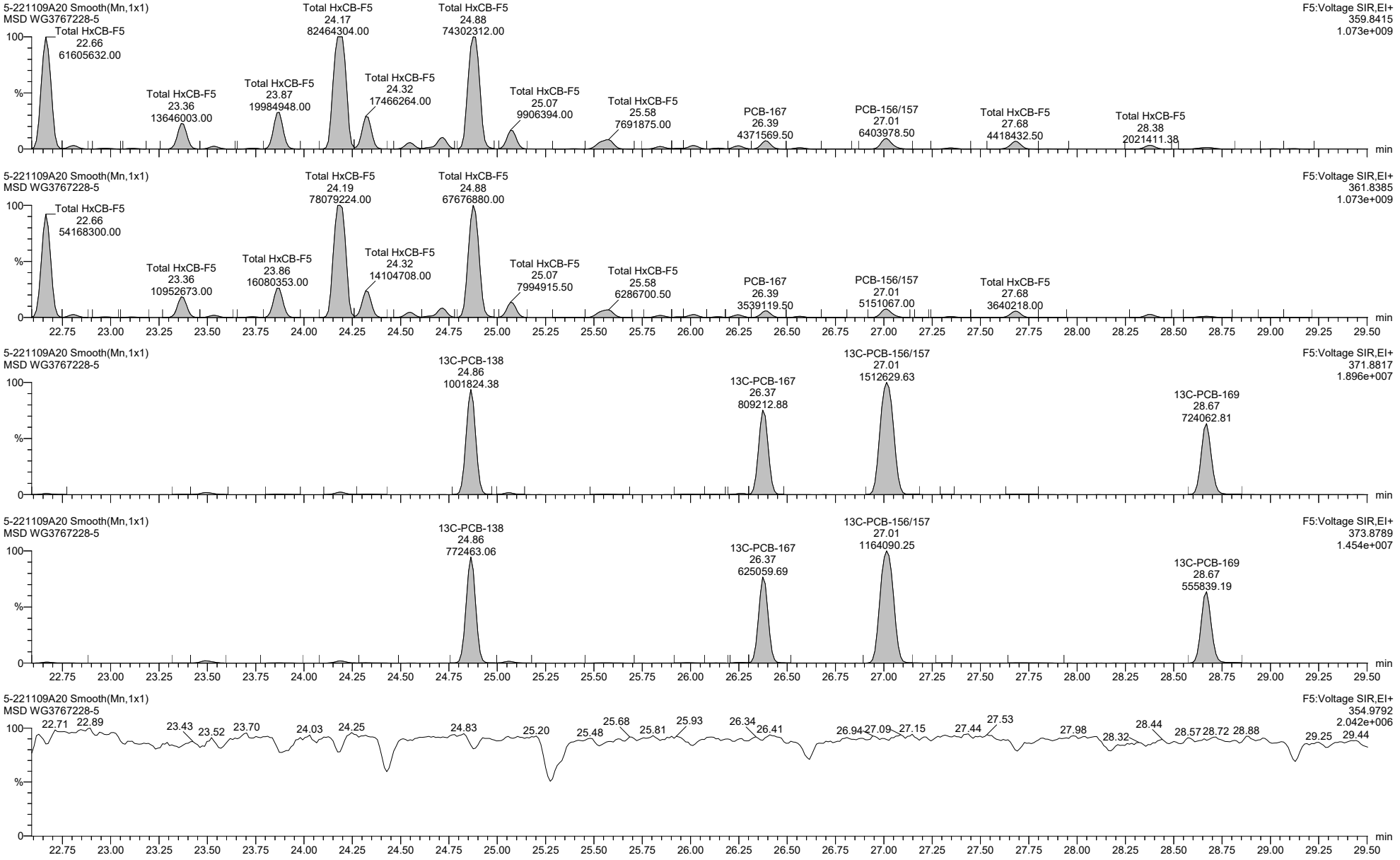


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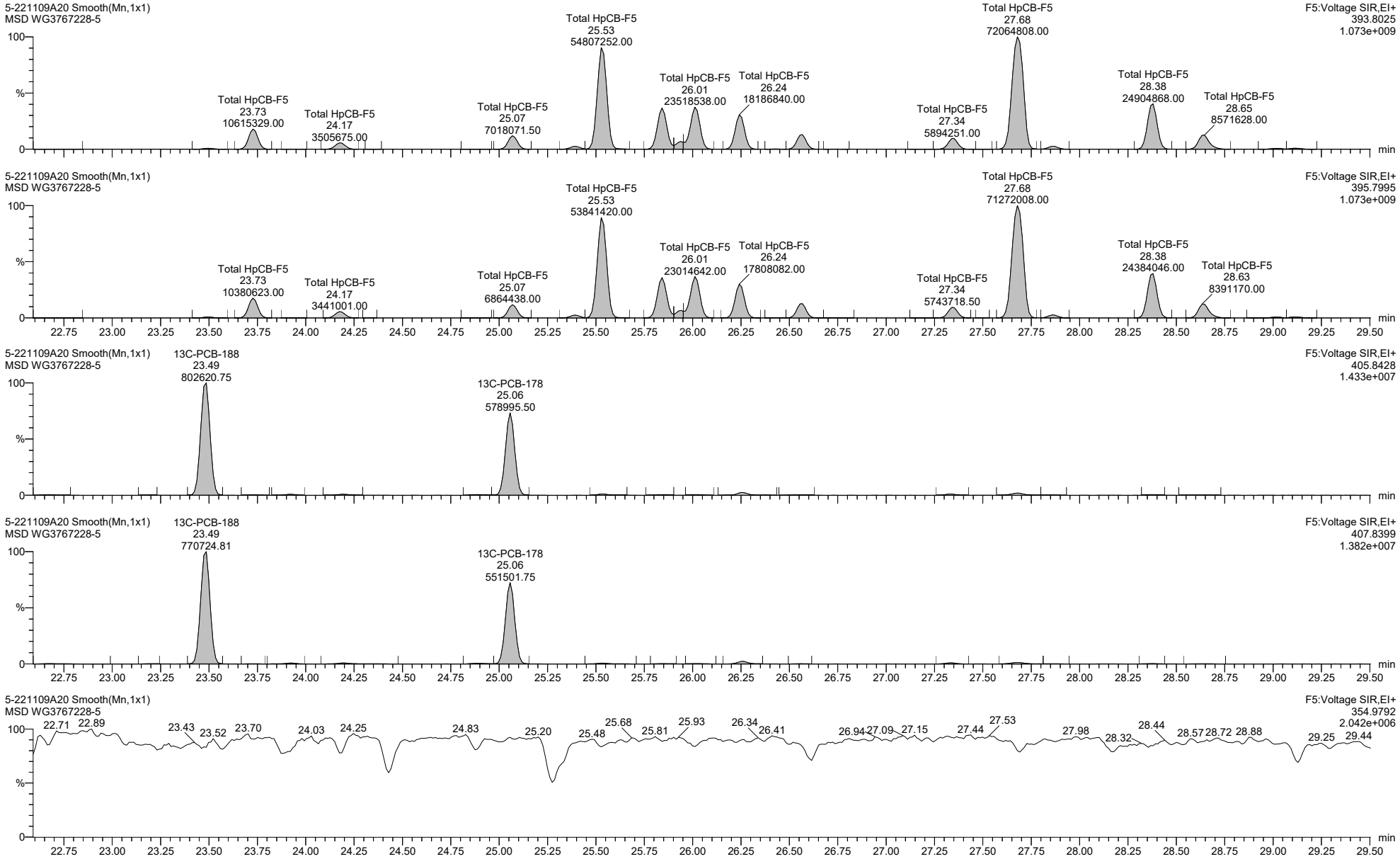


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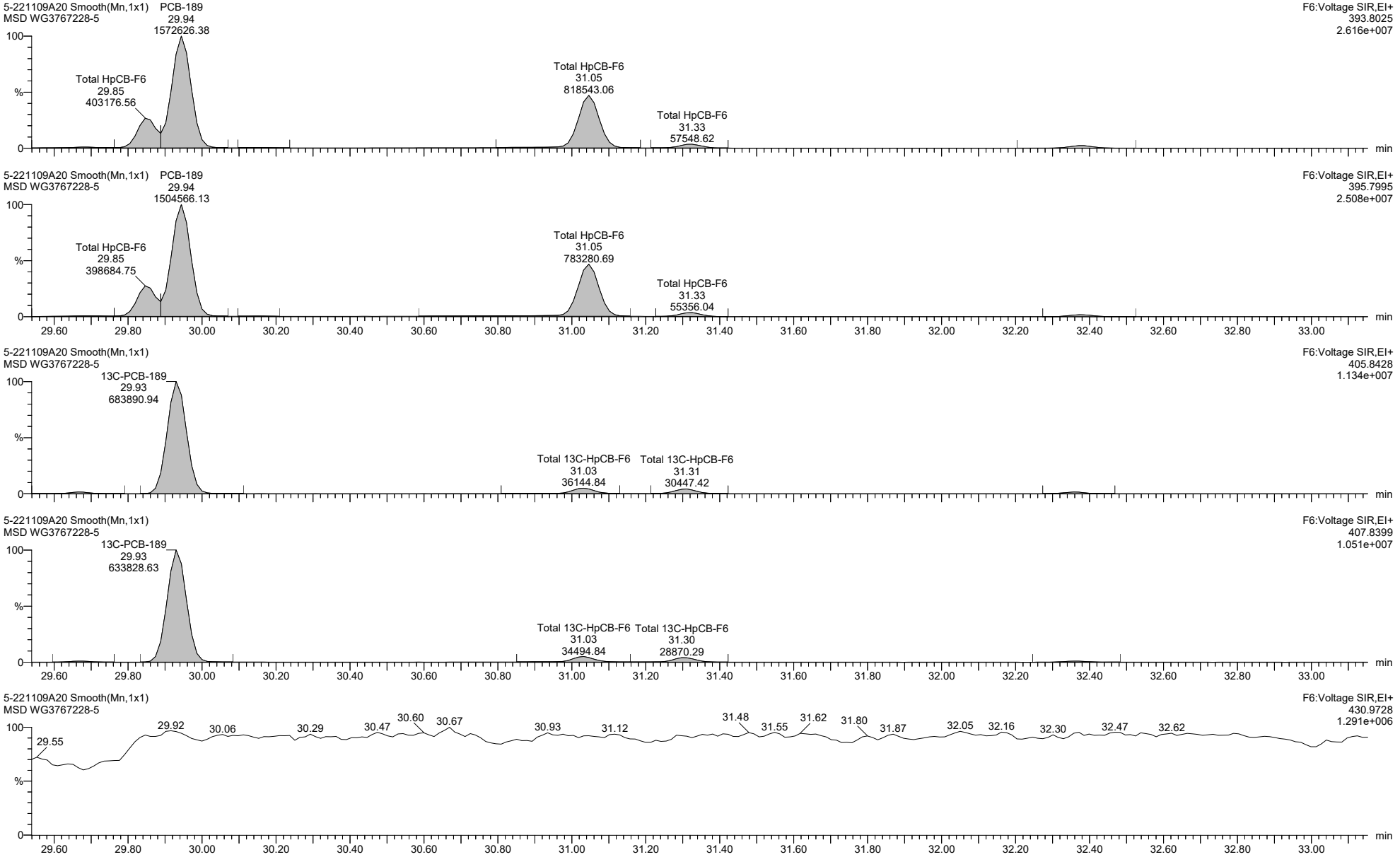


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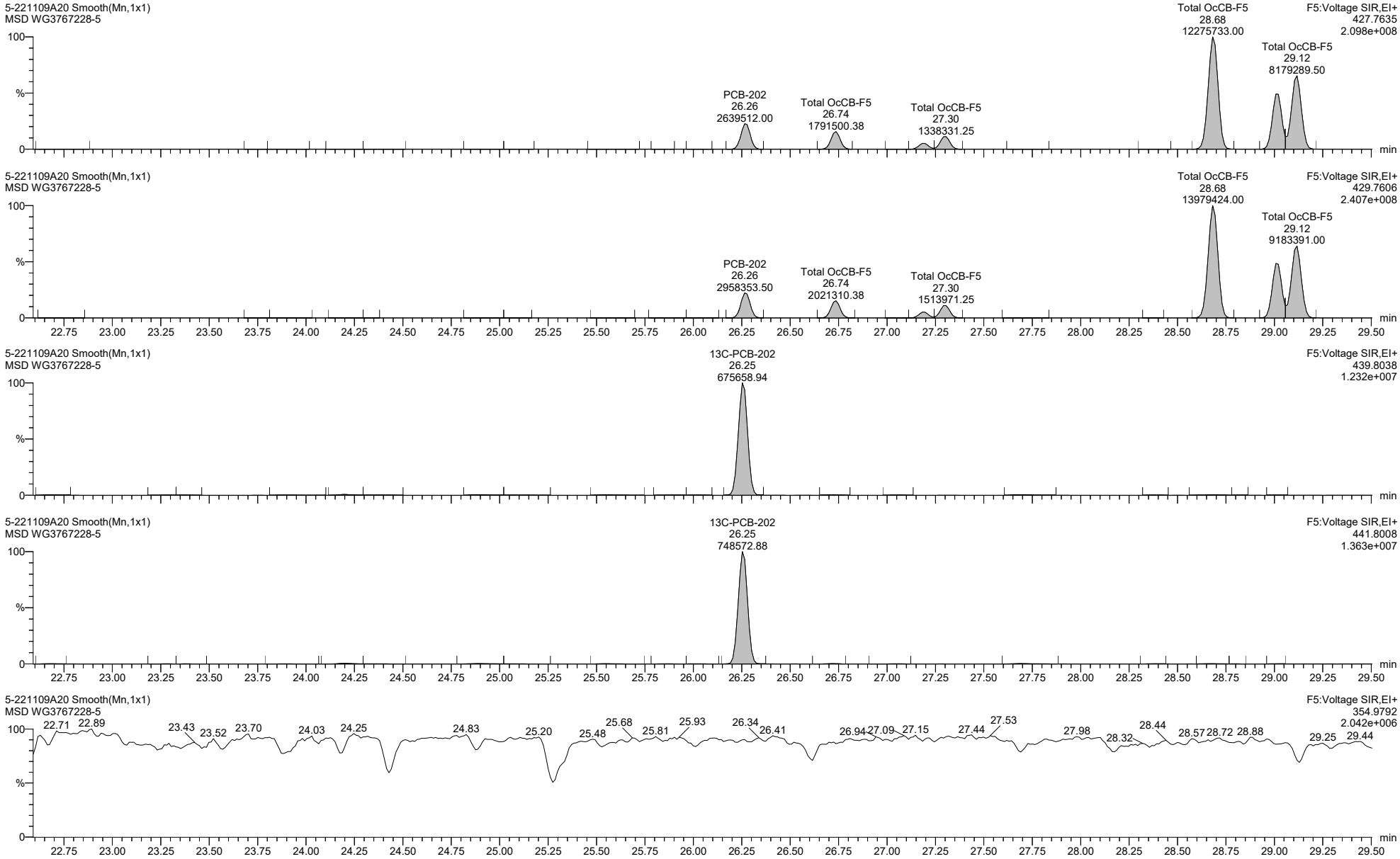


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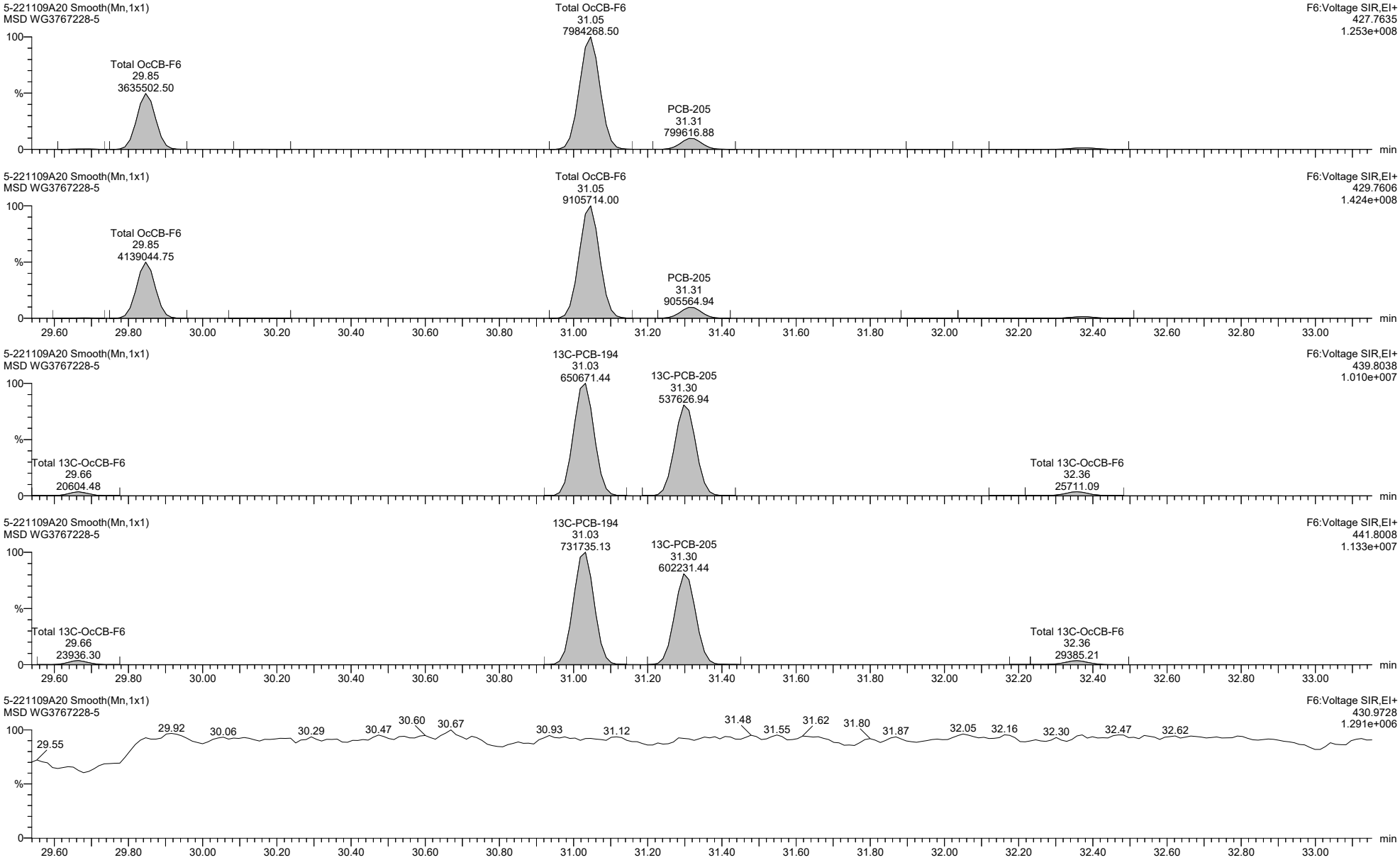


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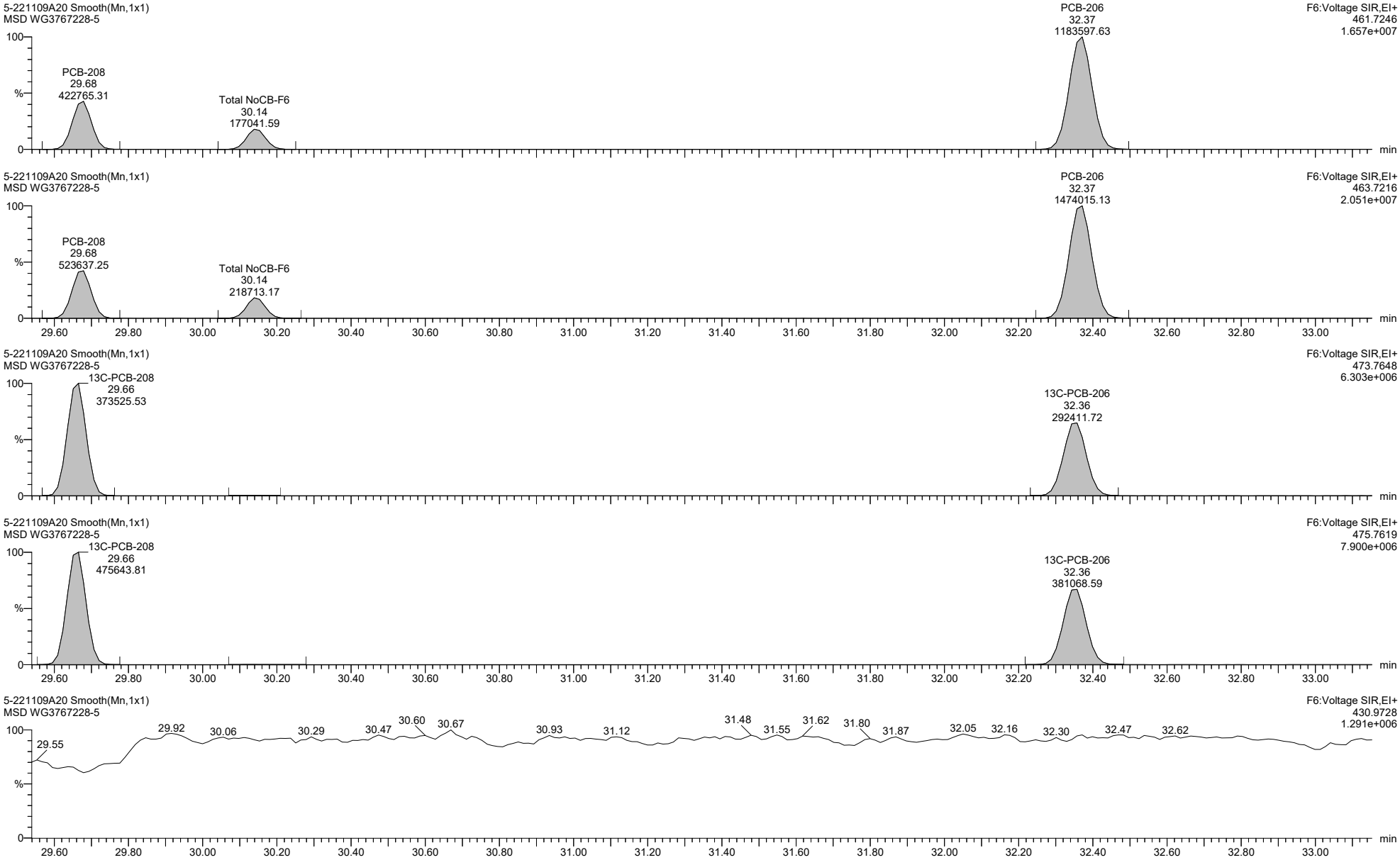


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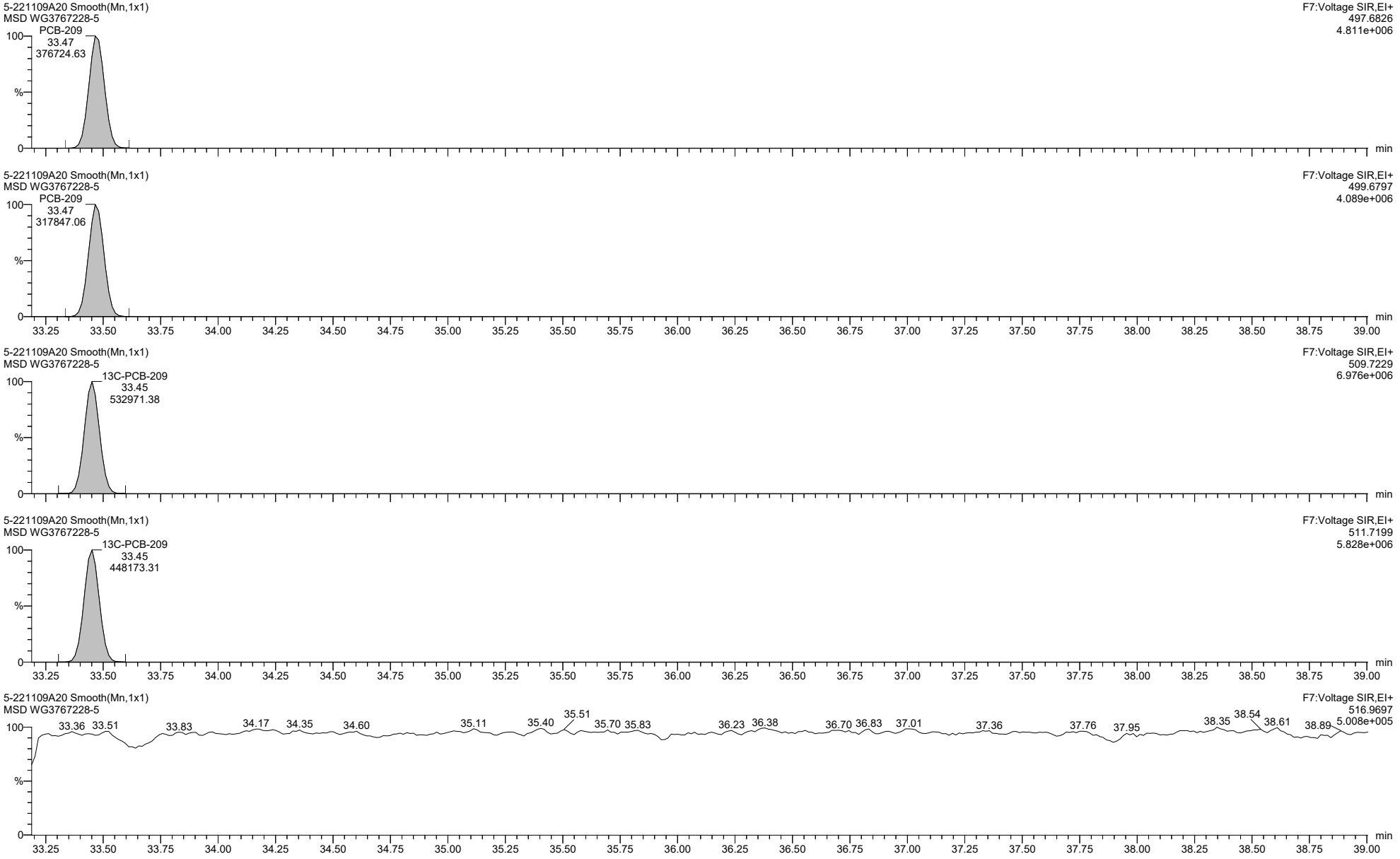


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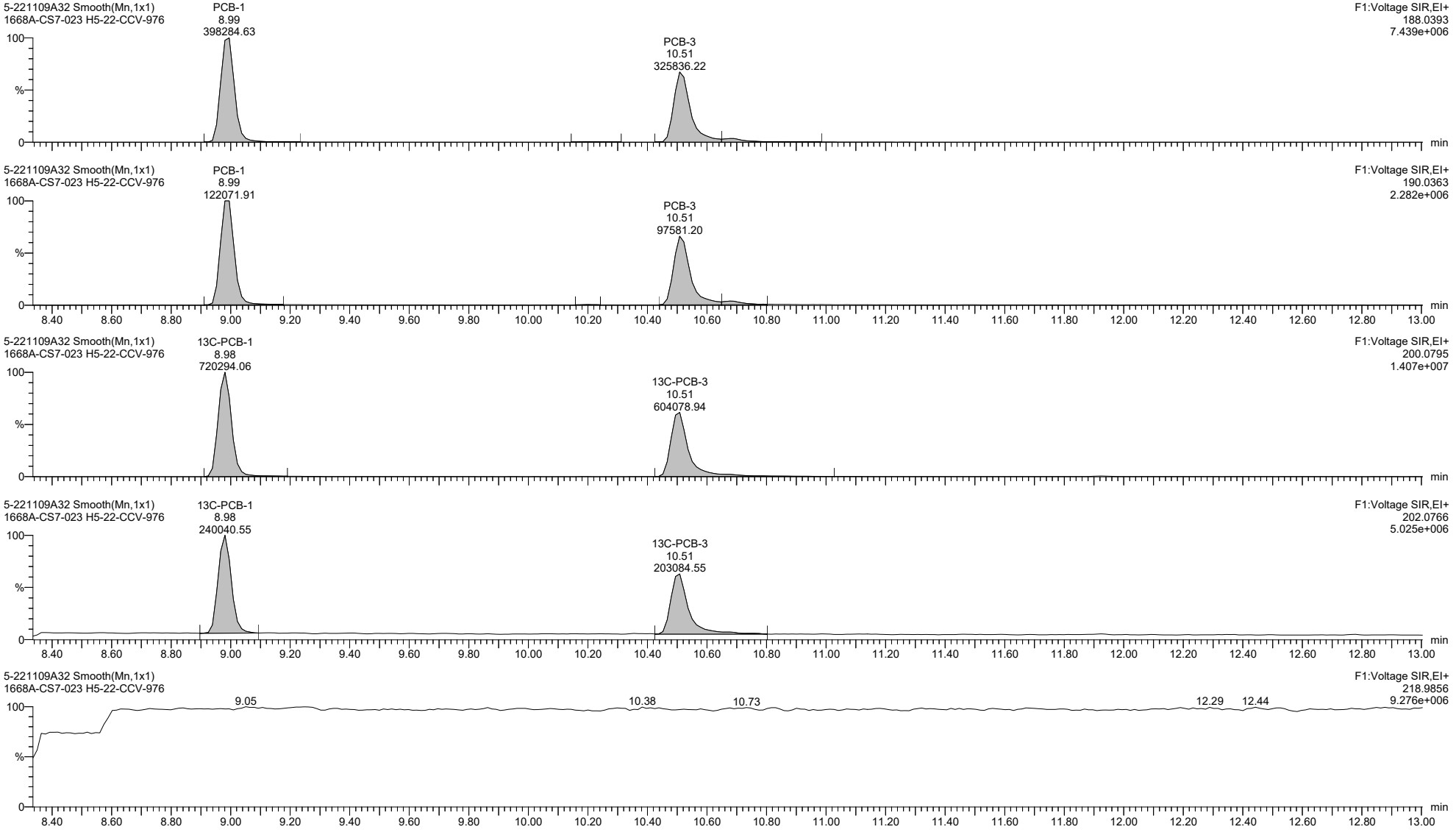
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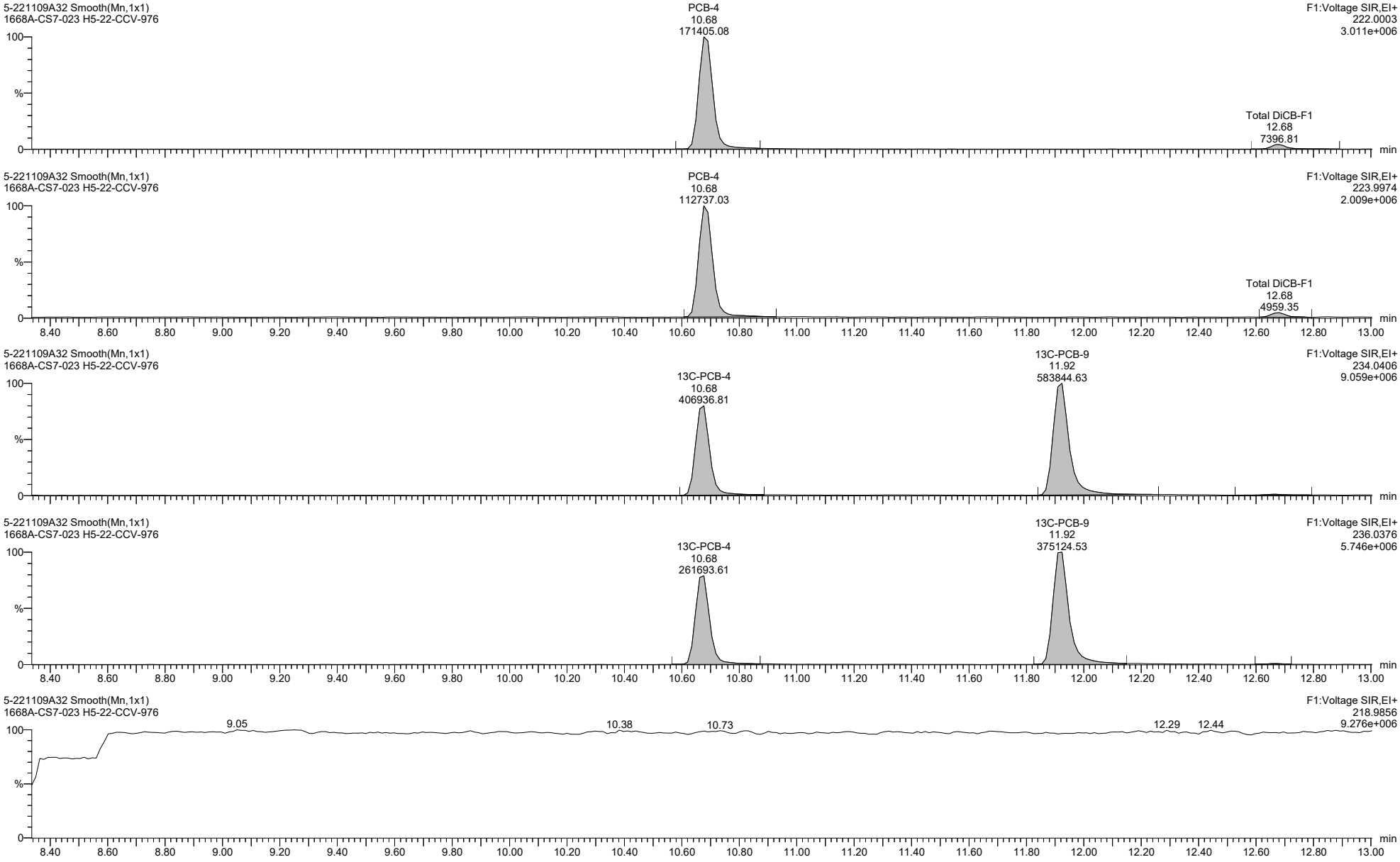


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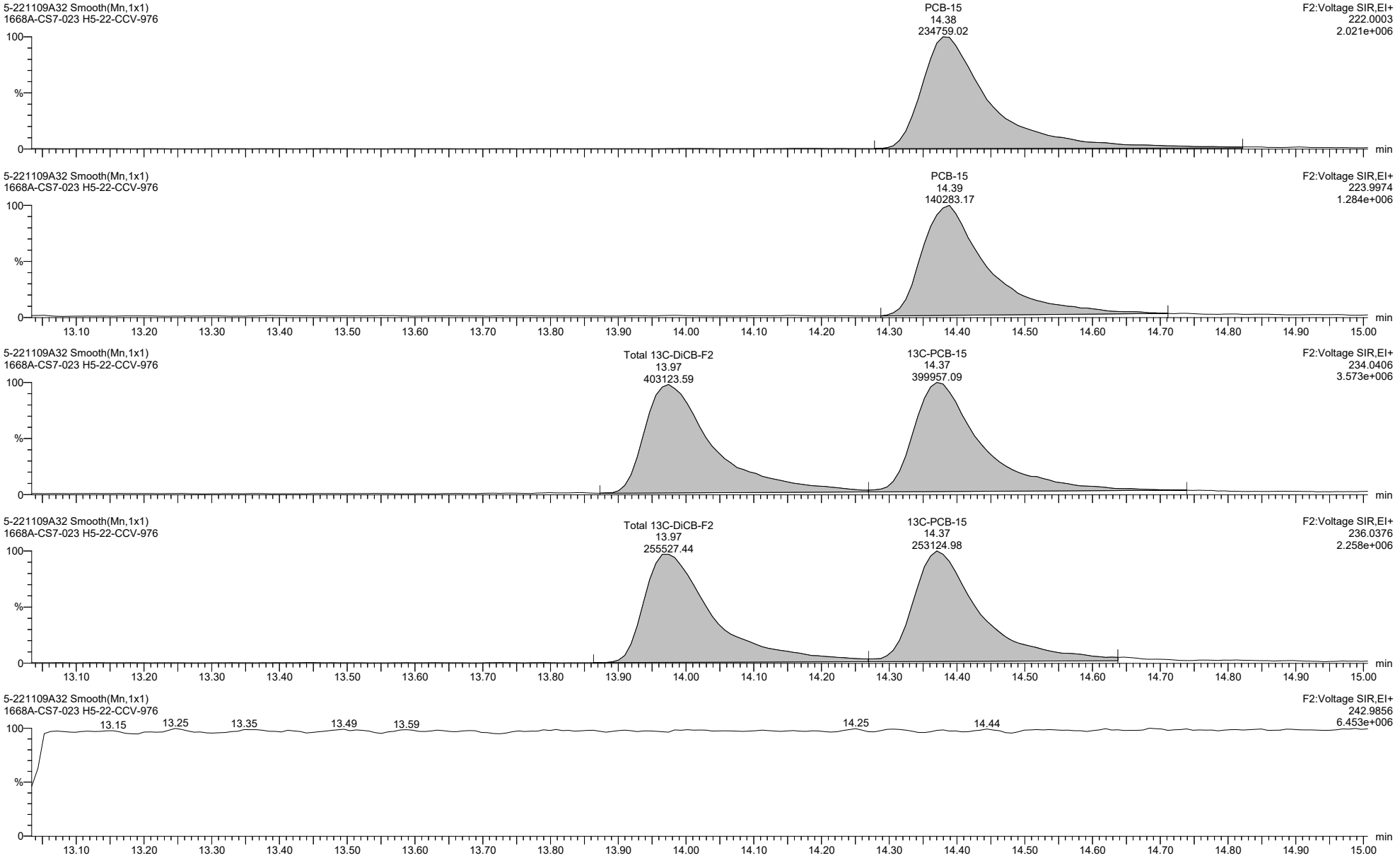
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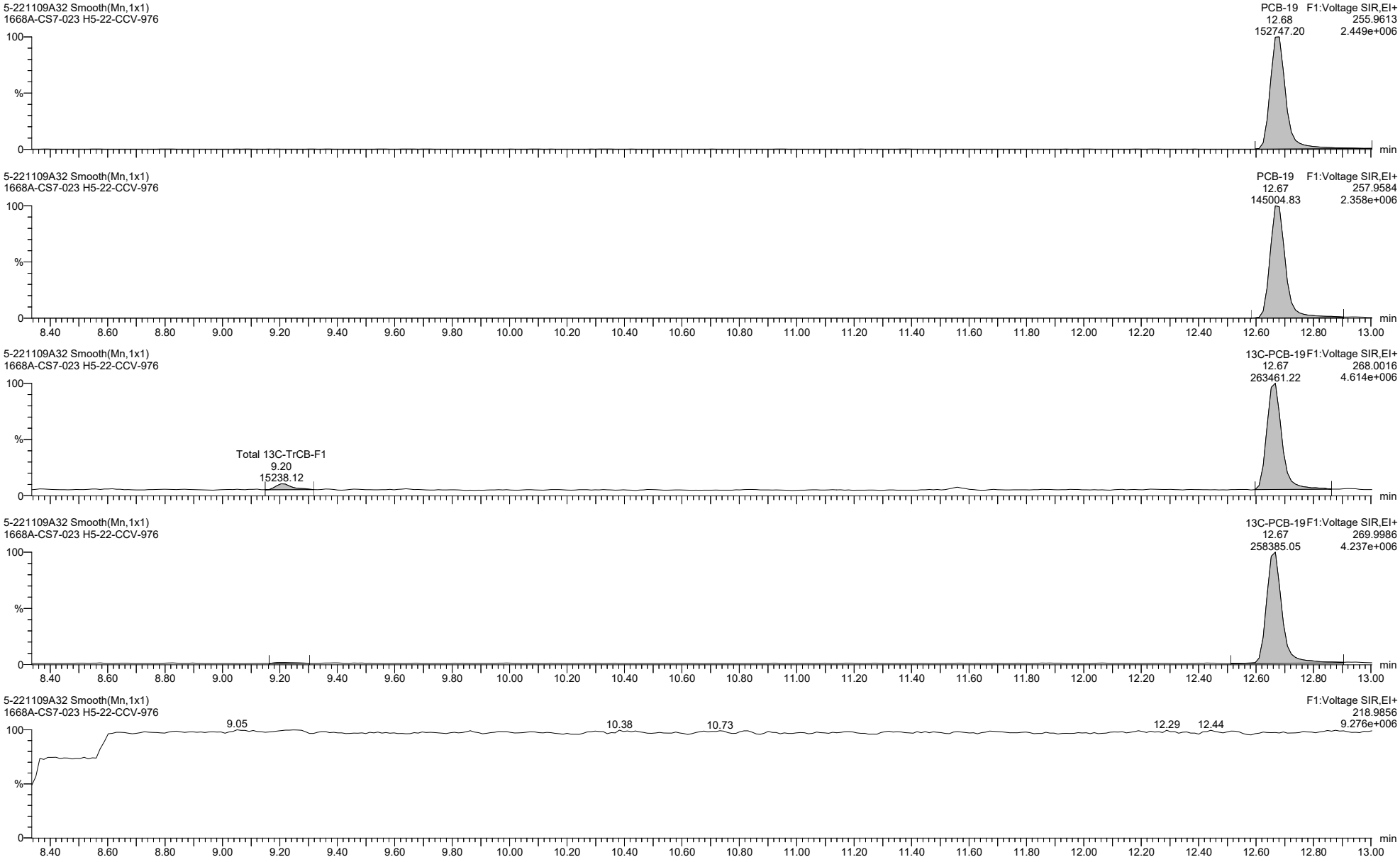


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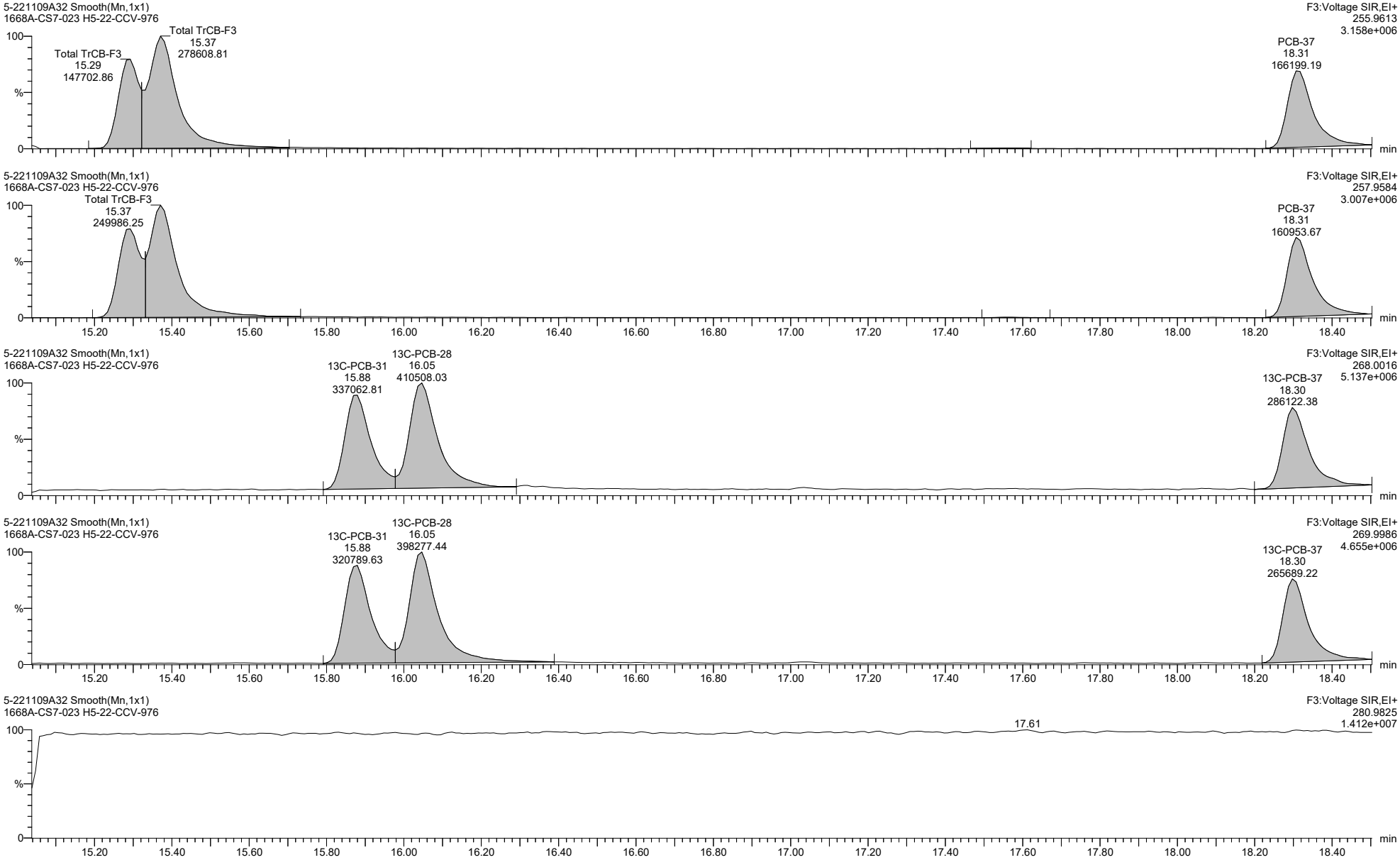
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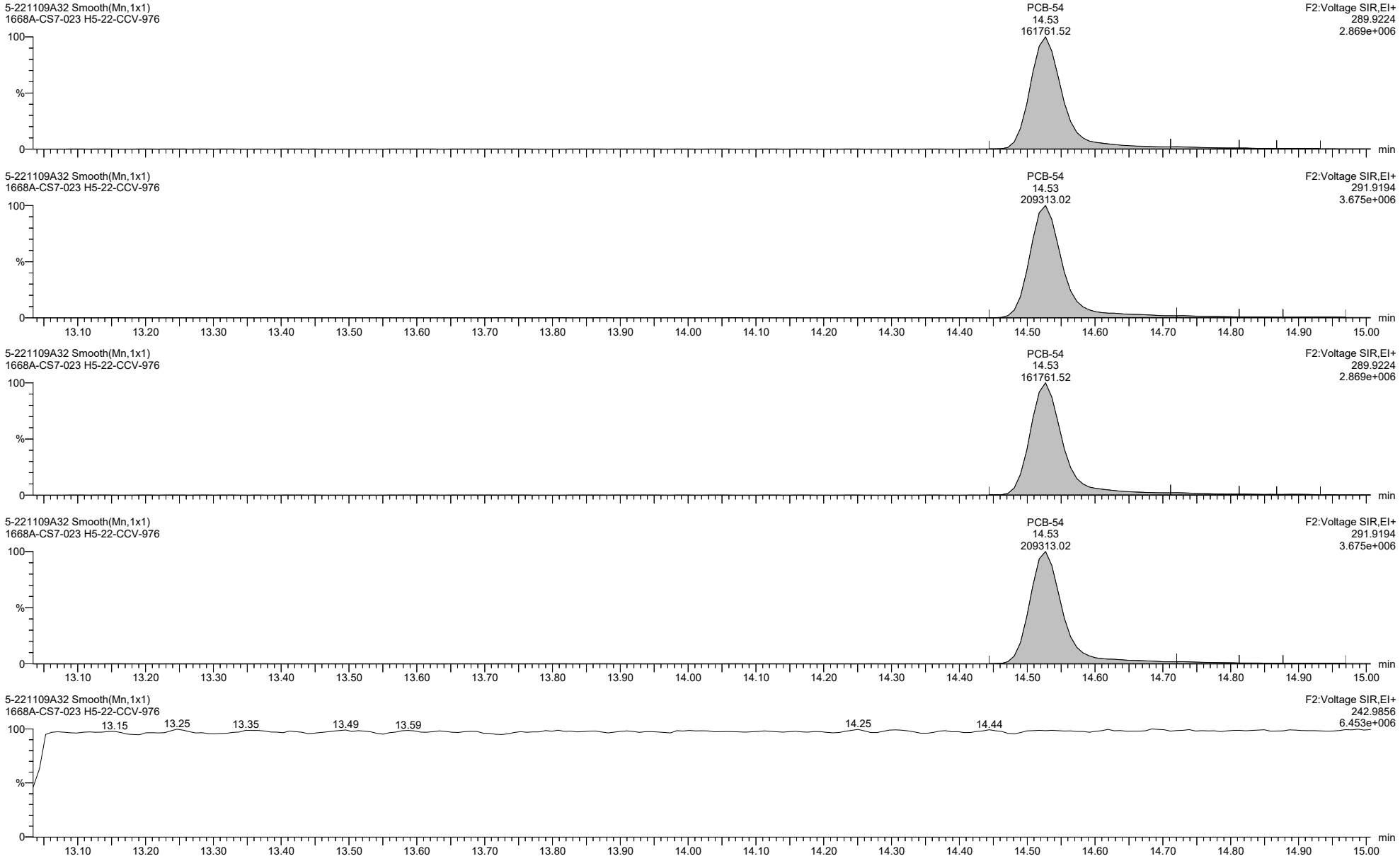


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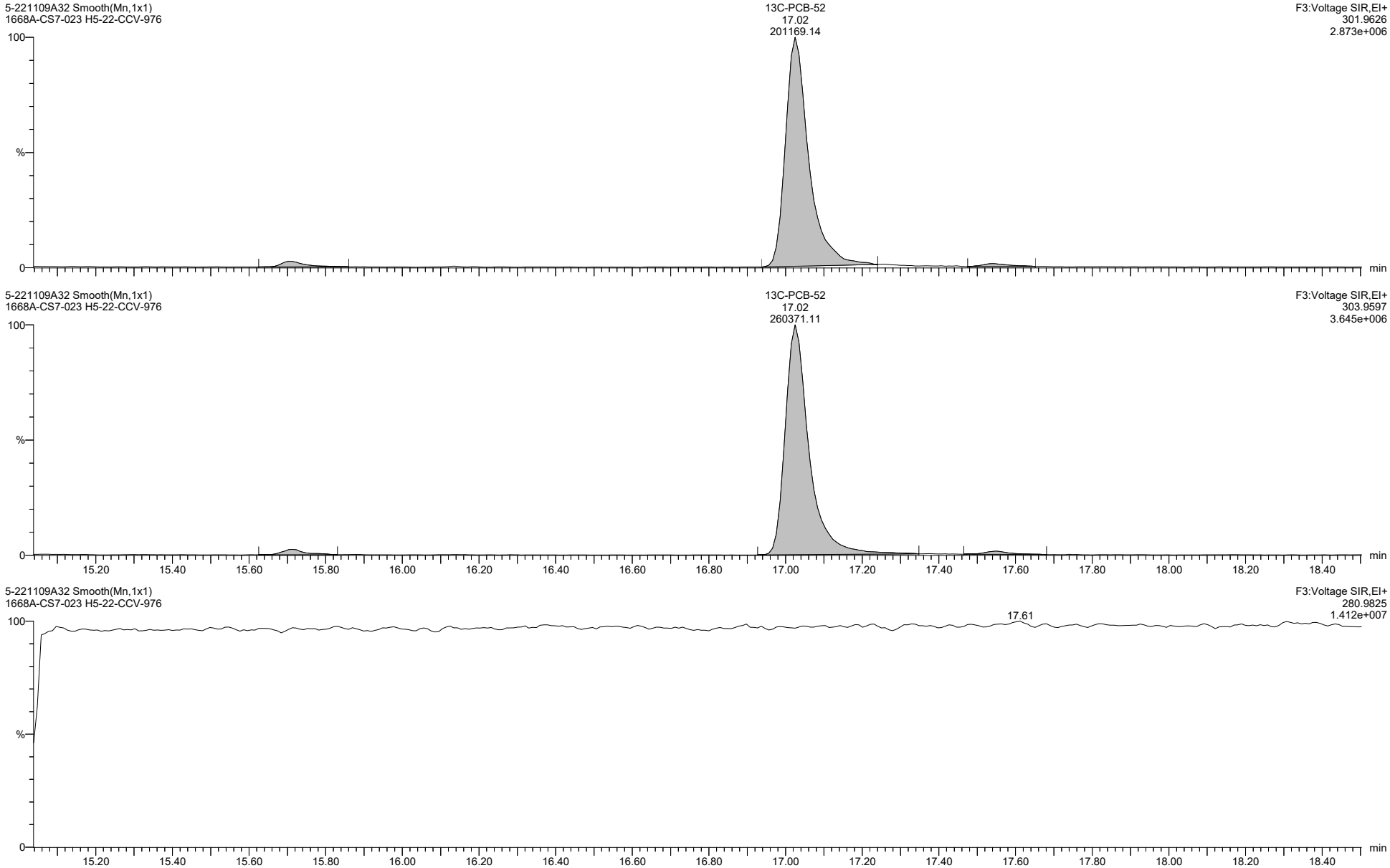


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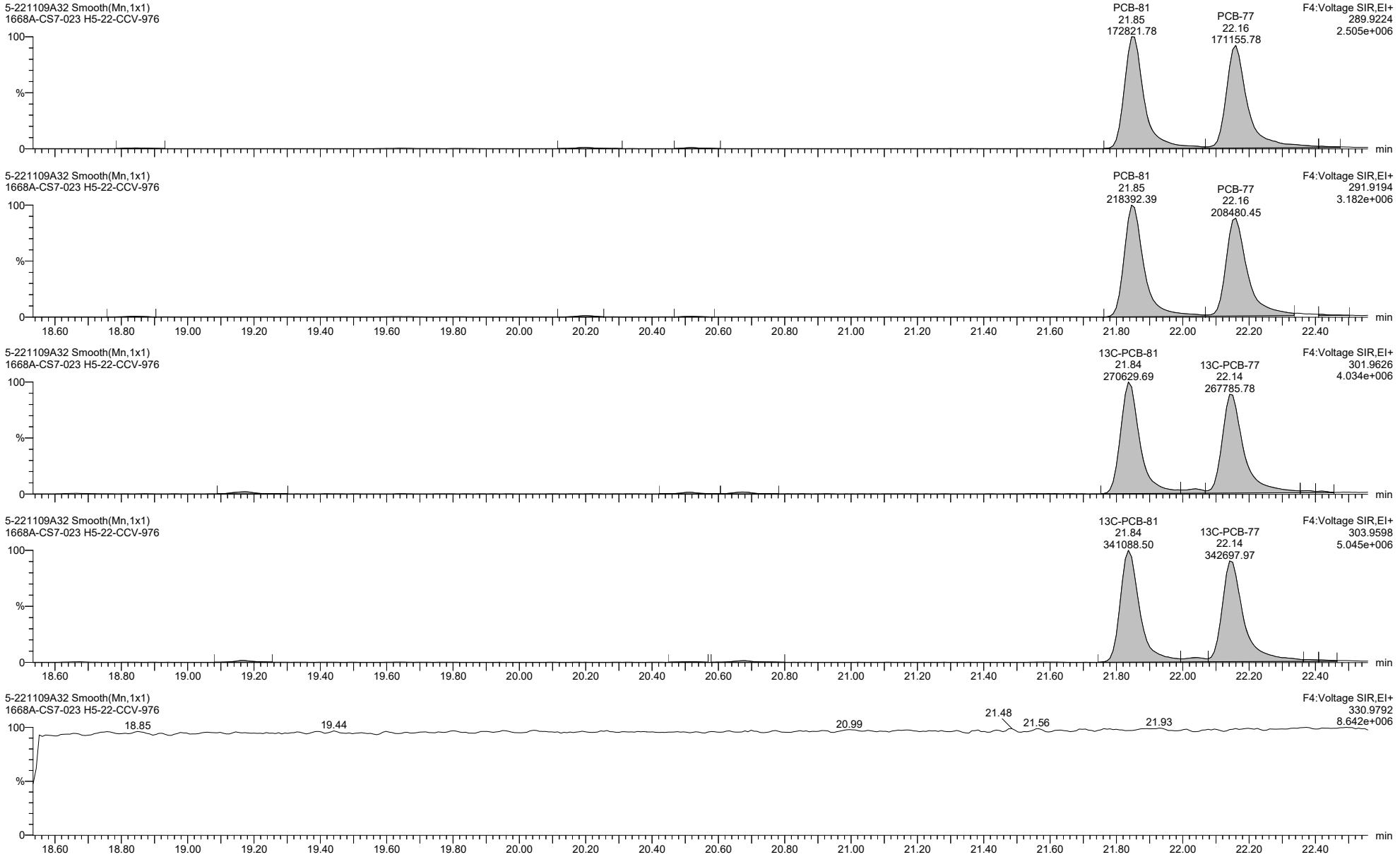


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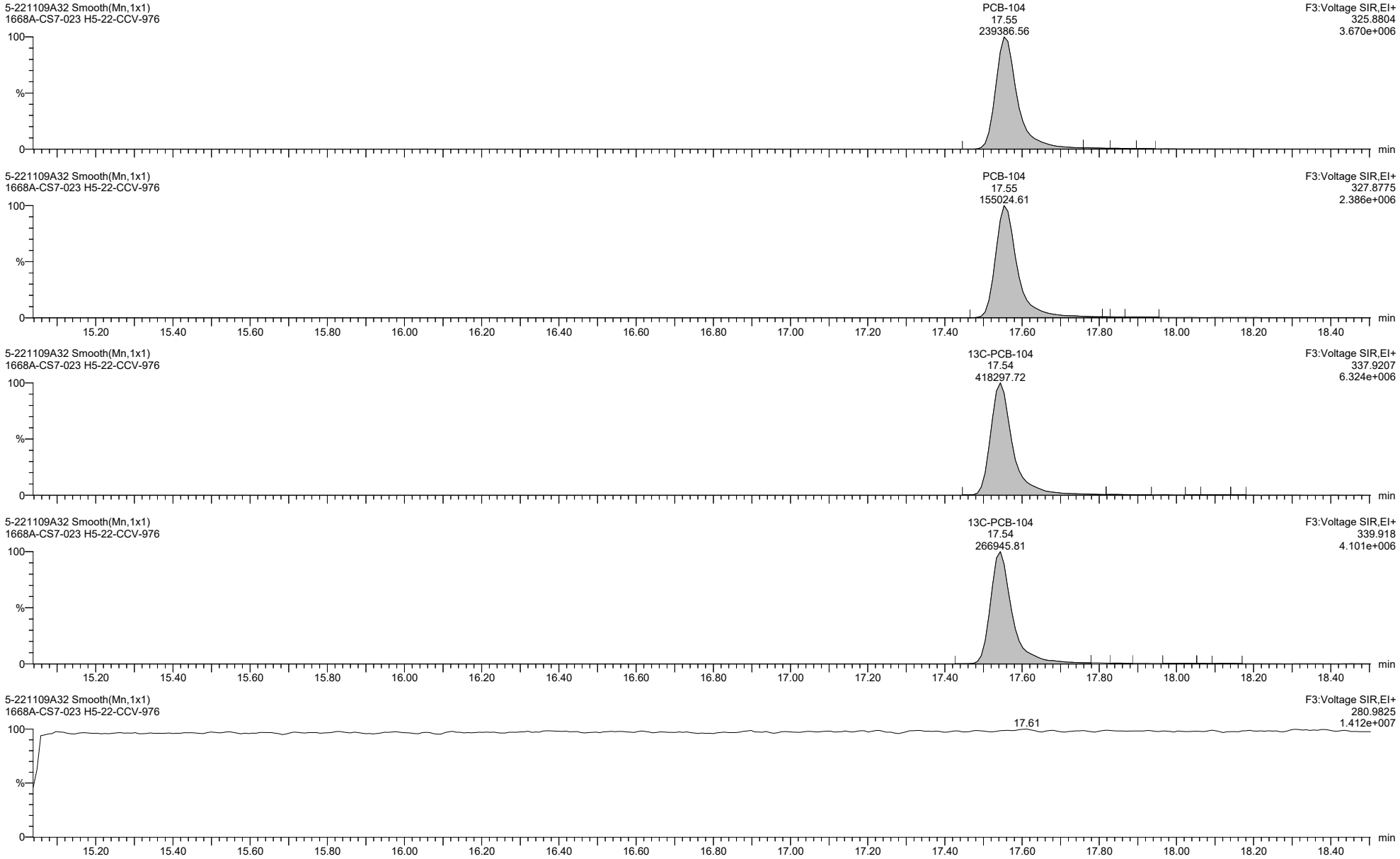


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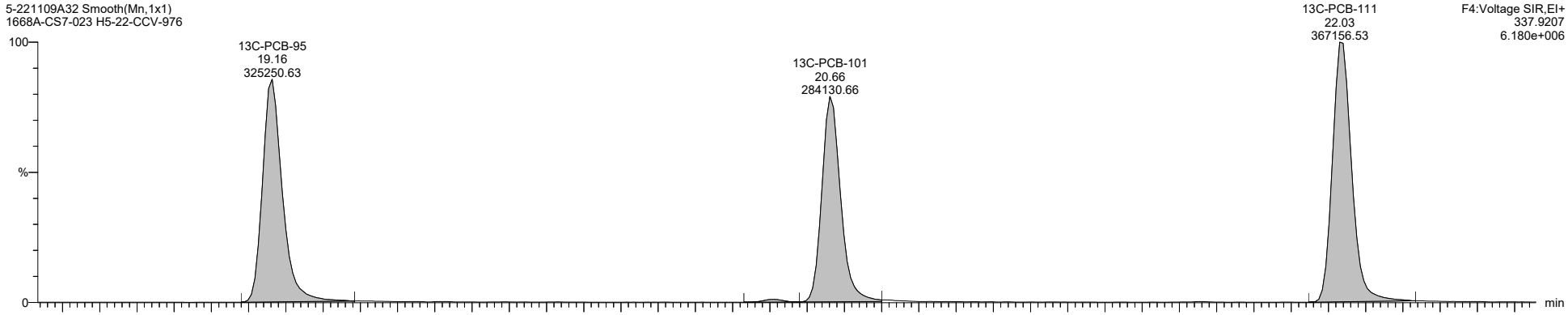
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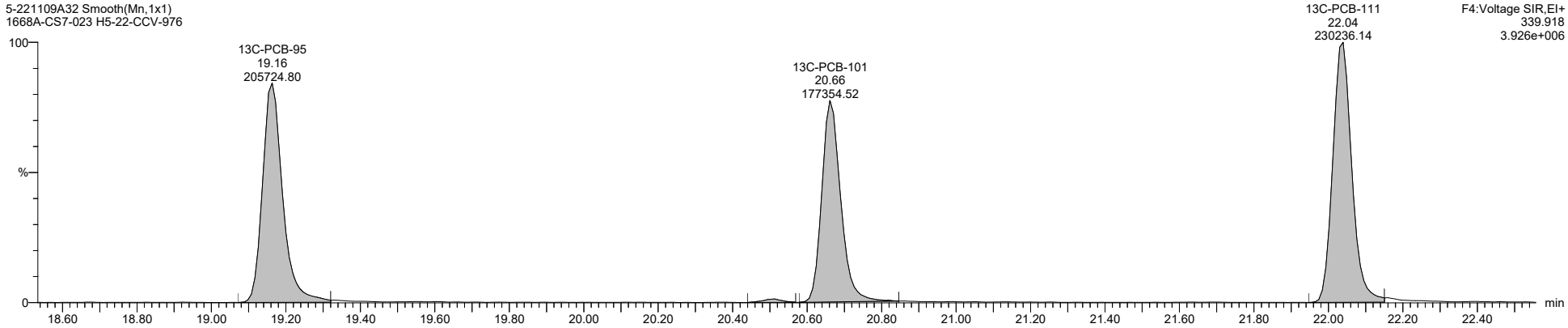


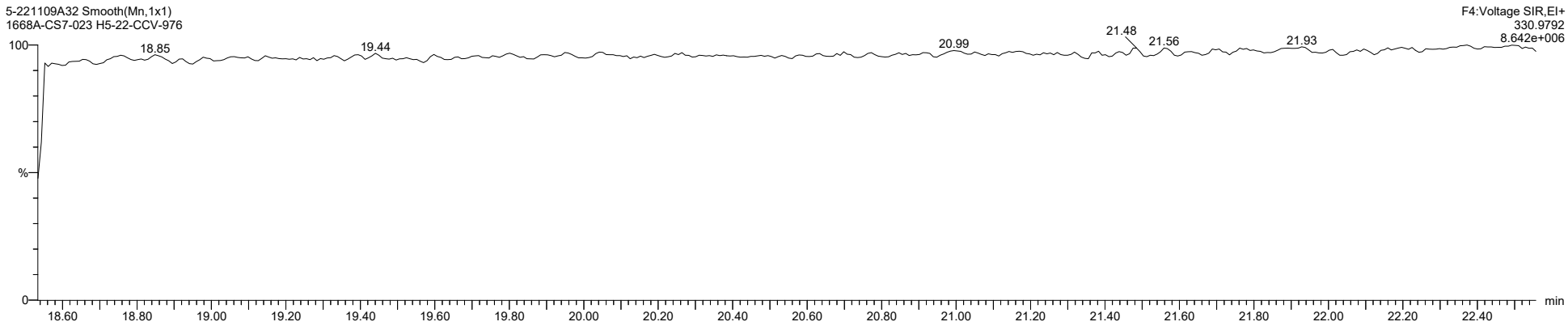
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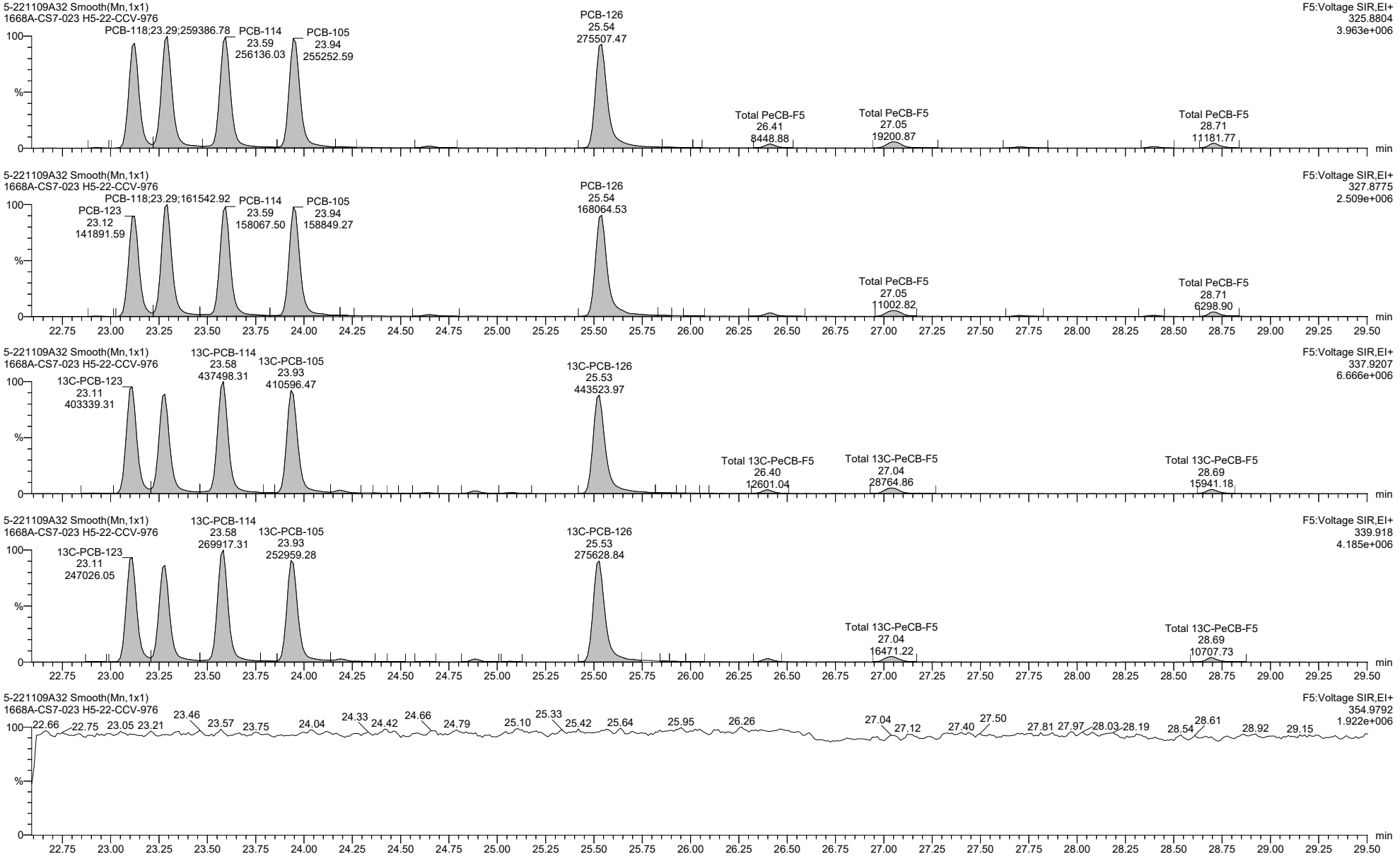


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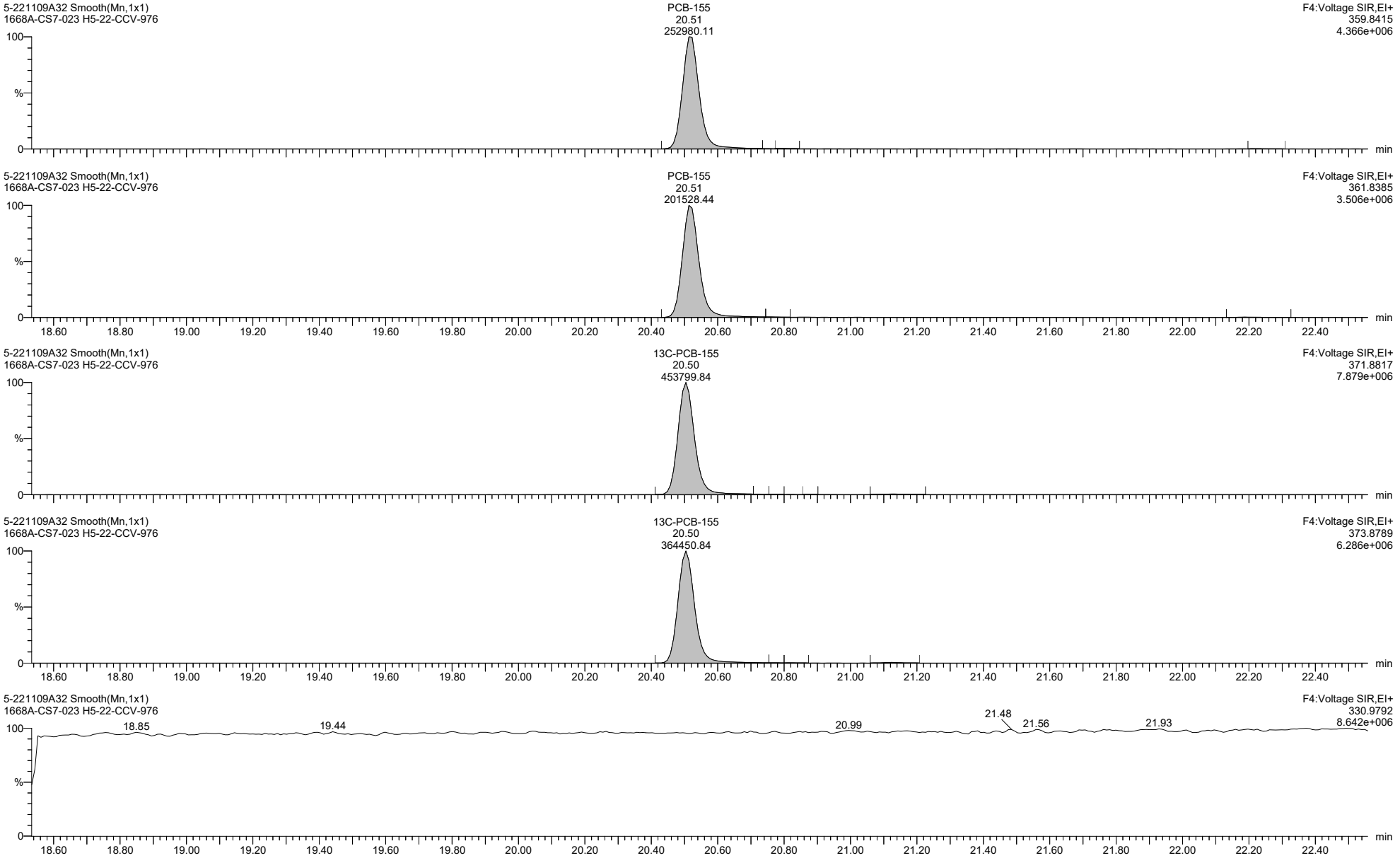


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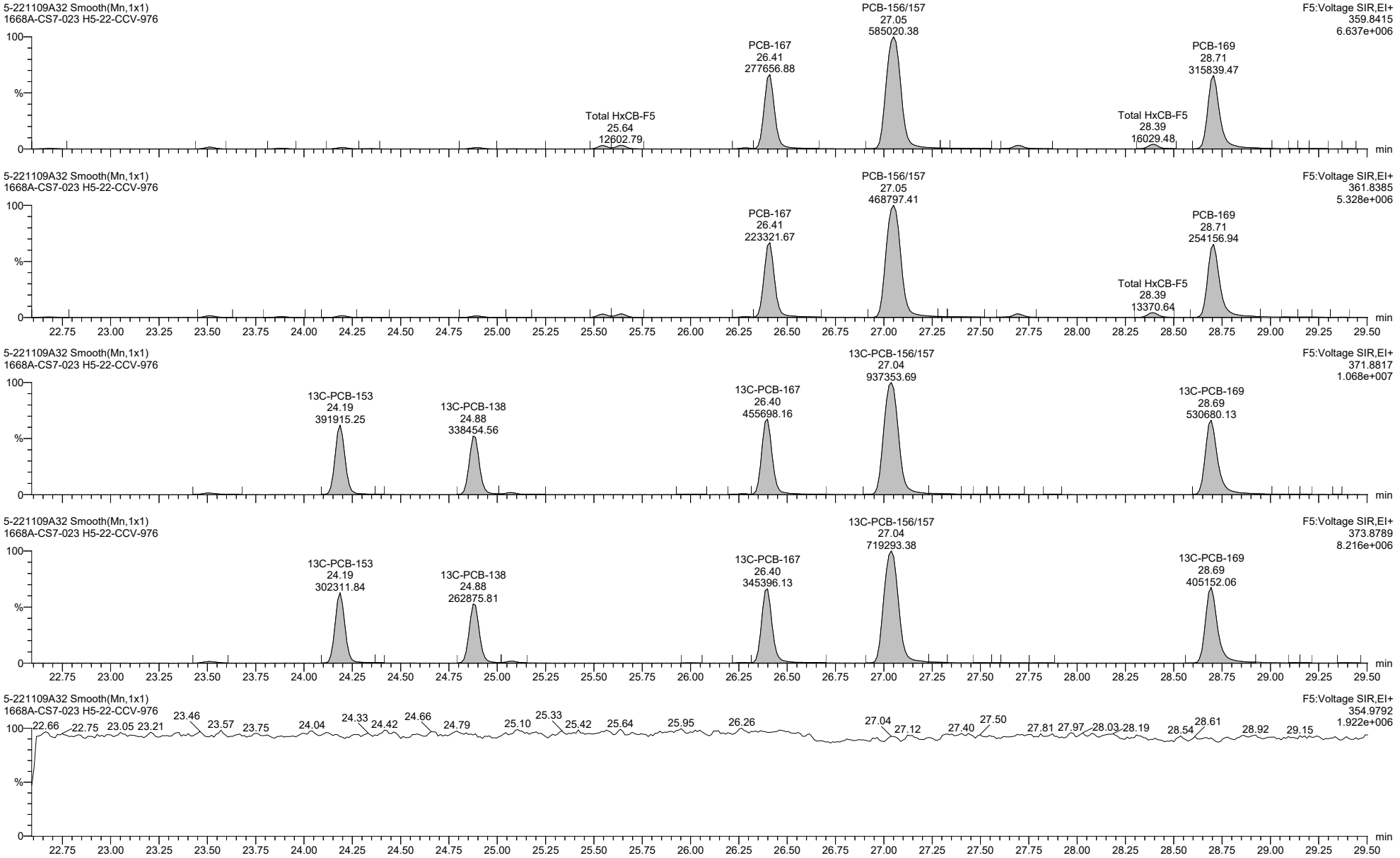


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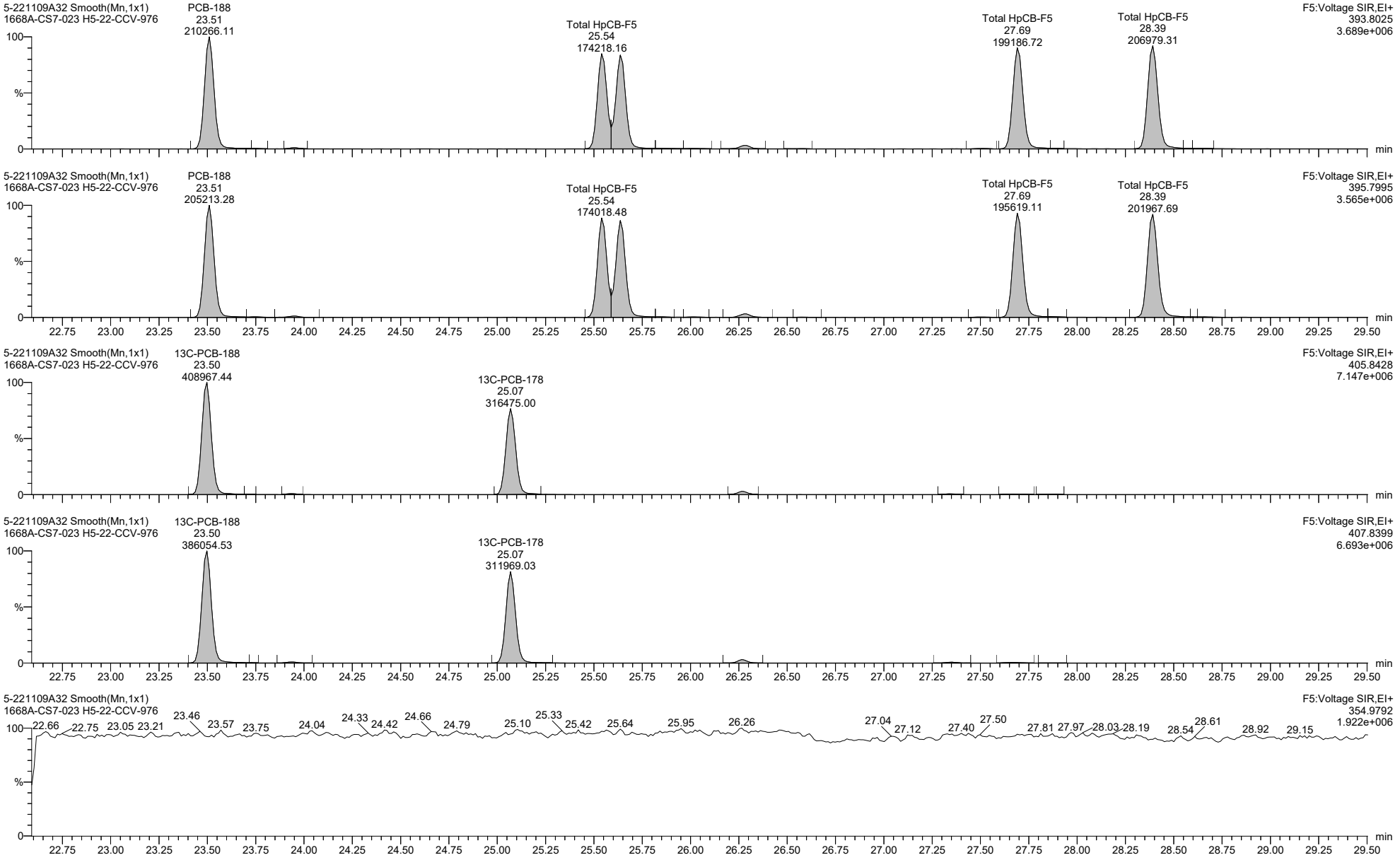
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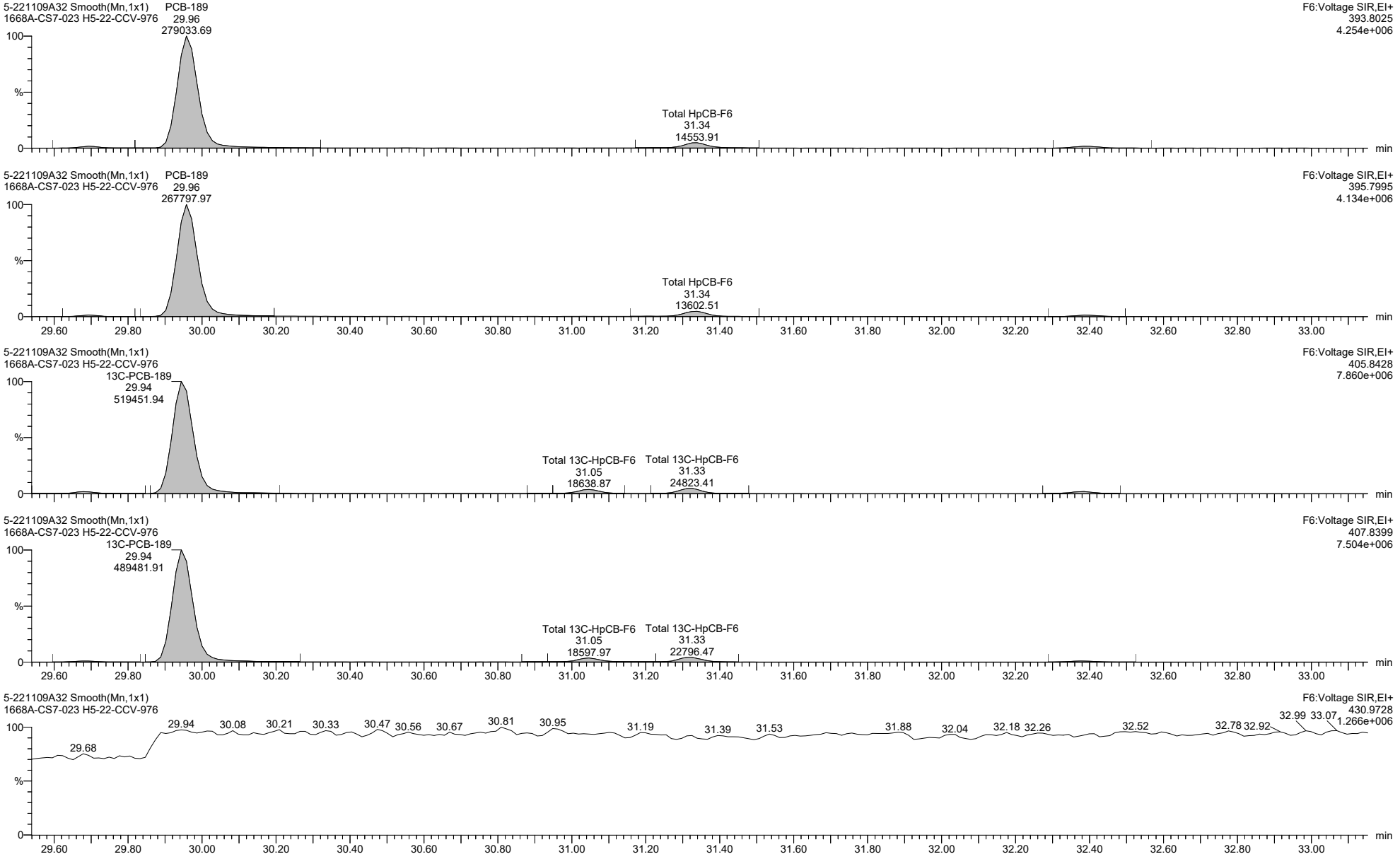


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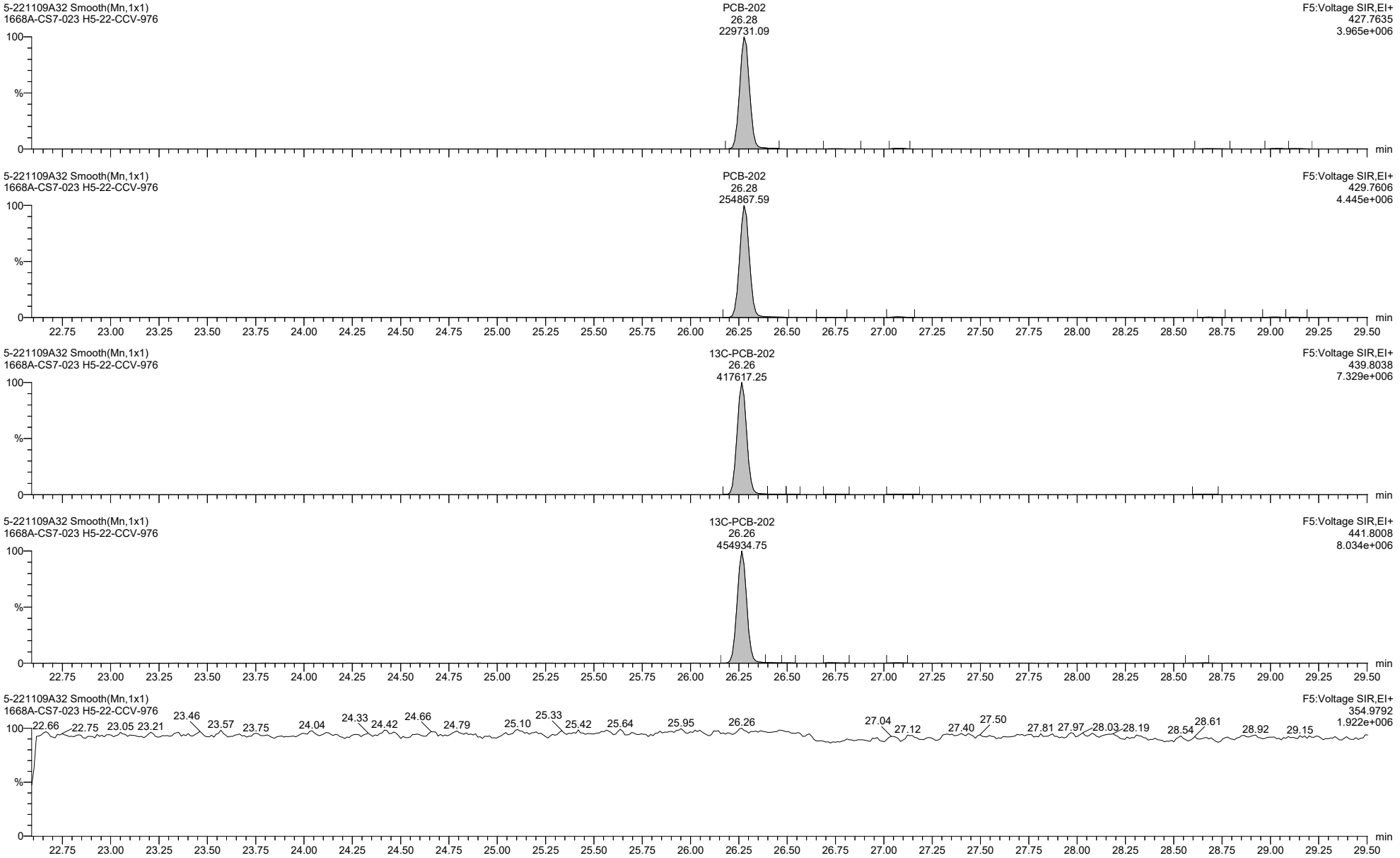
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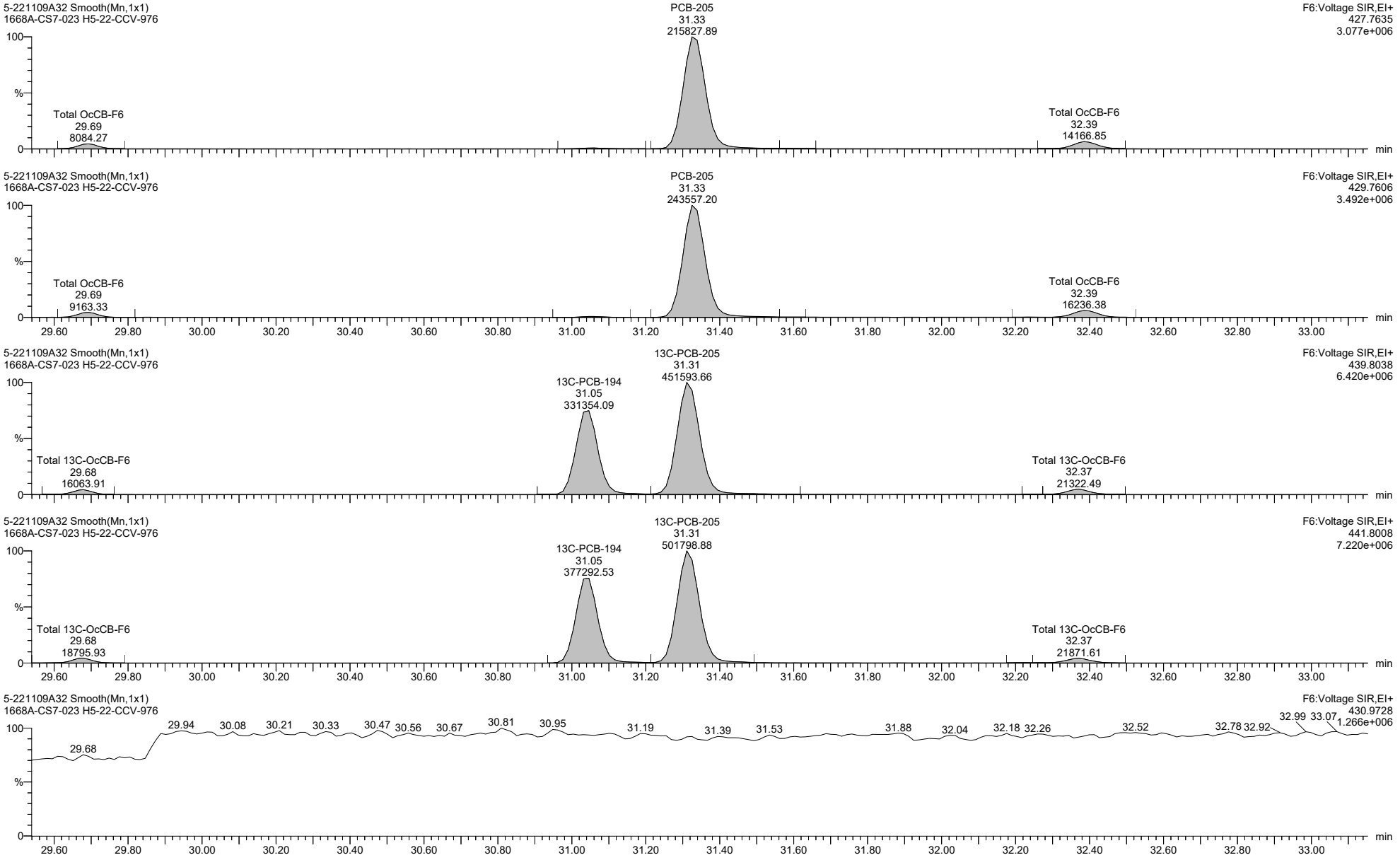


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221109A-QC.qld

Last Altered: Wednesday, November 23, 2022 17:30:50 Eastern Standard Time
Printed: Thursday, November 24, 2022 09:42:18 Eastern Standard Time

Name: 5-221109A32, Date: 10-Nov-2022, Time: 13:52:20, ID: H5-22-CCV-976, Description: 1668A-CS7-023, Vial: Tray1:1

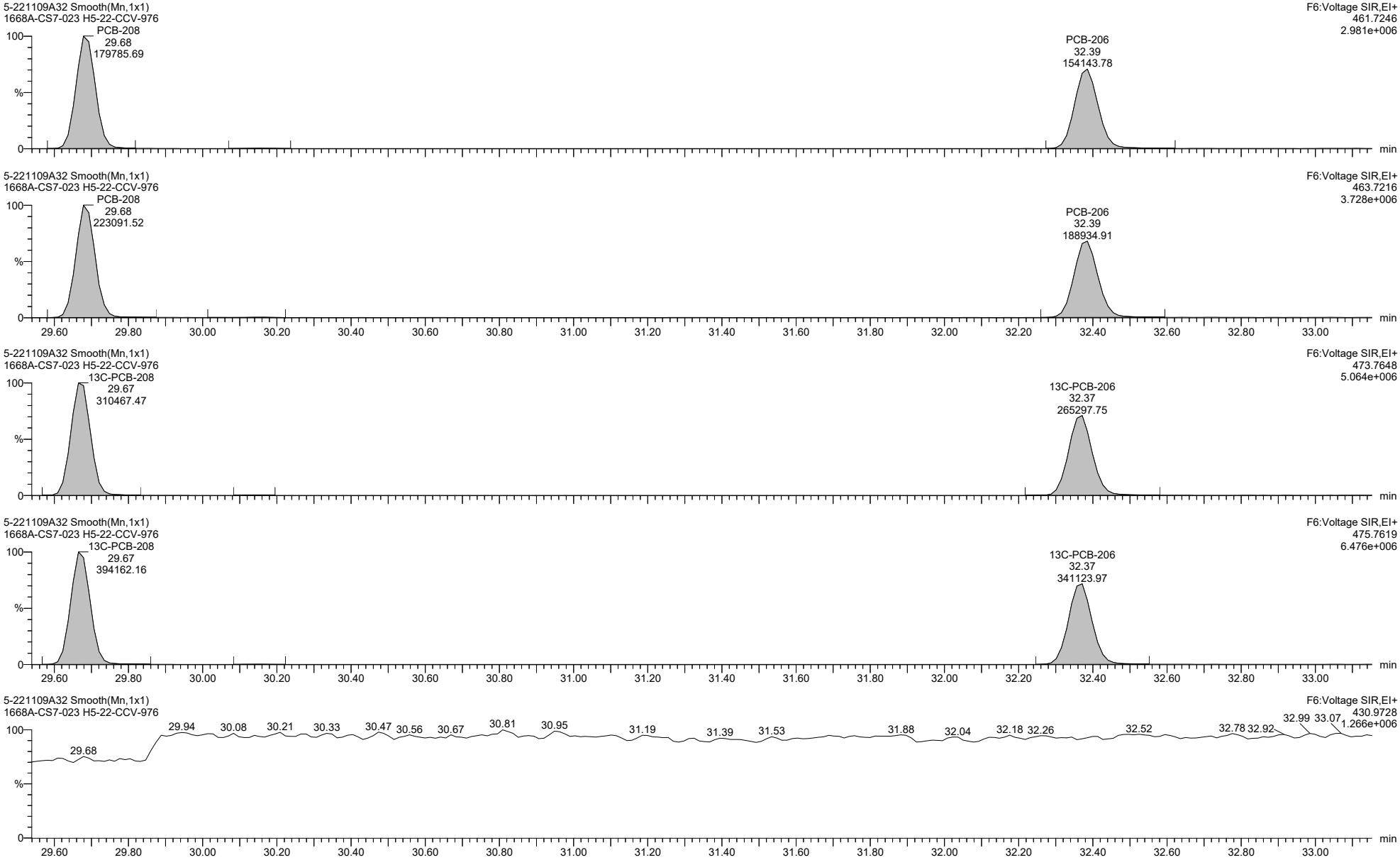


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221109A-QC.qld

Last Altered: Wednesday, November 23, 2022 17:30:50 Eastern Standard Time
Printed: Thursday, November 24, 2022 09:42:18 Eastern Standard Time

Name: 5-221109A32, Date: 10-Nov-2022, Time: 13:52:20, ID: H5-22-CCV-976, Description: 1668A-CS7-023, Vial: Tray1:1

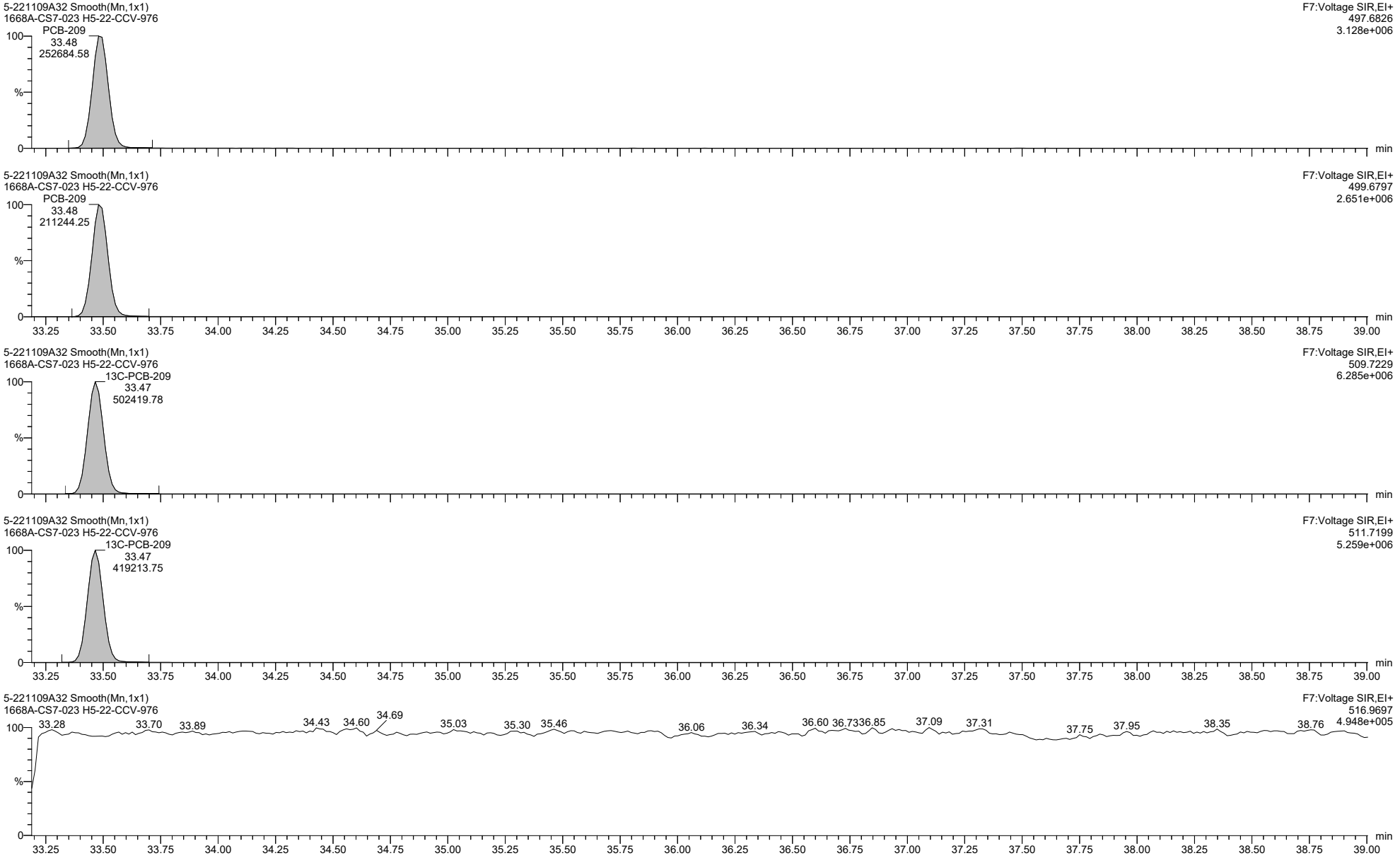


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221109A-QC.qld

Last Altered: Wednesday, November 23, 2022 17:30:50 Eastern Standard Time
Printed: Thursday, November 24, 2022 09:42:18 Eastern Standard Time

Name: 5-221109A32, Date: 10-Nov-2022, Time: 13:52:20, ID: H5-22-CCV-976, Description: 1668A-CS7-023, Vial: Tray1:1



Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221109A2-1117AK.qld

Last Altered: Thursday, November 17, 2022 12:03:54 Eastern Standard Time
Printed: Wednesday, November 23, 2022 18:29:11 Eastern Standard Time

Method: C:\MassLynx\PCB.PRO\MethDB\1668_OCTYL_209-1029.mdb 29 Oct 2022 09:21:57
Calibration: 17 Nov 2022 11:48:15

Name: 5-221109A17, Date: 10-Nov-2022, Time: 03:21:22, ID: H5-22-WDM-975, Description: 1668A-CS7-023, Vial: Tray1:2

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
1	* PCB-1		1807922	1377542	430379	3.20	NO	8.99	1.00	8.96	9.03	24.63262	98.5		2341	1018
2	PCB-2		1758899	1346278	412621	3.26	NO	10.38	0.99	10.35	10.42	25.00000	100.0		2341	1018
3	PCB-3		1820274	1391635	428639	3.25	NO	10.51	1.00	10.47	10.54	25.51083	102.0		2341	1018
4	*PCB-4		1078040	646145	431895	1.50	NO	10.68	1.00	10.64	10.71	21.81011	87.2		880	3690
5	PCB-10		1709530	1031633	677897	1.52	NO	10.79	1.01	10.76	10.82	25.00000	100.0		880	3690
6	PCB-9		1678446	1009929	668517	1.51	NO	11.92	1.12	11.89	11.96	25.00000	100.0		880	3690
7	PCB-7		1716941	1033222	683719	1.51	NO	12.02	1.13	11.99	12.06	25.00000	100.0		880	3690
8	PCB-6		1643815	990532	653283	1.52	NO	12.19	1.14	12.16	12.22	25.00000	100.0		880	3690
9	PCB-5		1621918	972105	649813	1.50	NO	12.39	1.16	12.35	12.42	25.00000	100.0		880	3690
10	PCB-8		1800557	1082094	718464	1.51	NO	12.46	1.17	12.42	12.49	25.00000	100.0		880	3690
11	* PCB-14		1679443	1032263	647179	1.60	NO	13.42	0.94	13.39	13.45	25.00000	100.0		4919	6501
12	PCB-11		1679607	1028758	650849	1.58	NO	13.94	0.97	13.90	13.97	25.00000	100.0		4919	6501
13	PCB-13/12		3504965	2151968	1352997	1.59	NO	14.14	0.99	14.11	14.17	50.00000	100.0		4919	6501
14	PCB-15		1777295	1085347	691948	1.57	NO	14.32	1.00	14.29	14.36	25.79516	103.2		4919	6501
15	* PCB-19		1105622	572896	532726	1.08	NO	12.67	1.00	12.63	12.70	22.63150	90.5		750	552
16	* PCB-30/18		2584642	1352471	1232171	1.10	NO	13.71	1.08	13.67	13.74	50.00000	100.0	AK221117MJ	2813	2042
17	PCB-17		1075081	564581	510500	1.11	NO	14.00	1.11	13.97	14.04	25.00000	100.0		2813	2042
18	PCB-27		1432238	747178	685060	1.09	NO	14.14	1.12	14.11	14.17	25.00000	100.0		2813	2042
19	PCB-24		1391156	728075	663081	1.10	NO	14.22	1.12	14.19	14.26	25.00000	100.0		2813	2042
20	PCB-16		1020318	535088	485230	1.10	NO	14.31	1.13	14.27	14.34	25.00000	100.0		2813	2042
21	PCB-32		1648686	864480	784206	1.10	NO	14.58	1.15	14.55	14.62	25.00000	100.0		2813	2042
22	* PCB-34		1539540	789923	749618	1.05	NO	15.26	0.84	15.23	15.30	25.00000	100.0		3850	6445
23	PCB-23		1643525	837374	806150	1.04	NO	15.35	0.84	15.32	15.38	25.00000	100.0		3850	6445
24	PCB-29/26		3287623	1681025	1606598	1.05	NO	15.54	0.85	15.50	15.57	50.00000	100.0		3850	6445
25	PCB-25		1647231	849267	797964	1.06	NO	15.67	0.86	15.64	15.71	25.00000	100.0		3850	6445
26	PCB-31		1739410	889900	849510	1.05	NO	15.85	0.87	15.82	15.88	25.00000	100.0		3850	6445
27	PCB-28/20		3255300	1689273	1566027	1.08	NO	16.04	0.88	16.00	16.07	50.00000	100.0		3850	6445
28	PCB-21/33		3348399	1688115	1660284	1.02	NO	16.15	0.89	16.12	16.19	50.00000	100.0		3850	6445
29	PCB-22		1602382	822555	779827	1.05	NO	16.40	0.90	16.36	16.43	25.00000	100.0		3850	6445
30	PCB-36		1865752	956160	909592	1.05	NO	17.21	0.94	17.18	17.24	25.00000	100.0		3850	6445
31	PCB-39		1606666	822304	784362	1.05	NO	17.43	0.95	17.39	17.46	25.00000	100.0		3850	6445
32	PCB-38		1672424	857177	815246	1.05	NO	17.76	0.97	17.73	17.79	25.00000	100.0		3850	6445
33	PCB-35		1601668	821997	779671	1.05	NO	18.02	0.99	17.99	18.06	25.00000	100.0		3850	6445
34	PCB-37		1569964	805417	764547	1.05	NO	18.27	1.00	18.23	18.30	26.37947	105.5		3850	6445

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221109A2-1117AK.qld

Last Altered: Thursday, November 17, 2022 12:03:54 Eastern Standard Time
Printed: Wednesday, November 23, 2022 18:29:11 Eastern Standard Time

Name: 5-221109A17, Date: 10-Nov-2022, Time: 03:21:22, ID: H5-22-WDM-975, Description: 1668A-CS7-023, Vial: Tray1:2

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
35	* PCB-54		3084224	1346781	1737443	0.78	NO	14.52	1.00	14.48	14.55	49.50323	99.0		979	902
36	* PCB-50/53		4415761	1931156	2484605	0.78	NO	15.70	1.08	15.67	15.74	100.00000	100.0		2397	3020
37	PCB-45/51		4278383	1863224	2415159	0.77	NO	16.11	1.11	16.08	16.15	100.00000	100.0		2397	3020
38	PCB-46		1894324	825397	1068928	0.77	NO	16.29	1.12	16.26	16.32	50.00000	100.0		2397	3020
39	PCB-52		2025445	882195	1143249	0.77	NO	17.01	1.17	16.98	17.05	50.00000	100.0		2397	3020
40	PCB-73		3194147	1392407	1801740	0.77	NO	17.08	1.18	17.05	17.12	50.00000	100.0		2397	3020
41	PCB-43		1721293	750854	970440	0.77	NO	17.15	1.18	17.12	17.19	50.00000	100.0		2397	3020
42	PCB-69/49		5088788	2221714	2867073	0.77	NO	17.24	1.19	17.21	17.27	100.00000	100.0	AK221117MJ	2397	3020
43	PCB-48		2303874	1004583	1299292	0.77	NO	17.45	1.20	17.41	17.48	50.00000	100.0		2397	3020
44	PCB-44/47/65		6837864	2980459	3857405	0.77	NO	17.58	1.21	17.55	17.62	150.00000	100.0		2397	3020
45	PCB-59/62/75		8693789	3788290	4905499	0.77	NO	17.75	1.22	17.72	17.78	150.00000	100.0		2397	3020
46	PCB-42		1905516	833510	1072007	0.78	NO	17.88	1.23	17.84	17.91	50.00000	100.0		2397	3020
47	PCB-41/71/40		6502618	2836178	3666439	0.77	NO	18.15	1.25	18.12	18.18	150.00000	100.0		2397	3020
48	PCB-64		2756067	1207113	1548954	0.78	NO	18.27	1.26	18.23	18.30	50.00000	100.0		2397	3020
49	* PCB-72		2704246	1174994	1529252	0.77	NO	18.65	0.86	18.61	18.68	50.00000	100.0		3971	18160
50	PCB-68		2816795	1176905	1639891	0.72	NO	18.81	0.86	18.78	18.84	50.00000	100.0		3971	18160
51	PCB-57		2664177	1166982	1497195	0.78	NO	19.05	0.87	19.02	19.09	50.00000	100.0		3971	18160
52	PCB-58		2753933	1200409	1553524	0.77	NO	19.19	0.88	19.16	19.22	50.00000	100.0		3971	18160
53	PCB-67		3030041	1314014	1716027	0.77	NO	19.27	0.88	19.24	19.31	50.00000	100.0		3971	18160
54	PCB-63		2763614	1187426	1576188	0.75	NO	19.42	0.89	19.39	19.46	50.00000	100.0		3971	18160
55	PCB-61/70/74/76		10399563	4513690	5885873	0.77	NO	19.62	0.90	19.58	19.65	200.00000	100.0		3971	18160
56	PCB-66		2768515	1176090	1592425	0.74	NO	19.78	0.91	19.75	19.82	50.00000	100.0		3971	18160
57	PCB-55		2583259	1089604	1493656	0.73	NO	19.90	0.91	19.87	19.94	50.00000	100.0		3971	18160
58	PCB-56		2520970	1090164	1430806	0.76	NO	20.17	0.92	20.14	20.20	50.00000	100.0		3971	18160
59	PCB-60		2677132	1162256	1514876	0.77	NO	20.29	0.93	20.26	20.32	50.00000	100.0		3971	18160
60	PCB-80		3204161	1396649	1807512	0.77	NO	20.41	0.94	20.38	20.45	50.00000	100.0		3971	18160
61	PCB-79		3143507	1372844	1770663	0.78	NO	21.26	0.98	21.23	21.30	50.00000	100.0		3971	18160
62	PCB-78		2409262	1051063	1358199	0.77	NO	21.58	0.99	21.54	21.61	50.00000	100.0		3971	18160
63	PCB-81		2350879	992428	1358451	0.73	NO	21.83	1.00	21.79	21.86	42.53182	85.1		3971	18160
64	PCB-77		2438968	1023006	1415963	0.72	NO	22.13	1.00	22.10	22.17	46.03236	92.1		3971	18160
65	* PCB-104		2798664	1707219	1091445	1.56	NO	17.54	1.00	17.51	17.58	45.34503	90.7		3028	826
66	PCB-96		2262727	1371680	891047	1.54	NO	17.80	1.02	17.76	17.83	50.00000	100.0		3028	826
67	* PCB-103		1774665	1098414	676250	1.62	NO	18.75	1.07	18.71	18.78	50.00000	100.0		10491	3976
68	PCB-94		1750828	1082928	667900	1.62	NO	18.90	1.08	18.87	18.94	50.00000	100.0		10491	3976
69	PCB-95		3702472	907700	2794772	0.32	YES	19.16	1.09	19.13	19.20	50.00000	100.0	AK221117MJ	10491	3976
70	PCB-100/93/102/98		5095782	4533689	562093	8.07	YES	19.21	1.10	19.18	19.24	200.00000	100.0	AK221117MJ	10491	3976
71	PCB-88/91		3501567	2173280	1328287	1.64	NO	19.61	1.12	19.57	19.64	100.00000	100.0		10491	3976

Name: 5-221109A17, Date: 10-Nov-2022, Time: 03:21:22, ID: H5-22-WDM-975, Description: 1668A-CS7-023, Vial: Tray1:2

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
72	PCB-84		1618296	1002811	615485	1.63	NO	19.77	1.13	19.74	19.81	50.00000	100.0		10491	3976
73	PCB-89		1419441	878467	540974	1.62	NO	20.01	1.14	19.98	20.05	50.00000	100.0		10491	3976
74	PCB-121		2599647	1608528	991119	1.62	NO	20.12	1.15	20.08	20.15	50.00000	100.0		10491	3976
75	PCB-92		1577531	976972	600559	1.63	NO	20.36	1.16	20.32	20.39	50.00000	100.0		10491	3976
76	PCB-113/90/101		6233166	3859684	2373483	1.63	NO	20.65	1.18	20.62	20.69	150.00000	100.0		10491	3976
77	PCB-83/99		3464122	2143929	1320193	1.62	NO	20.96	0.91	20.92	20.99	100.00000	100.0		10491	3976
78	PCB-112		2538630	1572353	966277	1.63	NO	21.06	0.91	21.03	21.09	50.00000	100.0		10491	3976
79	PCB-109/119/86/97/125/87		12767663	7882736	4884928	1.61	NO	21.23	0.92	21.20	21.27	300.00000	100.0	AK221117MJ	10491	3976
80	PCB-117/116/85/110/115		11266755	6965030	4301725	1.62	NO	21.66	0.94	21.63	21.69	250.00000	100.0	AK221117MJ	10491	3976
81	PCB-82		1401790	867540	534250	1.62	NO	21.95	0.95	21.91	21.98	50.00000	100.0		10491	3976
82	PCB-111		2678627	1661014	1017613	1.63	NO	22.04	0.95	22.01	22.07	50.00000	100.0		10491	3976
83	PCB-120		2662674	1654511	1008163	1.64	NO	22.28	0.97	22.25	22.31	50.00000	100.0		10491	3976
84	* PCB-108/124		5001725	3066210	1935515	1.58	NO	22.92	0.99	22.88	22.95	100.00000	100.0		4719	3798
85	PCB-107		2785933	1714486	1071447	1.60	NO	23.04	1.00	23.01	23.07	50.00000	100.0		4719	3798
86	PCB-123		2302267	1420121	882146	1.61	NO	23.10	1.00	23.07	23.13	47.33340	94.7		4719	3798
87	PCB-106		2259669	1397601	862068	1.62	NO	23.18	1.00	23.15	23.22	50.00000	100.0		4719	3798
88	PCB-118		2534058	1561079	972979	1.60	NO	23.27	1.00	23.23	23.30	47.77075	95.5		4719	3798
89	PCB-122		1836583	1131319	705263	1.60	NO	23.49	1.00	23.45	23.52	50.00000	100.0		4719	3798
90	PCB-114		2808596	1721815	1086782	1.58	NO	23.57	1.00	23.54	23.60	55.46035	110.9		4719	3798
91	PCB-105		2351239	1450842	900397	1.61	NO	23.93	1.00	23.90	23.97	46.77580	93.6		4719	3798
92	PCB-127		2601652	1607642	994011	1.62	NO	24.63	1.03	24.60	24.67	50.00000	100.0		4719	3798
93	PCB-126		2449886	1513249	936636	1.62	NO	25.52	1.00	25.48	25.55	48.77196	97.5		4719	3798
94	* PCB-155		2725152	1512807	1212344	1.25	NO	20.50	1.00	20.47	20.54	42.66945	85.3		2045	972
95	PCB-152		2407735	1331779	1075956	1.24	NO	20.71	1.01	20.67	20.74	50.00000	100.0		2045	972
96	PCB-150		2958424	1649542	1308882	1.26	NO	20.75	1.01	20.72	20.79	50.00000	100.0		2045	972
97	PCB-136		2516656	1402522	1114134	1.26	NO	21.00	1.02	20.97	21.04	50.00000	100.0		2045	972
98	PCB-145		2716501	1519005	1197496	1.27	NO	21.12	1.03	21.09	21.16	50.00000	100.0		2045	972
99	PCB-148		1956768	1091221	865547	1.26	NO	21.84	1.07	21.80	21.87	50.00000	100.0		2045	972
100	PCB-151/135		3655059	2022772	1632287	1.24	NO	22.22	1.08	22.19	22.26	100.00000	100.0		2045	972
101	PCB-154		2630822	1467788	1163033	1.26	NO	22.26	1.09	22.23	22.29	50.00000	100.0		2045	972
102	PCB-144		1893180	1051073	842107	1.25	NO	22.48	1.10	22.45	22.52	50.00000	100.0		2045	972
103	* PCB-147/149		4078778	2247748	1831031	1.23	NO	22.68	1.11	22.64	22.71	100.00000	100.0		5679	4641
104	PCB-134/143		3172141	1750879	1421262	1.23	NO	22.83	1.11	22.80	22.87	100.00000	100.0		5679	4641
105	PCB-139/140		4091004	2259202	1831803	1.23	NO	22.98	1.12	22.94	23.01	100.00000	100.0		5679	4641
106	PCB-131		1523499	843029	680470	1.24	NO	23.12	0.88	23.09	23.16	50.00000	100.0		5679	4641
107	PCB-142		1623942	898847	725095	1.24	NO	23.22	0.88	23.19	23.25	50.00000	100.0		5679	4641
108	PCB-132		1798283	993142	805141	1.23	NO	23.38	0.89	23.34	23.41	50.00000	100.0		5679	4641

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221109A2-1117AK.qld

Last Altered: Thursday, November 17, 2022 12:03:54 Eastern Standard Time
Printed: Wednesday, November 23, 2022 18:29:11 Eastern Standard Time

Name: 5-221109A17, Date: 10-Nov-2022, Time: 03:21:22, ID: H5-22-WDM-975, Description: 1668A-CS7-023, Vial: Tray1:2

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
109	PCB-133		1795436	990514	804922	1.23	NO	23.55	0.89	23.51	23.58	50.00000	100.0		5679	4641
110	PCB-165		2460456	1361809	1098647	1.24	NO	23.75	0.90	23.72	23.78	50.00000	100.0		5679	4641
111	PCB-146		2085726	1145745	939982	1.22	NO	23.87	0.90	23.84	23.91	50.00000	100.0		5679	4641
112	PCB-161		2650727	1468301	1182425	1.24	NO	23.94	0.91	23.91	23.98	50.00000	100.0		5679	4641
113	PCB-153/168		5003139	2762759	2240380	1.23	NO	24.20	0.92	24.17	24.23	100.00000	100.0		5679	4641
114	PCB-141		1965813	1085348	880465	1.23	NO	24.33	0.92	24.30	24.36	50.00000	100.0		5679	4641
115	PCB-130		1767084	976477	790608	1.24	NO	24.55	0.93	24.52	24.58	50.00000	100.0		5679	4641
116	PCB-137/164		4589324	2537052	2052272	1.24	NO	24.72	0.94	24.68	24.75	100.00000	100.0	AK221117MJ	5679	4641
117	PCB-138/163/129		4777248	2642468	2134780	1.24	NO	24.89	0.94	24.85	24.92	150.00000	100.0		5679	4641
118	PCB-160		3546095	1966766	1579329	1.25	NO	24.98	0.95	24.95	25.02	50.00000	100.0		5679	4641
119	PCB-158		2907544	1610917	1296627	1.24	NO	25.08	0.95	25.05	25.11	50.00000	100.0		5679	4641
120	PCB-128/166		4751592	2618082	2133511	1.23	NO	25.55	0.97	25.52	25.59	100.00000	100.0		5679	4641
121	PCB-159		2877107	1591074	1286033	1.24	NO	26.00	0.99	25.97	26.03	50.00000	100.0		5679	4641
122	PCB-162		2707120	1488622	1218498	1.22	NO	26.14	0.99	26.11	26.18	50.00000	100.0		5679	4641
123	PCB-167		2725539	1502566	1222974	1.23	NO	26.40	1.00	26.36	26.43	48.52981	97.1		5679	4641
124	PCB-156/157		5110294	2824810	2285484	1.24	NO	27.04	1.00	27.00	27.07	92.30929	92.3		5679	4641
125	PCB-169		2348250	1301122	1047128	1.24	NO	28.69	1.00	28.66	28.73	45.59212	91.2		5679	4641
126	* PCB-188		2255914	1136984	1118930	1.02	NO	23.50	1.00	23.46	23.53	42.30214	84.6		2231	2388
127	PCB-179		2375468	1198690	1176778	1.02	NO	23.74	1.01	23.71	23.77	50.00000	100.0		2231	2388
128	PCB-184		2546510	1287315	1259195	1.02	NO	23.94	1.02	23.91	23.98	50.00000	100.0		2231	2388
129	PCB-176		2361001	1196205	1164796	1.03	NO	24.19	1.03	24.15	24.22	50.00000	100.0		2231	2388
130	PCB-186		2350063	1180373	1169690	1.01	NO	24.44	1.04	24.41	24.47	50.00000	100.0		2231	2388
131	PCB-178		1715334	862334	853000	1.01	NO	25.08	1.07	25.05	25.11	50.00000	100.0		2231	2388
132	PCB-175		1812037	917961	894075	1.03	NO	25.39	1.08	25.36	25.43	50.00000	100.0		2231	2388
133	PCB-187		2044122	1031915	1012207	1.02	NO	25.54	1.09	25.51	25.57	50.00000	100.0		2231	2388
134	PCB-182		1874626	954017	920609	1.04	NO	25.64	1.09	25.60	25.67	50.00000	100.0		2231	2388
135	PCB-183		1930655	974855	955800	1.02	NO	25.84	1.10	25.81	25.88	50.00000	100.0		2231	2388
136	PCB-185		1765607	891917	873690	1.02	NO	25.94	1.10	25.91	25.97	50.00000	100.0		2231	2388
137	PCB-174		1891111	960809	930302	1.03	NO	26.01	1.11	25.98	26.04	50.00000	100.0		2231	2388
138	PCB-177		1813676	914969	898707	1.02	NO	26.25	1.12	26.22	26.29	50.00000	100.0		2231	2388
139	PCB-181		1815235	913274	901962	1.01	NO	26.43	0.88	26.40	26.47	50.00000	100.0		2231	2388
140	PCB-171/173		3380619	1705354	1675266	1.02	NO	26.58	0.89	26.55	26.61	100.00000	100.0		2231	2388
141	PCB-172		1818655	917276	901380	1.02	NO	27.35	0.91	27.32	27.39	50.00000	100.0		2231	2388
142	PCB-192		2102055	1059825	1042230	1.02	NO	27.50	0.92	27.46	27.53	50.00000	100.0		2231	2388
143	PCB-180/193		3891551	1963754	1927797	1.02	NO	27.67	0.92	27.63	27.70	100.00000	100.0		2231	2388
144	PCB-191		2304011	1167774	1136238	1.03	NO	27.87	0.93	27.84	27.91	50.00000	100.0		2231	2388
145	PCB-170		1657563	832199	825364	1.01	NO	28.38	0.95	28.35	28.41	50.00000	100.0		2231	2388

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221109A2-1117AK.qld

Last Altered: Thursday, November 17, 2022 12:03:54 Eastern Standard Time
Printed: Wednesday, November 23, 2022 18:29:11 Eastern Standard Time

Name: 5-221109A17, Date: 10-Nov-2022, Time: 03:21:22, ID: H5-22-WDM-975, Description: 1668A-CS7-023, Vial: Tray1:2

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
146	PCB-190		2521310	1269765	1251545	1.01	NO	28.65	0.96	28.61	28.68	50.00000	100.0		2231	2388
147	* PCB-189		2067885	1058149	1009737	1.05	NO	29.96	1.00	29.92	29.99	47.89085	95.8		1897	3718
148	* PCB-202		3678921	1727334	1951587	0.89	NO	26.28	1.00	26.24	26.31	68.25075	91.0		972	1725
149	PCB-201		3967405	1878587	2088818	0.90	NO	26.74	1.02	26.70	26.77	75.00000	100.0		972	1725
150	PCB-204		3802789	1789440	2013350	0.89	NO	27.07	1.03	27.04	27.11	75.00000	100.0		972	1725
151	PCB-197		3812011	1791988	2020023	0.89	NO	27.20	1.04	27.16	27.23	75.00000	100.0		972	1725
152	PCB-200		3546509	1664427	1882082	0.88	NO	27.30	1.04	27.27	27.34	75.00000	100.0		972	1725
153	PCB-198/199		5166893	2432207	2734687	0.89	NO	28.68	0.92	28.65	28.72	150.00000	100.0		972	1725
154	PCB-196		2600524	1217616	1382907	0.88	NO	29.02	0.93	28.99	29.05	75.00000	100.0		972	1725
155	PCB-203		2737984	1285353	1452632	0.88	NO	29.12	0.93	29.08	29.15	75.00000	100.0		972	1725
156	* PCB-195		1950666	906617	1044049	0.87	NO	29.86	0.95	29.83	29.89	75.00000	100.0		1711	1946
157	PCB-194		2026146	950640	1075506	0.88	NO	31.05	0.99	31.01	31.08	75.00000	100.0		1711	1946
158	PCB-205		2332859	1100468	1232390	0.89	NO	31.33	1.00	31.29	31.36	68.35727	91.1		1711	1946
159	* PCB-208		2489680	1103050	1386630	0.80	NO	29.68	1.00	29.65	29.71	69.61087	92.8		1273	2605
160	PCB-207		2571685	1141716	1429970	0.80	NO	30.15	1.02	30.12	30.19	75.00000	100.0		1273	2605
161	PCB-206		1694653	757397	937256	0.81	NO	32.37	1.00	32.34	32.40	68.47487	91.3		1273	2605
162	* PCB-209		2356179	1273780	1082398	1.18	NO	33.48	1.00	33.45	33.51	76.42163	101.9		440	353
163	13C-PCB-31		5343287	2748205	2595083	1.06	NO	15.84	0.87	15.81	15.87	91.51257	91.5		24964	11097
164	13C-PCB-95		3760598	2292872	1467726	1.56	NO	19.14	1.09	19.11	19.18	101.84545	101.8		4056	2729
165	13C-PCB-153		4071826	2291306	1780520	1.29	NO	24.17	1.18	24.14	24.21	101.39875	101.4		4182	4298
166	13C-PCB-28		5948650	3051995	2896656	1.05	NO	16.01	0.94	15.97	16.04	101.36461	101.4		24964	11097
167	13C-PCB-111		3989919	2433243	1556676	1.56	NO	22.02	1.07	21.99	22.05	101.37487	101.4		4056	2729
168	13C-PCB-178		3609234	1840773	1768460	1.04	NO	25.06	1.01	25.02	25.09	114.03508	114.0		2671	2532
169	13C-PCB-1		6827480	5091006	1736475	2.93	NO	8.99	0.76	8.96	9.03	87.23942	87.2		3237	19403
170	13C-PCB-3		6376496	4757732	1618764	2.94	NO	10.51	0.88	10.47	10.54	86.18840	86.2		3237	19403
171	13C-PCB-4		5275184	3197651	2077533	1.54	NO	10.68	0.90	10.64	10.71	108.85287	108.9		6183	2715
172	13C-PCB-15		5873855	3617670	2256185	1.60	NO	14.31	1.20	14.28	14.35	89.27421	89.3		10673	5812
173	13C-PCB-19		3892687	1981051	1911636	1.04	NO	12.65	1.06	12.62	12.69	123.59170	123.6		20420	8985
174	13C-PCB-37		5001229	2568196	2433032	1.06	NO	18.25	1.07	18.21	18.28	95.03018	95.0		24964	11097
175	13C-PCB-54		5567783	2447678	3120106	0.78	NO	14.51	0.85	14.48	14.54	116.87955	116.9		3304	1892
176	13C-PCB-81		4425414	1953472	2471942	0.79	NO	21.81	1.06	21.77	21.84	93.44864	93.4		4625	3829
177	13C-PCB-77		4389708	1924225	2465483	0.78	NO	22.12	1.07	22.09	22.16	92.01626	92.0		4625	3829
178	13C-PCB-104		4981381	3032088	1949293	1.56	NO	17.53	1.03	17.50	17.57	111.78165	111.8		1401	1724
179	13C-PCB-123		4214850	2583337	1631513	1.58	NO	23.09	1.12	23.05	23.12	96.36533	96.4		5196	4374
180	13C-PCB-118		3926442	2426286	1500157	1.62	NO	23.26	1.13	23.22	23.29	98.33463	98.3		5196	4374
181	13C-PCB-114		4335746	2674780	1660966	1.61	NO	23.56	0.95	23.52	23.59	97.50202	97.5		5196	4374
182	13C-PCB-105		4053721	2488059	1565662	1.59	NO	23.92	0.96	23.89	23.95	96.68050	96.7		5196	4374

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221109A2-1117AK.qld

Last Altered: Thursday, November 17, 2022 12:03:54 Eastern Standard Time
Printed: Wednesday, November 23, 2022 18:29:11 Eastern Standard Time

Name: 5-221109A17, Date: 10-Nov-2022, Time: 03:21:22, ID: H5-22-WDM-975, Description: 1668A-CS7-023, Vial: Tray1:2

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
183	13C-PCB-126		4130875	2542872	1588003	1.60	NO	25.50	1.03	25.47	25.54	95.83633	95.8		5196	4374
184	13C-PCB-155		5477407	3029379	2448029	1.24	NO	20.49	0.99	20.46	20.53	114.96940	115.0		3731	1560
185	13C-PCB-167		4391100	2476007	1915093	1.29	NO	26.39	1.06	26.35	26.42	102.63144	102.6		4182	4298
186	13C-PCB-156/157		8458450	4768896	3689554	1.29	NO	27.03	1.09	26.99	27.06	202.65037	101.3		4182	4298
187	13C-PCB-169		4113866	2319767	1794099	1.29	NO	28.68	1.15	28.65	28.72	95.62387	95.6		4182	4298
188	13C-PCB-188		4951588	2524532	2427056	1.04	NO	23.49	0.94	23.45	23.52	110.17082	110.2		2671	2532
189	13C-PCB-189		4104479	2120259	1984221	1.07	NO	29.94	0.96	29.91	29.98	91.66710	91.7		3141	2887
190	13C-PCB-202		4715924	2228741	2487184	0.90	NO	26.26	1.06	26.23	26.30	122.49194	122.5		2114	1795
191	13C-PCB-205		3577300	1685720	1891580	0.89	NO	31.31	1.01	31.28	31.34	103.93199	103.9		2330	3672
192	13C-PCB-208		3112766	1371637	1741129	0.79	NO	29.67	0.96	29.63	29.70	108.30381	108.3		2160	2403
193	13C-PCB-206		2165227	949413	1215814	0.78	NO	32.36	1.04	32.32	32.39	109.97986	110.0		2160	2403
194	13C-PCB-209		3152485	1717814	1434671	1.20	NO	33.47	1.08	33.43	33.50	102.51991	102.5		436	392
195	13C-PCB-9		7376194	4473824	2902371	1.54	NO	11.91	0.48	11.88	11.94	100.00000	100.0		6183	2715
196	13C-PCB-52		3441975	1532440	1909535	0.80	NO	17.01	0.68	16.97	17.04	100.00000	100.0		3282	3278
197	13C-PCB-101		3174038	1934253	1239784	1.56	NO	20.65	0.83	20.62	20.69	100.00000	100.0		4056	2729
198	13C-PCB-138		3374222	1891453	1482769	1.28	NO	24.86	0.00	24.83	24.90	100.00000	100.0		4182	4298
199	13C-PCB-194		2678570	1260858	1417712	0.89	NO	31.03	1.25	31.00	31.07	100.00000	100.0		2330	3672
200	Total MoCB-F1	11		4254459								505983.50126			2341	
201	Total DiCB-F1	8		6814403								69824.73055			880	
202	Total DiCB-F2	7		5357126								112508.23743			4919	
203	Total TrCB-F1	1		572896								22.63150			750	
204	Total TrCB-F2	7		4793774								2975.36042			2813	
205	Total TrCB-F3	19		13934313								673483.21743			3850	
206	Total TeCB-F2	1		1347085								49.50323			979	
207	Total TeCB-F3	14		22548833								75766.10938			2397	
208	Total TeCB-F4	19		22305320								519337.89285			3971	
209	Total PeCB-F3	10		3079675								13529.62544			3028	
210	Total PeCB-F4	18		41029315								270554.87173			10491	
211	Total PeCB-F5	33		17766923								3392611.302...			4719	
212	Total HxCB-F4	14		13054191								8858.26856			2045	
213	Total HxCB-F5	38		39860913								1976798.088...			5679	
214	Total HpCB-F5	34		23698491								843788.28448			2231	
215	Total HpCB-F6	1		1412287								47.89085			1897	
216	Total OcCB-F5	14		13787539								2072.76406			972	
217	Total OcCB-F6	7		3141297								932340.24049			1711	
218	Total NoCB-F6	3		3002163								213.08573			1273	
219	Total DeCB-F7	1		1273780								76.42163			440	

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221109A2-1117AK.qld

Last Altered: Thursday, November 17, 2022 12:03:54 Eastern Standard Time
Printed: Wednesday, November 23, 2022 18:29:11 Eastern Standard Time

Name: 5-221109A17, Date: 10-Nov-2022, Time: 03:21:22, ID: H5-22-WDM-975, Description: 1668A-CS7-023, Vial: Tray1:2

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
220	Total 13C-MoCB-F1	2		9980828								173.42781			3237	
221	Total 13C-DiCB-F1	6		7705965								210.31245			6183	
222	Total 13C-DiCB-F2	1		7161484								89.27421			10673	
223	Total 13C-TrCB-F1	1		2014688								123.59170			20420	
224	Total 13C-TrCB-F3	3		8439115								287.90736			24964	
225	Total 13C-TeCB-F2	1		2447678								116.87955			3304	
226	Total 13C-TeCB-F3	9		1603663								104.76420			3282	
227	Total 13C-TeCB-F4	2		4003364								185.46490			4625	
228	Total 13C-PeCB-F3	1		3033479								111.78165			1401	
229	Total 13C-PeCB-F4	9		6699756								309.36184			4056	
230	Total 13C-PeCB-F5	5		13167409								484.71882			5196	
231	Total 13C-HxCB-F4	1		3047902								114.96940			3731	
232	Total 13C-HxCB-F5	17		13932088								647.48024			4182	
233	Total 13C-HpCB-F5	2		4485945								224.20590			2671	
234	Total 13C-HpCB-F6	1		2367722								91.66710			3141	
235	Total 13C-OcCB-F5	1		2242481								122.49194			2114	
236	Total 13C-OcCB-F6	9		3104336								228.64500			2330	
237	Total 13C-NoCB-F6	2		2323843								218.28367			2160	
238	Total 13C-DeCB-F7	1		1717814								102.51991			436	
239	Lockmass F1			0											214984	
240	Lockmass F2			0											119581	
241	Lockmass F3			0											188434	
242	Lockmass F4			0											123603	
243	Lockmass F5			0											63439	
244	Lockmass F6			0											51434	
245	Lockmass F7			0											12893	

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221109A2-1117AK.qld

Last Altered: Thursday, November 17, 2022 12:03:54 Eastern Standard Time
Printed: Wednesday, November 23, 2022 18:29:11 Eastern Standard Time

Name: 5-221109A23, Date: 10-Nov-2022, Time: 07:32:27, ID: WG3767228-1, Description: MB, Vial: Tray1:18

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
1	* PCB-1						YES								721	987
2	PCB-2		571	406	165	2.47	YES	10.37	0.99	10.33	10.40	1.70915			721	987
3	PCB-3		997	597	399	1.50	YES	10.49	1.00	10.46	10.53	2.75391			721	987
4	*PCB-4						YES								1416	2922
5	PCB-10						YES								1416	2922
6	PCB-9		1565	669	896	0.75	YES	11.88	1.11	11.85	11.92	4.19788			1416	2922
7	PCB-7						YES								1416	2922
8	PCB-6						YES								1416	2922
9	PCB-5						YES								1416	2922
10	PCB-8		2006	988	1017	0.97	YES	12.46	1.17	12.42	12.49	5.01456			1416	2922
11	* PCB-14						YES								930	3088
12	PCB-11		8814	5685	3129	1.82	YES	13.94	0.97	13.90	13.97	17.20890			930	3088
13	PCB-13/12						YES								930	3088
14	PCB-15		1210	688	523	1.31	YES	14.32	1.00	14.29	14.36	2.30450		AK221117MA	930	3088
15	* PCB-19						YES								989	761
16	* PCB-30/18		947	488	459	1.06	NO	13.75	1.09	13.72	13.79	1.75900			1205	681
17	PCB-17						YES								1205	681
18	PCB-27						YES								1205	681
19	PCB-24						YES								1205	681
20	PCB-16		279	122	157	0.78	YES	14.29	1.13	14.25	14.32	0.65594		AK221117MA	1205	681
21	PCB-32		331	118	213	0.55	YES	14.58	1.15	14.55	14.62	0.48232			1205	681
22	* PCB-34						YES								1412	947
23	PCB-23						YES								1412	947
24	PCB-29/26						YES								1412	947
25	PCB-25						YES								1412	947
26	PCB-31		2318	1252	1066	1.17	NO	15.85	0.87	15.82	15.88	2.57358			1412	947
27	PCB-28/20		3189	1721	1468	1.17	NO	16.02	0.88	15.98	16.05	3.78344			1412	947
28	PCB-21/33		1788	1013	774	1.31	YES	16.16	0.89	16.13	16.20	2.06201			1412	947
29	PCB-22		1124	637	487	1.31	YES	16.41	0.90	16.37	16.44	1.35454			1412	947
30	PCB-36						YES								1412	947
31	PCB-39						YES								1412	947
32	PCB-38						YES								1412	947
33	PCB-35						YES								1412	947
34	PCB-37						YES								1412	947
35	* PCB-54						YES								426	915
36	* PCB-50/53						YES								705	1062
37	PCB-45/51						YES								705	1062

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221109A2-1117AK.qld

Last Altered: Thursday, November 17, 2022 12:03:54 Eastern Standard Time
Printed: Wednesday, November 23, 2022 18:29:11 Eastern Standard Time

Name: 5-221109A23, Date: 10-Nov-2022, Time: 07:32:27, ID: WG3767228-1, Description: MB, Vial: Tray1:18

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
38	PCB-46						YES								705	1062
39	PCB-52		1535	720	816	0.88	NO	17.01	1.17	16.98	17.05	2.79877			705	1062
40	PCB-73						YES								705	1062
41	PCB-43						YES								705	1062
42	PCB-69/49		1099	545	553	0.99	YES	17.28	1.19	17.25	17.31	1.59420			705	1062
43	PCB-48		356	161	195	0.83	NO	17.44	1.20	17.40	17.47	0.57081			705	1062
44	PCB-44/47/65		2608	1167	1442	0.81	NO	17.57	1.21	17.54	17.61	4.22522			705	1062
45	PCB-59/62/75		307	120	188	0.64	YES	17.76	1.22	17.73	17.79	0.39174			705	1062
46	PCB-42		409	161	249	0.65	YES	17.88	1.23	17.84	17.91	0.79295		AK221117MA	705	1062
47	PCB-41/71/40		750	364	386	0.94	YES	18.12	1.25	18.09	18.15	1.27726			705	1062
48	PCB-64		1092	549	543	1.01	YES	18.25	1.26	18.21	18.28	1.46277			705	1062
49	* PCB-72						YES								855	1970
50	PCB-68						YES								855	1970
51	PCB-57						YES								855	1970
52	PCB-58						YES								855	1970
53	PCB-67						YES								855	1970
54	PCB-63						YES								855	1970
55	PCB-61/70/74/76		2702	1128	1574	0.72	NO	19.61	0.90	19.57	19.64	3.10049			855	1970
56	PCB-66		1387	593	794	0.75	NO	19.77	0.91	19.74	19.81	1.49447			855	1970
57	PCB-55						YES								855	1970
58	PCB-56						YES								855	1970
59	PCB-60						YES								855	1970
60	PCB-80						YES								855	1970
61	PCB-79						YES								855	1970
62	PCB-78						YES								855	1970
63	PCB-81						YES								855	1970
64	PCB-77						YES								855	1970
65	* PCB-104						YES								585	783
66	PCB-96						YES								585	783
67	* PCB-103						YES								836	1111
68	PCB-94						YES								836	1111
69	PCB-95		1339	877	463	1.90	YES	19.14	1.09	19.11	19.18	1.14673			836	1111
70	PCB-100/93/102/98						YES								836	1111
71	PCB-88/91		209	159	50	3.17	YES	19.61	1.12	19.57	19.64	0.37889			836	1111
72	PCB-84		389	274	115	2.38	YES	19.77	1.13	19.74	19.81	0.76270			836	1111
73	PCB-89						YES								836	1111
74	PCB-121						YES								836	1111

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Name: 5-221109A23, Date: 10-Nov-2022, Time: 07:32:27, ID: WG3767228-1, Description: MB, Vial: Tray1:18

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
75	PCB-92		446	223	224	0.99	YES	20.35	1.16	20.31	20.38	0.89709			836	1111
76	PCB-113/90/101		3612	1995	1617	1.23	YES	20.65	1.18	20.62	20.69	5.51065		AK221117MJ	836	1111
77	PCB-83/99		1044	624	420	1.48	NO	20.96	0.91	20.92	20.99	1.91074			836	1111
78	PCB-112						YES								836	1111
79	PCB-109/119/86/97/125/87		1689	1121	568	1.98	YES	21.33	0.92	21.29	21.36	2.51564		AK221117MJ	836	1111
80	PCB-117/116/85/110/115		3688	2233	1456	1.53	NO	21.73	0.94	21.70	21.77	5.18860		AK221117MJ	836	1111
81	PCB-82		290	156	134	1.17	YES	21.94	0.95	21.90	21.97	0.65627			836	1111
82	PCB-111						YES								836	1111
83	PCB-120		215	64	151	0.42	YES	22.27	0.96	22.24	22.30	0.25572			836	1111
84	* PCB-108/124						YES								750	722
85	PCB-107		200	105	95	1.10	YES	23.04	1.00	23.01	23.07	0.22750			750	722
86	PCB-123						YES								750	722
87	PCB-106						YES								750	722
88	PCB-118		3734	2246	1488	1.51	NO	23.27	1.00	23.23	23.30	3.96711			750	722
89	PCB-122						YES								750	722
90	PCB-114						YES								750	722
91	PCB-105		1004	579	425	1.36	NO	23.91	1.00	23.88	23.94	1.11355			750	722
92	PCB-127						YES								750	722
93	PCB-126						YES								750	722
94	* PCB-155						YES								1128	874
95	PCB-152						YES								1128	874
96	PCB-150						YES								1128	874
97	PCB-136						YES								1128	874
98	PCB-145						YES								1128	874
99	PCB-148						YES								1128	874
100	PCB-151/135		1252	657	596	1.10	NO	22.18	1.08	22.14	22.21	2.24864		AK221117MB	1128	874
101	PCB-154						YES								1128	874
102	PCB-144						YES								1128	874
103	* PCB-147/149		3347	1828	1519	1.20	NO	22.66	1.11	22.63	22.70	4.56081			1283	1131
104	PCB-134/143						YES								1283	1131
105	PCB-139/140						YES								1283	1131
106	PCB-131						YES								1283	1131
107	PCB-142						YES								1283	1131
108	PCB-132		1130	660	470	1.40	NO	23.36	0.89	23.33	23.40	1.74685			1283	1131
109	PCB-133		202	117	85	1.38	NO	23.52	0.89	23.49	23.56	0.31230			1283	1131
110	PCB-165						YES								1283	1131
111	PCB-146		1399	880	519	1.70	YES	23.86	0.90	23.83	23.89	1.86453			1283	1131

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Name: 5-221109A23, Date: 10-Nov-2022, Time: 07:32:27, ID: WG3767228-1, Description: MB, Vial: Tray1:18

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
112	PCB-161						YES								1283	1131
113	PCB-153/168		10169	5386	4783	1.13	NO	24.19	0.92	24.15	24.22	11.29799			1283	1131
114	PCB-141		1369	874	494	1.77	YES	24.32	0.92	24.29	24.35	1.93493			1283	1131
115	PCB-130		311	173	138	1.25	NO	24.54	0.93	24.50	24.57	0.48869		AK221117MB	1283	1131
116	PCB-137/164		1053	448	605	0.74	YES	24.71	0.94	24.67	24.74	1.27557		AK221117MB	1283	1131
117	PCB-138/163/129		8845	4997	3848	1.30	NO	24.88	0.94	24.84	24.91	15.43797			1283	1131
118	PCB-160						YES								1283	1131
119	PCB-158		1058	569	489	1.16	NO	25.07	0.95	25.04	25.10	1.01093			1283	1131
120	PCB-128/166		852	579	272	2.13	YES	25.56	0.97	25.53	25.60	0.99620			1283	1131
121	PCB-159		113	57	56	1.03	YES	26.01	0.99	25.98	26.04	0.10921			1283	1131
122	PCB-162						YES								1283	1131
123	PCB-167		732	431	301	1.43	YES	26.40	1.00	26.36	26.43	0.71310			1283	1131
124	PCB-156/157		1606	993	613	1.62	YES	27.00	1.00	26.97	27.04	1.62459			1283	1131
125	PCB-169						YES								1283	1131
126	* PCB-188						YES								887	720
127	PCB-179		278	98	180	0.55	YES	23.72	1.01	23.68	23.75	0.32499			887	720
128	PCB-184						YES								887	720
129	PCB-176						YES								887	720
130	PCB-186						YES								887	720
131	PCB-178		284	150	134	1.12	NO	25.08	1.07	25.05	25.11	0.45960			887	720
132	PCB-175						YES								887	720
133	PCB-187		2050	1086	964	1.13	NO	25.53	1.09	25.49	25.56	2.78226			887	720
134	PCB-182						YES								887	720
135	PCB-183		828	512	316	1.62	YES	25.83	1.10	25.80	25.86	1.18971			887	720
136	PCB-185						YES								887	720
137	PCB-174		1403	777	626	1.24	YES	26.01	1.11	25.98	26.04	2.05890			887	720
138	PCB-177		766	402	364	1.11	NO	26.24	1.12	26.21	26.27	1.17249			887	720
139	PCB-181						YES								887	720
140	PCB-171/173		537	342	196	1.75	YES	26.57	0.89	26.53	26.60	0.88190			887	720
141	PCB-172		344	153	191	0.80	YES	27.35	0.91	27.32	27.39	0.52505			887	720
142	PCB-192						YES								887	720
143	PCB-180/193		6028	2974	3055	0.97	NO	27.68	0.92	27.65	27.71	8.59678			887	720
144	PCB-191		223	128	95	1.35	YES	27.88	0.93	27.85	27.92	0.26893			887	720
145	PCB-170		1976	887	1089	0.81	YES	28.38	0.95	28.35	28.41	3.30816			887	720
146	PCB-190		881	452	429	1.05	NO	28.62	0.96	28.59	28.65	0.96933		AK221117MB	887	720
147	* PCB-189						YES								693	568
148	* PCB-202		420	135	285	0.47	YES	26.24	1.00	26.21	26.27	0.43945			520	386

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Name: 5-221109A23, Date: 10-Nov-2022, Time: 07:32:27, ID: WG3767228-1, Description: MB, Vial: Tray1:18

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
149	PCB-201						YES								520	386
150	PCB-204						YES								520	386
151	PCB-197						YES								520	386
152	PCB-200						YES								520	386
153	PCB-198/199		527	135	392	0.34	YES	28.68	0.92	28.65	28.72	0.85563			520	386
154	PCB-196		359	183	176	1.04	YES	29.01	0.93	28.97	29.04	0.57913			520	386
155	PCB-203		446	247	199	1.24	YES	29.10	0.93	29.07	29.14	0.68346			520	386
156	* PCB-195		254	150	104	1.44	YES	29.85	0.95	29.81	29.88	0.54707			473	615
157	PCB-194		1119	422	697	0.61	YES	31.05	0.99	31.01	31.08	2.31719			473	615
158	PCB-205						YES								473	615
159	* PCB-208						YES								836	1294
160	PCB-207						YES								836	1294
161	PCB-206						YES								836	1294
162	* PCB-209		607	327	281	1.16	NO	33.48	1.00	33.45	33.51	1.11695		AK221117MB	458	659
163	13C-PCB-31						YES								25686	9862
164	13C-PCB-95		874	553	321	1.72	NO	19.19	1.10	19.16	19.22	1.50100	0.1		1438	1460
165	13C-PCB-153		4305	2456	1849	1.33	NO	24.16	1.18	24.13	24.20	6.24594	0.3		3383	2625
166	13C-PCB-28		1920484	985426	935058	1.05	NO	16.00	0.94	15.96	16.03	1129.74353	56.5		25686	9862
167	13C-PCB-111		1571628	959743	611886	1.57	NO	22.01	1.07	21.98	22.05	1382.99346	69.1		1438	1460
168	13C-PCB-178		1395759	711166	684593	1.04	NO	25.06	1.01	25.02	25.09	1557.45987	77.9		1865	1453
169	13C-PCB-1		607447	452979	154468	2.93	NO	8.98	0.75	8.95	9.01	283.26329	14.2		2200	13841
170	13C-PCB-3		646845	475401	171444	2.77	NO	10.49	0.88	10.46	10.53	319.07741	16.0		2200	13841
171	13C-PCB-4		585907	353679	232229	1.52	NO	10.66	0.90	10.63	10.70	441.22531	22.1		5972	2486
172	13C-PCB-15		895538	547444	348094	1.57	NO	14.31	1.20	14.28	14.35	496.72520	24.8		7555	5248
173	13C-PCB-19		557255	286057	271198	1.05	NO	12.65	1.06	12.62	12.69	645.68796	32.3		19060	6750
174	13C-PCB-37		1295022	664101	630921	1.05	NO	18.25	1.07	18.21	18.28	849.49985	42.5		25686	9862
175	13C-PCB-54		940488	412822	527666	0.78	NO	14.50	0.85	14.47	14.53	681.57071	34.1		3824	1968
176	13C-PCB-81		1446167	637057	809110	0.79	NO	21.81	1.06	21.77	21.84	1057.64903	52.9		3034	2610
177	13C-PCB-77		1508736	664043	844693	0.79	NO	22.11	1.07	22.08	22.15	1095.33281	54.8		3034	2610
178	13C-PCB-104		1221277	749772	471506	1.59	NO	17.52	1.03	17.49	17.56	949.15928	47.5		545	1182
179	13C-PCB-123		1473818	908867	564951	1.61	NO	23.09	1.12	23.05	23.12	1167.04193	58.4		3006	2978
180	13C-PCB-118		1393478	863407	530071	1.63	NO	23.26	1.13	23.22	23.29	1208.68052	60.4		3006	2978
181	13C-PCB-114		1419006	878486	540520	1.63	NO	23.56	0.95	23.52	23.59	1105.19270	55.3		3006	2978
182	13C-PCB-105		1453965	900441	553524	1.63	NO	23.91	0.96	23.88	23.94	1201.00006	60.1		3006	2978
183	13C-PCB-126		1392323	854312	538011	1.59	NO	25.49	1.03	25.46	25.52	1118.74781	55.9		3006	2978
184	13C-PCB-155		1669389	925153	744236	1.24	NO	20.49	0.99	20.45	20.52	1213.58133	60.7		1523	1165
185	13C-PCB-167		1604180	904082	700099	1.29	NO	26.37	1.06	26.34	26.41	1324.16857	66.2		3383	2625

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Name: 5-221109A23, Date: 10-Nov-2022, Time: 07:32:27, ID: WG3767228-1, Description: MB, Vial: Tray1:18

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
186	13C-PCB-156/157		3021356	1703158	1318199	1.29	NO	27.01	1.09	26.98	27.05	2556.47541	63.9		3383	2625
187	13C-PCB-169		1466777	827461	639316	1.29	NO	28.67	1.15	28.64	28.70	1204.10183	60.2		3383	2625
188	13C-PCB-188		1771612	907965	863647	1.05	NO	23.47	0.94	23.44	23.51	1392.11045	69.6		1865	1453
189	13C-PCB-189		1492113	772833	719280	1.07	NO	29.93	0.96	29.90	29.96	1176.90161	58.8		2042	2551
190	13C-PCB-202		1671977	788930	883047	0.89	NO	26.25	1.06	26.22	26.29	1533.74775	76.7		888	707
191	13C-PCB-205		1293947	607626	686320	0.89	NO	31.30	1.01	31.26	31.33	1449.00711	72.5		1476	1133
192	13C-PCB-208		975785	429441	546345	0.79	NO	29.65	0.96	29.62	29.68	1308.61483	65.4		1008	1748
193	13C-PCB-206		777027	339195	437832	0.77	NO	32.34	1.04	32.31	32.38	1521.26801	76.1		1008	1748
194	13C-PCB-209		1111906	605522	506383	1.20	NO	33.44	1.08	33.40	33.47	1393.74478	69.7		269	293
195	13C-PCB-9		4042342	2458675	1583667	1.55	NO	11.90	0.48	11.86	11.93	54.80254	2.7		5972	2486
196	13C-PCB-52		1994051	887852	1106199	0.80	NO	17.00	0.68	16.96	17.03	57.93335	2.9		3083	1391
197	13C-PCB-101		1832897	1120743	712154	1.57	NO	20.64	0.83	20.61	20.68	57.74654	2.9		1438	1460
198	13C-PCB-138		1910824	1072863	837961	1.28	NO	24.86	0.00	24.83	24.90	56.63005	2.8		3383	2625
199	13C-PCB-194		1389865	649329	740536	0.88	NO	31.02	1.25	30.98	31.05	51.88834	2.6		1476	1133
200	Total MoCB-F1	3		1269								1594.26187			721	
201	Total DiCB-F1	4		2953								2524.12331			1416	
202	Total DiCB-F2	2		6372								19.51340			930	
203	Total TrCB-F1			0											989	
204	Total TrCB-F2	3		728								2.89726			1205	
205	Total TrCB-F3	4		4624								9.77357			1412	
206	Total TeCB-F2			0											426	
207	Total TeCB-F3	8		3786								13.11373			705	
208	Total TeCB-F4	2		1721								4.59496			855	
209	Total PeCB-F3	1		113								873.09520			585	
210	Total PeCB-F4	12		7794								235.86398			836	
211	Total PeCB-F5	5		3776								2344.98259			750	
212	Total HxCB-F4	1		657								2.24864			1128	
213	Total HxCB-F5	16		18296								765.31070			1283	
214	Total HpCB-F5	12		7962								22.53810			887	
215	Total HpCB-F6			0											693	
216	Total OcCB-F5	5		817								421.24502			520	
217	Total OcCB-F6	2		573								2.86426			473	
218	Total NoCB-F6			0											836	
219	Total DeCB-F7	1		498								1.11695			458	
220	Total 13C-MoCB-F1	2		952612								602.34069			2200	
221	Total 13C-DiCB-F1	4		2819530								496.30094			5972	
222	Total 13C-DiCB-F2	1		547444								496.72520			7555	

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221109A2-1117AK.qld

Last Altered: Thursday, November 17, 2022 12:03:54 Eastern Standard Time
Printed: Wednesday, November 23, 2022 18:29:11 Eastern Standard Time

Name: 5-221109A23, Date: 10-Nov-2022, Time: 07:32:27, ID: WG3767228-1, Description: MB, Vial: Tray1:18

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
223	Total 13C-TrCB-F1	1		2481213								645.68796			19060	
224	Total 13C-TrCB-F3	2		2119928								1979.24338			25686	
225	Total 13C-TeCB-F2	1		412822								681.57071			3824	
226	Total 13C-TeCB-F3	6		896394								58.49040			3083	
227	Total 13C-TeCB-F4	2		1351159								2152.98184			3034	
228	Total 13C-PeCB-F3	1		749958								949.15928			545	
229	Total 13C-PeCB-F4	12		2095217								1444.47158			1438	
230	Total 13C-PeCB-F5	5		4593063								5800.66302			3006	
231	Total 13C-HxCB-F4	1		932023								1213.58133			1523	
232	Total 13C-HxCB-F5	15		4585999								5166.65816			3383	
233	Total 13C-HpCB-F5	2		1668858								2949.57032			1865	
234	Total 13C-HpCB-F6	1		894801								1176.90161			2042	
235	Total 13C-OcCB-F5	1		794725								1533.74775			888	
236	Total 13C-OcCB-F6	6		1319749								1510.92051			1476	
237	Total 13C-NoCB-F6	2		769536								2829.88283			1008	
238	Total 13C-DeCB-F7	1		605581								1393.74478			269	
239	Lockmass F1			0											144964	
240	Lockmass F2			0											110301	
241	Lockmass F3			0											230720	
242	Lockmass F4			0											184105	
243	Lockmass F5			0											72313	
244	Lockmass F6			0											43095	
245	Lockmass F7			0											12738	

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Name: 5-221109A24, Date: 10-Nov-2022, Time: 08:14:40, ID: L2735553-1, Description: SAMPLE, Vial: Tray1:19

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
1	* PCB-1		2557	1948	609	3.20	NO	8.98	1.00	8.95	9.01	4.26771			966	1113
2	PCB-2		26890	20387	6503	3.13	NO	10.37	0.99	10.33	10.40	43.93159			966	1113
3	PCB-3		4063	3023	1040	2.91	NO	10.49	1.00	10.46	10.53	6.13805			966	1113
4	*PCB-4		10263	6380	3882	1.64	NO	10.68	1.00	10.64	10.71	20.57093			840	3462
5	PCB-10						YES								840	3462
6	PCB-9		5969	3430	2538	1.35	NO	11.91	1.12	11.88	11.94	8.80859			840	3462
7	PCB-7						YES								840	3462
8	PCB-6		11135	6613	4522	1.46	NO	12.18	1.14	12.14	12.21	16.77885			840	3462
9	PCB-5		1057	687	369	1.86	YES	12.39	1.16	12.35	12.42	1.61354		AK221117MS	840	3462
10	PCB-8		53178	32065	21114	1.52	NO	12.46	1.17	12.42	12.49	73.15482		AK221117MS	840	3462
11	* PCB-14						YES								1601	2707
12	PCB-11		340383	208361	132022	1.58	NO	13.93	0.97	13.89	13.96	373.54952			1601	2707
13	PCB-13/12		8380	4432	3948	1.12	YES	14.09	0.99	14.06	14.13	8.81393			1601	2707
14	PCB-15		10952	6626	4326	1.53	NO	14.31	1.00	14.28	14.35	11.71978			1601	2707
15	* PCB-19		7513	4014	3499	1.15	NO	12.65	1.00	12.62	12.69	13.24530			865	707
16	* PCB-30/18		94534	50147	44387	1.13	NO	13.75	1.09	13.72	13.79	134.03595			1046	1063
17	PCB-17		62424	33034	29390	1.12	NO	13.99	1.11	13.96	14.03	106.39320			1046	1063
18	PCB-27		14158	7305	6853	1.07	NO	14.12	1.12	14.09	14.15	18.11280			1046	1063
19	PCB-24		2825	1549	1276	1.21	YES	14.20	1.12	14.17	14.24	3.72118			1046	1063
20	PCB-16		33701	18009	15692	1.15	NO	14.29	1.13	14.25	14.32	60.52182			1046	1063
21	PCB-32		47866	25449	22417	1.14	NO	14.57	1.15	14.54	14.61	53.19745			1046	1063
22	* PCB-34		2486	1295	1191	1.09	NO	15.24	0.84	15.21	15.28	2.65163			3324	2395
23	PCB-23		936	448	488	0.92	NO	15.34	0.84	15.31	15.37	0.93493			3324	2395
24	PCB-29/26		91832	46319	45513	1.02	NO	15.52	0.85	15.48	15.55	91.72586			3324	2395
25	PCB-25		36758	18490	18268	1.01	NO	15.65	0.86	15.62	15.69	36.63907			3324	2395
26	PCB-31		280106	143511	136595	1.05	NO	15.84	0.87	15.81	15.87	264.40646			3324	2395
27	PCB-28/20		1236704	634908	601796	1.05	NO	16.01	0.88	15.97	16.04	1247.54396			3324	2395
28	PCB-21/33		182197	92219	89979	1.02	NO	16.15	0.89	16.12	16.19	178.68399			3324	2395
29	PCB-22		158302	79129	79173	1.00	NO	16.39	0.90	16.36	16.42	162.20764			3324	2395
30	PCB-36						YES								3324	2395
31	PCB-39		5398	2234	3164	0.71	YES	17.44	0.96	17.40	17.47	5.51621			3324	2395
32	PCB-38		3094	1343	1751	0.77	YES	17.75	0.97	17.72	17.78	3.03757			3324	2395
33	PCB-35		429	165	264	0.63	YES	18.00	0.99	17.97	18.04	0.44021			3324	2395
34	PCB-37		46733	23332	23401	1.00	NO	18.25	1.00	18.21	18.28	51.57219			3324	2395
35	* PCB-54		1226	516	710	0.73	NO	14.51	1.00	14.48	14.54	1.65989			512	868
36	* PCB-50/53		100547	44444	56103	0.79	NO	15.69	1.08	15.66	15.73	157.78444			663	808
37	PCB-45/51		85521	37267	48254	0.77	NO	16.10	1.11	16.07	16.14	138.51395			663	808

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Name: 5-221109A24, Date: 10-Nov-2022, Time: 08:14:40, ID: L2735553-1, Description: SAMPLE, Vial: Tray1:19

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
38	PCB-46		21289	9445	11844	0.80	NO	16.28	1.12	16.25	16.31	38.93764			663	808
39	PCB-52		1630955	712395	918560	0.78	NO	17.01	1.17	16.97	17.04	2789.93125			663	808
40	PCB-73						YES								663	808
41	PCB-43		18039	8077	9962	0.81	NO	17.13	1.18	17.10	17.17	36.31016			663	808
42	PCB-69/49		1758527	767625	990902	0.77	NO	17.27	1.19	17.24	17.30	2394.61985			663	808
43	PCB-48		139246	60685	78561	0.77	NO	17.43	1.20	17.39	17.46	209.40975			663	808
44	PCB-44/47/65		1882501	823993	1058508	0.78	NO	17.57	1.21	17.54	17.61	2861.59354			663	808
45	PCB-59/62/75		171247	74667	96580	0.77	NO	17.74	1.22	17.71	17.77	204.74152			663	808
46	PCB-42		338843	147389	191454	0.77	NO	17.87	1.23	17.83	17.90	616.10992			663	808
47	PCB-41/71/40		470050	205282	264767	0.78	NO	18.13	1.25	18.10	18.16	751.36110			663	808
48	PCB-64		816711	357533	459178	0.78	NO	18.25	1.26	18.21	18.28	1026.71648			663	808
49	* PCB-72		84134	37364	46770	0.80	NO	18.64	0.85	18.60	18.67	96.86687			4431	5151
50	PCB-68		69523	29184	40339	0.72	NO	18.79	0.86	18.76	18.83	76.84649			4431	5151
51	PCB-57		16169	6993	9176	0.76	NO	19.03	0.87	19.00	19.07	18.89544			4431	5151
52	PCB-58						YES								4431	5151
53	PCB-67		30321	12829	17492	0.73	NO	19.26	0.88	19.22	19.29	31.15578			4431	5151
54	PCB-63		118381	51727	66654	0.78	NO	19.40	0.89	19.37	19.44	133.36809			4431	5151
55	PCB-61/70/74/76		2722549	1201424	1521125	0.79	NO	19.61	0.90	19.57	19.64	3260.38204			4431	5151
56	PCB-66		3199918	1410325	1789592	0.79	NO	19.77	0.91	19.74	19.81	3598.65144			4431	5151
57	PCB-55						YES								4431	5151
58	PCB-56		431958	189129	242829	0.78	NO	20.15	0.92	20.12	20.19	533.48437			4431	5151
59	PCB-60		341546	156068	185478	0.84	NO	20.27	0.93	20.24	20.31	397.21641			4431	5151
60	PCB-80						YES								4431	5151
61	PCB-79		145820	63611	82209	0.77	NO	21.25	0.98	21.22	21.29	144.42766			4431	5151
62	PCB-78						YES								4431	5151
63	PCB-81						YES								4431	5151
64	PCB-77		96186	38426	57760	0.67	NO	22.12	1.00	22.09	22.16	114.78789			4431	5151
65	* PCB-104		580	474	106	4.48	YES	17.52	1.00	17.49	17.56	0.65828			556	635
66	PCB-96		25674	15566	10108	1.54	NO	17.79	1.02	17.75	17.82	39.71023			556	635
67	* PCB-103		146905	91049	55856	1.63	NO	18.74	1.07	18.70	18.77	260.38206			1363	782
68	PCB-94		18664	11557	7107	1.63	NO	18.89	1.08	18.86	18.93	33.53112			1363	782
69	PCB-95		11635957	7189383	4446574	1.62	NO	19.14	1.09	19.11	19.18	9885.57242			1363	782
70	PCB-100/93/102/98		189568	117499	72069	1.63	NO	19.31	1.10	19.28	19.34	468.06471		AK221117MB	1363	782
71	PCB-88/91		866738	535504	331234	1.62	NO	19.60	1.12	19.56	19.63	1557.20866			1363	782
72	PCB-84		746711	461875	284836	1.62	NO	19.75	1.13	19.72	19.79	1451.39616			1363	782
73	PCB-89		35809	21788	14021	1.55	NO	20.00	1.14	19.97	20.04	79.35399			1363	782
74	PCB-121		7417	4732	2685	1.76	NO	20.11	1.15	20.07	20.14	8.97489			1363	782

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Name: 5-221109A24, Date: 10-Nov-2022, Time: 08:14:40, ID: L2735553-1, Description: SAMPLE, Vial: Tray1:19

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
75	PCB-92		3830110	2363165	1466945	1.61	NO	20.34	1.16	20.30	20.37	7637.03733			1363	782
76	PCB-113/90/101		35778263	22143348	13634915	1.62	NO	20.65	1.18	20.62	20.69	54165.57696			1363	782
77	PCB-83/99		6992781	4320060	2672721	1.62	NO	20.96	0.91	20.92	20.99	12699.25767			1363	782
78	PCB-112						YES								1363	782
79	PCB-109/119/86/97/125/87		8168183	5050213	3117970	1.62	NO	21.32	0.92	21.28	21.35	12074.15810		AK221117MJ	1363	782
80	PCB-117/116/85/110/115		22901499	14168936	8732563	1.62	NO	21.73	0.94	21.70	21.77	31968.82266		AK221117MJ	1363	782
81	PCB-82		497106	309322	187784	1.65	NO	21.93	0.95	21.90	21.96	1115.46818			1363	782
82	PCB-111		58181	36412	21769	1.67	NO	22.02	0.95	21.99	22.05	68.32163			1363	782
83	PCB-120		316398	195208	121190	1.61	NO	22.25	0.96	22.22	22.29	373.77258		AK221117MS	1363	782
84	* PCB-108/124		591345	364521	226823	1.61	NO	22.89	0.99	22.86	22.93	743.77670			7305	7200
85	PCB-107		2427924	1496338	931587	1.61	NO	23.03	1.00	22.99	23.06	2741.29671		AK221117MS	7305	7200
86	PCB-123		101700	64485	37215	1.73	NO	23.10	1.00	23.07	23.13	121.82541		AK221117MS	7305	7200
87	PCB-106						YES								7305	7200
88	PCB-118		18614447	11446741	7167706	1.60	NO	23.26	1.00	23.22	23.29	20874.96655			7305	7200
89	PCB-122		101427	63317	38110	1.66	NO	23.47	1.00	23.44	23.51	173.71397			7305	7200
90	PCB-114		337366	207886	129480	1.61	NO	23.55	1.00	23.51	23.58	424.74286			7305	7200
91	PCB-105		3586050	2209898	1376152	1.61	NO	23.92	1.00	23.89	23.95	4255.15686		AK221117MB	7305	7200
92	PCB-127						YES								7305	7200
93	PCB-126		58655	37976	20679	1.84	YES	25.49	1.00	25.46	25.52	76.26460		AK221117MB	7305	7200
94	* PCB-155		7594	4226	3369	1.25	NO	20.49	1.00	20.46	20.53	7.71898			1746	1195
95	PCB-152						YES								1746	1195
96	PCB-150		138232	76258	61974	1.23	NO	20.74	1.01	20.71	20.78	151.65388			1746	1195
97	PCB-136		10397943	5775420	4622523	1.25	NO	20.99	1.02	20.95	21.02	13409.97758			1746	1195
98	PCB-145		1577	992	585	1.70	YES	21.11	1.03	21.07	21.14	1.88458			1746	1195
99	PCB-148		99618	55444	44174	1.26	NO	21.82	1.07	21.78	21.85	165.23571			1746	1195
100	PCB-151/135		54499810	30212784	24287026	1.24	NO	22.18	1.08	22.14	22.21	96791.03968			1746	1195
101	PCB-154						YES								1746	1195
102	PCB-144		7396169	4110167	3286003	1.25	NO	22.46	1.10	22.43	22.50	12680.00324			1746	1195
103	* PCB-147/149		107702680	58451084	49251596	1.19	NO	22.66	1.11	22.63	22.70	166433.29246			9151	5518
104	PCB-134/143		2265533	1262053	1003480	1.26	NO	22.81	1.11	22.78	22.84	4501.54564			9151	5518
105	PCB-139/140		560831	309600	251232	1.23	NO	22.97	1.12	22.93	23.00	864.06428			9151	5518
106	PCB-131		453833	250355	203478	1.23	NO	23.11	0.88	23.08	23.14	938.78920			9151	5518
107	PCB-142						YES								9151	5518
108	PCB-132		22211874	12280554	9931320	1.24	NO	23.36	0.89	23.33	23.40	38926.10962			9151	5518
109	PCB-133		2220770	1228757	992013	1.24	NO	23.53	0.89	23.50	23.57	3898.05067			9151	5518
110	PCB-165		692717	381572	311144	1.23	NO	23.73	0.90	23.69	23.76	887.26593			9151	5518
111	PCB-146		32824903	18175520	14649383	1.24	NO	23.86	0.90	23.83	23.89	49597.51438			9151	5518

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Name: 5-221109A24, Date: 10-Nov-2022, Time: 08:14:40, ID: L2735553-1, Description: SAMPLE, Vial: Tray1:19

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
112	PCB-161						YES								9151	5518
113	PCB-153/168		153191672	79289264	73902408	1.07	NO	24.17	0.92	24.14	24.21	192990.70759			9151	5518
114	PCB-141		27318969	15118709	12200260	1.24	NO	24.32	0.92	24.29	24.35	43796.14473			9151	5518
115	PCB-130		5281084	2908737	2372347	1.23	NO	24.54	0.93	24.50	24.57	9418.45238			9151	5518
116	PCB-137/164		11046580	6112245	4934335	1.24	NO	24.71	0.94	24.67	24.74	15171.30363			9151	5518
117	PCB-138/163/129		135673392	71090792	64582600	1.10	NO	24.88	0.94	24.84	24.91	268504.74619			9151	5518
118	PCB-160						YES								9151	5518
119	PCB-158		16418132	9071355	7346777	1.23	NO	25.07	0.95	25.04	25.10	17795.54516			9151	5518
120	PCB-128/166		12763504	7031180	5732324	1.23	NO	25.56	0.97	25.53	25.60	16930.68641			9151	5518
121	PCB-159		3254427	1777070	1477357	1.20	NO	26.01	0.99	25.98	26.04	3564.77689			9151	5518
122	PCB-162		668589	370633	297956	1.24	NO	26.13	0.99	26.10	26.17	778.33283			9151	5518
123	PCB-167		6328349	3493215	2835134	1.23	NO	26.39	1.00	26.35	26.42	6924.14988			9151	5518
124	PCB-156/157		8859357	4894017	3965340	1.23	NO	27.00	1.00	26.97	27.04	10193.36467			9151	5518
125	PCB-169		505664	310738	194927	1.59	YES	28.66	1.00	28.62	28.69	629.29540		AK221117MB	9151	5518
126	* PCB-188		86180	43826	42354	1.03	NO	23.49	1.00	23.45	23.52	101.37248			4476	5624
127	PCB-179		18768752	9474738	9294014	1.02	NO	23.73	1.01	23.69	23.76	24881.42422			4476	5624
128	PCB-184		38511	19589	18922	1.04	NO	23.93	1.02	23.90	23.97	47.62401			4476	5624
129	PCB-176		6262172	3159539	3102633	1.02	NO	24.17	1.03	24.14	24.21	8352.52629			4476	5624
130	PCB-186						YES								4476	5624
131	PCB-178		12403055	6269905	6133151	1.02	NO	25.07	1.07	25.04	25.10	22770.30954			4476	5624
132	PCB-175		2486724	1253270	1233454	1.02	NO	25.38	1.08	25.35	25.42	4321.64945			4476	5624
133	PCB-187		98751132	49891556	48859576	1.02	NO	25.53	1.09	25.49	25.56	152133.29842			4476	5624
134	PCB-182						YES								4476	5624
135	PCB-183		38817312	19603898	19213414	1.02	NO	25.84	1.10	25.81	25.88	63315.46818			4476	5624
136	PCB-185		5999762	3028700	2971063	1.02	NO	25.93	1.10	25.89	25.96	10701.11746			4476	5624
137	PCB-174		41570196	21009842	20560354	1.02	NO	26.01	1.11	25.98	26.04	69223.58774			4476	5624
138	PCB-177		32567119	16461489	16105630	1.02	NO	26.24	1.12	26.21	26.27	56546.86789			4476	5624
139	PCB-181		134646	68657	65989	1.04	NO	26.42	0.88	26.39	26.46	233.58789			4476	5624
140	PCB-171/173		13845237	6995292	6849946	1.02	NO	26.56	0.89	26.52	26.59	25794.26577			4476	5624
141	PCB-172		10504457	5291282	5213176	1.01	NO	27.34	0.91	27.31	27.37	18189.14233			4476	5624
142	PCB-192		3422	1173	2248	0.52	YES	27.49	0.92	27.45	27.52	5.12590			4476	5624
143	PCB-180/193		137018416	68835584	68182832	1.01	NO	27.68	0.92	27.65	27.71	221755.92696			4476	5624
144	PCB-191		2807610	1425745	1381865	1.03	NO	27.86	0.93	27.83	27.89	3837.43729			4476	5624
145	PCB-170		44125504	22273622	21851882	1.02	NO	28.37	0.95	28.33	28.40	83831.79347			4476	5624
146	PCB-190		15181187	7670001	7511187	1.02	NO	28.63	0.96	28.60	28.67	18961.31457			4476	5624
147	* PCB-189		2088674	1061986	1026688	1.03	NO	29.94	1.00	29.91	29.98	3061.46584			3140	3472
148	* PCB-202		4317889	2038179	2279711	0.89	NO	26.26	1.00	26.23	26.30	5300.86640			1326	1281

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221109A2-1117AK.qld

Last Altered: Thursday, November 17, 2022 12:03:54 Eastern Standard Time
Printed: Wednesday, November 23, 2022 18:29:11 Eastern Standard Time

Name: 5-221109A24, Date: 10-Nov-2022, Time: 08:14:40, ID: L2735553-1, Description: SAMPLE, Vial: Tray1:19

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
149	PCB-201		3363323	1583291	1780032	0.89	NO	26.72	1.02	26.69	26.76	4129.28751			1326	1281
150	PCB-204		6005	2855	3150	0.91	NO	27.06	1.03	27.03	27.10	7.69121			1326	1281
151	PCB-197		1130812	532671	598142	0.89	NO	27.18	1.04	27.15	27.22	1444.93879			1326	1281
152	PCB-200		2559485	1205972	1353514	0.89	NO	27.29	1.04	27.26	27.33	3515.31787			1326	1281
153	PCB-198/199		23703582	11131963	12571619	0.89	NO	28.68	0.92	28.65	28.72	44691.76736			1326	1281
154	PCB-196		11230427	5267725	5962702	0.88	NO	29.01	0.93	28.97	29.04	21035.28928			1326	1281
155	PCB-203		15493891	7280555	8213336	0.89	NO	29.10	0.93	29.07	29.14	27564.02236			1326	1281
156	* PCB-195		6971417	3266910	3704507	0.88	NO	29.85	0.95	29.81	29.88	17408.08917			1740	1908
157	PCB-194		15345014	7196912	8148102	0.88	NO	31.03	0.99	31.00	31.07	36890.07984			1740	1908
158	PCB-205		1069462	500246	569216	0.88	NO	31.31	1.00	31.28	31.34	1986.62010			1740	1908
159	* PCB-208		419561	187126	232435	0.81	NO	29.67	1.00	29.63	29.70	882.67921			817	1535
160	PCB-207		352502	157065	195438	0.80	NO	30.14	1.02	30.11	30.17	722.85882			817	1535
161	PCB-206		2043444	906940	1136504	0.80	NO	32.36	1.00	32.32	32.39	5306.05417			817	1535
162	* PCB-209		129719	70263	59456	1.18	NO	33.47	1.00	33.43	33.50	276.22949			200	262
163	13C-PCB-31						YES								20565	11130
164	13C-PCB-95		1351	778	573	1.36	NO	19.19	1.10	19.16	19.22	2.30156	0.1		2007	1377
165	13C-PCB-153		35304	20857	14447	1.44	YES	24.19	1.18	24.15	24.22	55.90070	2.8		1900	2177
166	13C-PCB-28		1779632	912014	867618	1.05	NO	16.00	0.94	15.96	16.03	1081.06479	54.1		20565	11130
167	13C-PCB-111		1366176	838966	527209	1.59	NO	22.01	1.07	21.98	22.05	1194.35487	59.7		2007	1377
168	13C-PCB-178		1195084	607955	587130	1.04	NO	25.06	1.01	25.02	25.09	1399.06259	70.0		1868	1417
169	13C-PCB-1		1114488	833553	280935	2.97	NO	8.98	0.75	8.95	9.01	512.74462	25.6		2092	15385
170	13C-PCB-3		1182982	882590	300392	2.94	NO	10.49	0.88	10.46	10.53	575.72922	28.8		2092	15385
171	13C-PCB-4		1064855	646438	418417	1.54	NO	10.66	0.90	10.63	10.70	791.16394	39.6		5626	2019
172	13C-PCB-15		1593327	979078	614250	1.59	NO	14.31	1.20	14.27	14.34	871.92953	43.6		7334	3840
173	13C-PCB-19		903951	458737	445214	1.03	NO	12.64	1.06	12.61	12.67	1033.37562	51.7		22376	8450
174	13C-PCB-37		1522985	784368	738617	1.06	NO	18.24	1.07	18.21	18.27	1031.65424	51.6		20565	11130
175	13C-PCB-54		1319946	587077	732869	0.80	NO	14.49	0.85	14.46	14.52	987.79317	49.4		3202	2722
176	13C-PCB-81		1442791	634862	807929	0.79	NO	21.80	1.06	21.77	21.83	1048.29446	52.4		2698	2897
177	13C-PCB-77		1388473	612944	775529	0.79	NO	22.10	1.07	22.07	22.14	1001.44462	50.1		2698	2897
178	13C-PCB-104		1423316	868707	554609	1.57	NO	17.51	1.03	17.48	17.55	1098.96232	54.9		851	717
179	13C-PCB-123		1446793	889436	557357	1.60	NO	23.07	1.12	23.04	23.11	1138.16634	56.9		2931	2476
180	13C-PCB-118		1320076	808974	511102	1.58	NO	23.24	1.13	23.21	23.28	1137.54062	56.9		2931	2476
181	13C-PCB-114		1360075	842595	517481	1.63	NO	23.55	0.95	23.51	23.58	1052.38173	52.6		2931	2476
182	13C-PCB-105		1359280	843236	516044	1.63	NO	23.91	0.96	23.88	23.94	1115.46210	55.8		2931	2476
183	13C-PCB-126		1264964	777253	487711	1.59	NO	25.49	1.03	25.46	25.52	1009.78014	50.5		2931	2476
184	13C-PCB-155		1687604	934539	753065	1.24	NO	20.48	0.99	20.44	20.51	1218.81665	60.9		1258	1756
185	13C-PCB-167		1429168	803431	625738	1.28	NO	26.37	1.06	26.34	26.41	1237.67205	61.9		1900	2177

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Name: 5-221109A24, Date: 10-Nov-2022, Time: 08:14:40, ID: L2735553-1, Description: SAMPLE, Vial: Tray1:19

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
186	13C-PCB-156/157		2655859	1505395	1150464	1.31	NO	27.01	1.09	26.98	27.05	2357.63588	58.9		1900	2177
187	13C-PCB-169		1283611	724951	558660	1.30	NO	28.67	1.15	28.64	28.70	1105.51533	55.3		1900	2177
188	13C-PCB-188		1578700	805600	773100	1.04	NO	23.47	0.94	23.44	23.51	1301.47829	65.1		1868	1417
189	13C-PCB-189		1297046	667798	629248	1.06	NO	29.93	0.96	29.90	29.96	1073.31193	53.7		2367	1303
190	13C-PCB-202		1425307	676365	748942	0.90	NO	26.25	1.06	26.22	26.29	1371.71597	68.6		1141	741
191	13C-PCB-205		1128580	532249	596330	0.89	NO	31.30	1.01	31.26	31.33	1244.52530	62.2		1929	1434
192	13C-PCB-208		827375	364401	462974	0.79	NO	29.65	0.96	29.62	29.68	1092.63996	54.6		1089	1500
193	13C-PCB-206		673868	299284	374584	0.80	NO	32.34	1.04	32.31	32.38	1299.15846	65.0		1089	1500
194	13C-PCB-209		960336	523304	437031	1.20	NO	33.44	1.08	33.40	33.47	1185.37530	59.3		352	290
195	13C-PCB-9		4097215	2490653	1606563	1.55	NO	11.90	0.48	11.86	11.93	55.54646	2.8		5626	2019
196	13C-PCB-52		1931008	861385	1069623	0.81	NO	16.99	0.68	16.95	17.02	56.10174	2.8		3239	2571
197	13C-PCB-101		1844937	1124314	720622	1.56	NO	20.63	0.83	20.60	20.67	58.12585	2.9		2007	1377
198	13C-PCB-138		1821330	1019669	801661	1.27	NO	24.86	0.00	24.83	24.90	53.97776	2.7		1900	2177
199	13C-PCB-194		1411417	659789	751628	0.88	NO	31.02	1.25	30.98	31.05	52.69294	2.6		1929	1434
200	Total MoCB-F1	4		25511								1159.75449			966	
201	Total DiCB-F1	7		50917								3318.45809			840	
202	Total DiCB-F2	5		221578								5152.45191			1601	
203	Total TrCB-F1	1		4389								13.24530			865	
204	Total TrCB-F2	6		135492								375.98240			1046	
205	Total TrCB-F3	18		1166101								203149.99148			3324	
206	Total TeCB-F2	1		516								1.65989			512	
207	Total TeCB-F3	12		3248802								11226.02960			663	
208	Total TeCB-F4	21		4960393								3573072.412...			4431	
209	Total PeCB-F3	6		18344								12601.76507			556	
210	Total PeCB-F4	19		59145922								3777464.608...			1363	
211	Total PeCB-F5	36		38807812								65516442.24...			7305	
212	Total HxCB-F4	8		40235398								123509.69782			1746	
213	Total HxCB-F5	33		304532045								22431173.20...			9151	
214	Total HpCB-F5	27		243775380								3096379.980...			4476	
215	Total HpCB-F6	1		2311312								3061.46584			3140	
216	Total OcCB-F5	28		29069338								159351.45753			1326	
217	Total OcCB-F6	7		11089782								665446.67669			1740	
218	Total NoCB-F6	3		1251131								6911.59220			817	
219	Total DeCB-F7	1		70263								276.22949			200	
220	Total 13C-MoCB-F1	2		1733477								1088.47384			2092	
221	Total 13C-DiCB-F1	4		3143240								846.99629			5626	
222	Total 13C-DiCB-F2	1		979078								871.92953			7334	

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Name: 5-221109A24, Date: 10-Nov-2022, Time: 08:14:40, ID: L2735553-1, Description: SAMPLE, Vial: Tray1:19

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
223	Total 13C-TrCB-F1	1		2524943								1033.37562			22376	
224	Total 13C-TrCB-F3	2		2128139								2112.71903			20565	
225	Total 13C-TeCB-F2	1		587077								987.79317			3202	
226	Total 13C-TeCB-F3	6		871836								56.77030			3239	
227	Total 13C-TeCB-F4	2		1282264								2049.73908			2698	
228	Total 13C-PeCB-F3	1		868885								1098.96232			851	
229	Total 13C-PeCB-F4	10		1978459								1257.00363			2007	
230	Total 13C-PeCB-F5	5		4315597								5453.33093			2931	
231	Total 13C-HxCB-F4	1		942440								1218.81665			1258	
232	Total 13C-HxCB-F5	22		4152504								4830.56713			1900	
233	Total 13C-HpCB-F5	2		1492531								2700.54088			1868	
234	Total 13C-HpCB-F6	1		770569								1073.31193			2367	
235	Total 13C-OcCB-F5	1		699441								1371.71597			1141	
236	Total 13C-OcCB-F6	4		1243545								1305.29329			1929	
237	Total 13C-NoCB-F6	2		664244								2391.79842			1089	
238	Total 13C-DeCB-F7	1		523304								1185.37530			352	
239	Lockmass F1			0											138905	
240	Lockmass F2			0											136391	
241	Lockmass F3			0											203106	
242	Lockmass F4			0											180596	
243	Lockmass F5			0											71063	
244	Lockmass F6			0											33906	
245	Lockmass F7			0											12816	

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Name: 5-221109A25, Date: 10-Nov-2022, Time: 08:56:51, ID: L2735553-2, Description: SAMPLE, Vial: Tray1:20

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
1	* PCB-1		4459	3344	1115	3.00	NO	8.98	1.00	8.95	9.01	6.47752			1243	1368
2	PCB-2		31233	23519	7714	3.05	NO	10.37	0.99	10.33	10.40	46.53558			1243	1368
3	PCB-3		7018	5472	1546	3.54	NO	10.49	1.00	10.46	10.53	10.12882			1243	1368
4	*PCB-4		10474	6188	4286	1.44	NO	10.66	1.00	10.63	10.70	20.28468			707	3514
5	PCB-10						YES								707	3514
6	PCB-9		5848	3383	2464	1.37	NO	11.90	1.12	11.86	11.93	8.33771			707	3514
7	PCB-7						YES								707	3514
8	PCB-6		10099	6378	3721	1.71	NO	12.16	1.14	12.13	12.20	14.70221			707	3514
9	PCB-5						YES								707	3514
10	PCB-8		49057	29857	19200	1.55	NO	12.44	1.17	12.41	12.48	65.20414			707	3514
11	* PCB-14						YES								1441	4493
12	PCB-11		354084	216701	137382	1.58	NO	13.92	0.97	13.89	13.95	413.46800			1441	4493
13	PCB-13/12		7338	4190	3148	1.33	NO	14.10	0.99	14.07	14.14	8.21233		AK221117MB	1441	4493
14	PCB-15		10388	5805	4583	1.27	YES	14.30	1.00	14.26	14.33	11.82754			1441	4493
15	* PCB-19		5921	3113	2808	1.11	NO	12.65	1.00	12.62	12.69	10.44262			1002	699
16	* PCB-30/18		72164	38498	33666	1.14	NO	13.73	1.09	13.70	13.77	110.47351			1238	923
17	PCB-17		39046	20922	18124	1.15	NO	13.98	1.11	13.95	14.02	71.85207			1238	923
18	PCB-27		9190	4942	4249	1.16	NO	14.11	1.12	14.08	14.15	12.69456			1238	923
19	PCB-24		2308	1195	1113	1.07	NO	14.20	1.12	14.16	14.23	3.28216			1238	923
20	PCB-16		25445	12895	12550	1.03	NO	14.28	1.13	14.24	14.31	49.33743			1238	923
21	PCB-32		25452	13513	11939	1.13	NO	14.56	1.15	14.53	14.60	30.54199			1238	923
22	* PCB-34		1517	670	847	0.79	YES	15.24	0.84	15.21	15.28	1.83270			2731	2233
23	PCB-23		703	328	375	0.87	YES	15.33	0.84	15.30	15.36	0.79565			2731	2233
24	PCB-29/26		56630	28950	27680	1.05	NO	15.51	0.85	15.47	15.54	64.08921			2731	2233
25	PCB-25		21101	10874	10227	1.06	NO	15.64	0.86	15.61	15.68	23.83097			2731	2233
26	PCB-31		232890	119353	113537	1.05	NO	15.83	0.87	15.80	15.86	249.08053			2731	2233
27	PCB-28/20		716143	366870	349273	1.05	NO	16.00	0.88	15.96	16.03	818.52163			2731	2233
28	PCB-21/33		104518	53814	50704	1.06	NO	16.14	0.89	16.11	16.18	116.13824			2731	2233
29	PCB-22		102617	51970	50647	1.03	NO	16.38	0.90	16.35	16.41	119.13646			2731	2233
30	PCB-36						YES								2731	2233
31	PCB-39		2849	1380	1469	0.94	NO	17.43	0.96	17.39	17.46	3.29871			2731	2233
32	PCB-38		2006	1084	922	1.17	NO	17.73	0.97	17.70	17.76	2.23102			2731	2233
33	PCB-35		914	373	541	0.69	YES	18.00	0.99	17.97	18.04	1.06172			2731	2233
34	PCB-37		40829	20340	20489	0.99	NO	18.24	1.00	18.21	18.27	51.04997			2731	2233
35	* PCB-54		604	226	378	0.60	YES	14.50	1.00	14.47	14.53	0.85545			710	1021
36	* PCB-50/53		40336	17747	22589	0.79	NO	15.68	1.08	15.65	15.72	71.67790			1052	1251
37	PCB-45/51		42582	18806	23776	0.79	NO	16.09	1.11	16.06	16.13	78.09815			1052	1251

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Name: 5-221109A25, Date: 10-Nov-2022, Time: 08:56:51, ID: L2735553-2, Description: SAMPLE, Vial: Tray1:20

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
38	PCB-46		8876	3701	5175	0.72	NO	16.27	1.12	16.24	16.30	18.38380			1052	1251
39	PCB-52		891478	388658	502819	0.77	NO	16.99	1.17	16.95	17.02	1726.86369			1052	1251
40	PCB-73						YES								1052	1251
41	PCB-43		9553	4397	5157	0.85	NO	17.12	1.18	17.09	17.16	21.77522			1052	1251
42	PCB-69/49		595867	260707	335160	0.78	NO	17.26	1.19	17.23	17.29	918.82491			1052	1251
43	PCB-48		67959	29674	38285	0.78	NO	17.42	1.20	17.38	17.45	115.73320			1052	1251
44	PCB-44/47/65		757366	332516	424851	0.78	NO	17.56	1.21	17.53	17.60	1303.69124			1052	1251
45	PCB-59/62/75		83396	36590	46806	0.78	NO	17.73	1.22	17.70	17.76	112.90771			1052	1251
46	PCB-42		135606	58803	76802	0.77	NO	17.86	1.23	17.82	17.89	279.21113			1052	1251
47	PCB-41/71/40		180352	79007	101346	0.78	NO	18.12	1.25	18.09	18.15	326.45474			1052	1251
48	PCB-64		396163	174626	221537	0.79	NO	18.24	1.26	18.21	18.27	563.96472			1052	1251
49	* PCB-72		34111	14901	19210	0.78	NO	18.63	0.85	18.59	18.66	46.23756			2743	2799
50	PCB-68		24721	10586	14135	0.75	NO	18.78	0.86	18.75	18.82	32.17026			2743	2799
51	PCB-57		6605	3180	3425	0.93	YES	19.02	0.87	18.99	19.06	9.08740			2743	2799
52	PCB-58						YES								2743	2799
53	PCB-67		21963	10011	11953	0.84	NO	19.25	0.88	19.21	19.28	26.57023			2743	2799
54	PCB-63		56531	24950	31581	0.79	NO	19.39	0.89	19.36	19.43	74.98155			2743	2799
55	PCB-61/70/74/76		1406813	621522	785291	0.79	NO	19.59	0.90	19.55	19.62	1983.47210			2743	2799
56	PCB-66		1374860	605115	769745	0.79	NO	19.76	0.91	19.73	19.80	1820.35530			2743	2799
57	PCB-55						YES								2743	2799
58	PCB-56		234314	104104	130210	0.80	NO	20.14	0.92	20.11	20.18	340.70275			2743	2799
59	PCB-60		184831	81258	103573	0.78	NO	20.26	0.93	20.23	20.30	253.07560			2743	2799
60	PCB-80						YES								2743	2799
61	PCB-79		56738	24753	31985	0.77	NO	21.24	0.98	21.21	21.28	66.16190			2743	2799
62	PCB-78						YES								2743	2799
63	PCB-81						YES								2743	2799
64	PCB-77		72056	28480	43576	0.65	YES	22.10	1.00	22.07	22.14	101.83202			2743	2799
65	* PCB-104		428	203	226	0.90	YES	17.52	1.00	17.49	17.56	0.53709			924	989
66	PCB-96		13662	8330	5332	1.56	NO	17.78	1.02	17.75	17.81	23.35571			924	989
67	* PCB-103		67447	42199	25248	1.67	NO	18.73	1.07	18.69	18.76	141.95075			5474	2001
68	PCB-94		8407	5093	3314	1.54	NO	18.88	1.08	18.84	18.91	17.93415			5474	2001
69	PCB-95		6186799	3827736	2359063	1.62	NO	19.14	1.09	19.10	19.17	6241.13510			5474	2001
70	PCB-100/93/102/98		86750	53500	33250	1.61	NO	19.30	1.10	19.27	19.34	254.33556		AK221117MB	5474	2001
71	PCB-88/91		384949	239071	145878	1.64	NO	19.59	1.12	19.55	19.62	821.22144			5474	2001
72	PCB-84		363459	225742	137718	1.64	NO	19.75	1.13	19.71	19.78	838.85546			5474	2001
73	PCB-89		15702	9818	5884	1.67	NO	20.00	1.14	19.96	20.03	41.31674			5474	2001
74	PCB-121		4052	2533	1519	1.67	NO	20.09	1.15	20.05	20.12	5.82203			5474	2001

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Name: 5-221109A25, Date: 10-Nov-2022, Time: 08:56:51, ID: L2735553-2, Description: SAMPLE, Vial: Tray1:20

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
75	PCB-92		1983935	1227014	756921	1.62	NO	20.33	1.16	20.29	20.36	4697.19836			5474	2001
76	PCB-113/90/101		15587464	9651521	5935943	1.63	NO	20.63	1.18	20.60	20.67	28020.60104			5474	2001
77	PCB-83/99		2889138	1788110	1101028	1.62	NO	20.95	0.91	20.91	20.98	6230.09365			5474	2001
78	PCB-112						YES								5474	2001
79	PCB-109/119/86/97/125/87		3306714	2046494	1260221	1.62	NO	21.31	0.92	21.28	21.34	5803.98028		AK221117MJ	5474	2001
80	PCB-117/116/85/110/115		9945447	6165177	3780271	1.63	NO	21.72	0.94	21.68	21.75	16484.84670		AK221117MJ	5474	2001
81	PCB-82		204124	124953	79171	1.58	NO	21.92	0.95	21.89	21.95	543.87671			5474	2001
82	PCB-111		23418	14437	8981	1.61	NO	22.01	0.95	21.98	22.05	32.65278			5474	2001
83	PCB-120		123586	76668	46918	1.63	NO	22.24	0.96	22.21	22.28	173.35663		AK221117MS	5474	2001
84	* PCB-108/124		273102	169512	103590	1.64	NO	22.89	0.99	22.86	22.93	407.87275			4597	5172
85	PCB-107		959667	586609	373058	1.57	NO	23.01	1.00	22.98	23.05	1286.58735		AK221117MS	4597	5172
86	PCB-123		39928	24768	15161	1.63	NO	23.09	1.00	23.05	23.12	58.06715		AK221117MS	4597	5172
87	PCB-106						YES								4597	5172
88	PCB-118		6725648	4144270	2581378	1.61	NO	23.26	1.00	23.22	23.29	9348.98696			4597	5172
89	PCB-122		42507	26154	16353	1.60	NO	23.46	1.00	23.43	23.49	86.44526			4597	5172
90	PCB-114		142883	88027	54856	1.60	NO	23.55	1.00	23.51	23.58	216.55770			4597	5172
91	PCB-105		1456859	892161	564699	1.58	NO	23.91	1.00	23.88	23.94	2188.61962		AK221117MB	4597	5172
92	PCB-127						YES								4597	5172
93	PCB-126		21122	13653	7469	1.83	YES	25.48	1.00	25.45	25.51	33.57815		AK221117MB	4597	5172
94	* PCB-155		6854	3788	3066	1.24	NO	20.49	1.00	20.45	20.52	7.41190			1770	1596
95	PCB-152						YES								1770	1596
96	PCB-150		61532	34285	27246	1.26	NO	20.74	1.01	20.70	20.77	71.82202			1770	1596
97	PCB-136		5433395	3019385	2414010	1.25	NO	20.98	1.02	20.94	21.01	7455.33902			1770	1596
98	PCB-145		817	356	461	0.77	YES	21.10	1.03	21.06	21.13	1.03832			1770	1596
99	PCB-148		42867	23692	19175	1.24	NO	21.81	1.07	21.77	21.84	75.64938			1770	1596
100	PCB-151/135		25724280	14276132	11448148	1.25	NO	22.16	1.08	22.13	22.19	48607.00615			1770	1596
101	PCB-154						YES								1770	1596
102	PCB-144		3180264	1761314	1418951	1.24	NO	22.46	1.10	22.42	22.49	5800.84472			1770	1596
103	* PCB-147/149		47489708	26347016	21142692	1.25	NO	22.65	1.11	22.62	22.69	89823.50843			7620	6282
104	PCB-134/143		1131819	624542	507278	1.23	NO	22.80	1.11	22.76	22.83	2752.61334			7620	6282
105	PCB-139/140		225727	124592	101135	1.23	NO	22.95	1.12	22.92	22.99	425.67115			7620	6282
106	PCB-131		180108	99492	80616	1.23	NO	23.10	0.88	23.07	23.13	456.01636			7620	6282
107	PCB-142						YES								7620	6282
108	PCB-132		9284982	5127116	4157866	1.23	NO	23.35	0.89	23.32	23.39	19916.52947			7620	6282
109	PCB-133		913962	503590	410371	1.23	NO	23.52	0.89	23.49	23.56	1963.58028			7620	6282
110	PCB-165		317752	173971	143782	1.21	NO	23.72	0.90	23.68	23.75	498.15410			7620	6282
111	PCB-146		12252125	6775779	5476347	1.24	NO	23.85	0.90	23.81	23.88	22659.20664			7620	6282

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Name: 5-221109A25, Date: 10-Nov-2022, Time: 08:56:51, ID: L2735553-2, Description: SAMPLE, Vial: Tray1:20

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
112	PCB-161						YES								7620	6282
113	PCB-153/168		88626444	49180476	39445968	1.25	NO	24.17	0.92	24.14	24.21	136659.99070			7620	6282
114	PCB-141		12372750	6827957	5544793	1.23	NO	24.31	0.92	24.27	24.34	24278.09562			7620	6282
115	PCB-130		1956976	1072346	884629	1.21	NO	24.54	0.93	24.50	24.57	4271.87730			7620	6282
116	PCB-137/164		4554292	2483072	2071219	1.20	NO	24.71	0.94	24.67	24.74	7655.83764			7620	6282
117	PCB-138/163/129		60543030	33624636	26918394	1.25	NO	24.86	0.94	24.83	24.90	146655.46679			7620	6282
118	PCB-160						YES								7620	6282
119	PCB-158		5398158	2943209	2454949	1.20	NO	25.06	0.95	25.02	25.09	7161.59845			7620	6282
120	PCB-128/166		5111220	2818201	2293019	1.23	NO	25.56	0.97	25.53	25.60	8298.62353			7620	6282
121	PCB-159		1390406	761809	628597	1.21	NO	26.00	0.99	25.97	26.03	1864.13032			7620	6282
122	PCB-162		243486	133885	109602	1.22	NO	26.13	0.99	26.10	26.17	346.94285			7620	6282
123	PCB-167		2189154	1212591	976562	1.24	NO	26.37	1.00	26.34	26.41	2865.92852			7620	6282
124	PCB-156/157		3197749	1765205	1432544	1.23	NO	27.00	1.00	26.97	27.04	4557.10324			7620	6282
125	PCB-169		132451	80993	51458	1.57	YES	28.66	1.00	28.62	28.69	204.49049		AK221117MB	7620	6282
126	* PCB-188		34794	17876	16918	1.06	NO	23.49	1.00	23.45	23.52	45.74069			2593	2997
127	PCB-179		8783618	4442946	4340673	1.02	NO	23.72	1.01	23.68	23.75	13536.70322			2593	2997
128	PCB-184		17349	8409	8940	0.94	NO	23.92	1.02	23.89	23.95	24.94172			2593	2997
129	PCB-176		2712462	1370685	1341777	1.02	NO	24.16	1.03	24.13	24.20	4205.87350			2593	2997
130	PCB-186						YES								2593	2997
131	PCB-178		5103171	2570297	2532875	1.01	NO	25.06	1.07	25.02	25.09	10891.30734			2593	2997
132	PCB-175		965947	487195	478752	1.02	NO	25.38	1.08	25.35	25.42	1951.52816			2593	2997
133	PCB-187		37286170	18825408	18460762	1.02	NO	25.52	1.09	25.48	25.55	66777.41475			2593	2997
134	PCB-182						YES								2593	2997
135	PCB-183		14704065	7426615	7277450	1.02	NO	25.83	1.10	25.80	25.86	27881.83745			2593	2997
136	PCB-185		1973317	993966	979351	1.01	NO	25.93	1.11	25.89	25.96	4091.58433			2593	2997
137	PCB-174		17446104	8823320	8622784	1.02	NO	26.00	1.11	25.97	26.03	33773.03707			2593	2997
138	PCB-177		11731813	5909556	5822257	1.01	NO	26.23	1.12	26.20	26.26	23680.66829			2593	2997
139	PCB-181		44949	24403	20547	1.19	NO	26.42	0.88	26.39	26.46	90.65258			2593	2997
140	PCB-171/173		4798715	2431488	2367227	1.03	NO	26.54	0.89	26.51	26.58	10393.15397			2593	2997
141	PCB-172		3583860	1810387	1773473	1.02	NO	27.33	0.91	27.29	27.36	7214.21725			2593	2997
142	PCB-192		1258	165	1094	0.15	YES	27.47	0.92	27.44	27.51	2.19131			2593	2997
143	PCB-180/193		51798632	26197204	25601428	1.02	NO	27.67	0.92	27.63	27.70	97457.26323			2593	2997
144	PCB-191		887248	449685	437563	1.03	NO	27.85	0.93	27.81	27.88	1409.77319			2593	2997
145	PCB-170		14206488	7167028	7039460	1.02	NO	28.36	0.95	28.32	28.39	31376.56665			2593	2997
146	PCB-190		5284731	2671994	2612737	1.02	NO	28.62	0.96	28.59	28.65	7673.35315			2593	2997
147	* PCB-189		653649	332662	320987	1.04	NO	29.93	1.00	29.90	29.96	1171.09393			2483	1991
148	* PCB-202		1759005	834886	924120	0.90	NO	26.25	1.00	26.22	26.29	2425.37065			779	1095

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	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
149	PCB-201		1355758	637959	717800	0.89	NO	26.72	1.02	26.69	26.76	1899.00320			779	1095
150	PCB-204		2832	1505	1327	1.13	YES	27.05	1.03	27.02	27.08	4.13870			779	1095
151	PCB-197		446354	210299	236055	0.89	NO	27.17	1.04	27.14	27.20	650.69191			779	1095
152	PCB-200		984538	466436	518101	0.90	NO	27.28	1.04	27.25	27.31	1542.69906			779	1095
153	PCB-198/199		8436797	3976245	4460552	0.89	NO	28.67	0.92	28.64	28.70	18147.96841			779	1095
154	PCB-196		3960918	1856861	2104058	0.88	NO	29.00	0.93	28.96	29.03	8464.18207			779	1095
155	PCB-203		5696438	2678346	3018093	0.89	NO	29.10	0.93	29.07	29.14	11561.71793			779	1095
156	* PCB-195		2089119	976646	1112473	0.88	NO	29.83	0.95	29.80	29.87	5951.55149			1204	1822
157	PCB-194		4712578	2211910	2500668	0.88	NO	31.03	0.99	31.00	31.07	12925.21245			1204	1822
158	PCB-205		333814	157105	176709	0.89	NO	31.30	1.00	31.26	31.33	721.83058			1204	1822
159	* PCB-208		170081	76459	93622	0.82	NO	29.67	1.00	29.63	29.70	376.42355			636	1173
160	PCB-207		130598	57764	72834	0.79	NO	30.13	1.02	30.09	30.16	292.67787			636	1173
161	PCB-206		725310	324098	401212	0.81	NO	32.34	1.00	32.31	32.38	2161.29351			636	1173
162	* PCB-209		59334	32253	27081	1.19	NO	33.45	1.00	33.42	33.48	142.47697			195	260
163	13C-PCB-31						YES								25233	8151
164	13C-PCB-95						YES								1349	1039
165	13C-PCB-153		12592	7694	4898	1.57	YES	24.17	1.18	24.14	24.21	23.36893	1.2		2339	2104
166	13C-PCB-28		1537220	792151	745069	1.06	NO	15.99	0.94	15.95	16.02	995.76989	49.8		25233	8151
167	13C-PCB-111		1112268	683832	428436	1.60	NO	22.00	1.07	21.97	22.04	1046.28218	52.3		1349	1039
168	13C-PCB-178		991612	506984	484629	1.05	NO	25.04	1.01	25.01	25.08	1221.53456	61.1		2050	1825
169	13C-PCB-1		1280784	954591	326193	2.93	NO	8.97	0.75	8.93	9.00	602.72131	30.1		2738	17770
170	13C-PCB-3		1238428	916510	321918	2.85	NO	10.48	0.88	10.45	10.51	616.48952	30.8		2738	17770
171	13C-PCB-4		1102124	671733	430391	1.56	NO	10.65	0.90	10.62	10.68	837.57019	41.9		5634	2414
172	13C-PCB-15		1497441	918927	578515	1.59	NO	14.30	1.20	14.26	14.33	838.18720	41.9		10346	3286
173	13C-PCB-19		903620	458523	445097	1.03	NO	12.64	1.06	12.61	12.67	1056.60842	52.8		18935	8716
174	13C-PCB-37		1344173	691325	652848	1.06	NO	18.23	1.07	18.20	18.26	970.94607	48.5		25233	8151
175	13C-PCB-54		1261058	555899	705159	0.79	NO	14.48	0.85	14.45	14.51	1006.34390	50.3		3067	1336
176	13C-PCB-81		1232338	543650	688688	0.79	NO	21.79	1.06	21.76	21.82	963.43448	48.2		3029	2184
177	13C-PCB-77		1172488	513858	658630	0.78	NO	22.09	1.07	22.06	22.13	909.93480	45.5		3029	2184
178	13C-PCB-104		1287799	786876	500923	1.57	NO	17.50	1.03	17.47	17.54	1069.89720	53.5		794	1230
179	13C-PCB-123		1191722	730710	461012	1.59	NO	23.06	1.12	23.03	23.10	1008.75762	50.4		2734	2638
180	13C-PCB-118		1064987	658543	406444	1.62	NO	23.23	1.13	23.20	23.27	987.47165	49.4		2734	2638
181	13C-PCB-114		1129780	699473	430307	1.63	NO	23.55	0.95	23.51	23.58	940.62567	47.0		2734	2638
182	13C-PCB-105		1073632	661731	411902	1.61	NO	23.90	0.96	23.86	23.93	948.01196	47.4		2734	2638
183	13C-PCB-126		1034621	633963	400658	1.58	NO	25.48	1.03	25.45	25.51	888.67419	44.4		2734	2638
184	13C-PCB-155		1586189	881301	704888	1.25	NO	20.47	0.99	20.43	20.50	1232.63751	61.6		810	1068
185	13C-PCB-167		1194457	674847	519609	1.30	NO	26.36	1.06	26.33	26.40	1088.47330	54.4		2339	2104

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Last Altered: Thursday, November 17, 2022 12:03:54 Eastern Standard Time
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Name: 5-221109A25, Date: 10-Nov-2022, Time: 08:56:51, ID: L2735553-2, Description: SAMPLE, Vial: Tray1:20

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
186	13C-PCB-156/157		2144252	1212880	931372	1.30	NO	27.00	1.09	26.97	27.04	2002.96229	50.1		2339	2104
187	13C-PCB-169		1034685	585924	448762	1.31	NO	28.66	1.15	28.62	28.69	937.70174	46.9		2339	2104
188	13C-PCB-188		1412596	722847	689749	1.05	NO	23.46	0.94	23.43	23.49	1225.40735	61.3		2050	1825
189	13C-PCB-189		1061126	547643	513483	1.07	NO	29.92	0.96	29.88	29.95	923.98048	46.2		2452	2226
190	13C-PCB-202		1269033	595938	673095	0.89	NO	26.24	1.06	26.21	26.27	1285.15012	64.3		1221	1464
191	13C-PCB-205		969507	456947	512559	0.89	NO	31.28	1.01	31.25	31.32	1154.86152	57.7		1532	1533
192	13C-PCB-208		786482	343542	442940	0.78	NO	29.65	0.96	29.62	29.68	1121.94465	56.1		1478	1472
193	13C-PCB-206		587210	259305	327905	0.79	NO	32.33	1.04	32.30	32.36	1222.89308	61.1		1478	1472
194	13C-PCB-209		851628	465191	386437	1.20	NO	33.44	1.08	33.40	33.47	1135.50821	56.8		316	297
195	13C-PCB-9		4005659	2433618	1572041	1.55	NO	11.90	0.48	11.86	11.93	54.30523	2.7		5634	2414
196	13C-PCB-52		1810851	802621	1008229	0.80	NO	16.98	0.68	16.94	17.01	52.61080	2.6		3046	1515
197	13C-PCB-101		1714624	1047118	667506	1.57	NO	20.62	0.83	20.59	20.66	54.02029	2.7		1349	1039
198	13C-PCB-138		1730866	975077	755789	1.29	NO	24.85	0.00	24.82	24.88	51.29673	2.6		2339	2104
199	13C-PCB-194		1306615	609825	696791	0.88	NO	31.00	1.25	30.97	31.04	48.78033	2.4		1532	1533
200	Total MoCB-F1	4		32683								1404.15550			1243	
201	Total DiCB-F1	5		46700								1793.24312			707	
202	Total DiCB-F2	4		228261								3565.16726			1441	
203	Total TrCB-F1	1		3113								10.44262			1002	
204	Total TrCB-F2	6		91964								278.18172			1238	
205	Total TrCB-F3	19		710018								88953.26962			2731	
206	Total TeCB-F2	1		226								0.85545			710	
207	Total TeCB-F3	14		1405522								6028.29927			1052	
208	Total TeCB-F4	21		2316191								1587026.605...			2743	
209	Total PeCB-F3	3		9638								6717.63882			924	
210	Total PeCB-F4	21		26487416								1772065.328...			5474	
211	Total PeCB-F5	35		15830890								28266757.97...			4597	
212	Total HxCB-F4	8		19119003								62159.25320			1770	
213	Total HxCB-F5	33		146665831								8454632.237...			7620	
214	Total HpCB-F5	29		91993535								1189769.935...			2593	
215	Total HpCB-F6	1		721998								1171.09393			2483	
216	Total OcCB-F5	18		10667173								54625.54361			779	
217	Total OcCB-F6	7		3387992								232398.08689			1204	
218	Total NoCB-F6	4		458438								3554.87655			636	
219	Total DeCB-F7	1		32253								142.47697			195	
220	Total 13C-MoCB-F1	2		1901431								1219.21083			2738	
221	Total 13C-DiCB-F1	3		3112957								892.19123			5634	
222	Total 13C-DiCB-F2	1		920695								838.18720			10346	

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Name: 5-221109A25, Date: 10-Nov-2022, Time: 08:56:51, ID: L2735553-2, Description: SAMPLE, Vial: Tray1:20

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
223	Total 13C-TrCB-F1	1		2481552								1056.60842			18935	
224	Total 13C-TrCB-F3	2		2033560								1966.71596			25233	
225	Total 13C-TeCB-F2	1		556788								1006.34390			3067	
226	Total 13C-TeCB-F3	4		810831								53.16692			3046	
227	Total 13C-TeCB-F4	2		1089579								1873.36928			3029	
228	Total 13C-PeCB-F3	1		787369								1069.89720			794	
229	Total 13C-PeCB-F4	8		1743137								1102.08709			1349	
230	Total 13C-PeCB-F5	5		3508895								4773.54109			2734	
231	Total 13C-HxCB-F4	1		886871								1232.63751			810	
232	Total 13C-HxCB-F5	12		3509940								4116.98227			2339	
233	Total 13C-HpCB-F5	2		1274657								2446.94191			2050	
234	Total 13C-HpCB-F6	1		636928								923.98048			2452	
235	Total 13C-OcCB-F5	1		603339								1285.15012			1221	
236	Total 13C-OcCB-F6	7		1115149								1211.16022			1532	
237	Total 13C-NoCB-F6	2		603517								2344.83773			1478	
238	Total 13C-DeCB-F7	1		465191								1135.50821			316	
239	Lockmass F1			0											149735	
240	Lockmass F2			0											133565	
241	Lockmass F3			0											178647	
242	Lockmass F4			0											154384	
243	Lockmass F5			0											60074	
244	Lockmass F6			0											53283	
245	Lockmass F7			0											13546	

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Name: 5-221109A26, Date: 10-Nov-2022, Time: 09:39:05, ID: L2735553-3, Description: SAMPLE, Vial: Tray1:21

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
1	* PCB-1		3603	2768	835	3.32	NO	8.97	1.00	8.93	9.00	4.74454			917	1239
2	PCB-2		41301	31611	9690	3.26	NO	10.37	0.99	10.33	10.40	58.28856			917	1239
3	PCB-3		5213	3983	1230	3.24	NO	10.48	1.00	10.45	10.51	7.47359			917	1239
4	*PCB-4		13756	8492	5265	1.61	NO	10.66	1.00	10.63	10.70	24.13212			852	3078
5	PCB-10						YES								852	3078
6	PCB-9		9210	5218	3993	1.31	YES	11.90	1.12	11.86	11.93	11.89555			852	3078
7	PCB-7		3731	1950	1782	1.09	YES	12.01	1.13	11.97	12.04	4.71103		AK221117MB	852	3078
8	PCB-6		17808	10155	7652	1.33	NO	12.16	1.14	12.13	12.20	23.48371			852	3078
9	PCB-5		1083	736	347	2.12	YES	12.37	1.16	12.34	12.41	1.44779		AK221117MS	852	3078
10	PCB-8		88941	53953	34988	1.54	NO	12.44	1.17	12.41	12.48	107.07985		AK221117MS	852	3078
11	* PCB-14						YES								1716	3723
12	PCB-11		1593172	979478	613694	1.60	NO	13.92	0.97	13.89	13.95	1847.38689		AK221117MB	1716	3723
13	PCB-13/12		17385	10785	6600	1.63	NO	14.11	0.99	14.08	14.15	19.32126		AK221117MB	1716	3723
14	PCB-15		22284	14448	7836	1.84	YES	14.31	1.00	14.27	14.34	25.19581			1716	3723
15	* PCB-19		10589	5600	4988	1.12	NO	12.65	1.00	12.62	12.69	17.90506			1015	637
16	* PCB-30/18		180530	93442	87088	1.07	NO	13.74	1.09	13.71	13.78	271.56548			1307	810
17	PCB-17		94595	49837	44758	1.11	NO	13.98	1.11	13.95	14.02	171.05019			1307	810
18	PCB-27		21600	11130	10470	1.06	NO	14.11	1.12	14.08	14.15	29.31859			1307	810
19	PCB-24		5237	2633	2604	1.01	NO	14.20	1.12	14.16	14.23	7.31777			1307	810
20	PCB-16		47732	24752	22980	1.08	NO	14.28	1.13	14.24	14.31	90.94324			1307	810
21	PCB-32		70132	37316	32816	1.14	NO	14.56	1.15	14.53	14.60	82.69381			1307	810
22	* PCB-34		5202	2471	2731	0.90	NO	15.24	0.84	15.21	15.28	6.28171			2042	3040
23	PCB-23		1648	816	832	0.98	NO	15.34	0.84	15.31	15.37	1.86404			2042	3040
24	PCB-29/26		173911	89619	84292	1.06	NO	15.52	0.85	15.48	15.55	196.68596			2042	3040
25	PCB-25		51867	26914	24953	1.08	NO	15.65	0.86	15.62	15.69	58.53779			2042	3040
26	PCB-31		632664	325077	307587	1.06	NO	15.83	0.87	15.80	15.86	676.19062			2042	3040
27	PCB-28/20		2143503	1096533	1046969	1.05	NO	16.00	0.88	15.96	16.03	2448.27872			2042	3040
28	PCB-21/33		318537	162632	155905	1.04	NO	16.15	0.89	16.12	16.19	353.71283			2042	3040
29	PCB-22		296401	150605	145796	1.03	NO	16.38	0.90	16.35	16.41	343.88399			2042	3040
30	PCB-36						YES								2042	3040
31	PCB-39		12286	6165	6121	1.01	NO	17.43	0.96	17.39	17.46	14.21660			2042	3040
32	PCB-38		6486	3230	3256	0.99	NO	17.74	0.97	17.71	17.77	7.20986			2042	3040
33	PCB-35		1797	839	958	0.88	YES	18.00	0.99	17.97	18.04	2.08580			2042	3040
34	PCB-37		89168	46261	42907	1.08	NO	18.25	1.00	18.21	18.28	111.41474			2042	3040
35	* PCB-54		1170	538	632	0.85	NO	14.49	1.00	14.46	14.52	1.59482			653	876
36	* PCB-50/53		113958	49819	64139	0.78	NO	15.69	1.08	15.66	15.73	198.36931			800	1182
37	PCB-45/51		121944	53327	68617	0.78	NO	16.09	1.11	16.06	16.13	219.08726			800	1182

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Name: 5-221109A26, Date: 10-Nov-2022, Time: 09:39:05, ID: L2735553-3, Description: SAMPLE, Vial: Tray1:21

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
38	PCB-46		22363	10145	12218	0.83	NO	16.27	1.12	16.24	16.30	45.37180			800	1182
39	PCB-52		3857089	1686579	2170510	0.78	NO	17.00	1.17	16.96	17.03	7318.89367			800	1182
40	PCB-73						YES								800	1182
41	PCB-43		33887	14961	18926	0.79	NO	17.13	1.18	17.10	17.17	75.66305			800	1182
42	PCB-69/49		2400970	1048886	1352084	0.78	NO	17.26	1.19	17.23	17.29	3626.67419			800	1182
43	PCB-48		263406	115029	148377	0.78	NO	17.42	1.20	17.38	17.45	439.41275			800	1182
44	PCB-44/47/65		2741522	1198834	1542688	0.78	NO	17.56	1.21	17.53	17.60	4622.73167			800	1182
45	PCB-59/62/75		298671	130892	167779	0.78	NO	17.74	1.22	17.71	17.77	396.10600			800	1182
46	PCB-42		495216	218442	276774	0.79	NO	17.86	1.23	17.82	17.89	998.82148			800	1182
47	PCB-41/71/40		690909	300988	389921	0.77	NO	18.12	1.25	18.09	18.15	1225.06705			800	1182
48	PCB-64		1469878	644949	824929	0.78	NO	18.25	1.26	18.21	18.28	2049.73427			800	1182
49	* PCB-72		141700	62593	79107	0.79	NO	18.63	0.85	18.59	18.66	189.96948			7431	4237
50	PCB-68		98837	41508	57328	0.72	NO	18.78	0.86	18.75	18.82	127.21037			7431	4237
51	PCB-57		20727	8940	11788	0.76	NO	19.03	0.87	19.00	19.07	28.20593			7431	4237
52	PCB-58						YES								7431	4237
53	PCB-67		53400	22964	30436	0.75	NO	19.25	0.88	19.21	19.28	63.89320			7431	4237
54	PCB-63		228757	98931	129825	0.76	NO	19.39	0.89	19.36	19.43	300.09335			7431	4237
55	PCB-61/70/74/76		4652570	2051786	2600784	0.79	NO	19.61	0.90	19.57	19.64	6487.80227			7431	4237
56	PCB-66		5077213	2232830	2844383	0.79	NO	19.76	0.91	19.73	19.80	6648.72226			7431	4237
57	PCB-55						YES								7431	4237
58	PCB-56		731094	322613	408481	0.79	NO	20.15	0.92	20.12	20.19	1051.39357			7431	4237
59	PCB-60		680994	298532	382463	0.78	NO	20.26	0.93	20.23	20.30	922.21782			7431	4237
60	PCB-80						YES								7431	4237
61	PCB-79		203149	88433	114716	0.77	NO	21.24	0.98	21.21	21.28	234.29322			7431	4237
62	PCB-78						YES								7431	4237
63	PCB-81						YES								7431	4237
64	PCB-77		154618	61364	93254	0.66	NO	22.10	1.00	22.07	22.14	217.56811			7431	4237
65	* PCB-104		623	385	238	1.62	NO	17.52	1.00	17.49	17.56	0.75064			1186	958
66	PCB-96		36781	22929	13852	1.66	NO	17.78	1.02	17.75	17.81	60.40944			1186	958
67	* PCB-103		205226	127716	77510	1.65	NO	18.73	1.07	18.69	18.76	406.05397			590	1105
68	PCB-94		23359	14648	8711	1.68	NO	18.89	1.08	18.85	18.92	46.84566			590	1105
69	PCB-95		17103333	10574884	6528449	1.62	NO	19.14	1.09	19.10	19.17	16220.22321			590	1105
70	PCB-100/93/102/98		256283	159207	97076	1.64	NO	19.30	1.10	19.27	19.34	706.37795			590	1105
71	PCB-88/91		1347892	833712	514179	1.62	NO	19.59	1.12	19.55	19.62	2703.27646			590	1105
72	PCB-84		1119416	692736	426680	1.62	NO	19.75	1.13	19.71	19.78	2428.85293			590	1105
73	PCB-89		49502	30818	18684	1.65	NO	20.00	1.14	19.96	20.03	122.45309			590	1105
74	PCB-121		14969	9250	5719	1.62	NO	20.10	1.15	20.06	20.13	20.21802			590	1105

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Name: 5-221109A26, Date: 10-Nov-2022, Time: 09:39:05, ID: L2735553-3, Description: SAMPLE, Vial: Tray1:21

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
75	PCB-92		5836025	3613700	2222325	1.63	NO	20.34	1.16	20.30	20.37	12989.94148			590	1105
76	PCB-113/90/101		48064934	29738868	18326066	1.62	NO	20.64	1.18	20.61	20.68	81228.57112			590	1105
77	PCB-83/99		10206073	6310802	3895272	1.62	NO	20.95	0.91	20.91	20.98	20690.14008			590	1105
78	PCB-112						YES								590	1105
79	PCB-109/119/86/97/125/87		11269588	6966012	4303576	1.62	NO	21.31	0.92	21.28	21.34	18595.83829		AK221117MJ	590	1105
80	PCB-117/116/85/110/115		31319209	19378186	11941023	1.62	NO	21.72	0.94	21.69	21.76	48803.37534		AK221117MJ	590	1105
81	PCB-82		792467	491034	301434	1.63	NO	21.93	0.95	21.89	21.96	1985.02652			590	1105
82	PCB-111		79570	49226	30344	1.62	NO	22.01	0.95	21.98	22.05	104.30545			590	1105
83	PCB-120		406281	246833	159448	1.55	NO	22.24	0.96	22.21	22.28	535.76785		AK221117MS	590	1105
84	* PCB-108/124		723888	441717	282171	1.57	NO	22.89	0.99	22.86	22.93	1016.36435			14729	6613
85	PCB-107		3234206	1994663	1239542	1.61	NO	23.01	1.00	22.98	23.05	4076.28804		AK221117MS	14729	6613
86	PCB-123		164589	102258	62331	1.64	NO	23.09	1.00	23.05	23.12	224.66193		AK221117MS	14729	6613
87	PCB-106						YES								14729	6613
88	PCB-118		24816785	15272622	9544163	1.60	NO	23.26	1.00	23.22	23.29	31652.54666			14729	6613
89	PCB-122		124934	77284	47651	1.62	NO	23.46	1.00	23.43	23.49	238.85797			14729	6613
90	PCB-114		499533	308842	190691	1.62	NO	23.55	1.00	23.51	23.58	712.02990			14729	6613
91	PCB-105		5476433	3377599	2098834	1.61	NO	23.91	1.00	23.88	23.94	7683.20479		AK221117MB	14729	6613
92	PCB-127						YES								14729	6613
93	PCB-126		54568	34117	20451	1.67	NO	25.48	1.00	25.45	25.51	84.30077		AK221117MB	14729	6613
94	* PCB-155		22933	12717	10216	1.24	NO	20.49	1.00	20.45	20.52	25.18801			1329	1904
95	PCB-152						YES								1329	1904
96	PCB-150		166032	92535	73496	1.26	NO	20.74	1.01	20.70	20.77	196.83297			1329	1904
97	PCB-136		13739058	7629300	6109758	1.25	NO	20.99	1.02	20.95	21.02	19146.98220			1329	1904
98	PCB-145		2280	1164	1116	1.04	YES	21.11	1.03	21.07	21.14	2.94399			1329	1904
99	PCB-148		130820	72303	58517	1.24	NO	21.82	1.07	21.78	21.85	234.47809			1329	1904
100	PCB-151/135		65140610	36222224	28918386	1.25	NO	22.17	1.08	22.14	22.20	125012.86949			1329	1904
101	PCB-154						YES								1329	1904
102	PCB-144		8873457	4925610	3947847	1.25	NO	22.46	1.10	22.43	22.50	16438.72475			1329	1904
103	* PCB-147/149		115593704	61172168	54421536	1.12	NO	22.65	1.11	22.62	22.69	212420.26832			5541	10746
104	PCB-134/143		3112118	1730969	1381150	1.25	NO	22.80	1.11	22.76	22.83	7353.52275			5541	10746
105	PCB-139/140		720645	399437	321207	1.24	NO	22.95	1.12	22.92	22.99	1320.33201			5541	10746
106	PCB-131		566774	313702	253072	1.24	NO	23.10	0.88	23.07	23.13	1394.21472			5541	10746
107	PCB-142						YES								5541	10746
108	PCB-132		26131327	14497670	11633657	1.25	NO	23.35	0.89	23.32	23.39	54458.45838			5541	10746
109	PCB-133		2649350	1461340	1188010	1.23	NO	23.52	0.89	23.49	23.56	5530.07861			5541	10746
110	PCB-165		826279	451926	374353	1.21	NO	23.72	0.90	23.68	23.75	1258.55797			5541	10746
111	PCB-146		36242099	20086432	16155667	1.24	NO	23.85	0.90	23.81	23.88	65120.52323			5541	10746

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Name: 5-221109A26, Date: 10-Nov-2022, Time: 09:39:05, ID: L2735553-3, Description: SAMPLE, Vial: Tray1:21

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
112	PCB-161						YES								5541	10746
113	PCB-153/168		157419200	81345928	76073272	1.07	NO	24.16	0.92	24.13	24.20	235834.32818			5541	10746
114	PCB-141		34945734	19298520	15647214	1.23	NO	24.31	0.92	24.27	24.34	66621.41033			5541	10746
115	PCB-130		6228307	3441047	2787260	1.23	NO	24.54	0.93	24.50	24.57	13209.14115			5541	10746
116	PCB-137/164		13410530	7425639	5984891	1.24	NO	24.71	0.94	24.67	24.74	21902.26748			5541	10746
117	PCB-138/163/129		143104304	75154488	67949816	1.11	NO	24.86	0.94	24.83	24.90	336789.12374			5541	10746
118	PCB-160						YES								5541	10746
119	PCB-158		18418294	10166152	8252142	1.23	NO	25.06	0.95	25.02	25.09	23740.23608			5541	10746
120	PCB-128/166		15356353	8444252	6912101	1.22	NO	25.56	0.97	25.53	25.60	24223.71777			5541	10746
121	PCB-159		3423691	1878927	1544764	1.22	NO	26.00	0.99	25.97	26.03	4459.64643			5541	10746
122	PCB-162		748232	412172	336061	1.23	NO	26.13	0.99	26.10	26.17	1035.83567			5541	10746
123	PCB-167		6866820	3786457	3080363	1.23	NO	26.37	1.00	26.34	26.41	8719.91546			5541	10746
124	PCB-156/157		9869427	5448361	4421066	1.23	NO	27.00	1.00	26.97	27.04	13475.13354			5541	10746
125	PCB-169		420067	265958	154110	1.73	YES	28.66	1.00	28.62	28.69	640.64713		AK221117MB	5541	10746
126	* PCB-188		102037	51912	50125	1.04	NO	23.49	1.00	23.45	23.52	135.01076			4967	4991
127	PCB-179		23074299	11636761	11437538	1.02	NO	23.72	1.01	23.68	23.75	34953.68999			4967	4991
128	PCB-184		46882	23006	23876	0.96	NO	23.92	1.02	23.89	23.95	66.24881			4967	4991
129	PCB-176		7186756	3625774	3560982	1.02	NO	24.16	1.03	24.13	24.20	10953.43714			4967	4991
130	PCB-186		1234	422	812	0.52	YES	24.43	1.04	24.39	24.46	1.88955			4967	4991
131	PCB-178		13894760	7023563	6871197	1.02	NO	25.06	1.07	25.02	25.09	29148.48406			4967	4991
132	PCB-175		2746399	1382644	1363755	1.01	NO	25.38	1.08	25.35	25.42	5453.93936			4967	4991
133	PCB-187		103675712	52417348	51258364	1.02	NO	25.52	1.09	25.48	25.55	182508.83769			4967	4991
134	PCB-182						YES								4967	4991
135	PCB-183		41835138	21130034	20705104	1.02	NO	25.83	1.10	25.80	25.86	77974.07729			4967	4991
136	PCB-185		5462962	2755184	2707778	1.02	NO	25.93	1.10	25.89	25.96	11133.91506			4967	4991
137	PCB-174		45048336	22770914	22277422	1.02	NO	26.00	1.11	25.97	26.03	85718.67706			4967	4991
138	PCB-177		34772794	17578046	17194748	1.02	NO	26.23	1.12	26.20	26.26	68991.16446			4967	4991
139	PCB-181		148932	75877	73055	1.04	NO	26.42	0.88	26.39	26.46	295.23609			4967	4991
140	PCB-171/173		14281431	7211711	7069721	1.02	NO	26.54	0.89	26.51	26.58	30403.19157			4967	4991
141	PCB-172		10506916	5311838	5195078	1.02	NO	27.33	0.91	27.29	27.36	20789.23590			4967	4991
142	PCB-192		6011	2783	3228	0.86	YES	27.47	0.92	27.44	27.51	10.28966			4967	4991
143	PCB-180/193		134961400	67877440	67083960	1.01	NO	27.67	0.92	27.63	27.70	249591.93180			4967	4991
144	PCB-191		2714803	1373748	1341055	1.02	NO	27.85	0.93	27.81	27.88	4240.01533			4967	4991
145	PCB-170		44135832	22307438	21828394	1.02	NO	28.37	0.95	28.33	28.40	95815.34560			4967	4991
146	PCB-190		15527078	7844258	7682820	1.02	NO	28.63	0.96	28.60	28.67	22160.37586			4967	4991
147	* PCB-189		2124163	1083449	1040714	1.04	NO	29.93	1.00	29.90	29.96	3627.68486			3551	3686
148	* PCB-202		5022776	2357262	2665514	0.88	NO	26.25	1.00	26.22	26.29	7022.70809			1069	1342

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Name: 5-221109A26, Date: 10-Nov-2022, Time: 09:39:05, ID: L2735553-3, Description: SAMPLE, Vial: Tray1:21

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
149	PCB-201		3723667	1751667	1972000	0.89	NO	26.72	1.02	26.69	26.76	5277.25848			1069	1342
150	PCB-204		7529	3633	3896	0.93	NO	27.06	1.03	27.03	27.10	11.13176			1069	1342
151	PCB-197		1207270	566504	640766	0.88	NO	27.18	1.04	27.15	27.22	1780.71463			1069	1342
152	PCB-200		2751659	1296452	1455207	0.89	NO	27.29	1.04	27.26	27.33	4362.52193			1069	1342
153	PCB-198/199		24185485	11324969	12860516	0.88	NO	28.67	0.92	28.64	28.70	52637.99627			1069	1342
154	PCB-196						YES								1069	1342
155	PCB-203		14367480	6597548	7769932	0.85	NO	29.10	0.93	29.07	29.14	29504.86840			1069	1342
156	* PCB-195		6795203	3179531	3615672	0.88	NO	29.83	0.95	29.80	29.87	19586.80081			2058	2693
157	PCB-194		14728862	6903622	7825240	0.88	NO	31.03	0.99	31.00	31.07	40873.56306			2058	2693
158	PCB-205		1029960	483552	546408	0.88	NO	31.31	1.00	31.28	31.34	2246.97029			2058	2693
159	* PCB-208		418717	188619	230098	0.82	NO	29.67	1.00	29.63	29.70	1173.77455			927	1446
160	PCB-207		388465	173549	214916	0.81	NO	30.14	1.02	30.11	30.17	1008.47403			927	1446
161	PCB-206		2140250	952977	1187273	0.80	NO	32.36	1.00	32.32	32.39	6629.25459			927	1446
162	* PCB-209		216395	117706	98690	1.19	NO	33.47	1.00	33.43	33.50	532.84559			184	283
163	13C-PCB-31						YES								23812	9580
164	13C-PCB-95		1658	983	675	1.46	NO	19.18	1.10	19.15	19.21	3.15268	0.2		1230	868
165	13C-PCB-153		38111	22622	15489	1.46	YES	24.17	1.18	24.14	24.21	69.69786	3.5		2198	3240
166	13C-PCB-28		1687130	871443	815687	1.07	NO	15.99	0.94	15.95	16.02	1127.51724	56.4		23812	9580
167	13C-PCB-111		1162323	710349	451974	1.57	NO	22.00	1.07	21.97	22.04	1137.11544	56.9		1230	868
168	13C-PCB-178		976514	502228	474285	1.06	NO	25.04	1.01	25.01	25.08	1250.42437	62.5		2066	1463
169	13C-PCB-1		1412979	1057795	355184	2.98	NO	8.97	0.75	8.93	9.00	708.02899	35.4		1792	16308
170	13C-PCB-3		1246596	924556	322041	2.87	NO	10.48	0.88	10.45	10.51	660.77834	33.0		1792	16308
171	13C-PCB-4		1216732	743655	473077	1.57	NO	10.65	0.90	10.62	10.68	984.60105	49.2		7928	2462
172	13C-PCB-15		1507962	927454	580509	1.60	NO	14.30	1.20	14.26	14.33	898.78633	44.9		8452	2832
173	13C-PCB-19		942446	482228	460218	1.05	NO	12.64	1.06	12.61	12.67	1173.43641	58.7		25454	9616
174	13C-PCB-37		1345082	695360	649723	1.07	NO	18.23	1.07	18.20	18.26	1002.39838	50.1		23812	9580
175	13C-PCB-54		1310849	578511	732337	0.79	NO	14.49	0.85	14.46	14.52	1079.23364	54.0		2316	1479
176	13C-PCB-81		1253899	556298	697601	0.80	NO	21.79	1.06	21.76	21.82	1019.51404	51.0		4415	2352
177	13C-PCB-77		1177569	517699	659870	0.78	NO	22.09	1.07	22.06	22.13	950.44508	47.5		4415	2352
178	13C-PCB-104		1340401	818437	521964	1.57	NO	17.51	1.03	17.48	17.55	1158.15670	57.9		807	1387
179	13C-PCB-123		1269684	787236	482448	1.63	NO	23.07	1.12	23.04	23.11	1117.75385	55.9		3061	2025
180	13C-PCB-118		1160677	720074	440604	1.63	NO	23.23	1.13	23.20	23.27	1119.25863	56.0		3061	2025
181	13C-PCB-114		1201304	739039	462266	1.60	NO	23.55	0.95	23.51	23.58	1040.19434	52.0		3061	2025
182	13C-PCB-105		1149645	703622	446023	1.58	NO	23.90	0.96	23.86	23.93	1055.74839	52.8		3061	2025
183	13C-PCB-126		1064635	660838	403797	1.64	NO	25.48	1.03	25.45	25.51	951.04405	47.6		3061	2025
184	13C-PCB-155		1561737	864119	697617	1.24	NO	20.48	0.99	20.44	20.51	1262.19563	63.1		999	1101
185	13C-PCB-167		1231410	693652	537759	1.29	NO	26.36	1.06	26.33	26.40	1166.44832	58.3		2198	3240

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Name: 5-221109A26, Date: 10-Nov-2022, Time: 09:39:05, ID: L2735553-3, Description: SAMPLE, Vial: Tray1:21

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
186	13C-PCB-156/157		2238098	1258283	979815	1.28	NO	27.00	1.09	26.97	27.04	2173.15865	54.3		2198	3240
187	13C-PCB-169		1047432	594420	453012	1.31	NO	28.66	1.15	28.62	28.69	986.72807	49.3		2198	3240
188	13C-PCB-188		1403470	715563	687907	1.04	NO	23.47	0.94	23.44	23.51	1265.55434	63.3		2066	1463
189	13C-PCB-189		1113198	576303	536895	1.07	NO	29.92	0.96	29.88	29.95	1007.58917	50.4		2872	1971
190	13C-PCB-202		1251477	592415	659062	0.90	NO	26.24	1.06	26.21	26.27	1317.40480	65.9		701	940
191	13C-PCB-205		960958	454017	506941	0.90	NO	31.28	1.01	31.25	31.32	1188.87388	59.4		1889	1644
192	13C-PCB-208		620935	275556	345379	0.80	NO	29.65	0.96	29.62	29.68	919.98488	46.0		1168	993
193	13C-PCB-206		564916	245894	319022	0.77	NO	32.34	1.04	32.31	32.38	1221.88598	61.1		1168	993
194	13C-PCB-209		830496	452384	378111	1.20	NO	33.44	1.08	33.40	33.47	1150.08481	57.5		339	284
195	13C-PCB-9		3761830	2285675	1476155	1.55	NO	11.90	0.48	11.86	11.93	50.99960	2.5		7928	2462
196	13C-PCB-52		1755218	780880	974338	0.80	NO	16.98	0.68	16.94	17.01	50.99450	2.5		3453	1694
197	13C-PCB-101		1648657	1004579	644078	1.56	NO	20.62	0.83	20.59	20.66	51.94196	2.6		1230	868
198	13C-PCB-138		1665130	939373	725757	1.29	NO	24.85	0.00	24.82	24.88	49.34855	2.5		2198	3240
199	13C-PCB-194		1258043	592668	665375	0.89	NO	31.02	1.25	30.98	31.05	46.96698	2.3		1889	1644
200	Total MoCB-F1	4		38475								1731.62627			917	
201	Total DiCB-F1	11		84204								5938.75718			852	
202	Total DiCB-F2	5		1009582								11572.93818			1716	
203	Total TrCB-F1	1		5600								17.90506			1015	
204	Total TrCB-F2	6		219109								652.88907			1307	
205	Total TrCB-F3	19		2146846								379166.80379			2042	
206	Total TeCB-F2	1		538								1.59482			653	
207	Total TeCB-F3	12		5472851								21215.93249			800	
208	Total TeCB-F4	22		7712589								4896213.577...			7431	
209	Total PeCB-F3	6		27322								20560.66674			1186	
210	Total PeCB-F4	20		81777448								4549369.159...			590	
211	Total PeCB-F5	36		50652377								82906714.83...			14729	
212	Total HxCB-F4	8		48955937								161325.69950			1329	
213	Total HxCB-F5	34		328123717								23044130.52...			5541	
214	Total HpCB-F5	31		253361289								3170424.949...			4967	
215	Total HpCB-F6	1		2300920								3627.68486			3551	
216	Total OcCB-F5	25		29324990								12271965.14...			1069	
217	Total OcCB-F6	10		10697485								704957.17238			2058	
218	Total NoCB-F6	3		1315145								8811.50316			927	
219	Total DeCB-F7	1		117706								532.84559			184	
220	Total 13C-MoCB-F1	2		2020236								1368.80732			1792	
221	Total 13C-DiCB-F1	5		3041524								1036.08848			7928	
222	Total 13C-DiCB-F2	1		927454								898.78633			8452	

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Printed: Wednesday, November 23, 2022 18:29:11 Eastern Standard Time

Name: 5-221109A26, Date: 10-Nov-2022, Time: 09:39:05, ID: L2735553-3, Description: SAMPLE, Vial: Tray1:21

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
223	Total 13C-TrCB-F1	1		2350734								1173.43641			25454	
224	Total 13C-TrCB-F3	2		2080540								2129.91562			23812	
225	Total 13C-TeCB-F2	1		578511								1079.23364			2316	
226	Total 13C-TeCB-F3	5		791121								51.62799			3453	
227	Total 13C-TeCB-F4	2		1109804								1969.95912			4415	
228	Total 13C-PeCB-F3	1		819114								1158.15670			807	
229	Total 13C-PeCB-F4	11		1727777								1194.07803			1230	
230	Total 13C-PeCB-F5	5		3751995								5283.99927			3061	
231	Total 13C-HxCB-F4	1		872229								1262.19563			999	
232	Total 13C-HxCB-F5	18		3579174								4463.35419			2198	
233	Total 13C-HpCB-F5	2		1296390								2515.97872			2066	
234	Total 13C-HpCB-F6	1		662143								1007.58917			2872	
235	Total 13C-OcCB-F5	1		617662								1317.40480			701	
236	Total 13C-OcCB-F6	9		1088531								1242.57670			1889	
237	Total 13C-NoCB-F6	2		521821								2141.87086			1168	
238	Total 13C-DeCB-F7	1		452384								1150.08481			339	
239	Lockmass F1			0											139900	
240	Lockmass F2			0											102511	
241	Lockmass F3			0											164370	
242	Lockmass F4			0											161381	
243	Lockmass F5			0											45034	
244	Lockmass F6			0											50195	
245	Lockmass F7			0											10589	

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221109A2-1117AK.qld

Last Altered: Thursday, November 17, 2022 12:03:54 Eastern Standard Time
Printed: Wednesday, November 23, 2022 18:29:11 Eastern Standard Time

Name: 5-221109A27, Date: 10-Nov-2022, Time: 10:21:17, ID: L2735553-4, Description: SAMPLE, Vial: Tray1:22

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
1	* PCB-1		2171	1640	531	3.09	NO	8.98	1.00	8.95	9.01	2.56849			1028	1085
2	PCB-2		34007	26073	7934	3.29	NO	10.37	0.99	10.33	10.40	41.91577			1028	1085
3	PCB-3		3210	2377	834	2.85	NO	10.49	1.00	10.46	10.53	3.89629			1028	1085
4	*PCB-4		7621	4669	2951	1.58	NO	10.66	1.00	10.63	10.70	12.26024			1260	2993
5	PCB-10						YES								1260	2993
6	PCB-9		9594	5595	3998	1.40	NO	11.91	1.12	11.88	11.94	11.36309			1260	2993
7	PCB-7						YES								1260	2993
8	PCB-6		18707	11510	7196	1.60	NO	12.18	1.14	12.14	12.21	22.62363			1260	2993
9	PCB-5						YES								1260	2993
10	PCB-8		100842	61586	39256	1.57	NO	12.44	1.17	12.41	12.48	111.34133		AK221117MB	1260	2993
11	* PCB-14						YES								2136	4548
12	PCB-11		1470580	900541	570038	1.58	NO	13.93	0.97	13.89	13.96	1675.21027		AK221117MB	2136	4548
13	PCB-13/12		21062	13965	7096	1.97	YES	14.11	0.99	14.08	14.15	22.99467		AK221117MB	2136	4548
14	PCB-15		27843	17799	10044	1.77	NO	14.31	1.00	14.28	14.35	30.92780			2136	4548
15	* PCB-19		7600	3857	3743	1.03	NO	12.65	1.00	12.62	12.69	11.75521			1162	728
16	* PCB-30/18		262269	139117	123152	1.13	NO	13.74	1.09	13.71	13.78	366.57651			1327	784
17	PCB-17		65117	34523	30593	1.13	NO	13.99	1.11	13.96	14.03	109.40548			1327	784
18	PCB-27		21908	11842	10066	1.18	NO	14.12	1.12	14.09	14.15	27.62937			1327	784
19	PCB-24		6842	3518	3324	1.06	NO	14.20	1.12	14.17	14.24	8.88321			1327	784
20	PCB-16		47688	25202	22487	1.12	NO	14.29	1.13	14.25	14.32	84.42349			1327	784
21	PCB-32		87543	45291	42251	1.07	NO	14.56	1.15	14.53	14.60	95.91149			1327	784
22	* PCB-34		5517	2955	2562	1.15	NO	15.25	0.84	15.22	15.29	6.25978			3992	2788
23	PCB-23						YES								3992	2788
24	PCB-29/26		196403	99837	96567	1.03	NO	15.52	0.85	15.48	15.55	208.69963			3992	2788
25	PCB-25		83251	43393	39858	1.09	NO	15.65	0.86	15.62	15.69	88.27983			3992	2788
26	PCB-31		934680	478101	456579	1.05	NO	15.84	0.87	15.81	15.87	938.61077			3992	2788
27	PCB-28/20		1591540	814175	777364	1.05	NO	16.01	0.88	15.97	16.04	1707.97286			3992	2788
28	PCB-21/33		247437	127245	120191	1.06	NO	16.15	0.89	16.12	16.19	258.15549			3992	2788
29	PCB-22		300037	154853	145183	1.07	NO	16.39	0.90	16.36	16.42	327.06397			3992	2788
30	PCB-36		3685	2442	1243	1.96	YES	17.20	0.94	17.17	17.23	3.45024			3992	2788
31	PCB-39		5036	2629	2407	1.09	NO	17.43	0.96	17.39	17.46	5.47480			3992	2788
32	PCB-38		2740	1357	1384	0.98	NO	17.75	0.97	17.72	17.78	2.86196			3992	2788
33	PCB-35		2118	1112	1006	1.11	NO	18.01	0.99	17.98	18.05	2.31021			3992	2788
34	PCB-37		96375	49759	46616	1.07	NO	18.25	1.00	18.21	18.28	113.14210			3992	2788
35	* PCB-54		785	254	531	0.48	YES	14.50	1.00	14.47	14.53	0.96106			612	1031
36	* PCB-50/53		48831	20861	27970	0.75	NO	15.69	1.08	15.66	15.73	75.20924			1027	1574
37	PCB-45/51		68151	29465	38686	0.76	NO	16.09	1.11	16.06	16.13	108.33603			1027	1574

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Last Altered: Thursday, November 17, 2022 12:03:54 Eastern Standard Time
Printed: Wednesday, November 23, 2022 18:29:11 Eastern Standard Time

Name: 5-221109A27, Date: 10-Nov-2022, Time: 10:21:17, ID: L2735553-4, Description: SAMPLE, Vial: Tray1:22

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
38	PCB-46		10255	4411	5845	0.75	NO	16.28	1.12	16.25	16.31	18.40929			1027	1574
39	PCB-52		1932715	846732	1085984	0.78	NO	17.01	1.17	16.97	17.04	3244.87680			1027	1574
40	PCB-73						YES								1027	1574
41	PCB-43		27518	11876	15641	0.76	NO	17.14	1.18	17.11	17.18	54.36373			1027	1574
42	PCB-69/49		1240589	540749	699840	0.77	NO	17.27	1.19	17.24	17.30	1658.03745			1027	1574
43	PCB-48		100668	43550	57118	0.76	NO	17.43	1.20	17.39	17.46	148.58833			1027	1574
44	PCB-44/47/65		1271778	552930	718849	0.77	NO	17.57	1.21	17.54	17.61	1897.41734			1027	1574
45	PCB-59/62/75		123863	54632	69231	0.79	NO	17.74	1.22	17.71	17.77	145.34684			1027	1574
46	PCB-42		167282	72492	94790	0.76	NO	17.87	1.23	17.83	17.90	298.52974			1027	1574
47	PCB-41/71/40		225638	98163	127474	0.77	NO	18.13	1.25	18.10	18.16	353.99373			1027	1574
48	PCB-64		681793	298657	383136	0.78	NO	18.25	1.26	18.21	18.28	841.22718			1027	1574
49	* PCB-72		55300	24359	30941	0.79	NO	18.64	0.85	18.60	18.67	65.08967			3151	2820
50	PCB-68		38712	16210	22502	0.72	NO	18.80	0.86	18.77	18.84	43.74446			3151	2820
51	PCB-57		12699	5939	6760	0.88	NO	19.03	0.87	19.00	19.07	15.17199			3151	2820
52	PCB-58						YES								3151	2820
53	PCB-67		36280	16059	20221	0.79	NO	19.26	0.88	19.22	19.29	38.11145			3151	2820
54	PCB-63		85987	38465	47522	0.81	NO	19.40	0.89	19.37	19.44	99.03527			3151	2820
55	PCB-61/70/74/76		2937791	1291170	1646621	0.78	NO	19.60	0.90	19.56	19.63	3596.66298			3151	2820
56	PCB-66		1872144	828116	1044028	0.79	NO	19.77	0.91	19.74	19.81	2152.41628			3151	2820
57	PCB-55						YES								3151	2820
58	PCB-56		312834	139043	173792	0.80	NO	20.16	0.92	20.13	20.20	394.98480			3151	2820
59	PCB-60		245134	108368	136766	0.79	NO	20.28	0.93	20.25	20.32	291.45203			3151	2820
60	PCB-80						YES								3151	2820
61	PCB-79		37944	16562	21382	0.77	NO	21.25	0.98	21.22	21.29	38.42066			3151	2820
62	PCB-78						YES								3151	2820
63	PCB-81						YES								3151	2820
64	PCB-77		96932	44155	52777	0.84	NO	22.12	1.00	22.09	22.16	119.22846			3151	2820
65	* PCB-104						YES								984	1163
66	PCB-96		7804	4531	3273	1.38	NO	17.79	1.02	17.75	17.82	11.59118			984	1163
67	* PCB-103		62344	38555	23789	1.62	NO	18.74	1.07	18.70	18.77	117.16525			1385	921
68	PCB-94		6073	3661	2412	1.52	NO	18.89	1.08	18.86	18.93	11.56910			1385	921
69	PCB-95		4777878	2949152	1828726	1.61	NO	19.14	1.09	19.11	19.18	4303.94083			1385	921
70	PCB-100/93/102/98		52479	32368	20111	1.61	NO	19.31	1.10	19.28	19.34	137.39074		AK221117MB	1385	921
71	PCB-88/91		412727	257470	155257	1.66	NO	19.60	1.12	19.56	19.63	786.23757			1385	921
72	PCB-84		394724	244525	150198	1.63	NO	19.75	1.13	19.72	19.79	813.50083			1385	921
73	PCB-89		9456	6084	3371	1.80	YES	20.00	1.14	19.97	20.04	22.21730			1385	921
74	PCB-121		3315	2110	1205	1.75	NO	20.10	1.15	20.06	20.13	4.25237			1385	921

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Name: 5-221109A27, Date: 10-Nov-2022, Time: 10:21:17, ID: L2735553-4, Description: SAMPLE, Vial: Tray1:22

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
75	PCB-92		1595472	988478	606994	1.63	NO	20.34	1.16	20.30	20.37	3373.13920			1385	921
76	PCB-113/90/101		10003223	6198271	3804953	1.63	NO	20.65	1.18	20.62	20.69	16057.41206			1385	921
77	PCB-83/99		2656665	1646184	1010481	1.63	NO	20.96	0.91	20.92	20.99	5115.60037			1385	921
78	PCB-112						YES								1385	921
79	PCB-109/119/86/97/125/87		2452511	1518687	933824	1.63	NO	21.32	0.92	21.28	21.35	3843.91550		AK221117MJ	1385	921
80	PCB-117/116/85/110/115		8278241	5125898	3152344	1.63	NO	21.73	0.94	21.70	21.77	12252.71356		AK221117MJ	1385	921
81	PCB-82		111570	69790	41780	1.67	NO	21.94	0.95	21.90	21.97	265.45279			1385	921
82	PCB-111		17158	10290	6868	1.50	NO	22.02	0.95	21.99	22.05	21.36373			1385	921
83	PCB-120		91760	57490	34270	1.68	NO	22.25	0.96	22.22	22.29	114.93645		AK221117MS	1385	921
84	* PCB-108/124		250703	154972	95730	1.62	NO	22.89	0.99	22.86	22.93	334.34278			4348	4224
85	PCB-107		768756	475340	293416	1.62	NO	23.03	1.00	22.99	23.06	920.32451		AK221117MS	4348	4224
86	PCB-123		38521	23417	15103	1.55	NO	23.10	1.00	23.07	23.13	52.04118		AK221117MS	4348	4224
87	PCB-106						YES								4348	4224
88	PCB-118		5413766	3335477	2078289	1.60	NO	23.26	1.00	23.22	23.29	6807.20521			4348	4224
89	PCB-122		38148	23839	14309	1.67	NO	23.47	1.00	23.44	23.51	69.27624			4348	4224
90	PCB-114		116641	73033	43609	1.67	NO	23.56	1.00	23.52	23.59	154.57073			4348	4224
91	PCB-105		1306255	821478	484777	1.69	NO	23.92	1.00	23.89	23.95	1721.09650		AK221117MB	4348	4224
92	PCB-127						YES								4348	4224
93	PCB-126		14461	9343	5117	1.83	YES	25.49	1.00	25.46	25.52	19.91708		AK221117MB	4348	4224
94	* PCB-155		2147	1173	974	1.20	NO	20.50	1.00	20.47	20.54	2.17754			2098	1769
95	PCB-152						YES								2098	1769
96	PCB-150		31338	17190	14148	1.22	NO	20.74	1.01	20.71	20.78	34.30256			2098	1769
97	PCB-136		3183763	1770804	1412959	1.25	NO	20.99	1.02	20.95	21.02	4096.69065			2098	1769
98	PCB-145						YES								2098	1769
99	PCB-148		28158	15907	12252	1.30	NO	21.83	1.07	21.79	21.86	46.59996			2098	1769
100	PCB-151/135		13544019	7517849	6026171	1.25	NO	22.18	1.08	22.14	22.21	23999.35225			2098	1769
101	PCB-154						YES								2098	1769
102	PCB-144		1631241	905289	725952	1.25	NO	22.46	1.10	22.43	22.50	2790.24496			2098	1769
103	* PCB-147/149		25548894	14127336	11421558	1.24	NO	22.66	1.11	22.63	22.70	42633.72326			6190	4554
104	PCB-134/143		720686	398015	322671	1.23	NO	22.81	1.11	22.78	22.84	1546.33973			6190	4554
105	PCB-139/140		129264	71672	57592	1.24	NO	22.97	1.12	22.93	23.00	215.05956			6190	4554
106	PCB-131		89803	49449	40353	1.23	NO	23.11	0.88	23.08	23.14	200.59847			6190	4554
107	PCB-142						YES								6190	4554
108	PCB-132		5164421	2850256	2314165	1.23	NO	23.36	0.89	23.33	23.40	9773.38215			6190	4554
109	PCB-133		488180	270166	218014	1.24	NO	23.53	0.89	23.50	23.57	925.31887			6190	4554
110	PCB-165		164253	90227	74026	1.22	NO	23.73	0.90	23.69	23.76	227.18458			6190	4554
111	PCB-146		6043762	3338181	2705581	1.23	NO	23.86	0.90	23.83	23.89	9861.23347			6190	4554

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Name: 5-221109A27, Date: 10-Nov-2022, Time: 10:21:17, ID: L2735553-4, Description: SAMPLE, Vial: Tray1:22

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
112	PCB-161						YES								6190	4554
113	PCB-153/168		46563568	25749422	20814146	1.24	NO	24.19	0.92	24.15	24.22	63345.38154			6190	4554
114	PCB-141		7180677	3965519	3215157	1.23	NO	24.32	0.92	24.29	24.35	12430.95234			6190	4554
115	PCB-130		1198326	665282	533044	1.25	NO	24.55	0.93	24.52	24.58	2307.80444			6190	4554
116	PCB-137/164		2687380	1483350	1204030	1.23	NO	24.72	0.94	24.68	24.75	3985.58102			6190	4554
117	PCB-138/163/129		33478139	18594562	14883577	1.25	NO	24.88	0.94	24.84	24.91	71546.11476			6190	4554
118	PCB-160						YES								6190	4554
119	PCB-158		3029477	1663474	1366002	1.22	NO	25.07	0.95	25.04	25.10	3545.86862			6190	4554
120	PCB-128/166		2903853	1603472	1300381	1.23	NO	25.58	0.97	25.54	25.61	4159.55354			6190	4554
121	PCB-159		713657	386070	327587	1.18	NO	26.01	0.99	25.98	26.04	844.14046		AK221117MB	6190	4554
122	PCB-162		149015	81547	67468	1.21	NO	26.14	0.99	26.11	26.18	187.32857			6190	4554
123	PCB-167		1203027	664878	538149	1.24	NO	26.39	1.00	26.35	26.42	1402.42503			6190	4554
124	PCB-156/157		1763909	974537	789372	1.23	NO	27.01	1.00	26.98	27.05	2193.75654			6190	4554
125	PCB-169		66878	41650	25228	1.65	YES	28.67	1.00	28.64	28.70	91.15691		AK221117MB	6190	4554
126	* PCB-188		17948	9212	8736	1.05	NO	23.50	1.00	23.46	23.53	23.57095			2346	2177
127	PCB-179		4382063	2206812	2175251	1.01	NO	23.73	1.01	23.69	23.76	6407.09491			2346	2177
128	PCB-184		7122	3636	3485	1.04	NO	23.93	1.02	23.90	23.97	9.71362			2346	2177
129	PCB-176		1295860	653612	642248	1.02	NO	24.17	1.03	24.14	24.21	1906.31078			2346	2177
130	PCB-186						YES								2346	2177
131	PCB-178		2395056	1208704	1186352	1.02	NO	25.07	1.07	25.04	25.10	4849.51793			2346	2177
132	PCB-175		422817	215281	207537	1.04	NO	25.39	1.08	25.36	25.43	810.43401			2346	2177
133	PCB-187		16534235	8340920	8193316	1.02	NO	25.53	1.09	25.49	25.56	28093.70416			2346	2177
134	PCB-182						YES								2346	2177
135	PCB-183		6395119	3229876	3165243	1.02	NO	25.84	1.10	25.81	25.88	11504.71050			2346	2177
136	PCB-185		866313	437184	429129	1.02	NO	25.94	1.11	25.91	25.97	1704.16903			2346	2177
137	PCB-174		8472374	4282293	4190081	1.02	NO	26.01	1.11	25.98	26.04	15560.36708			2346	2177
138	PCB-177		5653827	2858675	2795152	1.02	NO	26.24	1.12	26.21	26.27	10827.15591			2346	2177
139	PCB-181		23936	12212	11723	1.04	NO	26.43	0.88	26.40	26.47	45.79799			2346	2177
140	PCB-171/173		2294024	1155950	1138074	1.02	NO	26.56	0.89	26.52	26.59	4713.71545			2346	2177
141	PCB-172		1676108	844837	831271	1.02	NO	27.34	0.91	27.31	27.37	3200.98224			2346	2177
142	PCB-192		275	129	146	0.88	YES	27.50	0.92	27.46	27.53	0.45466			2346	2177
143	PCB-180/193		24788394	12528212	12260182	1.02	NO	27.68	0.92	27.65	27.71	44247.36208			2346	2177
144	PCB-191		392473	198103	194370	1.02	NO	27.86	0.93	27.83	27.89	591.63976			2346	2177
145	PCB-170		7208499	3650400	3558099	1.03	NO	28.37	0.95	28.33	28.40	15104.50826			2346	2177
146	PCB-190		2616016	1322415	1293601	1.02	NO	28.63	0.96	28.60	28.67	3603.67677			2346	2177
147	* PCB-189		335218	172346	162872	1.06	NO	29.94	1.00	29.91	29.98	534.01964			2359	2724
148	* PCB-202		849866	398090	451776	0.88	NO	26.26	1.00	26.23	26.30	1108.74833			761	597

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221109A2-1117AK.qld

Last Altered: Thursday, November 17, 2022 12:03:54 Eastern Standard Time
Printed: Wednesday, November 23, 2022 18:29:11 Eastern Standard Time

Name: 5-221109A27, Date: 10-Nov-2022, Time: 10:21:17, ID: L2735553-4, Description: SAMPLE, Vial: Tray1:22

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
149	PCB-201		584900	274441	310459	0.88	NO	26.74	1.02	26.70	26.77	779.15683			761	597
150	PCB-204		1167	557	610	0.91	NO	27.06	1.03	27.03	27.10	1.62166			761	597
151	PCB-197		181168	86879	94289	0.92	NO	27.18	1.04	27.15	27.22	251.17496			761	597
152	PCB-200		467752	219340	248412	0.88	NO	27.29	1.04	27.26	27.33	697.05117			761	597
153	PCB-198/199		3964584	1868149	2096435	0.89	NO	28.68	0.92	28.65	28.72	8110.50567			761	597
154	PCB-196		1723570	813236	910335	0.89	NO	29.01	0.93	28.97	29.04	3502.82179			761	597
155	PCB-203		2471478	1163325	1308153	0.89	NO	29.12	0.93	29.08	29.15	4770.62821			761	597
156	* PCB-195		1055162	496015	559147	0.89	NO	29.85	0.95	29.81	29.88	2858.81476			1075	1859
157	PCB-194		2292478	1074096	1218383	0.88	NO	31.05	0.99	31.01	31.08	5979.76813			1075	1859
158	PCB-205		156503	72692	83811	0.87	NO	31.31	1.00	31.28	31.34	324.03205			1075	1859
159	* PCB-208		65862	29117	36746	0.79	NO	29.67	1.00	29.63	29.70	175.77951			499	1747
160	PCB-207		64152	28021	36130	0.78	NO	30.14	1.02	30.11	30.17	155.22247			499	1747
161	PCB-206		363841	160613	203228	0.79	NO	32.37	1.00	32.34	32.40	1026.64964			499	1747
162	* PCB-209		31094	16797	14297	1.17	NO	33.47	1.00	33.43	33.50	71.34511			196	237
163	13C-PCB-31						YES								29039	8116
164	13C-PCB-95		1251	891	360	2.47	YES	19.19	1.10	19.16	19.22	2.25966	0.1		882	1489
165	13C-PCB-153		7400	4599	2801	1.64	YES	24.17	1.18	24.14	24.21	12.35407	0.6		2274	1855
166	13C-PCB-28		1783359	921712	861647	1.07	NO	16.00	0.94	15.96	16.03	1277.71904	63.9		29039	8116
167	13C-PCB-111		1289665	788657	501008	1.57	NO	22.01	1.07	21.98	22.05	1374.03638	68.7		882	1489
168	13C-PCB-178		1090971	558714	532256	1.05	NO	25.06	1.01	25.02	25.09	1524.51918	76.2		2166	1005
169	13C-PCB-1		1572606	1169528	403078	2.90	NO	8.97	0.75	8.93	9.00	872.54551	43.6		3072	12971
170	13C-PCB-3		1472684	1092918	379766	2.88	NO	10.48	0.88	10.45	10.51	864.35529	43.2		3072	12971
171	13C-PCB-4		1326738	808592	518146	1.56	NO	10.65	0.90	10.62	10.68	1188.78503	59.4		6981	2679
172	13C-PCB-15		1534988	946485	588503	1.61	NO	14.31	1.20	14.27	14.34	1013.03304	50.7		13009	4085
173	13C-PCB-19		1030320	526033	504287	1.04	NO	12.64	1.06	12.61	12.67	1420.45643	71.0		17217	7927
174	13C-PCB-37		1431602	735133	696469	1.06	NO	18.24	1.07	18.21	18.27	1143.76226	57.2		29039	8116
175	13C-PCB-54		1460111	643068	817043	0.79	NO	14.49	0.85	14.46	14.52	1288.75661	64.4		2836	2101
176	13C-PCB-81		1422329	632021	790308	0.80	NO	21.80	1.06	21.77	21.83	1259.43111	63.0		3273	2029
177	13C-PCB-77		1347127	594557	752570	0.79	NO	22.10	1.07	22.07	22.14	1184.11133	59.2		3273	2029
178	13C-PCB-104		1482251	907555	574696	1.58	NO	17.51	1.03	17.48	17.55	1394.75435	69.7		567	1070
179	13C-PCB-123		1282833	790043	492790	1.60	NO	23.07	1.12	23.04	23.11	1229.88388	61.5		2648	2643
180	13C-PCB-118		1177349	730300	447049	1.63	NO	23.24	1.13	23.21	23.28	1236.42481	61.8		2648	2643
181	13C-PCB-114		1292147	798673	493475	1.62	NO	23.56	0.95	23.52	23.59	1218.47589	60.9		2648	2643
182	13C-PCB-105		1224140	757303	466837	1.62	NO	23.91	0.96	23.88	23.94	1224.25339	61.2		2648	2643
183	13C-PCB-126		1194159	735259	458899	1.60	NO	25.49	1.03	25.46	25.52	1161.73063	58.1		2648	2643
184	13C-PCB-155		1691448	944439	747009	1.26	NO	20.49	0.99	20.45	20.52	1488.74776	74.4		1144	952
185	13C-PCB-167		1341390	756970	584420	1.30	NO	26.37	1.06	26.34	26.41	1386.62340	69.3		2274	1855

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Name: 5-221109A27, Date: 10-Nov-2022, Time: 10:21:17, ID: L2735553-4, Description: SAMPLE, Vial: Tray1:22

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
186	13C-PCB-156/157		2457016	1384404	1072612	1.29	NO	27.01	1.09	26.98	27.05	2603.52023	65.1		2274	1855
187	13C-PCB-169		1171984	663859	508125	1.31	NO	28.67	1.15	28.64	28.70	1204.85326	60.2		2274	1855
188	13C-PCB-188		1414005	725888	688118	1.05	NO	23.47	0.94	23.44	23.51	1391.45616	69.6		2166	1005
189	13C-PCB-189		1193396	618201	575195	1.07	NO	29.93	0.96	29.90	29.96	1178.78962	58.9		2893	2386
190	13C-PCB-202		1341224	634265	706959	0.90	NO	26.25	1.06	26.22	26.29	1540.77224	77.0		1139	1091
191	13C-PCB-205		1012550	478349	534201	0.90	NO	31.30	1.01	31.26	31.33	1361.49158	68.1		1317	1778
192	13C-PCB-208		652198	286341	365857	0.78	NO	29.65	0.96	29.62	29.68	1050.22336	52.5		758	1211
193	13C-PCB-206		620117	274604	345513	0.79	NO	32.34	1.04	32.31	32.38	1457.76640	72.9		758	1211
194	13C-PCB-209		891266	488044	403222	1.21	NO	33.45	1.08	33.42	33.48	1341.42730	67.1		251	337
195	13C-PCB-9		3397398	2060524	1336874	1.54	NO	11.90	0.48	11.86	11.93	46.05896	2.3		6981	2679
196	13C-PCB-52		1637227	725221	912006	0.80	NO	16.99	0.68	16.95	17.02	47.56651	2.4		2937	1626
197	13C-PCB-101		1513864	924585	589279	1.57	NO	20.63	0.83	20.60	20.67	47.69521	2.4		882	1489
198	13C-PCB-138		1525834	861661	664173	1.30	NO	24.86	0.00	24.83	24.90	45.22032	2.3		2274	1855
199	13C-PCB-194		1157519	543069	614451	0.88	NO	31.03	1.25	31.00	31.07	43.21409	2.2		1317	1778
200	Total MoCB-F1	5		31442								5497.06265			1028	
201	Total DiCB-F1	7		85062								3258.29768			1260	
202	Total DiCB-F2	5		939243								15448.68347			2136	
203	Total TrCB-F1	1		3857								11.75521			1162	
204	Total TrCB-F2	6		259493								692.82955			1327	
205	Total TrCB-F3	17		1881919								170137.34561			3992	
206	Total TeCB-F2	1		254								0.96106			612	
207	Total TeCB-F3	12		2574518								8844.33569			1027	
208	Total TeCB-F4	21		3106217								1183440.682...			3151	
209	Total PeCB-F3	3		8237								17599.48455			984	
210	Total PeCB-F4	19		19675980								945901.93257			1385	
211	Total PeCB-F5	35		13662986								24613348.78...			4348	
212	Total HxCB-F4	6		10228210								30969.36792			2098	
213	Total HxCB-F5	33		79014495								4117858.555...			6190	
214	Total HpCB-F5	26		43321292								525819.51911			2346	
215	Total HpCB-F6	1		361388								534.01964			2359	
216	Total OcCB-F5	12		4825608								22101.50803			761	
217	Total OcCB-F6	7		1663539								110756.27540			1075	
218	Total NoCB-F6	3		217752								1357.65163			499	
219	Total DeCB-F7	1		16797								71.34511			196	
220	Total 13C-MoCB-F1	2		2300671								1736.90080			3072	
221	Total 13C-DiCB-F1	3		2877379								1235.19936			6981	
222	Total 13C-DiCB-F2	1		946485								1013.03304			13009	

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Name: 5-221109A27, Date: 10-Nov-2022, Time: 10:21:17, ID: L2735553-4, Description: SAMPLE, Vial: Tray1:22

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
223	Total 13C-TrCB-F1	1		2332385								1420.45643			17217	
224	Total 13C-TrCB-F3	2		2033536								2421.48130			29039	
225	Total 13C-TeCB-F2	1		643068								1288.75661			2836	
226	Total 13C-TeCB-F3	5		736029								48.24319			2937	
227	Total 13C-TeCB-F4	2		1261732								2443.54244			3273	
228	Total 13C-PeCB-F3	1		908031								1394.75435			567	
229	Total 13C-PeCB-F4	10		1726153								1425.90094			882	
230	Total 13C-PeCB-F5	5		3952973								6070.76859			2648	
231	Total 13C-HxCB-F4	1		950156								1488.74776			1144	
232	Total 13C-HxCB-F5	18		3732762								5267.58974			2274	
233	Total 13C-HpCB-F5	2		1323327								2915.97533			2166	
234	Total 13C-HpCB-F6	1		706252								1178.78962			2893	
235	Total 13C-OcCB-F5	1		639828								1540.77224			1139	
236	Total 13C-OcCB-F6	8		1067428								1411.83234			1317	
237	Total 13C-NoCB-F6	2		561271								2507.98976			758	
238	Total 13C-DeCB-F7	1		488044								1341.42730			251	
239	Lockmass F1			0											172663	
240	Lockmass F2			0											112733	
241	Lockmass F3			0											188884	
242	Lockmass F4			0											157910	
243	Lockmass F5			0											50814	
244	Lockmass F6			0											55625	
245	Lockmass F7			0											14174	

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Name: 5-221109A28, Date: 10-Nov-2022, Time: 11:03:30, ID: L2735553-5, Description: SAMPLE, Vial: Tray1:23

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
1	* PCB-1		2742	2120	621	3.41	NO	8.98	1.00	8.95	9.01	4.40924			1051	1060
2	PCB-2		48167	36753	11414	3.22	NO	10.38	0.99	10.35	10.42	71.30756			1051	1060
3	PCB-3		11833	8944	2889	3.10	NO	10.51	1.00	10.47	10.54	15.34081			1051	1060
4	*PCB-4		8800	5284	3517	1.50	NO	10.68	1.00	10.64	10.71	15.69068			594	2905
5	PCB-10						YES								594	2905
6	PCB-9		7828	4461	3367	1.32	YES	11.92	1.12	11.89	11.96	10.27541			594	2905
7	PCB-7		2397	1299	1098	1.18	YES	12.02	1.13	11.99	12.06	3.07558		AK221117MB	594	2905
8	PCB-6		15334	9064	6270	1.45	NO	12.19	1.14	12.16	12.22	20.55270			594	2905
9	PCB-5						YES								594	2905
10	PCB-8		66745	40380	26365	1.53	NO	12.46	1.17	12.42	12.49	81.67295			594	2905
11	* PCB-14						YES								1601	3290
12	PCB-11		2048757	1260356	788402	1.60	NO	13.94	0.97	13.90	13.97	2069.18573			1601	3290
13	PCB-13/12		31339	20456	10883	1.88	YES	14.10	0.99	14.07	14.14	30.33510			1601	3290
14	PCB-15		35041	22781	12259	1.86	YES	14.32	1.00	14.29	14.36	34.50855			1601	3290
15	* PCB-19		3283	1560	1723	0.91	NO	12.67	1.00	12.63	12.70	5.08416			991	652
16	* PCB-30/18		101161	53037	48124	1.10	NO	13.76	1.09	13.73	13.80	133.78319			1124	662
17	PCB-17		43050	22536	20514	1.10	NO	14.00	1.11	13.97	14.04	68.43680			1124	662
18	PCB-27		6296	3252	3044	1.07	NO	14.13	1.12	14.10	14.16	7.51251			1124	662
19	PCB-24		3607	1822	1784	1.02	NO	14.21	1.12	14.18	14.25	4.43094			1124	662
20	PCB-16		18944	9975	8968	1.11	NO	14.30	1.13	14.26	14.33	31.73130			1124	662
21	PCB-32		24562	12954	11608	1.12	NO	14.57	1.15	14.54	14.61	25.46170			1124	662
22	* PCB-34		4910	2568	2342	1.10	NO	15.26	0.84	15.23	15.30	5.06986			2480	1980
23	PCB-23		1377	805	572	1.41	YES	15.35	0.84	15.32	15.38	1.33190			2480	1980
24	PCB-29/26		135864	69476	66388	1.05	NO	15.53	0.85	15.49	15.56	131.38705			2480	1980
25	PCB-25		46233	23592	22642	1.04	NO	15.66	0.86	15.63	15.70	44.61676			2480	1980
26	PCB-31		809532	414242	395291	1.05	NO	15.85	0.87	15.82	15.88	739.82969			2480	1980
27	PCB-28/20		1253179	641438	611742	1.05	NO	16.02	0.88	15.98	16.05	1223.91624			2480	1980
28	PCB-21/33		133078	67378	65700	1.03	NO	16.16	0.89	16.13	16.20	126.35670			2480	1980
29	PCB-22		194740	100083	94658	1.06	NO	16.40	0.90	16.36	16.43	193.19209			2480	1980
30	PCB-36		5850	2956	2894	1.02	NO	17.21	0.94	17.18	17.24	4.98421		AK221117MB	2480	1980
31	PCB-39		4417	2212	2204	1.00	NO	17.44	0.96	17.40	17.47	4.36988			2480	1980
32	PCB-38		2047	973	1074	0.91	NO	17.76	0.97	17.73	17.79	1.94555			2480	1980
33	PCB-35		3811	2463	1348	1.83	YES	18.02	0.99	17.99	18.06	3.78230			2480	1980
34	PCB-37		118455	61617	56839	1.08	NO	18.26	1.00	18.22	18.29	126.55834			2480	1980
35	* PCB-54		318	94	224	0.42	YES	14.53	1.00	14.49	14.56	0.38552		AK221117MA	755	1136
36	* PCB-50/53		14419	6113	8305	0.74	NO	15.70	1.08	15.67	15.74	21.50130			604	787
37	PCB-45/51		28297	12843	15453	0.83	NO	16.10	1.11	16.07	16.14	43.55145			604	787

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Name: 5-221109A28, Date: 10-Nov-2022, Time: 11:03:30, ID: L2735553-5, Description: SAMPLE, Vial: Tray1:23

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
38	PCB-46		3103	1347	1755	0.77	NO	16.29	1.12	16.26	16.32	5.39282			604	787
39	PCB-52		1302141	568216	733925	0.77	NO	17.01	1.17	16.97	17.04	2116.68235			604	787
40	PCB-73						YES								604	787
41	PCB-43		20348	8866	11482	0.77	NO	17.14	1.18	17.11	17.18	38.92059			604	787
42	PCB-69/49		986537	430281	556257	0.77	NO	17.28	1.19	17.25	17.31	1276.57762			604	787
43	PCB-48		53414	22988	30427	0.76	NO	17.44	1.20	17.40	17.47	76.33394			604	787
44	PCB-44/47/65		896815	392986	503830	0.78	NO	17.58	1.21	17.55	17.62	1295.45355			604	787
45	PCB-59/62/75		83701	36286	47415	0.77	NO	17.75	1.22	17.72	17.78	95.09581			604	787
46	PCB-42		76033	33339	42693	0.78	NO	17.88	1.23	17.84	17.91	131.37271			604	787
47	PCB-41/71/40		89389	39369	50020	0.79	NO	18.14	1.25	18.11	18.17	135.77949			604	787
48	PCB-64		560216	245435	314781	0.78	NO	18.26	1.26	18.22	18.29	669.24281			604	787
49	* PCB-72		40718	17087	23630	0.72	NO	18.65	0.86	18.61	18.68	45.83277			4739	1828
50	PCB-68		34869	15287	19582	0.78	NO	18.80	0.86	18.77	18.84	37.68123			4739	1828
51	PCB-57		9634	4275	5359	0.80	NO	19.04	0.87	19.01	19.08	11.00736			4739	1828
52	PCB-58						YES								4739	1828
53	PCB-67		30112	13039	17072	0.76	NO	19.26	0.88	19.23	19.30	30.25000			4739	1828
54	PCB-63		66782	29497	37285	0.79	NO	19.41	0.89	19.38	19.45	73.55709			4739	1828
55	PCB-61/70/74/76		2437290	1072425	1364865	0.79	NO	19.61	0.90	19.57	19.64	2853.59538			4739	1828
56	PCB-66		1527513	678606	848907	0.80	NO	19.78	0.91	19.75	19.82	1679.49280		AK221117MB	4739	1828
57	PCB-55						YES								4739	1828
58	PCB-56		177853	78980	98873	0.80	NO	20.17	0.92	20.14	20.20	214.75008			4739	1828
59	PCB-60		238372	103409	134963	0.77	NO	20.28	0.93	20.25	20.32	271.03479			4739	1828
60	PCB-80						YES								4739	1828
61	PCB-79		29102	12194	16908	0.72	NO	21.26	0.98	21.23	21.30	28.18030			4739	1828
62	PCB-78						YES								4739	1828
63	PCB-81						YES								4739	1828
64	PCB-77		94426	43147	51280	0.84	NO	22.13	1.00	22.10	22.17	109.01985		AK221117MB	4739	1828
65	* PCB-104		262	149	113	1.32	NO	17.53	1.00	17.50	17.57	0.28448			999	988
66	PCB-96		3896	2471	1425	1.73	NO	17.80	1.02	17.76	17.83	5.77549			999	988
67	* PCB-103		65150	40553	24597	1.65	NO	18.75	1.07	18.71	18.78	155.20829			2936	1148
68	PCB-94		3389	2137	1252	1.71	NO	18.90	1.08	18.87	18.94	8.18347			2936	1148
69	PCB-95		2907388	1804238	1103150	1.64	NO	19.15	1.09	19.12	19.19	3319.92957			2936	1148
70	PCB-100/93/102/98		26838	17071	9766	1.75	NO	19.32	1.10	19.29	19.35	89.06638			2936	1148
71	PCB-88/91		327955	202685	125270	1.62	NO	19.61	1.12	19.57	19.64	791.95372			2936	1148
72	PCB-84		255756	157754	98003	1.61	NO	19.76	1.13	19.73	19.80	668.16893			2936	1148
73	PCB-89		4354	2695	1660	1.62	NO	20.01	1.14	19.98	20.05	12.96925			2936	1148
74	PCB-121		5290	3266	2024	1.61	NO	20.12	1.15	20.08	20.15	8.60395			2936	1148

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221109A2-1117AK.qld

Last Altered: Thursday, November 17, 2022 12:03:54 Eastern Standard Time
Printed: Wednesday, November 23, 2022 18:29:11 Eastern Standard Time

Name: 5-221109A28, Date: 10-Nov-2022, Time: 11:03:30, ID: L2735553-5, Description: SAMPLE, Vial: Tray1:23

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
75	PCB-92		1148686	710468	438218	1.62	NO	20.36	1.16	20.32	20.39	3078.51486			2936	1148
76	PCB-113/90/101		6647058	4113249	2533809	1.62	NO	20.66	1.18	20.63	20.69	13525.70066			2936	1148
77	PCB-83/99		2147573	1331993	815580	1.63	NO	20.97	0.91	20.93	21.00	5242.06588			2936	1148
78	PCB-112						YES								2936	1148
79	PCB-109/119/86/97/125/87		1768505	1093240	675266	1.62	NO	21.33	0.92	21.29	21.36	3513.69435		AK221117MJ	2936	1148
80	PCB-117/116/85/110/115		5290828	3275439	2015389	1.63	NO	21.74	0.94	21.71	21.78	9926.87417		AK221117MJ	2936	1148
81	PCB-82		63795	39235	24559	1.60	NO	21.95	0.95	21.91	21.98	192.40588			2936	1148
82	PCB-111		17272	11163	6109	1.83	YES	22.04	0.95	22.01	22.07	27.26161			2936	1148
83	PCB-120		77980	48105	29874	1.61	NO	22.26	0.96	22.23	22.29	123.81702		AK221117MS	2936	1148
84	* PCB-108/124		199873	123194	76679	1.61	NO	22.91	0.99	22.87	22.94	337.89491			3499	3178
85	PCB-107		544542	337116	207426	1.63	NO	23.04	1.00	23.01	23.07	826.37732		AK221117MS	3499	3178
86	PCB-123		17856	11384	6472	1.76	NO	23.11	1.00	23.08	23.14	34.03535		AK221117MS	3499	3178
87	PCB-106						YES								3499	3178
88	PCB-118		2429912	1493235	936677	1.59	NO	23.27	1.00	23.23	23.30	4943.55107			3499	3178
89	PCB-122		26905	17216	9689	1.78	NO	23.49	1.00	23.45	23.52	61.93539			3499	3178
90	PCB-114		65334	42291	23043	1.84	YES	23.57	1.00	23.54	23.60	111.05598			3499	3178
91	PCB-105		704103	435206	268897	1.62	NO	23.96	1.00	23.92	23.99	1533.45780		AK221117MB	3499	3178
92	PCB-127		12823	8890	3933	2.26	YES	24.68	1.03	24.65	24.72	20.83757			3499	3178
93	PCB-126		52125	38066	14058	2.71	YES	25.55	1.00	25.52	25.59	69.04592		AK221117MB	3499	3178
94	* PCB-155		2512	1466	1047	1.40	NO	20.50	1.00	20.47	20.54	2.61445			1462	1275
95	PCB-152						YES								1462	1275
96	PCB-150		23595	13240	10355	1.28	NO	20.75	1.01	20.72	20.79	26.50333			1462	1275
97	PCB-136		1791740	997988	793752	1.26	NO	21.00	1.02	20.97	21.04	2365.82839			1462	1275
98	PCB-145						YES								1462	1275
99	PCB-148		26847	14830	12017	1.23	NO	21.84	1.07	21.80	21.87	45.59176			1462	1275
100	PCB-151/135		7841933	4360691	3481242	1.25	NO	22.19	1.08	22.15	22.22	14259.06316			1462	1275
101	PCB-154						YES								1462	1275
102	PCB-144		941156	522736	418420	1.25	NO	22.48	1.10	22.45	22.52	1651.96940			1462	1275
103	* PCB-147/149		15187320	8396138	6791182	1.24	NO	22.68	1.11	22.64	22.71	24795.00176			2712	2755
104	PCB-134/143		459220	255298	203922	1.25	NO	22.81	1.11	22.78	22.84	964.00954			2712	2755
105	PCB-139/140		78985	44639	34345	1.30	NO	22.98	1.12	22.94	23.01	128.56580			2712	2755
106	PCB-131		37860	21457	16403	1.31	NO	23.12	0.88	23.09	23.16	82.74141			2712	2755
107	PCB-142						YES								2712	2755
108	PCB-132		2480313	1370623	1109690	1.24	NO	23.38	0.89	23.34	23.41	4592.31421			2712	2755
109	PCB-133		267351	146546	120804	1.21	NO	23.55	0.89	23.51	23.58	495.78643			2712	2755
110	PCB-165		103917	58154	45763	1.27	NO	23.75	0.90	23.72	23.78	140.62271			2712	2755
111	PCB-146		3049469	1688922	1360547	1.24	NO	23.88	0.90	23.85	23.92	4867.99289			2712	2755

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Printed: Wednesday, November 23, 2022 18:29:11 Eastern Standard Time

Name: 5-221109A28, Date: 10-Nov-2022, Time: 11:03:30, ID: L2735553-5, Description: SAMPLE, Vial: Tray1:23

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
112	PCB-161						YES								2712	2755
113	PCB-153/168		29546852	16365451	13181401	1.24	NO	24.21	0.92	24.18	24.24	39326.18014			2712	2755
114	PCB-141		4128385	2278332	1850053	1.23	NO	24.34	0.92	24.31	24.38	6992.31601			2712	2755
115	PCB-130		806543	445637	360906	1.23	NO	24.57	0.93	24.54	24.61	1519.68323			2712	2755
116	PCB-137/164		1663055	919370	743685	1.24	NO	24.74	0.94	24.71	24.78	2413.07586			2712	2755
117	PCB-138/163/129		20713481	11435626	9277855	1.23	NO	24.90	0.94	24.87	24.93	43309.15191			2712	2755
118	PCB-160						YES								2712	2755
119	PCB-158		1927742	1063900	863842	1.23	NO	25.09	0.95	25.06	25.13	2207.52577			2712	2755
120	PCB-128/166		1941298	1068834	872464	1.23	NO	25.60	0.97	25.57	25.63	2720.60927			2712	2755
121	PCB-159		448831	243711	205120	1.19	NO	26.05	0.99	26.01	26.08	519.40989			2712	2755
122	PCB-162		99966	54001	45965	1.17	NO	26.17	0.99	26.13	26.20	122.94996			2712	2755
123	PCB-167		755568	416434	339135	1.23	NO	26.41	1.00	26.38	26.44	886.78307			2712	2755
124	PCB-156/157		1176216	647667	528549	1.23	NO	27.03	1.00	26.99	27.06	1410.23555			2712	2755
125	PCB-169		40841	24543	16298	1.51	YES	28.68	1.00	28.65	28.72	53.56668		AK221117MB	2712	2755
126	* PCB-188		11938	6051	5887	1.03	NO	23.51	1.00	23.48	23.54	22.53049			1722	2004
127	PCB-179		2519551	1272510	1247041	1.02	NO	23.74	1.01	23.71	23.77	4368.49069			1722	2004
128	PCB-184		2234	1000	1234	0.81	YES	23.97	1.02	23.94	24.00	3.61366			1722	2004
129	PCB-176		727462	366931	360530	1.02	NO	24.20	1.03	24.17	24.23	1269.02850			1722	2004
130	PCB-186						YES								1722	2004
131	PCB-178		1439059	726346	712714	1.02	NO	25.09	1.07	25.06	25.13	3455.31280			1722	2004
132	PCB-175		174551	87063	87489	1.00	NO	25.43	1.08	25.40	25.46	396.74729			1722	2004
133	PCB-187		9798393	4954313	4844080	1.02	NO	25.55	1.09	25.52	25.59	19742.65317			1722	2004
134	PCB-182						YES								1722	2004
135	PCB-183		3657612	1847417	1810196	1.02	NO	25.87	1.10	25.83	25.90	7802.80067			1722	2004
136	PCB-185						YES								1722	2004
137	PCB-174		4815958	2393365	2422594	0.99	NO	26.04	1.11	26.00	26.07	10488.73784		AK221117MB	1722	2004
138	PCB-177		3306228	1669748	1636479	1.02	NO	26.26	1.12	26.23	26.30	7508.10693			1722	2004
139	PCB-181		14832	7480	7352	1.02	NO	26.46	0.88	26.42	26.49	33.65296			1722	2004
140	PCB-171/173		1393676	703506	690170	1.02	NO	26.58	0.89	26.55	26.61	3395.88493			1722	2004
141	PCB-172		988589	499284	489305	1.02	NO	27.36	0.91	27.33	27.40	2238.83940			1722	2004
142	PCB-192		620	144	476	0.30	YES	27.51	0.92	27.48	27.54	1.21504			1722	2004
143	PCB-180/193		14880559	7524503	7356056	1.02	NO	27.69	0.92	27.66	27.72	31498.07483			1722	2004
144	PCB-191		243609	124035	119574	1.04	NO	27.87	0.93	27.84	27.91	435.47796			1722	2004
145	PCB-170		4354660	2195115	2159546	1.02	NO	28.39	0.95	28.36	28.43	10820.36325			1722	2004
146	PCB-190		1529113	771750	757362	1.02	NO	28.65	0.96	28.61	28.68	2497.87473			1722	2004
147	* PCB-189		191117	97885	93232	1.05	NO	29.96	1.00	29.92	29.99	299.08798			2080	1510
148	* PCB-202		564064	266705	297359	0.90	NO	26.29	1.00	26.26	26.32	750.60520			876	984

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Name: 5-221109A28, Date: 10-Nov-2022, Time: 11:03:30, ID: L2735553-5, Description: SAMPLE, Vial: Tray1:23

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
149	PCB-201		328670	154744	173927	0.89	NO	26.75	1.02	26.71	26.78	437.85598			876	984
150	PCB-204		990	502	488	1.03	YES	27.09	1.03	27.05	27.12	1.37575			876	984
151	PCB-197		105266	49195	56071	0.88	NO	27.21	1.04	27.17	27.24	145.95318			876	984
152	PCB-200		274145	127801	146344	0.87	NO	27.32	1.04	27.28	27.35	408.56055			876	984
153	PCB-198/199		2348854	1108641	1240213	0.89	NO	28.69	0.92	28.66	28.73	4805.45077			876	984
154	PCB-196		942948	446091	496857	0.90	NO	29.02	0.93	28.99	29.05	1916.48114			876	984
155	PCB-203		1249974	588570	661405	0.89	NO	29.12	0.93	29.08	29.15	2412.94630			876	984
156	* PCB-195		624540	292233	332306	0.88	NO	29.86	0.95	29.83	29.89	1692.21154			1221	875
157	PCB-194		1335233	623170	712063	0.88	NO	31.05	0.99	31.01	31.08	3483.08313			1221	875
158	PCB-205		87014	40521	46493	0.87	NO	31.33	1.00	31.29	31.36	175.62192			1221	875
159	* PCB-208		74181	32935	41246	0.80	NO	29.68	1.00	29.65	29.71	165.57743			707	1402
160	PCB-207		43373	18700	24672	0.76	NO	30.15	1.02	30.12	30.19	96.16575			707	1402
161	PCB-206		236804	105671	131134	0.81	NO	32.37	1.00	32.34	32.40	680.78823			707	1402
162	* PCB-209		39470	21347	18123	1.18	NO	33.48	1.00	33.45	33.51	89.24037			192	276
163	13C-PCB-31						YES								27054	8769
164	13C-PCB-95		965	749	215	3.48	YES	19.20	1.10	19.17	19.23	2.20869	0.1		1047	1438
165	13C-PCB-153		5349	2978	2371	1.26	NO	24.21	1.18	24.18	24.24	8.86517	0.4		6692	2242
166	13C-PCB-28		2056697	1058153	998544	1.06	NO	16.01	0.94	15.97	16.04	1232.92000	61.6		27054	8769
167	13C-PCB-111		1452499	892226	560273	1.59	NO	22.02	1.07	21.99	22.05	1302.61960	65.1		1047	1438
168	13C-PCB-178		1200768	616424	584344	1.05	NO	25.08	1.01	25.05	25.11	1436.81731	71.8		2373	1558
169	13C-PCB-1		1156833	861019	295814	2.91	NO	8.98	0.75	8.95	9.01	531.31071	26.6		1923	21476
170	13C-PCB-3		1378589	1024239	354350	2.89	NO	10.49	0.88	10.46	10.53	669.77215	33.5		1923	21476
171	13C-PCB-4		1197128	732598	464529	1.58	NO	10.66	0.90	10.63	10.70	887.90870	44.4		6708	2564
172	13C-PCB-15		1731317	1055029	676288	1.56	NO	14.31	1.20	14.28	14.35	945.81258	47.3		7225	2451
173	13C-PCB-19		1028924	522101	506823	1.03	NO	12.65	1.06	12.62	12.69	1174.21763	58.7		18819	8663
174	13C-PCB-37		1573067	811339	761728	1.07	NO	18.25	1.07	18.21	18.28	1051.54718	52.6		27054	8769
175	13C-PCB-54		1472532	649394	823139	0.79	NO	14.50	0.85	14.47	14.53	1087.47113	54.4		2610	1632
176	13C-PCB-81		1460735	645902	814833	0.79	NO	21.81	1.06	21.77	21.84	1088.74453	54.4		3834	1747
177	13C-PCB-77		1435195	628806	806389	0.78	NO	22.11	1.07	22.08	22.15	1061.87967	53.1		3834	1747
178	13C-PCB-104		1485140	908314	576826	1.57	NO	17.52	1.03	17.49	17.56	1176.31468	58.8		1480	989
179	13C-PCB-123		909240	561604	347637	1.62	NO	23.09	1.12	23.05	23.12	733.75783	36.7		2927	2541
180	13C-PCB-118		727656	447401	280255	1.60	NO	23.26	1.13	23.22	23.29	643.23379	32.2		2927	2541
181	13C-PCB-114		1007366	623044	384322	1.62	NO	23.57	0.95	23.54	23.60	799.59974	40.0		2927	2541
182	13C-PCB-105		740581	460759	279822	1.65	NO	23.93	0.96	23.90	23.97	623.43792	31.2		2927	2541
183	13C-PCB-126		1241656	770786	470870	1.64	NO	25.53	1.03	25.49	25.56	1016.77479	50.8		2927	2541
184	13C-PCB-155		1648325	911155	737170	1.24	NO	20.49	0.99	20.46	20.53	1221.19634	61.1		1049	917
185	13C-PCB-167		1332342	751506	580836	1.29	NO	26.40	1.06	26.36	26.43	1179.34799	59.0		6692	2242

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221109A2-1117AK.qld

Last Altered: Thursday, November 17, 2022 12:03:54 Eastern Standard Time
Printed: Wednesday, November 23, 2022 18:29:11 Eastern Standard Time

Name: 5-221109A28, Date: 10-Nov-2022, Time: 11:03:30, ID: L2735553-5, Description: SAMPLE, Vial: Tray1:23

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
186	13C-PCB-156/157		2548683	1433176	1115508	1.28	NO	27.04	1.09	27.00	27.07	2312.55277	57.8		6692	2242
187	13C-PCB-169		1217936	688420	529516	1.30	NO	28.68	1.15	28.65	28.72	1072.16025	53.6		6692	2242
188	13C-PCB-188		983954	499498	484456	1.03	NO	23.50	0.94	23.46	23.53	829.11728	41.5		2373	1558
189	13C-PCB-189		1214828	628932	585896	1.07	NO	29.94	0.96	29.91	29.98	1027.51760	51.4		2631	2495
190	13C-PCB-202		1314924	627070	687854	0.91	NO	26.28	1.06	26.24	26.31	1293.48225	64.7		1308	1379
191	13C-PCB-205		1038700	487697	551003	0.89	NO	31.31	1.01	31.28	31.34	1187.14940	59.4		1779	1575
192	13C-PCB-208		779835	342699	437136	0.78	NO	29.67	0.96	29.63	29.70	1067.38593	53.4		1156	1597
193	13C-PCB-206		608642	268463	340179	0.79	NO	32.36	1.04	32.32	32.39	1216.16570	60.8		1156	1597
194	13C-PCB-209		904465	492726	411739	1.20	NO	33.47	1.08	33.43	33.50	1157.09278	57.9		260	293
195	13C-PCB-9		4104278	2494173	1610105	1.55	NO	11.91	0.48	11.88	11.94	55.64222	2.8		6708	2564
196	13C-PCB-52		1956776	871522	1085254	0.80	NO	17.00	0.68	16.96	17.03	56.85037	2.8		3159	1383
197	13C-PCB-101		1798484	1094340	704144	1.55	NO	20.64	0.83	20.61	20.68	56.66235	2.8		1047	1438
198	13C-PCB-138		1781905	1001454	780451	1.28	NO	24.89	0.00	24.85	24.92	52.80936	2.6		6692	2242
199	13C-PCB-194		1361794	641797	719997	0.89	NO	31.03	1.25	31.00	31.07	50.84036	2.5		1779	1575
200	Total MoCB-F1	5		48973								5485.14069			1051	
201	Total DiCB-F1	6		61691								2364.07595			594	
202	Total DiCB-F2	5		1306502								7735.08273			1601	
203	Total TrCB-F1	1		1560								5.08416			991	
204	Total TrCB-F2	7		103661								514.22338			1124	
205	Total TrCB-F3	18		1460977								118109.63653			2480	
206	Total TeCB-F2	1		94								0.38552			755	
207	Total TeCB-F3	13		1798145								6080.80650			604	
208	Total TeCB-F4	20		2415296								729956.73007			4739	
209	Total PeCB-F3	6		9274								35097.11339			999	
210	Total PeCB-F4	19		13155158								558620.72536			2936	
211	Total PeCB-F5	34		10883991								23413319.07...			3499	
212	Total HxCB-F4	6		5910951								18351.57049			1462	
213	Total HxCB-F5	32		48058720								2376646.501...			2712	
214	Total HpCB-F5	24		25545664								953937.52546			1722	
215	Total HpCB-F6	1		215940								299.08798			2080	
216	Total OcCB-F5	10		2742899								12296.85193			876	
217	Total OcCB-F6	7		969716								74566.00500			1221	
218	Total NoCB-F6	3		157307								942.53141			707	
219	Total DeCB-F7	1		21347								89.24037			192	
220	Total 13C-MoCB-F1	2		1922112								1201.08286			1923	
221	Total 13C-DiCB-F1	4		3236113								943.95522			6708	
222	Total 13C-DiCB-F2	1		1064874								945.81258			7225	

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Printed: Wednesday, November 23, 2022 18:29:11 Eastern Standard Time

Name: 5-221109A28, Date: 10-Nov-2022, Time: 11:03:30, ID: L2735553-5, Description: SAMPLE, Vial: Tray1:23

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
223	Total 13C-TrCB-F1	1		2566671								1174.21763			18819	
224	Total 13C-TrCB-F3	2		2300427								2284.46718			27054	
225	Total 13C-TeCB-F2	1		649851								1087.47113			2610	
226	Total 13C-TeCB-F3	8		883625								57.58644			3159	
227	Total 13C-TeCB-F4	2		1314664								2150.62421			3834	
228	Total 13C-PeCB-F3	1		908490								1176.31468			1480	
229	Total 13C-PeCB-F4	12		2002679								1363.86367			1047	
230	Total 13C-PeCB-F5	5		3011918								3816.80407			2927	
231	Total 13C-HxCB-F4	1		916094								1221.19634			1049	
232	Total 13C-HxCB-F5	19		3934348								4639.88433			6692	
233	Total 13C-HpCB-F5	2		1153471								2265.93459			2373	
234	Total 13C-HpCB-F6	1		726302								1027.51760			2631	
235	Total 13C-OcCB-F5	1		630472								1293.48225			1308	
236	Total 13C-OcCB-F6	5		1176938								1245.49599			1779	
237	Total 13C-NoCB-F6	2		611625								2283.55164			1156	
238	Total 13C-DeCB-F7	1		492726								1157.09278			260	
239	Lockmass F1			0											203195	
240	Lockmass F2			0											117891	
241	Lockmass F3			0											167093	
242	Lockmass F4			0											123265	
243	Lockmass F5			0											54011	
244	Lockmass F6			0											42498	
245	Lockmass F7			0											15079	

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Name: 5-221109A29, Date: 10-Nov-2022, Time: 11:45:43, ID: L2735553-6, Description: SAMPLE, Vial: Tray1:24

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
1	* PCB-1		5064	3932	1132	3.47	NO	8.98	1.00	8.95	9.01	6.55021			740	1081
2	PCB-2		51024	38878	12146	3.20	NO	10.37	0.99	10.33	10.40	66.92769			740	1081
3	PCB-3		10361	7847	2513	3.12	NO	10.49	1.00	10.46	10.53	13.00991			740	1081
4	*PCB-4		5672	3411	2261	1.51	NO	10.66	1.00	10.63	10.70	9.28168			879	4218
5	PCB-10						YES								879	4218
6	PCB-9		12597	7331	5266	1.39	NO	11.91	1.12	11.88	11.94	15.17639			879	4218
7	PCB-7		1603	1350	253	5.34	YES	12.01	1.13	11.97	12.04	1.88798			879	4218
8	PCB-6		30355	18077	12278	1.47	NO	12.18	1.14	12.14	12.21	37.34208			879	4218
9	PCB-5						YES								879	4218
10	PCB-8		203536	123494	80042	1.54	NO	12.46	1.17	12.42	12.49	228.58739			879	4218
11	* PCB-14						YES								2902	4085
12	PCB-11		2576170	1583896	992274	1.60	NO	13.93	0.97	13.89	13.96	2484.15635		AK221117MB	2902	4085
13	PCB-13/12		38140	24956	13185	1.89	YES	14.09	0.99	14.06	14.13	35.24870		AK221117MB	2902	4085
14	PCB-15		58771	37514	21257	1.76	NO	14.31	1.00	14.28	14.35	55.26048			2902	4085
15	* PCB-19		890	454	436	1.04	NO	12.65	1.00	12.62	12.69	1.31733			806	647
16	* PCB-30/18		165423	87307	78116	1.12	NO	13.75	1.09	13.72	13.79	205.99223			1040	829
17	PCB-17		120039	62648	57391	1.09	NO	13.99	1.11	13.96	14.03	179.68240			1040	829
18	PCB-27		4924	2616	2308	1.13	NO	14.12	1.12	14.09	14.15	5.53253			1040	829
19	PCB-24		11800	6032	5768	1.05	NO	14.21	1.12	14.18	14.25	13.64979			1040	829
20	PCB-16		13288	6861	6427	1.07	NO	14.29	1.13	14.25	14.32	20.95736			1040	829
21	PCB-32		57171	30352	26820	1.13	NO	14.57	1.15	14.54	14.61	55.80392			1040	829
22	* PCB-34		16023	7945	8078	0.98	NO	15.25	0.84	15.22	15.29	15.42437			4937	2722
23	PCB-23		2881	1394	1487	0.94	NO	15.34	0.84	15.31	15.37	2.59747			4937	2722
24	PCB-29/26		399119	203307	195812	1.04	NO	15.53	0.85	15.49	15.56	359.83773			4937	2722
25	PCB-25		135160	68464	66696	1.03	NO	15.66	0.86	15.63	15.70	121.60480			4937	2722
26	PCB-31		2607474	1329128	1278347	1.04	NO	15.84	0.87	15.81	15.87	2221.64476			4937	2722
27	PCB-28/20		4161512	2124795	2036717	1.04	NO	16.01	0.88	15.97	16.04	3789.19240			4937	2722
28	PCB-21/33		487669	246100	241569	1.02	NO	16.15	0.89	16.12	16.19	431.69225			4937	2722
29	PCB-22		610737	308982	301755	1.02	NO	16.39	0.90	16.36	16.42	564.86526			4937	2722
30	PCB-36		6547	2522	4025	0.63	YES	17.20	0.94	17.17	17.23	5.20023		AK221117MB	4937	2722
31	PCB-39		8934	4311	4623	0.93	NO	17.43	0.96	17.39	17.46	8.24088			4937	2722
32	PCB-38		4798	2238	2559	0.87	YES	17.75	0.97	17.72	17.78	4.25170			4937	2722
33	PCB-35		2861	1092	1769	0.62	YES	18.01	0.99	17.98	18.05	2.64697			4937	2722
34	PCB-37		290845	144553	146292	0.99	NO	18.25	1.00	18.21	18.28	289.70372			4937	2722
35	* PCB-54						YES								733	876
36	* PCB-50/53		5568	2593	2974	0.87	NO	15.69	1.08	15.66	15.73	7.80366			754	910
37	PCB-45/51		52552	22453	30099	0.75	NO	16.09	1.11	16.06	16.13	76.02070			754	910

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Name: 5-221109A29, Date: 10-Nov-2022, Time: 11:45:43, ID: L2735553-6, Description: SAMPLE, Vial: Tray1:24

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
38	PCB-46		884	502	383	1.31	YES	16.28	1.12	16.25	16.31	1.44478			754	910
39	PCB-52		3566037	1557164	2008873	0.78	NO	17.01	1.17	16.97	17.04	5448.23380			754	910
40	PCB-73						YES								754	910
41	PCB-43		61039	26956	34083	0.79	NO	17.14	1.18	17.11	17.18	109.73461			754	910
42	PCB-69/49		2734489	1193463	1541027	0.77	NO	17.27	1.19	17.24	17.30	3325.69333			754	910
43	PCB-48		123966	54762	69204	0.79	NO	17.43	1.20	17.39	17.46	166.50784			754	910
44	PCB-44/47/65		2240400	979855	1260546	0.78	NO	17.57	1.21	17.54	17.61	3041.70262			754	910
45	PCB-59/62/75		239664	104823	134841	0.78	NO	17.75	1.22	17.72	17.78	255.92037			754	910
46	PCB-42		158853	68453	90400	0.76	NO	17.87	1.23	17.83	17.90	257.97187			754	910
47	PCB-41/71/40		141668	61838	79830	0.77	NO	18.14	1.25	18.11	18.17	202.25284			754	910
48	PCB-64		1993963	868606	1125357	0.77	NO	18.26	1.26	18.22	18.29	2238.81179			754	910
49	* PCB-72		91264	38726	52538	0.74	NO	18.64	0.85	18.60	18.67	95.63769			4441	6936
50	PCB-68		61043	26744	34299	0.78	NO	18.80	0.86	18.77	18.84	61.41299			4441	6936
51	PCB-57		27821	12494	15327	0.82	NO	19.04	0.87	19.01	19.08	29.59285			4441	6936
52	PCB-58						YES								4441	6936
53	PCB-67		50896	22410	28486	0.79	NO	19.26	0.88	19.22	19.29	47.60072			4441	6936
54	PCB-63		248897	108594	140302	0.77	NO	19.40	0.89	19.37	19.44	255.22297			4441	6936
55	PCB-61/70/74/76		8358177	3694989	4663188	0.79	NO	19.60	0.90	19.56	19.63	9110.32797			4441	6936
56	PCB-66		5748988	2542712	3206276	0.79	NO	19.77	0.91	19.74	19.81	5884.66848			4441	6936
57	PCB-55						YES								4441	6936
58	PCB-56		384162	168983	215179	0.79	NO	20.16	0.92	20.13	20.20	431.84175			4441	6936
59	PCB-60		798536	346699	451837	0.77	NO	20.28	0.93	20.25	20.32	845.28280		AK221117MB	4441	6936
60	PCB-80						YES								4441	6936
61	PCB-79		32038	14607	17431	0.84	NO	21.26	0.98	21.23	21.30	28.88246		AK221117MB	4441	6936
62	PCB-78						YES								4441	6936
63	PCB-81						YES								4441	6936
64	PCB-77		192110	84837	107273	0.79	NO	22.12	1.00	22.09	22.16	208.50072		AK221117MB	4441	6936
65	* PCB-104						YES								865	716
66	PCB-96		1322	838	484	1.73	NO	17.79	1.02	17.75	17.82	1.78110			865	716
67	* PCB-103		79325	49945	29380	1.70	NO	18.74	1.07	18.70	18.77	142.30908			1978	1407
68	PCB-94		2089	1261	828	1.52	NO	18.89	1.08	18.86	18.93	3.79804			1978	1407
69	PCB-95		5077328	3141416	1935912	1.62	NO	19.14	1.09	19.11	19.18	4365.98001			1978	1407
70	PCB-100/93/102/98		28470	17959	10511	1.71	NO	19.27	1.10	19.24	19.31	71.14970		AK221117MJ	1978	1407
71	PCB-88/91		565230	351344	213886	1.64	NO	19.60	1.12	19.56	19.63	1027.85313			1978	1407
72	PCB-84		552893	343789	209104	1.64	NO	19.76	1.13	19.73	19.80	1087.73066			1978	1407
73	PCB-89		1778	1040	738	1.41	NO	20.00	1.14	19.97	20.04	3.98809			1978	1407
74	PCB-121		5107	2999	2108	1.42	NO	20.11	1.15	20.07	20.14	6.25423			1978	1407

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Name: 5-221109A29, Date: 10-Nov-2022, Time: 11:45:43, ID: L2735553-6, Description: SAMPLE, Vial: Tray1:24

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
75	PCB-92		1985141	1230634	754507	1.63	NO	20.35	1.16	20.31	20.38	4006.37817			1978	1407
76	PCB-113/90/101		10895358	6753221	4142137	1.63	NO	20.65	1.18	20.62	20.69	16695.22963			1978	1407
77	PCB-83/99		3862026	2388370	1473656	1.62	NO	20.96	0.91	20.92	20.99	7098.88887			1978	1407
78	PCB-112						YES								1978	1407
79	PCB-109/119/86/97/125/87		3011276	1858531	1152744	1.61	NO	21.32	0.92	21.28	21.35	4505.35169		AK221117MJ	1978	1407
80	PCB-117/116/85/110/115		10743565	6654133	4089432	1.63	NO	21.73	0.94	21.70	21.77	15179.51581		AK221117MJ	1978	1407
81	PCB-82		43584	27131	16453	1.65	NO	21.94	0.95	21.90	21.97	98.98890			1978	1407
82	PCB-111		23282	14468	8814	1.64	NO	22.03	0.95	22.00	22.06	27.67251			1978	1407
83	PCB-120		155486	96316	59170	1.63	NO	22.26	0.96	22.23	22.29	185.91401			1978	1407
84	* PCB-108/124		347790	217231	130559	1.66	NO	22.91	0.99	22.87	22.94	442.75678			6257	3624
85	PCB-107		1057154	648181	408973	1.58	NO	23.03	1.00	22.99	23.06	1208.10827		AK221117MS	6257	3624
86	PCB-123		75547	46146	29401	1.57	NO	23.10	1.00	23.07	23.13	95.92985		AK221117MS	6257	3624
87	PCB-106						YES								6257	3624
88	PCB-118		7386849	4542726	2844123	1.60	NO	23.27	1.00	23.23	23.30	9329.19315			6257	3624
89	PCB-122		65224	41344	23880	1.73	NO	23.47	1.00	23.44	23.51	113.06753			6257	3624
90	PCB-114		163021	101917	61104	1.67	NO	23.57	1.00	23.54	23.60	212.72185			6257	3624
91	PCB-105		2188412	1355324	833088	1.63	NO	23.93	1.00	23.90	23.97	2955.64510		AK221117MB	6257	3624
92	PCB-127		23625	14570	9055	1.61	NO	24.66	1.03	24.62	24.69	28.91093			6257	3624
93	PCB-126		162197	107546	54652	1.97	YES	25.54	1.00	25.51	25.57	204.19975		AK221117MB	6257	3624
94	* PCB-155		1413	780	633	1.23	NO	20.50	1.00	20.47	20.54	1.32166			1273	1120
95	PCB-152						YES								1273	1120
96	PCB-150		22040	12183	9856	1.24	NO	20.74	1.01	20.71	20.78	22.25680			1273	1120
97	PCB-136		2727953	1510705	1217248	1.24	NO	20.99	1.02	20.96	21.03	3238.42568			1273	1120
98	PCB-145						YES								1273	1120
99	PCB-148		28695	16118	12577	1.28	NO	21.83	1.07	21.79	21.86	43.81179			1273	1120
100	PCB-151/135		11351562	6296671	5054891	1.25	NO	22.18	1.08	22.14	22.21	18557.18617			1273	1120
101	PCB-154						YES								1273	1120
102	PCB-144		1442520	803088	639432	1.26	NO	22.47	1.10	22.44	22.51	2276.41051			1273	1120
103	* PCB-147/149		22210399	12290317	9920082	1.24	NO	22.66	1.11	22.63	22.70	33738.07035			2492	4075
104	PCB-134/143		628494	347761	280733	1.24	NO	22.81	1.11	22.78	22.84	1227.55978			2492	4075
105	PCB-139/140		102009	55904	46105	1.21	NO	22.97	1.12	22.93	23.00	154.49090			2492	4075
106	PCB-131		85020	47067	37953	1.24	NO	23.11	0.88	23.08	23.14	172.87835			2492	4075
107	PCB-142						YES								2492	4075
108	PCB-132		4592656	2532056	2060601	1.23	NO	23.38	0.89	23.34	23.41	7911.70186			2492	4075
109	PCB-133		451285	250428	200857	1.25	NO	23.53	0.89	23.50	23.57	778.65477			2492	4075
110	PCB-165		132188	72987	59201	1.23	NO	23.74	0.90	23.71	23.77	166.43375			2492	4075
111	PCB-146		5574996	3080523	2494473	1.23	NO	23.87	0.91	23.84	23.91	8280.39713			2492	4075

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221109A2-1117AK.qld

Last Altered: Thursday, November 17, 2022 12:03:54 Eastern Standard Time
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Name: 5-221109A29, Date: 10-Nov-2022, Time: 11:45:43, ID: L2735553-6, Description: SAMPLE, Vial: Tray1:24

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
112	PCB-161						YES								2492	4075
113	PCB-153/168		41782850	23106792	18676058	1.24	NO	24.19	0.92	24.15	24.22	51742.74758			2492	4075
114	PCB-141		5840871	3229370	2611501	1.24	NO	24.33	0.92	24.30	24.36	9204.48289			2492	4075
115	PCB-130		1176312	650058	526253	1.24	NO	24.55	0.93	24.52	24.58	2062.19195			2492	4075
116	PCB-137/164		2502993	1383126	1119867	1.24	NO	24.72	0.94	24.68	24.75	3379.12983			2492	4075
117	PCB-138/163/129		29145398	16183186	12962212	1.25	NO	24.88	0.94	24.84	24.91	56699.26884			2492	4075
118	PCB-160						YES								2492	4075
119	PCB-158		2798621	1542787	1255835	1.23	NO	25.08	0.95	25.05	25.11	2981.82290			2492	4075
120	PCB-128/166		2806754	1548255	1258499	1.23	NO	25.58	0.97	25.54	25.61	3659.81508			2492	4075
121	PCB-159		543985	297271	246714	1.20	NO	26.01	0.99	25.98	26.04	585.72678			2492	4075
122	PCB-162		162141	88816	73324	1.21	NO	26.14	0.99	26.11	26.18	185.54475			2492	4075
123	PCB-167		1167628	642106	525522	1.22	NO	26.39	1.00	26.35	26.42	1259.26527			2492	4075
124	PCB-156/157		1788485	988985	799501	1.24	NO	27.01	1.00	26.98	27.05	1995.18697			2492	4075
125	PCB-169		57376	36099	21277	1.70	YES	28.67	1.00	28.64	28.70	70.98970		AK221117MB	2492	4075
126	* PCB-188		17475	9117	8358	1.09	NO	23.50	1.00	23.46	23.53	21.45287			2159	2484
127	PCB-179		3582430	1811068	1771362	1.02	NO	23.73	1.01	23.69	23.76	4818.10050			2159	2484
128	PCB-184		4036	2084	1952	1.07	NO	23.94	1.02	23.91	23.98	5.06395			2159	2484
129	PCB-176		1111670	564771	546900	1.03	NO	24.17	1.03	24.14	24.21	1504.27455			2159	2484
130	PCB-186						YES								2159	2484
131	PCB-178		1930457	972720	957737	1.02	NO	25.07	1.07	25.04	25.10	3595.49402			2159	2484
132	PCB-175		348200	177907	170293	1.04	NO	25.39	1.08	25.36	25.43	613.91664			2159	2484
133	PCB-187		13959675	7049798	6909877	1.02	NO	25.53	1.09	25.49	25.56	21818.04220			2159	2484
134	PCB-182						YES								2159	2484
135	PCB-183		5177487	2616013	2561475	1.02	NO	25.84	1.10	25.81	25.88	8567.64915			2159	2484
136	PCB-185		886116	448133	437983	1.02	NO	25.94	1.10	25.91	25.97	1603.40676			2159	2484
137	PCB-174		6699577	3388690	3310887	1.02	NO	26.01	1.11	25.98	26.04	11318.20798			2159	2484
138	PCB-177		4315277	2181167	2134110	1.02	NO	26.24	1.12	26.21	26.27	7601.44422			2159	2484
139	PCB-181		21831	11621	10209	1.14	NO	26.43	0.88	26.40	26.47	38.42185			2159	2484
140	PCB-171/173		1959311	991135	968176	1.02	NO	26.57	0.89	26.53	26.60	3703.26140			2159	2484
141	PCB-172		1375816	694876	680940	1.02	NO	27.34	0.91	27.31	27.37	2416.89187			2159	2484
142	PCB-192		939	802	137	5.85	YES	27.47	0.92	27.44	27.51	1.42658			2159	2484
143	PCB-180/193		20236345	10216822	10019523	1.02	NO	27.68	0.92	27.65	27.71	33226.65636			2159	2484
144	PCB-191		326050	156140	169910	0.92	NO	27.86	0.93	27.83	27.89	452.11343			2159	2484
145	PCB-170		5701201	2879493	2821709	1.02	NO	28.38	0.95	28.35	28.41	10988.63385			2159	2484
146	PCB-190		2022428	1025619	996810	1.03	NO	28.65	0.96	28.61	28.68	2562.67856			2159	2484
147	* PCB-189		264620	134085	130536	1.03	NO	29.94	1.00	29.91	29.98	380.55925			2298	2615
148	* PCB-202		812594	382168	430426	0.89	NO	26.26	1.00	26.23	26.30	968.30083			726	893

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Name: 5-221109A29, Date: 10-Nov-2022, Time: 11:45:43, ID: L2735553-6, Description: SAMPLE, Vial: Tray1:24

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
149	PCB-201		443971	211358	232613	0.91	NO	26.74	1.02	26.70	26.77	569.08313			726	893
150	PCB-204		1593	711	881	0.81	NO	27.07	1.03	27.04	27.11	2.12993			726	893
151	PCB-197		147763	69899	77864	0.90	NO	27.20	1.04	27.16	27.23	197.12356			726	893
152	PCB-200		400768	189458	211310	0.90	NO	27.30	1.04	27.27	27.34	574.67221			726	893
153	PCB-198/199		3235222	1523409	1711813	0.89	NO	28.68	0.92	28.65	28.72	6368.43403			726	893
154	PCB-196		1272182	600979	671203	0.90	NO	29.01	0.93	28.97	29.04	2487.80666			726	893
155	PCB-203		2008825	948886	1059940	0.90	NO	29.12	0.93	29.08	29.15	3731.12051			726	893
156	* PCB-195		793394	371958	421437	0.88	NO	29.85	0.95	29.81	29.88	2068.39814			1019	946
157	PCB-194		1726832	808856	917976	0.88	NO	31.05	0.99	31.01	31.08	4334.18453			1019	946
158	PCB-205		95101	44618	50483	0.88	NO	31.31	1.00	31.28	31.34	203.90811			1019	946
159	* PCB-208		117082	52599	64483	0.82	NO	29.68	1.00	29.65	29.71	246.67658			786	1876
160	PCB-207		61027	26556	34471	0.77	NO	30.14	1.02	30.11	30.17	126.74748			786	1876
161	PCB-206		361802	161943	199859	0.81	NO	32.37	1.00	32.34	32.40	964.93833			786	1876
162	* PCB-209		58812	31763	27049	1.17	NO	33.47	1.00	33.43	33.50	135.05029			262	205
163	13C-PCB-31						YES								30902	11042
164	13C-PCB-95		1093	669	424	1.58	NO	19.17	1.09	19.14	19.21	1.88541	0.1		2155	1515
165	13C-PCB-153		6441	3886	2555	1.52	YES	24.19	1.18	24.15	24.22	9.82941	0.5		2109	1631
166	13C-PCB-28		2039739	1045749	993990	1.05	NO	16.00	0.94	15.96	16.03	1274.28580	63.7		30902	11042
167	13C-PCB-111		1487075	913083	573992	1.59	NO	22.01	1.07	21.98	22.05	1372.85418	68.6		2155	1515
168	13C-PCB-178		1247461	639776	607685	1.05	NO	25.06	1.01	25.02	25.09	1537.33665	76.9		1998	1558
169	13C-PCB-1		1438235	1075006	363229	2.96	NO	8.98	0.75	8.95	9.01	682.92752	34.1		2244	14542
170	13C-PCB-3		1423338	1061166	362172	2.93	NO	10.49	0.88	10.46	10.53	714.93635	35.7		2244	14542
171	13C-PCB-4		1304339	794296	510043	1.56	NO	10.66	0.90	10.63	10.70	1000.19635	50.0		8442	2706
172	13C-PCB-15		1813348	1108489	704859	1.57	NO	14.31	1.20	14.27	14.34	1024.18086	51.2		9636	3289
173	13C-PCB-19		1076074	548222	527852	1.04	NO	12.64	1.06	12.61	12.67	1269.62221	63.5		21550	8585
174	13C-PCB-37		1687292	865278	822013	1.05	NO	18.24	1.07	18.21	18.27	1175.43694	58.8		30902	11042
175	13C-PCB-54		1537248	678130	859118	0.79	NO	14.50	0.85	14.47	14.53	1183.10801	59.2		3273	2070
176	13C-PCB-81		1583903	698052	885851	0.79	NO	21.80	1.06	21.77	21.83	1215.27091	60.8		3653	2494
177	13C-PCB-77		1526744	670838	855906	0.78	NO	22.10	1.07	22.07	22.14	1162.84139	58.1		3653	2494
178	13C-PCB-104		1634334	998401	635933	1.57	NO	17.52	1.03	17.49	17.56	1332.56034	66.6		945	699
179	13C-PCB-123		1364856	842926	521930	1.62	NO	23.09	1.12	23.05	23.12	1133.83784	56.7		3301	2582
180	13C-PCB-118		1172168	717179	454989	1.58	NO	23.26	1.13	23.22	23.29	1066.65106	53.3		3301	2582
181	13C-PCB-114		1312252	810493	501759	1.62	NO	23.56	0.95	23.52	23.59	1072.24106	53.6		3301	2582
182	13C-PCB-105		1194222	740964	453258	1.63	NO	23.92	0.96	23.89	23.95	1034.89321	51.7		3301	2582
183	13C-PCB-126		1306427	803977	502450	1.60	NO	25.50	1.03	25.47	25.54	1101.28183	55.1		3301	2582
184	13C-PCB-155		1833387	1020722	812665	1.26	NO	20.49	0.99	20.45	20.52	1398.25607	69.9		760	927
185	13C-PCB-167		1449929	821374	628555	1.31	NO	26.37	1.06	26.34	26.41	1321.82013	66.1		2109	1631

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Name: 5-221109A29, Date: 10-Nov-2022, Time: 11:45:43, ID: L2735553-6, Description: SAMPLE, Vial: Tray1:24

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
186	13C-PCB-156/157		2739190	1545187	1194003	1.29	NO	27.01	1.09	26.98	27.05	2559.74805	64.0		2109	1631
187	13C-PCB-169		1291097	728570	562527	1.30	NO	28.67	1.15	28.64	28.70	1170.55920	58.5		2109	1631
188	13C-PCB-188		1512653	774966	737687	1.05	NO	23.49	0.94	23.45	23.52	1312.74372	65.6		1998	1558
189	13C-PCB-189		1321950	681798	640152	1.07	NO	29.93	0.96	29.90	29.96	1151.56669	57.6		3285	2139
190	13C-PCB-202		1468410	697764	770646	0.91	NO	26.25	1.06	26.22	26.29	1487.66937	74.4		1022	1214
191	13C-PCB-205		977760	459455	518305	0.89	NO	31.30	1.01	31.26	31.33	1178.06082	58.9		2201	1381
192	13C-PCB-208		826174	367051	459123	0.80	NO	29.65	0.96	29.62	29.68	1192.09441	59.6		1336	1111
193	13C-PCB-206		656077	289129	366948	0.79	NO	32.36	1.04	32.32	32.39	1381.99374	69.1		1336	1111
194	13C-PCB-209		890551	486746	403805	1.21	NO	33.45	1.08	33.42	33.48	1201.03508	60.1		316	310
195	13C-PCB-9		3969810	2410964	1558846	1.55	NO	11.90	0.48	11.86	11.93	53.81922	2.7		8442	2706
196	13C-PCB-52		1877644	829810	1047835	0.79	NO	16.99	0.68	16.95	17.02	54.55137	2.7		2481	1775
197	13C-PCB-101		1747096	1065218	681878	1.56	NO	20.63	0.83	20.60	20.67	55.04333	2.8		2155	1515
198	13C-PCB-138		1730156	972349	757806	1.28	NO	24.86	0.00	24.83	24.90	51.27569	2.6		2109	1631
199	13C-PCB-194		1291788	606570	685219	0.89	NO	31.03	1.25	31.00	31.07	48.22680	2.4		2201	1381
200	Total MoCB-F1	5		52399								7165.07558			740	
201	Total DiCB-F1	7		156097								4949.09525			879	
202	Total DiCB-F2	6		1651009								11001.69610			2902	
203	Total TrCB-F1	1		454								1.31733			806	
204	Total TrCB-F2	6		195816								481.61823			1040	
205	Total TrCB-F3	17		4635231								316838.60231			4937	
206	Total TeCB-F2			0											733	
207	Total TeCB-F3	13		4941572								15574.09472			754	
208	Total TeCB-F4	18		7565657								1074198.638...			4441	
209	Total PeCB-F3	3		21087								100951.55793			865	
210	Total PeCB-F4	20		23350425								768800.58217			1978	
211	Total PeCB-F5	34		21518689								40174832.49...			6257	
212	Total HxCB-F4	7		8639719								24538.65647			1273	
213	Total HxCB-F5	32		69869119								3184891.986...			2492	
214	Total HpCB-F5	27		35314779								387366.32058			2159	
215	Total HpCB-F6	1		279534								380.55925			2298	
216	Total OcCB-F5	17		3928777								18908.18830			726	
217	Total OcCB-F6	7		1246175								109500.45538			1019	
218	Total NoCB-F6	3		241098								1338.36239			786	
219	Total DeCB-F7	1		31763								135.05029			262	
220	Total 13C-MoCB-F1	2		2170242								1397.86387			2244	
221	Total 13C-DiCB-F1	3		3217421								1054.48308			8442	
222	Total 13C-DiCB-F2	1		1121132								1024.18086			9636	

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Name: 5-221109A29, Date: 10-Nov-2022, Time: 11:45:43, ID: L2735553-6, Description: SAMPLE, Vial: Tray1:24

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
223	Total 13C-TrCB-F1	1		2535631								1269.62221			21550	
224	Total 13C-TrCB-F3	2		2339948								2449.72275			30902	
225	Total 13C-TeCB-F2	1		678252								1183.10801			3273	
226	Total 13C-TeCB-F3	5		841625								55.26781			2481	
227	Total 13C-TeCB-F4	2		1413277								2378.11231			3653	
228	Total 13C-PeCB-F3	1		998752								1332.56034			945	
229	Total 13C-PeCB-F4	9		1991269								1431.69272			2155	
230	Total 13C-PeCB-F5	5		4054524								5408.90500			3301	
231	Total 13C-HxCB-F4	1		1026656								1398.25607			760	
232	Total 13C-HxCB-F5	19		4134251								5129.06903			2109	
233	Total 13C-HpCB-F5	2		1456786								2850.08037			1998	
234	Total 13C-HpCB-F6	1		771423								1151.56669			3285	
235	Total 13C-OcCB-F5	1		702750								1487.66937			1022	
236	Total 13C-OcCB-F6	6		1116630								1234.19950			2201	
237	Total 13C-NoCB-F6	2		657127								2574.08815			1336	
238	Total 13C-DeCB-F7	1		486746								1201.03508			316	
239	Lockmass F1			0											141170	
240	Lockmass F2			0											126038	
241	Lockmass F3			0											190586	
242	Lockmass F4			0											140301	
243	Lockmass F5			0											60962	
244	Lockmass F6			0											32371	
245	Lockmass F7			0											11640	

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Name: 5-221109A30, Date: 10-Nov-2022, Time: 12:27:54, ID: L2735553-7, Description: SAMPLE, Vial: Tray1:25

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
1	* PCB-1		2231	1716	515	3.33	NO	8.98	1.00	8.95	9.01	3.47565			950	1027
2	PCB-2		28801	21534	7268	2.96	NO	10.37	0.99	10.33	10.40	41.49040			950	1027
3	PCB-3		5303	4032	1270	3.17	NO	10.49	1.00	10.46	10.53	6.71573			950	1027
4	*PCB-4		4464	2552	1912	1.33	NO	10.68	1.00	10.64	10.71	7.93984			605	3569
5	PCB-10						YES								605	3569
6	PCB-9		5490	3265	2226	1.47	NO	11.90	1.12	11.86	11.93	7.19013		AK221117MA	605	3569
7	PCB-7						YES								605	3569
8	PCB-6		3937	2444	1493	1.64	NO	12.18	1.14	12.14	12.21	5.26483			605	3569
9	PCB-5		614	366	248	1.48	NO	12.39	1.16	12.35	12.42	0.83209		AK221117MB	605	3569
10	PCB-8		11560	6917	4643	1.49	NO	12.46	1.17	12.42	12.49	14.11243		AK221117MB	605	3569
11	* PCB-14						YES								2509	3515
12	PCB-11		1983553	1219039	764514	1.59	NO	13.93	0.97	13.89	13.96	1954.73810		AK221117MB	2509	3515
13	PCB-13/12		20085	12614	7471	1.69	NO	14.13	0.99	14.10	14.16	18.97004		AK221117MB	2509	3515
14	PCB-15		26884	16983	9901	1.72	NO	14.31	1.00	14.28	14.35	25.83333			2509	3515
15	* PCB-19		1654	911	742	1.23	YES	12.65	1.00	12.62	12.69	2.47819			925	631
16	* PCB-30/18		42281	22169	20112	1.10	NO	13.75	1.09	13.72	13.79	53.38182			1162	776
17	PCB-17		13347	6907	6440	1.07	NO	13.99	1.11	13.96	14.03	20.25664			1162	776
18	PCB-27		1606	973	634	1.53	YES	14.12	1.12	14.09	14.15	1.82979			1162	776
19	PCB-24		1439	768	671	1.14	NO	14.20	1.12	14.17	14.24	1.68823			1162	776
20	PCB-16		6439	3376	3063	1.10	NO	14.29	1.13	14.25	14.32	10.29600			1162	776
21	PCB-32		2968	1605	1363	1.18	NO	14.57	1.15	14.54	14.61	2.93726			1162	776
22	* PCB-34						YES								1971	1460
23	PCB-23						YES								1971	1460
24	PCB-29/26		55755	28888	26868	1.08	NO	15.53	0.85	15.49	15.56	51.02840			1971	1460
25	PCB-25		19203	9953	9250	1.08	NO	15.66	0.86	15.63	15.70	17.53805			1971	1460
26	PCB-31		236987	121511	115477	1.05	NO	15.84	0.87	15.81	15.87	204.97442			1971	1460
27	PCB-28/20		302571	154547	148024	1.04	NO	16.01	0.88	15.97	16.04	279.66832			1971	1460
28	PCB-21/33		16118	8672	7446	1.16	NO	16.15	0.89	16.12	16.19	14.48357			1971	1460
29	PCB-22		67739	34320	33419	1.03	NO	16.39	0.90	16.36	16.42	63.59888			1971	1460
30	PCB-36		5211	3038	2172	1.40	YES	17.20	0.94	17.17	17.23	4.20154			1971	1460
31	PCB-39		1097	608	489	1.24	YES	17.43	0.96	17.39	17.46	1.02715			1971	1460
32	PCB-38		644	293	351	0.84	YES	17.75	0.97	17.72	17.78	0.57915			1971	1460
33	PCB-35		2956	1274	1682	0.76	YES	18.01	0.99	17.98	18.05	2.77675			1971	1460
34	PCB-37		43936	22183	21754	1.02	NO	18.25	1.00	18.21	18.28	44.42586			1971	1460
35	* PCB-54						YES								493	756
36	* PCB-50/53		6184	2680	3505	0.76	NO	15.70	1.08	15.67	15.74	8.64748			581	1073
37	PCB-45/51		14677	6357	8320	0.76	NO	16.10	1.11	16.07	16.14	21.18271			581	1073

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221109A2-1117AK.qld

Last Altered: Thursday, November 17, 2022 12:03:54 Eastern Standard Time
Printed: Wednesday, November 23, 2022 18:29:11 Eastern Standard Time

Name: 5-221109A30, Date: 10-Nov-2022, Time: 12:27:54, ID: L2735553-7, Description: SAMPLE, Vial: Tray1:25

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
38	PCB-46		2101	959	1142	0.84	NO	16.28	1.12	16.25	16.31	3.42462			581	1073
39	PCB-52		620625	270499	350126	0.77	NO	17.01	1.17	16.97	17.04	945.99985			581	1073
40	PCB-73						YES								581	1073
41	PCB-43		6711	2757	3954	0.70	NO	17.14	1.18	17.11	17.18	12.03701			581	1073
42	PCB-69/49		256273	109604	146669	0.75	NO	17.27	1.19	17.24	17.30	310.95731			581	1073
43	PCB-48		19103	8501	10602	0.80	NO	17.43	1.20	17.39	17.46	25.59948			581	1073
44	PCB-44/47/65		350831	153202	197628	0.78	NO	17.57	1.21	17.54	17.61	475.20458			581	1073
45	PCB-59/62/75		36395	15992	20403	0.78	NO	17.75	1.22	17.72	17.78	38.77319			581	1073
46	PCB-42		52701	22390	30311	0.74	NO	17.87	1.23	17.83	17.90	85.38591			581	1073
47	PCB-41/71/40		26666	11788	14878	0.79	NO	18.16	1.25	18.13	18.19	37.98191			581	1073
48	PCB-64		171814	74829	96985	0.77	NO	18.26	1.26	18.22	18.29	192.46516			581	1073
49	* PCB-72		16240	7127	9114	0.78	NO	18.64	0.85	18.60	18.67	17.02802			4638	1983
50	PCB-68		11197	5063	6134	0.83	NO	18.80	0.86	18.77	18.84	11.27135			4638	1983
51	PCB-57		3469	1621	1848	0.88	NO	19.04	0.87	19.01	19.08	3.69222			4638	1983
52	PCB-58						YES								4638	1983
53	PCB-67		26917	11520	15398	0.75	NO	19.26	0.88	19.22	19.29	25.18805			4638	1983
54	PCB-63		21257	9431	11826	0.80	NO	19.41	0.89	19.38	19.45	21.80957			4638	1983
55	PCB-61/70/74/76		828236	365945	462291	0.79	NO	19.60	0.90	19.56	19.63	903.26144			4638	1983
56	PCB-66		401349	178461	222889	0.80	NO	19.77	0.91	19.74	19.81	411.04537			4638	1983
57	PCB-55						YES								4638	1983
58	PCB-56		101892	44440	57452	0.77	NO	20.16	0.92	20.13	20.20	114.60051			4638	1983
59	PCB-60		65861	29086	36775	0.79	NO	20.28	0.93	20.25	20.32	69.75501			4638	1983
60	PCB-80						YES								4638	1983
61	PCB-79		26206	11366	14840	0.77	NO	21.26	0.98	21.23	21.30	23.63711			4638	1983
62	PCB-78						YES								4638	1983
63	PCB-81						YES								4638	1983
64	PCB-77		45569	20388	25181	0.81	NO	22.12	1.00	22.09	22.16	49.14722			4638	1983
65	* PCB-104						YES								1048	968
66	PCB-96		4272	2590	1682	1.54	NO	17.79	1.02	17.75	17.82	5.87429			1048	968
67	* PCB-103		45298	28324	16974	1.67	NO	18.74	1.07	18.70	18.77	74.29663			1708	4670
68	PCB-94		3379	2147	1232	1.74	NO	18.89	1.08	18.86	18.93	5.61739			1708	4670
69	PCB-95		3507371	2162548	1344823	1.61	NO	19.14	1.09	19.11	19.18	2757.35032			1708	4670
70	PCB-100/93/102/98		32563	20509	12054	1.70	NO	19.31	1.10	19.28	19.34	74.40080			1708	4670
71	PCB-88/91		144293	89720	54572	1.64	NO	19.61	1.12	19.57	19.64	239.89071			1708	4670
72	PCB-84		149140	91813	57327	1.60	NO	19.76	1.13	19.73	19.80	268.24953			1708	4670
73	PCB-89		2395	1292	1103	1.17	YES	20.00	1.14	19.96	20.03	4.91169			1708	4670
74	PCB-121		1884	1119	765	1.46	NO	20.11	1.15	20.07	20.14	2.10966			1708	4670

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Name: 5-221109A30, Date: 10-Nov-2022, Time: 12:27:54, ID: L2735553-7, Description: SAMPLE, Vial: Tray1:25

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
75	PCB-92		1214893	752245	462648	1.63	NO	20.35	1.16	20.31	20.38	2241.62079			1708	4670
76	PCB-113/90/101		8275498	5104537	3170961	1.61	NO	20.65	1.18	20.62	20.69	11593.34447			1708	4670
77	PCB-83/99		1306079	809629	496450	1.63	NO	20.96	0.91	20.92	20.99	2194.86835			1708	4670
78	PCB-112						YES								1708	4670
79	PCB-109/119/86/97/125/87		1514277	939598	574679	1.63	NO	21.32	0.92	21.28	21.35	2071.32016		AK221117MJ	1708	4670
80	PCB-117/116/85/110/115		5526926	3409585	2117342	1.61	NO	21.73	0.94	21.70	21.77	7139.32067		AK221117MJ	1708	4670
81	PCB-82		55644	34978	20666	1.69	NO	21.94	0.95	21.90	21.97	115.54032			1708	4670
82	PCB-111		9729	5887	3841	1.53	NO	22.02	0.95	21.99	22.05	10.57163			1708	4670
83	PCB-120		66634	41712	24923	1.67	NO	22.25	0.96	22.22	22.29	72.84217		AK221117MS	1708	4670
84	* PCB-108/124		148360	90438	57922	1.56	NO	22.91	0.99	22.87	22.94	172.67450			2858	3254
85	PCB-107		449456	278043	171413	1.62	NO	23.03	1.00	22.99	23.06	469.58968		AK221117MS	2858	3254
86	PCB-123		19468	12009	7459	1.61	NO	23.10	1.00	23.07	23.13	22.01289		AK221117MS	2858	3254
87	PCB-106						YES								2858	3254
88	PCB-118		2762066	1698582	1063484	1.60	NO	23.26	1.00	23.22	23.29	2858.89288			2858	3254
89	PCB-122		25279	15720	9560	1.64	NO	23.47	1.00	23.44	23.51	40.06443			2858	3254
90	PCB-114		62274	37778	24496	1.54	NO	23.56	1.00	23.52	23.59	74.36536			2858	3254
91	PCB-105		721462	442215	279247	1.58	NO	23.92	1.00	23.89	23.95	785.18007		AK221117MB	2858	3254
92	PCB-127						YES								2858	3254
93	PCB-126		26202	17580	8622	2.04	YES	25.50	1.00	25.47	25.54	30.58416		AK221117MB	2858	3254
94	* PCB-155		1315	775	540	1.44	YES	20.50	1.00	20.47	20.54	1.21842			1134	998
95	PCB-152						YES								1134	998
96	PCB-150		24958	14197	10761	1.32	NO	20.74	1.01	20.71	20.78	24.95292			1134	998
97	PCB-136		2980303	1657063	1323240	1.25	NO	20.99	1.02	20.96	21.03	3502.79964			1134	998
98	PCB-145						YES								1134	998
99	PCB-148		22617	12836	9781	1.31	NO	21.83	1.07	21.79	21.86	34.18736			1134	998
100	PCB-151/135		13625875	7548371	6077505	1.24	NO	22.18	1.08	22.14	22.21	22053.56866			1134	998
101	PCB-154						YES								1134	998
102	PCB-144		1374677	764266	610411	1.25	NO	22.47	1.10	22.44	22.51	2147.76814			1134	998
103	* PCB-147/149		24137977	13386829	10751148	1.25	NO	22.66	1.11	22.63	22.70	35480.38156			2844	4450
104	PCB-134/143		626910	370377	256533	1.44	YES	22.81	1.11	22.78	22.84	1184.86950			2844	4450
105	PCB-139/140		101372	54983	46389	1.19	NO	22.98	1.12	22.94	23.01	148.56175			2844	4450
106	PCB-131		78763	43176	35587	1.21	NO	23.11	0.88	23.08	23.14	154.97636			2844	4450
107	PCB-142						YES								2844	4450
108	PCB-132		4651626	2571132	2080493	1.24	NO	23.36	0.89	23.33	23.40	7754.15133			2844	4450
109	PCB-133		446619	246318	200301	1.23	NO	23.53	0.89	23.50	23.57	745.68410			2844	4450
110	PCB-165		149626	82642	66984	1.23	NO	23.73	0.90	23.69	23.76	182.29693			2844	4450
111	PCB-146		6252016	3453994	2798021	1.23	NO	23.86	0.90	23.83	23.89	8985.66503			2844	4450

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Last Altered: Thursday, November 17, 2022 12:03:54 Eastern Standard Time
Printed: Wednesday, November 23, 2022 18:29:11 Eastern Standard Time

Name: 5-221109A30, Date: 10-Nov-2022, Time: 12:27:54, ID: L2735553-7, Description: SAMPLE, Vial: Tray1:25

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
112	PCB-161						YES								2844	4450
113	PCB-153/168		44020154	24352412	19667742	1.24	NO	24.17	0.92	24.14	24.21	52750.49237			2844	4450
114	PCB-141		6811820	3776914	3034907	1.24	NO	24.32	0.92	24.29	24.35	10387.43871			2844	4450
115	PCB-130		1082821	602455	480367	1.25	NO	24.54	0.93	24.50	24.57	1836.90636			2844	4450
116	PCB-137/164		2567765	1425907	1141858	1.25	NO	24.71	0.94	24.67	24.74	3354.47140			2844	4450
117	PCB-138/163/129		31425370	17404794	14020576	1.24	NO	24.88	0.94	24.84	24.91	59157.71646			2844	4450
118	PCB-160						YES								2844	4450
119	PCB-158		2790624	1539150	1251474	1.23	NO	25.07	0.95	25.04	25.10	2877.15048			2844	4450
120	PCB-128/166		2499960	1380001	1119959	1.23	NO	25.56	0.97	25.53	25.60	3154.36075			2844	4450
121	PCB-159		621567	339338	282229	1.20	NO	26.01	0.99	25.98	26.04	647.61888			2844	4450
122	PCB-162		109366	61163	48203	1.27	NO	26.13	0.99	26.10	26.17	121.10541			2844	4450
123	PCB-167		1004255	554528	449727	1.23	NO	26.39	1.00	26.35	26.42	1041.46688			2844	4450
124	PCB-156/157		1445850	802224	643626	1.25	NO	27.01	1.00	26.98	27.05	1574.54895			2844	4450
125	PCB-169		48806	29651	19155	1.55	YES	28.67	1.00	28.64	28.70	58.30703		AK221117MB	2844	4450
126	* PCB-188		12783	6498	6284	1.03	NO	23.49	1.00	23.45	23.52	13.64433			2310	2540
127	PCB-179		4295629	2167620	2128009	1.02	NO	23.73	1.01	23.69	23.76	5338.72060			2310	2540
128	PCB-184		5892	3175	2717	1.17	NO	23.93	1.02	23.90	23.97	6.83053			2310	2540
129	PCB-176		1134985	574501	560484	1.02	NO	24.17	1.03	24.14	24.21	1419.23279			2310	2540
130	PCB-186						YES								2310	2540
131	PCB-178		2387269	1201580	1185690	1.01	NO	25.07	1.07	25.04	25.10	4108.77472			2310	2540
132	PCB-175		355549	179912	175637	1.02	NO	25.38	1.08	25.35	25.42	579.28509			2310	2540
133	PCB-187		16039719	8103855	7935864	1.02	NO	25.53	1.09	25.49	25.56	23165.92141			2310	2540
134	PCB-182						YES								2310	2540
135	PCB-183		5299452	2676419	2623033	1.02	NO	25.83	1.10	25.80	25.86	8103.74870			2310	2540
136	PCB-185		1050203	531468	518735	1.02	NO	25.93	1.10	25.89	25.96	1756.05856			2310	2540
137	PCB-174		7644324	3856541	3787783	1.02	NO	26.01	1.11	25.98	26.04	11933.88246			2310	2540
138	PCB-177		5542089	2799756	2742333	1.02	NO	26.24	1.12	26.21	26.27	9021.38688			2310	2540
139	PCB-181		19415	9626	9789	0.98	NO	26.42	0.88	26.39	26.46	31.57705			2310	2540
140	PCB-171/173		2044587	1032846	1011740	1.02	NO	26.56	0.89	26.52	26.59	3571.07444			2310	2540
141	PCB-172		1505316	758236	747080	1.01	NO	27.34	0.91	27.31	27.37	2443.63854			2310	2540
142	PCB-192						YES								2310	2540
143	PCB-180/193		21126634	10658301	10468333	1.02	NO	27.68	0.92	27.65	27.71	32055.10770			2310	2540
144	PCB-191		323332	164679	158653	1.04	NO	27.86	0.93	27.83	27.89	414.30786			2310	2540
145	PCB-170		6942713	3505041	3437672	1.02	NO	28.37	0.95	28.33	28.40	12365.70635			2310	2540
146	PCB-190		2354694	1190117	1164578	1.02	NO	28.63	0.96	28.60	28.67	2757.19764			2310	2540
147	* PCB-189		318699	162140	156558	1.04	NO	29.94	1.00	29.91	29.98	456.32842			1998	1604
148	* PCB-202		742537	350405	392132	0.89	NO	26.26	1.00	26.23	26.30	855.93620			790	663

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Last Altered: Thursday, November 17, 2022 12:03:54 Eastern Standard Time
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Name: 5-221109A30, Date: 10-Nov-2022, Time: 12:27:54, ID: L2735553-7, Description: SAMPLE, Vial: Tray1:25

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
149	PCB-201		392640	184743	207897	0.89	NO	26.74	1.02	26.70	26.77	487.61858			790	663
150	PCB-204		711	348	363	0.96	NO	27.06	1.03	27.03	27.10	0.92133			790	663
151	PCB-197		121081	56273	64808	0.87	NO	27.18	1.04	27.15	27.22	156.49926			790	663
152	PCB-200		400614	189669	210946	0.90	NO	27.29	1.04	27.26	27.33	556.56662			790	663
153	PCB-198/199		3062498	1450354	1612144	0.90	NO	28.68	0.92	28.65	28.72	5840.74078			790	663
154	PCB-196		1157566	545288	612278	0.89	NO	29.01	0.93	28.97	29.04	2193.19224			790	663
155	PCB-203		1149640	543494	606146	0.90	NO	29.10	0.93	29.07	29.14	2068.81912			790	663
156	* PCB-195		943968	443231	500737	0.89	NO	29.85	0.95	29.81	29.88	2384.32734			745	820
157	PCB-194		1750583	820539	930044	0.88	NO	31.05	0.99	31.01	31.08	4256.99938			745	820
158	PCB-205		121003	57756	63248	0.91	NO	31.33	1.00	31.29	31.36	251.95811			745	820
159	* PCB-208		41580	18041	23539	0.77	NO	29.67	1.00	29.63	29.70	95.35561			556	2120
160	PCB-207		29639	12472	17168	0.73	NO	30.15	1.02	30.12	30.19	86.09678			556	2120
161	PCB-206		98856	43574	55282	0.79	NO	32.39	1.00	32.35	32.42	575.06742			556	2120
162	* PCB-209		8676	4793	3883	1.23	NO	33.48	1.00	33.45	33.51	20.28247			255	289
163	13C-PCB-31						YES								24296	7919
164	13C-PCB-95		1337	703	634	1.11	YES	19.18	1.10	19.15	19.21	2.10820	0.1		1187	1256
165	13C-PCB-153		7277	4240	3038	1.40	NO	24.17	1.18	24.14	24.21	10.82107	0.5		2036	1892
166	13C-PCB-28		1913581	978672	934909	1.05	NO	16.00	0.94	15.96	16.03	1101.97061	55.1		24296	7919
167	13C-PCB-111		1425130	871602	553528	1.57	NO	22.01	1.07	21.98	22.05	1220.80823	61.0		1187	1256
168	13C-PCB-178		1254775	642250	612524	1.05	NO	25.06	1.01	25.02	25.09	1382.43440	69.1		1852	1577
169	13C-PCB-1		1194346	893161	301185	2.97	NO	8.98	0.75	8.95	9.01	518.19971	25.9		2766	21349
170	13C-PCB-3		1411201	1046099	365102	2.87	NO	10.49	0.88	10.46	10.53	647.69481	32.4		2766	21349
171	13C-PCB-4		1199956	730893	469063	1.56	NO	10.66	0.90	10.63	10.70	840.78006	42.0		6101	2563
172	13C-PCB-15		1774356	1075051	699306	1.54	NO	14.31	1.20	14.27	14.34	915.71084	45.8		9311	3785
173	13C-PCB-19		1063351	547063	516288	1.06	NO	12.64	1.06	12.61	12.67	1146.38657	57.3		23584	9283
174	13C-PCB-37		1662149	861479	800671	1.08	NO	18.24	1.07	18.21	18.27	1067.35810	53.4		24296	7919
175	13C-PCB-54		1549745	683528	866217	0.79	NO	14.50	0.85	14.47	14.53	1099.44034	55.0		3495	1667
176	13C-PCB-81		1572584	695651	876933	0.79	NO	21.80	1.06	21.77	21.83	1119.59155	56.0		4196	2566
177	13C-PCB-77		1536368	674885	861482	0.78	NO	22.10	1.07	22.07	22.14	1085.80249	54.3		4196	2566
178	13C-PCB-104		1601029	984435	616594	1.60	NO	17.51	1.03	17.48	17.55	1211.28593	60.6		828	1929
179	13C-PCB-123		1532752	944958	587794	1.61	NO	23.07	1.12	23.04	23.11	1181.50960	59.1		2968	2718
180	13C-PCB-118		1430246	876885	553362	1.58	NO	23.24	1.13	23.21	23.28	1207.66051	60.4		2968	2718
181	13C-PCB-114		1433923	886420	547503	1.62	NO	23.56	0.95	23.52	23.59	1087.18219	54.4		2968	2718
182	13C-PCB-105		1482015	912574	569441	1.60	NO	23.91	0.96	23.88	23.94	1191.69317	59.6		2968	2718
183	13C-PCB-126		1409065	870490	538576	1.62	NO	25.49	1.03	25.46	25.52	1102.16345	55.1		2968	2718
184	13C-PCB-155		1851809	1026091	825718	1.24	NO	20.49	0.99	20.45	20.52	1310.47924	65.5		1517	2543
185	13C-PCB-167		1507850	855822	652027	1.31	NO	26.37	1.06	26.34	26.41	1228.91085	61.4		2036	1892

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221109A2-1117AK.qld

Last Altered: Thursday, November 17, 2022 12:03:54 Eastern Standard Time
Printed: Wednesday, November 23, 2022 18:29:11 Eastern Standard Time

Name: 5-221109A30, Date: 10-Nov-2022, Time: 12:27:54, ID: L2735553-7, Description: SAMPLE, Vial: Tray1:25

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
186	13C-PCB-156/157		2805999	1583277	1222722	1.29	NO	27.01	1.09	26.98	27.05	2344.22575	58.6		2036	1892
187	13C-PCB-169		1337144	760137	577008	1.32	NO	28.67	1.15	28.64	28.70	1083.80137	54.2		2036	1892
188	13C-PCB-188		1739716	882970	856746	1.03	NO	23.47	0.94	23.44	23.51	1349.75731	67.5		1852	1577
189	13C-PCB-189		1327752	686417	641335	1.07	NO	29.94	0.96	29.91	29.98	1034.01657	51.7		3580	7278
190	13C-PCB-202		1517960	715983	801978	0.89	NO	26.25	1.06	26.22	26.29	1374.85329	68.7		834	1440
191	13C-PCB-205		1006817	472339	534477	0.88	NO	31.31	1.01	31.28	31.34	1120.39571	56.0		1594	1618
192	13C-PCB-208		759011	334891	424120	0.79	NO	29.67	0.96	29.63	29.70	1011.51562	50.6		1219	1408
193	13C-PCB-206		300794	132046	168748	0.78	NO	32.36	1.04	32.32	32.39	585.20292	29.3		1219	1408
194	13C-PCB-209		874775	478745	396030	1.21	NO	33.45	1.08	33.42	33.48	1089.62955	54.5		303	305
195	13C-PCB-9		4344578	2623827	1720751	1.52	NO	11.90	0.48	11.86	11.93	58.90000	2.9		6101	2563
196	13C-PCB-52		2036960	903494	1133466	0.80	NO	16.99	0.68	16.95	17.02	59.17997	3.0		2651	1992
197	13C-PCB-101		1882848	1146745	736104	1.56	NO	20.63	0.83	20.60	20.67	59.32029	3.0		1187	1256
198	13C-PCB-138		1935300	1090327	844974	1.29	NO	24.86	0.00	24.83	24.90	57.35546	2.9		2036	1892
199	13C-PCB-194		1398639	656878	741762	0.89	NO	31.03	1.25	31.00	31.07	52.21591	2.6		1594	1618
200	Total MoCB-F1	5		27950								3588.59829			950	
201	Total DiCB-F1	10		21547								11110.25169			605	
202	Total DiCB-F2	8		1251750								7617.78823			2509	
203	Total TrCB-F1	1		1653								2.47819			925	
204	Total TrCB-F2	6		35798								90.38975			1162	
205	Total TrCB-F3	16		412579								44540.45495			1971	
206	Total TeCB-F2			0											493	
207	Total TeCB-F3	13		679660								2537.46962			581	
208	Total TeCB-F4	21		1111233								858997.38082			4638	
209	Total PeCB-F3	3		2738								965.91312			1048	
210	Total PeCB-F4	18		14002867								895587.03820			1708	
211	Total PeCB-F5	32		7074174								12829384.61...			2858	
212	Total HxCB-F4	6		9997507								27764.49514			1134	
213	Total HxCB-F5	32		74132492								3494849.183...			2844	
214	Total HpCB-F5	28		39502033								308470.68672			2310	
215	Total HpCB-F6	1		305720								456.32842			1998	
216	Total OcCB-F5	16		3322341								16279.88985			790	
217	Total OcCB-F6	9		1327173								34905.08081			745	
218	Total NoCB-F6	3		74087								756.51981			556	
219	Total DeCB-F7	1		4793								20.28247			255	
220	Total 13C-MoCB-F1	2		1972934								1165.89452			2766	
221	Total 13C-DiCB-F1	3		3365712								900.12073			6101	
222	Total 13C-DiCB-F2	1		1075051								915.71084			9311	

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Name: 5-221109A30, Date: 10-Nov-2022, Time: 12:27:54, ID: L2735553-7, Description: SAMPLE, Vial: Tray1:25

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
223	Total 13C-TrCB-F1	1		2701529								1146.38657			23584	
224	Total 13C-TrCB-F3	2		2307027								2169.32871			24296	
225	Total 13C-TeCB-F2	1		683641								1099.44034			3495	
226	Total 13C-TeCB-F3	6		913172								59.90218			2651	
227	Total 13C-TeCB-F4	2		1411252								2205.39404			4196	
228	Total 13C-PeCB-F3	1		984712								1211.28593			828	
229	Total 13C-PeCB-F4	13		2032414								1284.38041			1187	
230	Total 13C-PeCB-F5	5		4644252								5770.20893			2968	
231	Total 13C-HxCB-F4	1		1032599								1310.47924			1517	
232	Total 13C-HxCB-F5	21		4361247								4741.82808			2036	
233	Total 13C-HpCB-F5	2		1569225								2732.19171			1852	
234	Total 13C-HpCB-F6	1		776990								1034.01657			3580	
235	Total 13C-OcCB-F5	1		722186								1374.85329			834	
236	Total 13C-OcCB-F6	6		1159395								1177.38018			1594	
237	Total 13C-NoCB-F6	2		467881								1596.71854			1219	
238	Total 13C-DeCB-F7	1		478745								1089.62955			303	
239	Lockmass F1			0											154570	
240	Lockmass F2			0											109305	
241	Lockmass F3			0											233163	
242	Lockmass F4			0											196362	
243	Lockmass F5			0											62535	
244	Lockmass F6			0											45349	
245	Lockmass F7			0											12390	

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Name: 5-221109A31, Date: 10-Nov-2022, Time: 13:10:07, ID: L2735553-8, Description: SAMPLE, Vial: Tray1:26

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
1	* PCB-1		2082	1537	544	2.82	NO	8.99	1.00	8.96	9.03	2.90900			856	1474
2	PCB-2		11753	8905	2848	3.13	NO	10.38	0.99	10.35	10.42	15.81329			856	1474
3	PCB-3		4117	3239	878	3.69	YES	10.51	1.00	10.47	10.54	5.04464			856	1474
4	*PCB-4		3691	2159	1532	1.41	NO	10.68	1.00	10.64	10.71	6.48919			1008	3016
5	PCB-10		625	222	404	0.55	YES	10.79	1.01	10.76	10.82	0.79452			1008	3016
6	PCB-9		3251	1816	1435	1.27	YES	11.91	1.12	11.88	11.94	4.20778			1008	3016
7	PCB-7						YES								1008	3016
8	PCB-6		3393	2069	1324	1.56	NO	12.19	1.14	12.16	12.22	4.48417			1008	3016
9	PCB-5		782	349	433	0.81	YES	12.40	1.16	12.37	12.43	1.04752		AK221117MS	1008	3016
10	PCB-8		10630	6435	4195	1.53	NO	12.46	1.17	12.42	12.49	12.82724		AK221117MS	1008	3016
11	* PCB-14						YES								1633	2708
12	PCB-11		896667	550853	345814	1.59	NO	13.95	0.97	13.91	13.98	923.20447			1633	2708
13	PCB-13/12		14153	8850	5302	1.67	NO	14.12	0.99	14.09	14.15	13.96546		AK221117MB	1633	2708
14	PCB-15		15212	9279	5933	1.56	NO	14.32	1.00	14.29	14.36	15.27198			1633	2708
15	* PCB-19		1406	712	694	1.03	NO	12.67	1.00	12.63	12.70	2.16133			1099	628
16	* PCB-30/18		32071	16460	15611	1.05	NO	13.76	1.09	13.73	13.80	42.63923			1107	1317
17	PCB-17		12140	6371	5769	1.10	NO	14.00	1.11	13.97	14.04	19.40183			1107	1317
18	PCB-27		1586	793	793	1.00	NO	14.12	1.12	14.09	14.15	1.90250			1107	1317
19	PCB-24		1214	546	668	0.82	YES	14.21	1.12	14.18	14.25	1.49922			1107	1317
20	PCB-16		6655	3417	3238	1.06	NO	14.31	1.13	14.27	14.34	11.20740			1107	1317
21	PCB-32		3260	1748	1512	1.16	NO	14.58	1.15	14.55	14.62	3.39698			1107	1317
22	* PCB-34		844	421	423	0.99	NO	15.26	0.84	15.23	15.30	0.88321			1874	2854
23	PCB-23						YES								1874	2854
24	PCB-29/26		41640	21720	19920	1.09	NO	15.54	0.85	15.50	15.57	40.81889			1874	2854
25	PCB-25		16517	8406	8111	1.04	NO	15.67	0.86	15.64	15.71	16.15748			1874	2854
26	PCB-31		187719	97320	90398	1.08	NO	15.85	0.87	15.82	15.88	173.90193			1874	2854
27	PCB-28/20		259484	133726	125758	1.06	NO	16.02	0.88	15.98	16.05	256.89051			1874	2854
28	PCB-21/33		13924	6811	7113	0.96	NO	16.17	0.89	16.14	16.21	13.40188			1874	2854
29	PCB-22		59386	30133	29253	1.03	NO	16.40	0.90	16.36	16.43	59.71970			1874	2854
30	PCB-36		2194	1069	1125	0.95	NO	17.22	0.94	17.19	17.25	1.89495			1874	2854
31	PCB-39		727	478	248	1.92	YES	17.45	0.96	17.41	17.48	0.72890			1874	2854
32	PCB-38		743	341	402	0.85	YES	17.77	0.97	17.74	17.80	0.71569			1874	2854
33	PCB-35		1434	789	646	1.22	YES	18.01	0.99	17.98	18.05	1.44305			1874	2854
34	PCB-37		30197	15546	14651	1.06	NO	18.26	1.00	18.22	18.29	32.70359			1874	2854
35	* PCB-54						YES								641	1046
36	* PCB-50/53		4210	1849	2361	0.78	NO	15.71	1.08	15.68	15.75	6.24301			1257	1390
37	PCB-45/51		12420	5411	7009	0.77	NO	16.11	1.11	16.08	16.15	19.01023			1257	1390

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Name: 5-221109A31, Date: 10-Nov-2022, Time: 13:10:07, ID: L2735553-8, Description: SAMPLE, Vial: Tray1:26

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
38	PCB-46		1888	924	964	0.96	YES	16.30	1.12	16.27	16.33	3.26322			1257	1390
39	PCB-52		515223	225235	289988	0.78	NO	17.01	1.17	16.98	17.05	832.89990			1257	1390
40	PCB-73						YES								1257	1390
41	PCB-43		6406	2796	3610	0.77	NO	17.15	1.18	17.12	17.19	12.18584			1257	1390
42	PCB-69/49		227153	98807	128346	0.77	NO	17.28	1.19	17.25	17.31	292.31519			1257	1390
43	PCB-48		15854	6661	9193	0.72	NO	17.44	1.20	17.40	17.47	22.53196			1257	1390
44	PCB-44/47/65		300476	130993	169483	0.77	NO	17.58	1.21	17.55	17.62	431.64738			1257	1390
45	PCB-59/62/75		33241	14211	19030	0.75	NO	17.76	1.22	17.73	17.79	37.55865			1257	1390
46	PCB-42		49433	21834	27599	0.79	NO	17.88	1.23	17.84	17.91	84.94185			1257	1390
47	PCB-41/71/40		24766	10733	14033	0.76	NO	18.17	1.25	18.14	18.20	37.41134			1257	1390
48	PCB-64		157578	68177	89401	0.76	NO	18.27	1.26	18.23	18.30	187.20760			1257	1390
49	* PCB-72		14816	6299	8517	0.74	NO	18.65	0.85	18.61	18.68	16.88742			2734	2259
50	PCB-68		10470	4541	5929	0.77	NO	18.81	0.86	18.78	18.84	11.45679			2734	2259
51	PCB-57		3253	1473	1780	0.83	NO	19.05	0.87	19.02	19.09	3.76306			2734	2259
52	PCB-58						YES								2734	2259
53	PCB-67		22239	9532	12707	0.75	NO	19.26	0.88	19.23	19.30	22.62260			2734	2259
54	PCB-63		19344	8199	11145	0.74	NO	19.42	0.89	19.39	19.46	21.57458			2734	2259
55	PCB-61/70/74/76		727344	320969	406376	0.79	NO	19.61	0.90	19.57	19.64	862.31046			2734	2259
56	PCB-66		409018	178558	230460	0.77	NO	19.78	0.91	19.75	19.82	455.38024			2734	2259
57	PCB-55						YES								2734	2259
58	PCB-56		92308	41122	51186	0.80	NO	20.17	0.92	20.14	20.20	112.86313			2734	2259
59	PCB-60		61184	26443	34741	0.76	NO	20.29	0.93	20.26	20.32	70.44426			2734	2259
60	PCB-80						YES								2734	2259
61	PCB-79		23907	10409	13498	0.77	NO	21.27	0.98	21.24	21.31	23.44178			2734	2259
62	PCB-78						YES								2734	2259
63	PCB-81						YES								2734	2259
64	PCB-77		44691	17600	27091	0.65	YES	22.13	1.00	22.10	22.17	52.26936			2734	2259
65	* PCB-104						YES								712	842
66	PCB-96		3392	1989	1402	1.42	NO	17.81	1.02	17.77	17.84	4.83757			712	842
67	* PCB-103		43640	27015	16626	1.62	NO	18.75	1.07	18.71	18.78	77.24320			1801	1916
68	PCB-94		2844	1804	1039	1.74	NO	18.90	1.08	18.87	18.94	5.10168			1801	1916
69	PCB-95		3464900	2141975	1322926	1.62	NO	19.15	1.09	19.12	19.19	2939.59669			1801	1916
70	PCB-100/93/102/98		35075	22479	12596	1.78	YES	19.33	1.10	19.30	19.36	86.48517			1801	1916
71	PCB-88/91		135746	84637	51109	1.66	NO	19.62	1.12	19.58	19.65	243.54814			1801	1916
72	PCB-84		146801	90965	55837	1.63	NO	19.77	1.13	19.74	19.81	284.94466			1801	1916
73	PCB-89		2229	1337	892	1.50	NO	20.01	1.14	19.98	20.05	4.93246			1801	1916
74	PCB-121						YES								1801	1916

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Name: 5-221109A31, Date: 10-Nov-2022, Time: 13:10:07, ID: L2735553-8, Description: SAMPLE, Vial: Tray1:26

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
75	PCB-92		1136953	702697	434256	1.62	NO	20.36	1.16	20.32	20.39	2263.87977			1801	1916
76	PCB-113/90/101		7700507	4769953	2930554	1.63	NO	20.66	1.18	20.63	20.69	11641.81502			1801	1916
77	PCB-83/99		1230316	760269	470048	1.62	NO	20.97	0.91	20.93	21.00	2231.22045			1801	1916
78	PCB-112						YES								1801	1916
79	PCB-109/119/86/97/125/87		1341634	829814	511820	1.62	NO	21.33	0.92	21.29	21.36	1980.44510		AK221117MJ	1801	1916
80	PCB-117/116/85/110/115		5101066	3150782	1950285	1.62	NO	21.74	0.94	21.71	21.78	7110.84116		AK221117MJ	1801	1916
81	PCB-82		64001	37258	26743	1.39	NO	21.95	0.95	21.91	21.98	143.41457			1801	1916
82	PCB-111		10066	5291	4775	1.11	YES	22.04	0.95	22.01	22.07	11.80360			1801	1916
83	PCB-120		47569	29017	18552	1.56	NO	22.27	0.96	22.24	22.30	56.11713		AK221117MS	1801	1916
84	* PCB-108/124		136782	84813	51969	1.63	NO	22.92	0.99	22.88	22.95	171.80183			3936	2887
85	PCB-107		400827	246545	154281	1.60	NO	23.04	1.00	23.01	23.07	451.93362		AK221117MS	3936	2887
86	PCB-123		19472	12176	7296	1.67	NO	23.11	1.00	23.08	23.14	24.36932		AK221117MS	3936	2887
87	PCB-106						YES								3936	2887
88	PCB-118		2468754	1510382	958372	1.58	NO	23.27	1.00	23.23	23.30	2793.20898			3936	2887
89	PCB-122		24222	14821	9402	1.58	NO	23.49	1.00	23.45	23.52	41.42798			3936	2887
90	PCB-114		57518	35522	21996	1.62	NO	23.56	1.00	23.52	23.59	74.54261			3936	2887
91	PCB-105		603857	368294	235562	1.56	NO	23.93	1.00	23.90	23.97	718.70138		AK221117MB	3936	2887
92	PCB-127						YES								3936	2887
93	PCB-126		6086	2067	4019	0.51	YES	25.49	1.00	25.46	25.52	7.53162		AK221117MB	3936	2887
94	* PCB-155		1335	637	698	0.91	YES	20.50	1.00	20.47	20.54	1.29093			1165	1109
95	PCB-152						YES								1165	1109
96	PCB-150		22693	12531	10162	1.23	NO	20.75	1.01	20.72	20.79	23.67923			1165	1109
97	PCB-136		3059243	1697125	1362118	1.25	NO	21.00	1.02	20.97	21.04	3752.49685			1165	1109
98	PCB-145						YES								1165	1109
99	PCB-148		21555	12209	9347	1.31	NO	21.84	1.07	21.80	21.87	34.00499			1165	1109
100	PCB-151/135		13365634	7407348	5958286	1.24	NO	22.19	1.08	22.15	22.22	22576.43771			1165	1109
101	PCB-154						YES								1165	1109
102	PCB-144		1292528	717512	575016	1.25	NO	22.48	1.10	22.45	22.52	2107.55124			1165	1109
103	* PCB-147/149		22318840	12301523	10017317	1.23	NO	22.68	1.11	22.64	22.71	34675.59241			4676	4697
104	PCB-134/143		718097	395075	323023	1.22	NO	22.82	1.11	22.79	22.85	1434.54185			4676	4697
105	PCB-139/140		96809	54256	42552	1.27	NO	22.98	1.12	22.94	23.01	149.95674			4676	4697
106	PCB-131		75184	42114	33070	1.27	NO	23.12	0.88	23.09	23.16	156.36290			4676	4697
107	PCB-142						YES								4676	4697
108	PCB-132		4270533	2358000	1912534	1.23	NO	23.38	0.89	23.34	23.41	7524.47985			4676	4697
109	PCB-133		421009	231466	189542	1.22	NO	23.55	0.89	23.51	23.58	742.97391			4676	4697
110	PCB-165		150508	82967	67541	1.23	NO	23.74	0.90	23.71	23.77	193.81932			4676	4697
111	PCB-146		5730060	3164364	2565696	1.23	NO	23.87	0.90	23.84	23.91	8704.70798			4676	4697

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Name: 5-221109A31, Date: 10-Nov-2022, Time: 13:10:07, ID: L2735553-8, Description: SAMPLE, Vial: Tray1:26

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
112	PCB-161						YES								4676	4697
113	PCB-153/168		41692040	23086700	18605340	1.24	NO	24.19	0.92	24.15	24.22	52807.17854			4676	4697
114	PCB-141		6352844	3519401	2833443	1.24	NO	24.33	0.92	24.30	24.36	10239.49042			4676	4697
115	PCB-130		988348	555581	432767	1.28	NO	24.55	0.93	24.52	24.58	1772.16888			4676	4697
116	PCB-137/164		2281200	1259640	1021559	1.23	NO	24.72	0.94	24.68	24.75	3149.90124			4676	4697
117	PCB-138/163/129		29651967	16501121	13150846	1.25	NO	24.89	0.94	24.85	24.92	58999.64085			4676	4697
118	PCB-160						YES								4676	4697
119	PCB-158		2666811	1474241	1192570	1.24	NO	25.08	0.95	25.05	25.11	2906.15215			4676	4697
120	PCB-128/166		2472358	1363107	1109252	1.23	NO	25.58	0.97	25.54	25.61	3297.27069			4676	4697
121	PCB-159		555745	306352	249392	1.23	NO	26.02	0.99	25.99	26.06	612.02852			4676	4697
122	PCB-162		100678	55767	44911	1.24	NO	26.14	0.99	26.11	26.18	117.83660			4676	4697
123	PCB-167		933709	516477	417232	1.24	NO	26.40	1.00	26.36	26.43	1006.64806			4676	4697
124	PCB-156/157		1284580	708513	576066	1.23	NO	27.03	1.00	26.99	27.06	1502.56160			4676	4697
125	PCB-169		68127	42236	25891	1.63	YES	28.67	1.00	28.64	28.70	86.21019		AK221117MB	4676	4697
126	* PCB-188		12512	6238	6274	0.99	NO	23.50	1.00	23.46	23.53	14.16111			1739	1856
127	PCB-179		4111376	2084308	2027068	1.03	NO	23.74	1.01	23.71	23.77	5418.05723			1739	1856
128	PCB-184		4902	2436	2466	0.99	NO	23.94	1.02	23.91	23.98	6.02609			1739	1856
129	PCB-176		1043577	528628	514949	1.03	NO	24.19	1.03	24.15	24.22	1383.67476			1739	1856
130	PCB-186						YES								1739	1856
131	PCB-178		2256464	1140589	1115875	1.02	NO	25.08	1.07	25.05	25.11	4117.98904			1739	1856
132	PCB-175		348702	177735	170967	1.04	NO	25.39	1.08	25.36	25.43	602.41062			1739	1856
133	PCB-187		15597465	7874803	7722662	1.02	NO	25.54	1.09	25.51	25.57	23886.51164			1739	1856
134	PCB-182						YES								1739	1856
135	PCB-183		5279529	2662781	2616748	1.02	NO	25.84	1.10	25.81	25.88	8560.43897			1739	1856
136	PCB-185		967435	489935	477500	1.03	NO	25.94	1.10	25.91	25.97	1715.27352			1739	1856
137	PCB-174		6737866	3411554	3326312	1.03	NO	26.02	1.11	25.99	26.06	11153.49338			1739	1856
138	PCB-177		5251233	2654844	2596390	1.02	NO	26.25	1.12	26.22	26.29	9063.73156			1739	1856
139	PCB-181		17618	8826	8792	1.00	NO	26.45	0.88	26.41	26.48	30.38299			1739	1856
140	PCB-171/173		1931069	974333	956737	1.02	NO	26.57	0.89	26.53	26.60	3576.32630			1739	1856
141	PCB-172		1421411	717029	704381	1.02	NO	27.35	0.91	27.32	27.39	2446.66598			1739	1856
142	PCB-192						YES								1739	1856
143	PCB-180/193		20398708	10308918	10089790	1.02	NO	27.69	0.92	27.66	27.72	32818.25363			1739	1856
144	PCB-191		318645	160885	157760	1.02	NO	27.87	0.93	27.84	27.91	432.93974			1739	1856
145	PCB-170		6243791	3158146	3085645	1.02	NO	28.38	0.95	28.35	28.41	11791.90388			1739	1856
146	PCB-190		2141056	1082732	1058325	1.02	NO	28.65	0.96	28.61	28.68	2658.32027			1739	1856
147	* PCB-189		288324	148029	140295	1.06	NO	29.96	1.00	29.92	29.99	437.76247			2686	2809
148	* PCB-202		714548	337829	376719	0.90	NO	26.28	1.00	26.24	26.31	858.39624			482	839

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Name: 5-221109A31, Date: 10-Nov-2022, Time: 13:10:07, ID: L2735553-8, Description: SAMPLE, Vial: Tray1:26

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
149	PCB-201		414413	194422	219991	0.88	NO	26.74	1.02	26.70	26.77	518.63046			482	839
150	PCB-204		751	371	380	0.98	NO	27.07	1.03	27.04	27.11	0.98103			482	839
151	PCB-197		123286	58445	64841	0.90	NO	27.20	1.04	27.16	27.23	160.57993			482	839
152	PCB-200		350105	166352	183753	0.91	NO	27.30	1.04	27.27	27.34	490.14896			482	839
153	PCB-198/199		2989695	1411589	1578106	0.89	NO	28.69	0.92	28.66	28.73	5745.90843			482	839
154	PCB-196		1184252	556172	628080	0.89	NO	29.02	0.93	28.99	29.05	2261.07351			482	839
155	PCB-203		1049626	496540	553087	0.90	NO	29.12	0.93	29.08	29.15	1903.42238			482	839
156	* PCB-195		869125	408014	461111	0.88	NO	29.86	0.95	29.83	29.89	2212.23240			691	1084
157	PCB-194		1681051	788075	892976	0.88	NO	31.06	0.99	31.03	31.09	4119.47211			691	1084
158	PCB-205		126778	59787	66991	0.89	NO	31.34	1.00	31.31	31.37	253.39642			691	1084
159	* PCB-208		36055	15550	20505	0.76	NO	29.68	1.00	29.65	29.71	94.85777			601	1840
160	PCB-207		30815	13700	17115	0.80	NO	30.15	1.02	30.12	30.19	104.71539			601	1840
161	PCB-206		77571	34131	43441	0.79	NO	32.39	1.00	32.35	32.42	555.55792			601	1840
162	* PCB-209		10341	5629	4713	1.19	NO	33.49	1.00	33.46	33.53	23.30628			295	263
163	13C-PCB-31						YES								26435	9488
164	13C-PCB-95		1046	771	275	2.81	YES	19.20	1.10	19.17	19.23	1.77944	0.1		1707	1352
165	13C-PCB-153		6983	4056	2926	1.39	NO	24.19	1.18	24.15	24.22	10.93256	0.5		3194	2288
166	13C-PCB-28		1853353	948679	904674	1.05	NO	16.01	0.94	15.97	16.04	1079.32229	54.0		26435	9488
167	13C-PCB-111		1359905	837960	521945	1.61	NO	22.02	1.07	21.99	22.05	1166.84238	58.3		1707	1352
168	13C-PCB-178		1192022	612353	579670	1.06	NO	25.07	1.01	25.04	25.10	1299.11722	65.0		2076	1249
169	13C-PCB-1		1331246	989385	341861	2.89	NO	8.98	0.75	8.95	9.01	594.12670	29.7		2331	14667
170	13C-PCB-3		1458558	1078800	379757	2.84	NO	10.49	0.88	10.46	10.53	688.58690	34.4		2331	14667
171	13C-PCB-4		1213986	740223	473763	1.56	NO	10.66	0.90	10.63	10.70	874.95244	43.7		7141	1940
172	13C-PCB-15		1698318	1036688	661630	1.57	NO	14.31	1.20	14.28	14.35	901.55079	45.1		8905	4040
173	13C-PCB-19		1036342	528501	507841	1.04	NO	12.65	1.06	12.62	12.69	1149.24145	57.5		24429	7816
174	13C-PCB-37		1551844	804009	747834	1.08	NO	18.25	1.07	18.21	18.28	1007.76149	50.4		26435	9488
175	13C-PCB-54		1532777	681372	851405	0.80	NO	14.51	0.85	14.48	14.54	1099.66473	55.0		4226	1885
176	13C-PCB-81		1443136	635455	807681	0.79	NO	21.82	1.06	21.78	21.85	1029.11489	51.5		3231	2150
177	13C-PCB-77		1416756	621093	795663	0.78	NO	22.12	1.07	22.09	22.16	1002.90886	50.1		3231	2150
178	13C-PCB-104		1543467	946018	597449	1.58	NO	17.53	1.03	17.50	17.57	1169.64901	58.5		526	701
179	13C-PCB-123		1384830	849930	534900	1.59	NO	23.09	1.12	23.05	23.12	1069.23345	53.5		3751	3995
180	13C-PCB-118		1308425	807483	500942	1.61	NO	23.26	1.13	23.22	23.29	1106.60775	55.3		3751	3995
181	13C-PCB-114		1321246	818647	502600	1.63	NO	23.57	0.95	23.54	23.60	1003.39294	50.2		3751	3995
182	13C-PCB-105		1355169	832972	522197	1.60	NO	23.92	0.96	23.89	23.95	1091.48087	54.6		3751	3995
183	13C-PCB-126		1329146	823411	505734	1.63	NO	25.50	1.03	25.47	25.54	1041.35341	52.1		3751	3995
184	13C-PCB-155		1774373	980048	794325	1.23	NO	20.49	0.99	20.46	20.53	1257.73604	62.9		1837	1576
185	13C-PCB-167		1450418	815703	634715	1.29	NO	26.39	1.06	26.35	26.42	1169.33972	58.5		3194	2288

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	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
186	13C-PCB-156/157		2612457	1480951	1131506	1.31	NO	27.03	1.09	26.99	27.06	2158.96788	54.0		3194	2288
187	13C-PCB-169		1262363	712509	549854	1.30	NO	28.68	1.15	28.65	28.72	1012.14049	50.6		3194	2288
188	13C-PCB-188		1640755	839290	801466	1.05	NO	23.49	0.94	23.45	23.52	1259.23384	63.0		2076	1249
189	13C-PCB-189		1252149	647070	605079	1.07	NO	29.94	0.96	29.91	29.98	964.61032	48.2		2834	2629
190	13C-PCB-202		1456557	692623	763935	0.91	NO	26.26	1.06	26.23	26.30	1304.99463	65.2		915	1173
191	13C-PCB-205		1048878	492602	556277	0.89	NO	31.33	1.01	31.29	31.36	1189.63942	59.5		2218	1943
192	13C-PCB-208		661604	292477	369127	0.79	NO	29.67	0.96	29.63	29.70	898.65226	44.9		1208	1600
193	13C-PCB-206		244319	108973	135346	0.81	NO	32.37	1.04	32.34	32.40	484.46500	24.2		1208	1600
194	13C-PCB-209		907396	492813	414583	1.19	NO	33.48	1.08	33.45	33.51	1151.98906	57.6		287	289
195	13C-PCB-9		4223708	2567279	1656429	1.55	NO	11.91	0.48	11.88	11.94	57.26134	2.9		7141	1940
196	13C-PCB-52		2014247	896391	1117856	0.80	NO	17.00	0.68	16.96	17.03	58.52009	2.9		3156	2018
197	13C-PCB-101		1879770	1151508	728262	1.58	NO	20.64	0.83	20.61	20.68	59.22329	3.0		1707	1352
198	13C-PCB-138		1956425	1100035	856390	1.28	NO	24.88	0.00	24.84	24.91	57.98151	2.9		3194	2288
199	13C-PCB-194		1372261	645868	726393	0.89	NO	31.05	1.25	31.01	31.08	51.23110	2.6		2218	1943
200	Total MoCB-F1	4		13750								410.43336			856	
201	Total DiCB-F1	6		13049								29.85041			1008	
202	Total DiCB-F2	3		568982								952.44191			1633	
203	Total TrCB-F1	1		712								2.16133			1099	
204	Total TrCB-F2	6		29336								80.04714			1107	
205	Total TrCB-F3	18		338922								37418.17947			1874	
206	Total TeCB-F2			0											641	
207	Total TeCB-F3	12		587631								1967.21617			1257	
208	Total TeCB-F4	21		1038358								834332.63946			2734	
209	Total PeCB-F3	2		2070								347.43859			712	
210	Total PeCB-F4	20		13176669								921828.59633			1801	
211	Total PeCB-F5	33		6892466								13247902.03...			3936	
212	Total HxCB-F4	7		9847432								28826.57766			1165	
213	Total HxCB-F5	32		69626936								3402660.949...			4676	
214	Total HpCB-F5	24		37525094								306014.26791			1739	
215	Total HpCB-F6	1		294568								437.76247			2686	
216	Total OcCB-F5	14		3223129								15084.33128			482	
217	Total OcCB-F6	7		1260320								28651.81923			691	
218	Total NoCB-F6	3		63380								755.13108			601	
219	Total DeCB-F7	1		5629								23.30628			295	
220	Total 13C-MoCB-F1	2		2101675								1282.71360			2331	
221	Total 13C-DiCB-F1	3		3315628								932.56200			7141	
222	Total 13C-DiCB-F2	1		1038934								901.55079			8905	

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221109A2-1117AK.qld

Last Altered: Thursday, November 17, 2022 12:03:54 Eastern Standard Time
Printed: Wednesday, November 23, 2022 18:29:11 Eastern Standard Time

Name: 5-221109A31, Date: 10-Nov-2022, Time: 13:10:07, ID: L2735553-8, Description: SAMPLE, Vial: Tray1:26

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
223	Total 13C-TrCB-F1	1		2652544								1149.24145			24429	
224	Total 13C-TrCB-F3	2		2233674								2087.08378			26435	
225	Total 13C-TeCB-F2	1		683244								1099.66473			4226	
226	Total 13C-TeCB-F3	6		906203								59.17398			3156	
227	Total 13C-TeCB-F4	2		1296477								2032.02375			3231	
228	Total 13C-PeCB-F3	1		947366								1169.64901			526	
229	Total 13C-PeCB-F4	11		2004837								1230.16169			1707	
230	Total 13C-PeCB-F5	5		4275349								5312.06842			3751	
231	Total 13C-HxCB-F4	1		986769								1257.73604			1837	
232	Total 13C-HxCB-F5	13		4174269								4424.81455			3194	
233	Total 13C-HpCB-F5	2		1496024								2558.35106			2076	
234	Total 13C-HpCB-F6	1		738822								964.61032			2834	
235	Total 13C-OcCB-F5	1		697013								1304.99463			915	
236	Total 13C-OcCB-F6	6		1165998								1245.09372			2218	
237	Total 13C-NoCB-F6	2		402043								1383.11727			1208	
238	Total 13C-DeCB-F7	1		492813								1151.98906			287	
239	Lockmass F1			0											156585	
240	Lockmass F2			0											94681	
241	Lockmass F3			0											210268	
242	Lockmass F4			0											168744	
243	Lockmass F5			0											62526	
244	Lockmass F6			0											48219	
245	Lockmass F7			0											14471	

Quantify Sample Report **MassLynx V4.2 SCN1012**

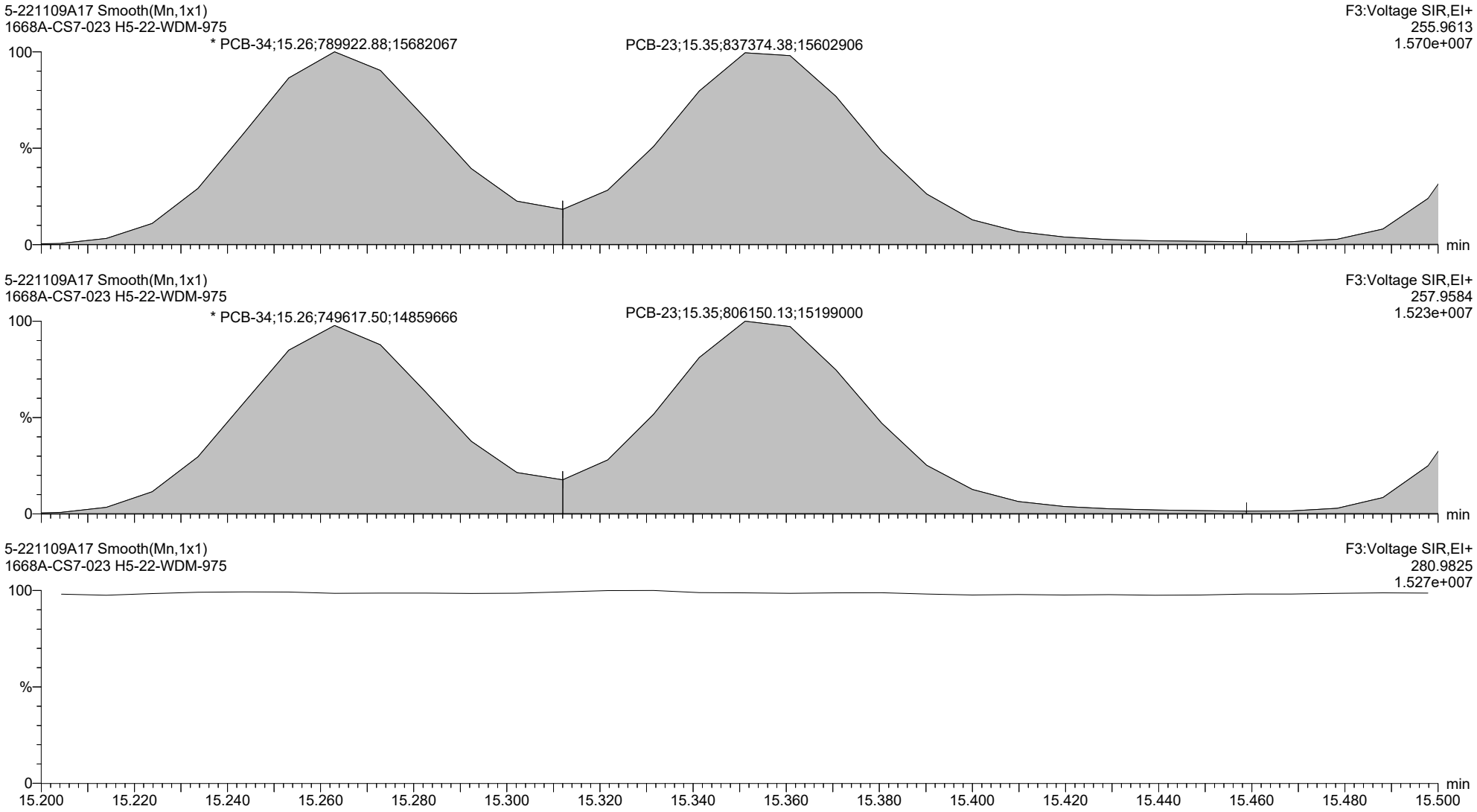
Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221109A2-1117AK.qld

Last Altered: Thursday, November 17, 2022 12:03:54 Eastern Standard Time
Printed: Wednesday, November 23, 2022 18:29:11 Eastern Standard Time

Method: C:\MassLynx\PCB.PRO\MethDB\1668_OCTYL_209-1029.mdb 29 Oct 2022 09:21:57
Calibration: 17 Nov 2022 11:48:15

Name: 5-221109A17, Date: 10-Nov-2022, Time: 03:21:22, ID: H5-22-WDM-975, Description: 1668A-CS7-023, Vial: Tray1:2

*** PCB-34**



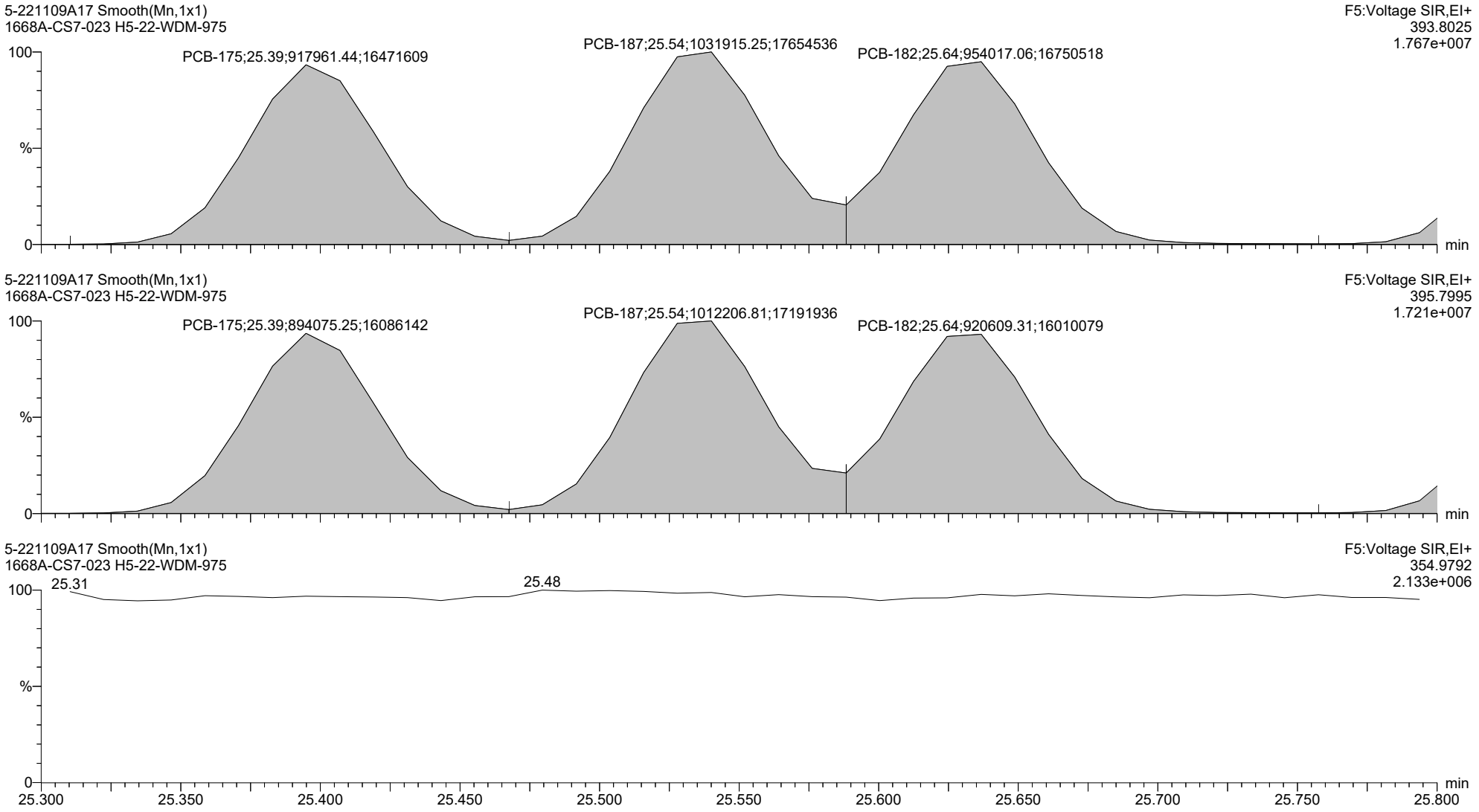
Quantify Sample Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221109A2-1117AK.qld

Last Altered: Thursday, November 17, 2022 12:03:54 Eastern Standard Time
Printed: Wednesday, November 23, 2022 18:29:11 Eastern Standard Time

Name: 5-221109A17, Date: 10-Nov-2022, Time: 03:21:22, ID: H5-22-WDM-975, Description: 1668A-CS7-023, Vial: Tray1:2

PCB-187



Quantify Audit Report MassLynx V4.2 SCN1012

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221109A2-1117AK.qld

Last Altered: Thursday, November 17, 2022 12:03:54 Eastern Standard Time
Printed: Wednesday, November 23, 2022 18:29:11 Eastern Standard Time

Date	Time	Event	Details	Comments
10-Nov-22	17:19:15	Process Extract		
10-Nov-22	17:19:16	Process Integrate		
10-Nov-22	17:19:18	Process Calibrate		
10-Nov-22	17:19:18	Process Quantify		
10-Nov-22	17:19:18	Dataset Created		
10-Nov-22	17:21:00	Method modified		
10-Nov-22	17:21:08	Process Calibrate		
10-Nov-22	17:21:09	Process Quantify		
10-Nov-22	17:22:04	Method modified		
10-Nov-22	17:22:12	Process Calibrate		
10-Nov-22	17:22:13	Process Quantify		
10-Nov-22	17:22:36	Method modified		
10-Nov-22	17:22:44	Process Calibrate		
10-Nov-22	17:22:45	Process Quantify		
10-Nov-22	17:25:03	Dataset Saved	Saved to 'I:\Organics Instrument\HIGHRES GCMS Complete...	
17-Nov-22	10:00:36	Peak added	Sample:5-221109A23, Compound:DiCB-F1, RT:12.064	AK221117MA
17-Nov-22	10:00:59	Peak added	Sample:5-221109A24, Compound:DiCB-F1, RT:12.022	AK221117MA
17-Nov-22	10:01:11	Peak deleted	Sample:5-221109A24, Compound:DiCB-F1, RT:12.022	
17-Nov-22	10:01:40	Pre modification peak	Sample:5-221109A26, Compound:DiCB-F1, RT:12.008	
17-Nov-22	10:01:40	Peak modified	Sample:5-221109A26, Compound:DiCB-F1, RT:12.008	AK221117MB
17-Nov-22	10:02:12	Pre modification peak	Sample:5-221109A26, Compound:DiCB-F1, RT:12.443	
17-Nov-22	10:02:12	Peak modified	Sample:5-221109A26, Compound:DiCB-F1, RT:12.443	AK221117MS
17-Nov-22	10:02:12	Peak added	Sample:5-221109A26, Compound:DiCB-F1, RT:12.373	AK221117MS
17-Nov-22	10:02:12	Pre modification peak	Sample:5-221109A26, Compound:DiCB-F1, RT:12.443	
17-Nov-22	10:02:12	Peak modified	Sample:5-221109A26, Compound:DiCB-F1, RT:12.443	AK221117MS
17-Nov-22	10:02:12	Peak added	Sample:5-221109A26, Compound:DiCB-F1, RT:12.373	AK221117MS
17-Nov-22	10:02:37	Pre modification peak	Sample:5-221109A27, Compound:DiCB-F1, RT:12.443	
17-Nov-22	10:02:37	Peak modified	Sample:5-221109A27, Compound:DiCB-F1, RT:12.443	AK221117MB
17-Nov-22	10:02:37	Pre modification peak	Sample:5-221109A27, Compound:DiCB-F1, RT:12.443	
17-Nov-22	10:02:37	Peak modified	Sample:5-221109A27, Compound:DiCB-F1, RT:12.443	AK221117MB
17-Nov-22	10:02:52	Pre modification peak	Sample:5-221109A28, Compound:DiCB-F1, RT:12.022	
17-Nov-22	10:02:52	Peak modified	Sample:5-221109A28, Compound:DiCB-F1, RT:12.022	AK221117MB
17-Nov-22	10:03:32	Pre modification peak	Sample:5-221109A30, Compound:DiCB-F1, RT:12.078	
17-Nov-22	10:03:32	Peak modified	Sample:5-221109A30, Compound:DiCB-F1, RT:12.078	AK221117MA
17-Nov-22	10:03:32	Pre modification peak	Sample:5-221109A30, Compound:DiCB-F1, RT:11.896	
17-Nov-22	10:03:32	Peak modified	Sample:5-221109A30, Compound:DiCB-F1, RT:11.896	AK221117MA
17-Nov-22	10:03:32	Peak added	Sample:5-221109A30, Compound:DiCB-F1, RT:12.008	AK221117MA
17-Nov-22	10:03:41	Peak deleted	Sample:5-221109A30, Compound:DiCB-F1, RT:12.008	
17-Nov-22	10:04:05	Pre modification peak	Sample:5-221109A30, Compound:DiCB-F1, RT:12.443	
17-Nov-22	10:04:05	Peak modified	Sample:5-221109A30, Compound:DiCB-F1, RT:12.443	AK221117MB
17-Nov-22	10:04:05	Peak added	Sample:5-221109A30, Compound:DiCB-F1, RT:12.401	AK221117MB
17-Nov-22	10:04:51	Pre modification peak	Sample:5-221109A31, Compound:DiCB-F1, RT:12.457	
17-Nov-22	10:04:51	Peak modified	Sample:5-221109A31, Compound:DiCB-F1, RT:12.457	AK221117MS
17-Nov-22	10:04:51	Peak added	Sample:5-221109A31, Compound:DiCB-F1, RT:12.401	AK221117MS
17-Nov-22	10:04:51	Pre modification peak	Sample:5-221109A31, Compound:DiCB-F1, RT:12.457	
17-Nov-22	10:04:51	Peak modified	Sample:5-221109A31, Compound:DiCB-F1, RT:12.457	AK221117MS
17-Nov-22	10:04:51	Peak added	Sample:5-221109A31, Compound:DiCB-F1, RT:12.401	AK221117MS
17-Nov-22	10:05:38	Pre modification peak	Sample:5-221109A24, Compound:DiCB-F1, RT:12.443	
17-Nov-22	10:05:38	Peak modified	Sample:5-221109A24, Compound:DiCB-F1, RT:12.443	AK221117MS
17-Nov-22	10:05:38	Peak added	Sample:5-221109A24, Compound:DiCB-F1, RT:12.387	AK221117MS
17-Nov-22	10:05:38	Pre modification peak	Sample:5-221109A24, Compound:DiCB-F1, RT:12.457	
17-Nov-22	10:05:38	Peak modified	Sample:5-221109A24, Compound:DiCB-F1, RT:12.457	AK221117MS
17-Nov-22	10:05:38	Peak added	Sample:5-221109A24, Compound:DiCB-F1, RT:12.387	AK221117MS

Quantify Audit Report MassLynx V4.2 SCN1012

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221109A2-1117AK.qld

Last Altered: Thursday, November 17, 2022 12:03:54 Eastern Standard Time
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Date	Time	Event	Details	Comments
17-Nov-22	10:06:12	Peak added	Sample:5-221109A23, Compound:DiCB-F2, RT:14.324	AK221117MA
17-Nov-22	10:06:44	Pre modification peak	Sample:5-221109A25, Compound:DiCB-F2, RT:13.034	
17-Nov-22	10:06:44	Peak modified	Sample:5-221109A25, Compound:DiCB-F2, RT:13.034	AK221117MB
17-Nov-22	10:06:44	Pre modification peak	Sample:5-221109A25, Compound:DiCB-F2, RT:14.103	
17-Nov-22	10:06:44	Peak modified	Sample:5-221109A25, Compound:DiCB-F2, RT:14.103	AK221117MB
17-Nov-22	10:07:21	Pre modification peak	Sample:5-221109A26, Compound:DiCB-F2, RT:13.034	
17-Nov-22	10:07:21	Peak modified	Sample:5-221109A26, Compound:DiCB-F2, RT:13.034	AK221117MB
17-Nov-22	10:07:21	Pre modification peak	Sample:5-221109A26, Compound:DiCB-F2, RT:13.919	
17-Nov-22	10:07:21	Peak modified	Sample:5-221109A26, Compound:DiCB-F2, RT:13.919	AK221117MB
17-Nov-22	10:07:21	Peak added	Sample:5-221109A26, Compound:DiCB-F2, RT:14.112	AK221117MB
17-Nov-22	10:08:08	Pre modification peak	Sample:5-221109A27, Compound:DiCB-F2, RT:14.112	
17-Nov-22	10:08:08	Peak modified	Sample:5-221109A27, Compound:DiCB-F2, RT:14.112	AK221117MB
17-Nov-22	10:08:08	Pre modification peak	Sample:5-221109A27, Compound:DiCB-F2, RT:13.928	
17-Nov-22	10:08:08	Peak modified	Sample:5-221109A27, Compound:DiCB-F2, RT:13.928	AK221117MB
17-Nov-22	10:08:08	Pre modification peak	Sample:5-221109A27, Compound:DiCB-F2, RT:14.112	
17-Nov-22	10:08:08	Peak modified	Sample:5-221109A27, Compound:DiCB-F2, RT:14.112	AK221117MB
17-Nov-22	10:08:08	Pre modification peak	Sample:5-221109A27, Compound:DiCB-F2, RT:13.928	
17-Nov-22	10:08:08	Peak modified	Sample:5-221109A27, Compound:DiCB-F2, RT:13.928	AK221117MB
17-Nov-22	10:08:58	Pre modification peak	Sample:5-221109A29, Compound:DiCB-F2, RT:13.928	
17-Nov-22	10:08:58	Peak modified	Sample:5-221109A29, Compound:DiCB-F2, RT:13.928	AK221117MB
17-Nov-22	10:08:58	Peak added	Sample:5-221109A29, Compound:DiCB-F2, RT:14.094	AK221117MB
17-Nov-22	10:08:58	Pre modification peak	Sample:5-221109A29, Compound:DiCB-F2, RT:13.034	
17-Nov-22	10:08:58	Peak modified	Sample:5-221109A29, Compound:DiCB-F2, RT:13.034	AK221117MB
17-Nov-22	10:08:58	Pre modification peak	Sample:5-221109A29, Compound:DiCB-F2, RT:14.094	
17-Nov-22	10:08:58	Peak modified	Sample:5-221109A29, Compound:DiCB-F2, RT:14.094	AK221117MB
17-Nov-22	10:09:30	Pre modification peak	Sample:5-221109A30, Compound:DiCB-F2, RT:14.131	
17-Nov-22	10:09:30	Peak modified	Sample:5-221109A30, Compound:DiCB-F2, RT:14.131	AK221117MB
17-Nov-22	10:09:30	Pre modification peak	Sample:5-221109A30, Compound:DiCB-F2, RT:13.928	
17-Nov-22	10:09:30	Peak modified	Sample:5-221109A30, Compound:DiCB-F2, RT:13.928	AK221117MB
17-Nov-22	10:09:30	Pre modification peak	Sample:5-221109A30, Compound:DiCB-F2, RT:13.928	
17-Nov-22	10:09:30	Peak modified	Sample:5-221109A30, Compound:DiCB-F2, RT:13.928	AK221117MB
17-Nov-22	10:09:30	Peak added	Sample:5-221109A30, Compound:DiCB-F2, RT:14.131	AK221117MB
17-Nov-22	10:09:51	Pre modification peak	Sample:5-221109A31, Compound:DiCB-F2, RT:14.131	
17-Nov-22	10:09:51	Peak modified	Sample:5-221109A31, Compound:DiCB-F2, RT:14.131	AK221117MB
17-Nov-22	10:09:51	Pre modification peak	Sample:5-221109A31, Compound:DiCB-F2, RT:13.034	
17-Nov-22	10:09:51	Peak modified	Sample:5-221109A31, Compound:DiCB-F2, RT:13.034	AK221117MB
17-Nov-22	10:10:47	Pre modification peak	Sample:5-221109A17, Compound:TrCB-F2, RT:13.707	
17-Nov-22	10:10:47	Peak modified	Sample:5-221109A17, Compound:TrCB-F2, RT:13.707	AK221117MJ
17-Nov-22	10:10:47	Pre modification peak	Sample:5-221109A17, Compound:TrCB-F2, RT:13.624	
17-Nov-22	10:10:47	Peak modified	Sample:5-221109A17, Compound:TrCB-F2, RT:13.624	AK221117MJ
17-Nov-22	10:10:47	Pre modification peak	Sample:5-221109A17, Compound:TrCB-F2, RT:13.707	
17-Nov-22	10:10:47	Peak modified	Sample:5-221109A17, Compound:TrCB-F2, RT:13.707	AK221117MJ
17-Nov-22	10:10:47	Pre modification peak	Sample:5-221109A17, Compound:TrCB-F2, RT:13.034	
17-Nov-22	10:10:47	Peak modified	Sample:5-221109A17, Compound:TrCB-F2, RT:13.034	AK221117MJ
17-Nov-22	10:11:01	Peak added	Sample:5-221109A23, Compound:TrCB-F2, RT:13.983	AK221117MA
17-Nov-22	10:11:01	Peak added	Sample:5-221109A23, Compound:TrCB-F2, RT:14.288	AK221117MA
17-Nov-22	10:11:12	Peak deleted	Sample:5-221109A23, Compound:TrCB-F2, RT:14.011	
17-Nov-22	10:11:12	Peak deleted	Sample:5-221109A23, Compound:TrCB-F2, RT:13.983	
17-Nov-22	10:13:44	Pre modification peak	Sample:5-221109A28, Compound:TrCB-F3, RT:17.201	
17-Nov-22	10:13:44	Peak modified	Sample:5-221109A28, Compound:TrCB-F3, RT:17.201	AK221117MB
17-Nov-22	10:13:56	Pre modification peak	Sample:5-221109A29, Compound:TrCB-F3, RT:17.201	
17-Nov-22	10:13:56	Peak modified	Sample:5-221109A29, Compound:TrCB-F3, RT:17.201	AK221117MB
17-Nov-22	10:14:34	Peak added	Sample:5-221109A28, Compound:TeCB-F2, RT:14.527	AK221117MA

Quantify Audit Report MassLynx V4.2 SCN1012

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221109A2-1117AK.qld

Last Altered: Thursday, November 17, 2022 12:03:54 Eastern Standard Time
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Date	Time	Event	Details	Comments
17-Nov-22	10:15:14	Pre modification peak	Sample:5-221109A17, Compound:TeCB-F3, RT:17.240	
17-Nov-22	10:15:14	Peak modified	Sample:5-221109A17, Compound:TeCB-F3, RT:17.240	AK221117MJ
17-Nov-22	10:15:14	Pre modification peak	Sample:5-221109A17, Compound:TeCB-F3, RT:15.038	
17-Nov-22	10:15:14	Peak modified	Sample:5-221109A17, Compound:TeCB-F3, RT:15.038	AK221117MJ
17-Nov-22	10:15:14	Pre modification peak	Sample:5-221109A17, Compound:TeCB-F3, RT:17.240	
17-Nov-22	10:15:14	Peak modified	Sample:5-221109A17, Compound:TeCB-F3, RT:17.240	AK221117MJ
17-Nov-22	10:15:14	Pre modification peak	Sample:5-221109A17, Compound:TeCB-F3, RT:15.038	
17-Nov-22	10:15:14	Peak modified	Sample:5-221109A17, Compound:TeCB-F3, RT:15.038	AK221117MJ
17-Nov-22	10:16:13	Peak added	Sample:5-221109A23, Compound:TeCB-F3, RT:17.876	AK221117MA
17-Nov-22	10:17:52	Method modified		
17-Nov-22	10:18:01	Process Calibrate		
17-Nov-22	10:18:01	Process Quantify		
17-Nov-22	10:21:57	Pre modification peak	Sample:5-221109A28, Compound:TeCB-F4, RT:22.132	
17-Nov-22	10:21:57	Peak modified	Sample:5-221109A28, Compound:TeCB-F4, RT:22.132	AK221117MB
17-Nov-22	10:22:26	Pre modification peak	Sample:5-221109A29, Compound:TeCB-F4, RT:22.123	
17-Nov-22	10:22:26	Peak modified	Sample:5-221109A29, Compound:TeCB-F4, RT:22.123	AK221117MB
17-Nov-22	10:22:58	Pre modification peak	Sample:5-221109A29, Compound:TeCB-F4, RT:21.253	
17-Nov-22	10:22:58	Peak modified	Sample:5-221109A29, Compound:TeCB-F4, RT:21.253	AK221117MB
17-Nov-22	10:22:58	Pre modification peak	Sample:5-221109A29, Compound:TeCB-F4, RT:21.355	
17-Nov-22	10:22:58	Peak modified	Sample:5-221109A29, Compound:TeCB-F4, RT:21.355	AK221117MB
17-Nov-22	10:23:22	Pre modification peak	Sample:5-221109A29, Compound:TeCB-F4, RT:20.282	
17-Nov-22	10:23:22	Peak modified	Sample:5-221109A29, Compound:TeCB-F4, RT:20.282	AK221117MB
17-Nov-22	10:23:22	Pre modification peak	Sample:5-221109A29, Compound:TeCB-F4, RT:20.282	
17-Nov-22	10:23:22	Peak modified	Sample:5-221109A29, Compound:TeCB-F4, RT:20.282	AK221117MB
17-Nov-22	10:25:59	Pre modification peak	Sample:5-221109A28, Compound:TeCB-F4, RT:19.783	
17-Nov-22	10:25:59	Peak modified	Sample:5-221109A28, Compound:TeCB-F4, RT:19.783	AK221117MB
17-Nov-22	10:25:59	Pre modification peak	Sample:5-221109A28, Compound:TeCB-F4, RT:19.783	
17-Nov-22	10:25:59	Peak modified	Sample:5-221109A28, Compound:TeCB-F4, RT:19.783	AK221117MB
17-Nov-22	10:27:17	Pre modification peak	Sample:5-221109A17, Compound:PeCB-F4, RT:18.534	
17-Nov-22	10:27:17	Peak modified	Sample:5-221109A17, Compound:PeCB-F4, RT:18.534	AK221117MJ
17-Nov-22	10:27:17	Pre modification peak	Sample:5-221109A17, Compound:PeCB-F4, RT:18.534	
17-Nov-22	10:27:17	Peak modified	Sample:5-221109A17, Compound:PeCB-F4, RT:18.534	AK221117MJ
17-Nov-22	10:27:17	Pre modification peak	Sample:5-221109A17, Compound:PeCB-F4, RT:19.209	
17-Nov-22	10:27:17	Peak modified	Sample:5-221109A17, Compound:PeCB-F4, RT:19.209	AK221117MJ
17-Nov-22	10:27:17	Pre modification peak	Sample:5-221109A17, Compound:PeCB-F4, RT:18.534	
17-Nov-22	10:27:17	Peak modified	Sample:5-221109A17, Compound:PeCB-F4, RT:18.534	AK221117MJ
17-Nov-22	10:27:17	Pre modification peak	Sample:5-221109A17, Compound:PeCB-F4, RT:18.534	
17-Nov-22	10:27:17	Peak modified	Sample:5-221109A17, Compound:PeCB-F4, RT:18.534	AK221117MJ
17-Nov-22	10:27:17	Pre modification peak	Sample:5-221109A17, Compound:PeCB-F4, RT:19.209	
17-Nov-22	10:27:17	Peak modified	Sample:5-221109A17, Compound:PeCB-F4, RT:19.209	AK221117MJ
17-Nov-22	10:27:38	Pre modification peak	Sample:5-221109A17, Compound:PeCB-F4, RT:18.534	
17-Nov-22	10:27:38	Peak modified	Sample:5-221109A17, Compound:PeCB-F4, RT:18.534	AK221117MJ
17-Nov-22	10:27:38	Pre modification peak	Sample:5-221109A17, Compound:PeCB-F4, RT:21.235	
17-Nov-22	10:27:38	Peak modified	Sample:5-221109A17, Compound:PeCB-F4, RT:21.235	AK221117MJ
17-Nov-22	10:27:38	Pre modification peak	Sample:5-221109A17, Compound:PeCB-F4, RT:18.534	
17-Nov-22	10:27:38	Peak modified	Sample:5-221109A17, Compound:PeCB-F4, RT:18.534	AK221117MJ
17-Nov-22	10:27:38	Pre modification peak	Sample:5-221109A17, Compound:PeCB-F4, RT:21.235	
17-Nov-22	10:27:38	Peak modified	Sample:5-221109A17, Compound:PeCB-F4, RT:21.235	AK221117MJ
17-Nov-22	10:28:37	Pre modification peak	Sample:5-221109A17, Compound:PeCB-F4, RT:21.512	
17-Nov-22	10:28:37	Peak modified	Sample:5-221109A17, Compound:PeCB-F4, RT:21.512	AK221117MJ
17-Nov-22	10:28:37	Pre modification peak	Sample:5-221109A17, Compound:PeCB-F4, RT:21.512	
17-Nov-22	10:28:37	Peak modified	Sample:5-221109A17, Compound:PeCB-F4, RT:21.512	AK221117MJ
17-Nov-22	10:28:37	Pre modification peak	Sample:5-221109A17, Compound:PeCB-F4, RT:21.660	

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Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221109A2-1117AK.qld

Last Altered: Thursday, November 17, 2022 12:03:54 Eastern Standard Time
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Date	Time	Event	Details	Comments
17-Nov-22	10:28:37	Peak modified	Sample:5-221109A17, Compound:PeCB-F4, RT:21.660	AK221117MJ
17-Nov-22	10:28:37	Pre modification peak	Sample:5-221109A17, Compound:PeCB-F4, RT:18.534	
17-Nov-22	10:28:37	Peak modified	Sample:5-221109A17, Compound:PeCB-F4, RT:18.534	AK221117MJ
17-Nov-22	10:28:37	Pre modification peak	Sample:5-221109A17, Compound:PeCB-F4, RT:18.534	
17-Nov-22	10:28:37	Peak modified	Sample:5-221109A17, Compound:PeCB-F4, RT:18.534	AK221117MJ
17-Nov-22	10:28:37	Pre modification peak	Sample:5-221109A17, Compound:PeCB-F4, RT:21.660	
17-Nov-22	10:28:37	Peak modified	Sample:5-221109A17, Compound:PeCB-F4, RT:21.660	AK221117MJ
17-Nov-22	10:29:24	Pre modification peak	Sample:5-221109A23, Compound:PeCB-F4, RT:18.534	
17-Nov-22	10:29:24	Peak modified	Sample:5-221109A23, Compound:PeCB-F4, RT:18.534	AK221117MJ
17-Nov-22	10:29:24	Pre modification peak	Sample:5-221109A23, Compound:PeCB-F4, RT:21.725	
17-Nov-22	10:29:24	Peak modified	Sample:5-221109A23, Compound:PeCB-F4, RT:21.725	AK221117MJ
17-Nov-22	10:29:24	Pre modification peak	Sample:5-221109A23, Compound:PeCB-F4, RT:18.534	
17-Nov-22	10:29:24	Peak modified	Sample:5-221109A23, Compound:PeCB-F4, RT:18.534	AK221117MJ
17-Nov-22	10:29:24	Pre modification peak	Sample:5-221109A23, Compound:PeCB-F4, RT:21.734	
17-Nov-22	10:29:24	Peak modified	Sample:5-221109A23, Compound:PeCB-F4, RT:21.734	AK221117MJ
17-Nov-22	10:31:43	Pre modification peak	Sample:5-221109A23, Compound:PeCB-F4, RT:20.467	
17-Nov-22	10:31:43	Peak modified	Sample:5-221109A23, Compound:PeCB-F4, RT:20.467	AK221117MJ
17-Nov-22	10:31:43	Pre modification peak	Sample:5-221109A23, Compound:PeCB-F4, RT:20.652	
17-Nov-22	10:31:43	Peak modified	Sample:5-221109A23, Compound:PeCB-F4, RT:20.652	AK221117MJ
17-Nov-22	10:31:43	Pre modification peak	Sample:5-221109A23, Compound:PeCB-F4, RT:18.534	
17-Nov-22	10:31:43	Peak modified	Sample:5-221109A23, Compound:PeCB-F4, RT:18.534	AK221117MJ
17-Nov-22	10:31:43	Pre modification peak	Sample:5-221109A23, Compound:PeCB-F4, RT:20.652	
17-Nov-22	10:31:43	Peak modified	Sample:5-221109A23, Compound:PeCB-F4, RT:20.652	AK221117MJ
17-Nov-22	10:33:01	Dataset Saved	Saved to 'I:\Organics Instrument\HIGHRES GCMS Complete...	
17-Nov-22	10:43:14	Pre modification peak	Sample:5-221109A23, Compound:PeCB-F4, RT:18.534	
17-Nov-22	10:43:14	Peak modified	Sample:5-221109A23, Compound:PeCB-F4, RT:18.534	AK221117MJ
17-Nov-22	10:43:14	Pre modification peak	Sample:5-221109A23, Compound:PeCB-F4, RT:21.318	
17-Nov-22	10:43:14	Peak modified	Sample:5-221109A23, Compound:PeCB-F4, RT:21.318	AK221117MJ
17-Nov-22	10:43:14	Pre modification peak	Sample:5-221109A23, Compound:PeCB-F4, RT:18.534	
17-Nov-22	10:43:14	Peak modified	Sample:5-221109A23, Compound:PeCB-F4, RT:18.534	AK221117MJ
17-Nov-22	10:43:14	Pre modification peak	Sample:5-221109A23, Compound:PeCB-F4, RT:21.327	
17-Nov-22	10:43:14	Peak modified	Sample:5-221109A23, Compound:PeCB-F4, RT:21.327	AK221117MJ
17-Nov-22	10:44:05	Pre modification peak	Sample:5-221109A24, Compound:PeCB-F4, RT:19.311	
17-Nov-22	10:44:05	Peak modified	Sample:5-221109A24, Compound:PeCB-F4, RT:19.311	AK221117MB
17-Nov-22	10:44:05	Pre modification peak	Sample:5-221109A24, Compound:PeCB-F4, RT:18.534	
17-Nov-22	10:44:05	Peak modified	Sample:5-221109A24, Compound:PeCB-F4, RT:18.534	AK221117MB
17-Nov-22	10:44:29	Pre modification peak	Sample:5-221109A24, Compound:PeCB-F4, RT:18.534	
17-Nov-22	10:44:29	Peak modified	Sample:5-221109A24, Compound:PeCB-F4, RT:18.534	AK221117MJ
17-Nov-22	10:44:29	Pre modification peak	Sample:5-221109A24, Compound:PeCB-F4, RT:21.318	
17-Nov-22	10:44:29	Peak modified	Sample:5-221109A24, Compound:PeCB-F4, RT:21.318	AK221117MJ
17-Nov-22	10:44:29	Pre modification peak	Sample:5-221109A24, Compound:PeCB-F4, RT:18.534	
17-Nov-22	10:44:29	Peak modified	Sample:5-221109A24, Compound:PeCB-F4, RT:18.534	AK221117MJ
17-Nov-22	10:44:29	Pre modification peak	Sample:5-221109A24, Compound:PeCB-F4, RT:21.318	
17-Nov-22	10:44:29	Peak modified	Sample:5-221109A24, Compound:PeCB-F4, RT:21.318	AK221117MJ
17-Nov-22	10:45:03	Pre modification peak	Sample:5-221109A24, Compound:PeCB-F4, RT:21.512	
17-Nov-22	10:45:03	Peak modified	Sample:5-221109A24, Compound:PeCB-F4, RT:21.512	AK221117MJ
17-Nov-22	10:45:03	Pre modification peak	Sample:5-221109A24, Compound:PeCB-F4, RT:21.512	
17-Nov-22	10:45:03	Peak modified	Sample:5-221109A24, Compound:PeCB-F4, RT:21.512	AK221117MJ
17-Nov-22	10:45:03	Pre modification peak	Sample:5-221109A24, Compound:PeCB-F4, RT:21.725	
17-Nov-22	10:45:03	Peak modified	Sample:5-221109A24, Compound:PeCB-F4, RT:21.725	AK221117MJ
17-Nov-22	10:45:03	Pre modification peak	Sample:5-221109A24, Compound:PeCB-F4, RT:21.512	
17-Nov-22	10:45:03	Peak modified	Sample:5-221109A24, Compound:PeCB-F4, RT:21.512	AK221117MJ
17-Nov-22	10:45:03	Pre modification peak	Sample:5-221109A24, Compound:PeCB-F4, RT:21.512	

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Date	Time	Event	Details	Comments
17-Nov-22	10:45:03	Peak modified	Sample:5-221109A24, Compound:PeCB-F4, RT:21.512	AK221117MJ
17-Nov-22	10:45:03	Pre modification peak	Sample:5-221109A24, Compound:PeCB-F4, RT:21.734	
17-Nov-22	10:45:03	Peak modified	Sample:5-221109A24, Compound:PeCB-F4, RT:21.734	AK221117MJ
17-Nov-22	10:57:21	Pre modification peak	Sample:5-221109A25, Compound:PeCB-F4, RT:19.302	
17-Nov-22	10:57:21	Peak modified	Sample:5-221109A25, Compound:PeCB-F4, RT:19.302	AK221117MB
17-Nov-22	10:57:21	Pre modification peak	Sample:5-221109A25, Compound:PeCB-F4, RT:18.534	
17-Nov-22	10:57:21	Peak modified	Sample:5-221109A25, Compound:PeCB-F4, RT:18.534	AK221117MB
17-Nov-22	10:57:50	Pre modification peak	Sample:5-221109A26, Compound:PeCB-F4, RT:18.534	
17-Nov-22	10:57:50	Peak modified	Sample:5-221109A26, Compound:PeCB-F4, RT:18.534	AK221117MJ
17-Nov-22	10:57:50	Pre modification peak	Sample:5-221109A26, Compound:PeCB-F4, RT:21.309	
17-Nov-22	10:57:50	Peak modified	Sample:5-221109A26, Compound:PeCB-F4, RT:21.309	AK221117MJ
17-Nov-22	10:57:50	Pre modification peak	Sample:5-221109A26, Compound:PeCB-F4, RT:18.534	
17-Nov-22	10:57:50	Peak modified	Sample:5-221109A26, Compound:PeCB-F4, RT:18.534	AK221117MJ
17-Nov-22	10:57:50	Pre modification peak	Sample:5-221109A26, Compound:PeCB-F4, RT:21.309	
17-Nov-22	10:57:50	Peak modified	Sample:5-221109A26, Compound:PeCB-F4, RT:21.309	AK221117MJ
17-Nov-22	10:58:16	Pre modification peak	Sample:5-221109A26, Compound:PeCB-F4, RT:21.503	
17-Nov-22	10:58:16	Peak modified	Sample:5-221109A26, Compound:PeCB-F4, RT:21.503	AK221117MJ
17-Nov-22	10:58:16	Pre modification peak	Sample:5-221109A26, Compound:PeCB-F4, RT:21.503	
17-Nov-22	10:58:16	Peak modified	Sample:5-221109A26, Compound:PeCB-F4, RT:21.503	AK221117MJ
17-Nov-22	10:58:16	Pre modification peak	Sample:5-221109A26, Compound:PeCB-F4, RT:21.725	
17-Nov-22	10:58:16	Peak modified	Sample:5-221109A26, Compound:PeCB-F4, RT:21.725	AK221117MJ
17-Nov-22	10:58:16	Pre modification peak	Sample:5-221109A26, Compound:PeCB-F4, RT:21.503	
17-Nov-22	10:58:16	Peak modified	Sample:5-221109A26, Compound:PeCB-F4, RT:21.503	AK221117MJ
17-Nov-22	10:58:16	Pre modification peak	Sample:5-221109A26, Compound:PeCB-F4, RT:21.503	
17-Nov-22	10:58:16	Peak modified	Sample:5-221109A26, Compound:PeCB-F4, RT:21.503	AK221117MJ
17-Nov-22	10:58:16	Pre modification peak	Sample:5-221109A26, Compound:PeCB-F4, RT:21.725	
17-Nov-22	10:58:16	Peak modified	Sample:5-221109A26, Compound:PeCB-F4, RT:21.725	AK221117MJ
17-Nov-22	10:58:51	Pre modification peak	Sample:5-221109A27, Compound:PeCB-F4, RT:19.311	
17-Nov-22	10:58:51	Peak modified	Sample:5-221109A27, Compound:PeCB-F4, RT:19.311	AK221117MB
17-Nov-22	10:58:51	Pre modification peak	Sample:5-221109A27, Compound:PeCB-F4, RT:18.534	
17-Nov-22	10:58:51	Peak modified	Sample:5-221109A27, Compound:PeCB-F4, RT:18.534	AK221117MB
17-Nov-22	10:58:51	Pre modification peak	Sample:5-221109A27, Compound:PeCB-F4, RT:19.311	
17-Nov-22	10:58:51	Peak modified	Sample:5-221109A27, Compound:PeCB-F4, RT:19.311	AK221117MB
17-Nov-22	10:58:51	Pre modification peak	Sample:5-221109A27, Compound:PeCB-F4, RT:19.505	
17-Nov-22	10:58:51	Peak modified	Sample:5-221109A27, Compound:PeCB-F4, RT:19.505	AK221117MB
17-Nov-22	10:59:12	Pre modification peak	Sample:5-221109A27, Compound:PeCB-F4, RT:18.534	
17-Nov-22	10:59:12	Peak modified	Sample:5-221109A27, Compound:PeCB-F4, RT:18.534	AK221117MJ
17-Nov-22	10:59:12	Pre modification peak	Sample:5-221109A27, Compound:PeCB-F4, RT:21.318	
17-Nov-22	10:59:12	Peak modified	Sample:5-221109A27, Compound:PeCB-F4, RT:21.318	AK221117MJ
17-Nov-22	10:59:12	Pre modification peak	Sample:5-221109A27, Compound:PeCB-F4, RT:18.534	
17-Nov-22	10:59:12	Peak modified	Sample:5-221109A27, Compound:PeCB-F4, RT:18.534	AK221117MJ
17-Nov-22	10:59:12	Pre modification peak	Sample:5-221109A27, Compound:PeCB-F4, RT:21.318	
17-Nov-22	10:59:12	Peak modified	Sample:5-221109A27, Compound:PeCB-F4, RT:21.318	AK221117MJ
17-Nov-22	10:59:50	Pre modification peak	Sample:5-221109A27, Compound:PeCB-F4, RT:18.534	
17-Nov-22	10:59:50	Peak modified	Sample:5-221109A27, Compound:PeCB-F4, RT:18.534	AK221117MJ
17-Nov-22	10:59:50	Pre modification peak	Sample:5-221109A27, Compound:PeCB-F4, RT:18.534	
17-Nov-22	10:59:50	Peak modified	Sample:5-221109A27, Compound:PeCB-F4, RT:18.534	AK221117MJ
17-Nov-22	10:59:50	Pre modification peak	Sample:5-221109A27, Compound:PeCB-F4, RT:21.734	
17-Nov-22	10:59:50	Peak modified	Sample:5-221109A27, Compound:PeCB-F4, RT:21.734	AK221117MJ
17-Nov-22	10:59:50	Pre modification peak	Sample:5-221109A27, Compound:PeCB-F4, RT:21.512	
17-Nov-22	10:59:50	Peak modified	Sample:5-221109A27, Compound:PeCB-F4, RT:21.512	AK221117MJ
17-Nov-22	10:59:50	Pre modification peak	Sample:5-221109A27, Compound:PeCB-F4, RT:21.512	
17-Nov-22	10:59:50	Peak modified	Sample:5-221109A27, Compound:PeCB-F4, RT:21.512	AK221117MJ

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17-Nov-22	10:59:50	Pre modification peak	Sample:5-221109A27, Compound:PeCB-F4, RT:21.734	
17-Nov-22	10:59:50	Peak modified	Sample:5-221109A27, Compound:PeCB-F4, RT:21.734	AK221117MJ
17-Nov-22	11:00:15	Pre modification peak	Sample:5-221109A28, Compound:PeCB-F4, RT:18.534	
17-Nov-22	11:00:15	Peak modified	Sample:5-221109A28, Compound:PeCB-F4, RT:18.534	AK221117MJ
17-Nov-22	11:00:15	Pre modification peak	Sample:5-221109A28, Compound:PeCB-F4, RT:21.327	
17-Nov-22	11:00:15	Peak modified	Sample:5-221109A28, Compound:PeCB-F4, RT:21.327	AK221117MJ
17-Nov-22	11:00:15	Pre modification peak	Sample:5-221109A28, Compound:PeCB-F4, RT:18.534	
17-Nov-22	11:00:15	Peak modified	Sample:5-221109A28, Compound:PeCB-F4, RT:18.534	AK221117MJ
17-Nov-22	11:00:15	Pre modification peak	Sample:5-221109A28, Compound:PeCB-F4, RT:21.327	
17-Nov-22	11:00:15	Peak modified	Sample:5-221109A28, Compound:PeCB-F4, RT:21.327	AK221117MJ
17-Nov-22	11:00:56	Pre modification peak	Sample:5-221109A28, Compound:PeCB-F4, RT:18.534	
17-Nov-22	11:00:56	Peak modified	Sample:5-221109A28, Compound:PeCB-F4, RT:18.534	AK221117MJ
17-Nov-22	11:00:56	Pre modification peak	Sample:5-221109A28, Compound:PeCB-F4, RT:18.534	
17-Nov-22	11:00:56	Peak modified	Sample:5-221109A28, Compound:PeCB-F4, RT:18.534	AK221117MJ
17-Nov-22	11:00:56	Pre modification peak	Sample:5-221109A28, Compound:PeCB-F4, RT:21.743	
17-Nov-22	11:00:56	Peak modified	Sample:5-221109A28, Compound:PeCB-F4, RT:21.743	AK221117MJ
17-Nov-22	11:00:56	Pre modification peak	Sample:5-221109A28, Compound:PeCB-F4, RT:21.521	
17-Nov-22	11:00:56	Peak modified	Sample:5-221109A28, Compound:PeCB-F4, RT:21.521	AK221117MJ
17-Nov-22	11:00:56	Pre modification peak	Sample:5-221109A28, Compound:PeCB-F4, RT:21.521	
17-Nov-22	11:00:56	Peak modified	Sample:5-221109A28, Compound:PeCB-F4, RT:21.521	AK221117MJ
17-Nov-22	11:00:56	Pre modification peak	Sample:5-221109A28, Compound:PeCB-F4, RT:21.743	
17-Nov-22	11:00:56	Peak modified	Sample:5-221109A28, Compound:PeCB-F4, RT:21.743	AK221117MJ
17-Nov-22	11:01:36	Pre modification peak	Sample:5-221109A29, Compound:PeCB-F4, RT:19.283	
17-Nov-22	11:01:36	Peak modified	Sample:5-221109A29, Compound:PeCB-F4, RT:19.283	AK221117MJ
17-Nov-22	11:01:36	Pre modification peak	Sample:5-221109A29, Compound:PeCB-F4, RT:18.534	
17-Nov-22	11:01:36	Peak modified	Sample:5-221109A29, Compound:PeCB-F4, RT:18.534	AK221117MJ
17-Nov-22	11:01:36	Pre modification peak	Sample:5-221109A29, Compound:PeCB-F4, RT:18.534	
17-Nov-22	11:01:36	Peak modified	Sample:5-221109A29, Compound:PeCB-F4, RT:18.534	AK221117MJ
17-Nov-22	11:01:36	Pre modification peak	Sample:5-221109A29, Compound:PeCB-F4, RT:19.274	
17-Nov-22	11:01:36	Peak modified	Sample:5-221109A29, Compound:PeCB-F4, RT:19.274	AK221117MJ
17-Nov-22	11:02:06	Pre modification peak	Sample:5-221109A29, Compound:PeCB-F4, RT:21.133	
17-Nov-22	11:02:06	Peak modified	Sample:5-221109A29, Compound:PeCB-F4, RT:21.133	AK221117MJ
17-Nov-22	11:02:06	Pre modification peak	Sample:5-221109A29, Compound:PeCB-F4, RT:21.318	
17-Nov-22	11:02:06	Peak modified	Sample:5-221109A29, Compound:PeCB-F4, RT:21.318	AK221117MJ
17-Nov-22	11:02:06	Pre modification peak	Sample:5-221109A29, Compound:PeCB-F4, RT:21.142	
17-Nov-22	11:02:06	Peak modified	Sample:5-221109A29, Compound:PeCB-F4, RT:21.142	AK221117MJ
17-Nov-22	11:02:06	Pre modification peak	Sample:5-221109A29, Compound:PeCB-F4, RT:21.318	
17-Nov-22	11:02:06	Peak modified	Sample:5-221109A29, Compound:PeCB-F4, RT:21.318	AK221117MJ
17-Nov-22	11:02:43	Pre modification peak	Sample:5-221109A29, Compound:PeCB-F4, RT:21.512	
17-Nov-22	11:02:43	Peak modified	Sample:5-221109A29, Compound:PeCB-F4, RT:21.512	AK221117MJ
17-Nov-22	11:02:43	Pre modification peak	Sample:5-221109A29, Compound:PeCB-F4, RT:21.512	
17-Nov-22	11:02:43	Peak modified	Sample:5-221109A29, Compound:PeCB-F4, RT:21.512	AK221117MJ
17-Nov-22	11:02:43	Pre modification peak	Sample:5-221109A29, Compound:PeCB-F4, RT:21.734	
17-Nov-22	11:02:43	Peak modified	Sample:5-221109A29, Compound:PeCB-F4, RT:21.734	AK221117MJ
17-Nov-22	11:02:43	Pre modification peak	Sample:5-221109A29, Compound:PeCB-F4, RT:21.512	
17-Nov-22	11:02:43	Peak modified	Sample:5-221109A29, Compound:PeCB-F4, RT:21.512	AK221117MJ
17-Nov-22	11:02:43	Pre modification peak	Sample:5-221109A29, Compound:PeCB-F4, RT:21.512	
17-Nov-22	11:02:43	Peak modified	Sample:5-221109A29, Compound:PeCB-F4, RT:21.512	AK221117MJ
17-Nov-22	11:02:43	Pre modification peak	Sample:5-221109A29, Compound:PeCB-F4, RT:21.734	
17-Nov-22	11:02:43	Peak modified	Sample:5-221109A29, Compound:PeCB-F4, RT:21.734	AK221117MJ
17-Nov-22	11:03:14	Pre modification peak	Sample:5-221109A30, Compound:PeCB-F4, RT:18.534	
17-Nov-22	11:03:14	Peak modified	Sample:5-221109A30, Compound:PeCB-F4, RT:18.534	AK221117MJ
17-Nov-22	11:03:14	Pre modification peak	Sample:5-221109A30, Compound:PeCB-F4, RT:21.318	

Date	Time	Event	Details	Comments
17-Nov-22	11:03:14	Peak modified	Sample:5-221109A30, Compound:PeCB-F4, RT:21.318	AK221117MJ
17-Nov-22	11:03:14	Pre modification peak	Sample:5-221109A30, Compound:PeCB-F4, RT:21.142	
17-Nov-22	11:03:14	Peak modified	Sample:5-221109A30, Compound:PeCB-F4, RT:21.142	AK221117MJ
17-Nov-22	11:03:14	Pre modification peak	Sample:5-221109A30, Compound:PeCB-F4, RT:21.318	
17-Nov-22	11:03:14	Peak modified	Sample:5-221109A30, Compound:PeCB-F4, RT:21.318	AK221117MJ
17-Nov-22	11:03:46	Pre modification peak	Sample:5-221109A30, Compound:PeCB-F4, RT:18.534	
17-Nov-22	11:03:46	Peak modified	Sample:5-221109A30, Compound:PeCB-F4, RT:18.534	AK221117MJ
17-Nov-22	11:03:46	Pre modification peak	Sample:5-221109A30, Compound:PeCB-F4, RT:18.534	
17-Nov-22	11:03:46	Peak modified	Sample:5-221109A30, Compound:PeCB-F4, RT:18.534	AK221117MJ
17-Nov-22	11:03:46	Pre modification peak	Sample:5-221109A30, Compound:PeCB-F4, RT:21.734	
17-Nov-22	11:03:46	Peak modified	Sample:5-221109A30, Compound:PeCB-F4, RT:21.734	AK221117MJ
17-Nov-22	11:03:46	Pre modification peak	Sample:5-221109A30, Compound:PeCB-F4, RT:21.521	
17-Nov-22	11:03:46	Peak modified	Sample:5-221109A30, Compound:PeCB-F4, RT:21.521	AK221117MJ
17-Nov-22	11:03:46	Pre modification peak	Sample:5-221109A30, Compound:PeCB-F4, RT:21.734	
17-Nov-22	11:03:46	Peak modified	Sample:5-221109A30, Compound:PeCB-F4, RT:21.734	AK221117MJ
17-Nov-22	11:04:10	Pre modification peak	Sample:5-221109A31, Compound:PeCB-F4, RT:18.534	
17-Nov-22	11:04:10	Peak modified	Sample:5-221109A31, Compound:PeCB-F4, RT:18.534	AK221117MJ
17-Nov-22	11:04:10	Pre modification peak	Sample:5-221109A31, Compound:PeCB-F4, RT:21.327	
17-Nov-22	11:04:10	Peak modified	Sample:5-221109A31, Compound:PeCB-F4, RT:21.327	AK221117MJ
17-Nov-22	11:04:10	Pre modification peak	Sample:5-221109A31, Compound:PeCB-F4, RT:21.152	
17-Nov-22	11:04:10	Peak modified	Sample:5-221109A31, Compound:PeCB-F4, RT:21.152	AK221117MJ
17-Nov-22	11:04:10	Pre modification peak	Sample:5-221109A31, Compound:PeCB-F4, RT:21.327	
17-Nov-22	11:04:10	Peak modified	Sample:5-221109A31, Compound:PeCB-F4, RT:21.327	AK221117MJ
17-Nov-22	11:04:42	Pre modification peak	Sample:5-221109A31, Compound:PeCB-F4, RT:18.534	
17-Nov-22	11:04:42	Peak modified	Sample:5-221109A31, Compound:PeCB-F4, RT:18.534	AK221117MJ
17-Nov-22	11:04:42	Pre modification peak	Sample:5-221109A31, Compound:PeCB-F4, RT:18.534	
17-Nov-22	11:04:42	Peak modified	Sample:5-221109A31, Compound:PeCB-F4, RT:18.534	AK221117MJ
17-Nov-22	11:04:42	Pre modification peak	Sample:5-221109A31, Compound:PeCB-F4, RT:21.743	
17-Nov-22	11:04:42	Peak modified	Sample:5-221109A31, Compound:PeCB-F4, RT:21.743	AK221117MJ
17-Nov-22	11:04:42	Pre modification peak	Sample:5-221109A31, Compound:PeCB-F4, RT:18.534	
17-Nov-22	11:04:42	Peak modified	Sample:5-221109A31, Compound:PeCB-F4, RT:18.534	AK221117MJ
17-Nov-22	11:04:42	Pre modification peak	Sample:5-221109A31, Compound:PeCB-F4, RT:18.534	
17-Nov-22	11:04:42	Peak modified	Sample:5-221109A31, Compound:PeCB-F4, RT:18.534	AK221117MJ
17-Nov-22	11:04:42	Pre modification peak	Sample:5-221109A31, Compound:PeCB-F4, RT:21.743	
17-Nov-22	11:04:42	Peak modified	Sample:5-221109A31, Compound:PeCB-F4, RT:21.743	AK221117MJ
17-Nov-22	11:05:27	Pre modification peak	Sample:5-221109A31, Compound:PeCB-F4, RT:22.187	
17-Nov-22	11:05:27	Peak modified	Sample:5-221109A31, Compound:PeCB-F4, RT:22.187	AK221117MB
17-Nov-22	11:05:27	Peak added	Sample:5-221109A31, Compound:PeCB-F4, RT:22.354	AK221117MB
17-Nov-22	11:08:47	Pre modification peak	Sample:5-221109A25, Compound:PeCB-F4, RT:18.534	
17-Nov-22	11:08:47	Peak modified	Sample:5-221109A25, Compound:PeCB-F4, RT:18.534	AK221117MJ
17-Nov-22	11:08:47	Pre modification peak	Sample:5-221109A25, Compound:PeCB-F4, RT:21.309	
17-Nov-22	11:08:47	Peak modified	Sample:5-221109A25, Compound:PeCB-F4, RT:21.309	AK221117MJ
17-Nov-22	11:08:47	Pre modification peak	Sample:5-221109A25, Compound:PeCB-F4, RT:18.534	
17-Nov-22	11:08:47	Peak modified	Sample:5-221109A25, Compound:PeCB-F4, RT:18.534	AK221117MJ
17-Nov-22	11:08:47	Pre modification peak	Sample:5-221109A25, Compound:PeCB-F4, RT:21.309	
17-Nov-22	11:08:47	Peak modified	Sample:5-221109A25, Compound:PeCB-F4, RT:21.309	AK221117MJ
17-Nov-22	11:09:23	Pre modification peak	Sample:5-221109A25, Compound:PeCB-F4, RT:21.503	
17-Nov-22	11:09:23	Peak modified	Sample:5-221109A25, Compound:PeCB-F4, RT:21.503	AK221117MJ
17-Nov-22	11:09:23	Pre modification peak	Sample:5-221109A25, Compound:PeCB-F4, RT:21.503	
17-Nov-22	11:09:23	Peak modified	Sample:5-221109A25, Compound:PeCB-F4, RT:21.503	AK221117MJ
17-Nov-22	11:09:23	Pre modification peak	Sample:5-221109A25, Compound:PeCB-F4, RT:21.716	
17-Nov-22	11:09:23	Peak modified	Sample:5-221109A25, Compound:PeCB-F4, RT:21.716	AK221117MJ
17-Nov-22	11:09:23	Pre modification peak	Sample:5-221109A25, Compound:PeCB-F4, RT:21.503	

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Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221109A2-1117AK.qld

Last Altered: Thursday, November 17, 2022 12:03:54 Eastern Standard Time
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Date	Time	Event	Details	Comments
17-Nov-22	11:09:23	Peak modified	Sample:5-221109A25, Compound:PeCB-F4, RT:21.503	AK221117MJ
17-Nov-22	11:09:23	Pre modification peak	Sample:5-221109A25, Compound:PeCB-F4, RT:21.503	
17-Nov-22	11:09:23	Peak modified	Sample:5-221109A25, Compound:PeCB-F4, RT:21.503	AK221117MJ
17-Nov-22	11:09:23	Pre modification peak	Sample:5-221109A25, Compound:PeCB-F4, RT:21.716	
17-Nov-22	11:09:23	Peak modified	Sample:5-221109A25, Compound:PeCB-F4, RT:21.716	AK221117MJ
17-Nov-22	11:10:47	Dataset Saved	Saved to 'I:\Organics Instrument\HIGHRES GCMS Complete...	
17-Nov-22	11:19:31	Pre modification peak	Sample:5-221109A30, Compound:PeCB-F4, RT:22.178	
17-Nov-22	11:19:31	Peak modified	Sample:5-221109A30, Compound:PeCB-F4, RT:22.178	AK221117MS
17-Nov-22	11:19:31	Peak added	Sample:5-221109A30, Compound:PeCB-F4, RT:22.252	AK221117MS
17-Nov-22	11:19:31	Pre modification peak	Sample:5-221109A30, Compound:PeCB-F4, RT:22.178	
17-Nov-22	11:19:31	Peak modified	Sample:5-221109A30, Compound:PeCB-F4, RT:22.178	AK221117MS
17-Nov-22	11:19:31	Peak added	Sample:5-221109A30, Compound:PeCB-F4, RT:22.252	AK221117MS
17-Nov-22	11:20:12	Peak modified	Sample:5-221109A31, Compound:PeCB-F4, RT:22.187	AK221117MS
17-Nov-22	11:20:12	Peak added	Sample:5-221109A31, Compound:PeCB-F4, RT:22.271	AK221117MS
17-Nov-22	11:20:12	Pre modification peak	Sample:5-221109A31, Compound:PeCB-F4, RT:22.187	
17-Nov-22	11:20:12	Peak modified	Sample:5-221109A31, Compound:PeCB-F4, RT:22.187	AK221117MS
17-Nov-22	11:20:12	Peak added	Sample:5-221109A31, Compound:PeCB-F4, RT:22.271	AK221117MS
17-Nov-22	11:20:57	Pre modification peak	Sample:5-221109A24, Compound:PeCB-F4, RT:22.178	
17-Nov-22	11:20:57	Peak modified	Sample:5-221109A24, Compound:PeCB-F4, RT:22.178	AK221117MS
17-Nov-22	11:20:57	Peak added	Sample:5-221109A24, Compound:PeCB-F4, RT:22.252	AK221117MS
17-Nov-22	11:20:57	Pre modification peak	Sample:5-221109A24, Compound:PeCB-F4, RT:22.178	
17-Nov-22	11:20:57	Peak modified	Sample:5-221109A24, Compound:PeCB-F4, RT:22.178	AK221117MS
17-Nov-22	11:20:57	Peak added	Sample:5-221109A24, Compound:PeCB-F4, RT:22.252	AK221117MS
17-Nov-22	11:21:36	Pre modification peak	Sample:5-221109A25, Compound:PeCB-F4, RT:22.169	
17-Nov-22	11:21:36	Peak modified	Sample:5-221109A25, Compound:PeCB-F4, RT:22.169	AK221117MS
17-Nov-22	11:21:36	Peak added	Sample:5-221109A25, Compound:PeCB-F4, RT:22.243	AK221117MS
17-Nov-22	11:21:36	Pre modification peak	Sample:5-221109A25, Compound:PeCB-F4, RT:22.169	
17-Nov-22	11:21:36	Peak modified	Sample:5-221109A25, Compound:PeCB-F4, RT:22.169	AK221117MS
17-Nov-22	11:21:36	Peak added	Sample:5-221109A25, Compound:PeCB-F4, RT:22.243	AK221117MS
17-Nov-22	11:22:20	Pre modification peak	Sample:5-221109A26, Compound:PeCB-F4, RT:22.169	
17-Nov-22	11:22:20	Peak modified	Sample:5-221109A26, Compound:PeCB-F4, RT:22.169	AK221117MS
17-Nov-22	11:22:20	Peak added	Sample:5-221109A26, Compound:PeCB-F4, RT:22.243	AK221117MS
17-Nov-22	11:22:20	Pre modification peak	Sample:5-221109A26, Compound:PeCB-F4, RT:22.169	
17-Nov-22	11:22:20	Peak modified	Sample:5-221109A26, Compound:PeCB-F4, RT:22.169	AK221117MS
17-Nov-22	11:22:20	Peak added	Sample:5-221109A26, Compound:PeCB-F4, RT:22.243	AK221117MS
17-Nov-22	11:22:56	Pre modification peak	Sample:5-221109A27, Compound:PeCB-F4, RT:22.178	
17-Nov-22	11:22:56	Peak modified	Sample:5-221109A27, Compound:PeCB-F4, RT:22.178	AK221117MS
17-Nov-22	11:22:56	Peak added	Sample:5-221109A27, Compound:PeCB-F4, RT:22.252	AK221117MS
17-Nov-22	11:22:56	Pre modification peak	Sample:5-221109A27, Compound:PeCB-F4, RT:22.178	
17-Nov-22	11:22:56	Peak modified	Sample:5-221109A27, Compound:PeCB-F4, RT:22.178	AK221117MS
17-Nov-22	11:22:56	Peak added	Sample:5-221109A27, Compound:PeCB-F4, RT:22.252	AK221117MS
17-Nov-22	11:23:30	Pre modification peak	Sample:5-221109A28, Compound:PeCB-F4, RT:22.187	
17-Nov-22	11:23:30	Peak modified	Sample:5-221109A28, Compound:PeCB-F4, RT:22.187	AK221117MS
17-Nov-22	11:23:30	Peak added	Sample:5-221109A28, Compound:PeCB-F4, RT:22.261	AK221117MS
17-Nov-22	11:23:30	Pre modification peak	Sample:5-221109A28, Compound:PeCB-F4, RT:22.187	
17-Nov-22	11:23:30	Peak modified	Sample:5-221109A28, Compound:PeCB-F4, RT:22.187	AK221117MS
17-Nov-22	11:23:30	Peak added	Sample:5-221109A28, Compound:PeCB-F4, RT:22.261	AK221117MS
17-Nov-22	11:24:50	Pre modification peak	Sample:5-221109A24, Compound:PeCB-F5, RT:23.026	
17-Nov-22	11:24:50	Peak modified	Sample:5-221109A24, Compound:PeCB-F5, RT:23.026	AK221117MS
17-Nov-22	11:24:50	Peak added	Sample:5-221109A24, Compound:PeCB-F5, RT:23.099	AK221117MS
17-Nov-22	11:24:50	Pre modification peak	Sample:5-221109A24, Compound:PeCB-F5, RT:23.026	
17-Nov-22	11:24:50	Peak modified	Sample:5-221109A24, Compound:PeCB-F5, RT:23.026	AK221117MS
17-Nov-22	11:24:50	Peak added	Sample:5-221109A24, Compound:PeCB-F5, RT:23.099	AK221117MS

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Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221109A2-1117AK.qld

Last Altered: Thursday, November 17, 2022 12:03:54 Eastern Standard Time
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Date	Time	Event	Details	Comments
17-Nov-22	11:26:15	Pre modification peak	Sample:5-221109A24, Compound:PeCB-F5, RT:23.921	
17-Nov-22	11:26:15	Peak modified	Sample:5-221109A24, Compound:PeCB-F5, RT:23.921	AK221117MB
17-Nov-22	11:26:15	Pre modification peak	Sample:5-221109A24, Compound:PeCB-F5, RT:23.921	
17-Nov-22	11:26:15	Peak modified	Sample:5-221109A24, Compound:PeCB-F5, RT:23.921	AK221117MB
17-Nov-22	11:27:02	Pre modification peak	Sample:5-221109A24, Compound:PeCB-F5, RT:25.492	
17-Nov-22	11:27:02	Peak modified	Sample:5-221109A24, Compound:PeCB-F5, RT:25.492	AK221117MB
17-Nov-22	11:27:02	Pre modification peak	Sample:5-221109A24, Compound:PeCB-F5, RT:25.492	
17-Nov-22	11:27:02	Peak modified	Sample:5-221109A24, Compound:PeCB-F5, RT:25.492	AK221117MB
17-Nov-22	11:27:25	Pre modification peak	Sample:5-221109A25, Compound:PeCB-F5, RT:23.909	
17-Nov-22	11:27:25	Peak modified	Sample:5-221109A25, Compound:PeCB-F5, RT:23.909	AK221117MB
17-Nov-22	11:27:25	Pre modification peak	Sample:5-221109A25, Compound:PeCB-F5, RT:23.909	
17-Nov-22	11:27:25	Peak modified	Sample:5-221109A25, Compound:PeCB-F5, RT:23.909	AK221117MB
17-Nov-22	11:27:57	Pre modification peak	Sample:5-221109A25, Compound:PeCB-F5, RT:23.014	
17-Nov-22	11:27:57	Peak modified	Sample:5-221109A25, Compound:PeCB-F5, RT:23.014	AK221117MS
17-Nov-22	11:27:57	Peak added	Sample:5-221109A25, Compound:PeCB-F5, RT:23.087	AK221117MS
17-Nov-22	11:27:57	Pre modification peak	Sample:5-221109A25, Compound:PeCB-F5, RT:23.014	
17-Nov-22	11:27:57	Peak modified	Sample:5-221109A25, Compound:PeCB-F5, RT:23.014	AK221117MS
17-Nov-22	11:27:57	Peak added	Sample:5-221109A25, Compound:PeCB-F5, RT:23.087	AK221117MS
17-Nov-22	11:28:19	Pre modification peak	Sample:5-221109A25, Compound:PeCB-F5, RT:25.479	
17-Nov-22	11:28:19	Peak modified	Sample:5-221109A25, Compound:PeCB-F5, RT:25.479	AK221117MB
17-Nov-22	11:28:19	Pre modification peak	Sample:5-221109A25, Compound:PeCB-F5, RT:25.479	
17-Nov-22	11:28:19	Peak modified	Sample:5-221109A25, Compound:PeCB-F5, RT:25.479	AK221117MB
17-Nov-22	11:29:37	Pre modification peak	Sample:5-221109A26, Compound:PeCB-F5, RT:23.014	
17-Nov-22	11:29:37	Peak modified	Sample:5-221109A26, Compound:PeCB-F5, RT:23.014	AK221117MS
17-Nov-22	11:29:37	Peak added	Sample:5-221109A26, Compound:PeCB-F5, RT:23.087	AK221117MS
17-Nov-22	11:29:37	Pre modification peak	Sample:5-221109A26, Compound:PeCB-F5, RT:23.014	
17-Nov-22	11:29:37	Peak modified	Sample:5-221109A26, Compound:PeCB-F5, RT:23.014	AK221117MS
17-Nov-22	11:29:37	Peak added	Sample:5-221109A26, Compound:PeCB-F5, RT:23.087	AK221117MS
17-Nov-22	11:30:18	Pre modification peak	Sample:5-221109A26, Compound:PeCB-F5, RT:25.479	
17-Nov-22	11:30:18	Peak modified	Sample:5-221109A26, Compound:PeCB-F5, RT:25.479	AK221117MB
17-Nov-22	11:30:18	Pre modification peak	Sample:5-221109A26, Compound:PeCB-F5, RT:25.479	
17-Nov-22	11:30:18	Peak modified	Sample:5-221109A26, Compound:PeCB-F5, RT:25.479	AK221117MB
17-Nov-22	11:30:37	Pre modification peak	Sample:5-221109A26, Compound:PeCB-F5, RT:23.909	
17-Nov-22	11:30:37	Peak modified	Sample:5-221109A26, Compound:PeCB-F5, RT:23.909	AK221117MB
17-Nov-22	11:30:37	Pre modification peak	Sample:5-221109A26, Compound:PeCB-F5, RT:23.909	
17-Nov-22	11:30:37	Peak modified	Sample:5-221109A26, Compound:PeCB-F5, RT:23.909	AK221117MB
17-Nov-22	11:31:17	Pre modification peak	Sample:5-221109A27, Compound:PeCB-F5, RT:23.026	
17-Nov-22	11:31:17	Peak modified	Sample:5-221109A27, Compound:PeCB-F5, RT:23.026	AK221117MS
17-Nov-22	11:31:17	Peak added	Sample:5-221109A27, Compound:PeCB-F5, RT:23.099	AK221117MS
17-Nov-22	11:31:17	Pre modification peak	Sample:5-221109A27, Compound:PeCB-F5, RT:23.026	
17-Nov-22	11:31:17	Peak modified	Sample:5-221109A27, Compound:PeCB-F5, RT:23.026	AK221117MS
17-Nov-22	11:31:17	Peak added	Sample:5-221109A27, Compound:PeCB-F5, RT:23.099	AK221117MS
17-Nov-22	11:31:38	Pre modification peak	Sample:5-221109A27, Compound:PeCB-F5, RT:23.921	
17-Nov-22	11:31:38	Peak modified	Sample:5-221109A27, Compound:PeCB-F5, RT:23.921	AK221117MB
17-Nov-22	11:31:38	Pre modification peak	Sample:5-221109A27, Compound:PeCB-F5, RT:23.921	
17-Nov-22	11:31:38	Peak modified	Sample:5-221109A27, Compound:PeCB-F5, RT:23.921	AK221117MB
17-Nov-22	11:31:59	Pre modification peak	Sample:5-221109A27, Compound:PeCB-F5, RT:25.492	
17-Nov-22	11:31:59	Peak modified	Sample:5-221109A27, Compound:PeCB-F5, RT:25.492	AK221117MB
17-Nov-22	11:31:59	Pre modification peak	Sample:5-221109A27, Compound:PeCB-F5, RT:25.492	
17-Nov-22	11:31:59	Peak modified	Sample:5-221109A27, Compound:PeCB-F5, RT:25.492	AK221117MB
17-Nov-22	11:32:52	Pre modification peak	Sample:5-221109A28, Compound:PeCB-F5, RT:23.038	
17-Nov-22	11:32:52	Peak modified	Sample:5-221109A28, Compound:PeCB-F5, RT:23.038	AK221117MS
17-Nov-22	11:32:52	Peak added	Sample:5-221109A28, Compound:PeCB-F5, RT:23.111	AK221117MS

Quantify Audit Report MassLynx V4.2 SCN1012

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221109A2-1117AK.qld

Last Altered: Thursday, November 17, 2022 12:03:54 Eastern Standard Time
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Date	Time	Event	Details	Comments
17-Nov-22	11:32:52	Pre modification peak	Sample:5-221109A28, Compound:PeCB-F5, RT:23.038	
17-Nov-22	11:32:52	Peak modified	Sample:5-221109A28, Compound:PeCB-F5, RT:23.038	AK221117MS
17-Nov-22	11:32:52	Peak added	Sample:5-221109A28, Compound:PeCB-F5, RT:23.111	AK221117MS
17-Nov-22	11:33:07	Pre modification peak	Sample:5-221109A28, Compound:PeCB-F5, RT:23.957	
17-Nov-22	11:33:07	Peak modified	Sample:5-221109A28, Compound:PeCB-F5, RT:23.957	AK221117MB
17-Nov-22	11:33:07	Pre modification peak	Sample:5-221109A28, Compound:PeCB-F5, RT:23.957	
17-Nov-22	11:33:07	Peak modified	Sample:5-221109A28, Compound:PeCB-F5, RT:23.957	AK221117MB
17-Nov-22	11:33:40	Pre modification peak	Sample:5-221109A28, Compound:PeCB-F5, RT:25.540	
17-Nov-22	11:33:40	Peak modified	Sample:5-221109A28, Compound:PeCB-F5, RT:25.540	AK221117MB
17-Nov-22	11:33:40	Pre modification peak	Sample:5-221109A28, Compound:PeCB-F5, RT:25.552	
17-Nov-22	11:33:40	Peak modified	Sample:5-221109A28, Compound:PeCB-F5, RT:25.552	AK221117MB
17-Nov-22	11:42:26	Pre modification peak	Sample:5-221109A29, Compound:PeCB-F5, RT:23.026	
17-Nov-22	11:42:26	Peak modified	Sample:5-221109A29, Compound:PeCB-F5, RT:23.026	AK221117MS
17-Nov-22	11:42:26	Peak added	Sample:5-221109A29, Compound:PeCB-F5, RT:23.099	AK221117MS
17-Nov-22	11:42:26	Pre modification peak	Sample:5-221109A29, Compound:PeCB-F5, RT:23.026	
17-Nov-22	11:42:26	Peak modified	Sample:5-221109A29, Compound:PeCB-F5, RT:23.026	AK221117MS
17-Nov-22	11:42:26	Peak added	Sample:5-221109A29, Compound:PeCB-F5, RT:23.099	AK221117MS
17-Nov-22	11:42:52	Pre modification peak	Sample:5-221109A29, Compound:PeCB-F5, RT:23.933	
17-Nov-22	11:42:52	Peak modified	Sample:5-221109A29, Compound:PeCB-F5, RT:23.933	AK221117MB
17-Nov-22	11:42:52	Pre modification peak	Sample:5-221109A29, Compound:PeCB-F5, RT:23.933	
17-Nov-22	11:42:52	Peak modified	Sample:5-221109A29, Compound:PeCB-F5, RT:23.933	AK221117MB
17-Nov-22	11:43:14	Pre modification peak	Sample:5-221109A29, Compound:PeCB-F5, RT:25.540	
17-Nov-22	11:43:14	Peak modified	Sample:5-221109A29, Compound:PeCB-F5, RT:25.540	AK221117MB
17-Nov-22	11:44:23	Pre modification peak	Sample:5-221109A30, Compound:PeCB-F5, RT:23.026	
17-Nov-22	11:44:23	Peak modified	Sample:5-221109A30, Compound:PeCB-F5, RT:23.026	AK221117MS
17-Nov-22	11:44:23	Peak added	Sample:5-221109A30, Compound:PeCB-F5, RT:23.099	AK221117MS
17-Nov-22	11:44:23	Pre modification peak	Sample:5-221109A30, Compound:PeCB-F5, RT:23.026	
17-Nov-22	11:44:23	Peak modified	Sample:5-221109A30, Compound:PeCB-F5, RT:23.026	AK221117MS
17-Nov-22	11:44:23	Peak added	Sample:5-221109A30, Compound:PeCB-F5, RT:23.099	AK221117MS
17-Nov-22	11:44:45	Pre modification peak	Sample:5-221109A30, Compound:PeCB-F5, RT:23.921	
17-Nov-22	11:44:45	Peak modified	Sample:5-221109A30, Compound:PeCB-F5, RT:23.921	AK221117MB
17-Nov-22	11:44:45	Pre modification peak	Sample:5-221109A30, Compound:PeCB-F5, RT:23.921	
17-Nov-22	11:44:45	Peak modified	Sample:5-221109A30, Compound:PeCB-F5, RT:23.921	AK221117MB
17-Nov-22	11:45:12	Pre modification peak	Sample:5-221109A30, Compound:PeCB-F5, RT:25.504	
17-Nov-22	11:45:12	Peak modified	Sample:5-221109A30, Compound:PeCB-F5, RT:25.504	AK221117MB
17-Nov-22	11:45:12	Pre modification peak	Sample:5-221109A30, Compound:PeCB-F5, RT:25.504	
17-Nov-22	11:45:12	Peak modified	Sample:5-221109A30, Compound:PeCB-F5, RT:25.504	AK221117MB
17-Nov-22	11:45:49	Pre modification peak	Sample:5-221109A31, Compound:PeCB-F5, RT:23.038	
17-Nov-22	11:45:49	Peak modified	Sample:5-221109A31, Compound:PeCB-F5, RT:23.038	AK221117MS
17-Nov-22	11:45:49	Peak added	Sample:5-221109A31, Compound:PeCB-F5, RT:23.111	AK221117MS
17-Nov-22	11:45:49	Pre modification peak	Sample:5-221109A31, Compound:PeCB-F5, RT:23.038	
17-Nov-22	11:45:49	Peak modified	Sample:5-221109A31, Compound:PeCB-F5, RT:23.038	AK221117MS
17-Nov-22	11:45:49	Peak added	Sample:5-221109A31, Compound:PeCB-F5, RT:23.111	AK221117MS
17-Nov-22	11:46:15	Pre modification peak	Sample:5-221109A31, Compound:PeCB-F5, RT:23.933	
17-Nov-22	11:46:15	Peak modified	Sample:5-221109A31, Compound:PeCB-F5, RT:23.933	AK221117MB
17-Nov-22	11:46:15	Pre modification peak	Sample:5-221109A31, Compound:PeCB-F5, RT:23.933	
17-Nov-22	11:46:15	Peak modified	Sample:5-221109A31, Compound:PeCB-F5, RT:23.933	AK221117MB
17-Nov-22	11:46:41	Pre modification peak	Sample:5-221109A31, Compound:PeCB-F5, RT:25.504	
17-Nov-22	11:46:41	Peak modified	Sample:5-221109A31, Compound:PeCB-F5, RT:25.504	AK221117MB
17-Nov-22	11:46:41	Pre modification peak	Sample:5-221109A31, Compound:PeCB-F5, RT:25.504	
17-Nov-22	11:46:41	Peak modified	Sample:5-221109A31, Compound:PeCB-F5, RT:25.504	AK221117MB
17-Nov-22	11:46:55	Peak modified	Sample:5-221109A31, Compound:PeCB-F5, RT:25.492	AK221117MB
17-Nov-22	11:47:27	Pre modification peak	Sample:5-221109A23, Compound:HxCB-F4, RT:22.178	

Quantify Audit Report MassLynx V4.2 SCN1012

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221109A2-1117AK.qld

Last Altered: Thursday, November 17, 2022 12:03:54 Eastern Standard Time
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Date	Time	Event	Details	Comments
17-Nov-22	11:47:27	Peak modified	Sample:5-221109A23, Compound:HxCB-F4, RT:22.178	AK221117MB
17-Nov-22	11:48:10	Pre modification peak	Sample:5-221109A17, Compound:HxCB-F5, RT:22.591	
17-Nov-22	11:48:10	Peak modified	Sample:5-221109A17, Compound:HxCB-F5, RT:22.591	AK221117MJ
17-Nov-22	11:48:10	Pre modification peak	Sample:5-221109A17, Compound:HxCB-F5, RT:24.718	
17-Nov-22	11:48:10	Peak modified	Sample:5-221109A17, Compound:HxCB-F5, RT:24.718	AK221117MJ
17-Nov-22	11:48:10	Pre modification peak	Sample:5-221109A17, Compound:HxCB-F5, RT:22.591	
17-Nov-22	11:48:10	Peak modified	Sample:5-221109A17, Compound:HxCB-F5, RT:22.591	AK221117MJ
17-Nov-22	11:48:10	Pre modification peak	Sample:5-221109A17, Compound:HxCB-F5, RT:24.718	
17-Nov-22	11:48:10	Peak modified	Sample:5-221109A17, Compound:HxCB-F5, RT:24.718	AK221117MJ
17-Nov-22	11:48:37	Pre modification peak	Sample:5-221109A23, Compound:HxCB-F5, RT:24.549	
17-Nov-22	11:48:37	Peak modified	Sample:5-221109A23, Compound:HxCB-F5, RT:24.549	AK221117MB
17-Nov-22	11:48:37	Pre modification peak	Sample:5-221109A23, Compound:HxCB-F5, RT:24.706	
17-Nov-22	11:48:37	Peak modified	Sample:5-221109A23, Compound:HxCB-F5, RT:24.706	AK221117MB
17-Nov-22	11:48:37	Pre modification peak	Sample:5-221109A23, Compound:HxCB-F5, RT:22.591	
17-Nov-22	11:48:37	Peak modified	Sample:5-221109A23, Compound:HxCB-F5, RT:22.591	AK221117MB
17-Nov-22	11:48:37	Pre modification peak	Sample:5-221109A23, Compound:HxCB-F5, RT:24.706	
17-Nov-22	11:48:37	Peak modified	Sample:5-221109A23, Compound:HxCB-F5, RT:24.706	AK221117MB
17-Nov-22	11:49:47	Pre modification peak	Sample:5-221109A24, Compound:HxCB-F5, RT:28.657	
17-Nov-22	11:49:47	Peak modified	Sample:5-221109A24, Compound:HxCB-F5, RT:28.657	AK221117MB
17-Nov-22	11:49:47	Pre modification peak	Sample:5-221109A24, Compound:HxCB-F5, RT:28.657	
17-Nov-22	11:49:47	Peak modified	Sample:5-221109A24, Compound:HxCB-F5, RT:28.657	AK221117MB
17-Nov-22	11:50:22	Pre modification peak	Sample:5-221109A25, Compound:HxCB-F5, RT:28.658	
17-Nov-22	11:50:22	Peak modified	Sample:5-221109A25, Compound:HxCB-F5, RT:28.658	AK221117MB
17-Nov-22	11:50:22	Pre modification peak	Sample:5-221109A25, Compound:HxCB-F5, RT:28.658	
17-Nov-22	11:50:22	Peak modified	Sample:5-221109A25, Compound:HxCB-F5, RT:28.658	AK221117MB
17-Nov-22	11:50:52	Pre modification peak	Sample:5-221109A26, Compound:HxCB-F5, RT:28.657	
17-Nov-22	11:50:52	Peak modified	Sample:5-221109A26, Compound:HxCB-F5, RT:28.657	AK221117MB
17-Nov-22	11:50:52	Pre modification peak	Sample:5-221109A26, Compound:HxCB-F5, RT:28.657	
17-Nov-22	11:50:52	Peak modified	Sample:5-221109A26, Compound:HxCB-F5, RT:28.657	AK221117MB
17-Nov-22	11:51:31	Pre modification peak	Sample:5-221109A27, Compound:HxCB-F5, RT:28.658	
17-Nov-22	11:51:31	Peak modified	Sample:5-221109A27, Compound:HxCB-F5, RT:28.658	AK221117MB
17-Nov-22	11:51:31	Pre modification peak	Sample:5-221109A27, Compound:HxCB-F5, RT:28.670	
17-Nov-22	11:51:31	Peak modified	Sample:5-221109A27, Compound:HxCB-F5, RT:28.670	AK221117MB
17-Nov-22	11:51:51	Peak modified	Sample:5-221109A27, Compound:HxCB-F5, RT:28.670	AK221117MB
17-Nov-22	11:52:16	Pre modification peak	Sample:5-221109A27, Compound:HxCB-F5, RT:26.011	
17-Nov-22	11:52:16	Peak modified	Sample:5-221109A27, Compound:HxCB-F5, RT:26.011	AK221117MB
17-Nov-22	11:52:16	Peak added	Sample:5-221109A27, Compound:HxCB-F5, RT:25.939	AK221117MB
17-Nov-22	11:52:54	Pre modification peak	Sample:5-221109A28, Compound:HxCB-F5, RT:28.682	
17-Nov-22	11:52:54	Peak modified	Sample:5-221109A28, Compound:HxCB-F5, RT:28.682	AK221117MB
17-Nov-22	11:52:54	Pre modification peak	Sample:5-221109A28, Compound:HxCB-F5, RT:28.682	
17-Nov-22	11:52:54	Peak modified	Sample:5-221109A28, Compound:HxCB-F5, RT:28.682	AK221117MB
17-Nov-22	11:53:20	Pre modification peak	Sample:5-221109A29, Compound:HxCB-F5, RT:28.670	
17-Nov-22	11:53:20	Peak modified	Sample:5-221109A29, Compound:HxCB-F5, RT:28.670	AK221117MB
17-Nov-22	11:53:20	Pre modification peak	Sample:5-221109A29, Compound:HxCB-F5, RT:28.670	
17-Nov-22	11:53:20	Peak modified	Sample:5-221109A29, Compound:HxCB-F5, RT:28.670	AK221117MB
17-Nov-22	11:53:50	Pre modification peak	Sample:5-221109A30, Compound:HxCB-F5, RT:28.670	
17-Nov-22	11:53:50	Peak modified	Sample:5-221109A30, Compound:HxCB-F5, RT:28.670	AK221117MB
17-Nov-22	11:53:50	Pre modification peak	Sample:5-221109A30, Compound:HxCB-F5, RT:28.670	
17-Nov-22	11:53:50	Peak modified	Sample:5-221109A30, Compound:HxCB-F5, RT:28.670	AK221117MB
17-Nov-22	11:54:31	Pre modification peak	Sample:5-221109A31, Compound:HxCB-F5, RT:28.670	
17-Nov-22	11:54:31	Peak modified	Sample:5-221109A31, Compound:HxCB-F5, RT:28.670	AK221117MB
17-Nov-22	11:54:31	Pre modification peak	Sample:5-221109A31, Compound:HxCB-F5, RT:28.670	
17-Nov-22	11:54:31	Peak modified	Sample:5-221109A31, Compound:HxCB-F5, RT:28.670	AK221117MB

Quantify Audit Report MassLynx V4.2 SCN1012

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221109A2-1117AK.qld

Last Altered: Thursday, November 17, 2022 12:03:54 Eastern Standard Time
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Date	Time	Event	Details	Comments
17-Nov-22	11:57:32	Pre modification peak	Sample:5-221109A23, Compound:HpCB-F5, RT:22.591	
17-Nov-22	11:57:32	Peak modified	Sample:5-221109A23, Compound:HpCB-F5, RT:22.591	AK221117MB
17-Nov-22	11:57:32	Pre modification peak	Sample:5-221109A23, Compound:HpCB-F5, RT:28.621	
17-Nov-22	11:57:32	Peak modified	Sample:5-221109A23, Compound:HpCB-F5, RT:28.621	AK221117MB
17-Nov-22	11:59:18	Pre modification peak	Sample:5-221109A28, Compound:HpCB-F5, RT:26.035	
17-Nov-22	11:59:18	Peak modified	Sample:5-221109A28, Compound:HpCB-F5, RT:26.035	AK221117MB
17-Nov-22	11:59:18	Peak added	Sample:5-221109A28, Compound:HpCB-F5, RT:25.963	AK221117MB
17-Nov-22	11:59:18	Pre modification peak	Sample:5-221109A28, Compound:HpCB-F5, RT:26.035	
17-Nov-22	11:59:18	Peak modified	Sample:5-221109A28, Compound:HpCB-F5, RT:26.035	AK221117MB
17-Nov-22	11:59:18	Peak added	Sample:5-221109A28, Compound:HpCB-F5, RT:25.987	AK221117MB
17-Nov-22	12:03:51	Pre modification peak	Sample:5-221109A23, Compound:DeCB-F7, RT:33.451	
17-Nov-22	12:03:51	Peak modified	Sample:5-221109A23, Compound:DeCB-F7, RT:33.451	AK221117MB
17-Nov-22	12:03:51	Pre modification peak	Sample:5-221109A23, Compound:DeCB-F7, RT:33.480	
17-Nov-22	12:03:51	Peak modified	Sample:5-221109A23, Compound:DeCB-F7, RT:33.480	AK221117MB
17-Nov-22	12:04:12	Dataset Saved	Saved to 'I:\Organics Instrument\HIGHRES GCMS Complete...	

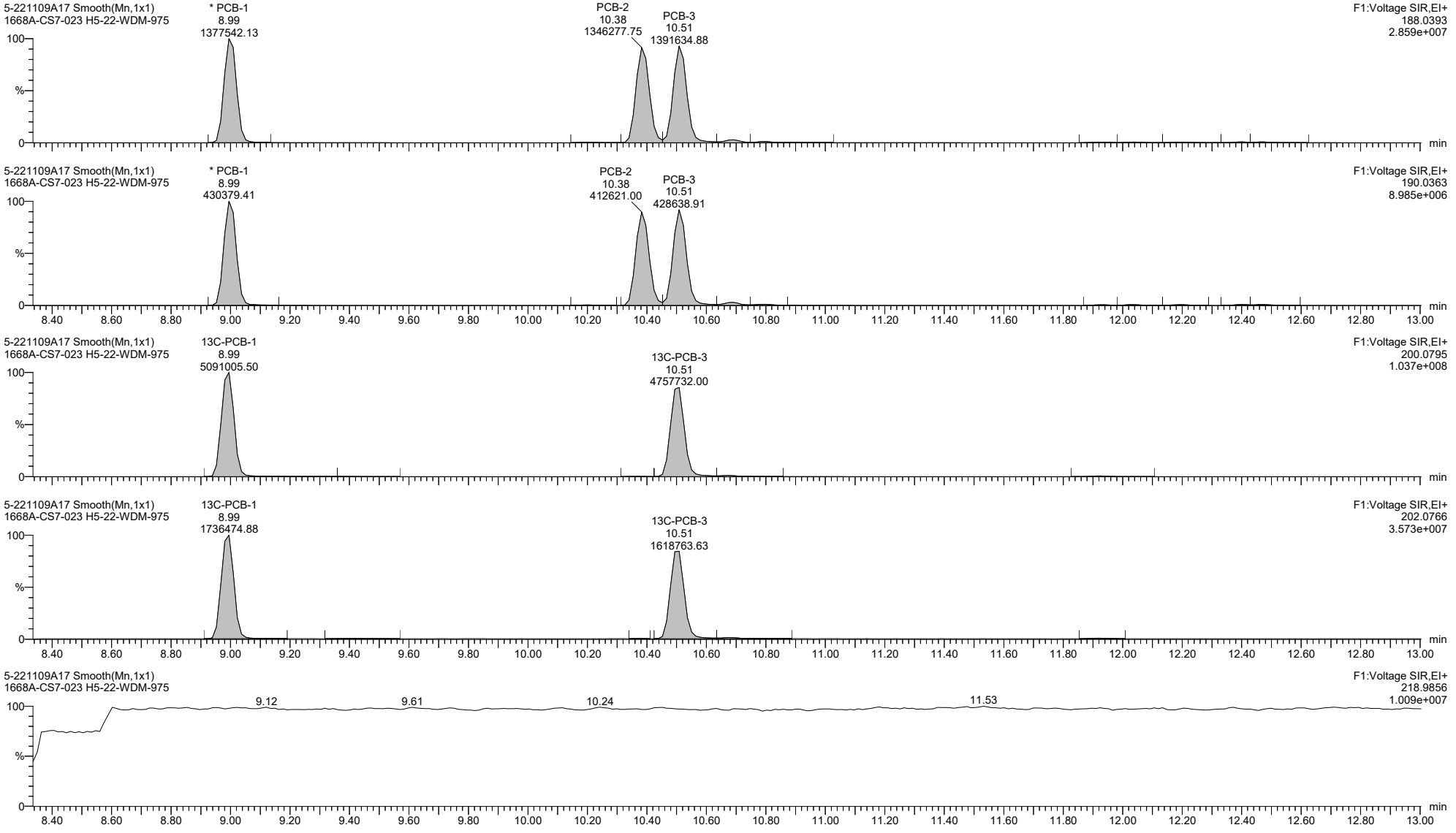
Quantify Sample Template Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221109A2-1117AK.qld

Last Altered: Thursday, November 17, 2022 12:03:54 Eastern Standard Time
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Method: C:\MassLynx\PCB.PRO\MethDB\1668_OCTYL_209-1029.mdb 29 Oct 2022 09:21:57
Calibration: 17 Nov 2022 11:48:15

Name: 5-221109A17, Date: 10-Nov-2022, Time: 03:21:22, ID: H5-22-WDM-975, Description: 1668A-CS7-023, Vial: Tray1:2

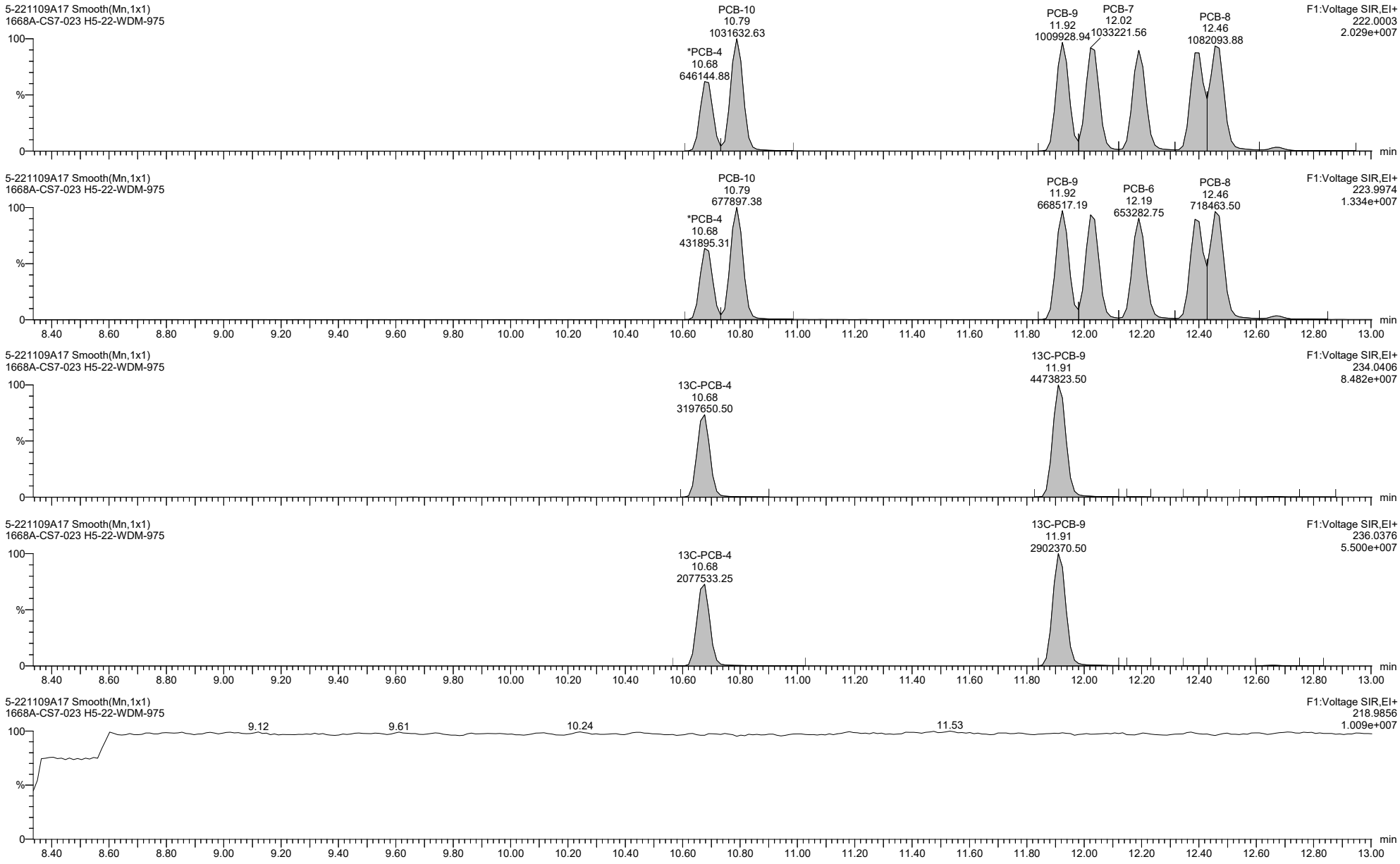


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

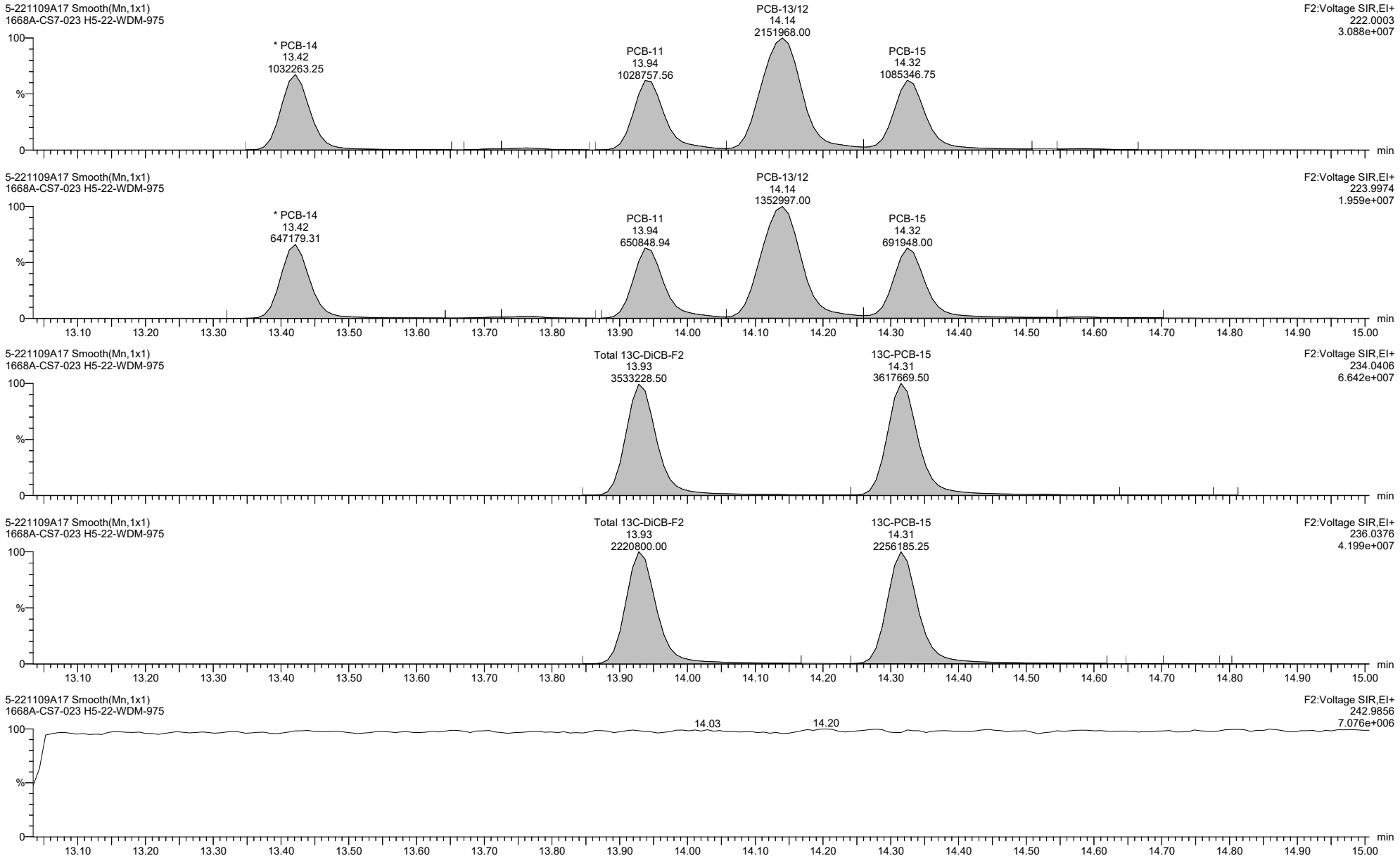
Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221109A2-1117AK.qld

Last Altered: Thursday, November 17, 2022 12:03:54 Eastern Standard Time
Printed: Wednesday, November 23, 2022 18:29:11 Eastern Standard Time

Name: 5-221109A17, Date: 10-Nov-2022, Time: 03:21:22, ID: H5-22-WDM-975, Description: 1668A-CS7-023, Vial: Tray1:2



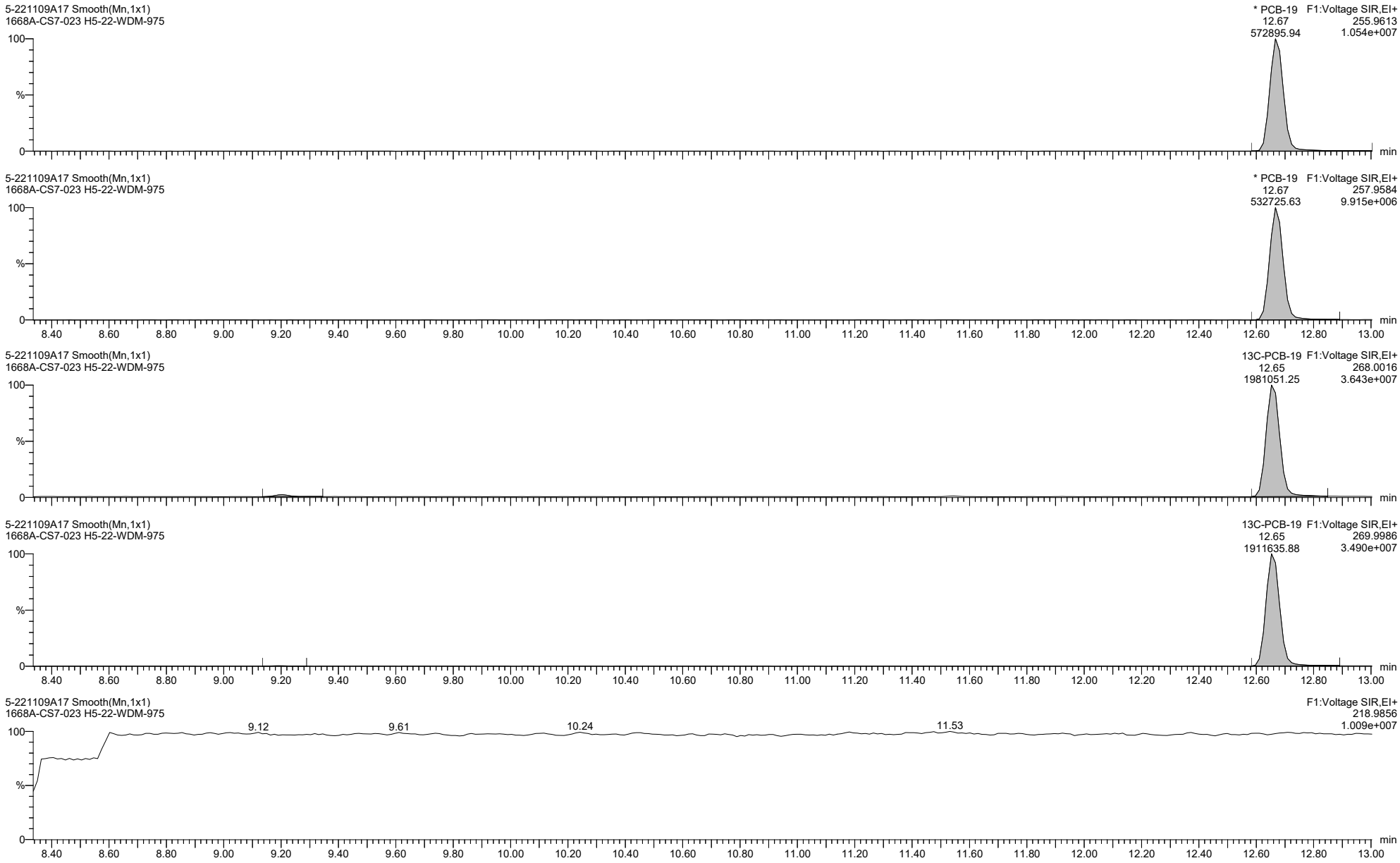
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Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221109A2-1117AK.qld

Last Altered: Thursday, November 17, 2022 12:03:54 Eastern Standard Time
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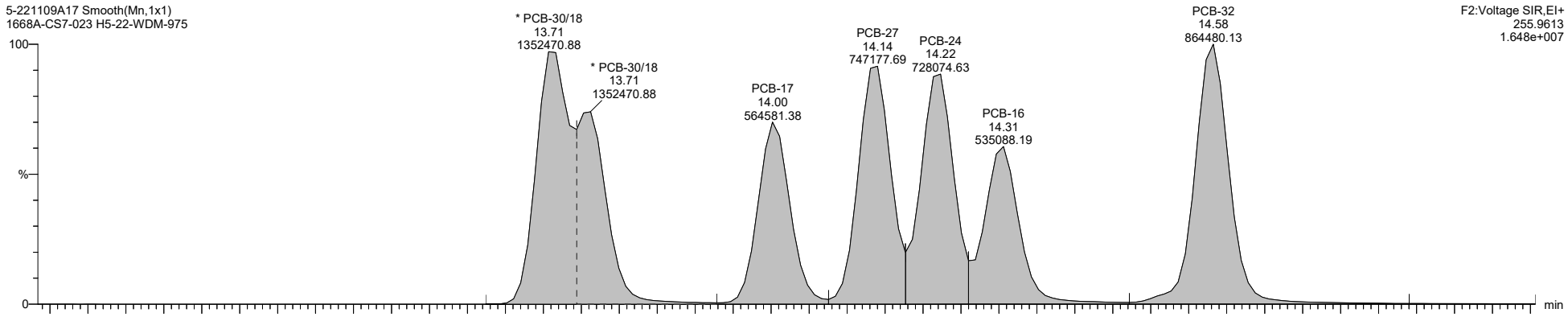
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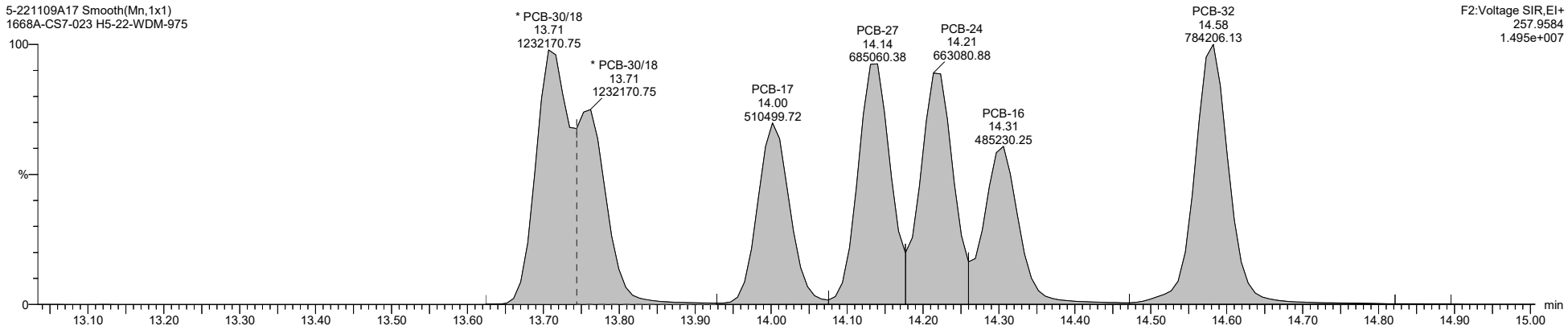


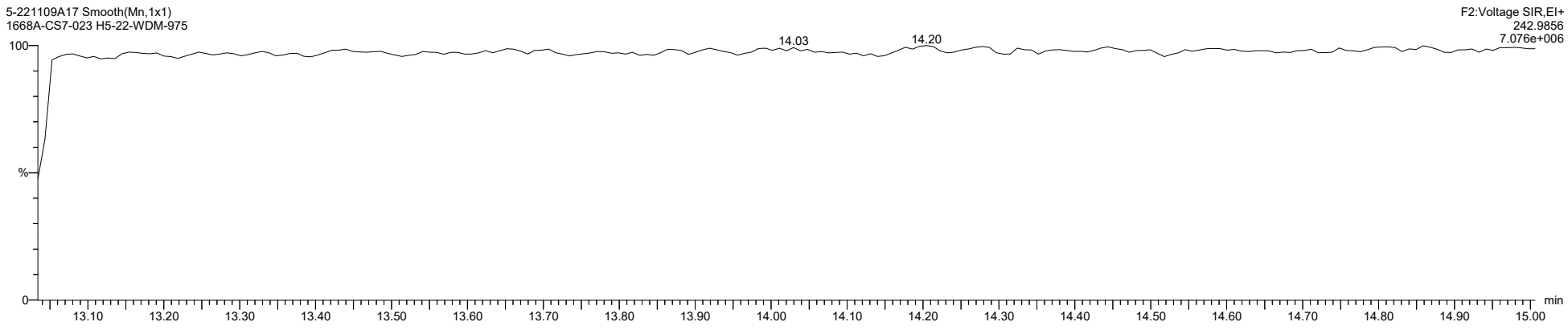
Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221109A2-1117AK.qld

Last Altered: Thursday, November 17, 2022 12:03:54 Eastern Standard Time
Printed: Wednesday, November 23, 2022 18:29:11 Eastern Standard Time

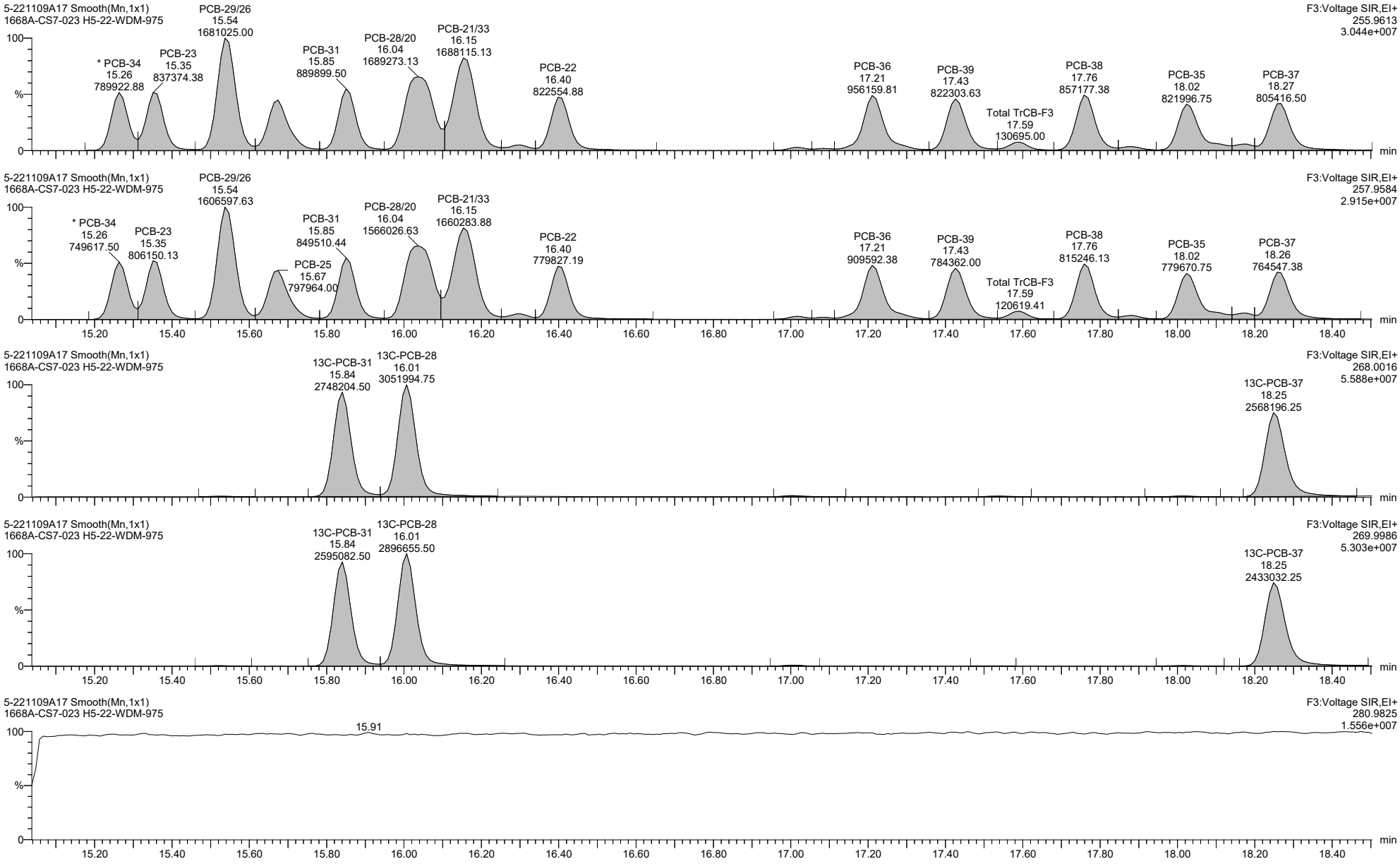
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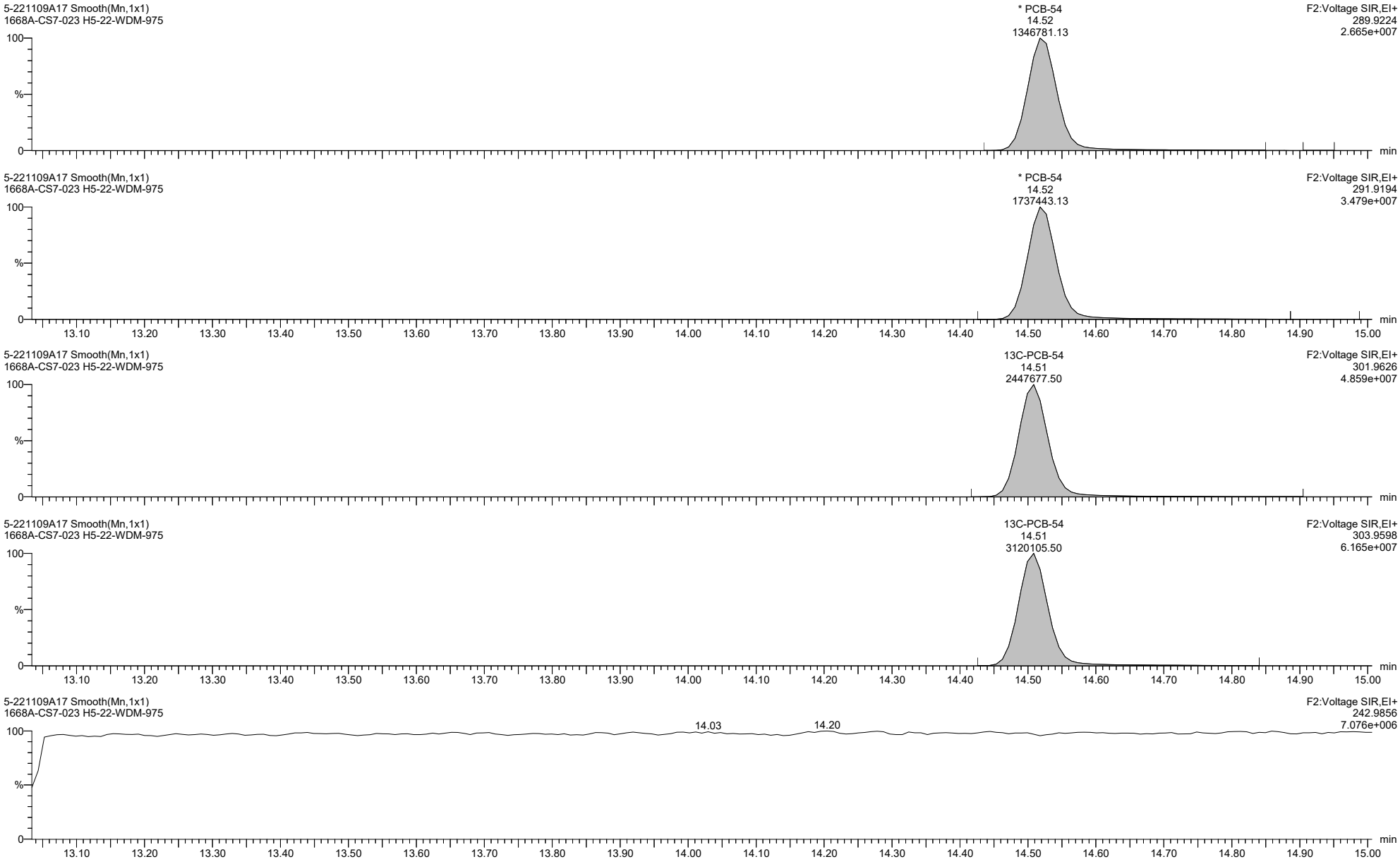




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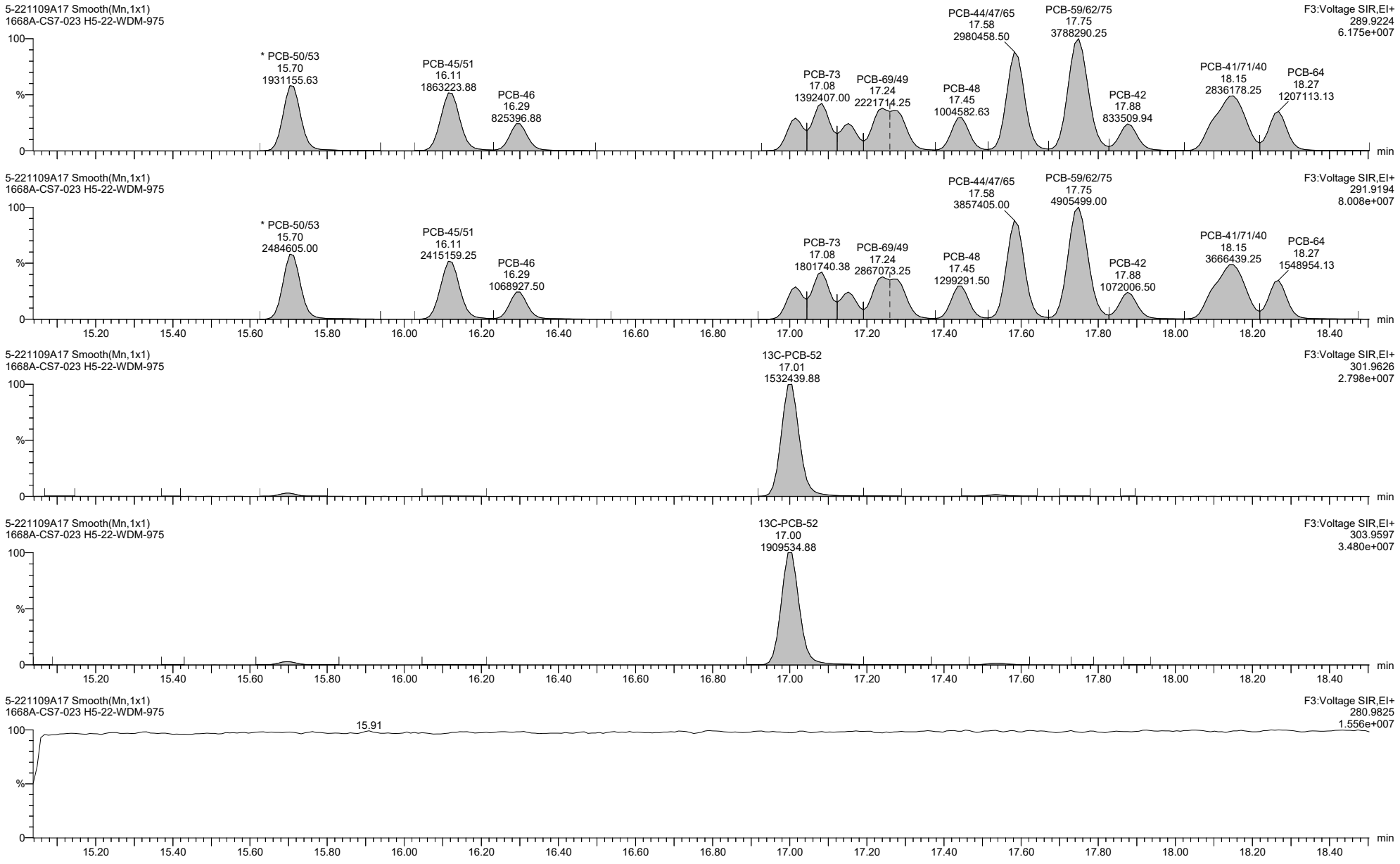
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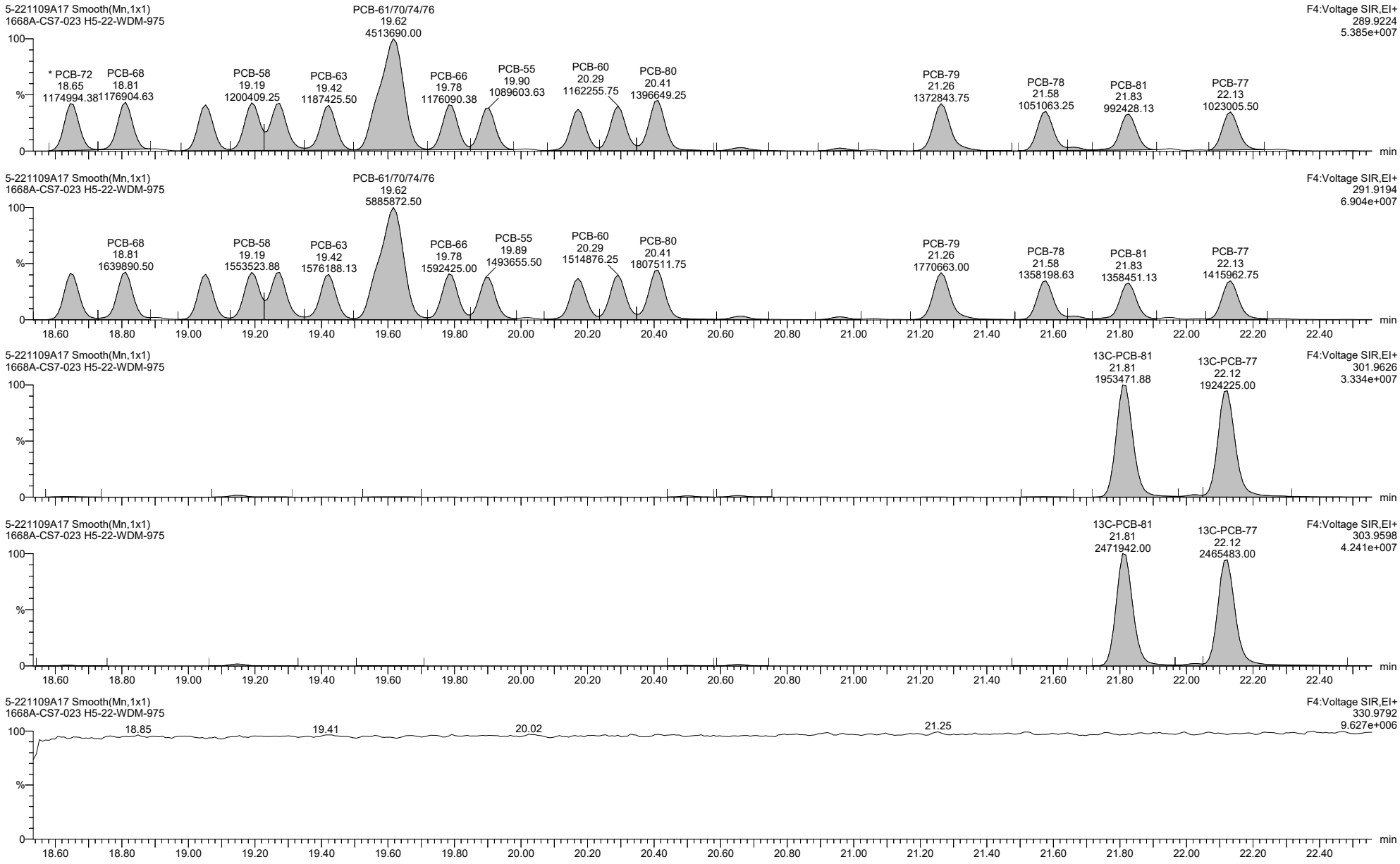
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Printed: Wednesday, November 23, 2022 18:29:11 Eastern Standard Time

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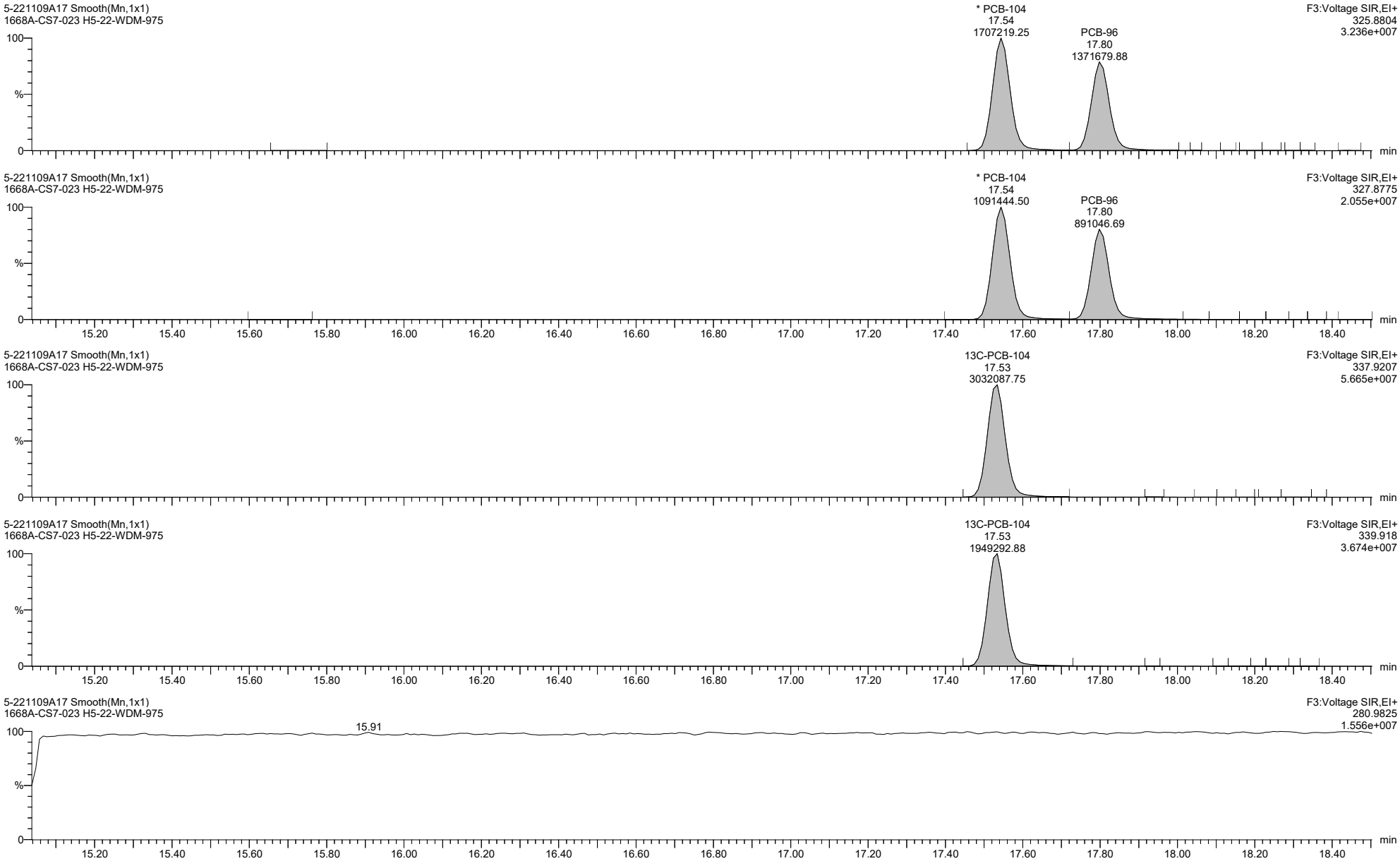


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

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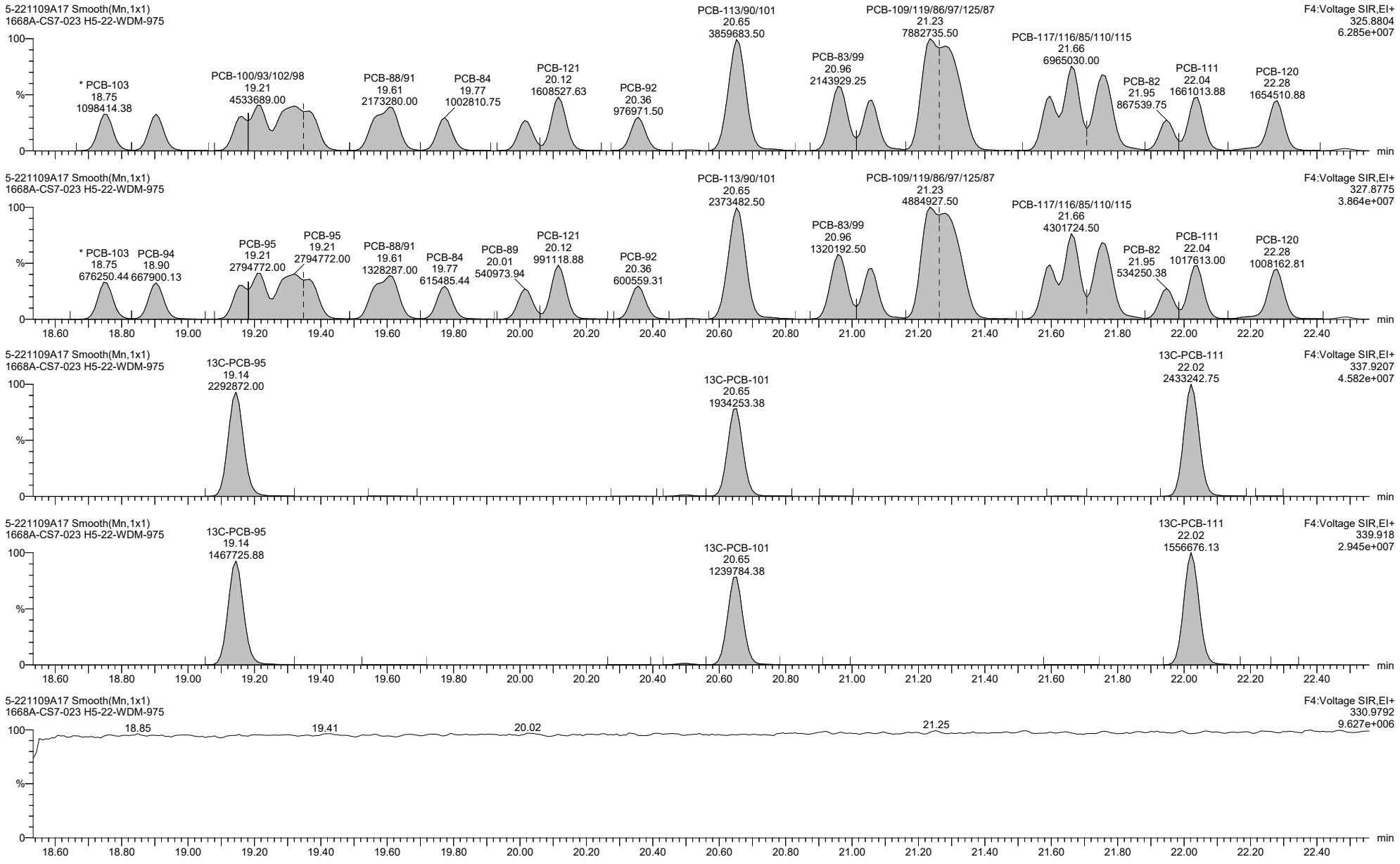
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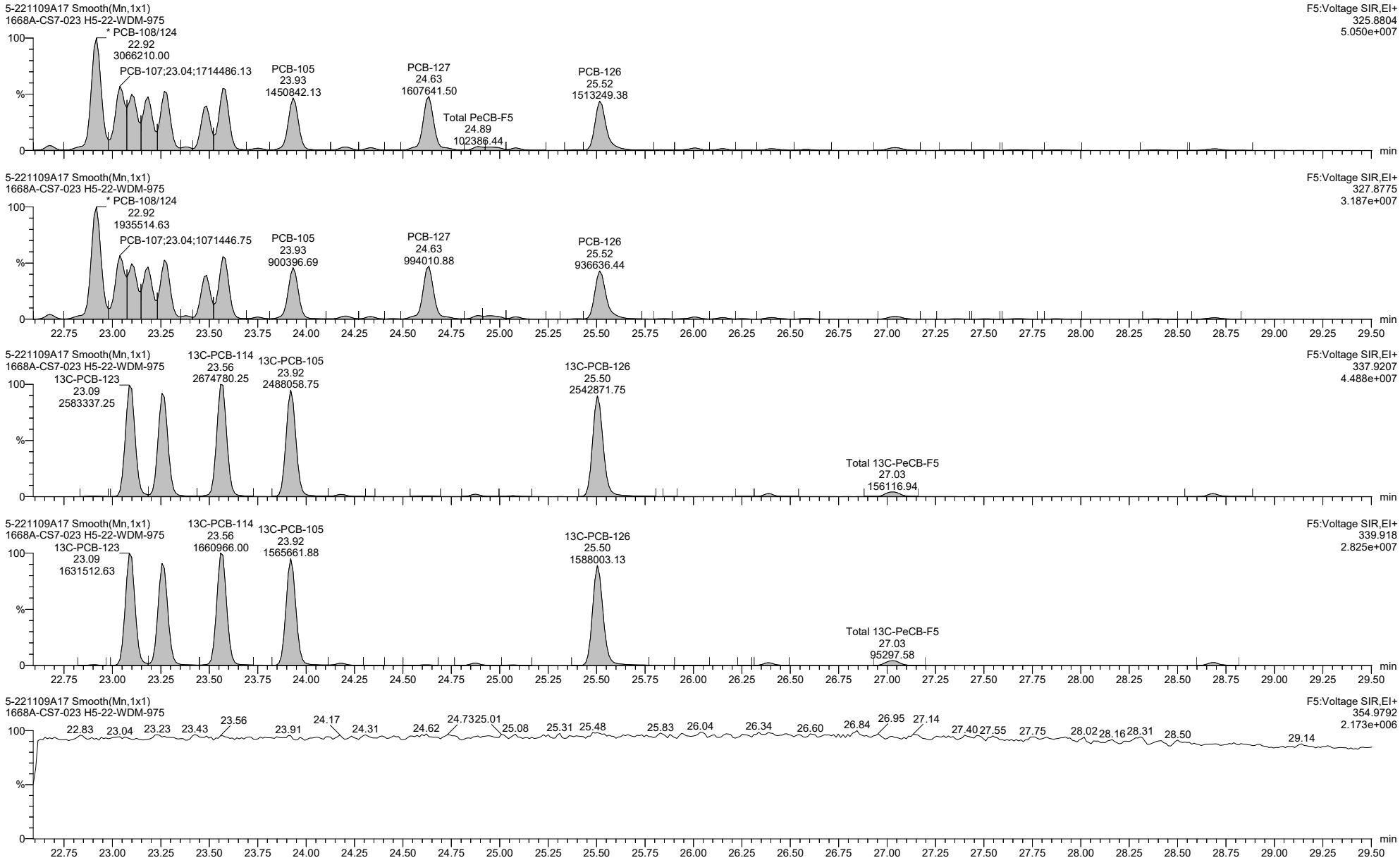


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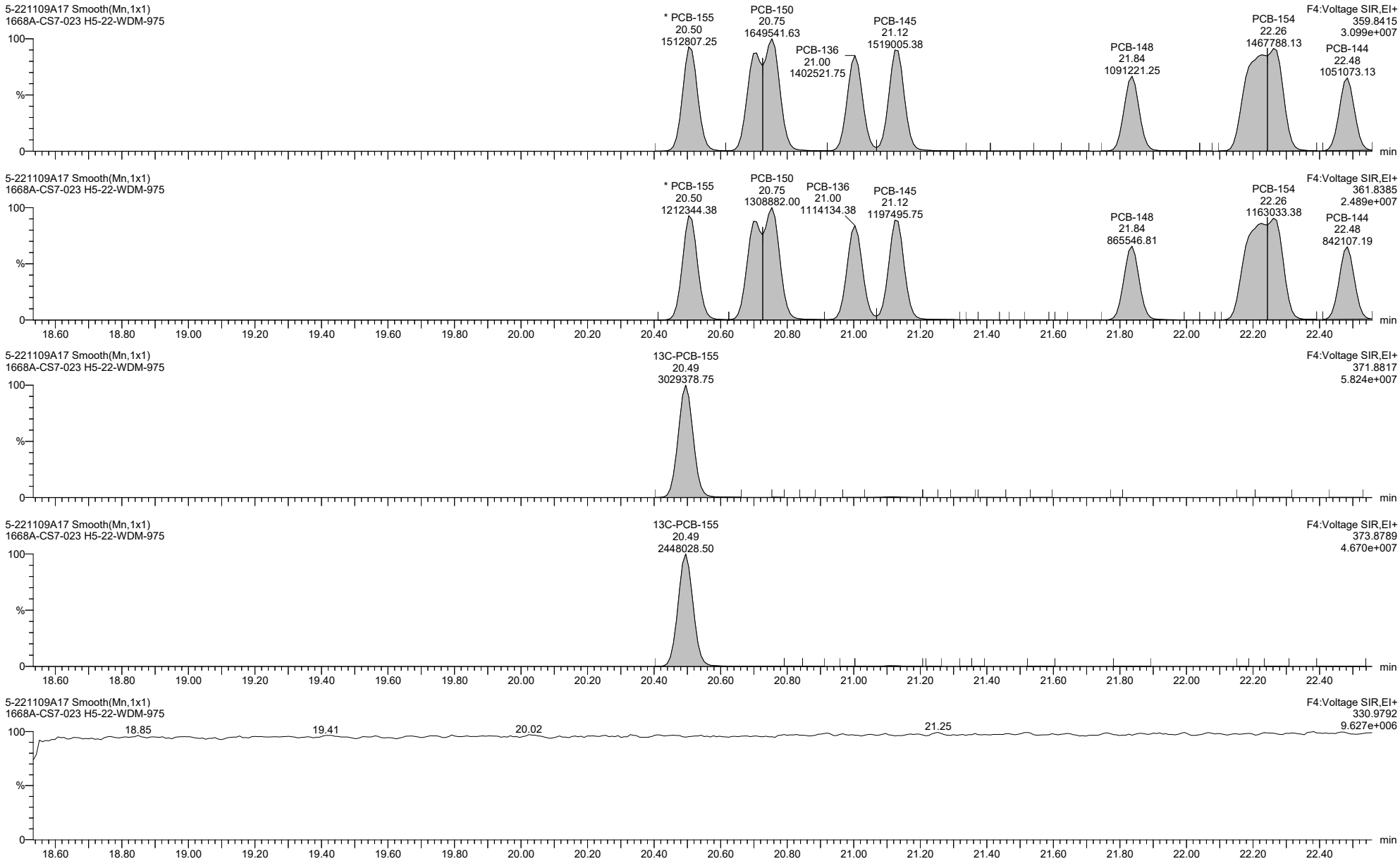


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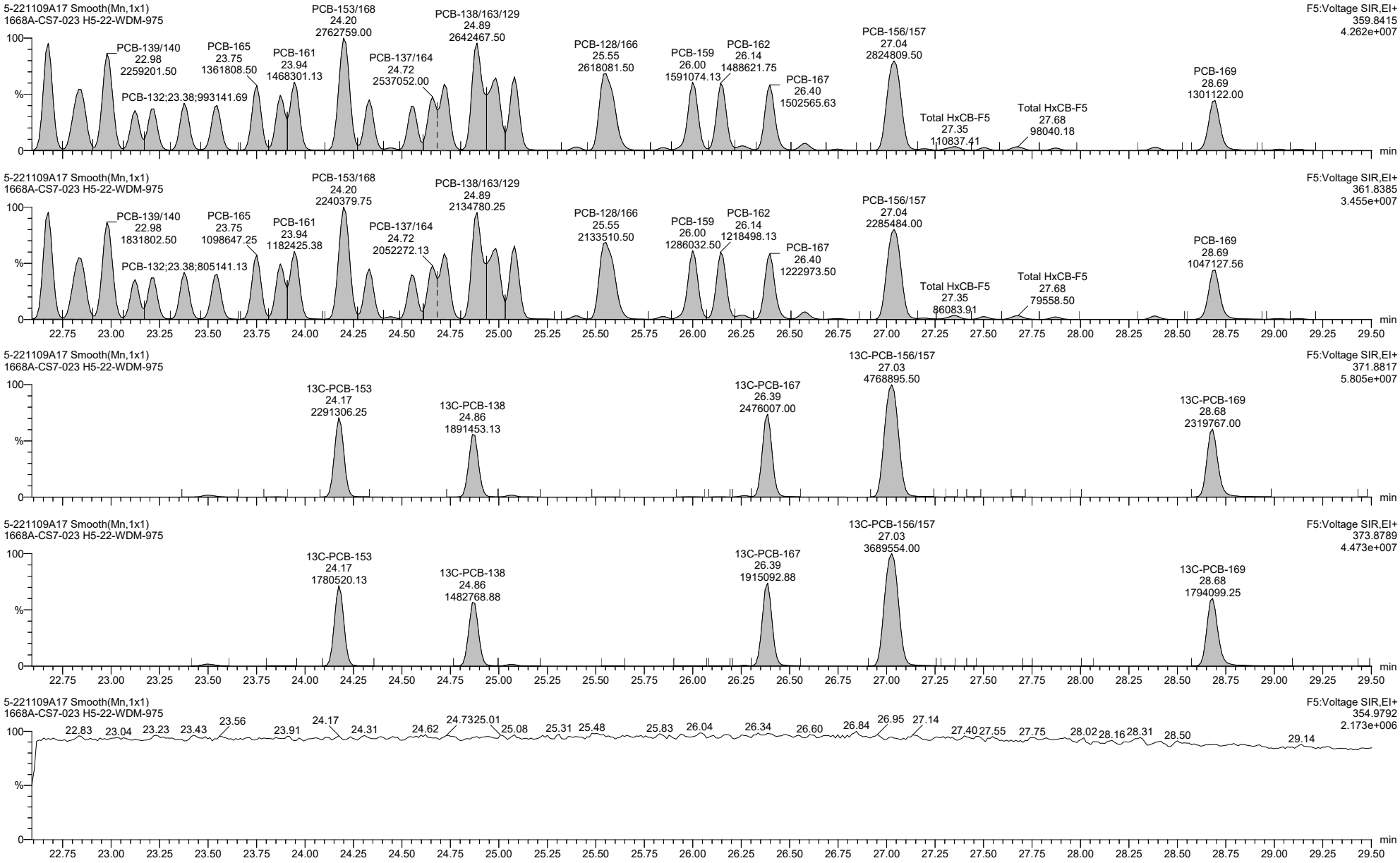


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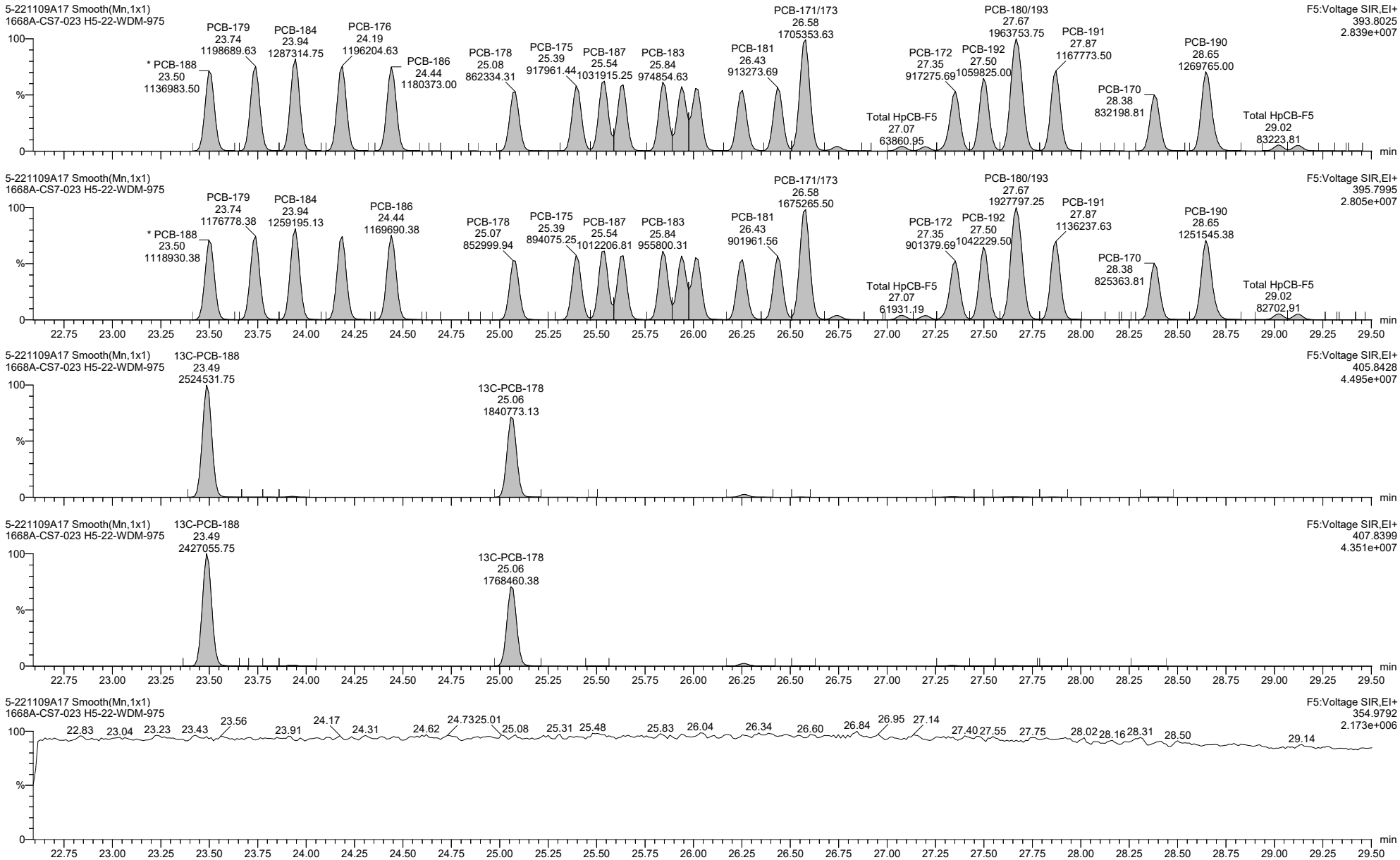
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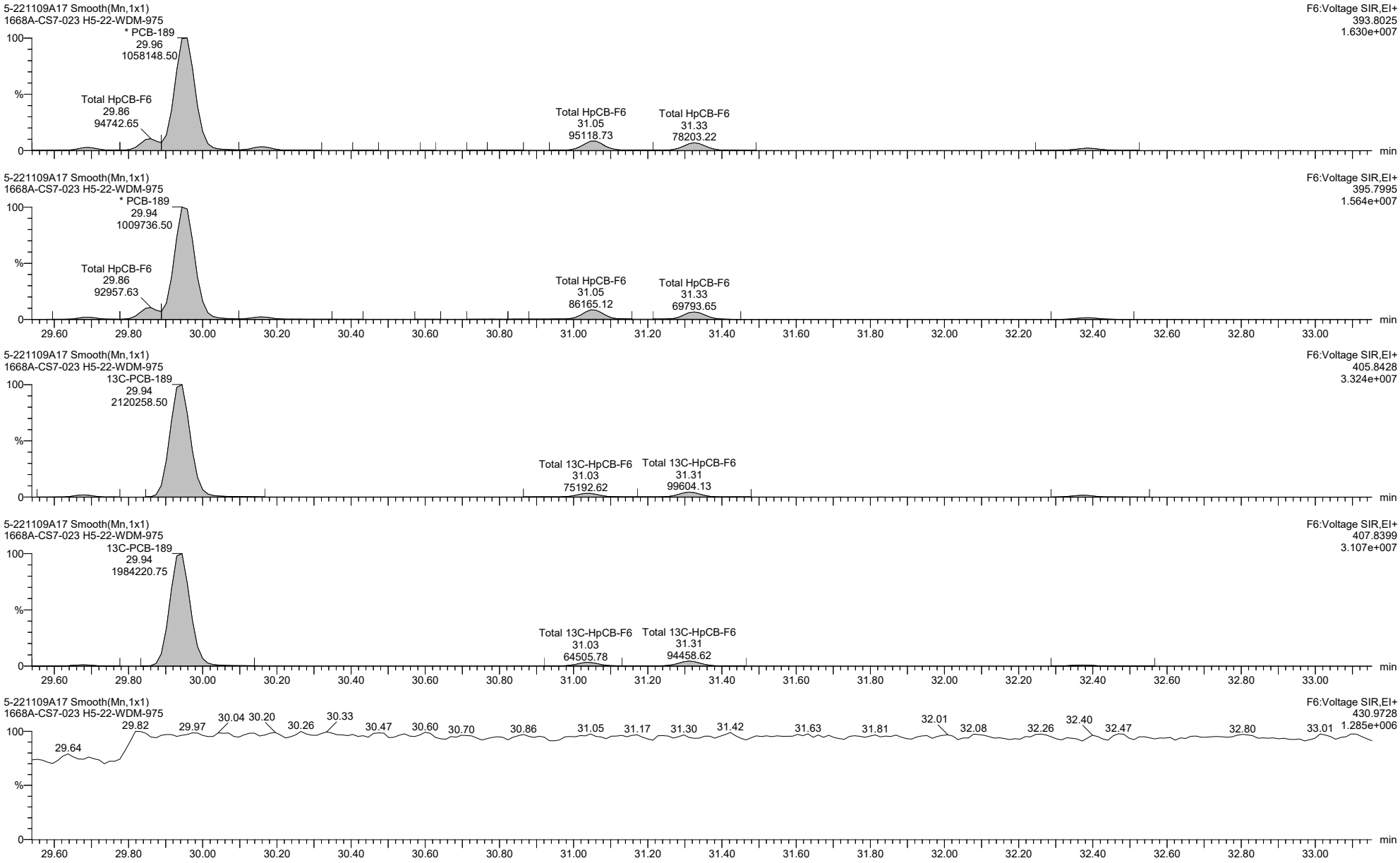
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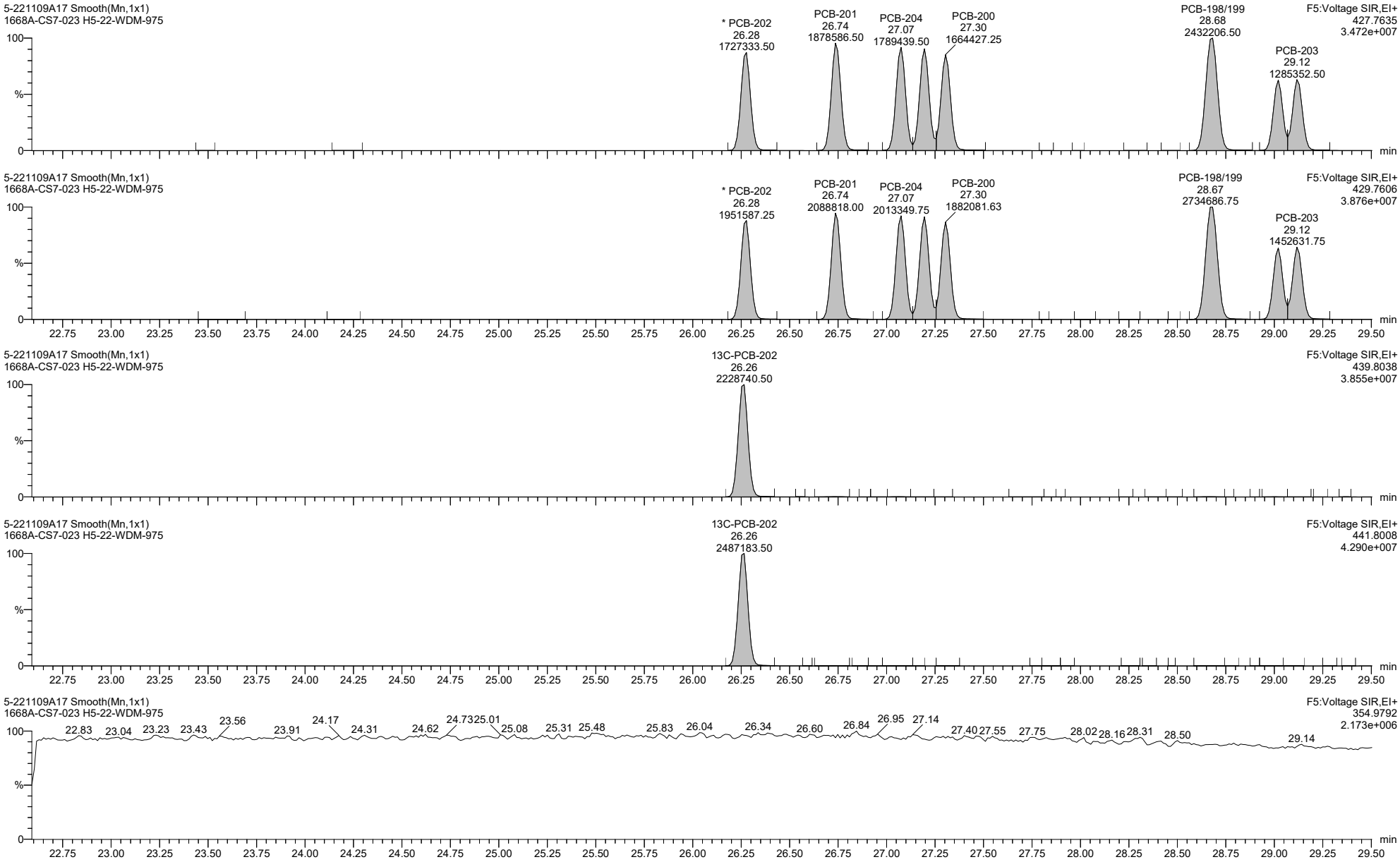


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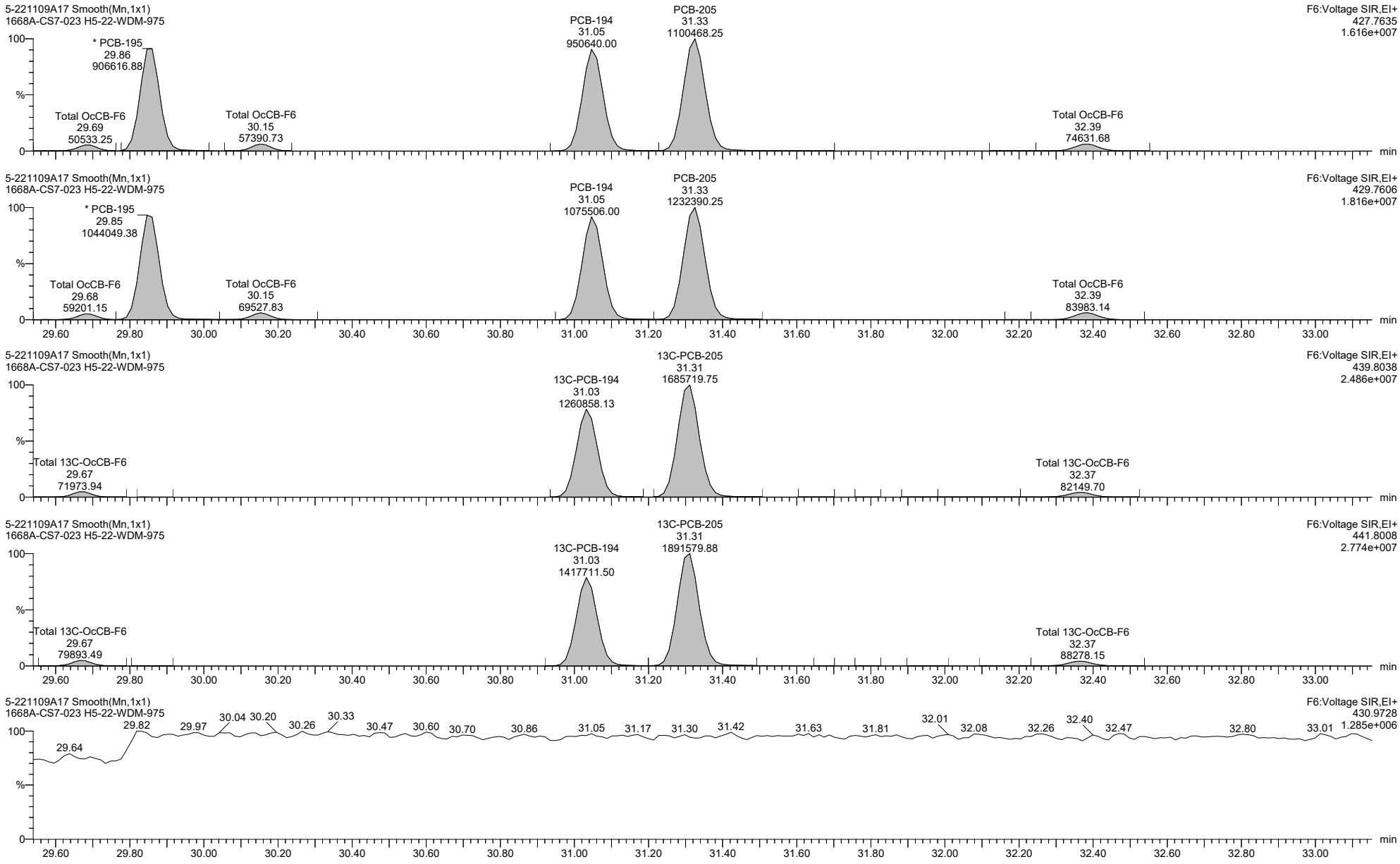


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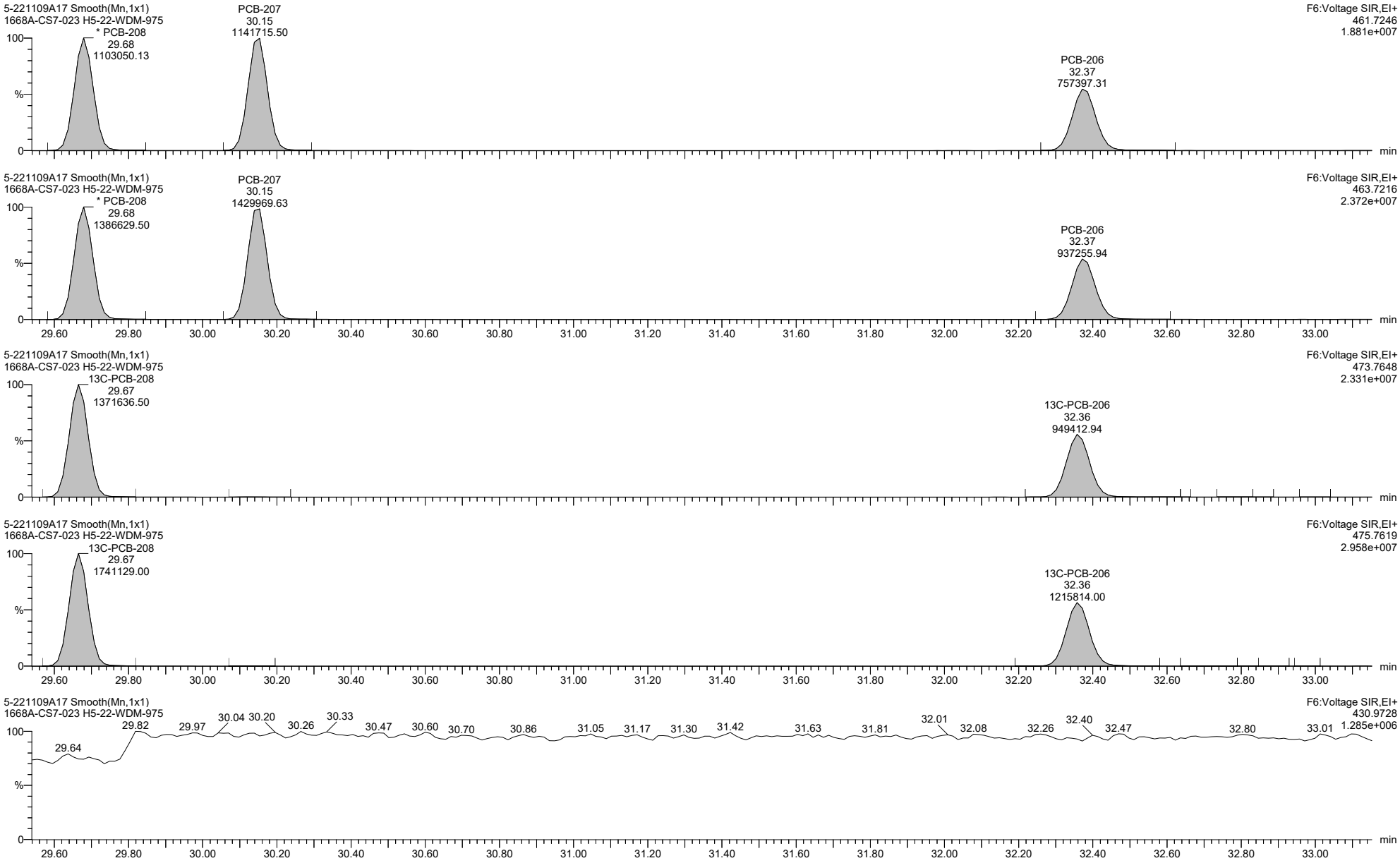


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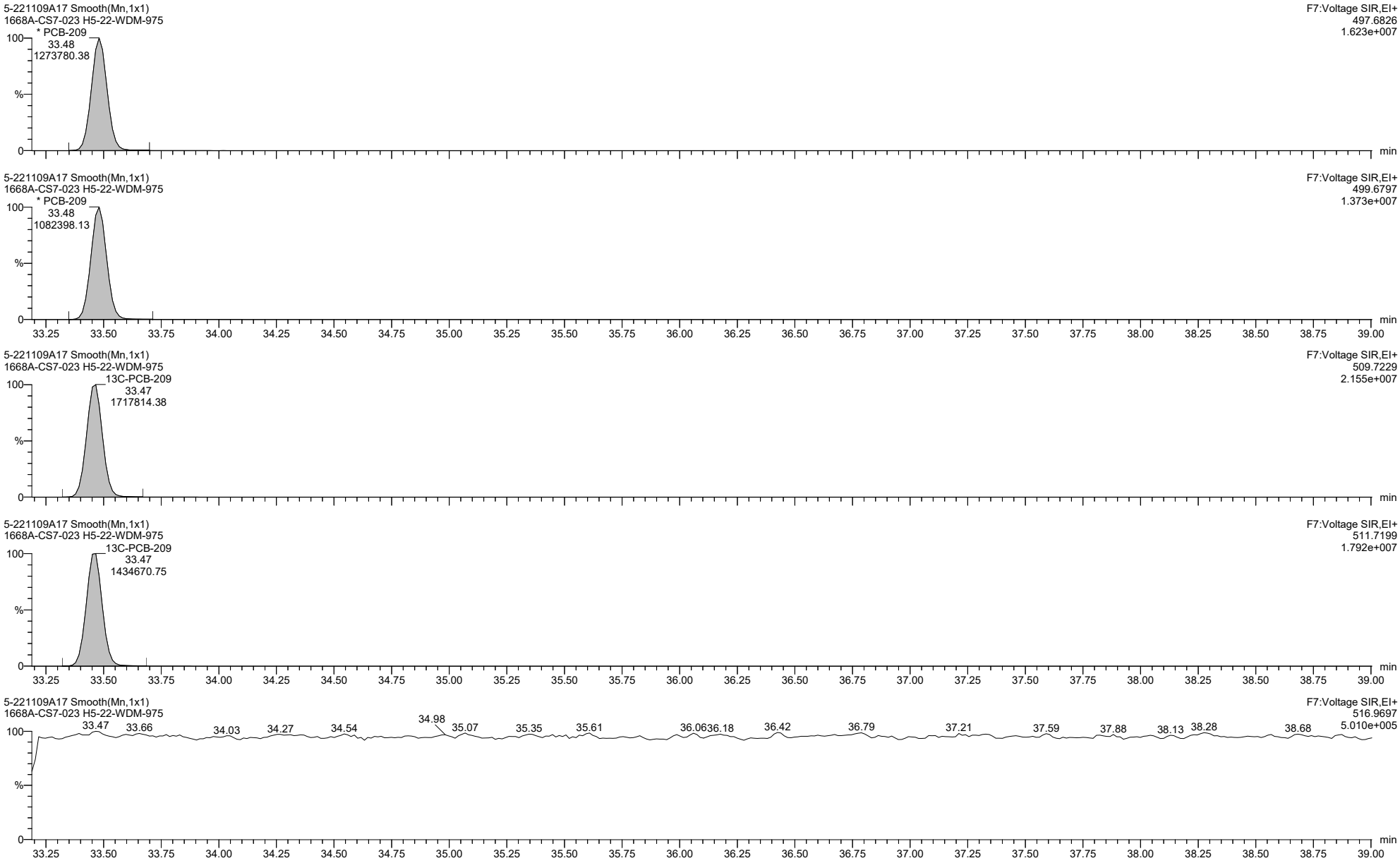


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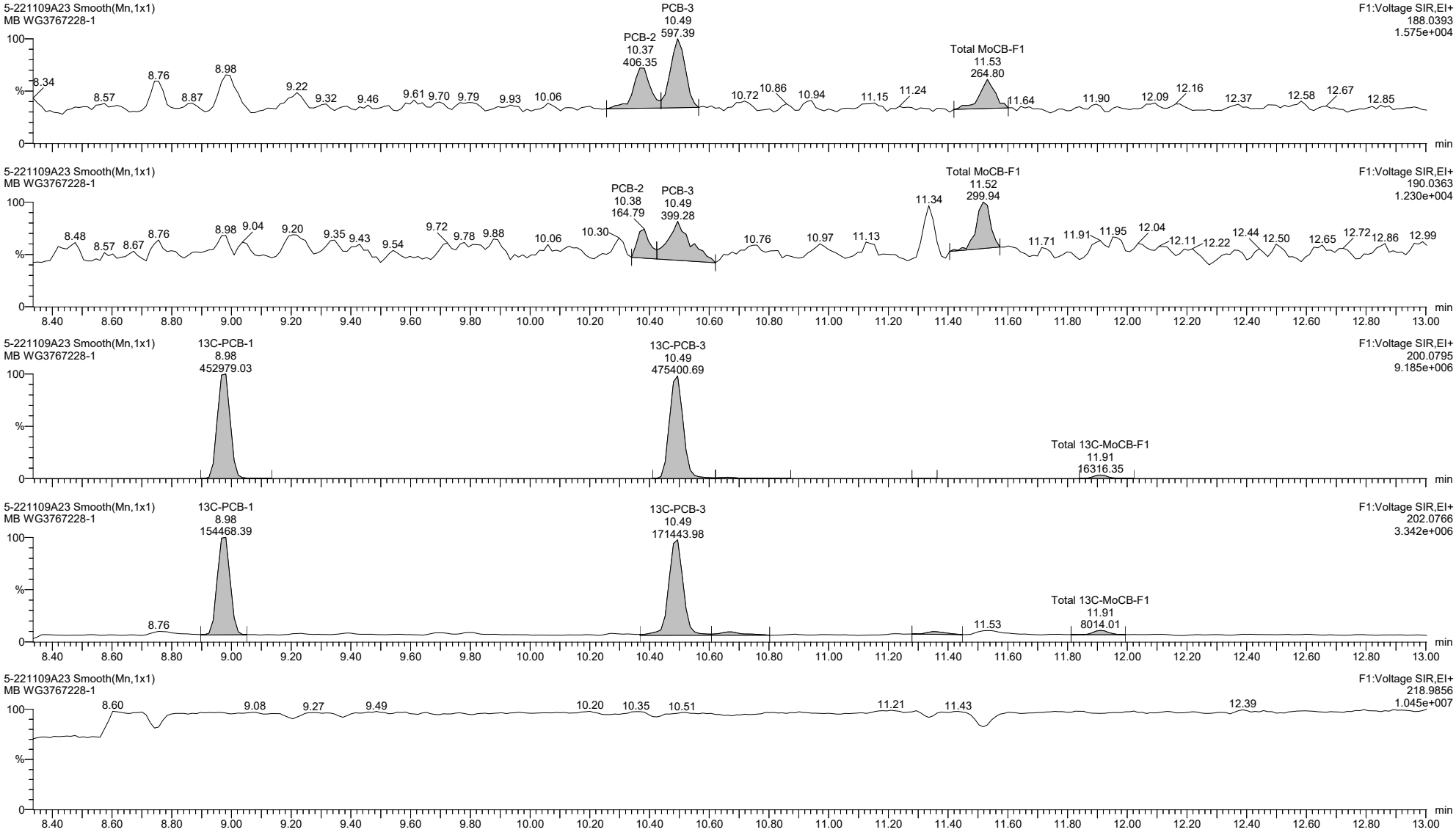
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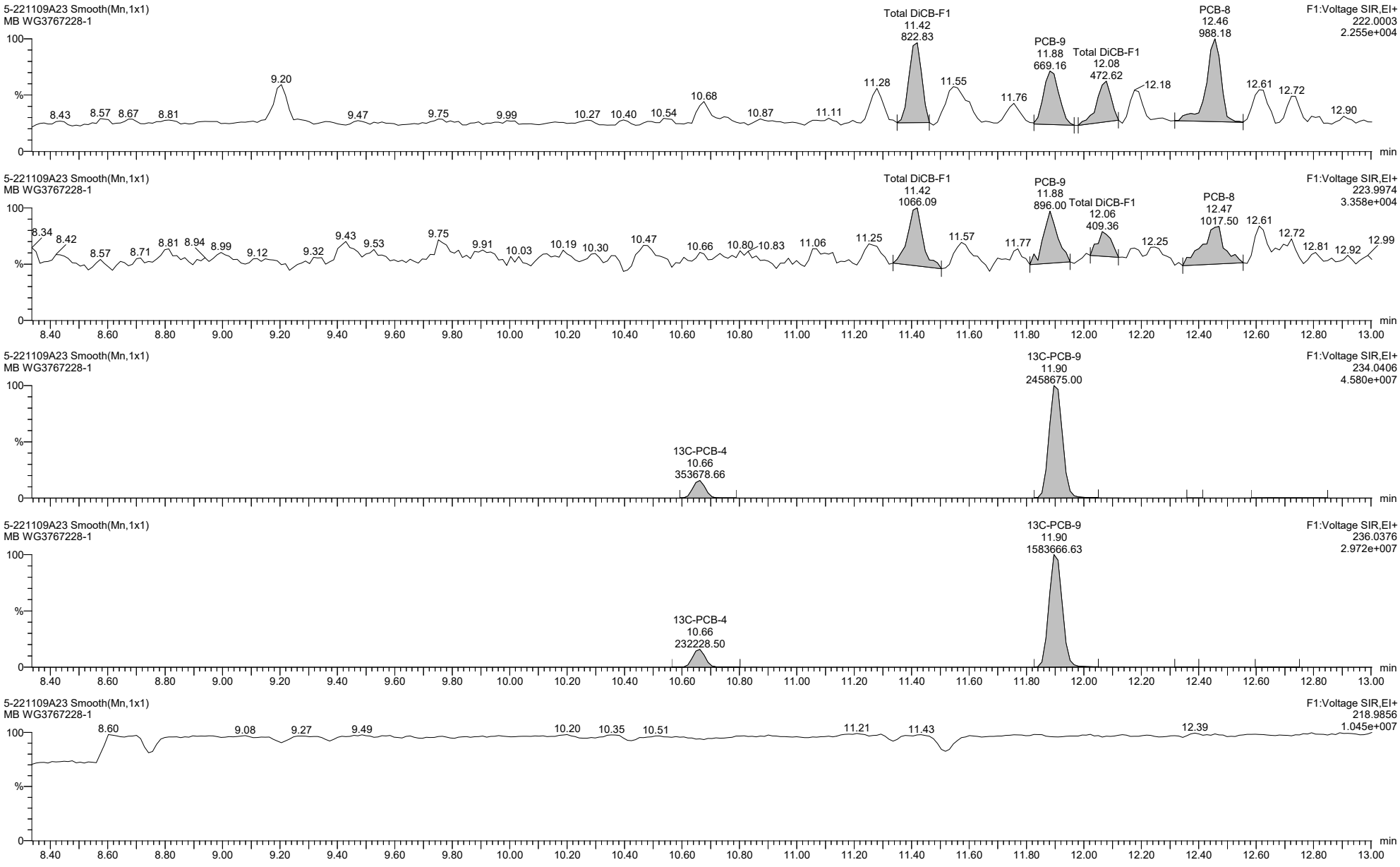
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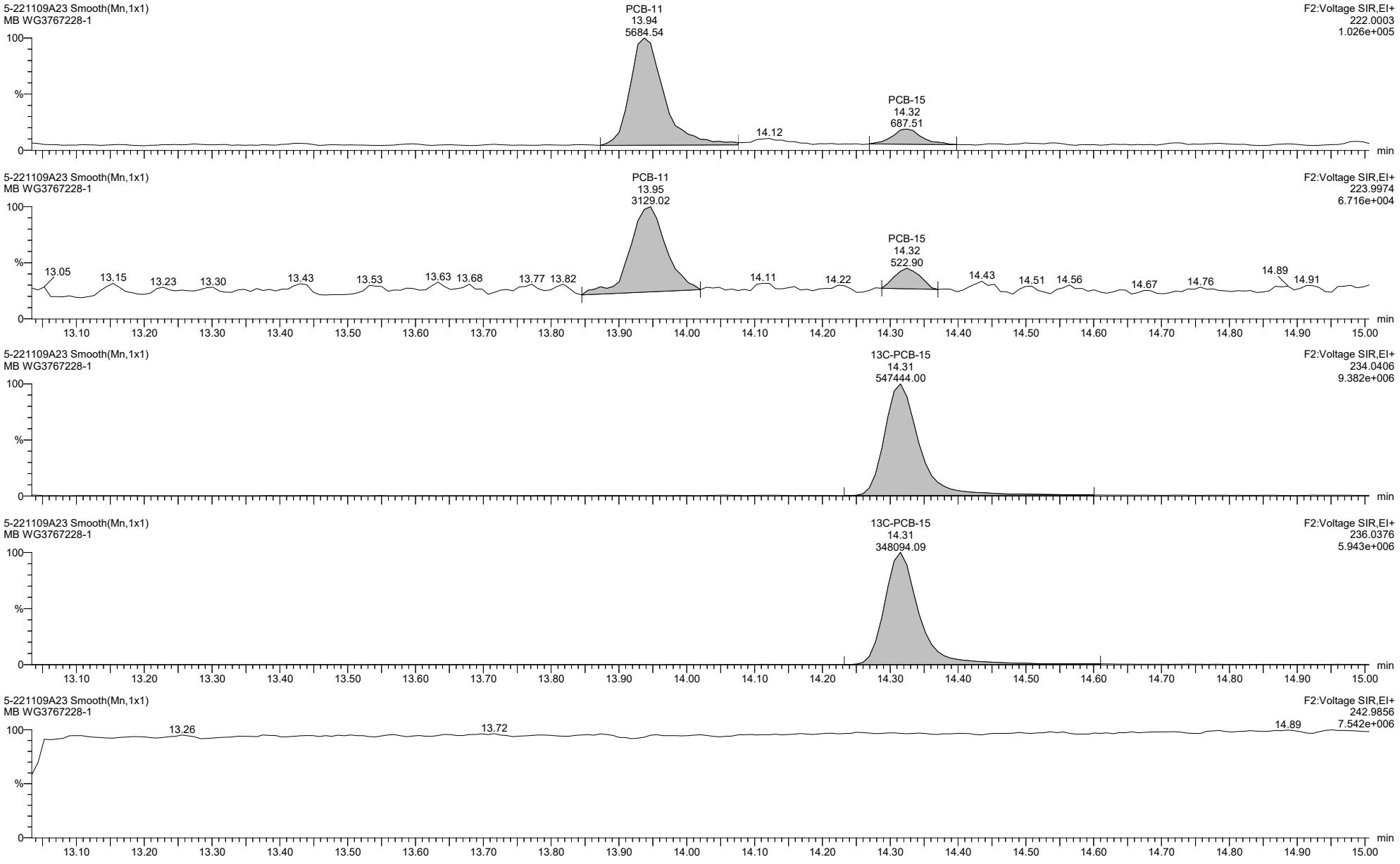
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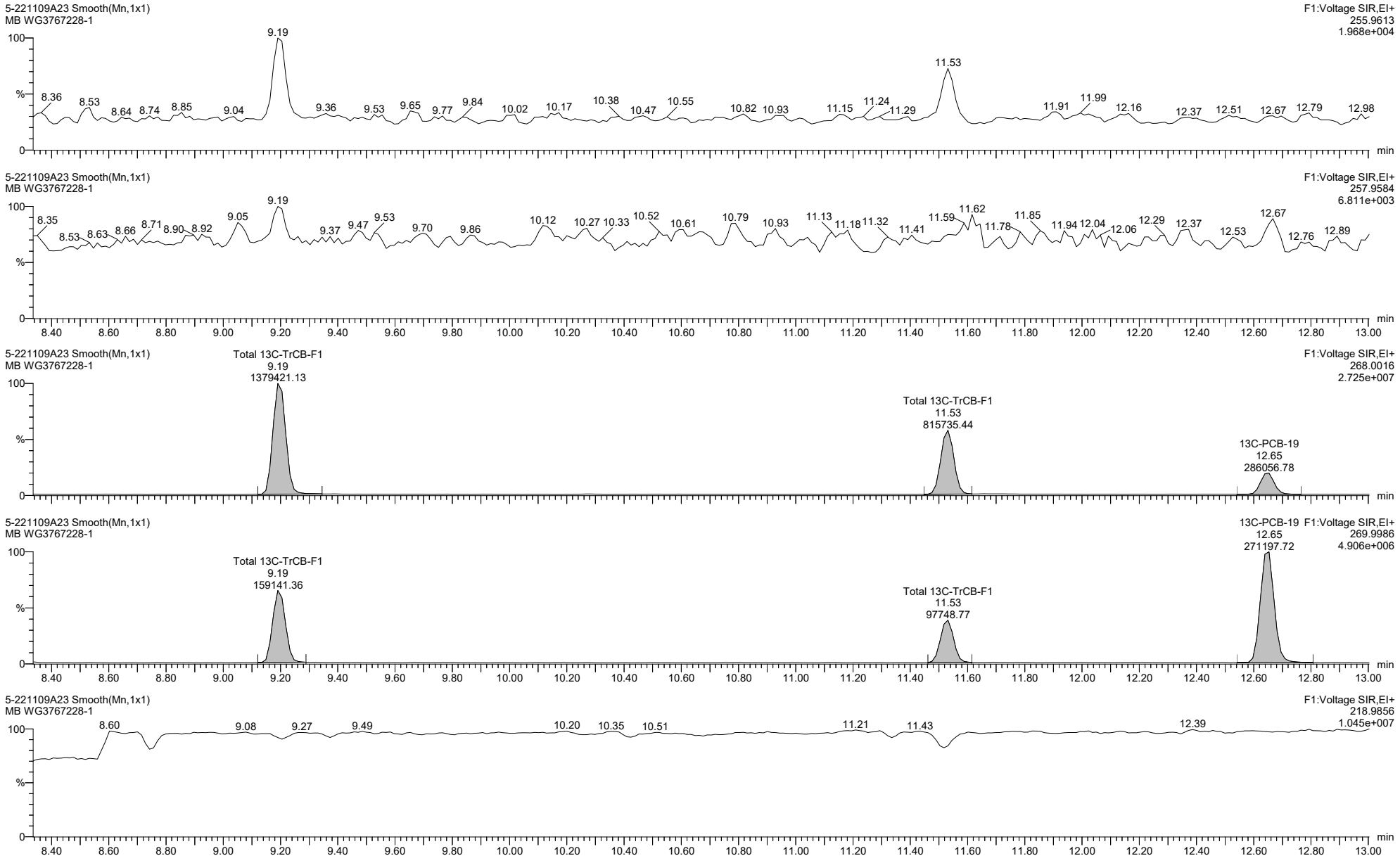
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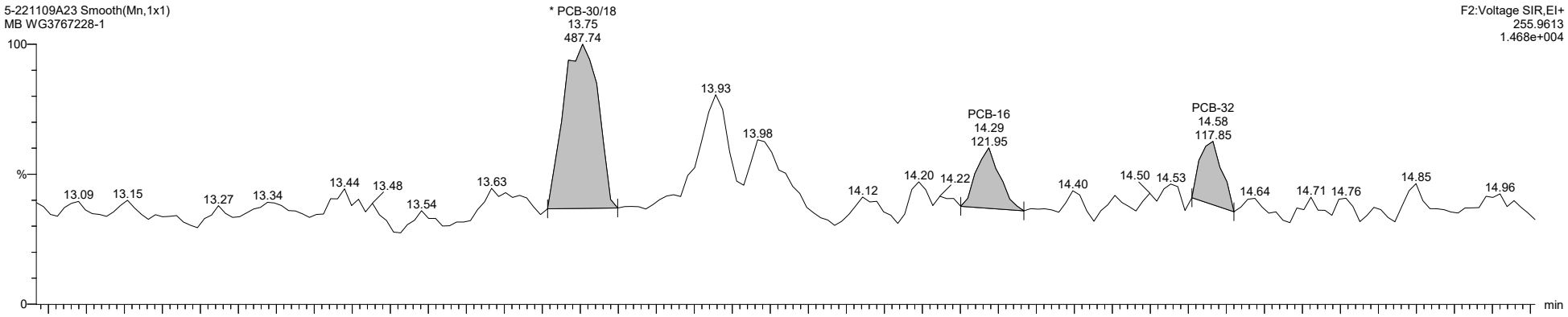
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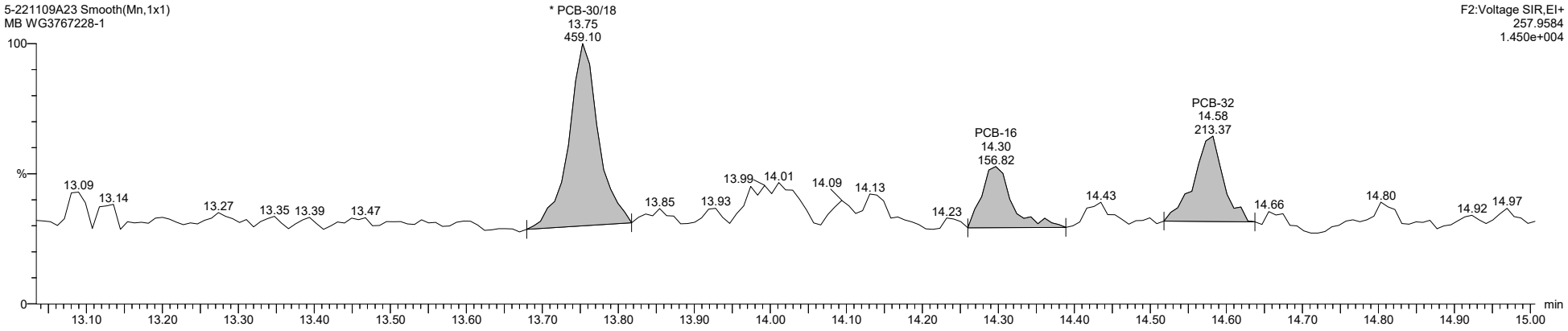


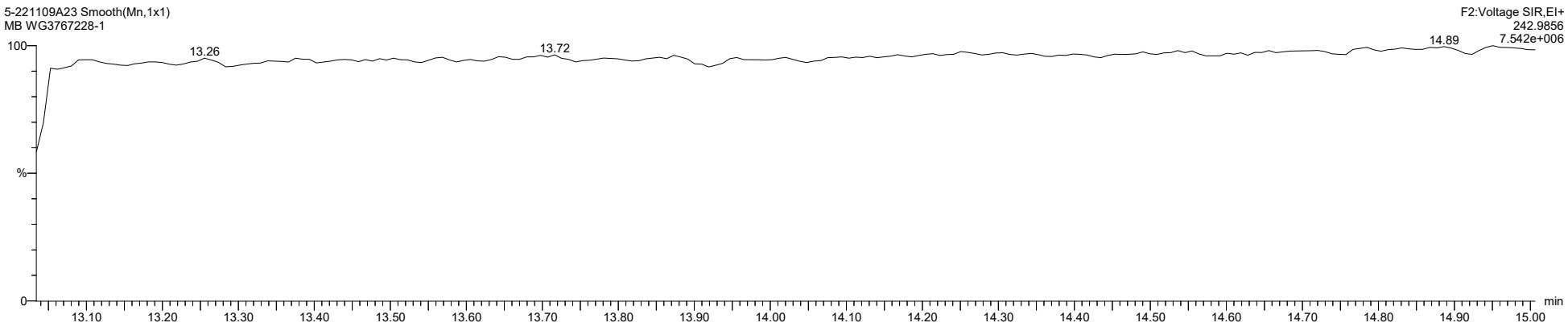
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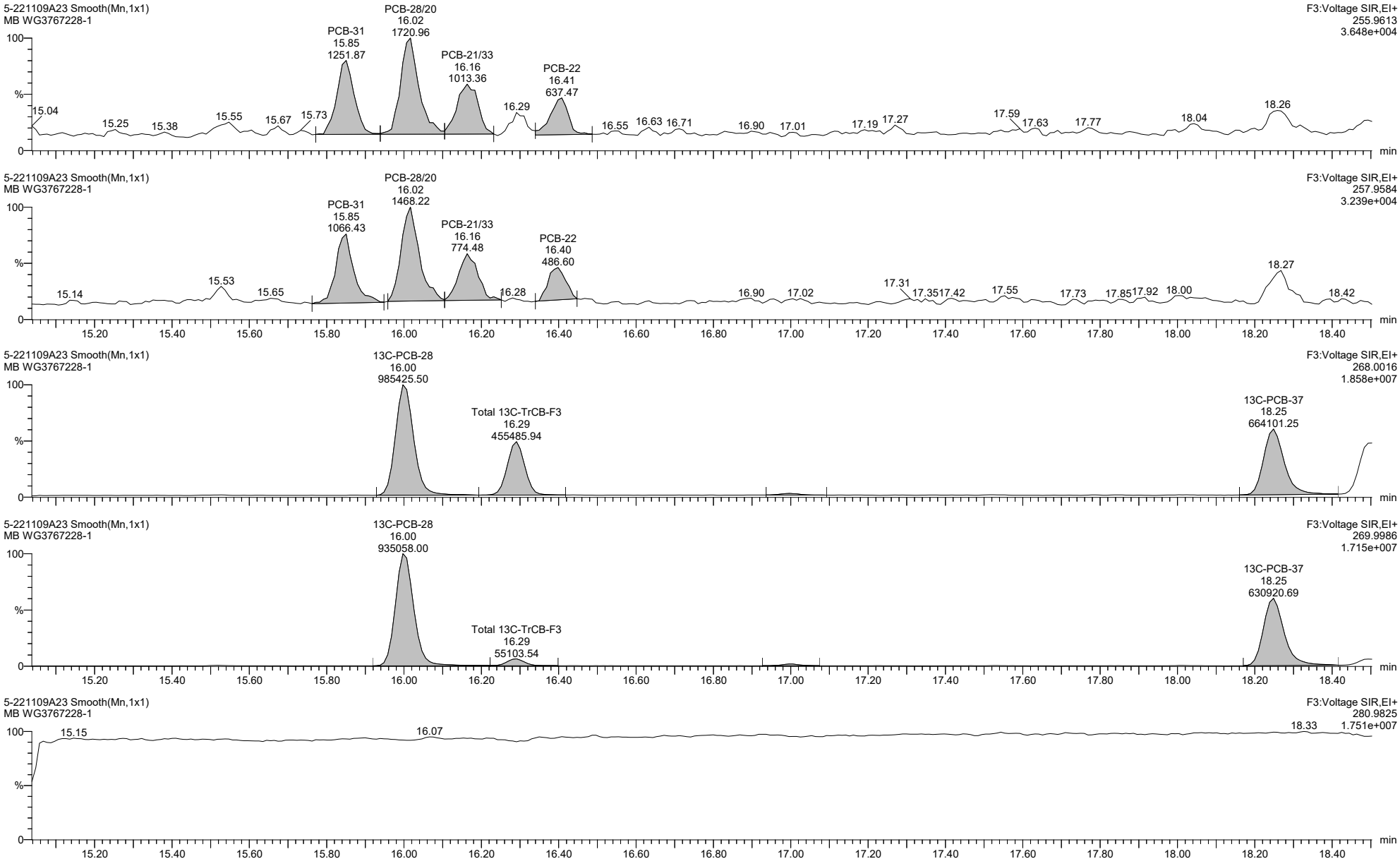


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

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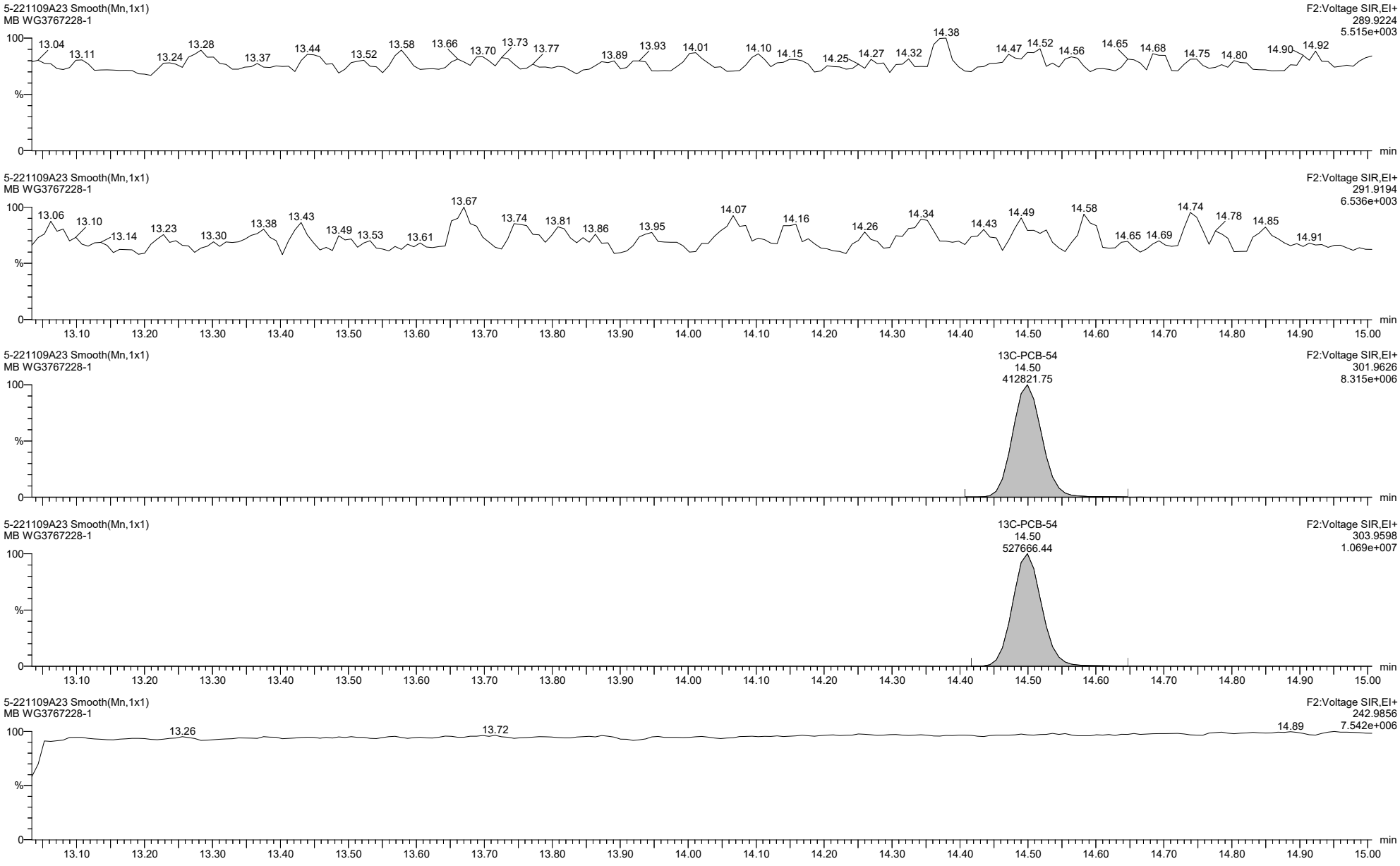


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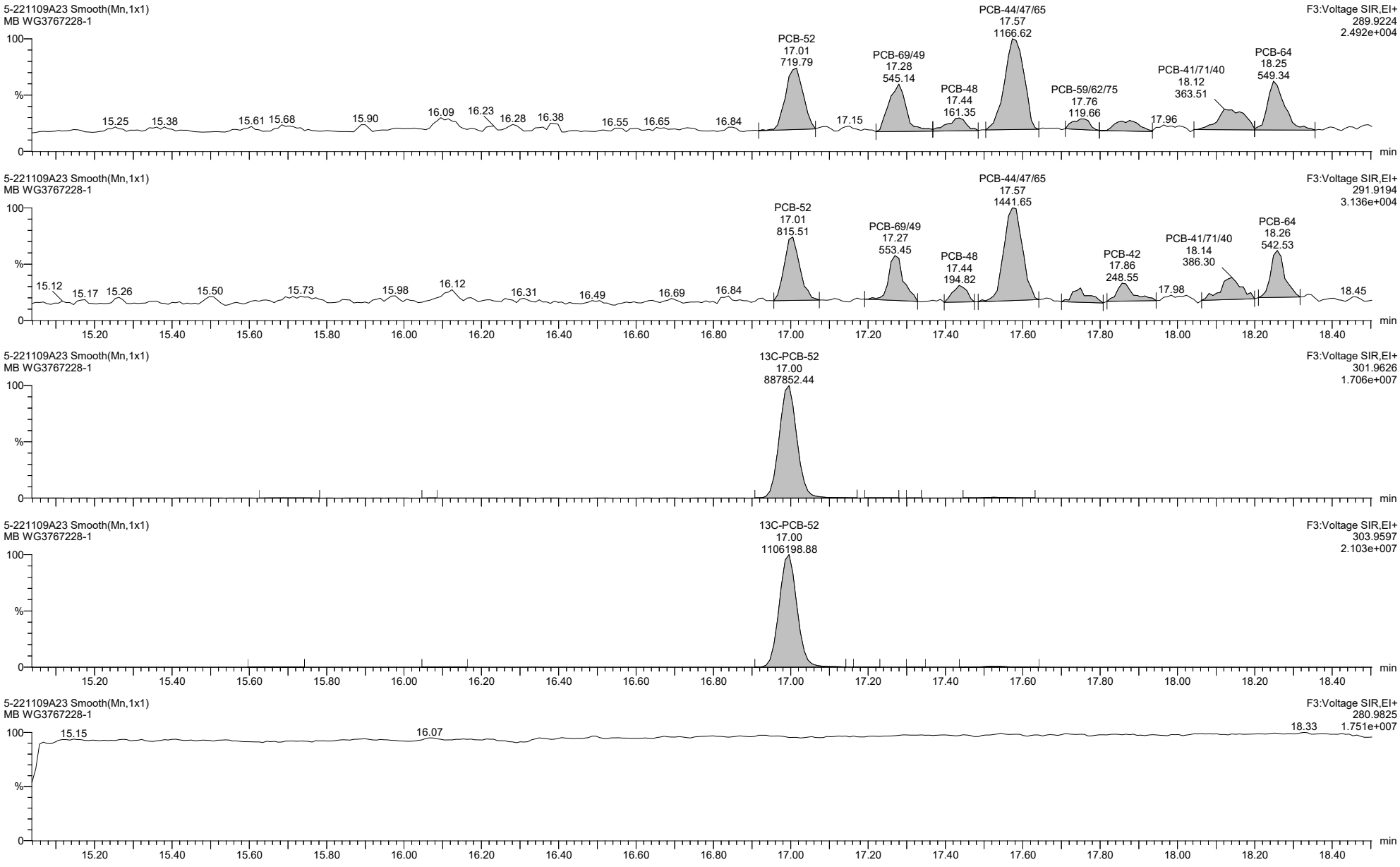


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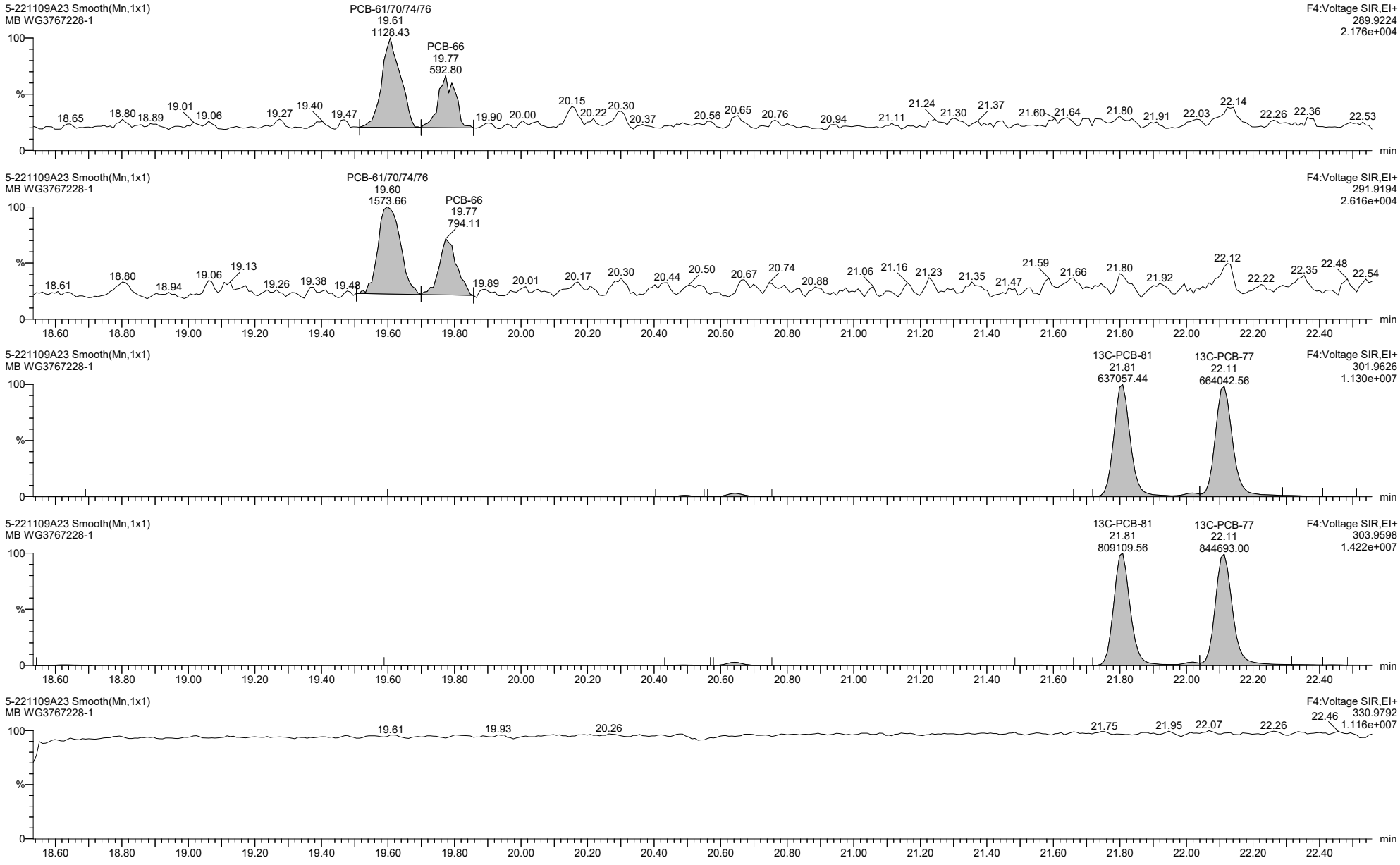


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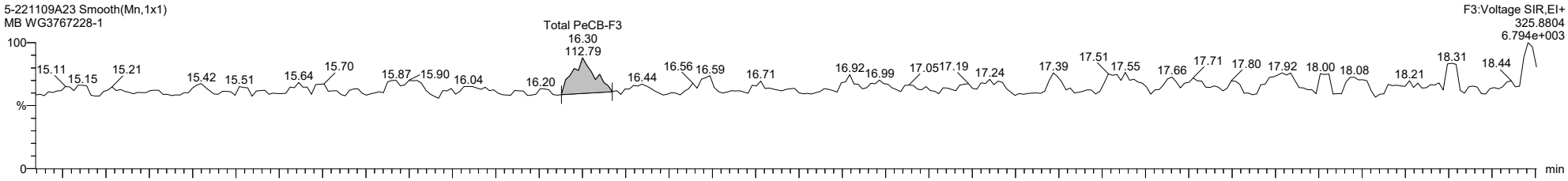
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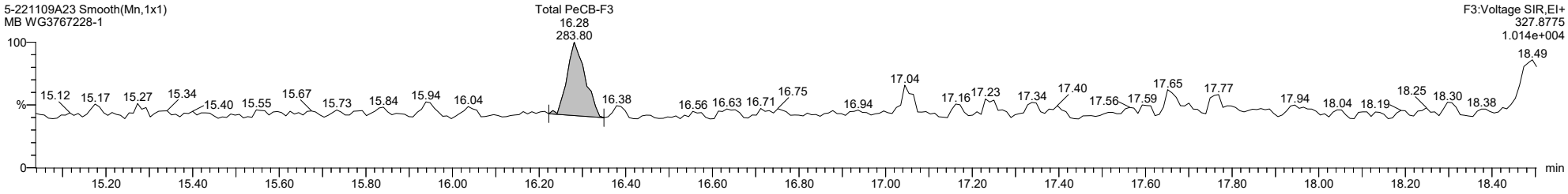


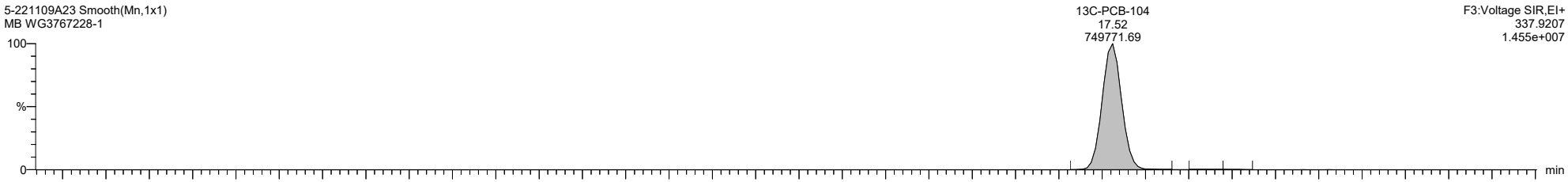
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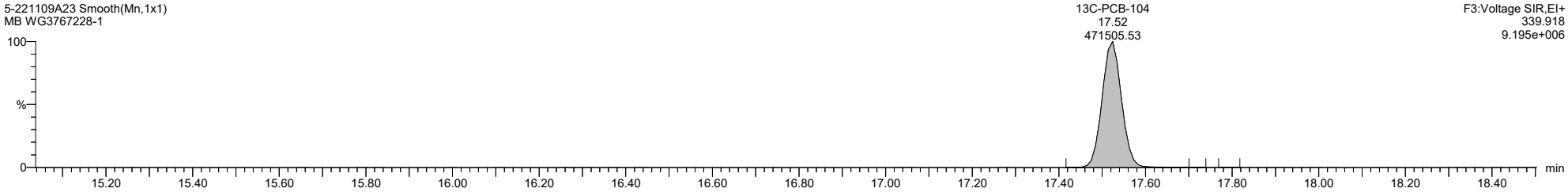
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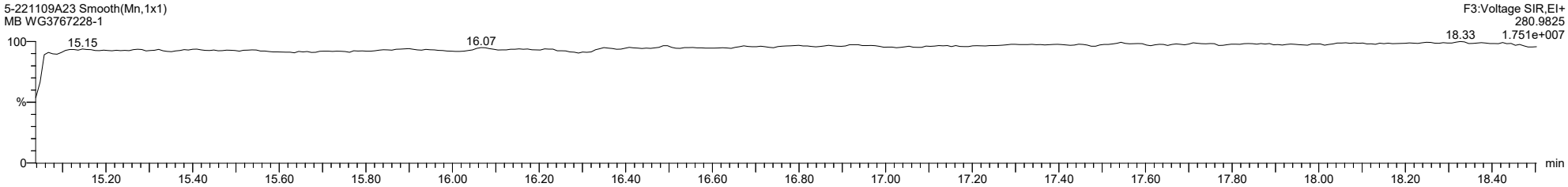
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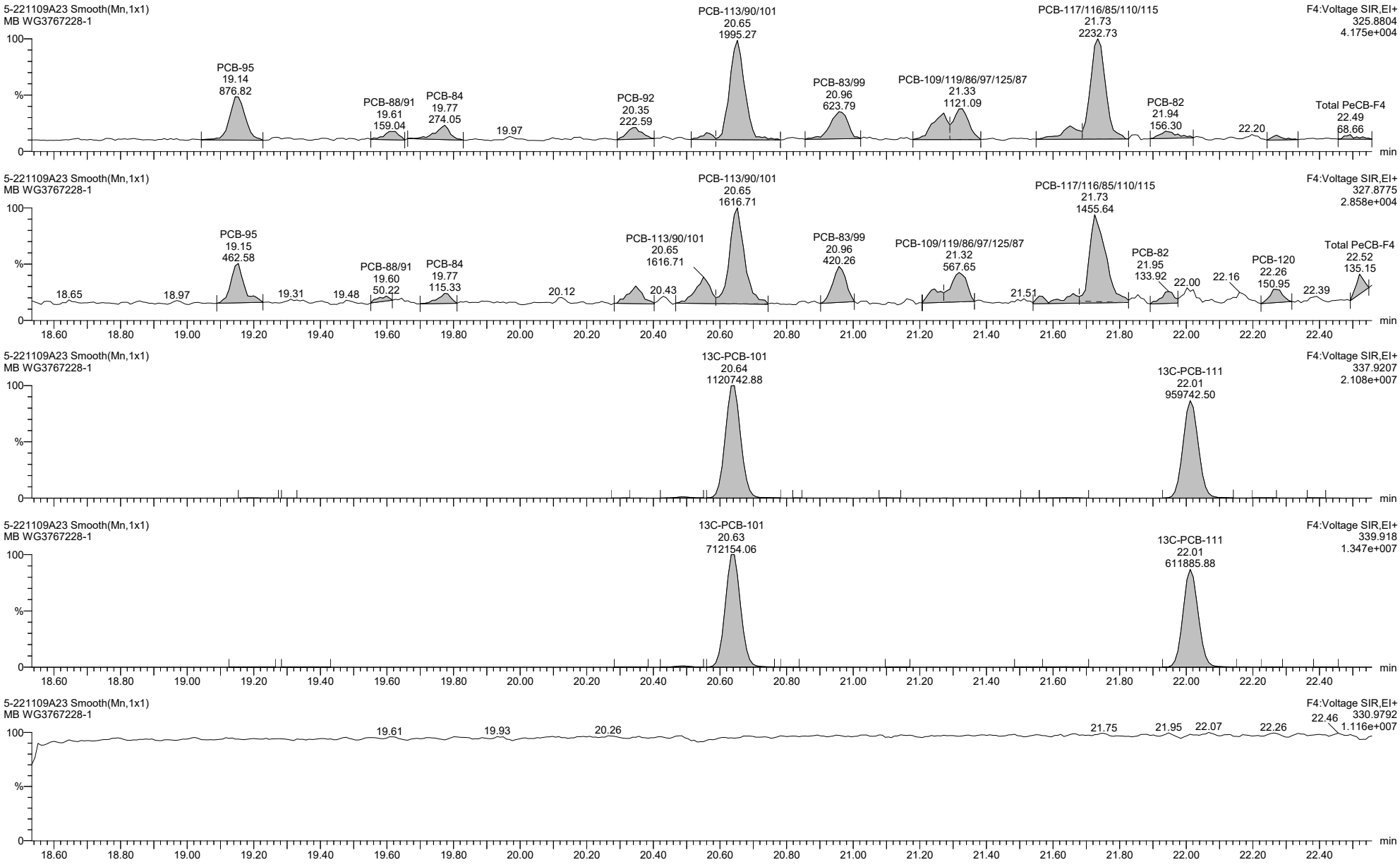


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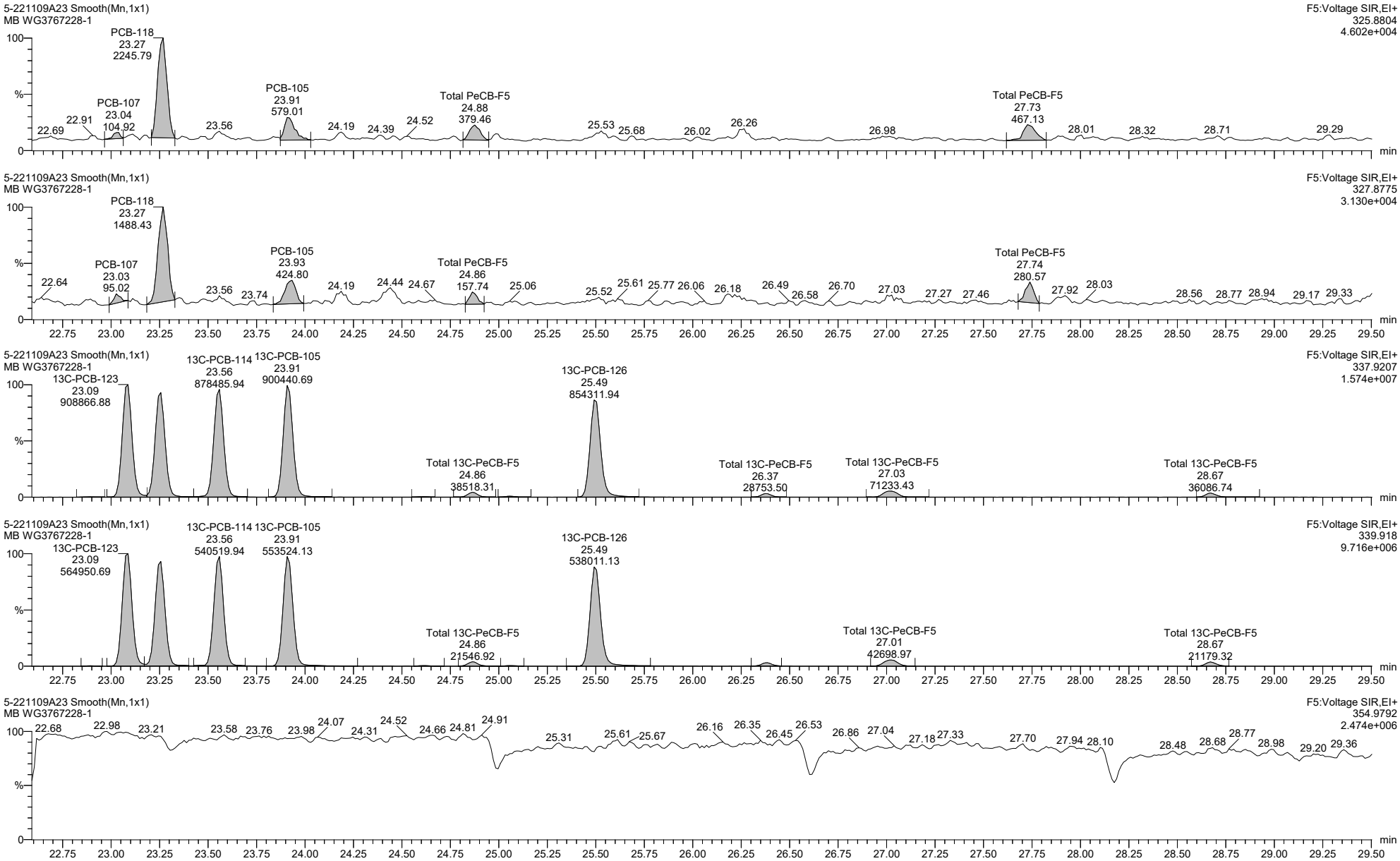


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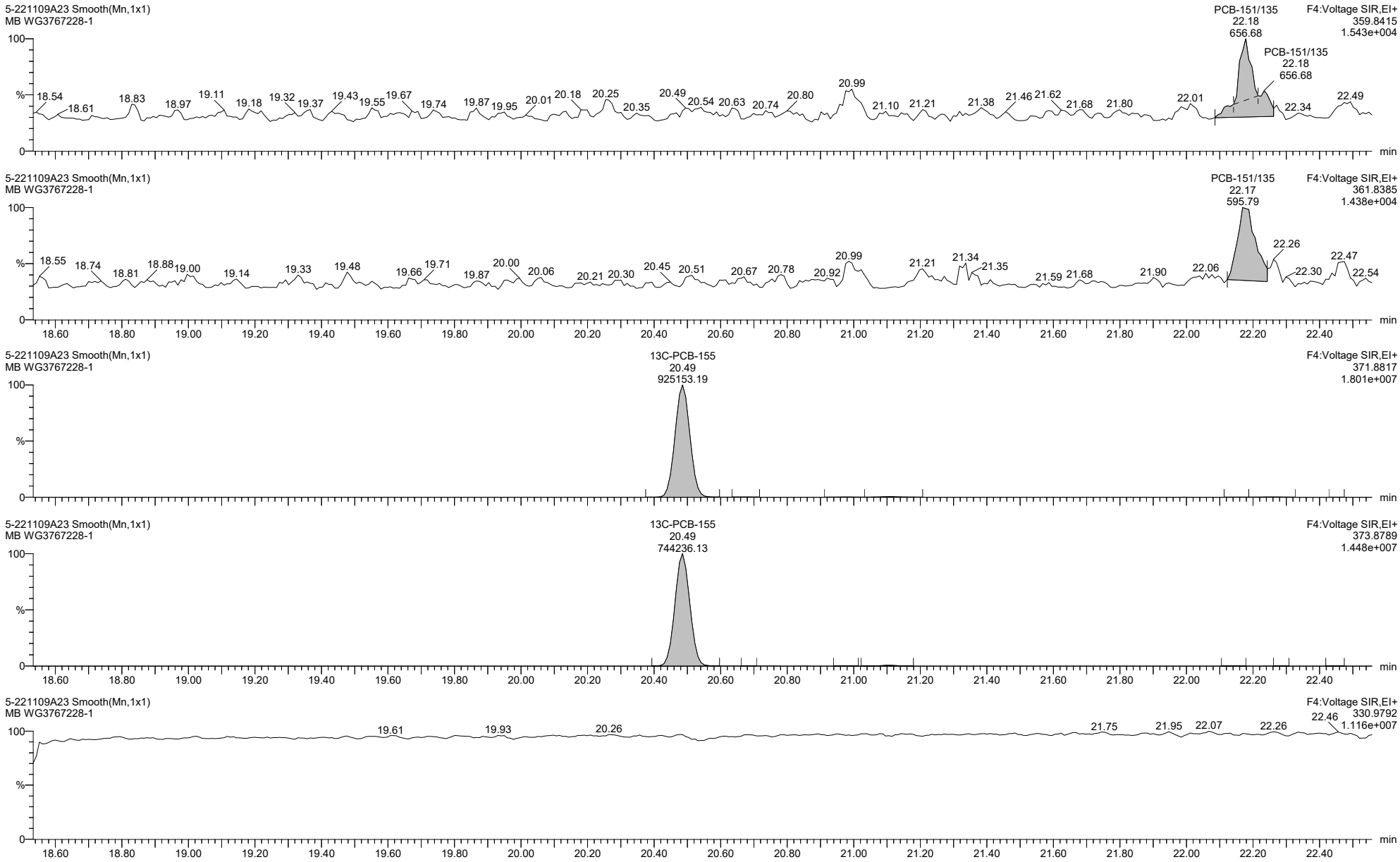
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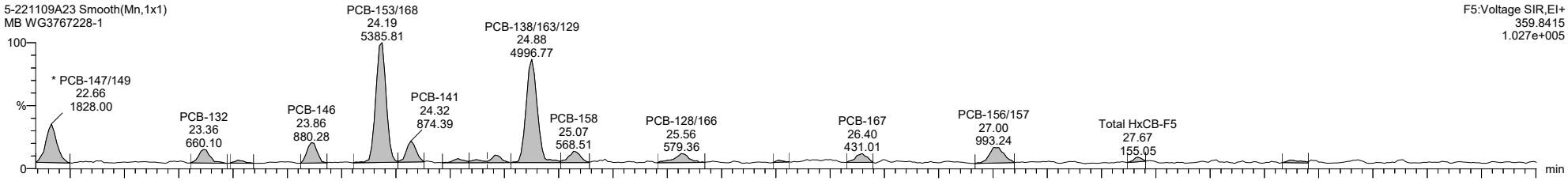


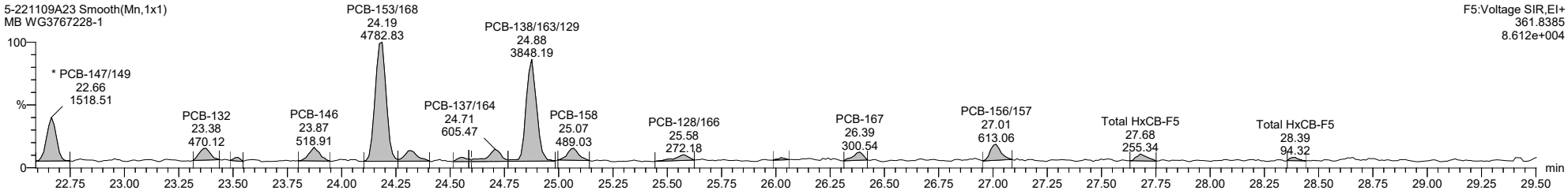
Quantify Sample Template Report **MassLynx V4.2 SCN1012**

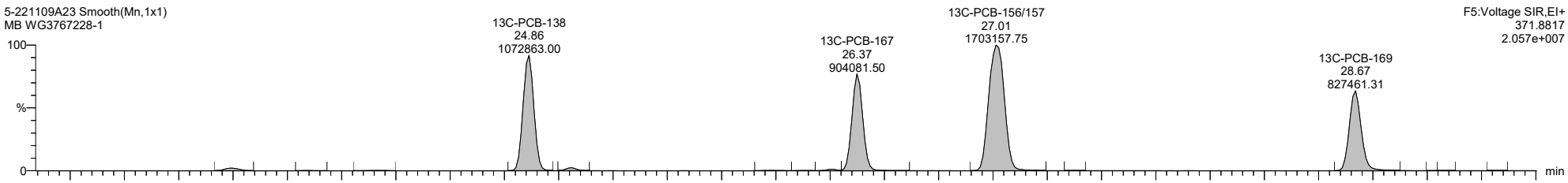
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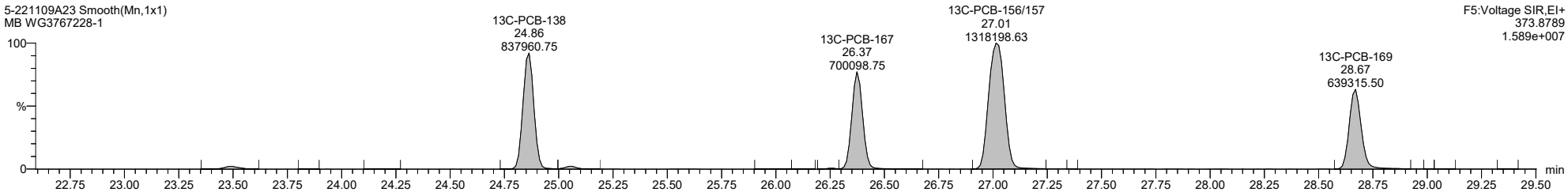
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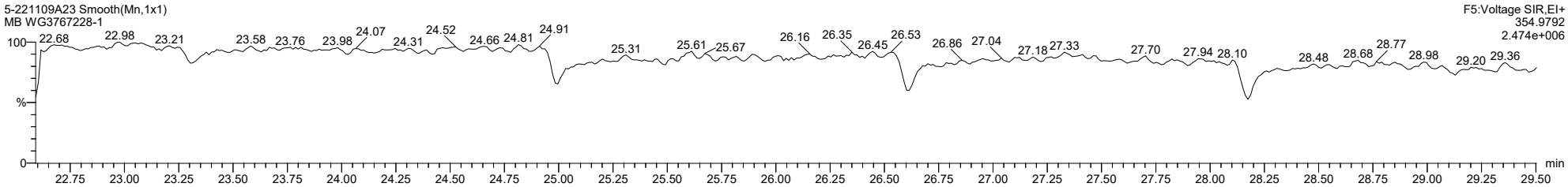
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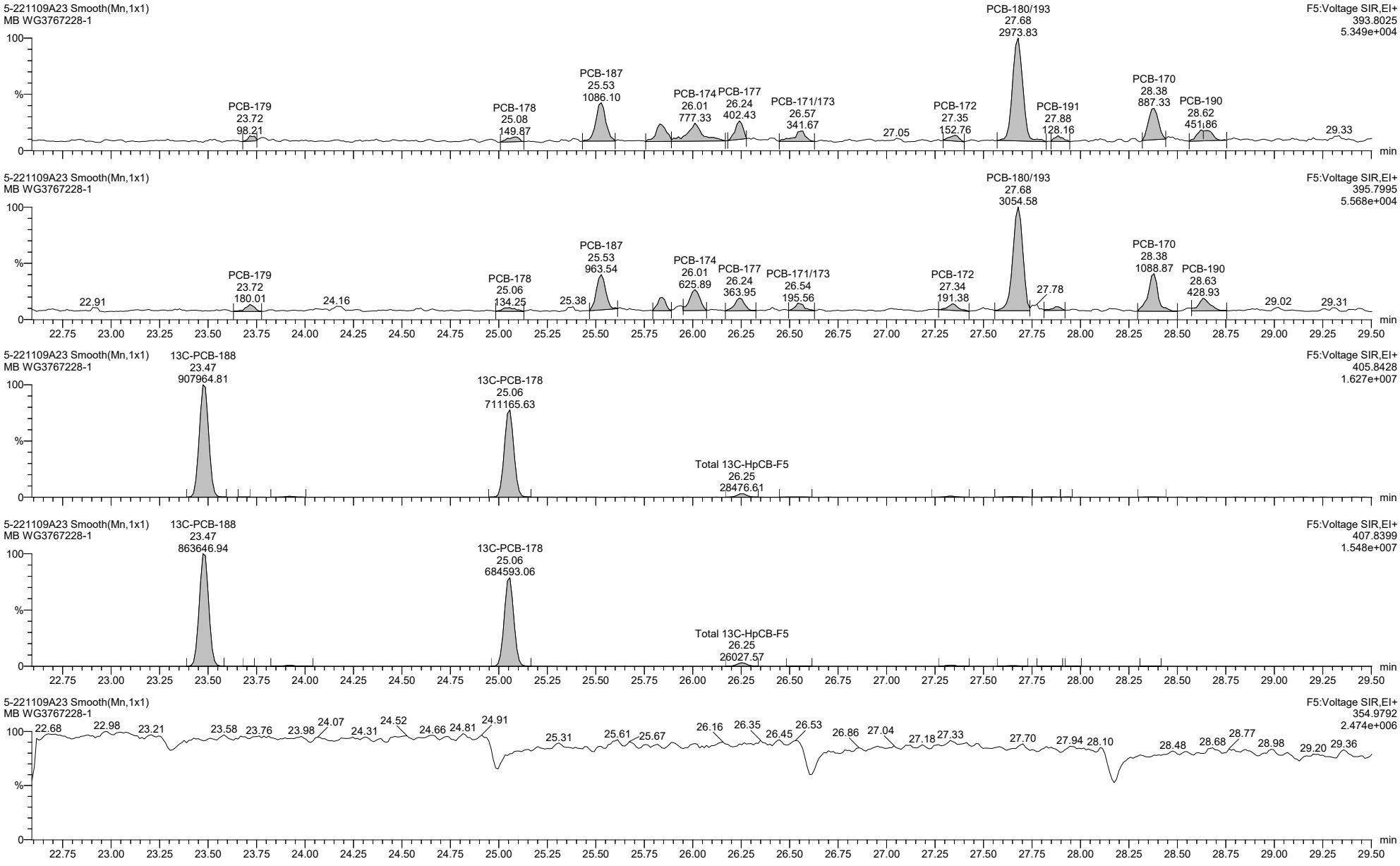


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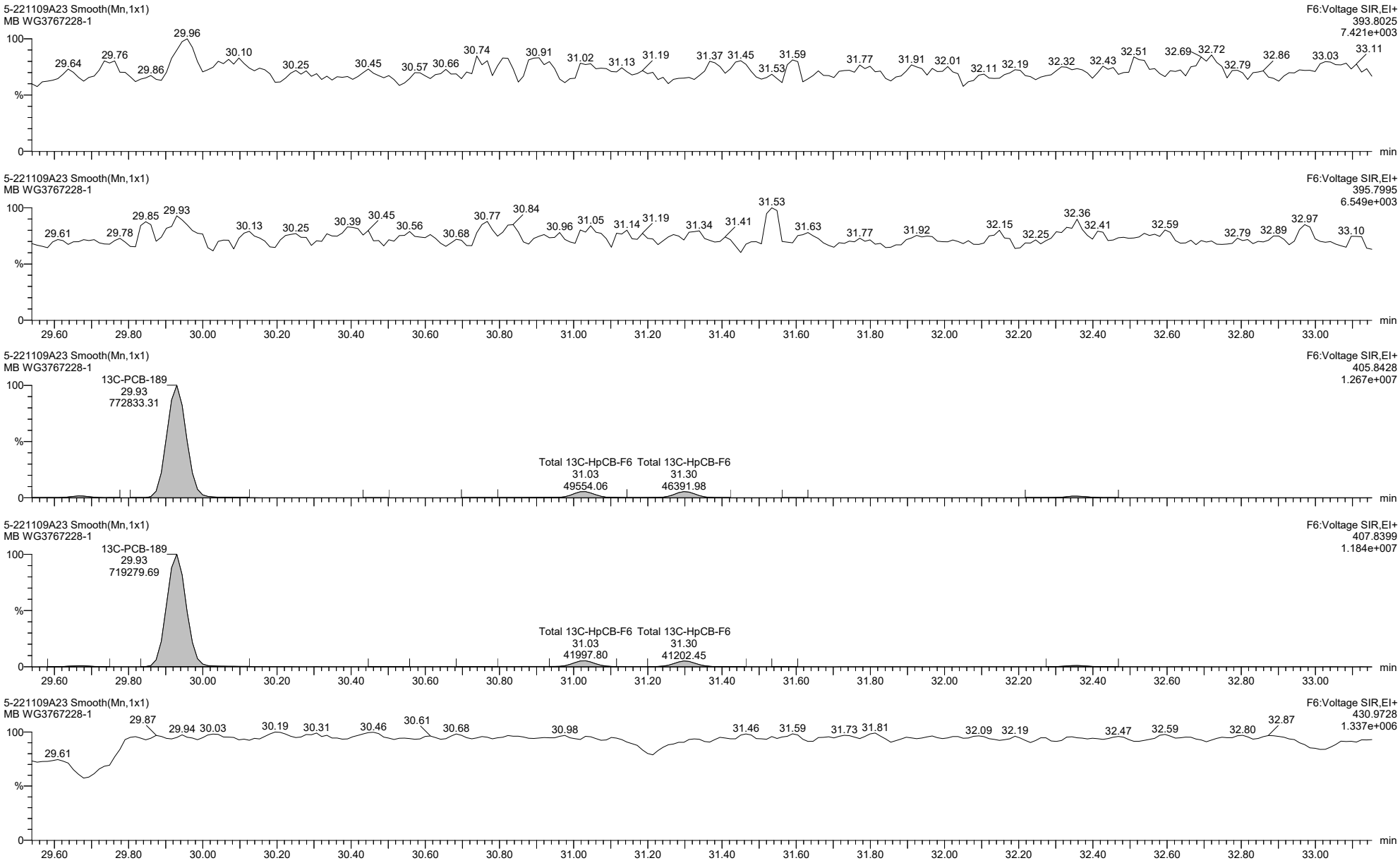


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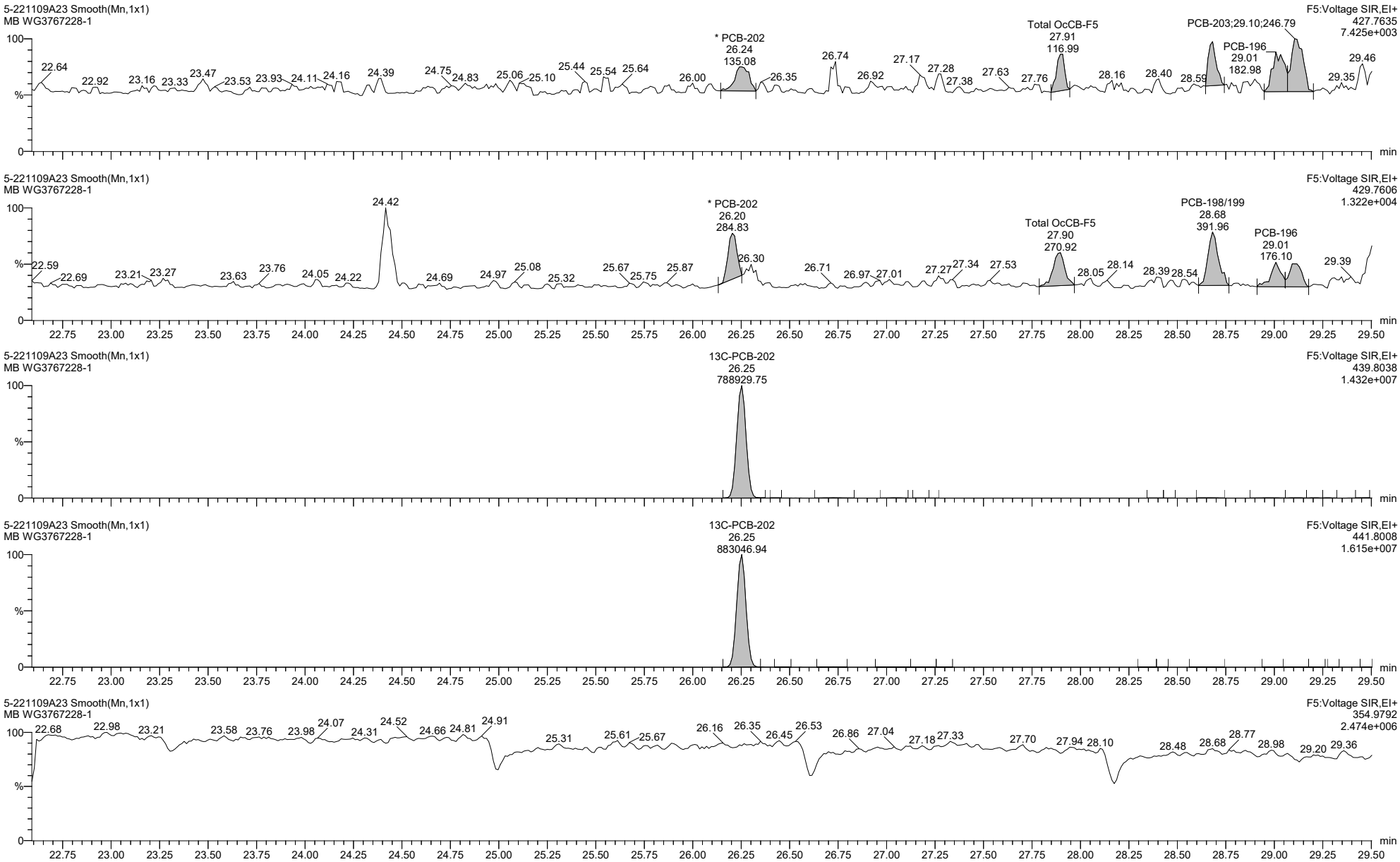


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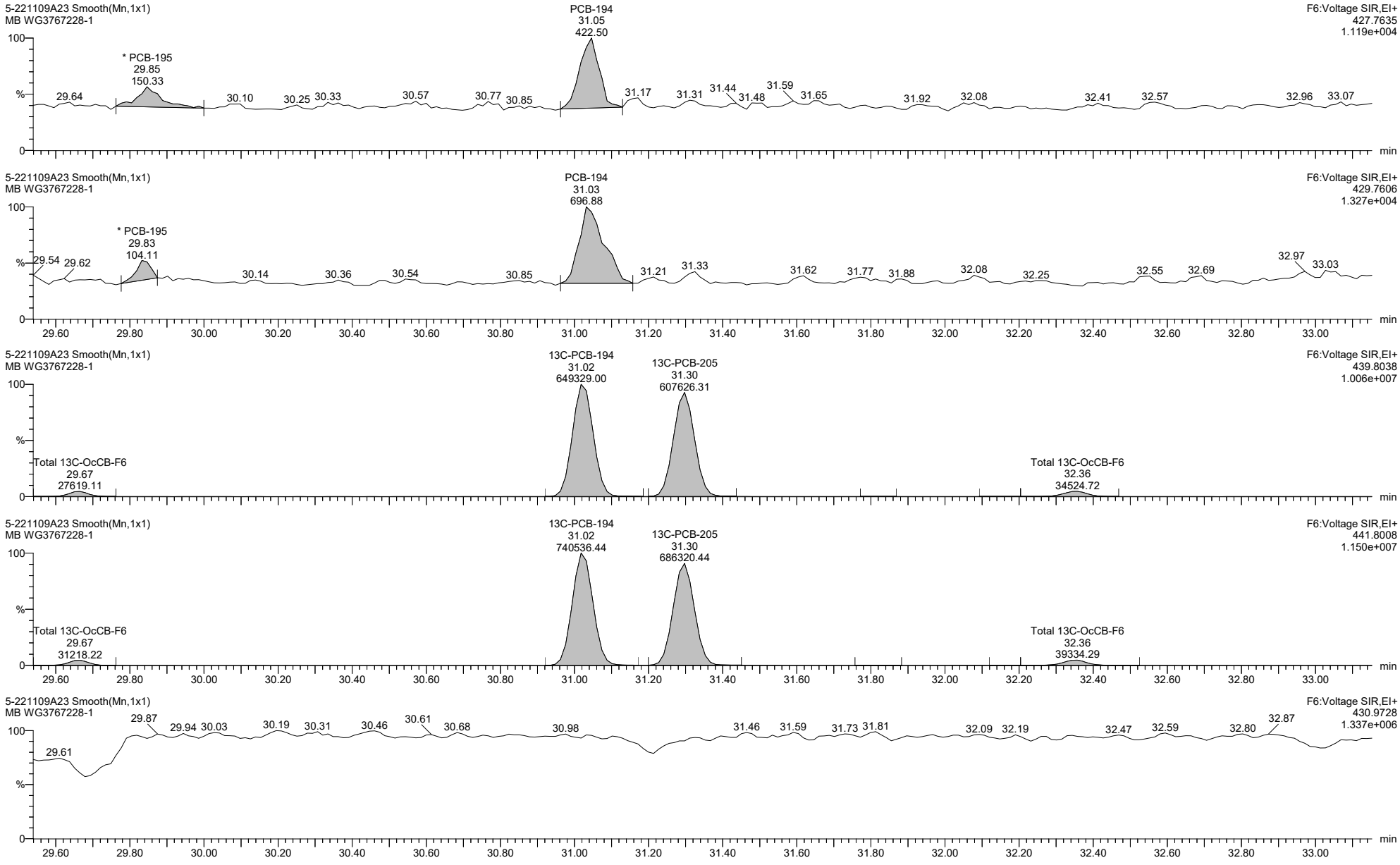
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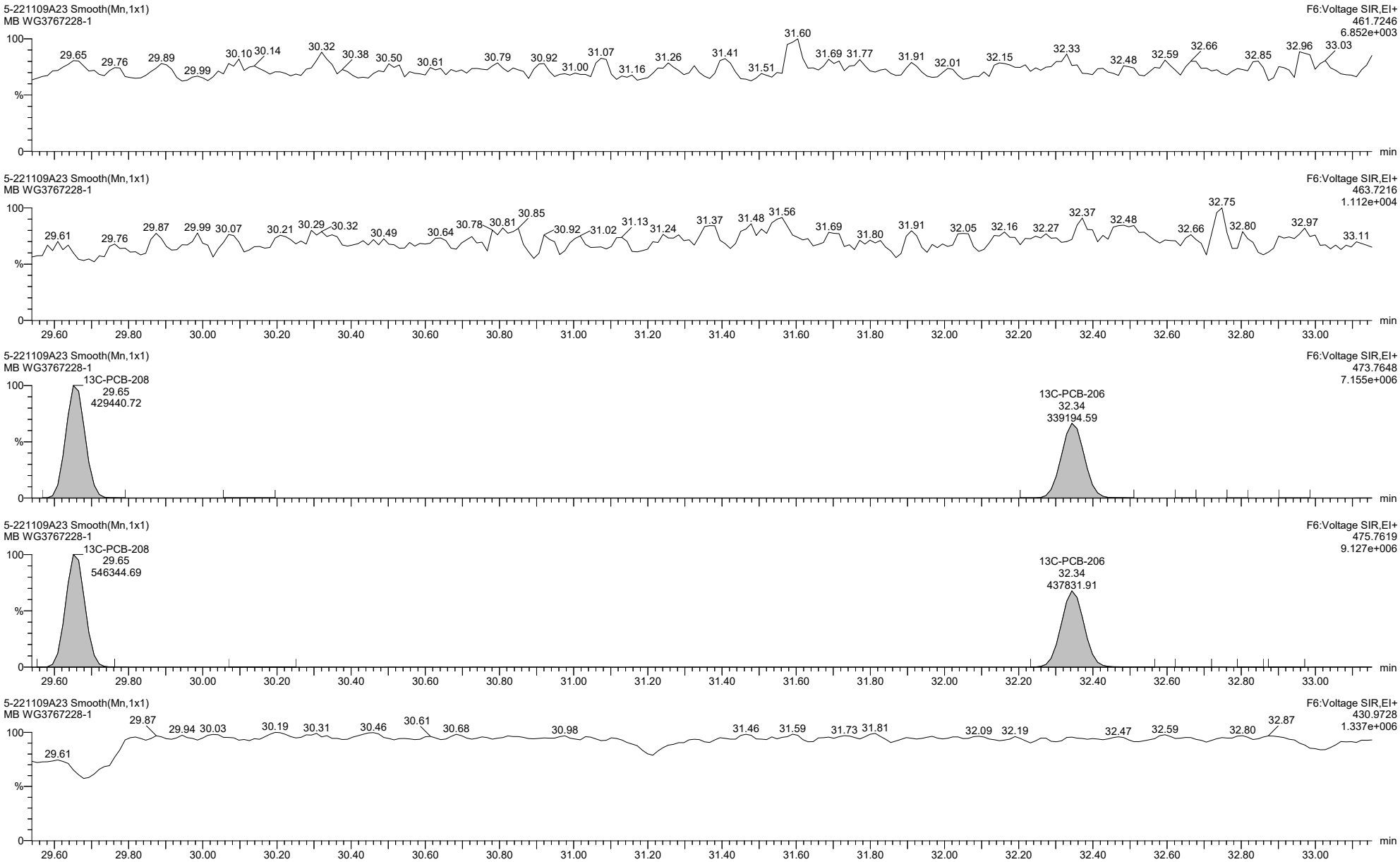


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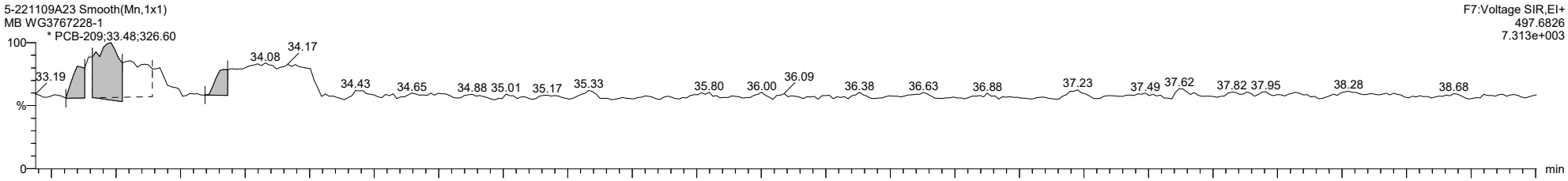
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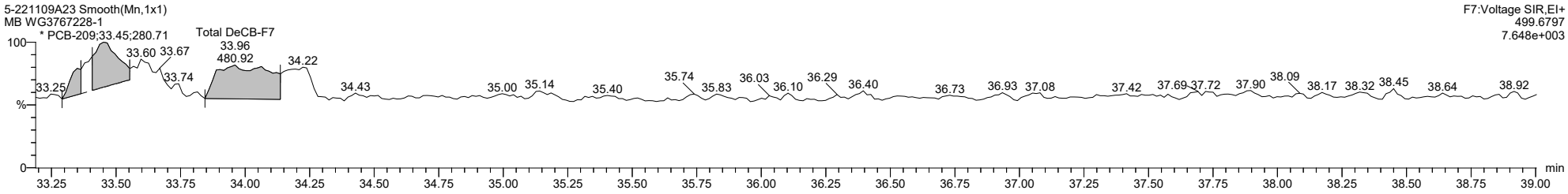


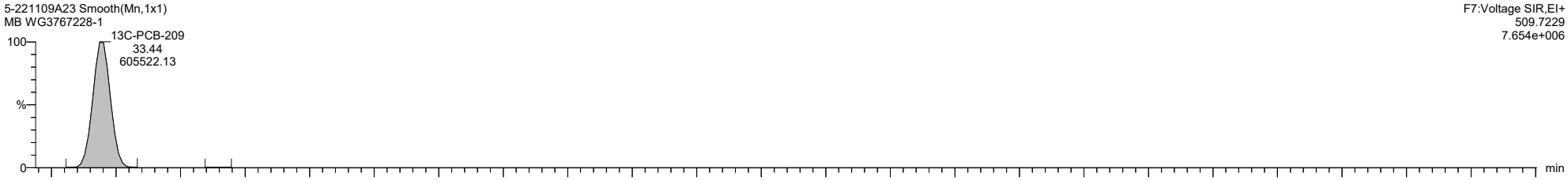
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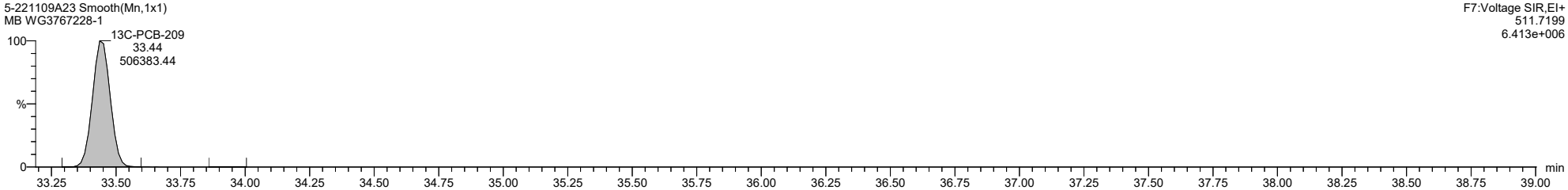
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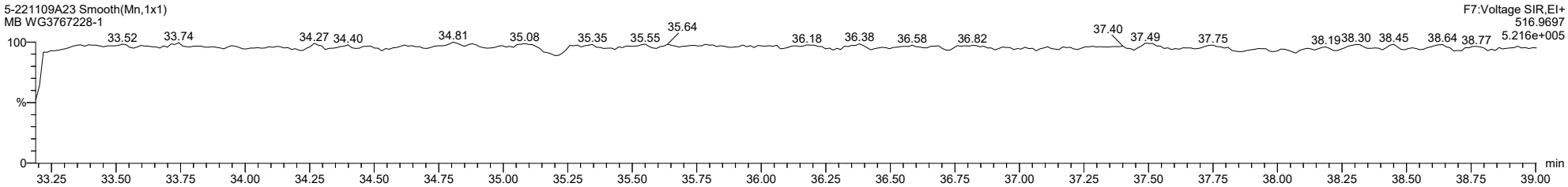
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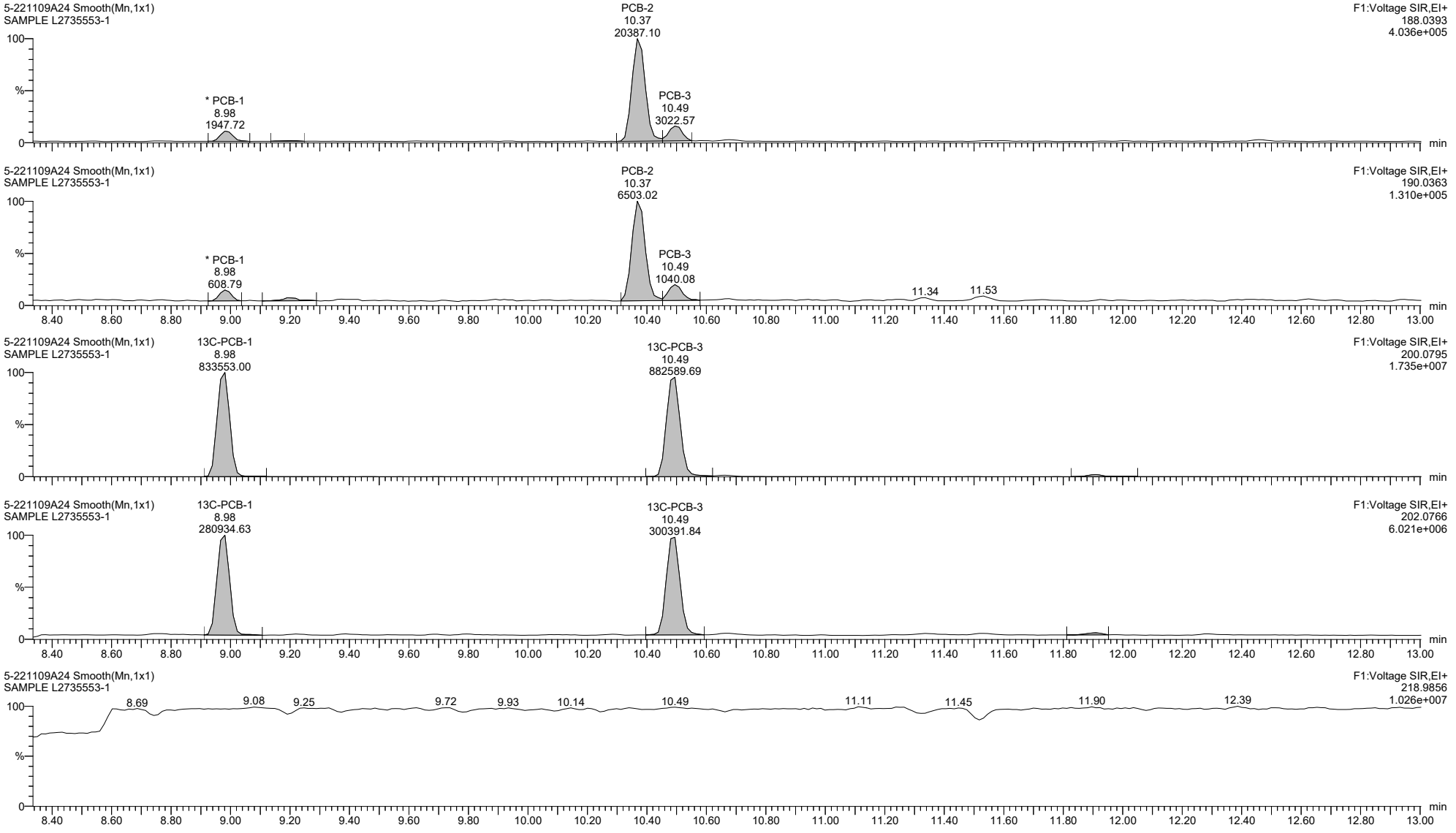
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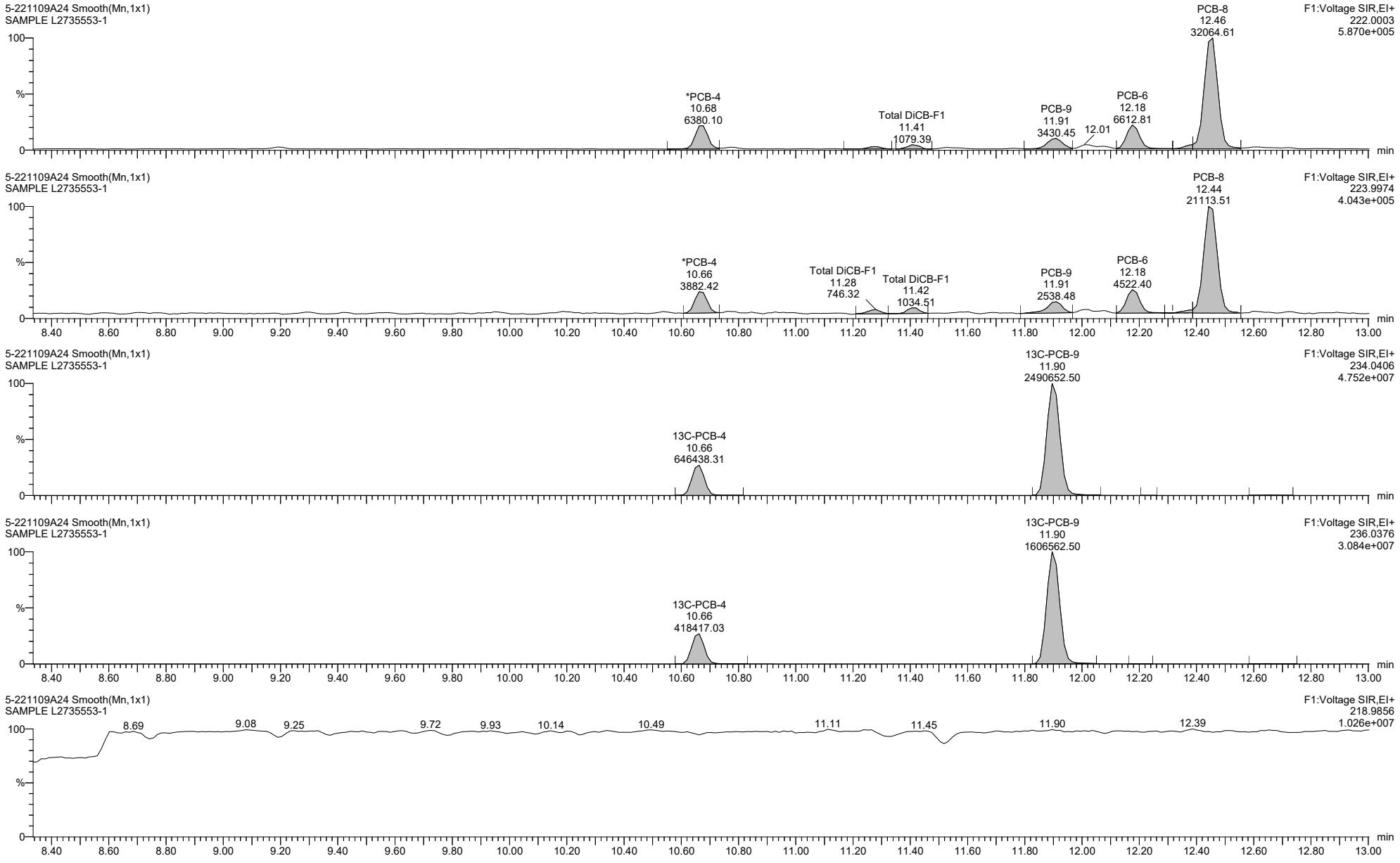


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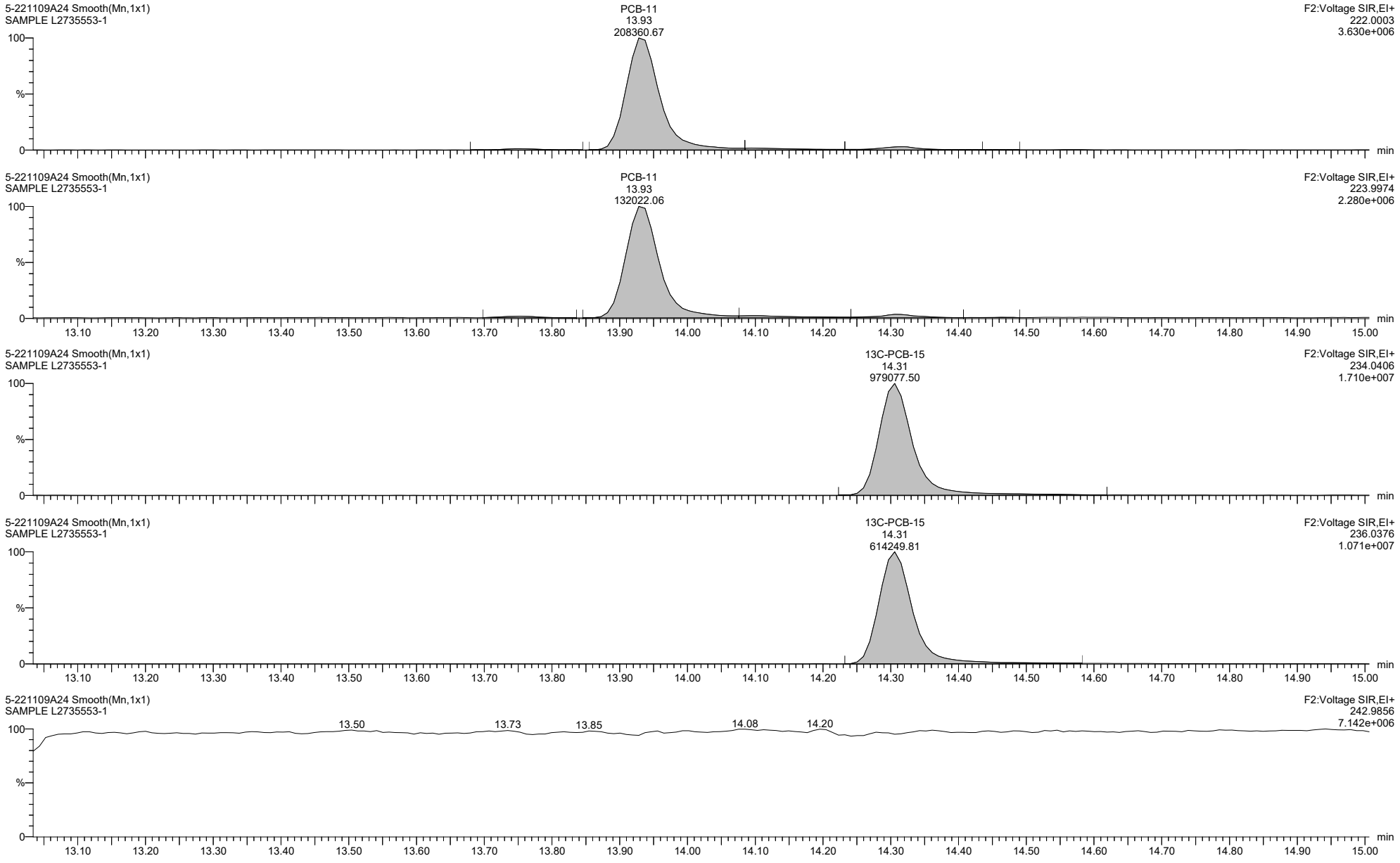


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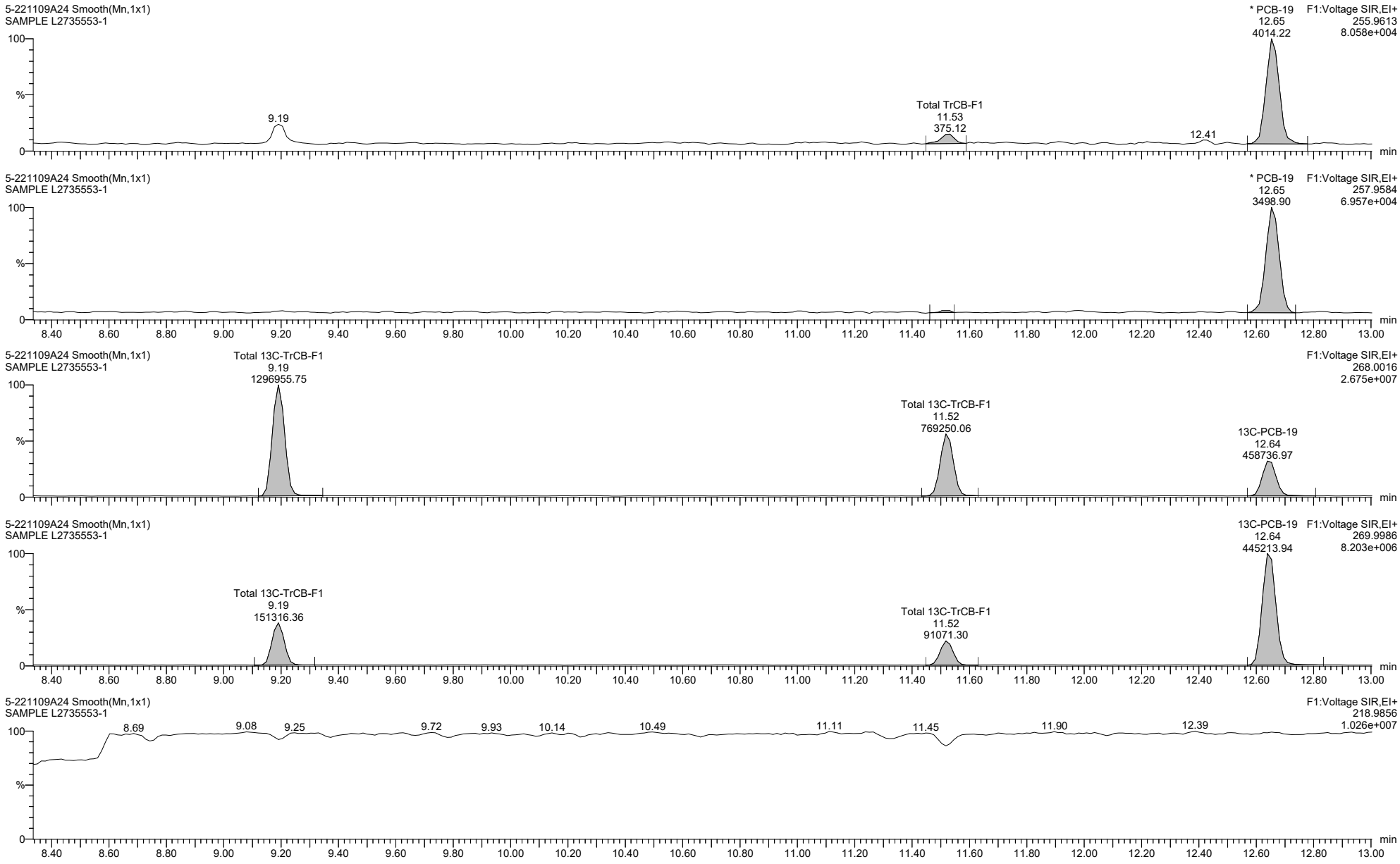
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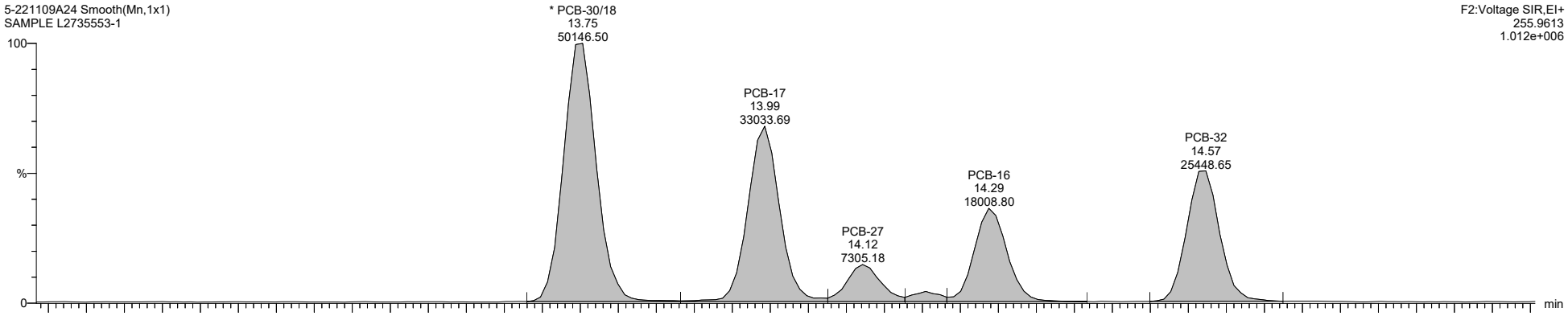


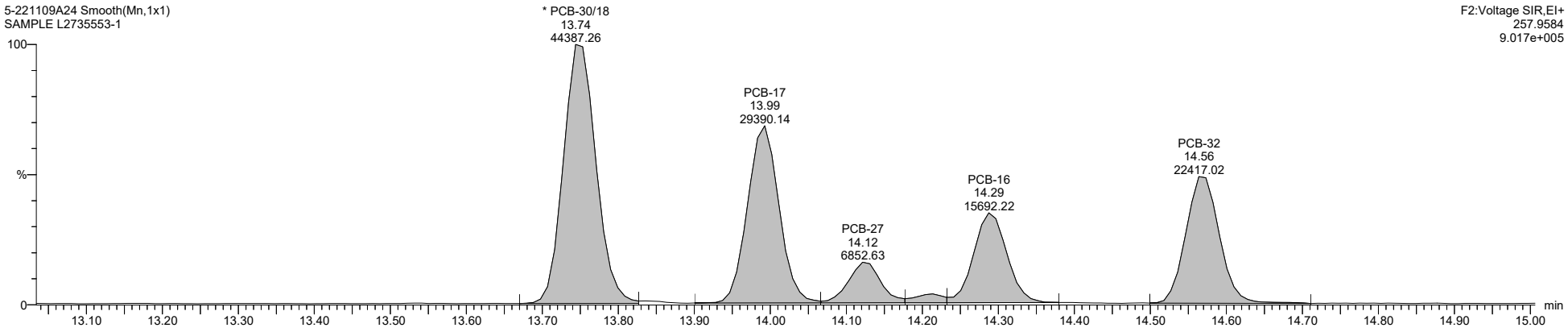
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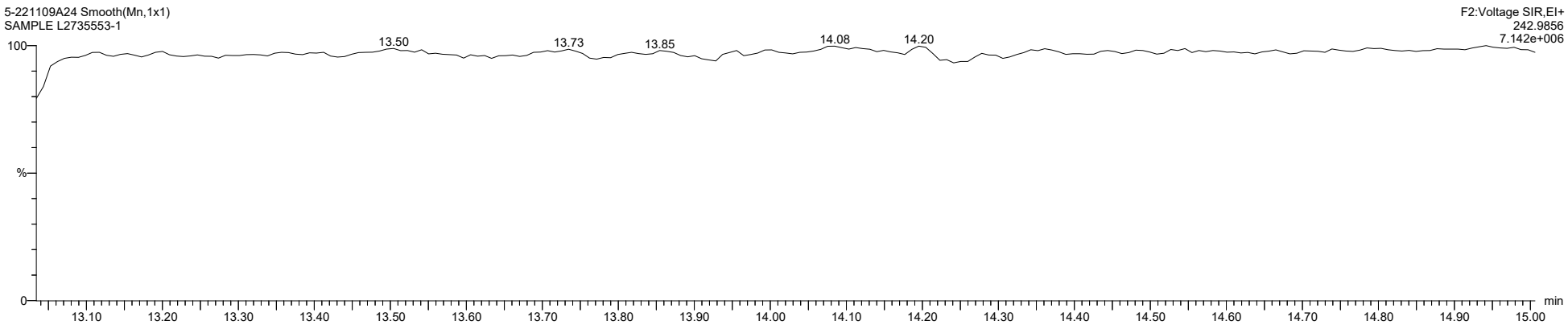
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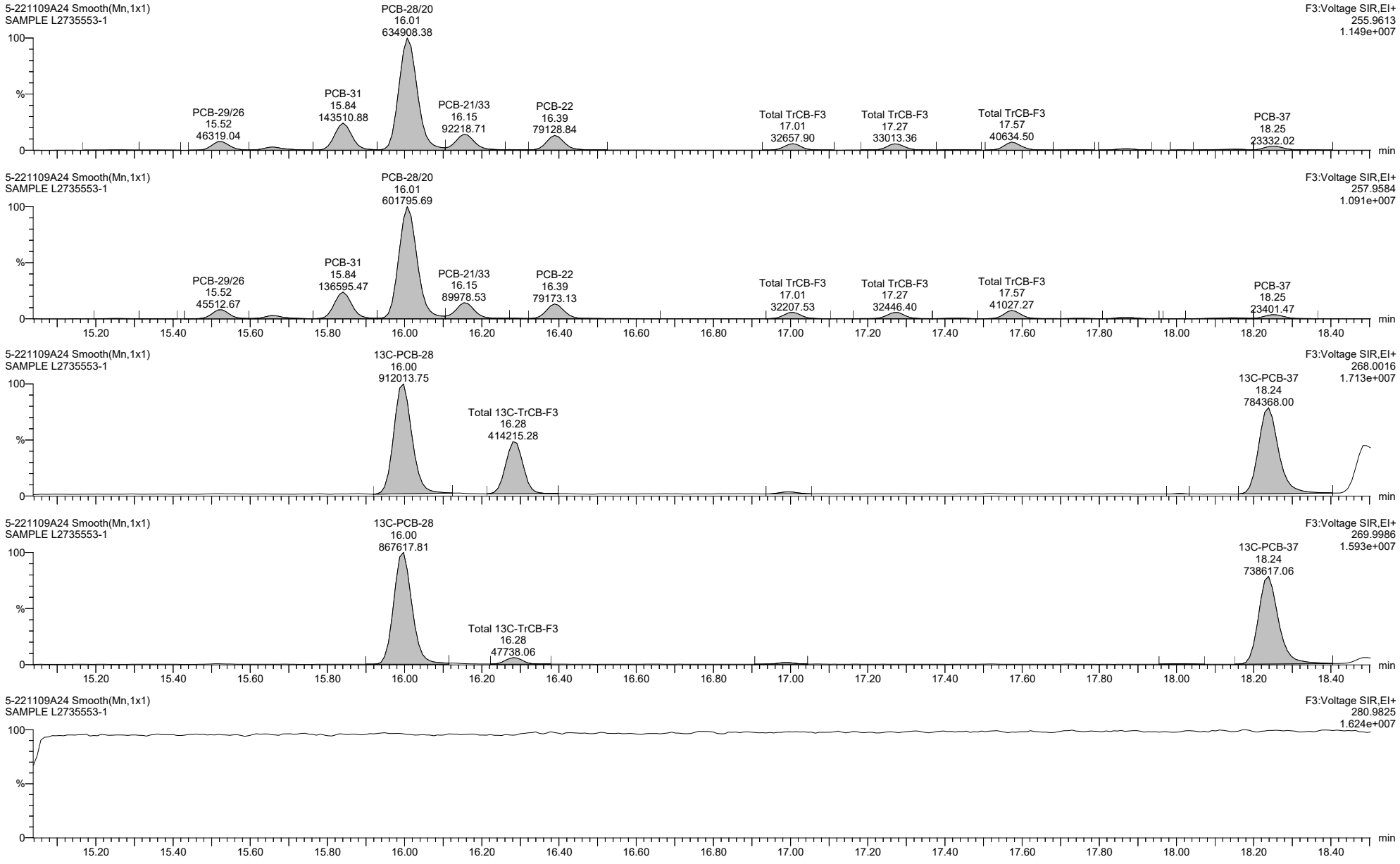


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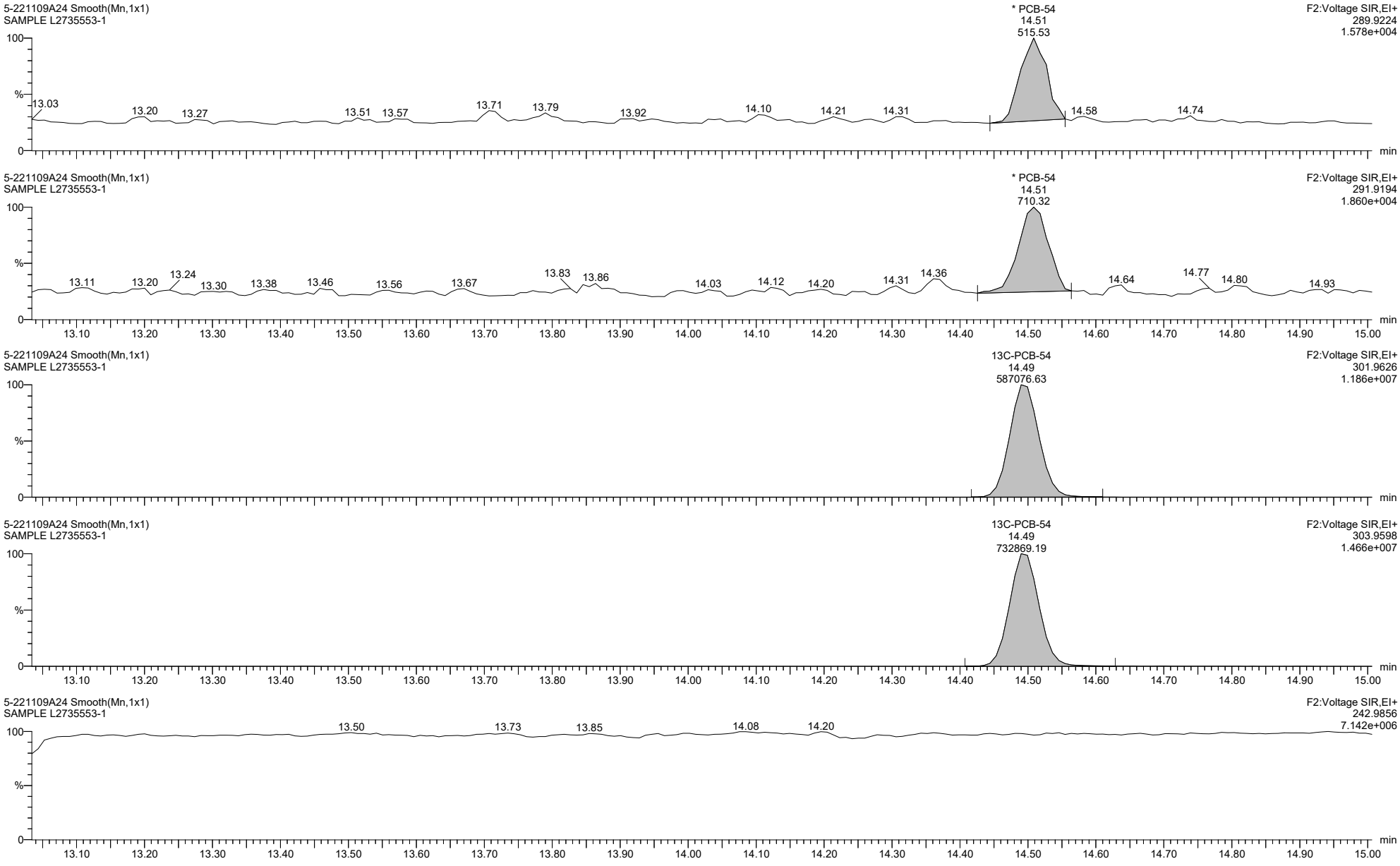


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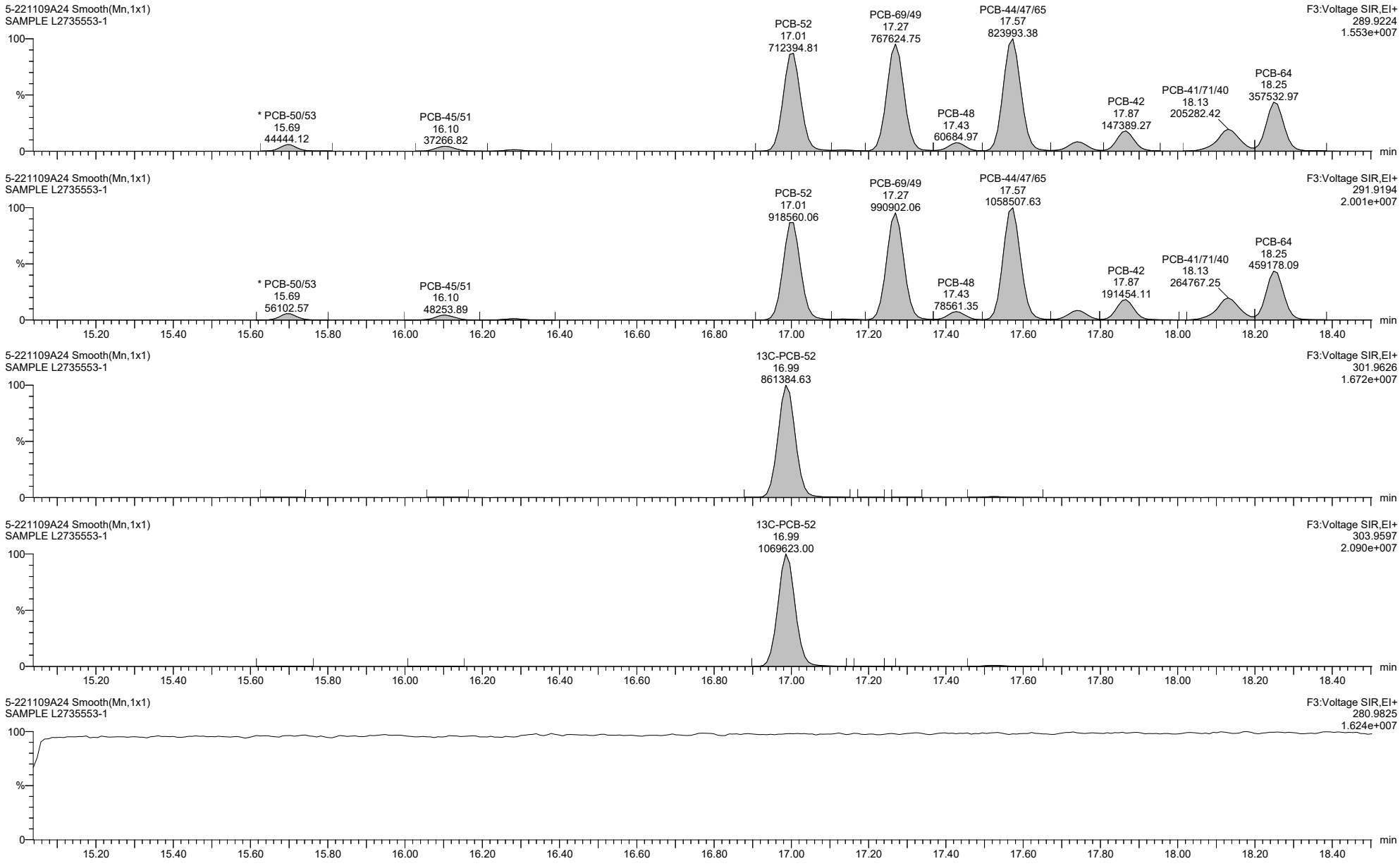


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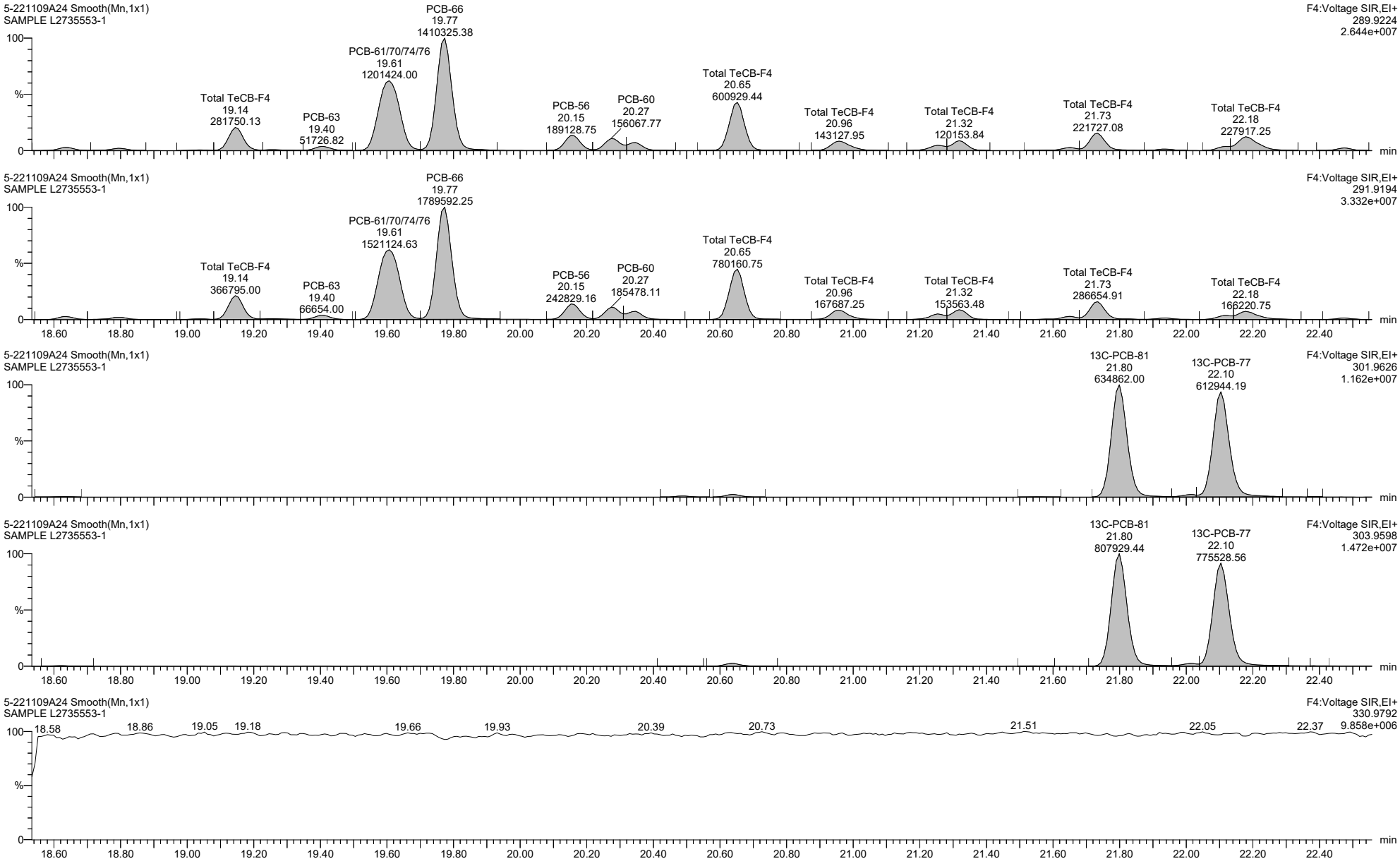


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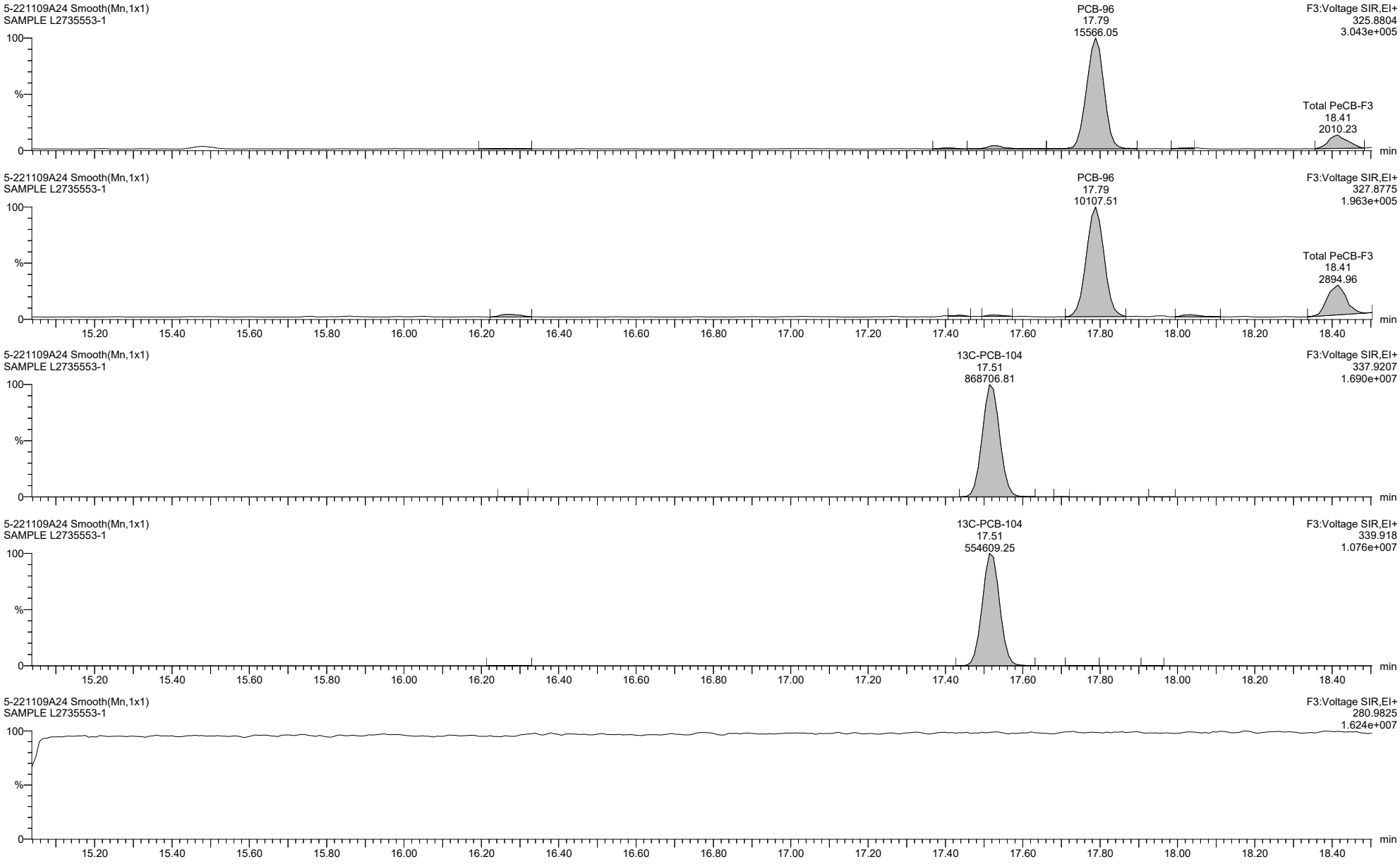


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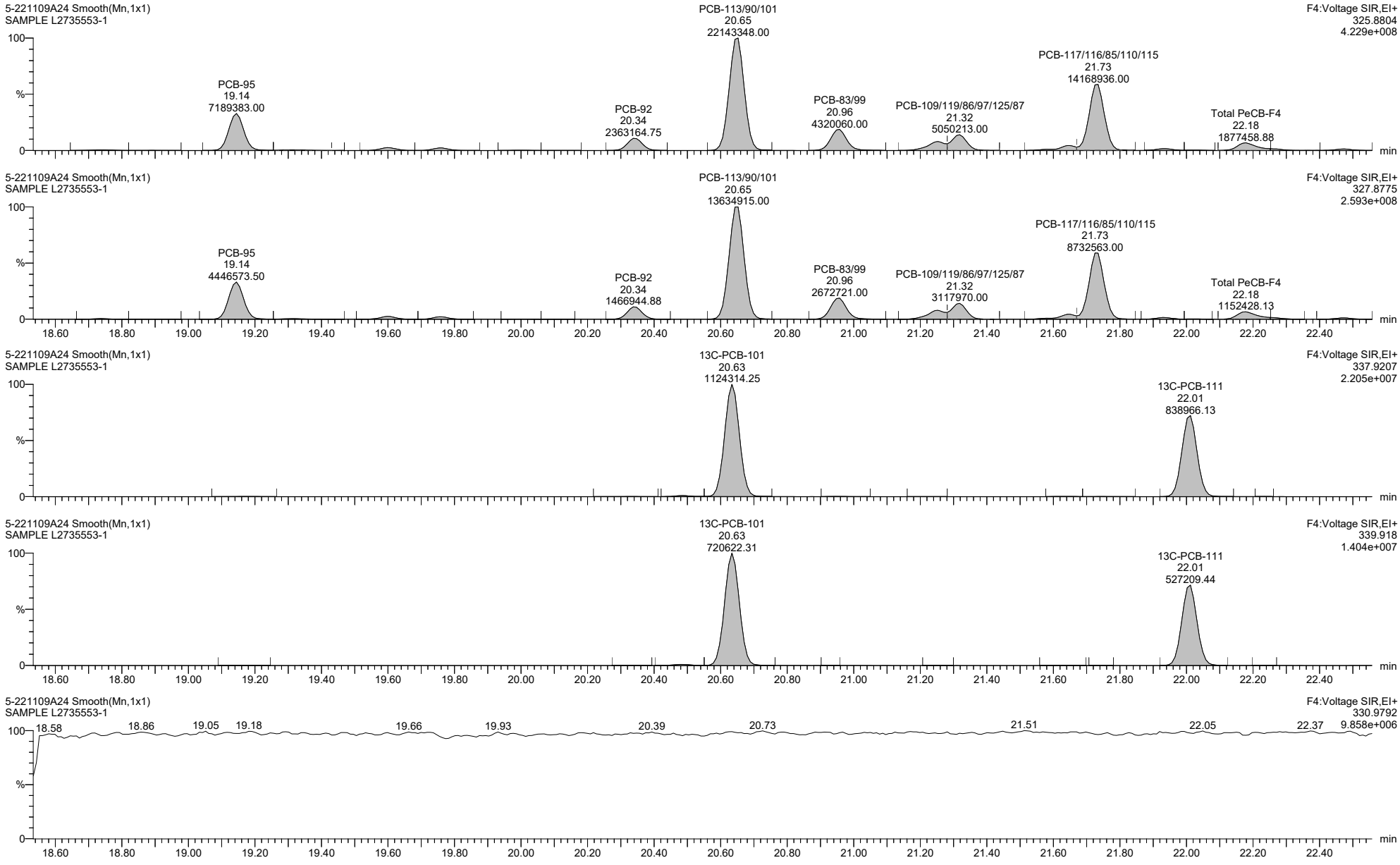


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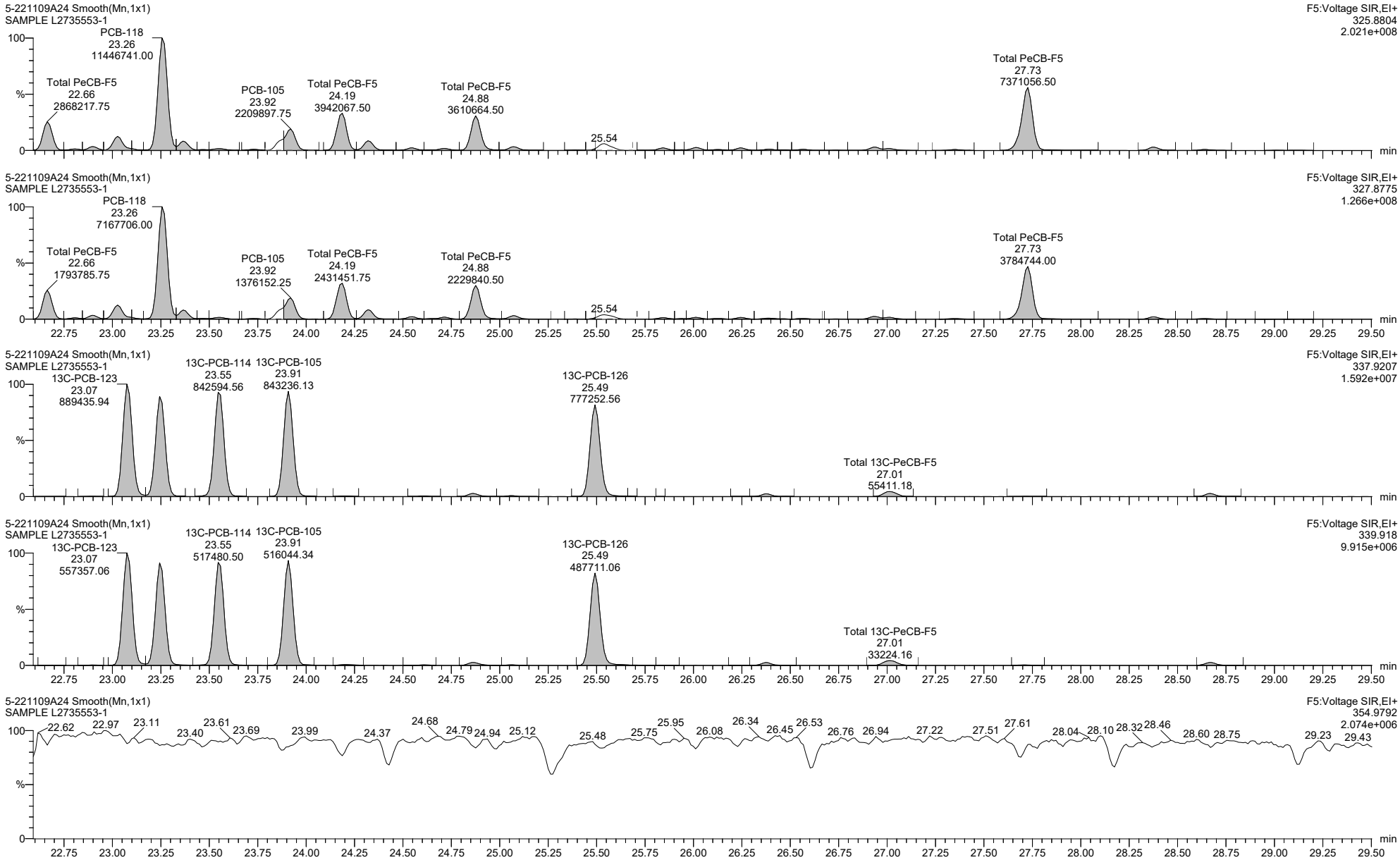


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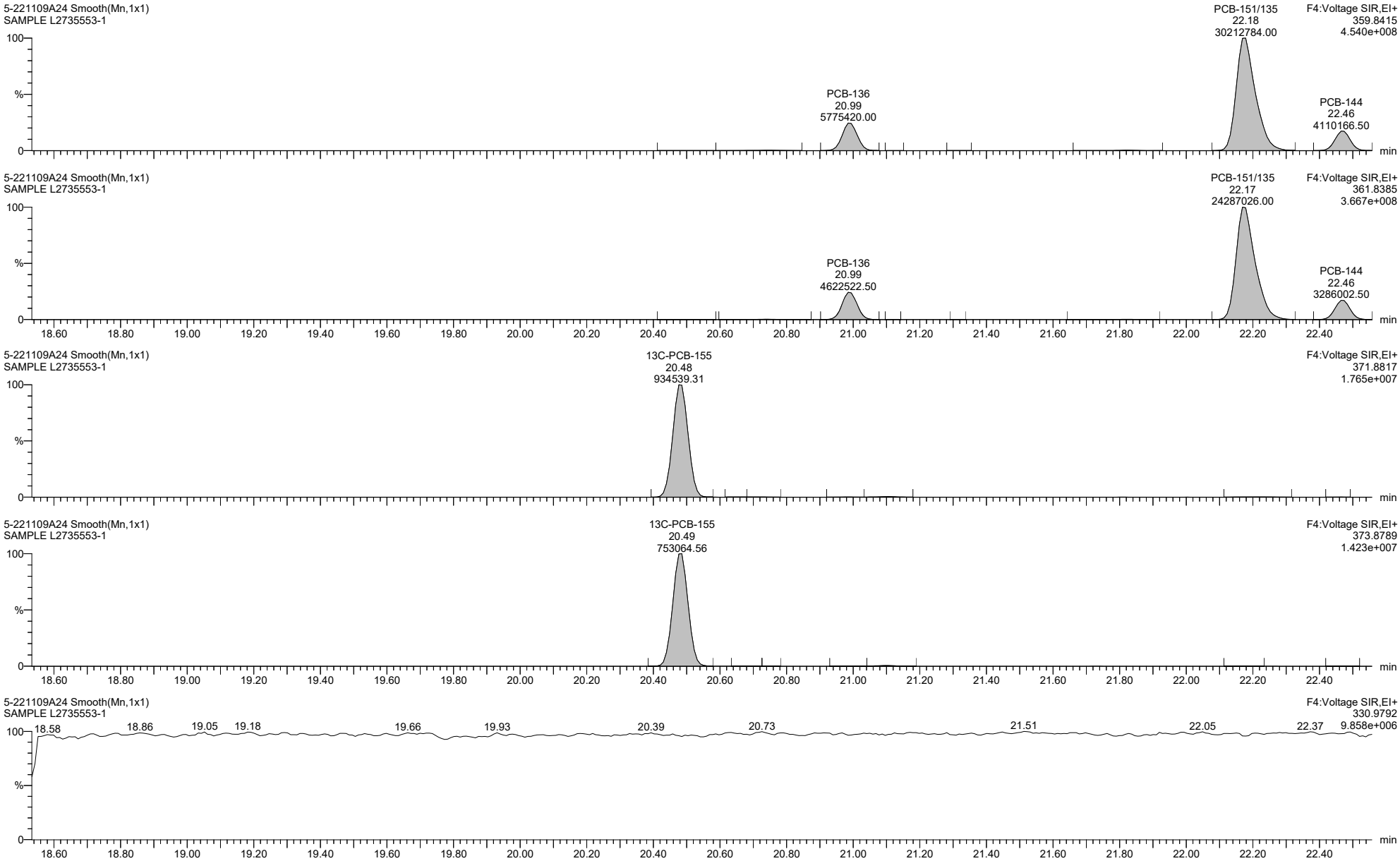
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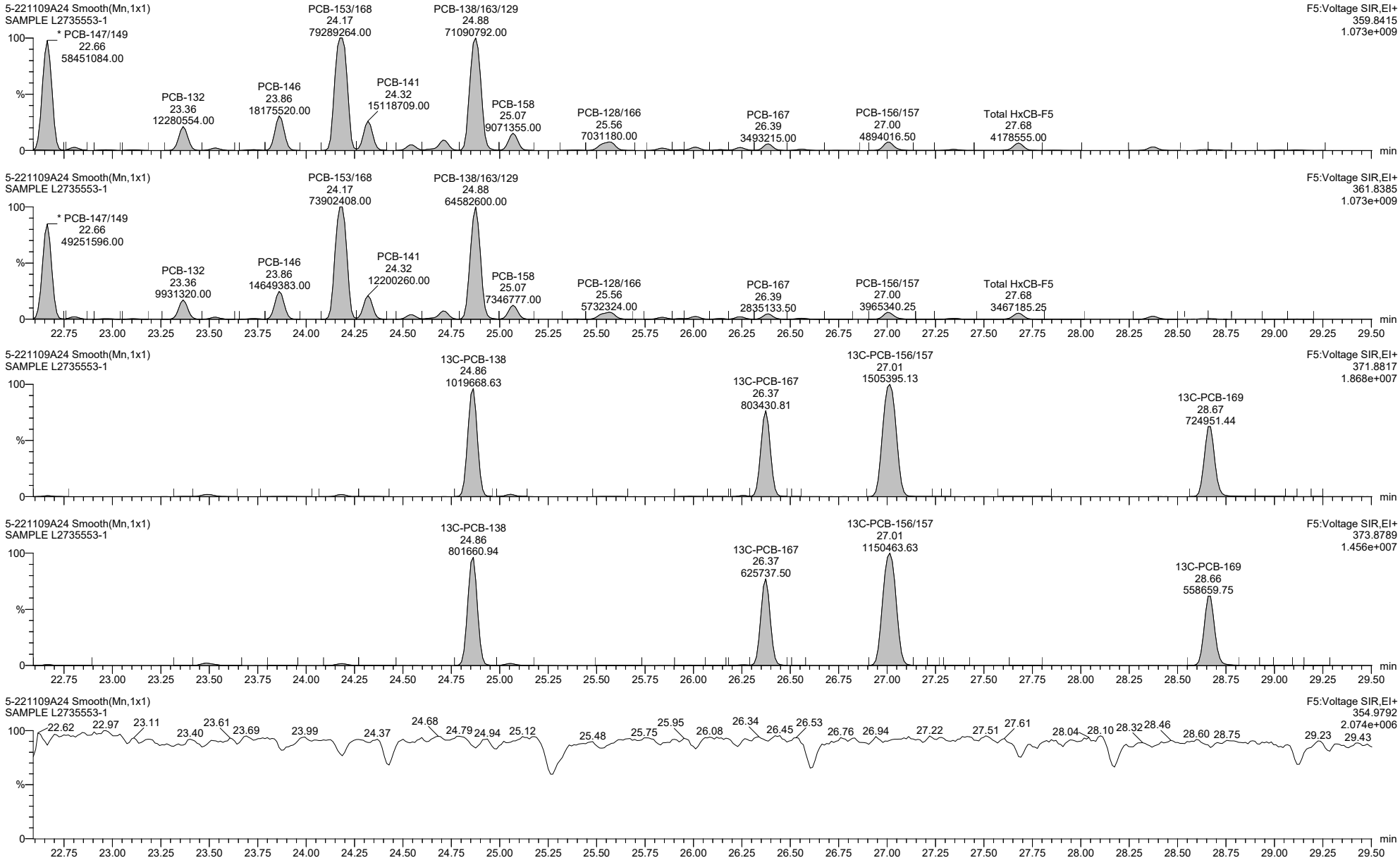


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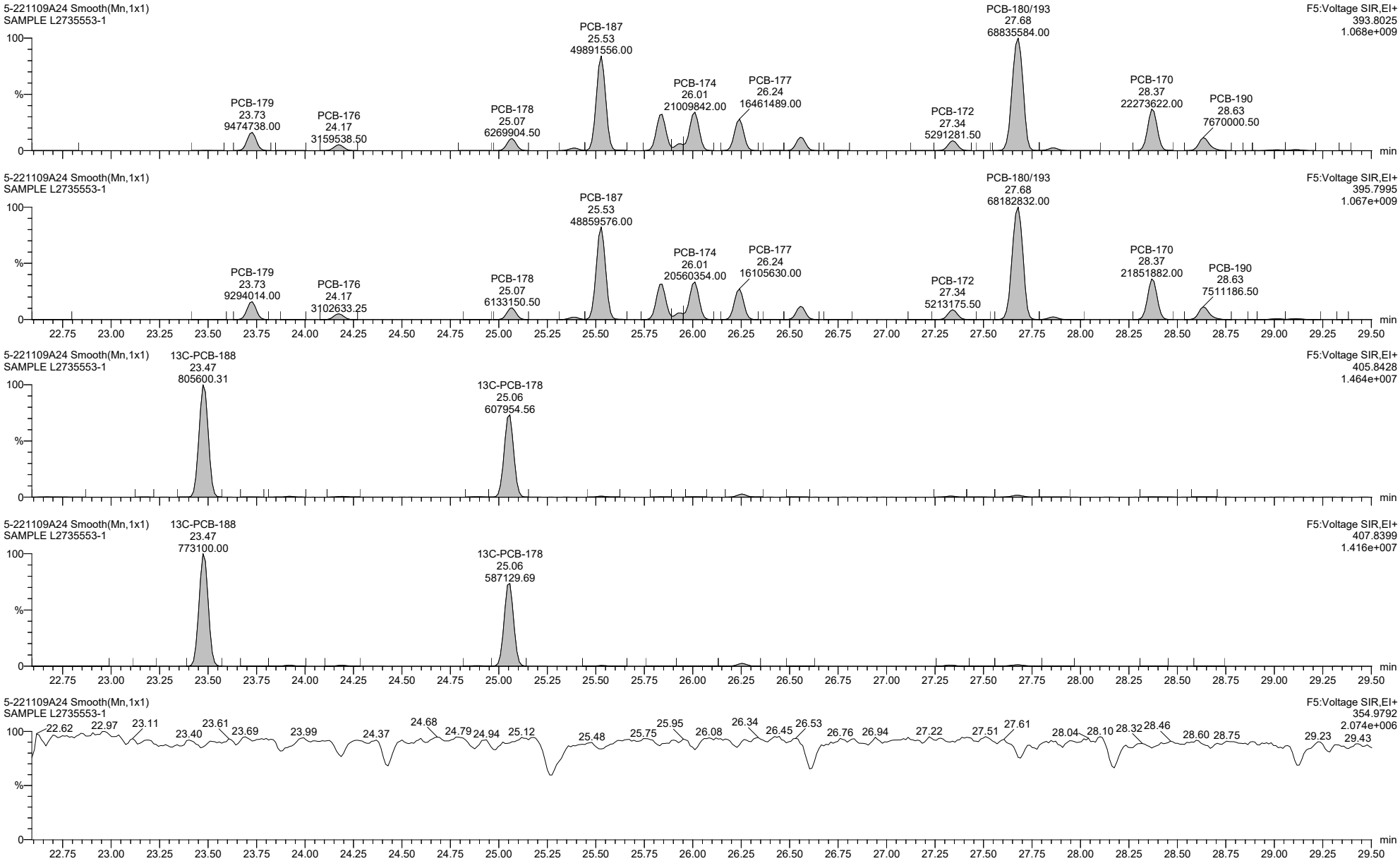


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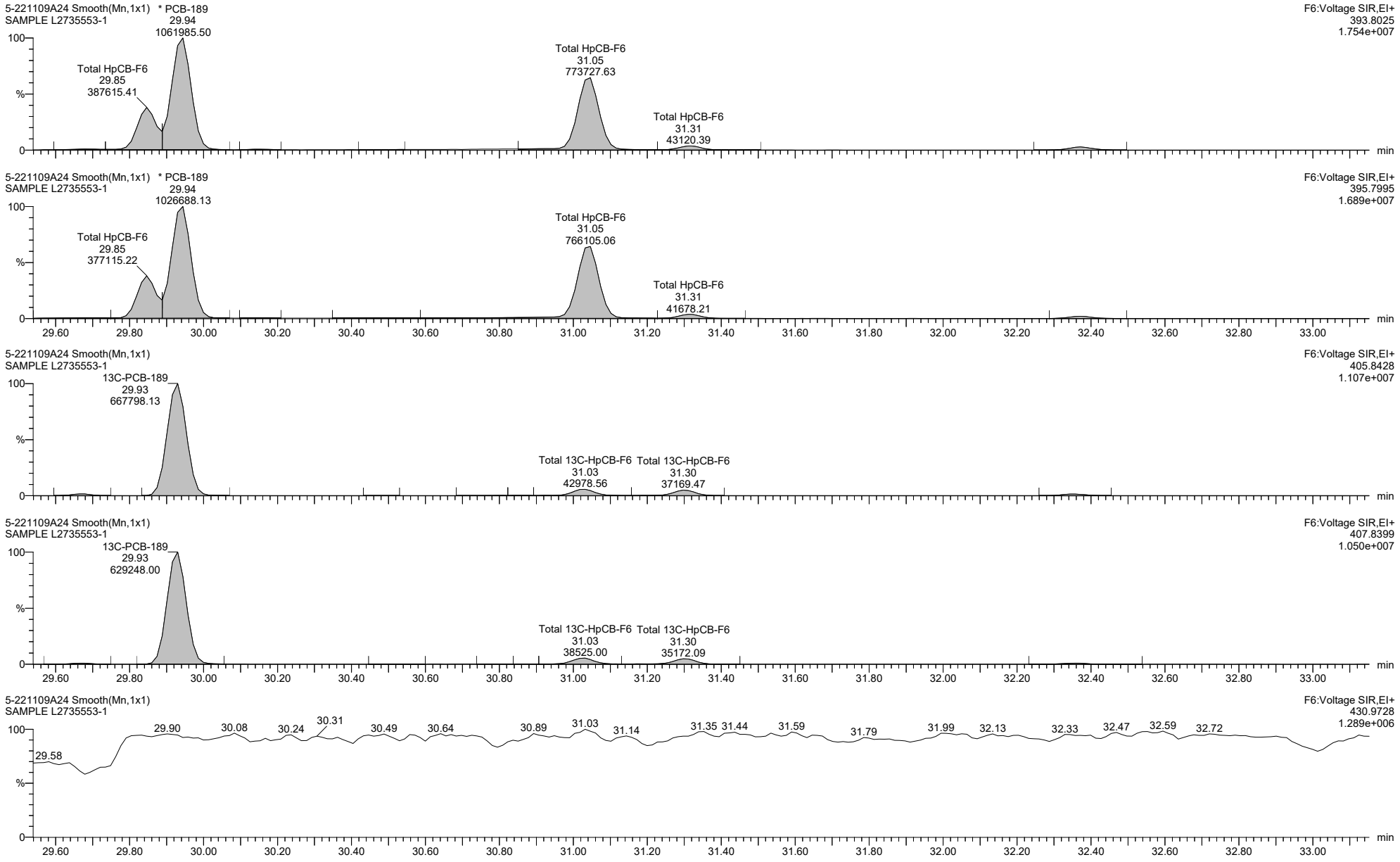


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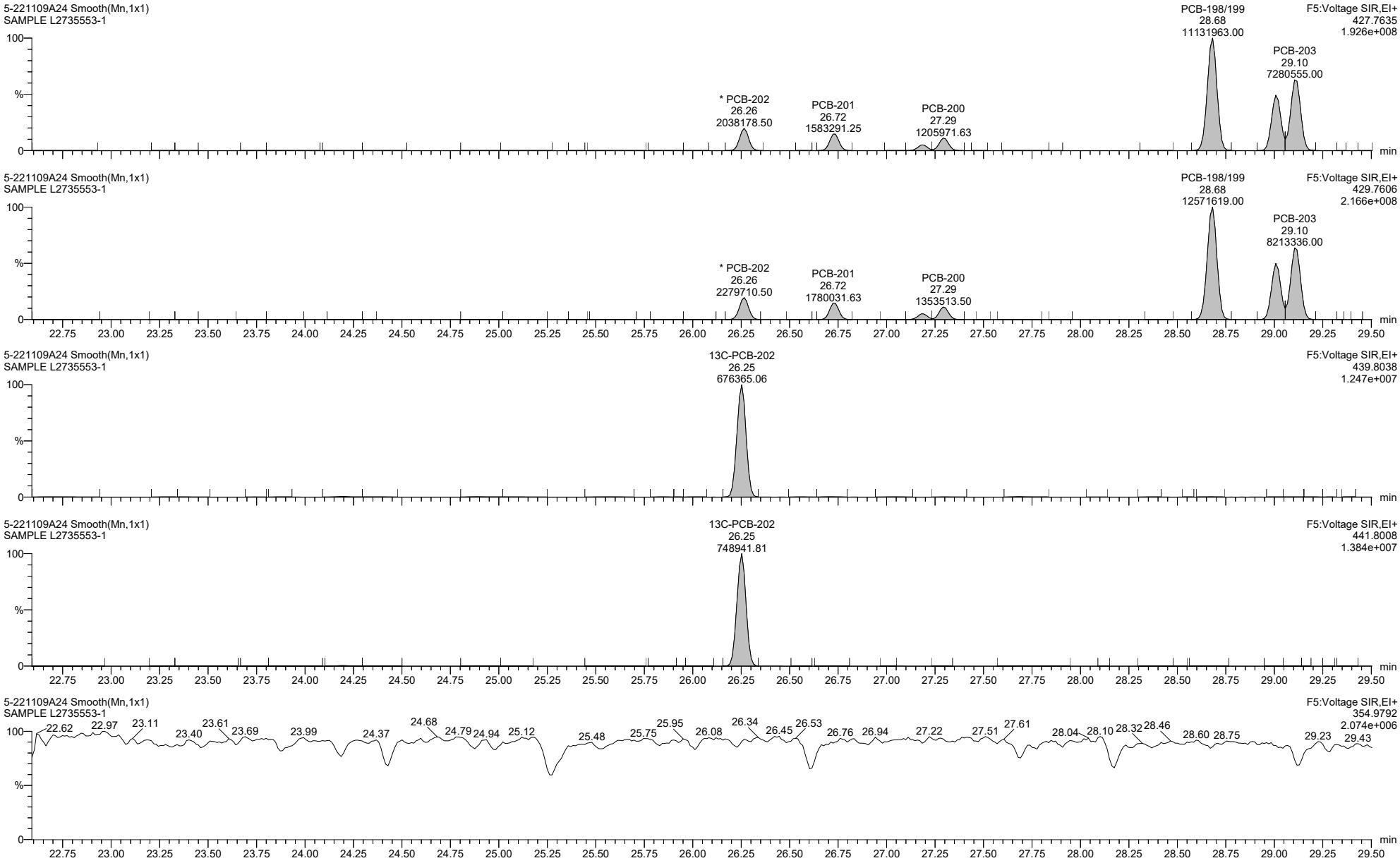


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Last Altered: Thursday, November 17, 2022 12:03:54 Eastern Standard Time
Printed: Wednesday, November 23, 2022 18:29:11 Eastern Standard Time

Name: 5-221109A24, Date: 10-Nov-2022, Time: 08:14:40, ID: L2735553-1, Description: SAMPLE, Vial: Tray1:19

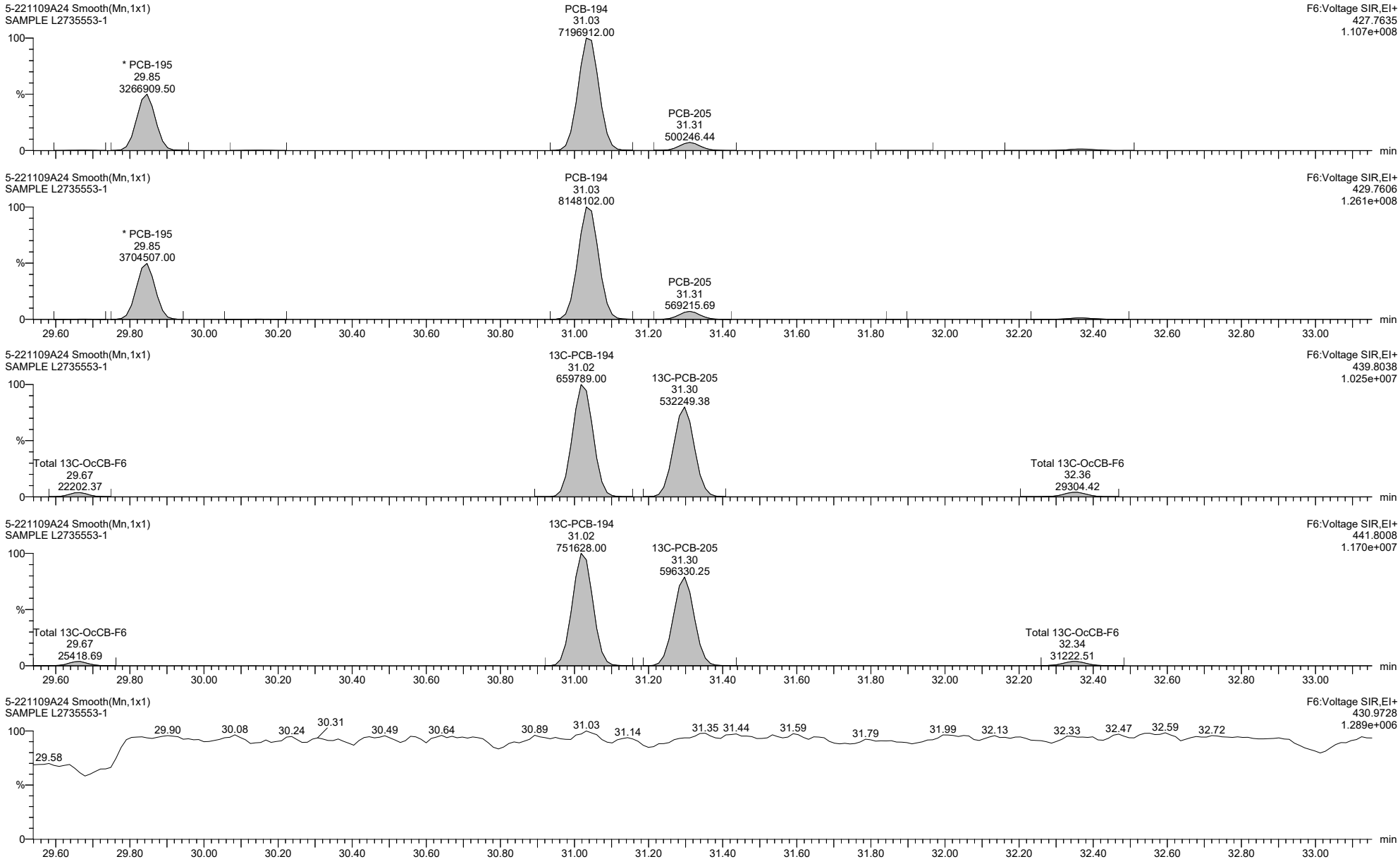


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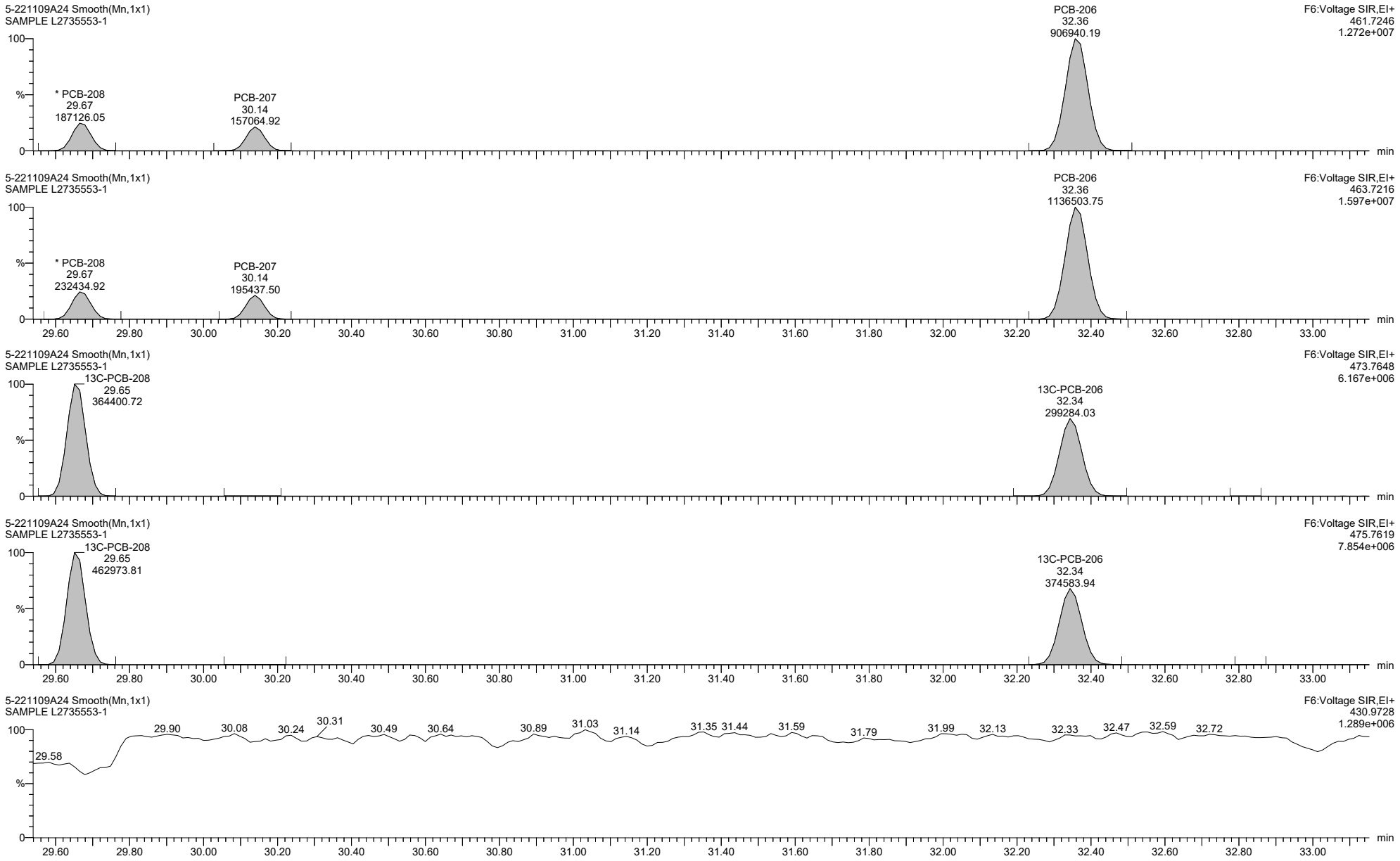


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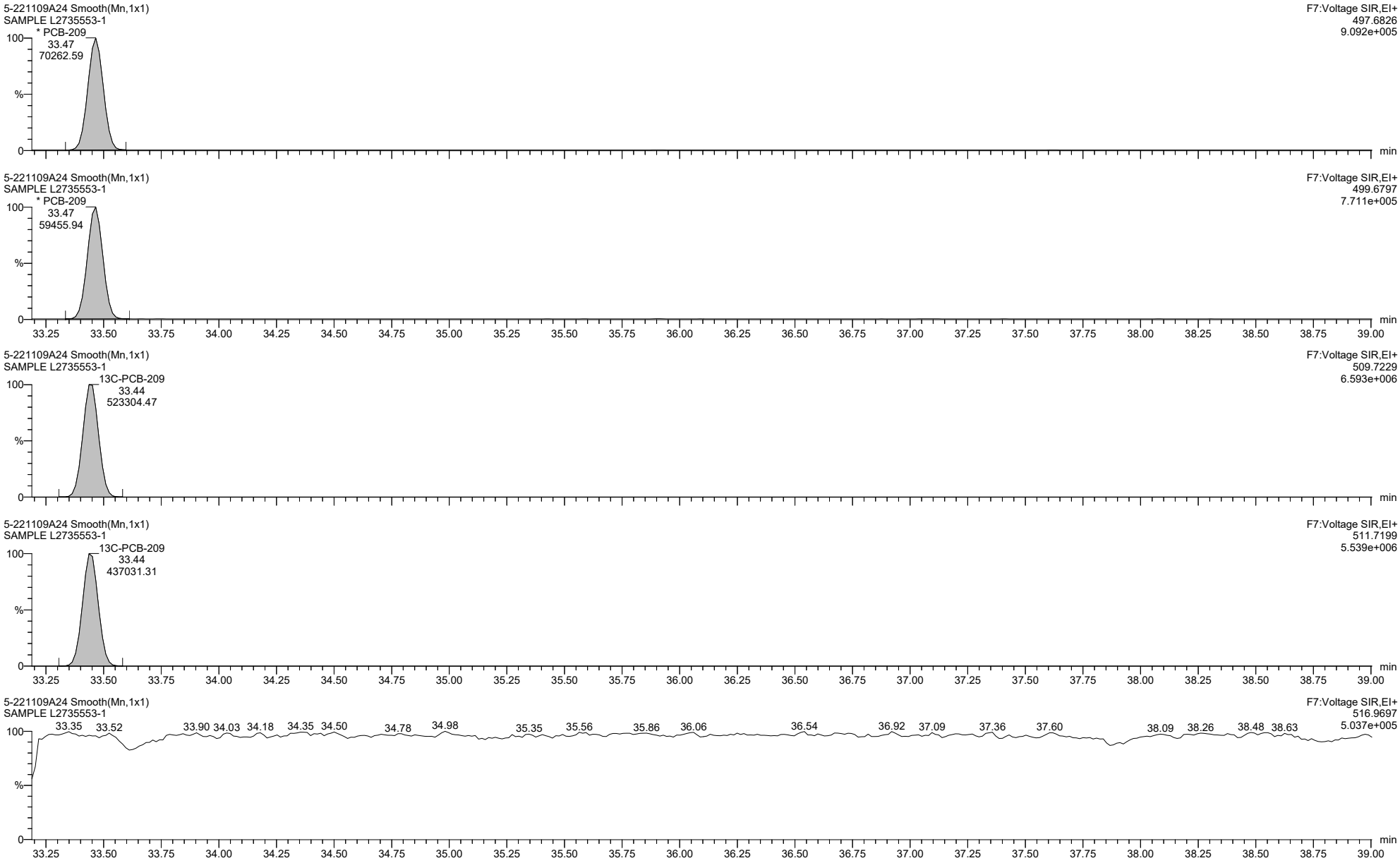
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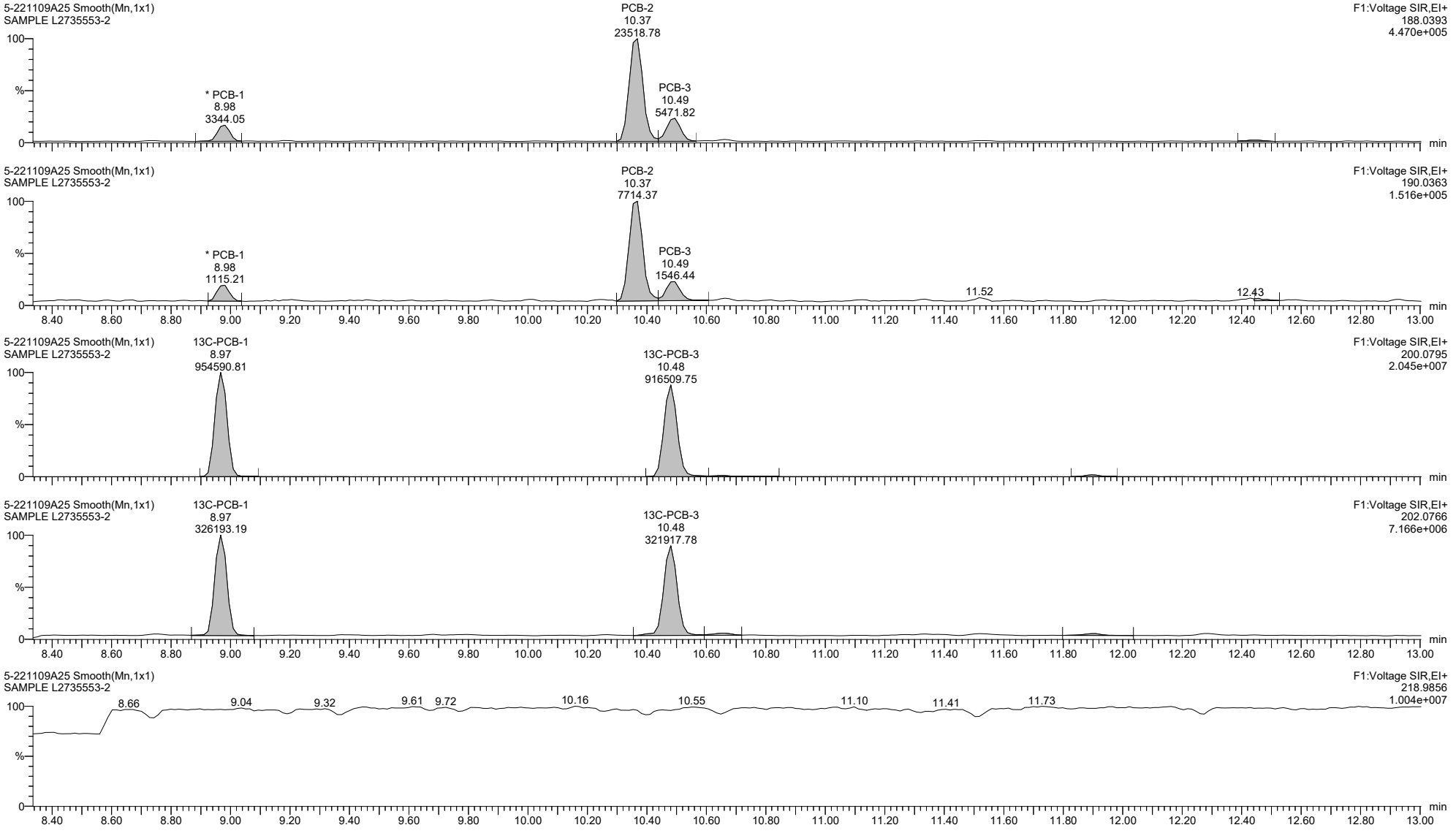
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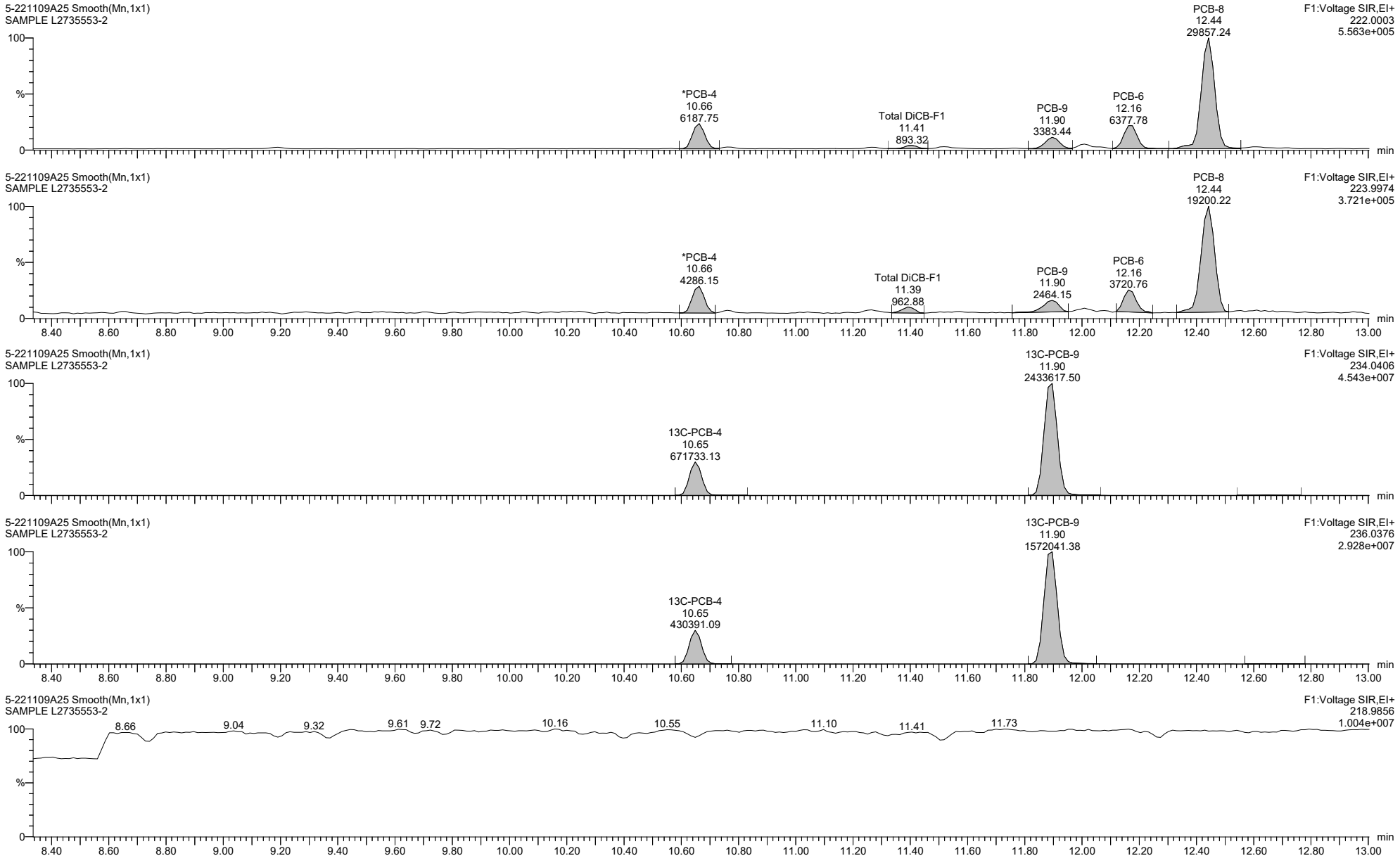


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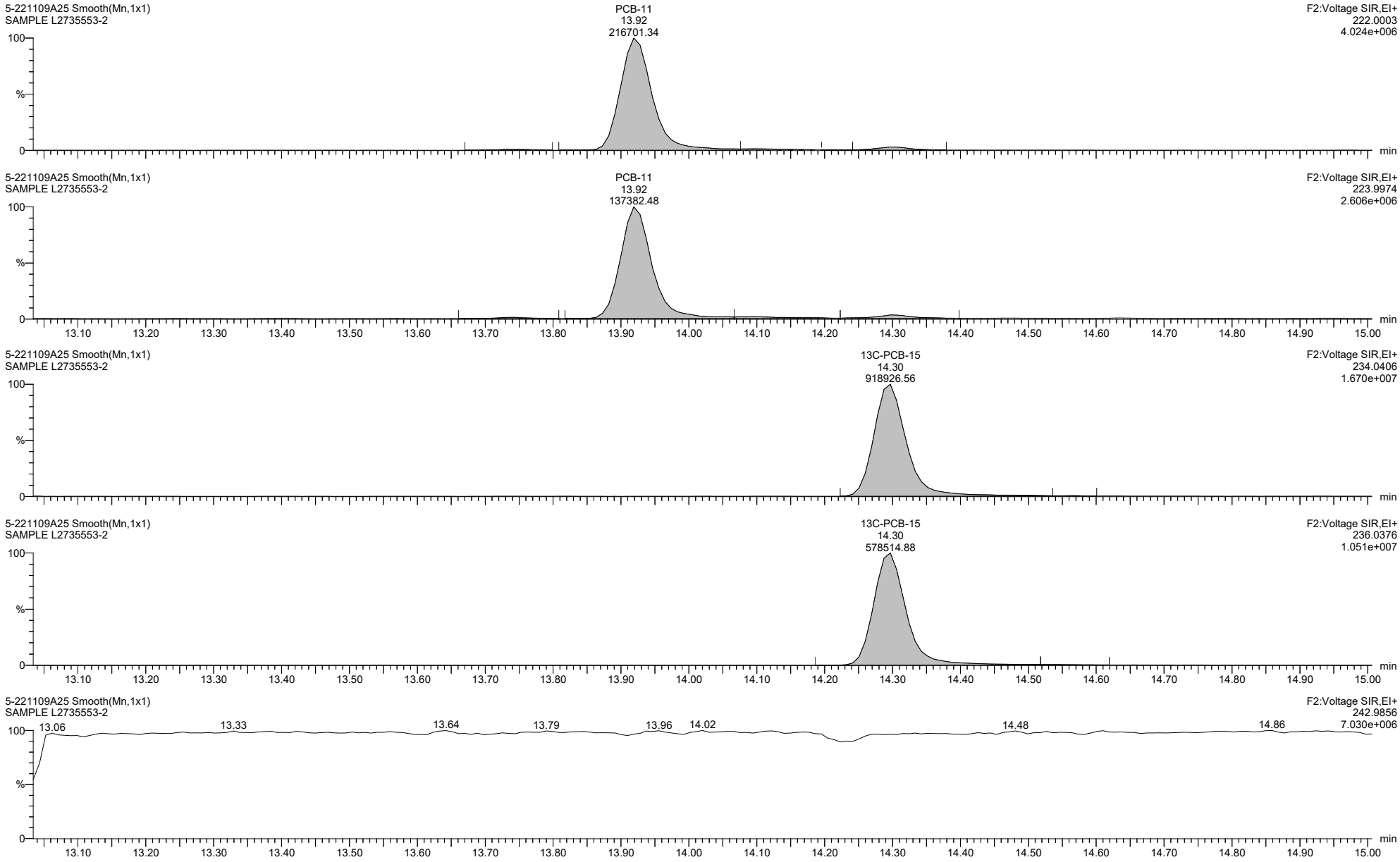
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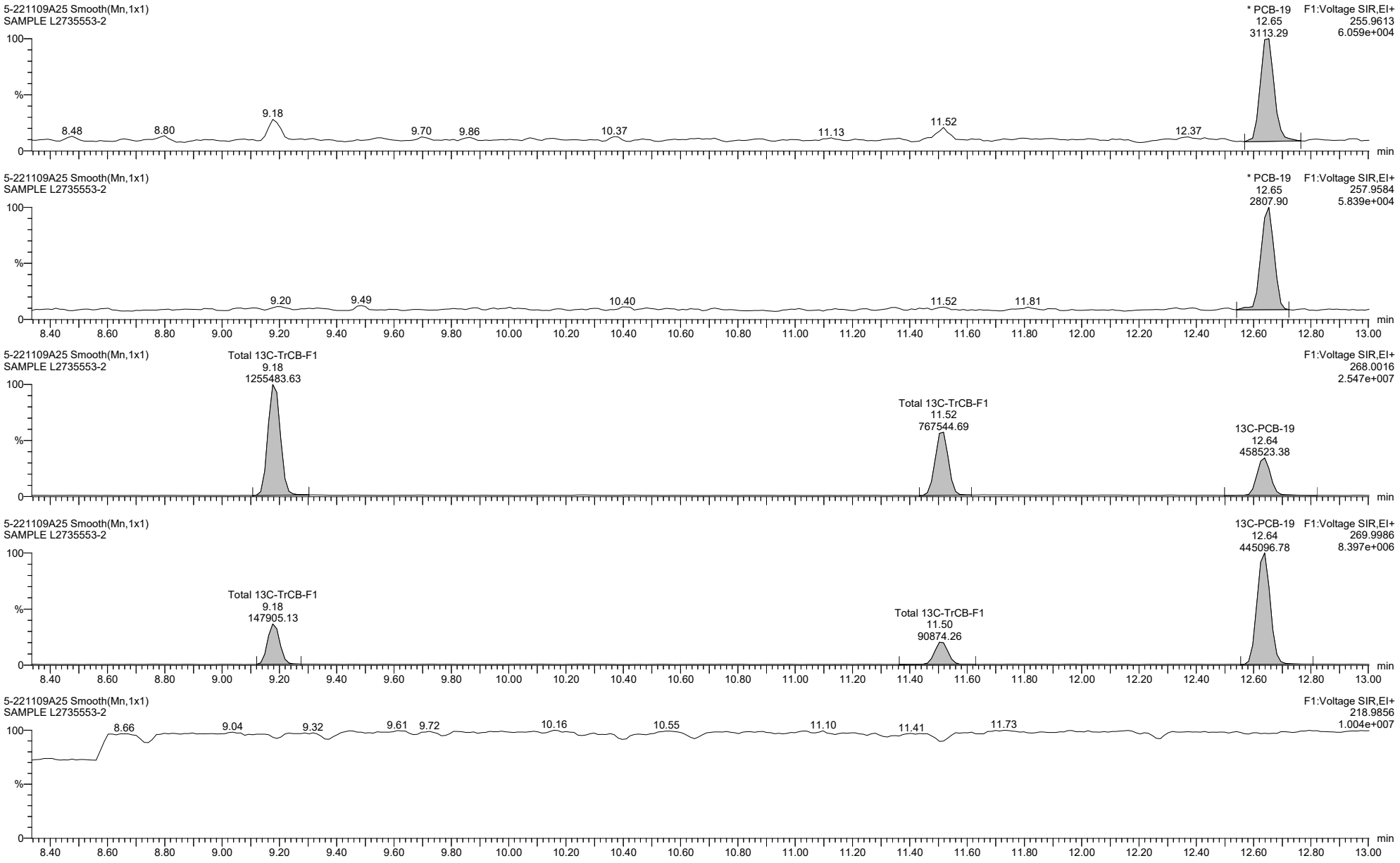
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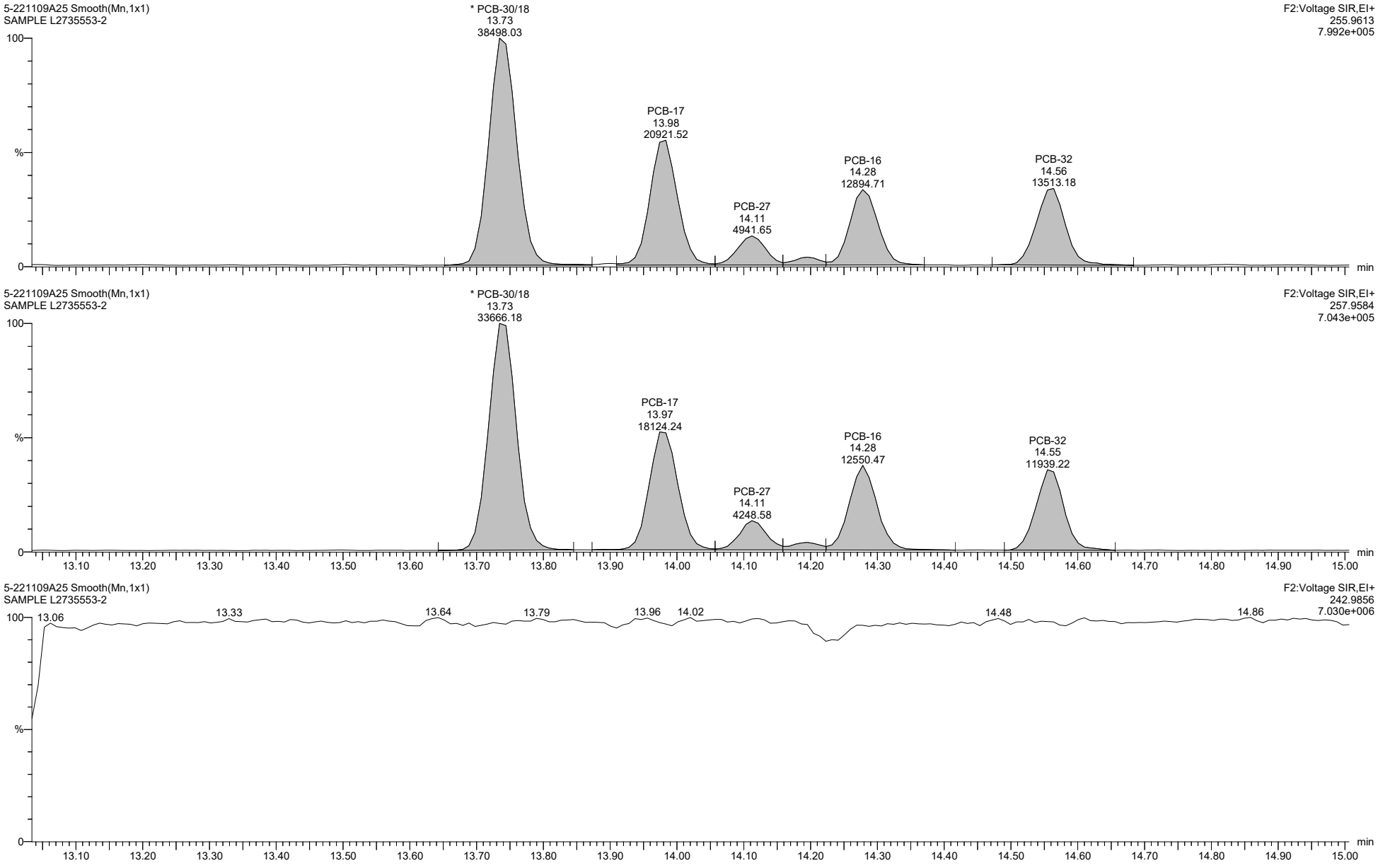


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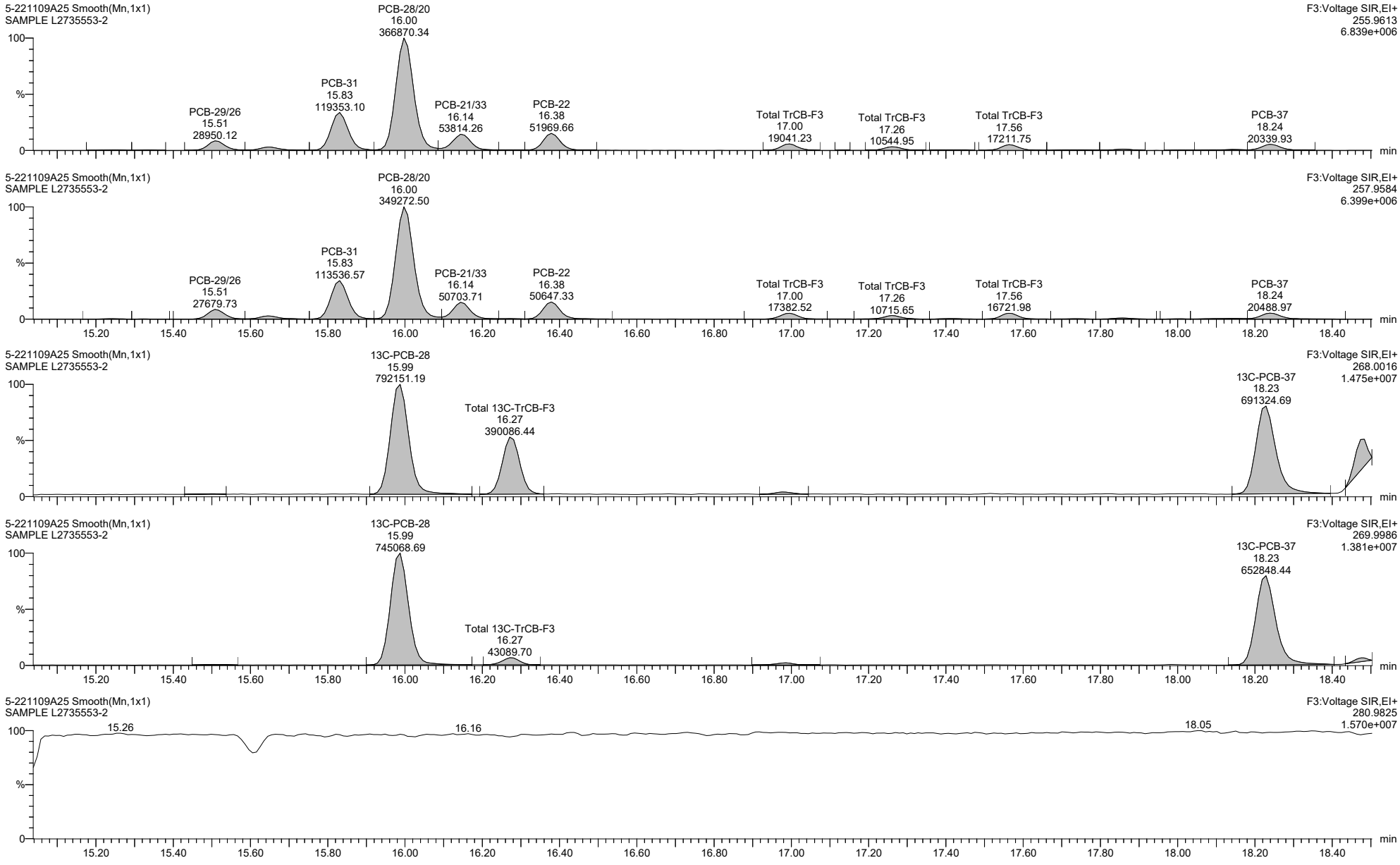


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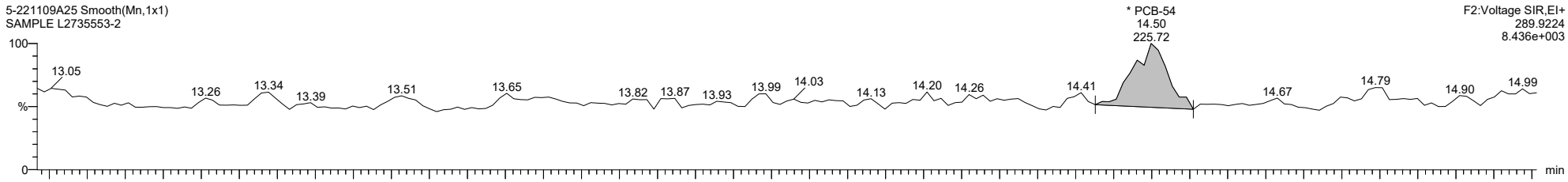
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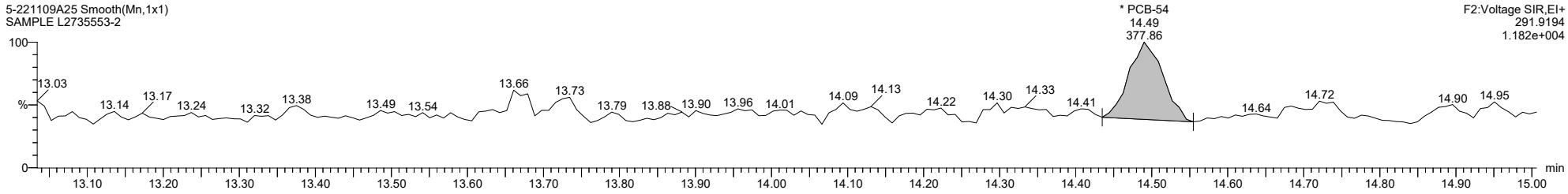


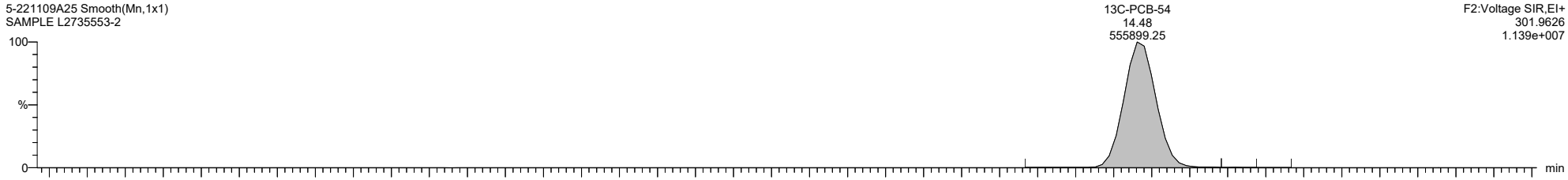
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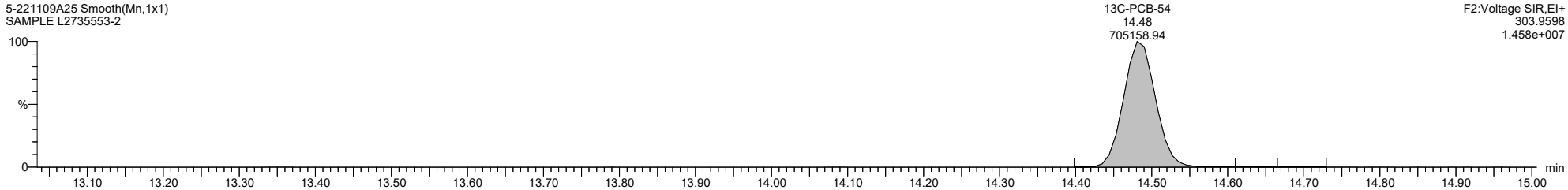
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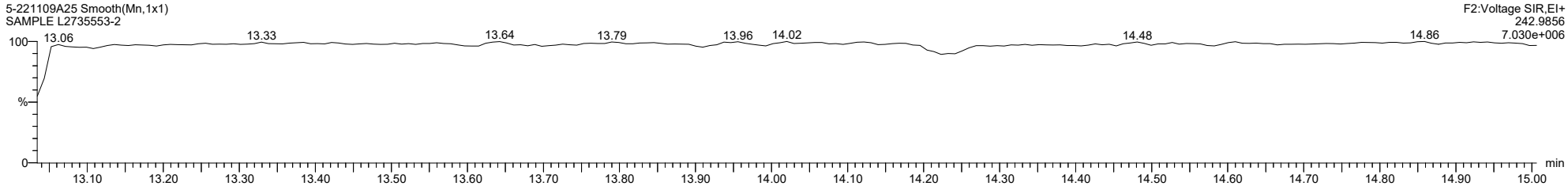
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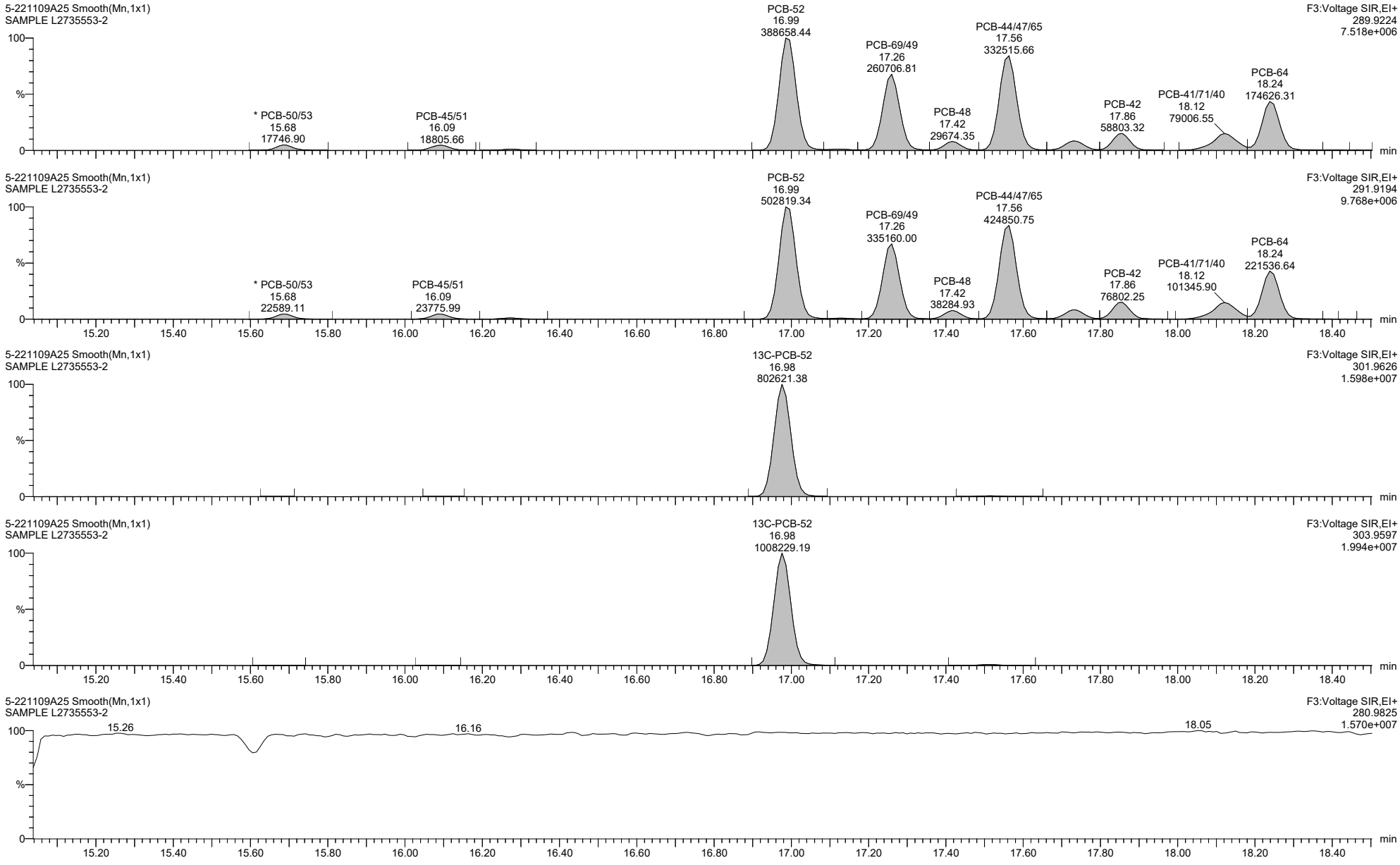


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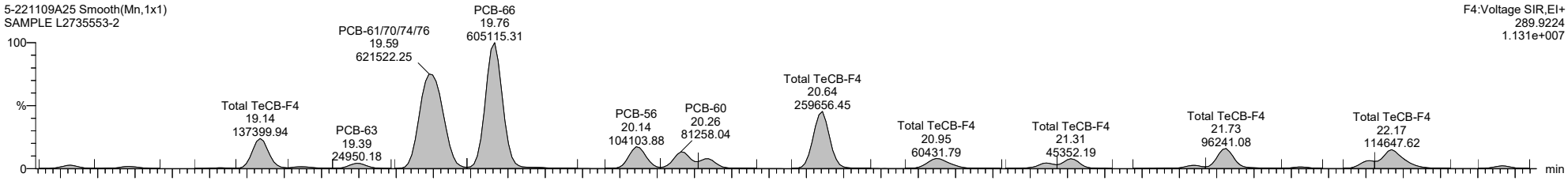
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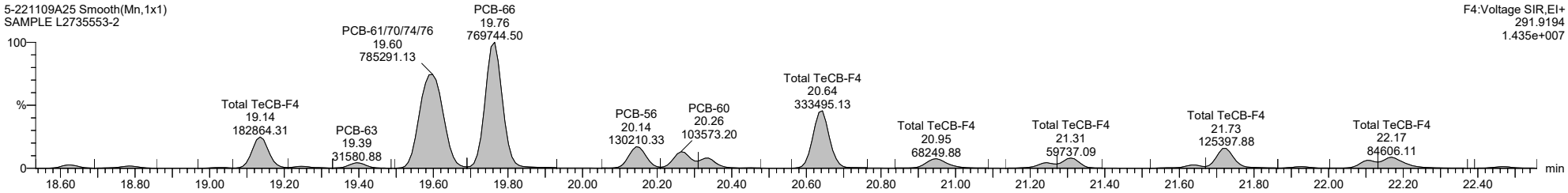


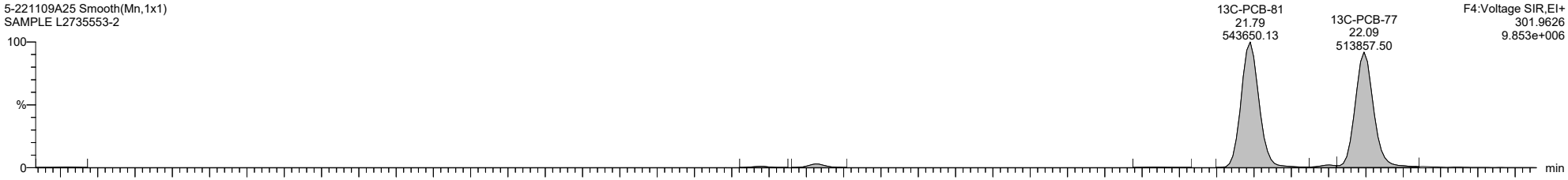
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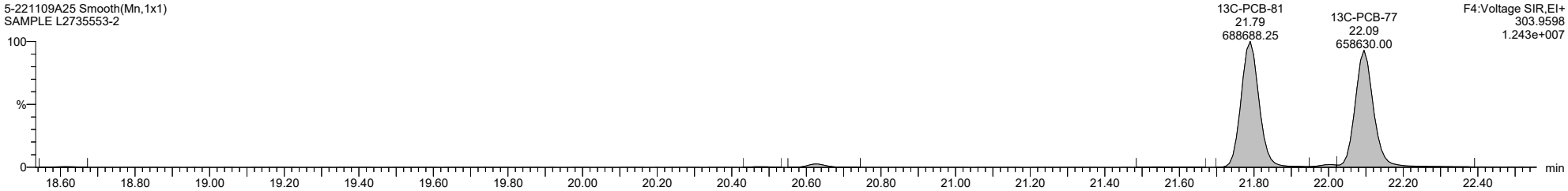
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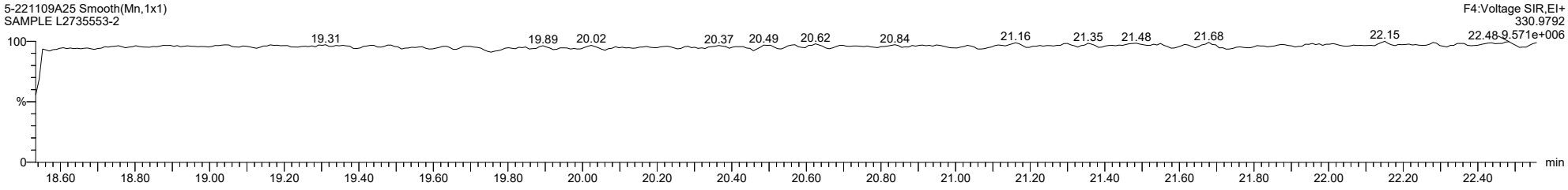
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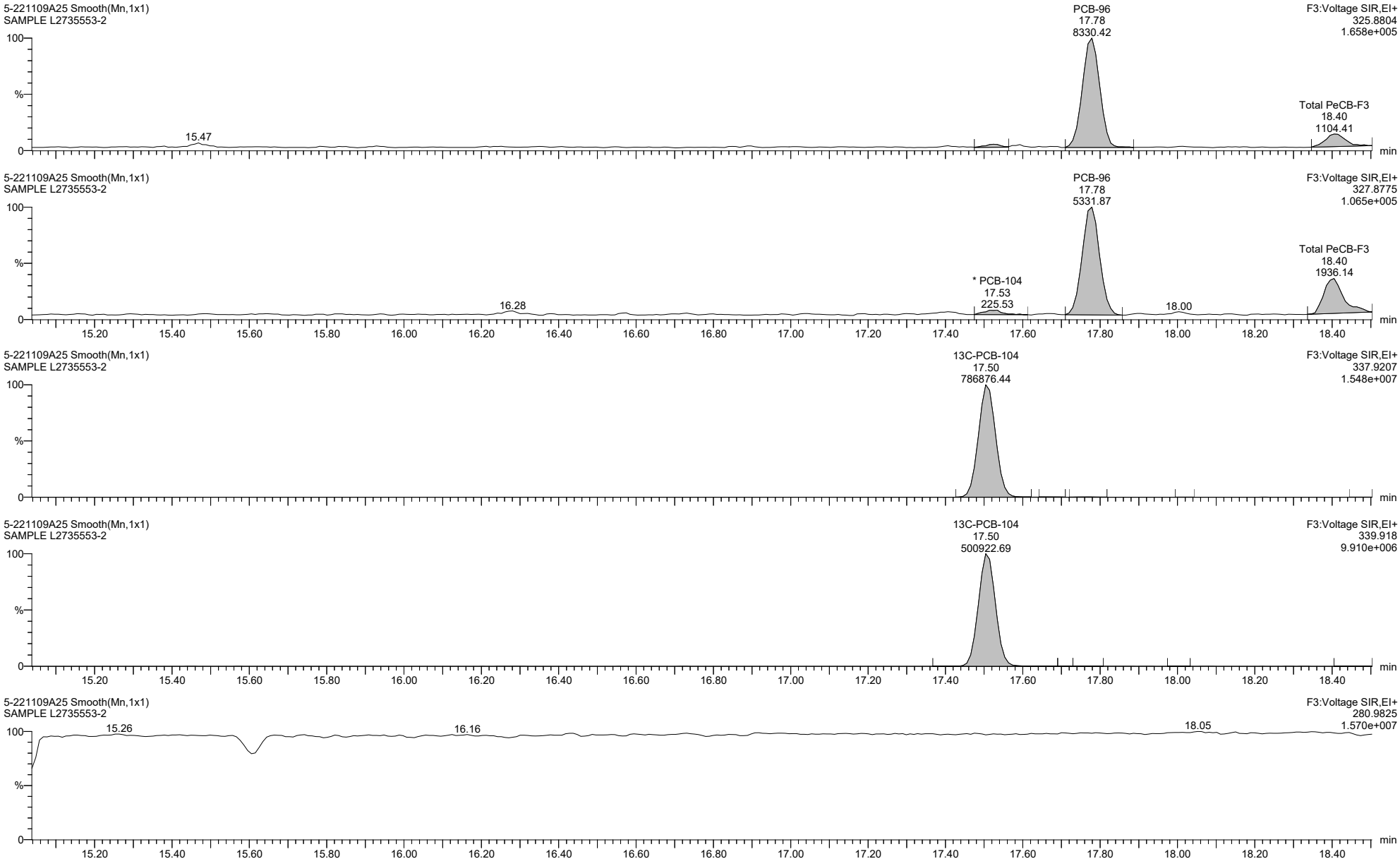


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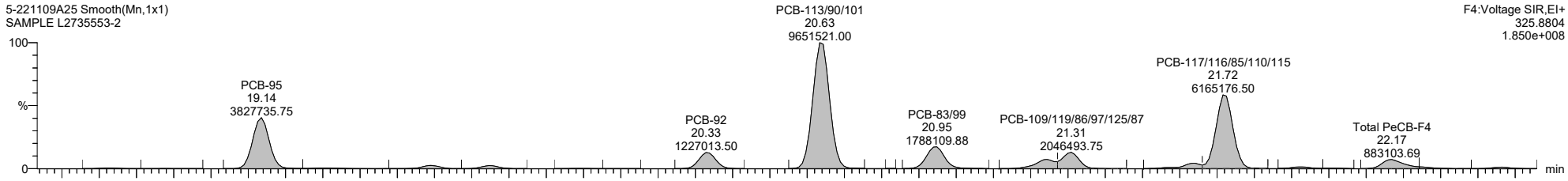
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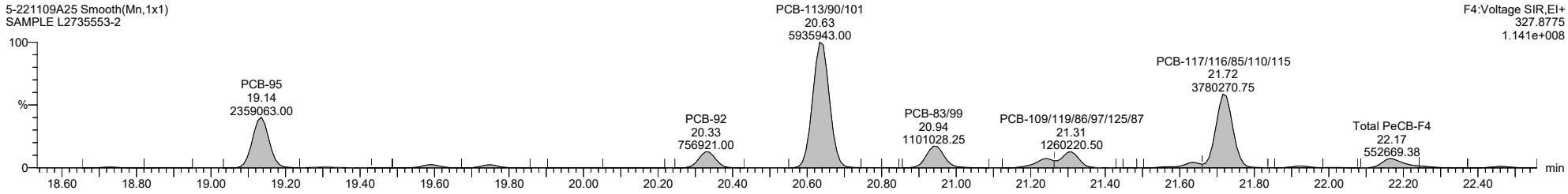


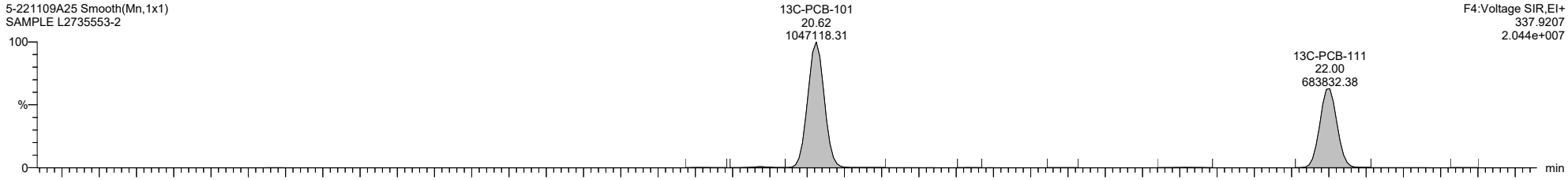
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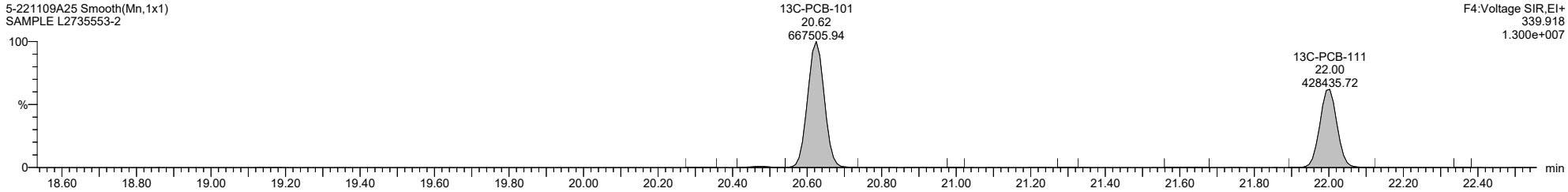
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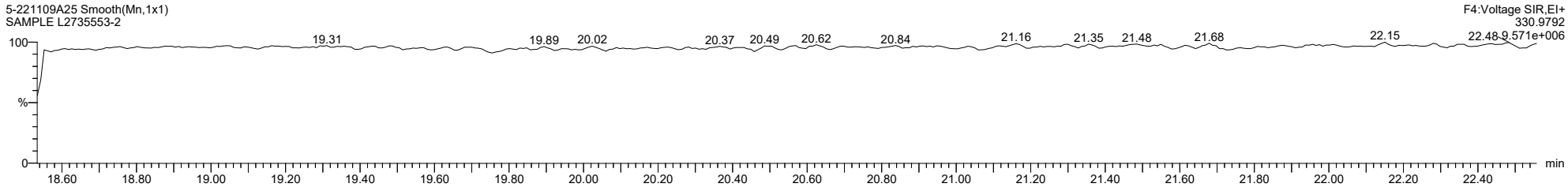
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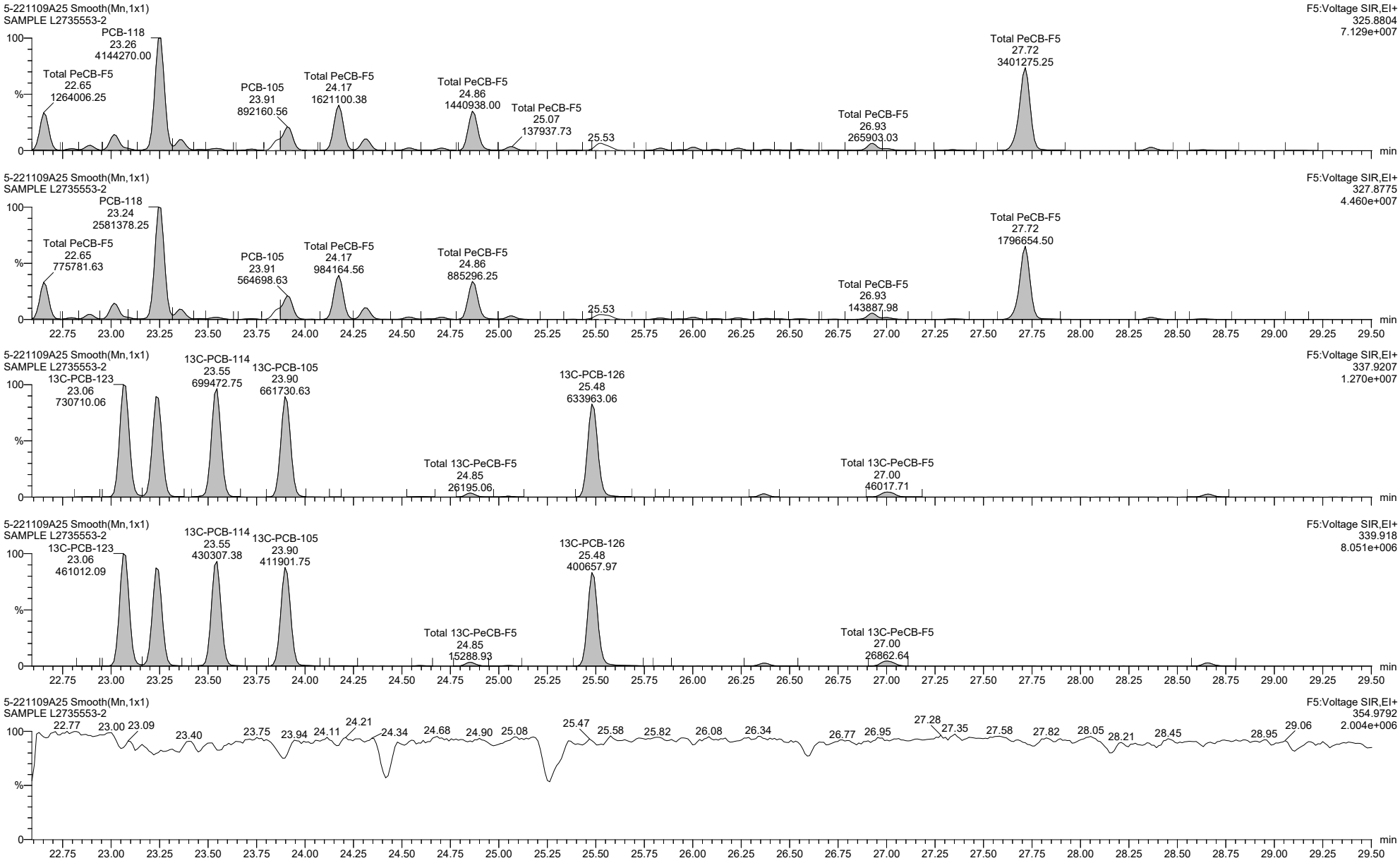


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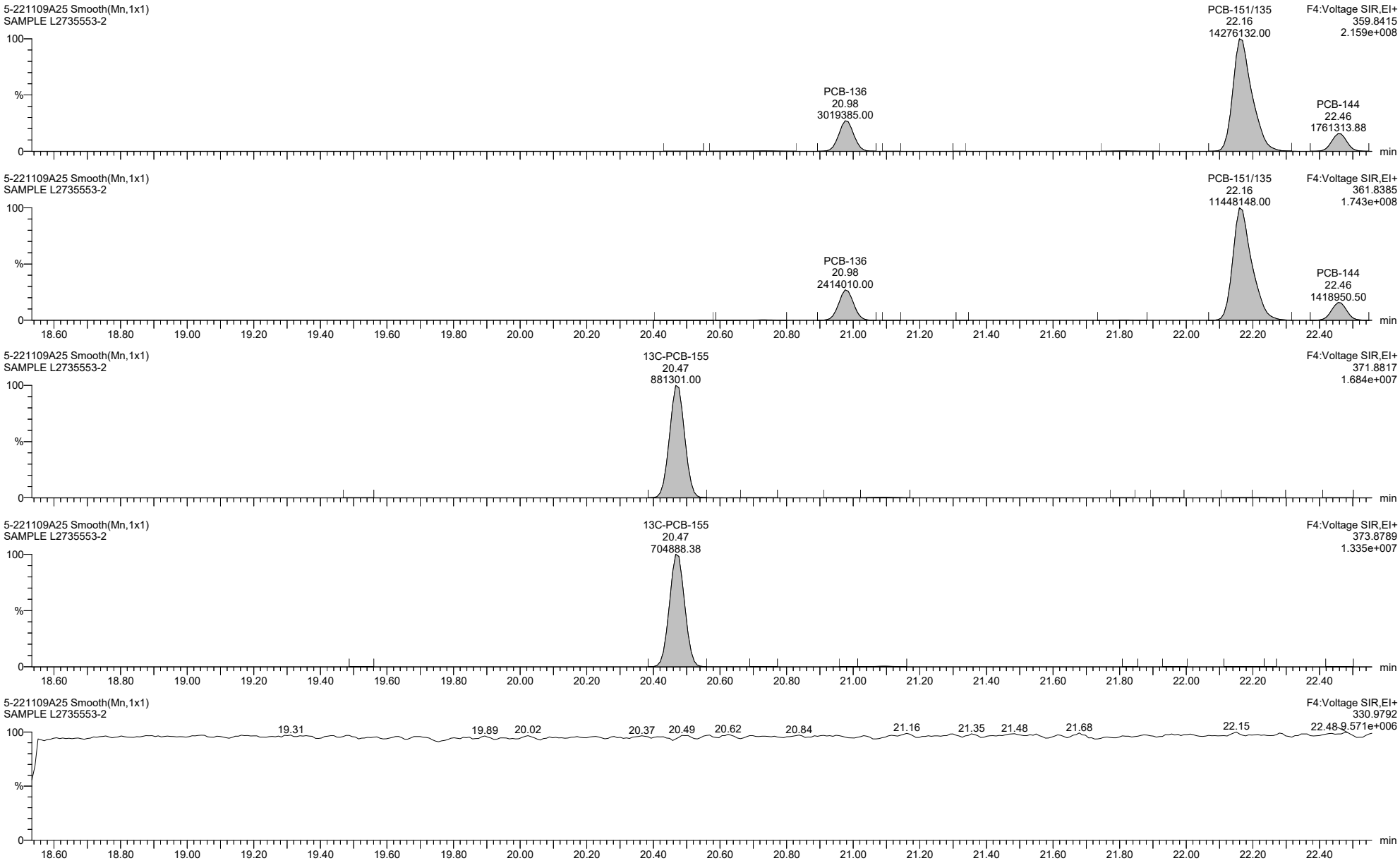


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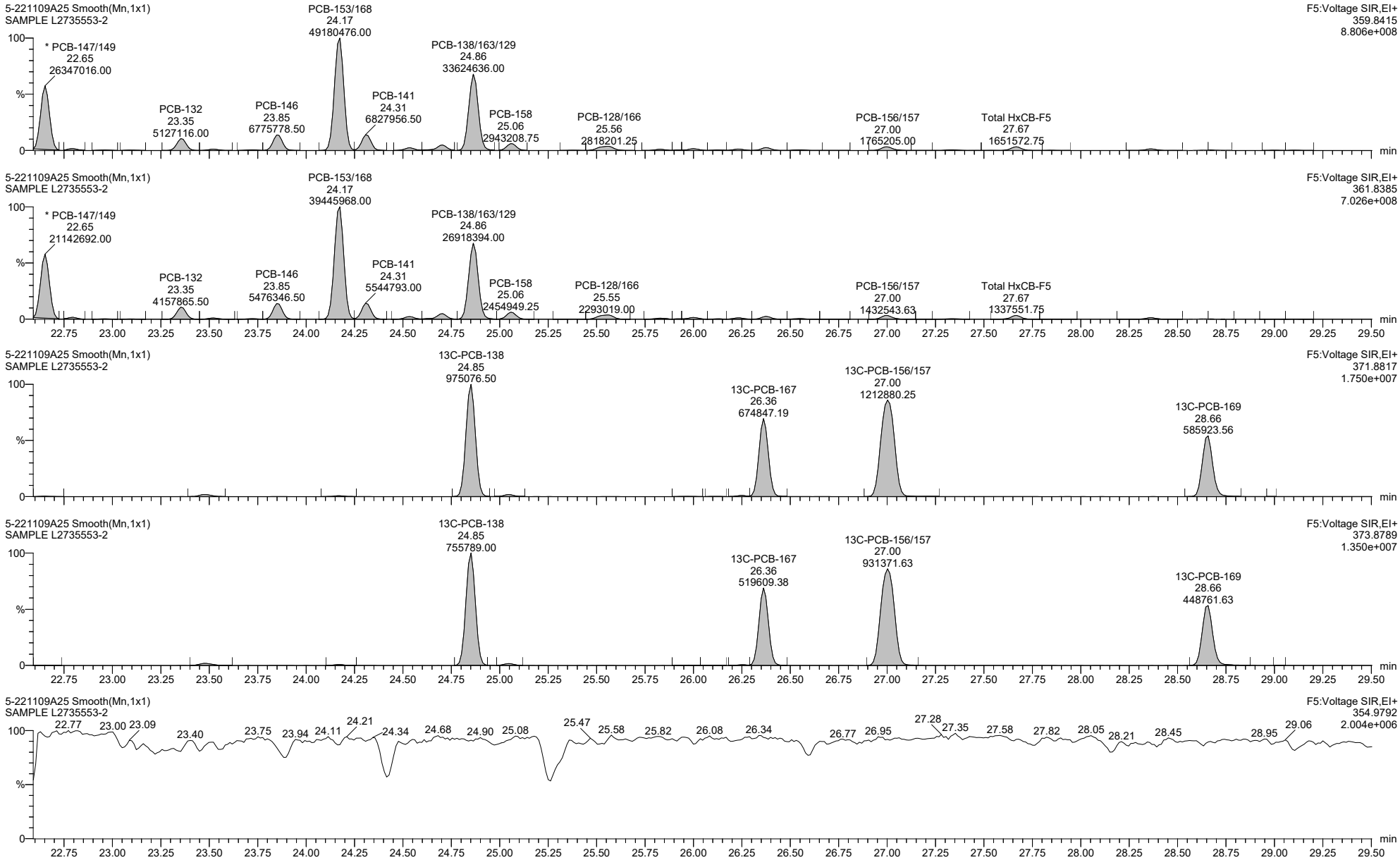


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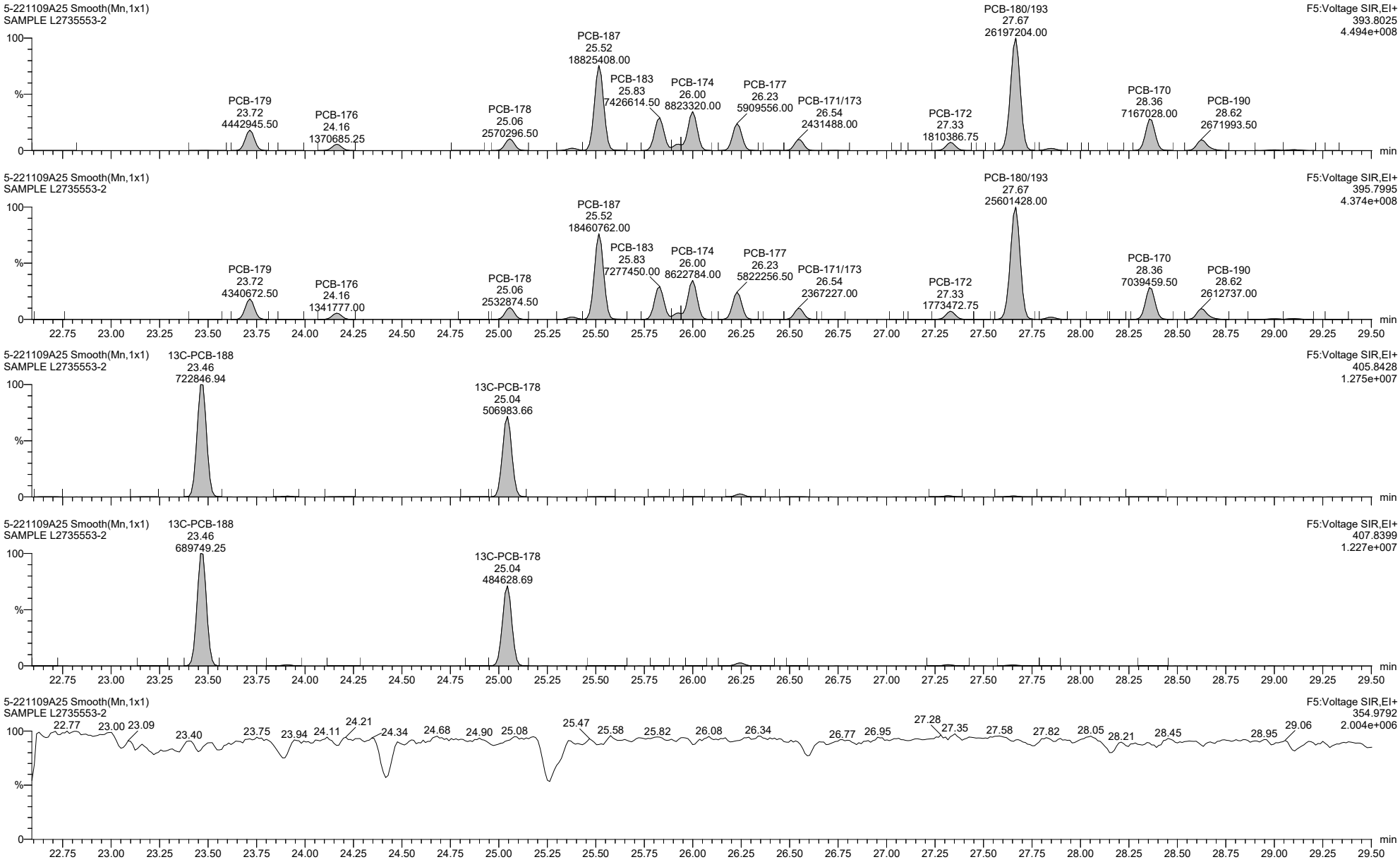
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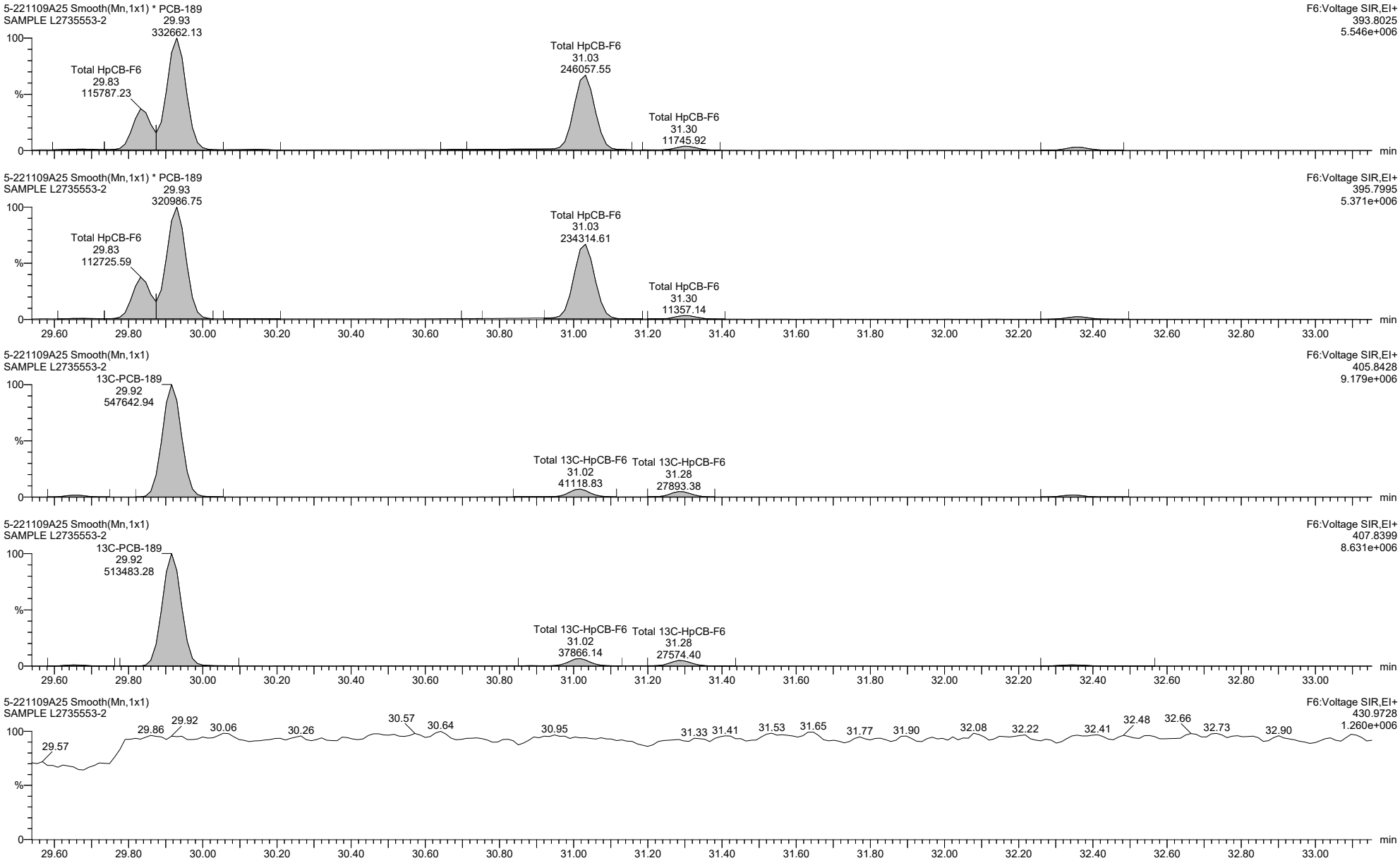


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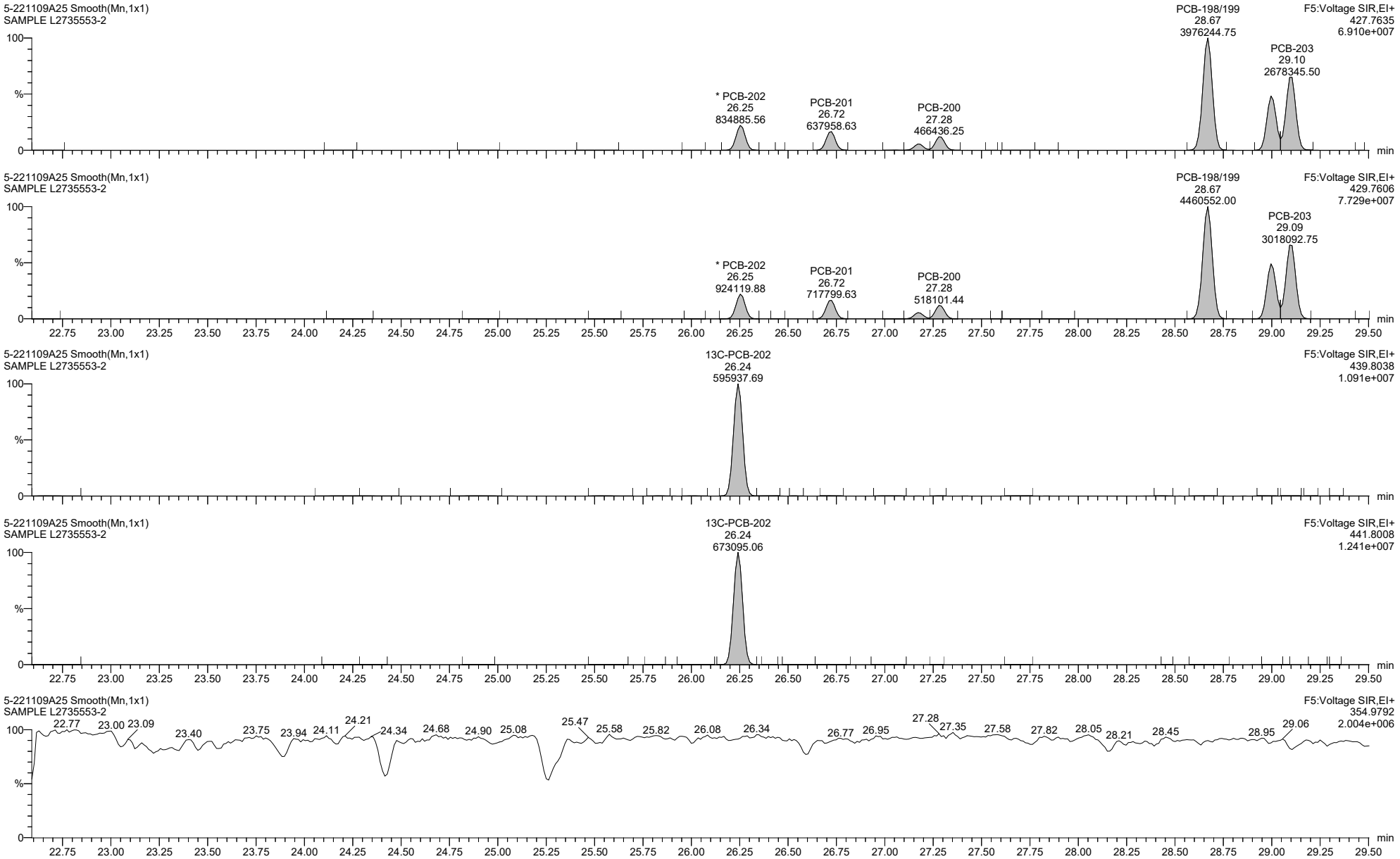
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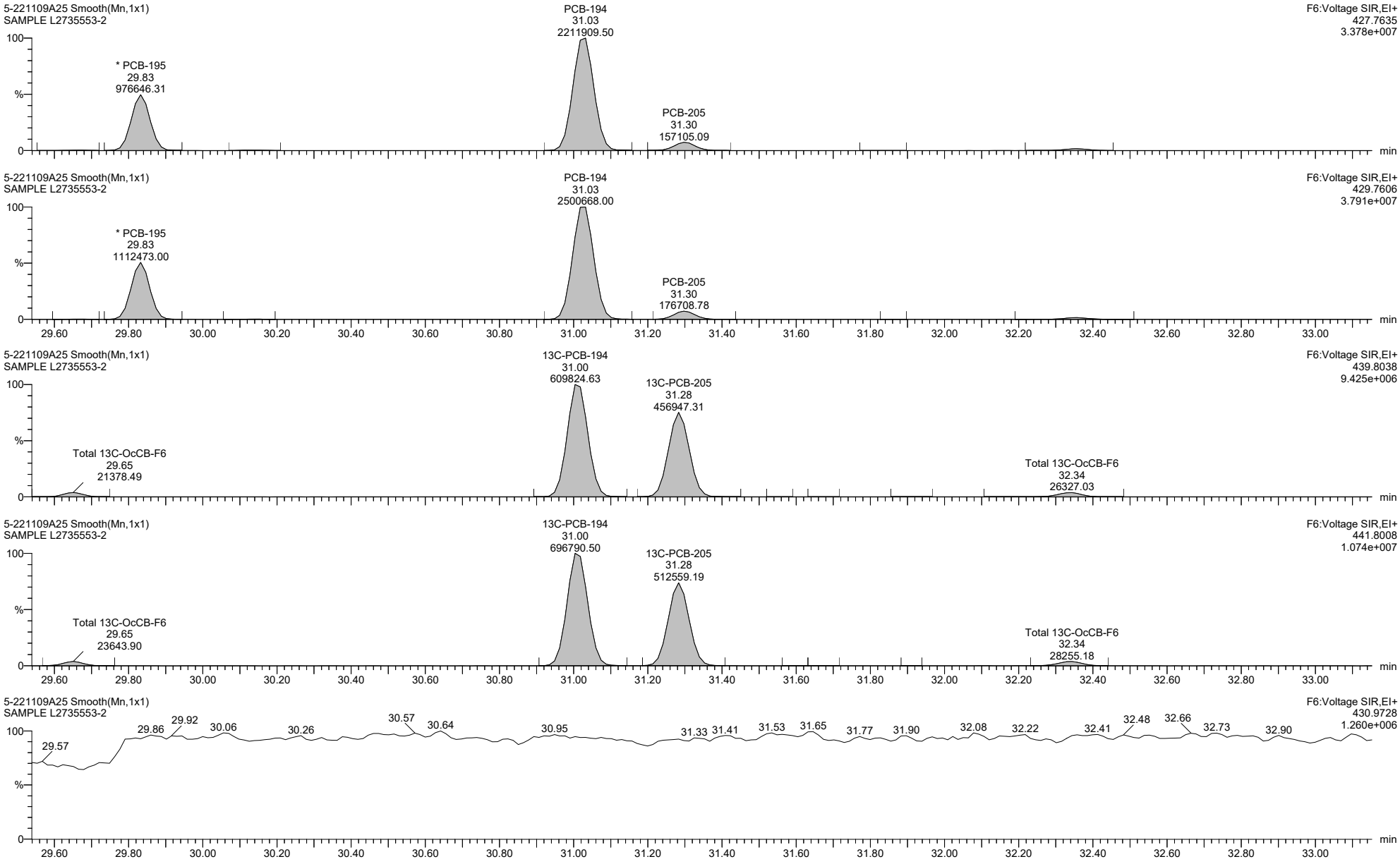


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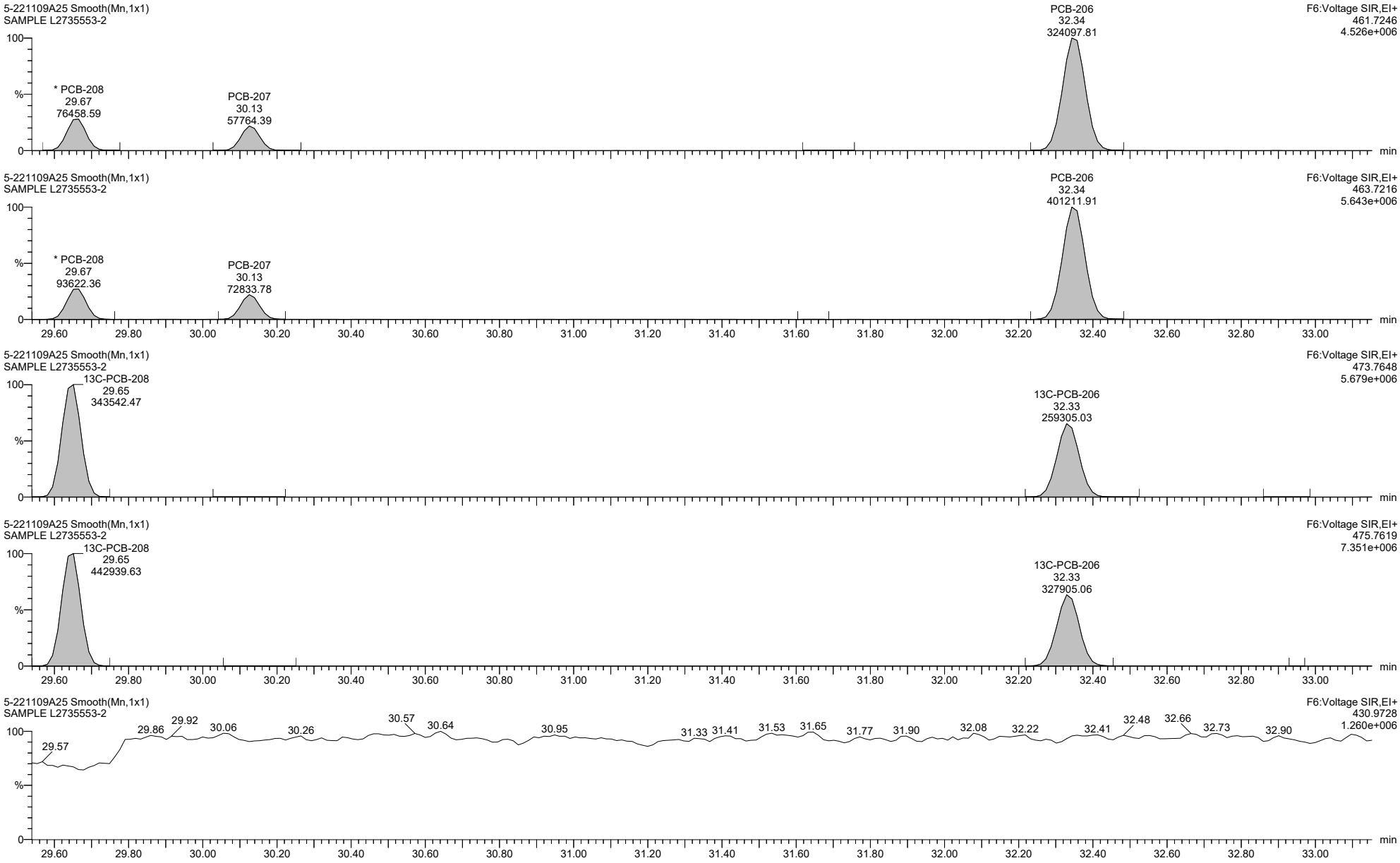


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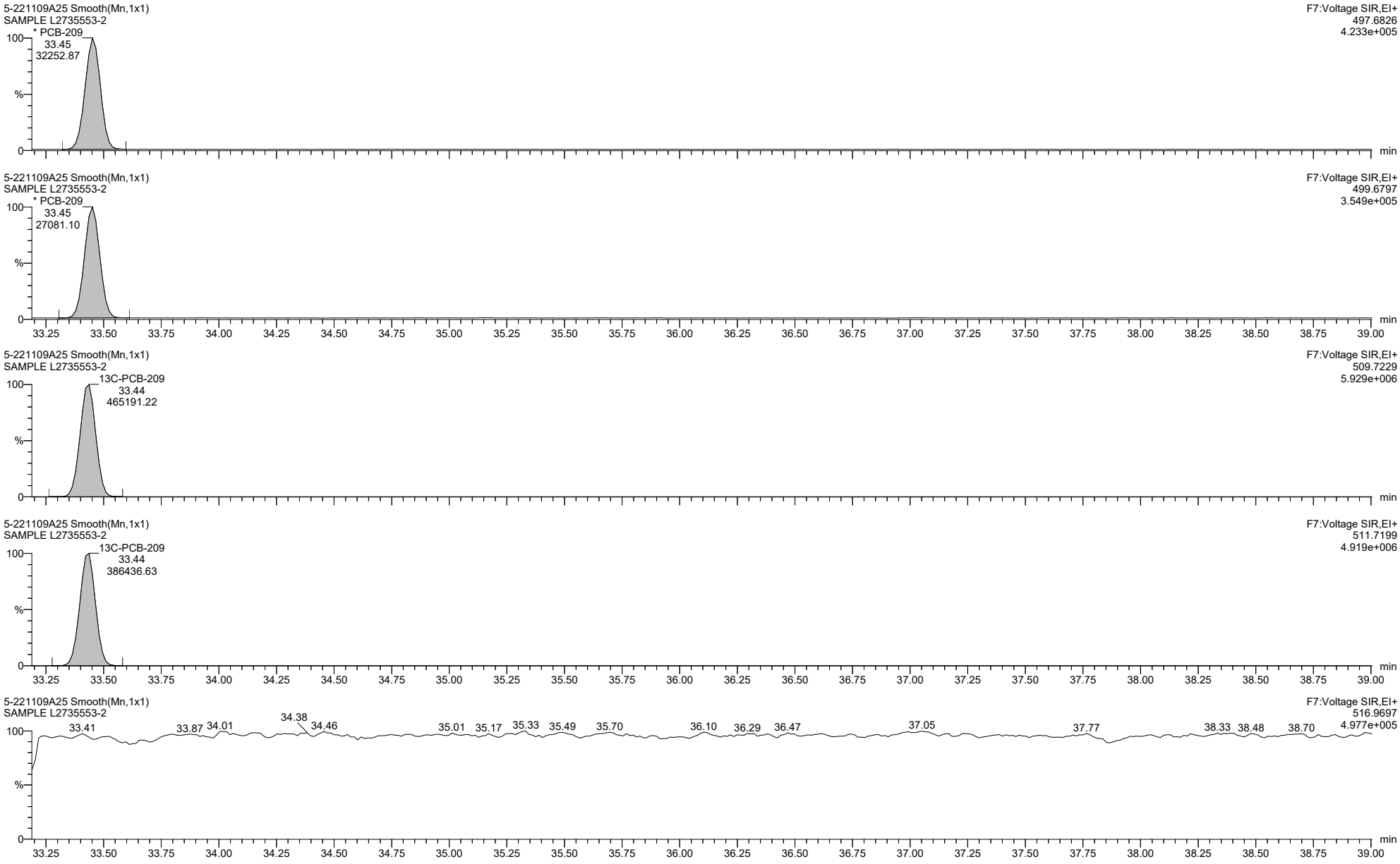


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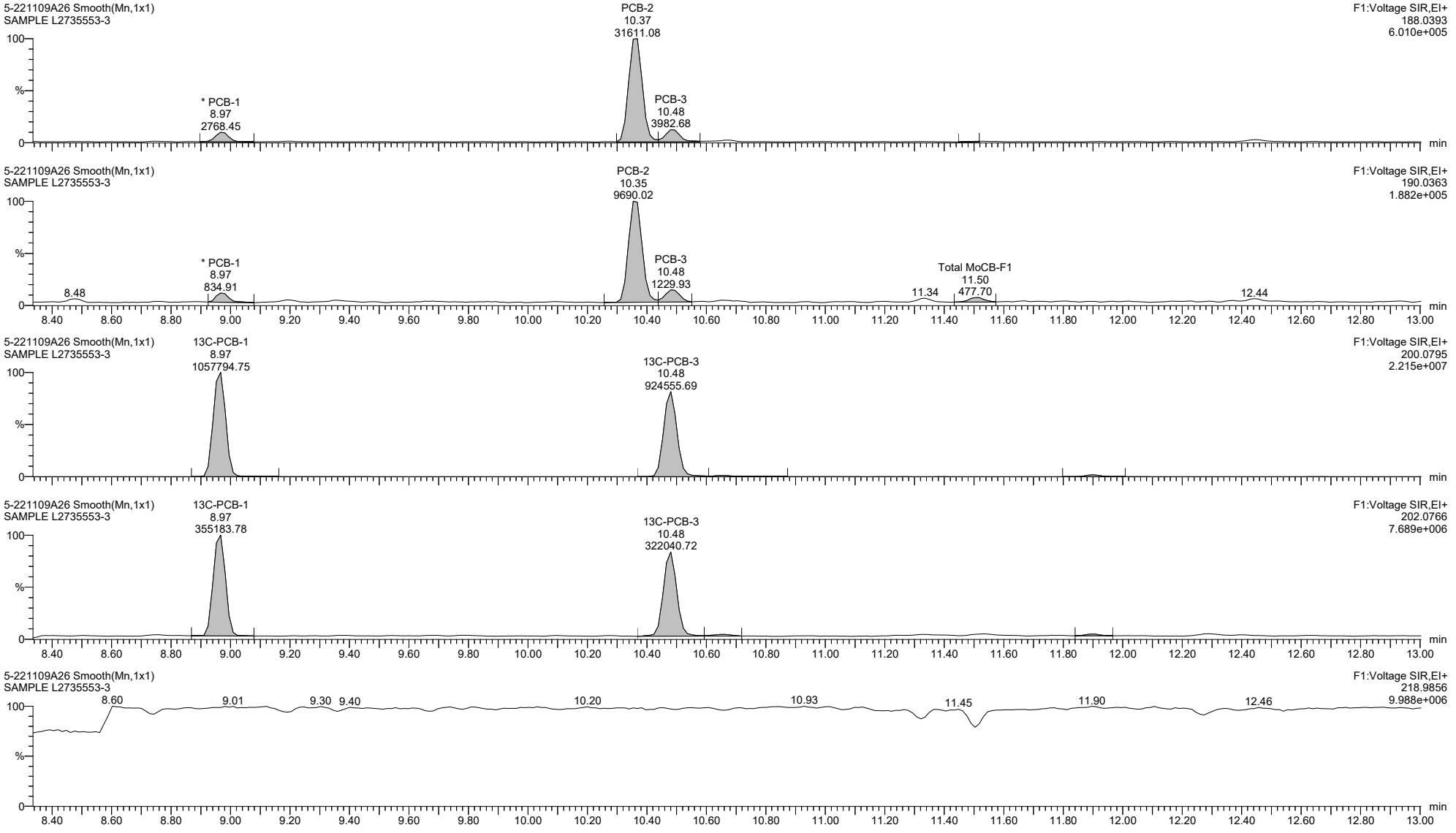
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Calibration: 17 Nov 2022 11:48:15

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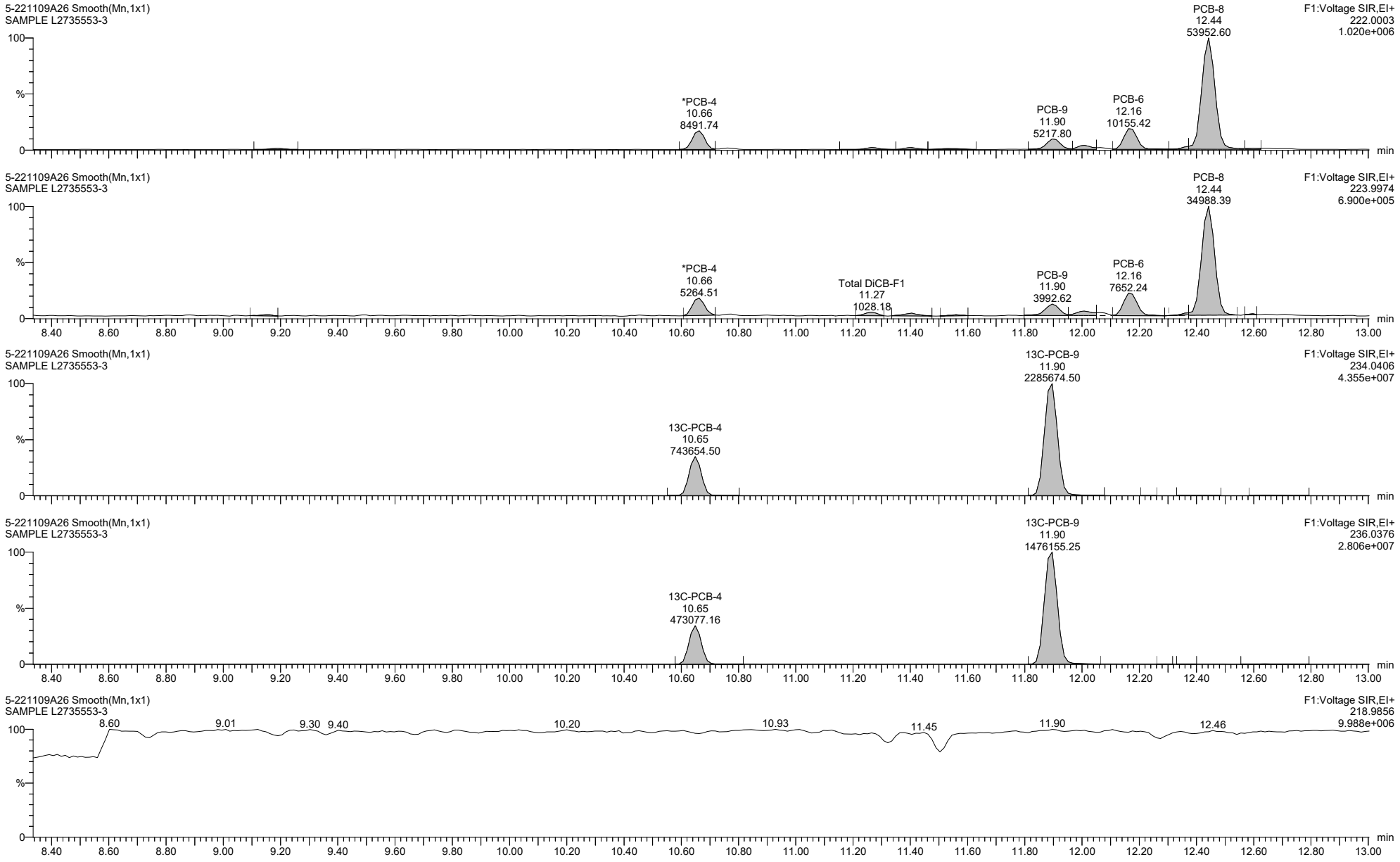


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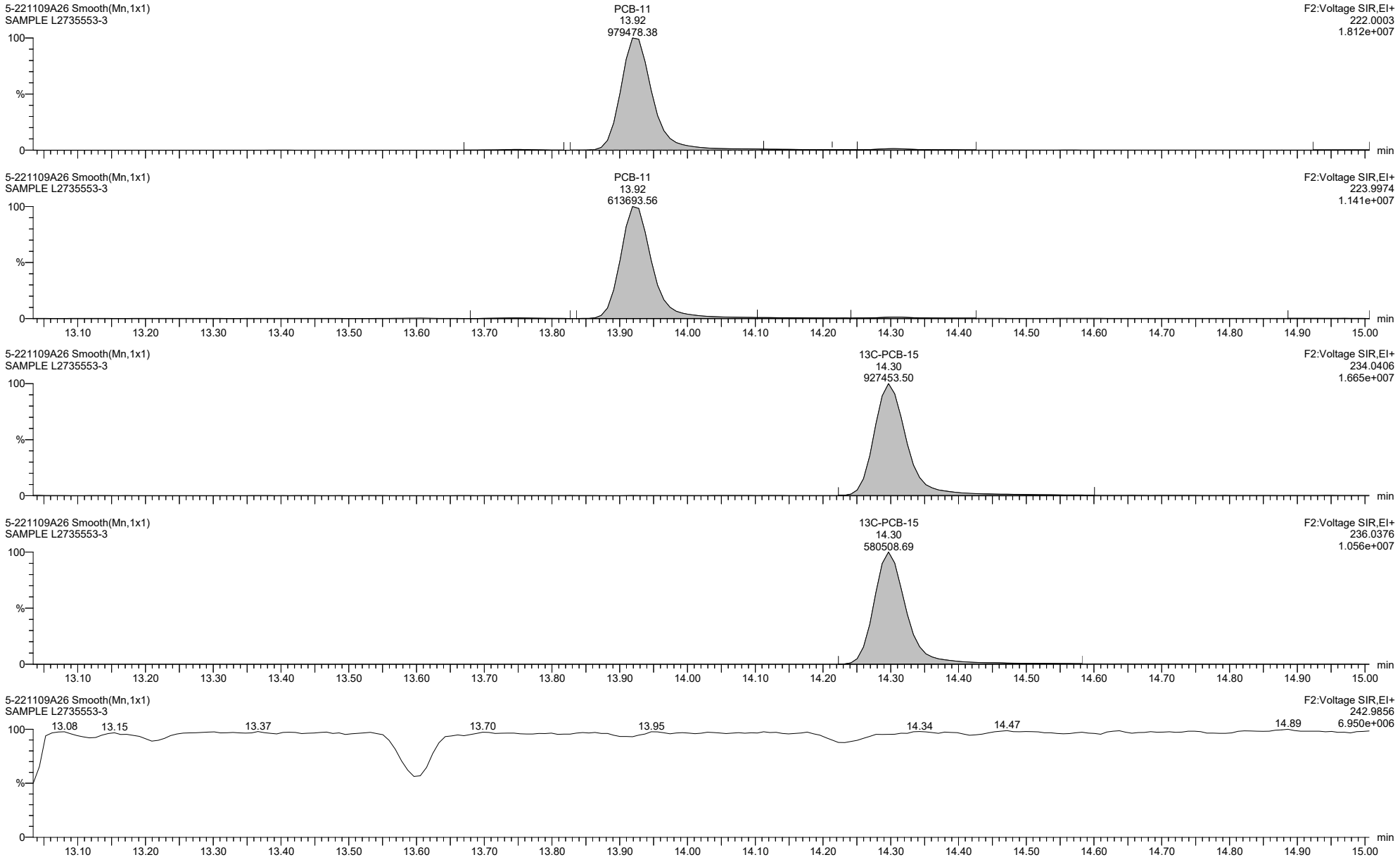
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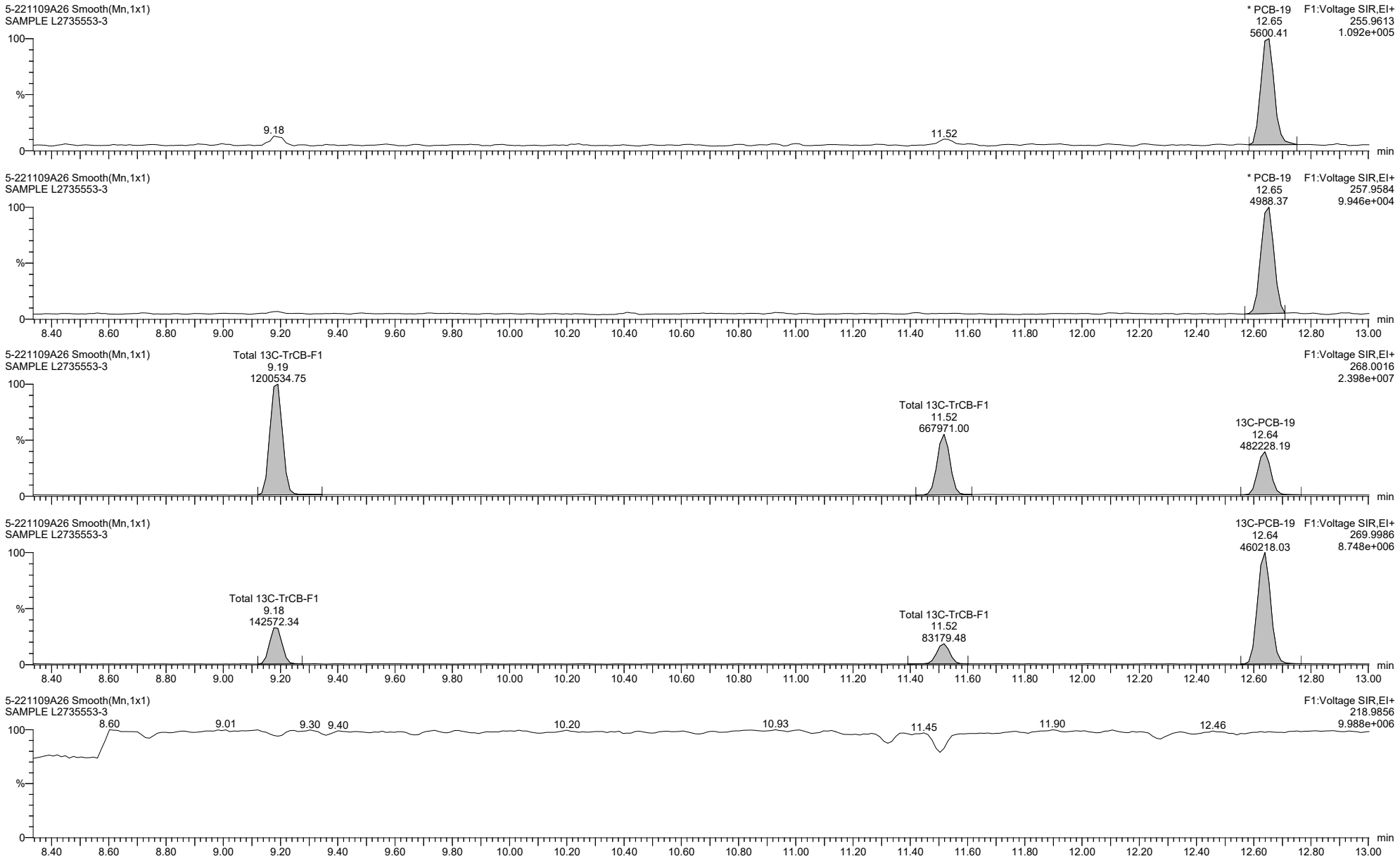


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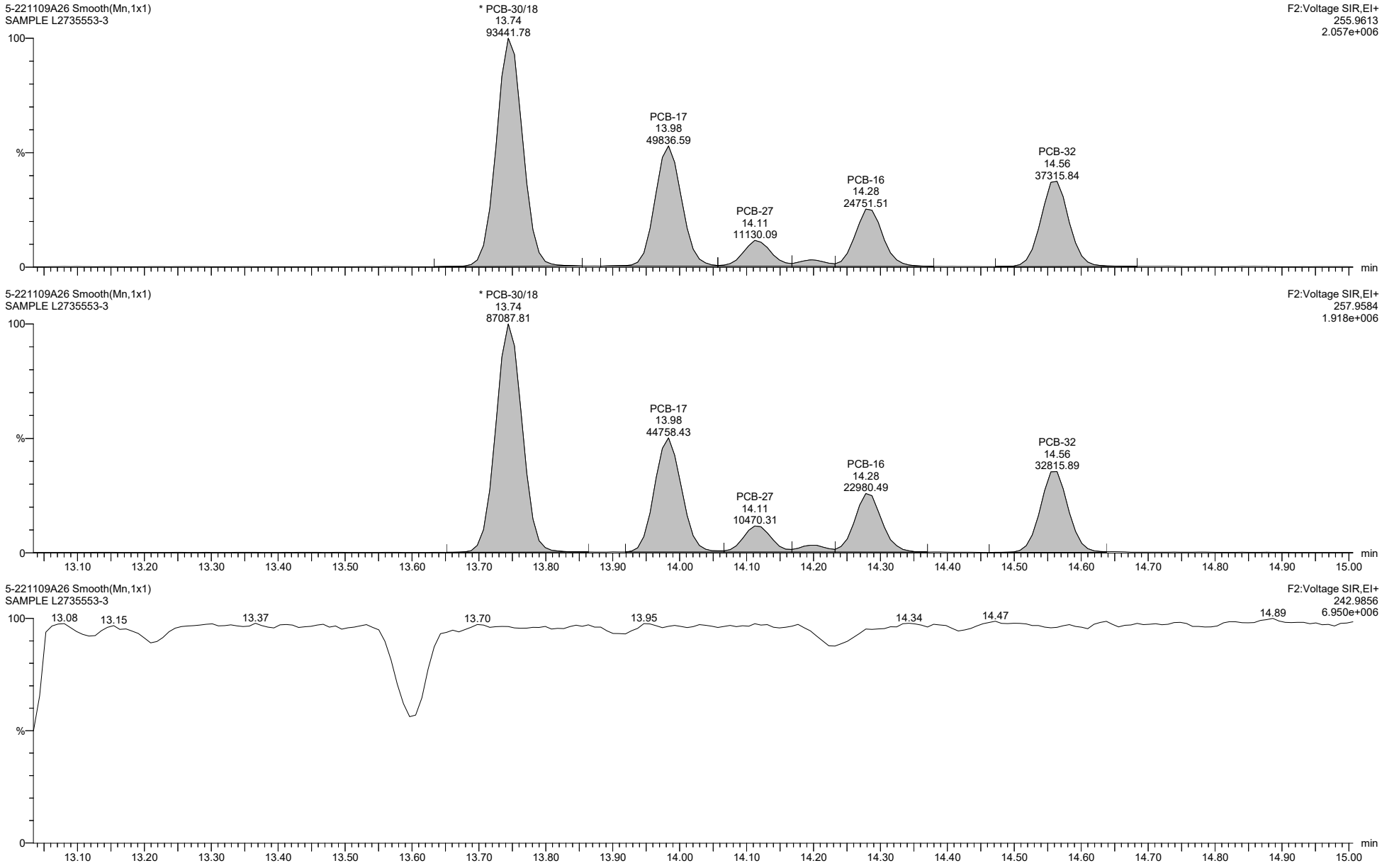


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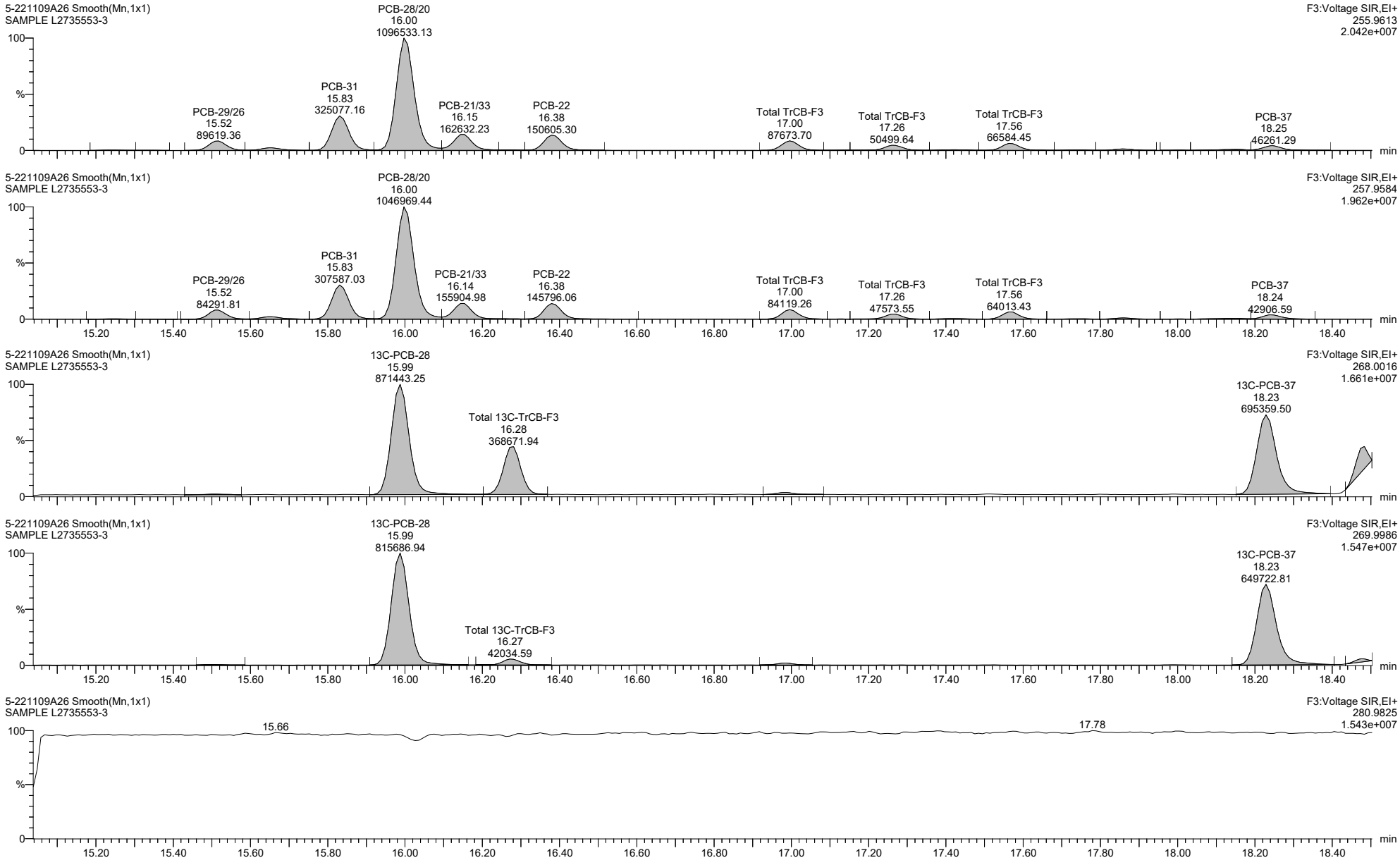


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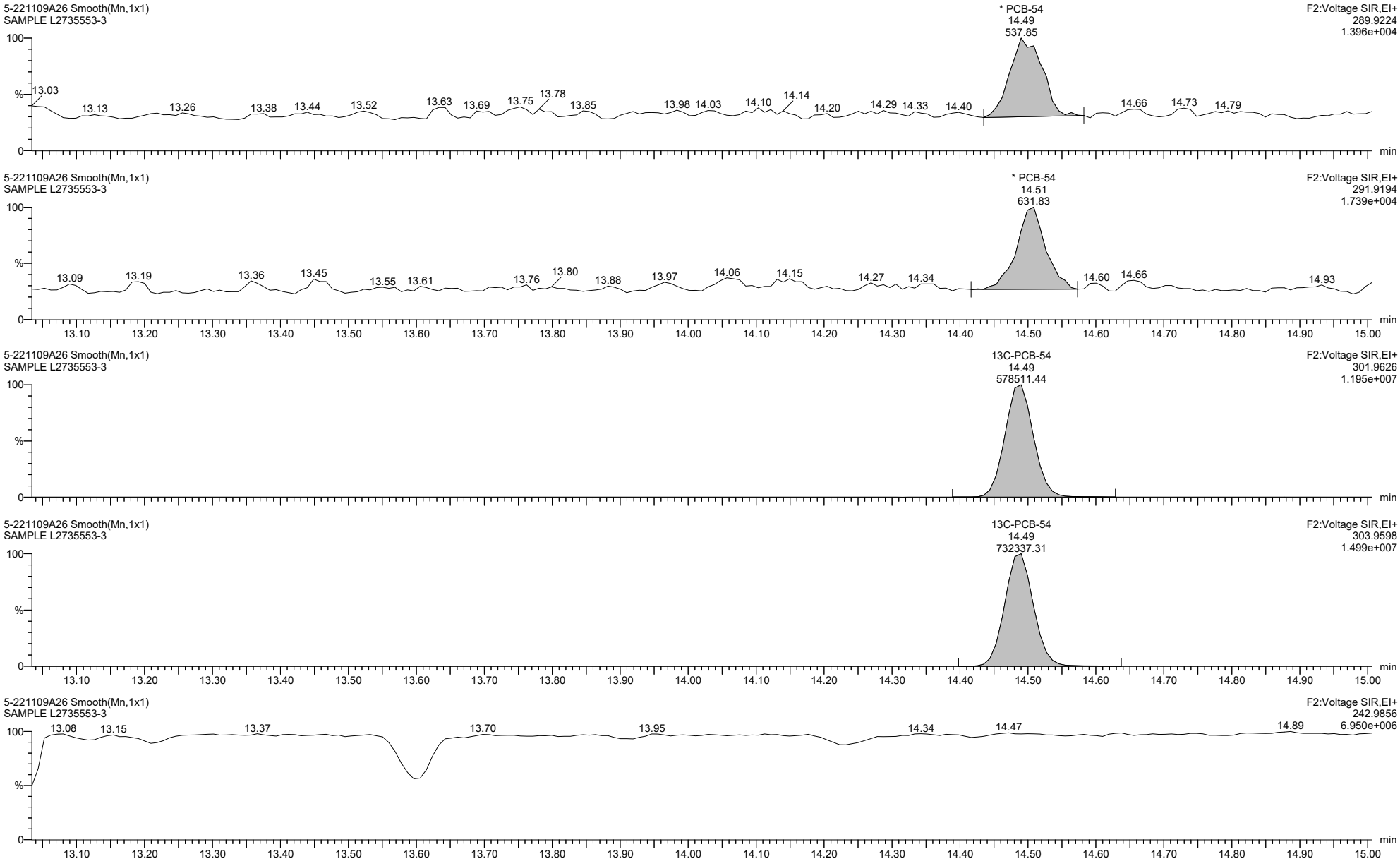


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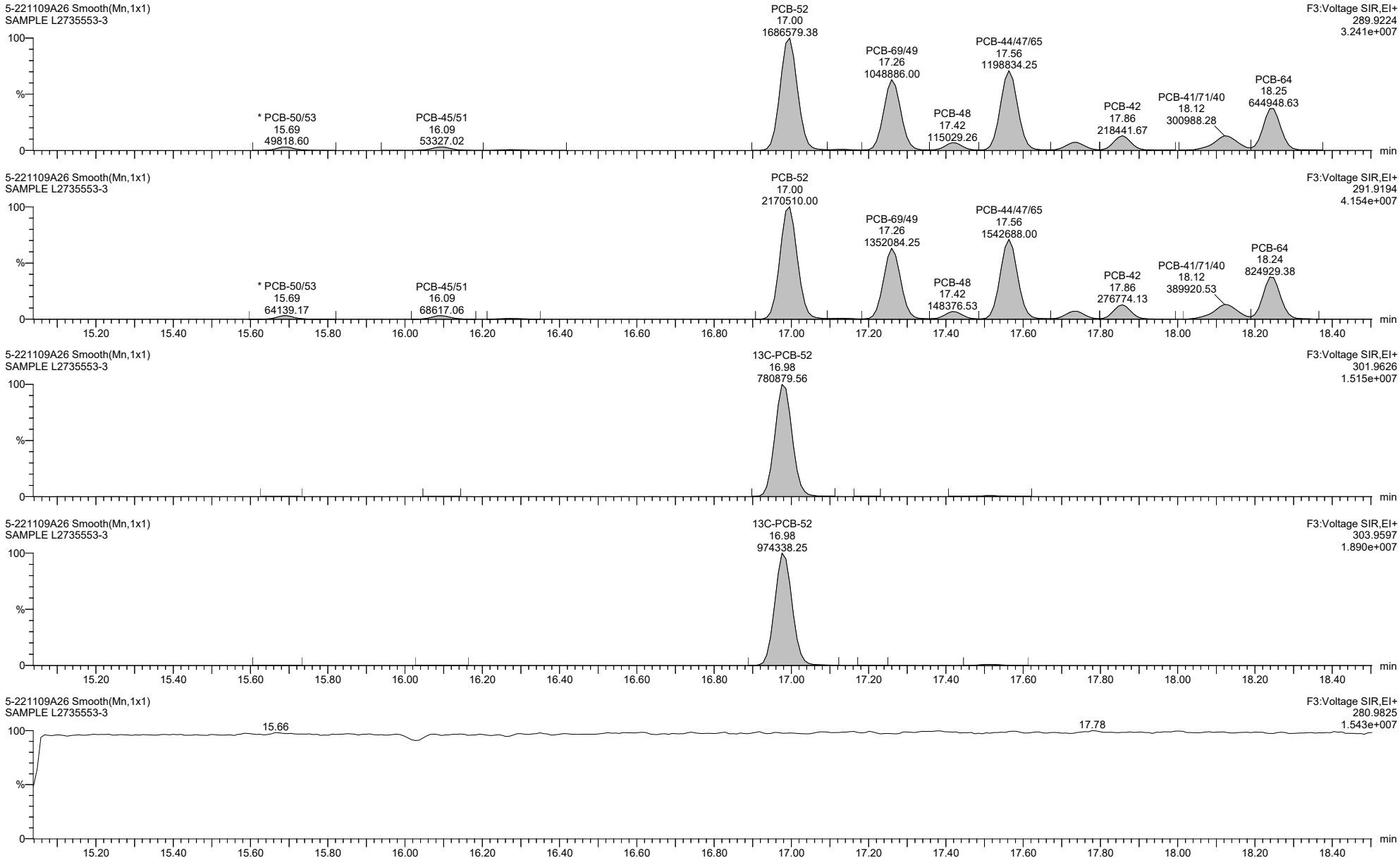
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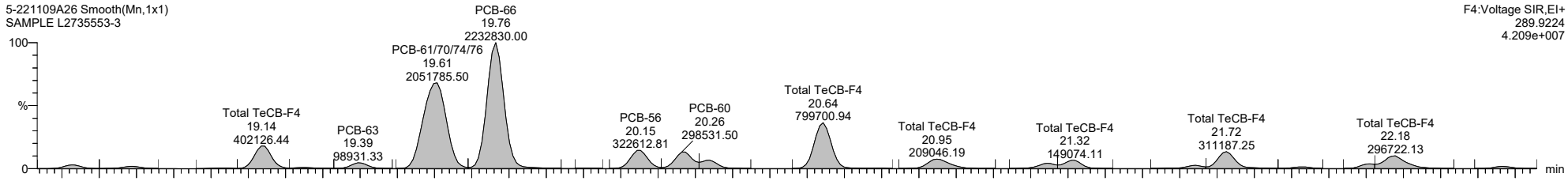
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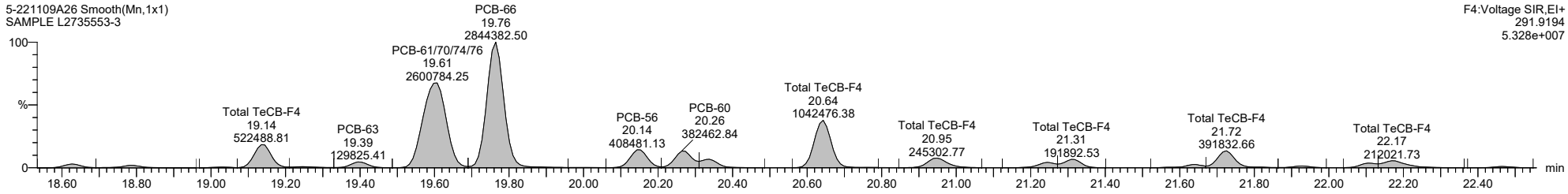


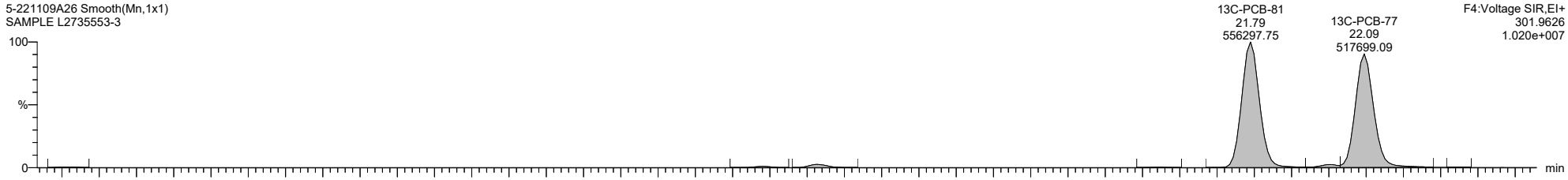
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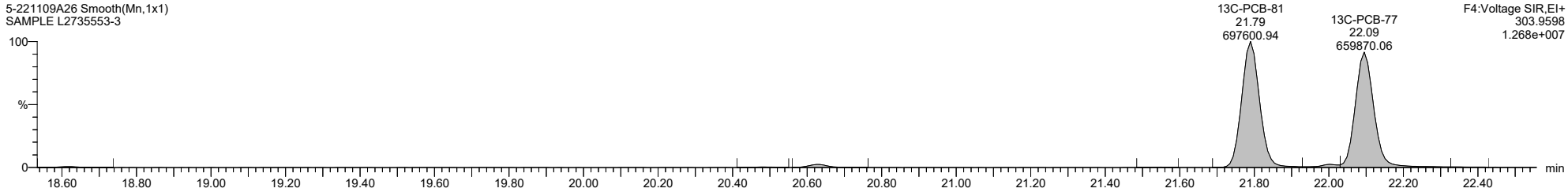
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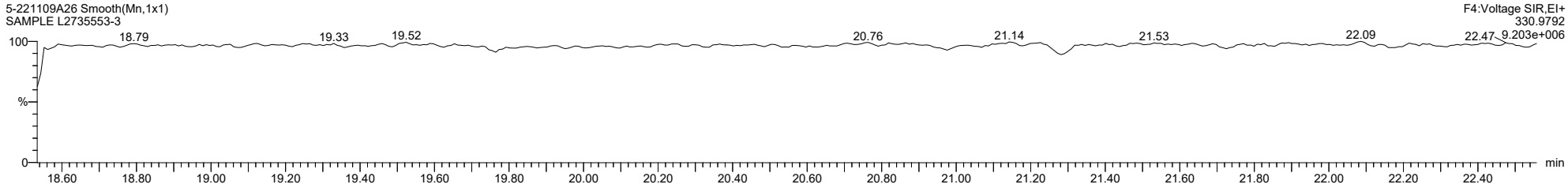
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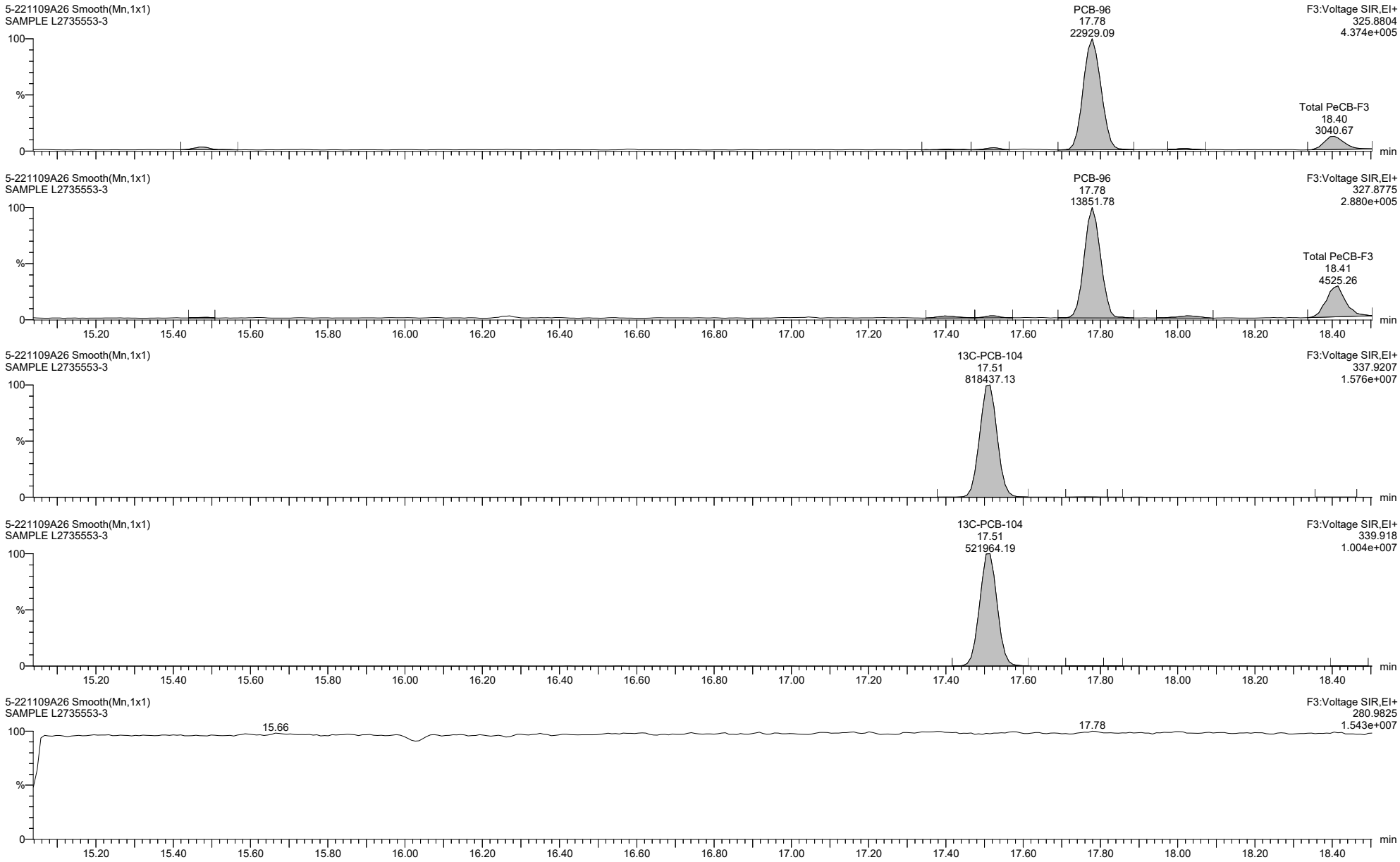


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

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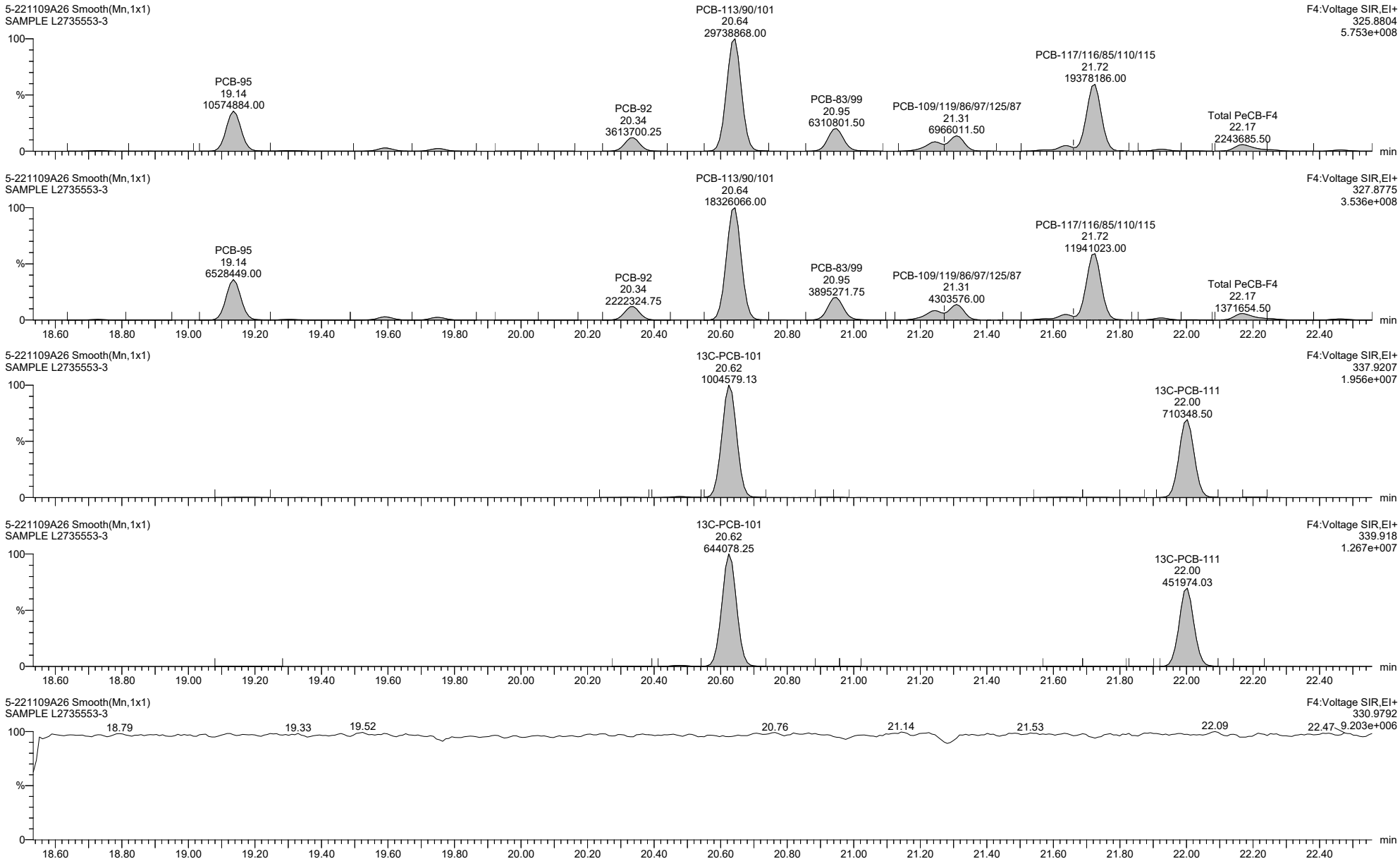
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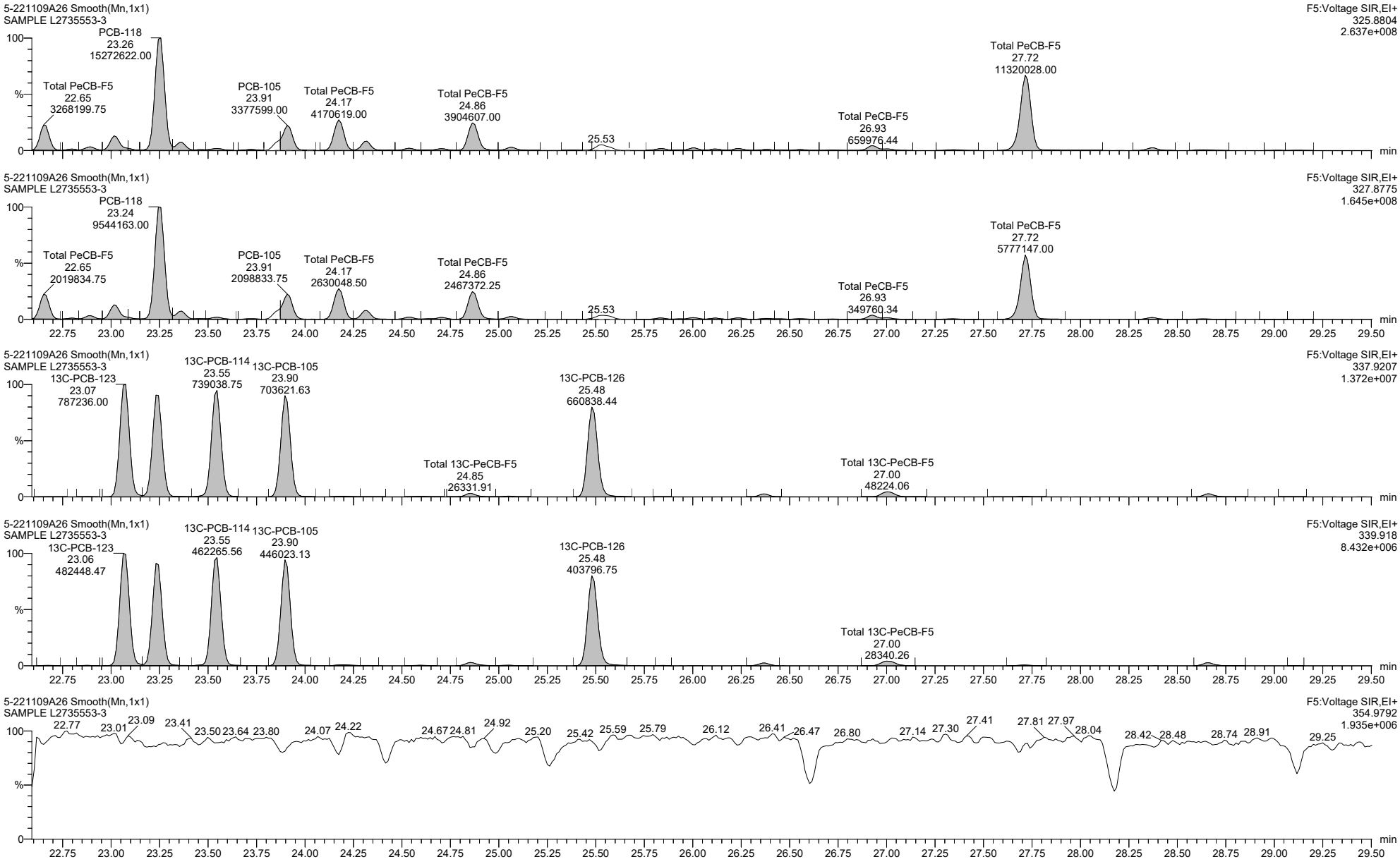


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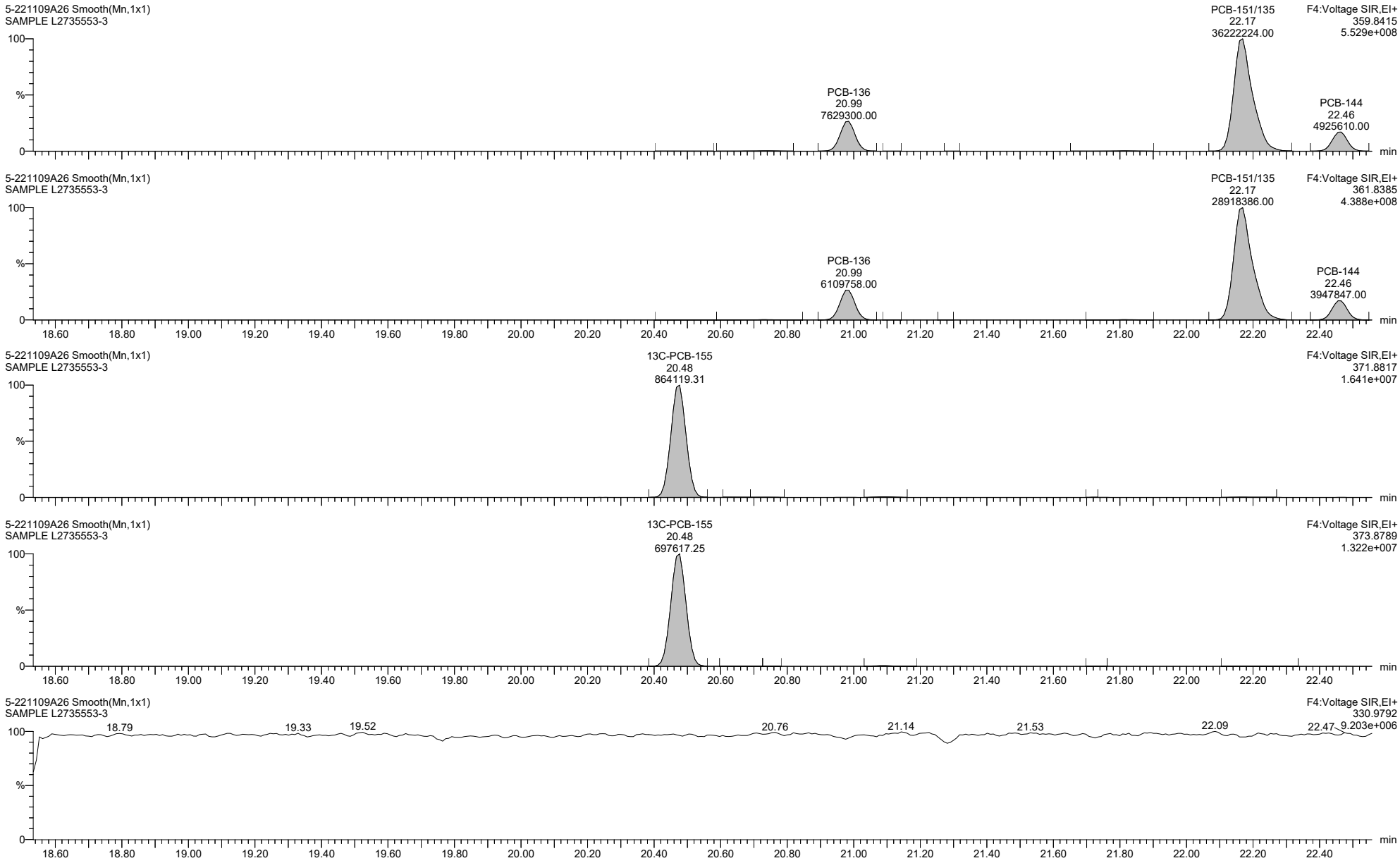


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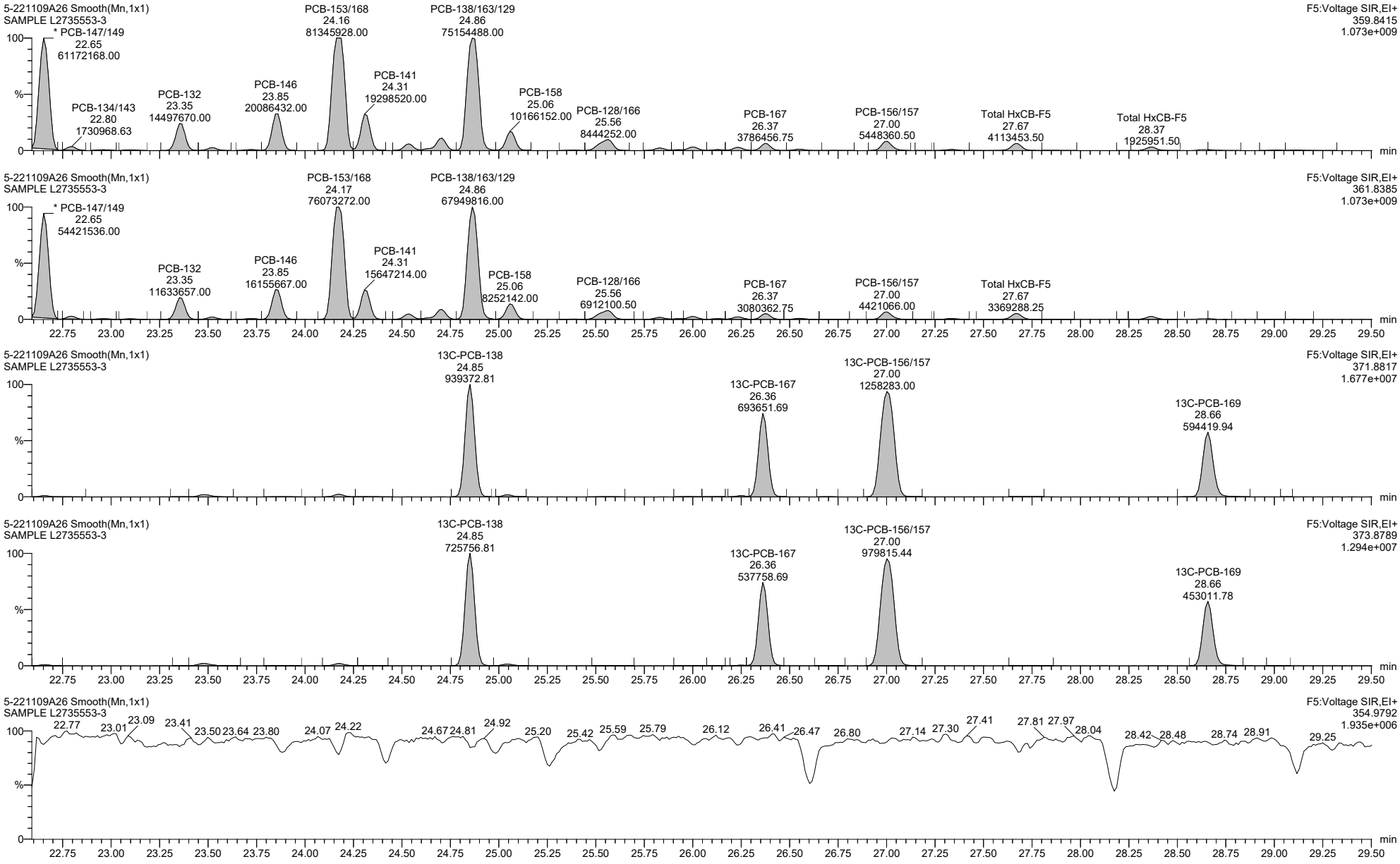


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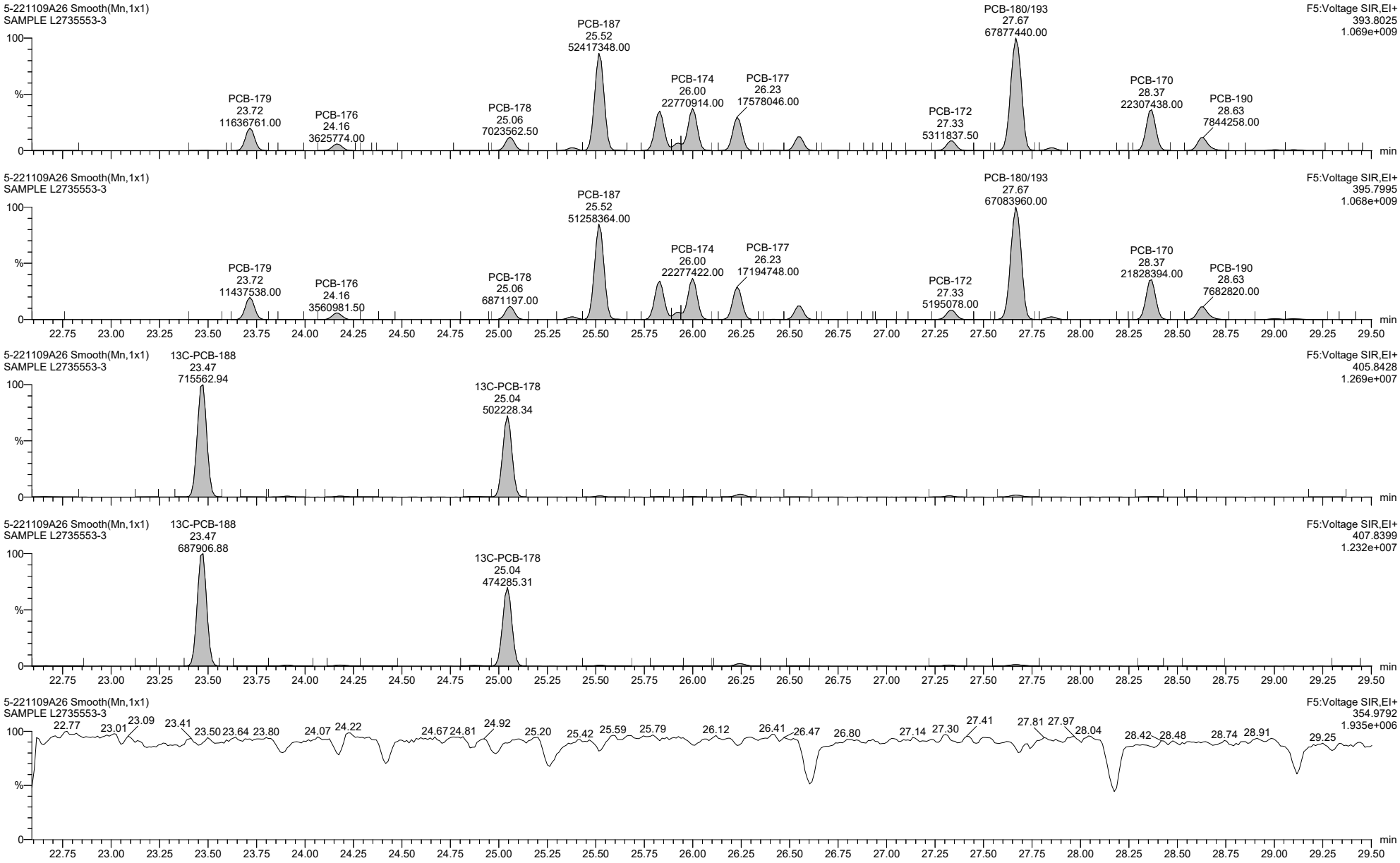
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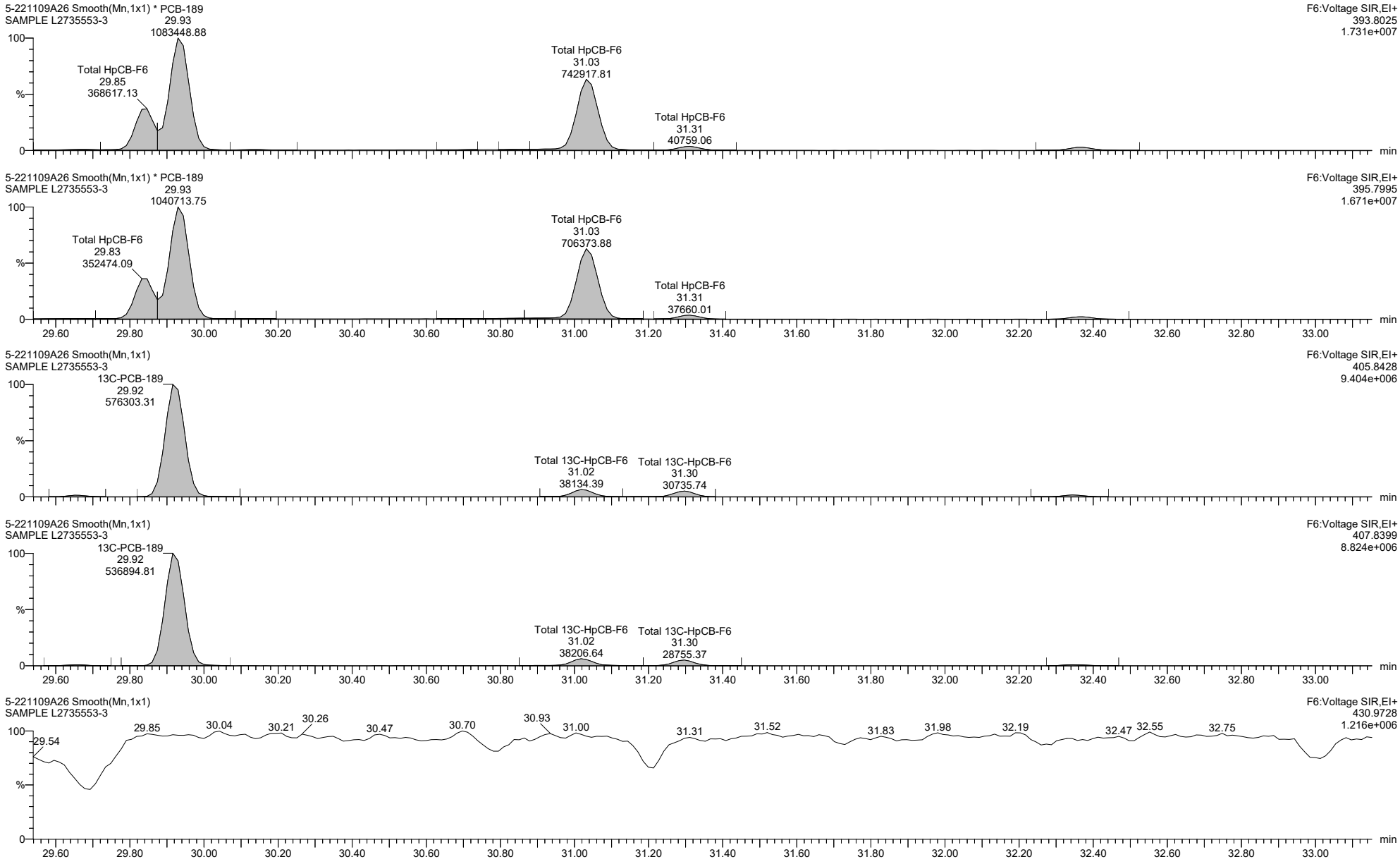


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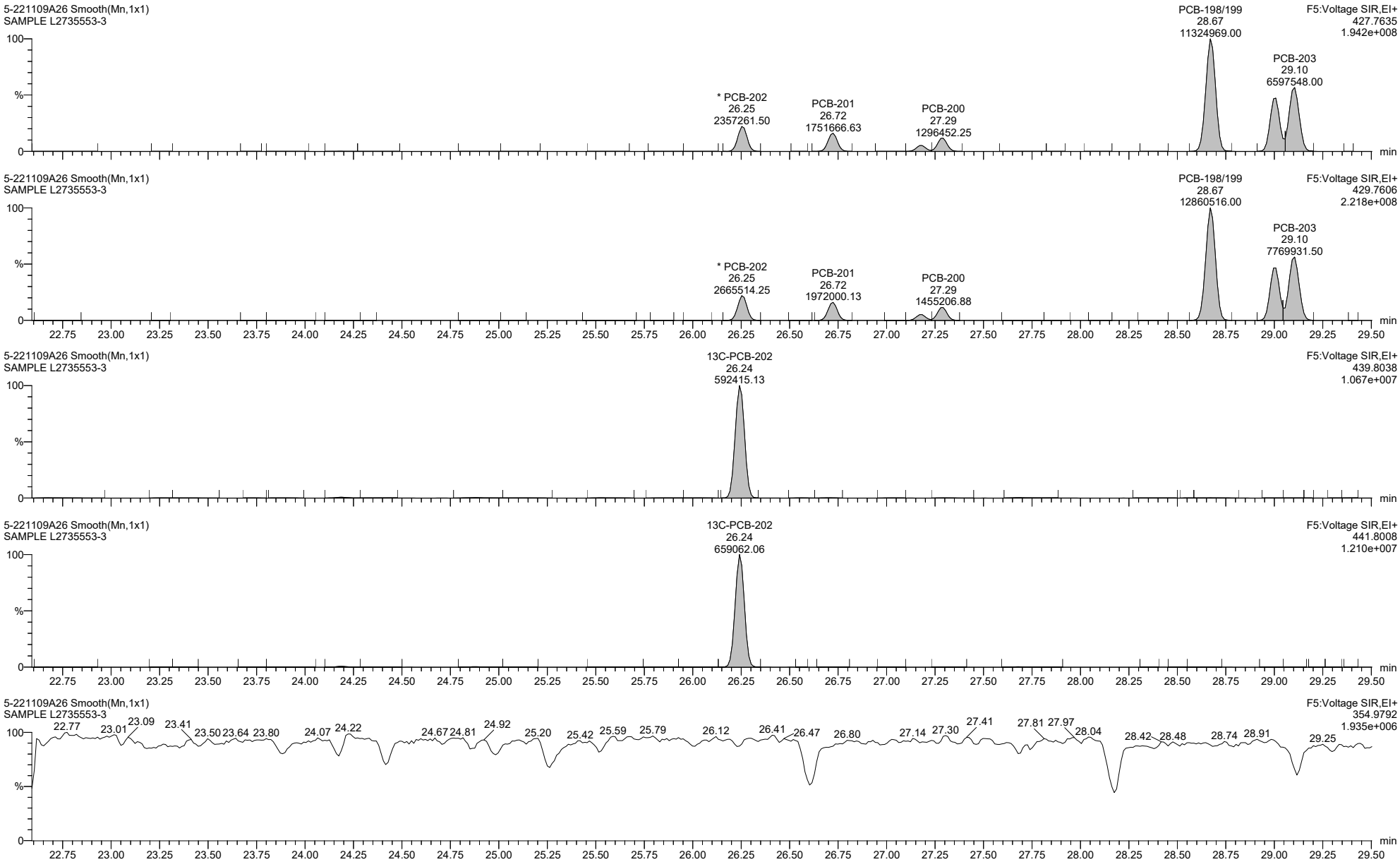
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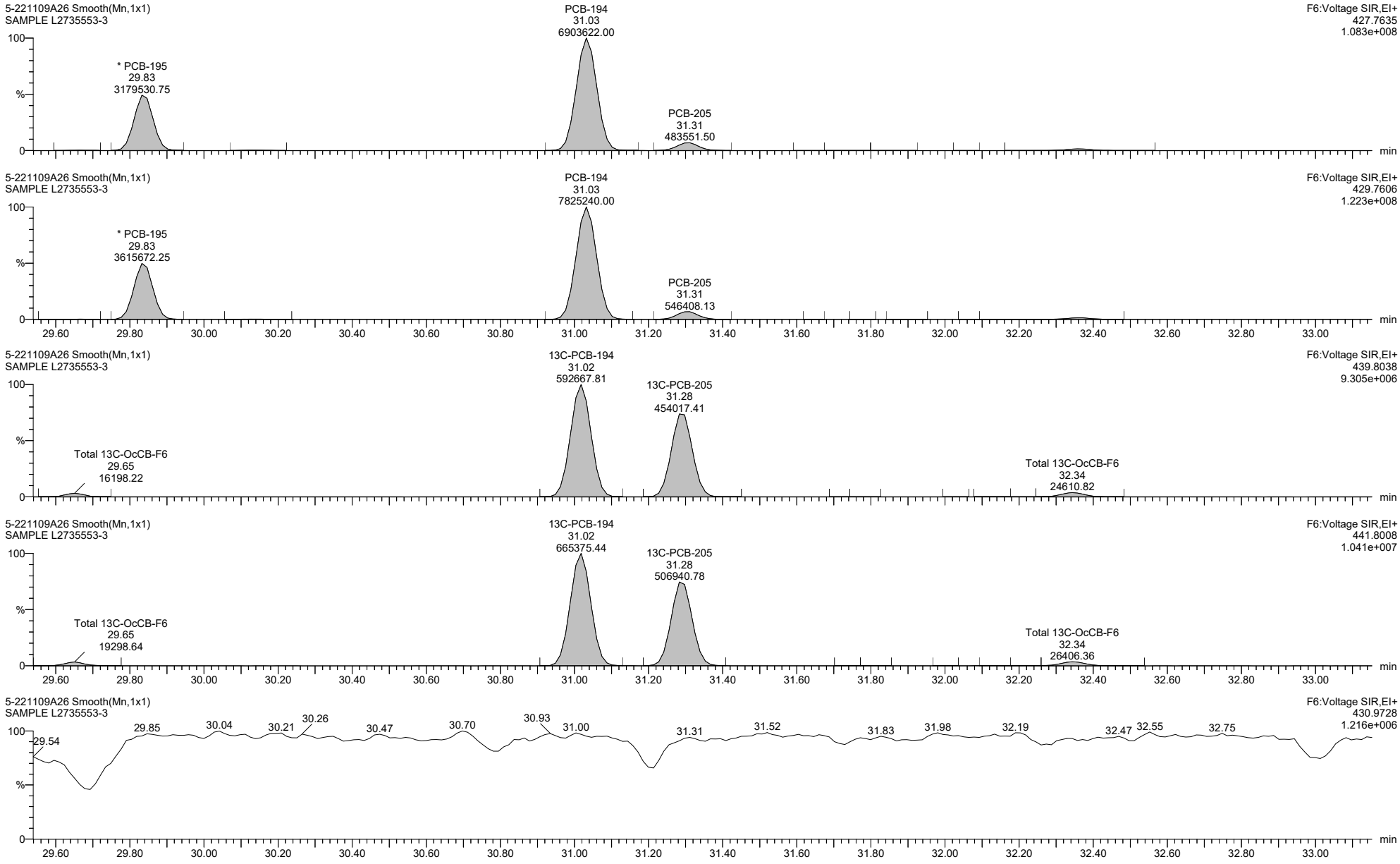


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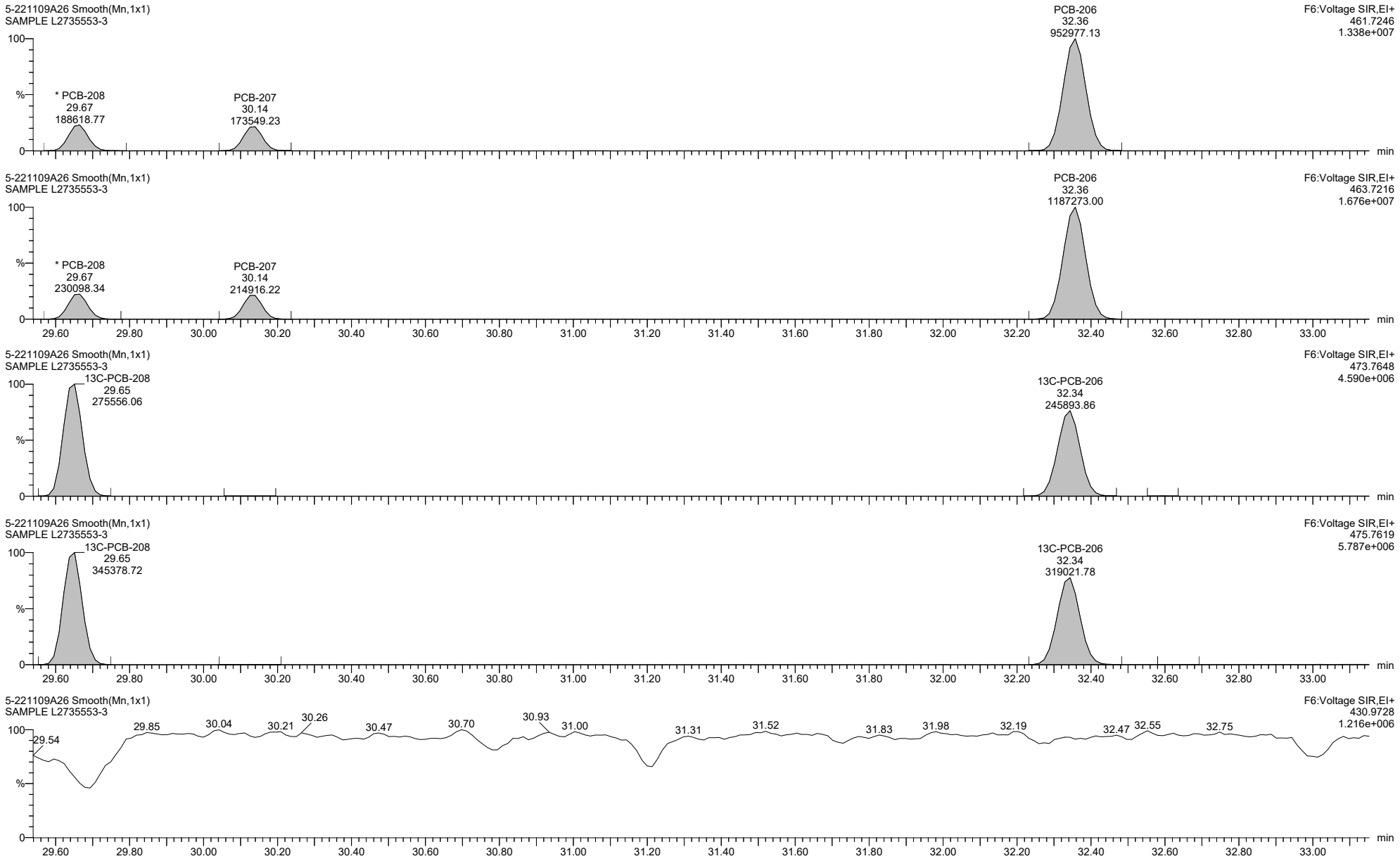


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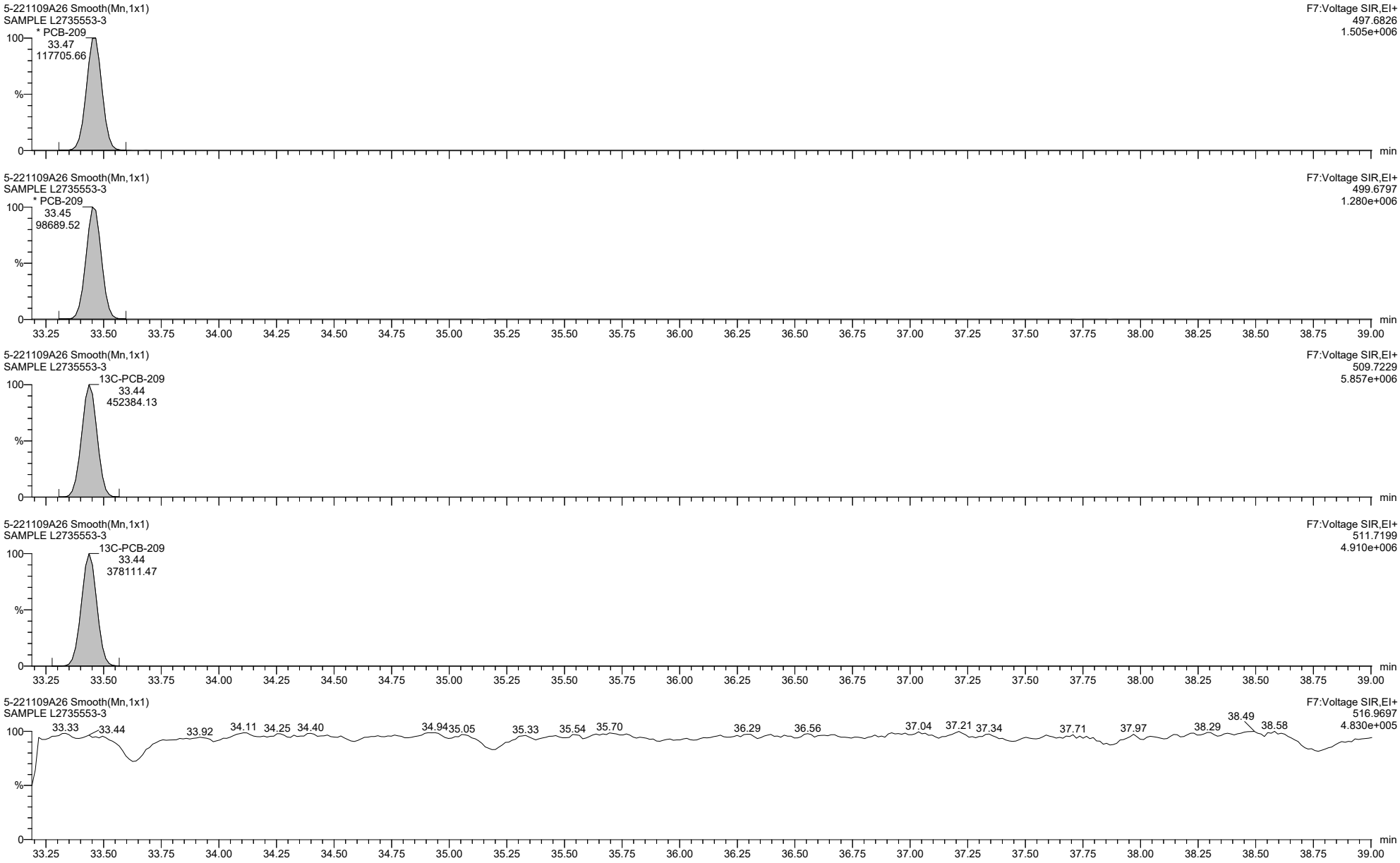


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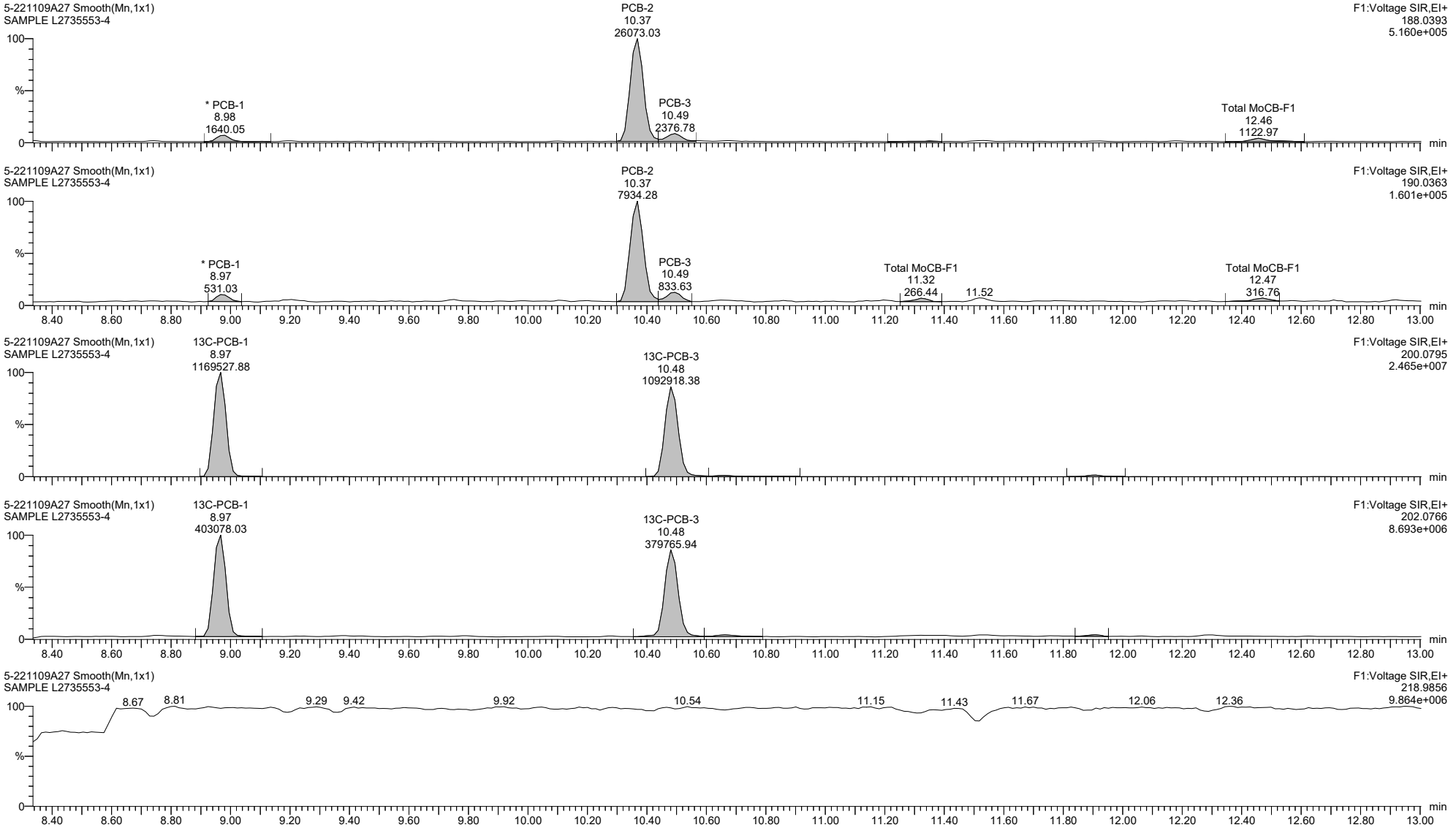
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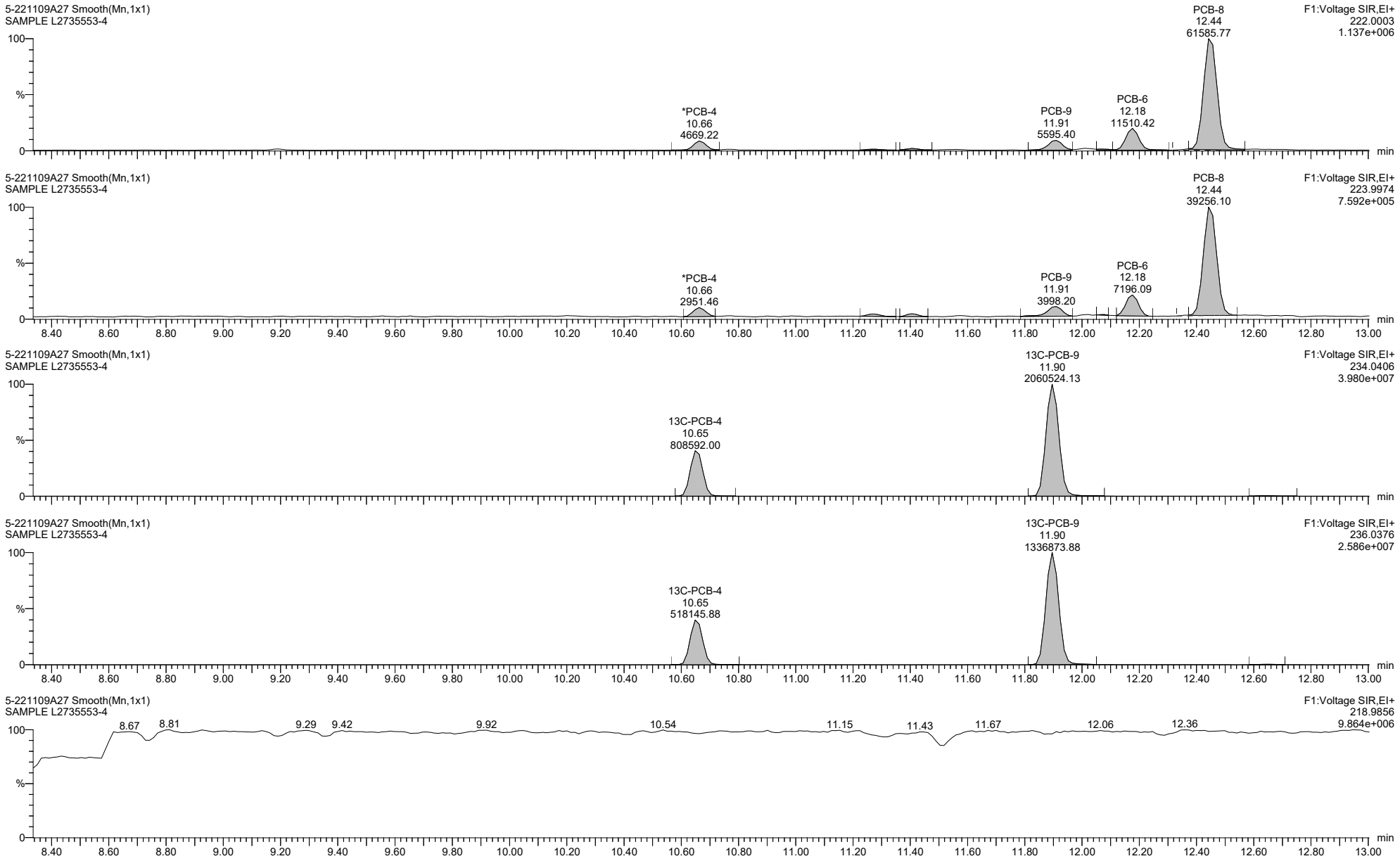
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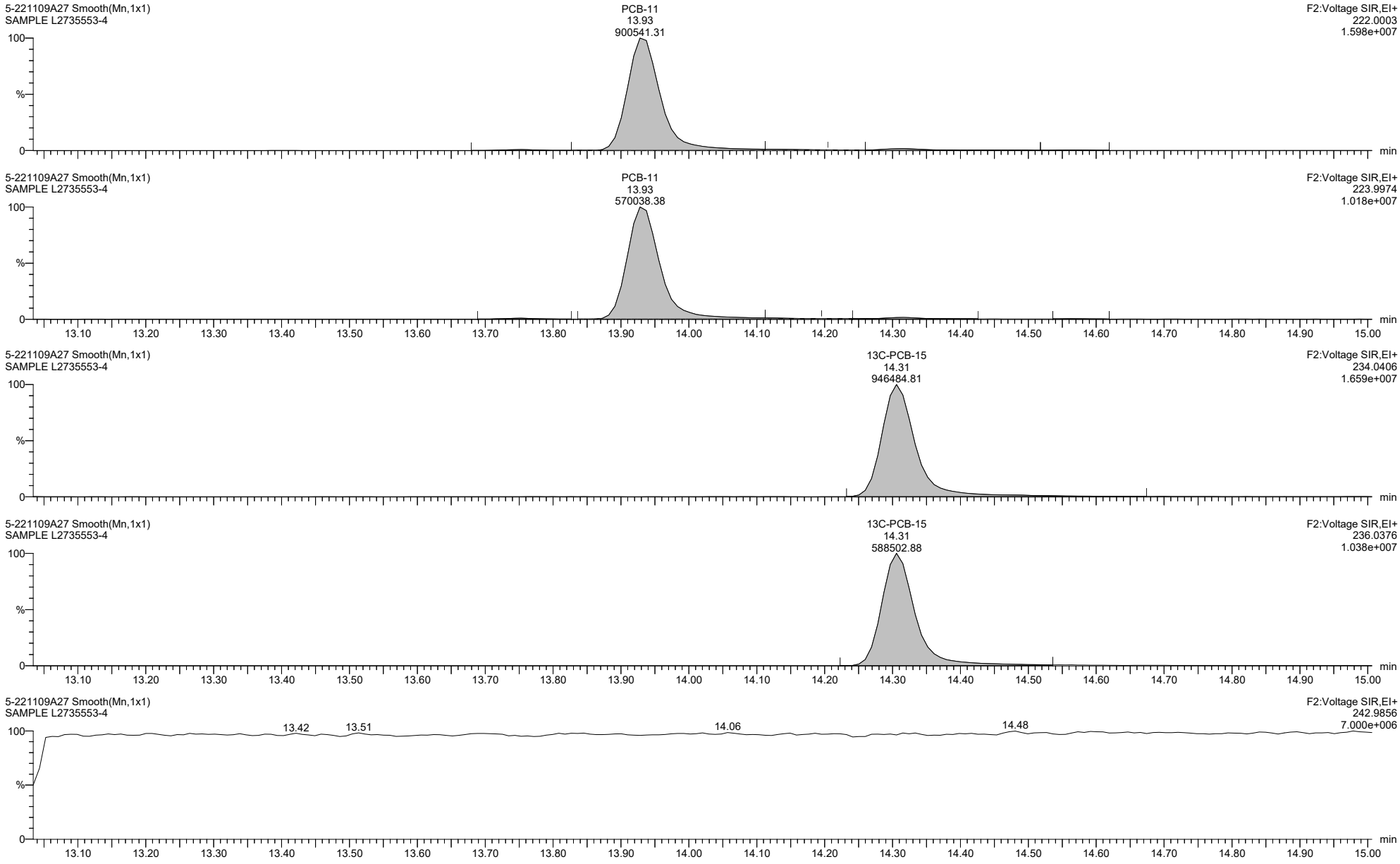
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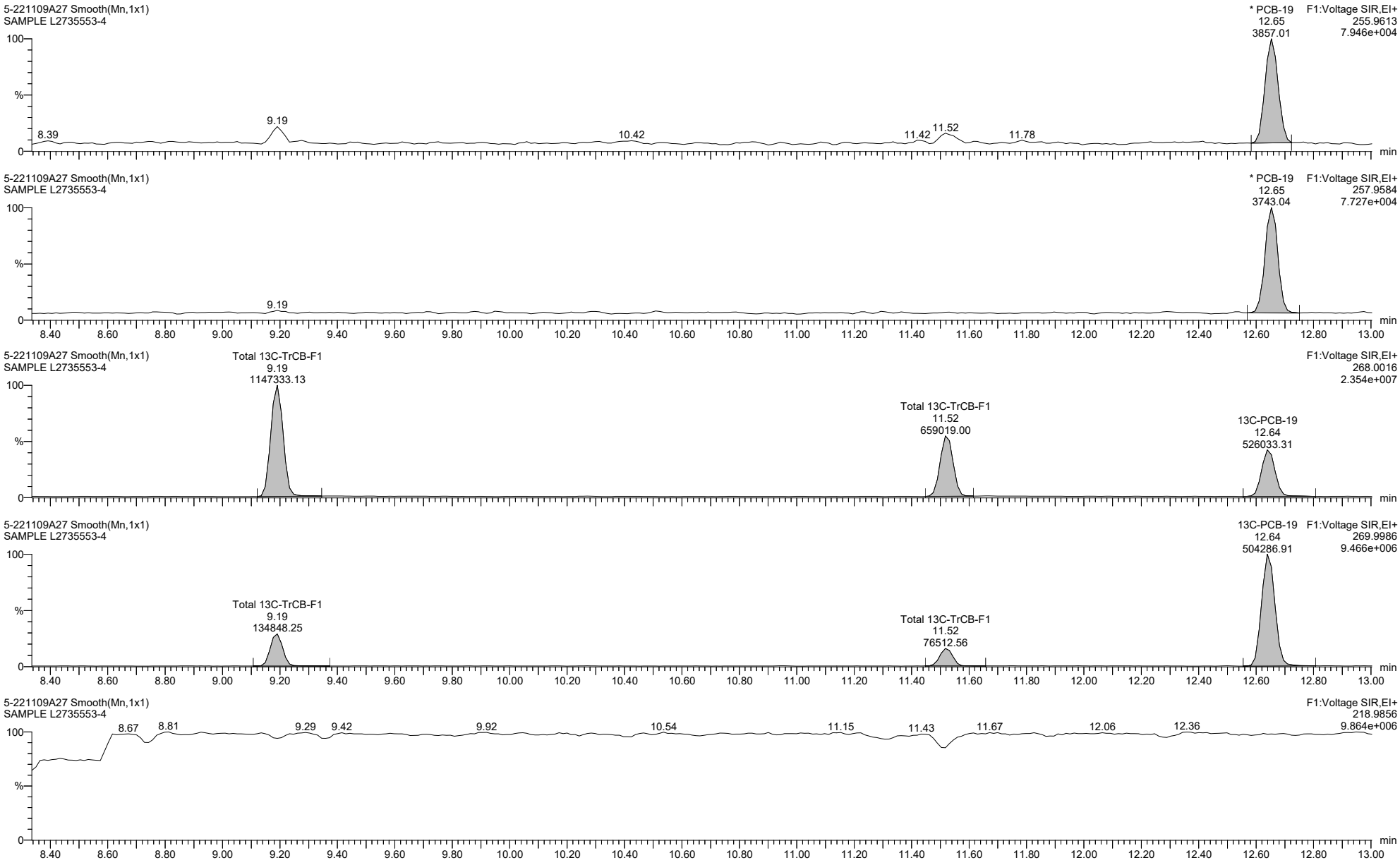
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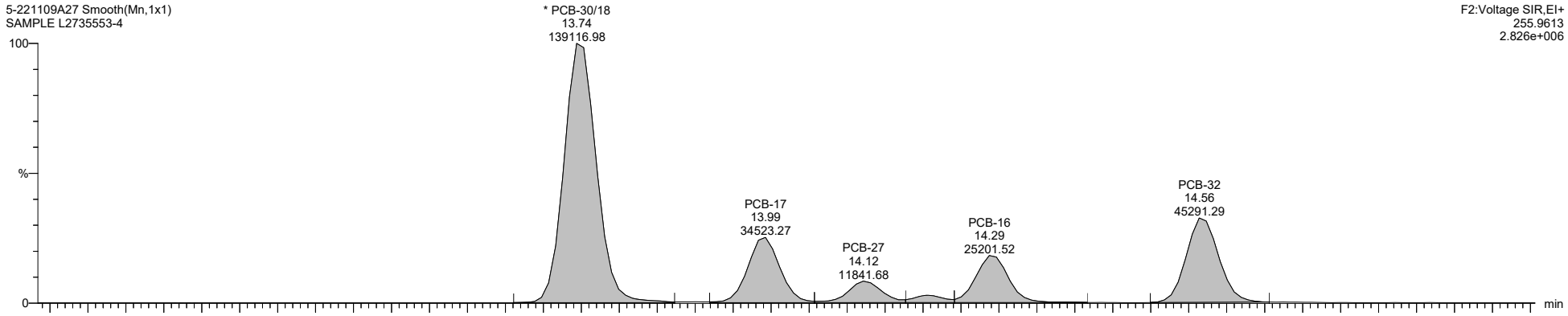
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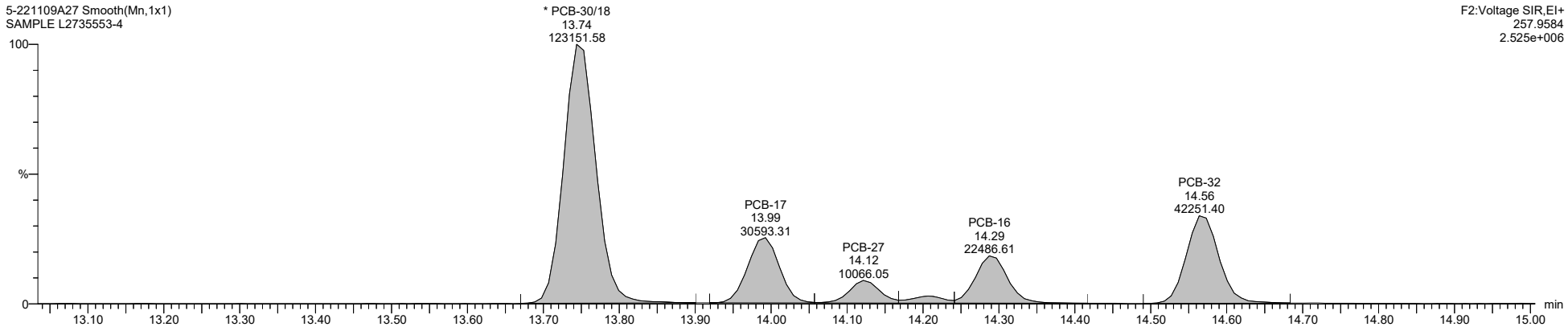


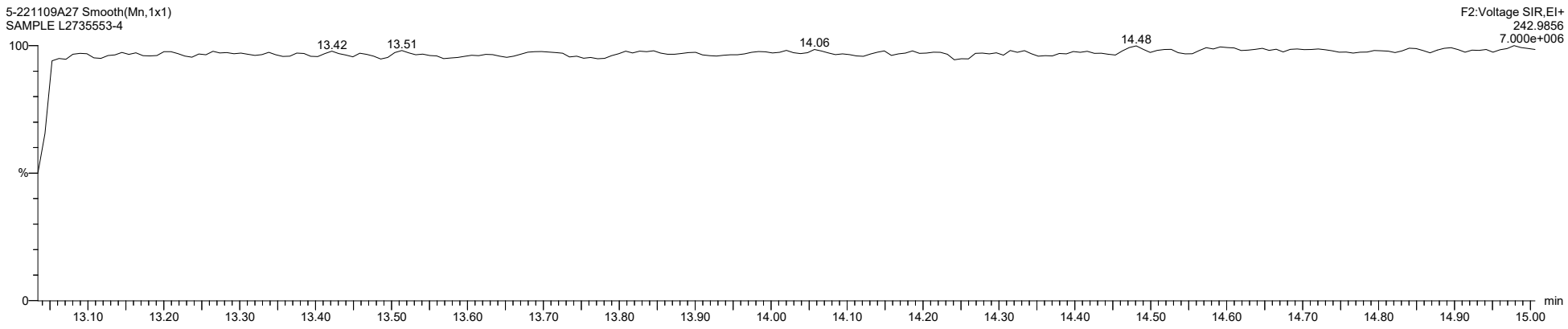
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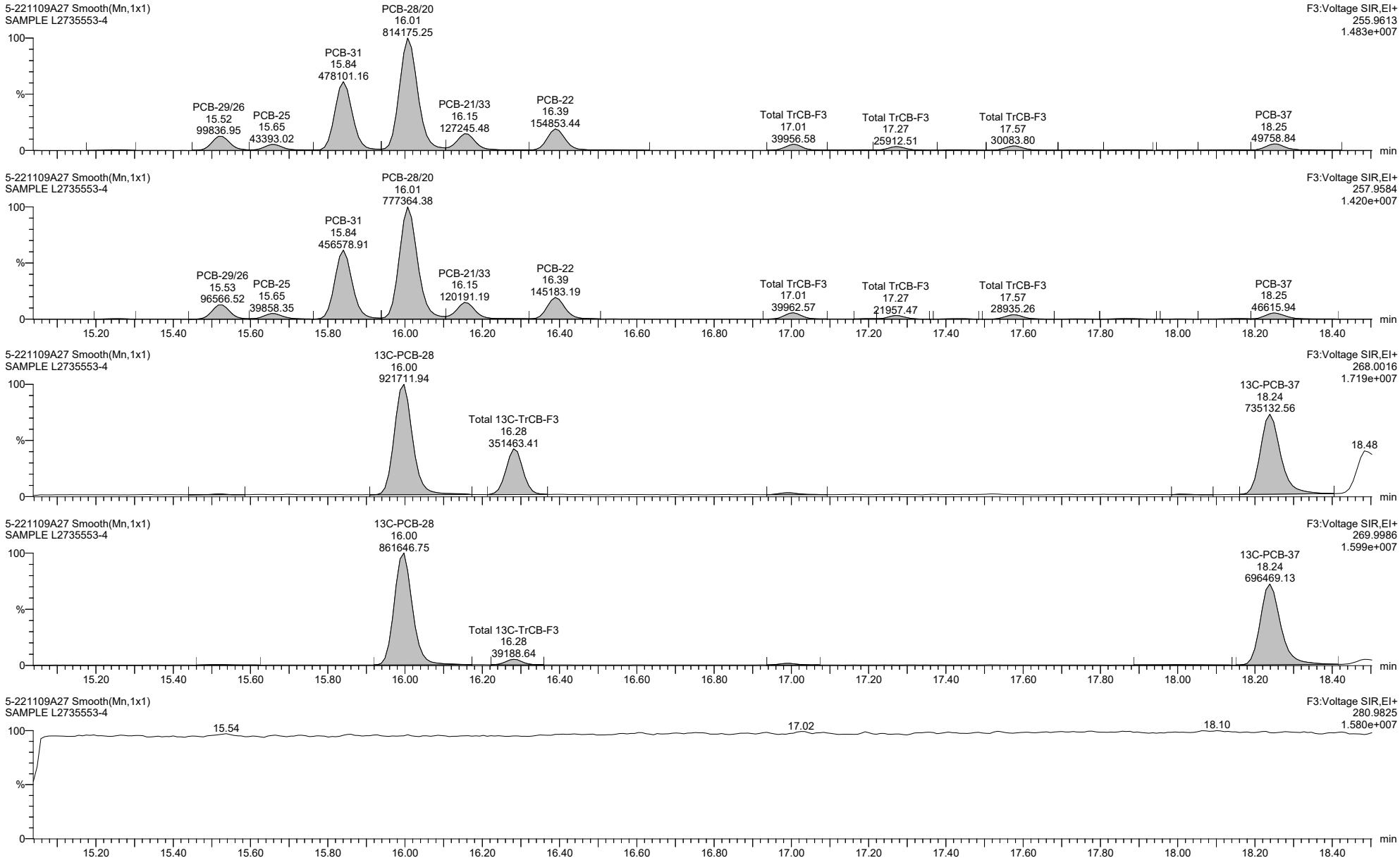




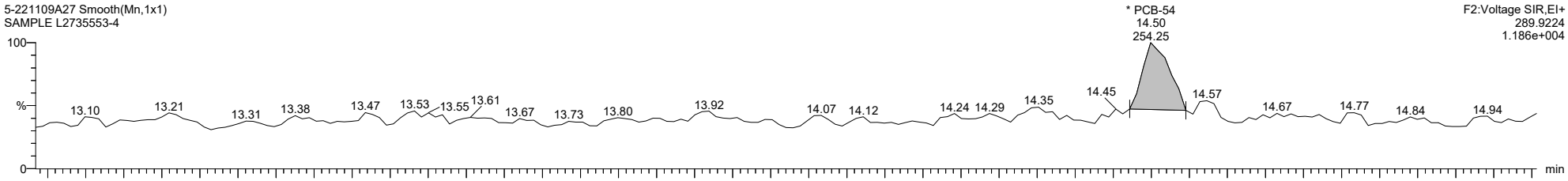
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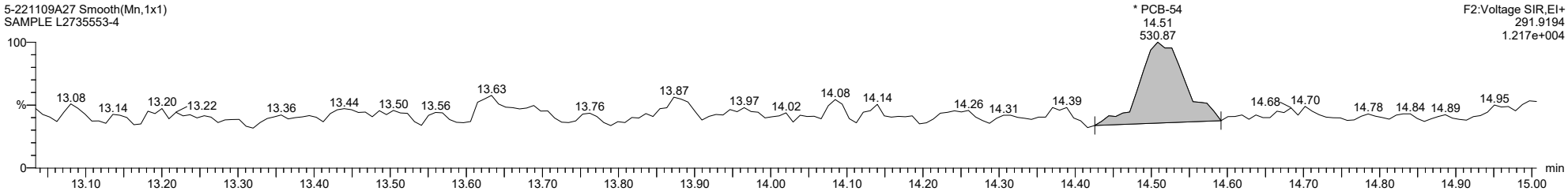
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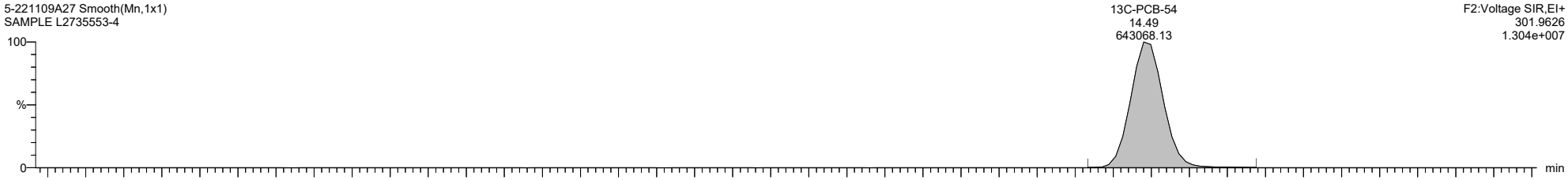
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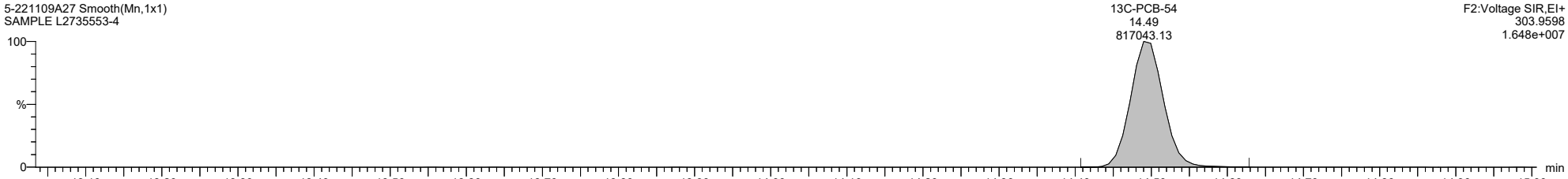


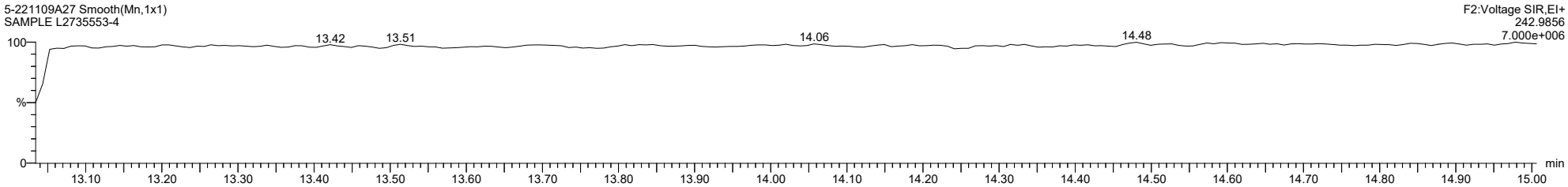
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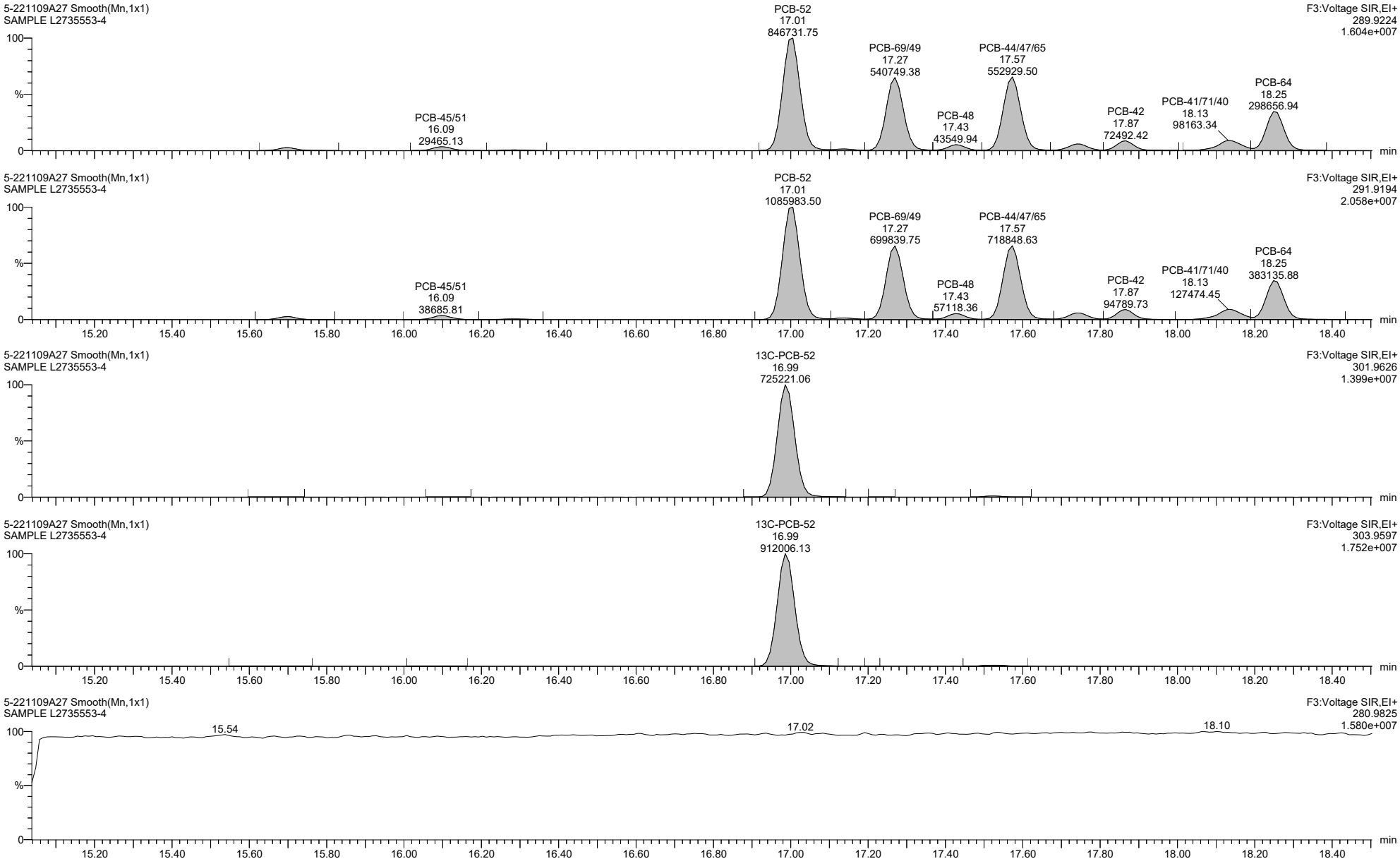




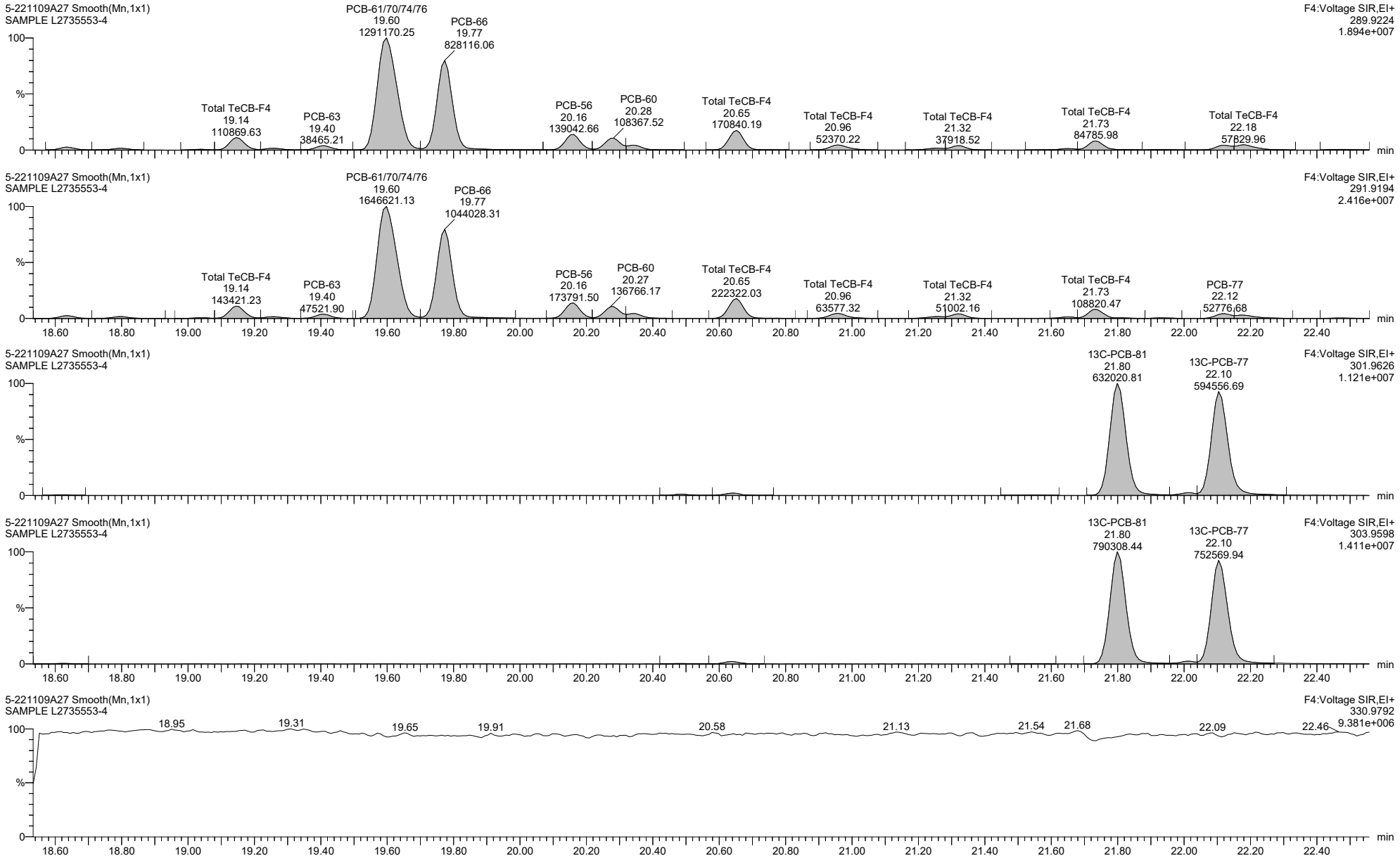




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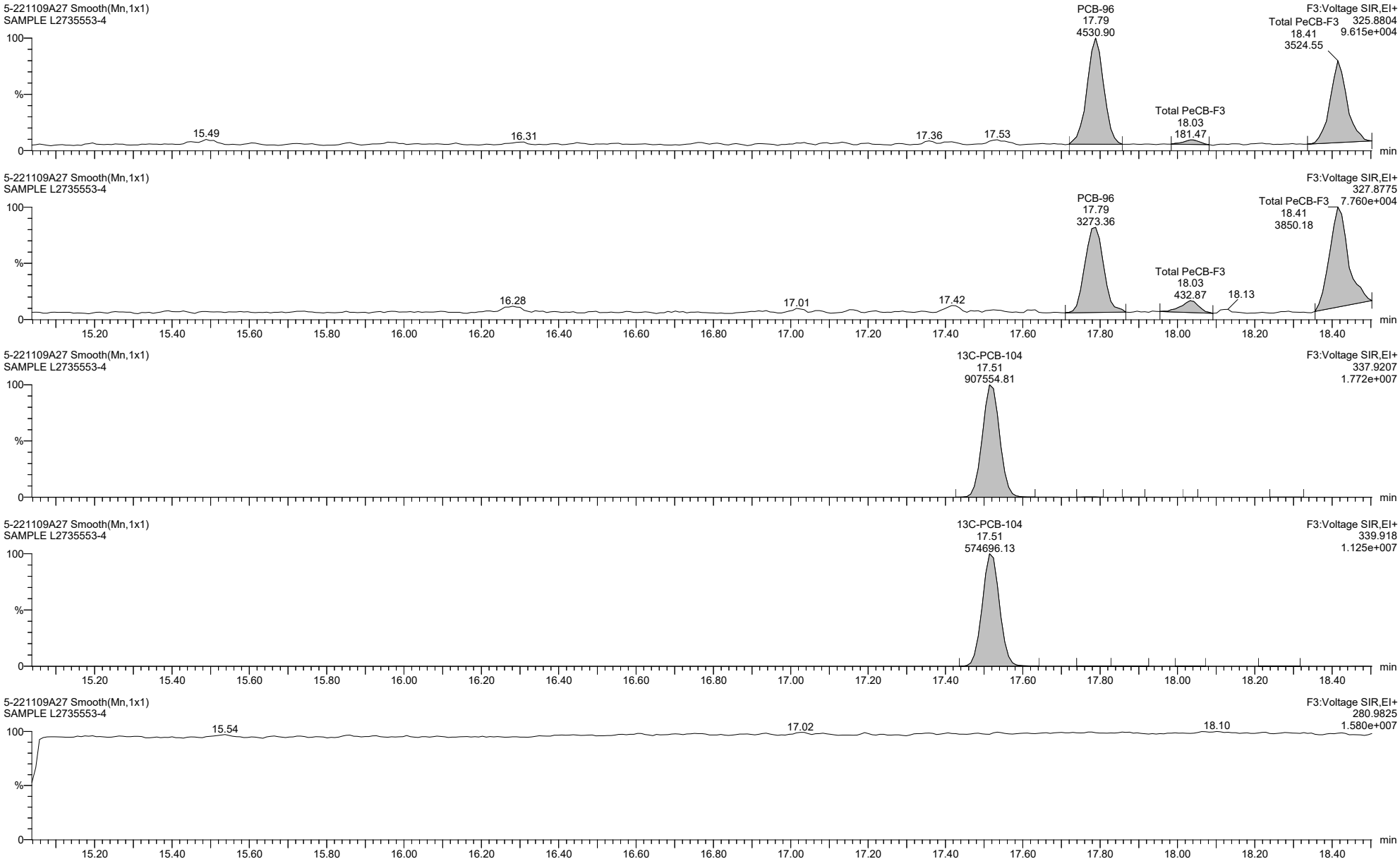


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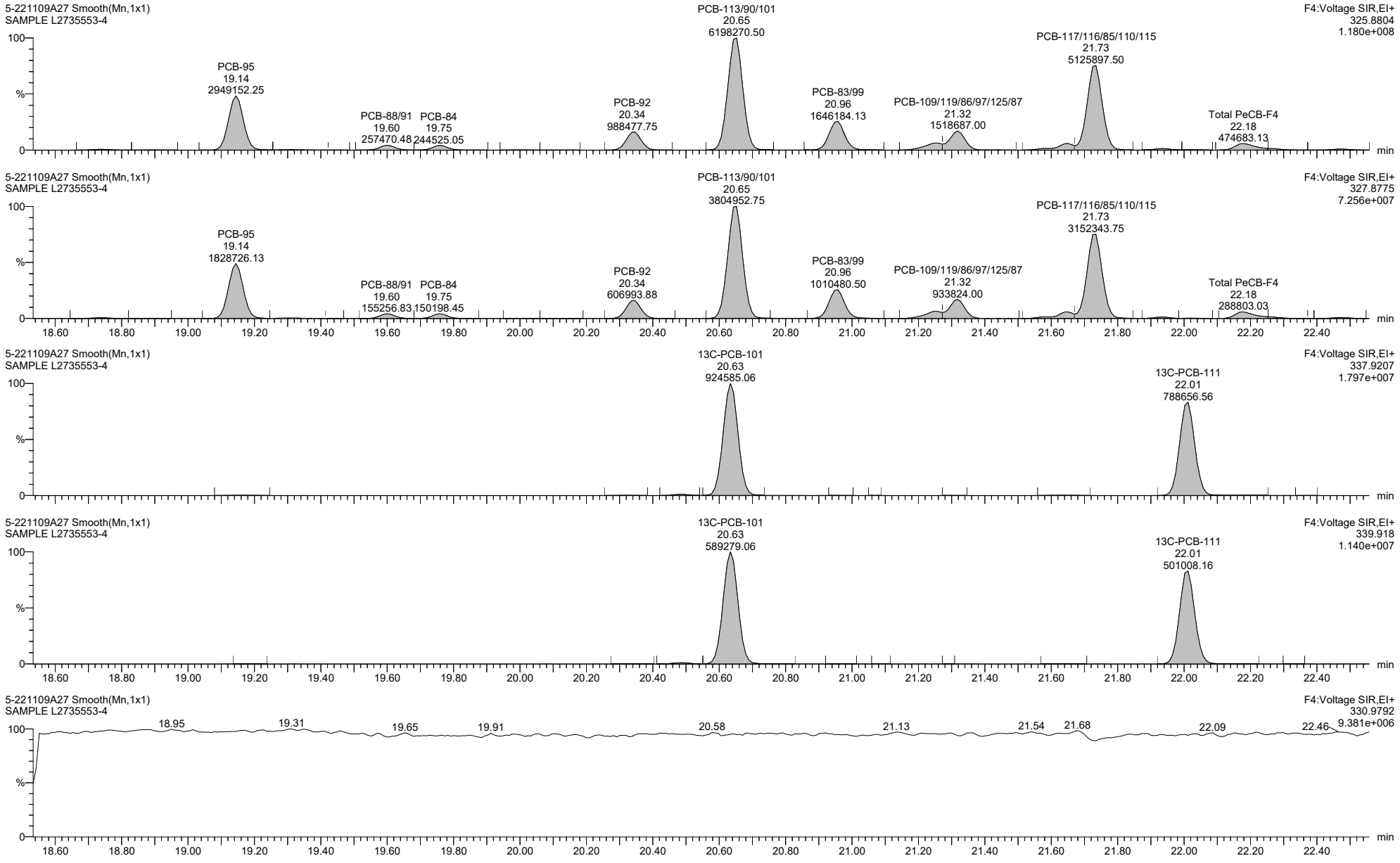


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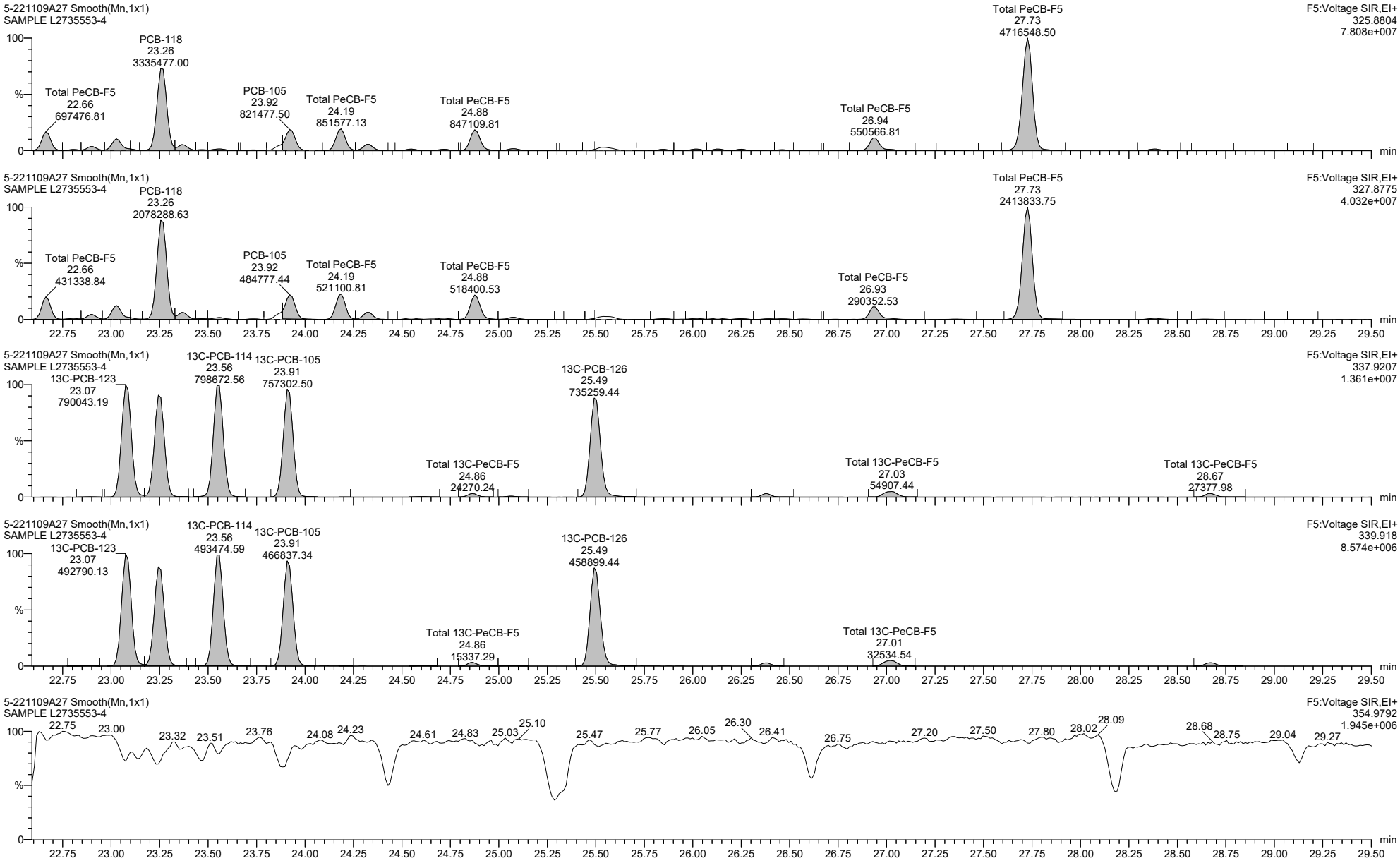


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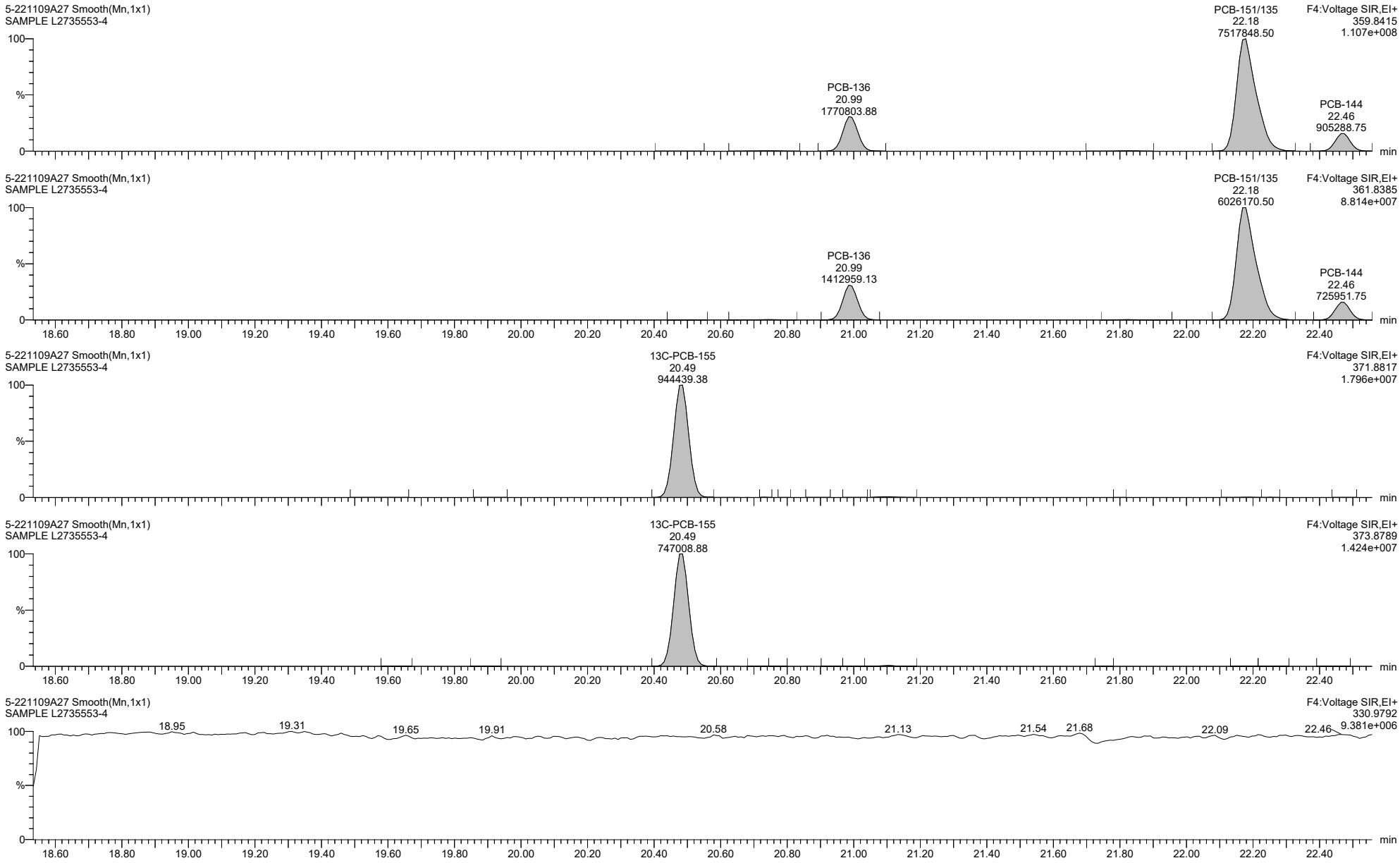
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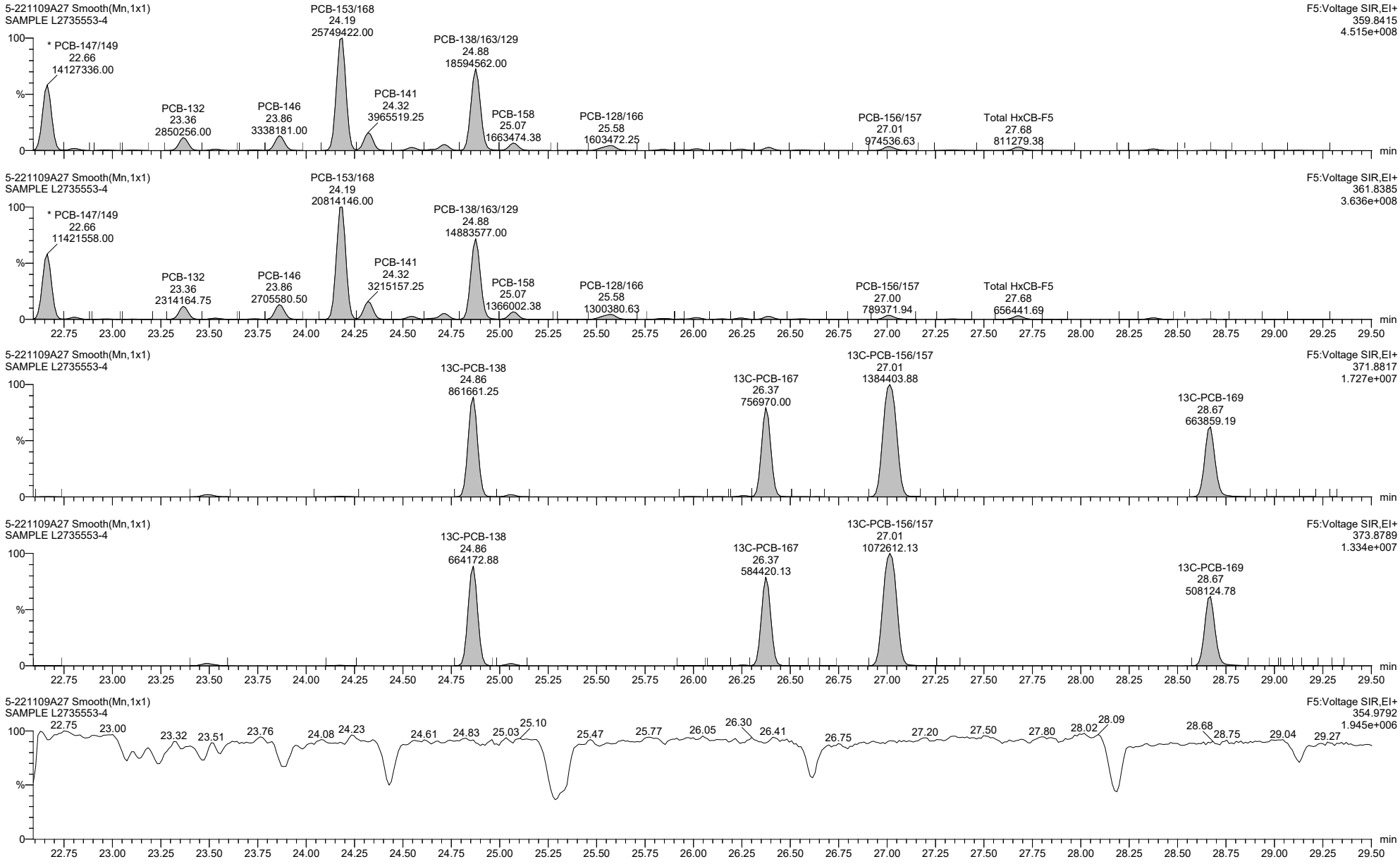


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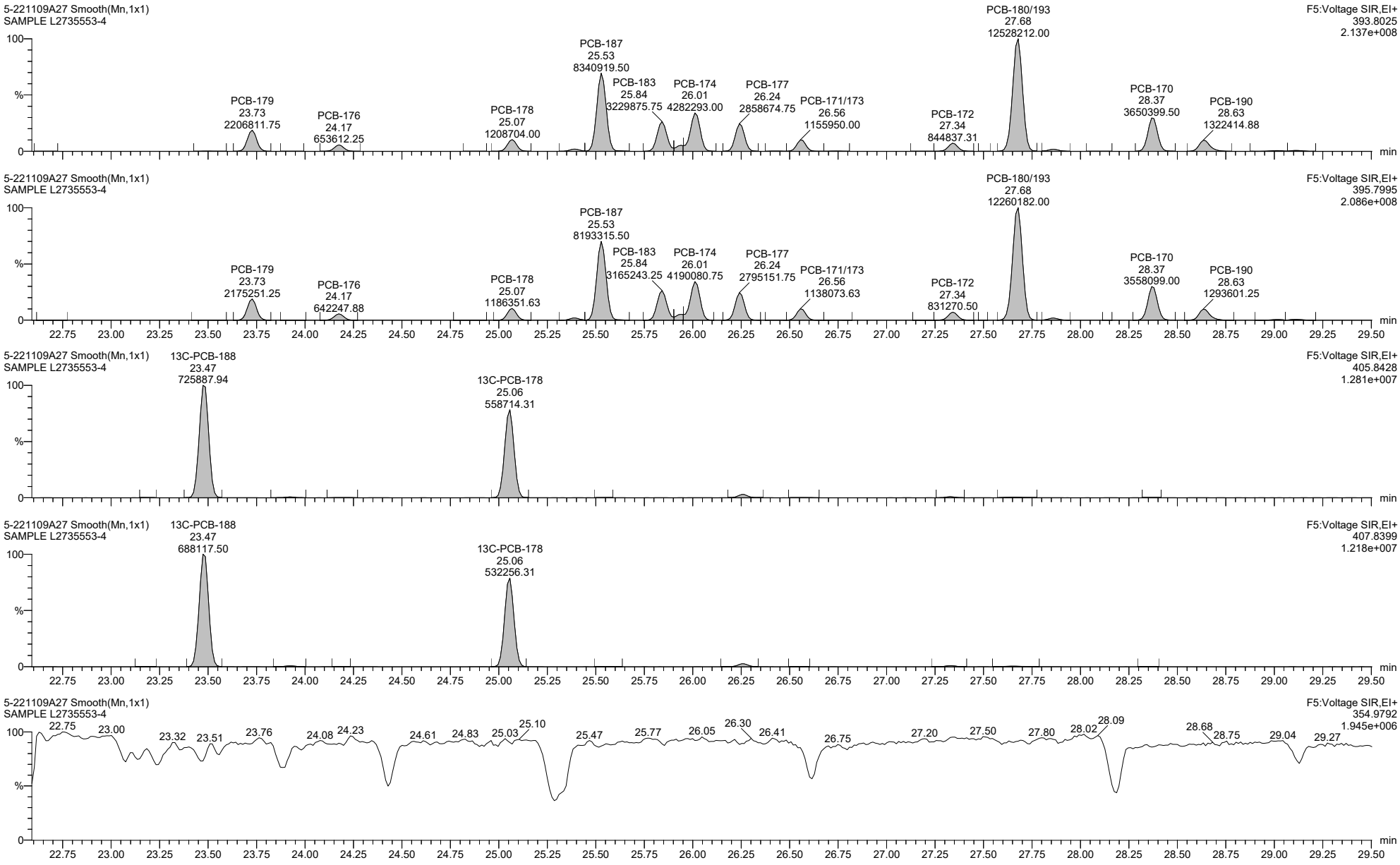


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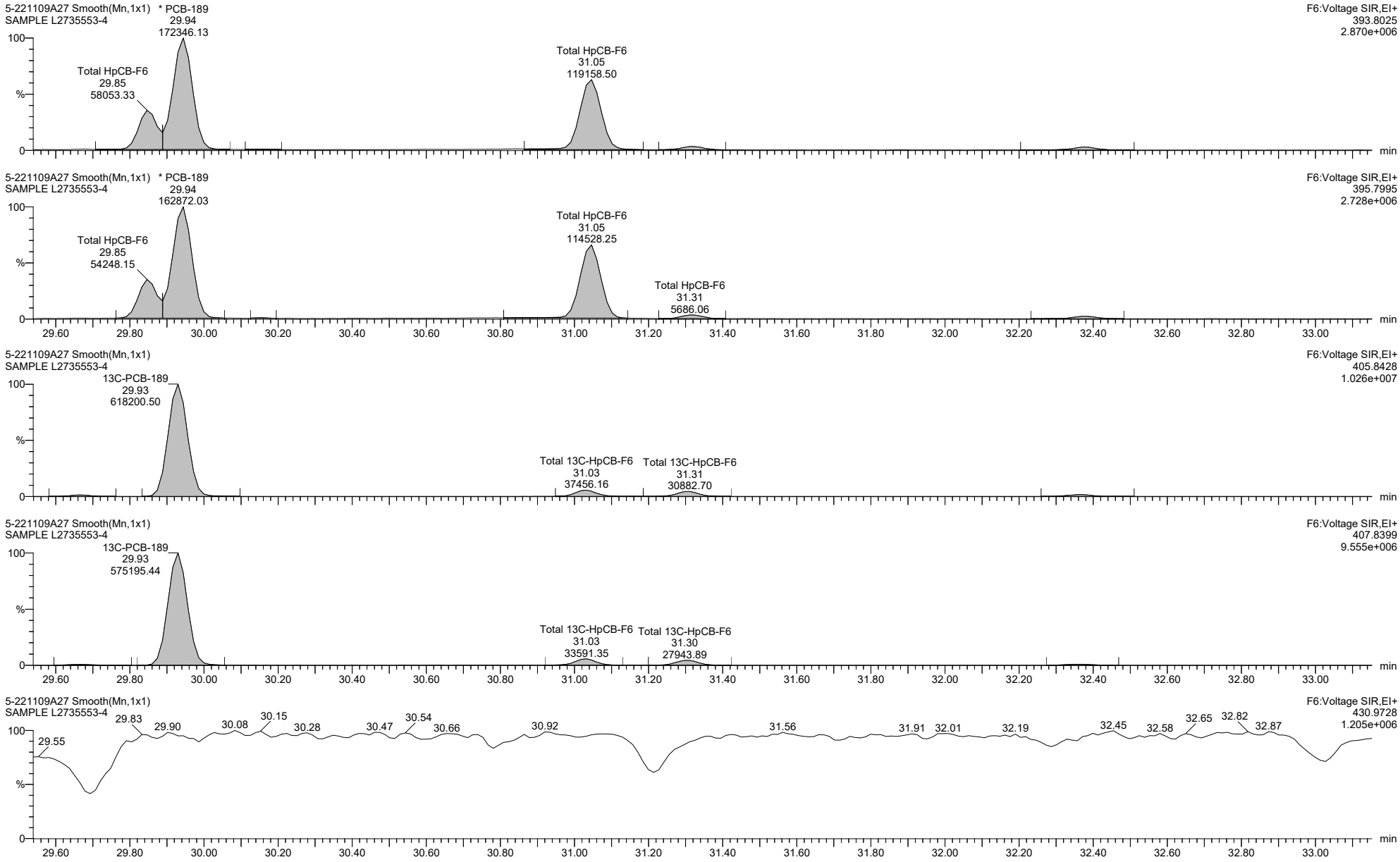


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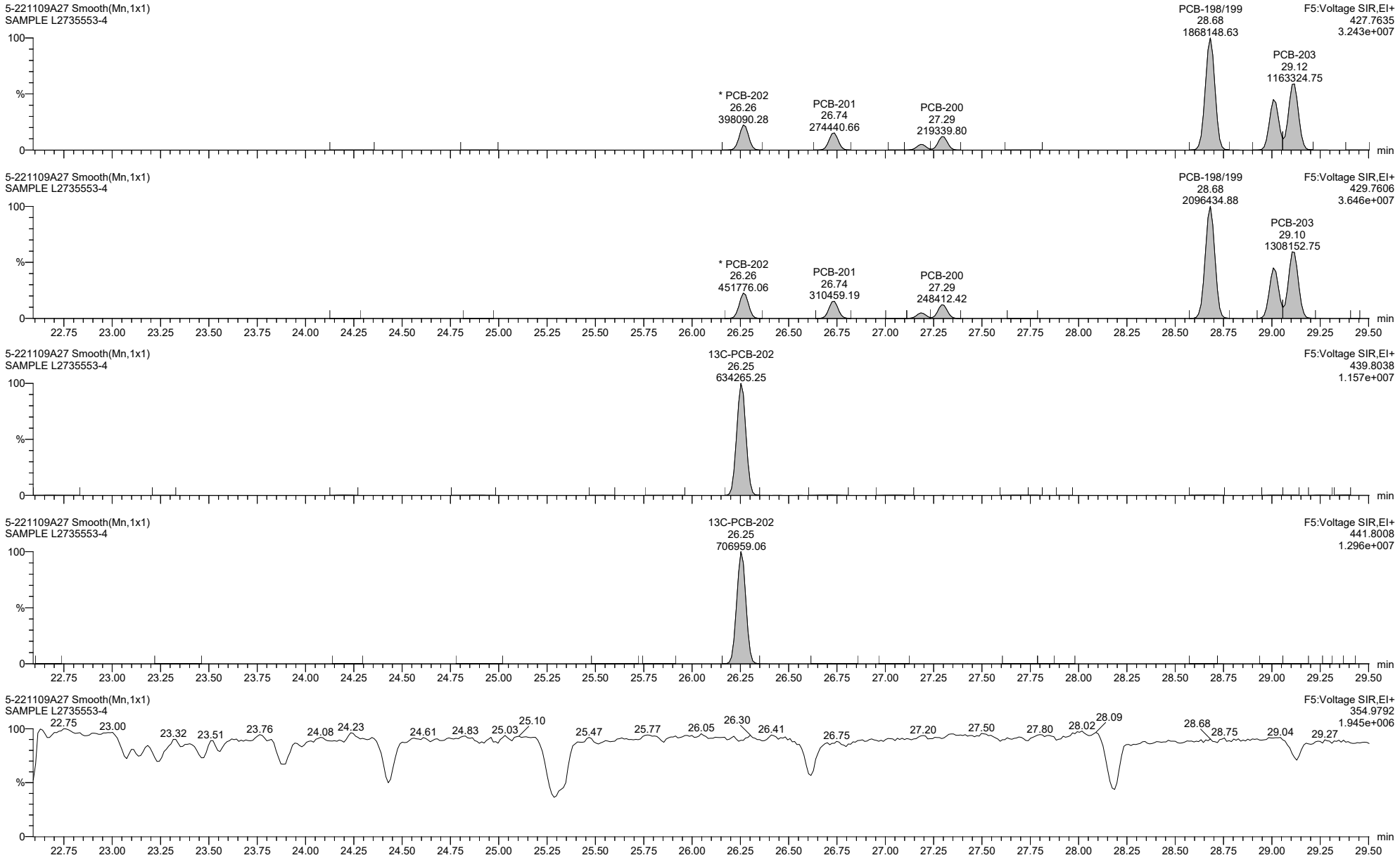
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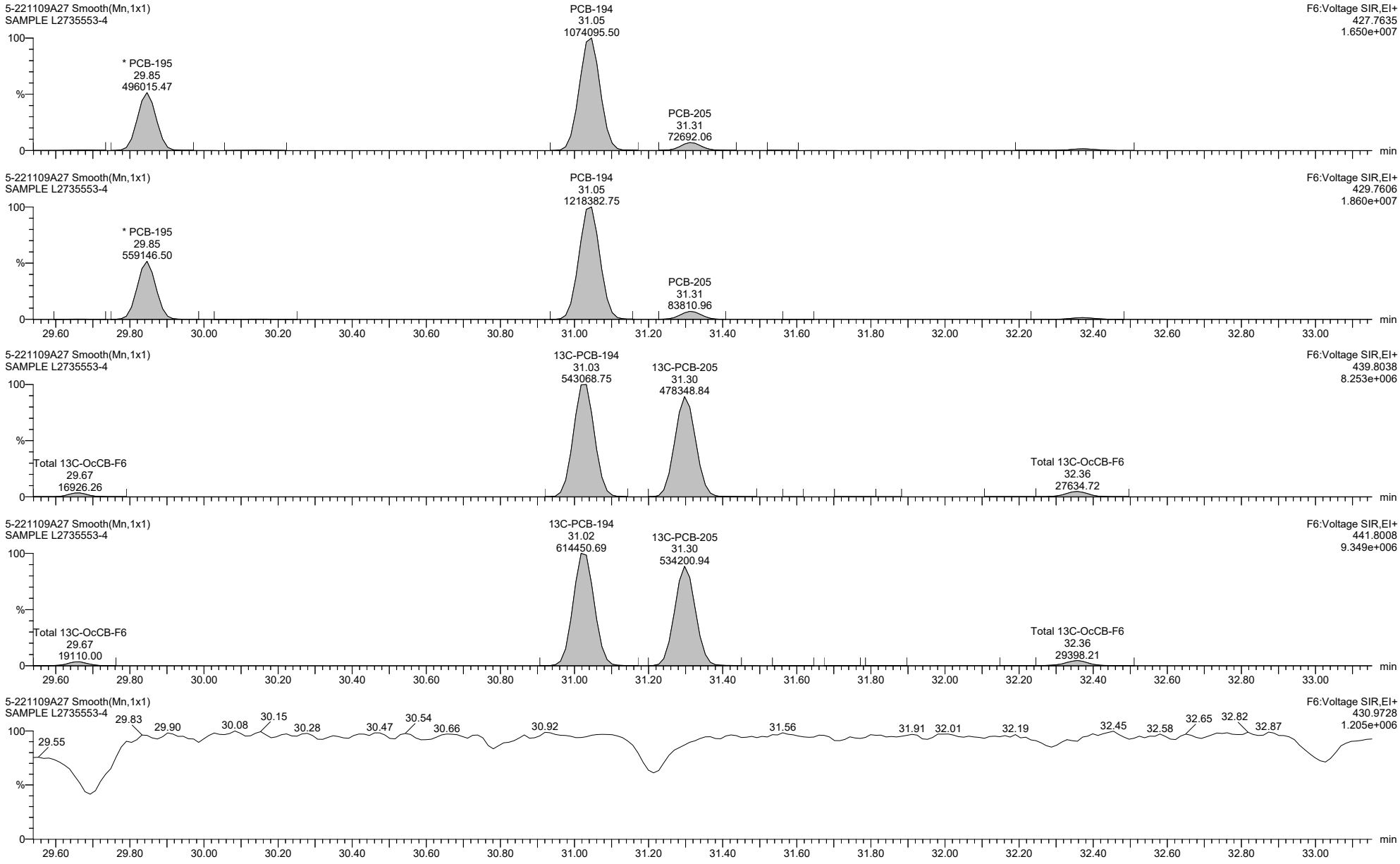


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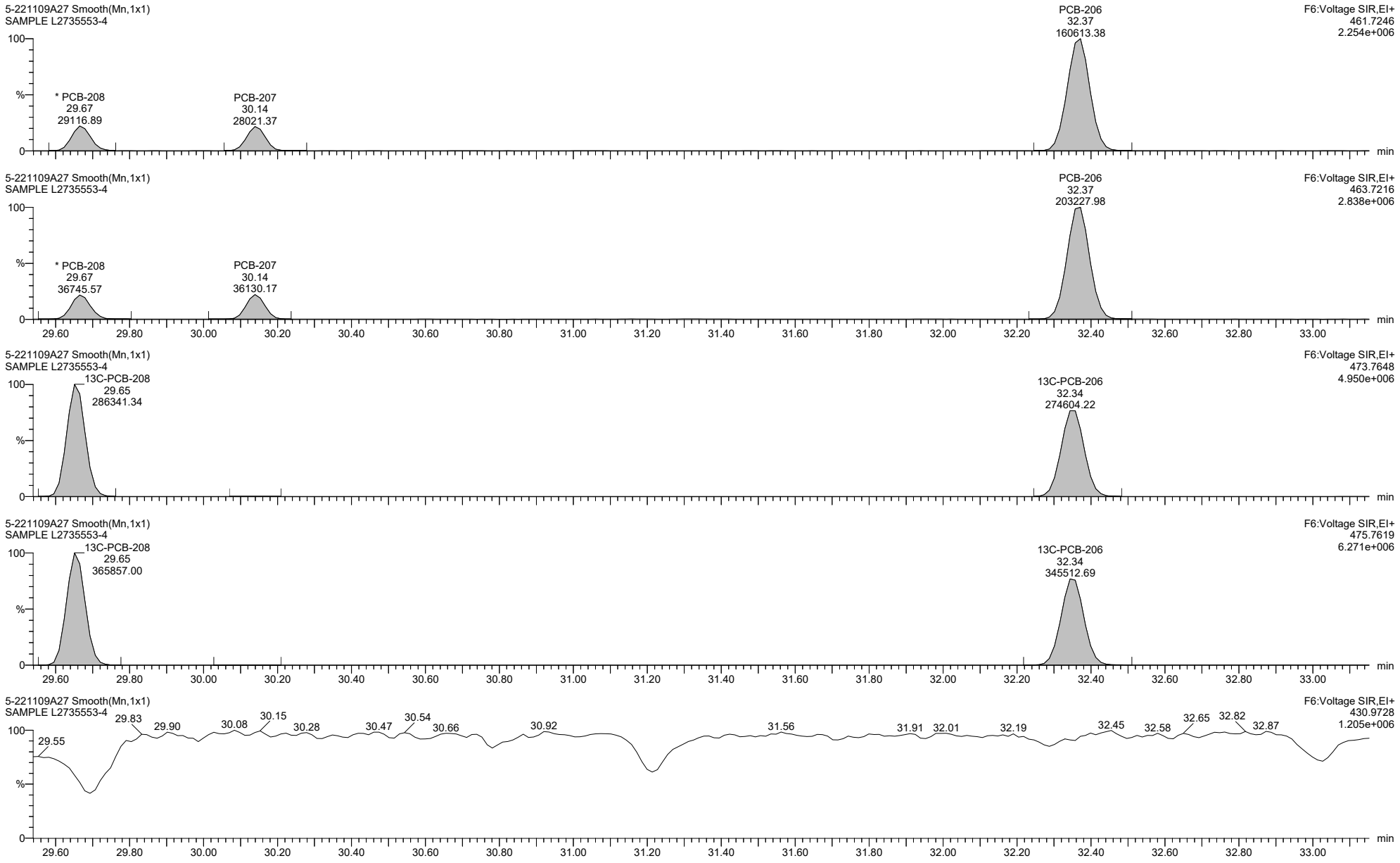


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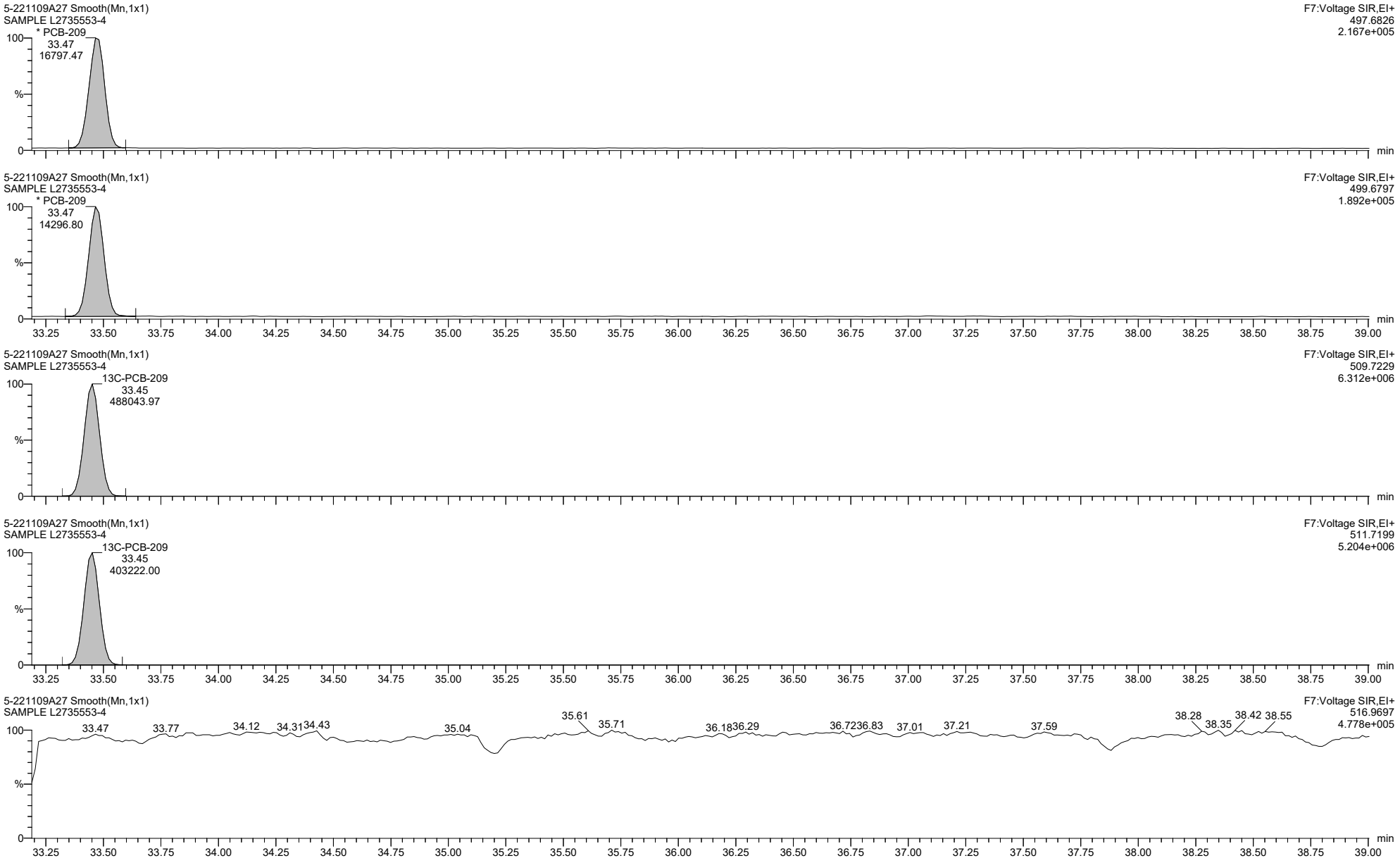
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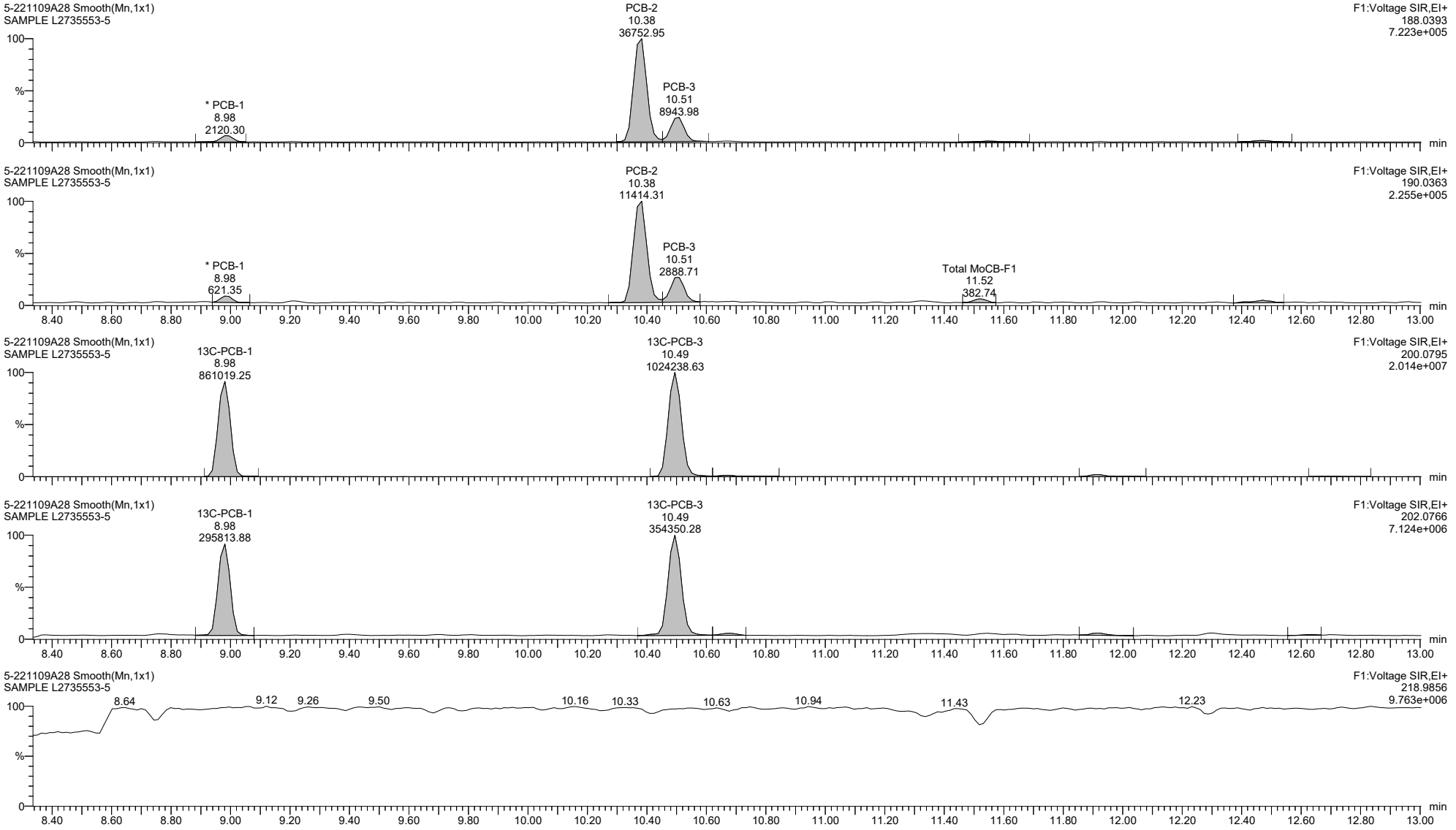
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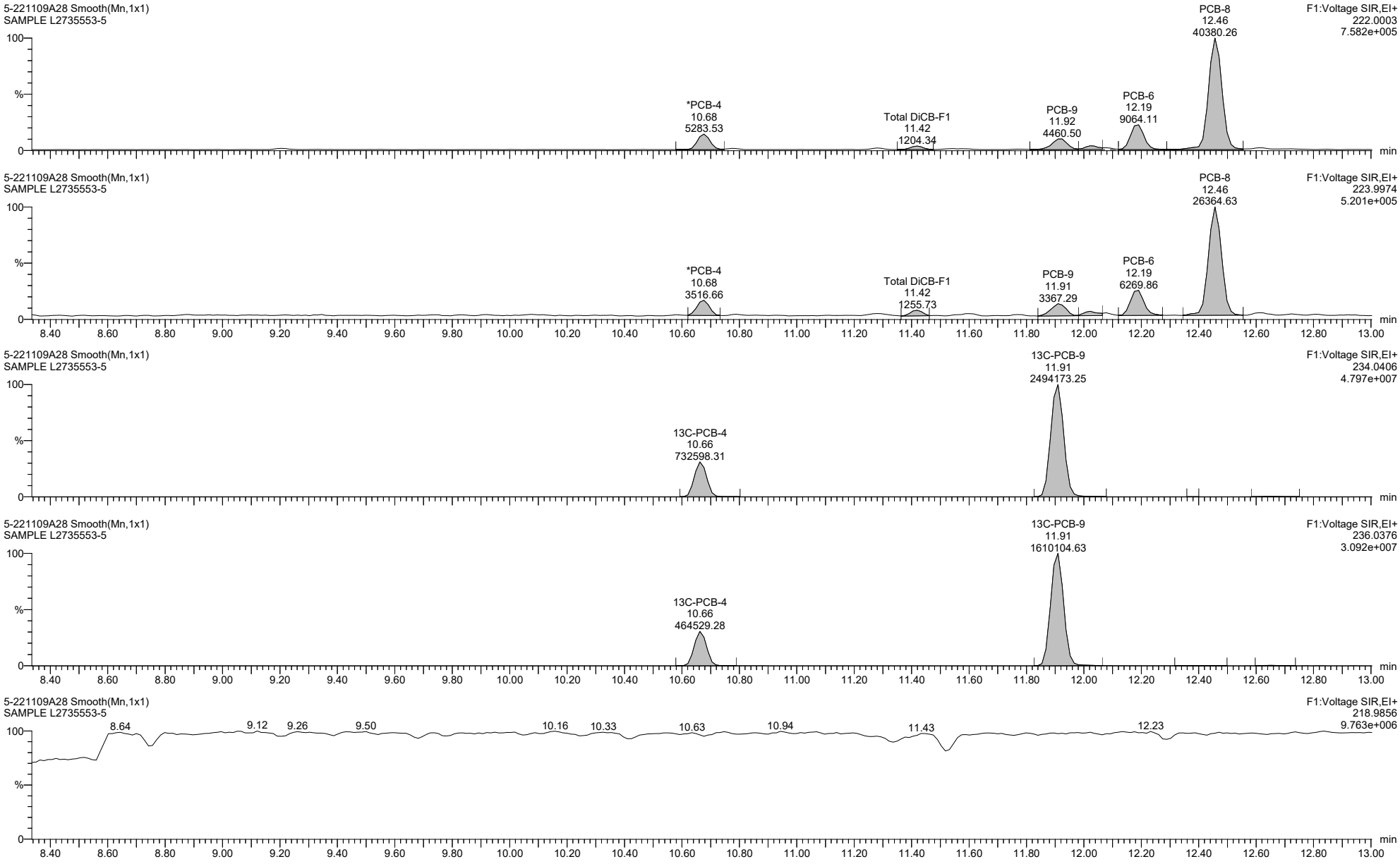


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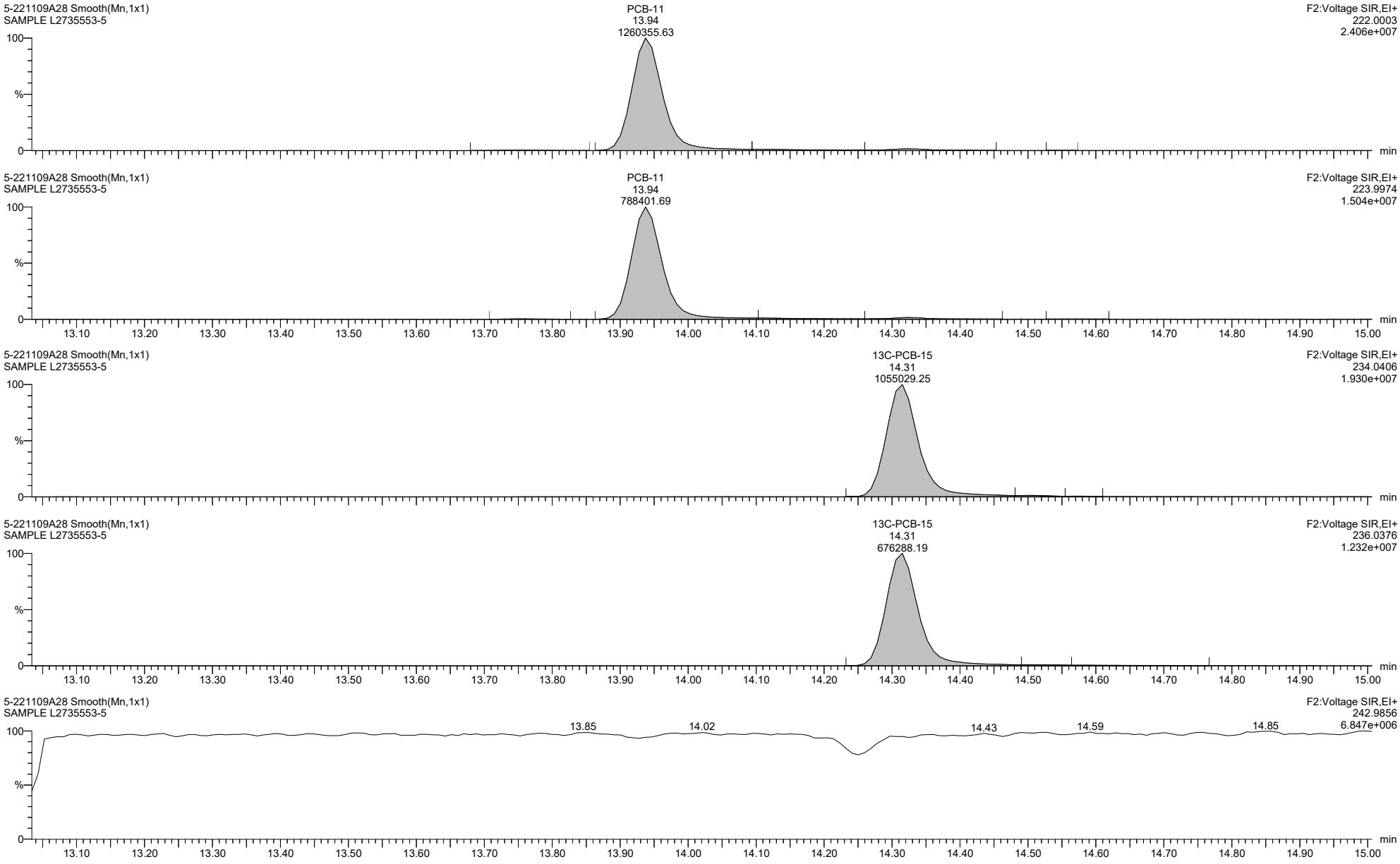


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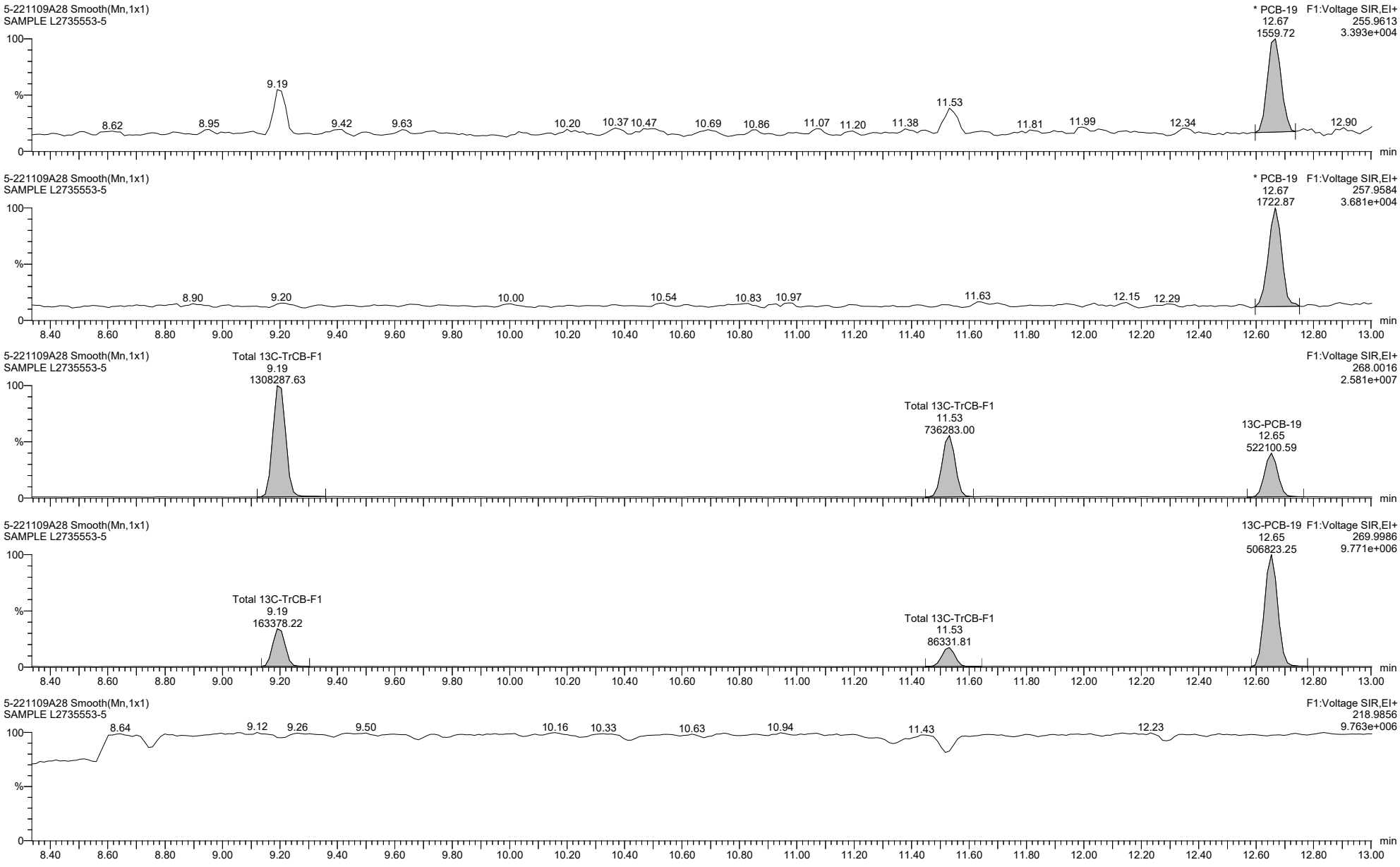


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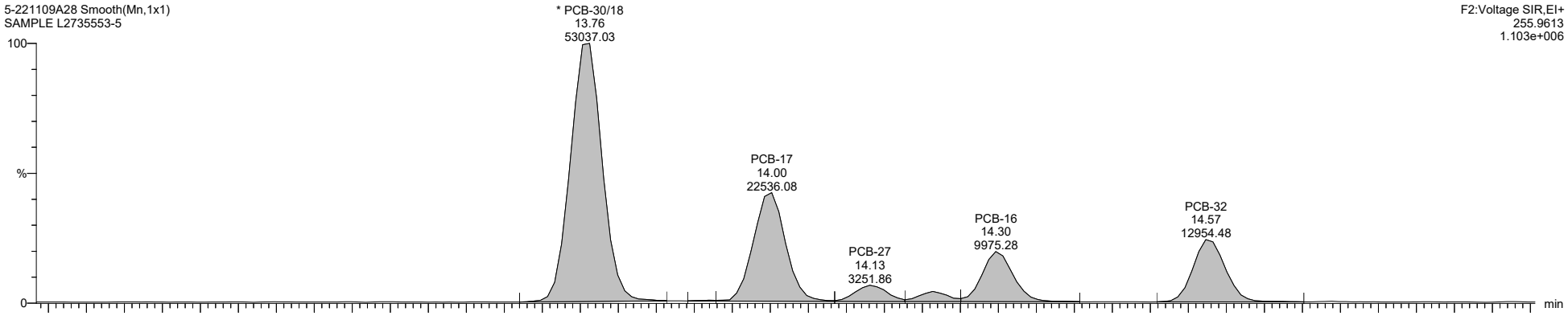


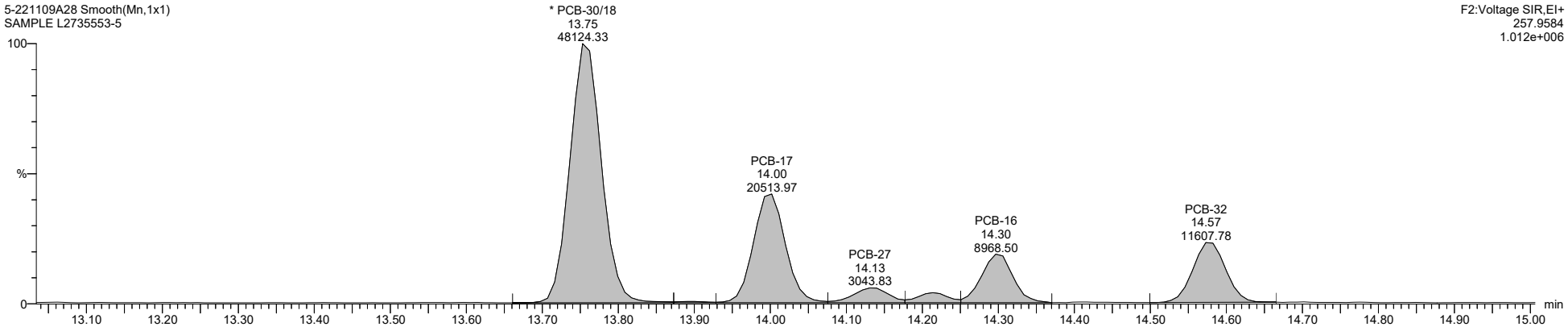
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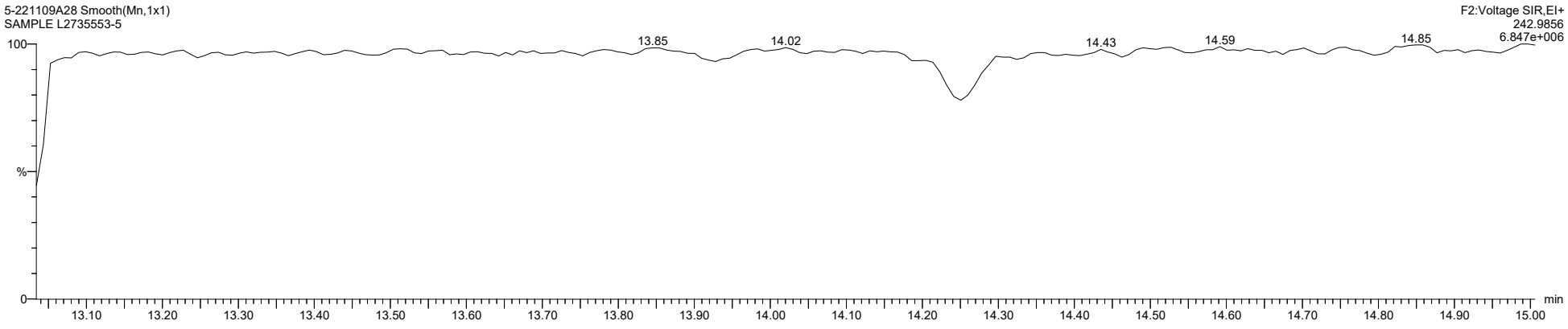
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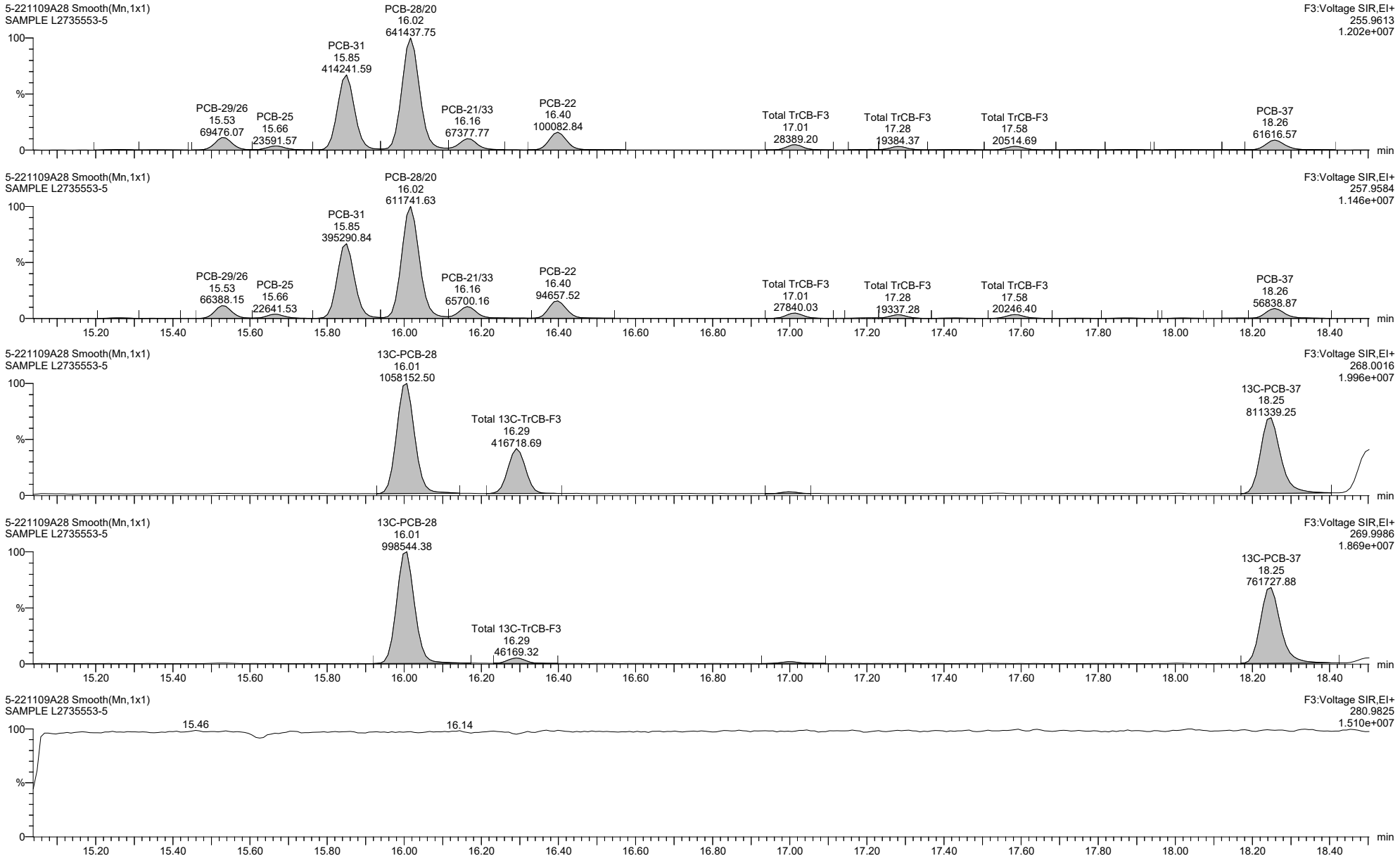
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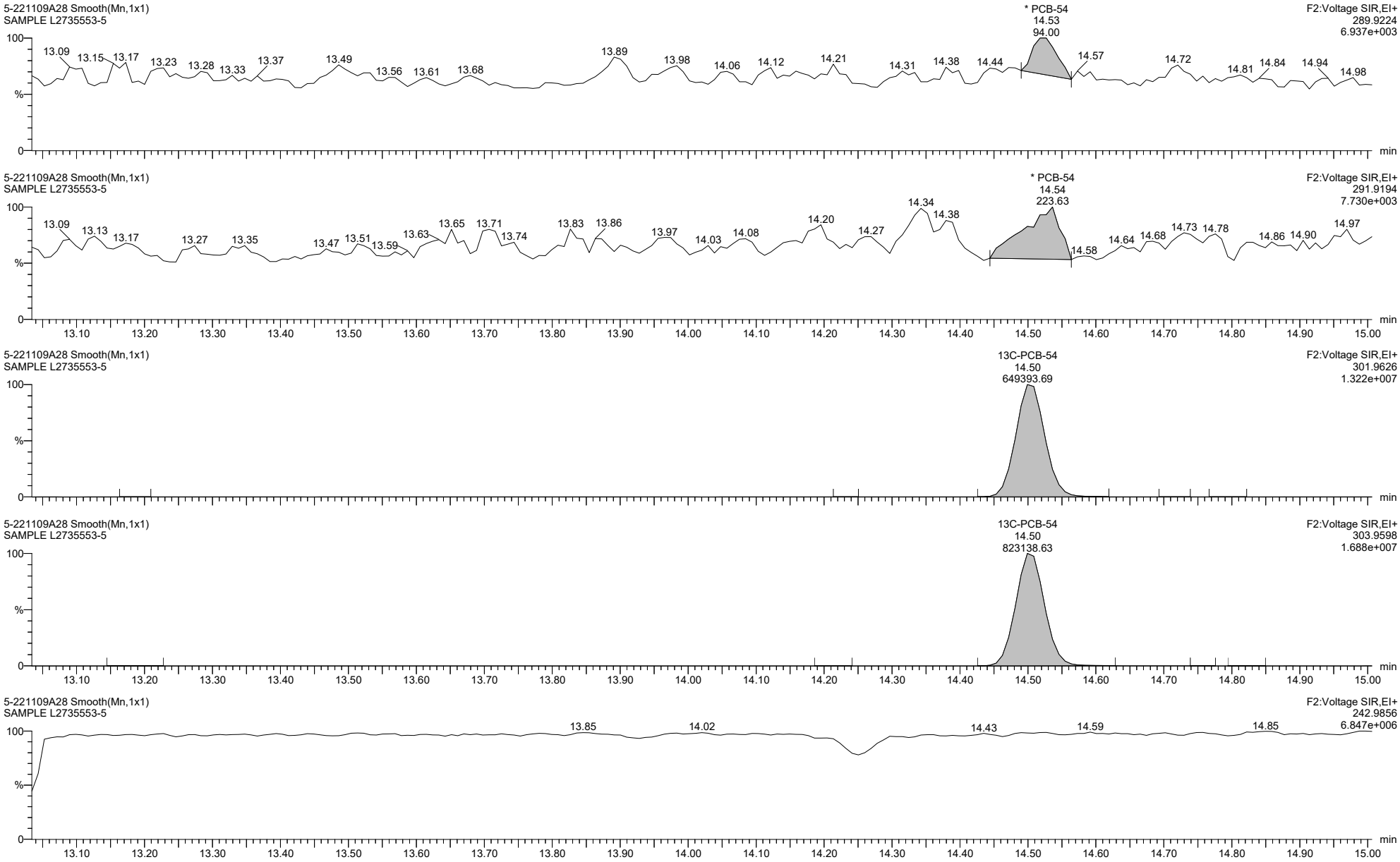


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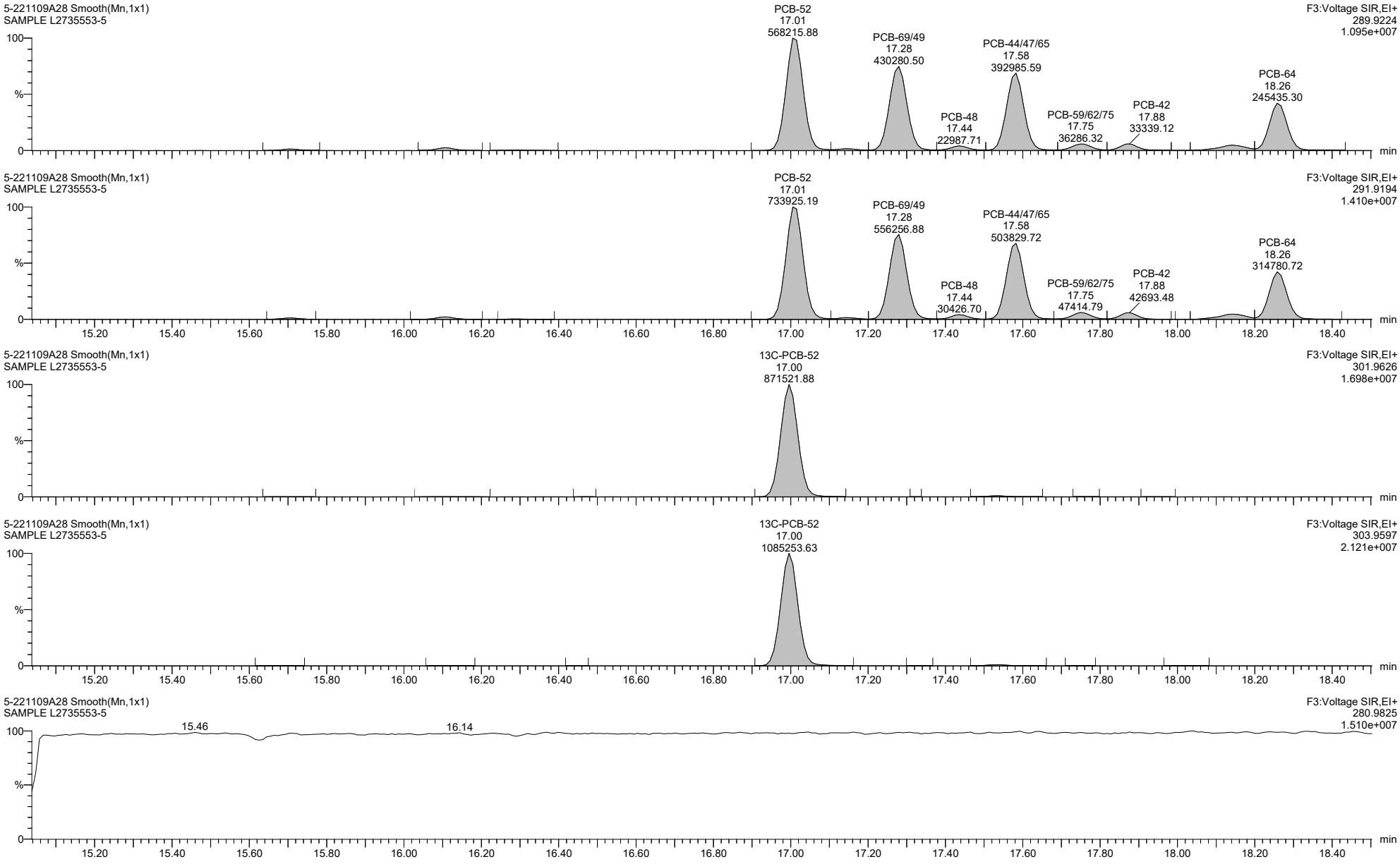


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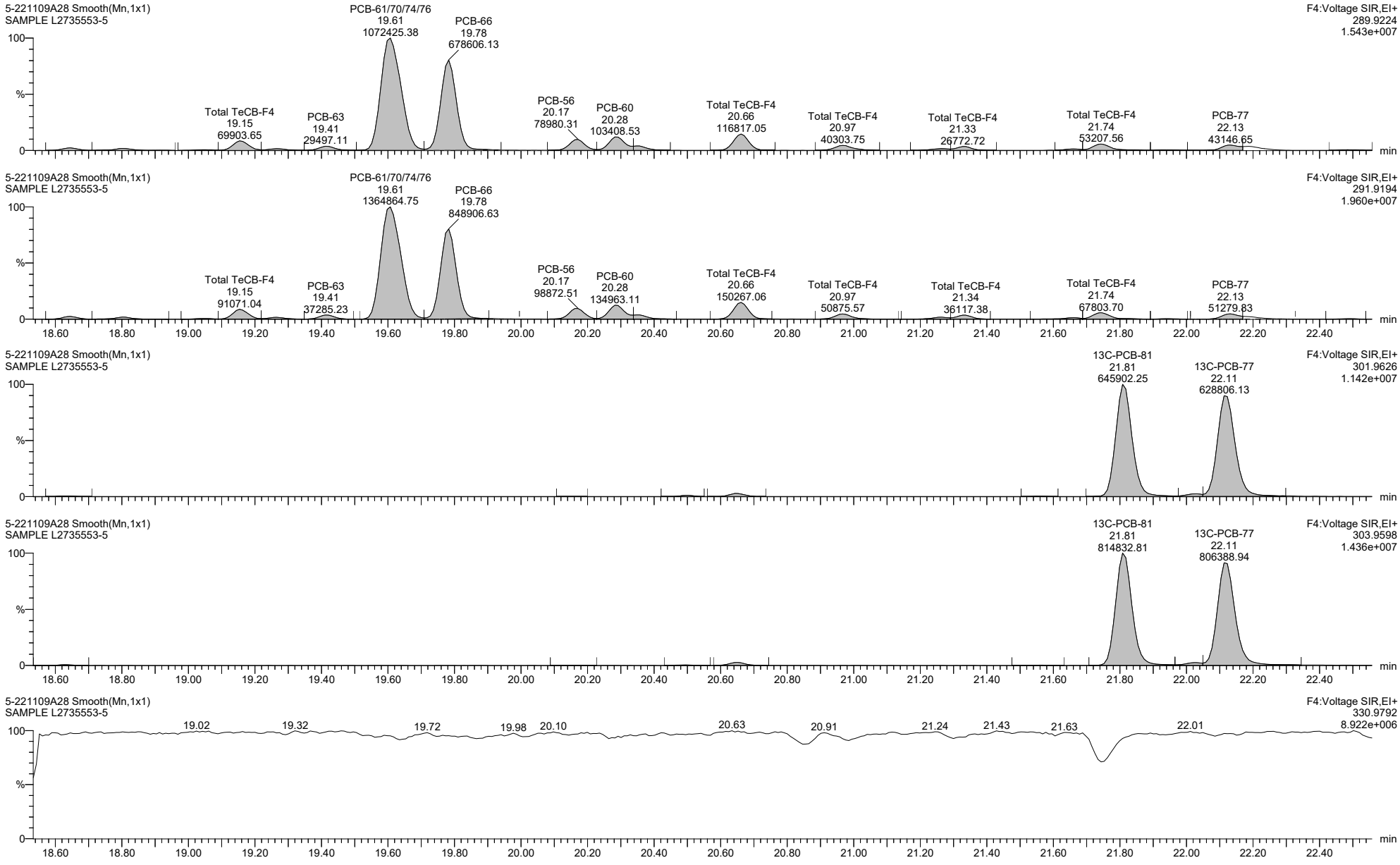


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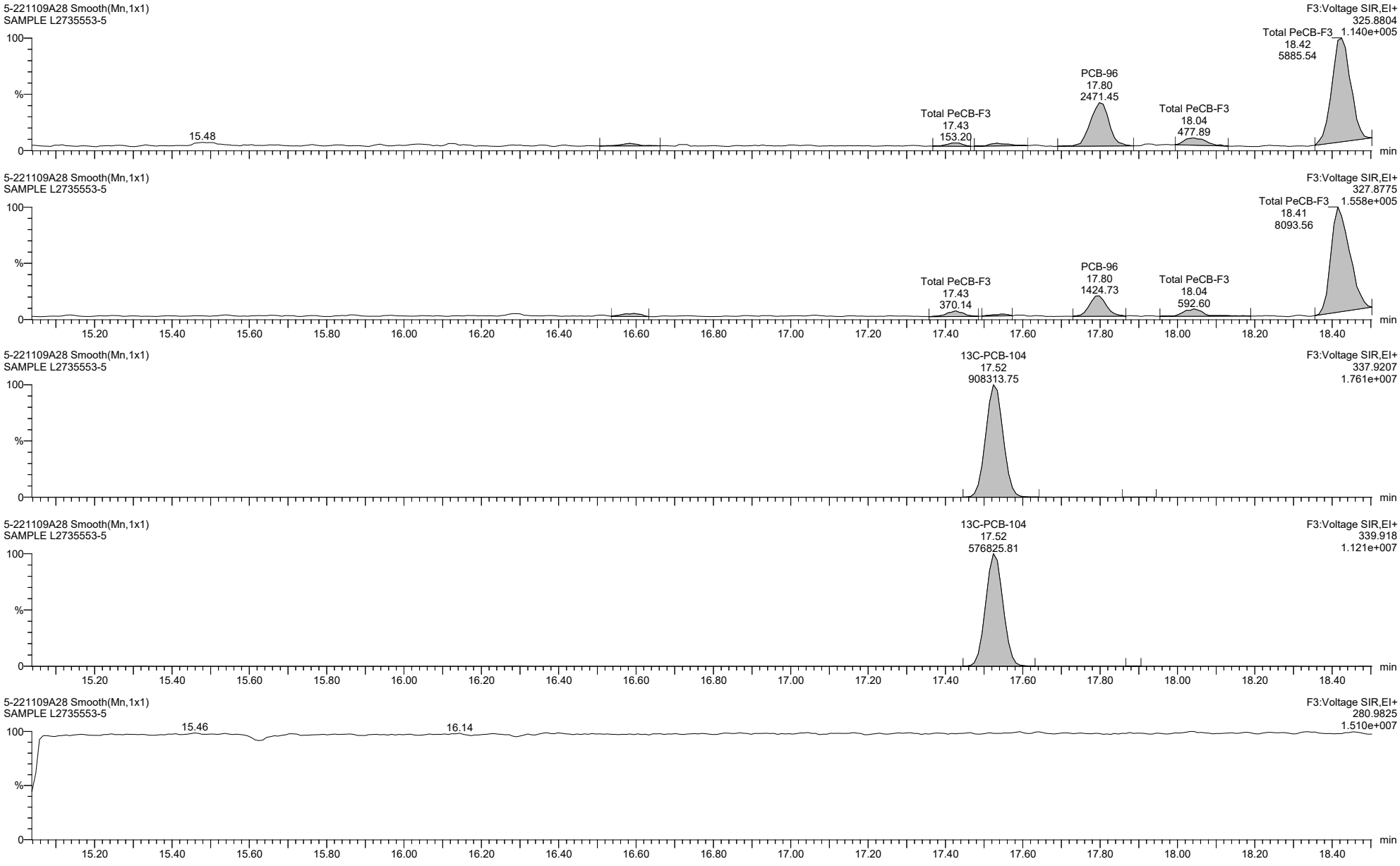


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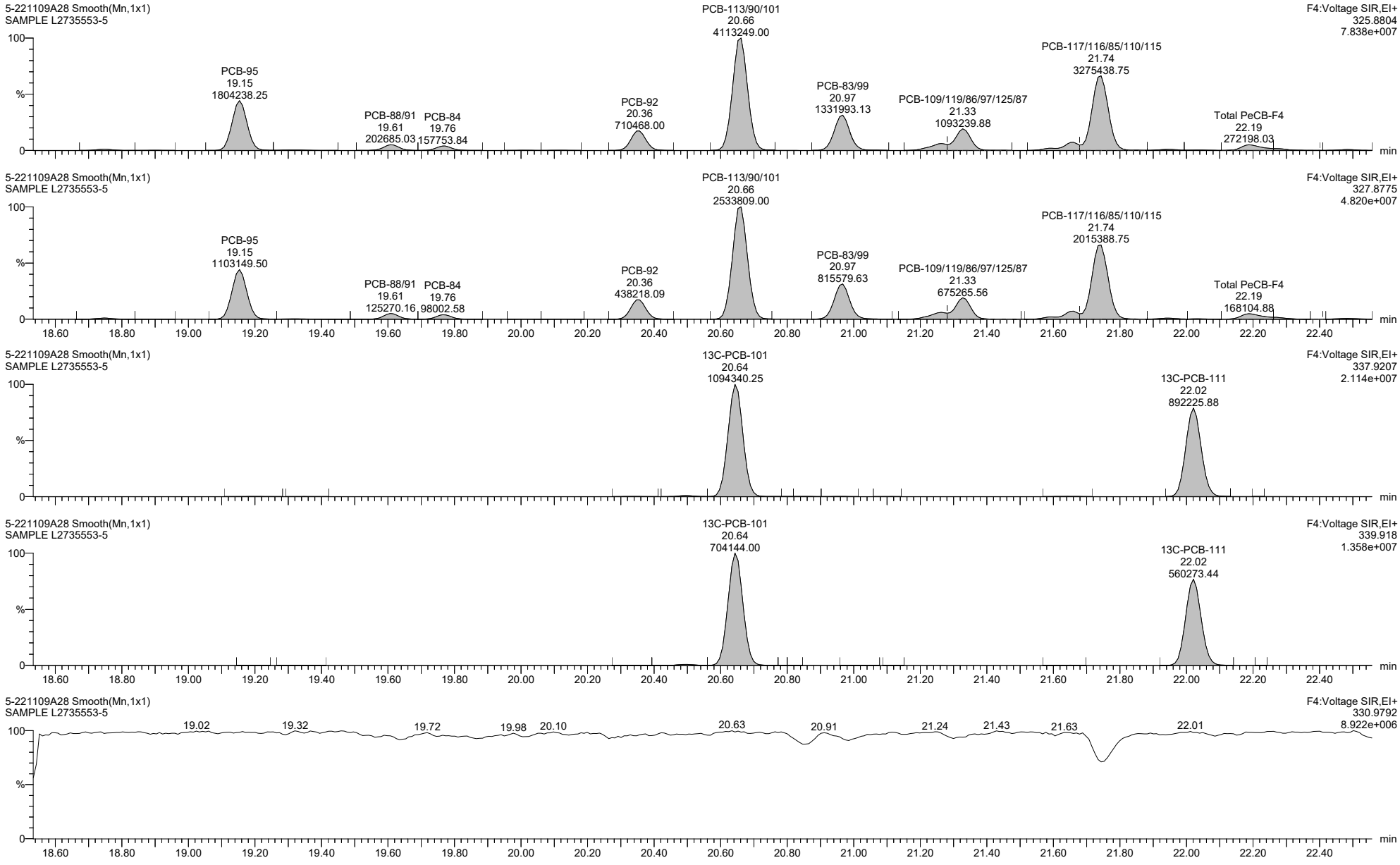
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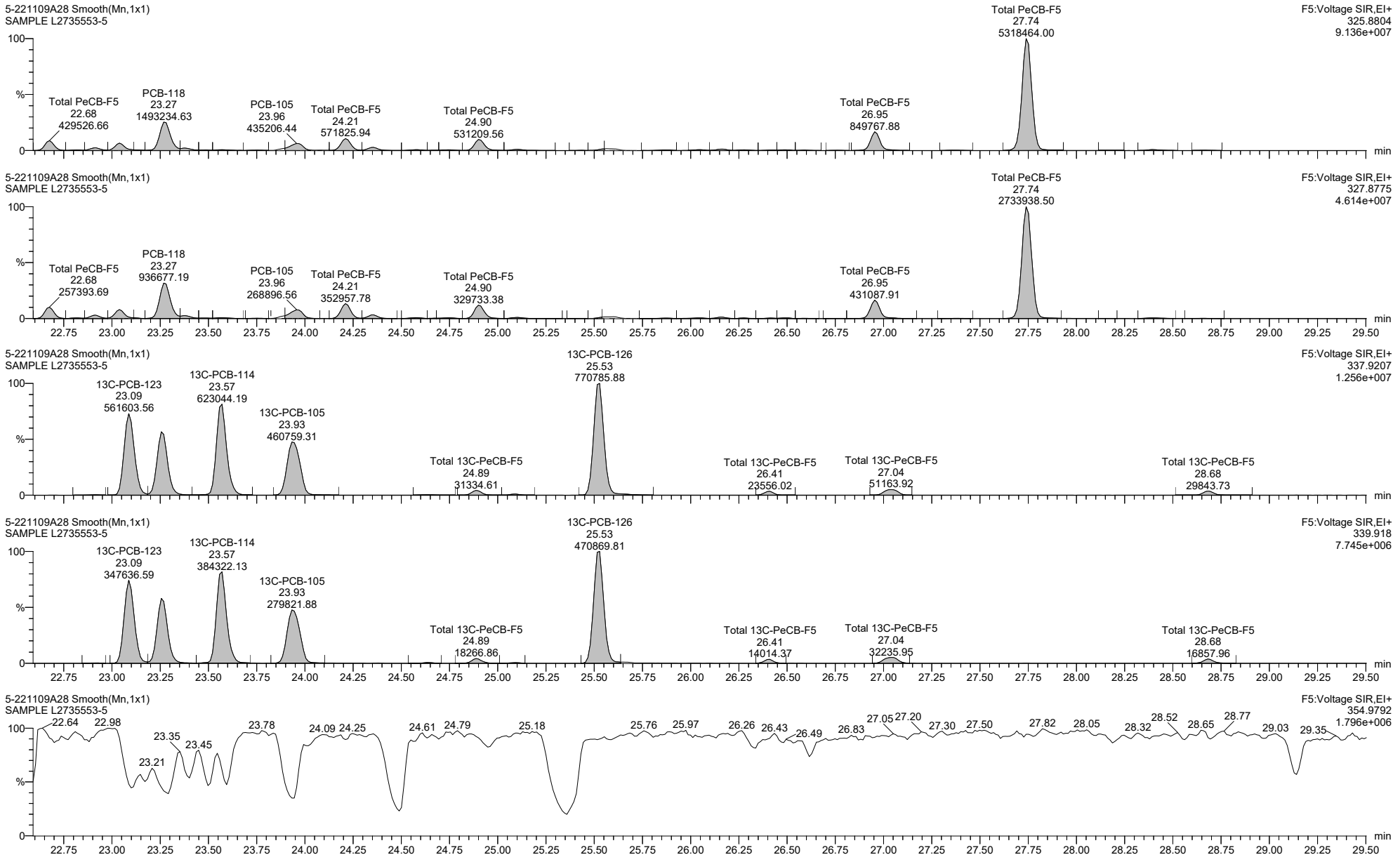


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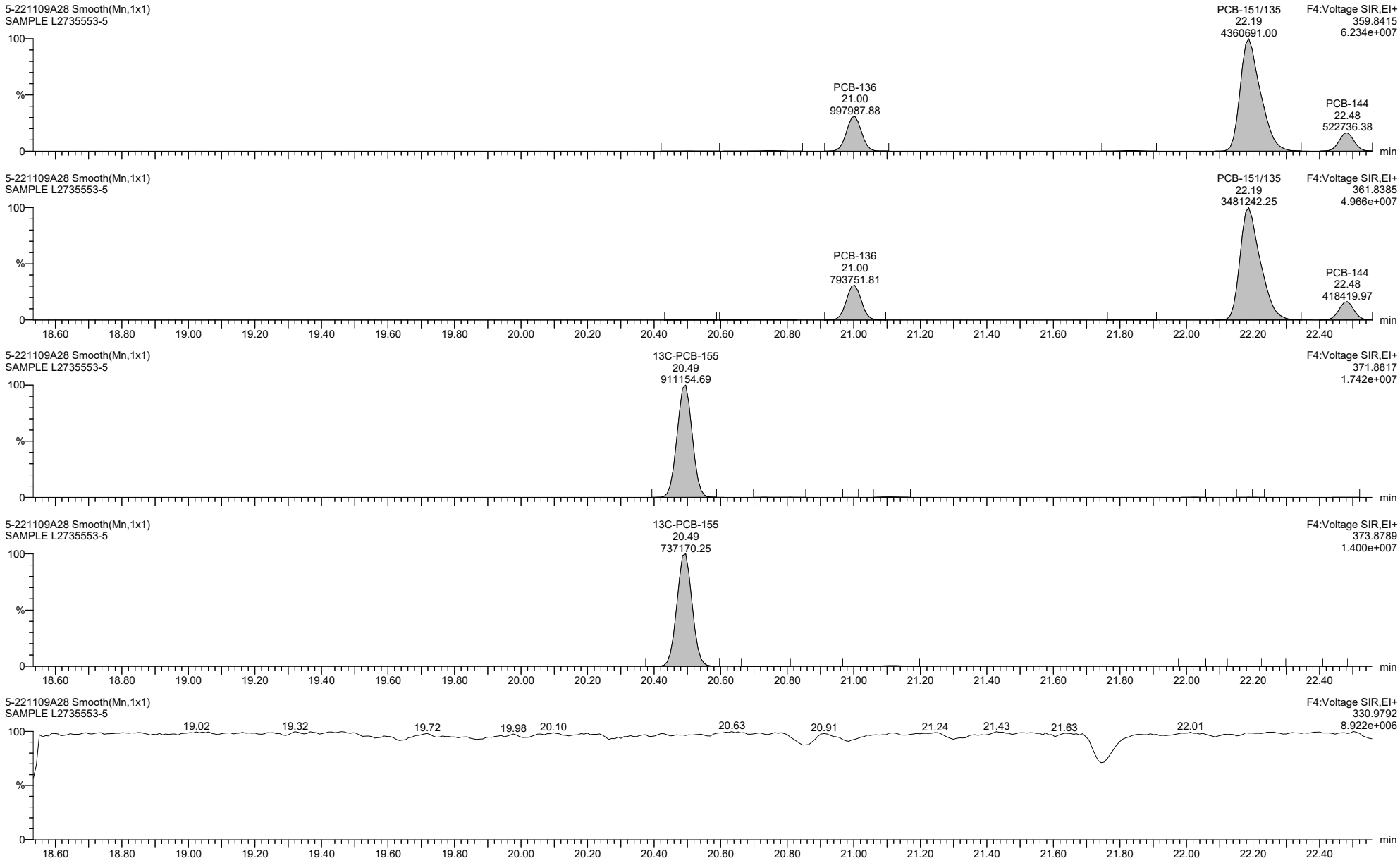


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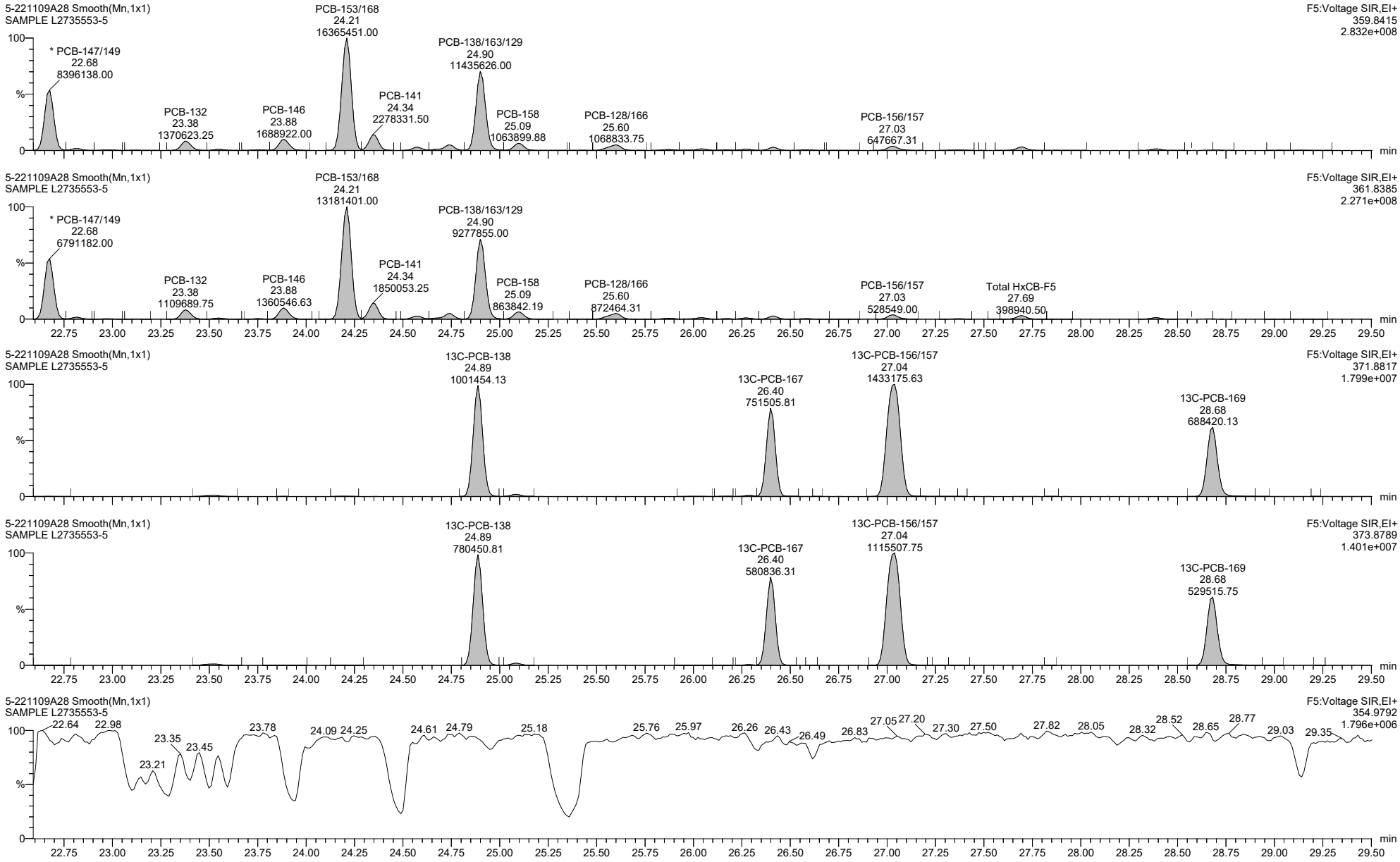
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Printed: Wednesday, November 23, 2022 18:29:11 Eastern Standard Time

Name: 5-221109A28, Date: 10-Nov-2022, Time: 11:03:30, ID: L2735553-5, Description: SAMPLE, Vial: Tray1:23



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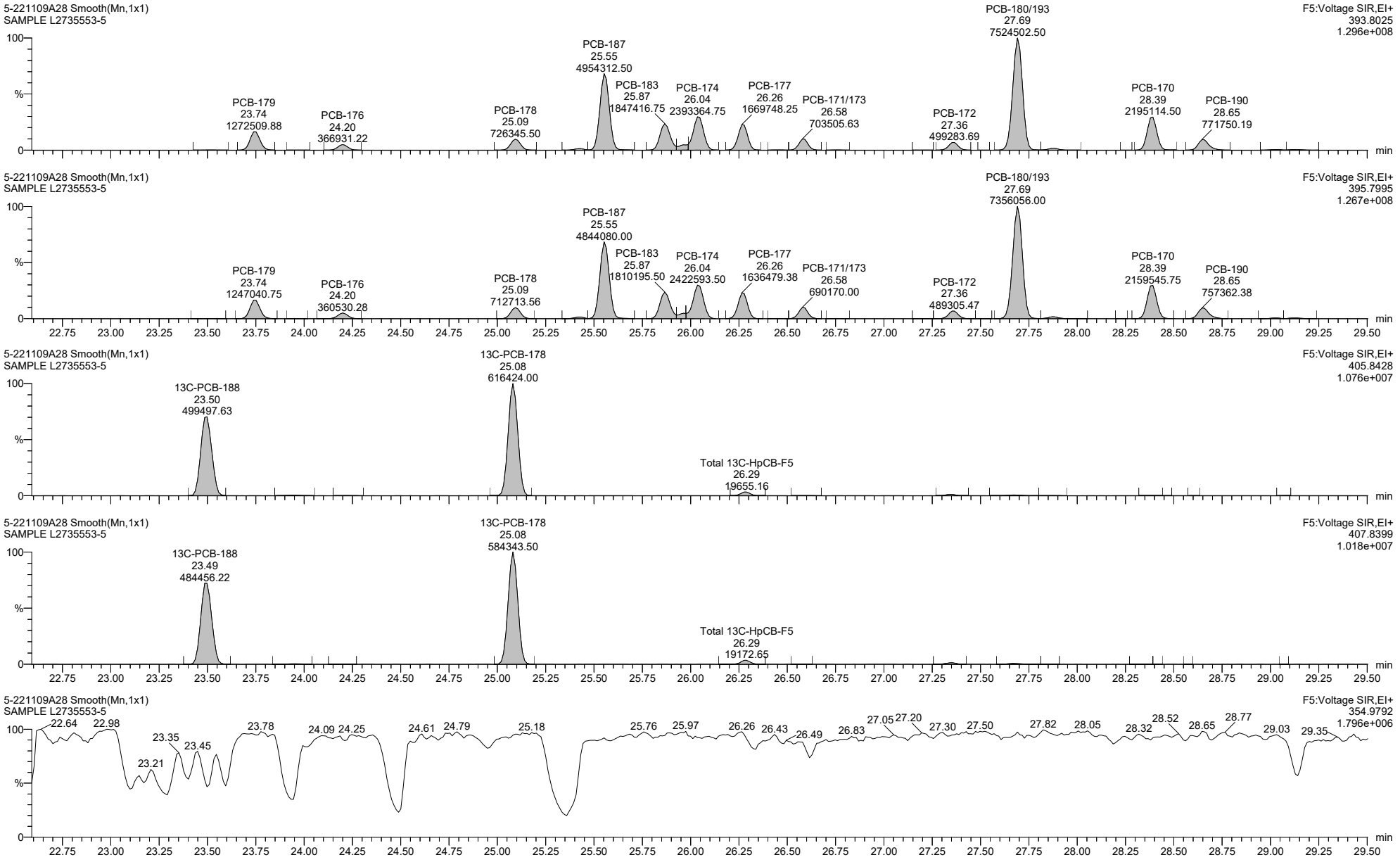


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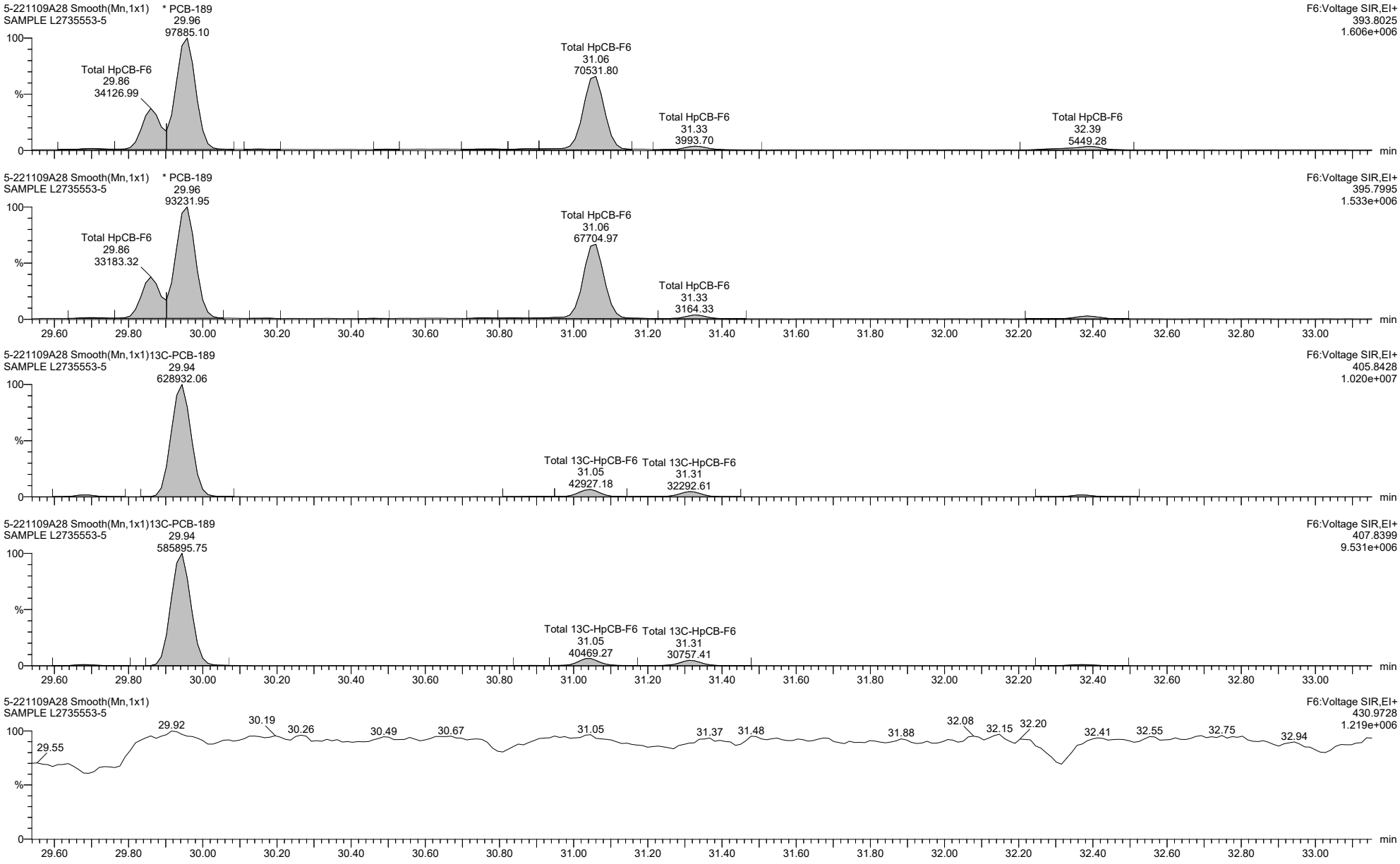


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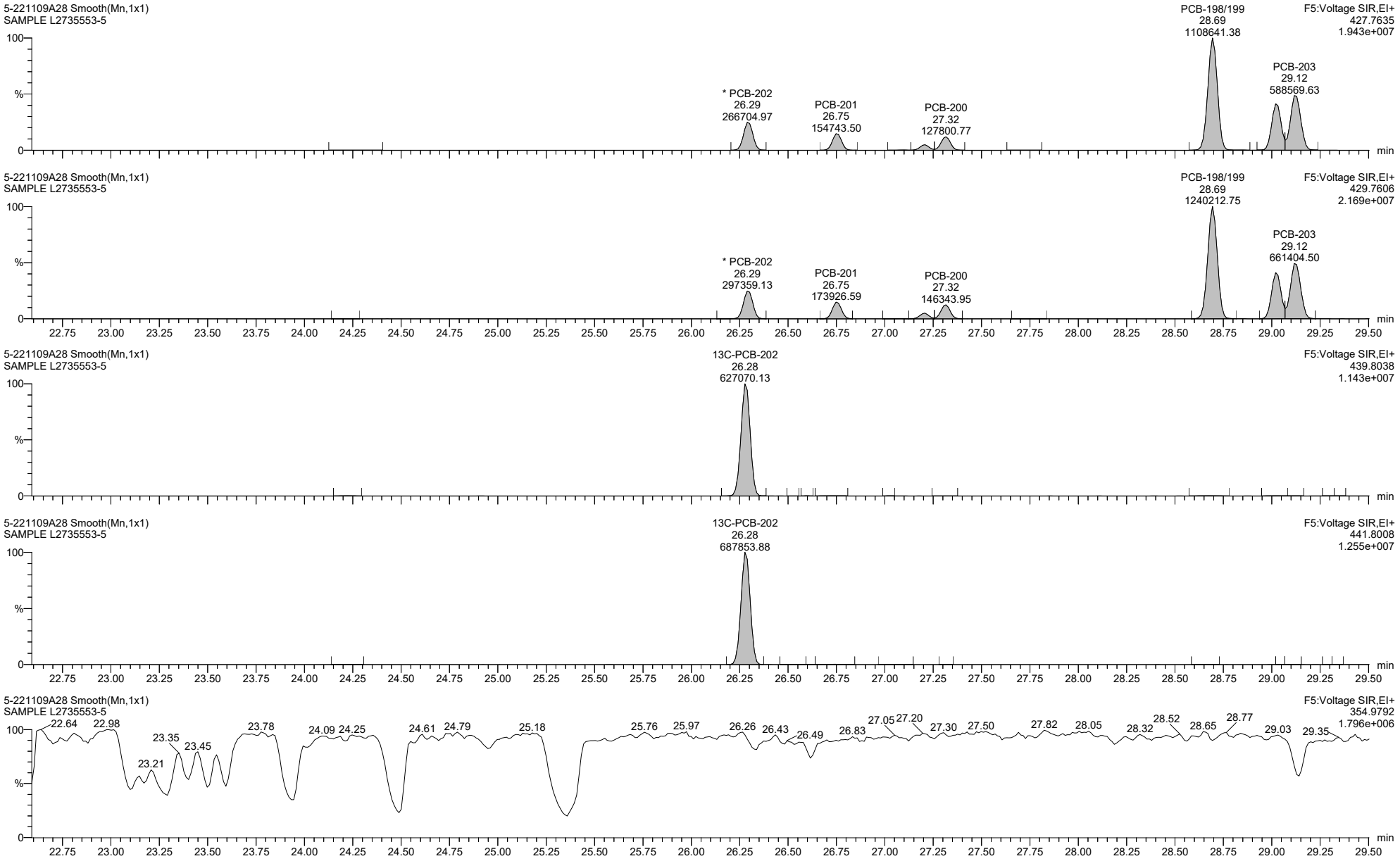
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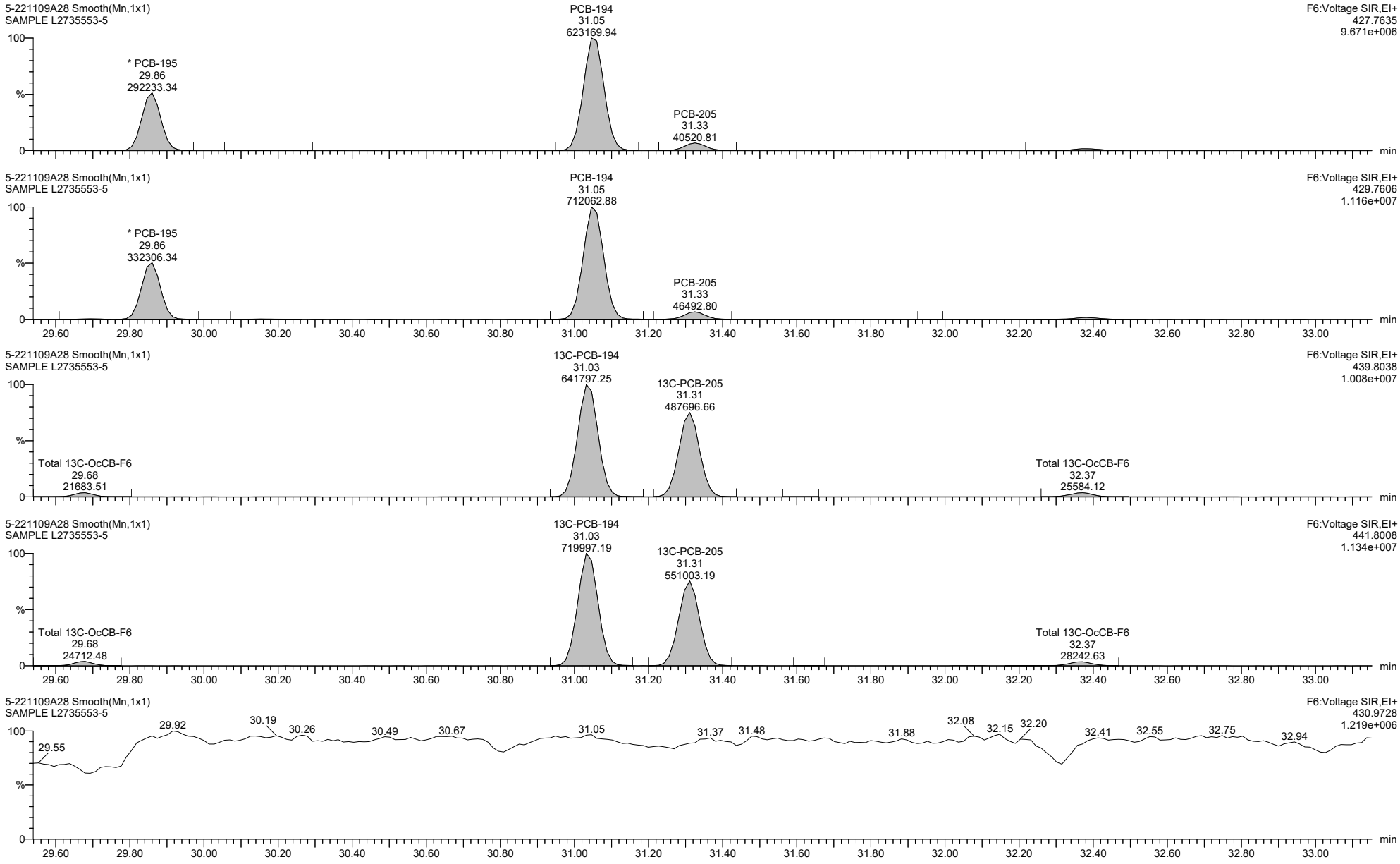


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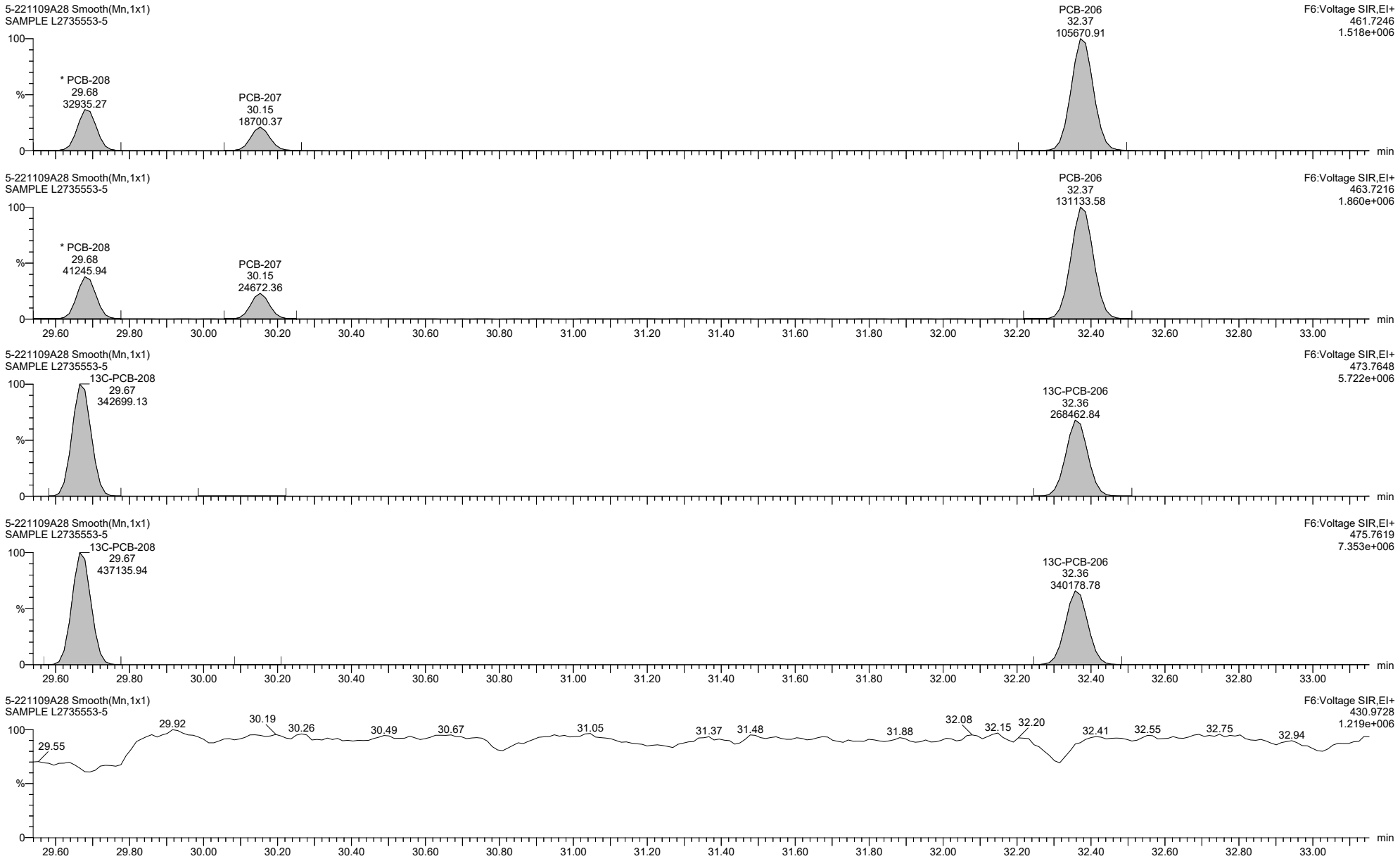


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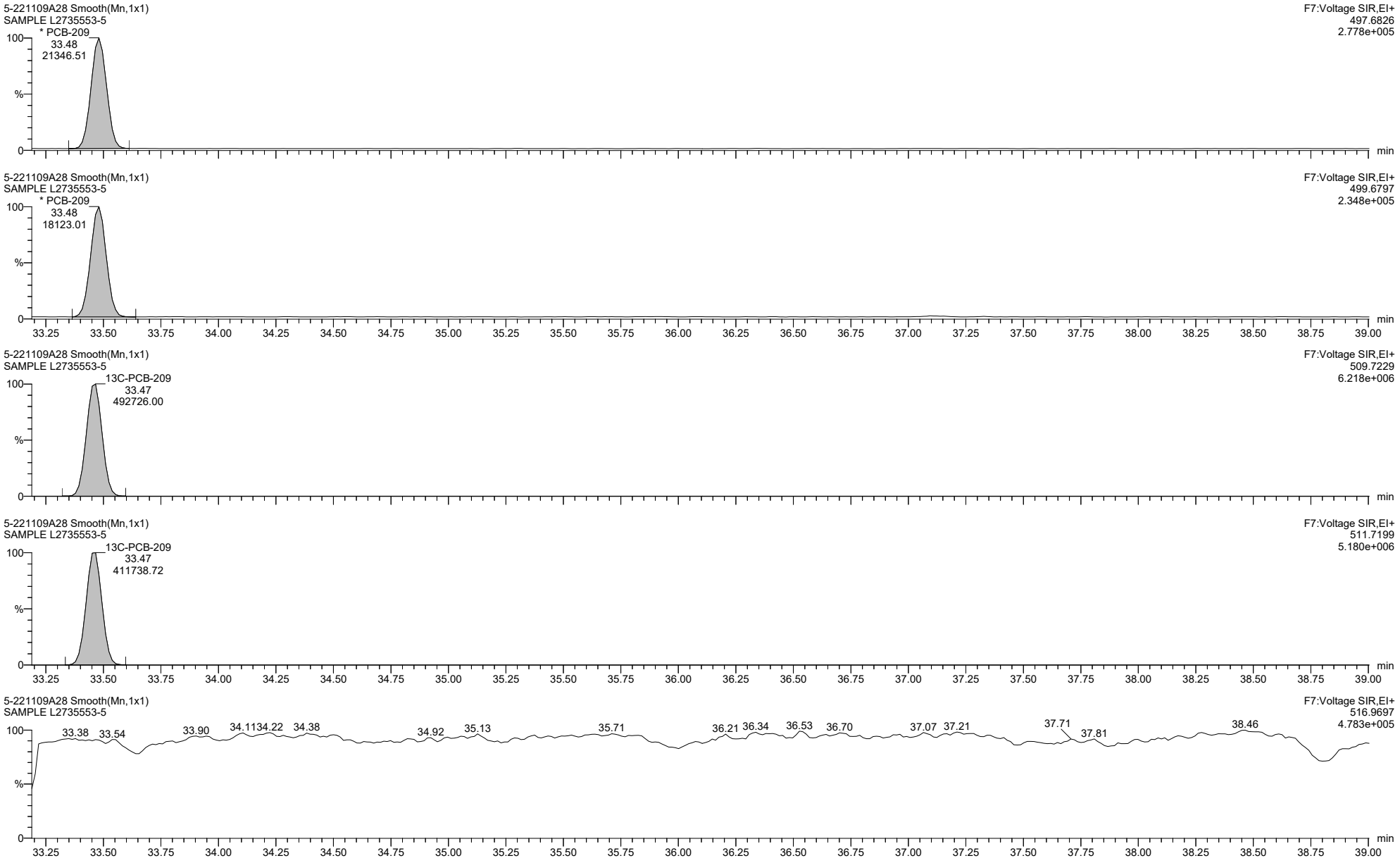


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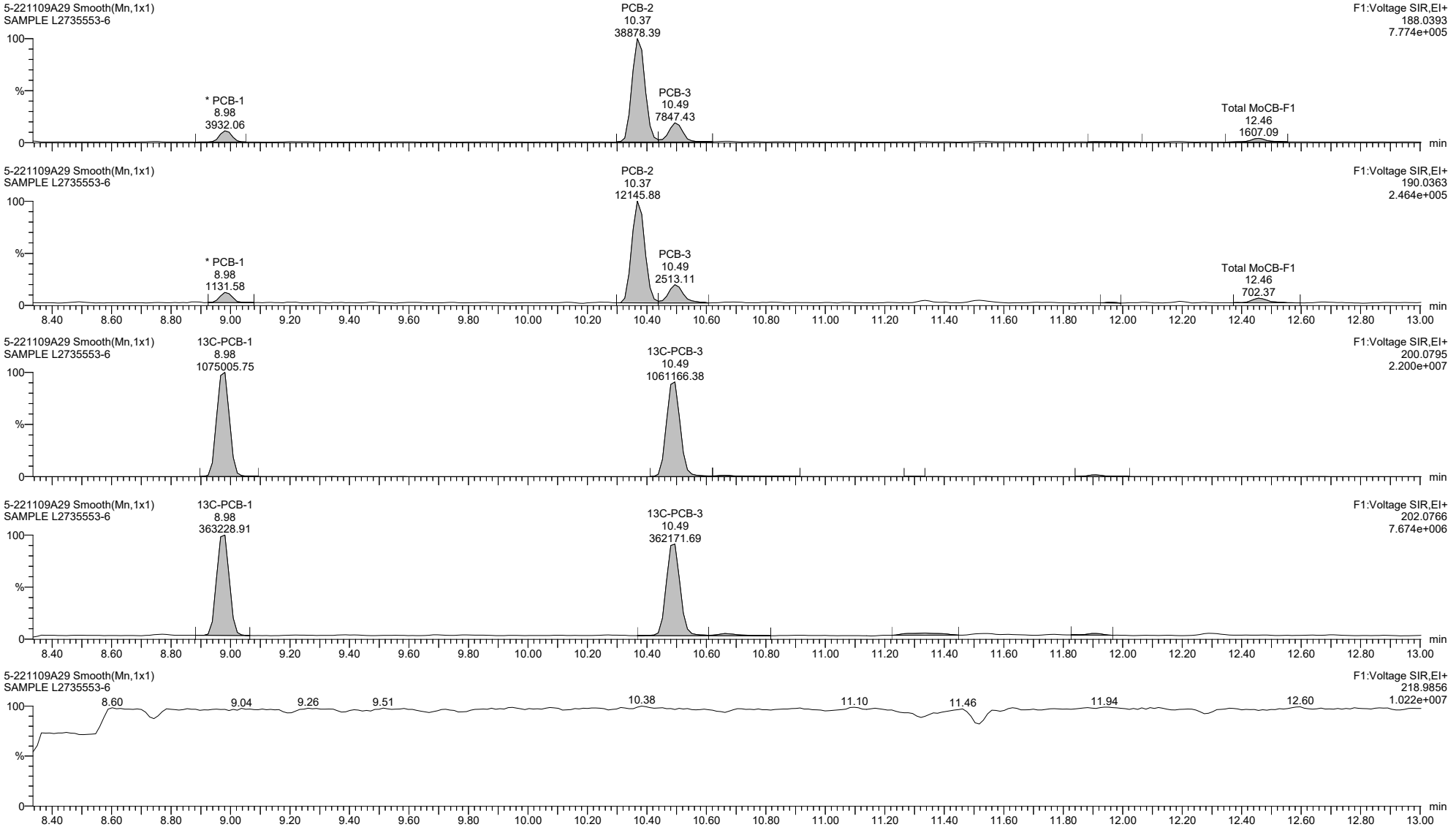
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Method: C:\MassLynx\PCB.PRO\MethDB\1668_OCTYL_209-1029.mdb 29 Oct 2022 09:21:57
Calibration: 17 Nov 2022 11:48:15

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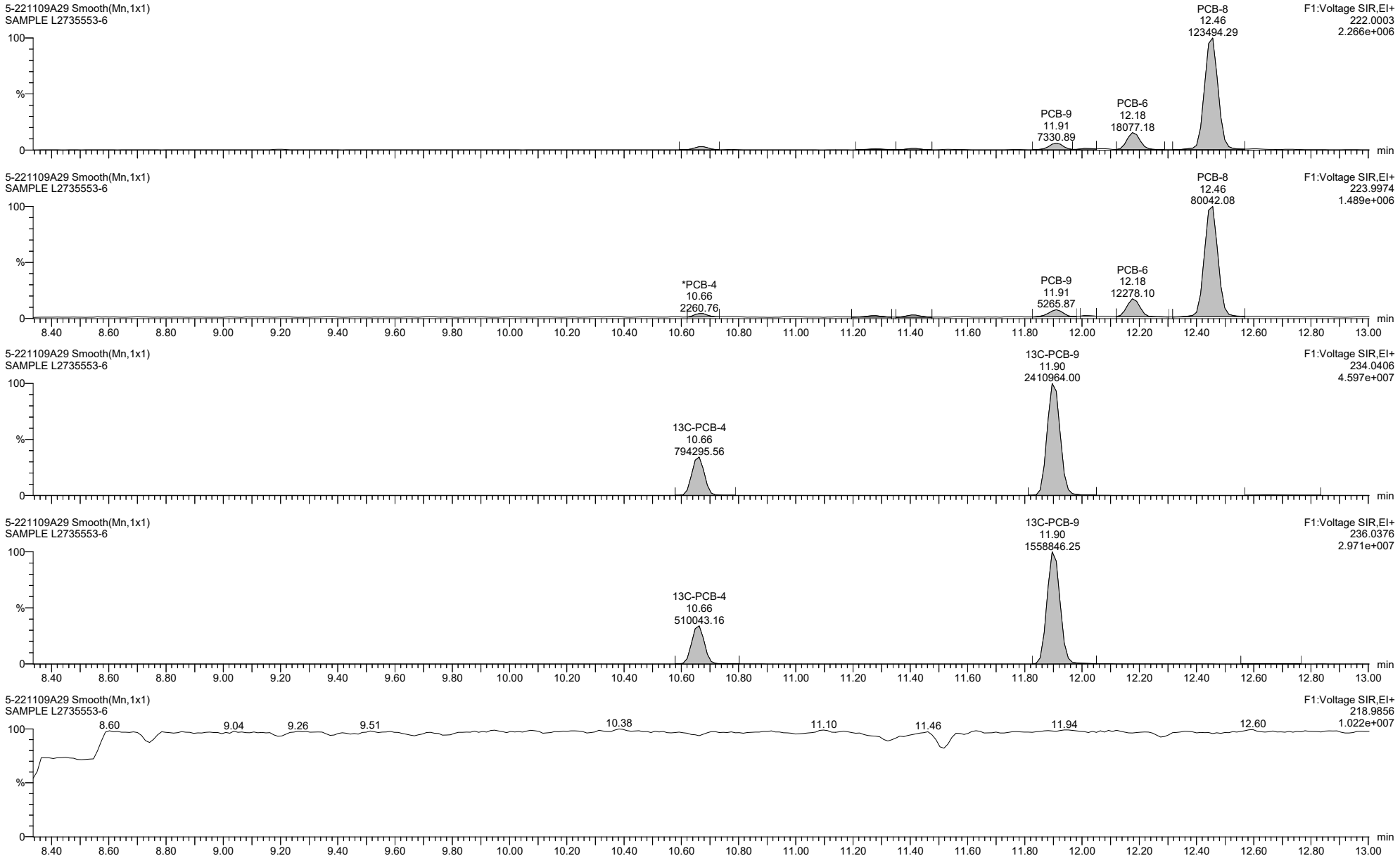


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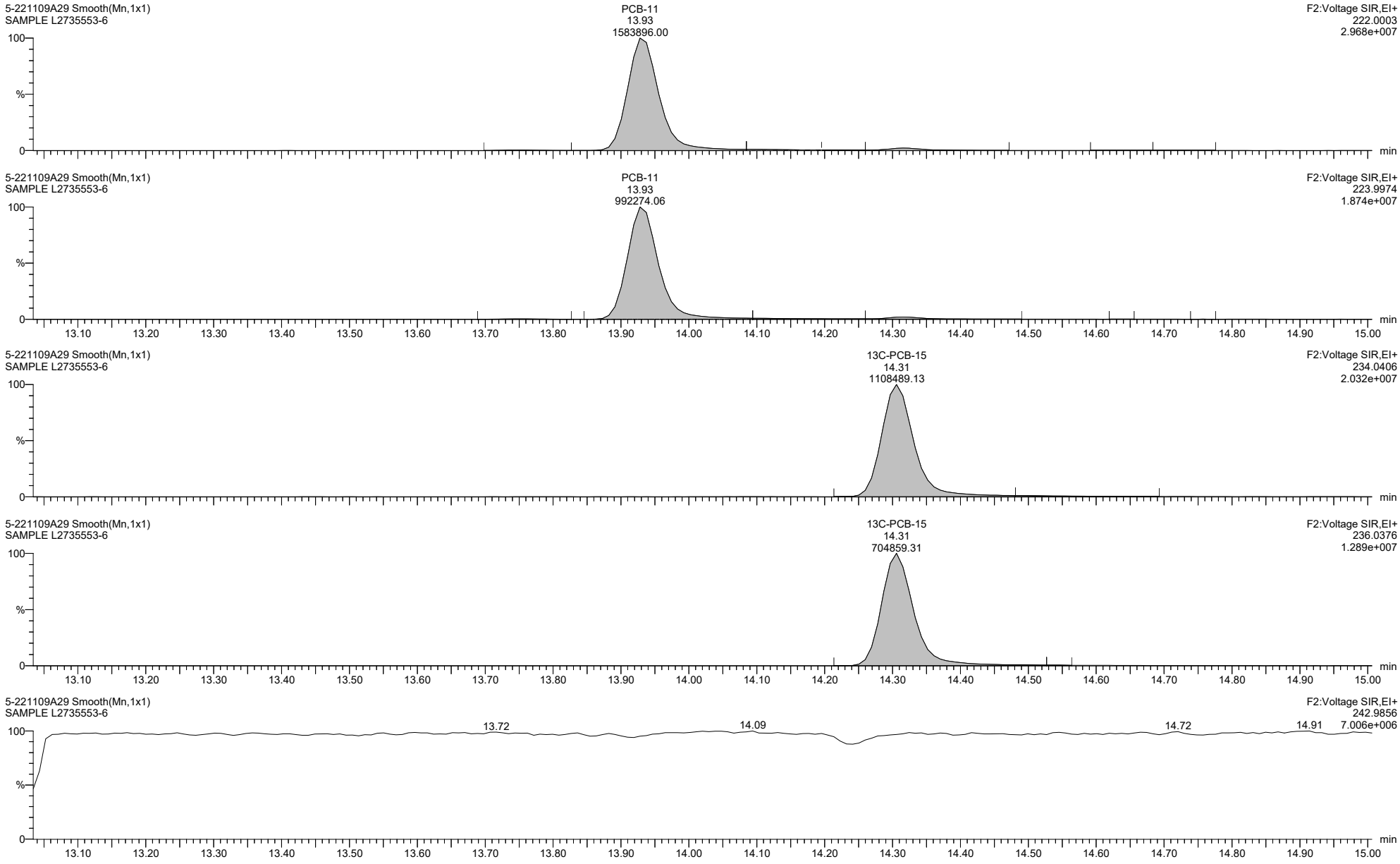


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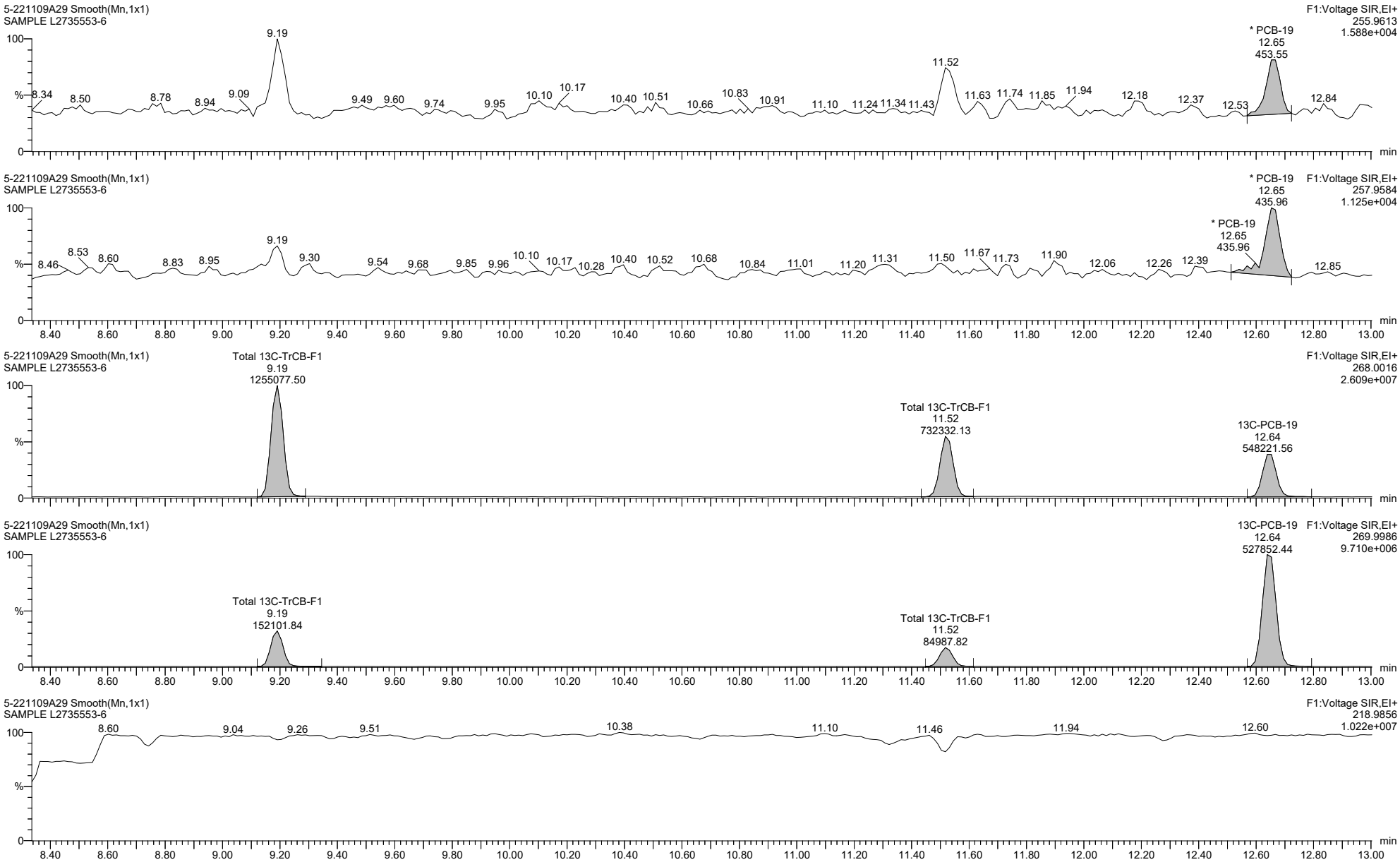


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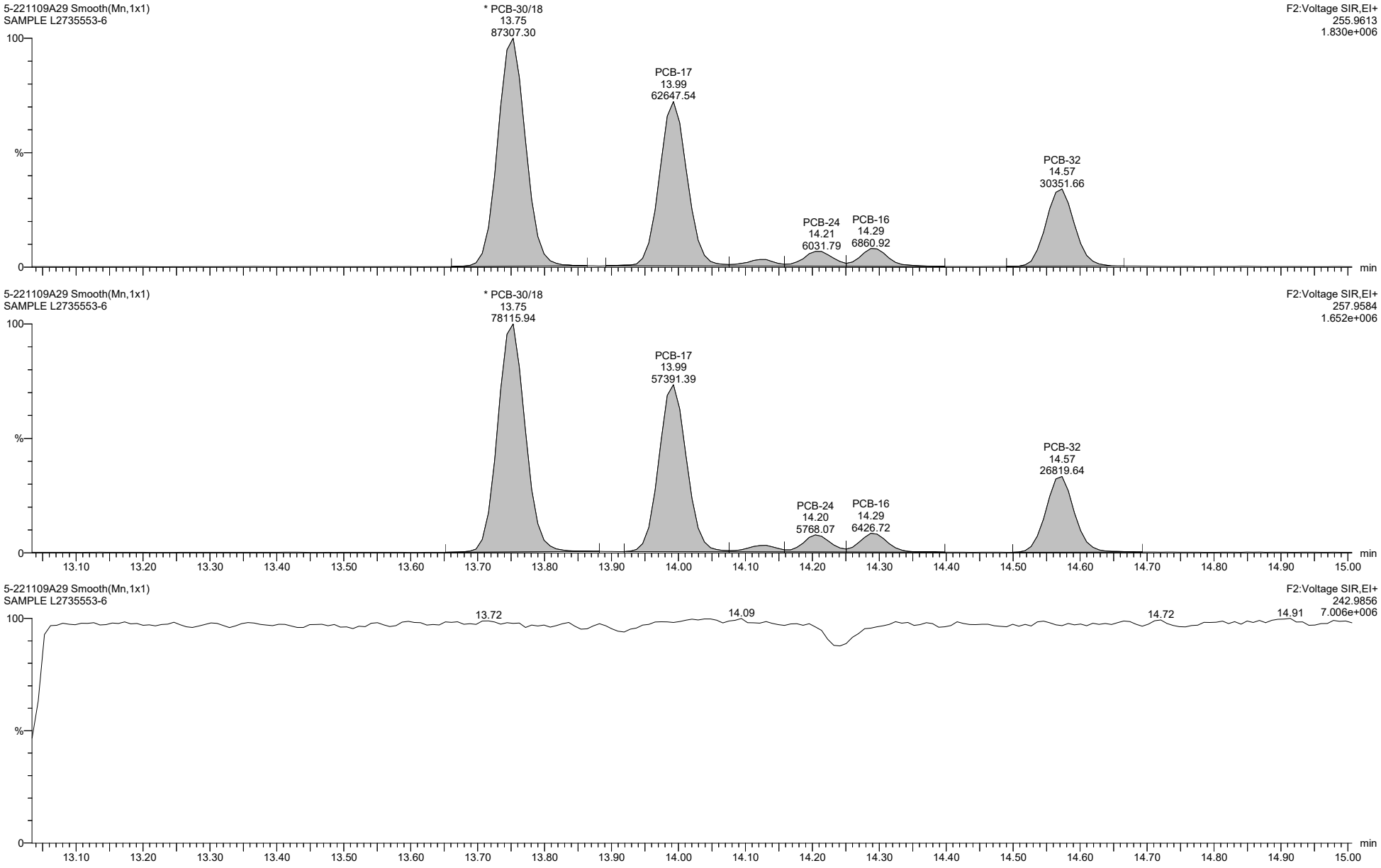


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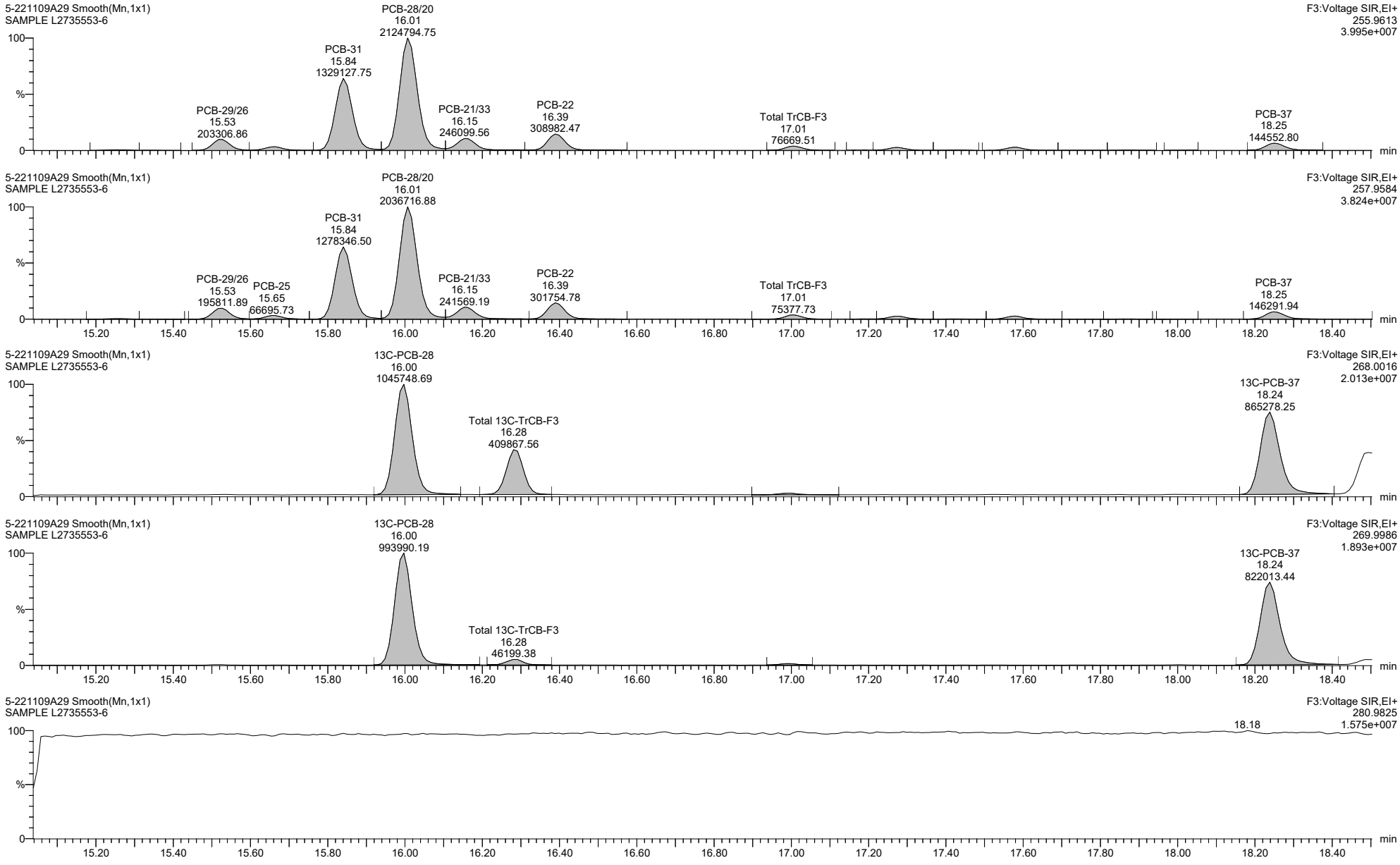


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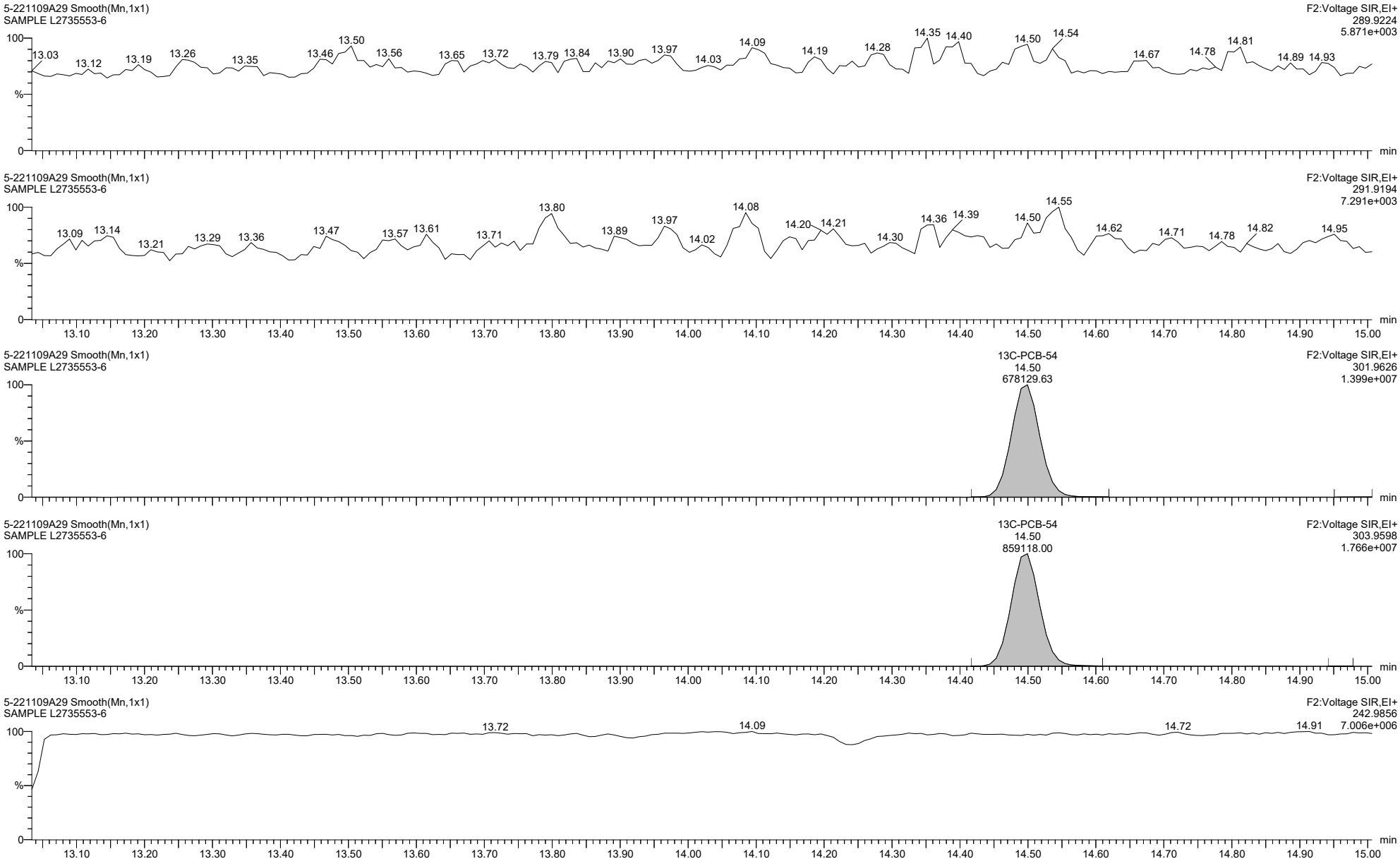


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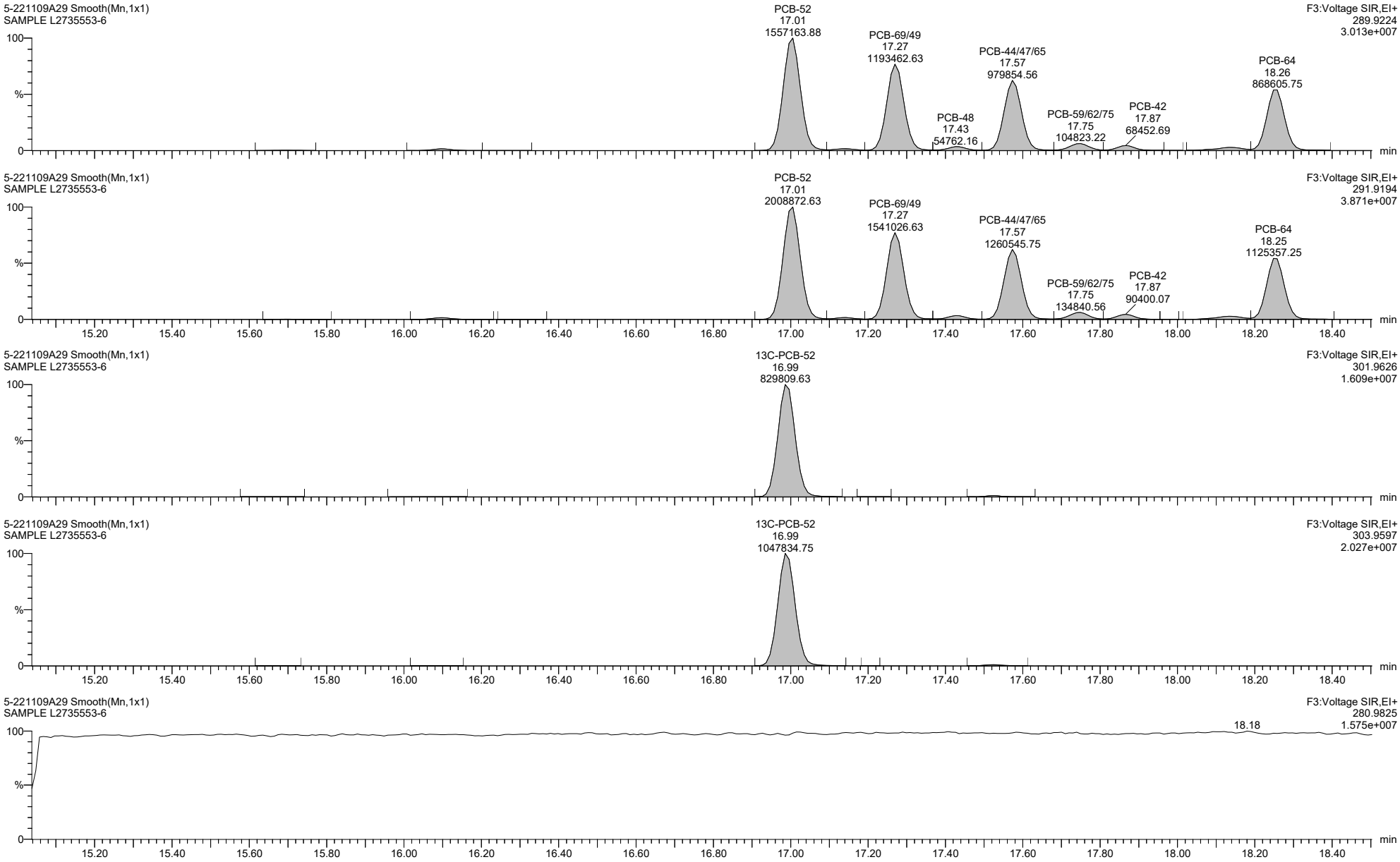


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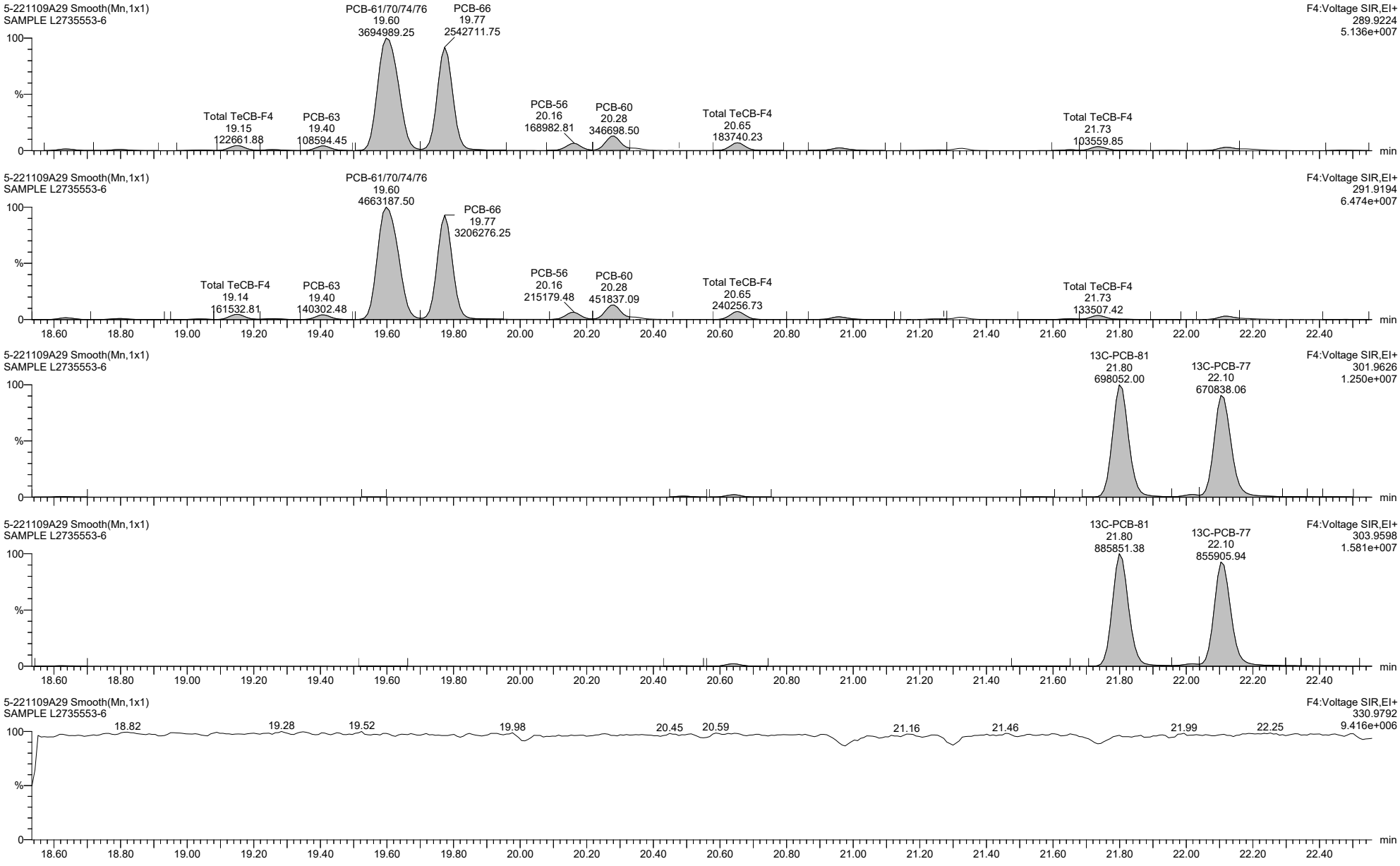


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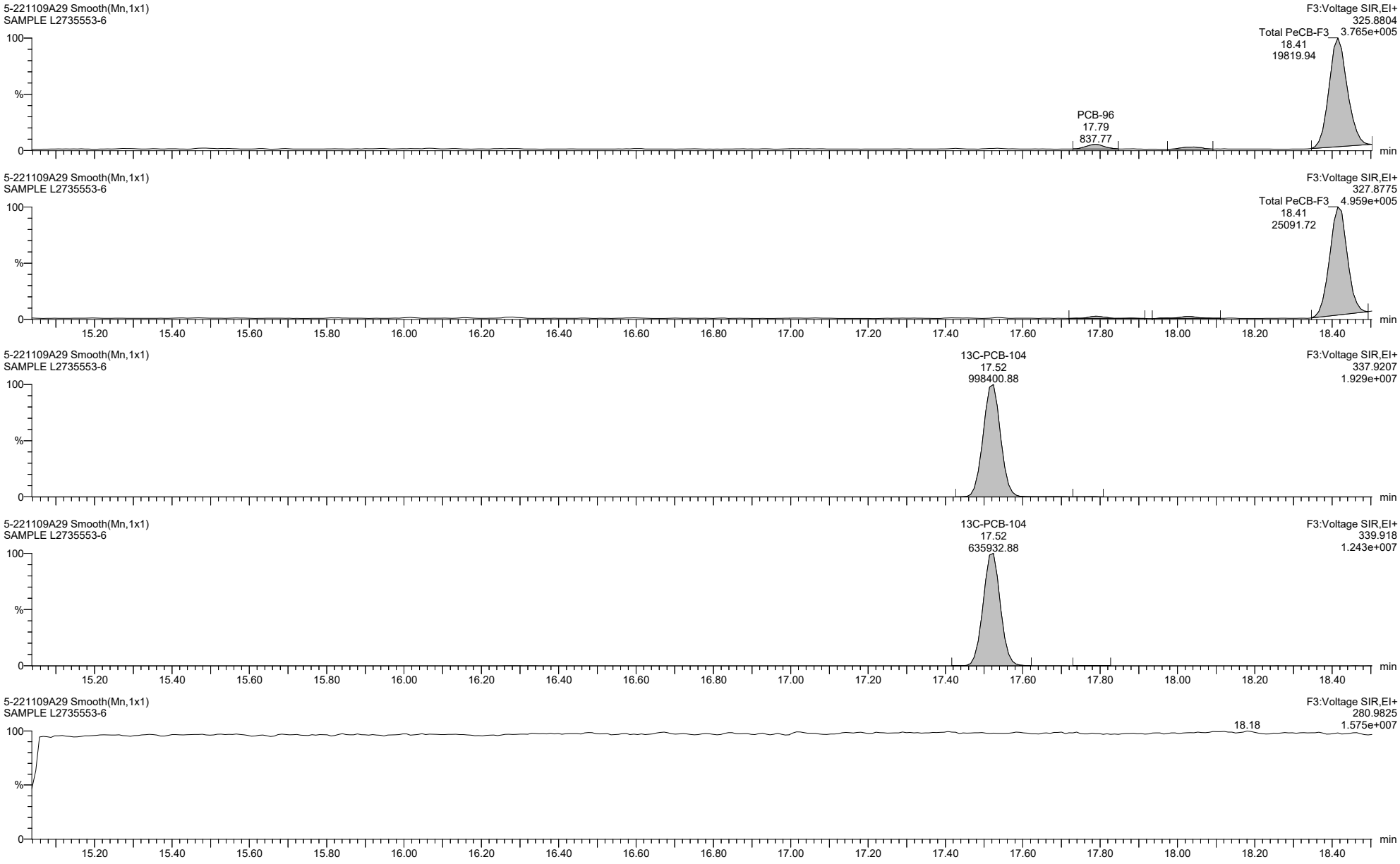


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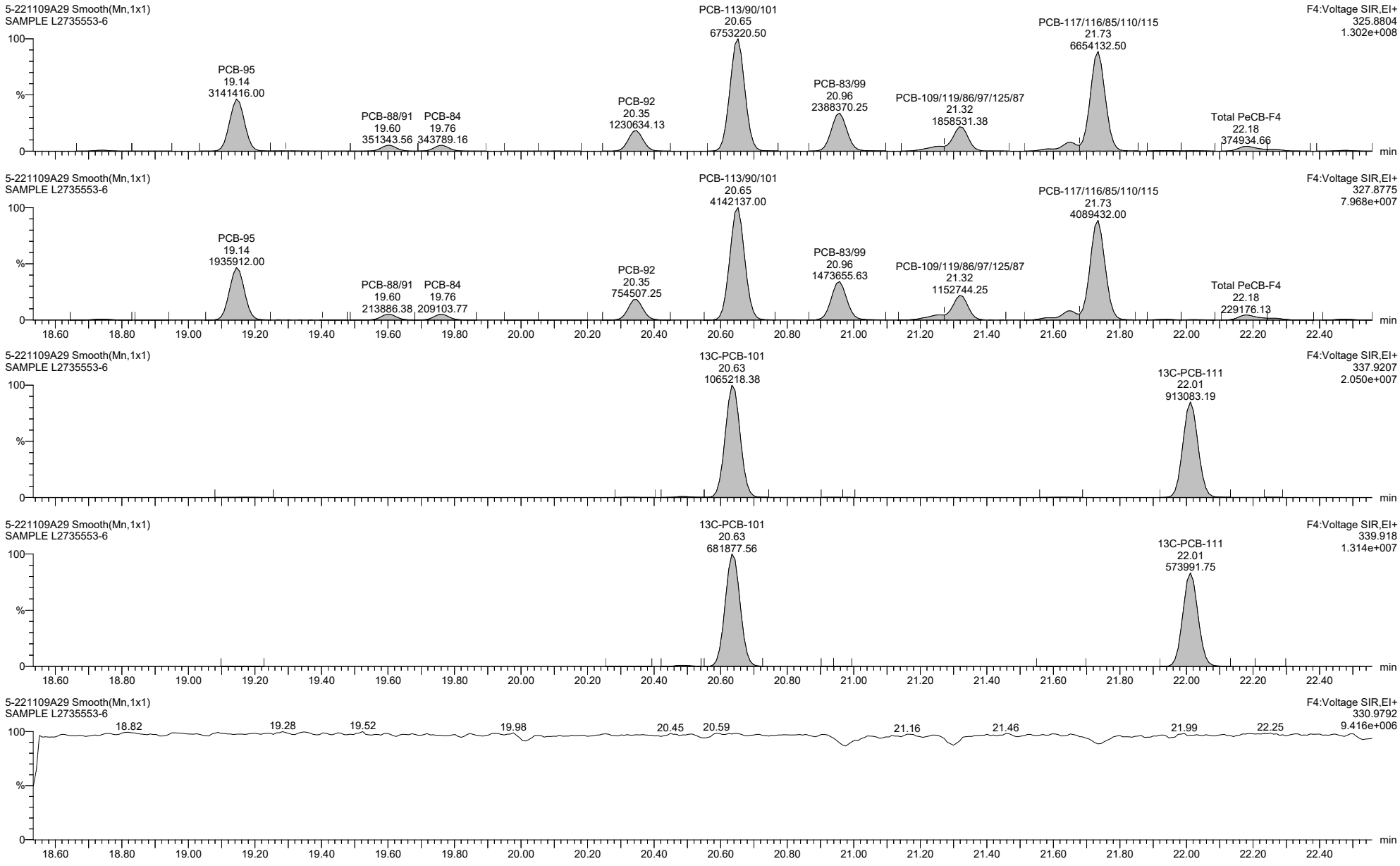


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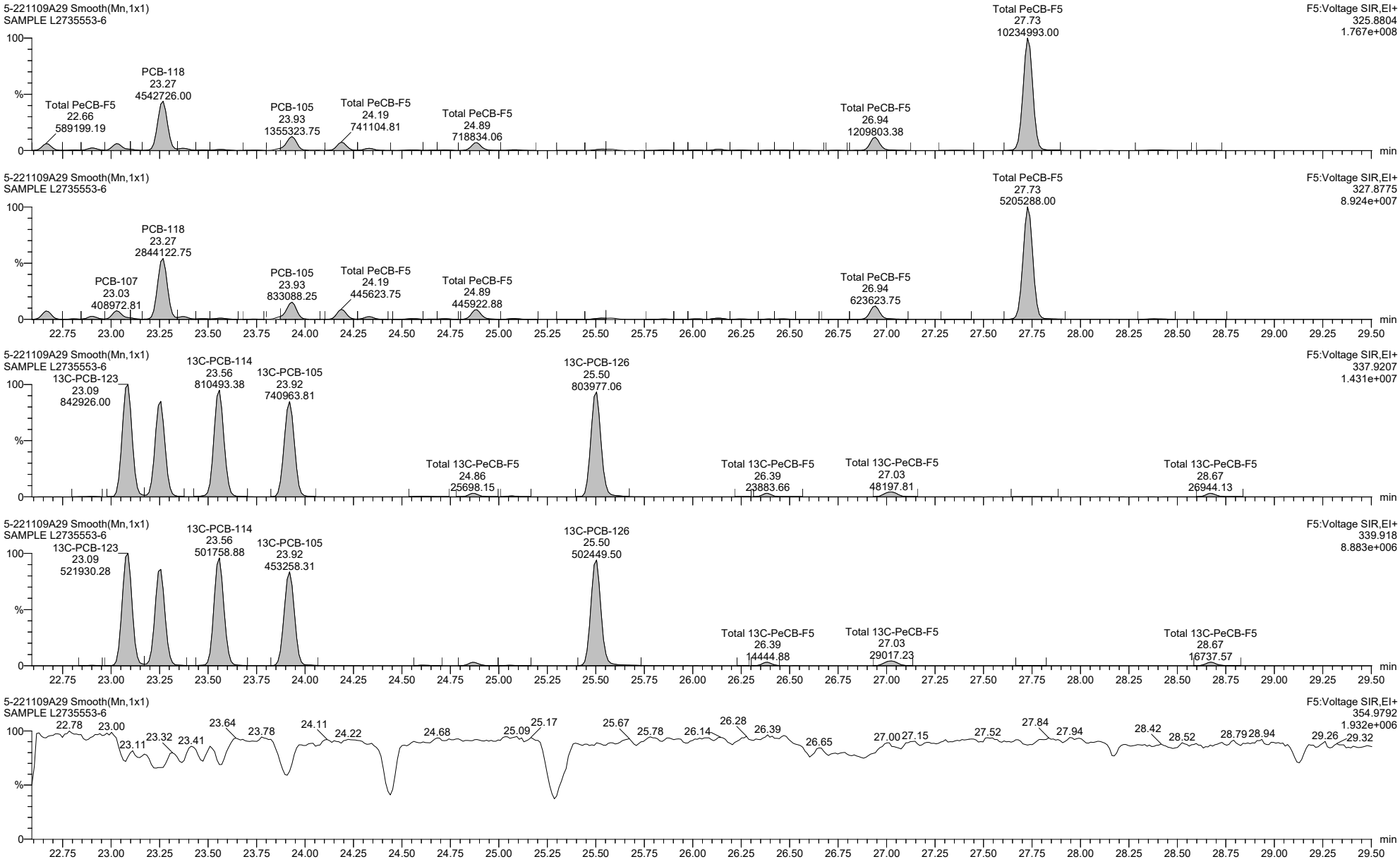


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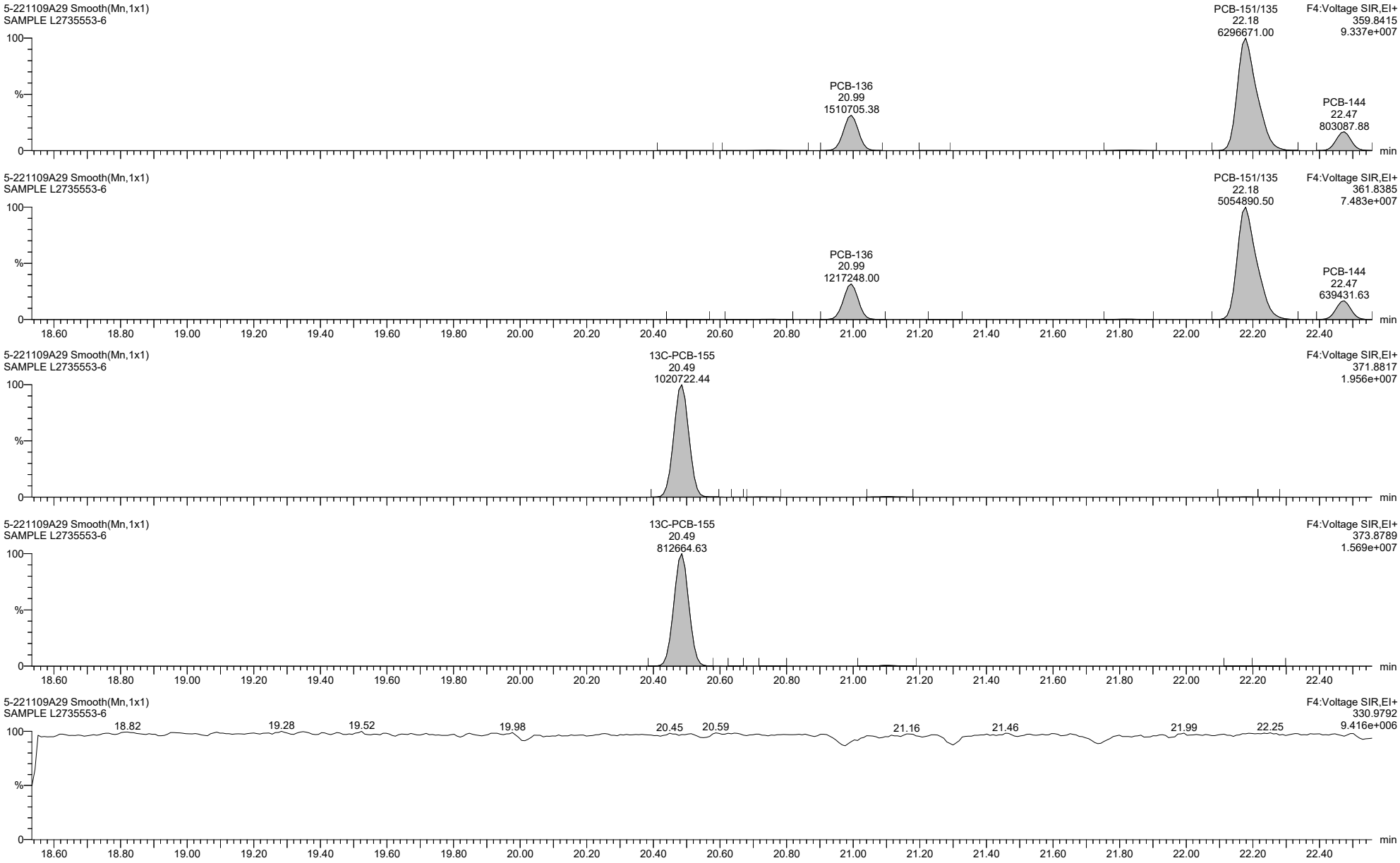
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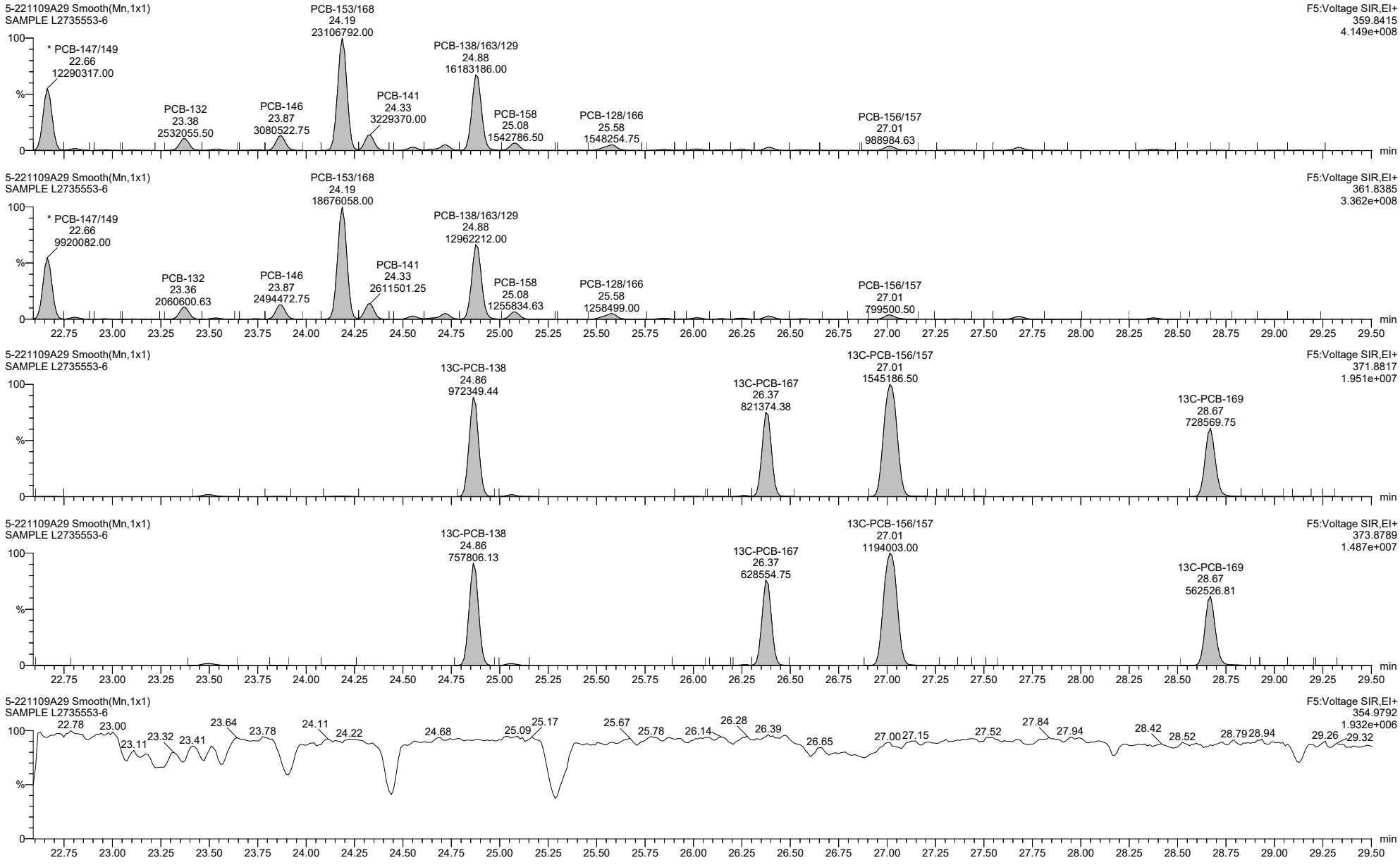


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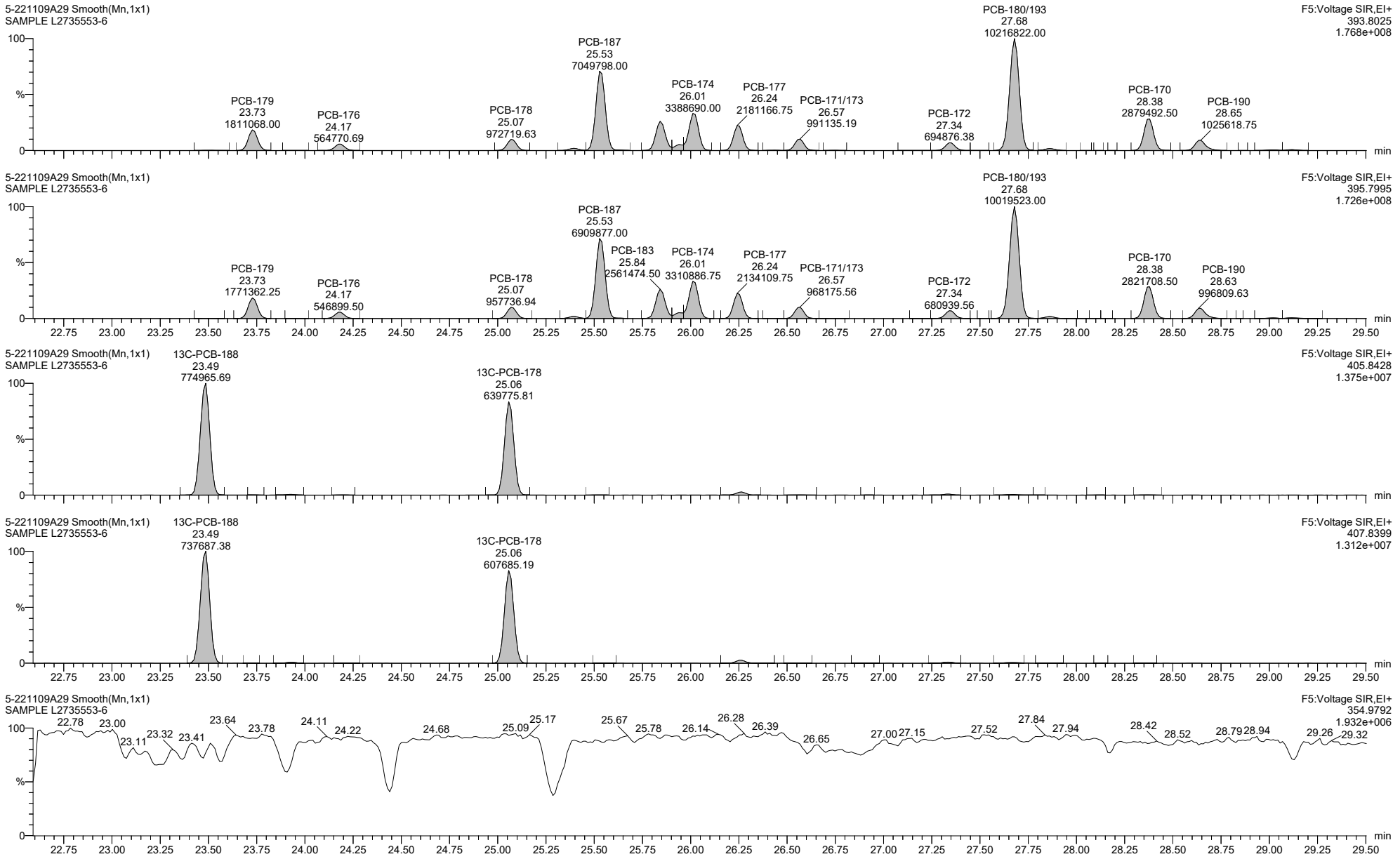
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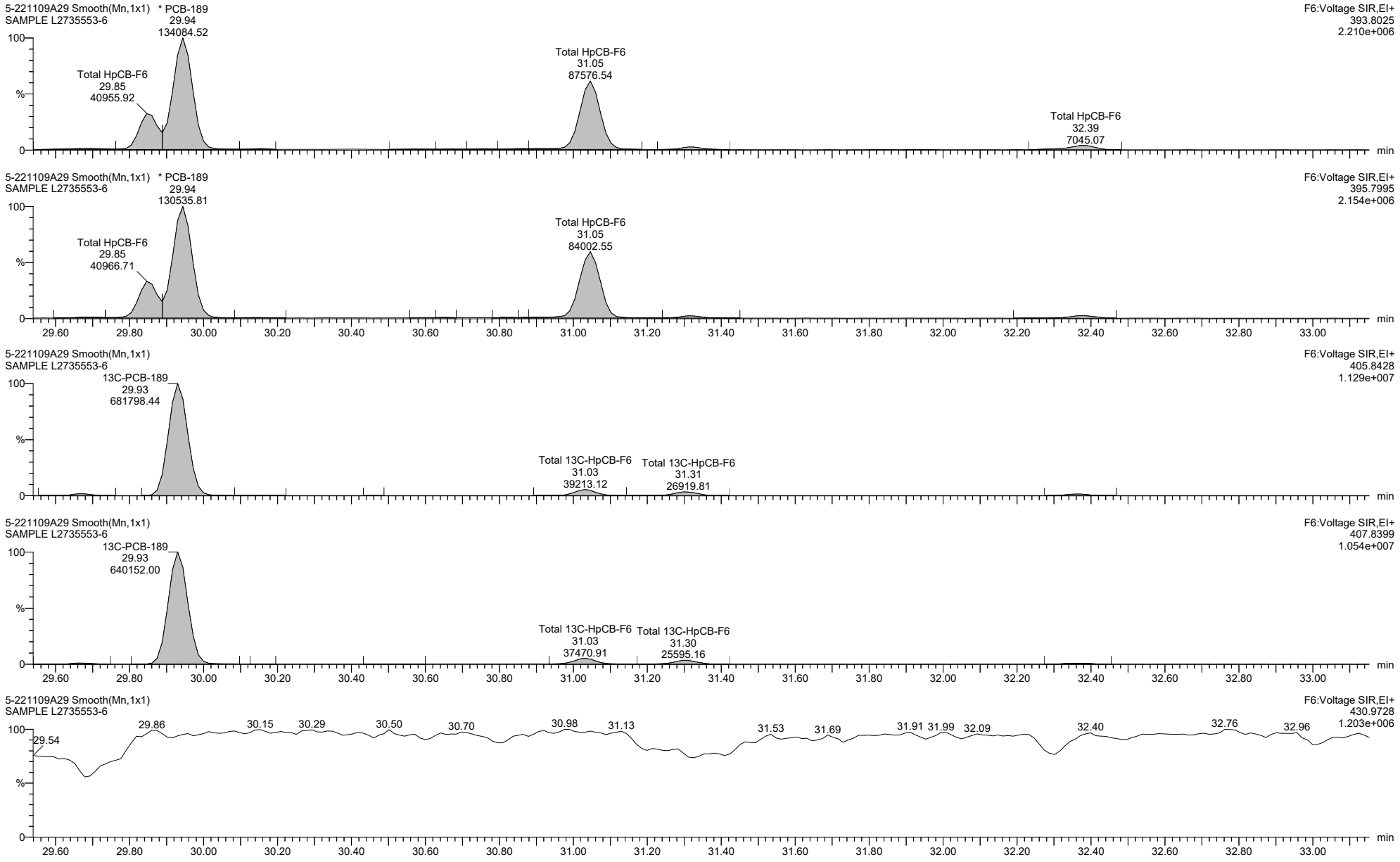


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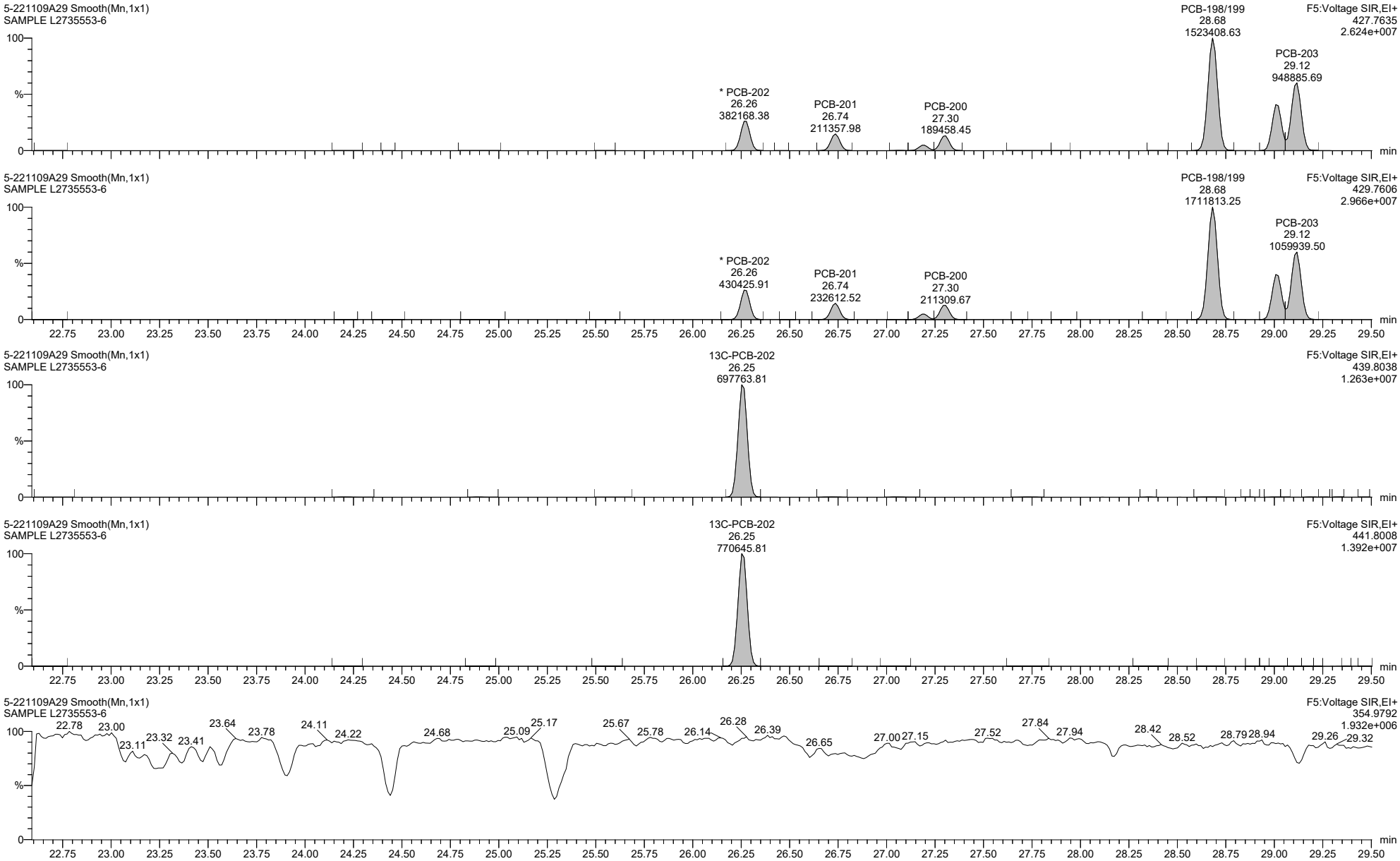


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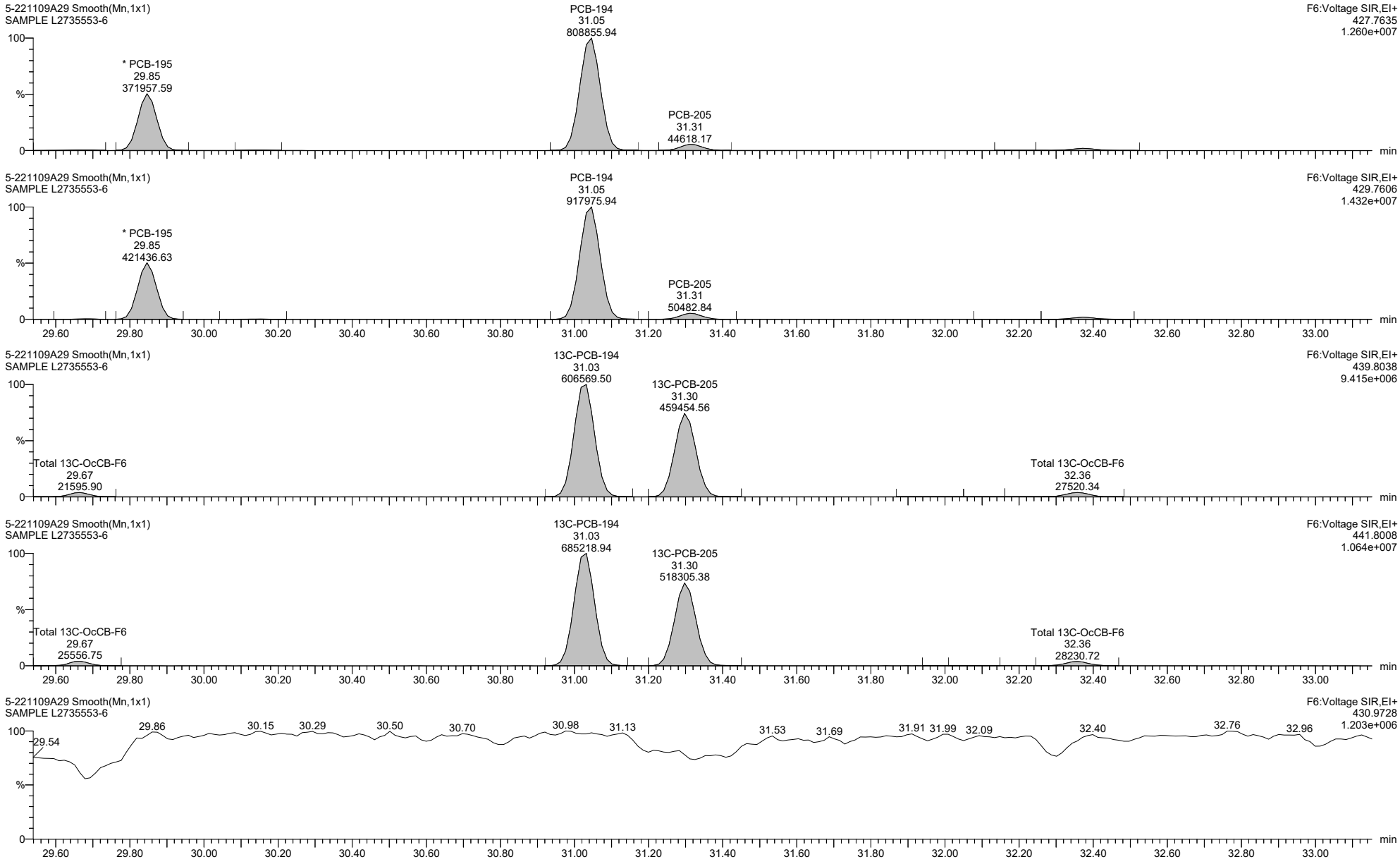


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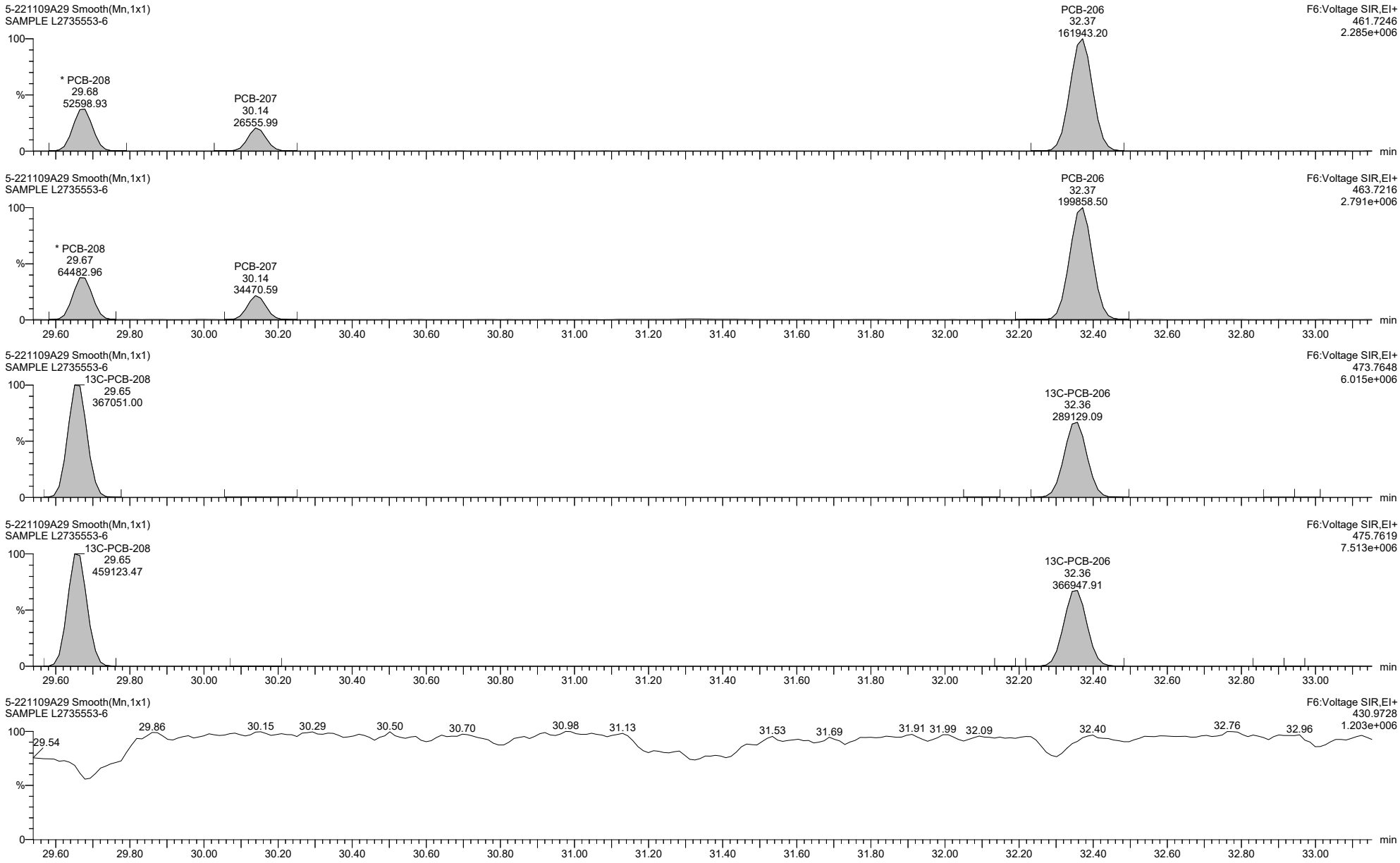


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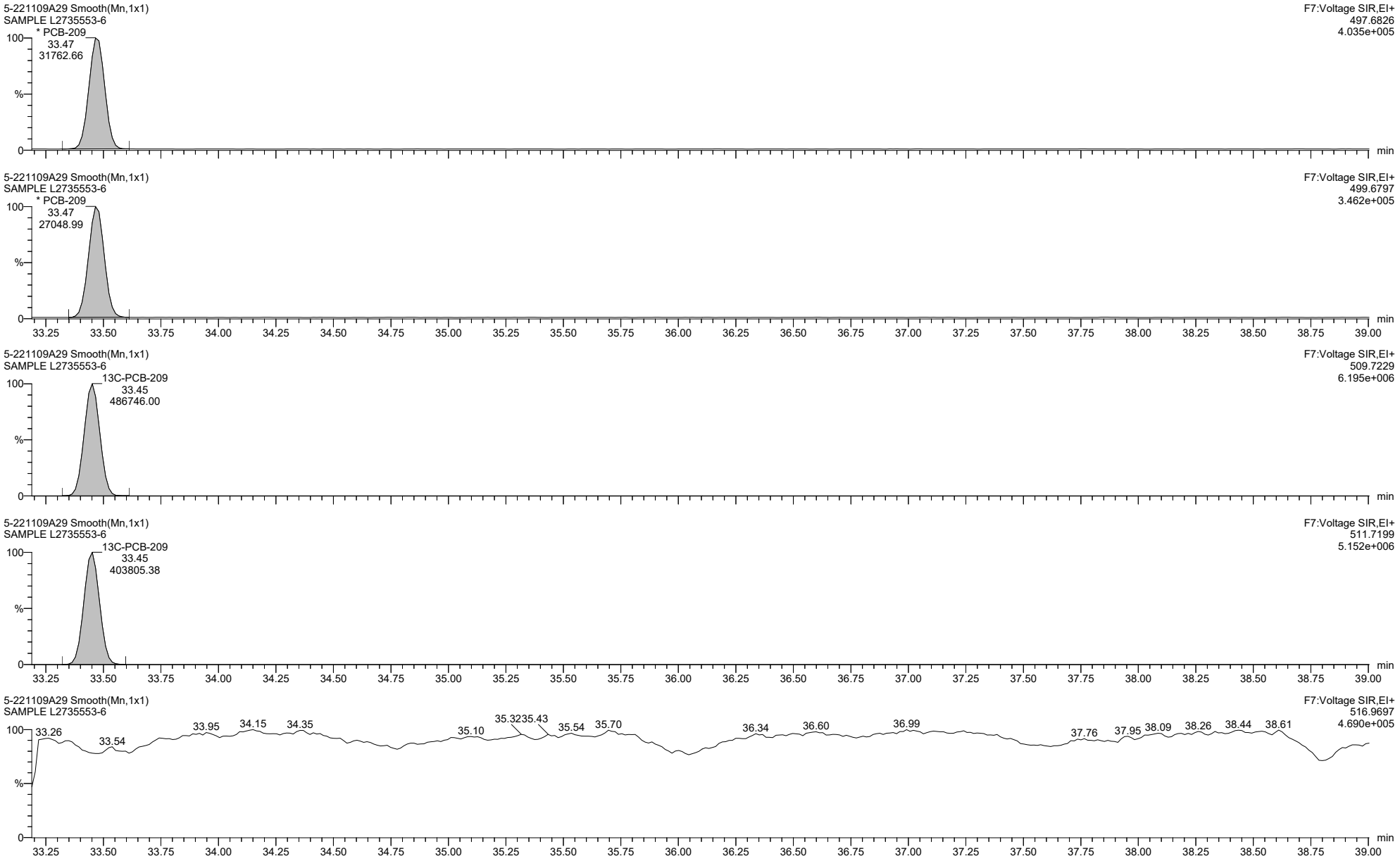
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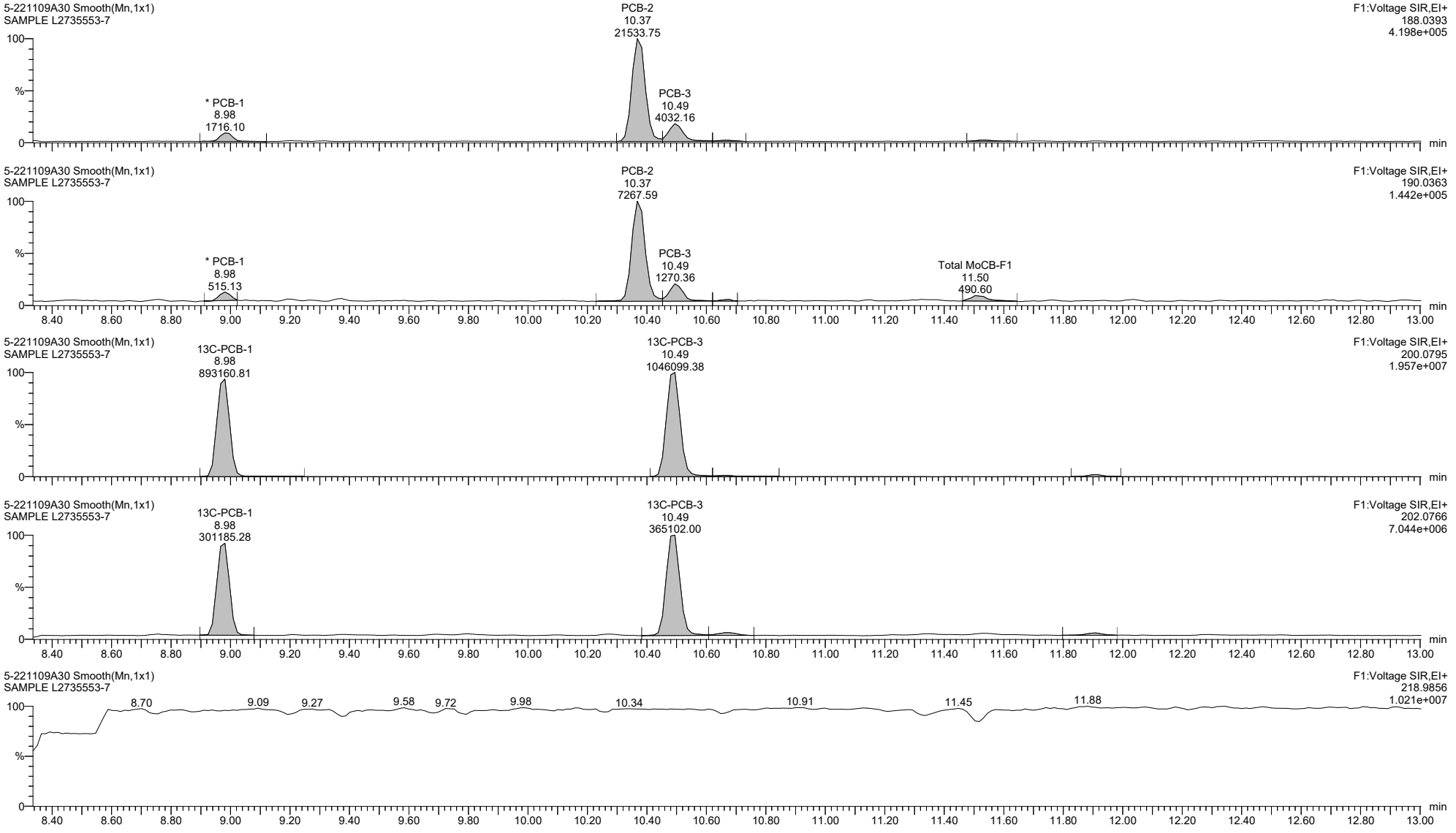
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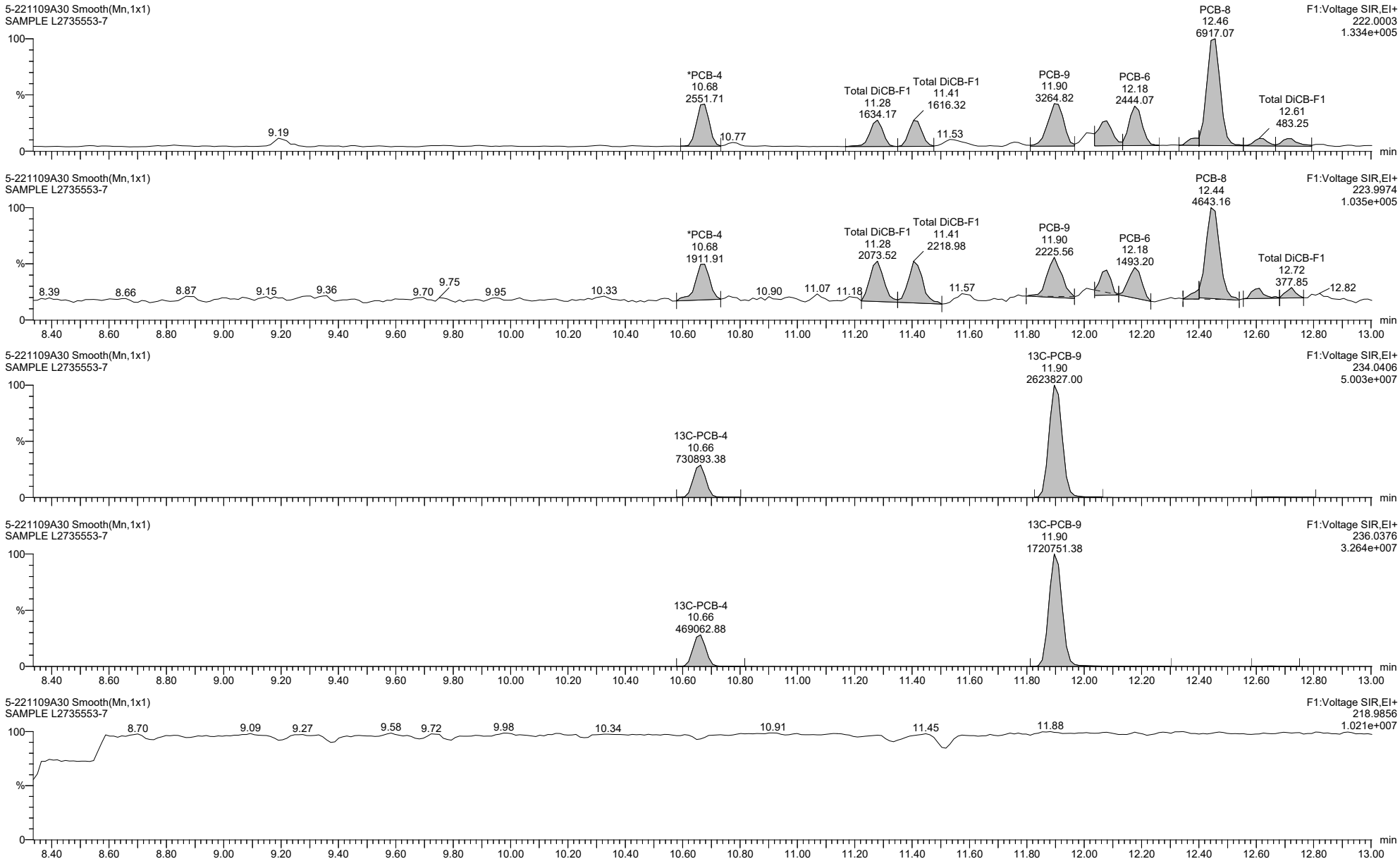


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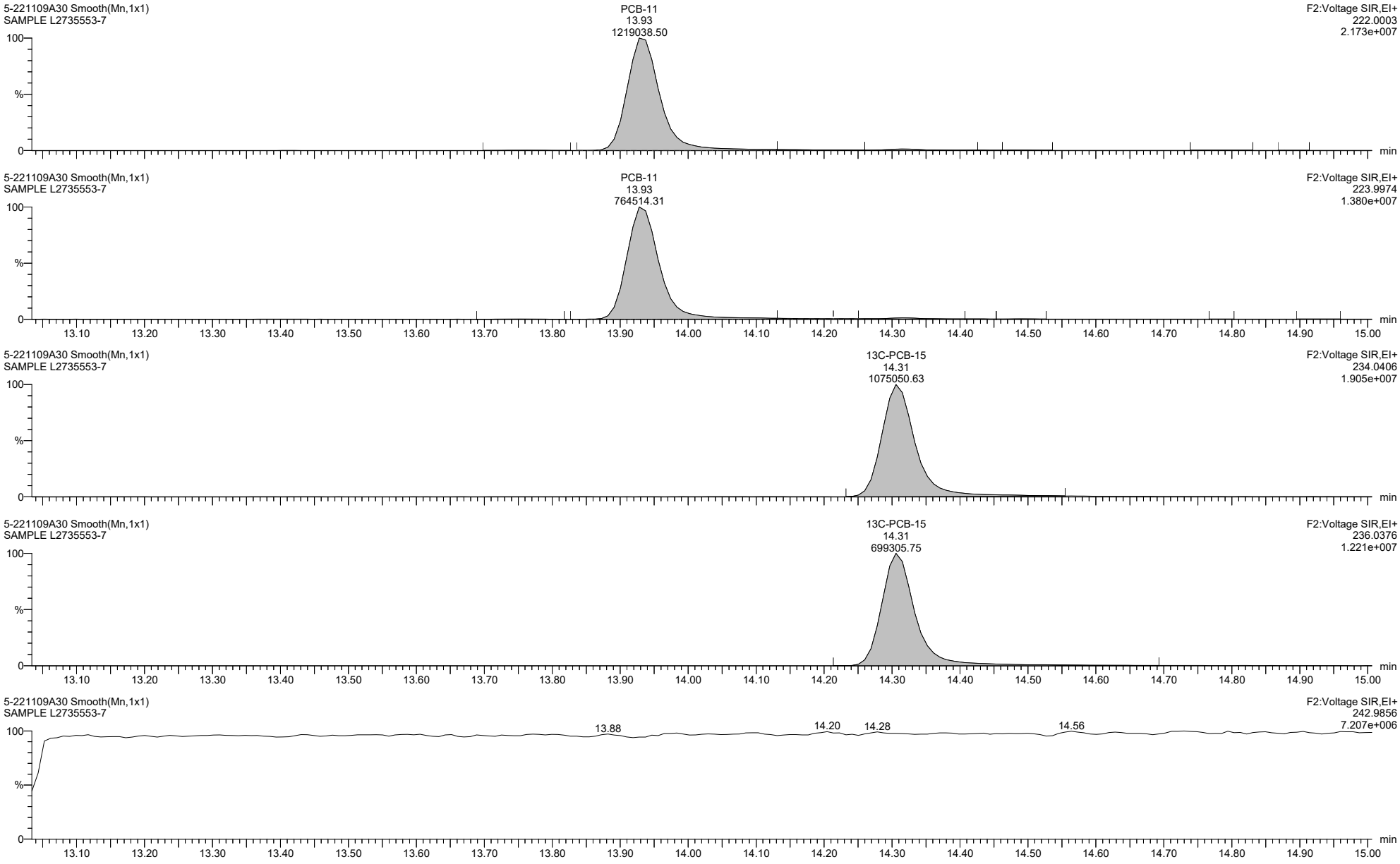


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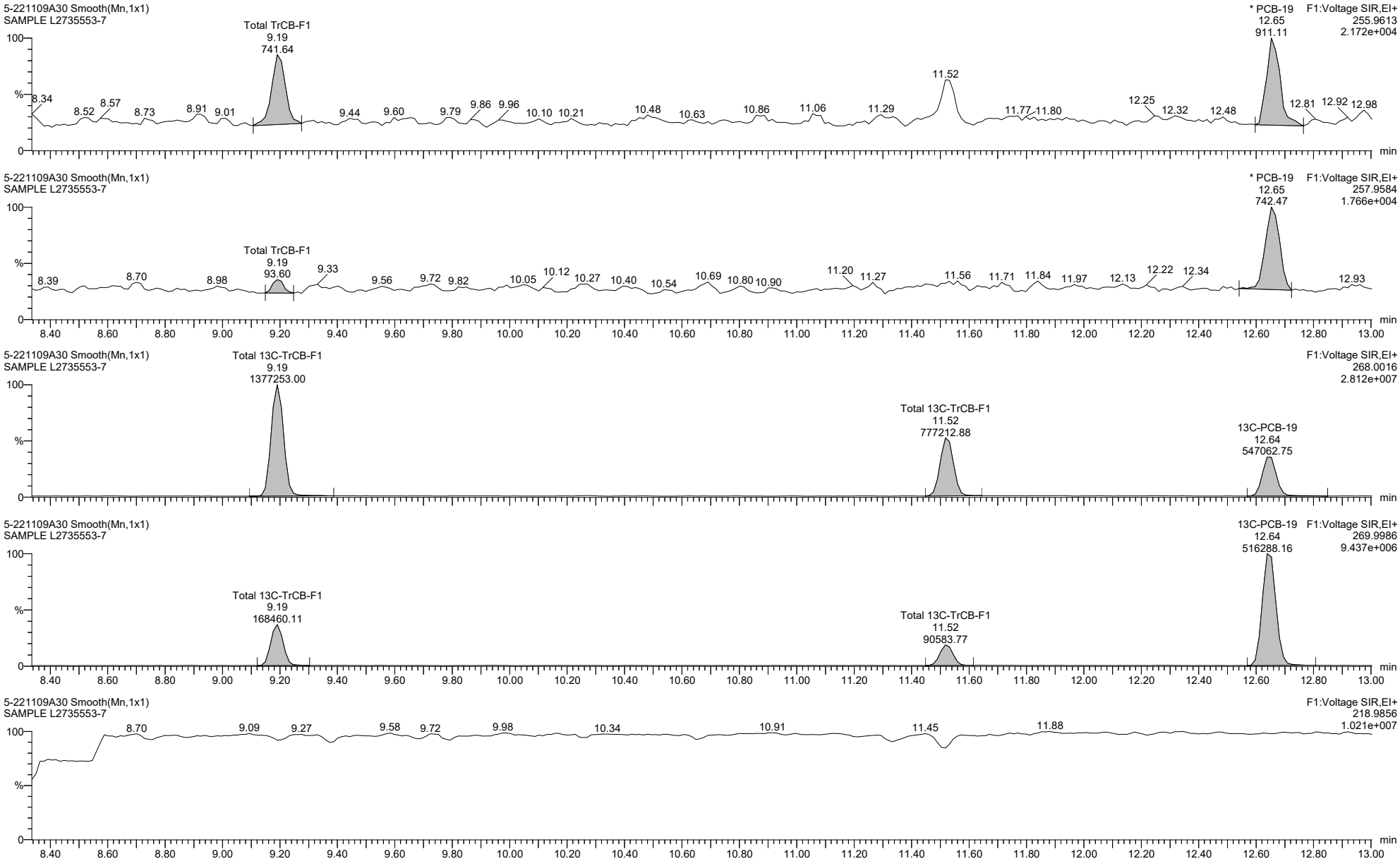


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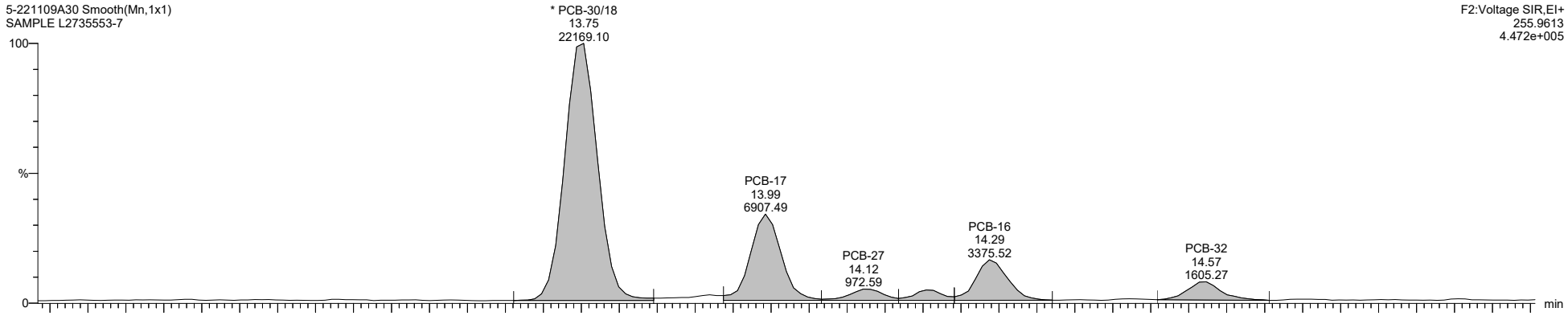


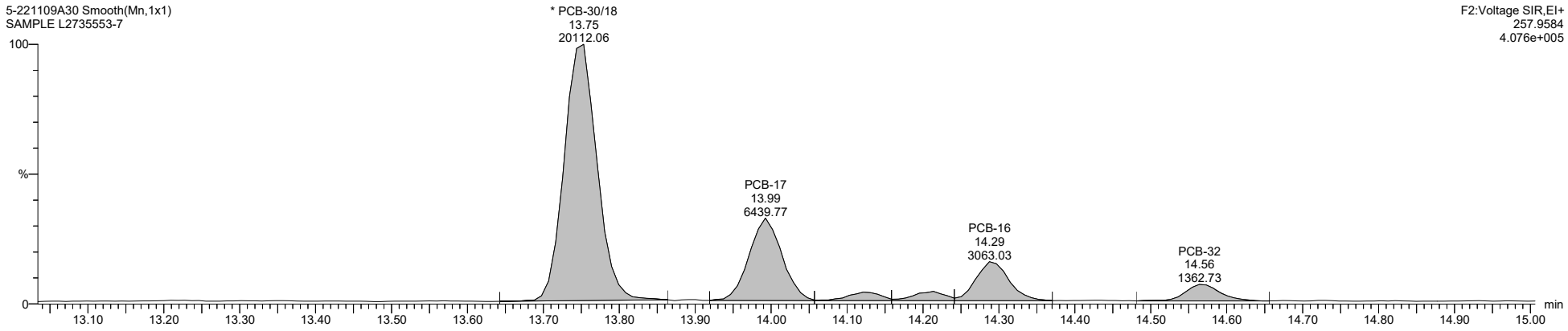
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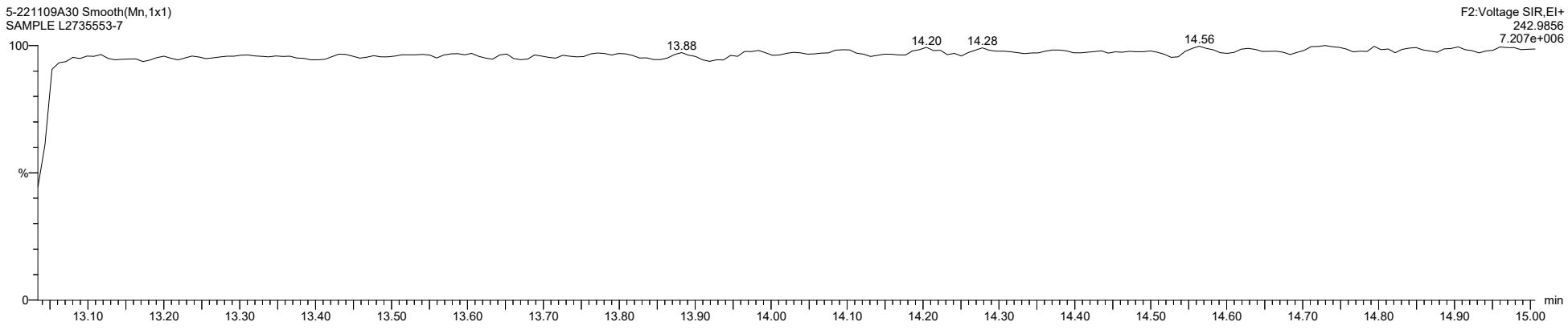
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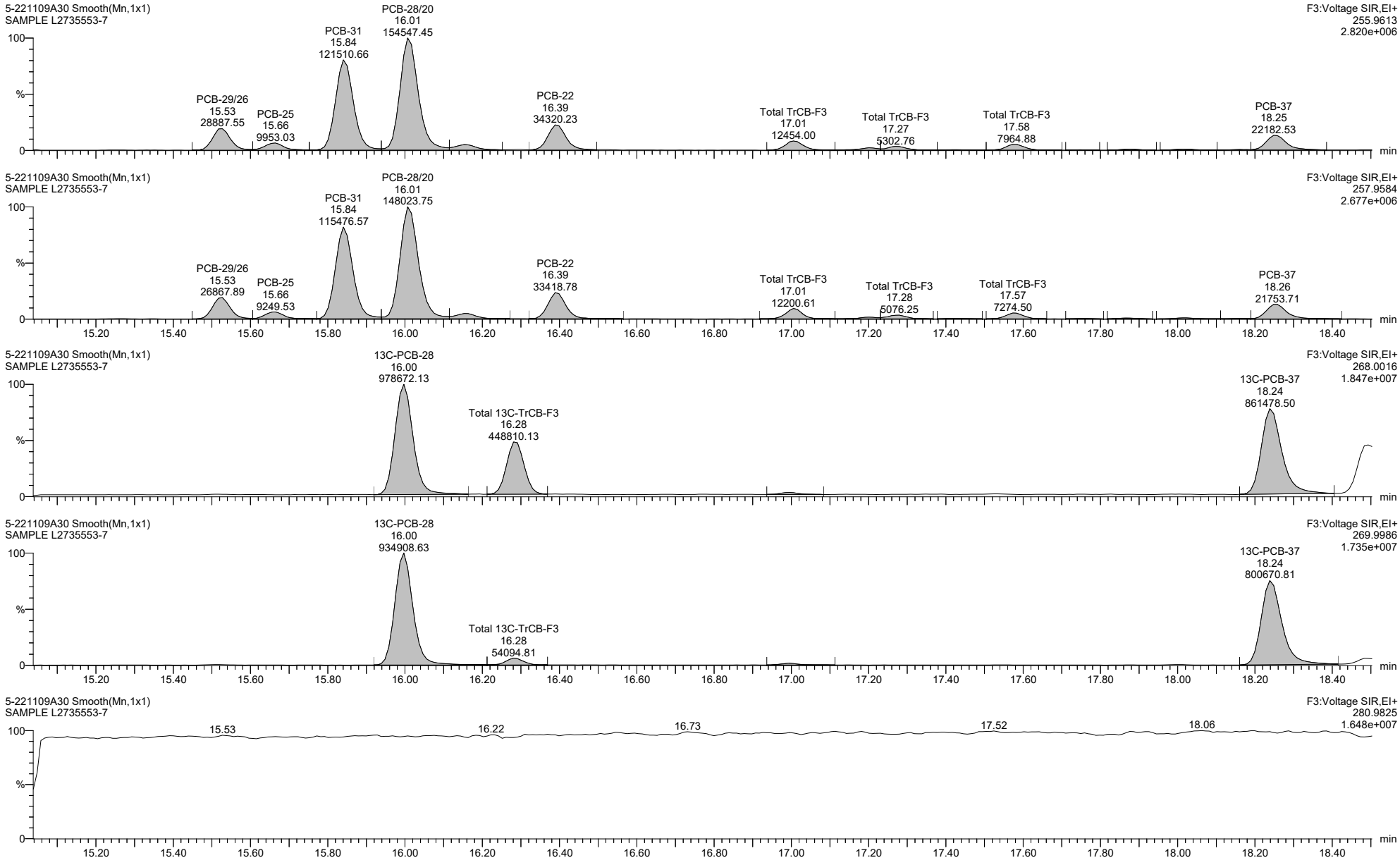
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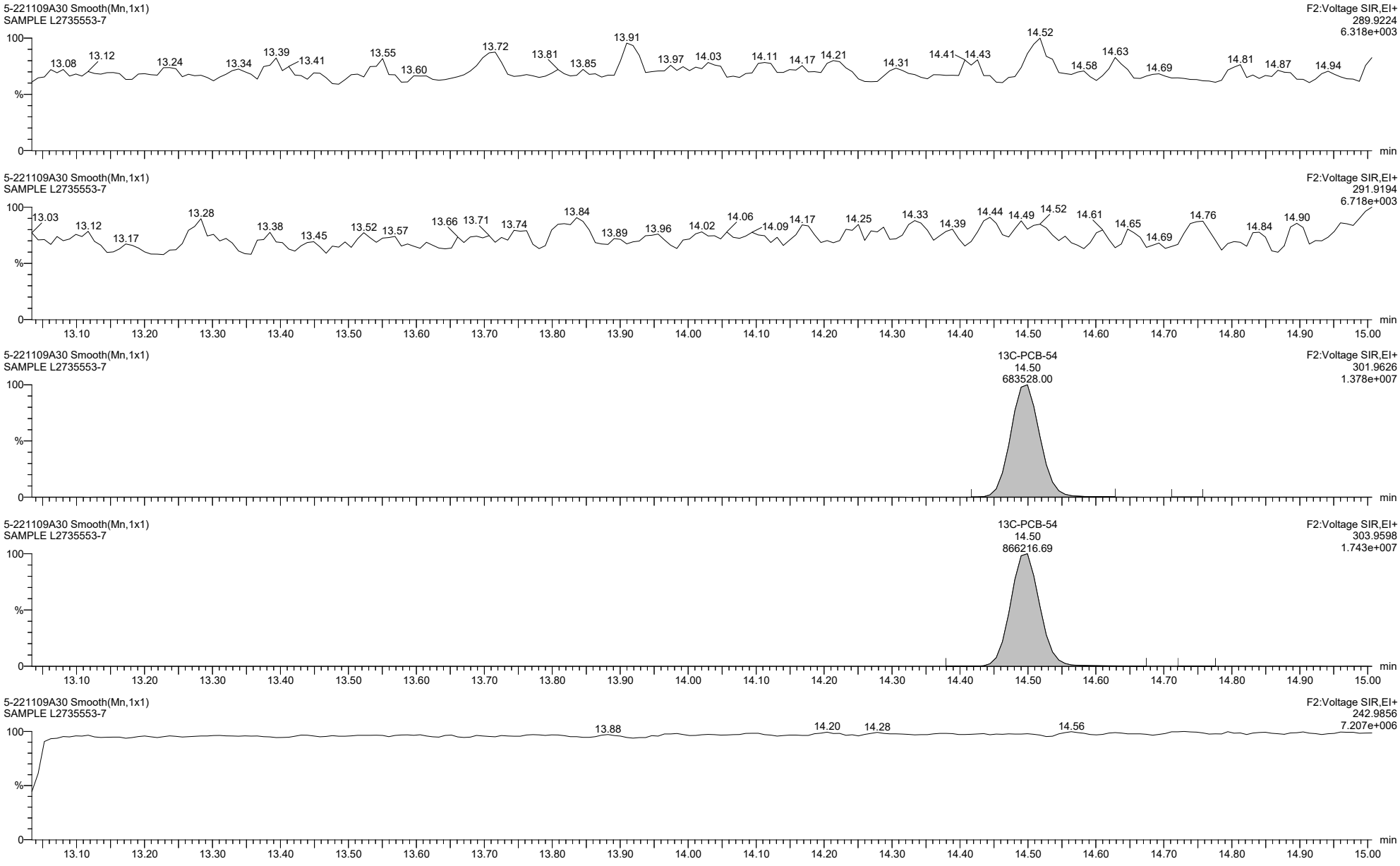


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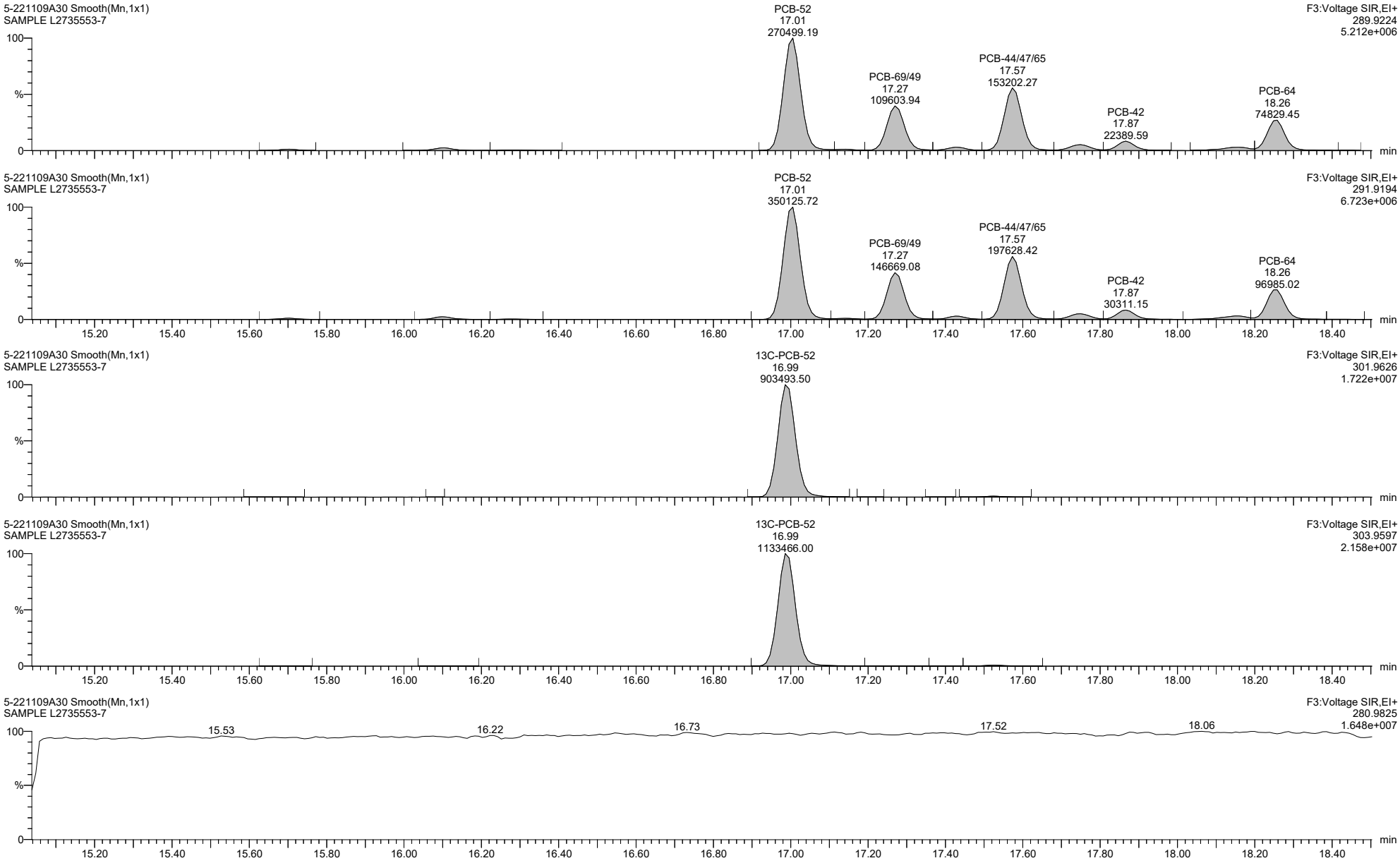
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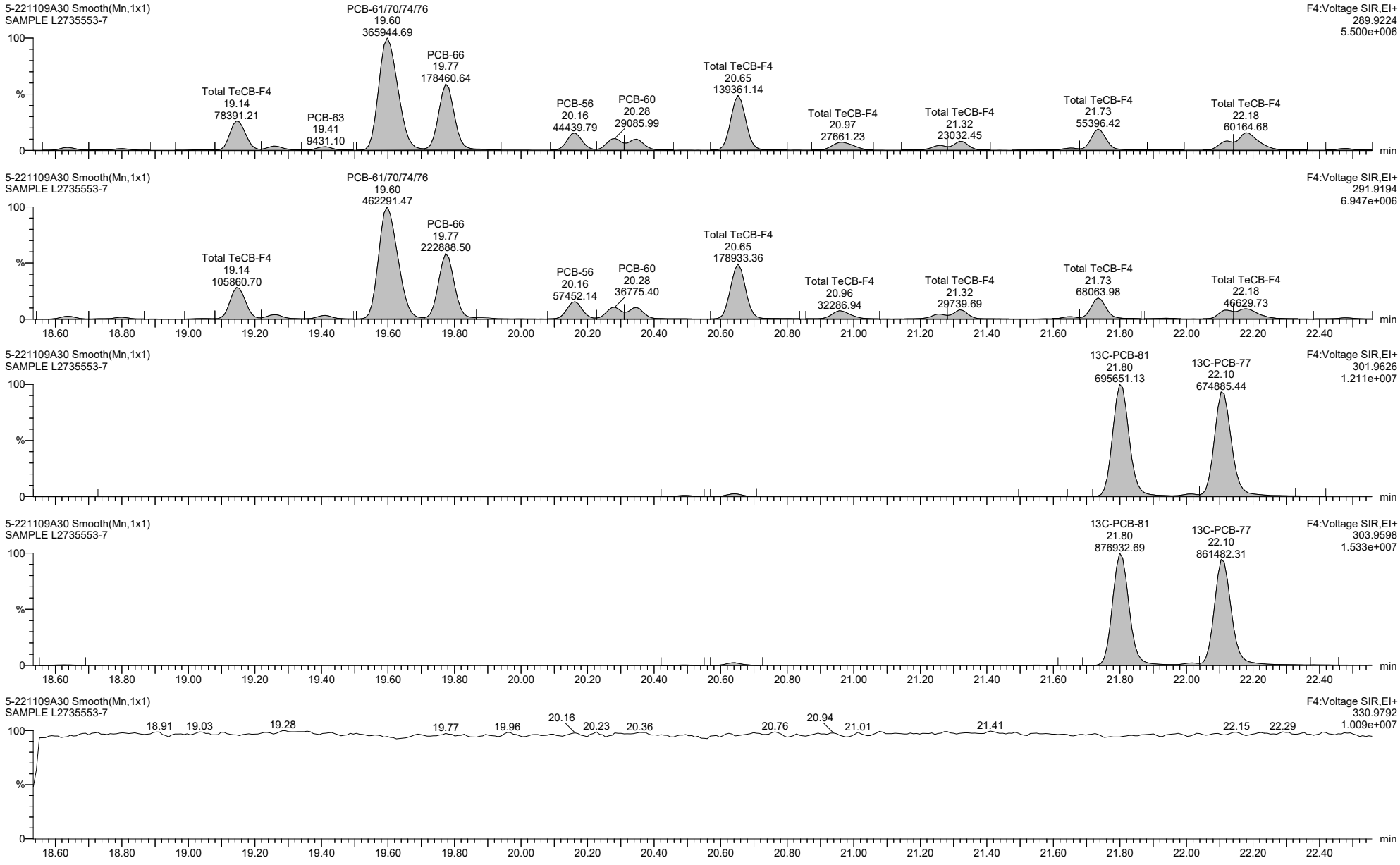
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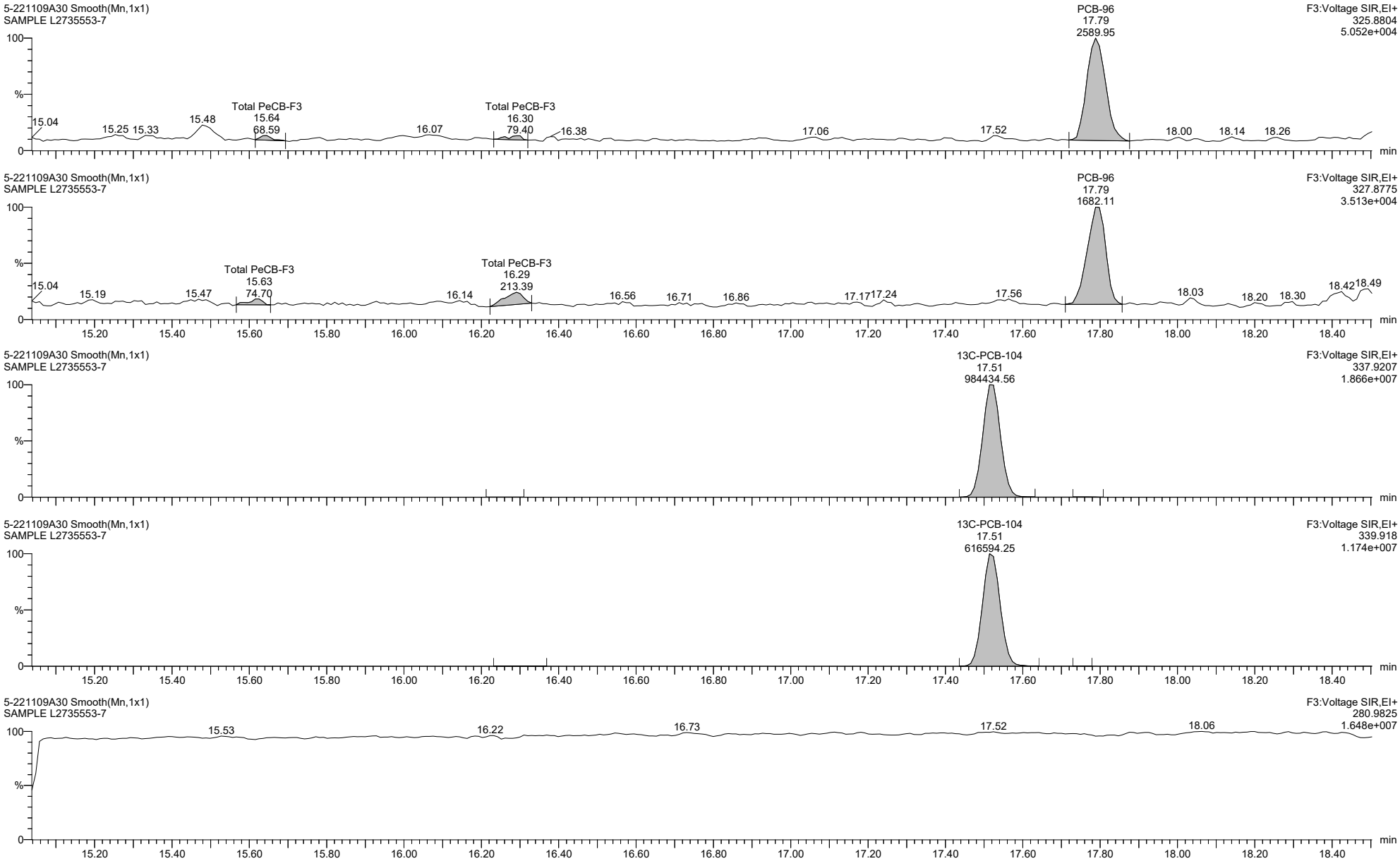


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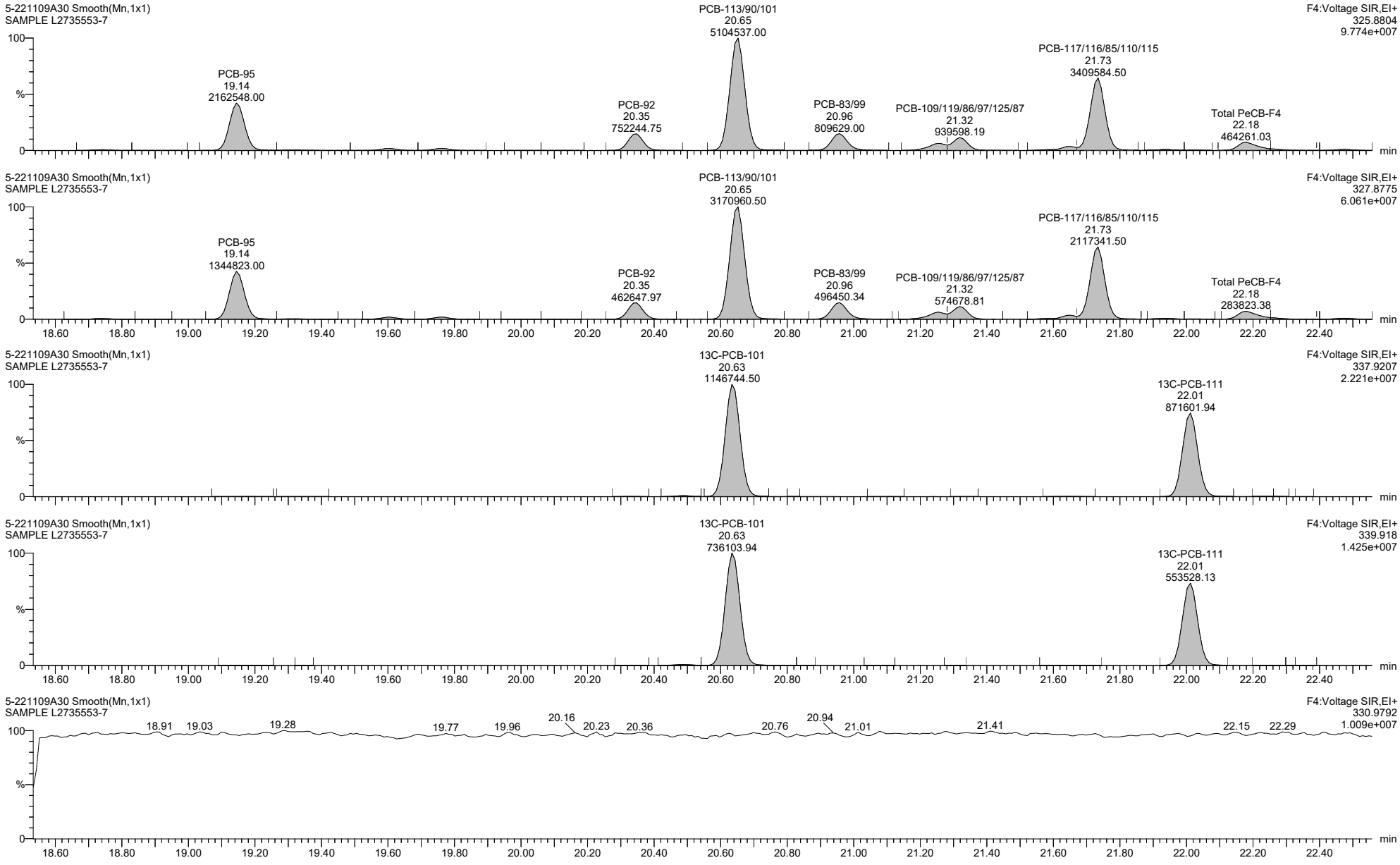
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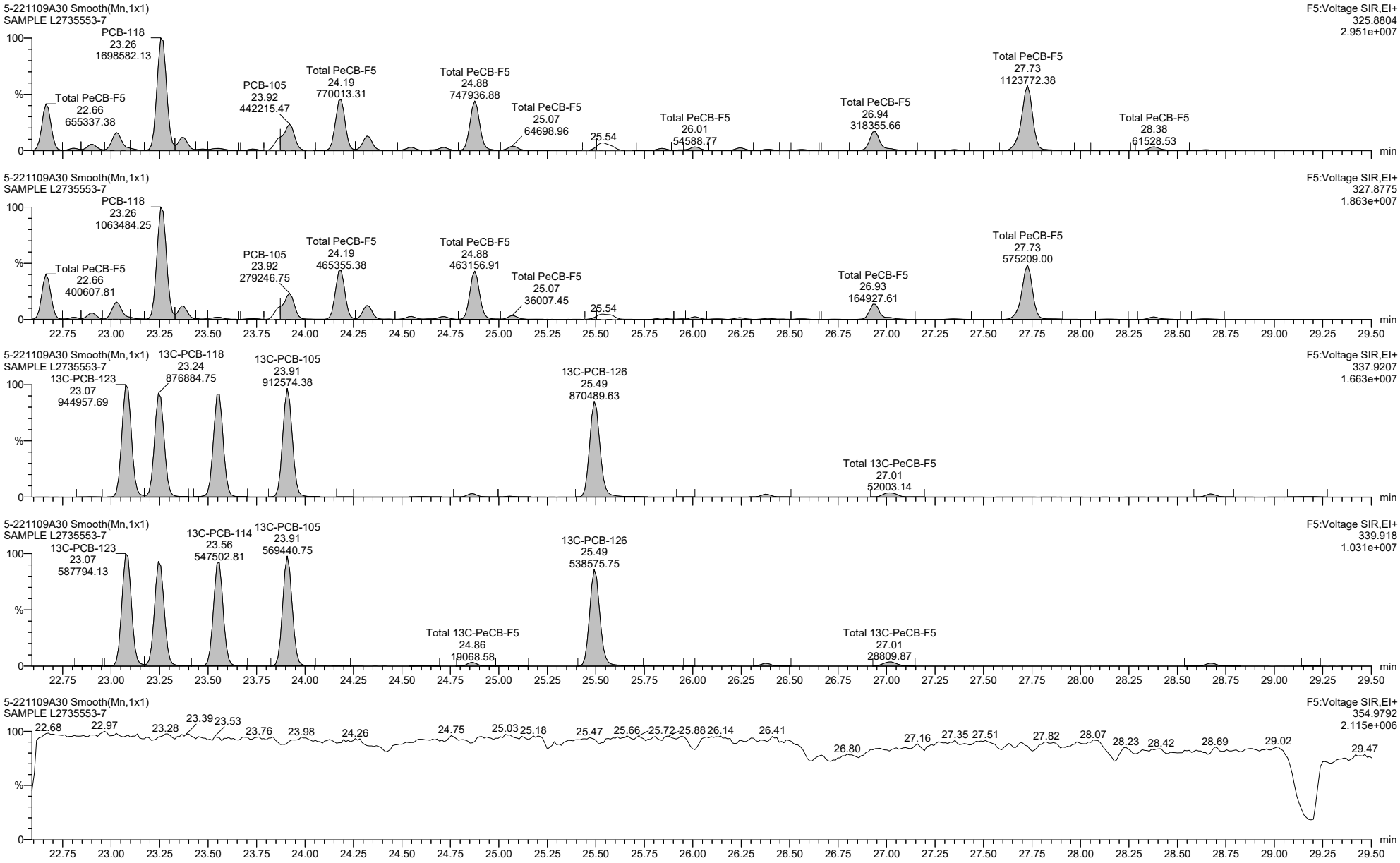


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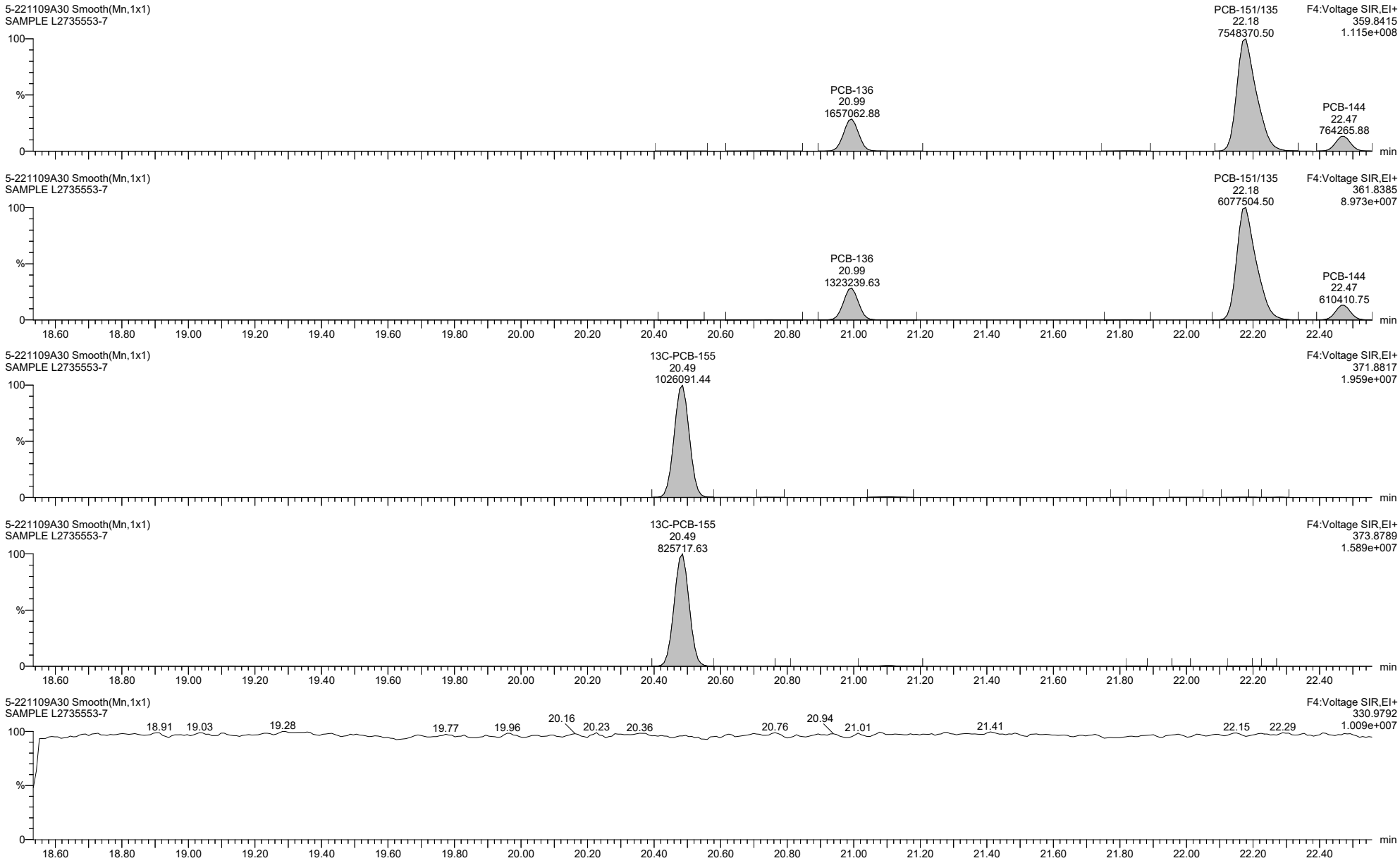
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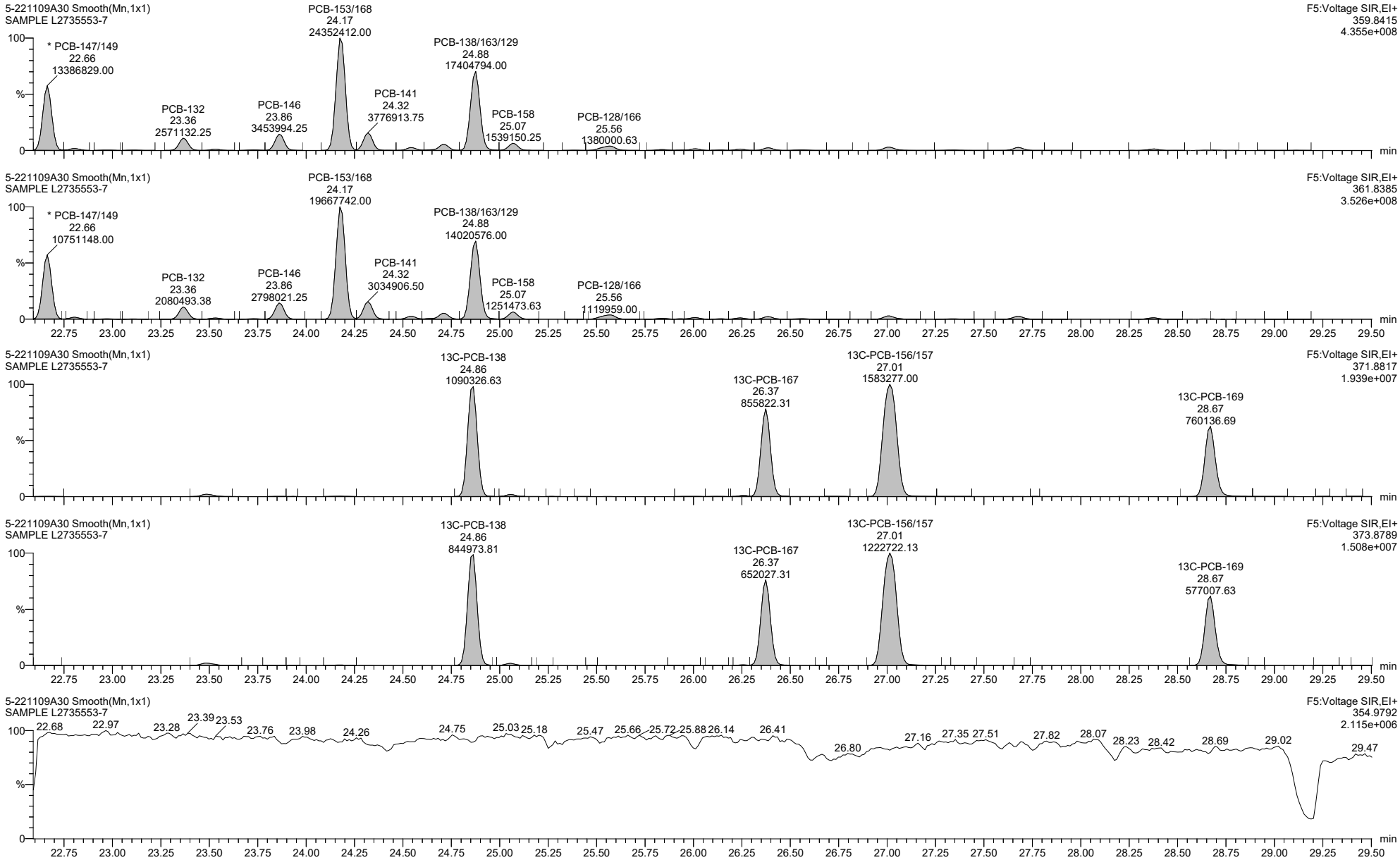


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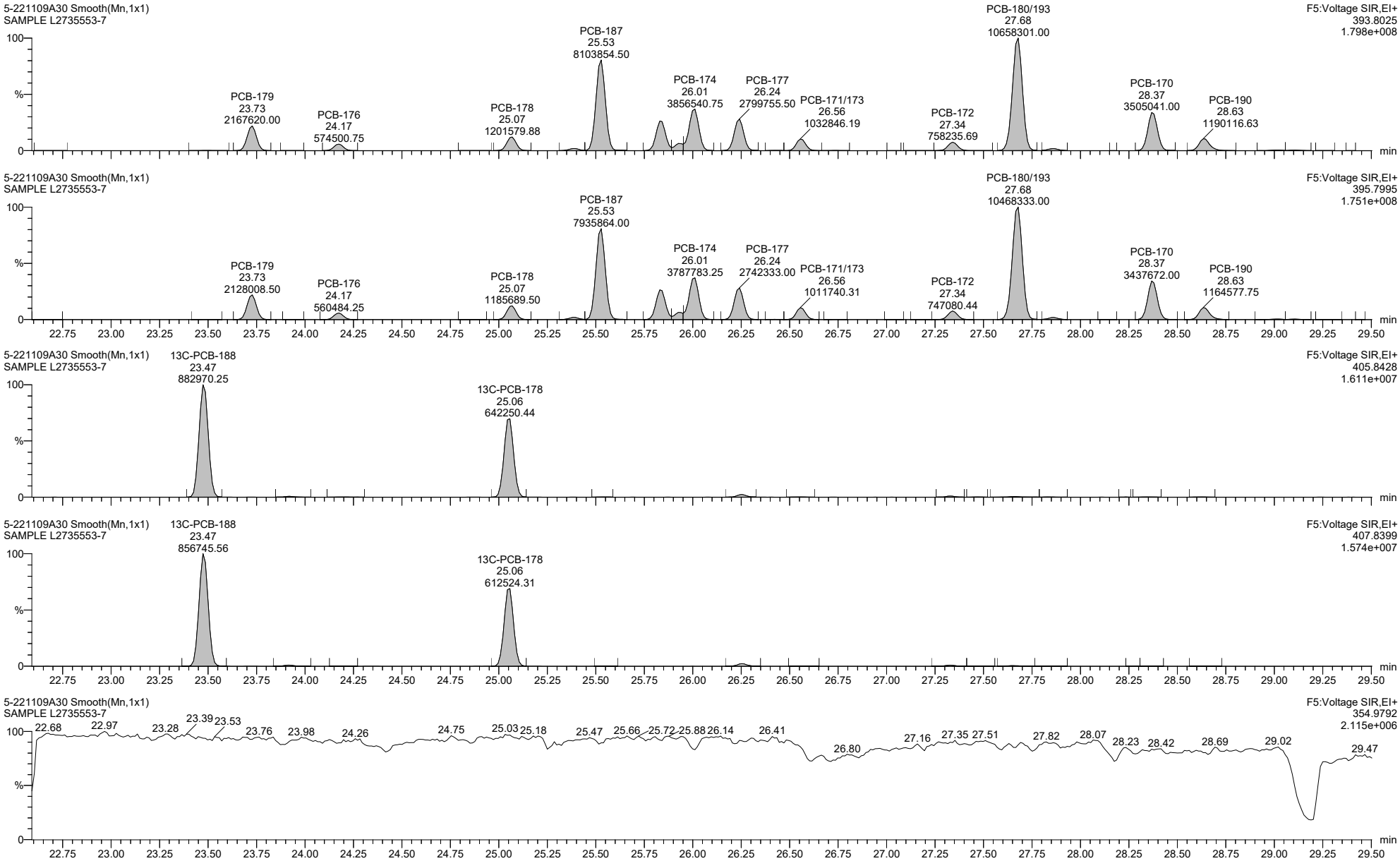


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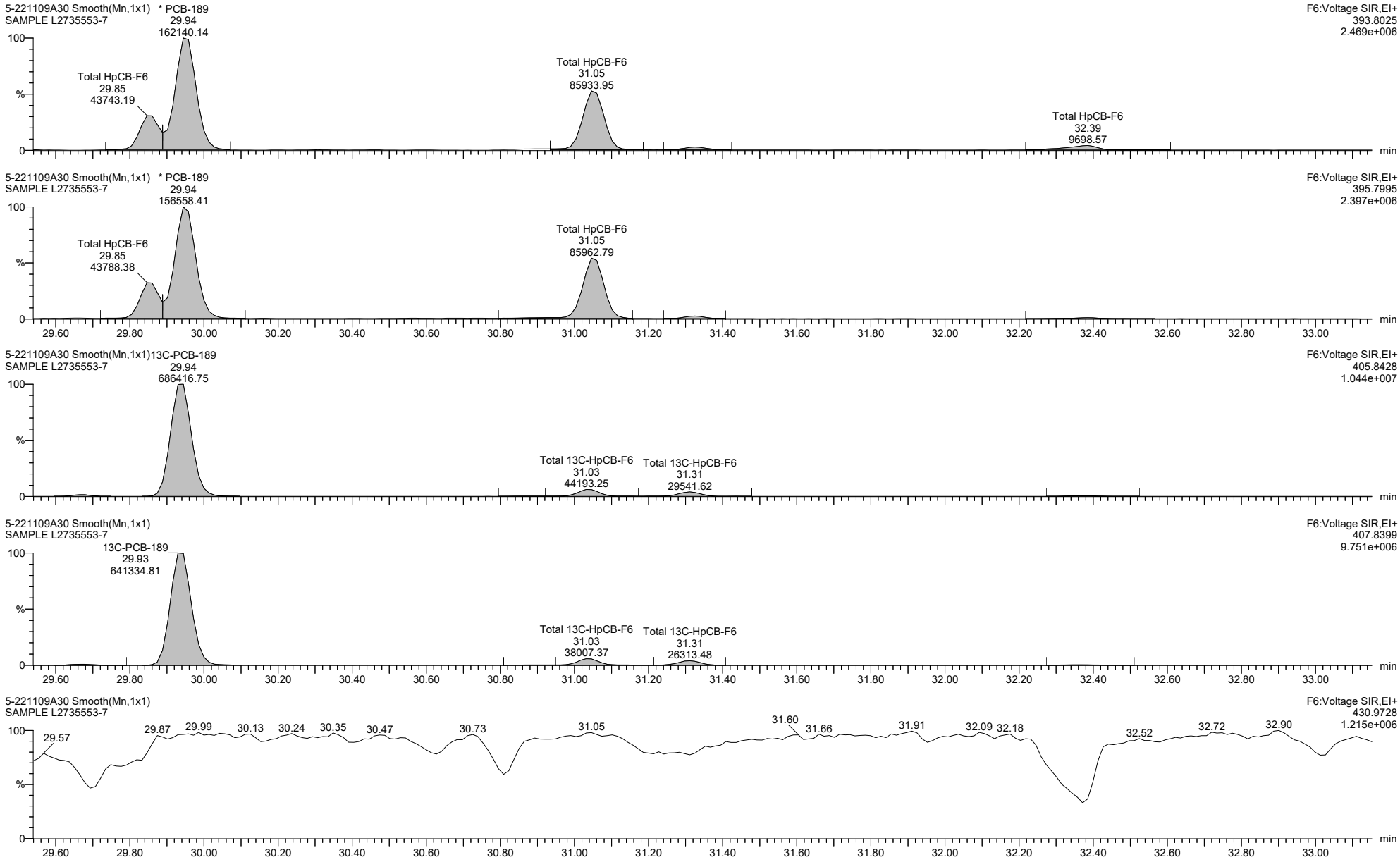


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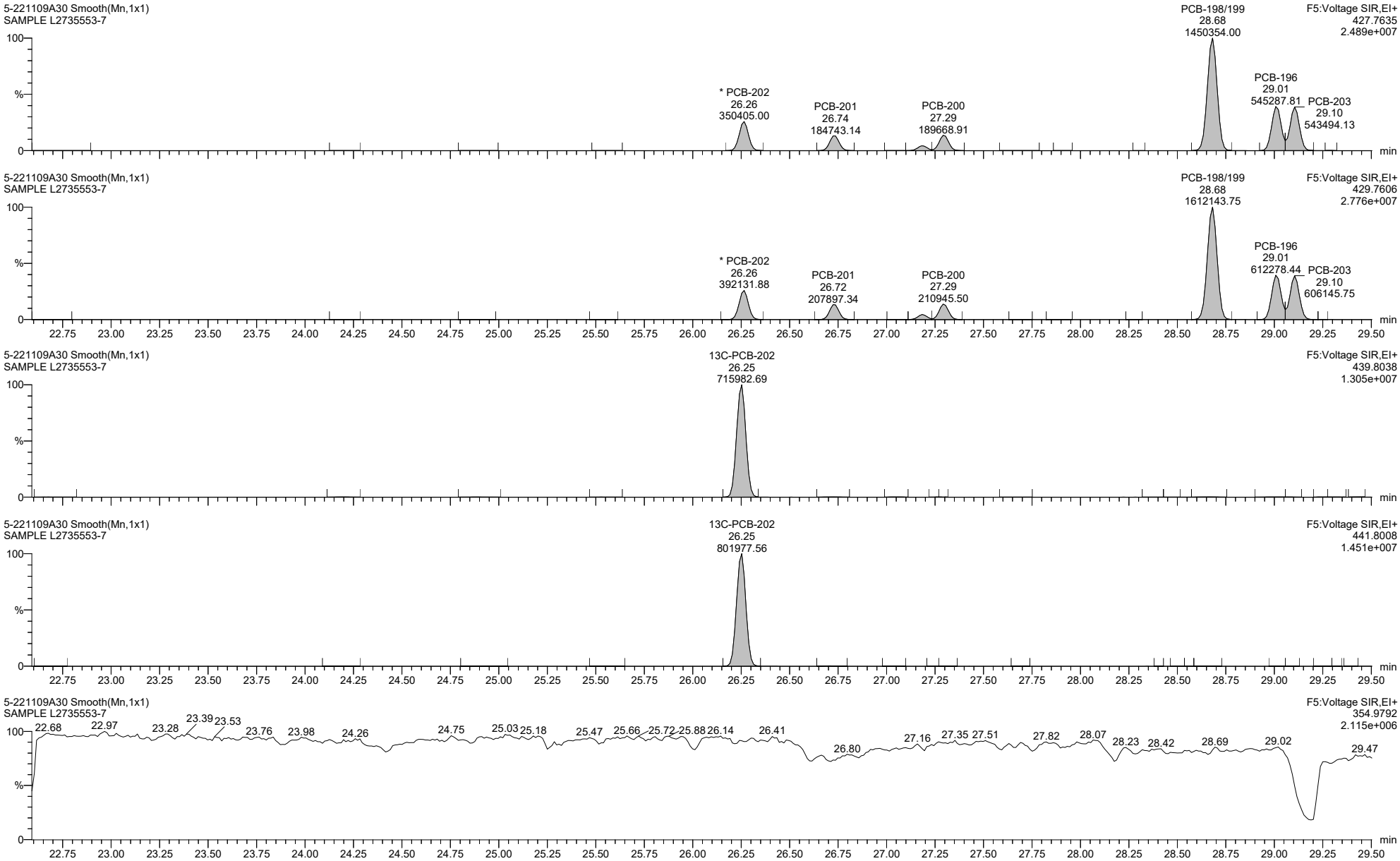
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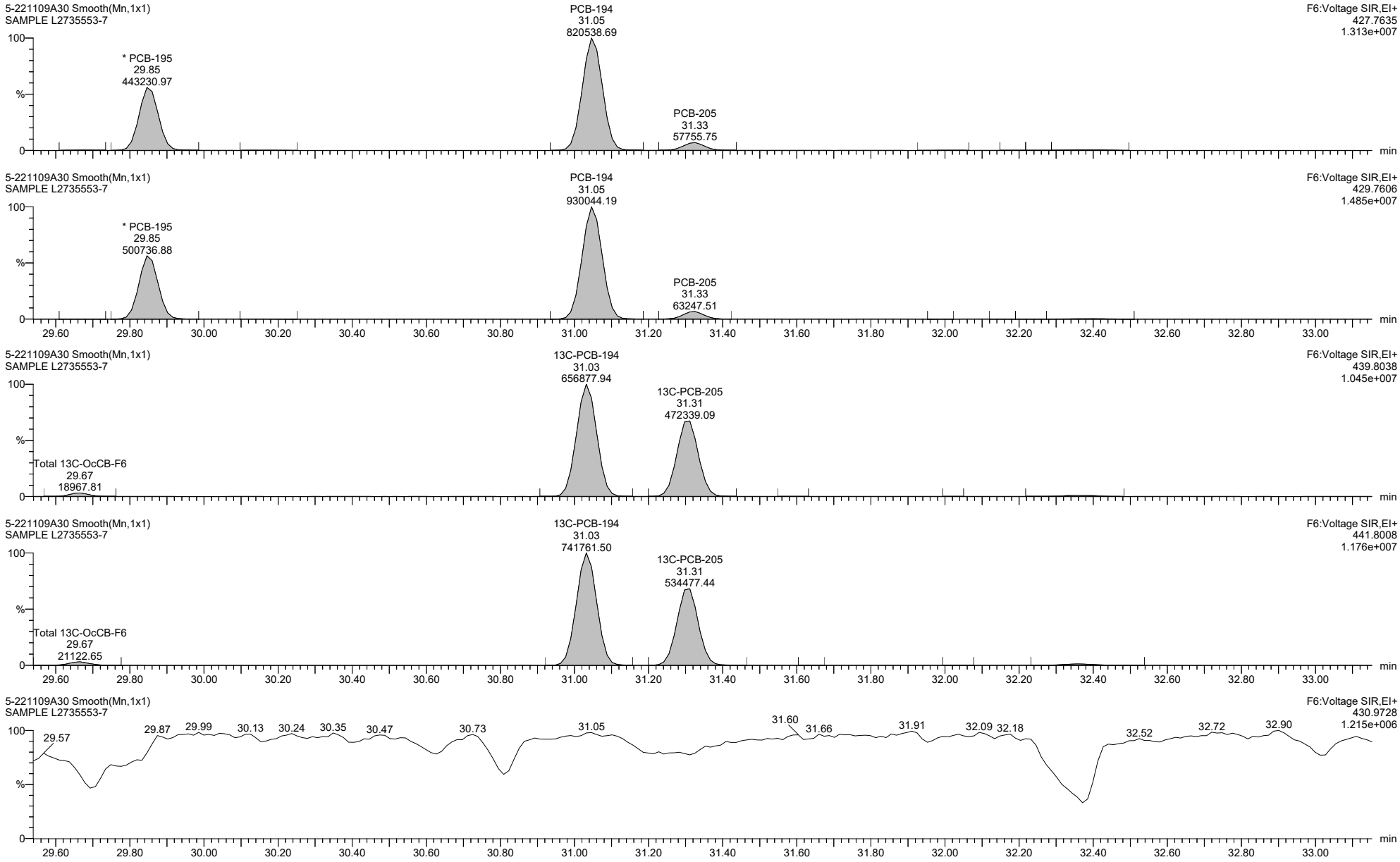


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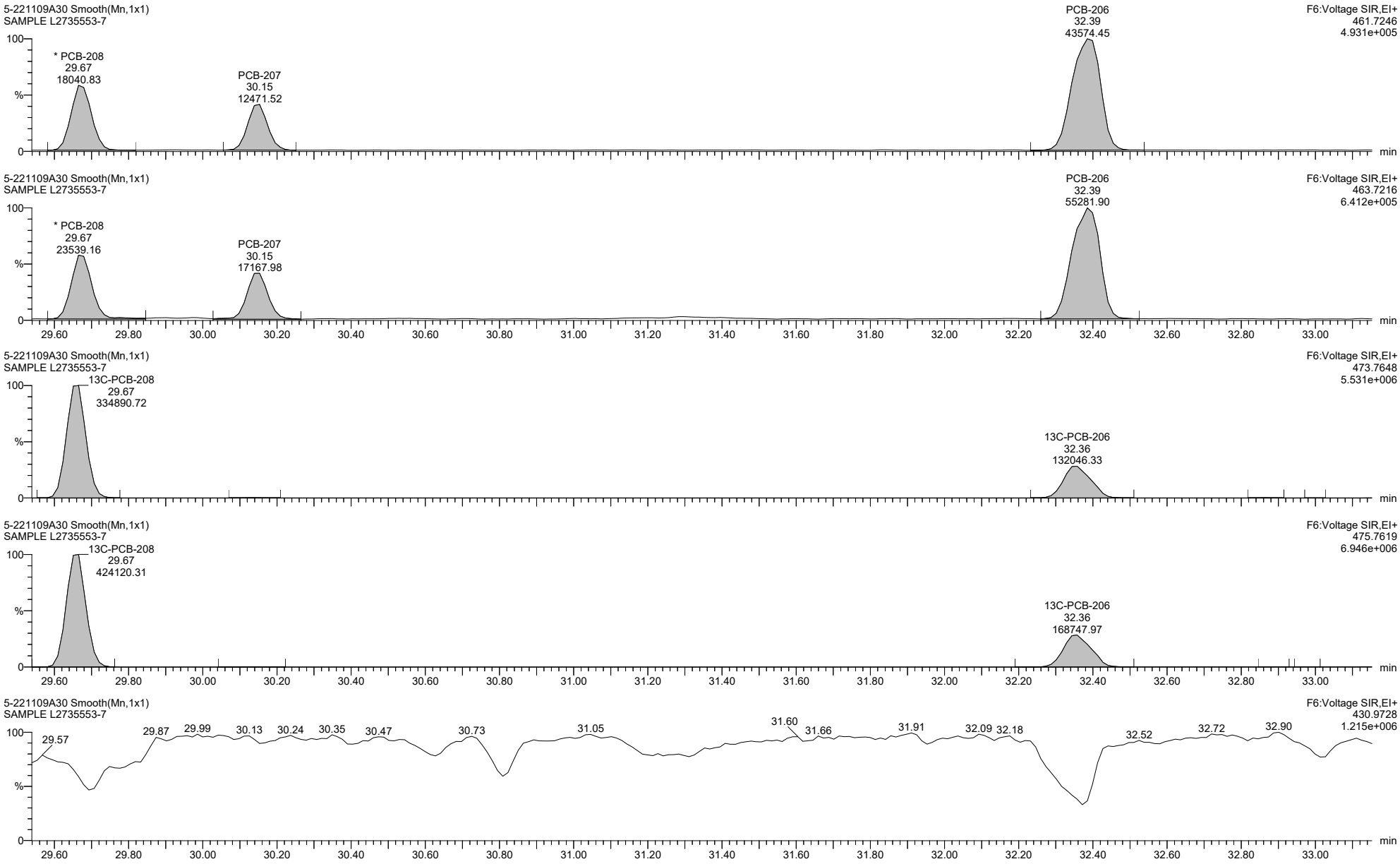


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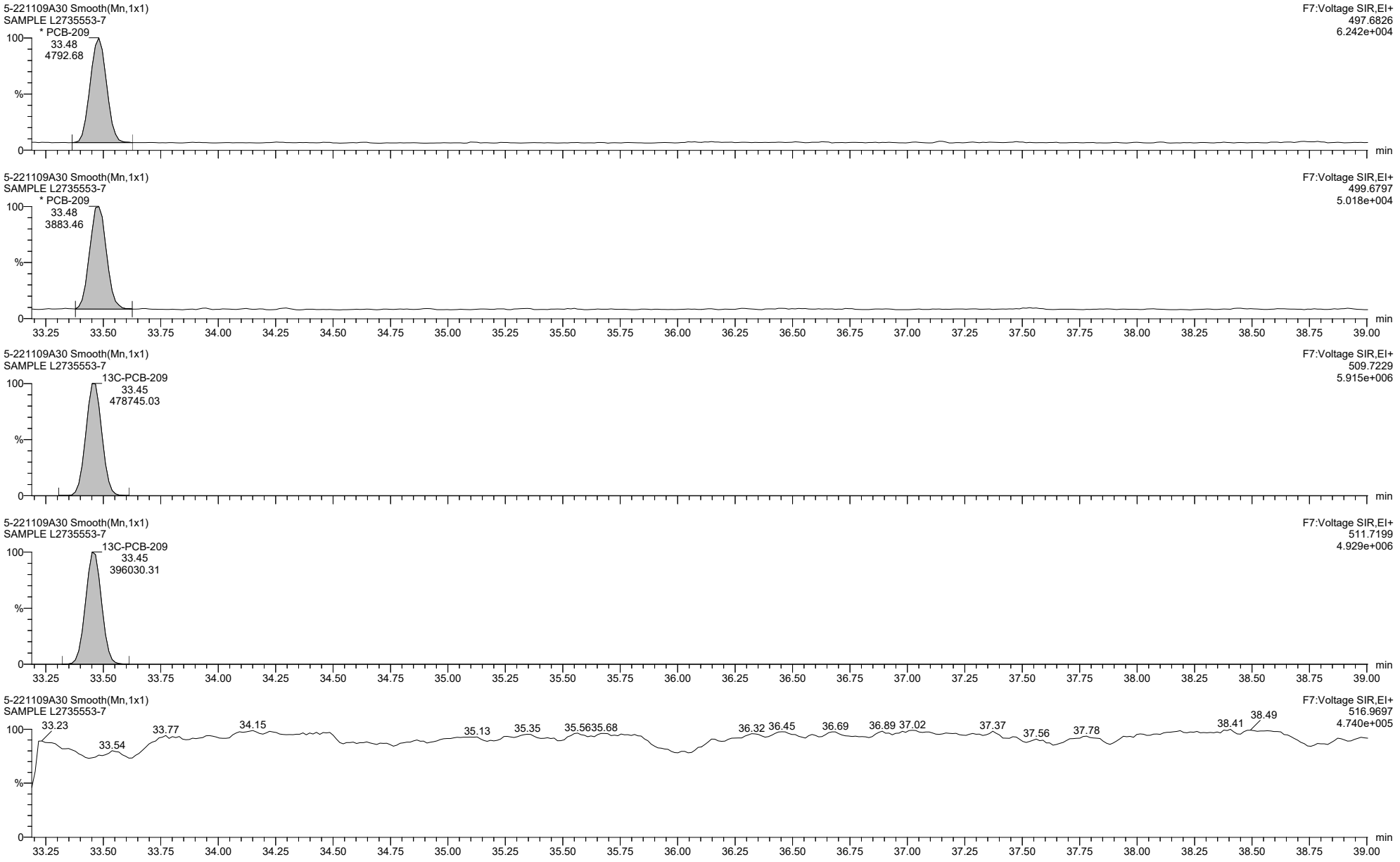


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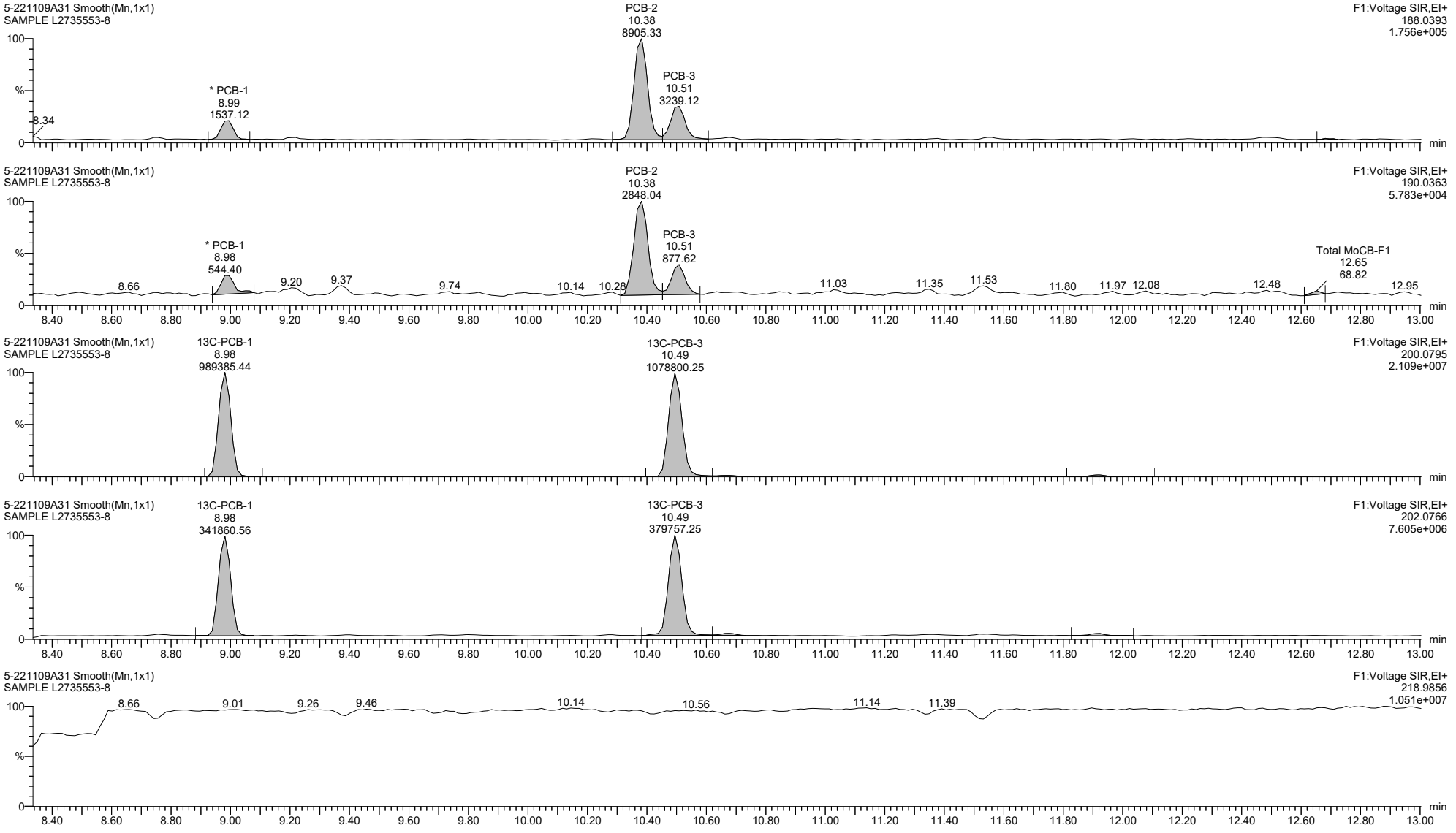
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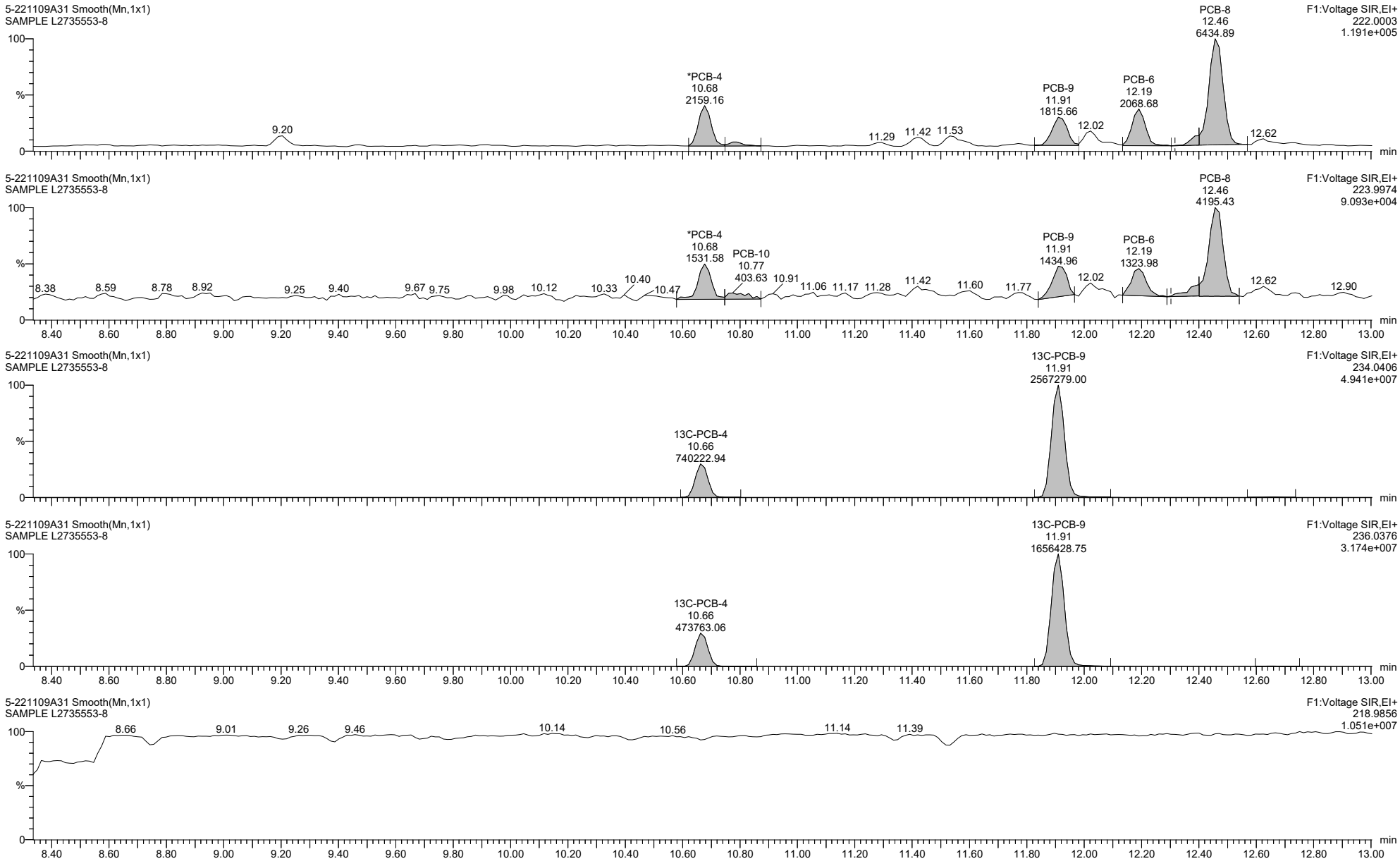
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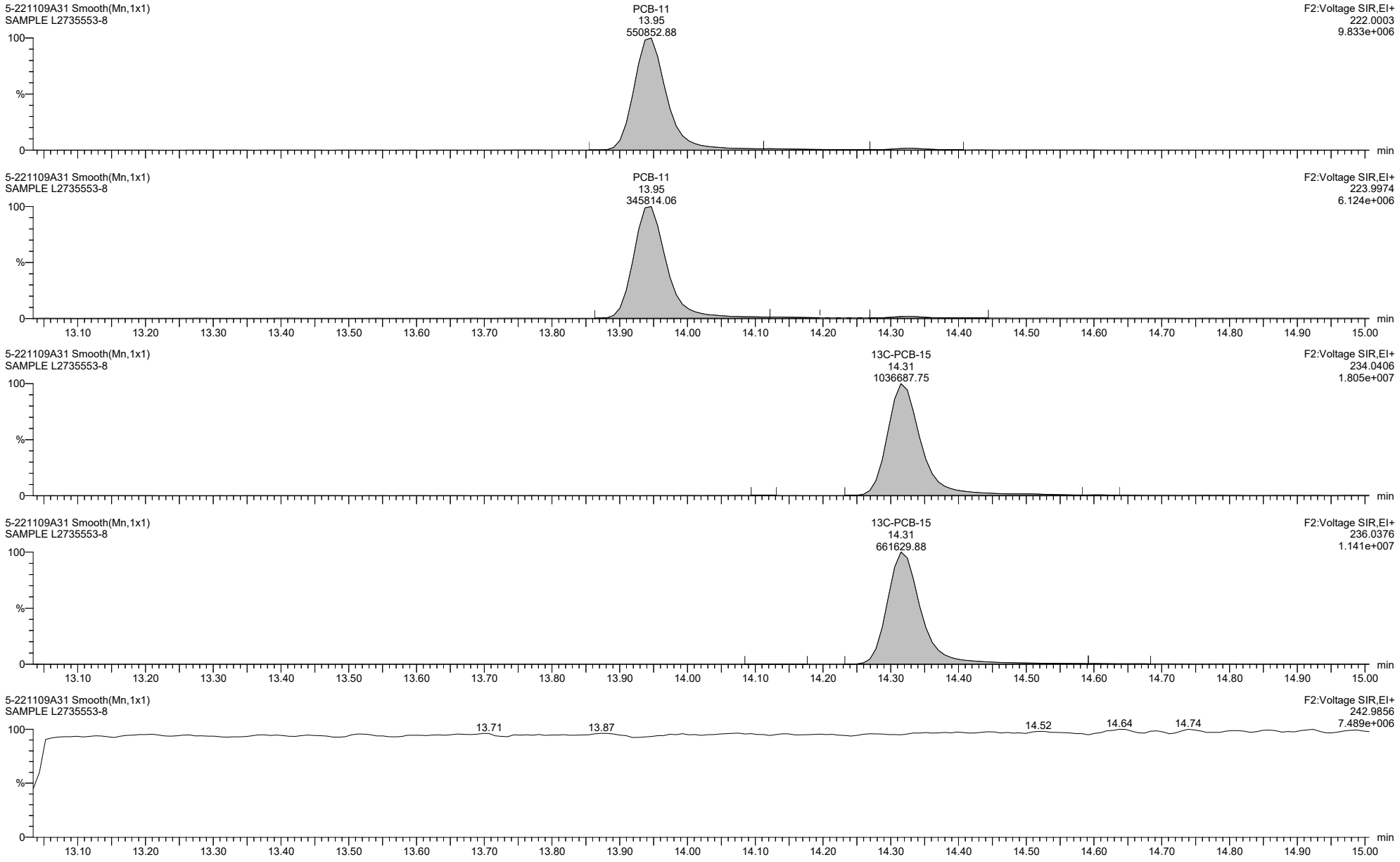
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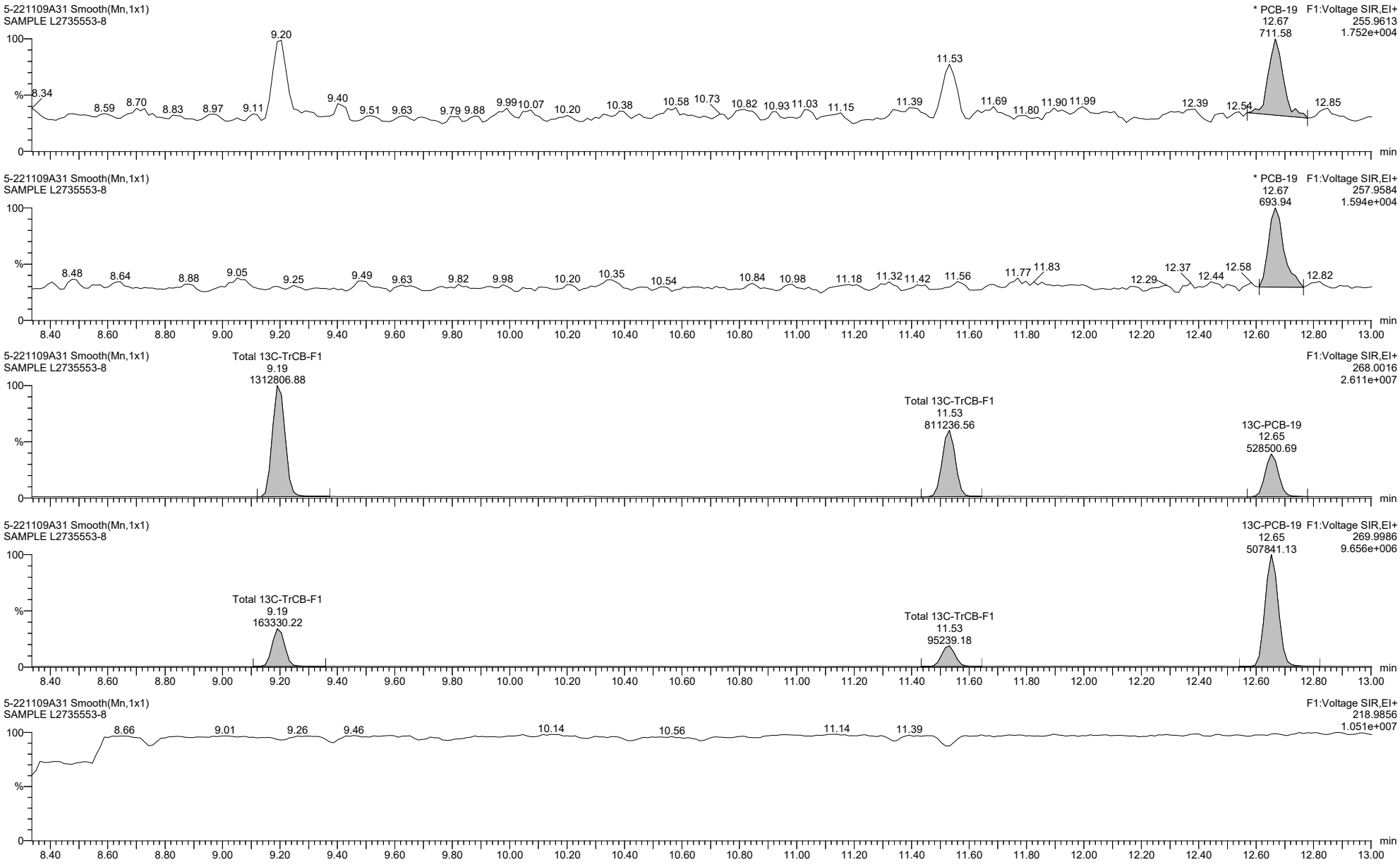


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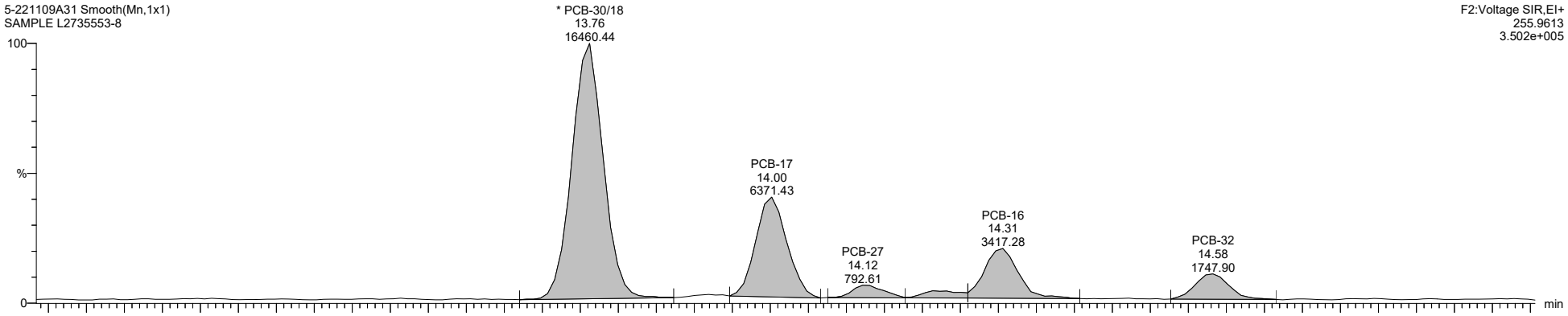


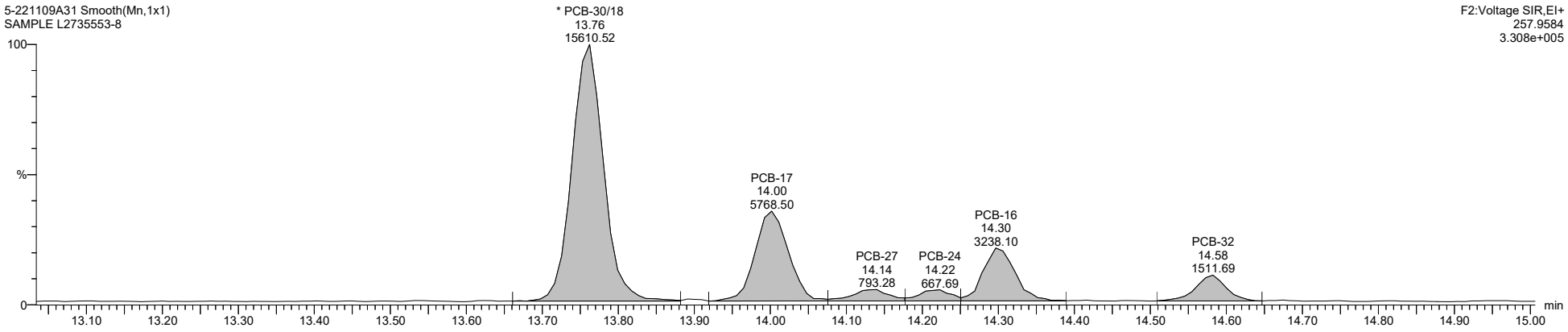
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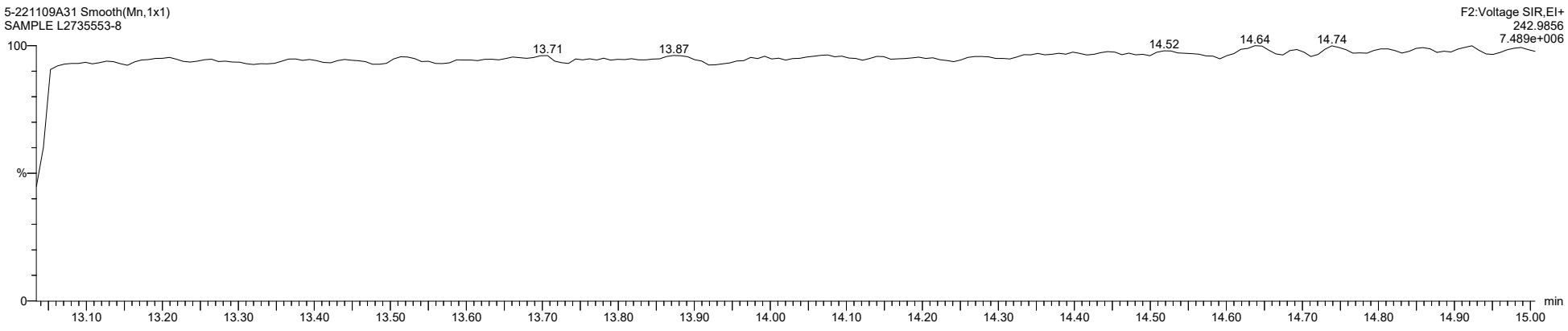
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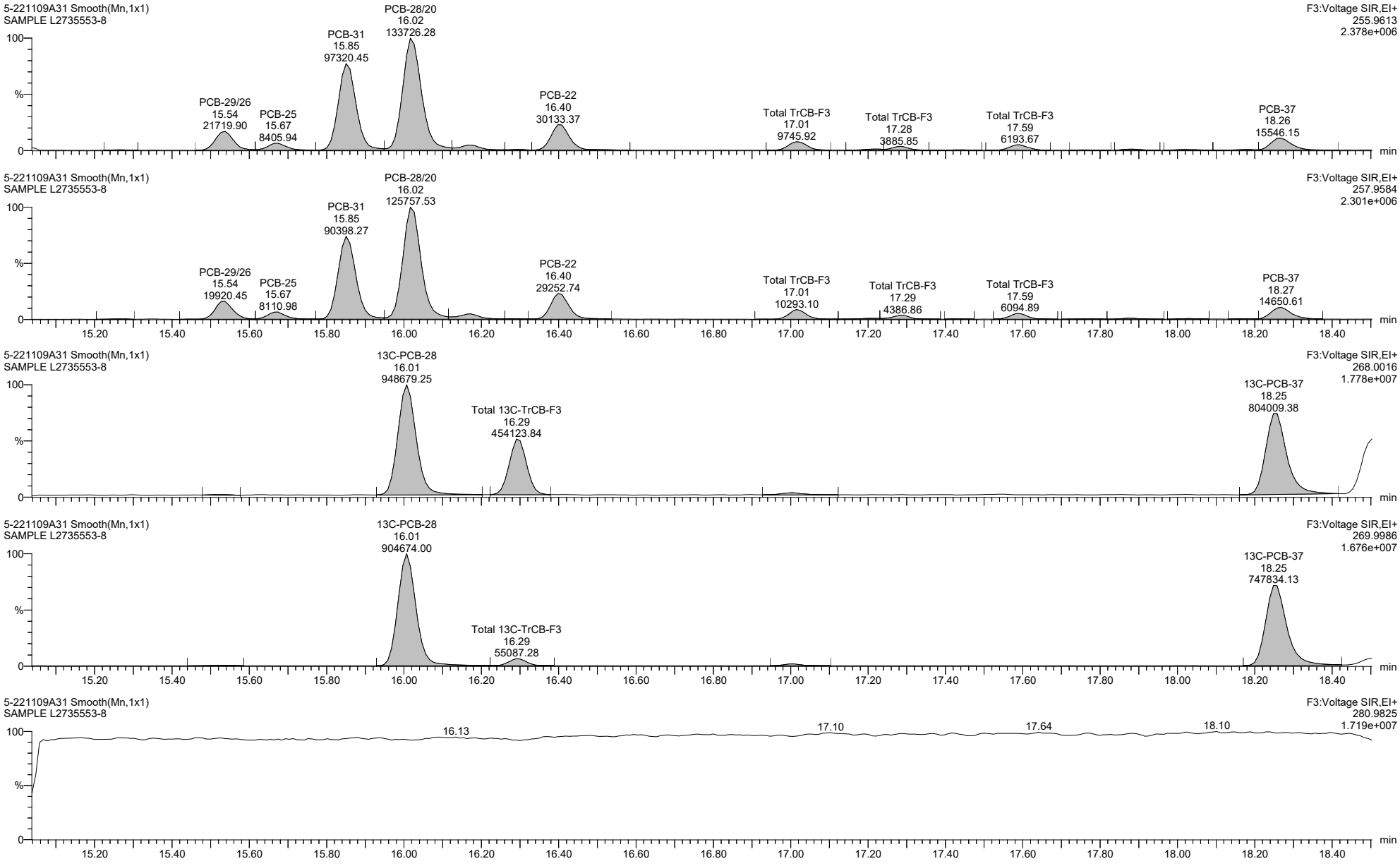


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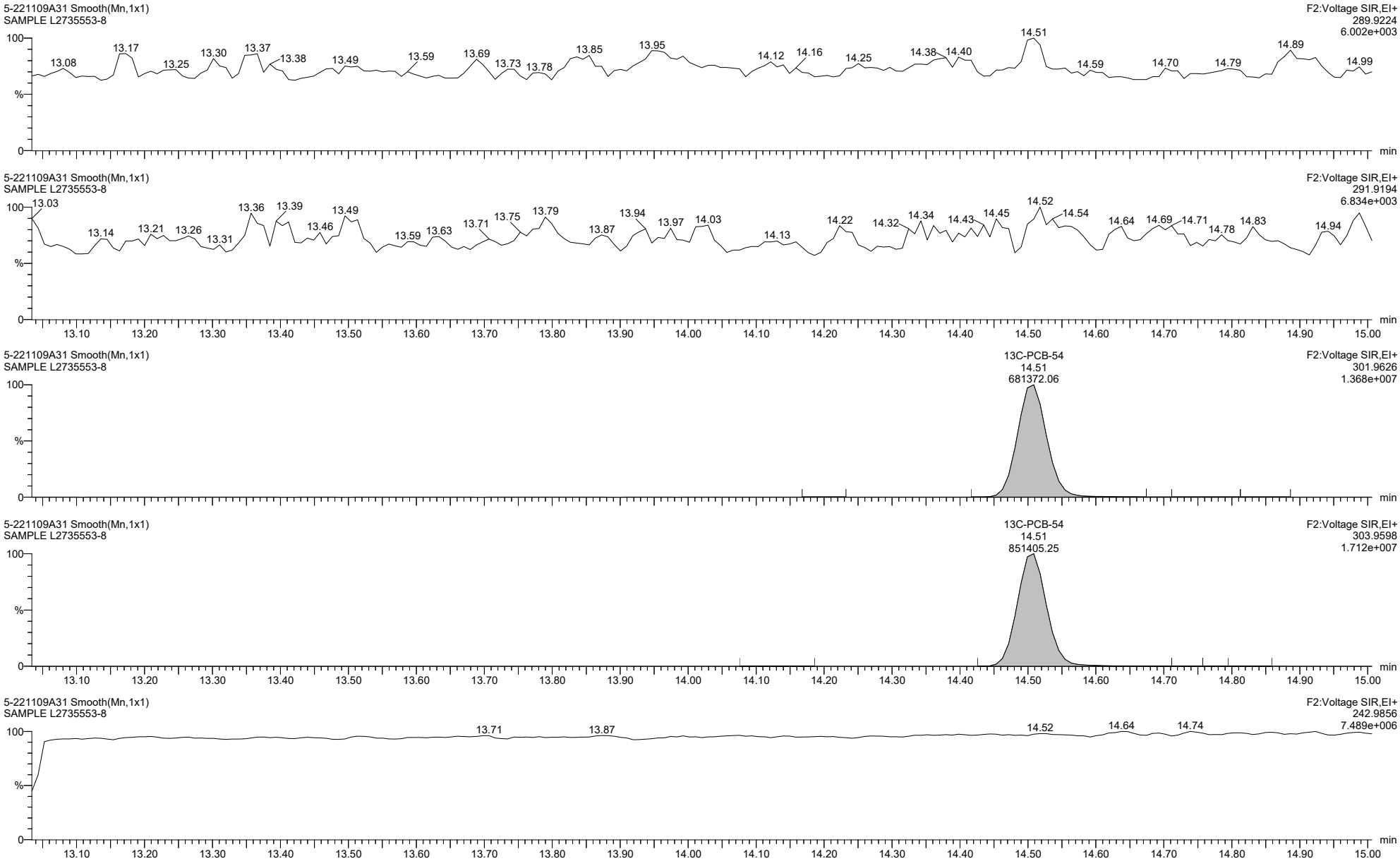


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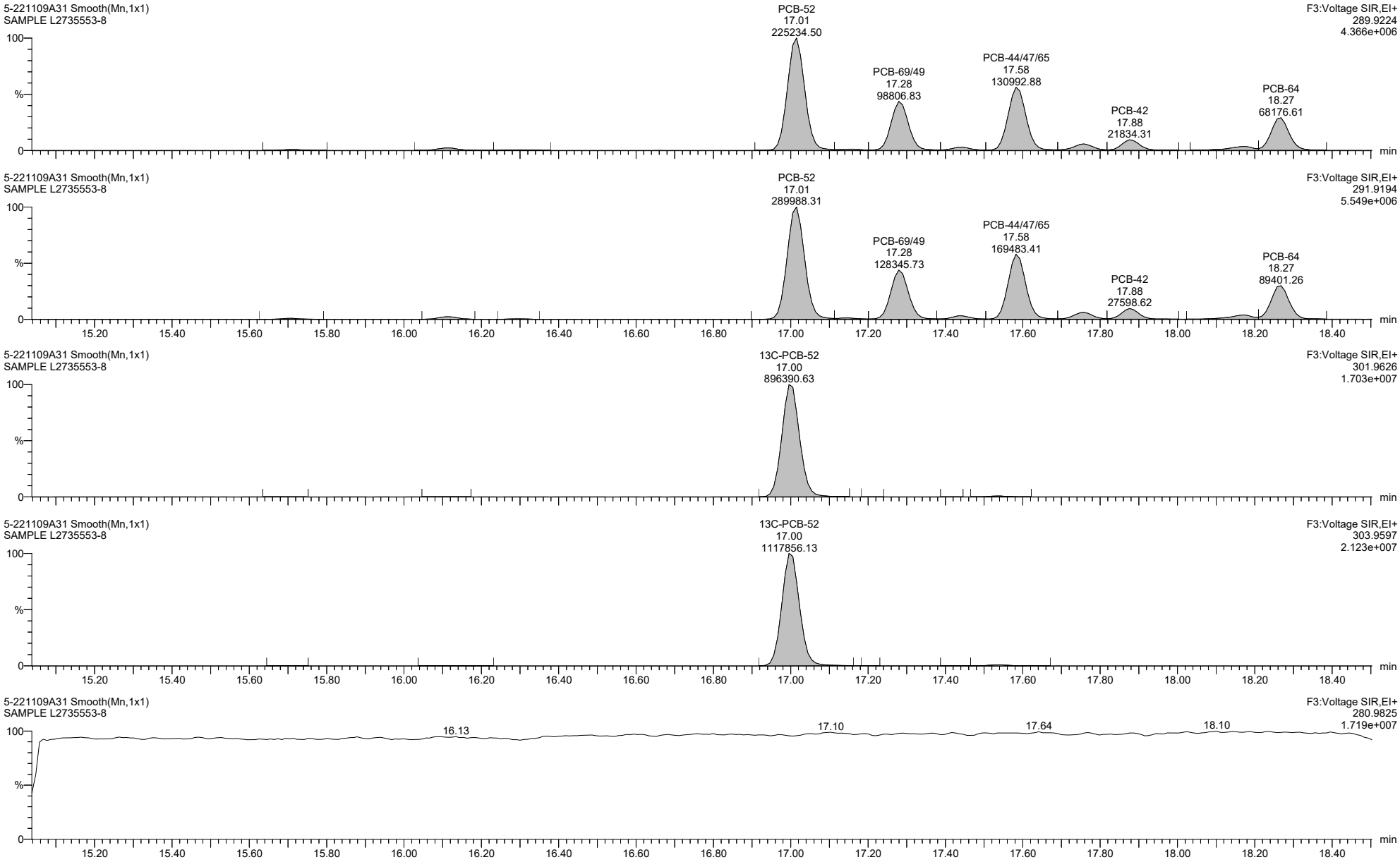


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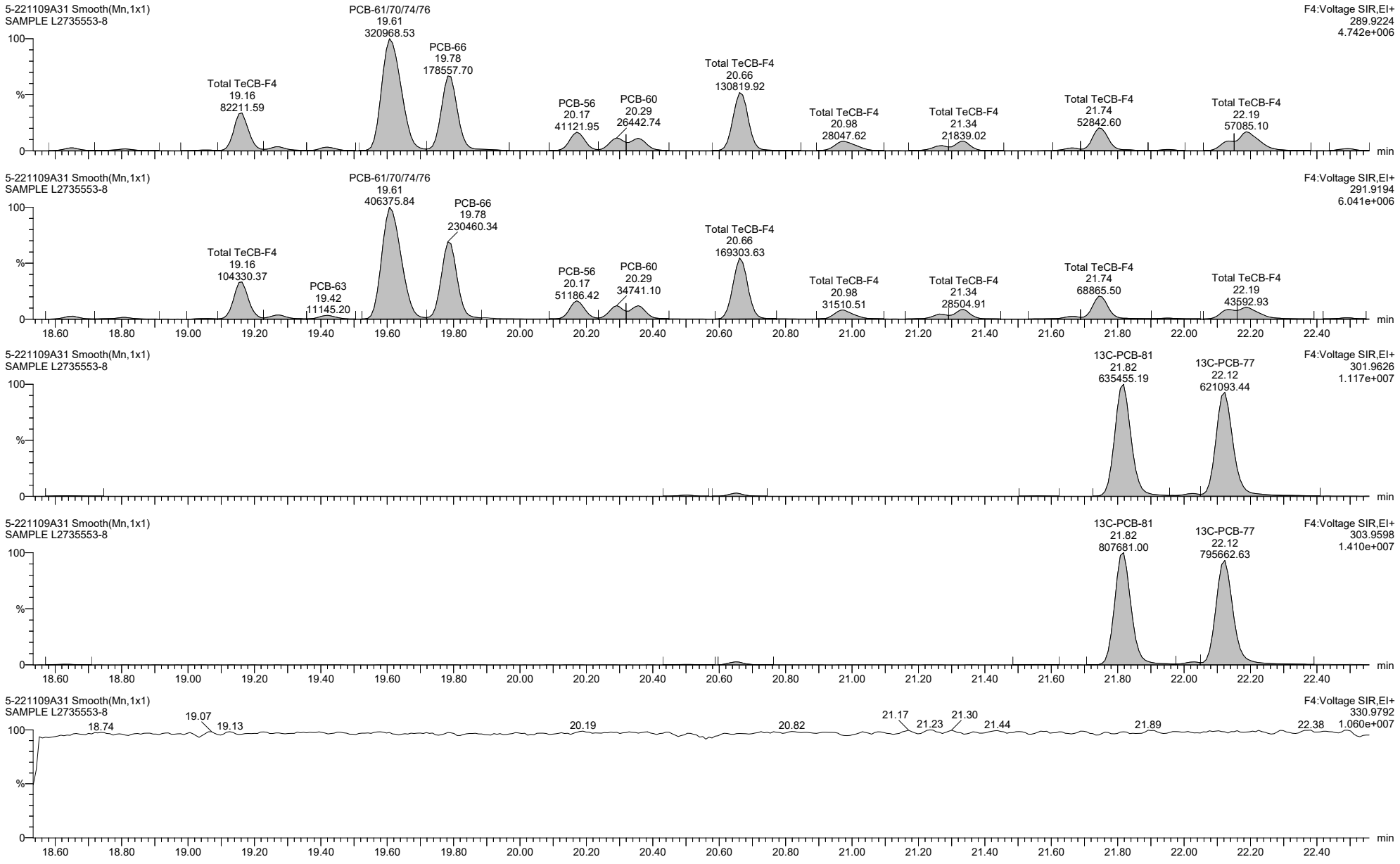
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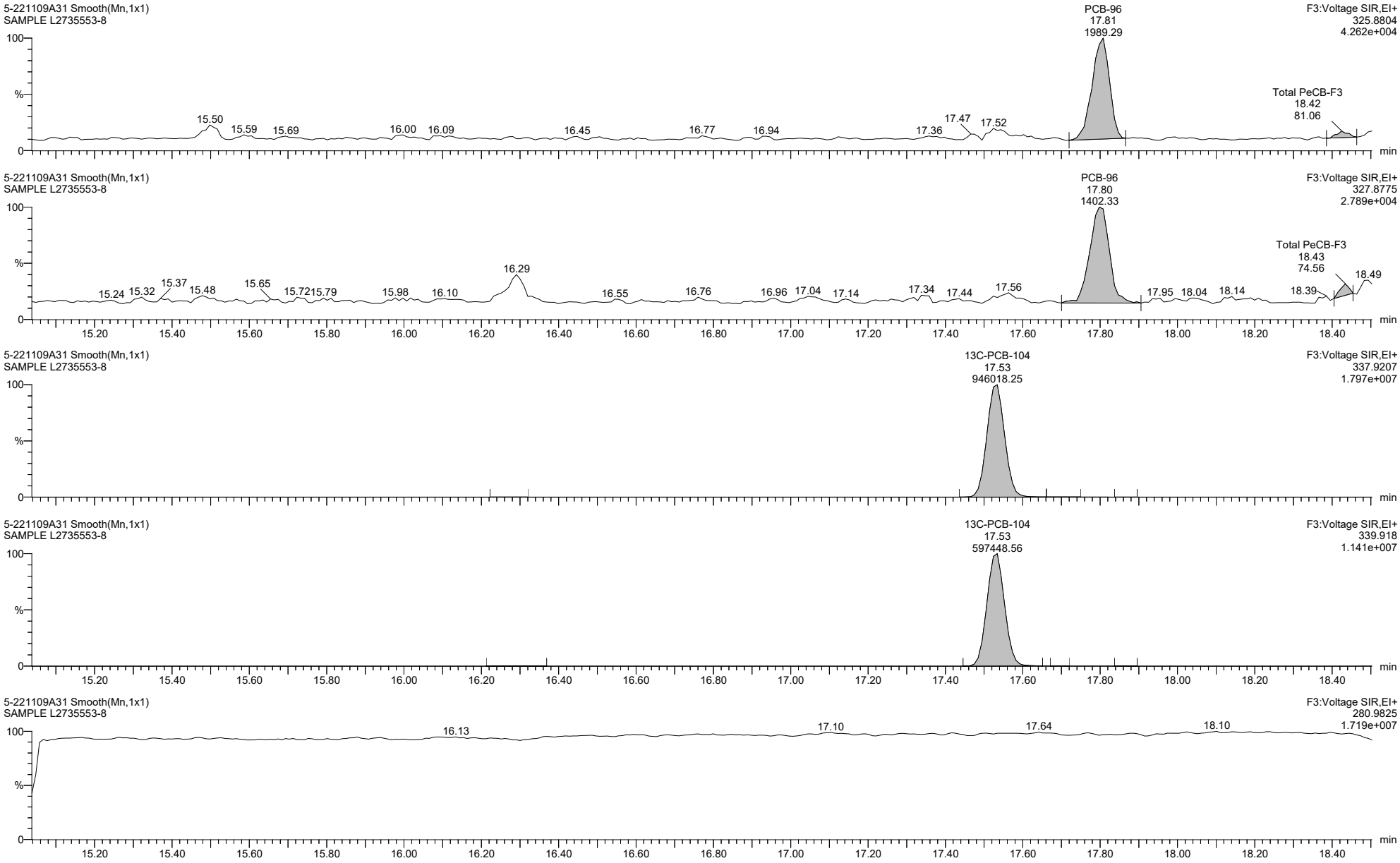


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-5\5-221109A2-1117AK.qld

Last Altered: Thursday, November 17, 2022 12:03:54 Eastern Standard Time
Printed: Wednesday, November 23, 2022 18:29:11 Eastern Standard Time

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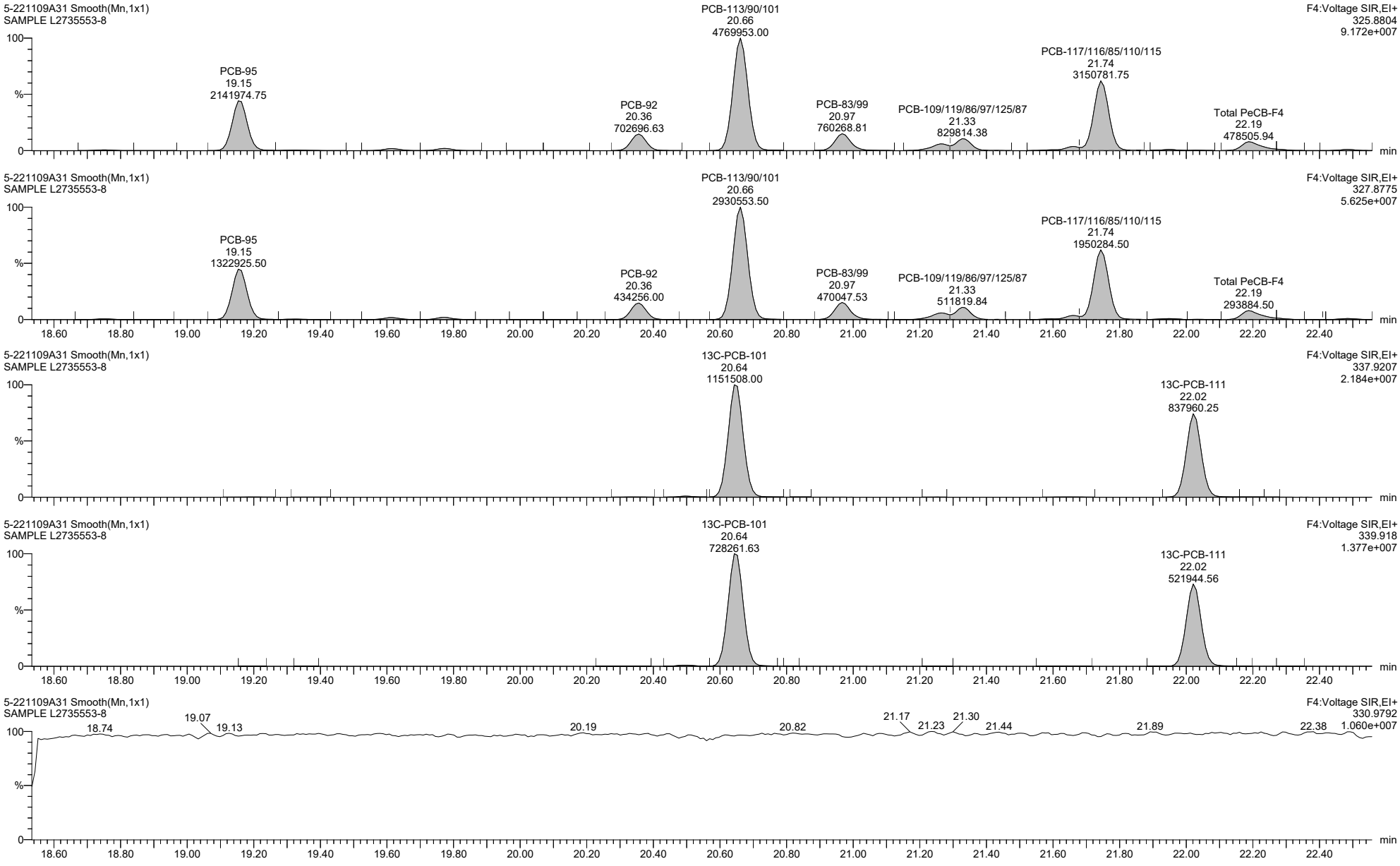


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

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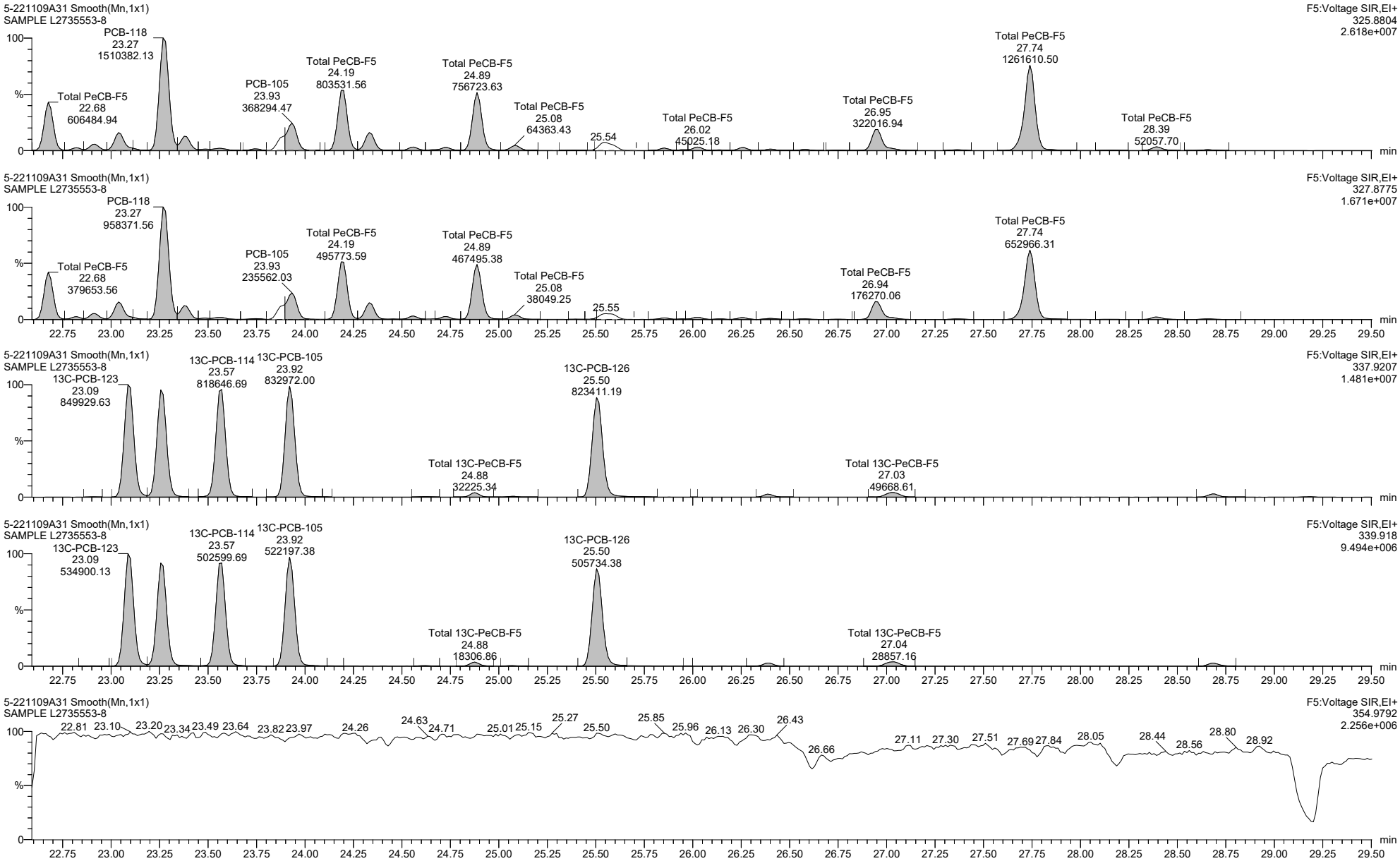


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

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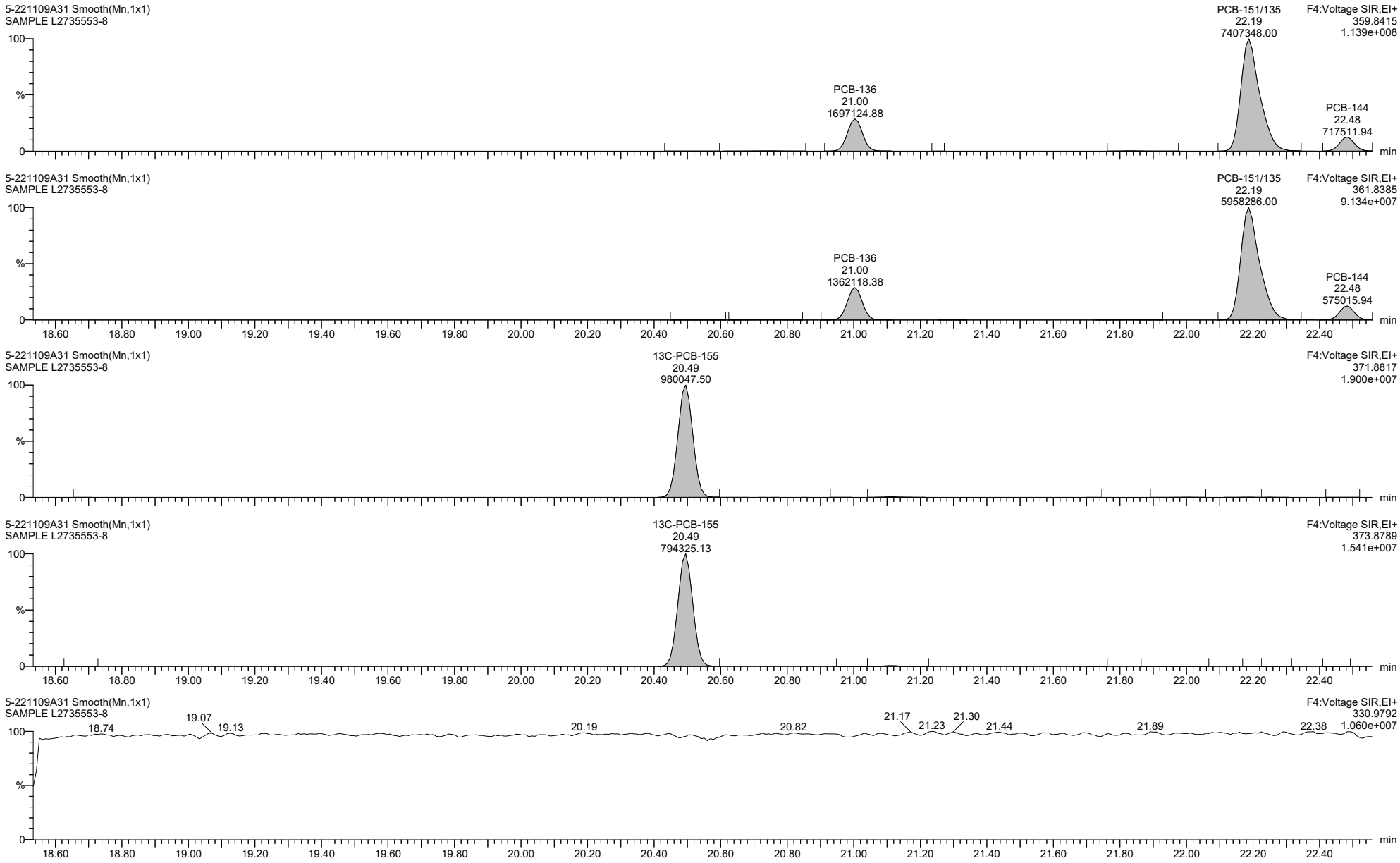
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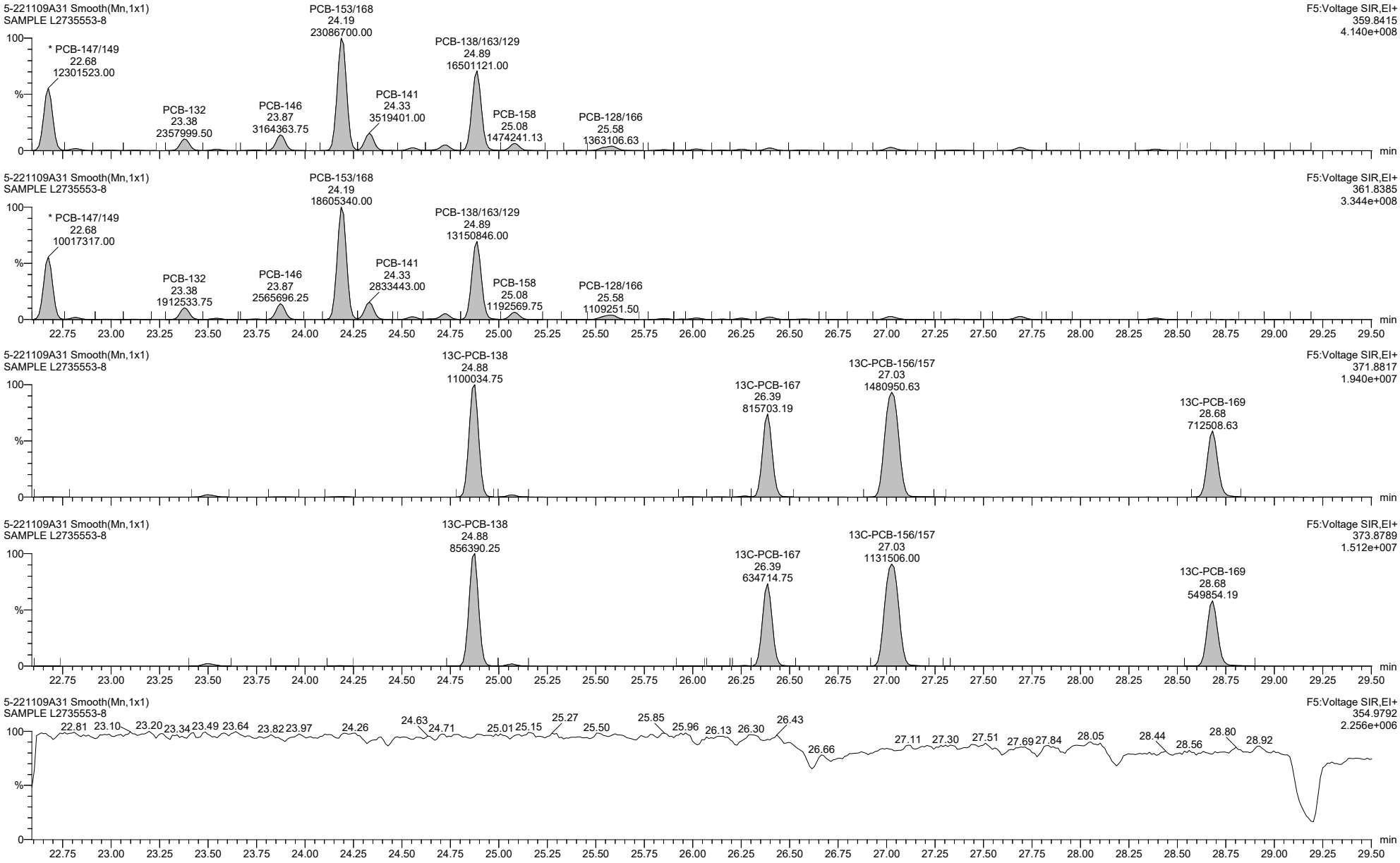


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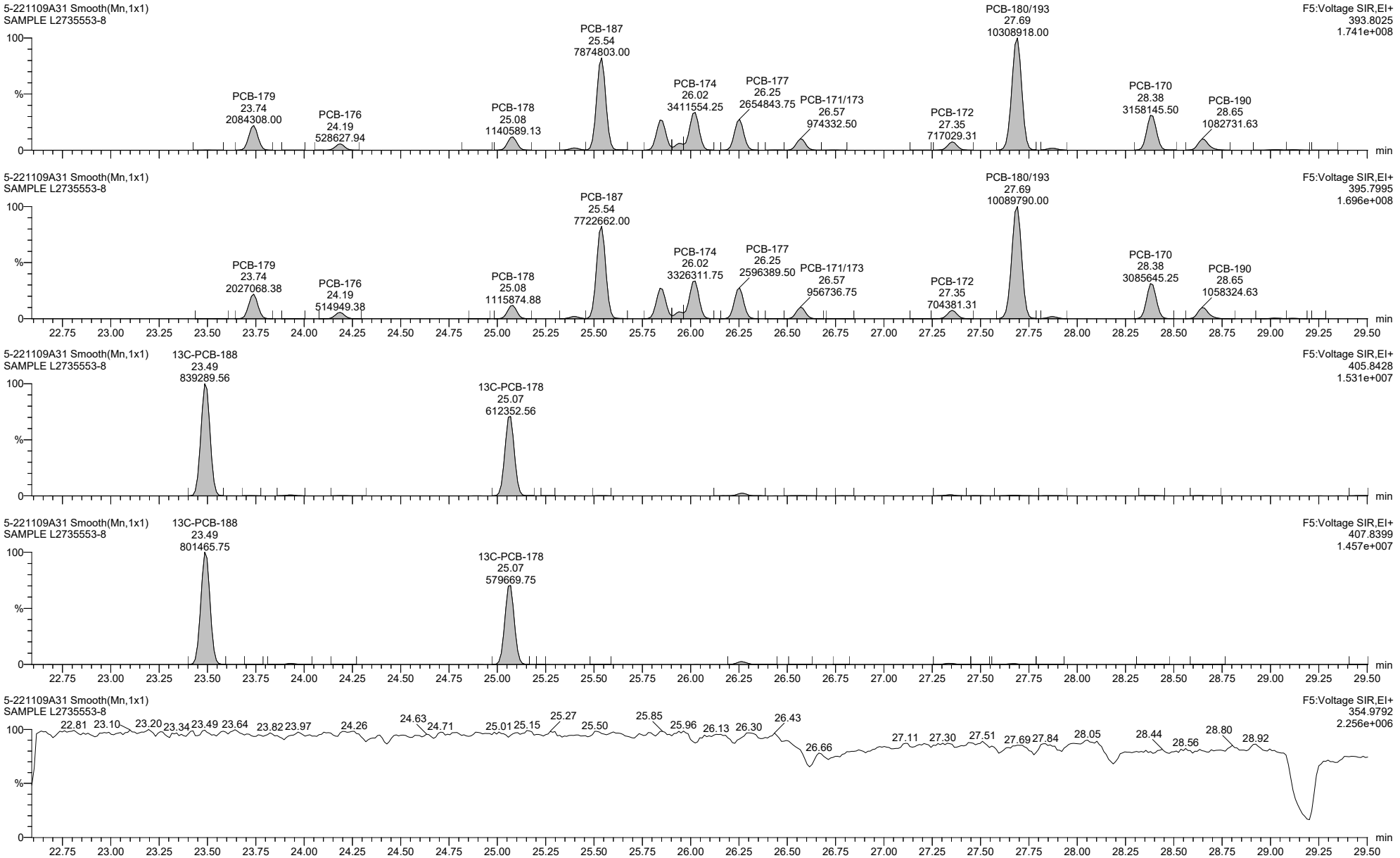


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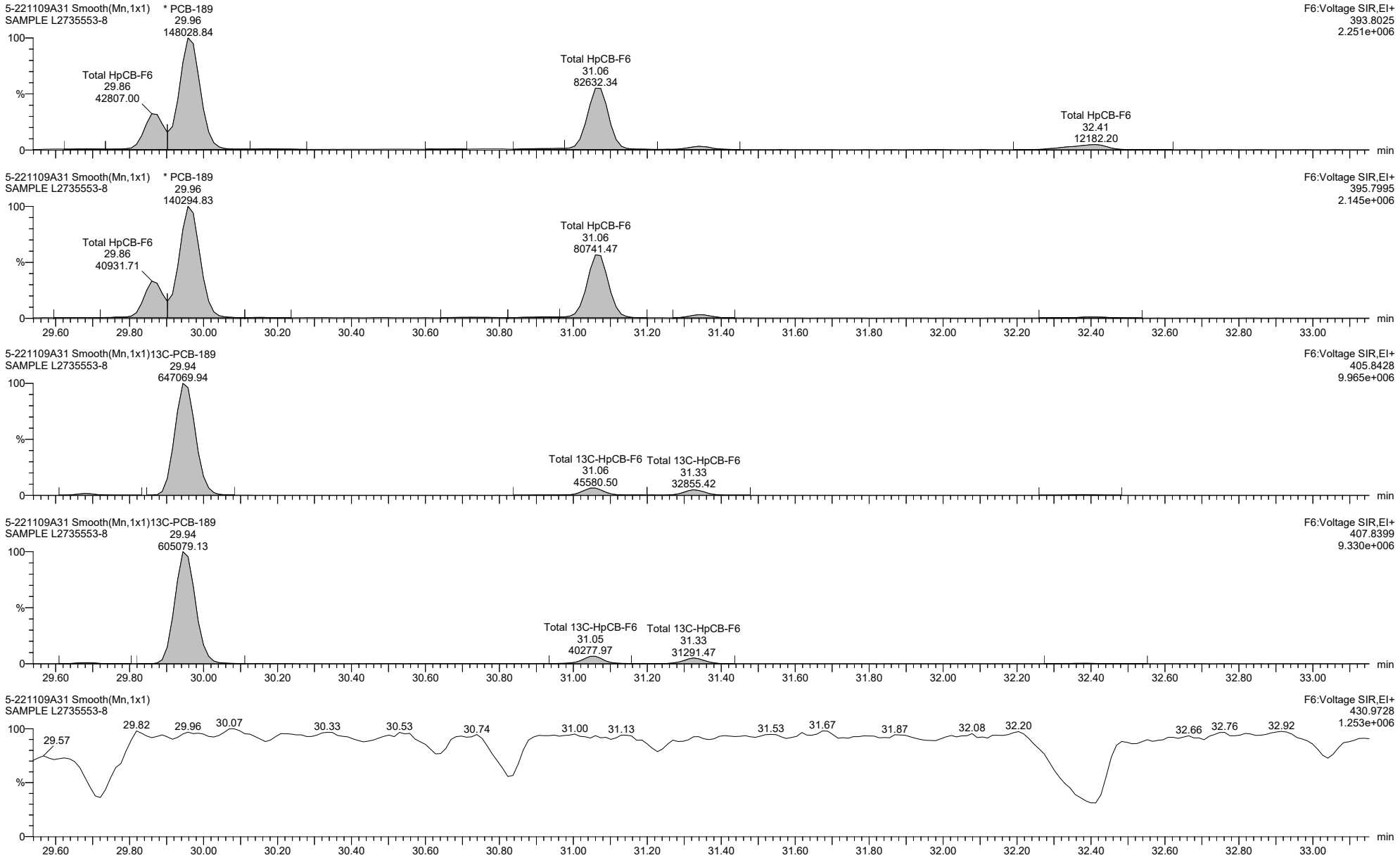


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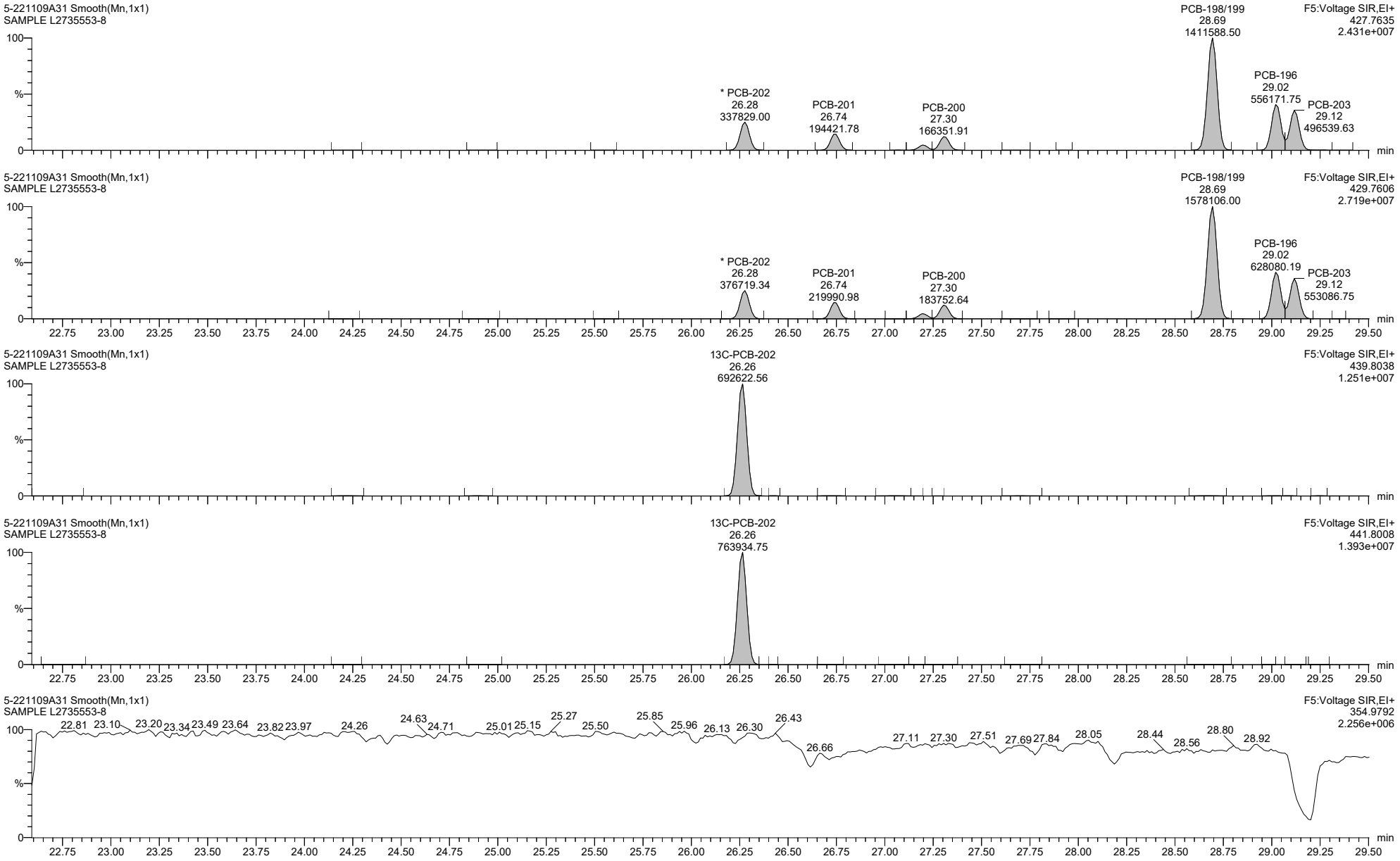


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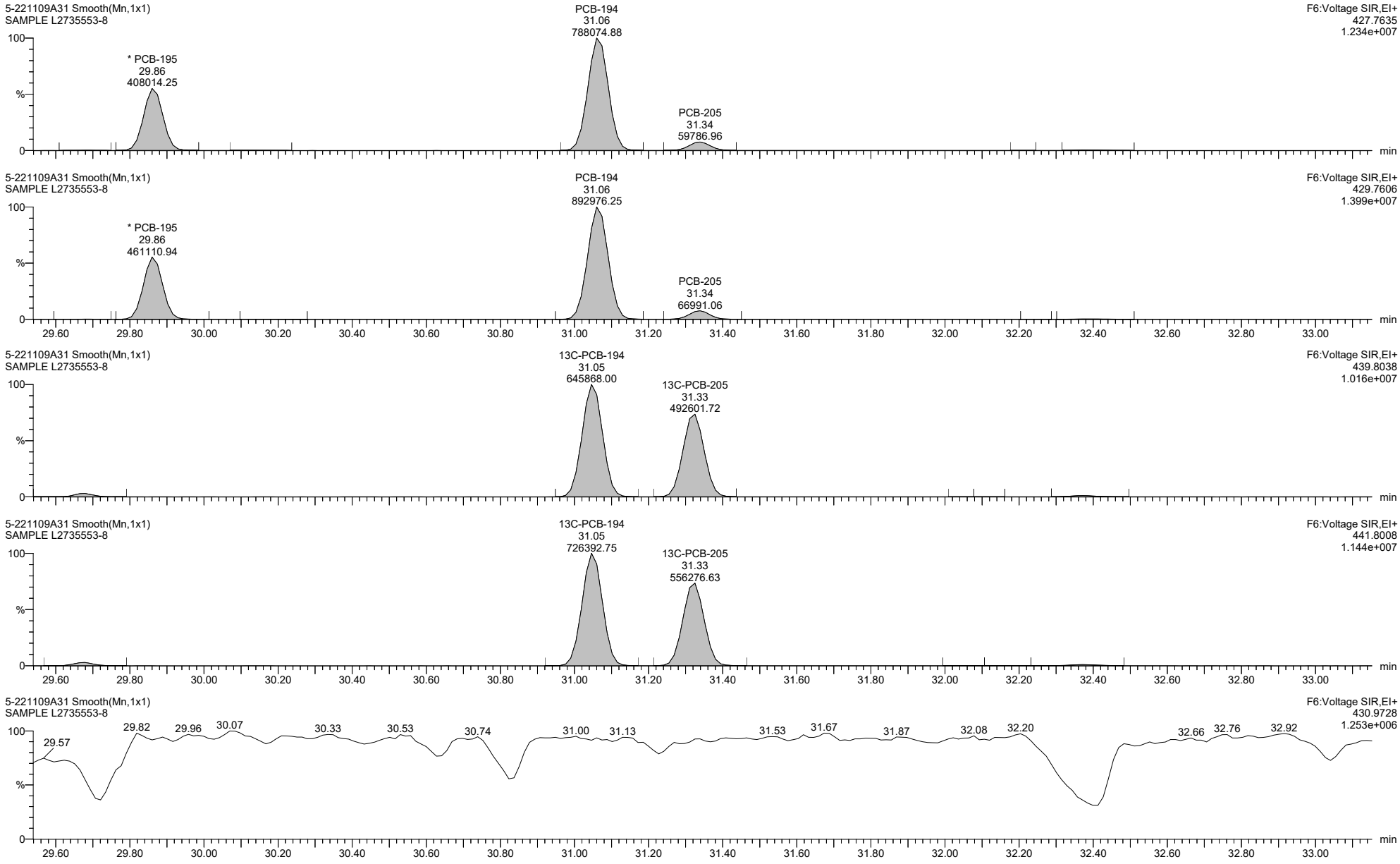


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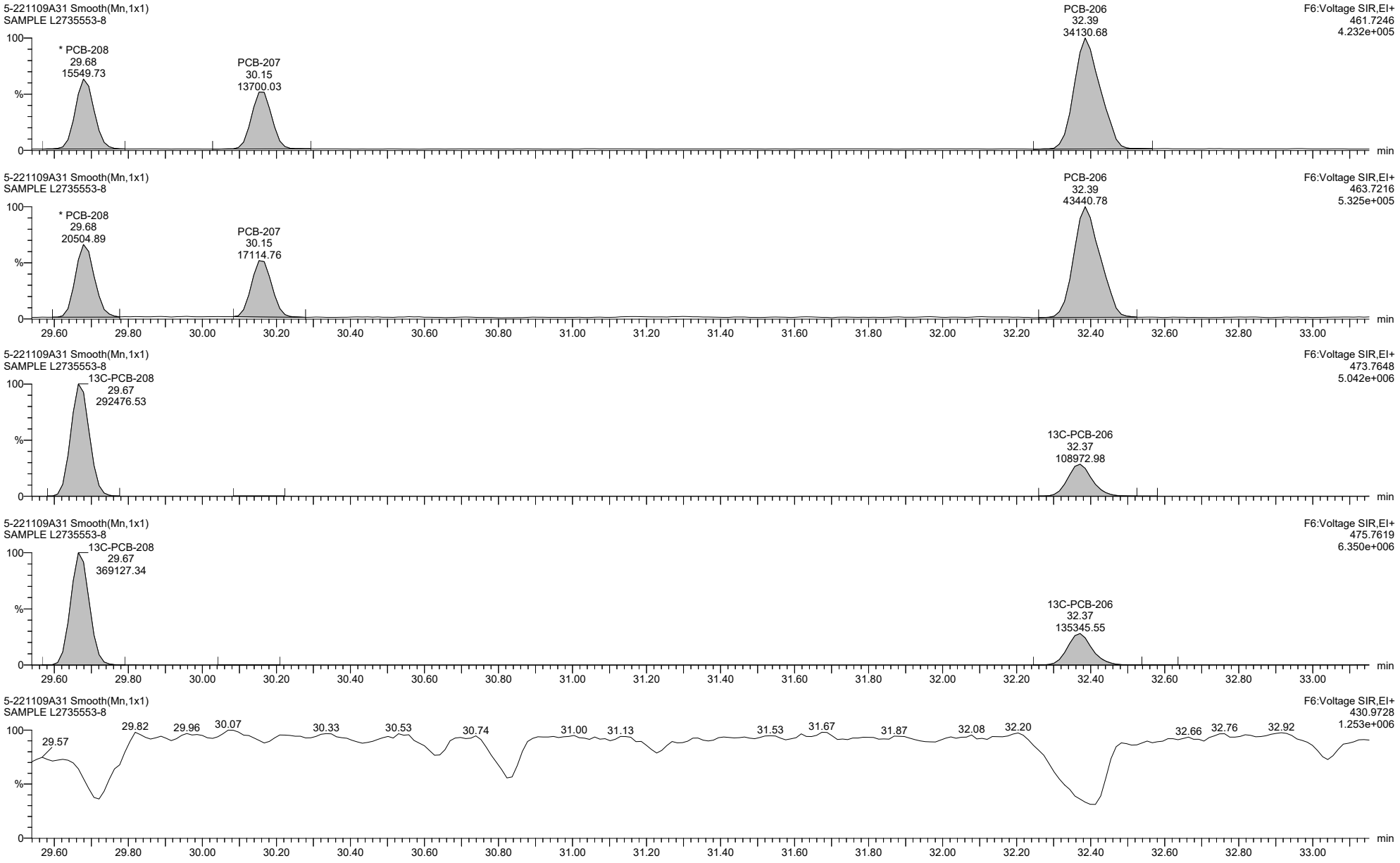


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

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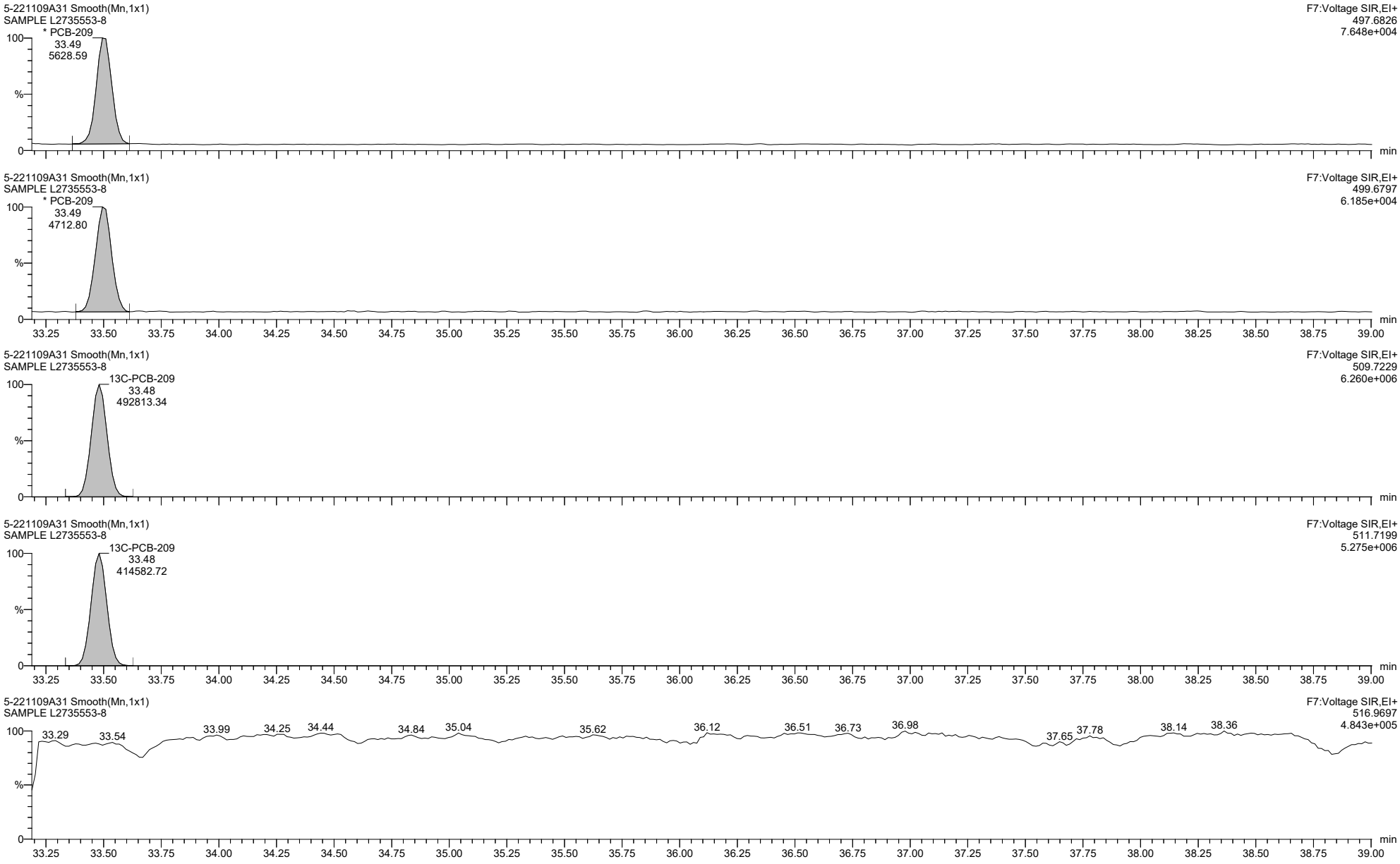


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

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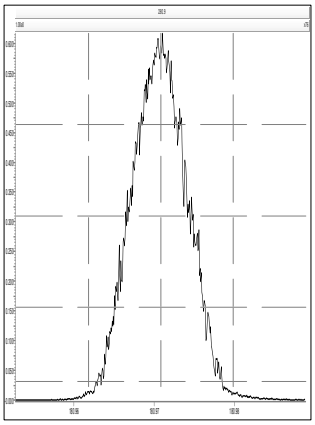
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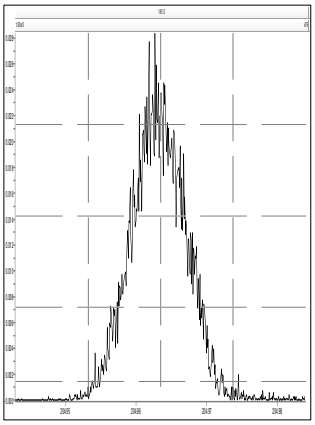
File: Experiment: 1668_octyl_1.exp Reference: Pfk.ref Function: 1 @ 200 (ppm)

Printed: Wednesday, November 09, 2022 15:25:43 Eastern Standard Time

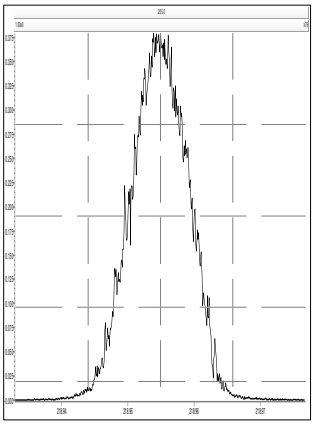
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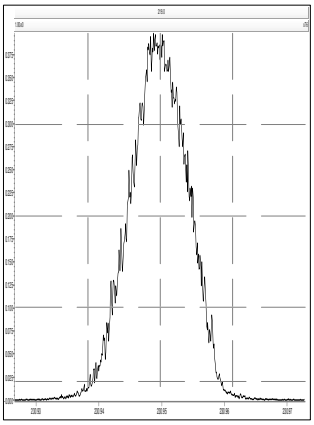
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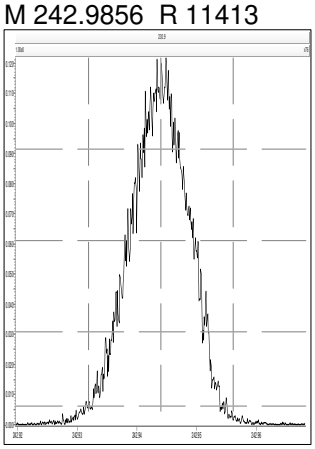
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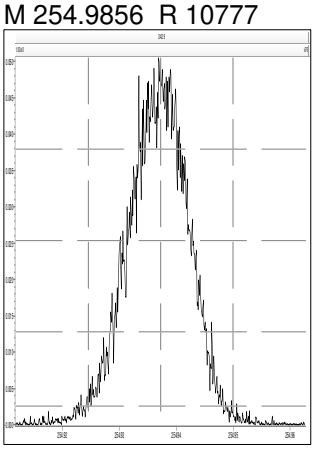
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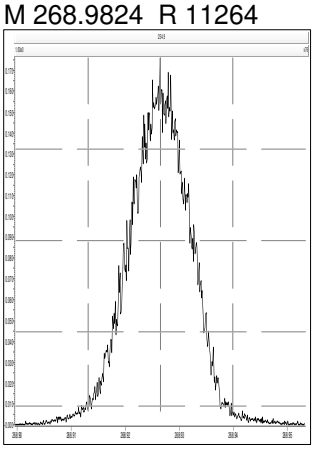
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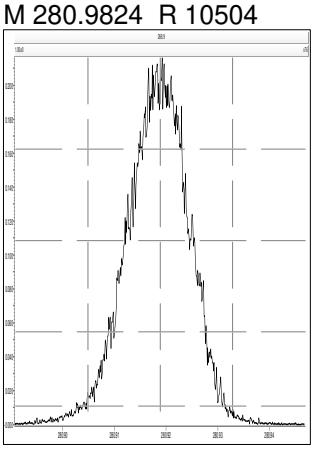
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M 268.9824 R 11264



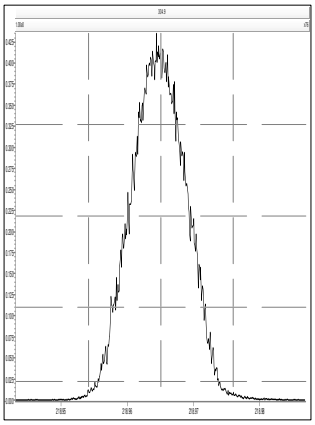
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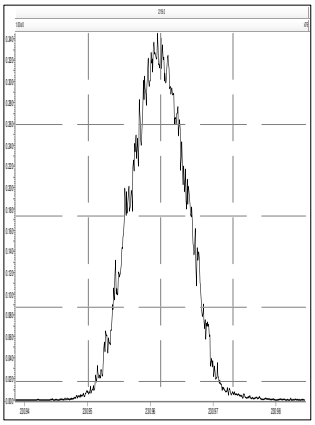
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Printed: Wednesday, November 09, 2022 15:26:35 Eastern Standard Time

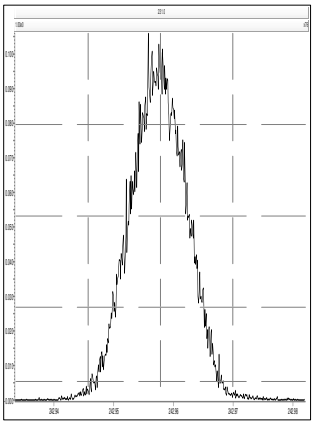
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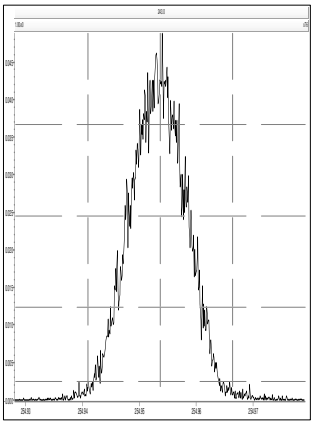
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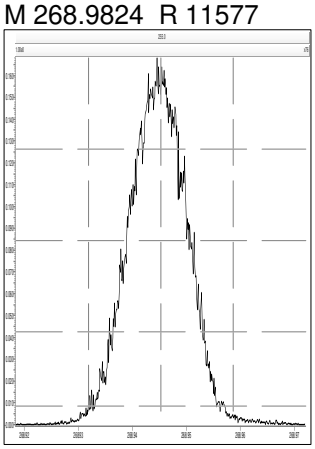
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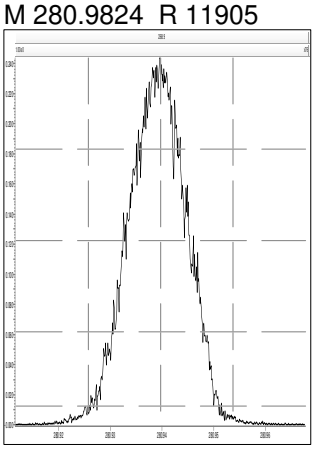
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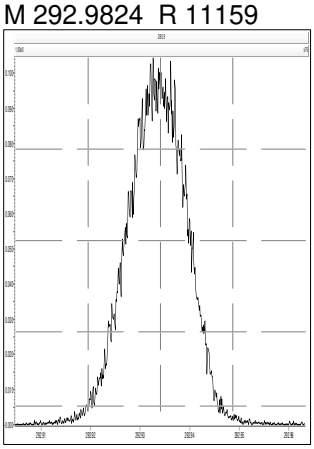
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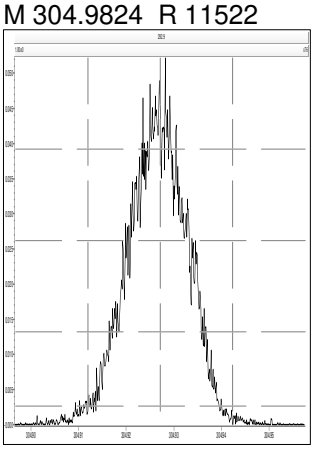
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M 292.9824 R 11159



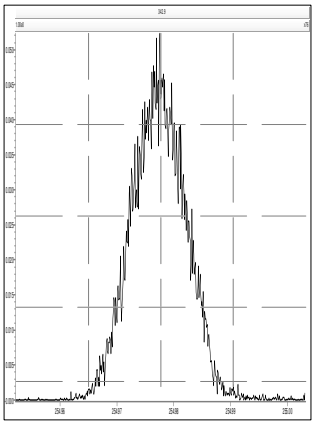
M 304.9824 R 11522



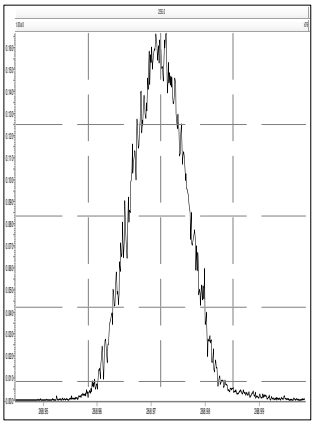
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Printed: Wednesday, November 09, 2022 15:27:06 Eastern Standard Time

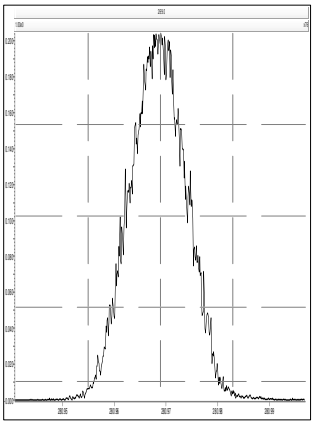
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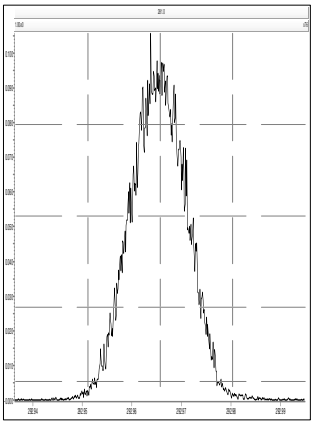
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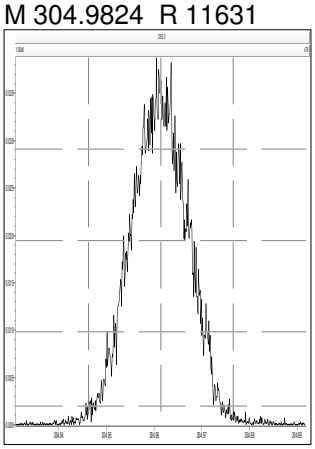
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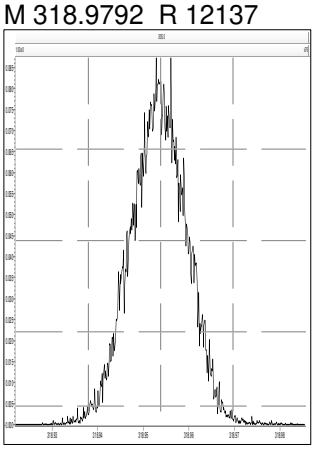
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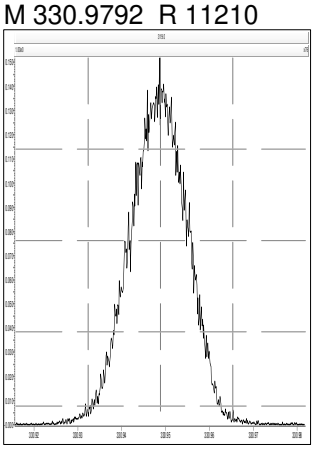
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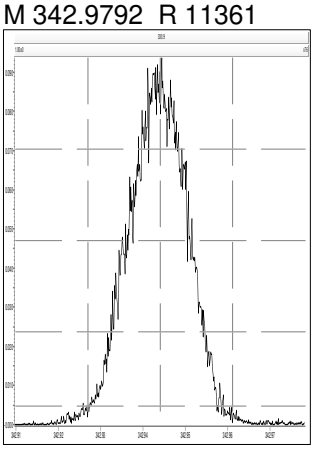
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M 330.9792 R 11210



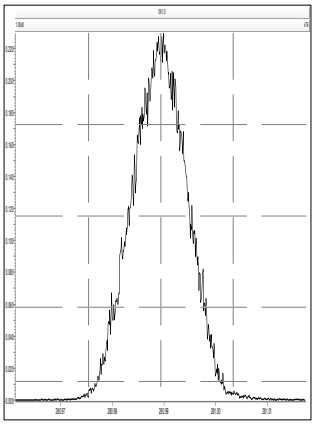
M 342.9792 R 11361



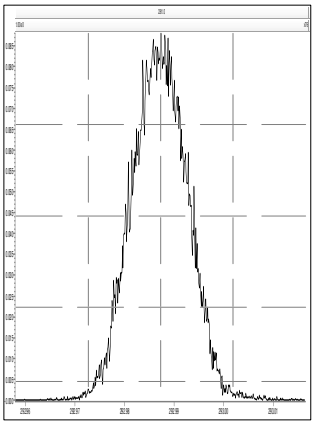
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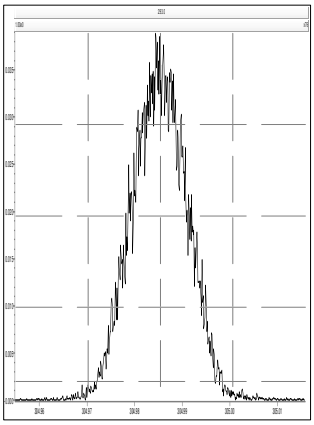
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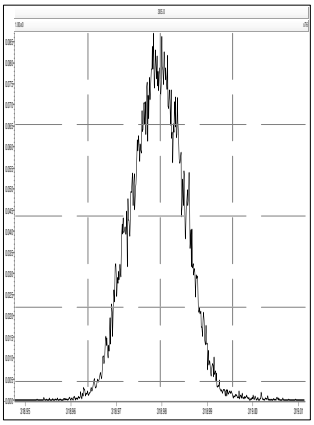
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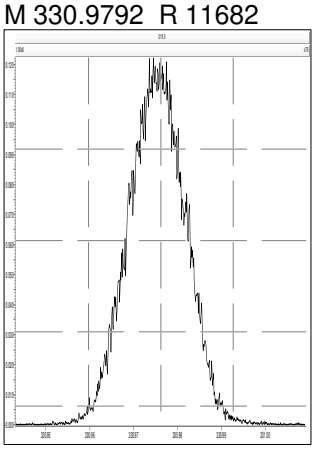
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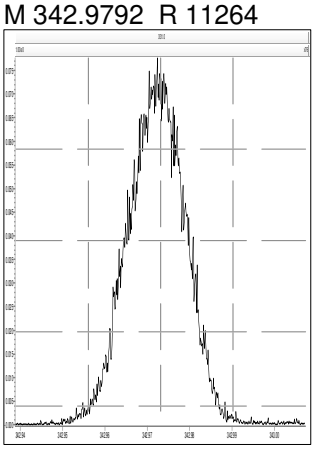
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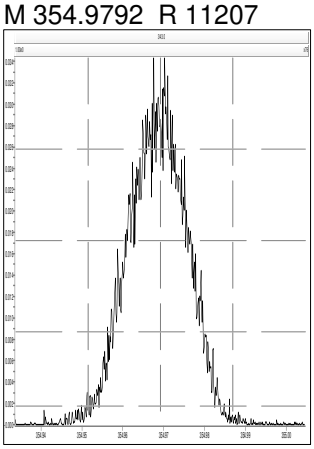
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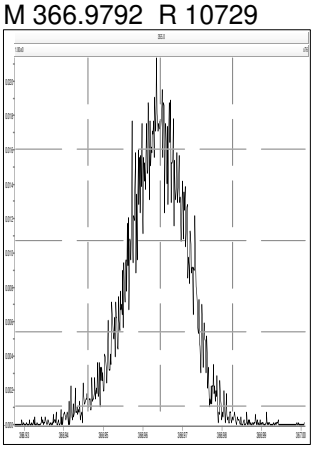
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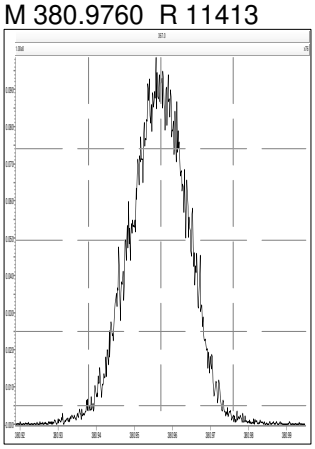
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M 366.9792 R 10729



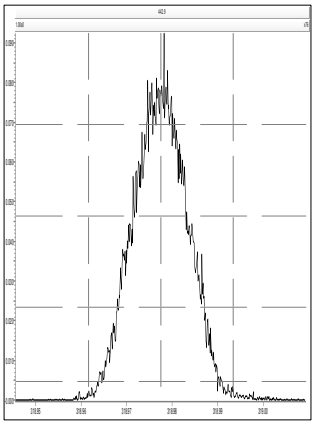
M 380.9760 R 11413



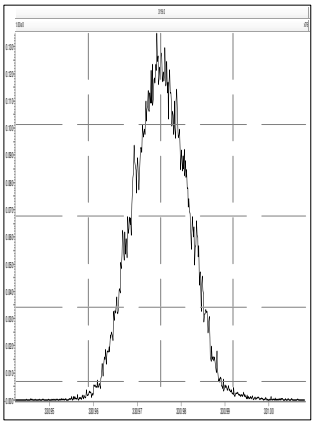
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Printed: Wednesday, November 09, 2022 15:28:04 Eastern Standard Time

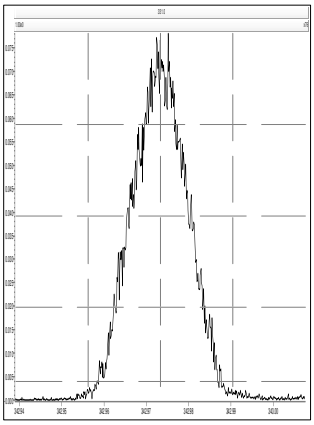
M 318.9792 R 12197



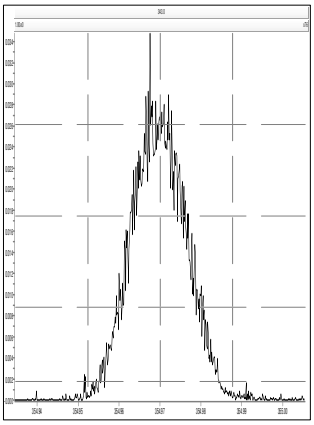
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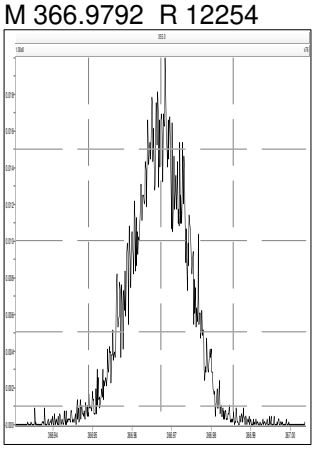
M 342.9792 R 11846



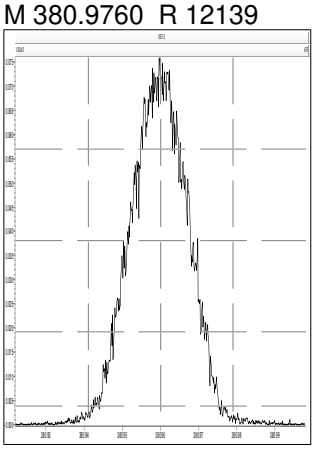
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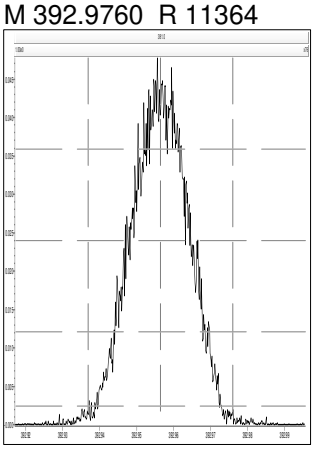
M 366.9792 R 12254



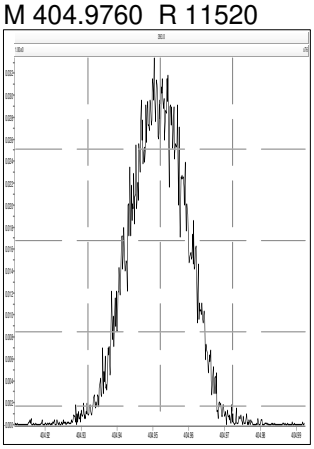
M 380.9760 R 12139



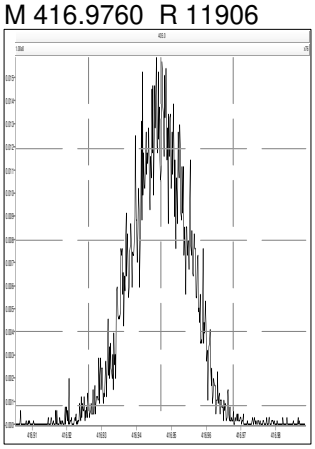
M 392.9760 R 11364



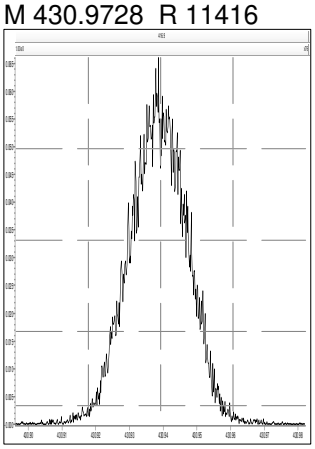
M 404.9760 R 11520



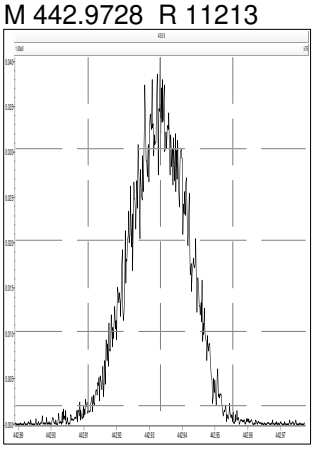
M 416.9760 R 11906



M 430.9728 R 11416



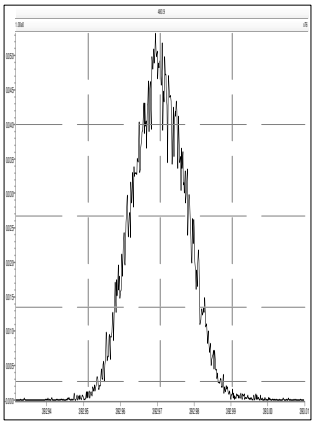
M 442.9728 R 11213



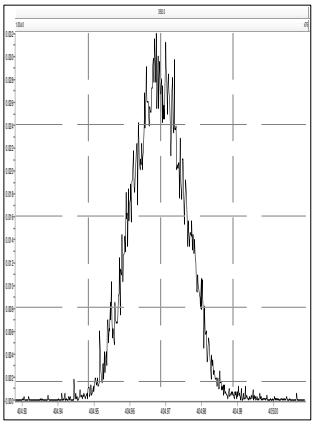
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Printed: Wednesday, November 09, 2022 15:28:32 Eastern Standard Time

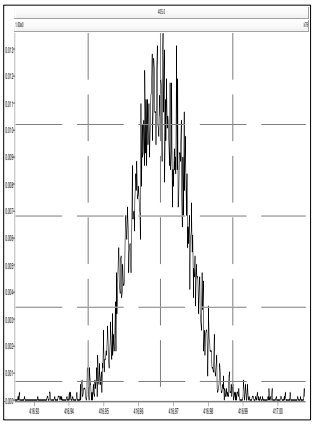
M 392.9760 R 11963



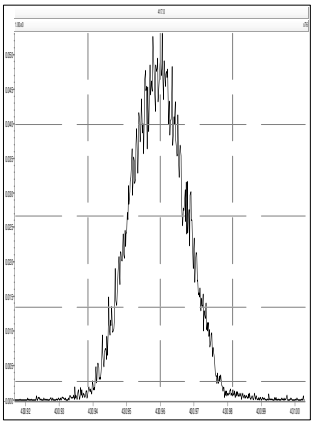
M 404.9760 R 12077



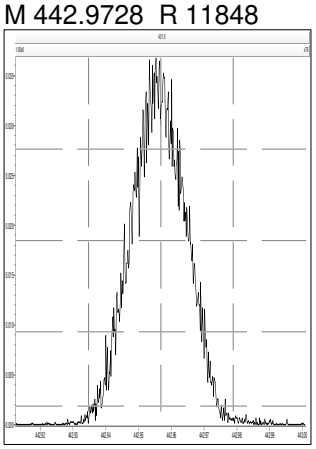
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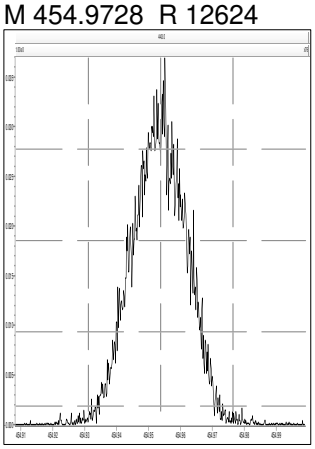
M 430.9728 R 11793



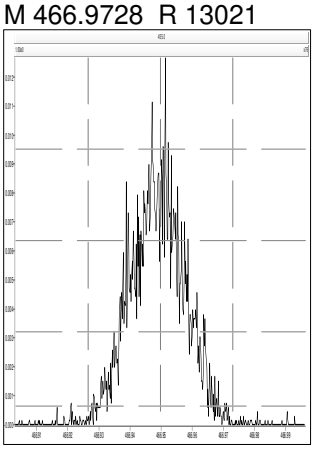
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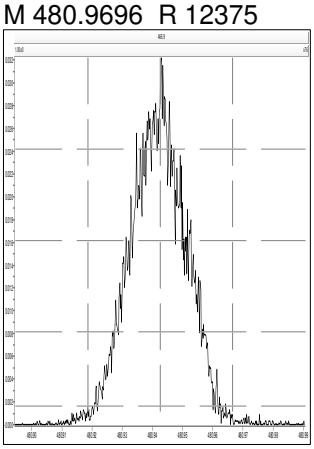
M 454.9728 R 12624



M 466.9728 R 13021



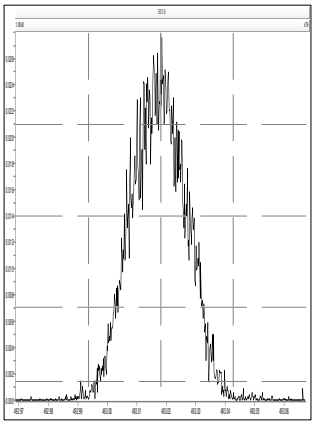
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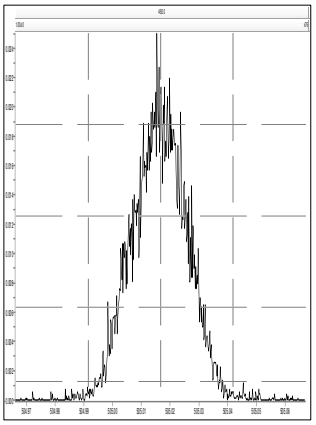
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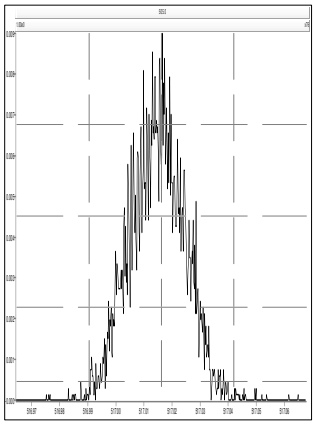
M 492.9696 R 11737



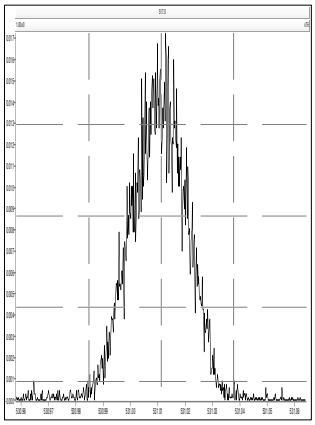
M 504.9696 R 12498



M 516.9697 R 12563

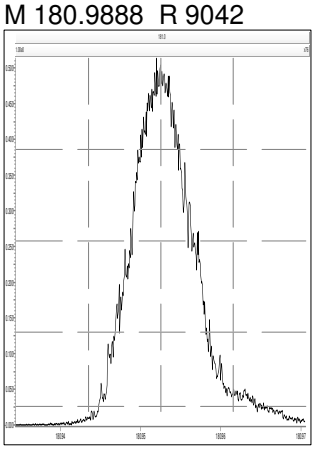


M 530.9664 R 11961

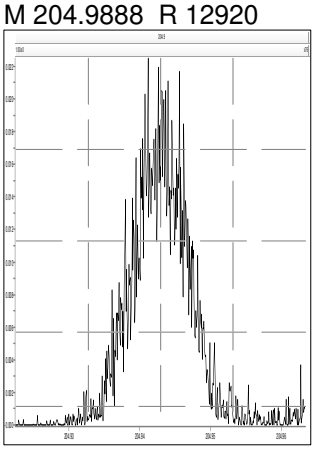


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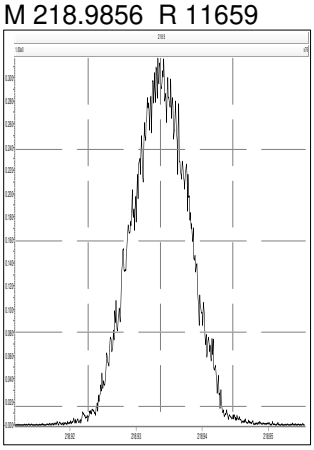
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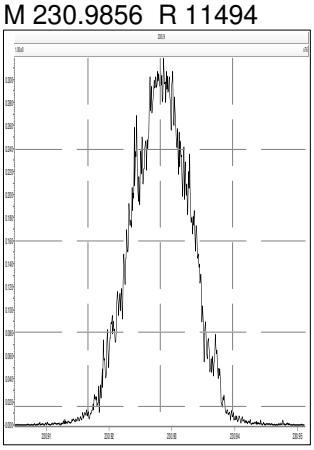
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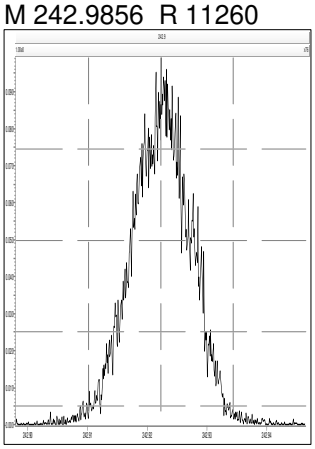
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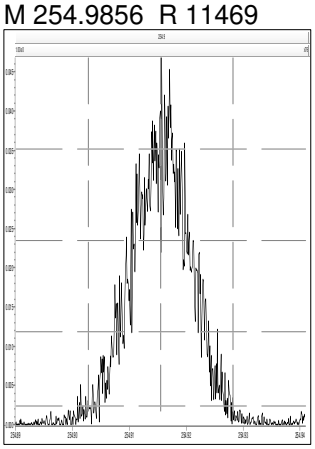
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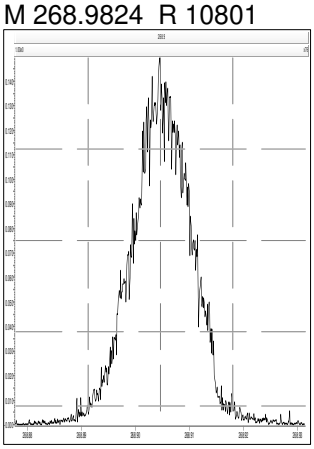
M 242.9856 R 11260



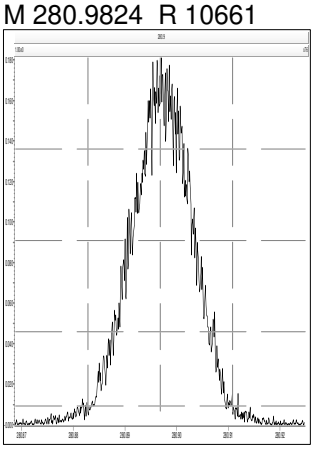
M 254.9856 R 11469



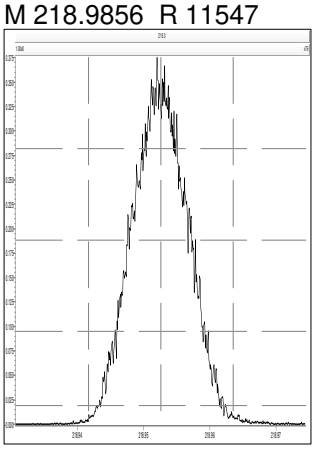
M 268.9824 R 10801



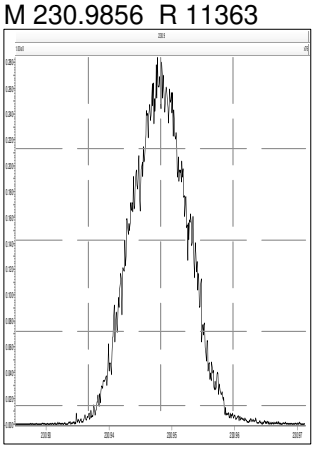
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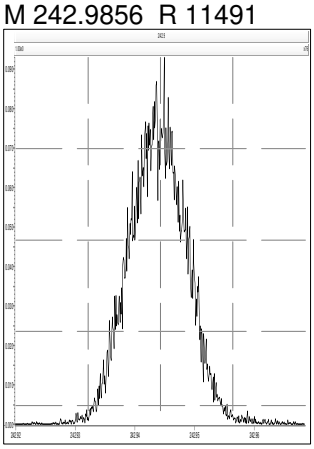
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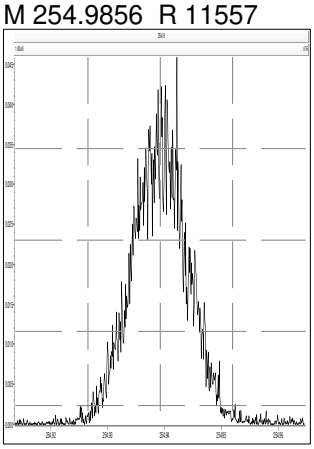
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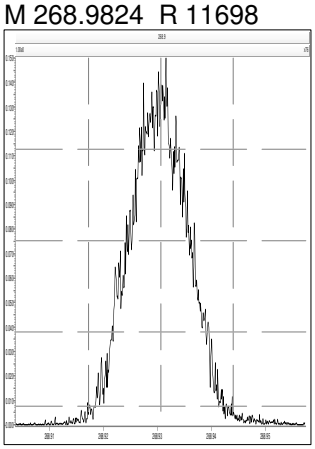
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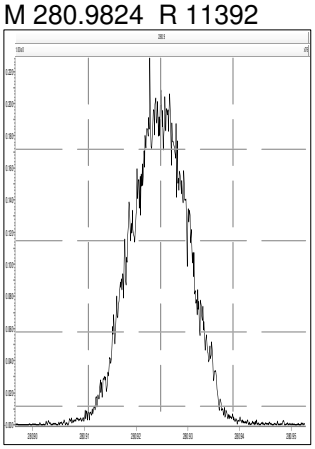
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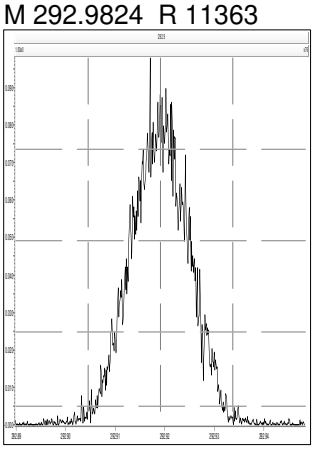
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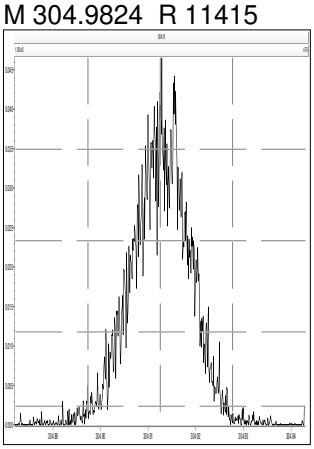
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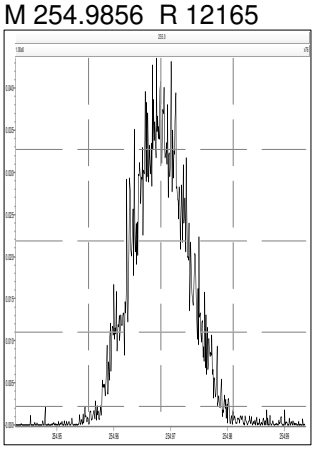
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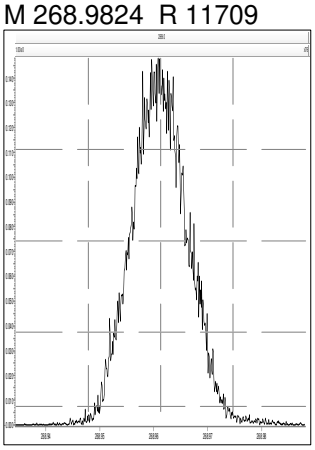
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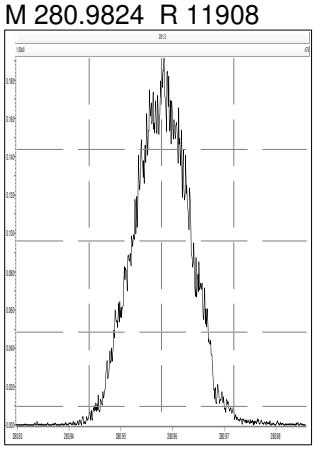
M 254.9856 R 12165



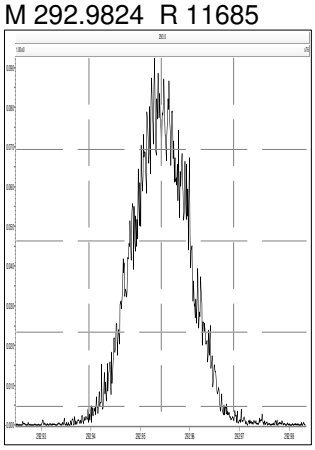
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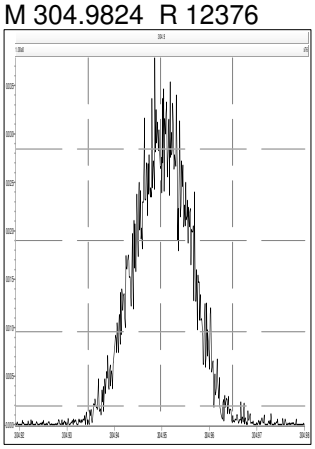
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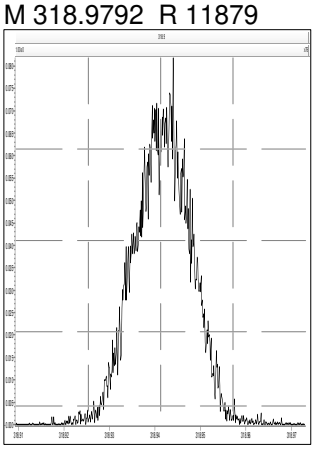
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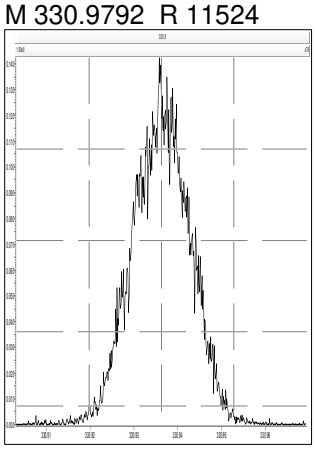
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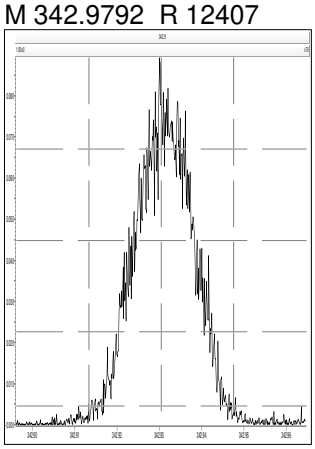
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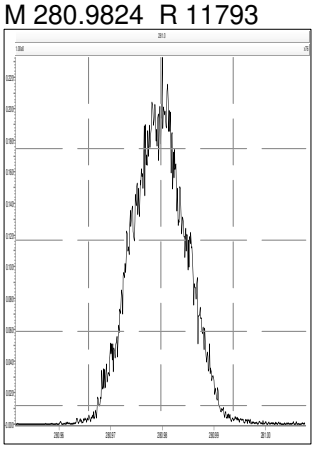
M 330.9792 R 11524



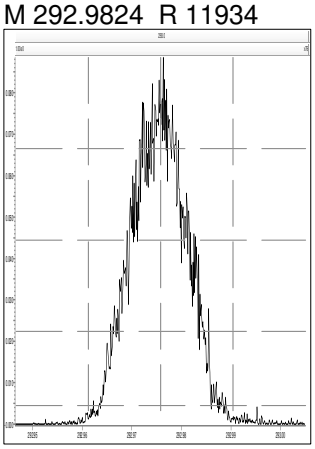
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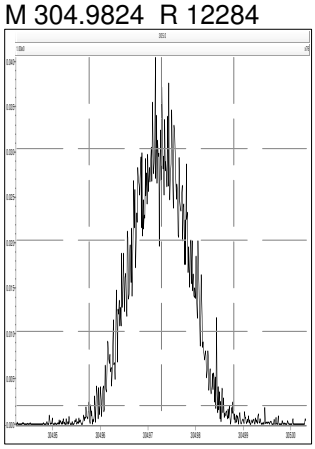
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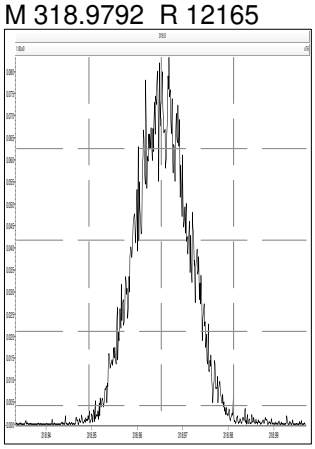
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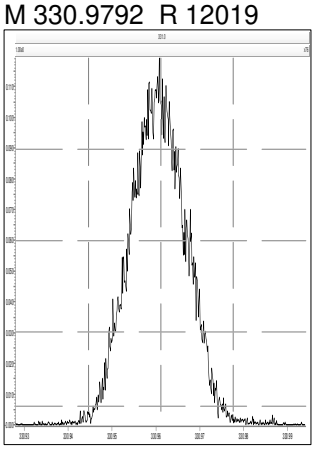
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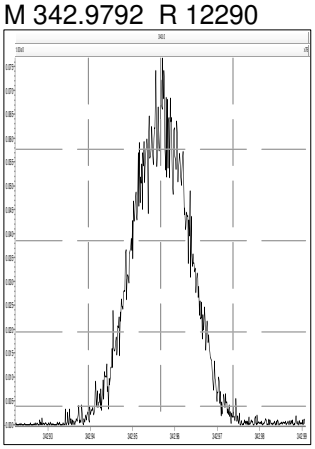
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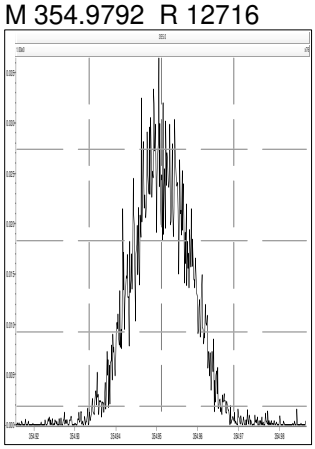
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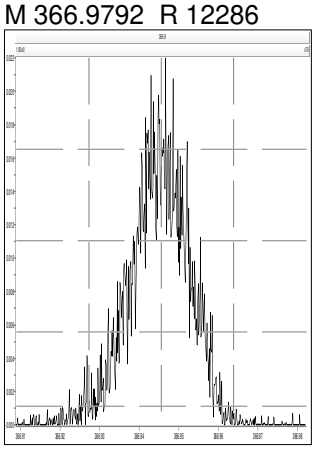
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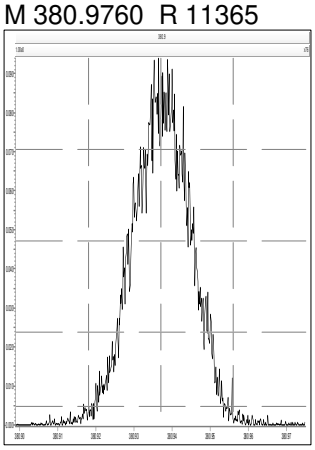
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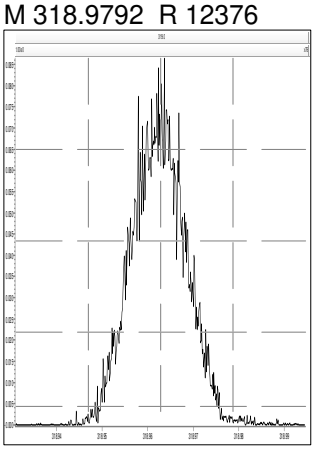
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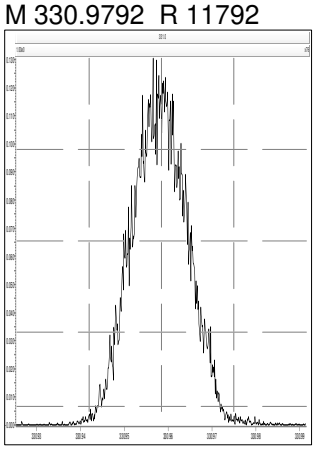
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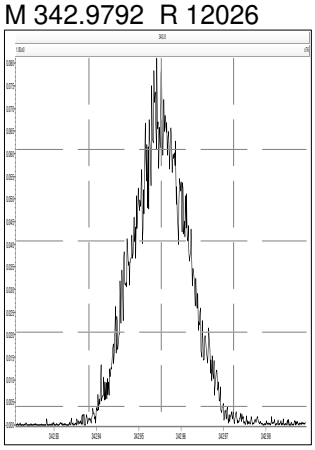
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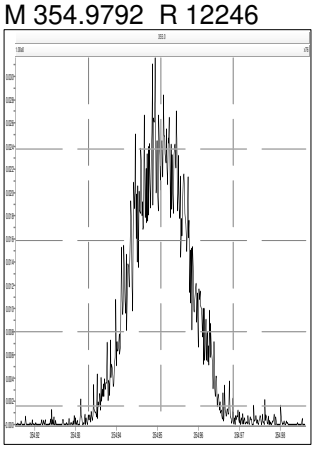
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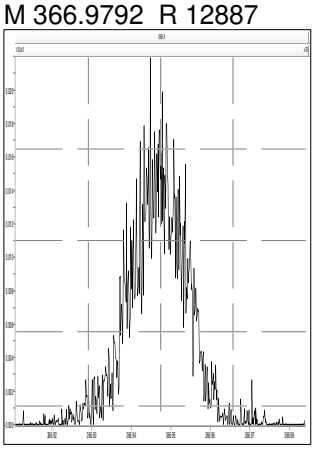
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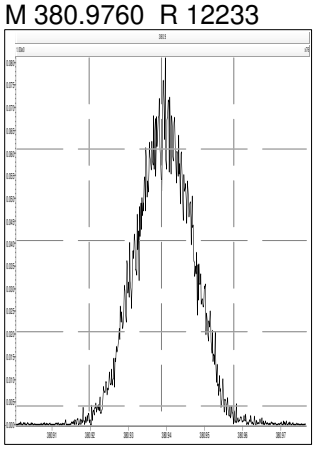
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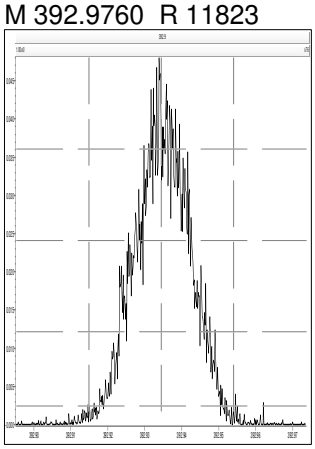
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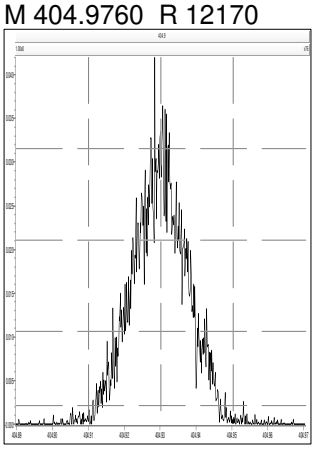
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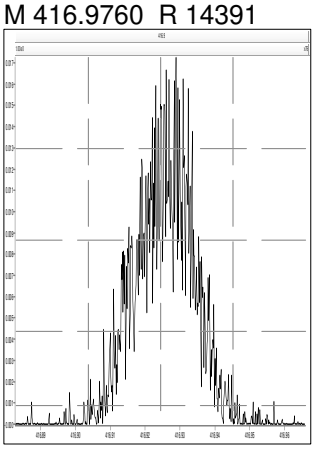
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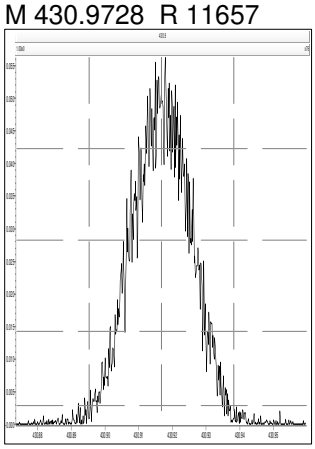
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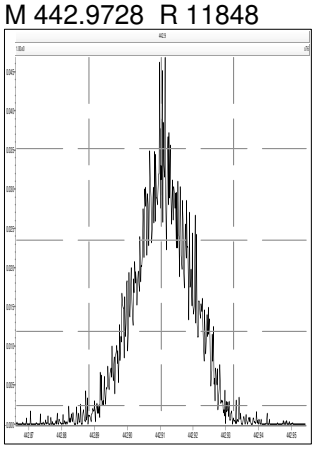
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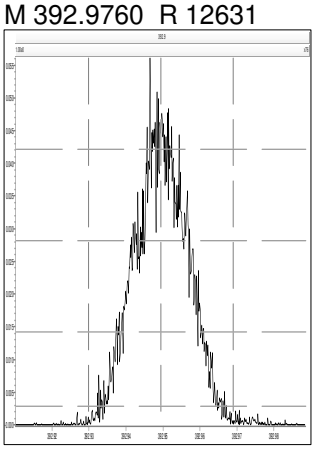
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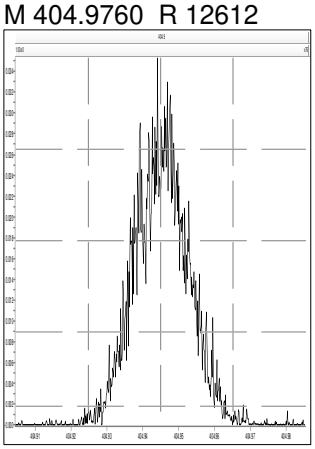
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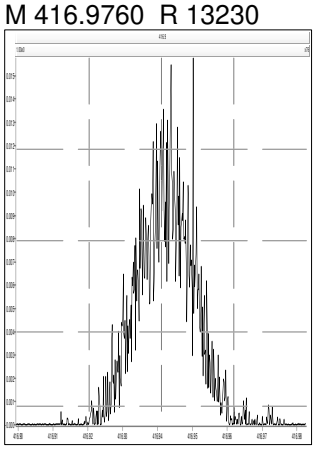
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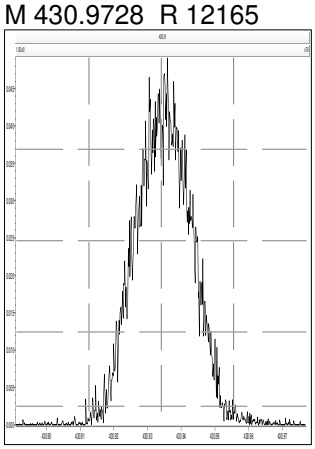
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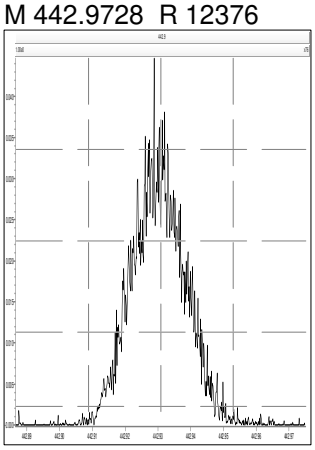
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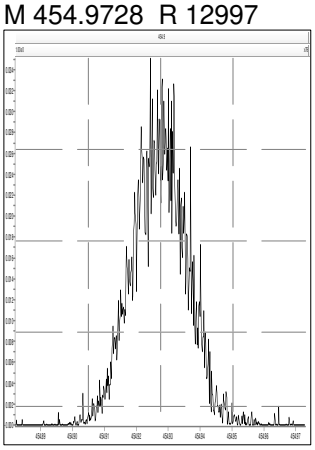
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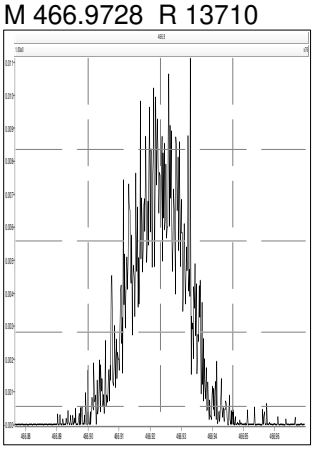
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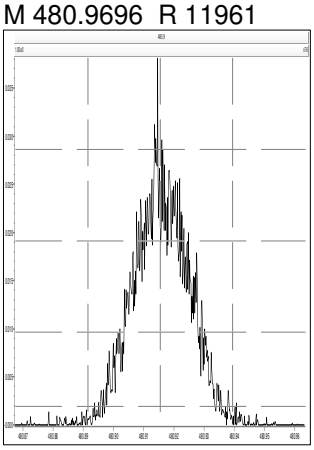
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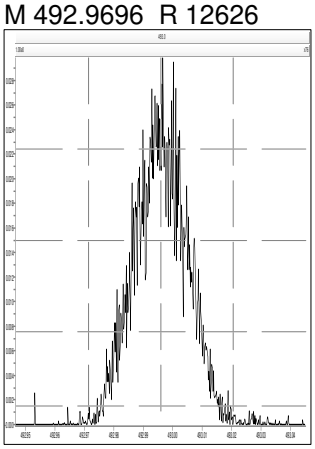
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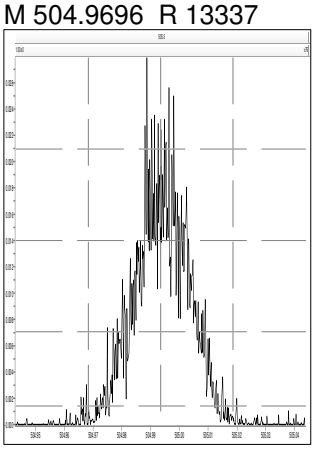
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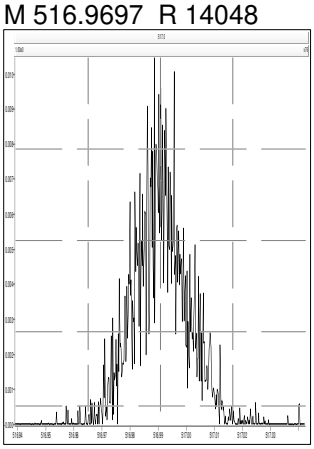
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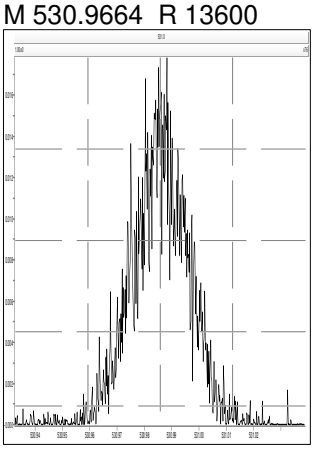
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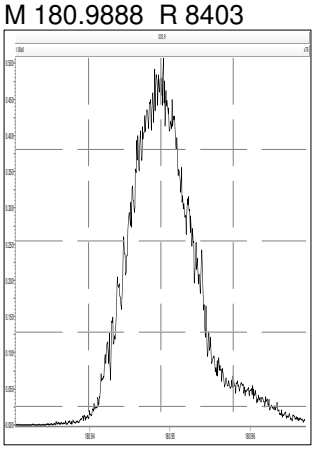


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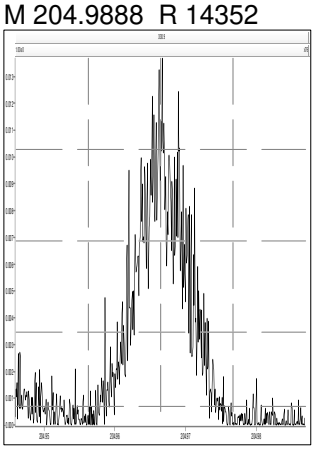


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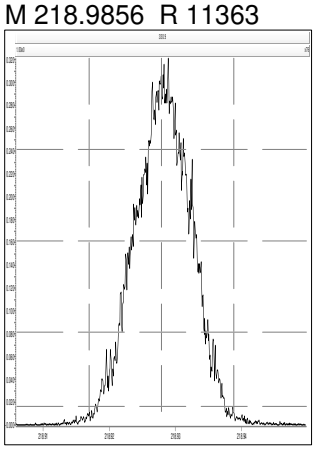
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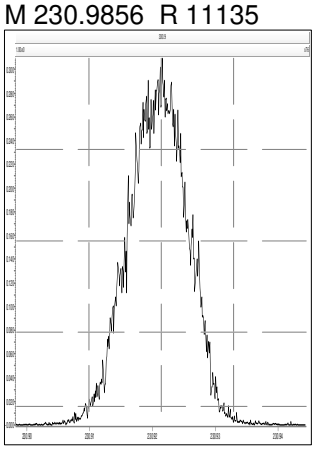
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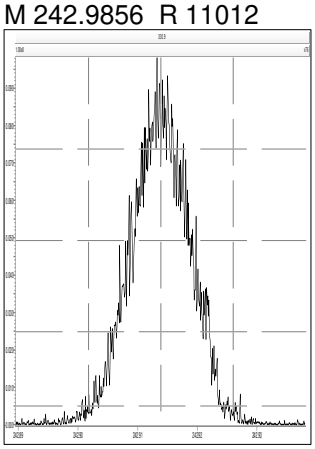
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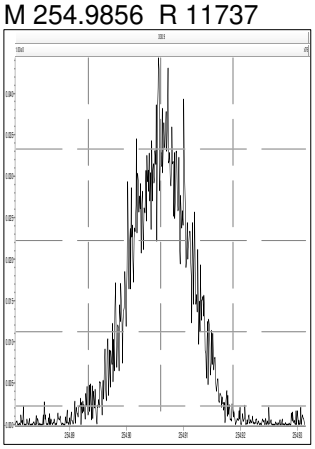
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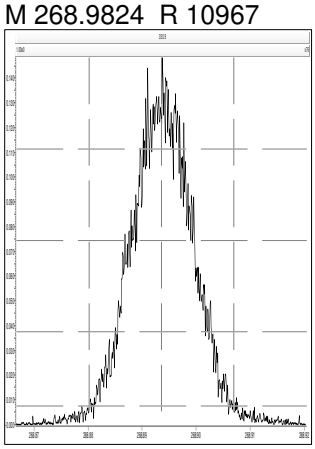
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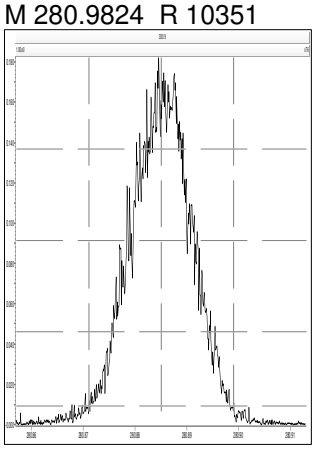
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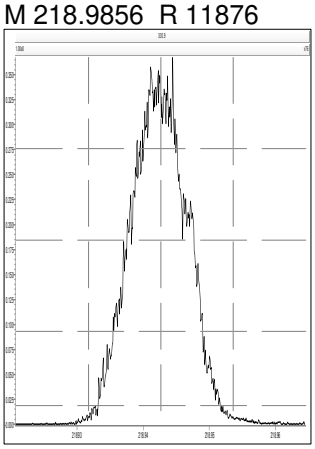
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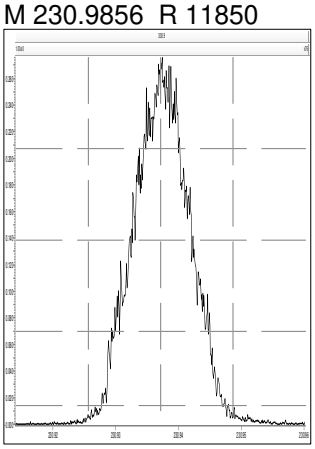
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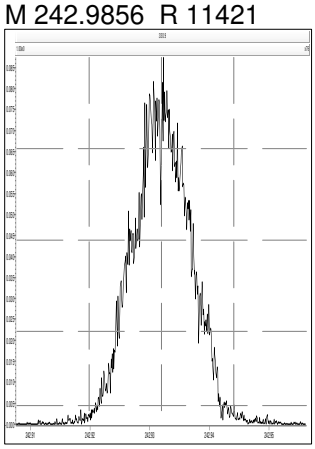
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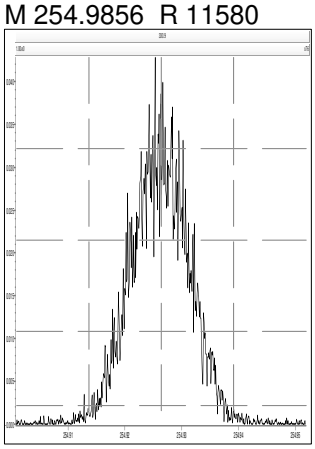
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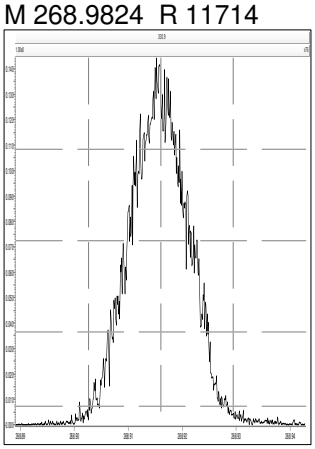
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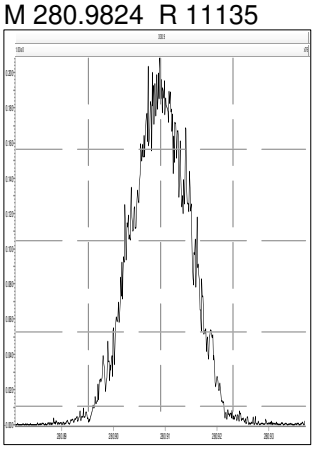
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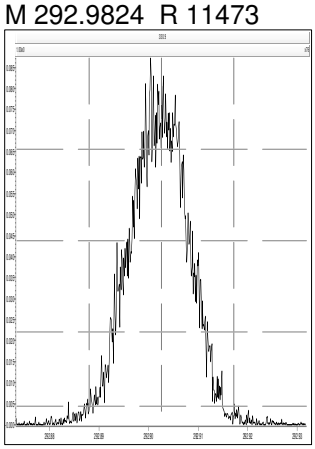
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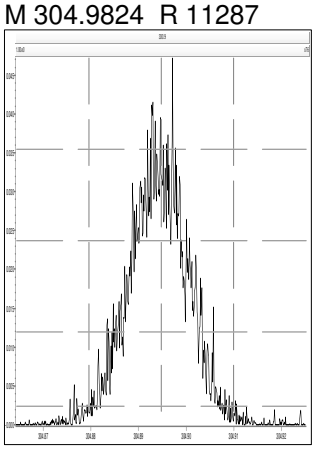
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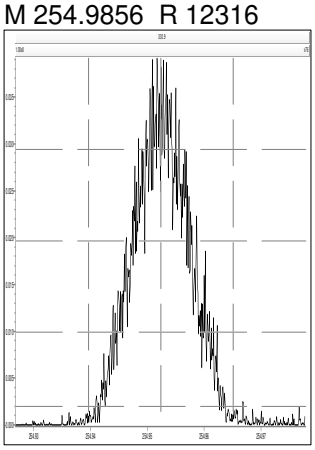
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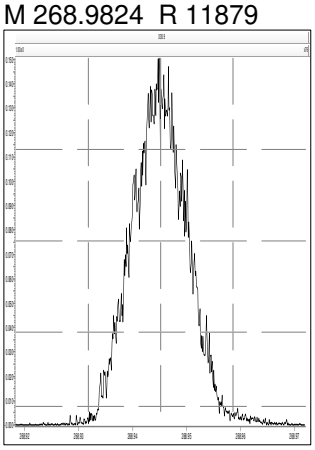
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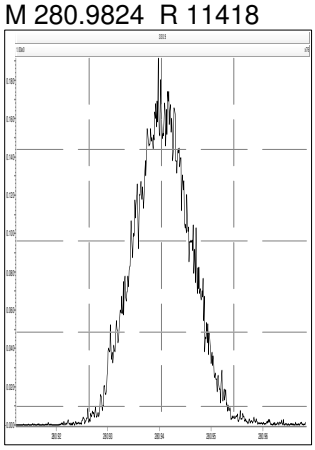
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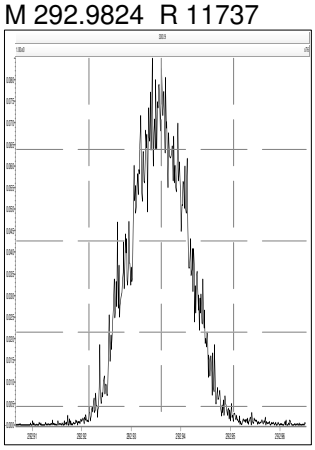
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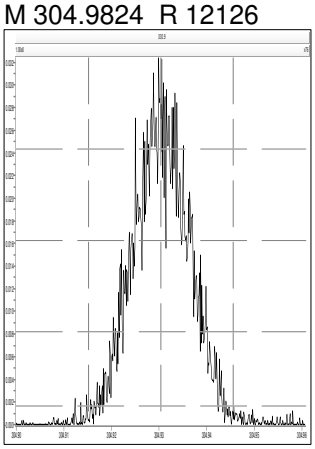
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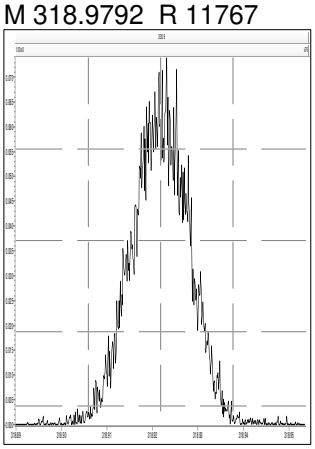
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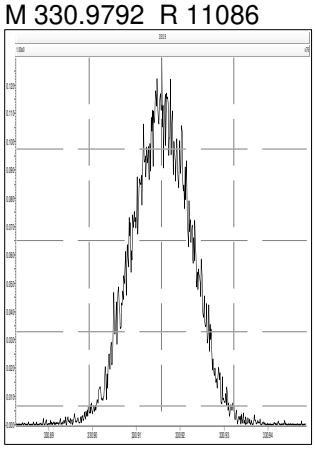
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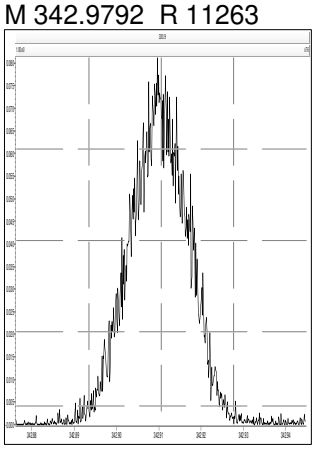
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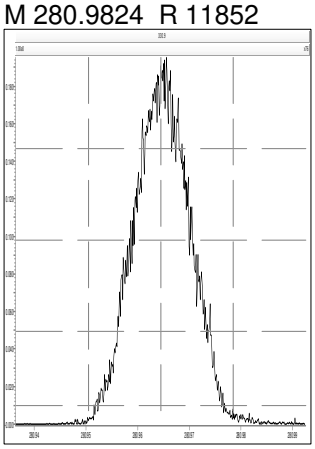
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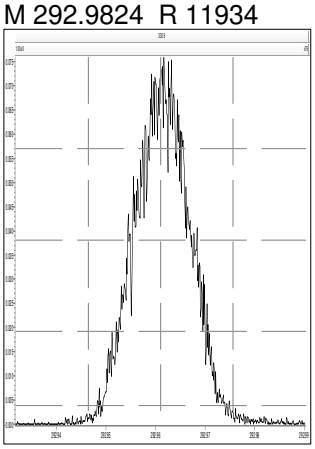
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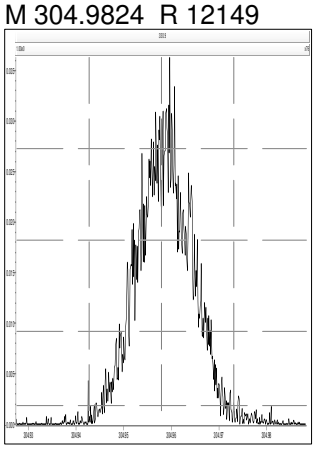
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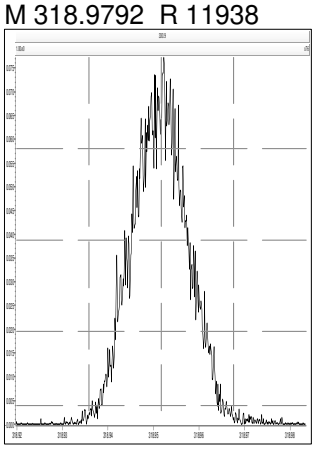
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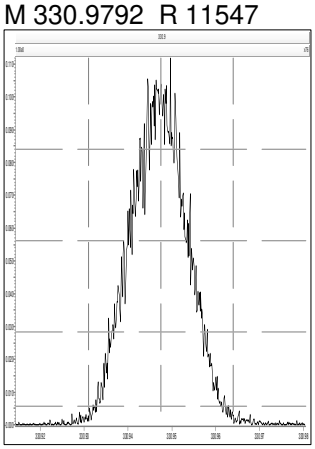
M 304.9824 R 12149



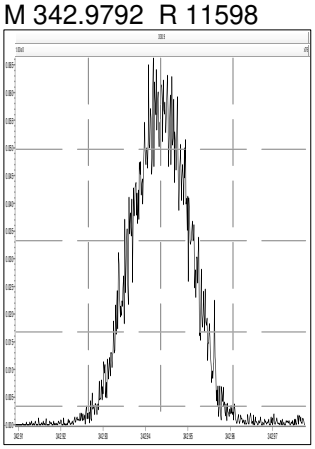
M 318.9792 R 11938



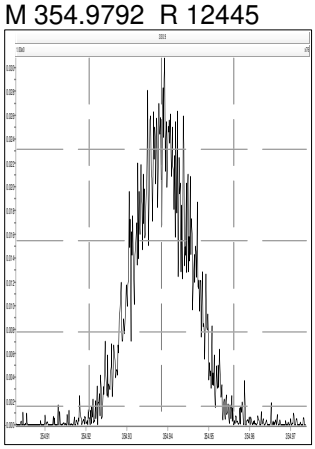
M 330.9792 R 11547



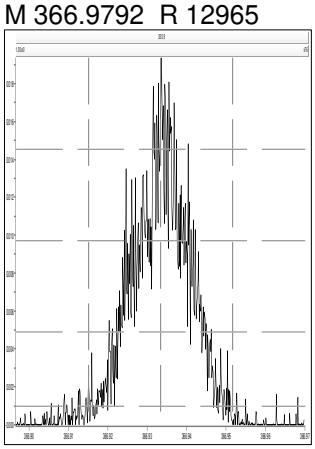
M 342.9792 R 11598



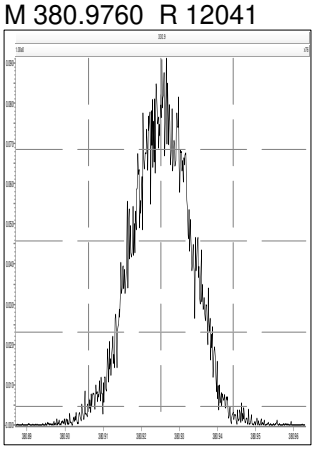
M 354.9792 R 12445



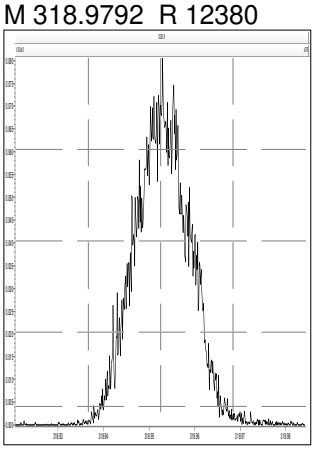
M 366.9792 R 12965



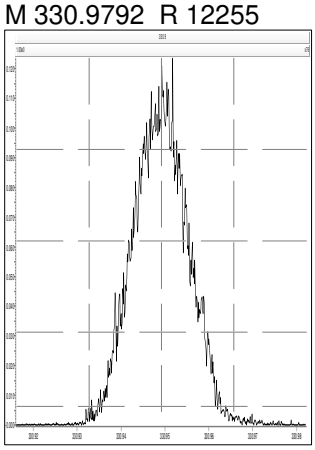
M 380.9760 R 12041



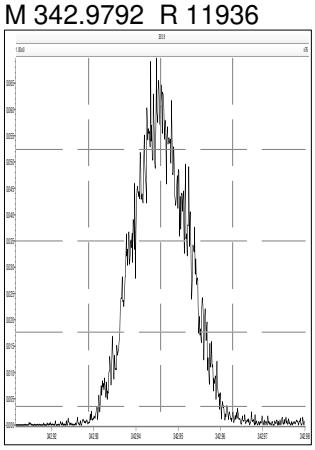
M 318.9792 R 12380



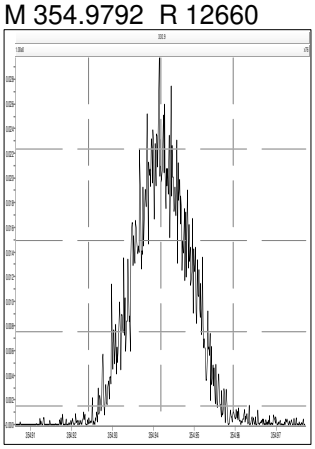
M 330.9792 R 12255



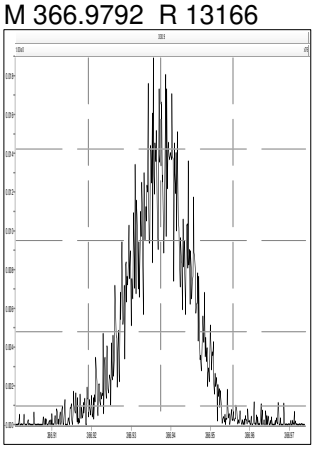
M 342.9792 R 11936



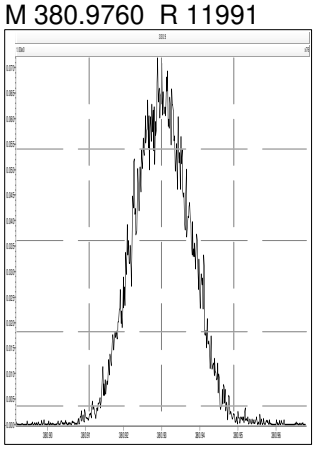
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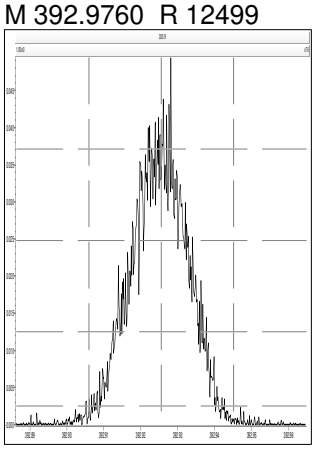
M 366.9792 R 13166



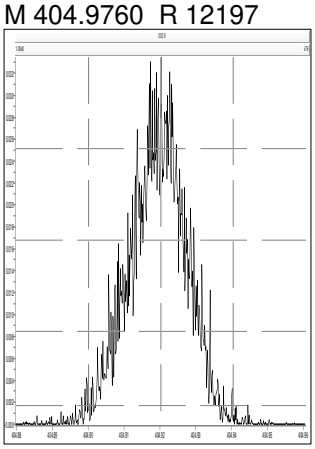
M 380.9760 R 11991



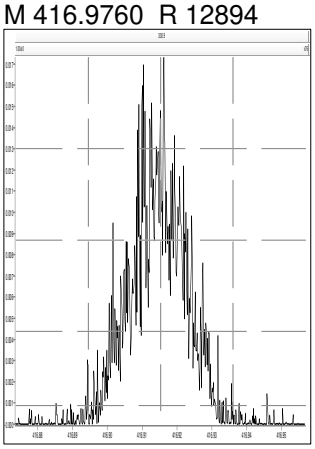
M 392.9760 R 12499



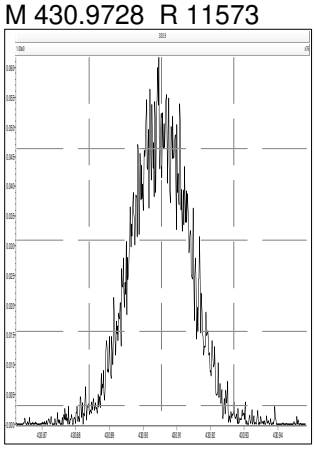
M 404.9760 R 12197



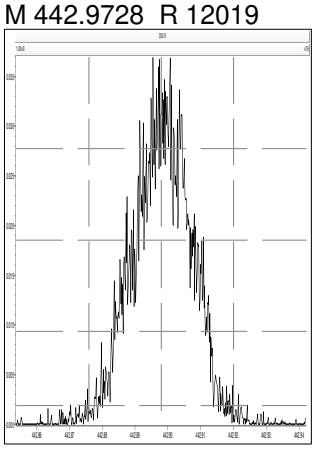
M 416.9760 R 12894



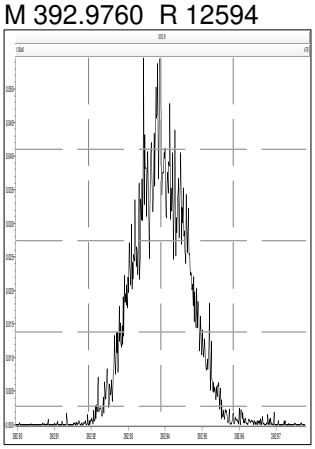
M 430.9728 R 11573



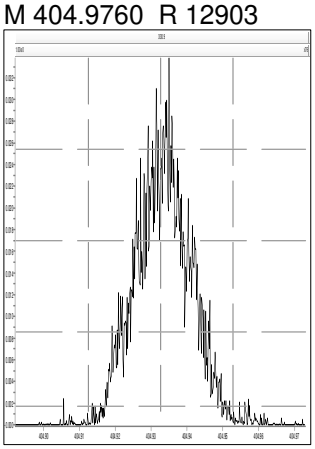
M 442.9728 R 12019



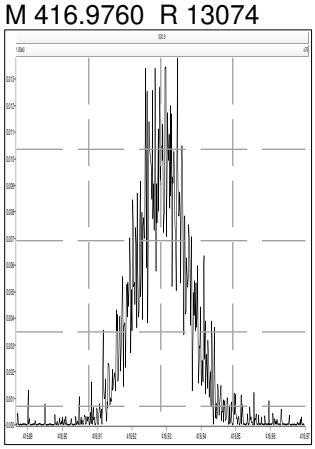
M 392.9760 R 12594



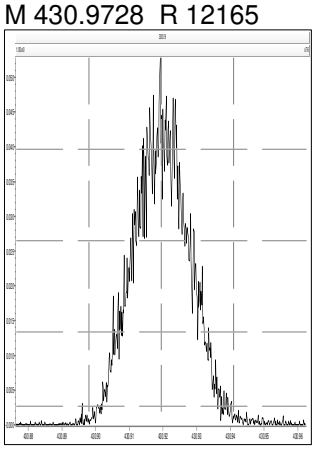
M 404.9760 R 12903



M 416.9760 R 13074

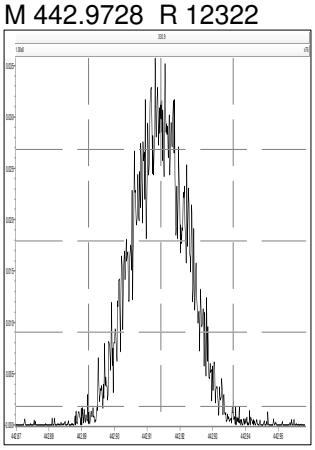


M 430.9728 R 12165

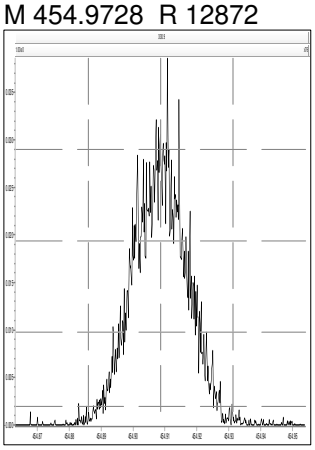


Printed: Thursday, November 10, 2022 14:46:02 Eastern Standard Time

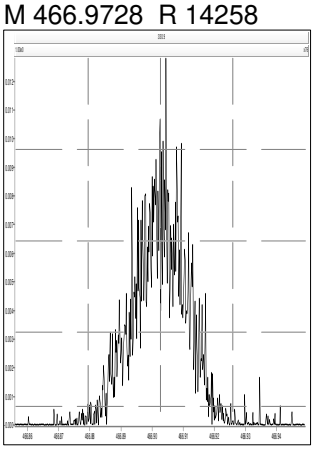
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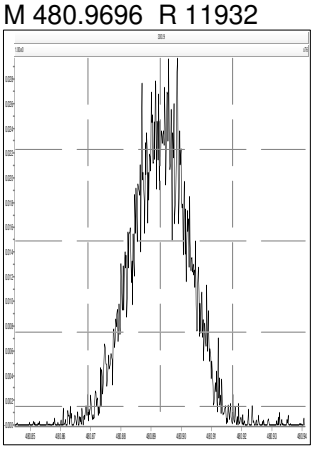
M 454.9728 R 12872



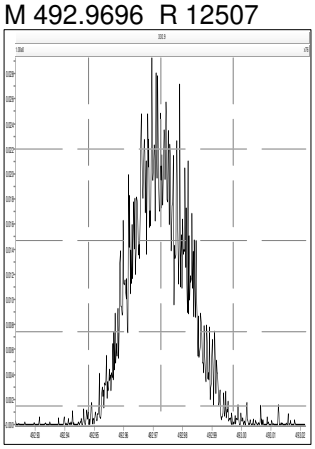
M 466.9728 R 14258



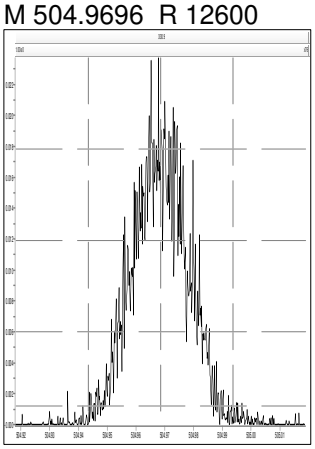
M 480.9696 R 11932



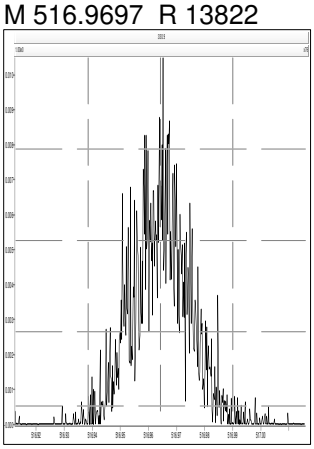
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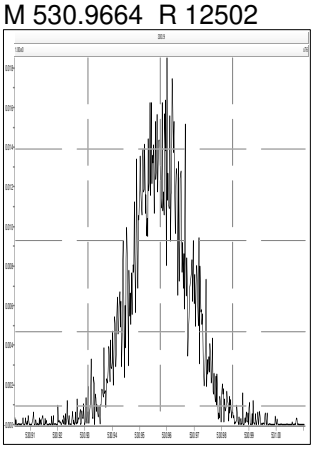
M 504.9696 R 12600



M 516.9697 R 13822



M 530.9664 R 12502



Sample List Report **MassLynx 4.1 SCN815**

Sample List: C:\MassLynx\Default.pro\Sampledb\9-221103B-PCB-RUN.SPL
Last Modified: Thursday, November 03, 2022 18:00:41 Eastern Daylight Time
Printed: Friday, November 04, 2022 10:05:39 Eastern Daylight Time

Page Position (1, 1)

	File Name	Sample ID	File Text	MS File	Inlet File	Vial
1	9-221103B01	H9-21-WDM-569	1668-CS#6-023	1668_octyl_1	1668_octyl_1	Tray1:2
2	9-221103B02	H9-21-CS3-570	1668-CS#3-023	1668_octyl_1	1668_octyl_1	Tray1:1
3	9-221103B03	H9-21-CS2-570	1668-CS#2-023	1668_octyl_1	1668_octyl_1	Tray1:4
4	9-221103B04	H9-21-CS1-570	1668-CS#1-023	1668_octyl_1	1668_octyl_1	Tray1:5
5	9-221103B05	H9-21-CS0-570	1668-CS#0-023	1668_octyl_1	1668_octyl_1	Tray1:6
6	9-221103B06	H9-21-CS5-570	1668-CS#5-023	1668_octyl_1	1668_octyl_1	Tray1:7
7	9-221103B07	H9-21-CS4-570	1668-CS#4-023	1668_octyl_1	1668_octyl_1	Tray1:8
8	9-221103B08	H9-21-RS1-570	1668-RS#1-023	1668_octyl_1	1668_octyl_1	Tray1:9
9	9-221103B09	H9-21-CS7-570	1668-CS#7-023	1668_octyl_1	1668_octyl_1	Tray1:2
10	9-221103B10	H9-21-CCV-571	1668-CS#3-023	1668_octyl_1	1668_octyl_1	Tray1:1
11	9-221103B11	WG3766219-2	LCS	1668_octyl_1	1668_octyl_1	Tray1:10
12	9-221103B12	TOLUENE	IB	1668_octyl_1	1668_octyl_1	Tray1:3
13	9-221103B13	WG3766219-1	MB	1668_octyl_1	1668_octyl_1	Tray1:11
14	9-221103B14	WG3764944-1	MB	1668_octyl_1	1668_octyl_1	Tray1:16
15	9-221103B15	L2735055-1	SAMP	1668_octyl_1	1668_octyl_1	Tray1:12
16	9-221103B16	L2735055-2	SAMP	1668_octyl_1	1668_octyl_1	Tray1:13
17	9-221103B17	L2735055-3	SAMP	1668_octyl_1	1668_octyl_1	Tray1:14
18	9-221103B18	L2735055-4	SAMP	1668_octyl_1	1668_octyl_1	Tray1:15
19	9-221103B19	L2735053-1	SAMP	1668_octyl_1	1668_octyl_1	Tray1:17
20	9-221103B20	L2735053-2	SAMP	1668_octyl_1	1668_octyl_1	Tray1:18
21	9-221103B21	L2735053-3	SAMP	1668_octyl_1	1668_octyl_1	Tray1:19
22	9-221103B22	L2735053-4	SAMP	1668_octyl_1	1668_octyl_1	Tray1:20
23	9-221103B23	H9-22-CCV-572	1668-CS#3-021A	1668_octyl_1	1668_octyl_1	Tray1:1
24	9-221103B24	STANDBY	STANDBY	STANDBY	STANDBY_BACK	Tray1:3
25	---	---	---	---	---	---
26	---	Column SPBOCTYL	Serial No 273027-01	---	---	---
27	---	Detector	380	---	---	---
28	---	OP	ES	---	---	---

VP ✓ EA Nov 4

MR ✓

Wi ✓

Chl ✓

Tol ✓

ES B19

LM B22

QC ✓

B1 MB ✓

Rec B18

	File Name	Sample ID	File Text	Sample Type	Na Conc A	Na Conc B	Na Conc C	Na Conc D	Na Conc E	Na Conc F	Na Conc G	Na Conc H	FS Conc	CS Conc	ES Conc 1	ES Conc 2	IS Conc	Sample Size
1	9-221103B04	H9-21-CS1-570	1668-CS#1-023	Standard	1	1	1	2	---	---	---	---	100	100	100	200	100	1.000
2	9-221103B03	H9-21-CS2-570	1668-CS#2-023	Standard	5	5	5	10	---	---	---	---	100	100	100	200	100	1.000
3	9-221103B02	H9-21-CS3-570	1668-CS#3-023	Standard	50	50	50	100	---	---	---	---	100	100	100	200	100	1.000
4	9-221103B07	H9-21-CS4-570	1668-CS#4-023	Standard	400	400	400	800	---	---	---	---	100	100	100	200	100	1.000
5	9-221103B06	H9-21-CS5-570	1668-CS#5-023	Standard	2000	2000	2000	4000	---	---	---	---	100	100	100	200	100	1.000
6	9-221103B08	H9-21-RS1-570	1668-RS#1-023	QC	50	50	50	100	---	---	---	---	100	100	100	200	100	1.000

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221103B-PCB-ICAL.qld

Last Altered: Friday, November 04, 2022 09:45:08 Eastern Daylight Time
Printed: Wednesday, November 09, 2022 15:41:14 Eastern Standard Time

Method: C:\MassLynx\PCB.PRO\MethDB\1668-OCTYL-1-ICAL-10-221103B.mdb 23 Jun 2022 15:50:30
Calibration: C:\MassLynx\PCB.PRO\CurveDB\10-221103B-PCB-ICAL.cdb 04 Nov 2022 10:45:08

Name: 9-221103B04, Date: 03-Nov-2022, Time: 19:38:37, ID: H9-21-CS1-570, Description: 1668-CS#1-023, Vial: Tray1:5

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
1	PCB-1		33234	25441	7793	3.26	NO	8.87	1.00	8.84	8.91	1.08410	108.4		935	2310
2	PCB-3		33405	25512	7893	3.23	NO	10.42	1.00	10.39	10.45	1.07401	107.4		935	2310
3	PCB-4		24815	14232	10583	1.34	NO	10.59	1.00	10.55	10.62	1.07761	107.8	ES221104MB	1841	9627
4	PCB-15		31686	19266	12421	1.55	NO	14.29	1.00	14.26	14.33	1.06801	106.8		2677	5064
5	PCB-19		34695	18248	16447	1.11	NO	12.61	1.00	12.58	12.64	1.04669	104.7		2935	1701
6	PCB-37		27107	14179	12928	1.10	NO	18.27	1.00	18.24	18.30	1.04971	105.0		1604	1596
7	PCB-54		32018	14132	17887	0.79	NO	14.49	1.00	14.45	14.52	1.03456	103.5		1003	1147
8	PCB-81		26397	12041	14356	0.84	NO	21.88	1.00	21.85	21.92	1.05491	105.5		1110	2427
9	PCB-77		27983	11889	16094	0.74	NO	22.18	1.00	22.15	22.21	1.10588	110.6		1110	2427
10	PCB-104		28881	17645	11236	1.57	NO	17.61	1.00	17.57	17.64	1.04099	104.1		675	1570
11	PCB-123		21147	12788	8359	1.53	NO	23.21	1.00	23.17	23.24	1.05017	105.0		1434	1853
12	PCB-118		24567	15351	9216	1.67	NO	23.39	1.00	23.35	23.42	1.10651	110.7		1434	1853
13	PCB-114		22262	13549	8713	1.55	NO	23.68	1.00	23.64	23.71	1.07566	107.6		1434	1853
14	PCB-105		22161	13596	8565	1.59	NO	24.02	1.00	23.98	24.05	1.07625	107.6		1434	1853
15	PCB-126		22882	14031	8851	1.59	NO	25.61	1.00	25.58	25.64	1.10572	110.6		1434	1853
16	PCB-155		29445	15959	13486	1.18	NO	20.65	1.00	20.62	20.69	1.04679	104.7		949	855
17	PCB-167		19345	10519	8826	1.19	NO	26.55	1.00	26.52	26.59	1.03888	103.9		1172	676
18	PCB-156/157		37791	20815	16976	1.23	NO	27.17	1.00	27.14	27.20	2.07841	103.9		1172	676
19	PCB-169		17807	10263	7543	1.36	NO	28.84	1.00	28.80	28.87	1.03844	103.8		1172	676
20	PCB-188		23132	12326	10806	1.14	NO	23.65	1.00	23.62	23.69	1.00622	100.6		1062	847
21	PCB-189		16027	8152	7875	1.04	NO	30.14	1.00	30.11	30.18	1.02393	102.4		958	1334
22	PCB-202		24750	11673	13077	0.89	NO	26.44	1.00	26.41	26.48	1.04384	104.4		1092	856
23	PCB-205		11766	5642	6123	0.92	NO	31.59	1.00	31.55	31.62	0.98808	98.8		541	861
24	PCB-208		13880	6164	7717	0.80	NO	29.90	1.00	29.86	29.93	1.04067	104.1		669	1814
25	PCB-206		9095	4096	4999	0.82	NO	32.72	1.00	32.69	32.75	1.10006	110.0		669	1814
26	PCB-209		10184	5412	4772	1.13	NO	33.92	1.00	33.88	33.95	1.03754	103.8		235	403
27	13C-PCB-31		2362497	1224385	1138112	1.08	NO	15.85	0.87	15.82	15.89	101.30496	101.3		19950	10304
28	13C-PCB-95		1786461	1085750	700711	1.55	NO	19.18	1.09	19.15	19.22	101.62990	101.6		2238	2112
29	13C-PCB-153		1566149	869093	697056	1.25	NO	24.33	1.18	24.30	24.36	101.93056	101.9		4948	3907
30	13C-PCB-28		2613812	1340966	1272846	1.05	NO	16.03	0.94	16.00	16.06	97.01705	97.0		19950	10304
31	13C-PCB-111		1907719	1159811	747909	1.55	NO	22.14	1.07	22.11	22.18	96.80926	96.8		2238	2112
32	13C-PCB-178		1564350	793528	770821	1.03	NO	25.21	1.01	25.18	25.25	97.95208	98.0		4190	3829
33	13C-PCB-1		2638681	2000101	638580	3.13	NO	8.86	0.75	8.82	8.89	97.26074	97.3		2560	14401
34	13C-PCB-3		2536813	1915341	621472	3.08	NO	10.41	0.88	10.37	10.44	96.75188	96.8		2560	14401

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221103B-PCB-ICAL.qld

Last Altered: Friday, November 04, 2022 09:45:08 Eastern Daylight Time
Printed: Wednesday, November 09, 2022 15:41:14 Eastern Standard Time

Name: 9-221103B04, Date: 03-Nov-2022, Time: 19:38:37, ID: H9-21-CS1-570, Description: 1668-CS#1-023, Vial: Tray1:5

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
35	13C-PCB-4		2660180	1628954	1031226	1.58	NO	10.59	0.89	10.55	10.62	97.05287	97.1		11951	4049
36	13C-PCB-15		2608561	1610492	998069	1.61	NO	14.28	1.20	14.25	14.32	92.47623	92.5		10376	4798
37	13C-PCB-19		2970390	1537857	1432533	1.07	NO	12.60	1.06	12.56	12.63	94.14181	94.1		54862	40792
38	13C-PCB-37		2348976	1202644	1146332	1.05	NO	18.26	1.07	18.23	18.29	92.91150	92.9		19950	10304
39	13C-PCB-54		3538405	1523985	2014420	0.76	NO	14.47	0.85	14.44	14.50	95.16821	95.2		8392	5098
40	13C-PCB-81		1974248	879130	1095119	0.80	NO	21.86	1.05	21.83	21.90	93.24337	93.2		6270	4005
41	13C-PCB-77		2020323	898629	1121693	0.80	NO	22.16	1.07	22.13	22.19	93.90702	93.9		6270	4005
42	13C-PCB-104		2411146	1480388	930758	1.59	NO	17.60	1.03	17.56	17.63	93.00416	93.0		1241	1078
43	13C-PCB-123		1843720	1145020	698700	1.64	NO	23.19	1.12	23.16	23.23	93.82113	93.8		6790	3598
44	13C-PCB-118		1720109	1066805	653304	1.63	NO	23.38	1.13	23.34	23.41	94.98714	95.0		6790	3598
45	13C-PCB-114		1857918	1154967	702951	1.64	NO	23.67	0.95	23.63	23.70	94.91311	94.9		6790	3598
46	13C-PCB-105		1752512	1092809	659703	1.66	NO	24.00	0.96	23.97	24.04	94.00779	94.0		6790	3598
47	13C-PCB-126		1795209	1106103	689106	1.61	NO	25.60	1.02	25.57	25.63	94.97351	95.0		6790	3598
48	13C-PCB-155		2540582	1408927	1131655	1.25	NO	20.64	1.00	20.61	20.68	93.70258	93.7		1400	1253
49	13C-PCB-167		1594565	884866	709699	1.25	NO	26.54	1.06	26.51	26.58	95.49923	95.5		4948	3907
50	13C-PCB-156/157		3086877	1728268	1358609	1.27	NO	27.16	1.09	27.12	27.19	194.07383	97.0		4948	3907
51	13C-PCB-169		1505411	840671	664740	1.26	NO	28.81	1.15	28.78	28.85	97.24800	97.2		4948	3907
52	13C-PCB-188		2154811	1094111	1060699	1.03	NO	23.64	0.95	23.61	23.67	96.08076	96.1		4190	3829
53	13C-PCB-189		1572077	802284	769793	1.04	NO	30.13	0.96	30.10	30.16	97.17836	97.2		6022	6495
54	13C-PCB-202		2469532	1147313	1322218	0.87	NO	26.42	1.06	26.39	26.45	99.90471	99.9		6545	6160
55	13C-PCB-205		1110313	525763	584550	0.90	NO	31.57	1.01	31.54	31.61	95.76330	95.8		4846	5638
56	13C-PCB-208		1278470	561400	717069	0.78	NO	29.89	0.96	29.85	29.92	98.30309	98.3		4580	5645
57	13C-PCB-206		785916	341203	444714	0.77	NO	32.71	1.05	32.67	32.74	95.69498	95.7		4580	5645
58	13C-PCB-209		1063294	577149	486146	1.19	NO	33.89	1.08	33.85	33.92	96.66405	96.7		318	408
59	13C-PCB-9		4165351	2537688	1627663	1.56	NO	11.87	0.47	11.83	11.90	101.27745	101.3		11951	4049
60	13C-PCB-52		1651017	716558	934459	0.77	NO	17.04	0.68	17.00	17.07	101.05516	101.1		6263	4086
61	13C-PCB-101		1609427	980817	628610	1.56	NO	20.75	0.83	20.71	20.78	101.98492	102.0		2238	2112
62	13C-PCB-138		1373561	762991	610570	1.25	NO	24.99	0.00	24.96	25.03	103.59019	103.6		4948	3907
63	13C-PCB-194		939037	442977	496060	0.89	NO	31.29	1.25	31.26	31.32	103.15425	103.2		4846	5638
64	Total MoCB-F1	3		51574								819.55412			935	
65	Total DiCB-F1	1		14232								1.07761			1841	
66	Total DiCB-F2	1		19266								1.06801			2677	
67	Total TrCB-F1	1		18248								1.04669			2935	
68	Total TrCB-F3	3		40108								46571.57342			1604	
69	Total TeCB-F2	1		14132								1.03456			1003	
70	Total TeCB-F4	2		23930								2.16079			1110	
71	Total PeCB-F3	1		17645								1.04099			675	

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Last Altered: Friday, November 04, 2022 09:45:08 Eastern Daylight Time
Printed: Wednesday, November 09, 2022 15:41:14 Eastern Standard Time

Name: 9-221103B04, Date: 03-Nov-2022, Time: 19:38:37, ID: H9-21-CS1-570, Description: 1668-CS#1-023, Vial: Tray1:5

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
72	Total PeCB-F5	6		70023								1049.44535			1434	
73	Total HxCB-F4	1		15959								1.04679			949	
74	Total HxCB-F5	6		42817								2248.77245			1172	
75	Total HpCB-F5	6		48238								65867.95672			1062	
76	Total HpCB-F6	1		8152								1.02393			958	
77	Total OcCB-F5	1		11673								1.04384			1092	
78	Total OcCB-F6	2		5971								748.07731			541	
79	Total NoCB-F6	2		10260								2.14074			669	
80	Total DeCB-F7	1		5412								1.03754			235	
81	Total 13C-MoCB-F1	3		3921315								16221.41771			2560	
82	Total 13C-DiCB-F1	3		4174532								198.97262			11951	
83	Total 13C-DiCB-F2	4		3170546								3708595.679...			10376	
84	Total 13C-TrCB-F1	1		1537857								94.14181			54862	
85	Total 13C-TrCB-F3	6		3787945								30492.97972			19950	
86	Total 13C-TeCB-F2	1		1523985								95.16821			8392	
87	Total 13C-TeCB-F3	4		740871								104.60384			6263	
88	Total 13C-TeCB-F4	6		1798101								33293.91583			6270	
89	Total 13C-PeCB-F3	1		1480388								93.00416			1241	
90	Total 13C-PeCB-F4	10		3240931								304.85327			2238	
91	Total 13C-PeCB-F5	13		5710421								196844.32803			6790	
92	Total 13C-HxCB-F4	2		1417005								8953.19121			1400	
93	Total 13C-HxCB-F5	12		5131983								621.65948			4948	
94	Total 13C-HpCB-F5	18		1938275								68478.06011			4190	
95	Total 13C-HpCB-F6	10		877182								118879.40355			6022	
96	Total 13C-OcCB-F5	21		1176967								28387.72475			6545	
97	Total 13C-OcCB-F6	4		1008810								217.44343			4846	
98	Total 13C-NoCB-F6	2		902603								193.99807			4580	
99	Total 13C-DeCB-F7	1		577149								96.66405			318	
100	Lockmass F1			0											548644	
101	Lockmass F2			0											356966	
102	Lockmass F3			0											696402	
103	Lockmass F4			0											450913	
104	Lockmass F5			0											107831	
105	Lockmass F6			0											114649	
106	Lockmass F7			0											36889	

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221103B-PCB-ICAL.qld

Last Altered: Friday, November 04, 2022 09:45:08 Eastern Daylight Time
Printed: Wednesday, November 09, 2022 15:41:14 Eastern Standard Time

Name: 9-221103B03, Date: 03-Nov-2022, Time: 18:56:18, ID: H9-21-CS2-570, Description: 1668-CS#2-023, Vial: Tray1:4

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
1	PCB-1		158642	119744	38898	3.08	NO	8.87	1.00	8.84	8.91	5.11366	102.3		942	2330
2	PCB-3		159624	121243	38381	3.16	NO	10.42	1.00	10.39	10.45	5.16627	103.3		942	2330
3	PCB-4		118630	69854	48776	1.43	NO	10.59	1.00	10.55	10.62	5.14746	102.9		1695	7005
4	PCB-15		152762	92063	60699	1.52	NO	14.29	1.00	14.26	14.33	5.07544	101.5		1390	6085
5	PCB-19		173919	89625	84294	1.06	NO	12.61	1.00	12.58	12.64	5.11612	102.3		2075	1694
6	PCB-37		136368	68383	67985	1.01	NO	18.26	1.00	18.23	18.29	5.17725	103.5		2169	2070
7	PCB-54		160416	69907	90509	0.77	NO	14.48	1.00	14.45	14.51	5.06569	101.3		691	1789
8	PCB-81		128531	55556	72975	0.76	NO	21.87	1.00	21.84	21.91	5.18974	103.8		1627	2039
9	PCB-77		127616	56068	71549	0.78	NO	22.17	1.00	22.14	22.20	5.06007	101.2		1627	2039
10	PCB-104		148092	87879	60213	1.46	NO	17.60	1.00	17.56	17.63	5.19455	103.9		1130	1275
11	PCB-123		105346	63454	41892	1.51	NO	23.21	1.00	23.17	23.24	5.25491	105.1		1771	2068
12	PCB-118		110594	67579	43015	1.57	NO	23.38	1.00	23.34	23.41	5.01191	100.2		1771	2068
13	PCB-114		106615	65436	41179	1.59	NO	23.68	1.00	23.64	23.71	5.11417	102.3		1771	2068
14	PCB-105		105187	64418	40769	1.58	NO	24.00	1.00	23.97	24.04	5.08326	101.7		1771	2068
15	PCB-126		106021	64483	41537	1.55	NO	25.60	1.00	25.57	25.63	5.11191	102.2		1771	2068
16	PCB-155		148948	83114	65834	1.26	NO	20.65	1.00	20.62	20.69	5.19123	103.8		889	787
17	PCB-167		95897	52769	43127	1.22	NO	26.55	1.00	26.52	26.59	5.14251	102.9		1288	1072
18	PCB-156/157		189025	105752	83273	1.27	NO	27.16	1.00	27.12	27.19	10.35812	103.6		1288	1072
19	PCB-169		88600	50074	38527	1.30	NO	28.83	1.00	28.79	28.86	5.12175	102.4		1288	1072
20	PCB-188		119268	60101	59167	1.02	NO	23.65	1.00	23.62	23.69	5.24855	105.0		1282	1133
21	PCB-189		83115	42362	40753	1.04	NO	30.14	1.00	30.11	30.18	5.16359	103.3		1448	1302
22	PCB-202		117260	55608	61653	0.90	NO	26.43	1.00	26.40	26.47	4.91577	98.3		1162	1113
23	PCB-205		63139	29650	33489	0.89	NO	31.59	1.00	31.55	31.62	4.93857	98.8		895	1509
24	PCB-208		69432	30524	38908	0.78	NO	29.90	1.00	29.86	29.93	4.93691	98.7		1132	2017
25	PCB-206		44121	19054	25067	0.76	NO	32.72	1.00	32.69	32.75	4.79081	95.8		1132	2017
26	PCB-209		54421	29086	25334	1.15	NO	33.92	1.00	33.88	33.95	5.16528	103.3		176	292
27	13C-PCB-31		2403644	1236680	1166965	1.06	NO	15.85	0.87	15.82	15.89	100.74173	100.7		19746	9601
28	13C-PCB-95		1802022	1089614	712408	1.53	NO	19.18	1.09	19.15	19.22	101.71891	101.7		2110	1574
29	13C-PCB-153		1513329	846188	667140	1.27	NO	24.33	1.18	24.30	24.36	97.51438	97.5		5138	3289
30	13C-PCB-28		2580143	1324390	1255753	1.05	NO	16.03	0.94	16.00	16.06	97.53963	97.5		19746	9601
31	13C-PCB-111		1885866	1151332	734534	1.57	NO	22.14	1.07	22.11	22.18	99.25989	99.3		2110	1574
32	13C-PCB-178		1505706	762620	743085	1.03	NO	25.21	1.01	25.18	25.25	99.71373	99.7		5516	3374
33	13C-PCB-1		2670286	2019457	650829	3.10	NO	8.86	0.75	8.82	8.89	100.95408	101.0		2275	15083
34	13C-PCB-3		2519992	1902055	617937	3.08	NO	10.41	0.88	10.37	10.44	98.57927	98.6		2275	15083
35	13C-PCB-4		2662323	1625889	1036434	1.57	NO	10.57	0.89	10.54	10.60	99.62618	99.6		11471	4079
36	13C-PCB-15		2646361	1634995	1011366	1.62	NO	14.28	1.20	14.24	14.31	96.22628	96.2		10978	5686
37	13C-PCB-19		3046325	1571109	1475216	1.07	NO	12.60	1.06	12.56	12.63	99.02863	99.0		28238	33033

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Last Altered: Friday, November 04, 2022 09:45:08 Eastern Daylight Time
Printed: Wednesday, November 09, 2022 15:41:14 Eastern Standard Time

Name: 9-221103B03, Date: 03-Nov-2022, Time: 18:56:18, ID: H9-21-CS2-570, Description: 1668-CS#2-023, Vial: Tray1:4

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
38	13C-PCB-37		2395944	1238122	1157821	1.07	NO	18.25	1.07	18.22	18.28	96.52310	96.5		19746	9601
39	13C-PCB-54		3620546	1538283	2082263	0.74	NO	14.47	0.85	14.44	14.50	99.17955	99.2		9130	5075
40	13C-PCB-81		1954002	874566	1079436	0.81	NO	21.86	1.05	21.83	21.90	95.71984	95.7		5174	5253
41	13C-PCB-77		2013630	901120	1112510	0.81	NO	22.16	1.07	22.13	22.19	97.07730	97.1		5174	5253
42	13C-PCB-104		2477688	1514837	962851	1.57	NO	17.59	1.03	17.55	17.62	99.12569	99.1		966	1595
43	13C-PCB-123		1835521	1132270	703251	1.61	NO	23.19	1.12	23.16	23.23	96.87811	96.9		6120	4279
44	13C-PCB-118		1709547	1053681	655866	1.61	NO	23.36	1.13	23.33	23.40	97.91530	97.9		6120	4279
45	13C-PCB-114		1871449	1152249	719201	1.60	NO	23.67	0.95	23.63	23.70	99.16045	99.2		6120	4279
46	13C-PCB-105		1761206	1090800	670406	1.63	NO	23.99	0.96	23.96	24.03	97.98817	98.0		6120	4279
47	13C-PCB-126		1799183	1112296	686887	1.62	NO	25.59	1.02	25.55	25.62	98.72414	98.7		6120	4279
48	13C-PCB-155		2591441	1437455	1153986	1.25	NO	20.63	1.00	20.60	20.67	99.13348	99.1		1051	1052
49	13C-PCB-167		1596873	886651	710222	1.25	NO	26.54	1.06	26.51	26.58	101.14934	101.1		5138	3289
50	13C-PCB-156/157		3098145	1727241	1370903	1.26	NO	27.15	1.09	27.11	27.18	206.00813	103.0		5138	3289
51	13C-PCB-169		1518694	850918	667776	1.27	NO	28.81	1.15	28.78	28.85	103.76023	103.8		5138	3289
52	13C-PCB-188		2129970	1083995	1045975	1.04	NO	23.64	0.95	23.61	23.67	100.44674	100.4		5516	3374
53	13C-PCB-189		1616655	831500	785154	1.06	NO	30.13	0.96	30.10	30.16	105.69345	105.7		5358	3757
54	13C-PCB-202		2484438	1160824	1323614	0.88	NO	26.42	1.06	26.39	26.45	106.30029	106.3		5090	4689
55	13C-PCB-205		1192132	567368	624764	0.91	NO	31.57	1.01	31.54	31.61	102.22458	102.2		4609	4974
56	13C-PCB-208		1348069	588955	759114	0.78	NO	29.89	0.96	29.85	29.92	103.05430	103.1		4289	6561
57	13C-PCB-206		875460	380512	494948	0.77	NO	32.71	1.05	32.67	32.74	105.98063	106.0		4289	6561
58	13C-PCB-209		1141289	617858	523431	1.18	NO	33.90	1.08	33.87	33.93	103.15369	103.2		352	364
59	13C-PCB-9		4061030	2466649	1594381	1.55	NO	11.87	0.47	11.83	11.90	98.74095	98.7		11471	4079
60	13C-PCB-52		1621018	705110	915907	0.77	NO	17.03	0.68	16.99	17.06	99.21899	99.2		7012	3147
61	13C-PCB-101		1551710	938382	613329	1.53	NO	20.74	0.83	20.70	20.77	98.32757	98.3		2110	1574
62	13C-PCB-138		1298713	722435	576277	1.25	NO	24.99	0.00	24.96	25.03	97.94530	97.9		5138	3289
63	13C-PCB-194		944507	446112	498395	0.90	NO	31.28	1.25	31.24	31.31	103.75517	103.8		4609	4974
64	Total MoCB-F1	3		243867								3366.56589			942	
65	Total DiCB-F1	2		73810								9047.42414			1695	
66	Total DiCB-F2	1		92063								5.07544			1390	
67	Total TrCB-F1	1		89625								5.11612			2075	
68	Total TrCB-F3	3		202430								238878.80709			2169	
69	Total TeCB-F2	1		69907								5.06569			691	
70	Total TeCB-F4	4		112518								1707.40524			1627	
71	Total PeCB-F3	1		87879								5.19455			1130	
72	Total PeCB-F5	9		333902								12063.21361			1771	
73	Total HxCB-F4	1		83114								5.19123			889	
74	Total HxCB-F5	9		219421								17029.72142			1288	

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221103B-PCB-ICAL.qld

Last Altered: Friday, November 04, 2022 09:45:08 Eastern Daylight Time
Printed: Wednesday, November 09, 2022 15:41:14 Eastern Standard Time

Name: 9-221103B03, Date: 03-Nov-2022, Time: 18:56:18, ID: H9-21-CS2-570, Description: 1668-CS#2-023, Vial: Tray1:4

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
75	Total HpCB-F5	7		237159								327287.06648			1282	
76	Total HpCB-F6	2		44323								3850.26985			1448	
77	Total OcCB-F5	2		56183								1121.31347			1162	
78	Total OcCB-F6	4		33491								7508.88451			895	
79	Total NoCB-F6	2		49578								9.72772			1132	
80	Total DeCB-F7	1		29086								5.16528			176	
81	Total 13C-MoCB-F1	2		3921512								199.53336			2275	
82	Total 13C-DiCB-F1	5		4103829								199.29047			11471	
83	Total 13C-DiCB-F2	2		3196956								3717992.881...			10978	
84	Total 13C-TrCB-F1	1		1571109								99.02863			28238	
85	Total 13C-TrCB-F3	5		3814458								19400.73521			19746	
86	Total 13C-TeCB-F2	2		1538956								561.23059			9130	
87	Total 13C-TeCB-F3	4		731095								102.88422			7012	
88	Total 13C-TeCB-F4	10		1799552								37219.86189			5174	
89	Total 13C-PeCB-F3	1		1514837								99.12569			966	
90	Total 13C-PeCB-F4	10		3194085								303.74064			2110	
91	Total 13C-PeCB-F5	13		5683920								197986.57606			6120	
92	Total 13C-HxCB-F4	2		1445390								8467.33383			1051	
93	Total 13C-HxCB-F5	16		5075111								634.78710			5138	
94	Total 13C-HpCB-F5	17		1890133								63961.73839			5516	
95	Total 13C-HpCB-F6	11		912171								130796.28826			5358	
96	Total 13C-OcCB-F5	26		1183140								27580.60316			5090	
97	Total 13C-OcCB-F6	4		1055912								225.50380			4609	
98	Total 13C-NoCB-F6	2		969467								209.03493			4289	
99	Total 13C-DeCB-F7	1		617858								103.15369			352	
100	Lockmass F1			0											514028	
101	Lockmass F2			0											283901	
102	Lockmass F3			0											681482	
103	Lockmass F4			0											505026	
104	Lockmass F5			0											117926	
105	Lockmass F6			0											110097	
106	Lockmass F7			0											36632	

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221103B-PCB-ICAL.qld

Last Altered: Friday, November 04, 2022 09:45:08 Eastern Daylight Time
Printed: Wednesday, November 09, 2022 15:41:14 Eastern Standard Time

Name: 9-221103B02, Date: 03-Nov-2022, Time: 18:14:04, ID: H9-21-CS3-570, Description: 1668-CS#3-023, Vial: Tray1:1

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
1	PCB-1		1464155	1110003	354152	3.13	NO	8.89	1.00	8.85	8.92	48.32347	96.6		1532	2200
2	PCB-3		1486122	1131254	354869	3.19	NO	10.44	1.00	10.40	10.47	48.37810	96.8		1532	2200
3	PCB-4		1066435	644455	421980	1.53	NO	10.60	1.00	10.57	10.63	46.87674	93.8		2058	4925
4	PCB-15		1471810	894938	576872	1.55	NO	14.30	1.00	14.27	14.34	48.80491	97.6		2401	4267
5	PCB-19		1642740	844267	798473	1.06	NO	12.63	1.00	12.59	12.66	48.21086	96.4		2274	1878
6	PCB-37		1326869	676714	650155	1.04	NO	18.28	1.00	18.25	18.31	50.18489	100.4		2107	2712
7	PCB-54		1529045	670322	858722	0.78	NO	14.50	1.00	14.46	14.53	47.87258	95.7		950	1415
8	PCB-81		1278152	566477	711675	0.80	NO	21.89	1.00	21.86	21.93	50.67912	101.4		1741	2729
9	PCB-77		1274208	559494	714714	0.78	NO	22.19	1.00	22.15	22.22	50.36759	100.7		1741	2729
10	PCB-104		1429262	865381	563881	1.53	NO	17.62	1.00	17.58	17.65	49.56390	99.1		881	1165
11	PCB-123		1050179	642710	407469	1.58	NO	23.22	1.00	23.19	23.25	50.91093	101.8		3353	2227
12	PCB-118		1123249	685783	437466	1.57	NO	23.39	1.00	23.35	23.42	50.82688	101.7		3353	2227
13	PCB-114		1073354	652076	421277	1.55	NO	23.69	1.00	23.66	23.72	50.86547	101.7		3353	2227
14	PCB-105		1061489	642028	419462	1.53	NO	24.02	1.00	23.98	24.05	50.69818	101.4		3353	2227
15	PCB-126		1042247	636537	405711	1.57	NO	25.62	1.00	25.59	25.66	50.07192	100.1		3353	2227
16	PCB-155		1497476	827726	669750	1.24	NO	20.67	1.00	20.64	20.70	50.18926	100.4		996	1034
17	PCB-167		938733	520916	417817	1.25	NO	26.57	1.00	26.53	26.60	50.15087	100.3		3590	2358
18	PCB-156/157		1815480	1012126	803354	1.26	NO	27.17	1.00	27.14	27.20	100.06946	100.1		3590	2358
19	PCB-169		850660	472424	378236	1.25	NO	28.84	1.00	28.80	28.87	49.85609	99.7		3590	2358
20	PCB-188		1208011	612587	595424	1.03	NO	23.67	1.00	23.63	23.70	50.50056	101.0		2587	1713
21	PCB-189		777198	395975	381223	1.04	NO	30.16	1.00	30.12	30.19	49.22319	98.4		4090	3687
22	PCB-202		1166003	548010	617994	0.89	NO	26.44	1.00	26.41	26.48	48.90192	97.8		2468	1746
23	PCB-205		635371	301678	333693	0.90	NO	31.60	1.00	31.57	31.63	49.18649	98.4		3295	3223
24	PCB-208		680307	297692	382615	0.78	NO	29.91	1.00	29.88	29.94	49.95463	99.9		2902	4674
25	PCB-206		448627	196151	252476	0.78	NO	32.73	1.00	32.70	32.77	48.54138	97.1		2902	4674
26	PCB-209		531350	287779	243571	1.18	NO	33.93	1.00	33.90	33.96	49.63048	99.3		254	291
27	13C-PCB-31		2426165	1255738	1170427	1.07	NO	15.86	0.87	15.83	15.90	101.38340	101.4		26754	9621
28	13C-PCB-95		1861693	1129003	732690	1.54	NO	19.19	1.09	19.16	19.22	103.68087	103.7		2109	1411
29	13C-PCB-153		1574098	869115	704983	1.23	NO	24.34	1.18	24.31	24.38	100.33043	100.3		4790	2865
30	13C-PCB-28		2632401	1352317	1280085	1.06	NO	16.04	0.94	16.01	16.07	99.28840	99.3		26754	9621
31	13C-PCB-111		1984529	1209682	774846	1.56	NO	22.16	1.07	22.13	22.19	101.51474	101.5		2109	1411
32	13C-PCB-178		1582462	803454	779007	1.03	NO	25.22	1.01	25.19	25.26	104.12752	104.1		4657	3385
33	13C-PCB-1		2607949	1972876	635073	3.11	NO	8.87	0.75	8.84	8.91	100.57130	100.6		2246	17076
34	13C-PCB-3		2505442	1891277	614165	3.08	NO	10.42	0.88	10.39	10.46	99.97228	100.0		2246	17076
35	13C-PCB-4		2628064	1601144	1026919	1.56	NO	10.59	0.89	10.55	10.62	100.31304	100.3		8982	2744
36	13C-PCB-15		2651521	1637360	1014161	1.61	NO	14.29	1.20	14.26	14.33	98.34411	98.3		12290	3377
37	13C-PCB-19		3053478	1575446	1478032	1.07	NO	12.61	1.06	12.58	12.64	101.24840	101.2		23936	31903

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221103B-PCB-ICAL.qld

Last Altered: Friday, November 04, 2022 09:45:08 Eastern Daylight Time
Printed: Wednesday, November 09, 2022 15:41:14 Eastern Standard Time

Name: 9-221103B02, Date: 03-Nov-2022, Time: 18:14:04, ID: H9-21-CS3-570, Description: 1668-CS#3-023, Vial: Tray1:1

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
38	13C-PCB-37		2405013	1243949	1161064	1.07	NO	18.27	1.07	18.24	18.30	96.66766	96.7		26754	9621
39	13C-PCB-54		3651717	1575912	2075805	0.76	NO	14.48	0.85	14.45	14.51	99.80543	99.8		6097	4746
40	13C-PCB-81		1989829	883591	1106238	0.80	NO	21.87	1.05	21.84	21.91	94.73300	94.7		6086	4240
41	13C-PCB-77		2019851	902286	1117565	0.81	NO	22.17	1.07	22.14	22.20	94.63811	94.6		6086	4240
42	13C-PCB-104		2506164	1527230	978934	1.56	NO	17.60	1.03	17.56	17.63	97.44458	97.4		1073	960
43	13C-PCB-123		1888674	1168596	720078	1.62	NO	23.21	1.12	23.17	23.24	96.87954	96.9		5920	4369
44	13C-PCB-118		1712118	1061151	650967	1.63	NO	23.38	1.13	23.34	23.41	95.30416	95.3		5920	4369
45	13C-PCB-114		1894328	1177756	716572	1.64	NO	23.68	0.95	23.64	23.71	97.54931	97.5		5920	4369
46	13C-PCB-105		1782025	1115356	666669	1.67	NO	24.00	0.96	23.97	24.04	96.35763	96.4		5920	4369
47	13C-PCB-126		1805692	1121549	684143	1.64	NO	25.61	1.02	25.58	25.64	96.29424	96.3		5920	4369
48	13C-PCB-155		2694786	1499163	1195623	1.25	NO	20.65	1.00	20.62	20.69	100.18713	100.2		1563	1295
49	13C-PCB-167		1602898	889880	713019	1.25	NO	26.55	1.06	26.52	26.59	100.88260	100.9		4790	2865
50	13C-PCB-156/157		3080013	1710434	1369579	1.25	NO	27.17	1.09	27.14	27.20	203.49454	101.7		4790	2865
51	13C-PCB-169		1497926	836495	661431	1.26	NO	28.83	1.15	28.79	28.86	101.68770	101.7		4790	2865
52	13C-PCB-188		2242150	1135776	1106374	1.03	NO	23.65	0.95	23.62	23.69	105.06171	105.1		4657	3385
53	13C-PCB-189		1585806	805082	780725	1.03	NO	30.14	0.96	30.11	30.18	103.01453	103.0		6017	3372
54	13C-PCB-202		2483374	1155726	1327647	0.87	NO	26.43	1.06	26.40	26.47	105.57618	105.6		5394	5186
55	13C-PCB-205		1204506	569918	634588	0.90	NO	31.59	1.01	31.55	31.62	102.54683	102.5		4668	4843
56	13C-PCB-208		1305373	570062	735311	0.78	NO	29.90	0.96	29.86	29.93	99.07658	99.1		6999	5880
57	13C-PCB-206		878568	388380	490188	0.79	NO	32.71	1.05	32.67	32.74	105.59613	105.6		6999	5880
58	13C-PCB-209		1159732	628396	531336	1.18	NO	33.92	1.08	33.88	33.95	104.07075	104.1		351	339
59	13C-PCB-9		3981323	2415155	1566168	1.54	NO	11.88	0.48	11.85	11.91	96.80293	96.8		8982	2744
60	13C-PCB-52		1624721	706872	917848	0.77	NO	17.05	0.68	17.01	17.08	99.44564	99.4		4721	3309
61	13C-PCB-101		1596622	968989	627632	1.54	NO	20.75	0.83	20.72	20.79	101.17346	101.2		2109	1411
62	13C-PCB-138		1307060	728278	578782	1.26	NO	25.01	0.00	24.97	25.04	98.57485	98.6		4790	2865
63	13C-PCB-194		951312	451815	499497	0.90	NO	31.29	1.25	31.26	31.32	104.50271	104.5		4668	4843
64	Total MoCB-F1	3		2275776								37936.93506			1532	
65	Total DiCB-F1	2		679317								67212.17615			2058	
66	Total DiCB-F2	2		897320								3563.75610			2401	
67	Total TrCB-F1	1		844267								48.21086			2274	
68	Total TrCB-F3	6		1975932								2323771.995...			2107	
69	Total TeCB-F2	1		670322								47.87258			950	
70	Total TeCB-F4	13		1142026								30158.49216			1741	
71	Total PeCB-F3	1		865381								49.56390			881	
72	Total PeCB-F5	13		3342731								117046.22560			3353	
73	Total HxCB-F4	4		828952								2048.68781			996	
74	Total HxCB-F5	13		2114715								169021.20641			3590	

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221103B-PCB-ICAL.qld

Last Altered: Friday, November 04, 2022 09:45:08 Eastern Daylight Time
Printed: Wednesday, November 09, 2022 15:41:14 Eastern Standard Time

Name: 9-221103B02, Date: 03-Nov-2022, Time: 18:14:04, ID: H9-21-CS3-570, Description: 1668-CS#3-023, Vial: Tray1:1

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
75	Total HpCB-F5	13		2345832								3207403.776...			2587	
76	Total HpCB-F6	4		419033								44526.62160			4090	
77	Total OcCB-F5	15		560351								28624.99128			2468	
78	Total OcCB-F6	5		334179								62720.88333			3295	
79	Total NoCB-F6	4		495478								3650.70376			2902	
80	Total DeCB-F7	1		287779								49.63048			254	
81	Total 13C-MoCB-F1	5		3888362								53286.29431			2246	
82	Total 13C-DiCB-F1	3		4024001								197.77085			8982	
83	Total 13C-DiCB-F2	3		3216895								3784925.720...			12290	
84	Total 13C-TrCB-F1	1		1575446								101.24840			23936	
85	Total 13C-TrCB-F3	6		3868148								25392.67633			26754	
86	Total 13C-TeCB-F2	1		1575912								99.80543			6097	
87	Total 13C-TeCB-F3	5		733624								103.19651			4721	
88	Total 13C-TeCB-F4	7		1806885								33546.15701			6086	
89	Total 13C-PeCB-F3	2		1527529								425.44005			1073	
90	Total 13C-PeCB-F4	11		3321606								310.69768			2109	
91	Total 13C-PeCB-F5	14		5785462								194294.51667			5920	
92	Total 13C-HxCB-F4	4		1509020								10209.92060			1563	
93	Total 13C-HxCB-F5	12		5076078								632.93367			4790	
94	Total 13C-HpCB-F5	17		1983939								63585.41083			4657	
95	Total 13C-HpCB-F6	8		880045								117929.08414			6017	
96	Total 13C-OcCB-F5	15		1167927								15971.70623			5394	
97	Total 13C-OcCB-F6	4		1064615								226.50711			4668	
98	Total 13C-NoCB-F6	2		958442								204.67271			6999	
99	Total 13C-DeCB-F7	1		628396								104.07075			351	
100	Lockmass F1			0											492760	
101	Lockmass F2			0											300863	
102	Lockmass F3			0											653065	
103	Lockmass F4			0											429026	
104	Lockmass F5			0											99181	
105	Lockmass F6			0											95070	
106	Lockmass F7			0											28169	

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221103B-PCB-ICAL.qld

Last Altered: Friday, November 04, 2022 09:45:08 Eastern Daylight Time
Printed: Wednesday, November 09, 2022 15:41:14 Eastern Standard Time

Name: 9-221103B07, Date: 03-Nov-2022, Time: 21:45:31, ID: H9-21-CS4-570, Description: 1668-CS#4-023, Vial: Tray1:8

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
1	PCB-1		13049794	9913281	3136513	3.16	NO	8.86	1.00	8.82	8.89	419.04642	104.8		1905	2325
2	PCB-3		13093403	9942650	3150753	3.16	NO	10.41	1.00	10.37	10.44	411.18441	102.8		1905	2325
3	PCB-4		8857698	5312806	3544892	1.50	NO	10.57	1.00	10.54	10.60	380.75837	95.2		2280	11842
4	PCB-15		12456689	7548675	4908014	1.54	NO	14.28	1.00	14.24	14.31	363.93179	91.0		3162	8940
5	PCB-19		14024905	7157558	6867347	1.04	NO	12.60	1.00	12.56	12.63	396.65123	99.2		2354	2367
6	PCB-37		11045129	5629205	5415924	1.04	NO	18.25	1.00	18.22	18.28	378.53204	94.6		3618	3414
7	PCB-54		12620986	5554709	7066277	0.79	NO	14.47	1.00	14.44	14.50	415.25339	103.8		1530	1461
8	PCB-81		10545319	4605269	5940050	0.78	NO	21.86	1.00	21.83	21.90	375.61553	93.9		2216	2901
9	PCB-77		10517817	4615077	5902740	0.78	NO	22.16	1.00	22.13	22.19	375.56287	93.9		2216	2901
10	PCB-104		11714917	7100377	4614541	1.54	NO	17.59	1.00	17.55	17.62	382.64714	95.7		1307	1950
11	PCB-123		8307814	5029066	3278748	1.53	NO	23.19	1.00	23.16	23.23	373.44725	93.4		9784	7944
12	PCB-118		8982334	5455897	3526437	1.55	NO	23.36	1.00	23.33	23.40	371.70665	92.9		9784	7944
13	PCB-114		8437309	5146647	3290662	1.56	NO	23.65	1.00	23.62	23.69	370.08983	92.5		9784	7944
14	PCB-105		8455138	5123956	3331182	1.54	NO	23.99	1.00	23.96	24.03	372.93076	93.2		9784	7944
15	PCB-126		8307704	5051953	3255751	1.55	NO	25.59	1.00	25.55	25.62	373.23354	93.3		9784	7944
16	PCB-155		11567447	6372157	5195290	1.23	NO	20.63	1.00	20.60	20.67	381.05392	95.3		2137	1341
17	PCB-167		7367930	4090031	3277899	1.25	NO	26.53	1.00	26.50	26.56	384.31022	96.1		8453	8518
18	PCB-156/157		13944063	7736532	6207531	1.25	NO	27.15	1.00	27.11	27.18	770.92129	96.4		8453	8518
19	PCB-169		6477058	3593404	2883654	1.25	NO	28.81	1.00	28.78	28.85	387.13820	96.8		8453	8518
20	PCB-188		9040680	4570655	4470026	1.02	NO	23.63	1.00	23.60	23.66	389.89071	97.5		4254	6047
21	PCB-189		5888851	3002378	2886472	1.04	NO	30.12	1.00	30.08	30.15	392.02113	98.0		12378	5901
22	PCB-202		8639272	4079428	4559845	0.89	NO	26.41	1.00	26.38	26.44	403.54863	100.9		5109	3841
23	PCB-205		4622363	2208042	2414322	0.91	NO	31.56	1.00	31.53	31.59	413.78329	103.4		12064	9296
24	PCB-208		4836696	2121536	2715160	0.78	NO	29.87	1.00	29.84	29.91	396.51476	99.1		9222	12084
25	PCB-206		2964671	1299454	1665218	0.78	NO	32.69	1.00	32.66	32.73	396.65712	99.2		9222	12084
26	PCB-209		3404182	1841915	1562268	1.18	NO	33.89	1.00	33.85	33.92	387.87163	97.0		304	413
27	13C-PCB-31		2546698	1311182	1235516	1.06	NO	15.83	0.87	15.80	15.87	99.76292	99.8		30602	13437
28	13C-PCB-95		1856819	1130637	726181	1.56	NO	19.16	1.09	19.13	19.20	96.02760	96.0		2106	1974
29	13C-PCB-153		1572221	878813	693408	1.27	NO	24.31	1.18	24.27	24.34	99.50484	99.5		3630	5274
30	13C-PCB-28		2726618	1402650	1323969	1.06	NO	16.01	0.94	15.98	16.04	104.50964	104.5		30602	13437
31	13C-PCB-111		1950752	1187826	762926	1.56	NO	22.12	1.07	22.09	22.16	104.38383	104.4		2106	1974
32	13C-PCB-178		1510194	764537	745657	1.03	NO	25.19	1.01	25.15	25.22	100.05924	100.1		4102	3735
33	13C-PCB-1		2680475	2031241	649235	3.13	NO	8.86	0.75	8.82	8.89	103.63506	103.6		1681	14558
34	13C-PCB-3		2597135	1959985	637150	3.08	NO	10.39	0.88	10.36	10.43	103.89860	103.9		1681	14558
35	13C-PCB-4		2687388	1628075	1059313	1.54	NO	10.57	0.89	10.54	10.60	102.84231	102.8		8511	4583
36	13C-PCB-15		3009465	1859892	1149573	1.62	NO	14.27	1.20	14.23	14.30	111.90838	111.9		15324	6456
37	13C-PCB-19		3168561	1624266	1544295	1.05	NO	12.58	1.06	12.55	12.61	105.33564	105.3		40103	35820

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221103B-PCB-ICAL.qld

Last Altered: Friday, November 04, 2022 09:45:08 Eastern Daylight Time
Printed: Wednesday, November 09, 2022 15:41:14 Eastern Standard Time

Name: 9-221103B07, Date: 03-Nov-2022, Time: 21:45:31, ID: H9-21-CS4-570, Description: 1668-CS#4-023, Vial: Tray1:8

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
38	13C-PCB-37		2654181	1372763	1281418	1.07	NO	18.24	1.07	18.21	18.28	108.41264	108.4		30602	13437
39	13C-PCB-54		3474912	1462842	2012070	0.73	NO	14.46	0.85	14.43	14.49	96.51316	96.5		9796	5314
40	13C-PCB-81		2215025	990113	1224912	0.81	NO	21.85	1.05	21.81	21.88	110.31223	110.3		6825	4301
41	13C-PCB-77		2236006	1003180	1232826	0.81	NO	22.14	1.07	22.11	22.18	109.59210	109.6		6825	4301
42	13C-PCB-104		2660748	1630646	1030102	1.58	NO	17.58	1.03	17.54	17.61	108.22099	108.2		1545	1387
43	13C-PCB-123		2036864	1250024	786840	1.59	NO	23.18	1.12	23.15	23.22	109.29408	109.3		6087	4609
44	13C-PCB-118		1872147	1147407	724740	1.58	NO	23.35	1.13	23.32	23.38	109.01282	109.0		6087	4609
45	13C-PCB-114		2046596	1253745	792851	1.58	NO	23.64	0.95	23.61	23.67	110.24544	110.2		6087	4609
46	13C-PCB-105		1929670	1187298	742372	1.60	NO	23.98	0.96	23.95	24.01	109.14777	109.1		6087	4609
47	13C-PCB-126		1930934	1185208	745725	1.59	NO	25.58	1.02	25.54	25.61	107.71685	107.7		6087	4609
48	13C-PCB-155		2741740	1524246	1217494	1.25	NO	20.63	1.00	20.59	20.66	106.62855	106.6		1522	1600
49	13C-PCB-167		1641746	915236	726511	1.26	NO	26.52	1.06	26.48	26.55	104.04194	104.0		3630	5274
50	13C-PCB-156/157		3070732	1702258	1368474	1.24	NO	27.13	1.09	27.10	27.17	204.28394	102.1		3630	5274
51	13C-PCB-169		1468805	820081	648724	1.26	NO	28.80	1.15	28.77	28.83	100.40016	100.4		3630	5274
52	13C-PCB-188		2173443	1107814	1065628	1.04	NO	23.62	0.95	23.58	23.65	102.54632	102.5		4102	3735
53	13C-PCB-189		1508723	769133	739591	1.04	NO	30.10	0.96	30.07	30.14	98.68475	98.7		7342	5613
54	13C-PCB-202		2229716	1035020	1194696	0.87	NO	26.40	1.06	26.36	26.43	95.44772	95.4		3014	6309
55	13C-PCB-205		1041642	492979	548662	0.90	NO	31.55	1.01	31.51	31.58	102.13249	102.1		6241	5822
56	13C-PCB-208		1169216	518017	651199	0.80	NO	29.86	0.96	29.83	29.89	102.20290	102.2		5159	4838
57	13C-PCB-206		710499	310801	399697	0.78	NO	32.67	1.05	32.64	32.70	98.34856	98.3		5159	4838
58	13C-PCB-209		950714	516087	434628	1.19	NO	33.86	1.08	33.82	33.89	98.25472	98.3		349	308
59	13C-PCB-9		3971069	2399438	1571631	1.53	NO	11.85	0.47	11.82	11.88	96.55362	96.6		8511	4583
60	13C-PCB-52		1598796	693554	905243	0.77	NO	17.02	0.68	16.98	17.05	97.85886	97.9		5936	3702
61	13C-PCB-101		1526309	926225	600084	1.54	NO	20.73	0.83	20.69	20.76	96.71795	96.7		2106	1974
62	13C-PCB-138		1298086	723417	574669	1.26	NO	24.97	0.00	24.94	25.00	97.89805	97.9		3630	5274
63	13C-PCB-194		826021	392419	433601	0.90	NO	31.25	1.25	31.22	31.28	90.73927	90.7		6241	5822
64	Total MoCB-F1	4		20126373								299571.53088			1905	
65	Total DiCB-F1	2		5587878								525153.12454			2280	
66	Total DiCB-F2	3		7569117								30140.43734			3162	
67	Total TrCB-F1	1		7157558								396.65123			2354	
68	Total TrCB-F3	9		16600134								19545583.45...			3618	
69	Total TeCB-F2	1		5554709								415.25339			1530	
70	Total TeCB-F4	11		9325655								189437.61648			2216	
71	Total PeCB-F3	1		7100377								382.64714			1307	
72	Total PeCB-F5	15		26379145								808212.98119			9784	
73	Total HxCB-F4	5		6378318								11002.73478			2137	
74	Total HxCB-F5	15		16229662								1261808.940...			8453	

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221103B-PCB-ICAL.qld

Last Altered: Friday, November 04, 2022 09:45:08 Eastern Daylight Time
Printed: Wednesday, November 09, 2022 15:41:14 Eastern Standard Time

Name: 9-221103B07, Date: 03-Nov-2022, Time: 21:45:31, ID: H9-21-CS4-570, Description: 1668-CS#4-023, Vial: Tray1:8

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
75	Total HpCB-F5	19		17321081								23674878.29...			4254	
76	Total HpCB-F6	6		3169366								335154.20012			12378	
77	Total OcCB-F5	25		4200628								294782.39870			5109	
78	Total OcCB-F6	4		2422606								417776.36970			12064	
79	Total NoCB-F6	10		3453431								140605.36263			9222	
80	Total DeCB-F7	1		1841915								387.87163			304	
81	Total 13C-MoCB-F1	4		4005926								32829.24336			1681	
82	Total 13C-DiCB-F1	3		4033976								199.99488			8511	
83	Total 13C-DiCB-F2	3		3538265								4020545.275...			15324	
84	Total 13C-TrCB-F1	1		1624266								105.33564			40103	
85	Total 13C-TrCB-F3	5		4105720								25489.13983			30602	
86	Total 13C-TeCB-F2	1		1462842								96.51316			9796	
87	Total 13C-TeCB-F3	4		722059								101.68715			5936	
88	Total 13C-TeCB-F4	7		2017779								39136.80442			6825	
89	Total 13C-PeCB-F3	1		1630646								108.22099			1545	
90	Total 13C-PeCB-F4	11		3260108								301.72955			2106	
91	Total 13C-PeCB-F5	12		6156045								184097.98008			6087	
92	Total 13C-HxCB-F4	2		1533336								9285.05953			1522	
93	Total 13C-HxCB-F5	11		5083881								635.31516			3630	
94	Total 13C-HpCB-F5	14		1915368								57204.63232			4102	
95	Total 13C-HpCB-F6	12		837660								115448.13971			7342	
96	Total 13C-OcCB-F5	24		1067674								33163.29160			3014	
97	Total 13C-OcCB-F6	5		922361								209.51616			6241	
98	Total 13C-NoCB-F6	3		829418								3047.42757			5159	
99	Total 13C-DeCB-F7	1		516087								98.25472			349	
100	Lockmass F1			0											740245	
101	Lockmass F2			0											344225	
102	Lockmass F3			0											785406	
103	Lockmass F4			0											477180	
104	Lockmass F5			0											138087	
105	Lockmass F6			0											109654	
106	Lockmass F7			0											36917	

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221103B-PCB-ICAL.qld

Last Altered: Friday, November 04, 2022 09:45:08 Eastern Daylight Time
Printed: Wednesday, November 09, 2022 15:41:14 Eastern Standard Time

Name: 9-221103B06, Date: 03-Nov-2022, Time: 21:03:13, ID: H9-21-CS5-570, Description: 1668-CS#5-023, Vial: Tray1:7

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
1	PCB-1		56930261	41187508	15742753	2.62	YES	8.86	1.00	8.82	8.89	1758.17492	87.9		4198	2805
2	PCB-3		61217610	44963960	16253650	2.77	NO	10.41	1.00	10.37	10.44	1794.43456	89.7		4198	2805
3	PCB-4		50216096	30231176	19984920	1.51	NO	10.57	1.00	10.54	10.60	2006.93818	100.3		2664	10397
4	PCB-15		70372456	42791996	27580460	1.55	NO	14.28	1.00	14.25	14.32	2061.94540	103.1		3181	28615
5	PCB-19		72404668	37467156	34937512	1.07	NO	12.60	1.00	12.56	12.63	1948.47628	97.4		2239	1802
6	PCB-37		57338272	29308480	28029792	1.05	NO	18.25	1.00	18.22	18.28	1929.63381	96.5		4777	5128
7	PCB-54		68952502	30076654	38875848	0.77	NO	14.47	1.00	14.44	14.50	1913.42843	95.7		1075	1466
8	PCB-81		54200660	23771272	30429388	0.78	NO	21.86	1.00	21.83	21.90	1909.04682	95.5		5383	5495
9	PCB-77		52750054	23008840	29741214	0.77	NO	22.16	1.00	22.13	22.19	1871.69076	93.6		5383	5495
10	PCB-104		59171356	35798016	23373340	1.53	NO	17.59	1.00	17.55	17.62	1944.40972	97.2		681	2081
11	PCB-123		41844787	25450440	16394347	1.55	NO	23.19	1.00	23.16	23.23	1894.01546	94.7		20513	13362
12	PCB-118		45336668	27629700	17706968	1.56	NO	23.36	1.00	23.33	23.40	1890.61541	94.5		20513	13362
13	PCB-114		40964207	24850660	16113547	1.54	NO	23.67	1.00	23.63	23.70	1917.94030	95.9		20513	13362
14	PCB-105		43061276	26167082	16894194	1.55	NO	23.99	1.00	23.96	24.03	1921.61802	96.1		20513	13362
15	PCB-126		41708550	25318808	16389742	1.54	NO	25.59	1.00	25.55	25.62	1874.76021	93.7		20513	13362
16	PCB-155		57643946	31801606	25842340	1.23	NO	20.63	1.00	20.60	20.67	1917.08854	95.9		2499	2691
17	PCB-167		36612805	20313022	16299783	1.25	NO	26.53	1.00	26.50	26.56	1937.64258	96.9		19490	14835
18	PCB-156/157		68103670	37888204	30215466	1.25	NO	27.15	1.00	27.11	27.18	3842.53883	96.1		19490	14835
19	PCB-169		32712476	18226920	14485556	1.26	NO	28.81	1.00	28.78	28.85	1944.48394	97.2		19490	14835
20	PCB-188		43329498	21944396	21385102	1.03	NO	23.64	1.00	23.61	23.67	1918.65756	95.9		8516	9416
21	PCB-189		29626642	15129892	14496750	1.04	NO	30.13	1.00	30.10	30.16	1957.67711	97.9		13081	18059
22	PCB-202		42753178	20149834	22603344	0.89	NO	26.42	1.00	26.39	26.45	1972.19361	98.6		8576	12516
23	PCB-205		23098354	10982924	12115430	0.91	NO	31.57	1.00	31.54	31.61	2012.03371	100.6		17418	22307
24	PCB-208		24599723	10783855	13815868	0.78	NO	29.87	1.00	29.84	29.91	1963.13489	98.2		21657	28323
25	PCB-206		15148790	6636738	8512052	0.78	NO	32.69	1.00	32.66	32.73	1958.60451	97.9		21657	28323
26	PCB-209		18231842	9869590	8362252	1.18	NO	33.89	1.00	33.85	33.92	1934.23345	96.7		494	489
27	13C-PCB-31		2560434	1326376	1234058	1.07	NO	15.84	0.87	15.81	15.88	96.80700	96.8		28169	13206
28	13C-PCB-95		1836749	1112370	724379	1.54	NO	19.17	1.09	19.14	19.21	96.94271	96.9		2231	2658
29	13C-PCB-153		1575815	880634	695181	1.27	NO	24.32	1.18	24.28	24.35	100.71979	100.7		3915	4367
30	13C-PCB-28		2775528	1423262	1352266	1.05	NO	16.01	0.94	15.98	16.04	101.64527	101.6		28169	13206
31	13C-PCB-111		1928244	1176096	752148	1.56	NO	22.13	1.07	22.10	22.17	98.03229	98.0		2231	2658
32	13C-PCB-178		1543280	785463	757818	1.04	NO	25.19	1.01	25.15	25.22	98.14742	98.1		4819	4896
33	13C-PCB-1		2787092	2109818	677274	3.12	NO	8.84	0.75	8.81	8.88	97.57881	97.6		2564	13698
34	13C-PCB-3		2782450	2096792	685658	3.06	NO	10.39	0.88	10.36	10.43	100.79797	100.8		2564	13698
35	13C-PCB-4		2890466	1773508	1116958	1.59	NO	10.57	0.89	10.54	10.60	100.16561	100.2		12153	3463
36	13C-PCB-15		3000767	1847135	1153632	1.60	NO	14.27	1.20	14.23	14.30	101.04500	101.0		14880	5113
37	13C-PCB-19		3329986	1705511	1624475	1.05	NO	12.58	1.06	12.55	12.61	100.24551	100.2		44095	46683

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221103B-PCB-ICAL.qld

Last Altered: Friday, November 04, 2022 09:45:08 Eastern Daylight Time
Printed: Wednesday, November 09, 2022 15:41:14 Eastern Standard Time

Name: 9-221103B06, Date: 03-Nov-2022, Time: 21:03:13, ID: H9-21-CS5-570, Description: 1668-CS#5-023, Vial: Tray1:7

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
38	13C-PCB-37		2702913	1385827	1317087	1.05	NO	18.24	1.07	18.21	18.28	105.48510	105.5		28169	13206
39	13C-PCB-54		4120041	1780284	2339757	0.76	NO	14.46	0.85	14.43	14.49	109.33366	109.3		10379	7086
40	13C-PCB-81		2240012	1001421	1238591	0.81	NO	21.86	1.05	21.82	21.89	105.99158	106.0		6045	5675
41	13C-PCB-77		2250189	1010395	1239794	0.81	NO	22.15	1.07	22.12	22.18	104.78546	104.8		6045	5675
42	13C-PCB-104		2644763	1617823	1026940	1.58	NO	17.58	1.03	17.54	17.61	102.20458	102.2		1296	1368
43	13C-PCB-123		2022844	1249160	773684	1.61	NO	23.18	1.12	23.15	23.22	103.12713	103.1		5319	5400
44	13C-PCB-118		1857793	1141164	716629	1.59	NO	23.35	1.13	23.32	23.38	102.78058	102.8		5319	5400
45	13C-PCB-114		1917365	1178160	739204	1.59	NO	23.65	0.95	23.62	23.69	98.13168	98.1		5319	5400
46	13C-PCB-105		1907262	1174945	732317	1.60	NO	23.98	0.96	23.95	24.01	102.49864	102.5		5319	5400
47	13C-PCB-126		1929951	1182899	747052	1.58	NO	25.59	1.02	25.55	25.62	102.29127	102.3		5319	5400
48	13C-PCB-155		2715731	1519412	1196319	1.27	NO	20.63	1.00	20.59	20.66	100.34826	100.3		1350	1399
49	13C-PCB-167		1618087	907811	710276	1.28	NO	26.52	1.06	26.48	26.55	98.42690	98.4		3915	4367
50	13C-PCB-156/157		3008950	1675339	1333610	1.26	NO	27.13	1.09	27.10	27.17	192.13956	96.1		3915	4367
51	13C-PCB-169		1476936	828079	648857	1.28	NO	28.80	1.15	28.77	28.83	96.90391	96.9		3915	4367
52	13C-PCB-188		2116782	1079552	1037230	1.04	NO	23.63	0.95	23.60	23.66	95.86446	95.9		4819	4896
53	13C-PCB-189		1519952	777252	742700	1.05	NO	30.10	0.96	30.07	30.14	95.42890	95.4		6817	5845
54	13C-PCB-202		2257809	1042984	1214825	0.86	NO	26.40	1.06	26.36	26.43	92.77110	92.8		5060	6887
55	13C-PCB-205		1070466	510799	559667	0.91	NO	31.55	1.01	31.51	31.58	97.33280	97.3		5539	5349
56	13C-PCB-208		1201117	528414	672704	0.79	NO	29.86	0.96	29.83	29.89	97.36314	97.4		3452	4994
57	13C-PCB-206		735247	323395	411852	0.79	NO	32.68	1.05	32.65	32.72	94.37969	94.4		3452	4994
58	13C-PCB-209		1021050	552240	468810	1.18	NO	33.87	1.08	33.84	33.91	97.85679	97.9		385	291
59	13C-PCB-9		4385288	2672269	1713019	1.56	NO	11.85	0.47	11.82	11.88	106.62506	106.6		12153	3463
60	13C-PCB-52		1673337	730052	943285	0.77	NO	17.02	0.68	16.98	17.05	102.42135	102.4		4502	3912
61	13C-PCB-101		1606448	977777	628671	1.56	NO	20.73	0.83	20.69	20.76	101.79611	101.8		2231	2658
62	13C-PCB-138		1352365	753288	599077	1.26	NO	24.97	0.00	24.94	25.00	101.99161	102.0		3915	4367
63	13C-PCB-194		890738	420268	470470	0.89	NO	31.26	1.25	31.23	31.30	97.84860	97.8		5539	5349
64	Total MoCB-F1	4		87545228								1547318.009...			4198	
65	Total DiCB-F1	4		31808921								3047440.264...			2664	
66	Total DiCB-F2	3		42900750								158399.61837			3181	
67	Total TrCB-F1	4		37472751								11230.44740			2239	
68	Total TrCB-F3	10		89857590								108510028.7...			4777	
69	Total TeCB-F2	2		30077890								4698.19038			1075	
70	Total TeCB-F4	14		47287944								917904.67045			5383	
71	Total PeCB-F3	4		35800771								6850.95353			681	
72	Total PeCB-F5	15		131832849								3417162.603...			20513	
73	Total HxCB-F4	7		31837973								60356.18796			2499	
74	Total HxCB-F5	17		80212763								5901777.270...			19490	

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221103B-PCB-ICAL.qld

Last Altered: Friday, November 04, 2022 09:45:08 Eastern Daylight Time
Printed: Wednesday, November 09, 2022 15:41:14 Eastern Standard Time

Name: 9-221103B06, Date: 03-Nov-2022, Time: 21:03:13, ID: H9-21-CS5-570, Description: 1668-CS#5-023, Vial: Tray1:7

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
75	Total HpCB-F5	21		86764873								120139526.3...			8516	
76	Total HpCB-F6	13		16085207								1847884.637...			13081	
77	Total OcCB-F5	28		20745278								1326076.346...			8576	
78	Total OcCB-F6	5		11963367								1919669.760...			17418	
79	Total NoCB-F6	4		17488432								152590.87157			21657	
80	Total DeCB-F7	1		9869590								1934.23345			494	
81	Total 13C-MoCB-F1	3		4209616								5609.43934			2564	
82	Total 13C-DiCB-F1	3		4452496								207.42886			12153	
83	Total 13C-DiCB-F2	2		3486682								3923473.925...			14880	
84	Total 13C-TrCB-F1	1		1705511								100.24551			44095	
85	Total 13C-TrCB-F3	8		4154457								28413.85631			28169	
86	Total 13C-TeCB-F2	1		1780284								109.33366			10379	
87	Total 13C-TeCB-F3	5		759448								106.46672			4502	
88	Total 13C-TeCB-F4	7		2038028								41251.96768			6045	
89	Total 13C-PeCB-F3	5		1621372								4119.02598			1296	
90	Total 13C-PeCB-F4	11		3280541								301.33349			2231	
91	Total 13C-PeCB-F5	13		6043510								160831.95685			5319	
92	Total 13C-HxCB-F4	4		1529043								10671.77400			1350	
93	Total 13C-HxCB-F5	13		5093483								620.83636			3915	
94	Total 13C-HpCB-F5	19		1918410								76670.05400			4819	
95	Total 13C-HpCB-F6	7		832292								91087.05389			6817	
96	Total 13C-OcCB-F5	30		1074512								35459.85436			5060	
97	Total 13C-OcCB-F6	4		963841								209.85228			5539	
98	Total 13C-NoCB-F6	3		852213								1069.58622			3452	
99	Total 13C-DeCB-F7	1		552240								97.85679			385	
100	Lockmass F1			0											737427	
101	Lockmass F2			0											517239	
102	Lockmass F3			0											711777	
103	Lockmass F4			0											452682	
104	Lockmass F5			0											102459	
105	Lockmass F6			0											110211	
106	Lockmass F7			0											38014	

Quantify Audit Report MassLynx V4.2 SCN1012

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221103B-PCB-ICAL.qld

Last Altered: Friday, November 04, 2022 09:45:08 Eastern Daylight Time
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Date	Time	Event	Details	Comments
04-Nov-22	09:43:27	Process Extract		
04-Nov-22	09:43:27	Process Integrate		
04-Nov-22	09:43:28	Process Calibrate		
04-Nov-22	09:43:28	Process Quantify		
04-Nov-22	09:43:32	Dataset Created		
04-Nov-22	09:44:49	Pre modification peak	Sample:9-221103B04, Compound:DiCB-F1, RT:10.585	
04-Nov-22	09:44:49	Peak modified	Sample:9-221103B04, Compound:DiCB-F1, RT:10.585	ES221104MB
04-Nov-22	09:44:49	Pre modification peak	Sample:9-221103B04, Compound:DiCB-F1, RT:10.585	
04-Nov-22	09:44:49	Peak modified	Sample:9-221103B04, Compound:DiCB-F1, RT:10.585	ES221104MB
04-Nov-22	09:45:04	Peak modified	Sample:9-221103B04, Compound:DiCB-F1, RT:10.585	ES221104MB
04-Nov-22	09:46:13	Dataset Saved	Saved to 'I:\Organics Instrument\HIGHRES GCMS Complete...	
04-Nov-22	09:46:59	Method Saved	Saved to 'C:\MassLynx\PCB.PRO\MethDB\1668-OCTYL-1-IC...	
04-Nov-22	09:47:52	Calibration Saved	Saved to 'C:\MassLynx\PCB.PRO\CurveDB\10-221103B-PCB...	
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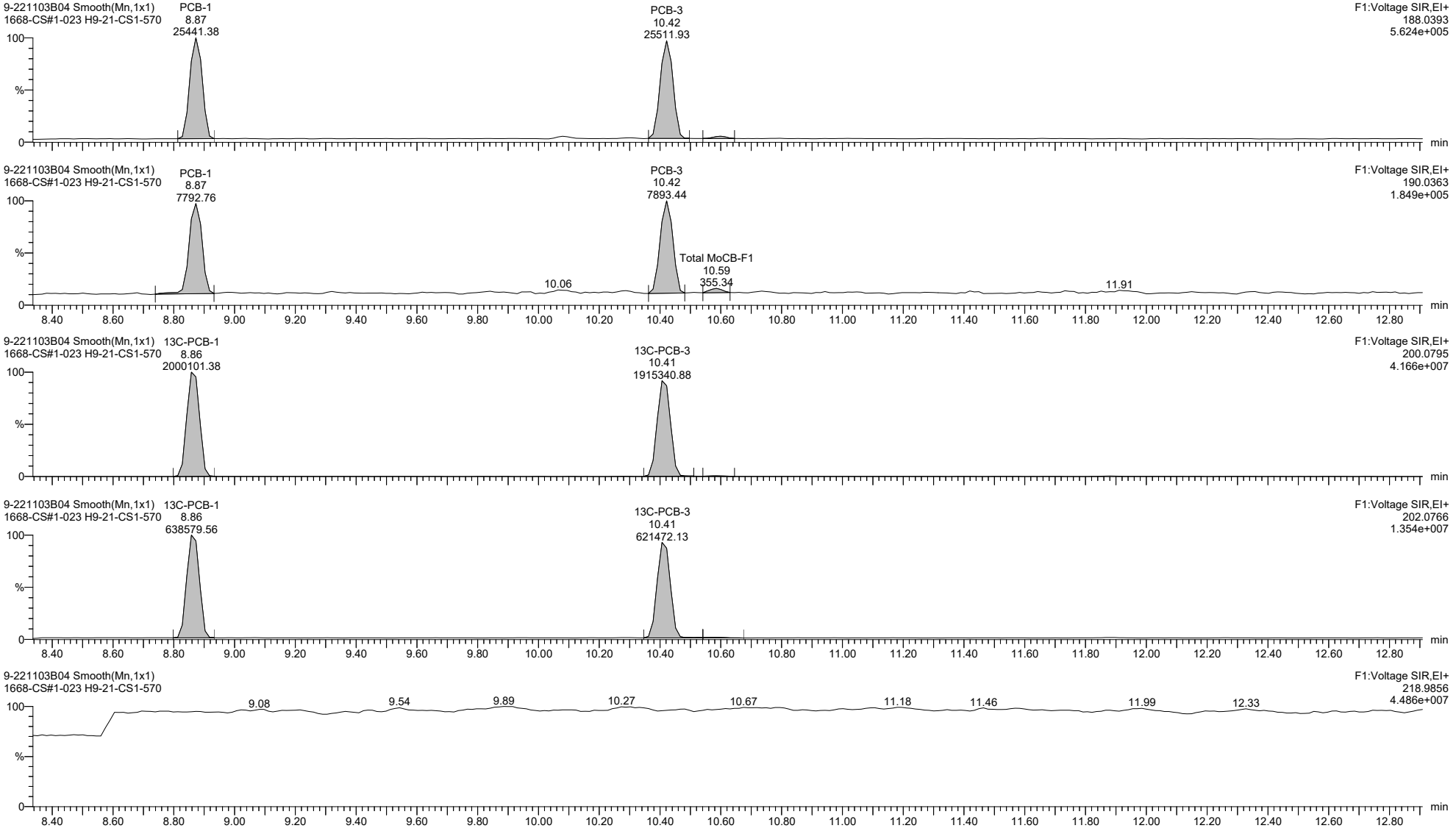
Quantify Sample Template Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221103B-PCB-ICAL.qld

Last Altered: Friday, November 04, 2022 09:45:08 Eastern Daylight Time
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Calibration: C:\MassLynx\PCB.PRO\CurveDB\10-221103B-PCB-ICAL.cdb 04 Nov 2022 10:45:08

Name: 9-221103B04, Date: 03-Nov-2022, Time: 19:38:37, ID: H9-21-CS1-570, Description: 1668-CS#1-023, Vial: Tray1:5

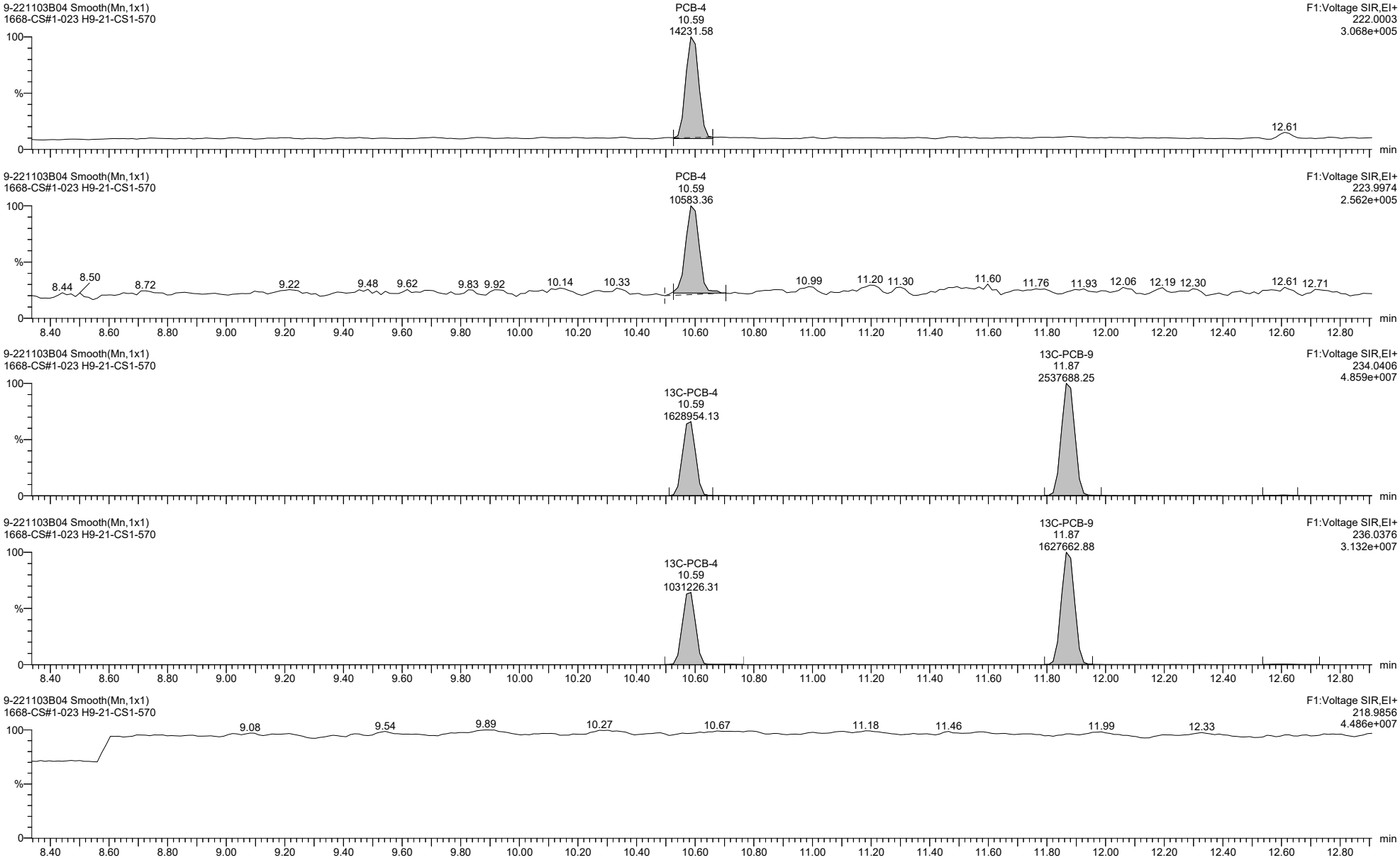


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Last Altered: Friday, November 04, 2022 09:45:08 Eastern Daylight Time
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Name: 9-221103B04, Date: 03-Nov-2022, Time: 19:38:37, ID: H9-21-CS1-570, Description: 1668-CS#1-023, Vial: Tray1:5

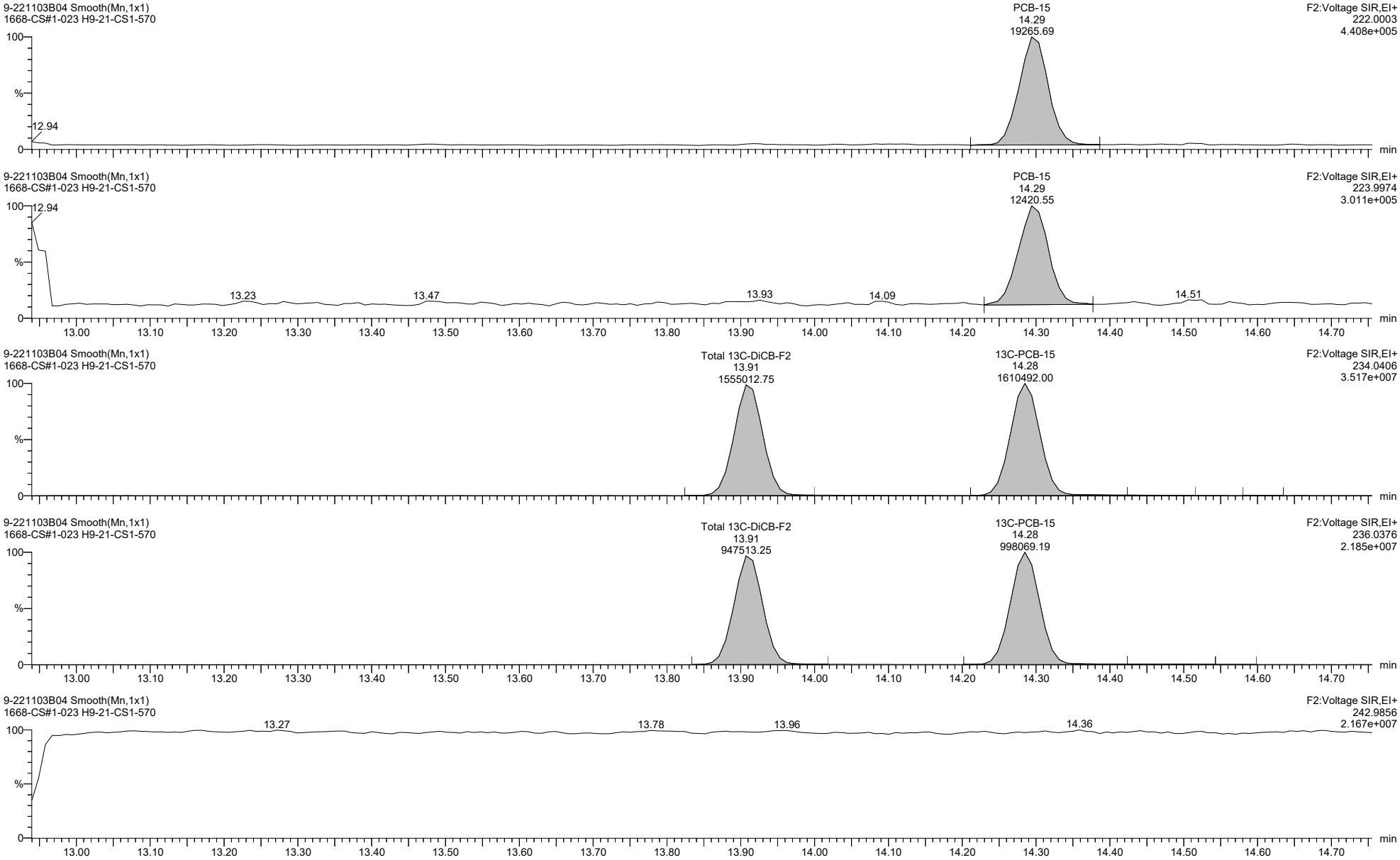


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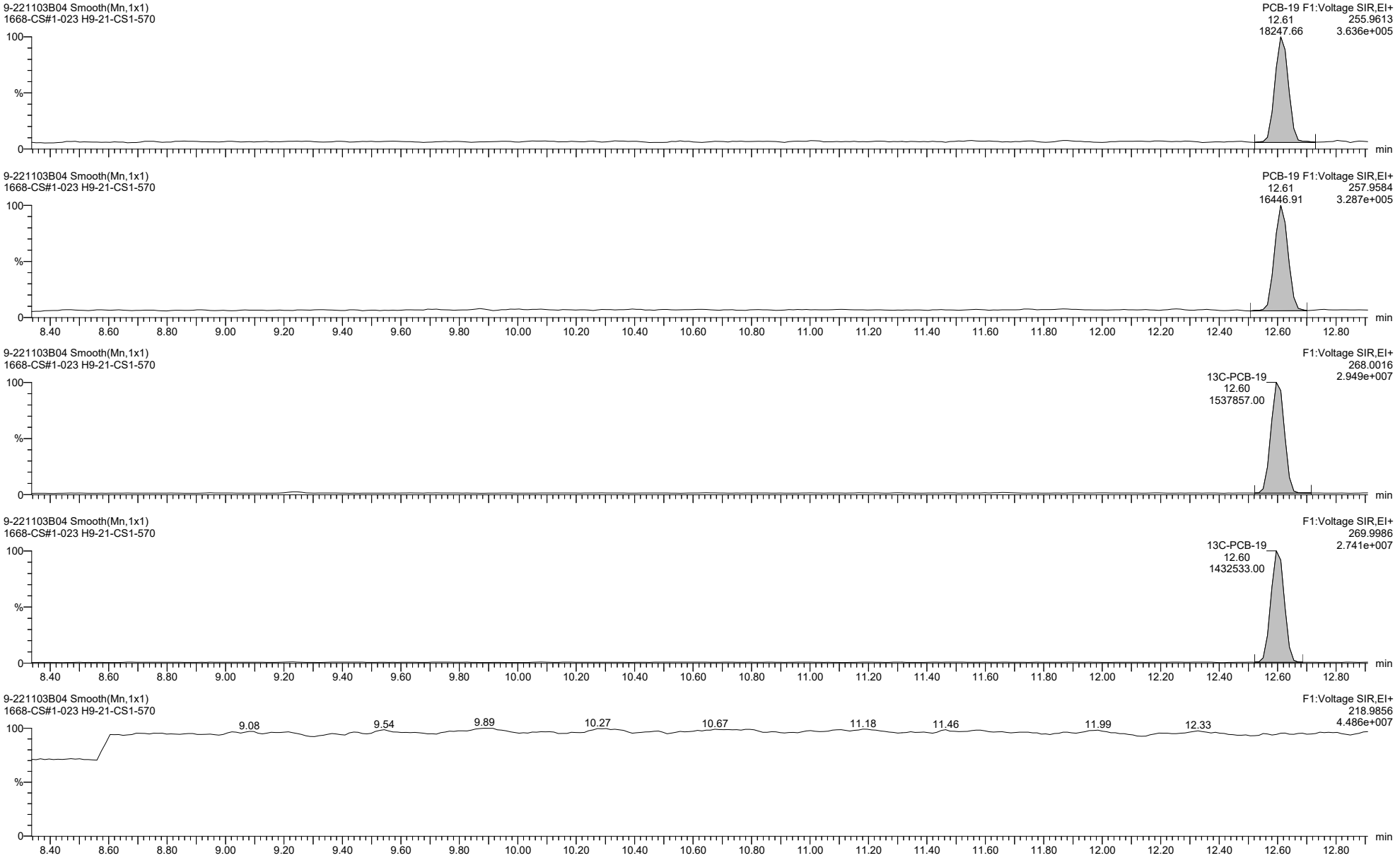
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Name: 9-221103B04, Date: 03-Nov-2022, Time: 19:38:37, ID: H9-21-CS1-570, Description: 1668-CS#1-023, Vial: Tray1:5



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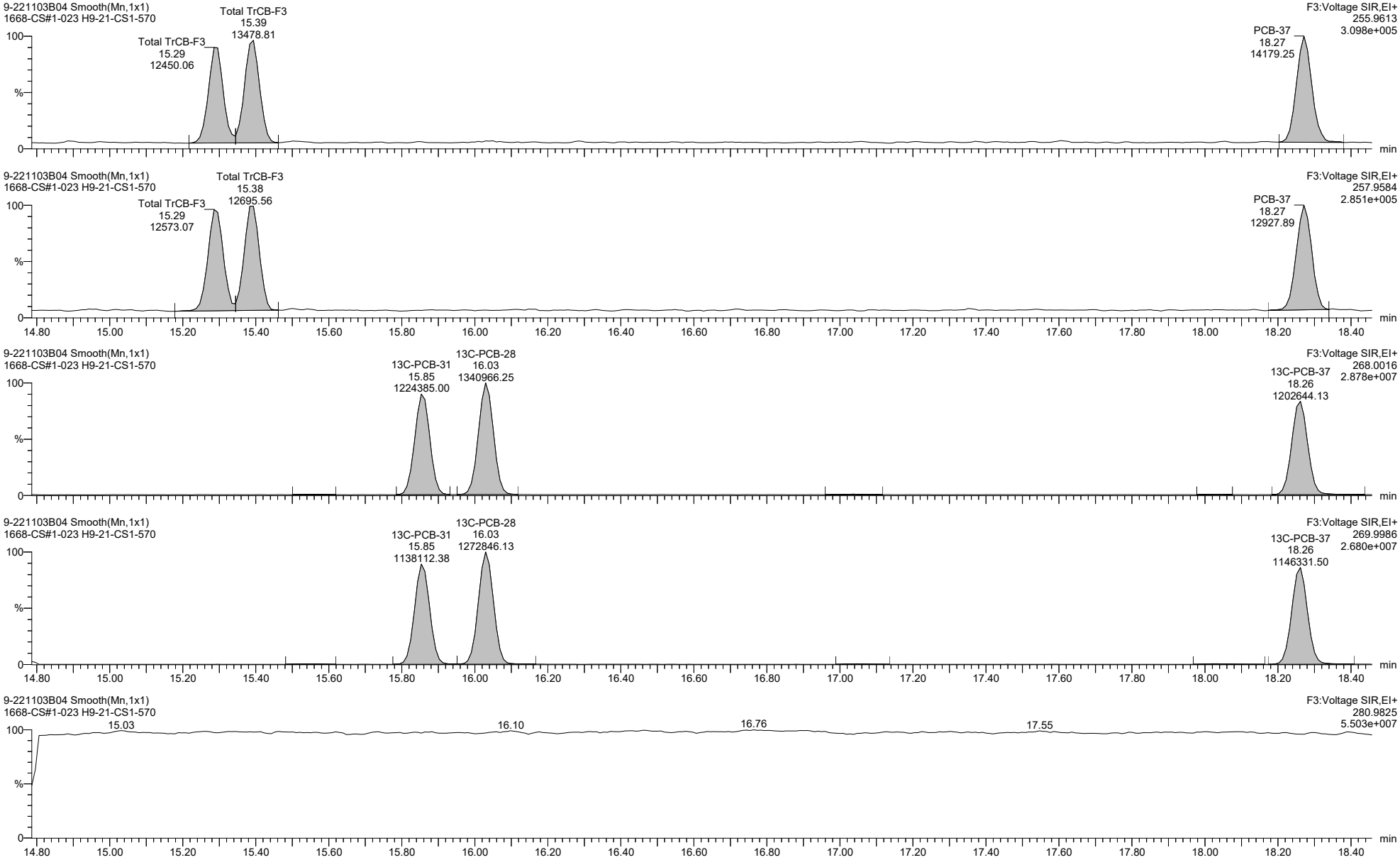


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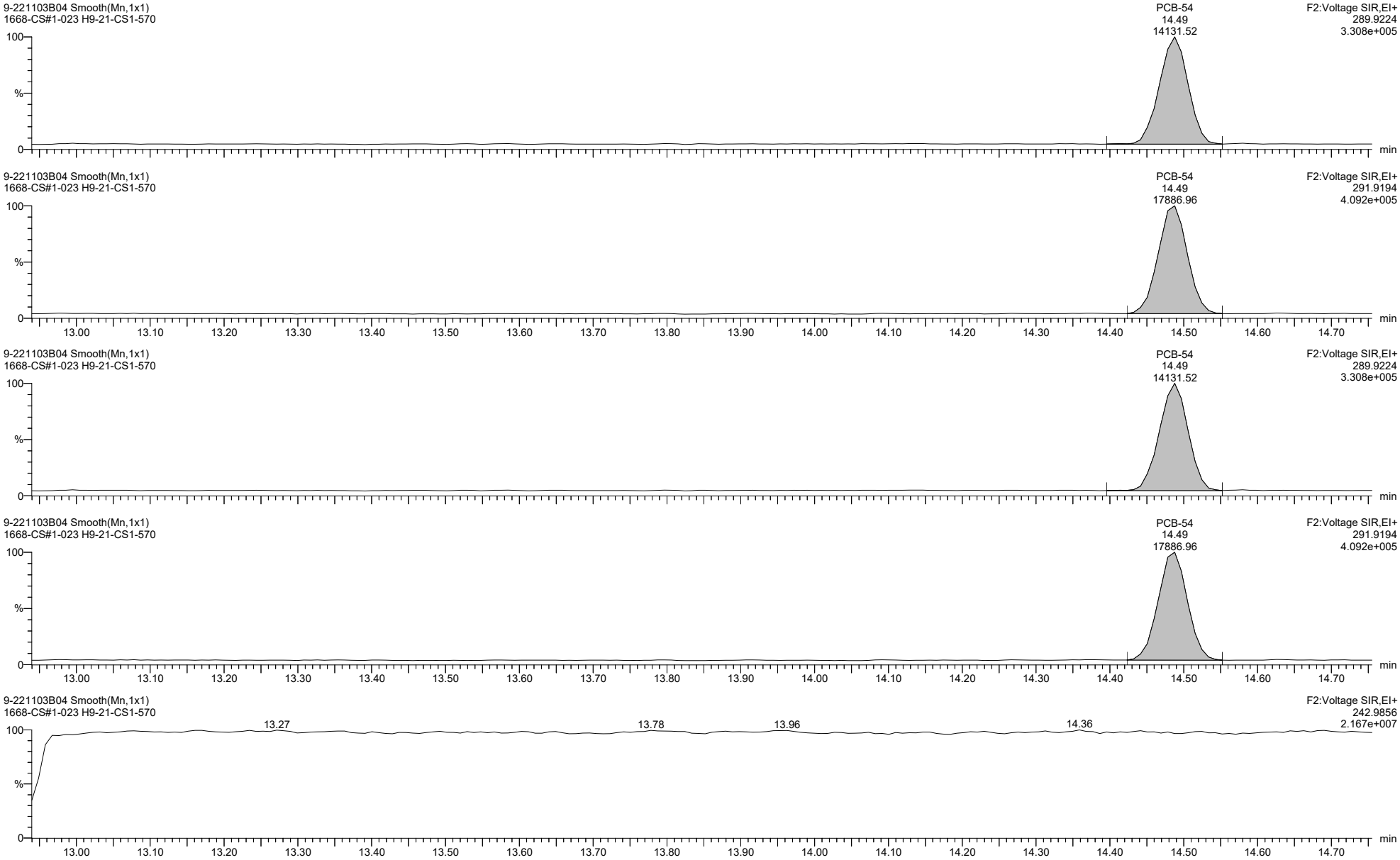


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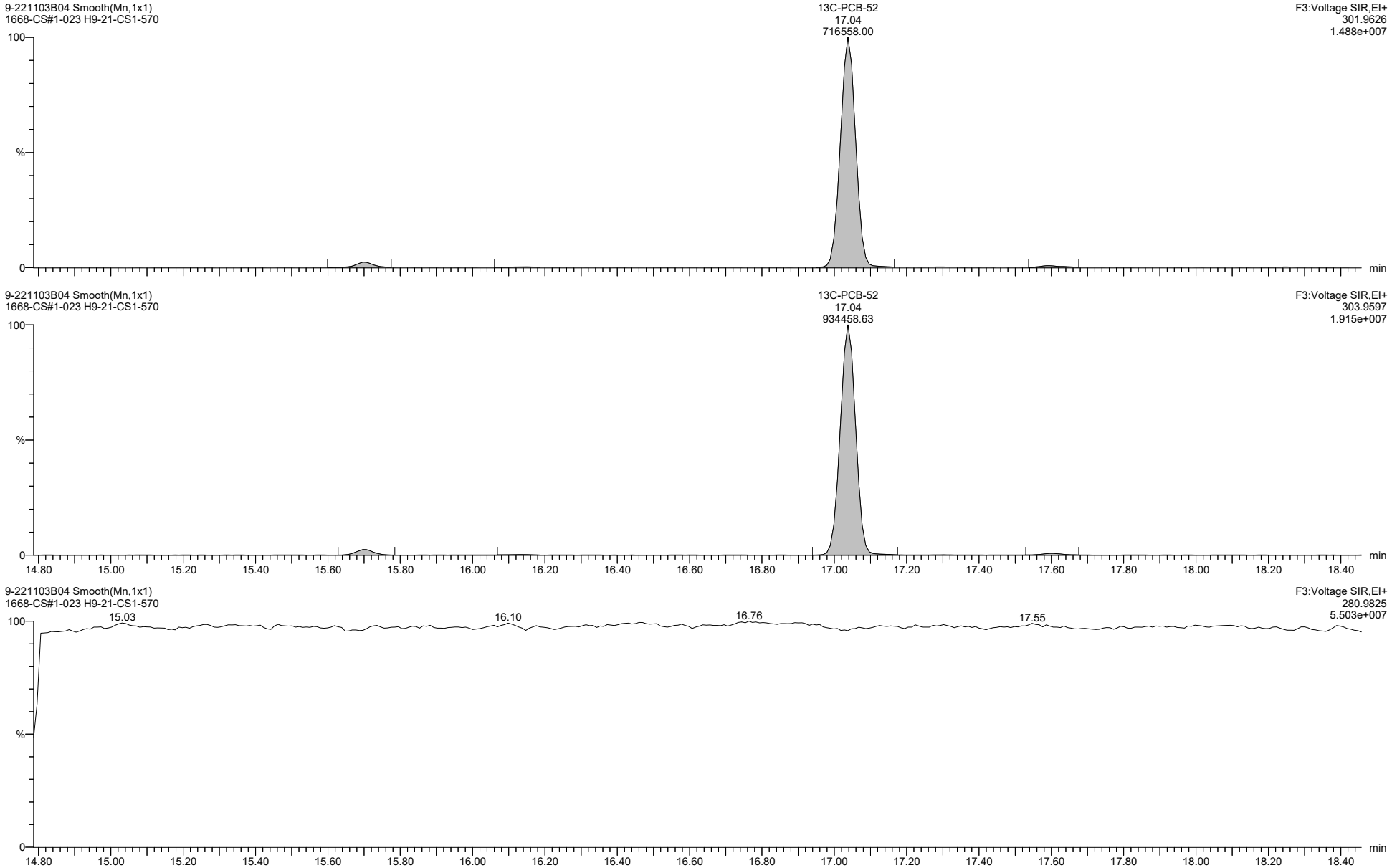


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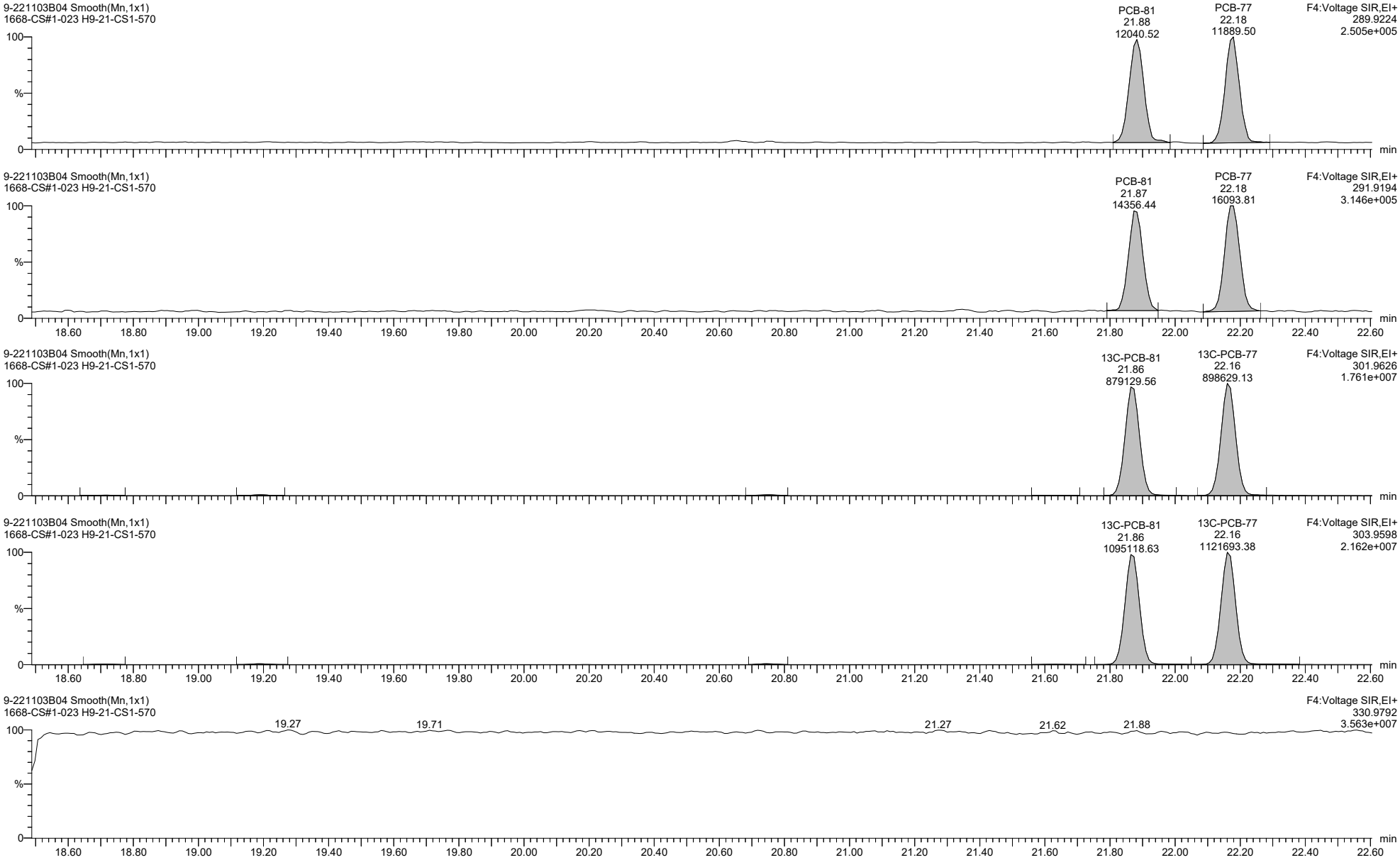


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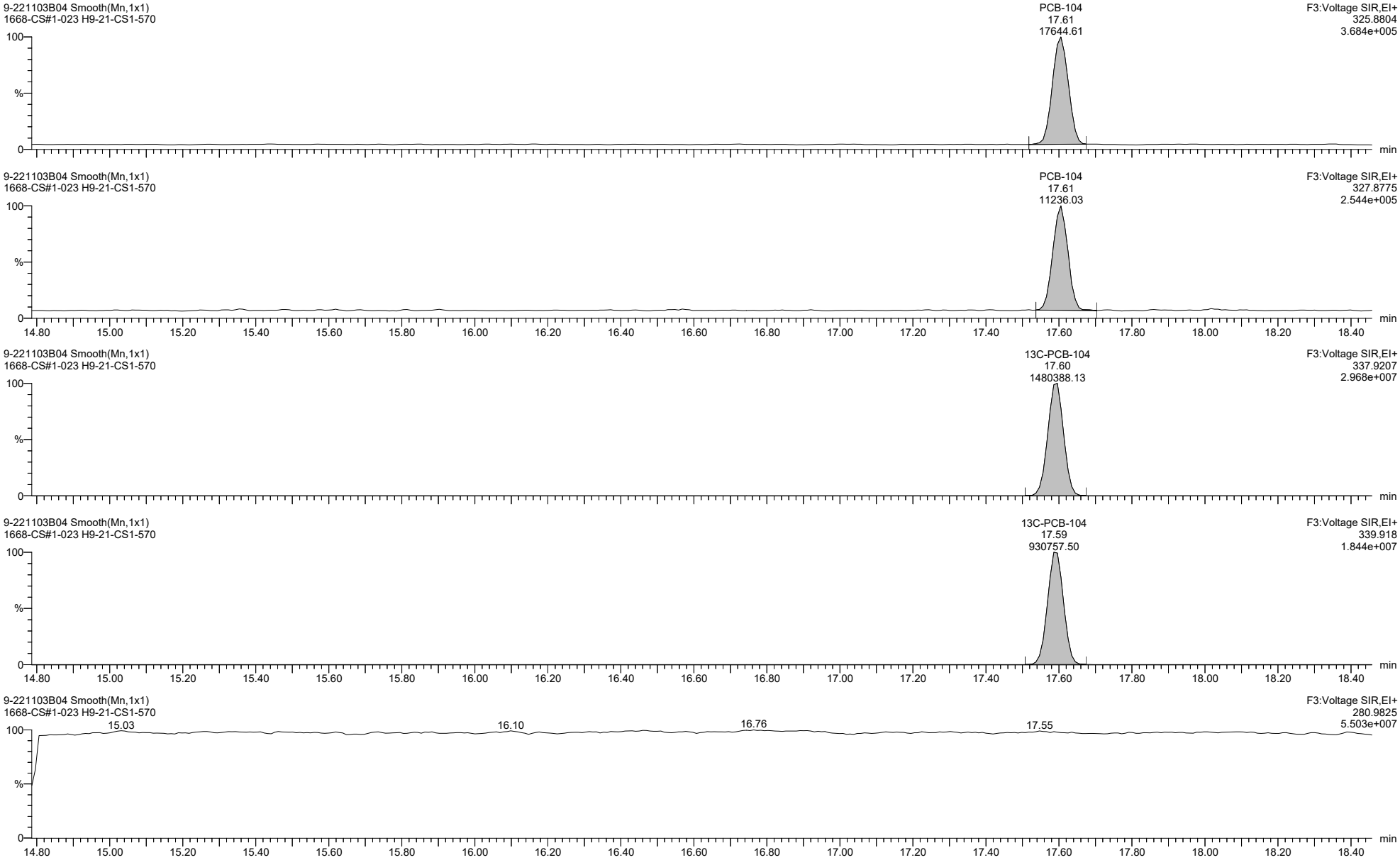


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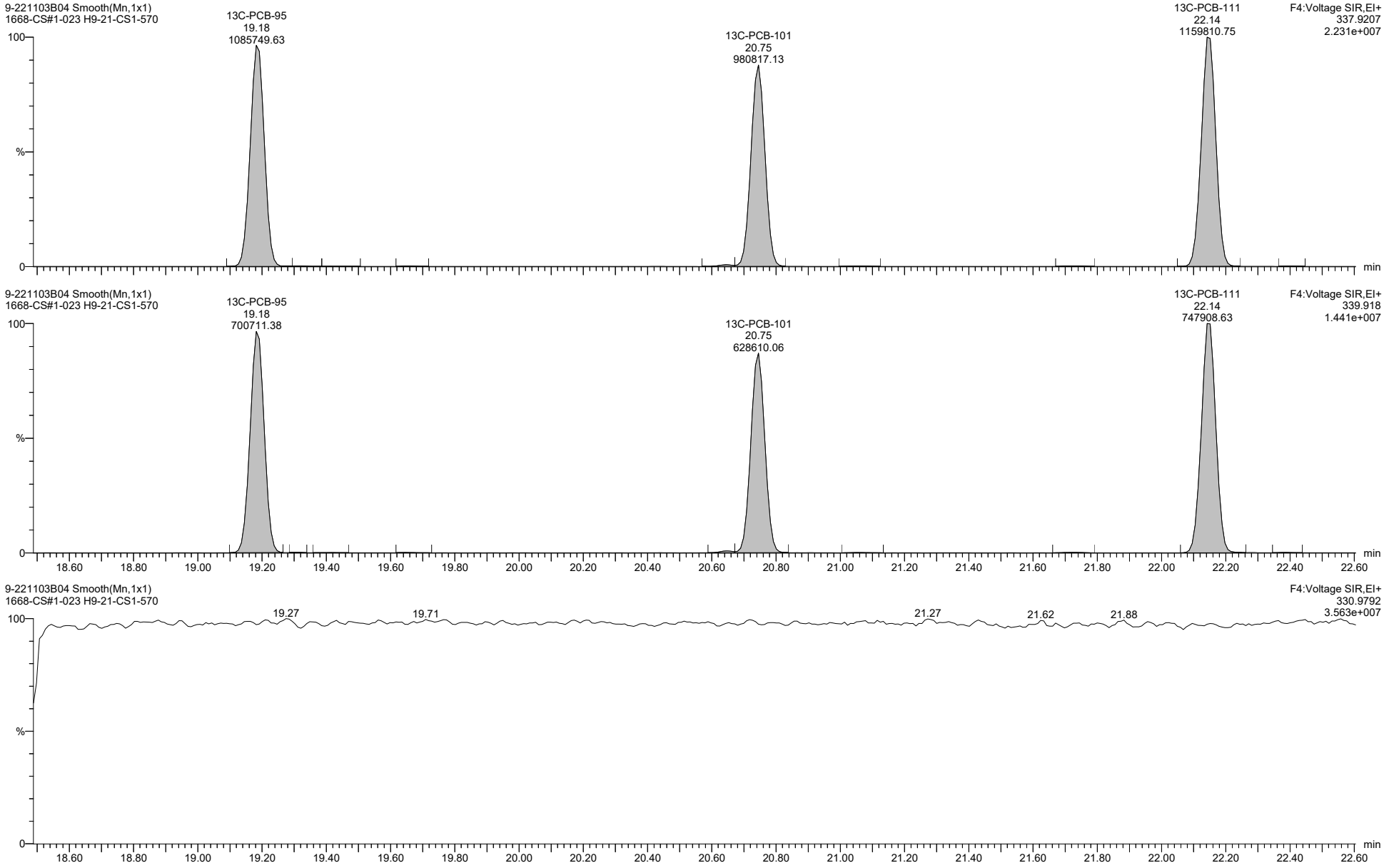


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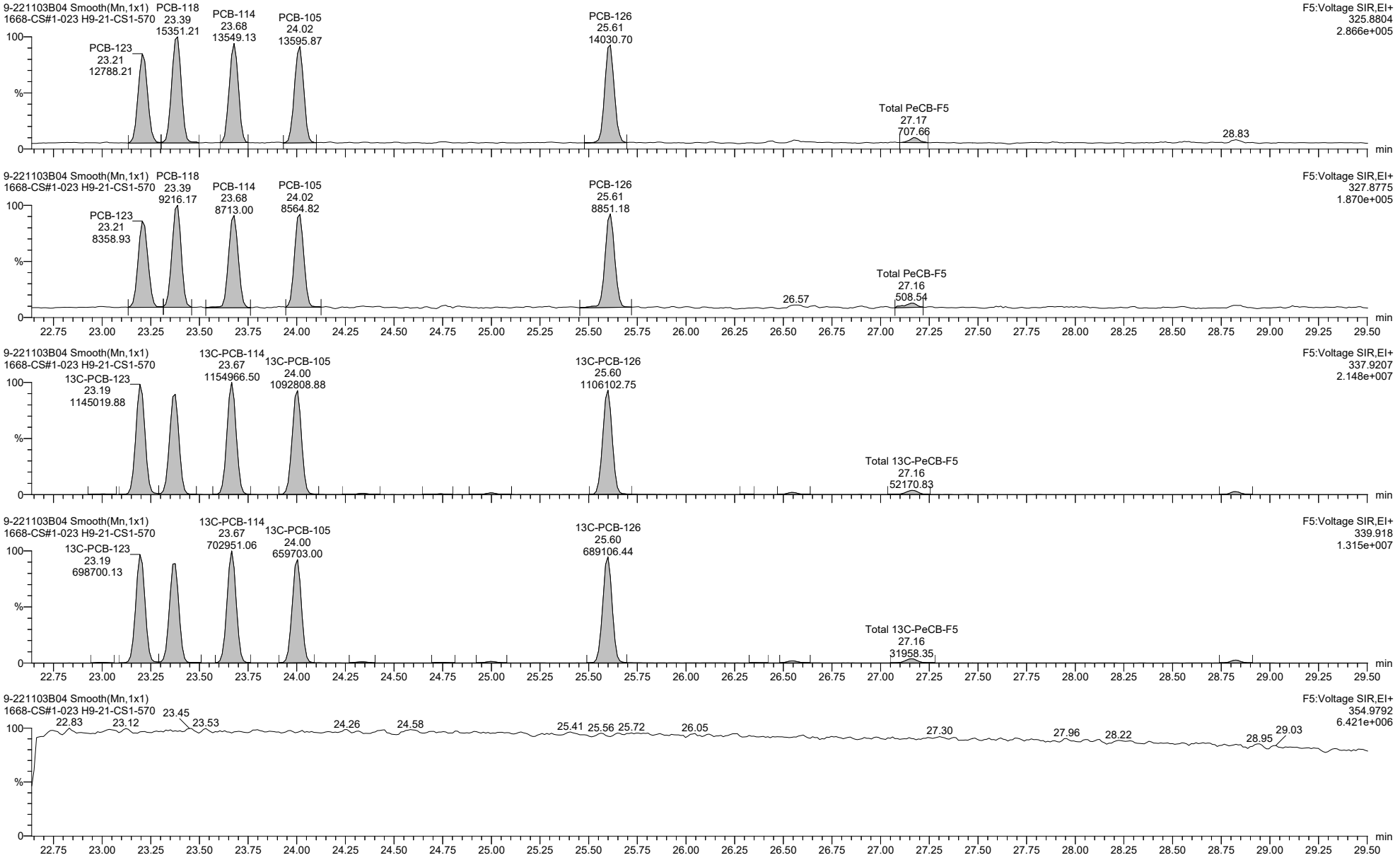


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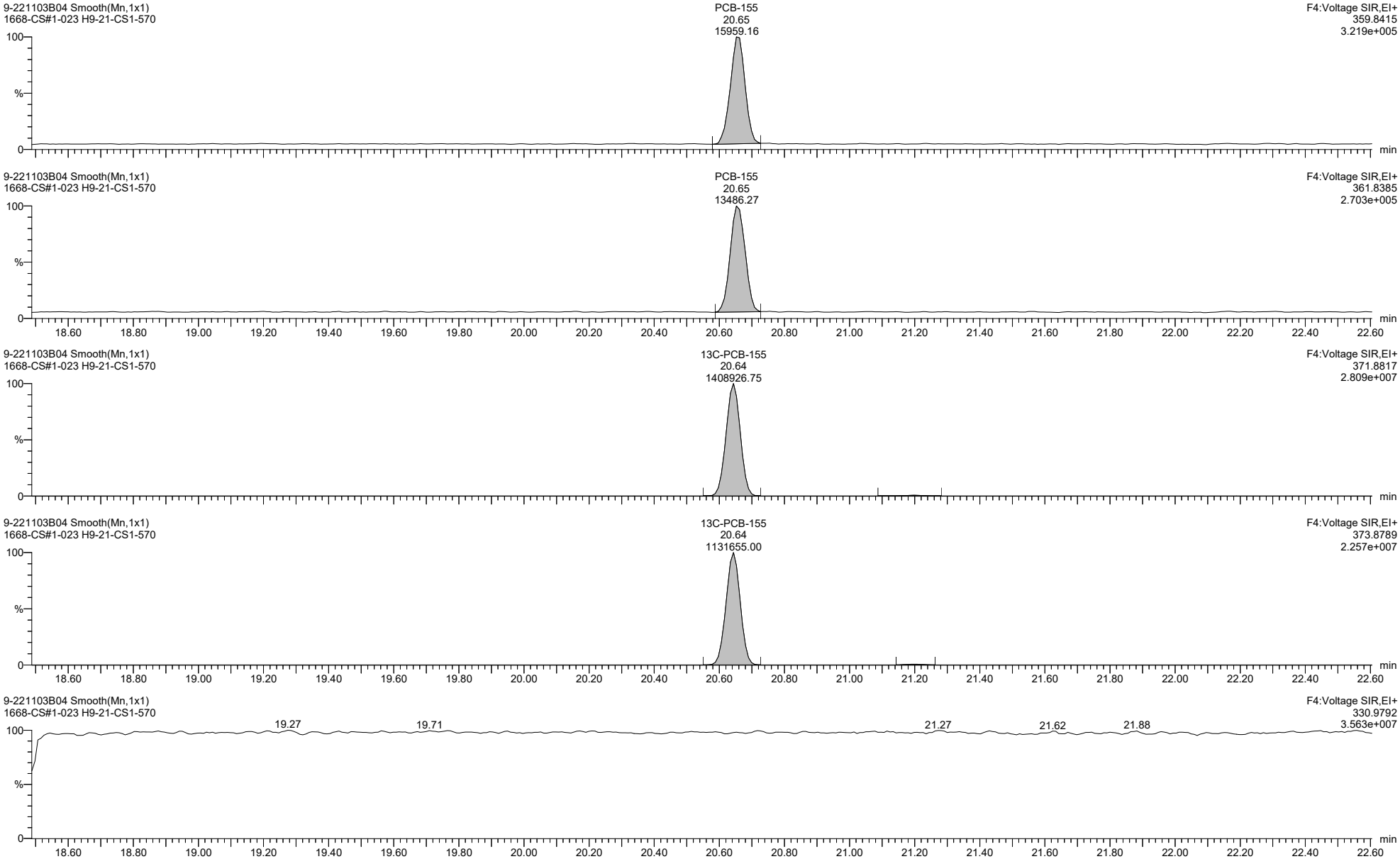


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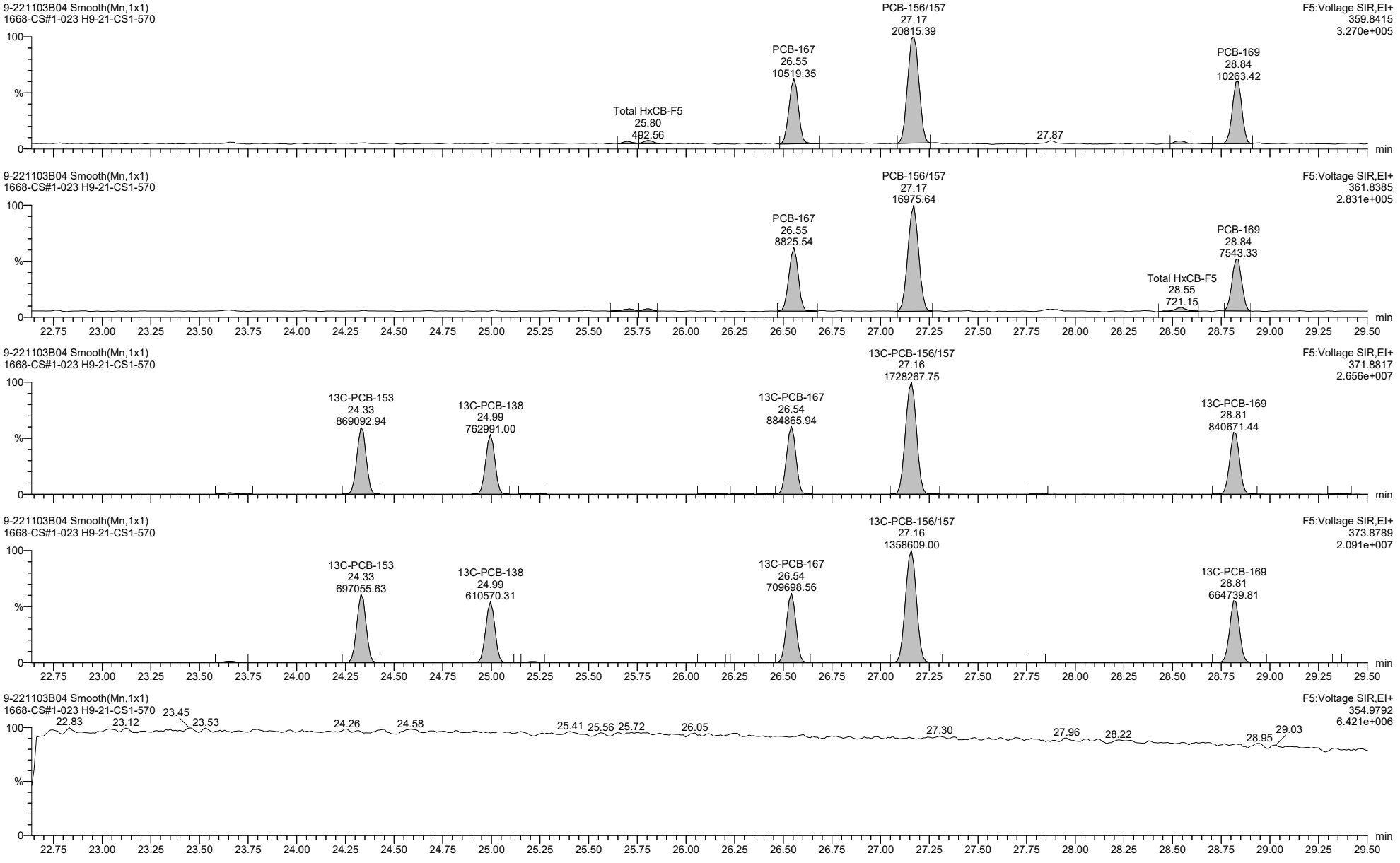


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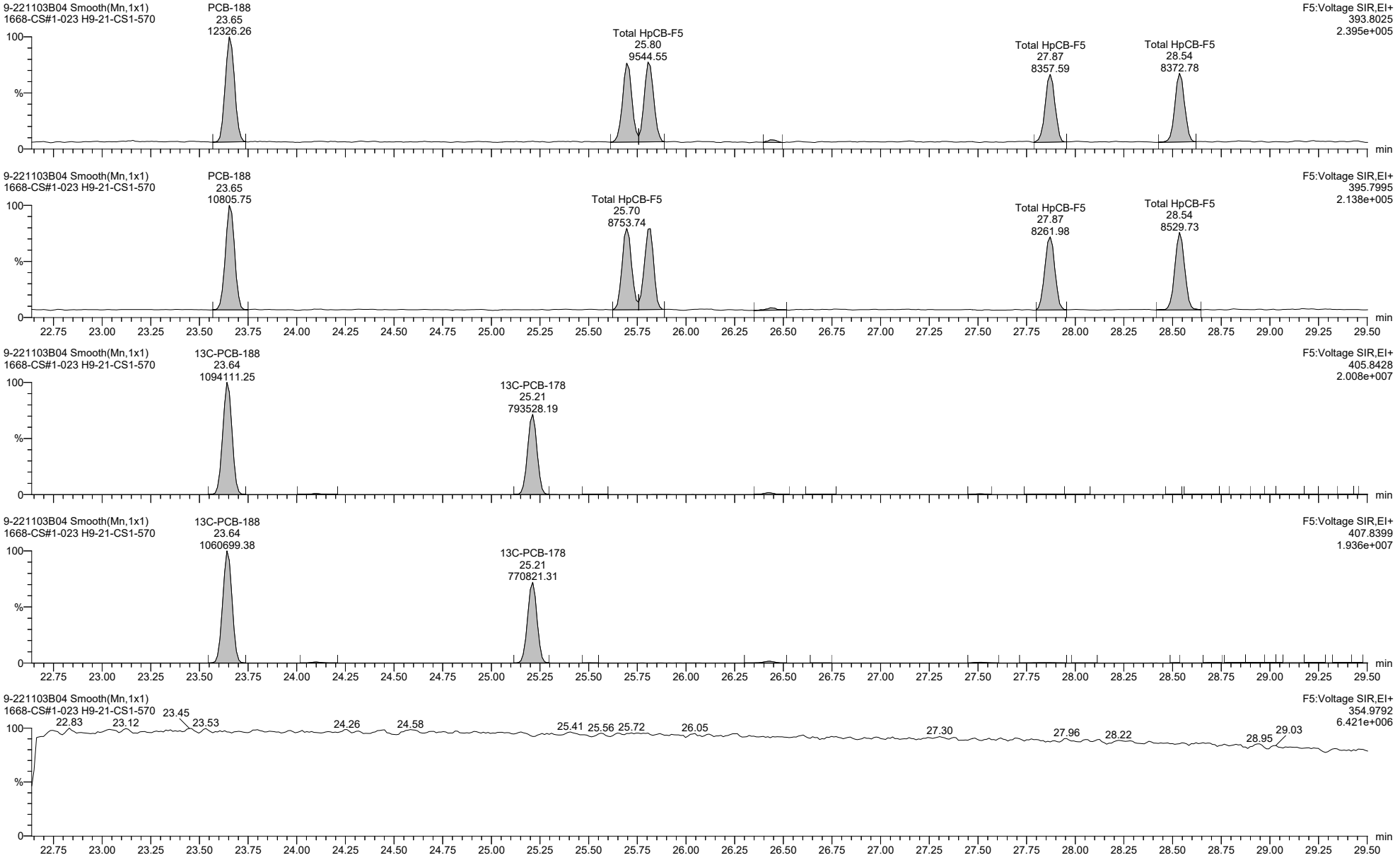


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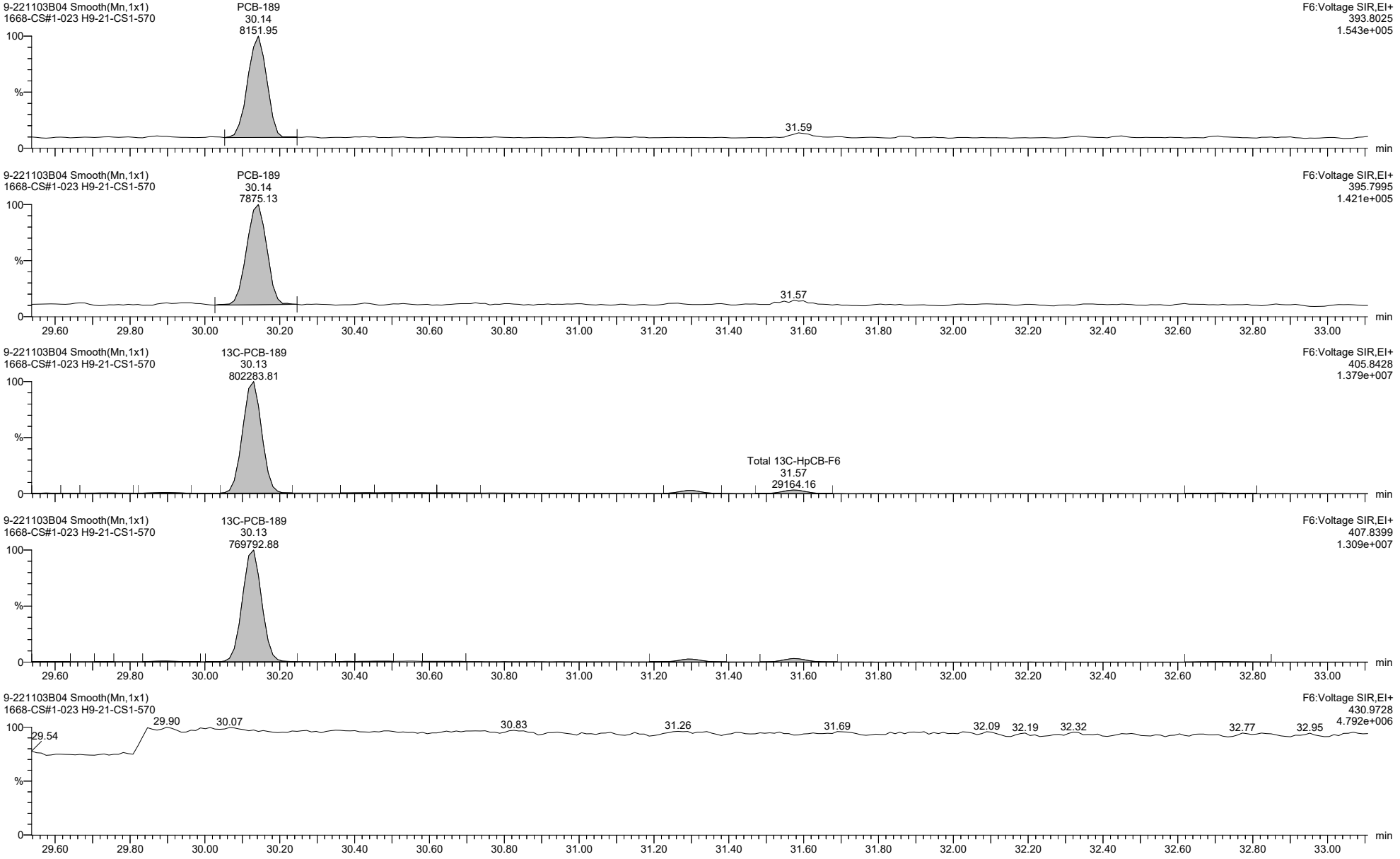


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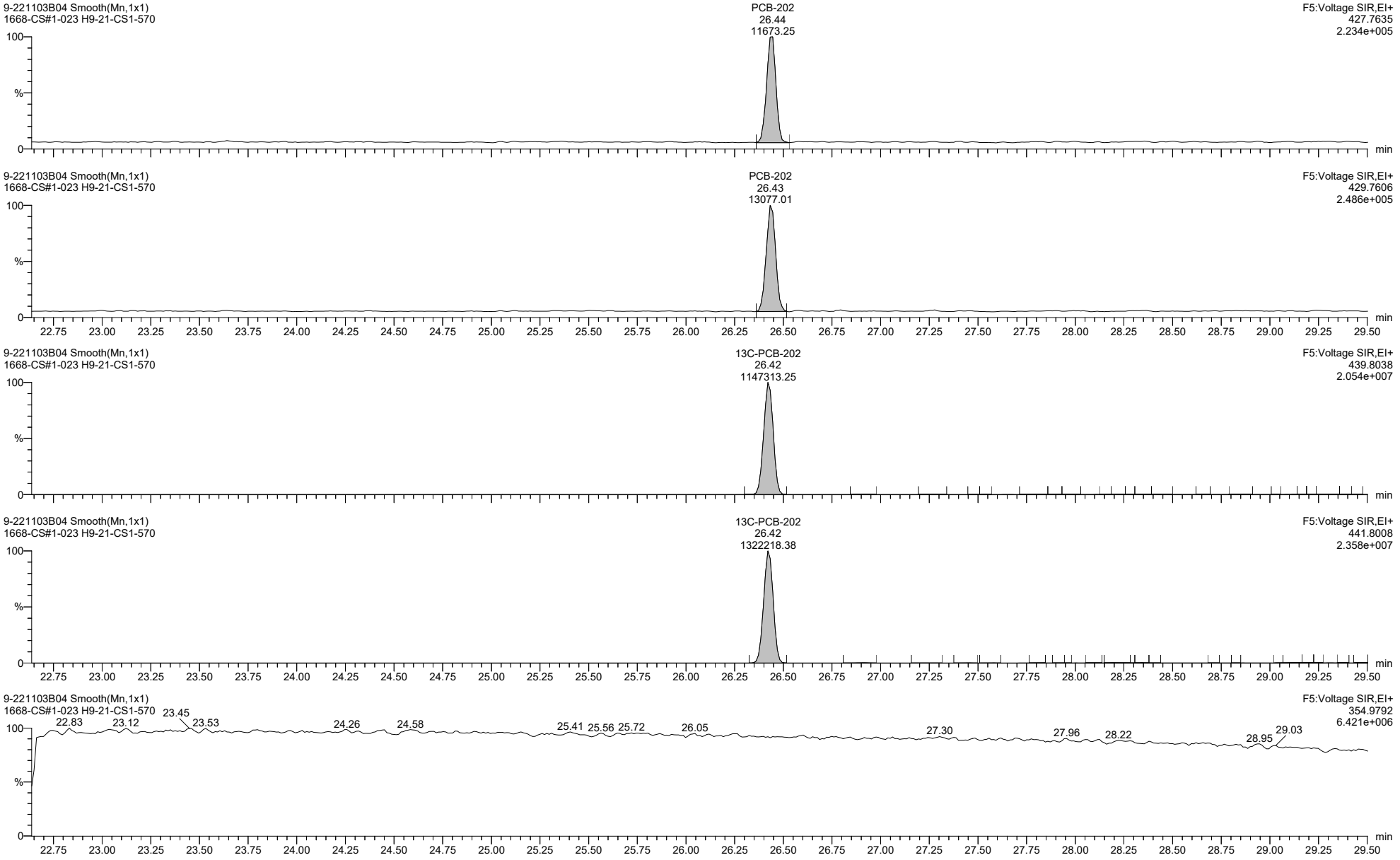


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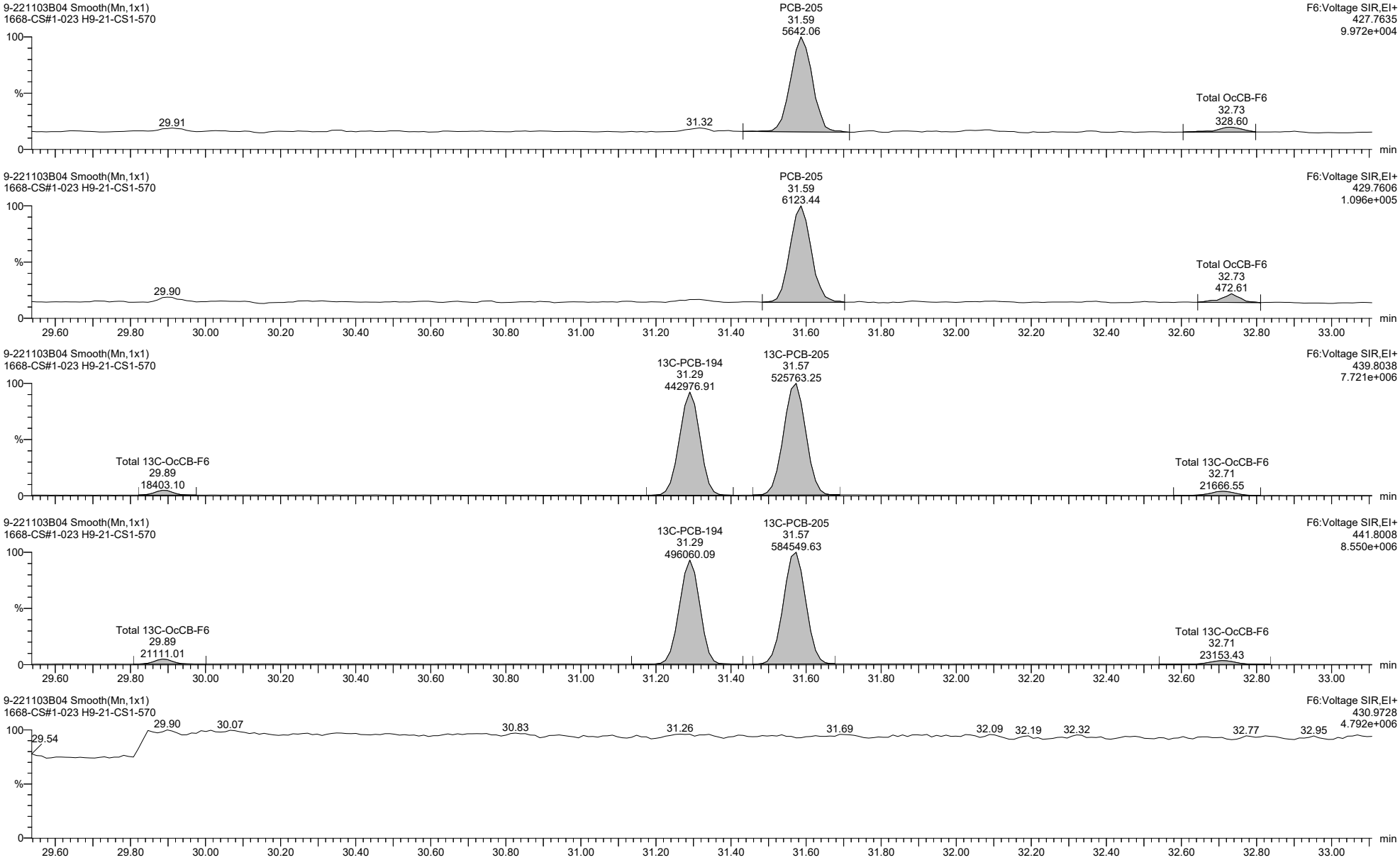


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Name: 9-221103B04, Date: 03-Nov-2022, Time: 19:38:37, ID: H9-21-CS1-570, Description: 1668-CS#1-023, Vial: Tray1:5

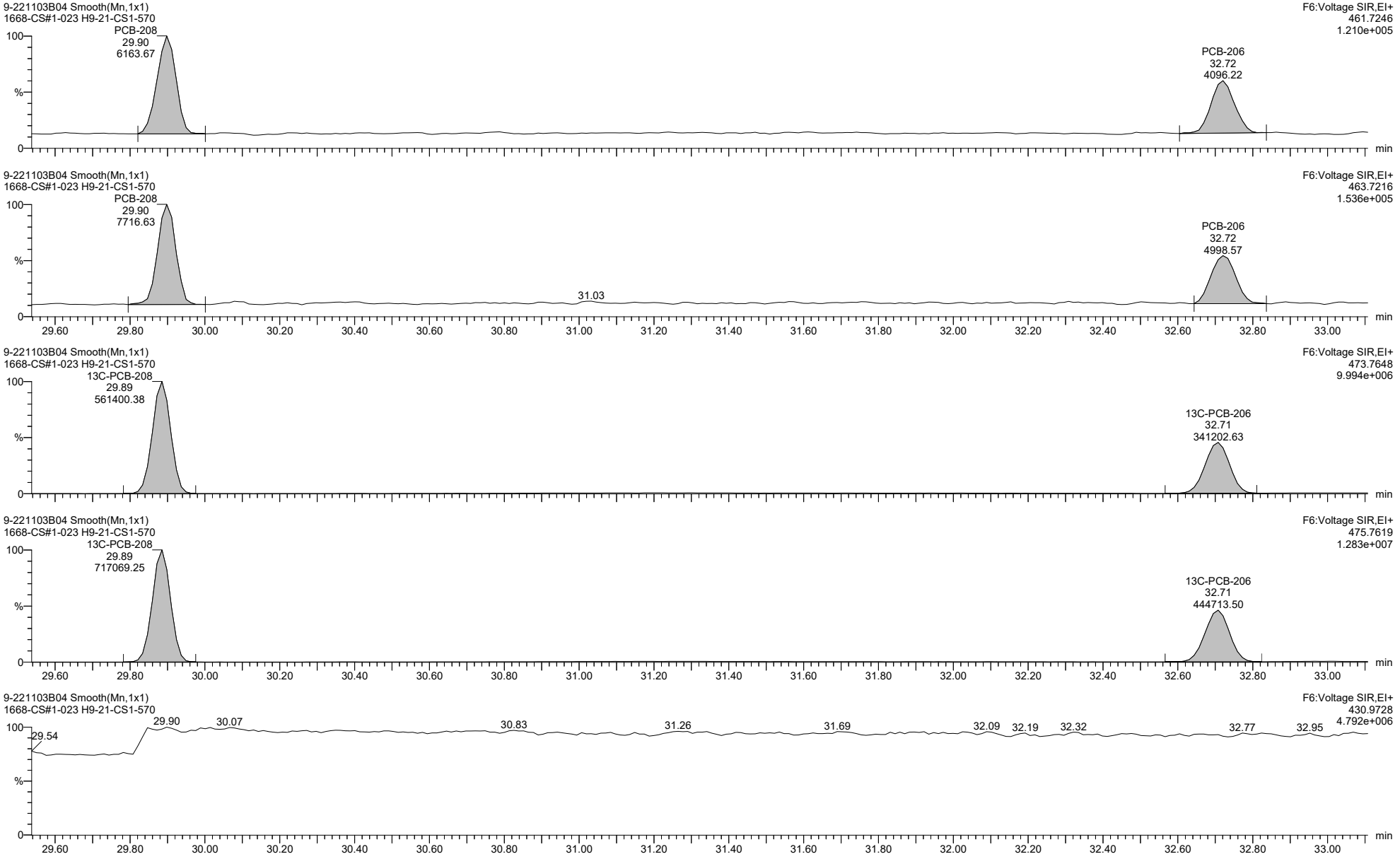


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

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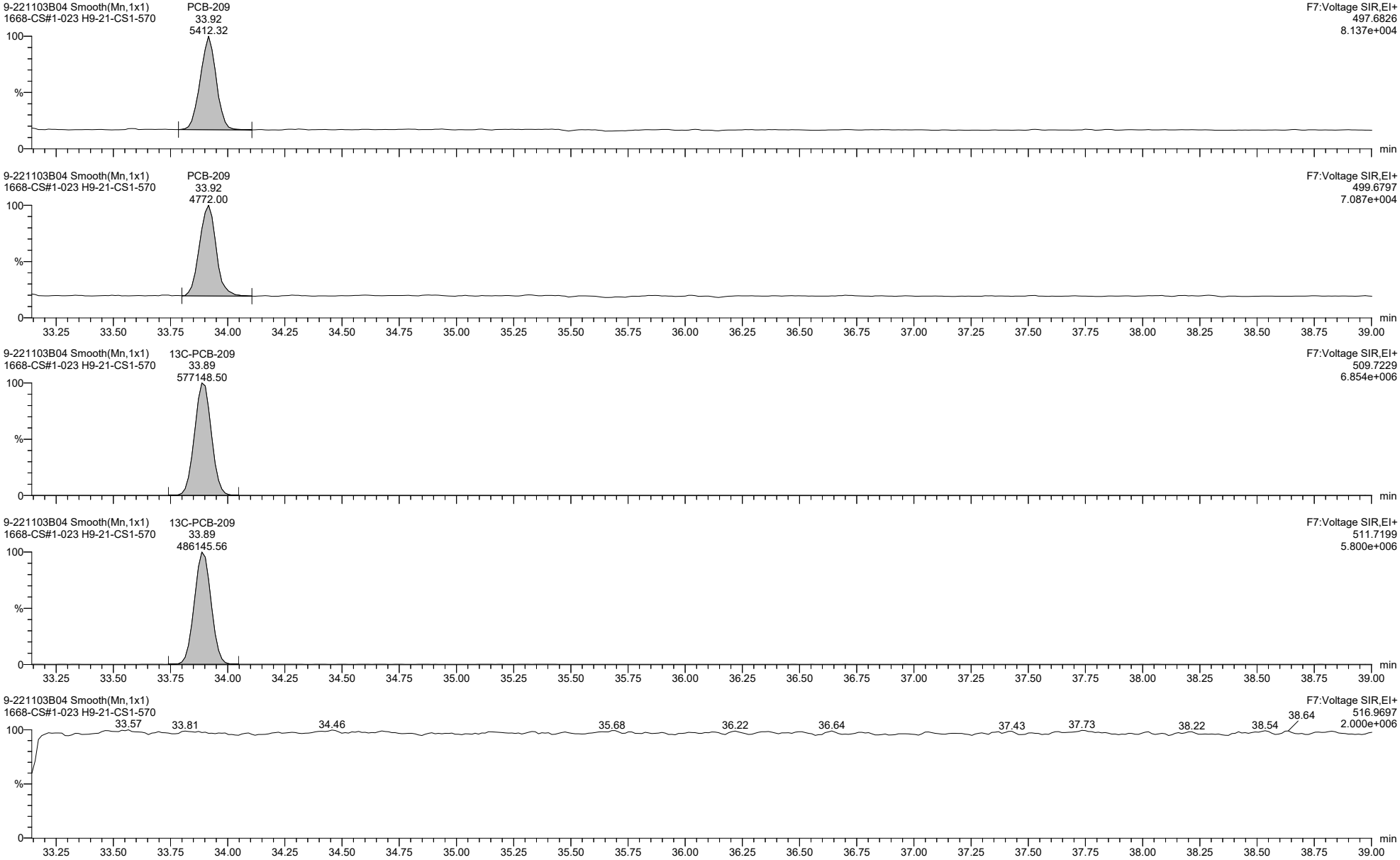


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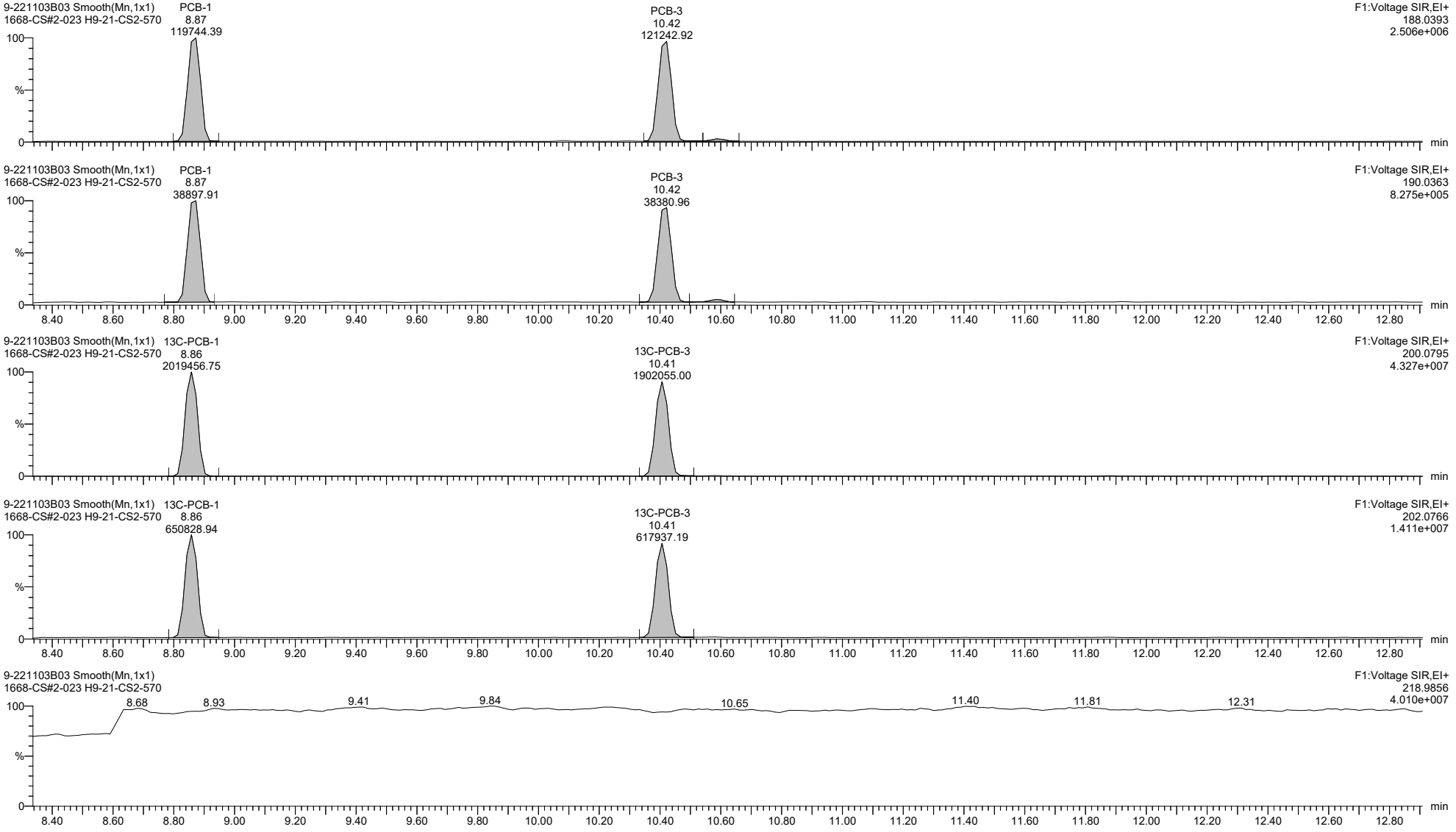
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Printed: Wednesday, November 09, 2022 15:41:14 Eastern Standard Time

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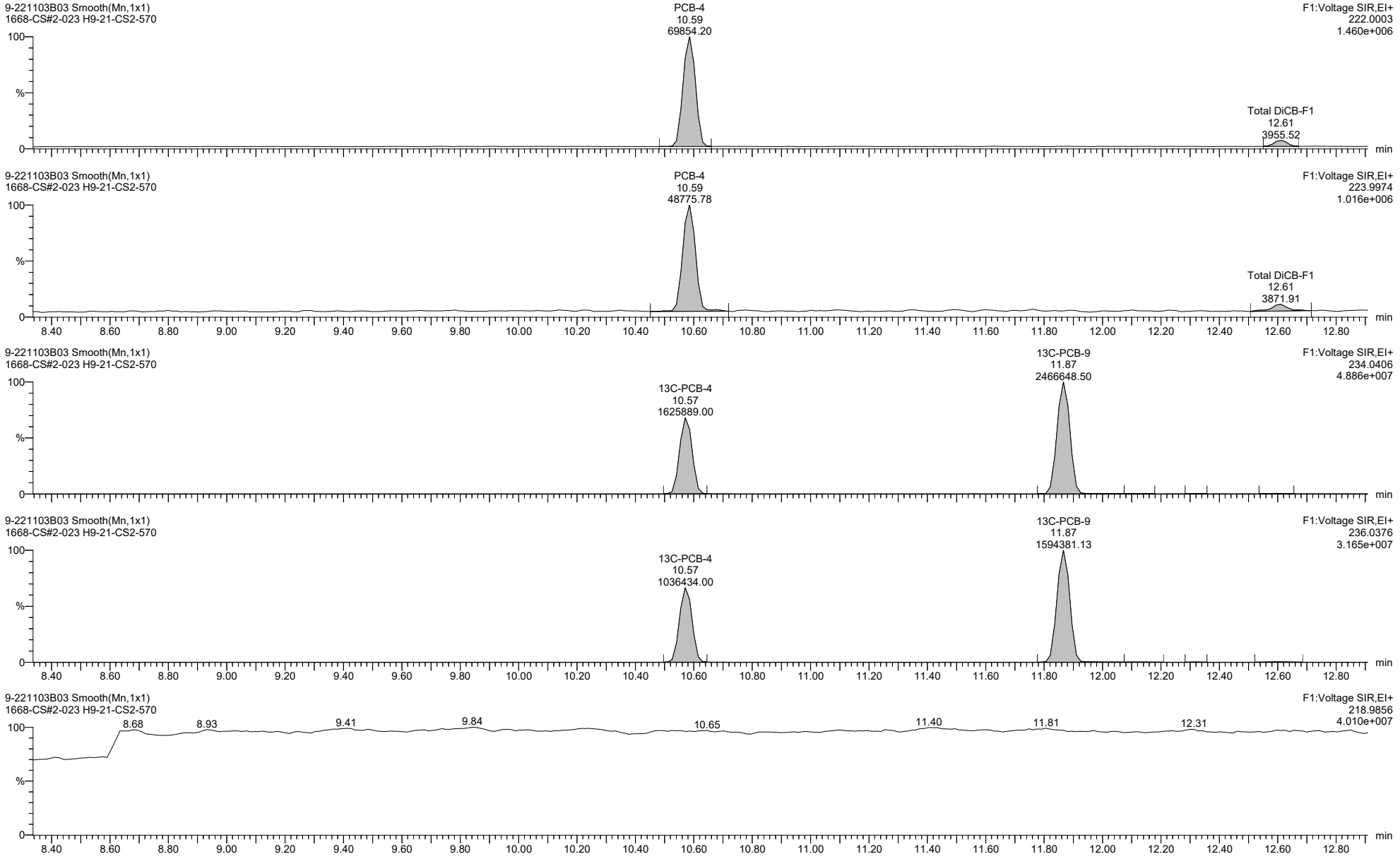


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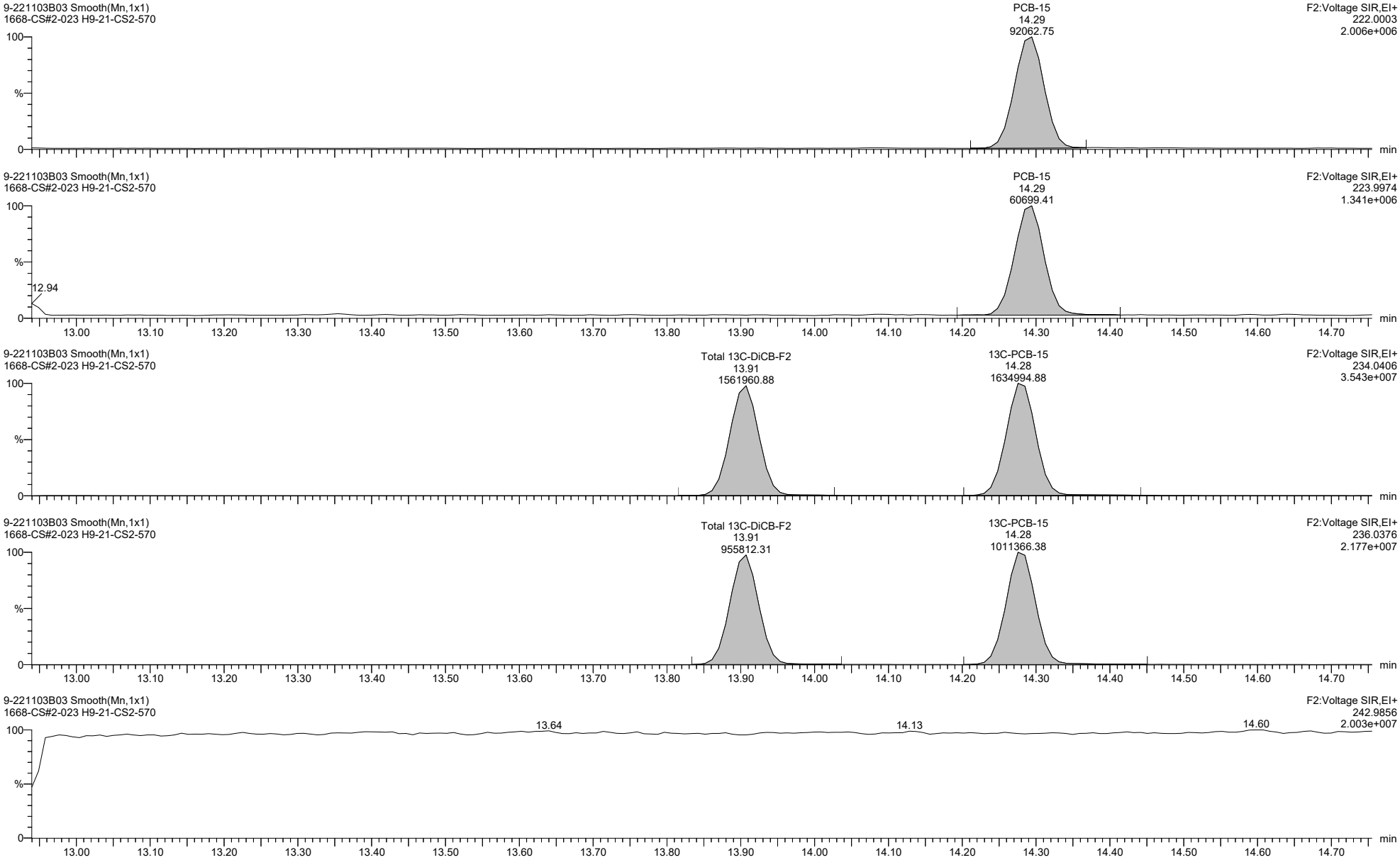


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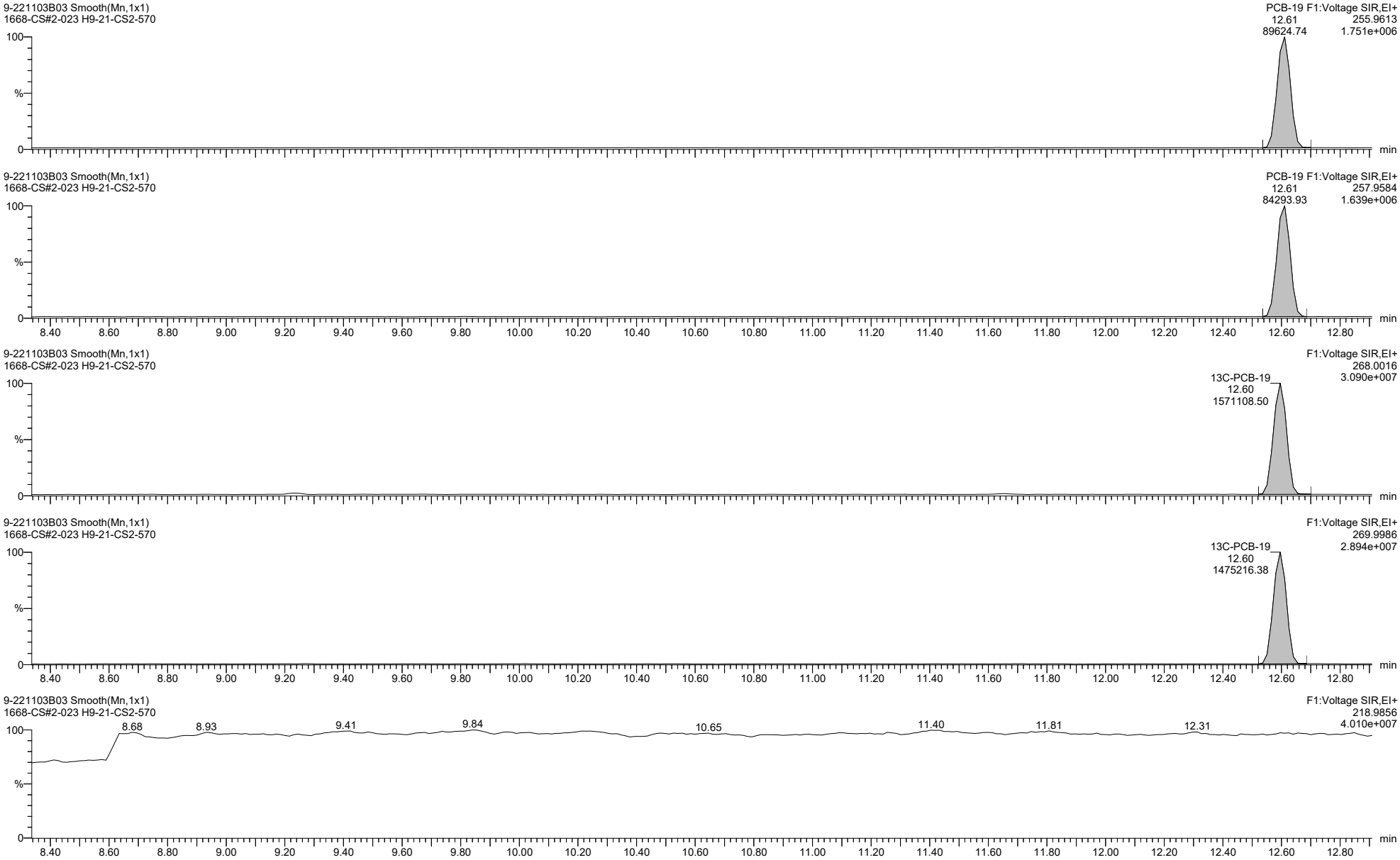


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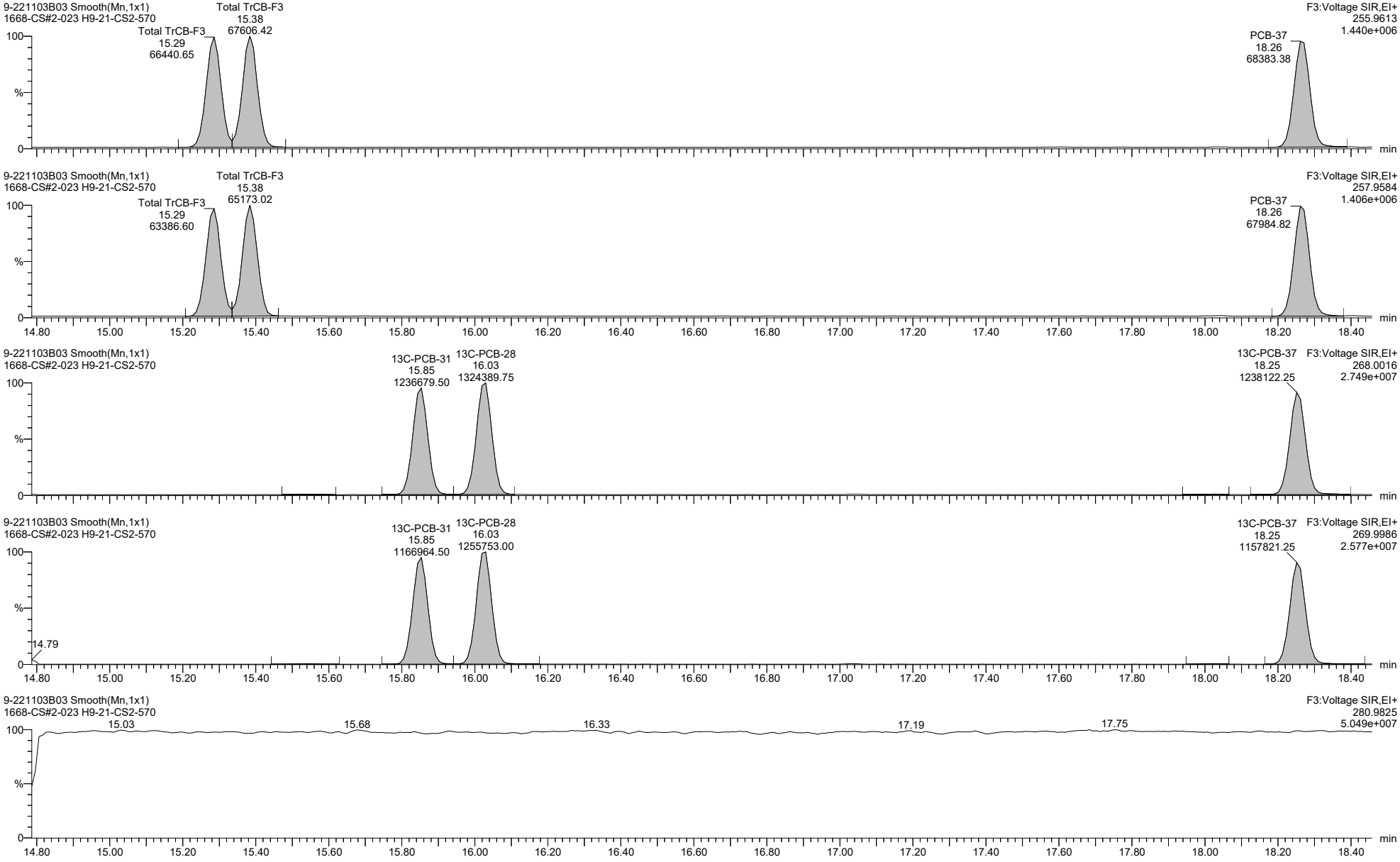
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Name: 9-221103B03, Date: 03-Nov-2022, Time: 18:56:18, ID: H9-21-CS2-570, Description: 1668-CS#2-023, Vial: Tray1:4



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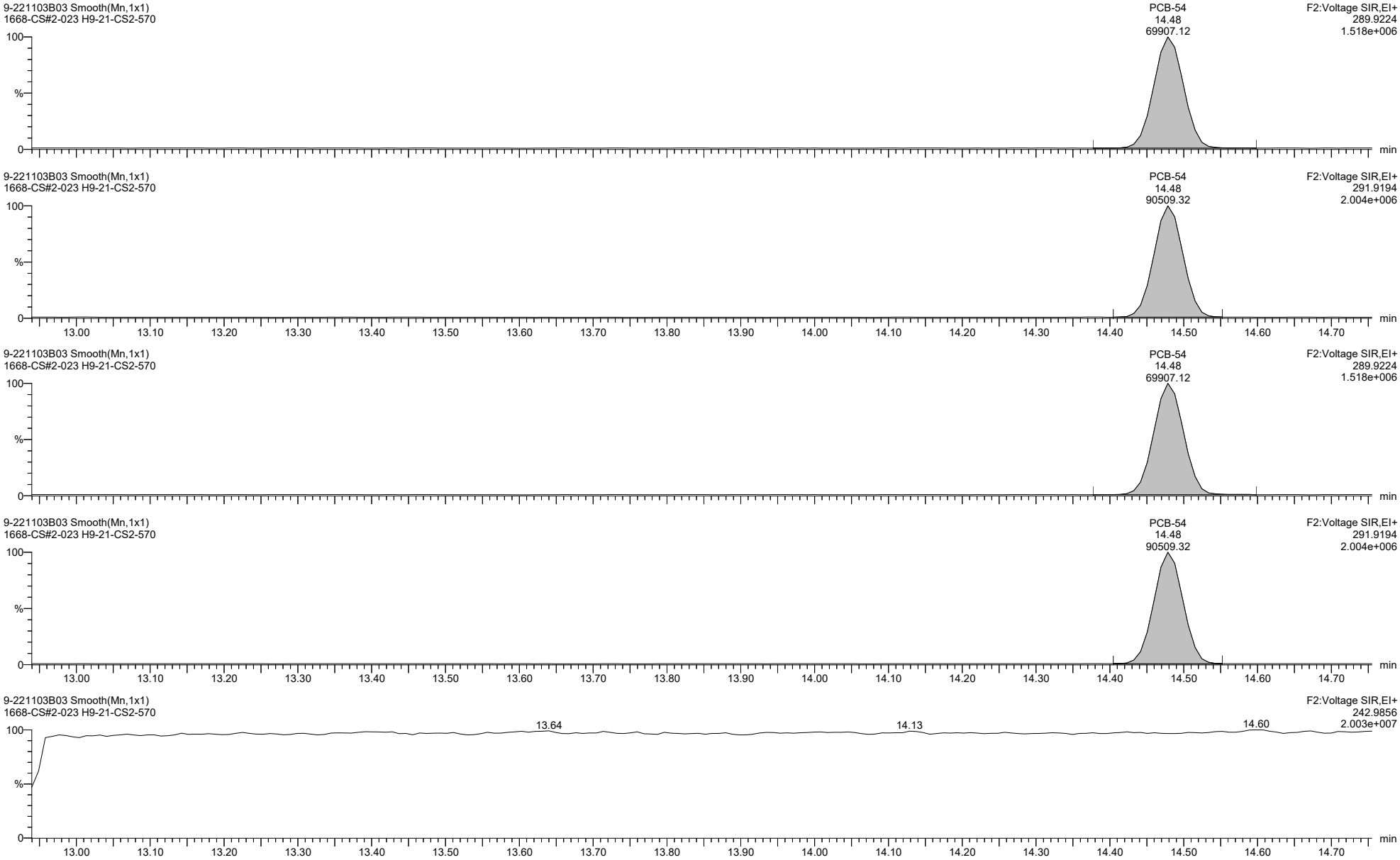


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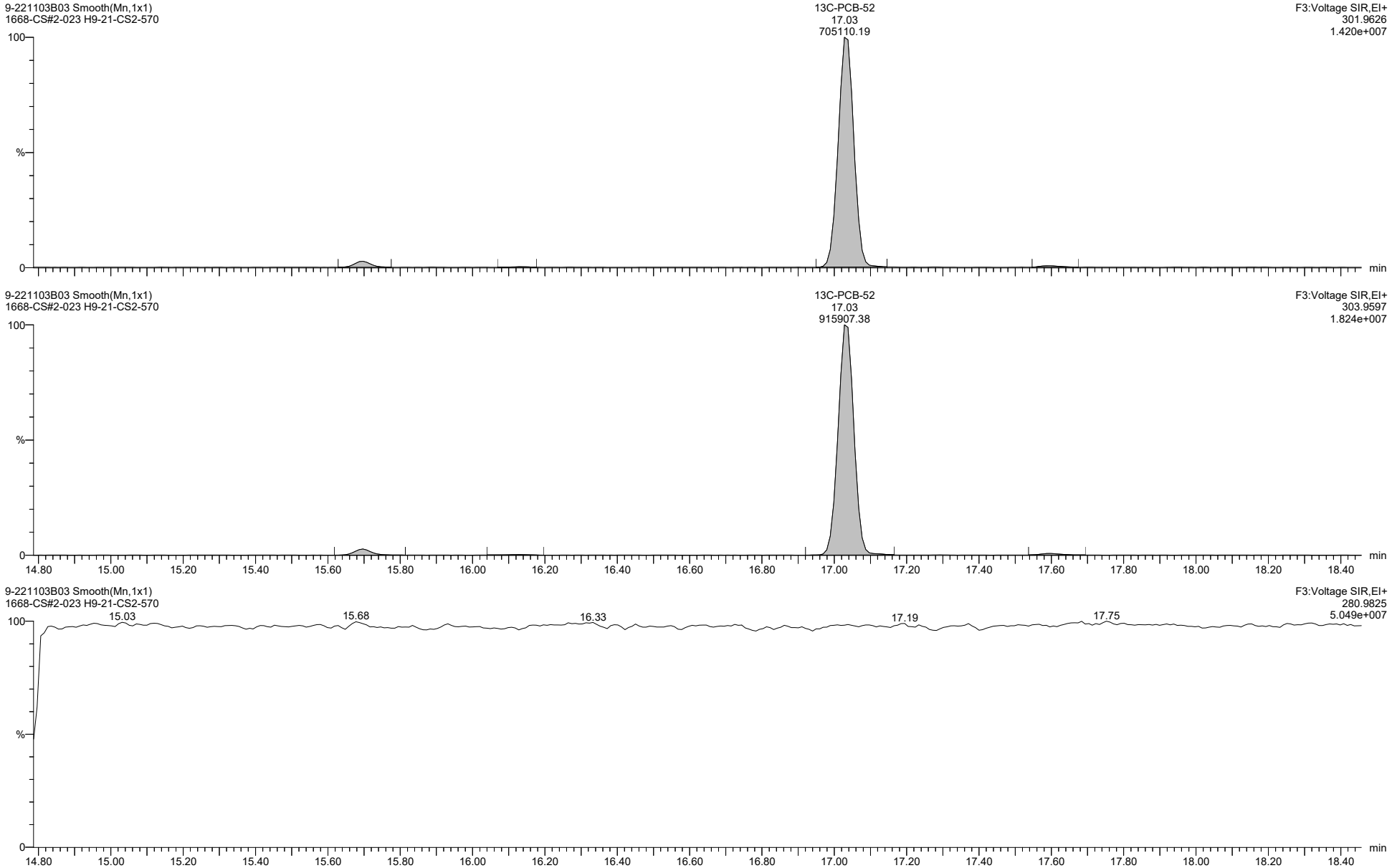
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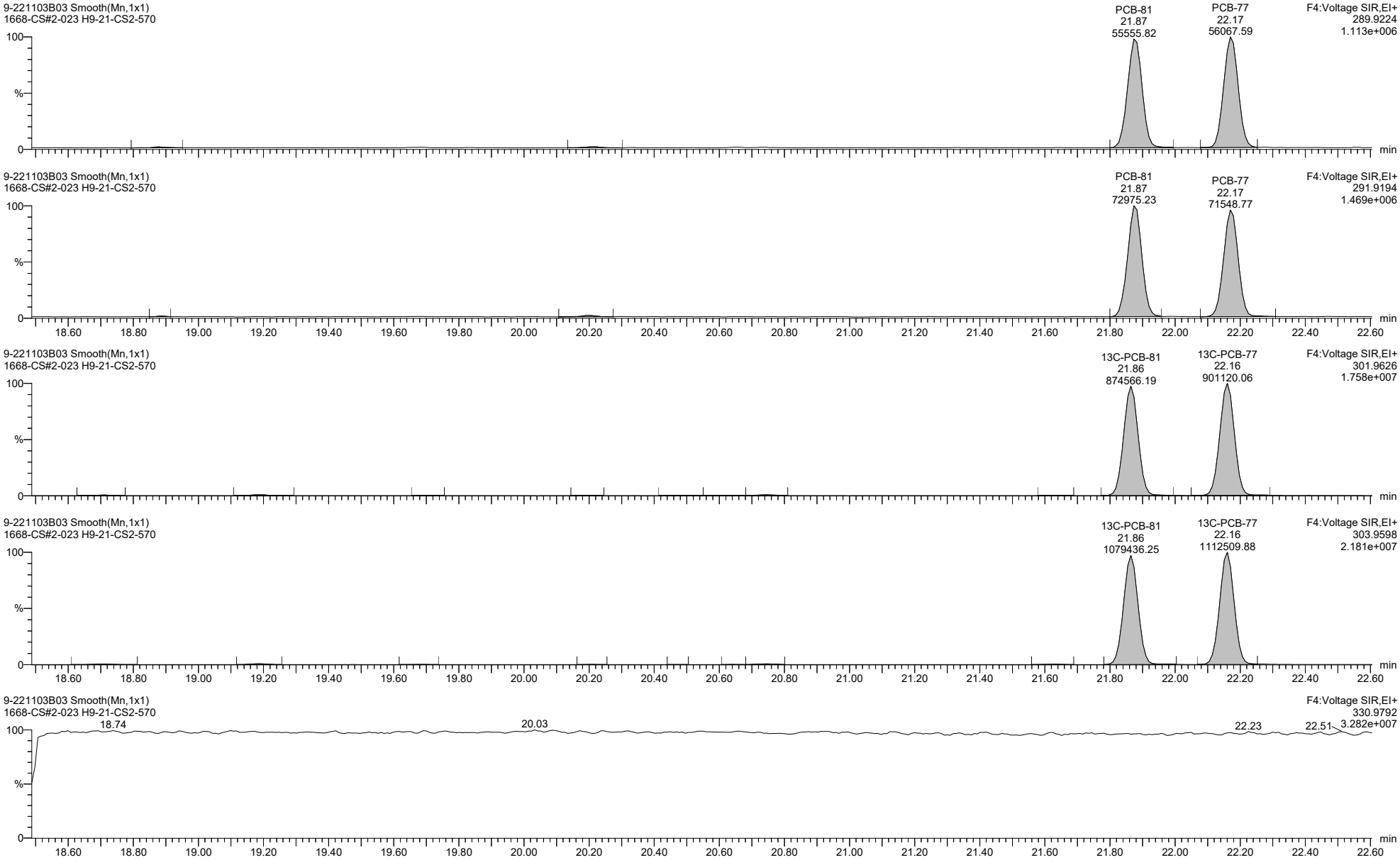


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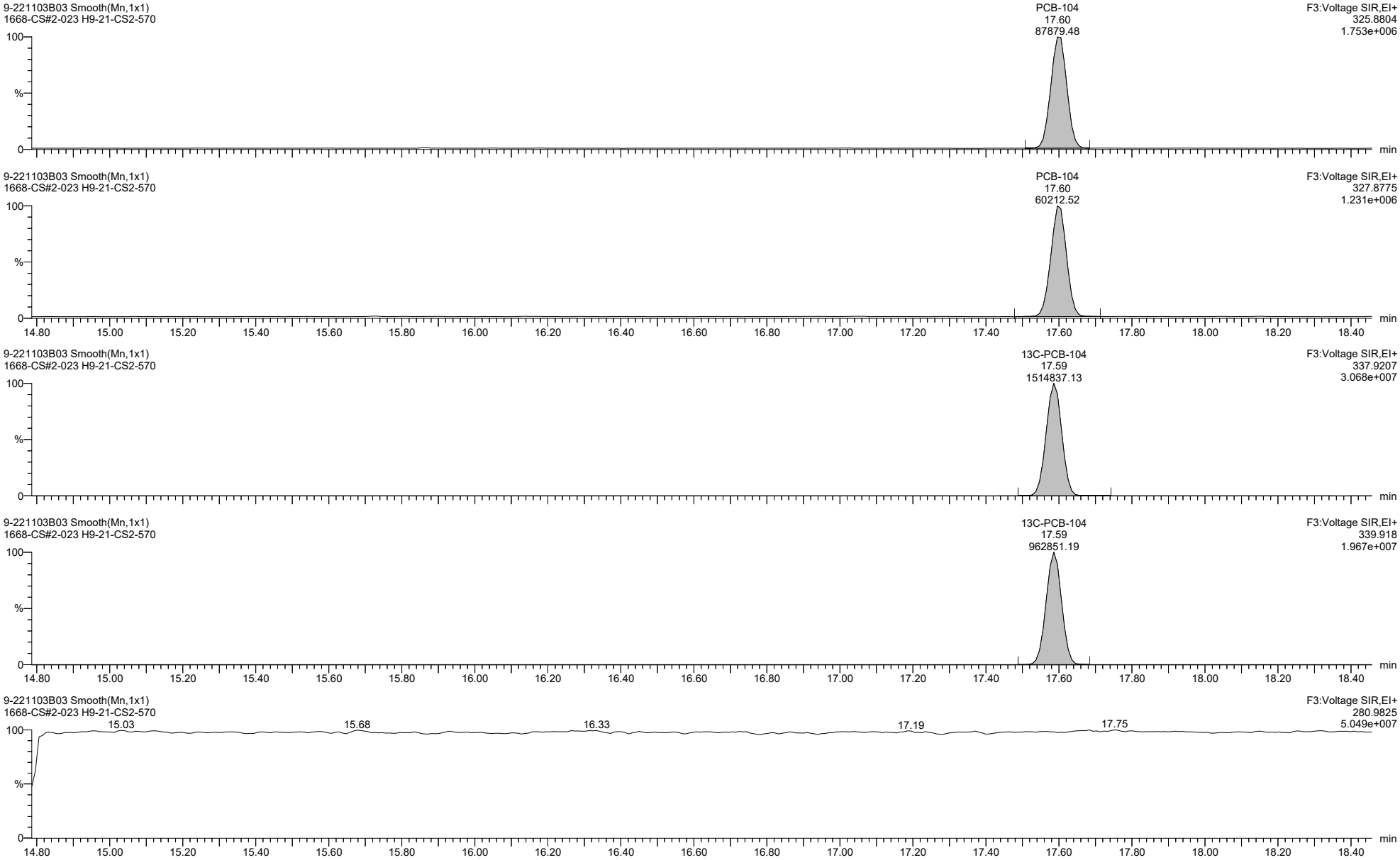


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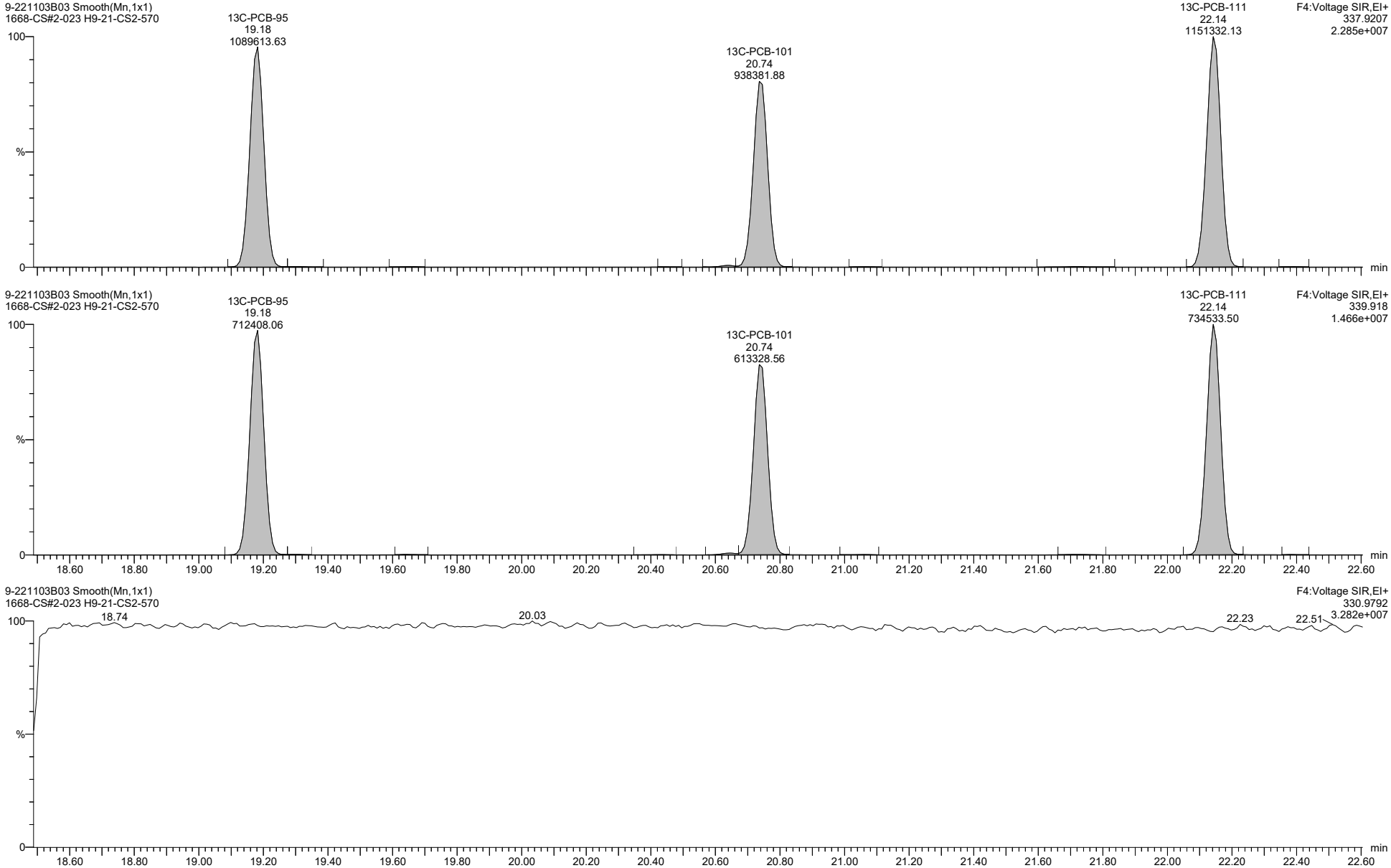


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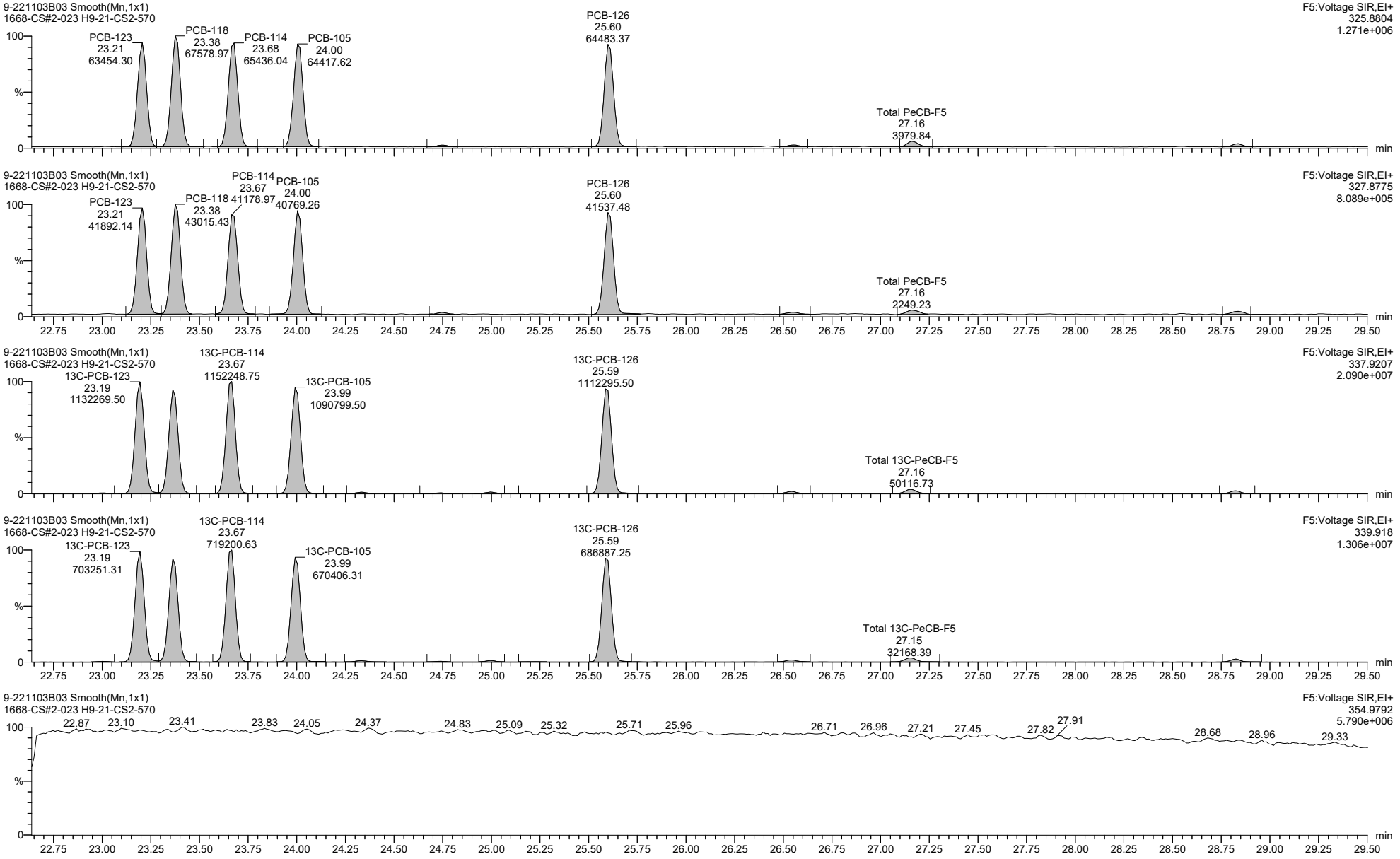
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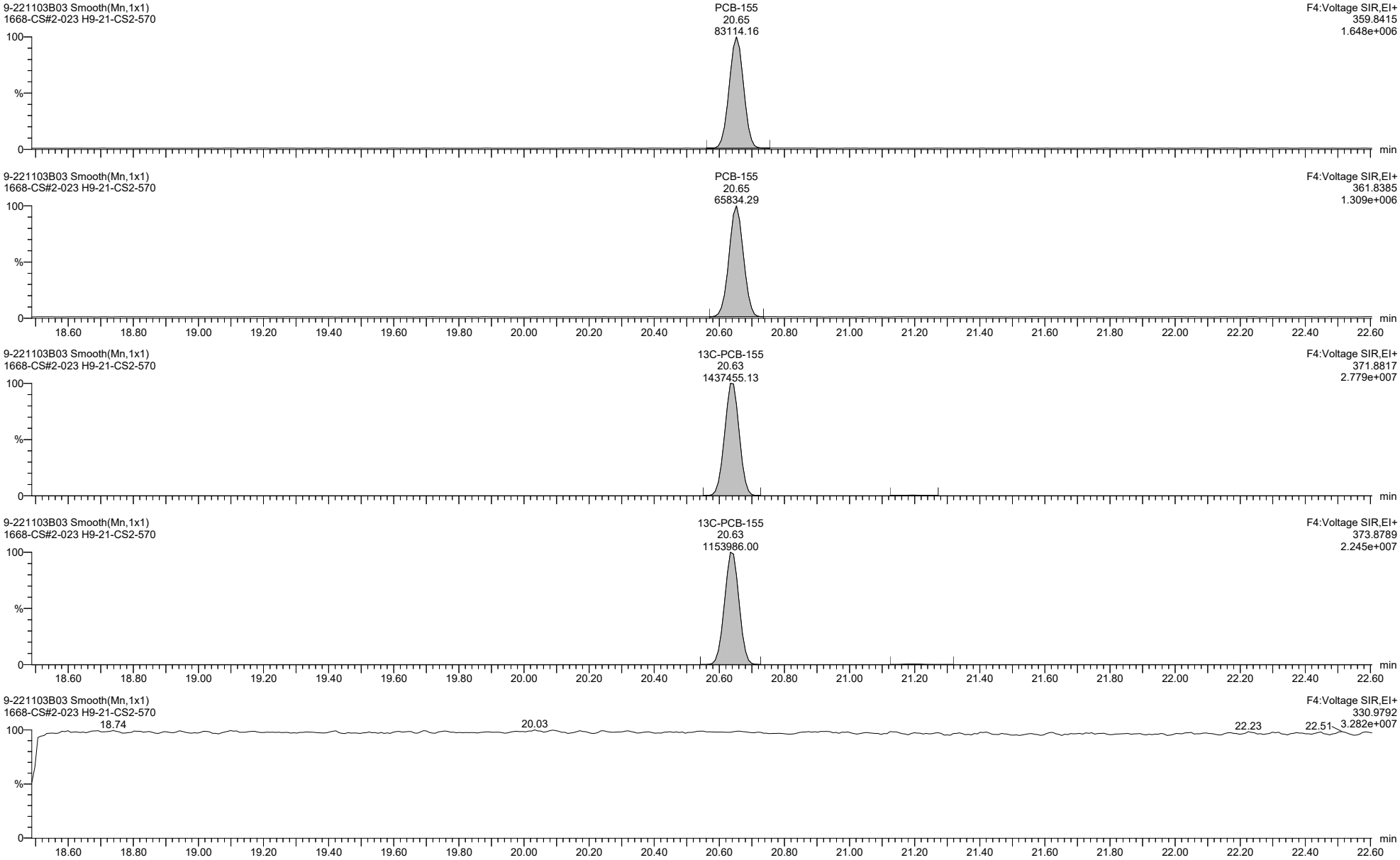


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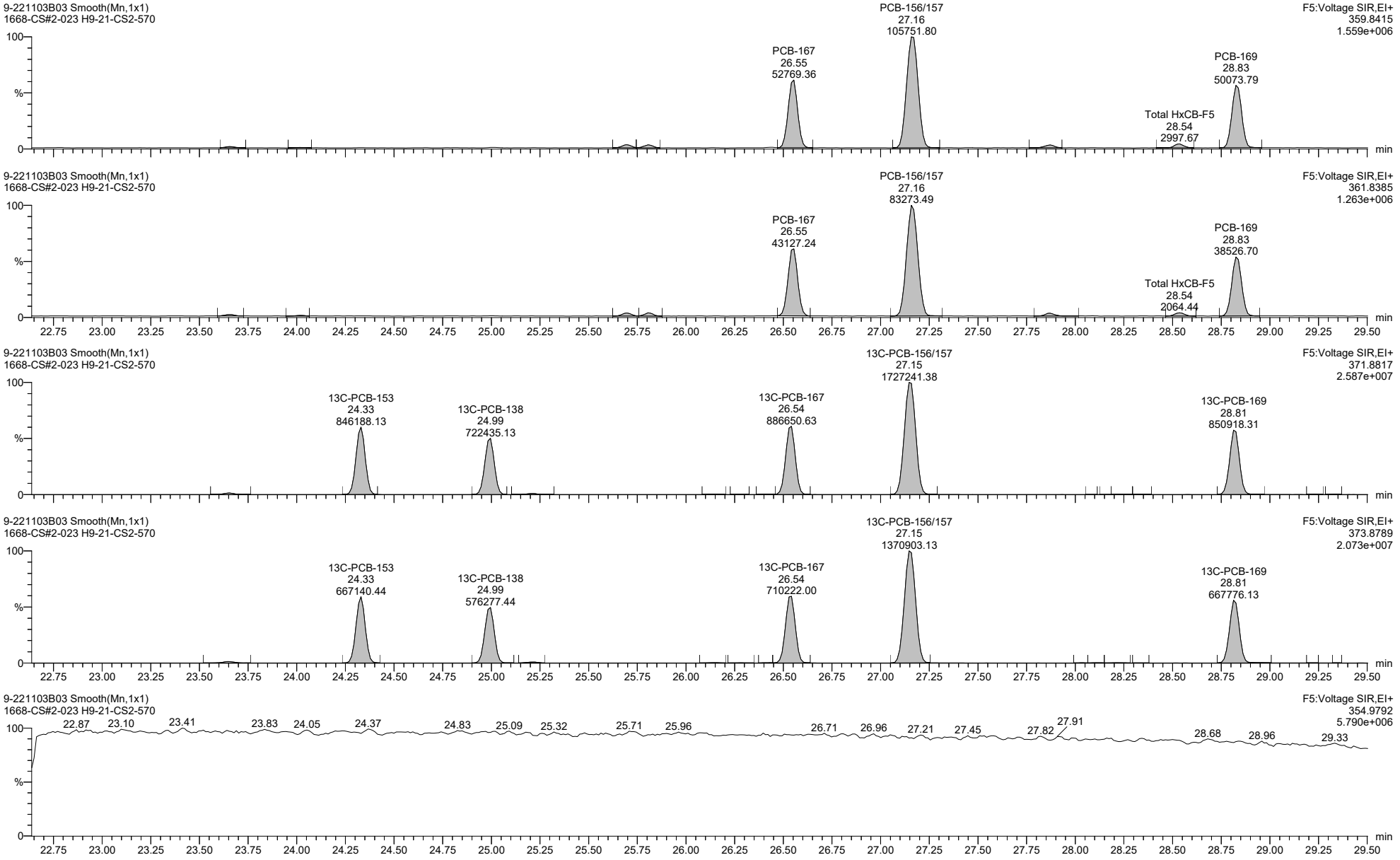


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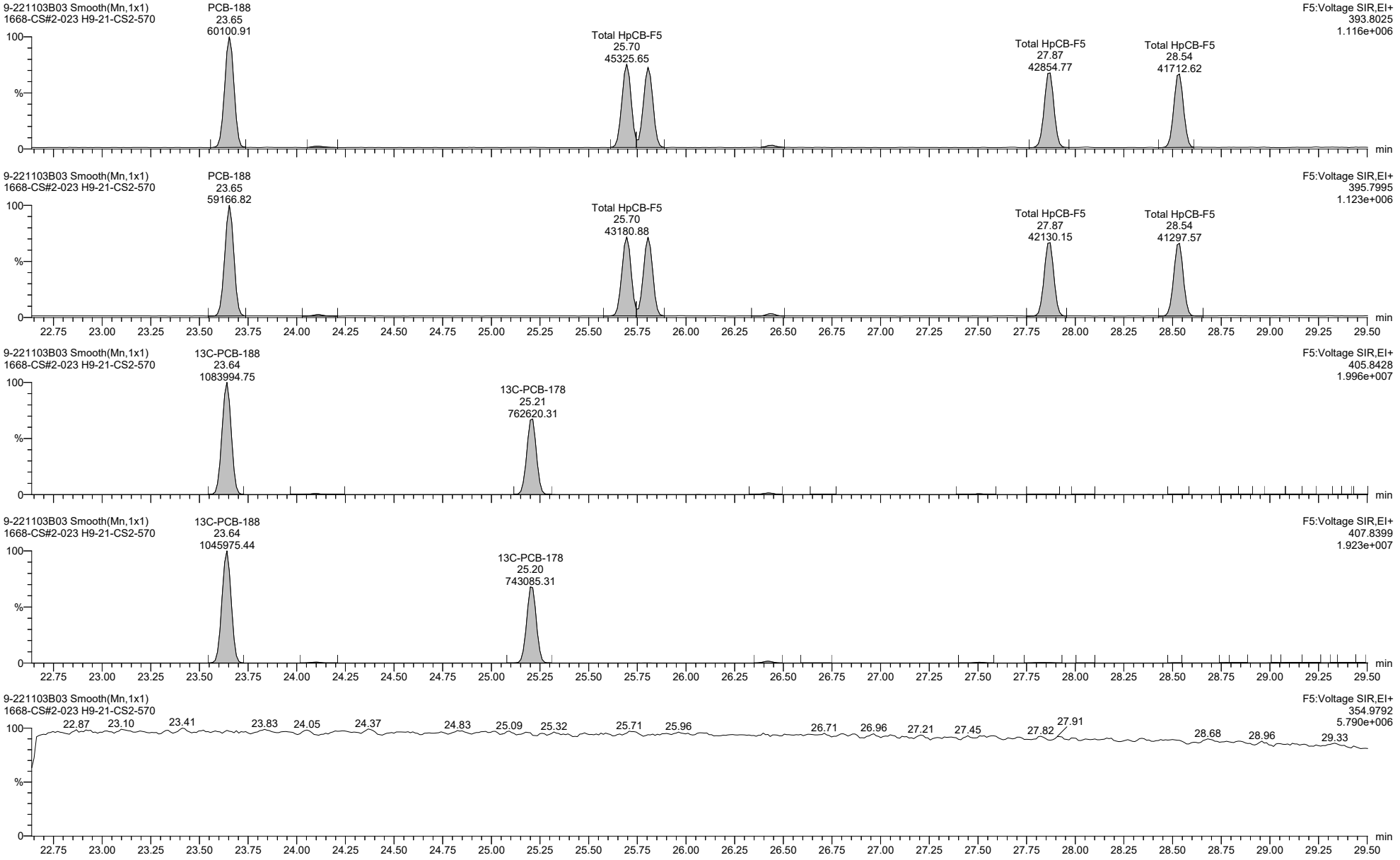


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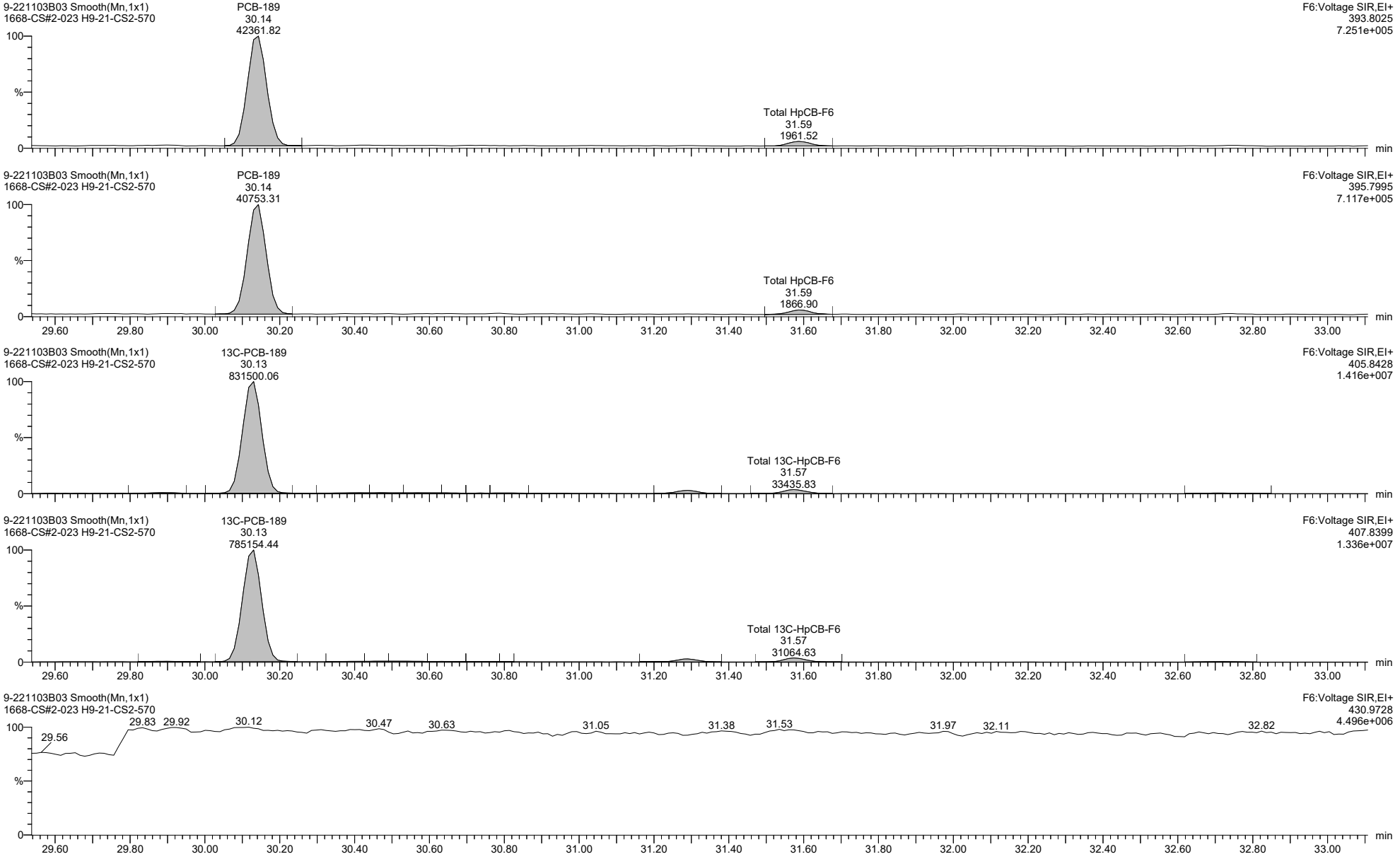


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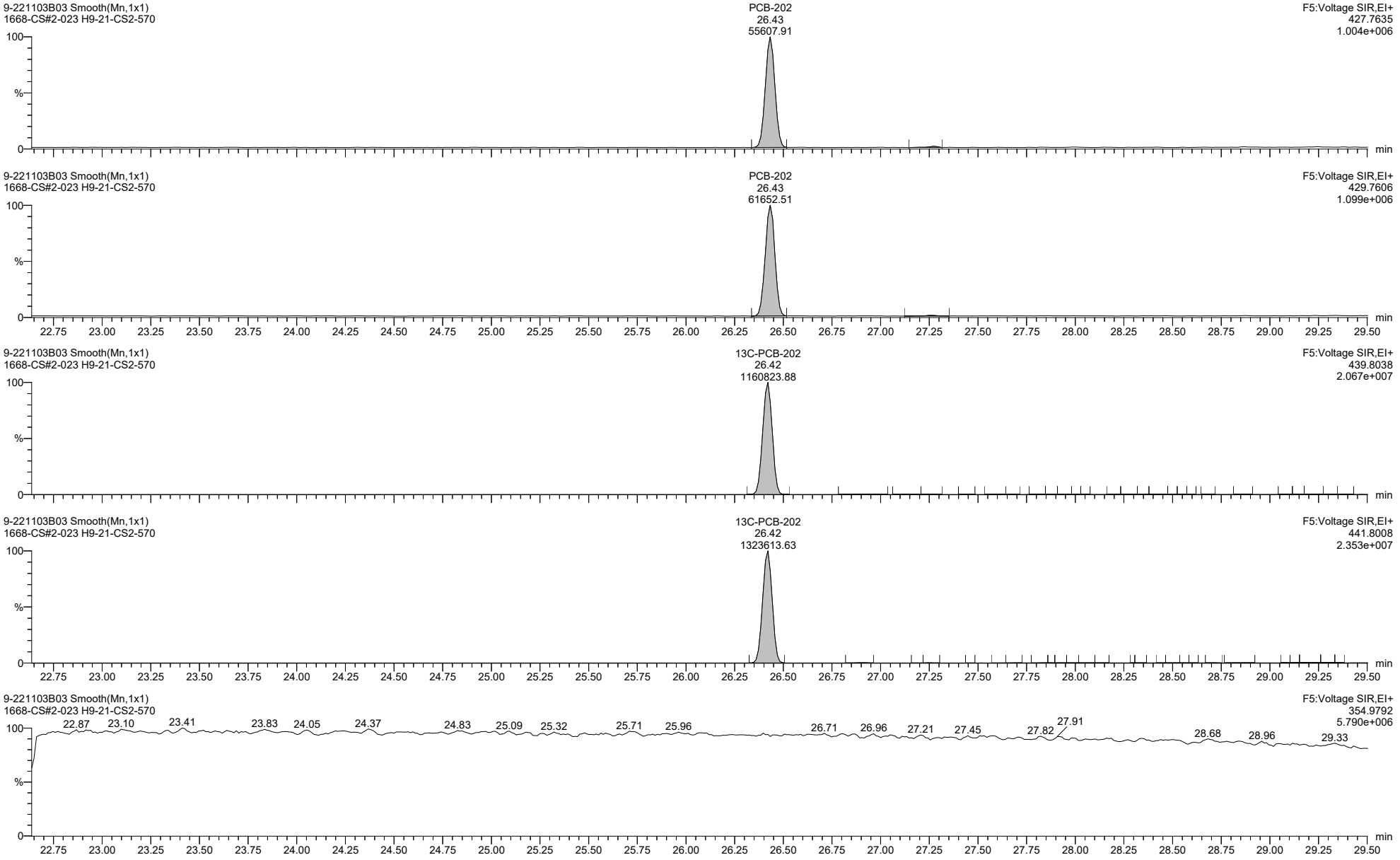


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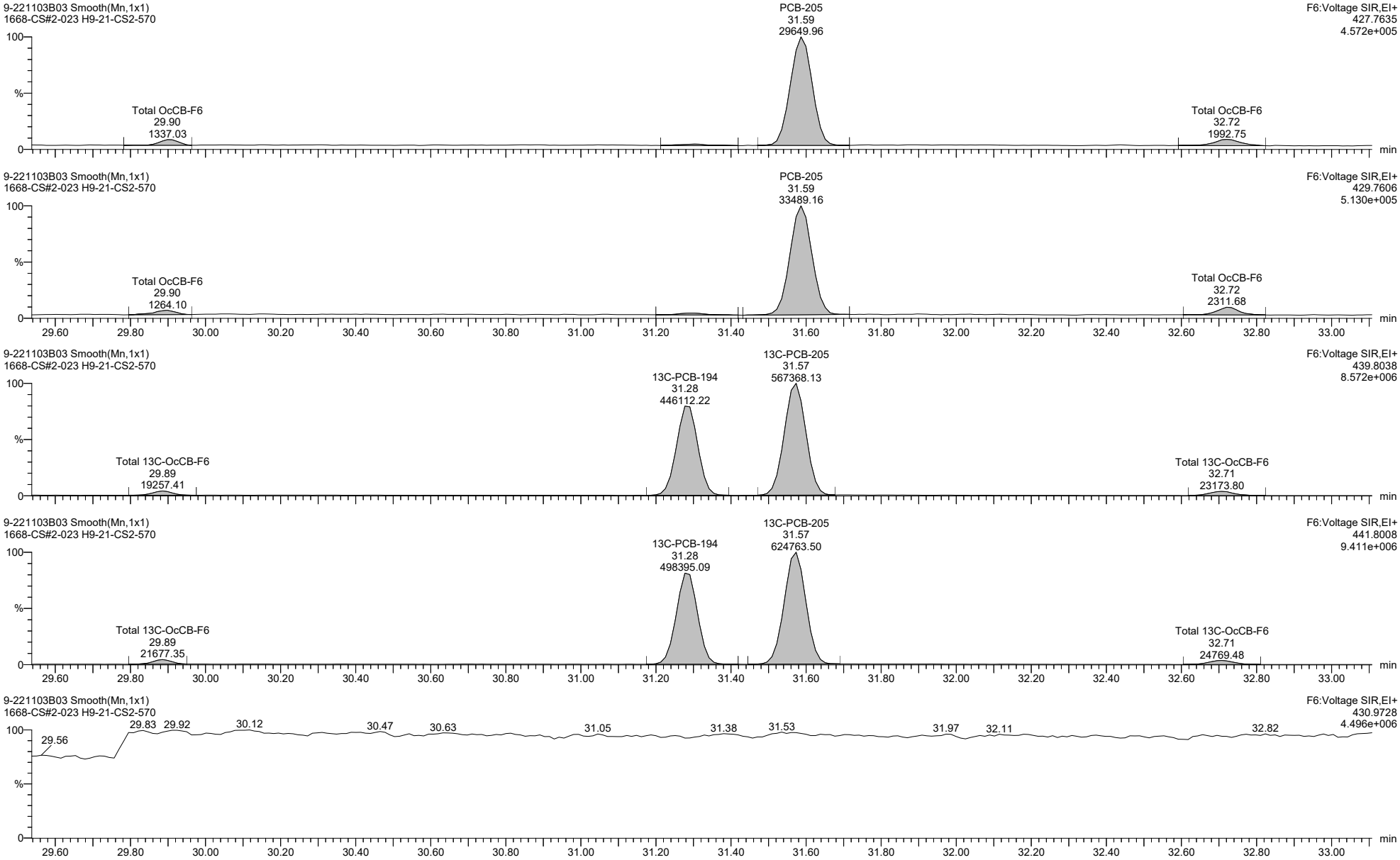


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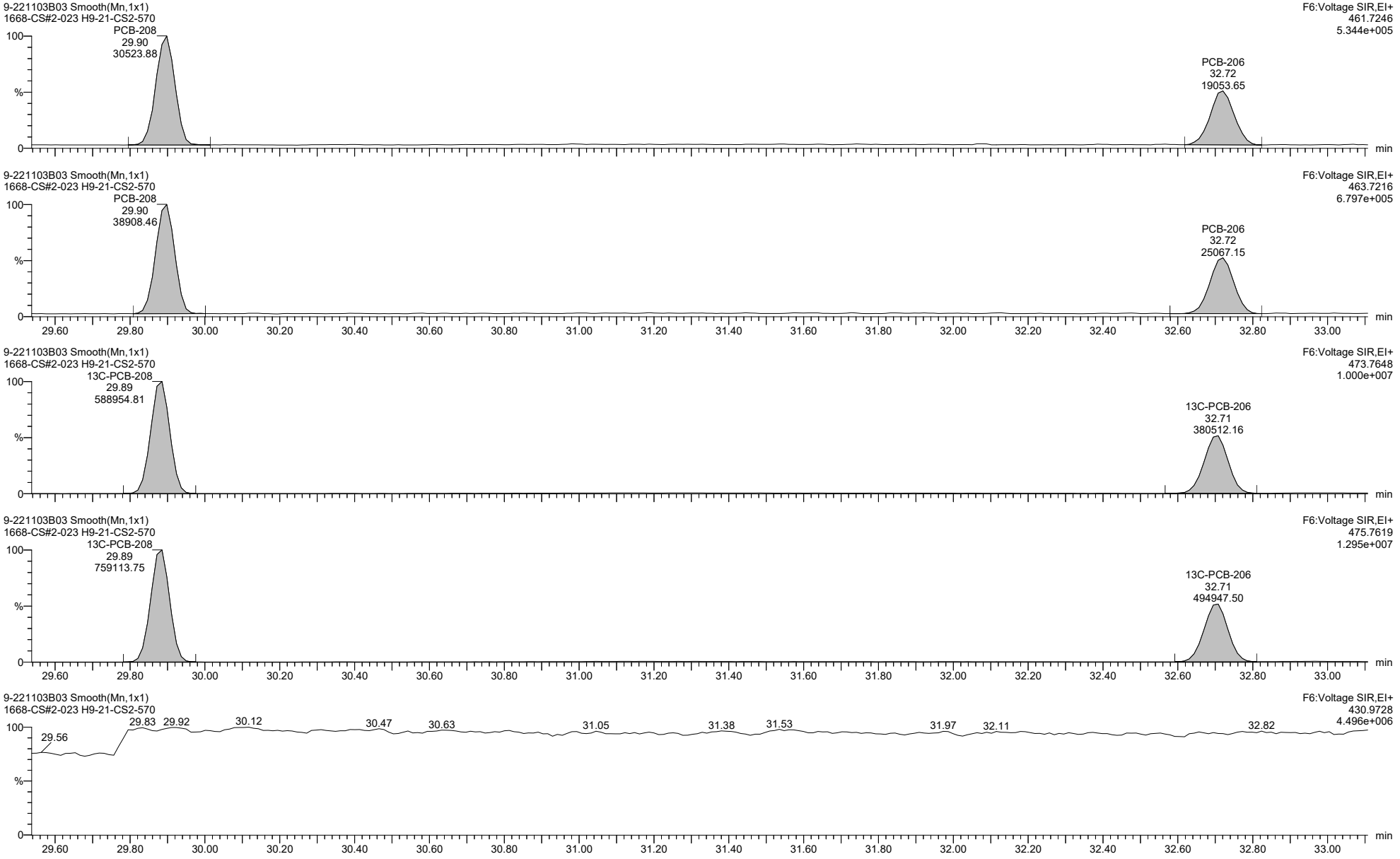
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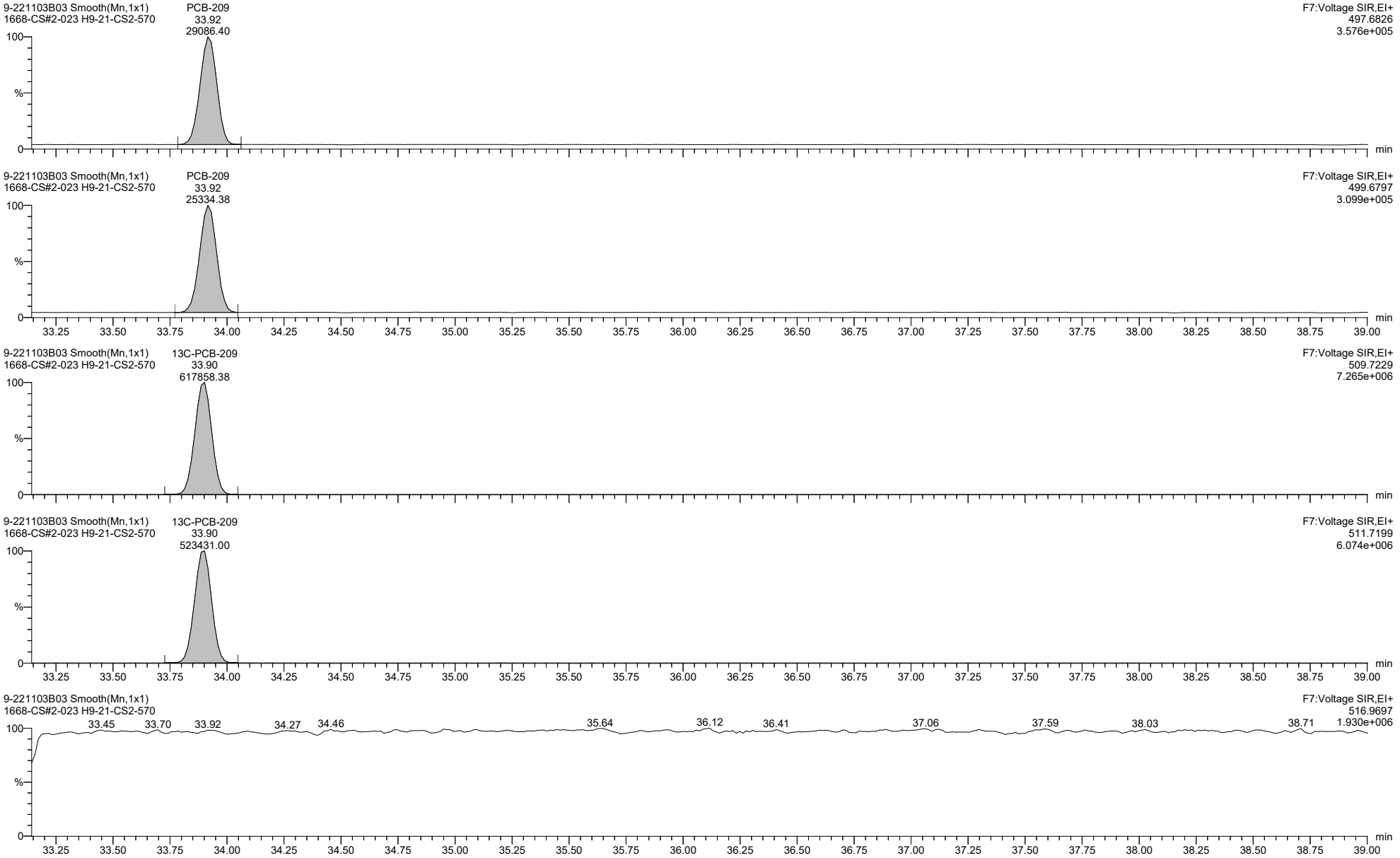
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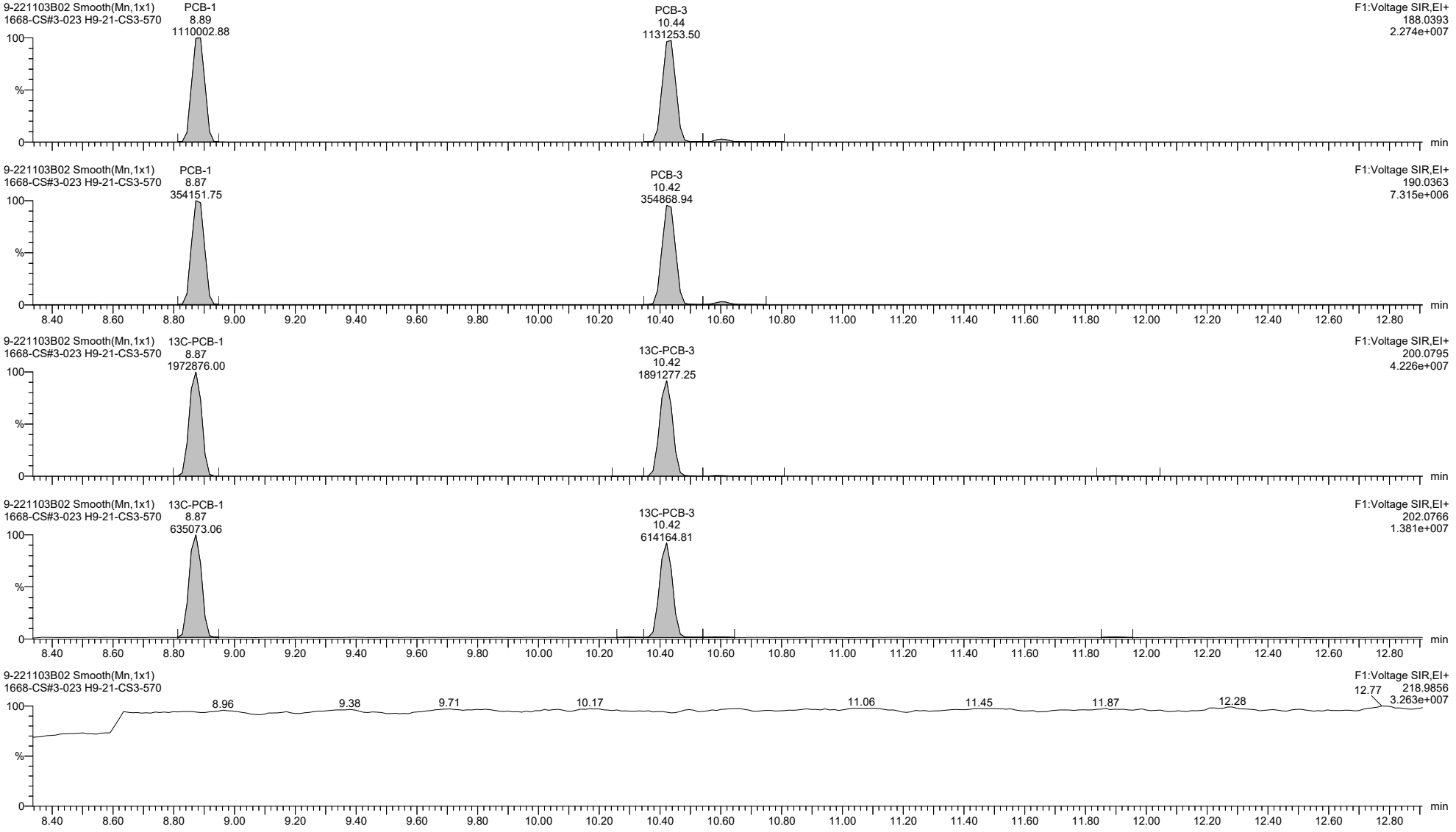
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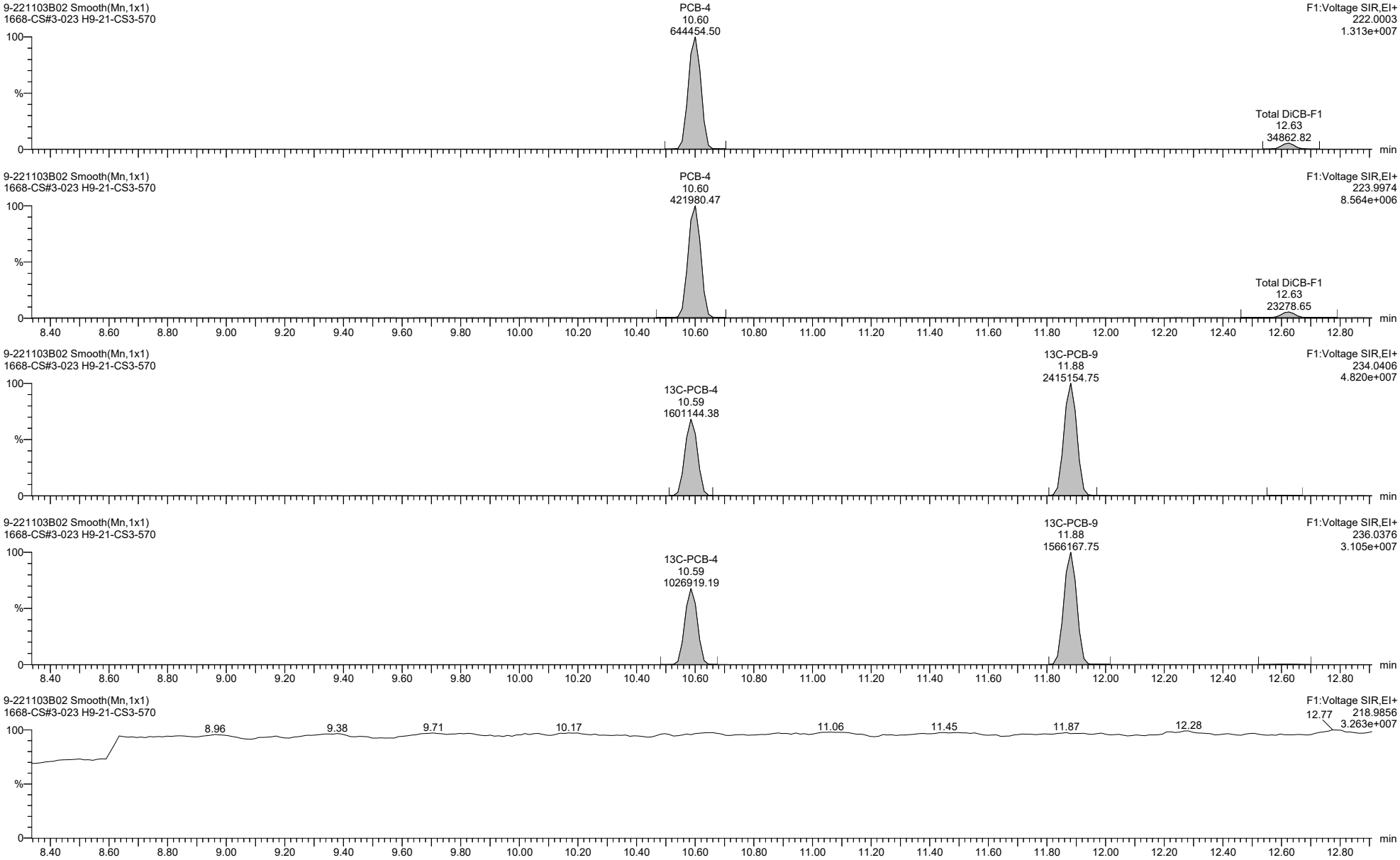


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

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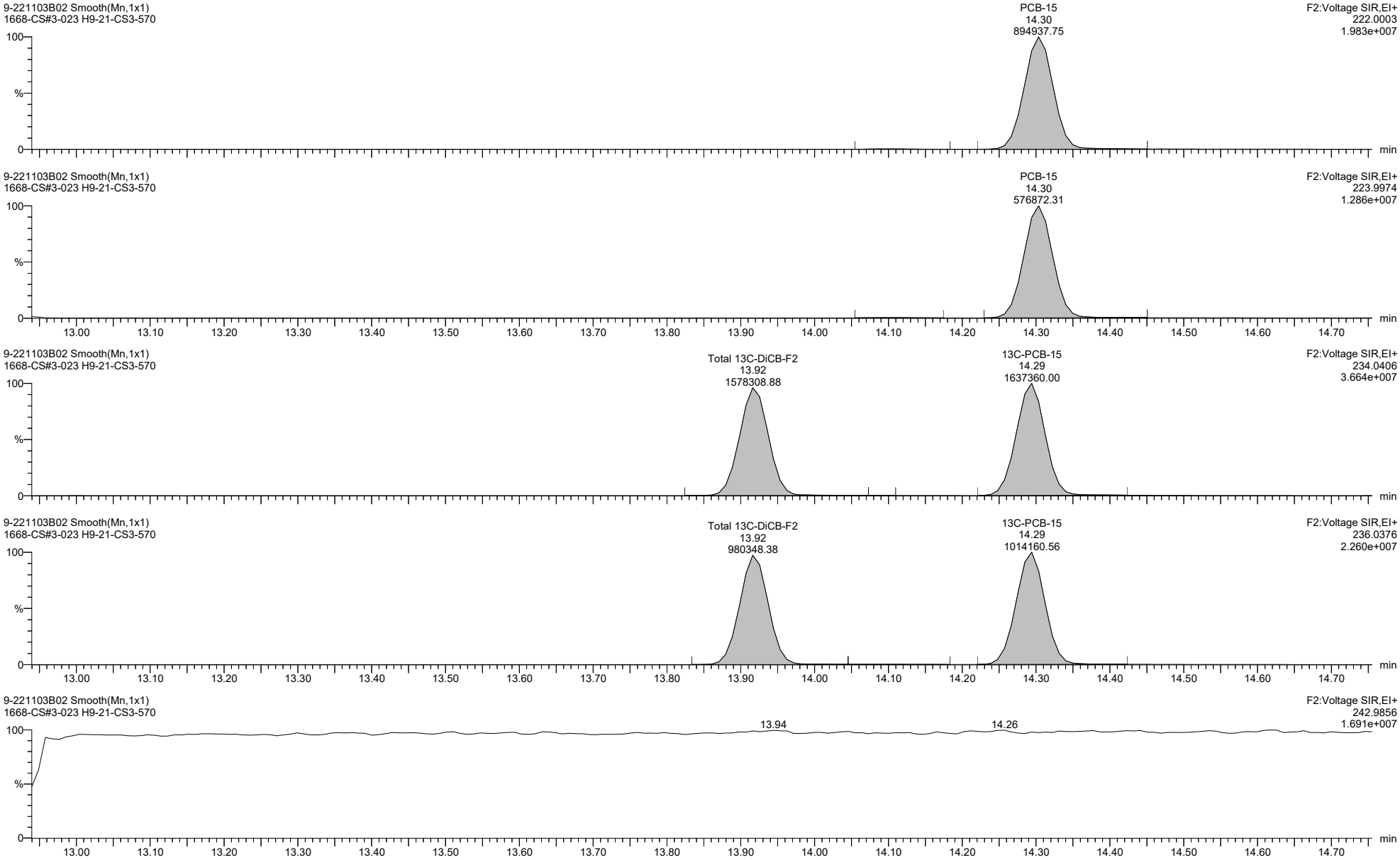


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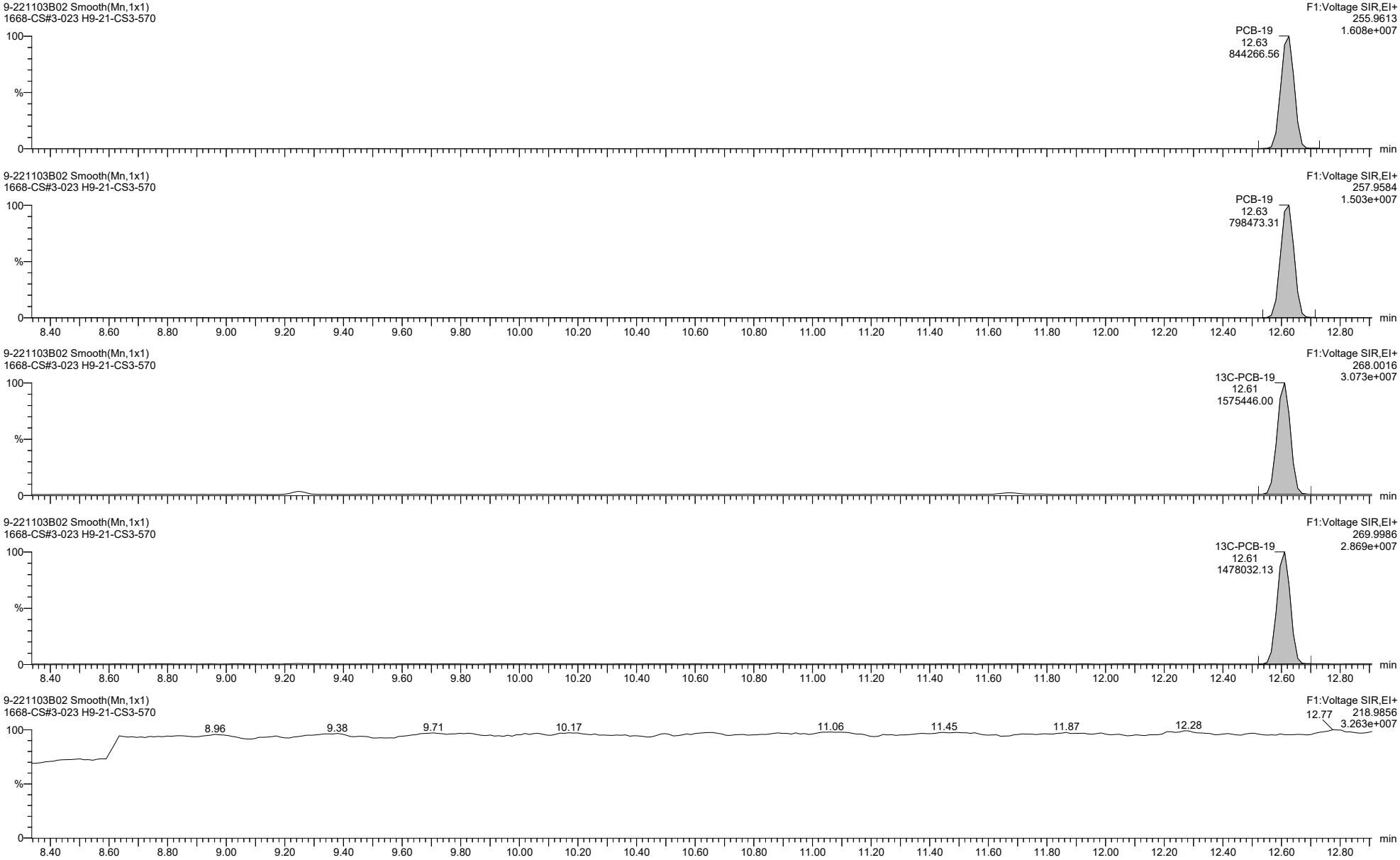
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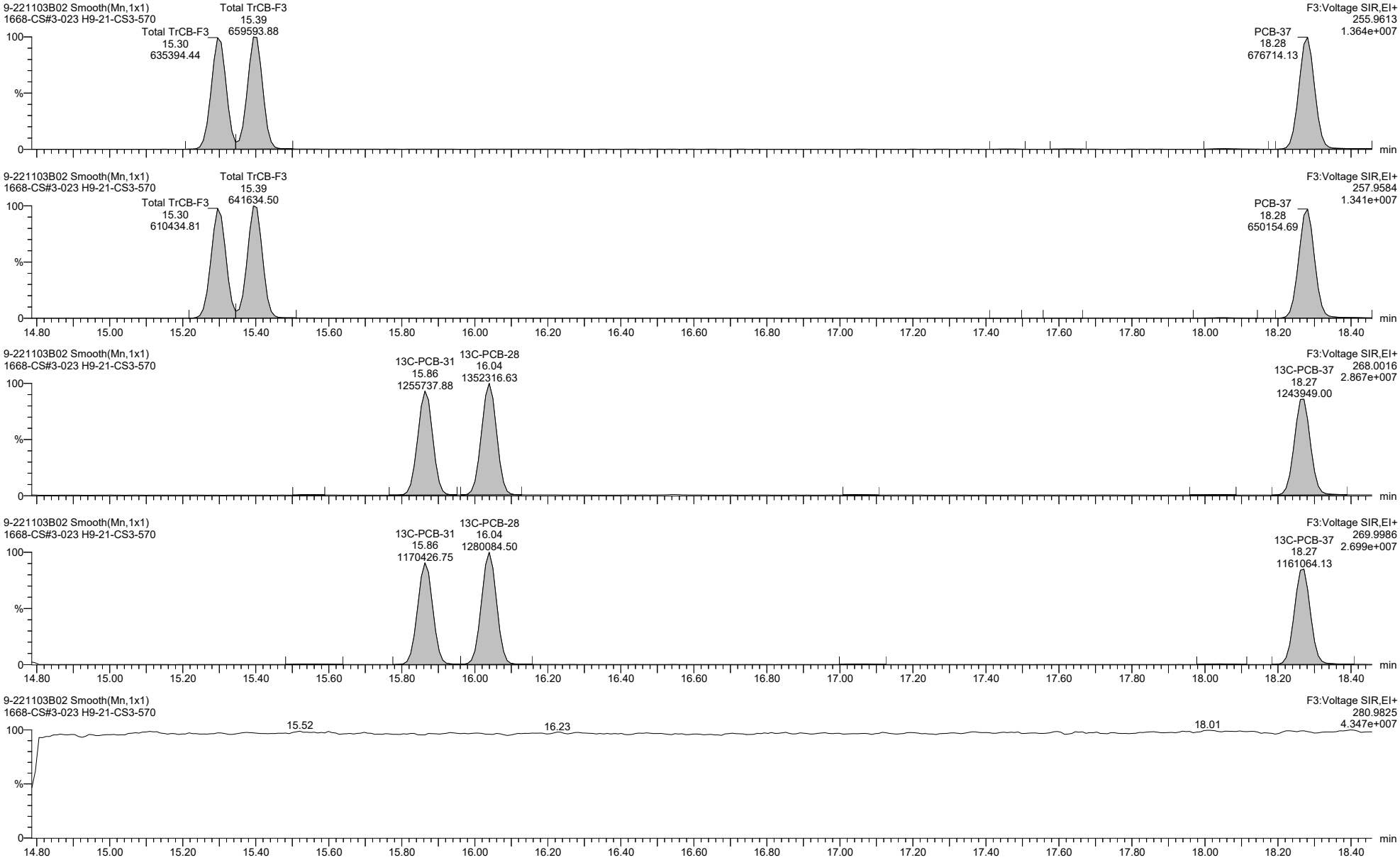
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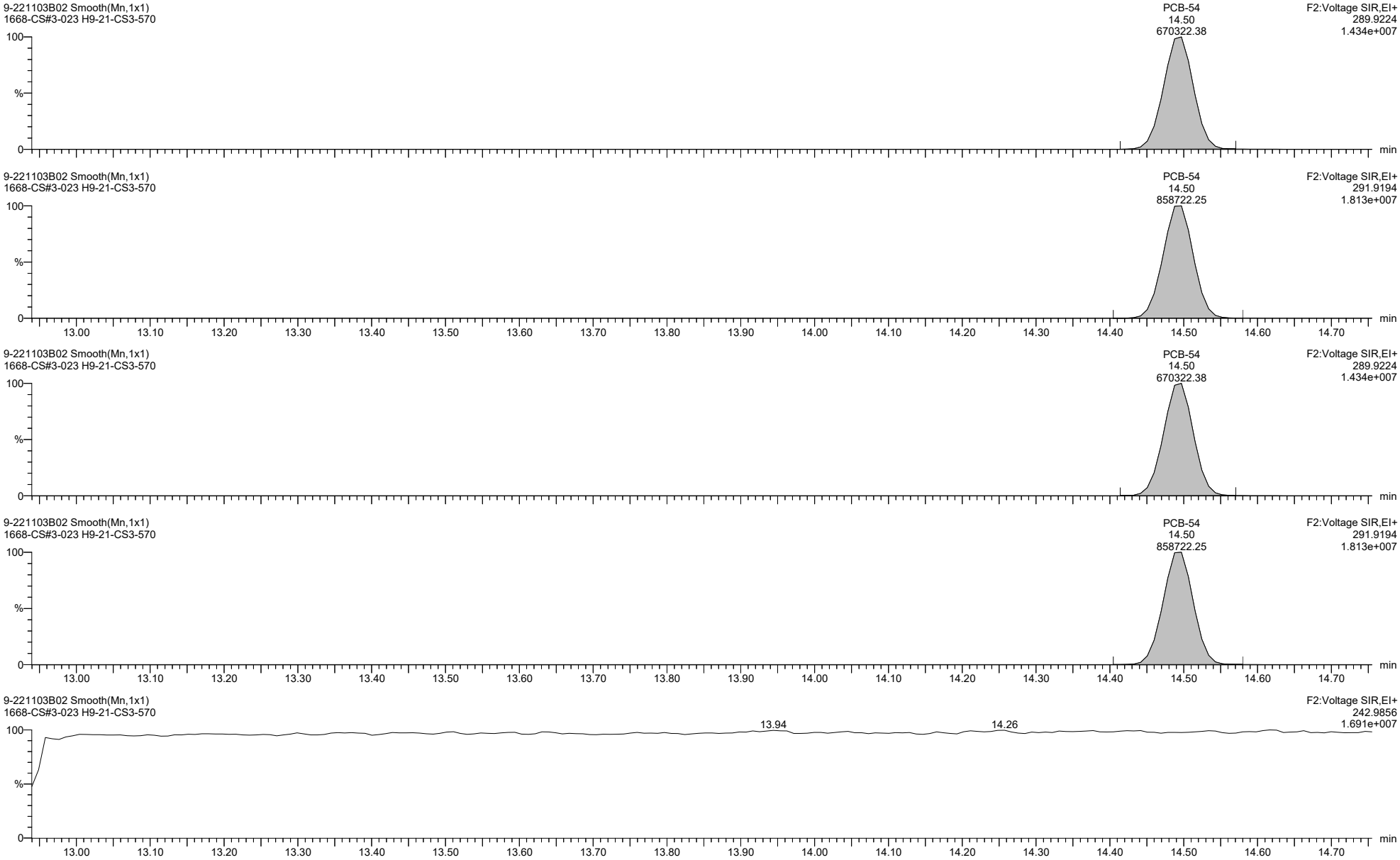


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

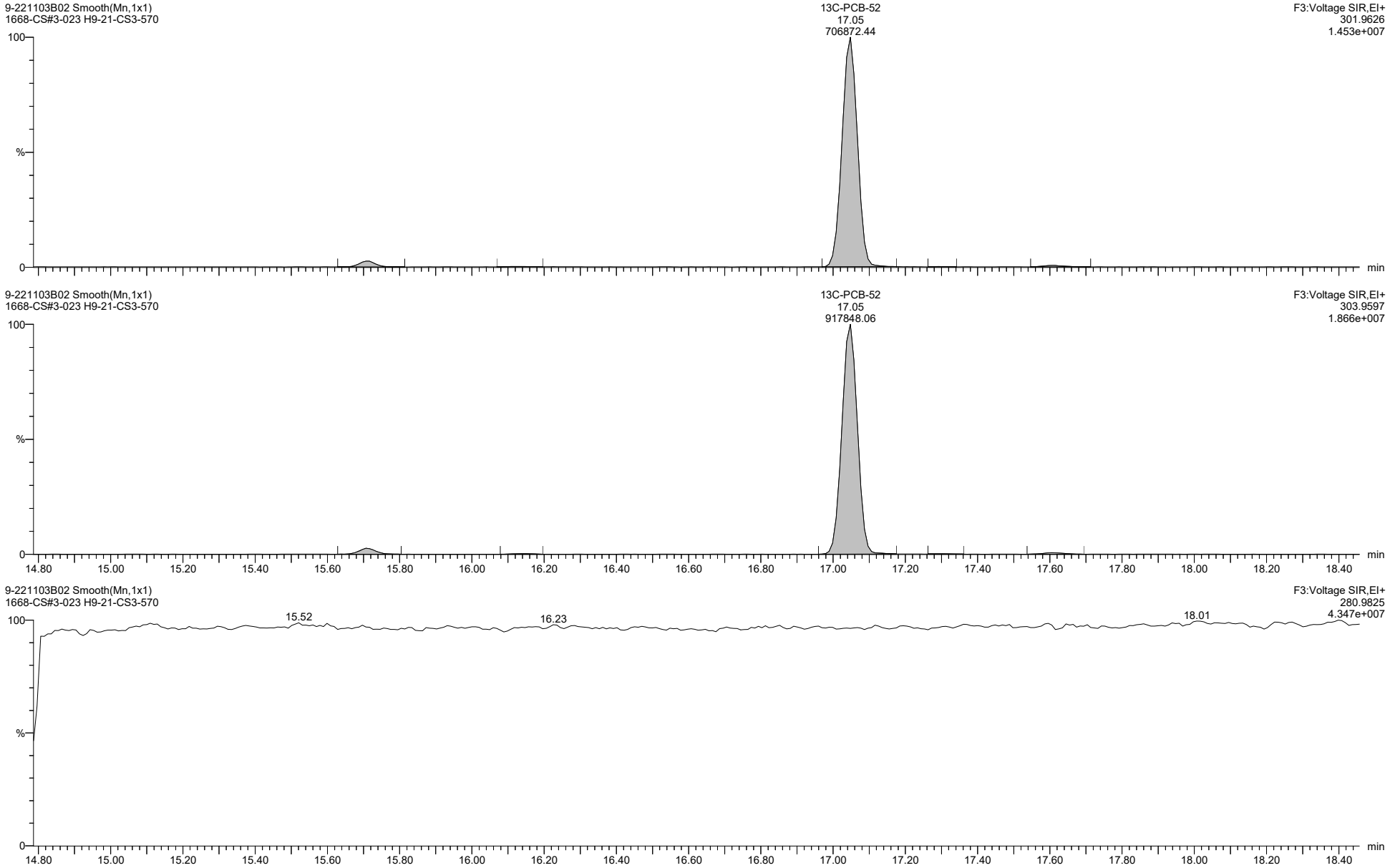
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Name: 9-221103B02, Date: 03-Nov-2022, Time: 18:14:04, ID: H9-21-CS3-570, Description: 1668-CS#3-023, Vial: Tray1:1



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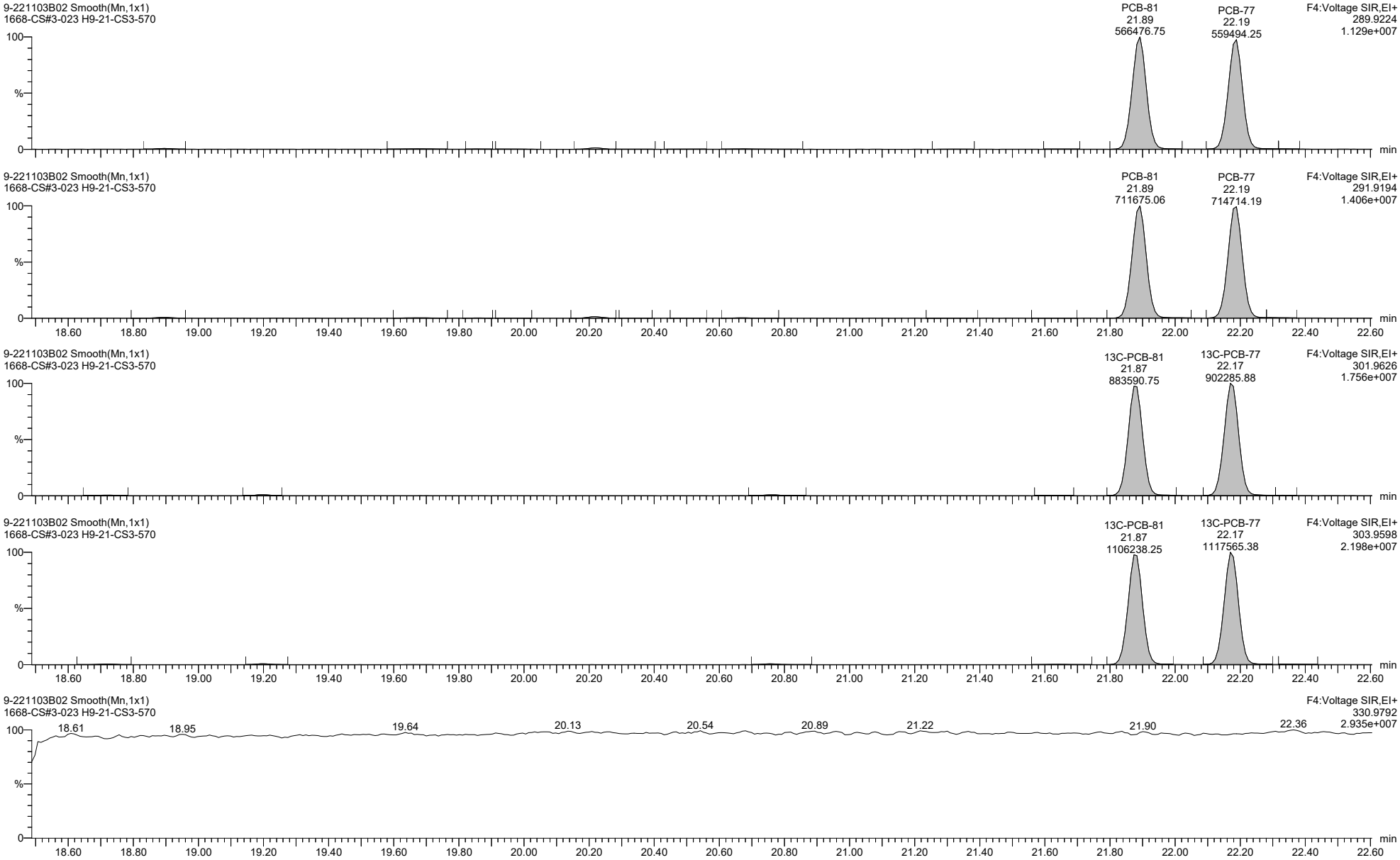


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Printed: Wednesday, November 09, 2022 15:41:14 Eastern Standard Time

Name: 9-221103B02, Date: 03-Nov-2022, Time: 18:14:04, ID: H9-21-CS3-570, Description: 1668-CS#3-023, Vial: Tray1:1

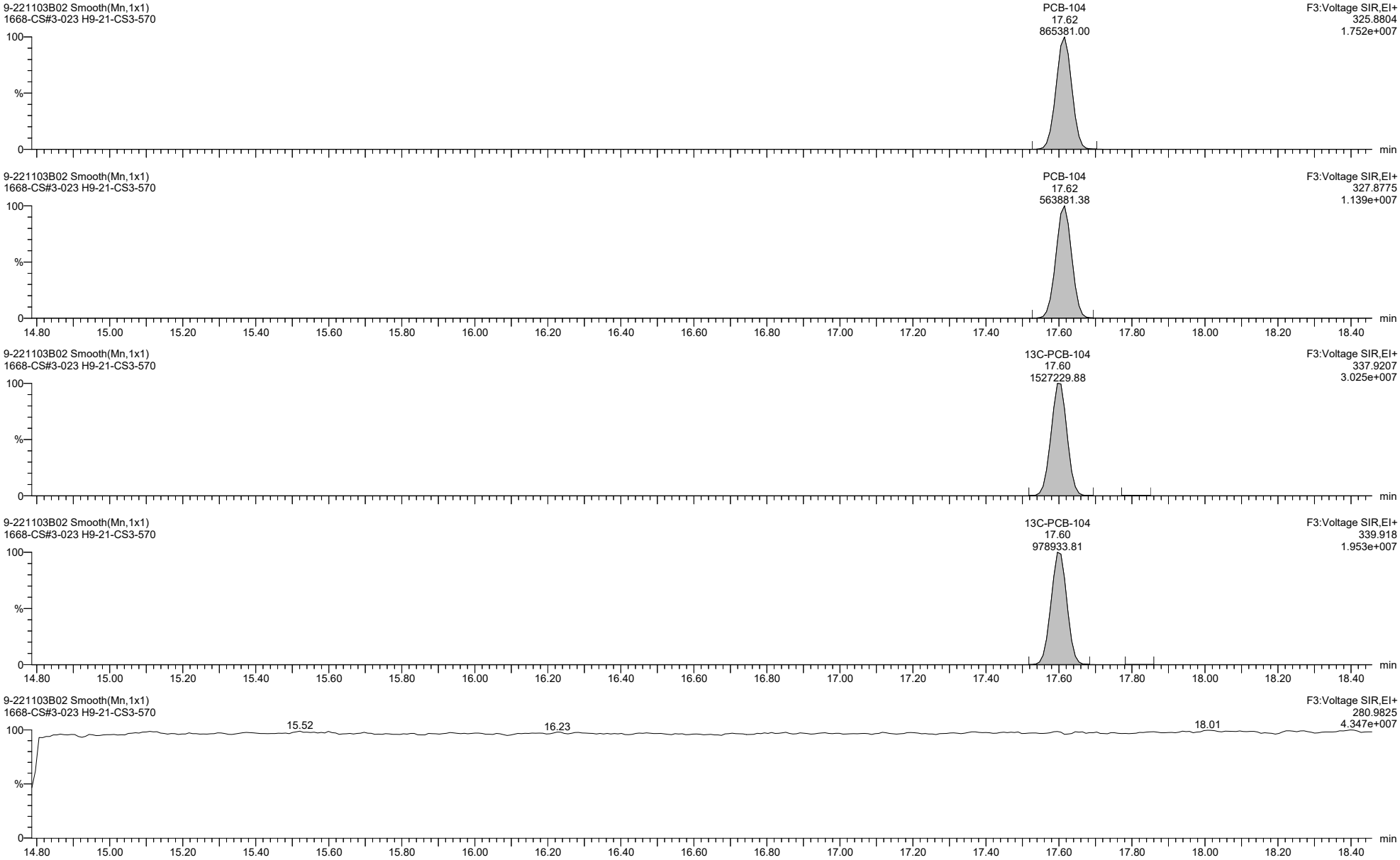


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

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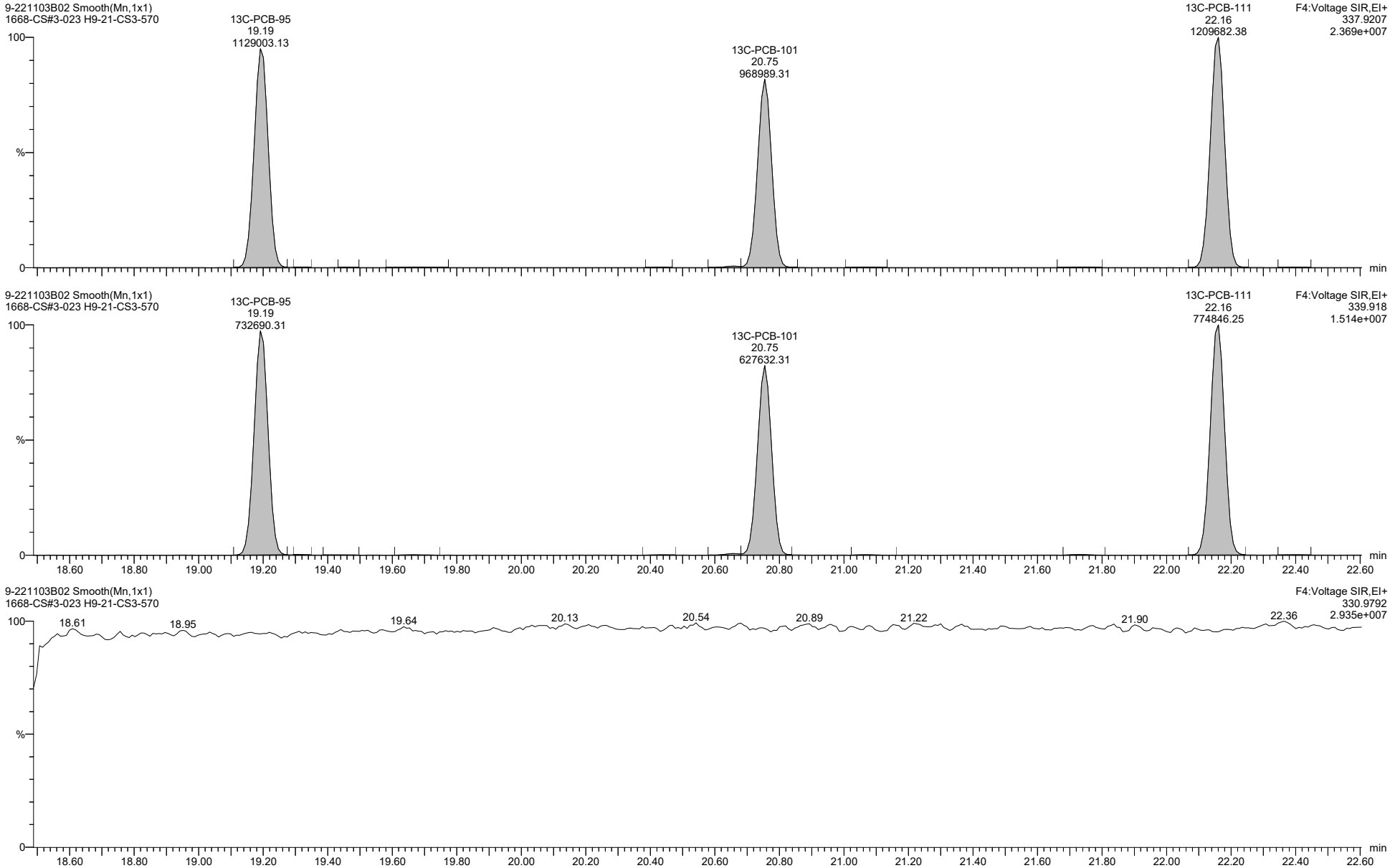


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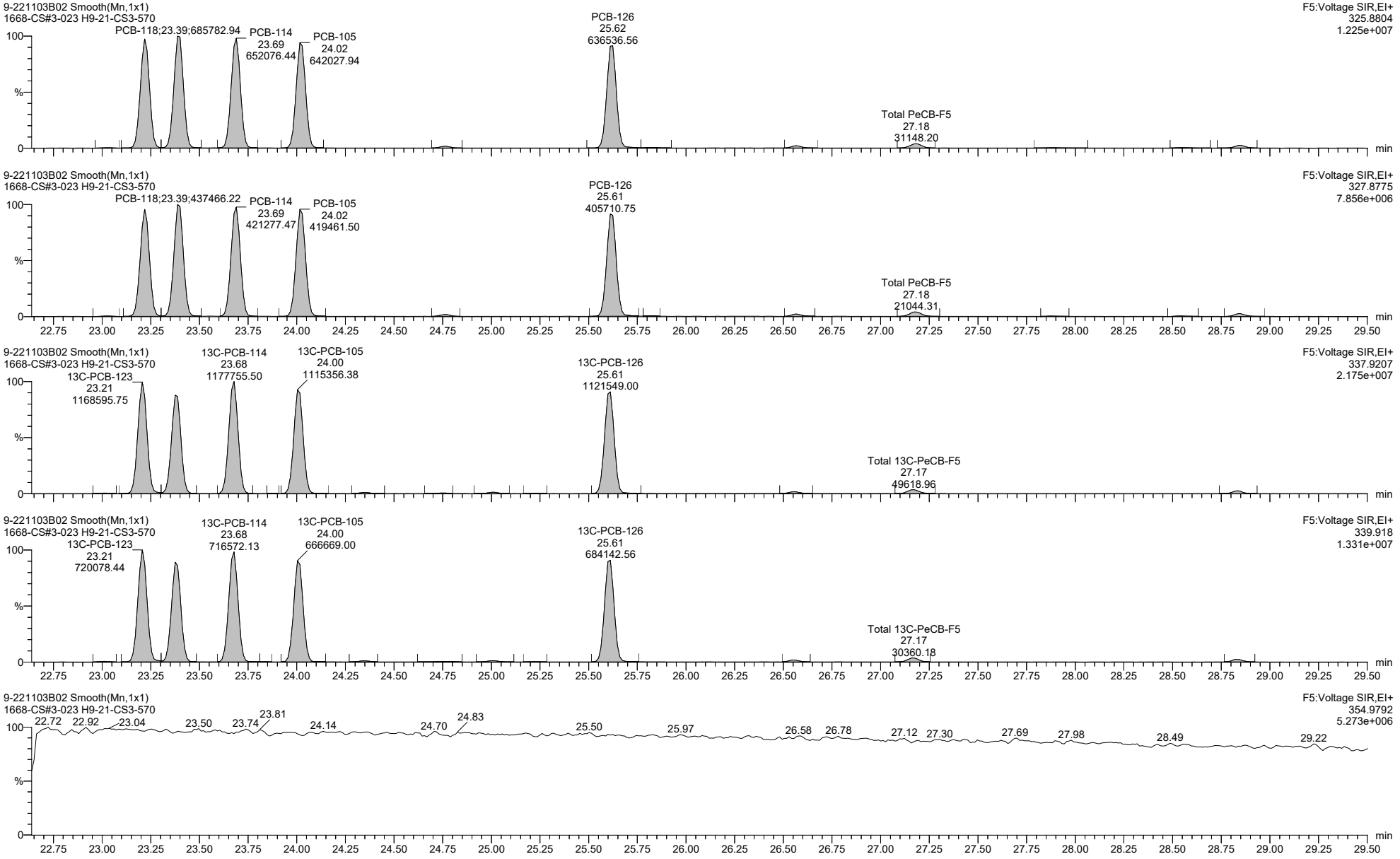


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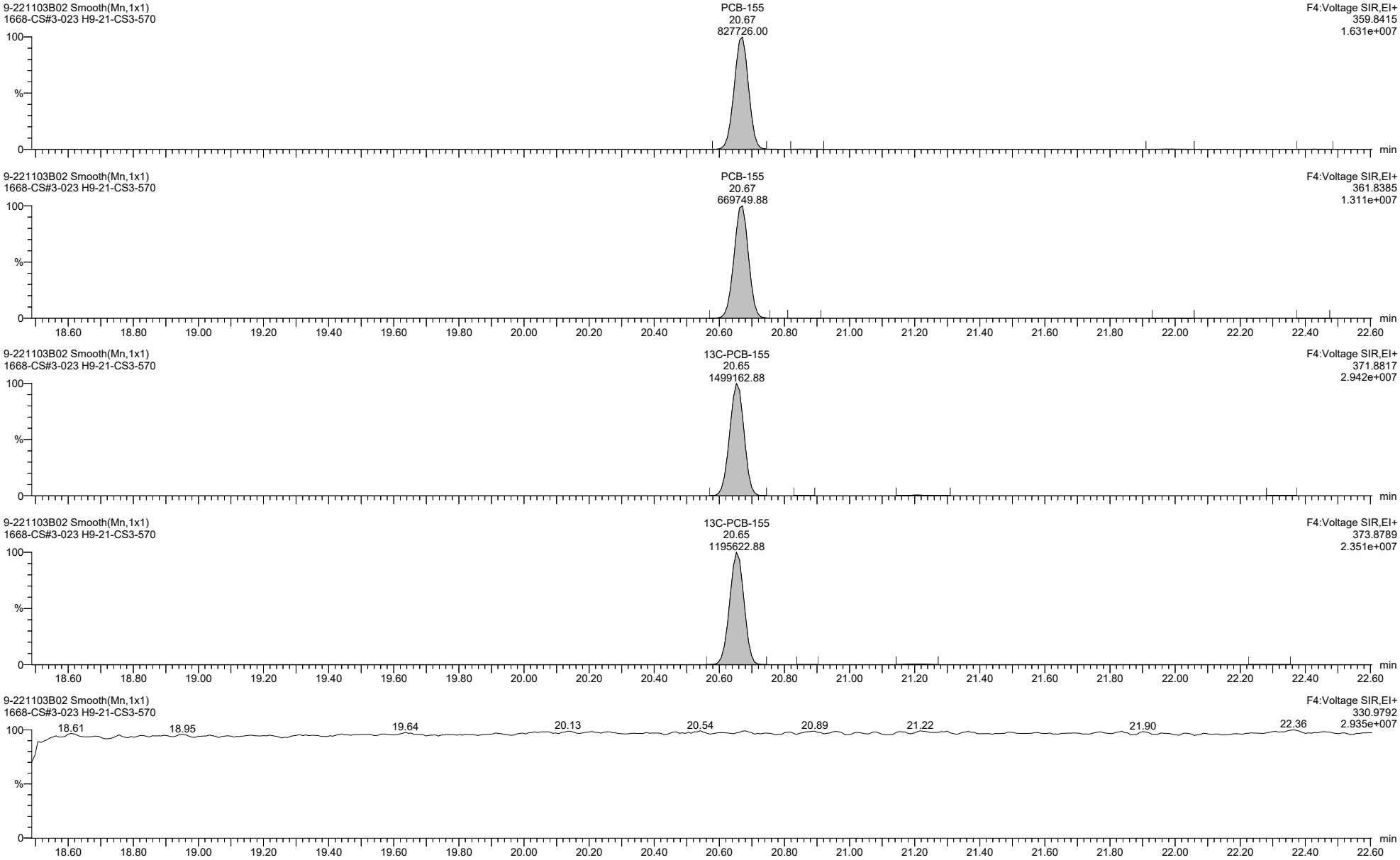


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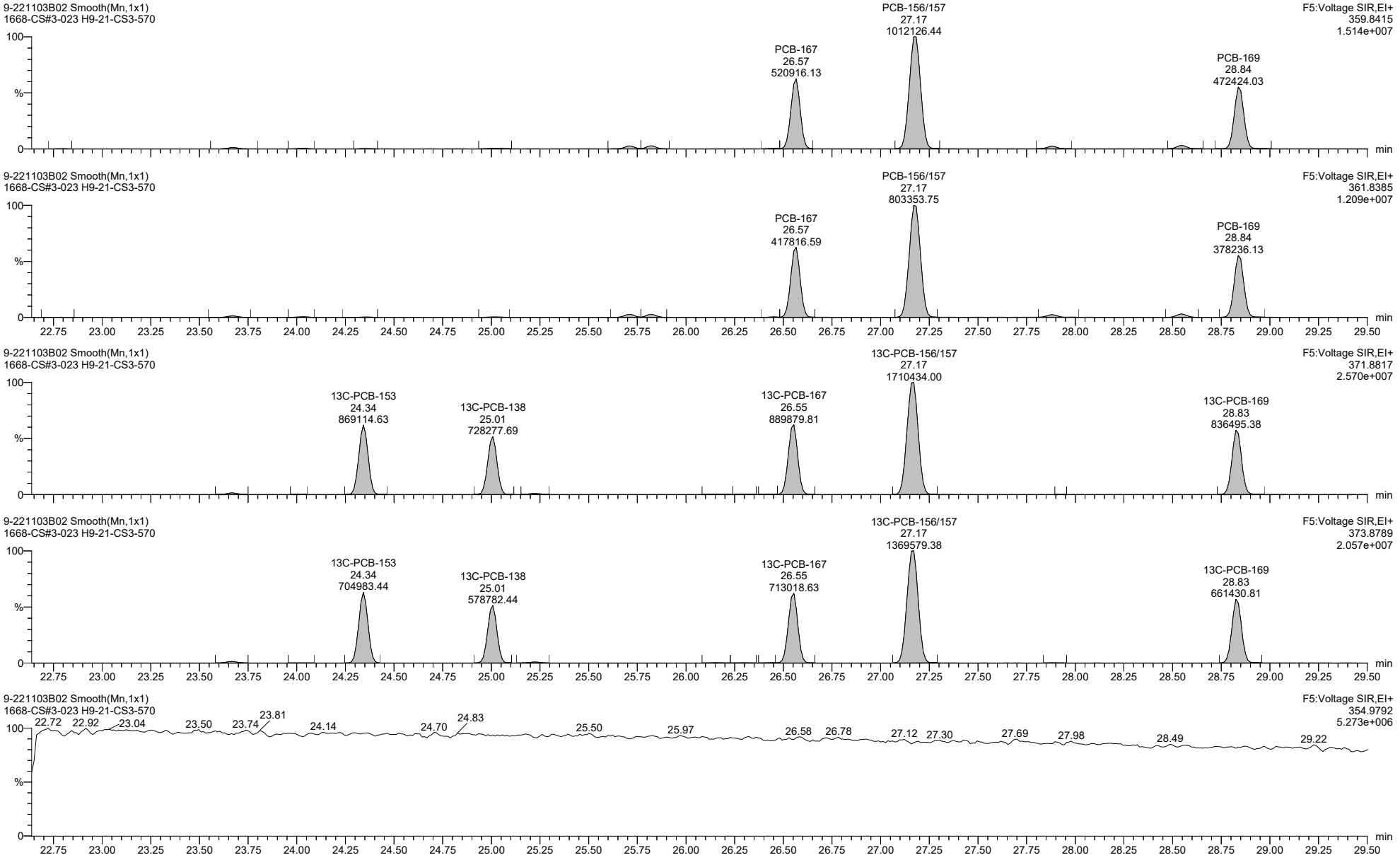
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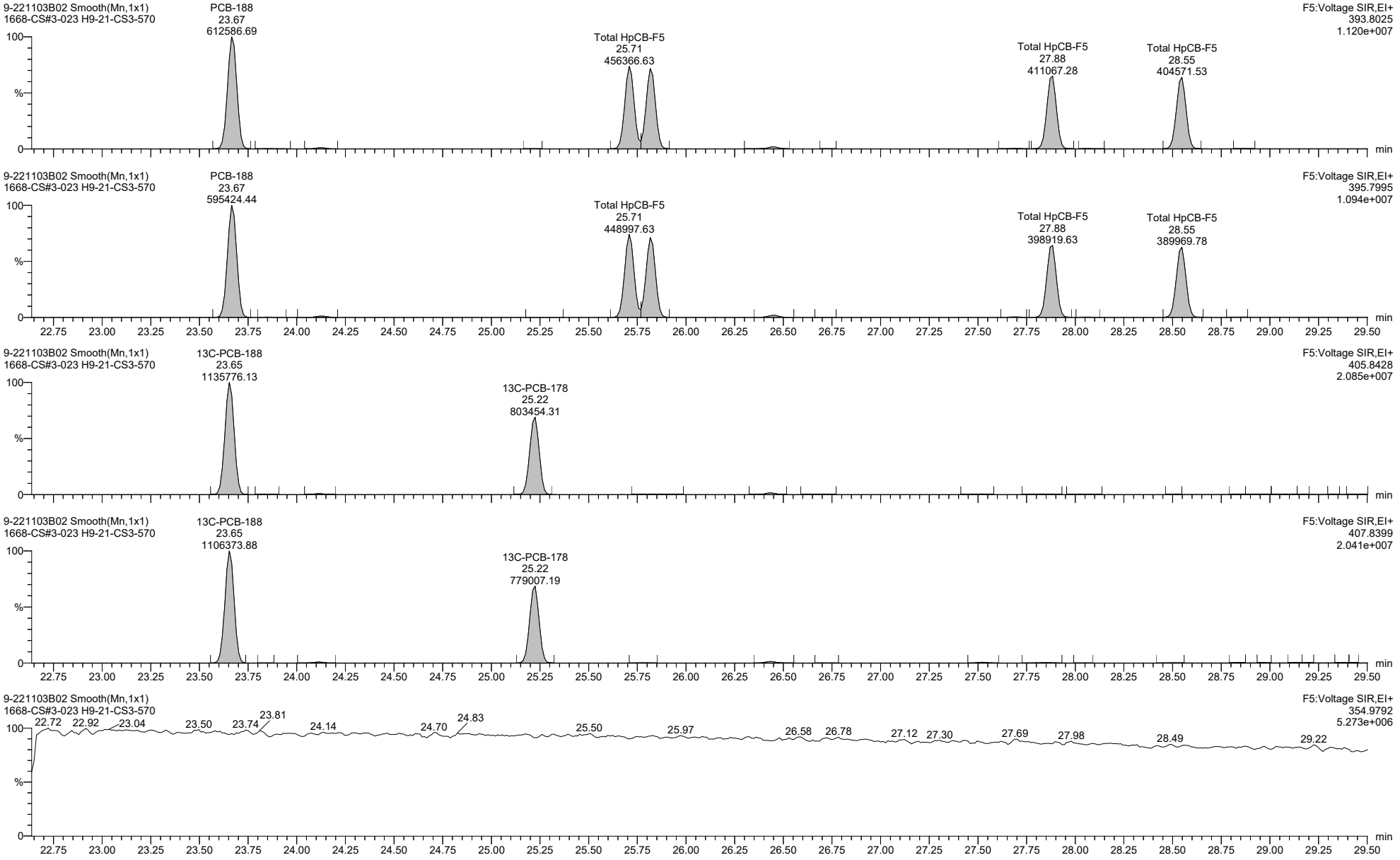


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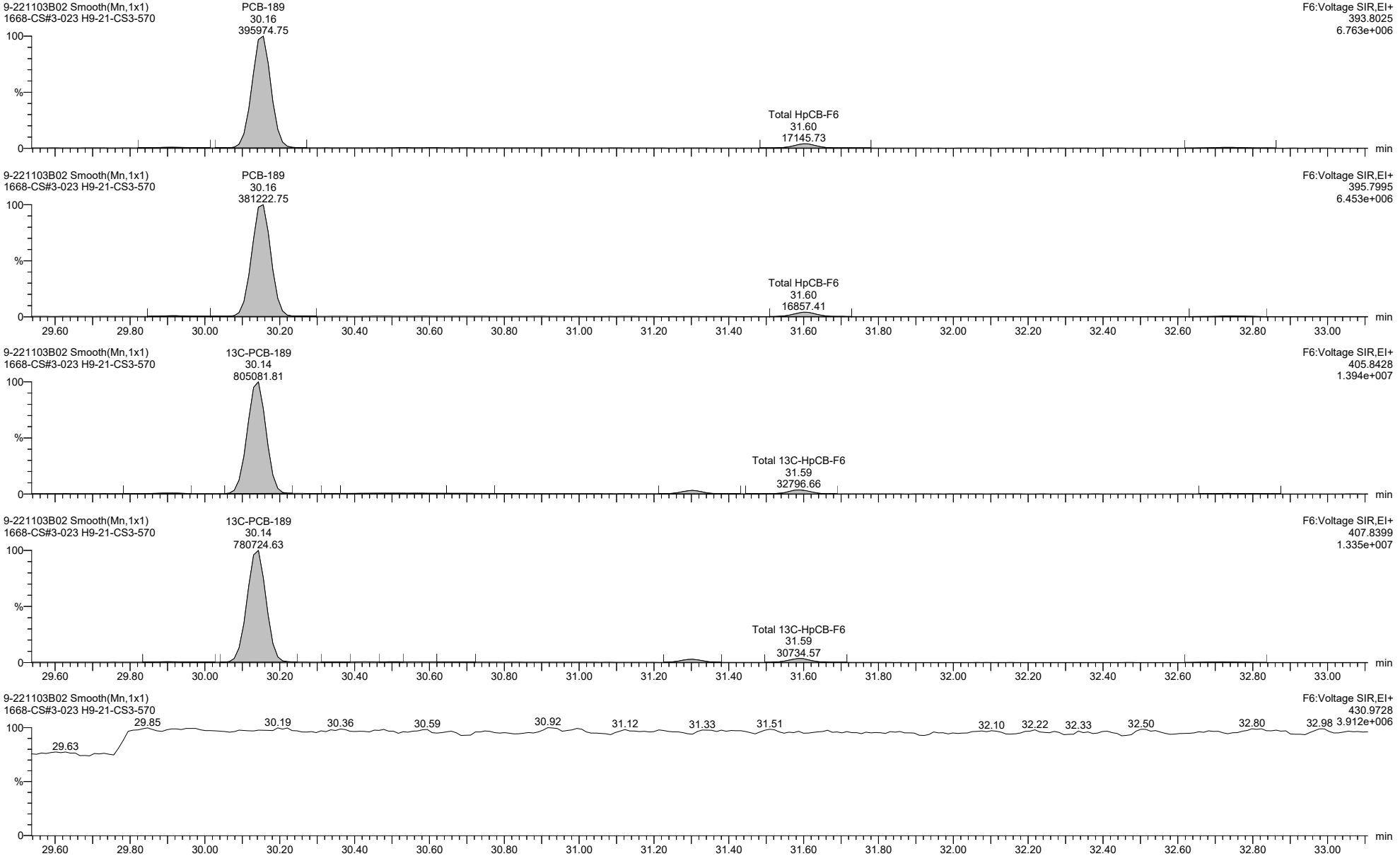


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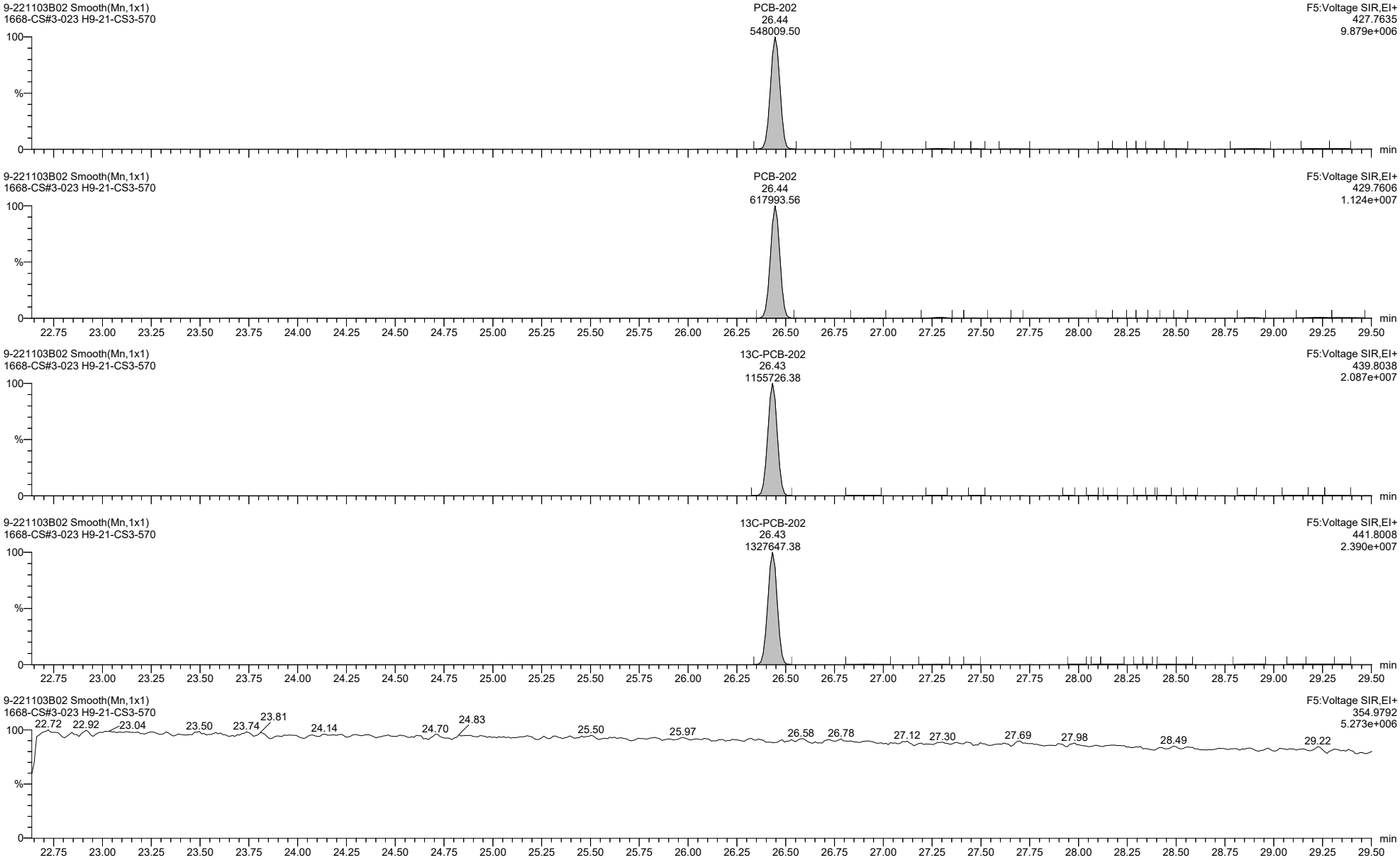


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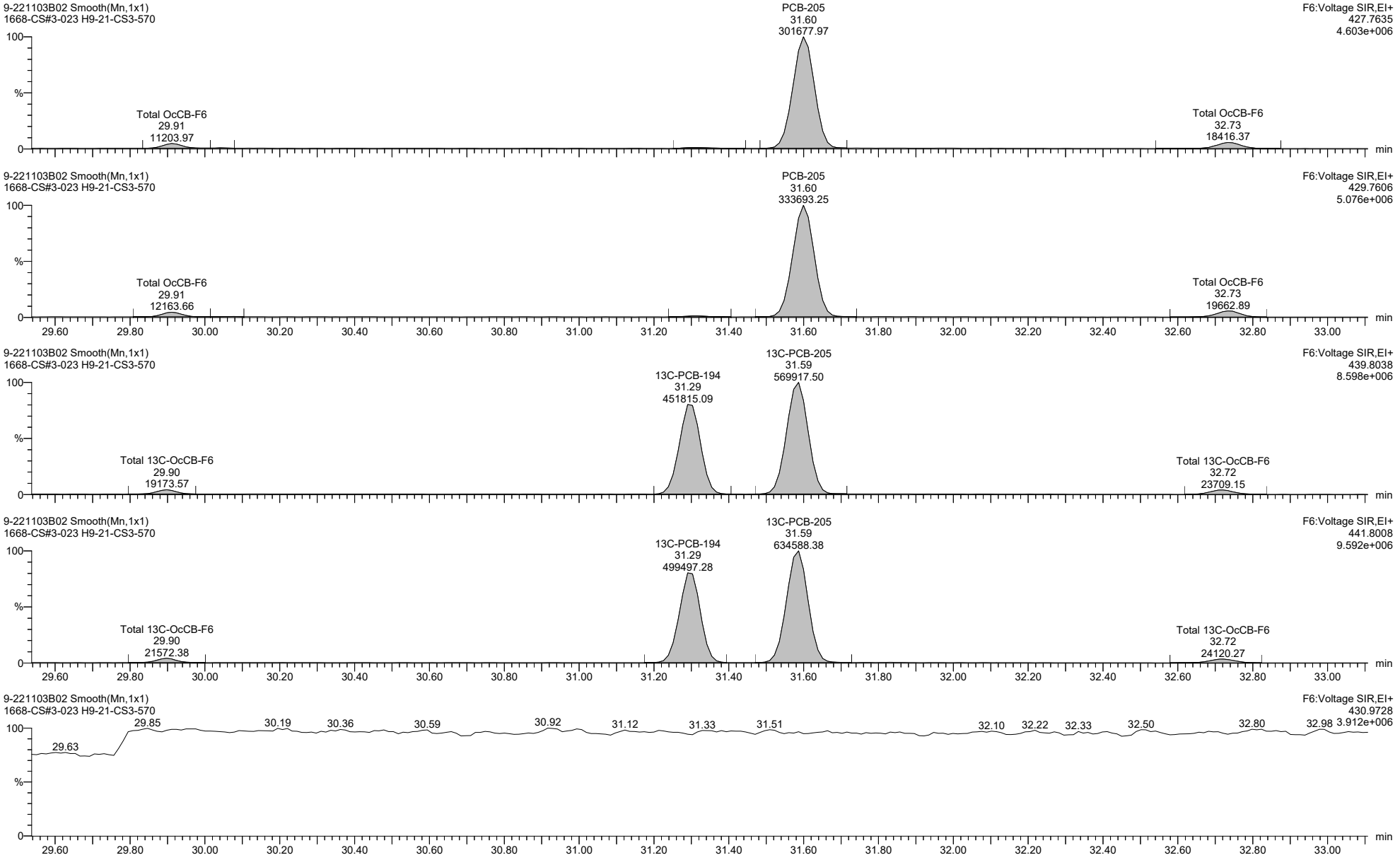


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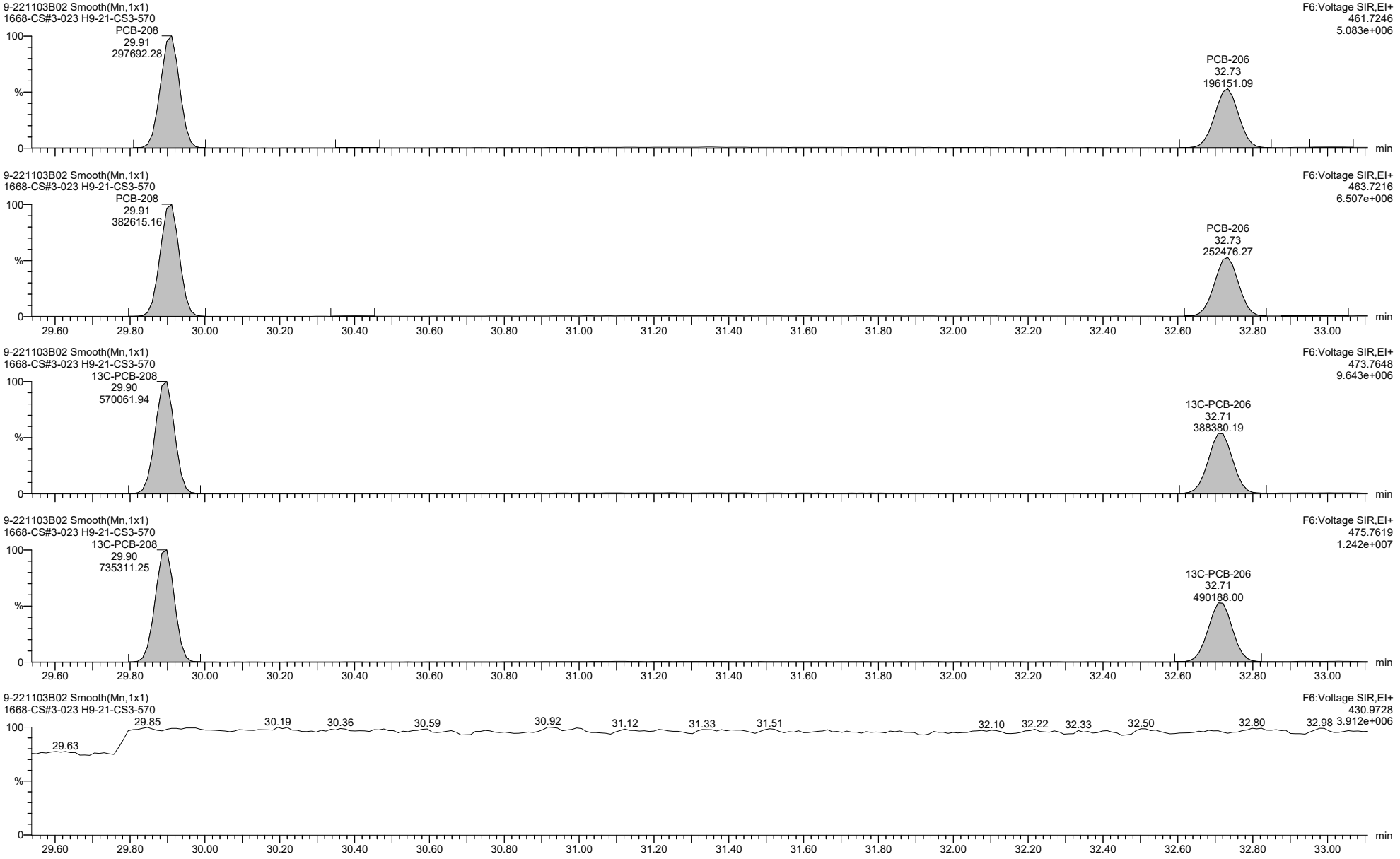


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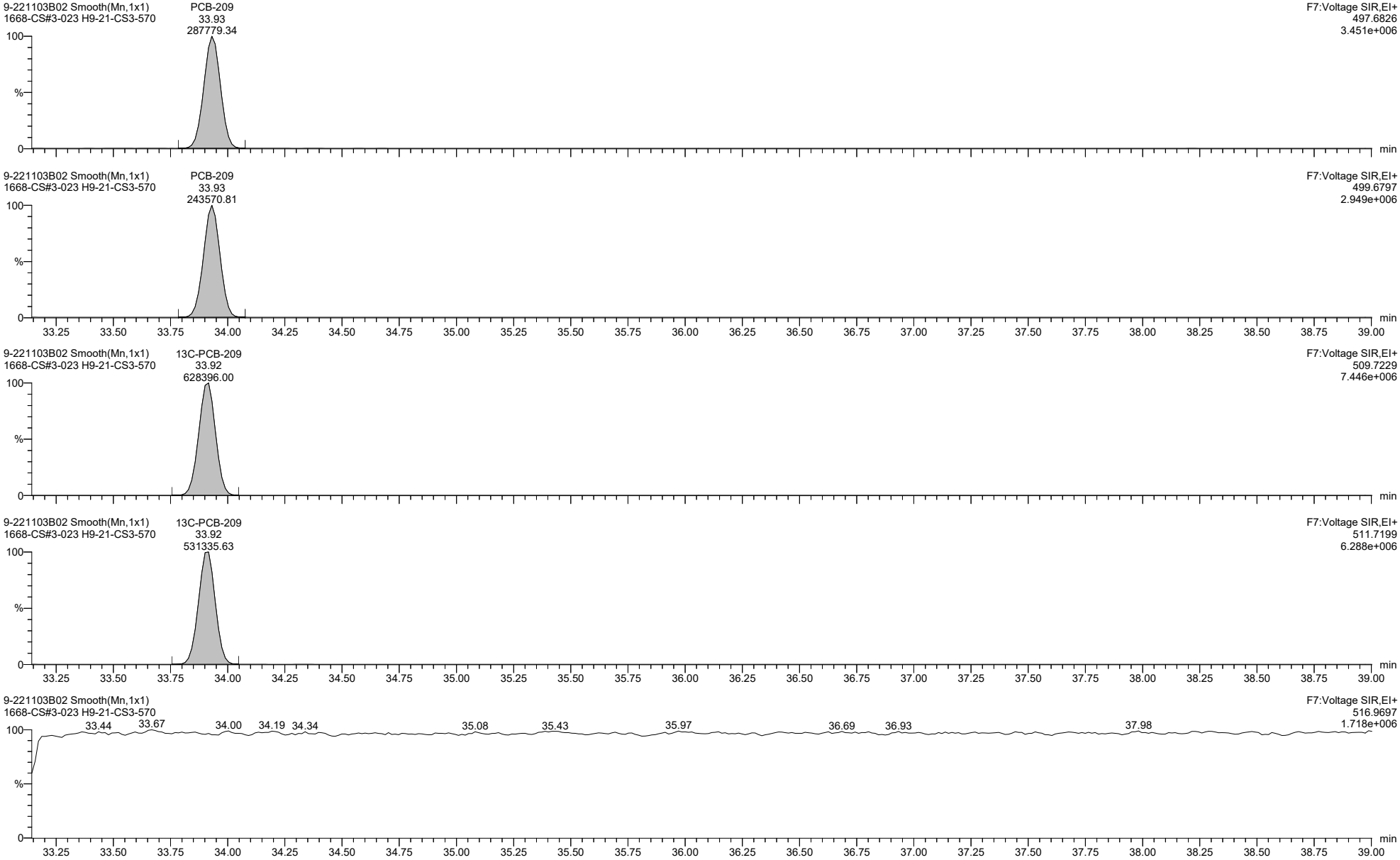


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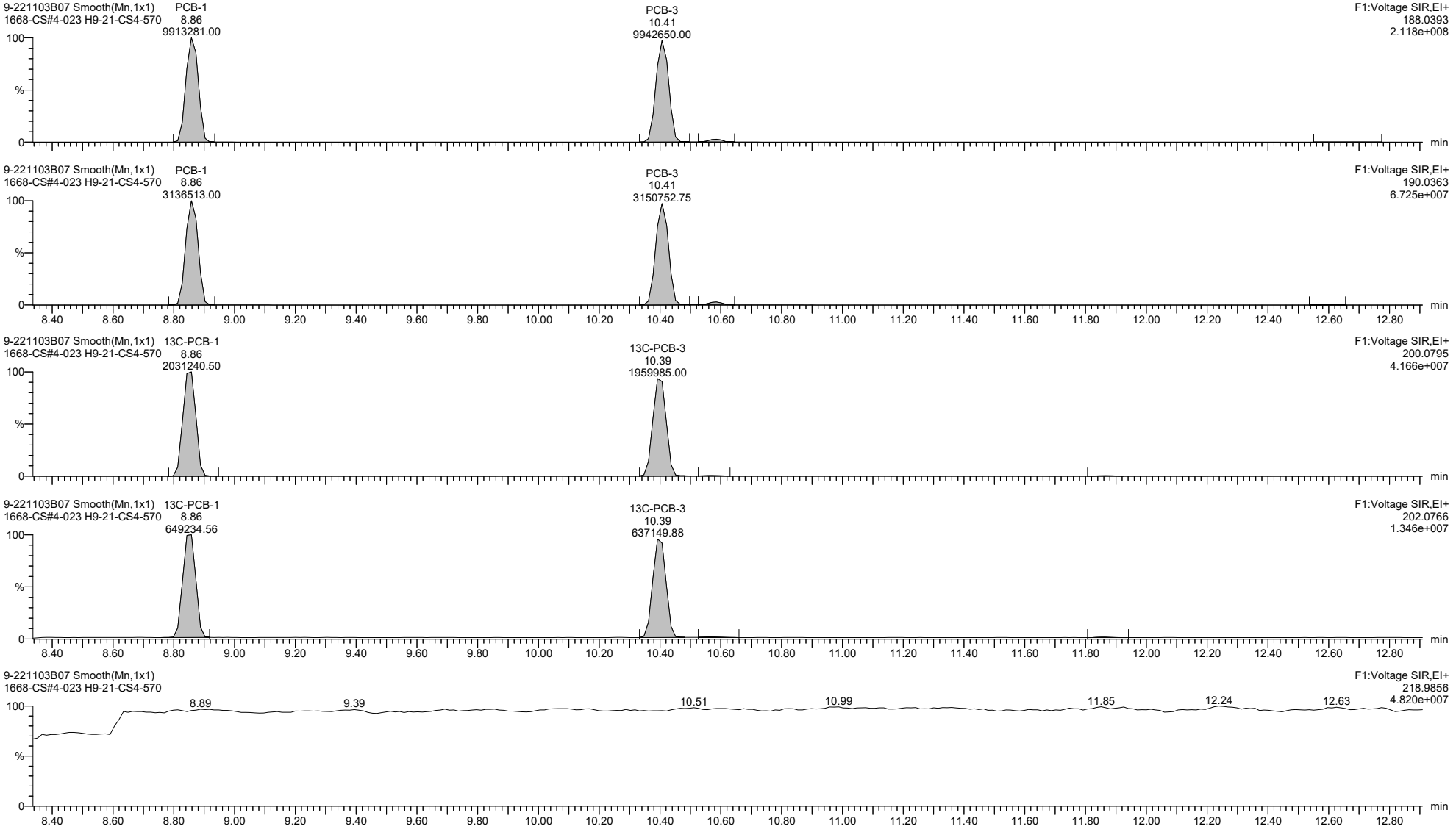
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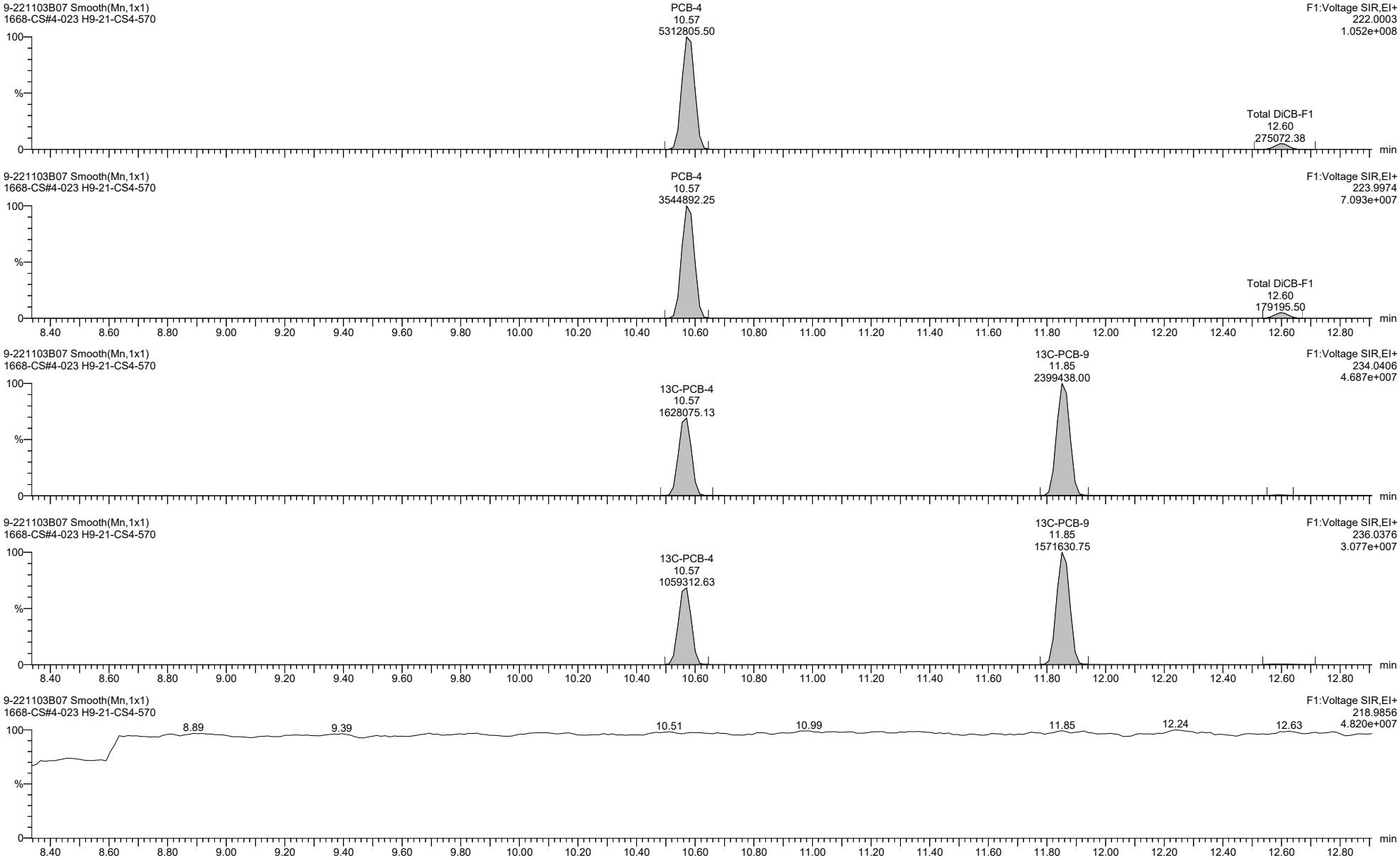


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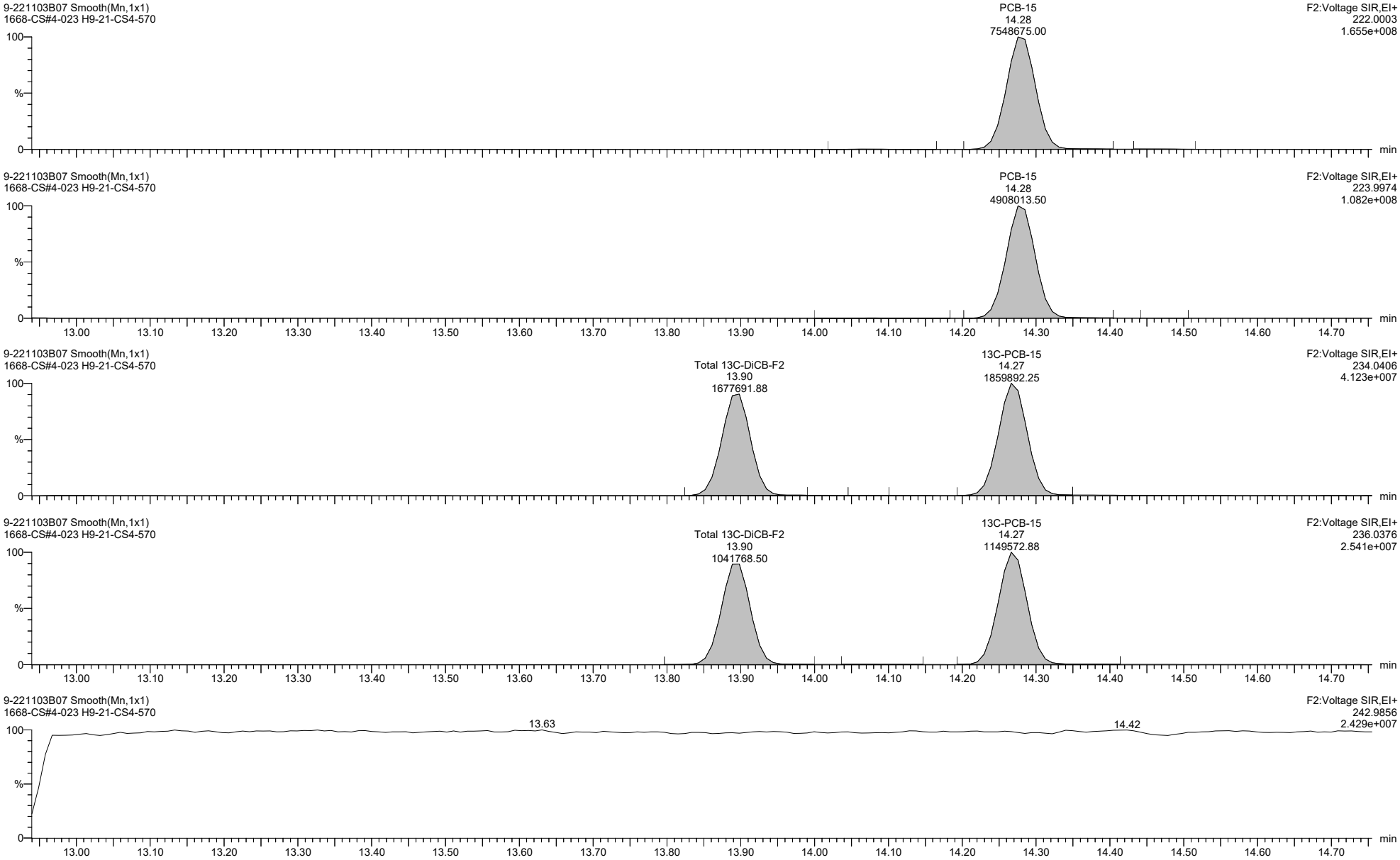


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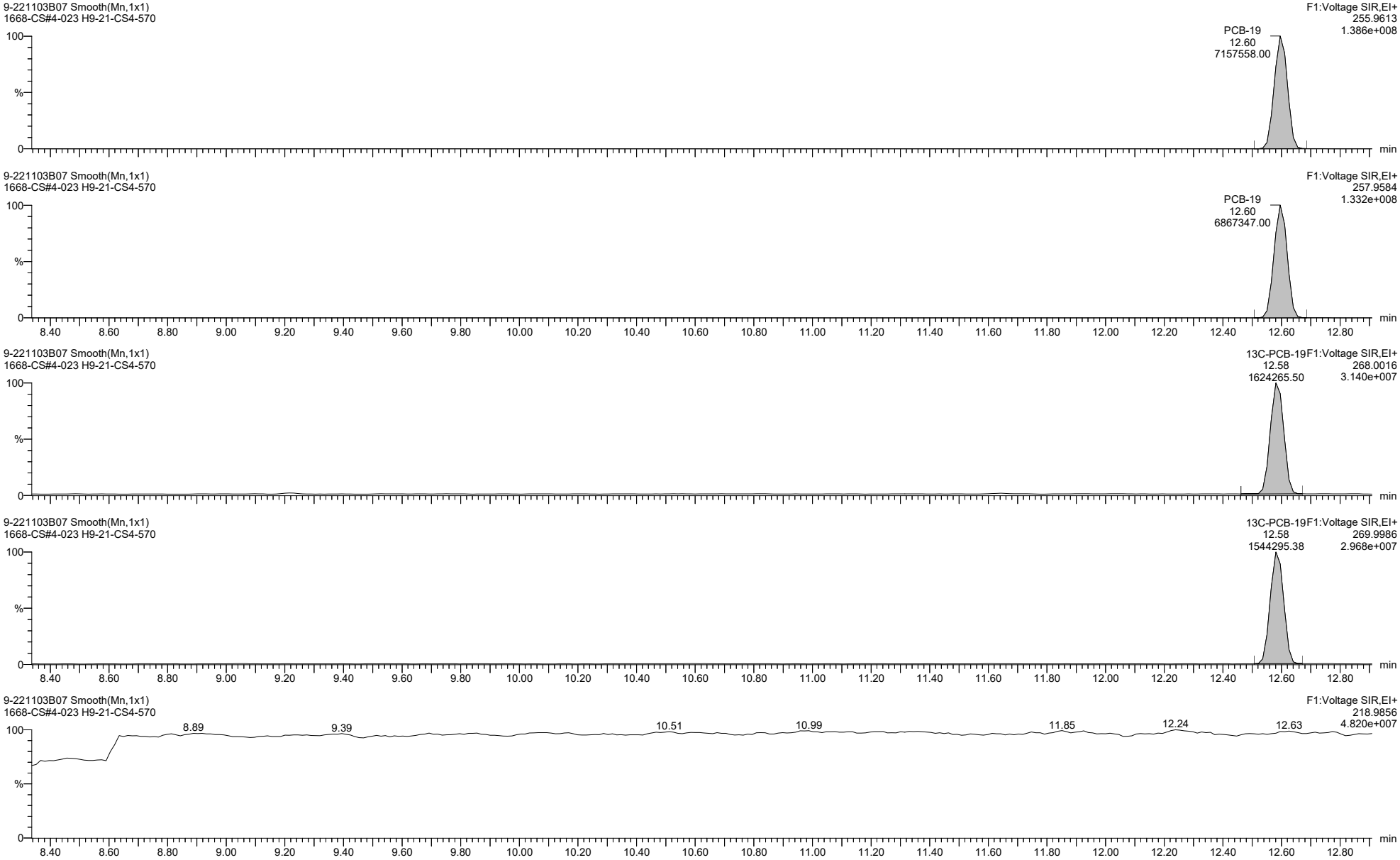


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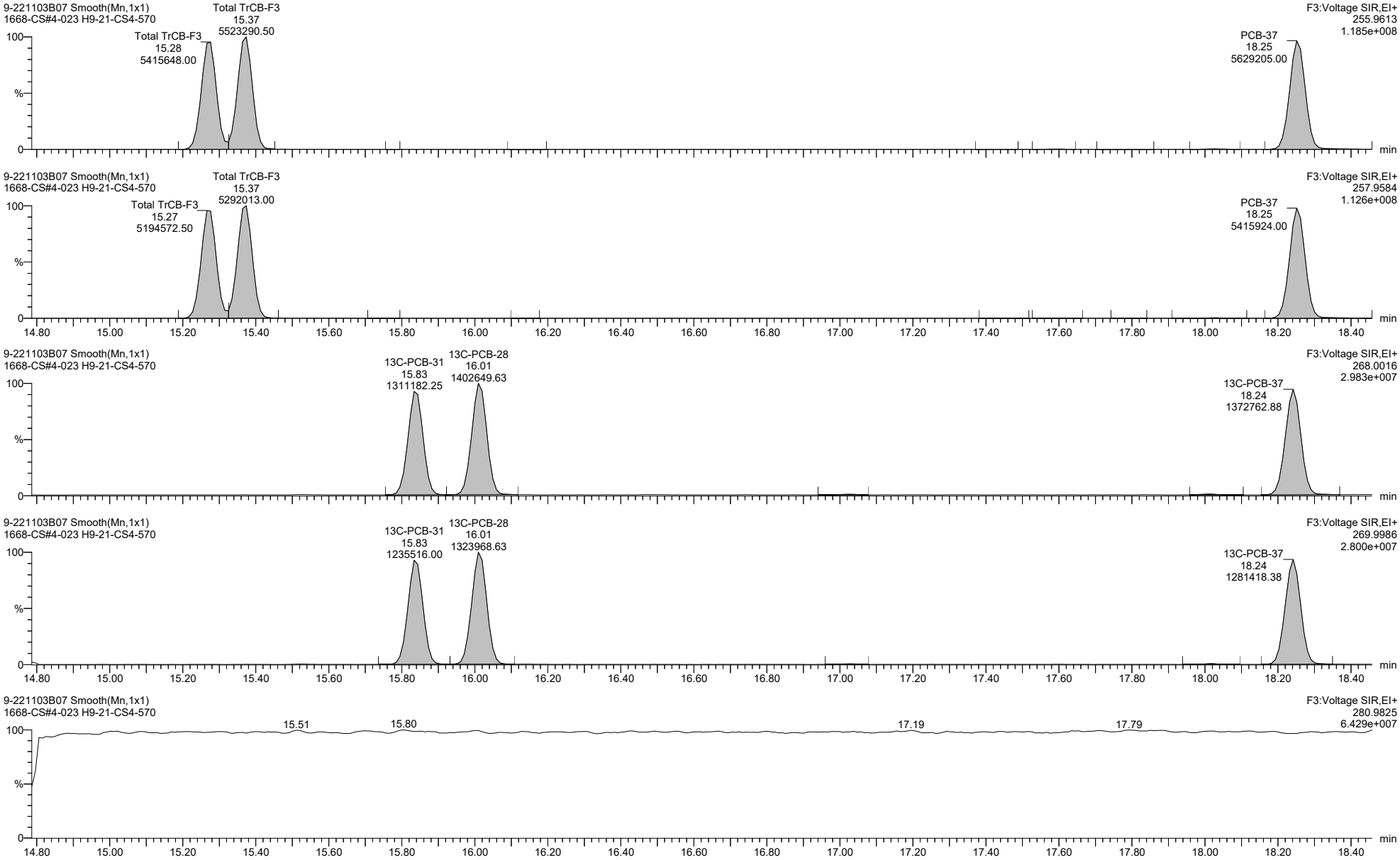
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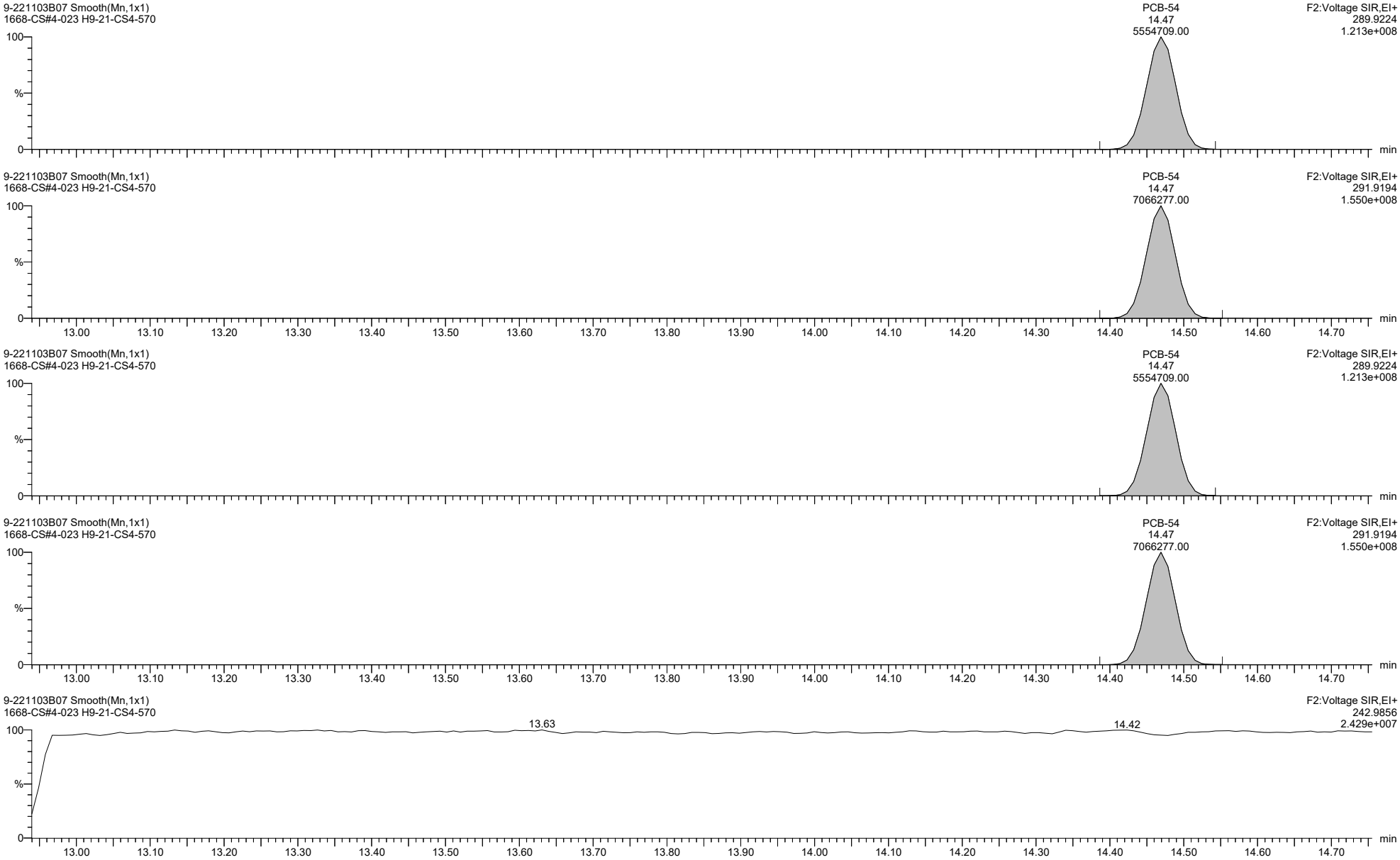


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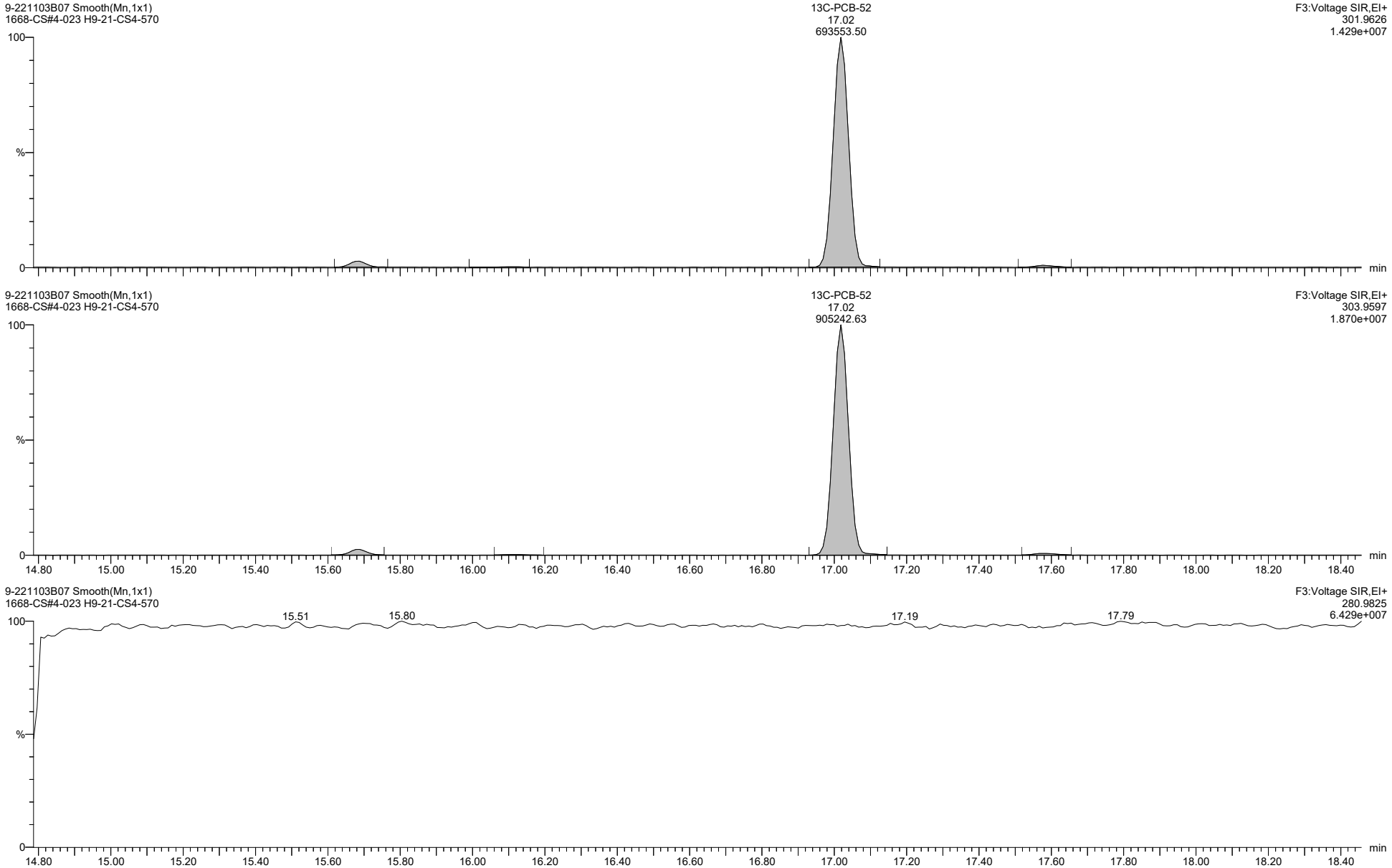


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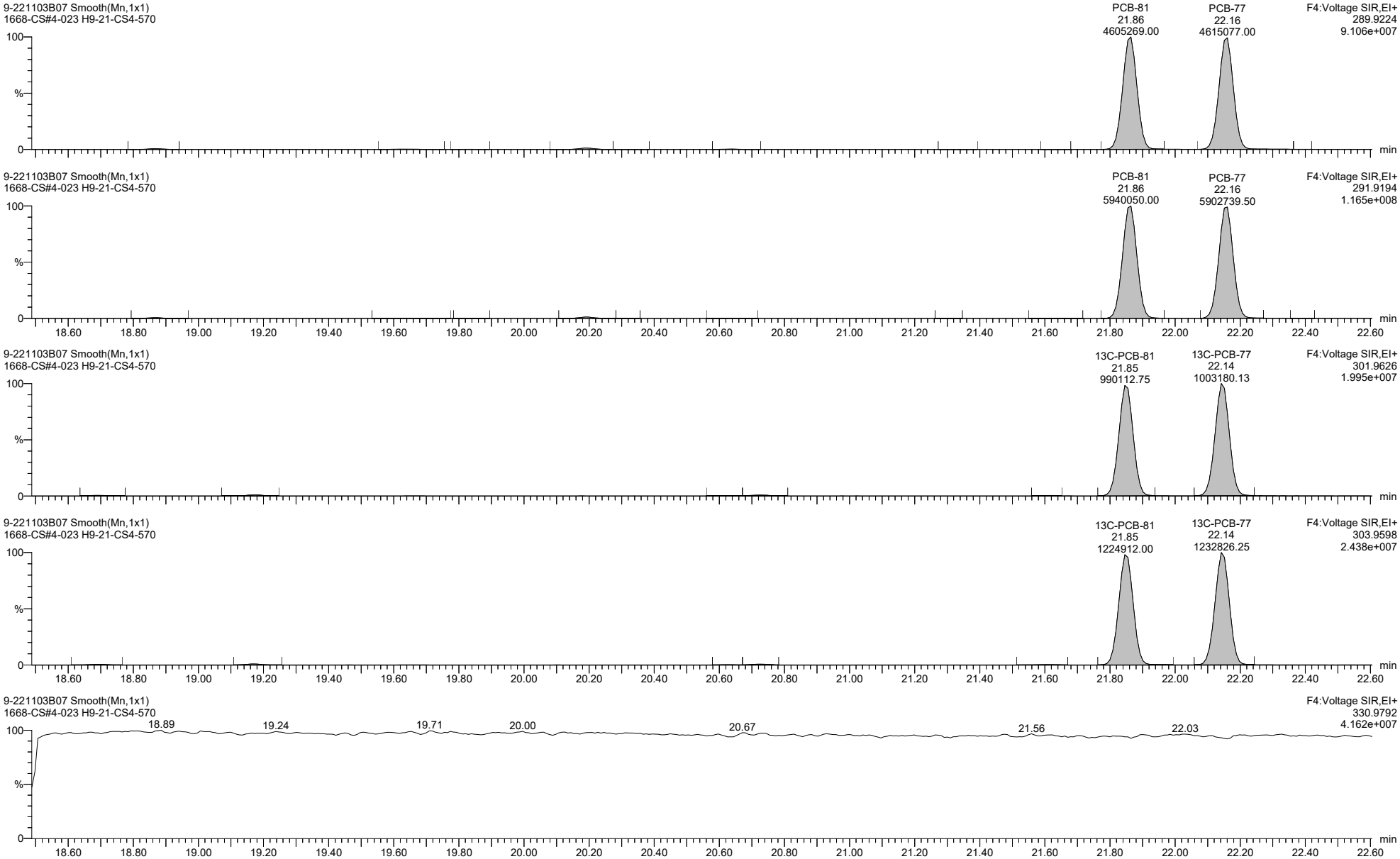


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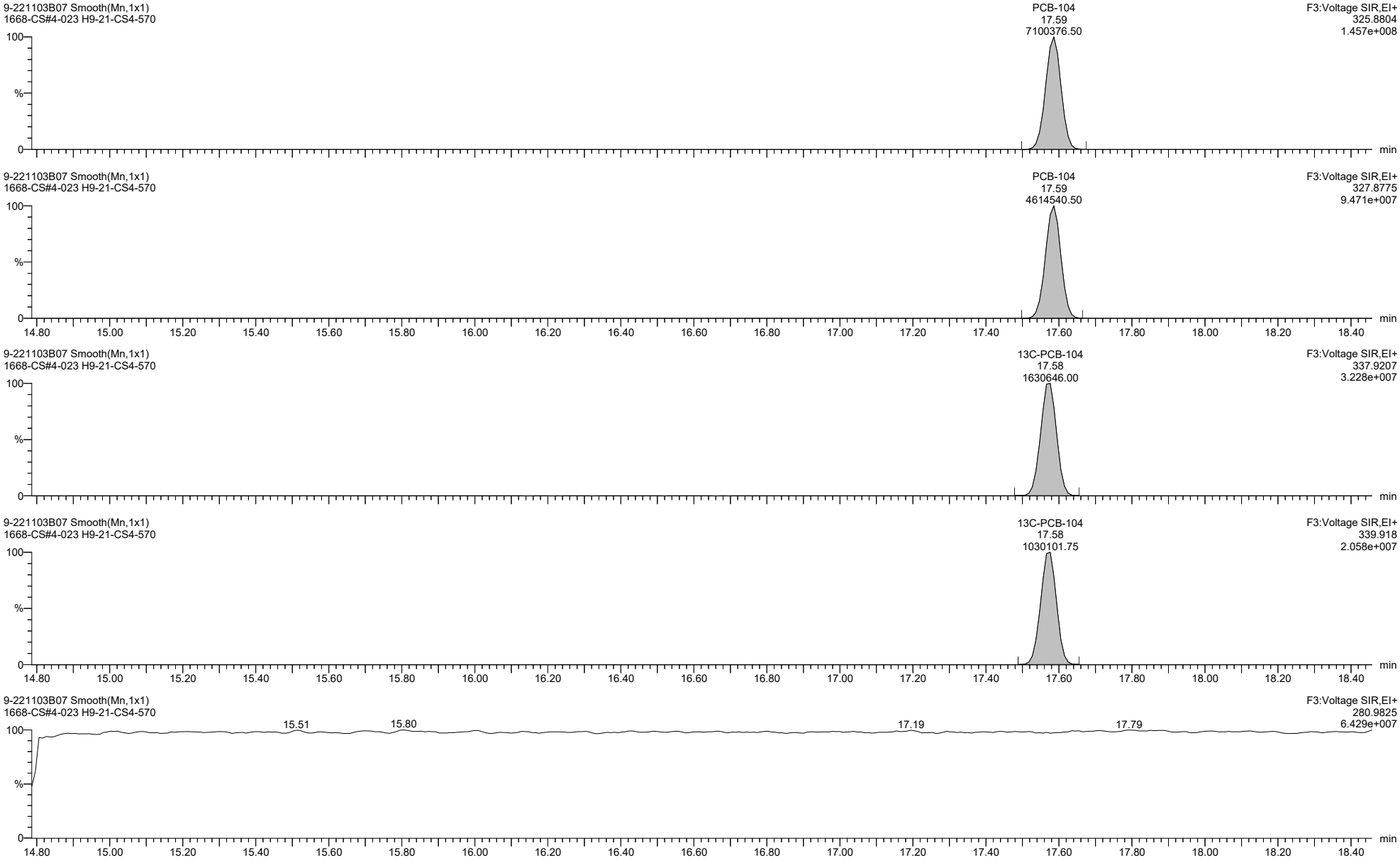


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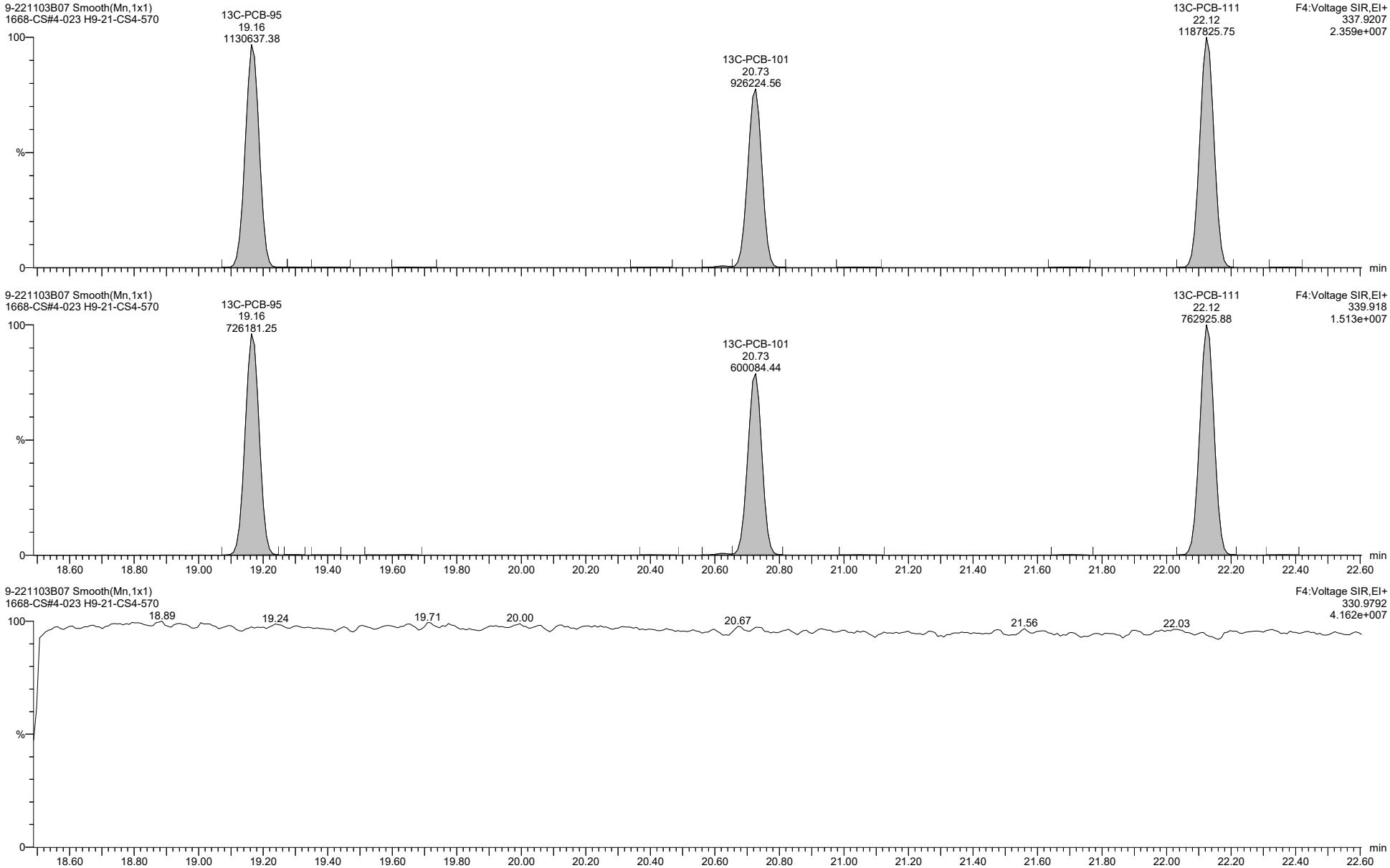


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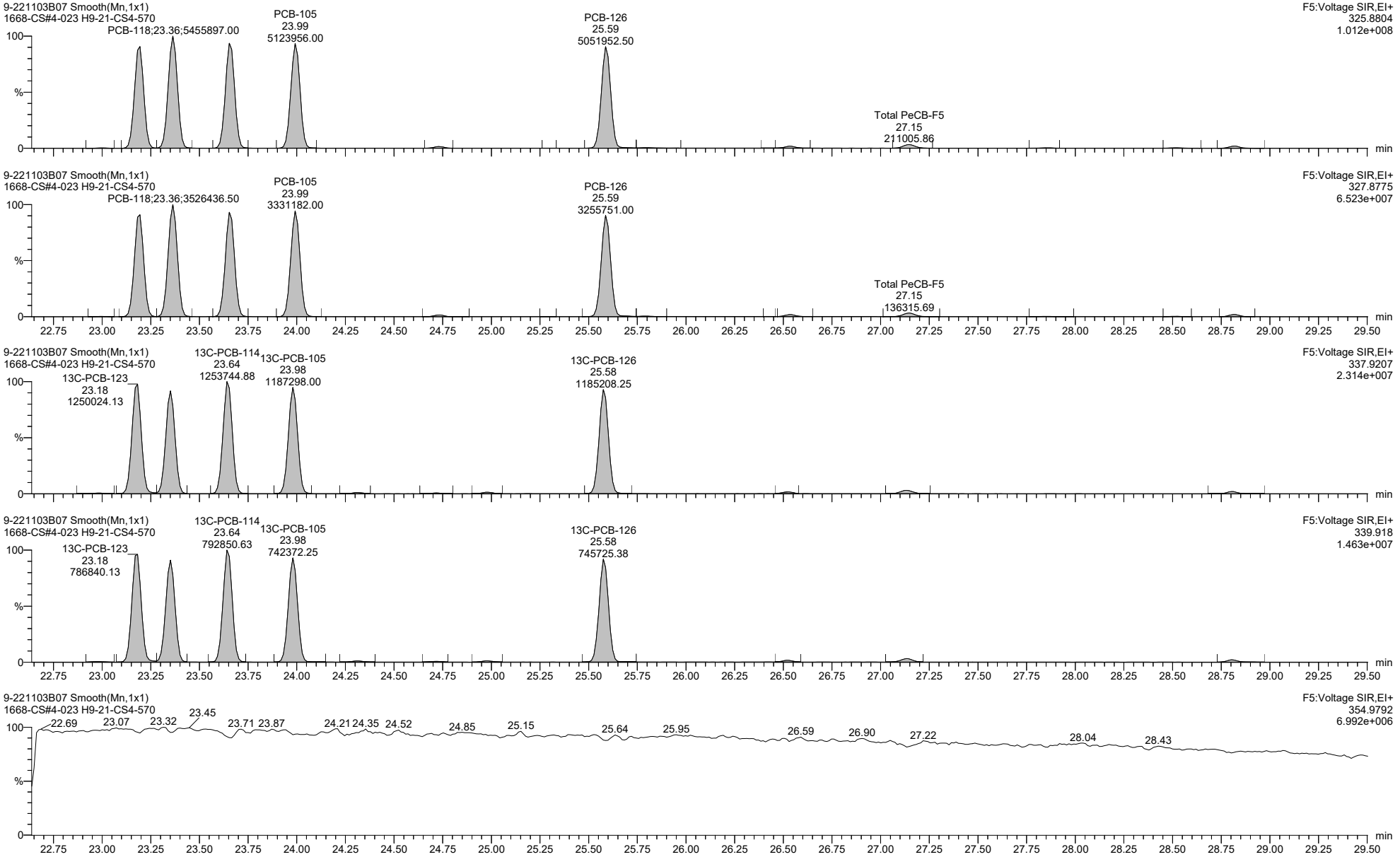


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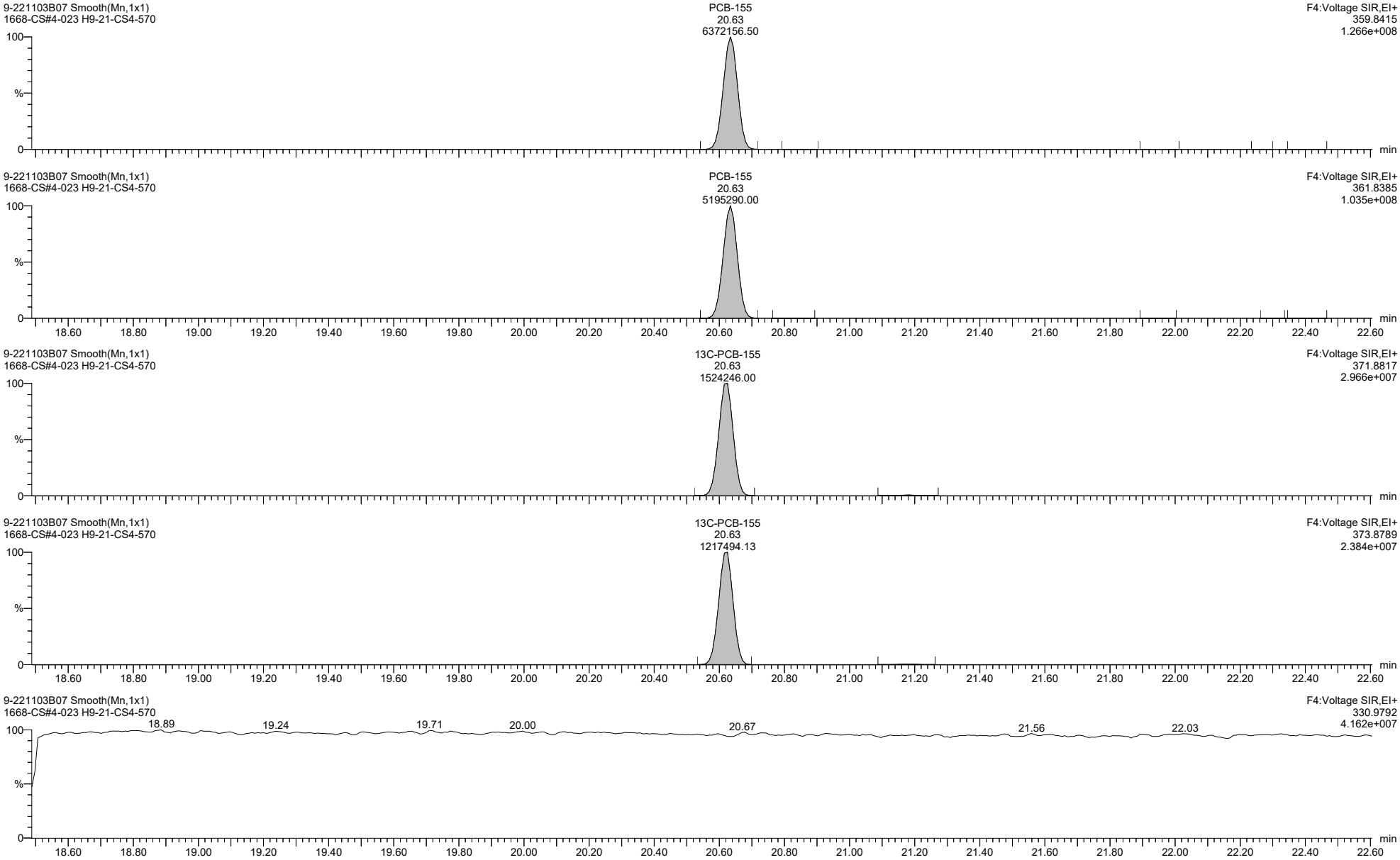


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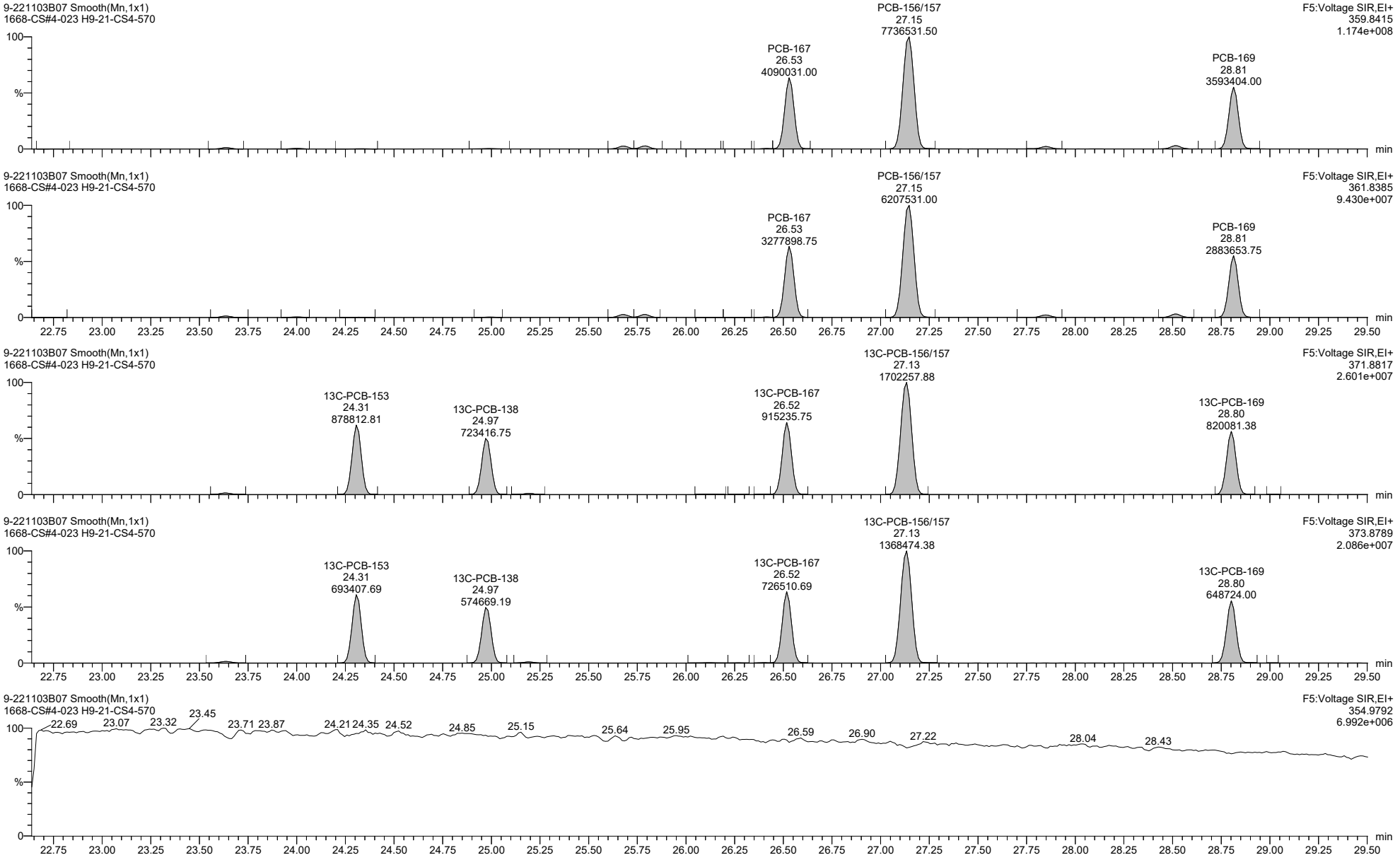


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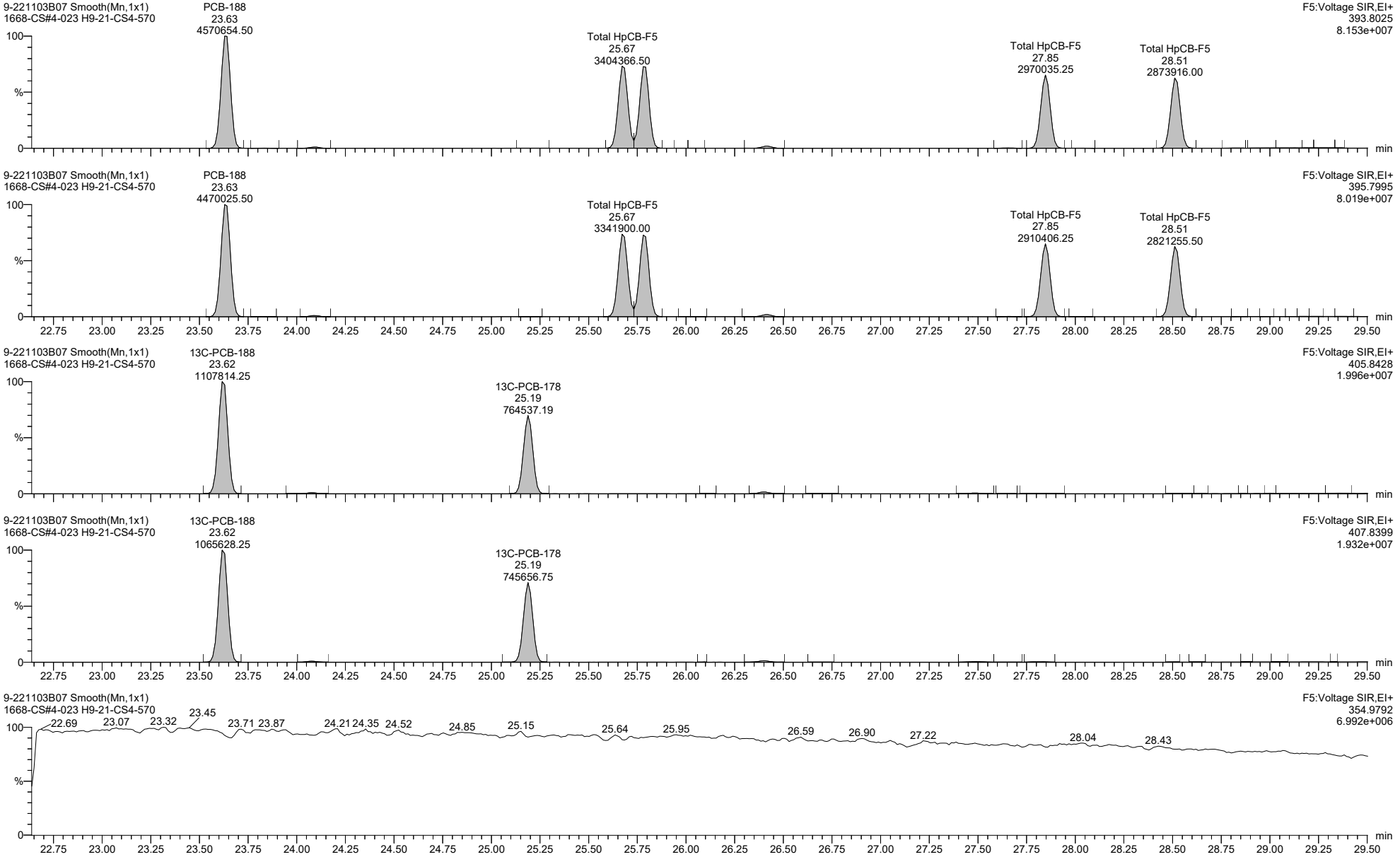


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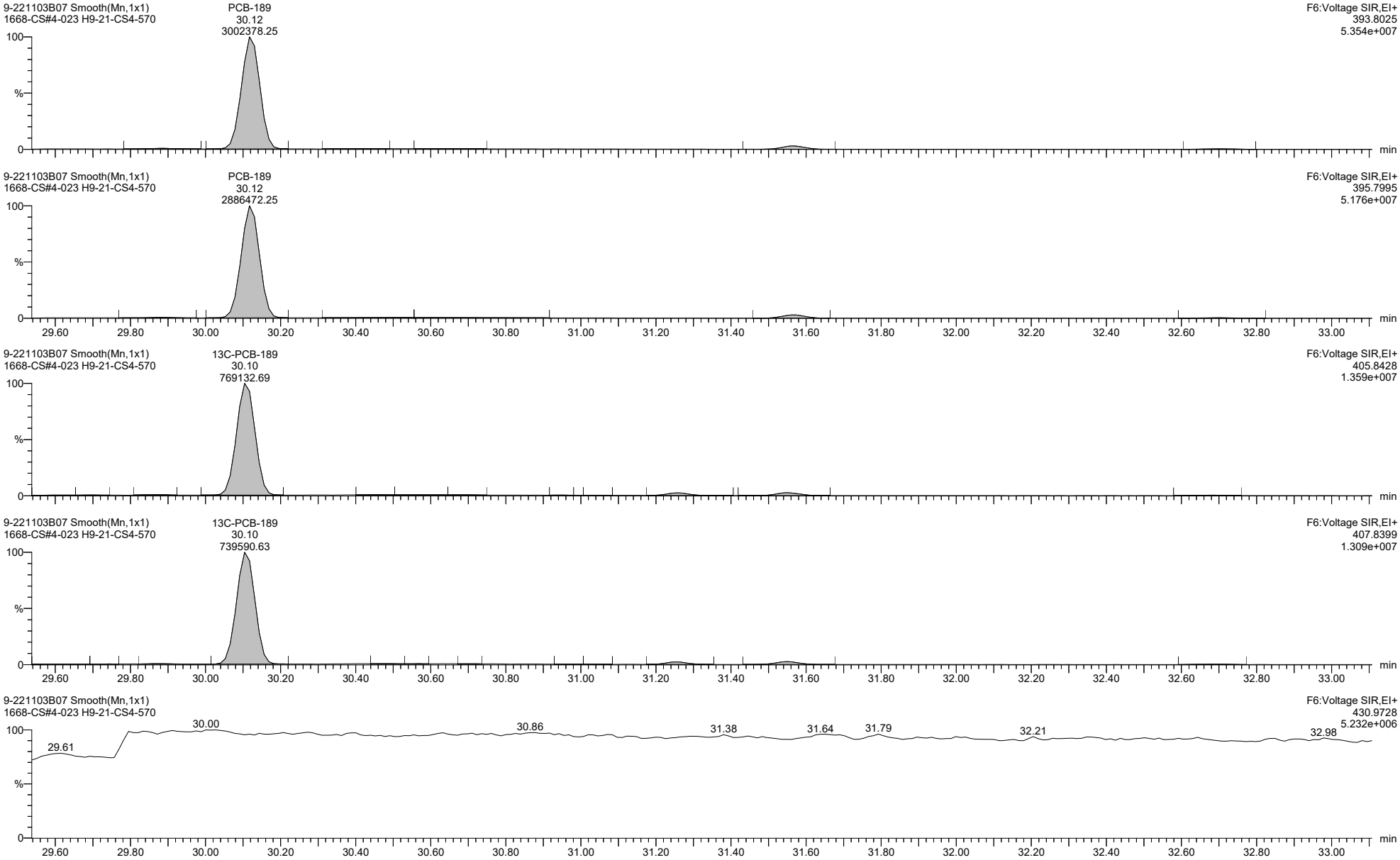


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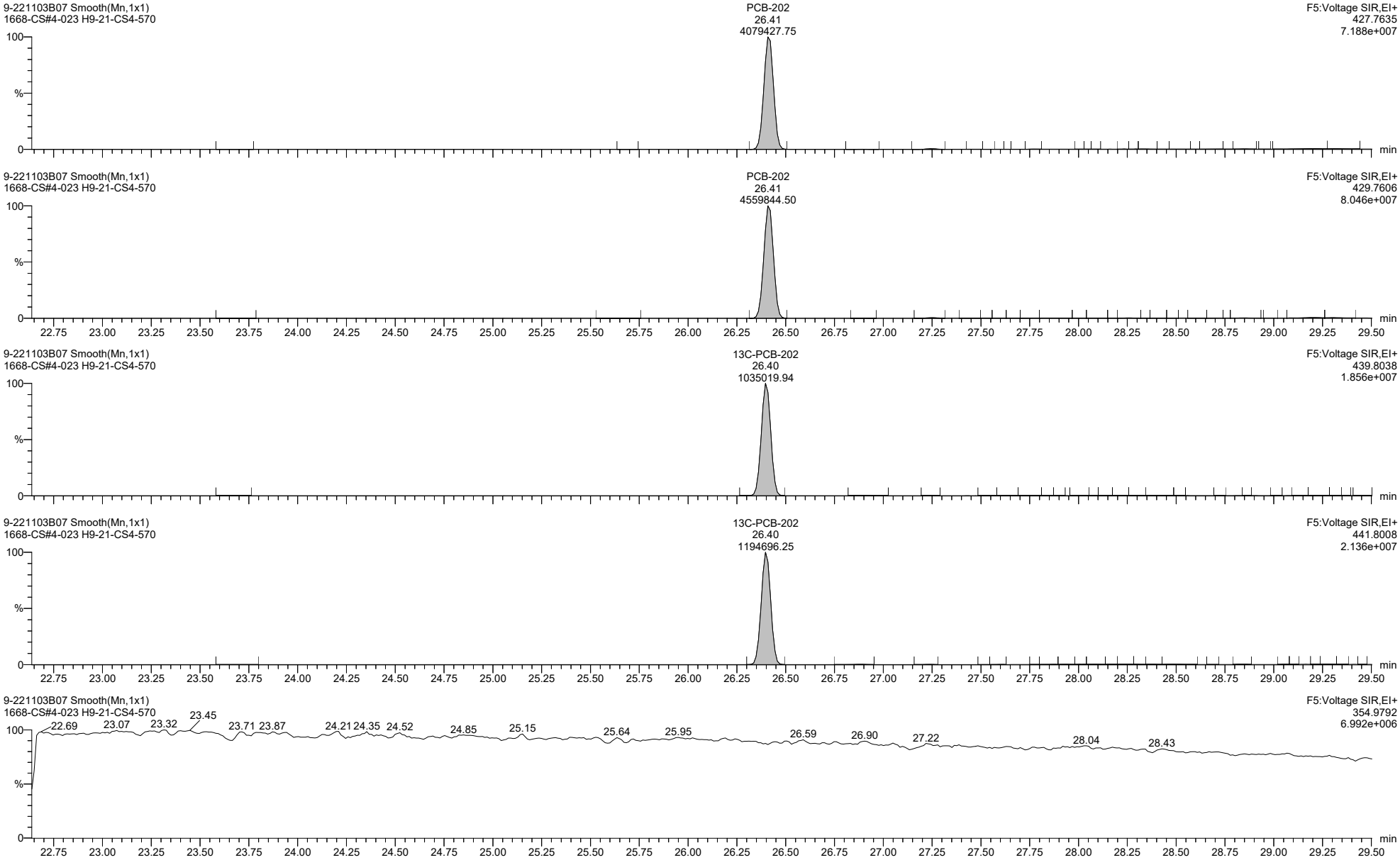


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Printed: Wednesday, November 09, 2022 15:41:14 Eastern Standard Time

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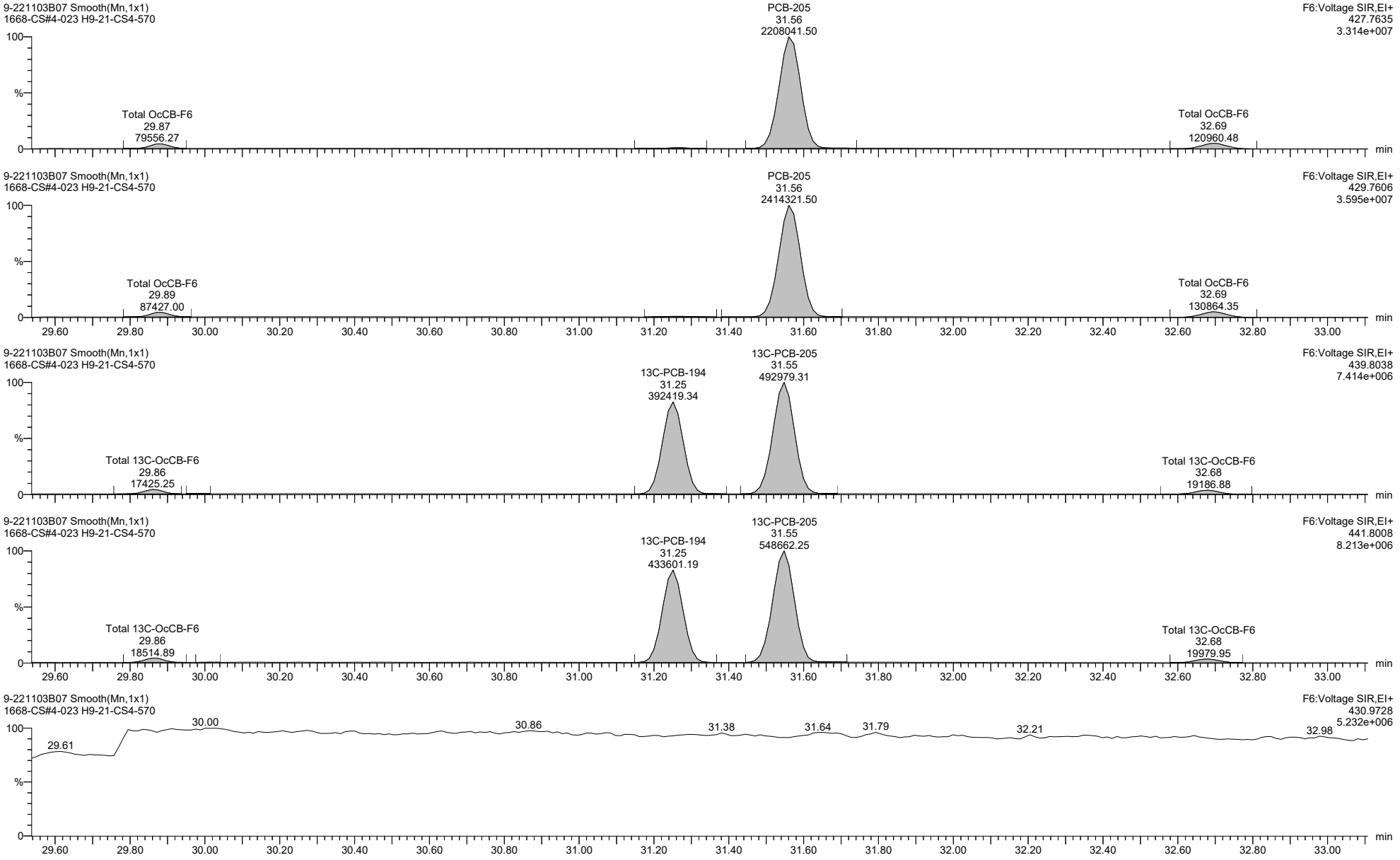


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

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Printed: Wednesday, November 09, 2022 15:41:14 Eastern Standard Time

Name: 9-221103B07, Date: 03-Nov-2022, Time: 21:45:31, ID: H9-21-CS4-570, Description: 1668-CS#4-023, Vial: Tray1:8

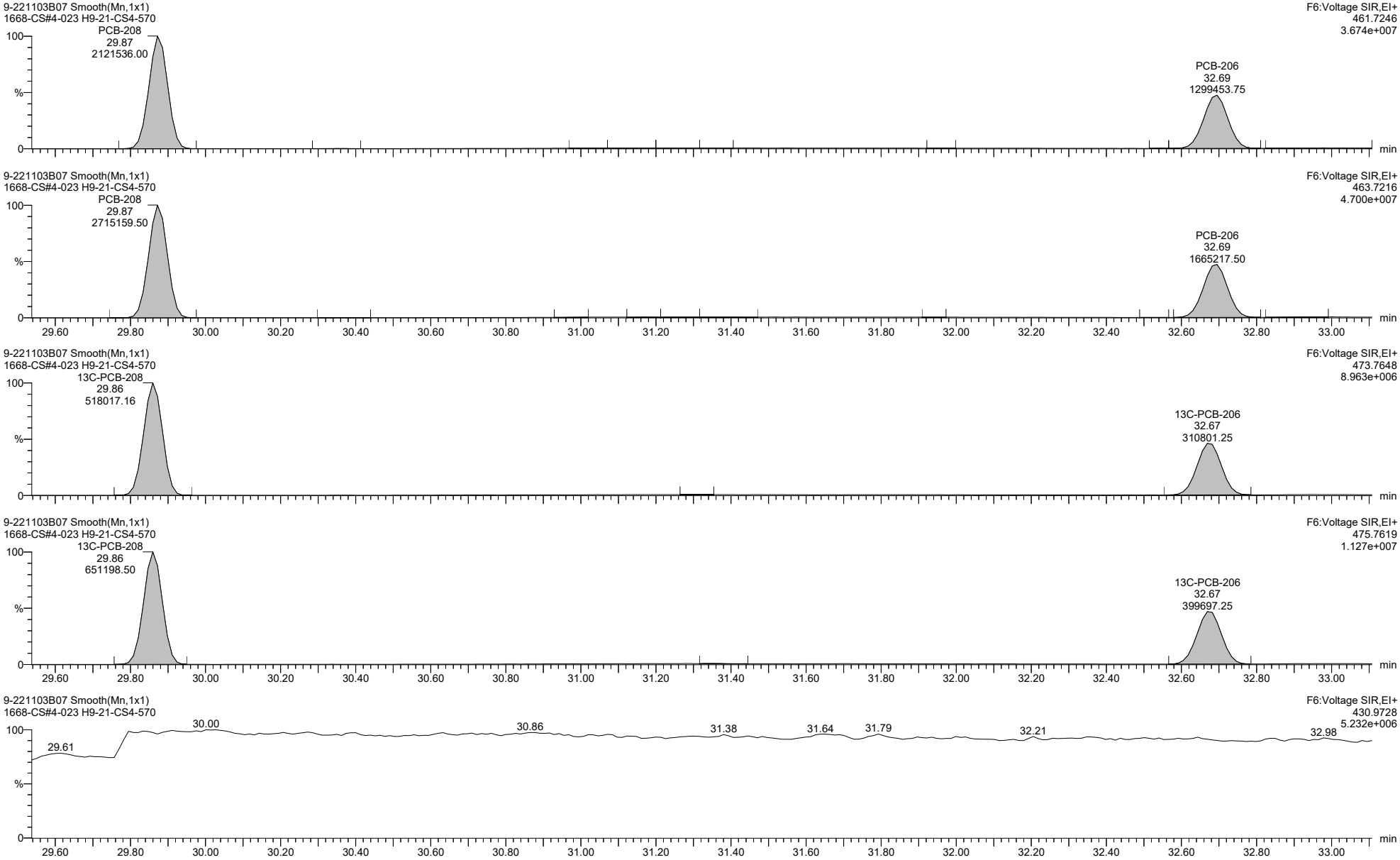


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

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Printed: Wednesday, November 09, 2022 15:41:14 Eastern Standard Time

Name: 9-221103B07, Date: 03-Nov-2022, Time: 21:45:31, ID: H9-21-CS4-570, Description: 1668-CS#4-023, Vial: Tray1:8

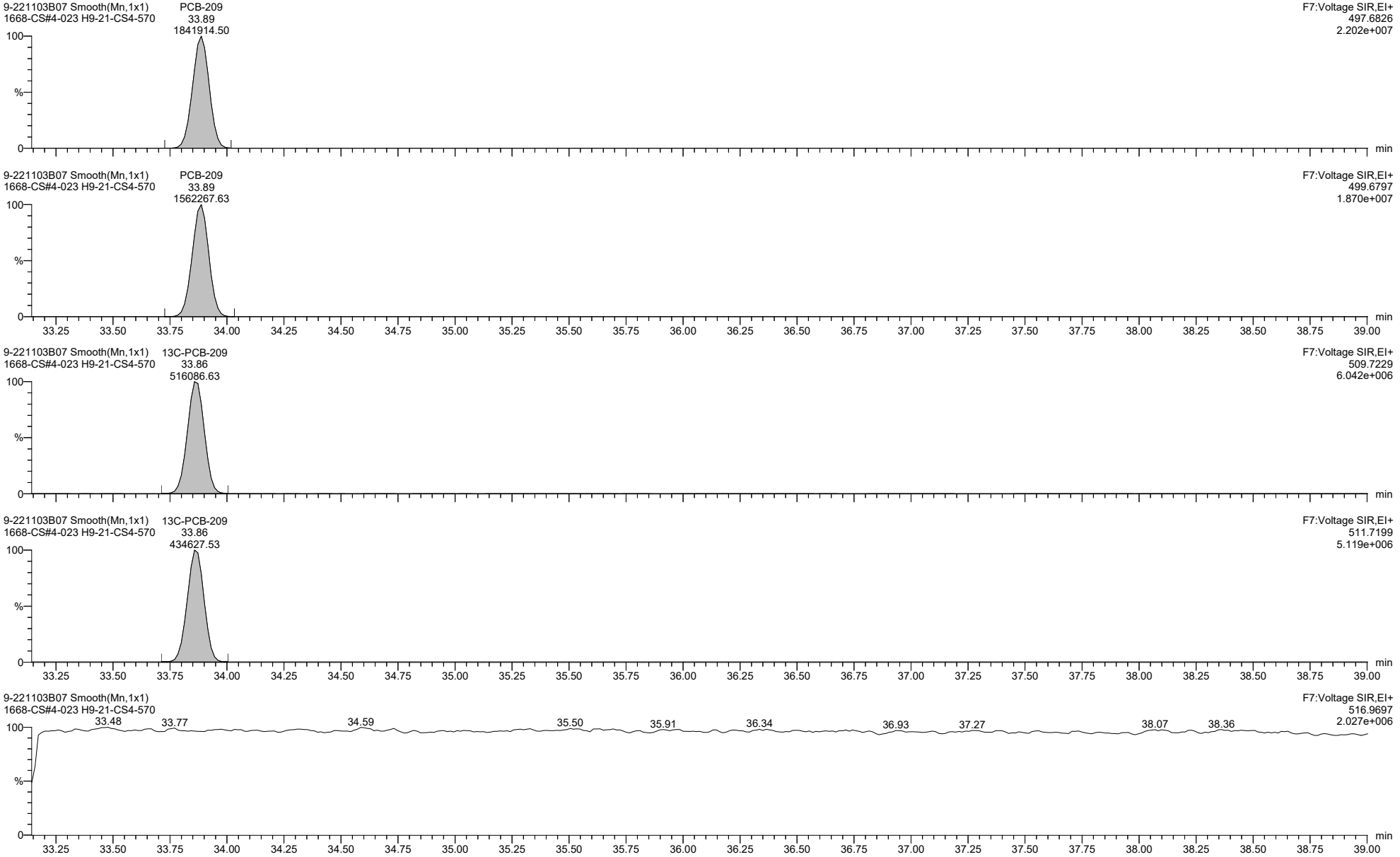


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

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Printed: Wednesday, November 09, 2022 15:41:14 Eastern Standard Time

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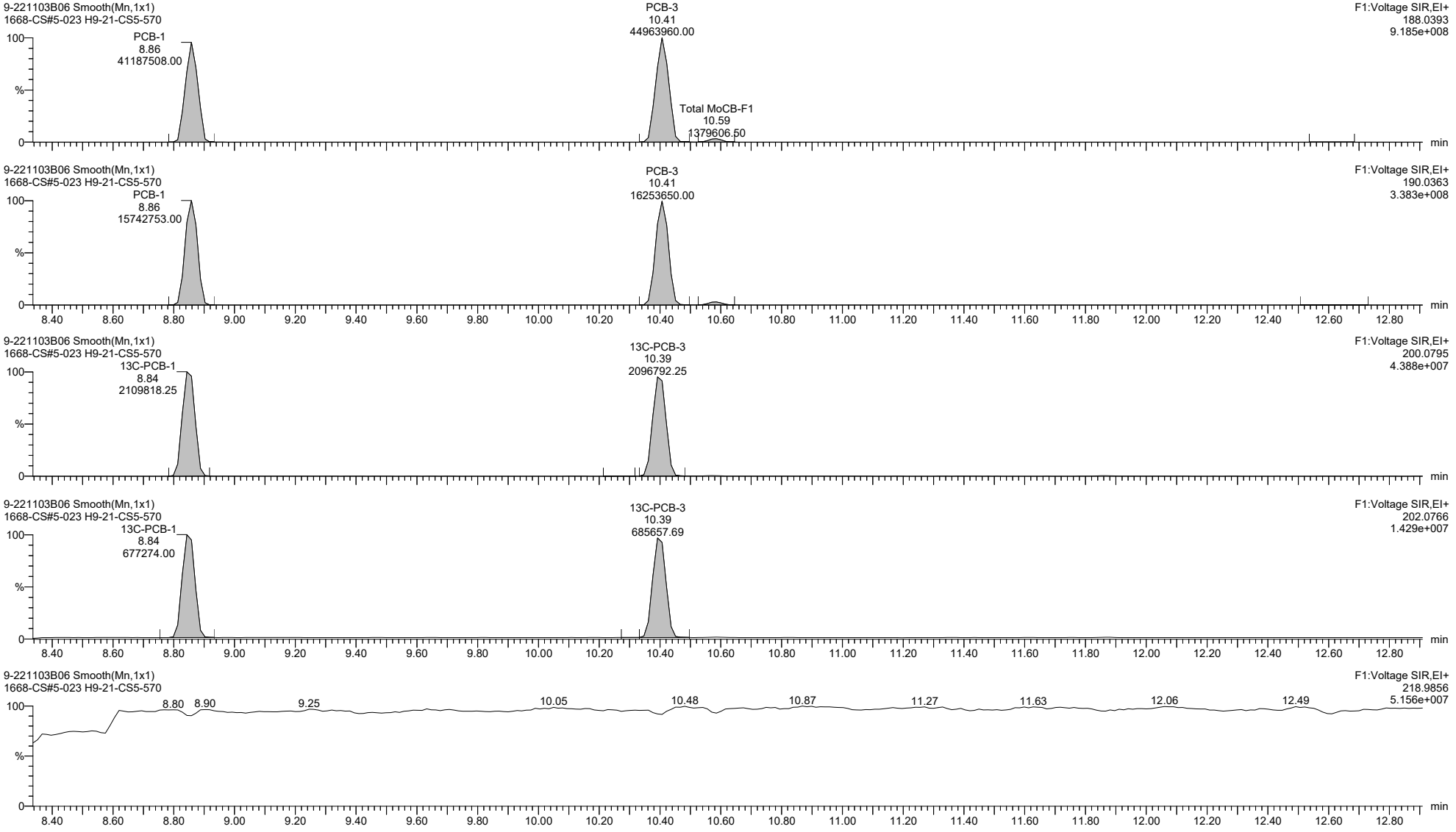
Quantify Sample Template Report **MassLynx V4.2 SCN1012**

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Printed: Wednesday, November 09, 2022 15:41:14 Eastern Standard Time

Method: C:\MassLynx\PCB.PRO\MethDB\1668-OCTYL-1-ICAL-10-221103B.mdb 23 Jun 2022 15:50:30
Calibration: C:\MassLynx\PCB.PRO\CurveDB\10-221103B-PCB-ICAL.cdb 04 Nov 2022 10:45:08

Name: 9-221103B06, Date: 03-Nov-2022, Time: 21:03:13, ID: H9-21-CS5-570, Description: 1668-CS#5-023, Vial: Tray1:7

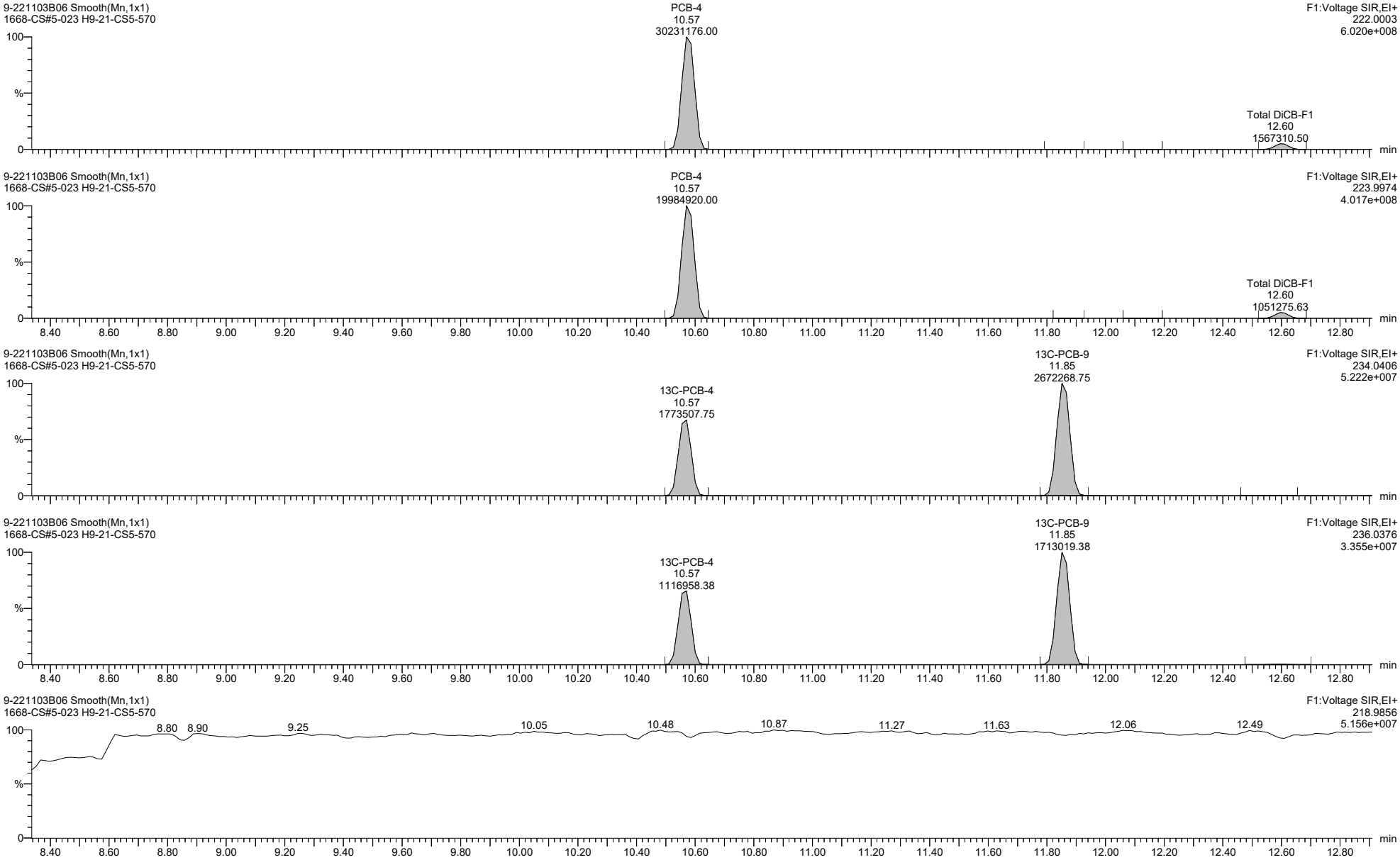


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

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Last Altered: Friday, November 04, 2022 09:45:08 Eastern Daylight Time
Printed: Wednesday, November 09, 2022 15:41:14 Eastern Standard Time

Name: 9-221103B06, Date: 03-Nov-2022, Time: 21:03:13, ID: H9-21-CS5-570, Description: 1668-CS#5-023, Vial: Tray1:7

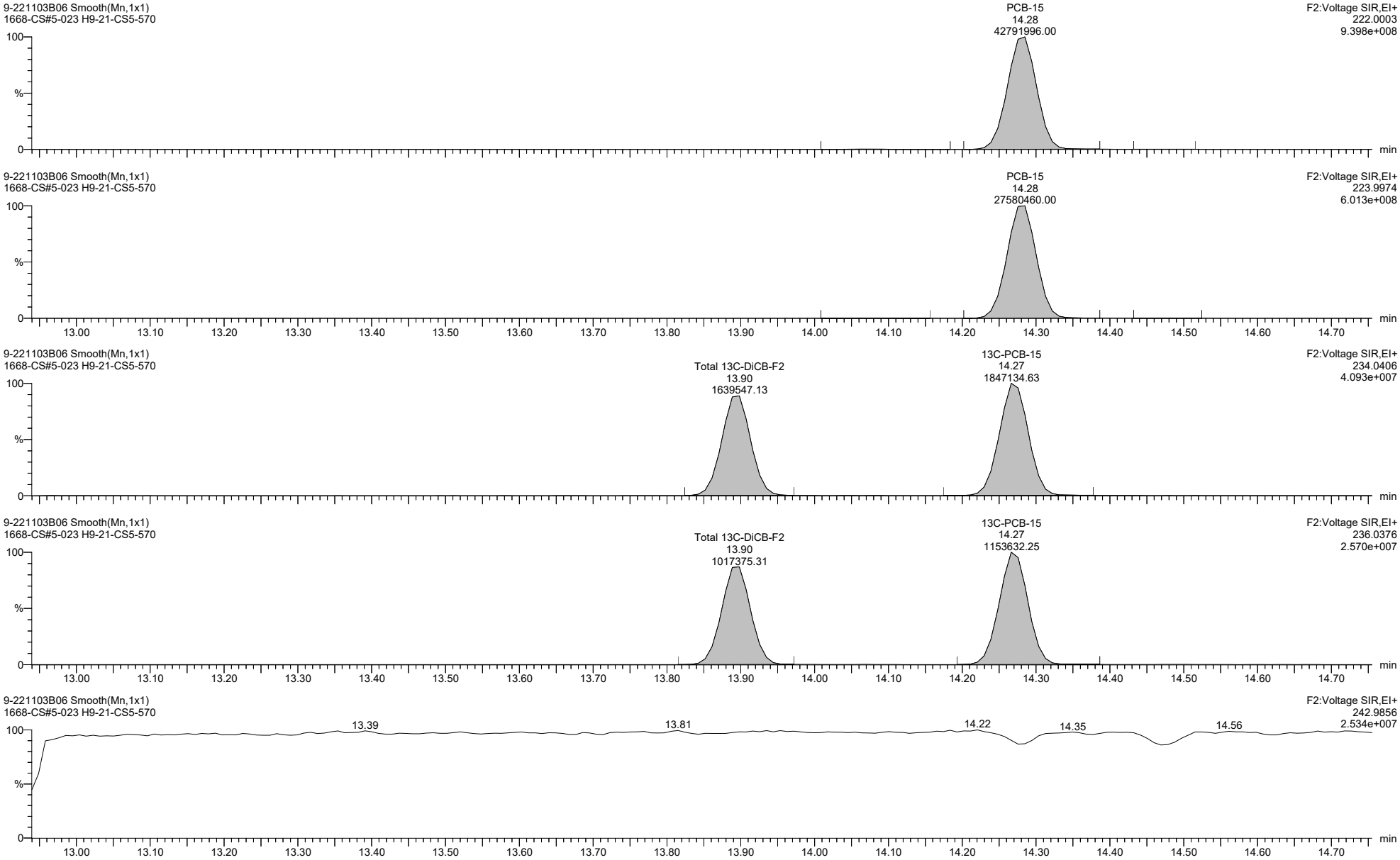


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

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Last Altered: Friday, November 04, 2022 09:45:08 Eastern Daylight Time
Printed: Wednesday, November 09, 2022 15:41:14 Eastern Standard Time

Name: 9-221103B06, Date: 03-Nov-2022, Time: 21:03:13, ID: H9-21-CS5-570, Description: 1668-CS#5-023, Vial: Tray1:7

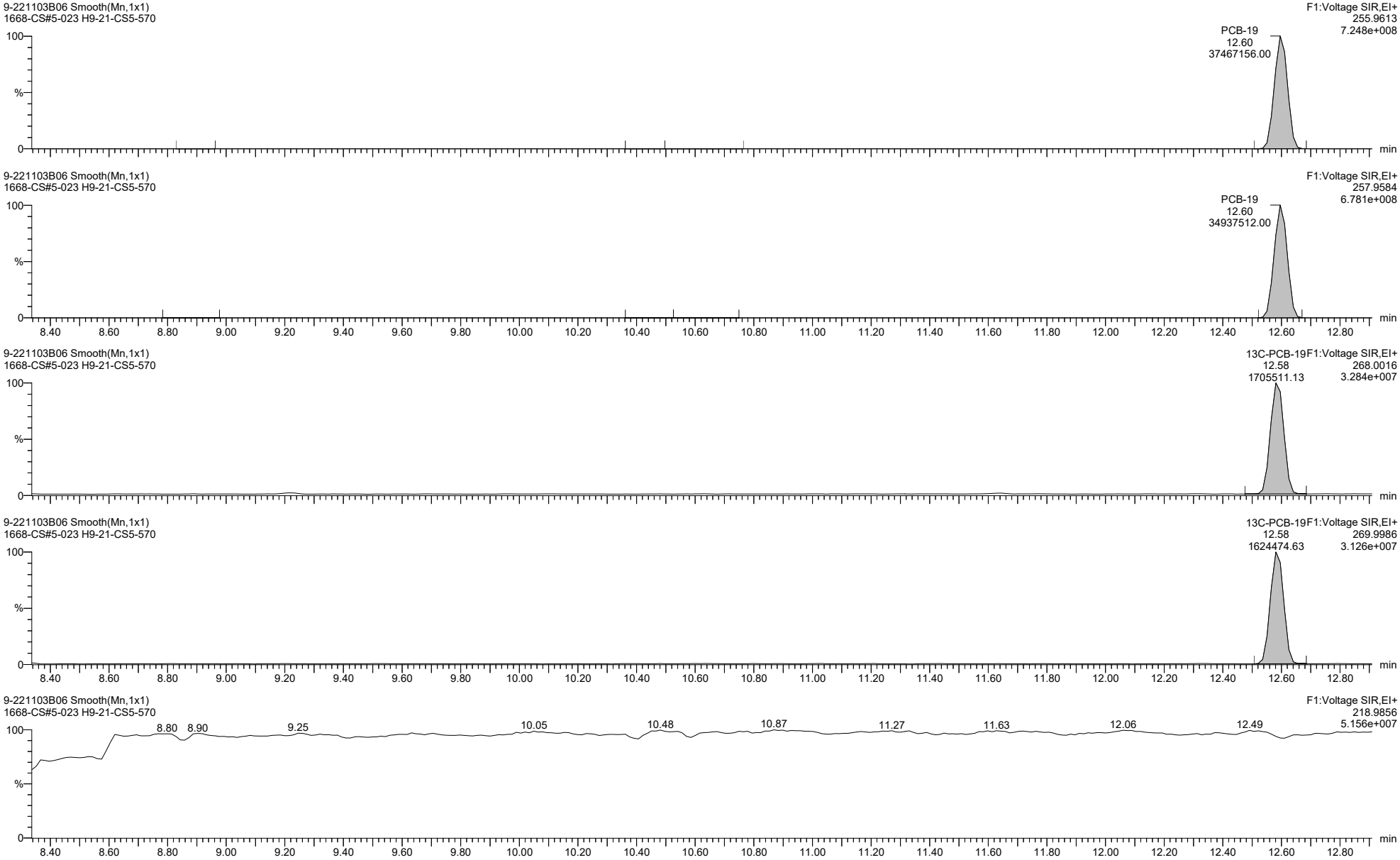


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

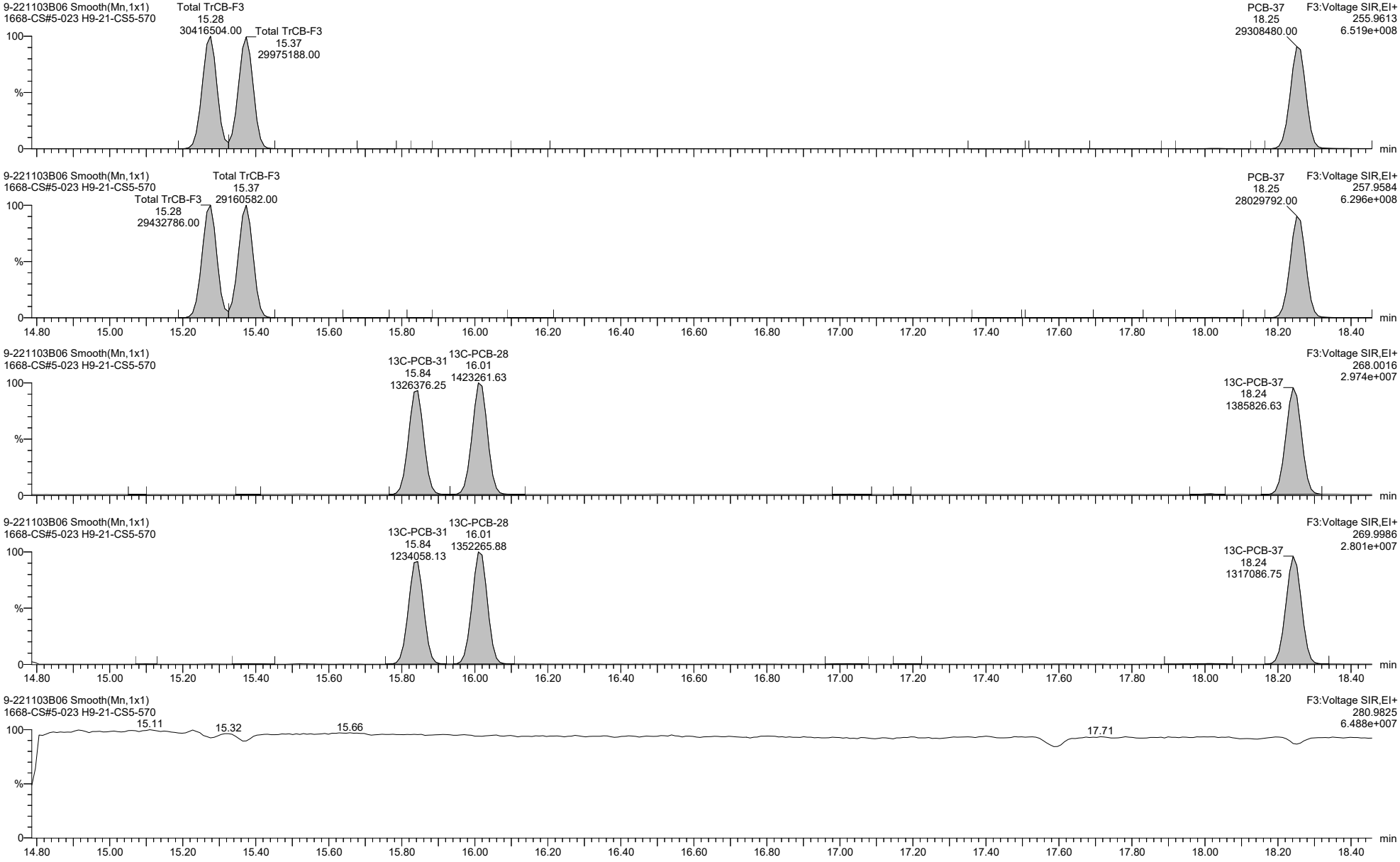
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Printed: Wednesday, November 09, 2022 15:41:14 Eastern Standard Time

Name: 9-221103B06, Date: 03-Nov-2022, Time: 21:03:13, ID: H9-21-CS5-570, Description: 1668-CS#5-023, Vial: Tray1:7



Name: 9-221103B06, Date: 03-Nov-2022, Time: 21:03:13, ID: H9-21-CS5-570, Description: 1668-CS#5-023, Vial: Tray1:7

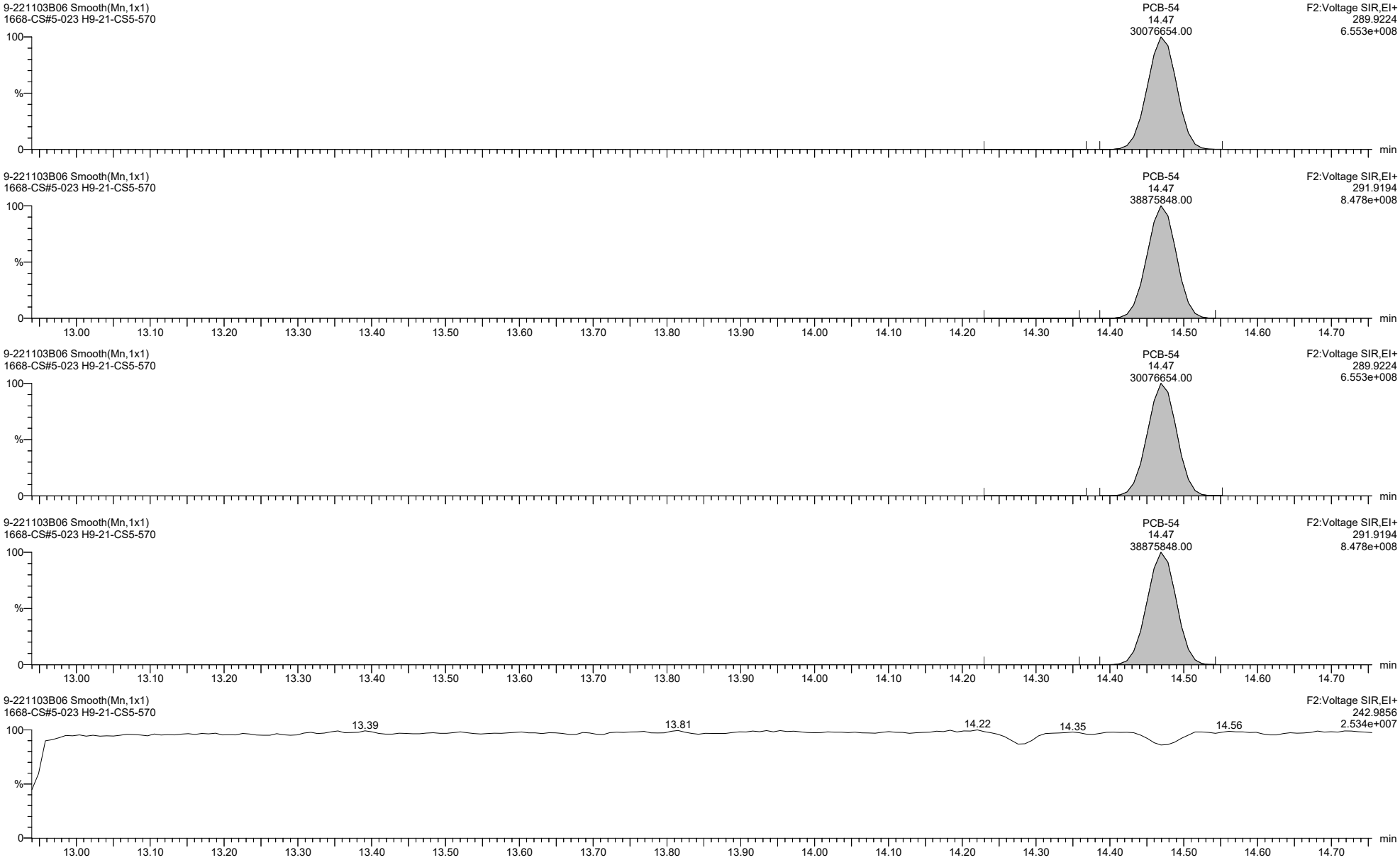


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

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Last Altered: Friday, November 04, 2022 09:45:08 Eastern Daylight Time
Printed: Wednesday, November 09, 2022 15:41:14 Eastern Standard Time

Name: 9-221103B06, Date: 03-Nov-2022, Time: 21:03:13, ID: H9-21-CS5-570, Description: 1668-CS#5-023, Vial: Tray1:7

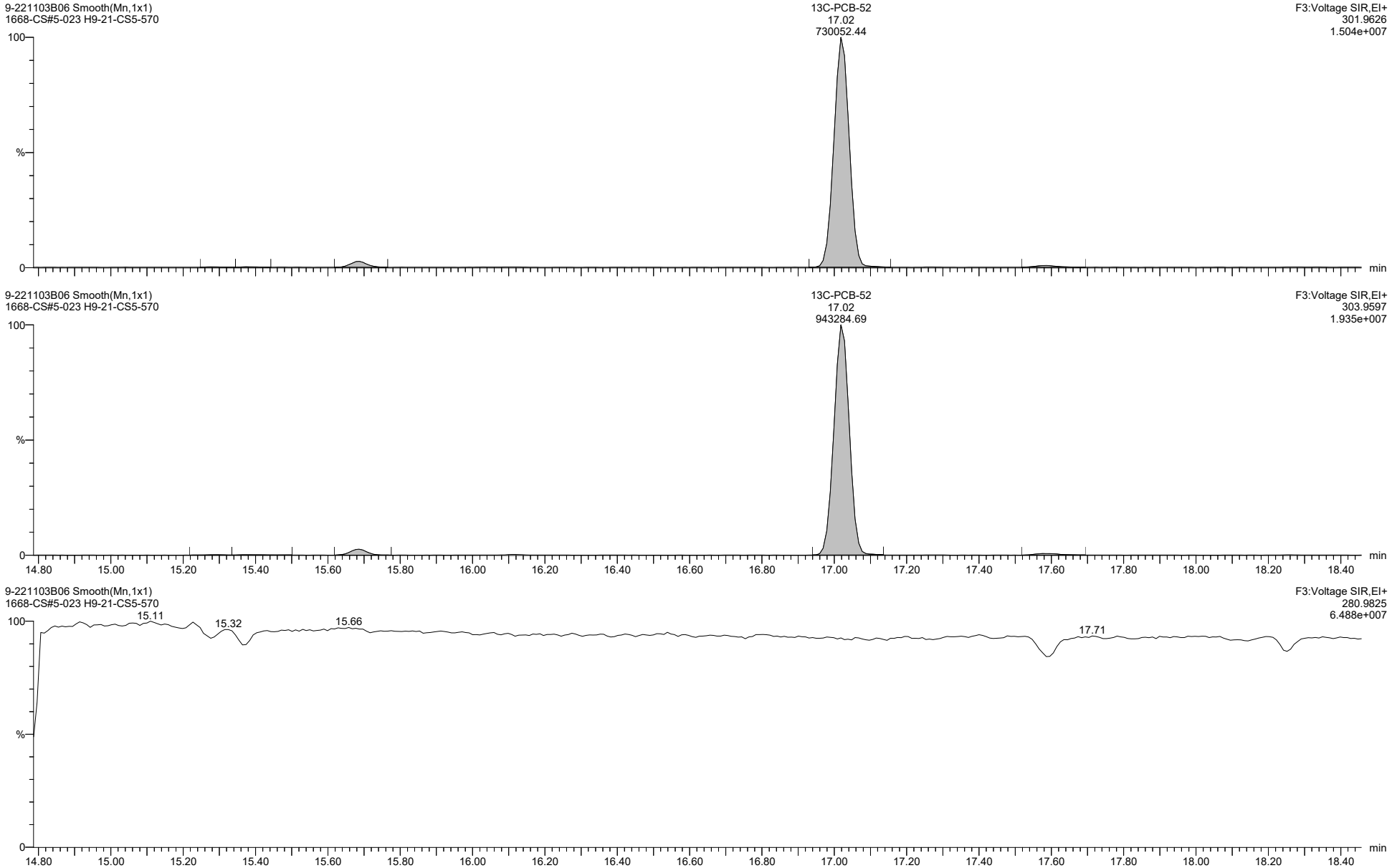


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

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Last Altered: Friday, November 04, 2022 09:45:08 Eastern Daylight Time
Printed: Wednesday, November 09, 2022 15:41:14 Eastern Standard Time

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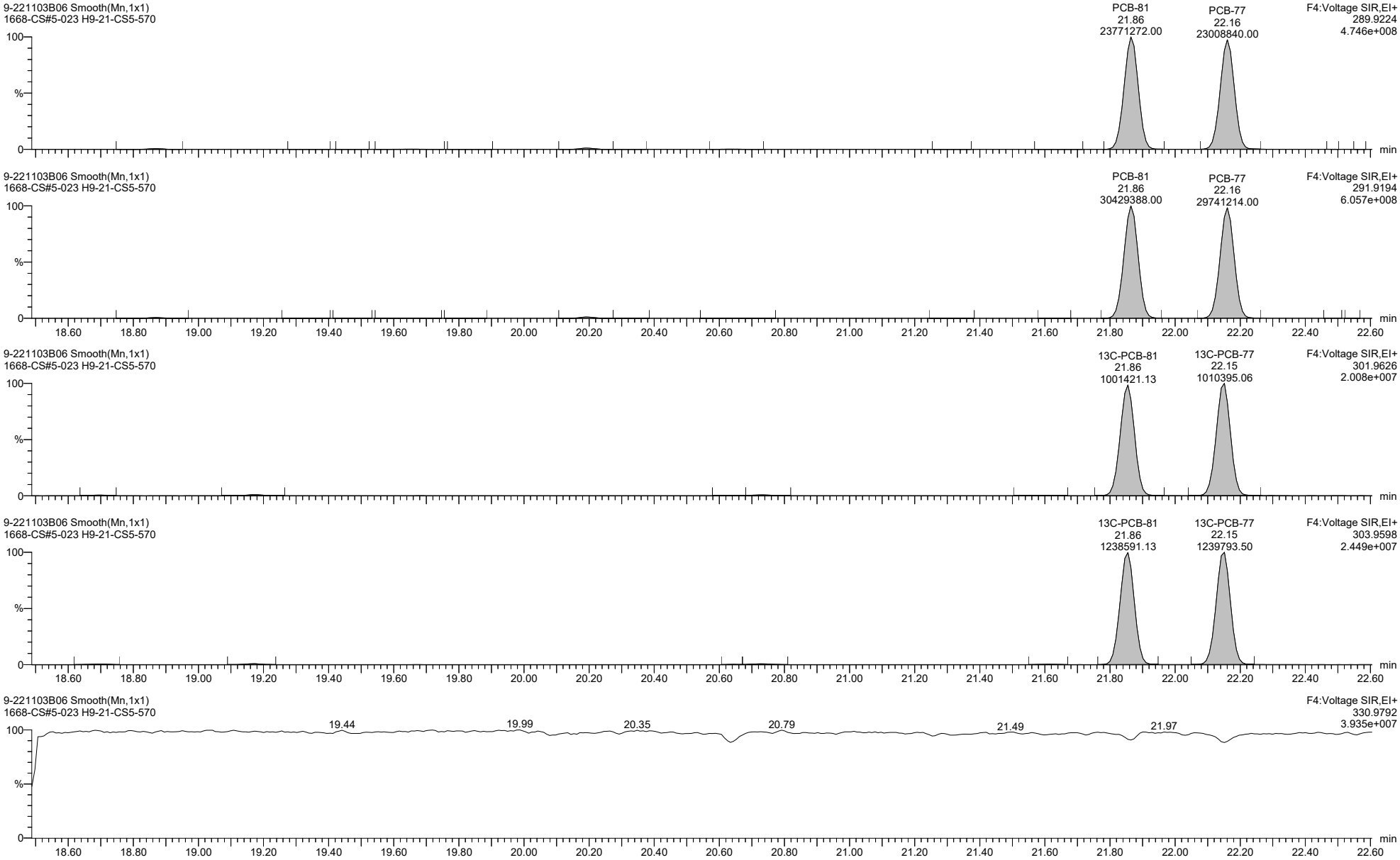


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

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Printed: Wednesday, November 09, 2022 15:41:14 Eastern Standard Time

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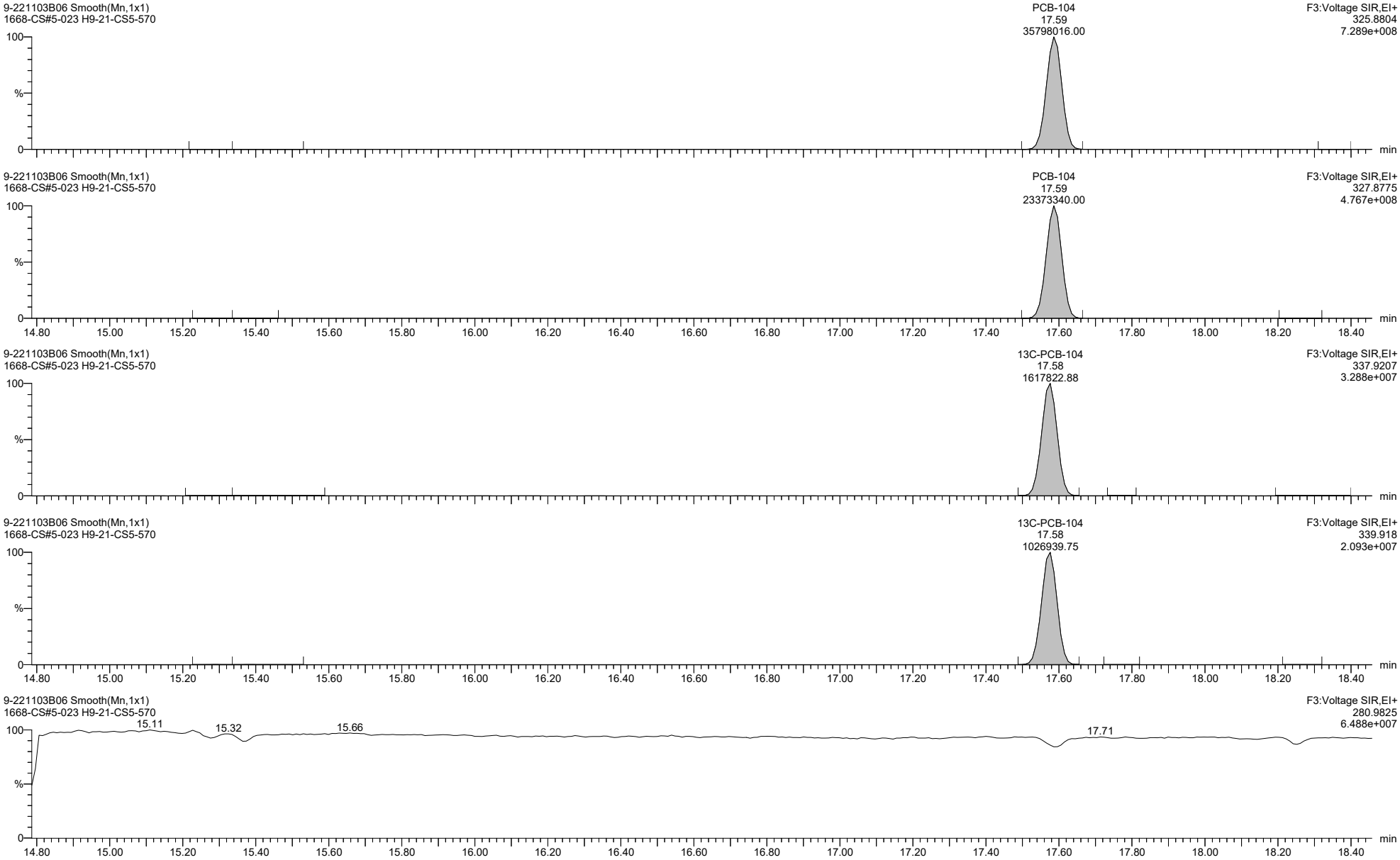


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

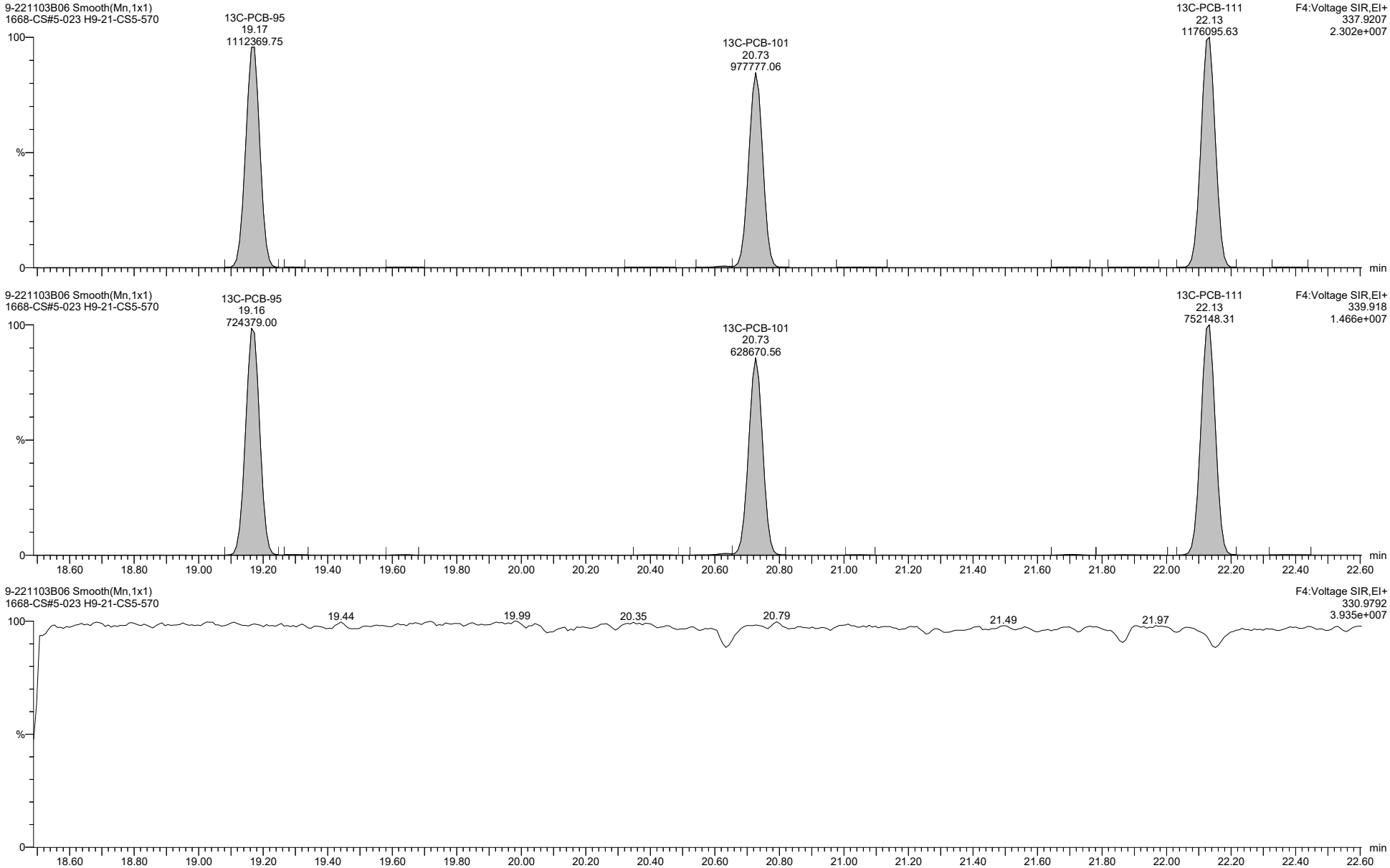
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Printed: Wednesday, November 09, 2022 15:41:14 Eastern Standard Time

Name: 9-221103B06, Date: 03-Nov-2022, Time: 21:03:13, ID: H9-21-CS5-570, Description: 1668-CS#5-023, Vial: Tray1:7



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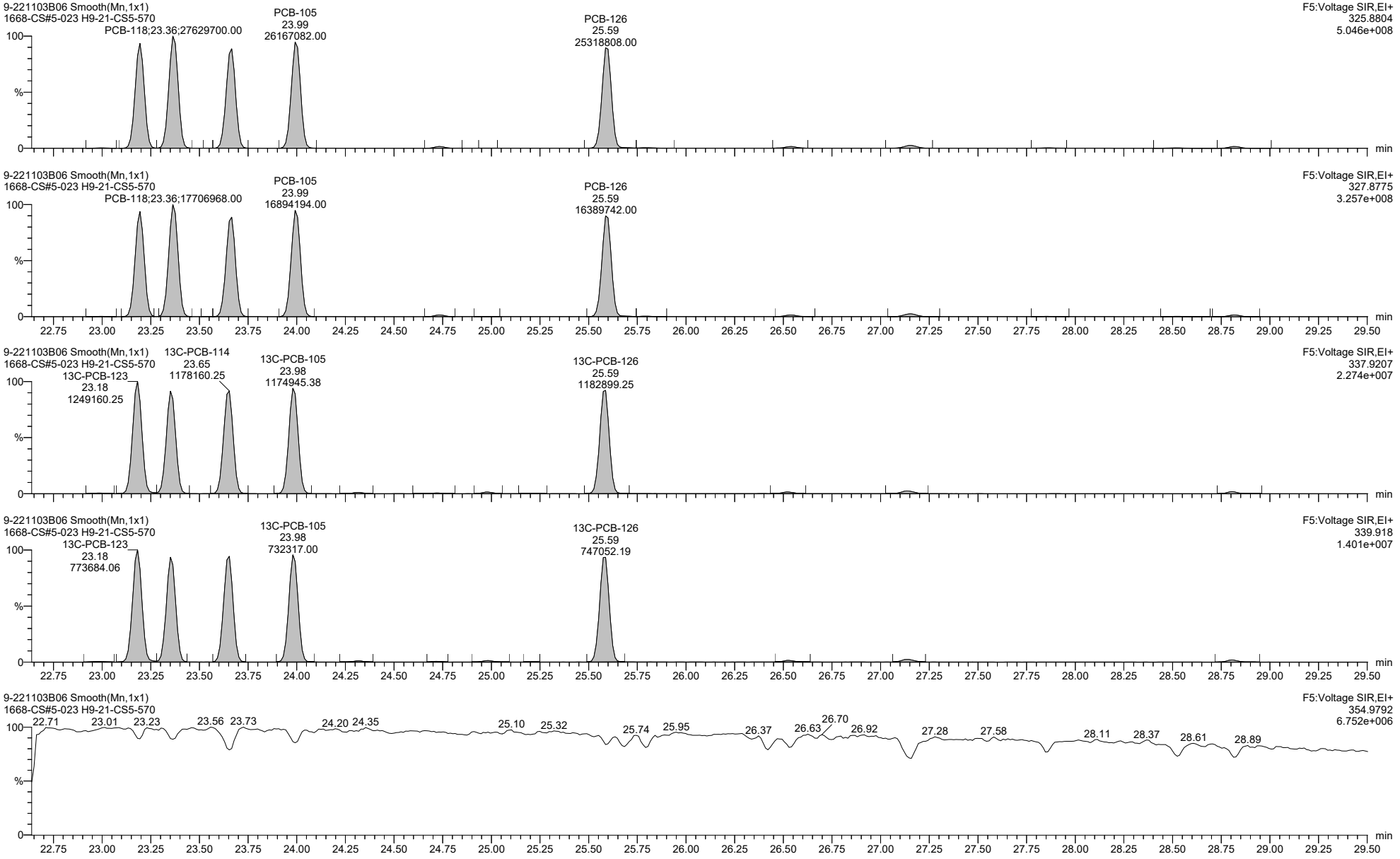


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

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Printed: Wednesday, November 09, 2022 15:41:14 Eastern Standard Time

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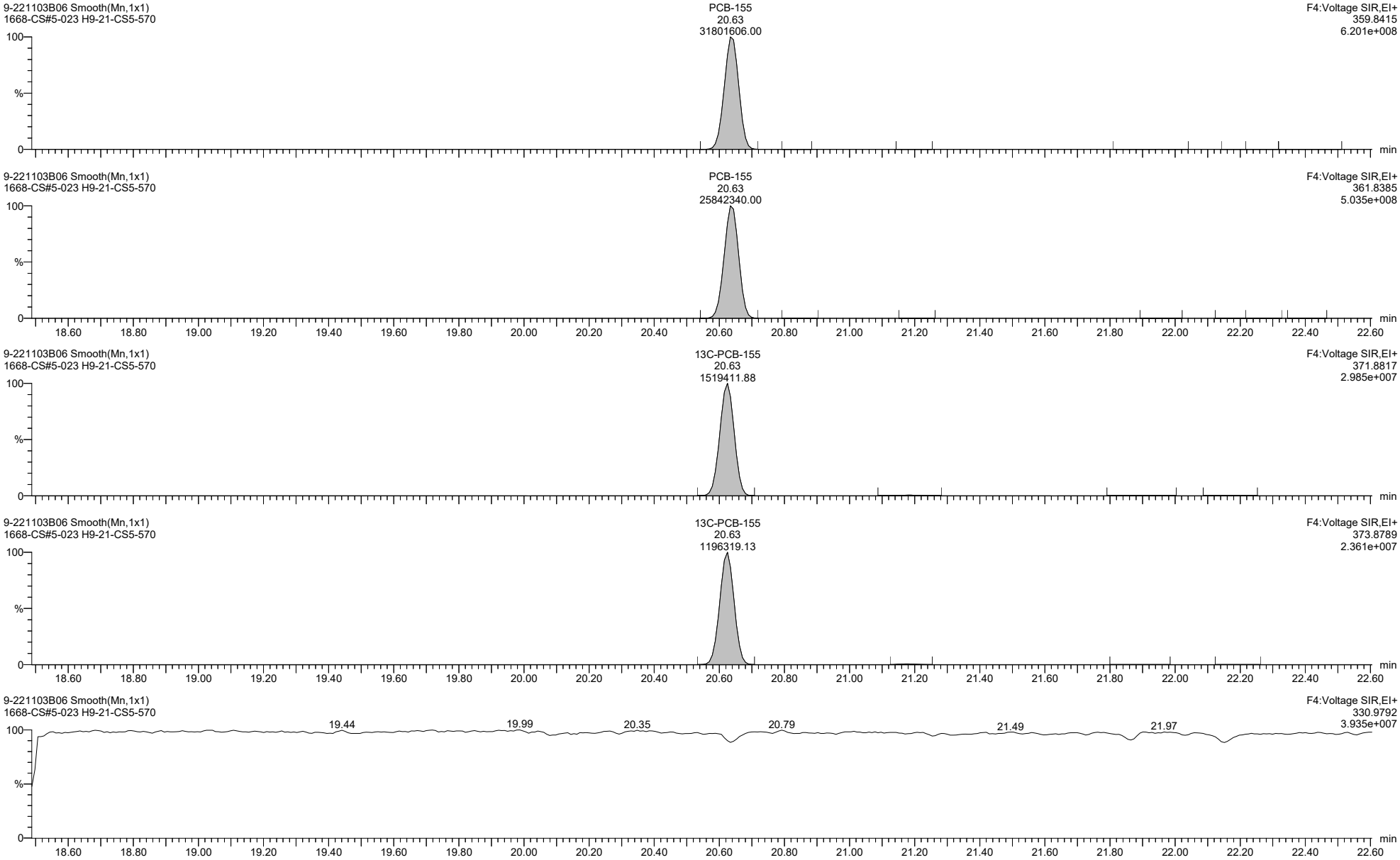


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

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Printed: Wednesday, November 09, 2022 15:41:14 Eastern Standard Time

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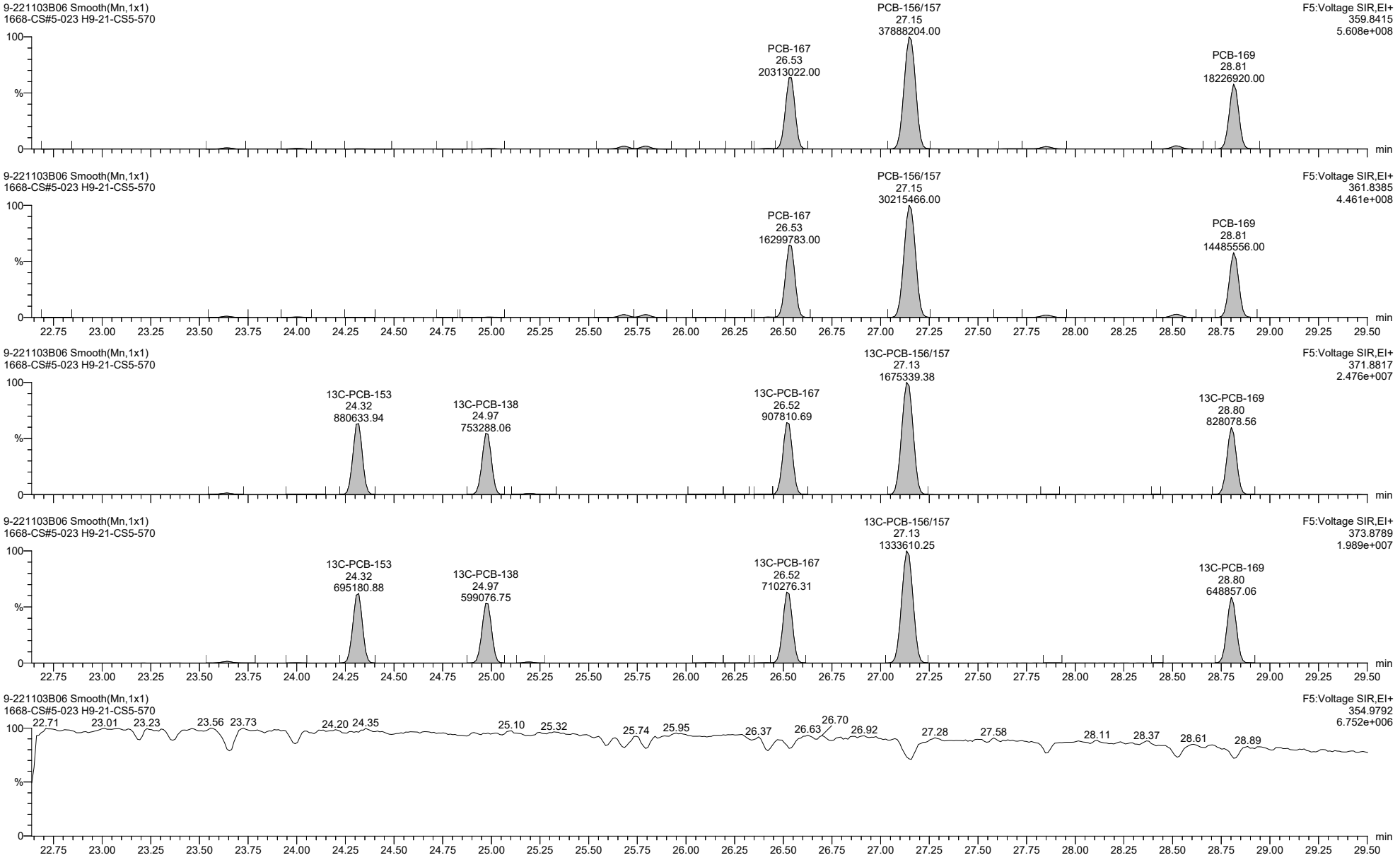


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

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Printed: Wednesday, November 09, 2022 15:41:14 Eastern Standard Time

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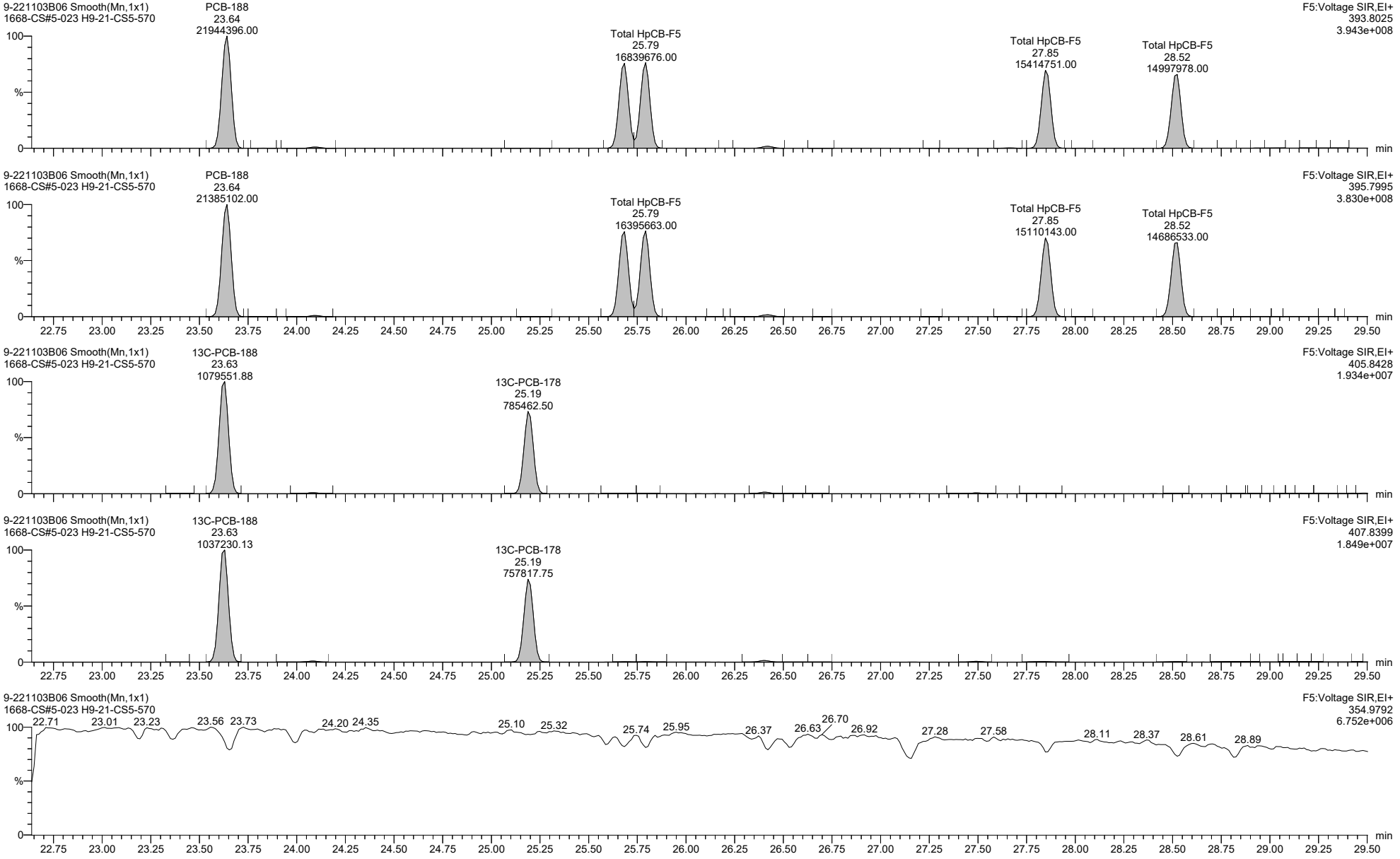


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

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Printed: Wednesday, November 09, 2022 15:41:14 Eastern Standard Time

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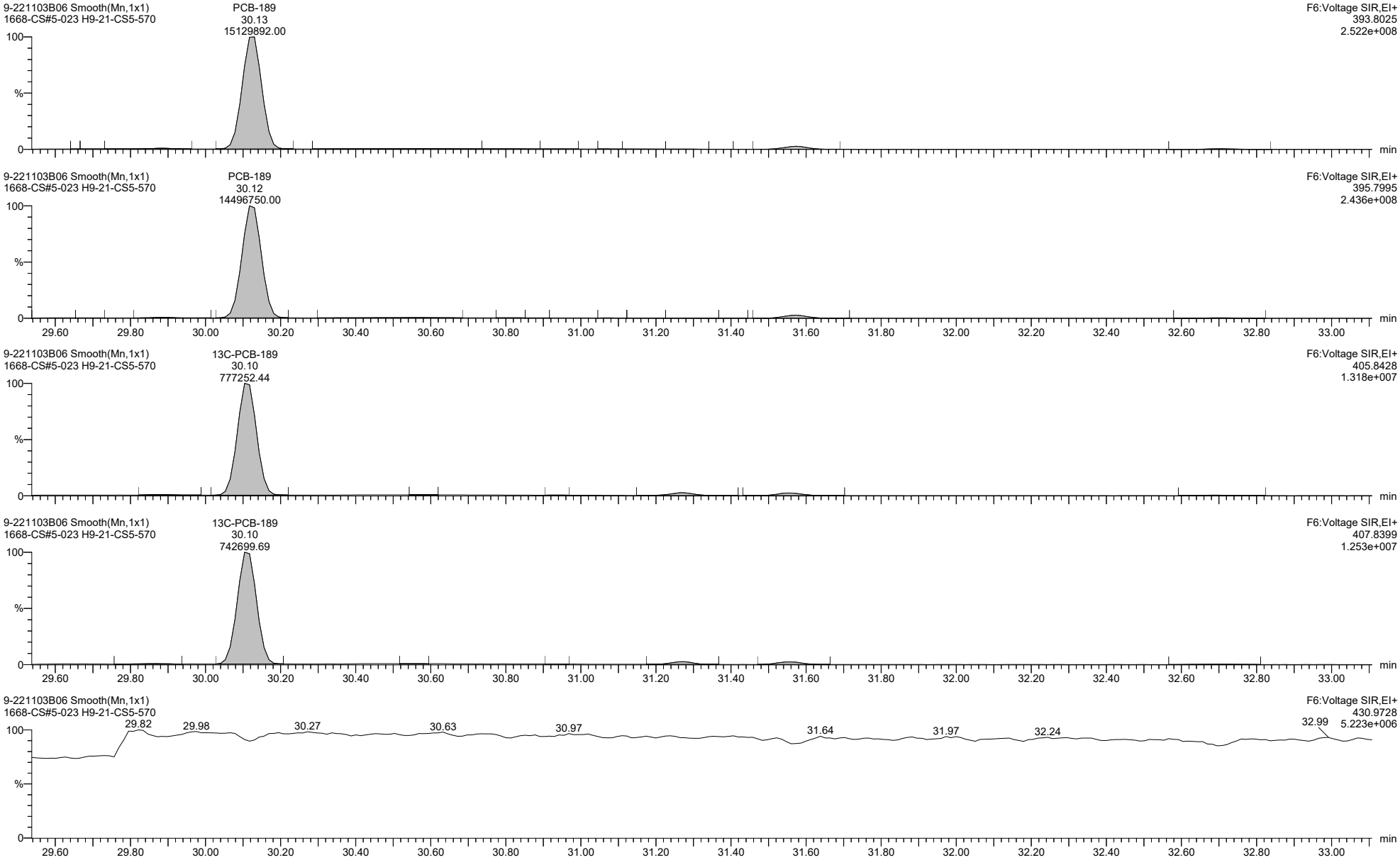


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

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Printed: Wednesday, November 09, 2022 15:41:14 Eastern Standard Time

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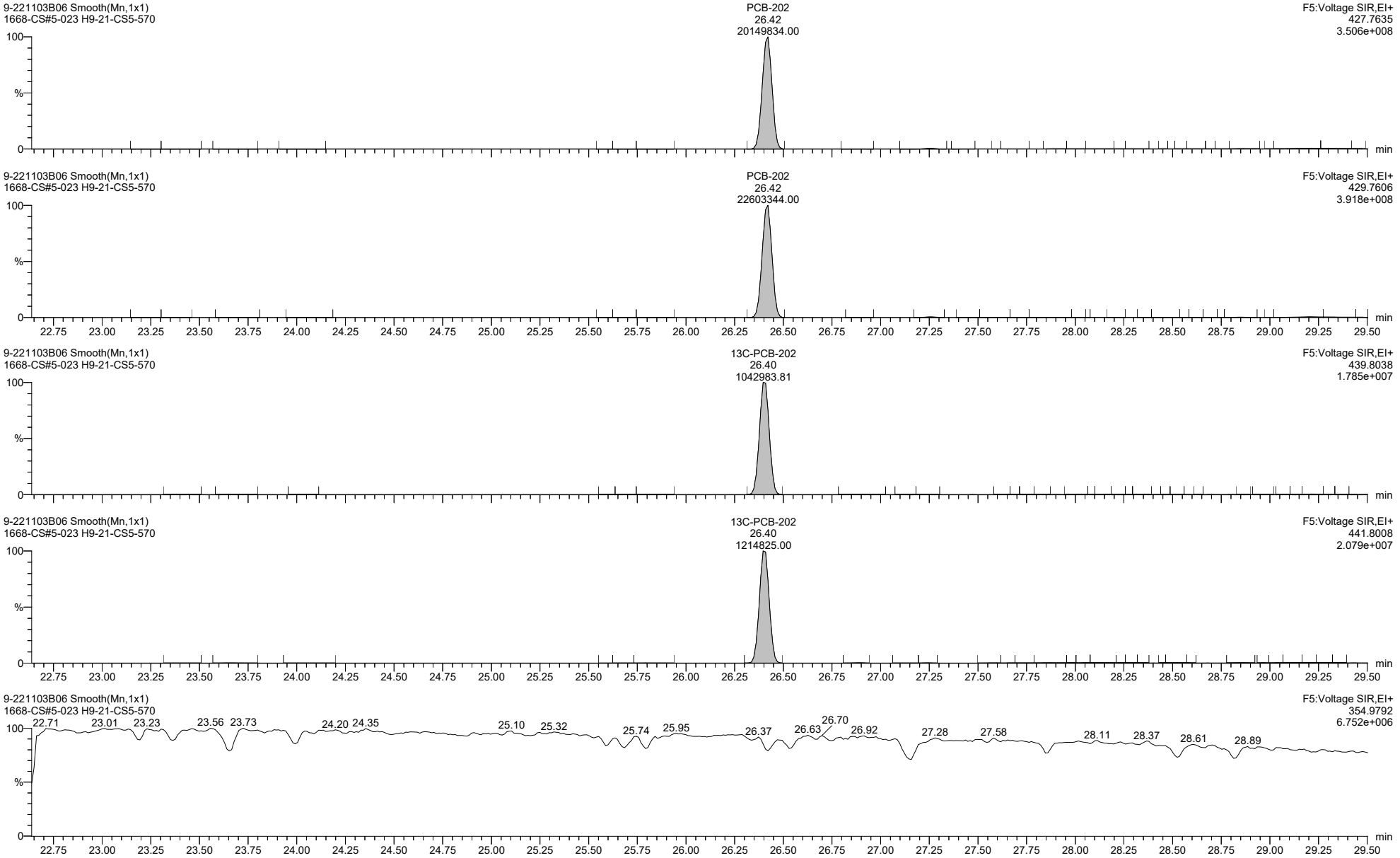


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

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Printed: Wednesday, November 09, 2022 15:41:14 Eastern Standard Time

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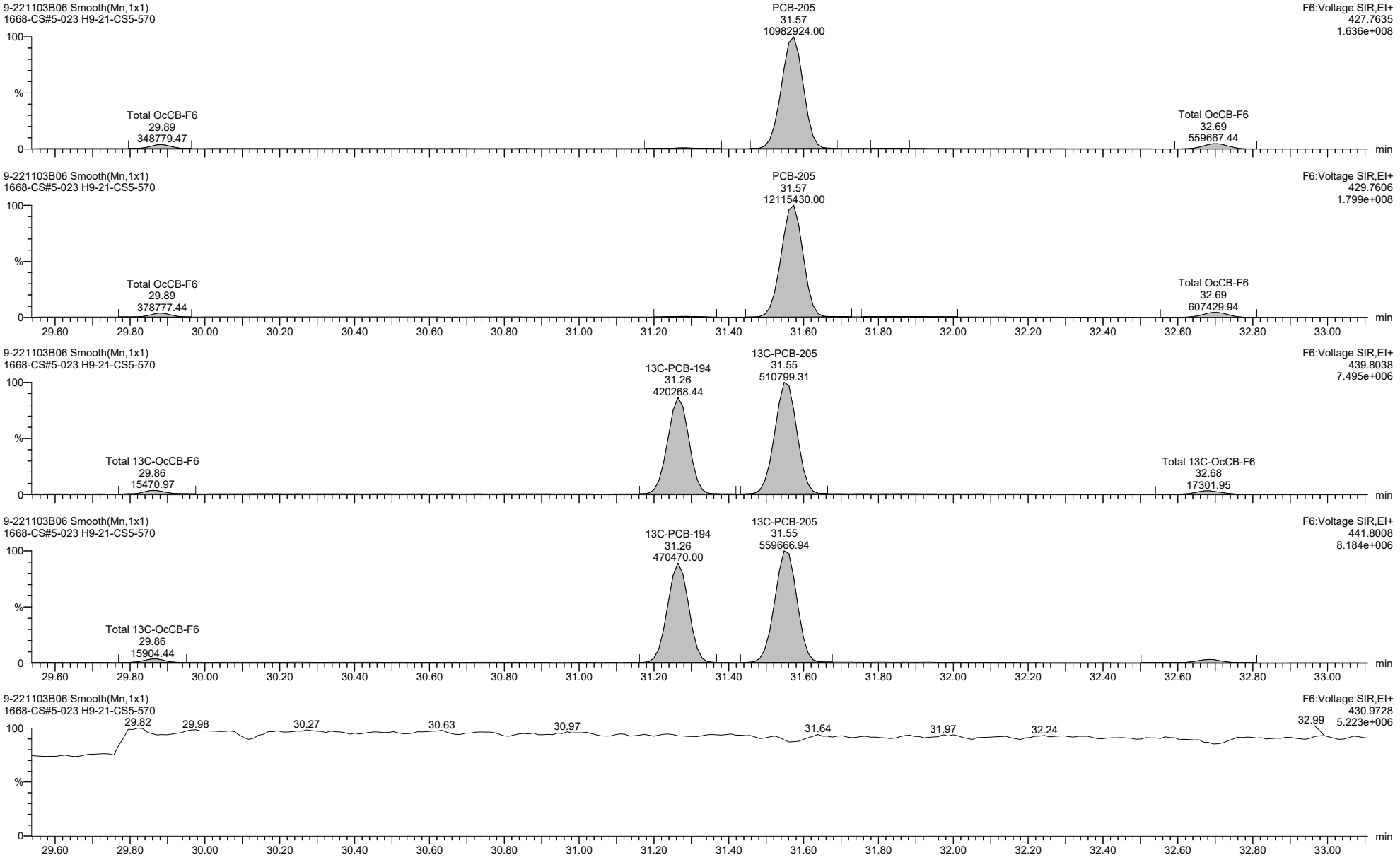


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221103B-PCB-ICAL.qld

Last Altered: Friday, November 04, 2022 09:45:08 Eastern Daylight Time
Printed: Wednesday, November 09, 2022 15:41:14 Eastern Standard Time

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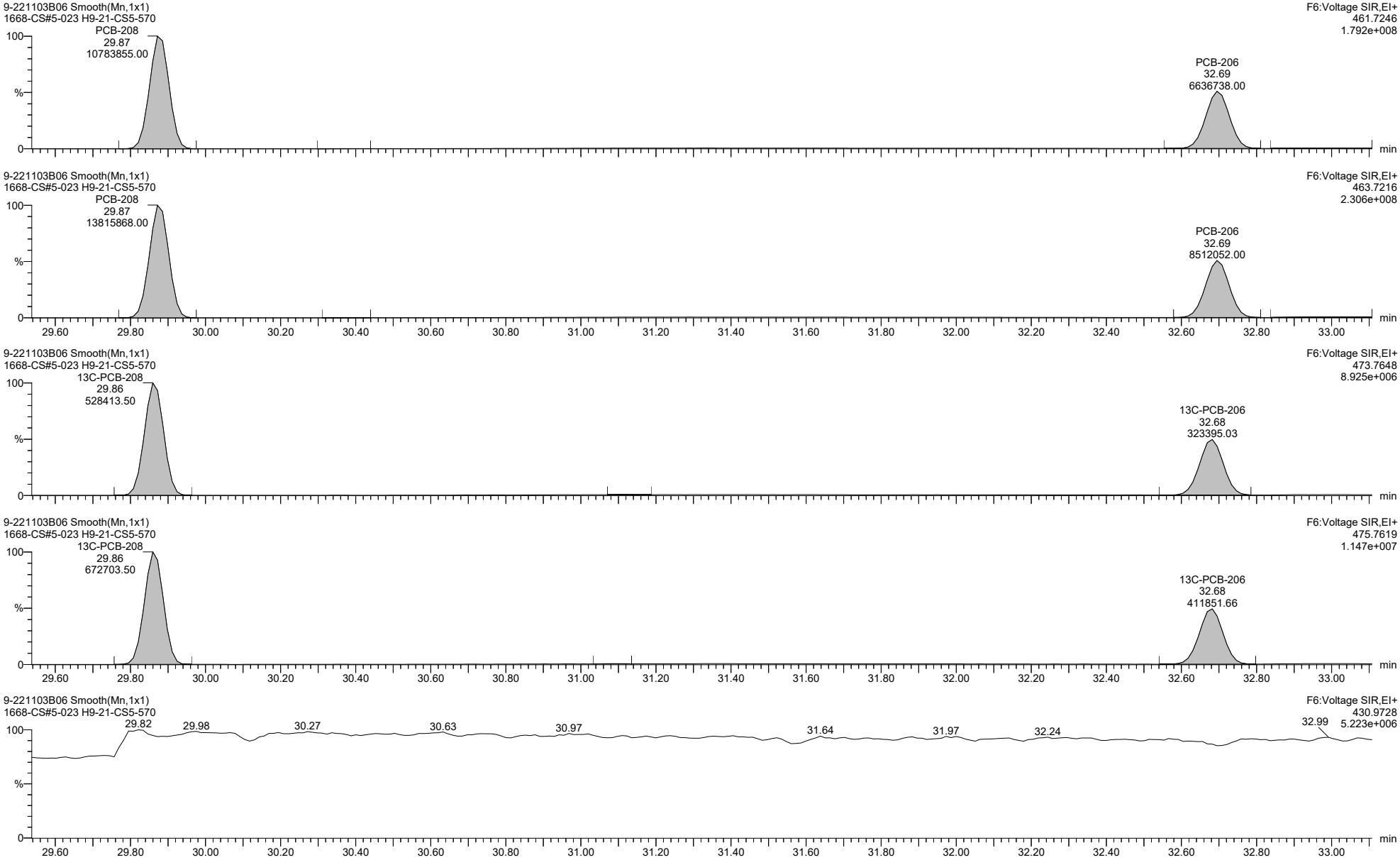


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221103B-PCB-ICAL.qld

Last Altered: Friday, November 04, 2022 09:45:08 Eastern Daylight Time
Printed: Wednesday, November 09, 2022 15:41:14 Eastern Standard Time

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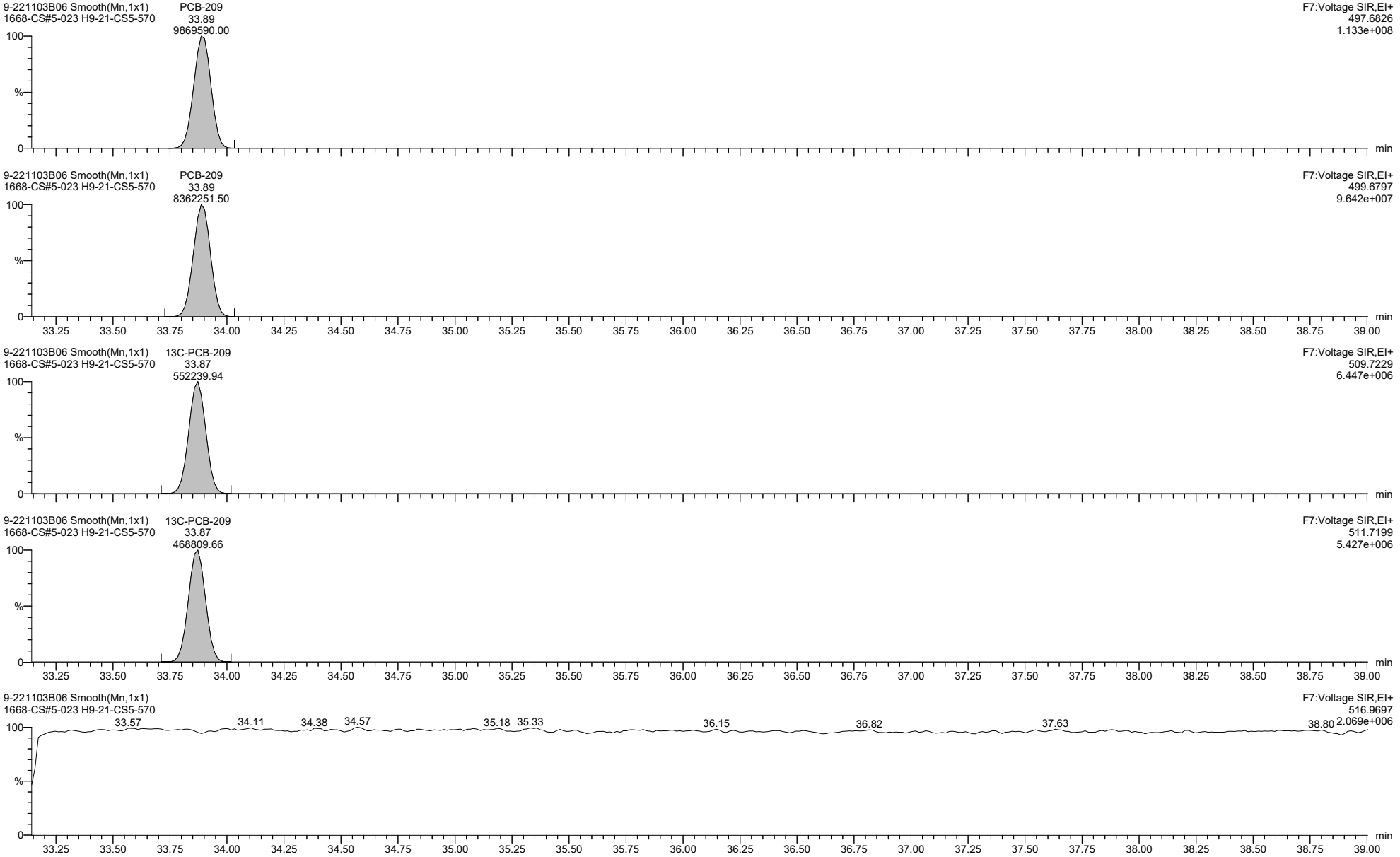


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221103B-PCB-ICAL.qld

Last Altered: Friday, November 04, 2022 09:45:08 Eastern Daylight Time
Printed: Wednesday, November 09, 2022 15:41:14 Eastern Standard Time

Name: 9-221103B06, Date: 03-Nov-2022, Time: 21:03:13, ID: H9-21-CS5-570, Description: 1668-CS#5-023, Vial: Tray1:7



Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221103B-QC.qld

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Printed: Wednesday, November 09, 2022 15:44:24 Eastern Standard Time

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Name: 9-221103B08, Date: 03-Nov-2022, Time: 22:27:49, ID: H9-21-RS1-570, Description: 1668-RS#1-023, Vial: Tray1:9

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
1	PCB-1		1684392	1272709	411683	3.09	NO	8.86	1.00	8.82	8.89	50.50598	101.0		1061	2331
2	PCB-3		1663286	1258179	405107	3.11	NO	10.41	1.00	10.37	10.44	49.68611	99.4		1061	2331
3	PCB-4		1135410	676489	458921	1.47	NO	10.57	1.00	10.54	10.60	48.17560	96.4		1823	7918
4	PCB-15		1580416	970865	609551	1.59	NO	14.28	1.00	14.24	14.31	44.43116	88.9		4515	56852
5	PCB-19		1889497	948927	940570	1.01	NO	12.60	1.00	12.56	12.63	51.36215	102.7		2631	2233
6	PCB-37		1417474	727016	690458	1.05	NO	18.25	1.00	18.22	18.28	49.00257	98.0		2426	2360
7	PCB-54		1670757	731097	939661	0.78	NO	14.47	1.00	14.44	14.50	57.14220	114.3		903	1417
8	PCB-81		1294068	563102	730966	0.77	NO	21.86	1.00	21.82	21.89	43.80739	87.6		3232	3054
9	PCB-77		1270791	553121	717670	0.77	NO	22.15	1.00	22.12	22.18	42.67520	85.4		3232	3054
10	PCB-104		1295962	790227	505736	1.56	NO	17.59	1.00	17.55	17.62	42.45870	84.9		951	1929
11	PCB-123		1053826	640235	413591	1.55	NO	23.18	1.00	23.15	23.22	45.41450	90.8		4153	3193
12	PCB-118		1119978	680406	439572	1.55	NO	23.36	1.00	23.33	23.40	43.77528	87.6		4153	3193
13	PCB-114		1107980	676207	431773	1.57	NO	23.65	1.00	23.62	23.69	46.36943	92.7		4153	3193
14	PCB-105		1067174	646793	420381	1.54	NO	23.99	1.00	23.96	24.03	44.73674	89.5		4153	3193
15	PCB-126		1068100	648238	419862	1.54	NO	25.59	1.00	25.55	25.62	45.18152	90.4		4153	3193
16	PCB-155		1402092	776909	625183	1.24	NO	20.63	1.00	20.59	20.66	44.17572	88.4		1267	1119
17	PCB-167		957288	531348	425940	1.25	NO	26.53	1.00	26.50	26.56	46.88017	93.8		2503	2238
18	PCB-156/157		1851181	1027067	824115	1.25	NO	27.15	1.00	27.11	27.18	93.80021	93.8		2503	2238
19	PCB-169		833711	466941	366771	1.27	NO	28.81	1.00	28.78	28.85	47.13573	94.3		2503	2238
20	PCB-188		1115888	562595	553294	1.02	NO	23.63	1.00	23.60	23.66	45.54235	91.1		1882	1735
21	PCB-189		769818	394385	375432	1.05	NO	30.12	1.00	30.08	30.15	48.35142	96.7		3815	3174
22	PCB-202		1191645	557981	633664	0.88	NO	26.41	1.00	26.38	26.44	50.62553	101.3		1939	2610
23	PCB-205		570188	273541	296647	0.92	NO	31.56	1.00	31.53	31.59	47.78799	95.6		3456	3123
24	PCB-208		605952	266270	339682	0.78	NO	29.87	1.00	29.84	29.91	46.26947	92.5		3201	4229
25	PCB-206		366028	160329	205699	0.78	NO	32.68	1.00	32.65	32.72	46.14333	92.3		3201	4229
26	PCB-209		502811	271895	230916	1.18	NO	33.87	1.00	33.84	33.91	52.15715	104.3		262	350
27	13C-PCB-31		2727317	1385848	1341469	1.03	NO	15.83	0.87	15.80	15.87	104.94334	104.9		25393	12497
28	13C-PCB-95		1893201	1154453	738748	1.56	NO	19.16	1.09	19.13	19.20	94.74109	94.7		2150	1547
29	13C-PCB-153		1711222	956788	754433	1.27	NO	24.31	1.18	24.27	24.34	102.01077	102.0		4406	4579
30	13C-PCB-28		2920738	1490928	1429810	1.04	NO	16.01	0.94	15.98	16.04	111.17753	111.2		25393	12497
31	13C-PCB-111		2009632	1223924	785708	1.56	NO	22.12	1.07	22.09	22.16	105.49332	105.5		2150	1547
32	13C-PCB-178		1658885	843938	814946	1.04	NO	25.19	1.01	25.15	25.22	102.07408	102.1		6255	6013
33	13C-PCB-1		2870587	2193836	676751	3.24	NO	8.84	0.75	8.81	8.88	107.37187	107.4		2998	12175
34	13C-PCB-3		2730302	2070374	659928	3.14	NO	10.39	0.88	10.36	10.43	105.66975	105.7		2998	12175

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221103B-QC.qld

Last Altered: Friday, November 04, 2022 09:59:29 Eastern Daylight Time
Printed: Wednesday, November 09, 2022 15:44:24 Eastern Standard Time

Name: 9-221103B08, Date: 03-Nov-2022, Time: 22:27:49, ID: H9-21-RS1-570, Description: 1668-RS#1-023, Vial: Tray1:9

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
35	13C-PCB-4		2722605	1648122	1074483	1.53	NO	10.57	0.89	10.54	10.60	100.79778	100.8		12523	3382
36	13C-PCB-15		3127451	1921227	1206223	1.59	NO	14.27	1.20	14.23	14.30	112.50936	112.5		13200	4488
37	13C-PCB-19		3296658	1687347	1609311	1.05	NO	12.58	1.06	12.55	12.61	106.02593	106.0		34825	36459
38	13C-PCB-37		2631229	1345947	1285282	1.05	NO	18.24	1.07	18.21	18.28	106.73340	106.7		25393	12497
39	13C-PCB-54		3342875	1411309	1931566	0.73	NO	14.45	0.85	14.42	14.48	92.20515	92.2		7405	3773
40	13C-PCB-81		2330622	1047131	1283491	0.82	NO	21.85	1.05	21.81	21.88	113.86602	113.9		7565	4563
41	13C-PCB-77		2377545	1063344	1314201	0.81	NO	22.14	1.07	22.11	22.18	114.31735	114.3		7565	4563
42	13C-PCB-104		2652703	1611735	1040969	1.55	NO	17.57	1.03	17.53	17.60	105.84580	105.8		1373	1637
43	13C-PCB-123		2124609	1292389	832221	1.55	NO	23.17	1.12	23.14	23.20	111.83837	111.8		7828	5107
44	13C-PCB-118		1982127	1217875	764252	1.59	NO	23.35	1.13	23.32	23.38	113.22607	113.2		7828	5107
45	13C-PCB-114		2145039	1303246	841793	1.55	NO	23.64	0.95	23.61	23.67	113.35510	113.4		7828	5107
46	13C-PCB-105		2030306	1247767	782539	1.59	NO	23.98	0.96	23.95	24.01	112.66017	112.7		7828	5107
47	13C-PCB-126		2050775	1267701	783073	1.62	NO	25.58	1.02	25.54	25.61	112.23064	112.2		7828	5107
48	13C-PCB-155		2866607	1601656	1264951	1.27	NO	20.62	1.00	20.58	20.65	109.36857	109.4		1558	1608
49	13C-PCB-167		1748622	971966	776656	1.25	NO	26.52	1.06	26.48	26.55	102.91370	102.9		4406	4579
50	13C-PCB-156/157		3350486	1871752	1478734	1.27	NO	27.13	1.09	27.10	27.17	207.00216	103.5		4406	4579
51	13C-PCB-169		1552809	866028	686781	1.26	NO	28.80	1.15	28.77	28.83	98.57412	98.6		4406	4579
52	13C-PCB-188		2296652	1160320	1136332	1.02	NO	23.62	0.95	23.58	23.65	100.63334	100.6		6255	6013
53	13C-PCB-189		1599069	811503	787566	1.03	NO	30.10	0.96	30.07	30.14	97.13648	97.1		7258	4892
54	13C-PCB-202		2451578	1133721	1317857	0.86	NO	26.40	1.06	26.36	26.43	97.46224	97.5		6586	6140
55	13C-PCB-205		1112569	525368	587200	0.89	NO	31.55	1.01	31.51	31.58	104.32599	104.3		5376	7656
56	13C-PCB-208		1255303	550695	704608	0.78	NO	29.86	0.96	29.83	29.89	104.93910	104.9		5969	6854
57	13C-PCB-206		754063	333142	420921	0.79	NO	32.67	1.05	32.64	32.70	99.82347	99.8		5969	6854
58	13C-PCB-209		1044279	565870	478409	1.18	NO	33.86	1.08	33.82	33.89	103.21435	103.2		300	304
59	13C-PCB-9		4104710	2472799	1631911	1.52	NO	11.85	0.47	11.82	11.88	99.80301	99.8		12523	3382
60	13C-PCB-52		1609907	705618	904289	0.78	NO	17.02	0.68	16.98	17.05	98.53891	98.5		5747	4199
61	13C-PCB-101		1555841	950754	605087	1.57	NO	20.72	0.83	20.68	20.75	98.58932	98.6		2150	1547
62	13C-PCB-138		1397747	778882	618866	1.26	NO	24.97	0.00	24.94	25.00	105.41423	105.4		4406	4579
63	13C-PCB-194		863716	405313	458403	0.88	NO	31.25	1.25	31.22	31.28	94.88011	94.9		5376	7656
64	Total MoCB-F1	3		2569420								42935.59004			1061	
65	Total DiCB-F1	3		717496								79847.68614			1823	
66	Total DiCB-F2	3		986163								20951.97154			4515	
67	Total TrCB-F1	1		948927								51.36215			2631	
68	Total TrCB-F3	5		730205								6915.52580			2426	
69	Total TeCB-F2	1		731097								57.14220			903	
70	Total TeCB-F4	9		1128096								21136.13912			3232	
71	Total PeCB-F3	1		790227								42.45870			951	

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Last Altered: Friday, November 04, 2022 09:59:29 Eastern Daylight Time
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Name: 9-221103B08, Date: 03-Nov-2022, Time: 22:27:49, ID: H9-21-RS1-570, Description: 1668-RS#1-023, Vial: Tray1:9

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
72	Total PeCB-F5	11		3356596								91407.48001			4153	
73	Total HxCB-F4	1		776909								44.17572			1267	
74	Total HxCB-F5	6		2038050								19769.04556			2503	
75	Total HpCB-F5	12		595925								61092.96549			1882	
76	Total HpCB-F6	10		418874								47793.49888			3815	
77	Total OcCB-F5	10		564923								14608.73105			1939	
78	Total OcCB-F6	4		300027								53246.98868			3456	
79	Total NoCB-F6	3		427204								1077.81263			3201	
80	Total DeCB-F7	1		271895								52.15715			262	
81	Total 13C-MoCB-F1	4		4278092								32711.32363			2998	
82	Total 13C-DiCB-F1	4		4135107								201.58638			12523	
83	Total 13C-DiCB-F2	2		3767235								4433589.605...			13200	
84	Total 13C-TrCB-F1	2		1687888								4133.81800			34825	
85	Total 13C-TrCB-F3	5		4237768								20737.06622			25393	
86	Total 13C-TeCB-F2	1		1411309								92.20515			7405	
87	Total 13C-TeCB-F3	4		733573								102.36850			5747	
88	Total 13C-TeCB-F4	7		2133605								39753.51935			7565	
89	Total 13C-PeCB-F3	2		1611959								416.06410			1373	
90	Total 13C-PeCB-F4	10		3343652								303.24127			2150	
91	Total 13C-PeCB-F5	16		6482662								210974.57875			7828	
92	Total 13C-HxCB-F4	2		1610788								9750.14655			1558	
93	Total 13C-HxCB-F5	10		5489087								645.66032			4406	
94	Total 13C-HpCB-F5	16		2052420								64364.01772			6255	
95	Total 13C-HpCB-F6	11		889862								121708.62343			7258	
96	Total 13C-OcCB-F5	18		1152658								23261.97912			6586	
97	Total 13C-OcCB-F6	5		970594								217.15293			5376	
98	Total 13C-NoCB-F6	2		883837								204.76257			5969	
99	Total 13C-DeCB-F7	1		565870								103.21435			300	
100	Lockmass F1			0											622376	
101	Lockmass F2			0											289698	
102	Lockmass F3			0											698736	
103	Lockmass F4			0											509630	
104	Lockmass F5			0											116617	
105	Lockmass F6			0											94933	
106	Lockmass F7			0											36115	

Quantify Audit Report MassLynx V4.2 SCN1012

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221103B-QC.qld

Last Altered: Friday, November 04, 2022 09:59:29 Eastern Daylight Time
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Date	Time	Event	Details	Comments
04-Nov-22	09:58:30	Process Extract		
04-Nov-22	09:58:30	Process Integrate		
04-Nov-22	09:58:31	Process Quantify		
04-Nov-22	09:58:31	Dataset Created		
04-Nov-22	09:58:56	Pre modification peak	Sample:9-221103B09, Compound:PeCB-F5, RT:23.182	
04-Nov-22	09:58:56	Peak modified	Sample:9-221103B09, Compound:PeCB-F5, RT:23.182	ES221104MB
04-Nov-22	09:58:56	Pre modification peak	Sample:9-221103B09, Compound:PeCB-F5, RT:23.122	
04-Nov-22	09:58:56	Peak modified	Sample:9-221103B09, Compound:PeCB-F5, RT:23.122	ES221104MB
04-Nov-22	09:58:56	Pre modification peak	Sample:9-221103B09, Compound:PeCB-F5, RT:23.182	
04-Nov-22	09:58:56	Peak modified	Sample:9-221103B09, Compound:PeCB-F5, RT:23.182	ES221104MB
04-Nov-22	09:58:56	Pre modification peak	Sample:9-221103B09, Compound:PeCB-F5, RT:23.122	
04-Nov-22	09:58:56	Peak modified	Sample:9-221103B09, Compound:PeCB-F5, RT:23.122	ES221104MB
04-Nov-22	09:59:28	Peak deleted	Sample:9-221103B23, Compound:13C-HxCB-F5, RT:25.116	
04-Nov-22	09:59:28	Peak deleted	Sample:9-221103B23, Compound:13C-HxCB-F5, RT:25.116	
04-Nov-22	09:59:42	Dataset Saved	Saved to 'I:\Organics Instrument\HIGHRES GCMS Complete...	

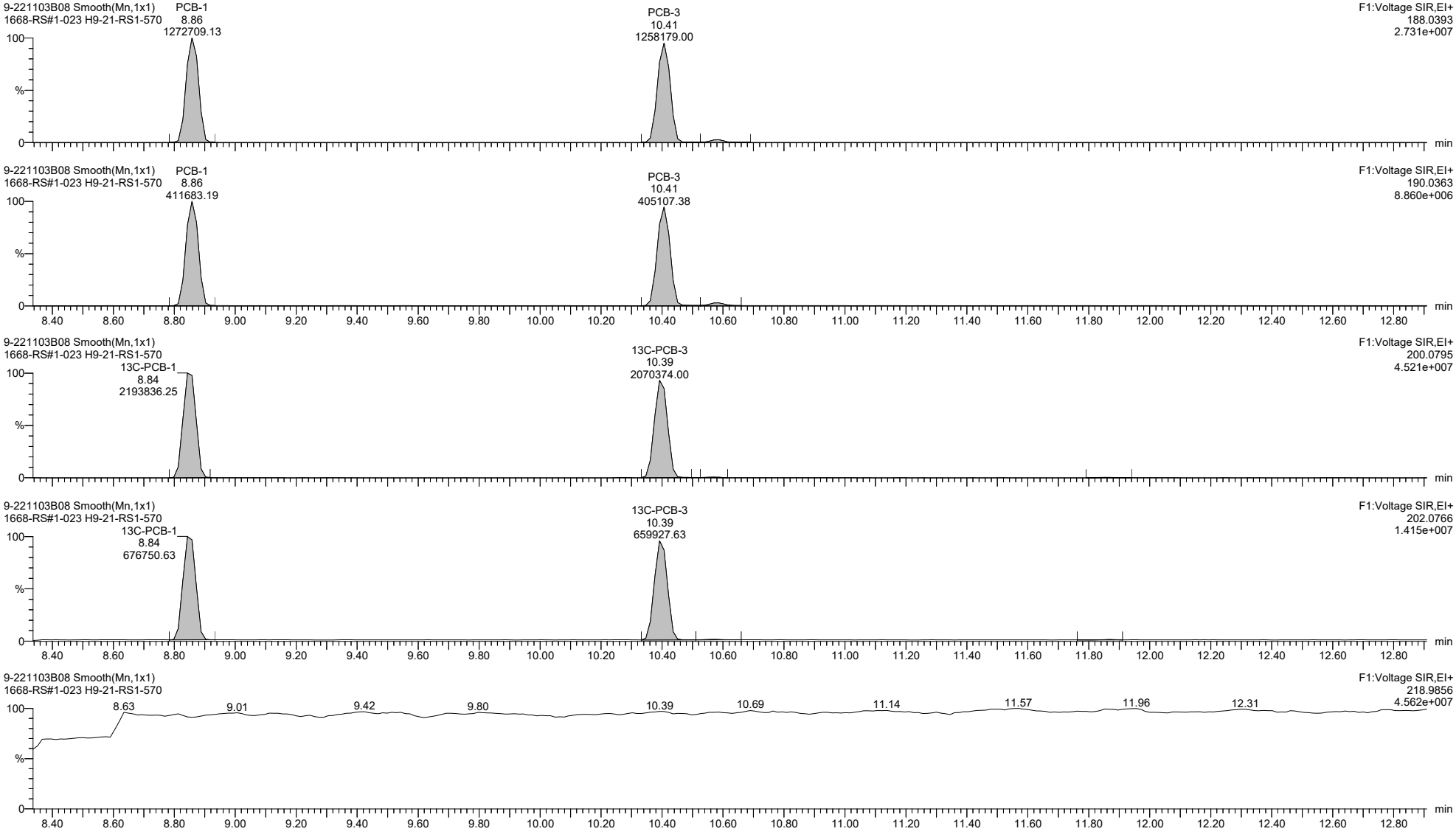
Quantify Sample Template Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221103B-QC.qld

Last Altered: Friday, November 04, 2022 09:59:29 Eastern Daylight Time
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Method: C:\MassLynx\PCB.PRO\MethDB\1668-OCTYL-1-ICAL-10-221103B.mdb 23 Jun 2022 15:50:30
Calibration: C:\MassLynx\PCB.PRO\CurveDB\10-221103B-PCB-ICAL.cdb 04 Nov 2022 10:45:08

Name: 9-221103B08, Date: 03-Nov-2022, Time: 22:27:49, ID: H9-21-RS1-570, Description: 1668-RS#1-023, Vial: Tray1:9

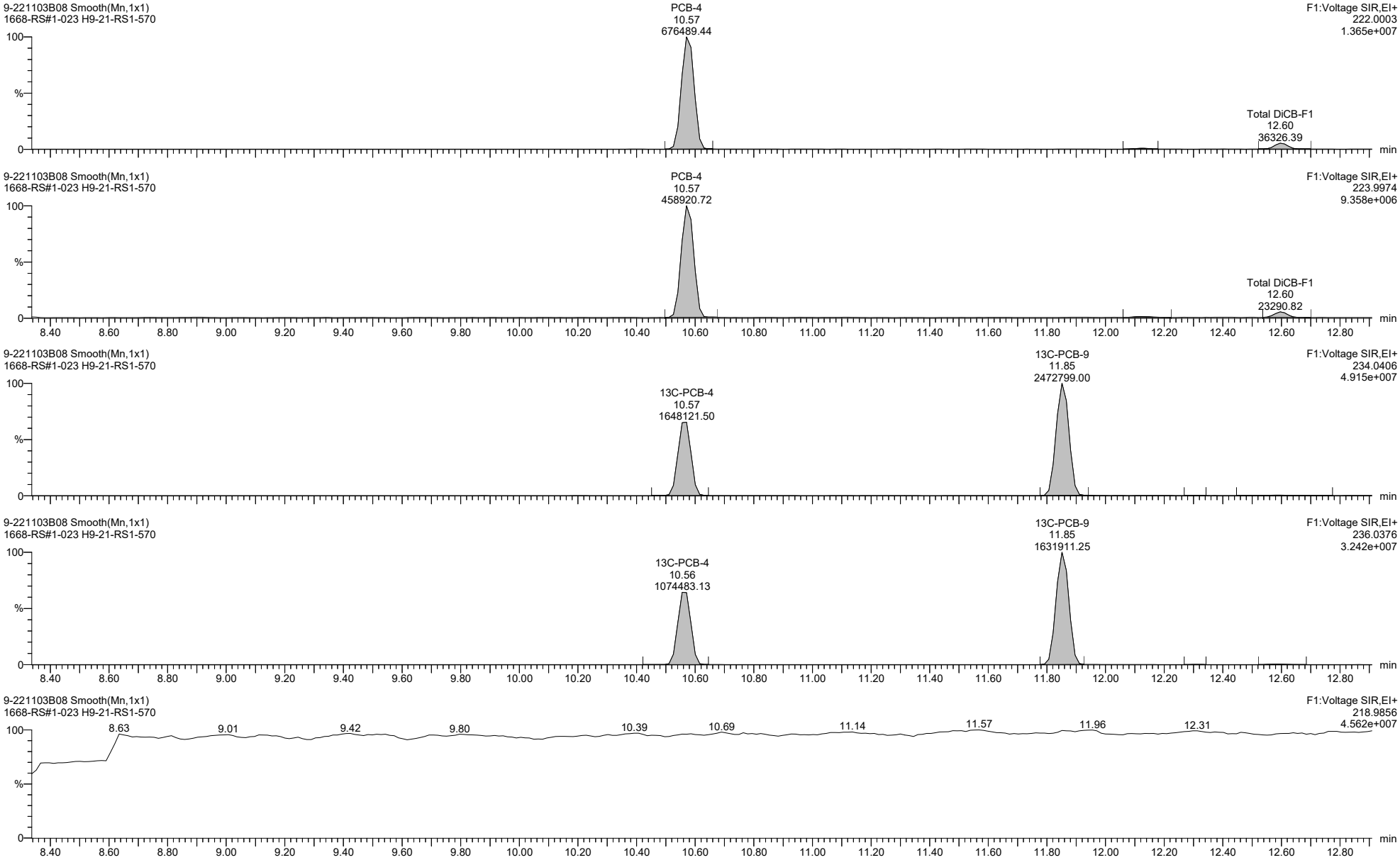


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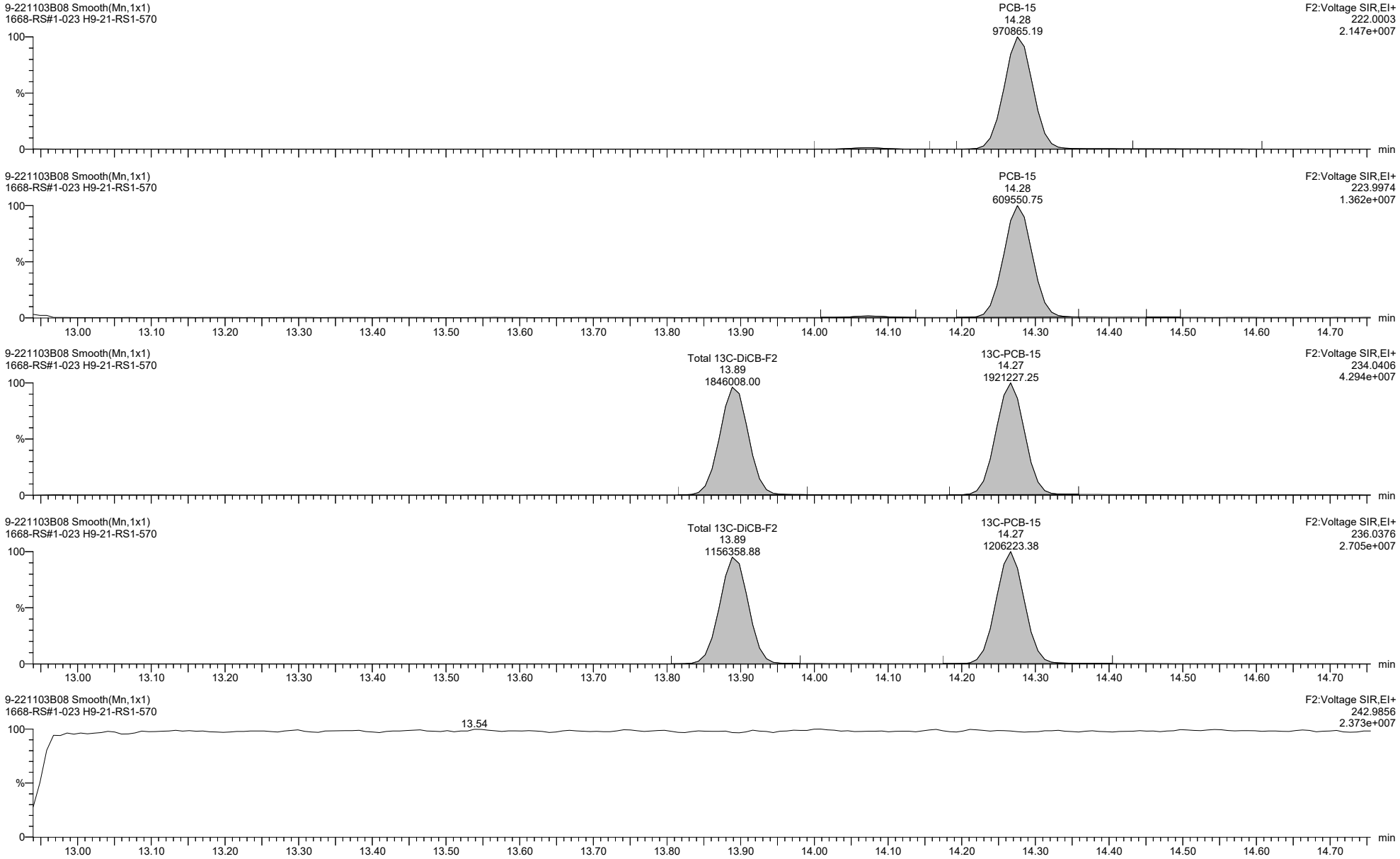


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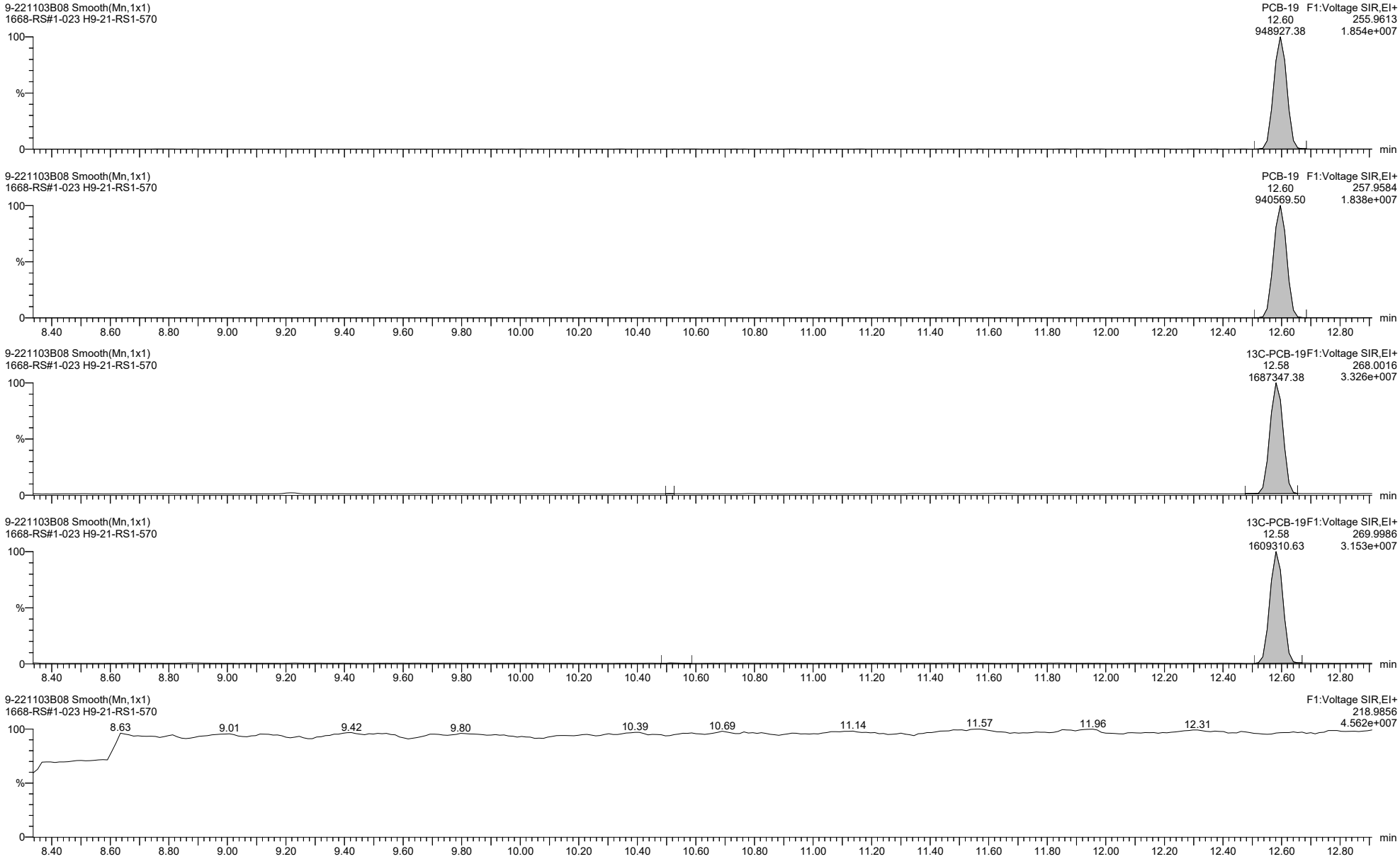


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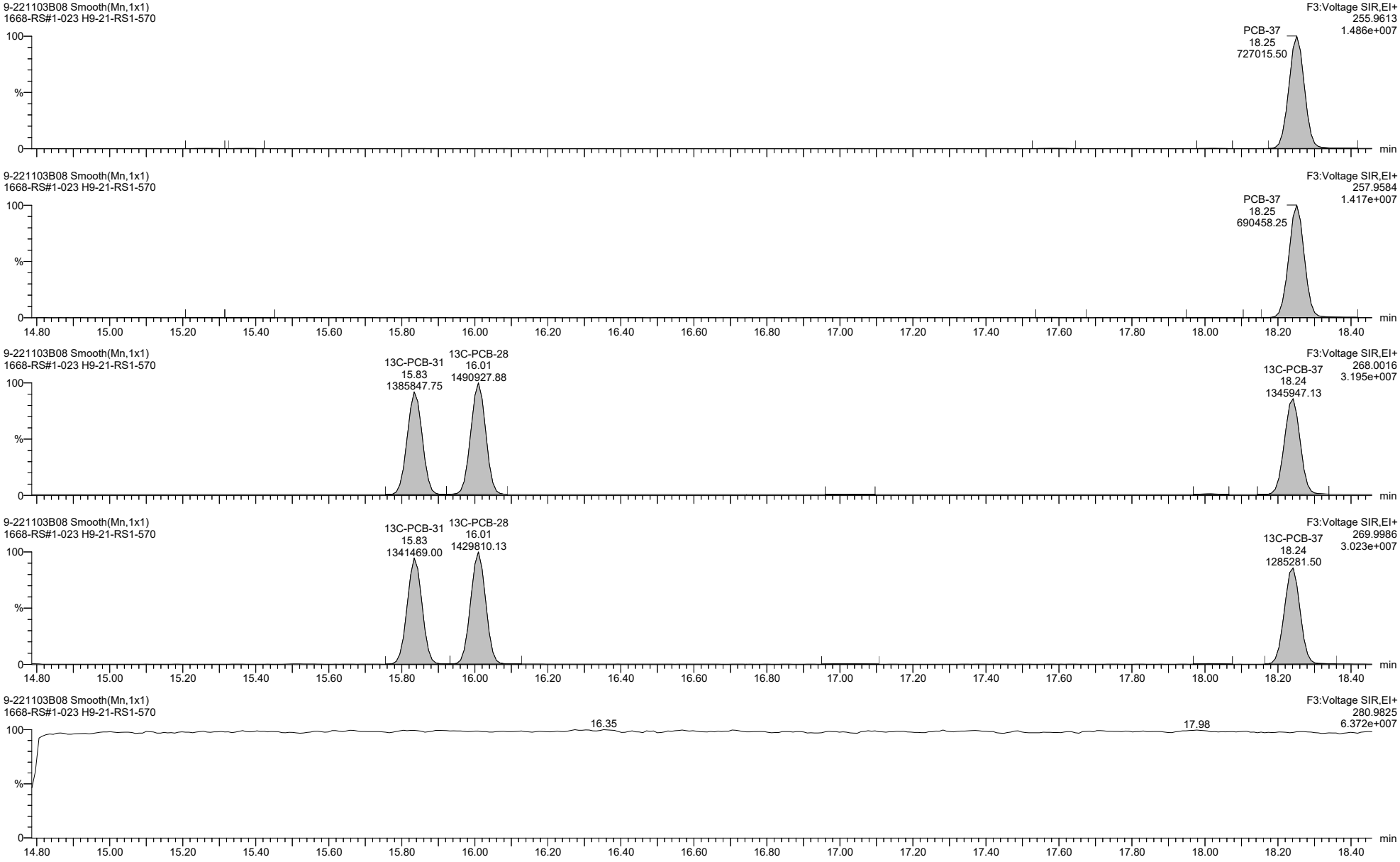
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Name: 9-221103B08, Date: 03-Nov-2022, Time: 22:27:49, ID: H9-21-RS1-570, Description: 1668-RS#1-023, Vial: Tray1:9

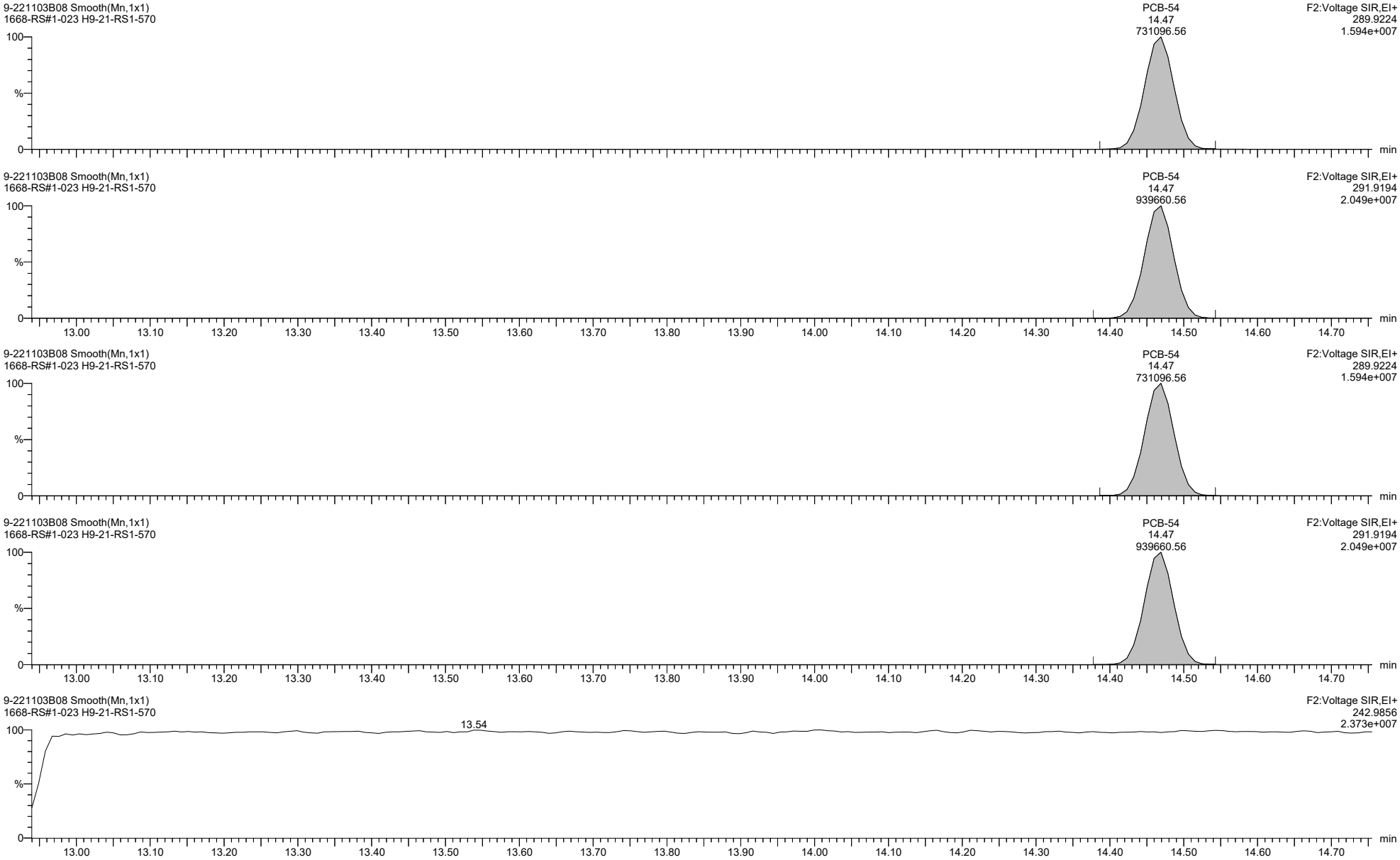


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

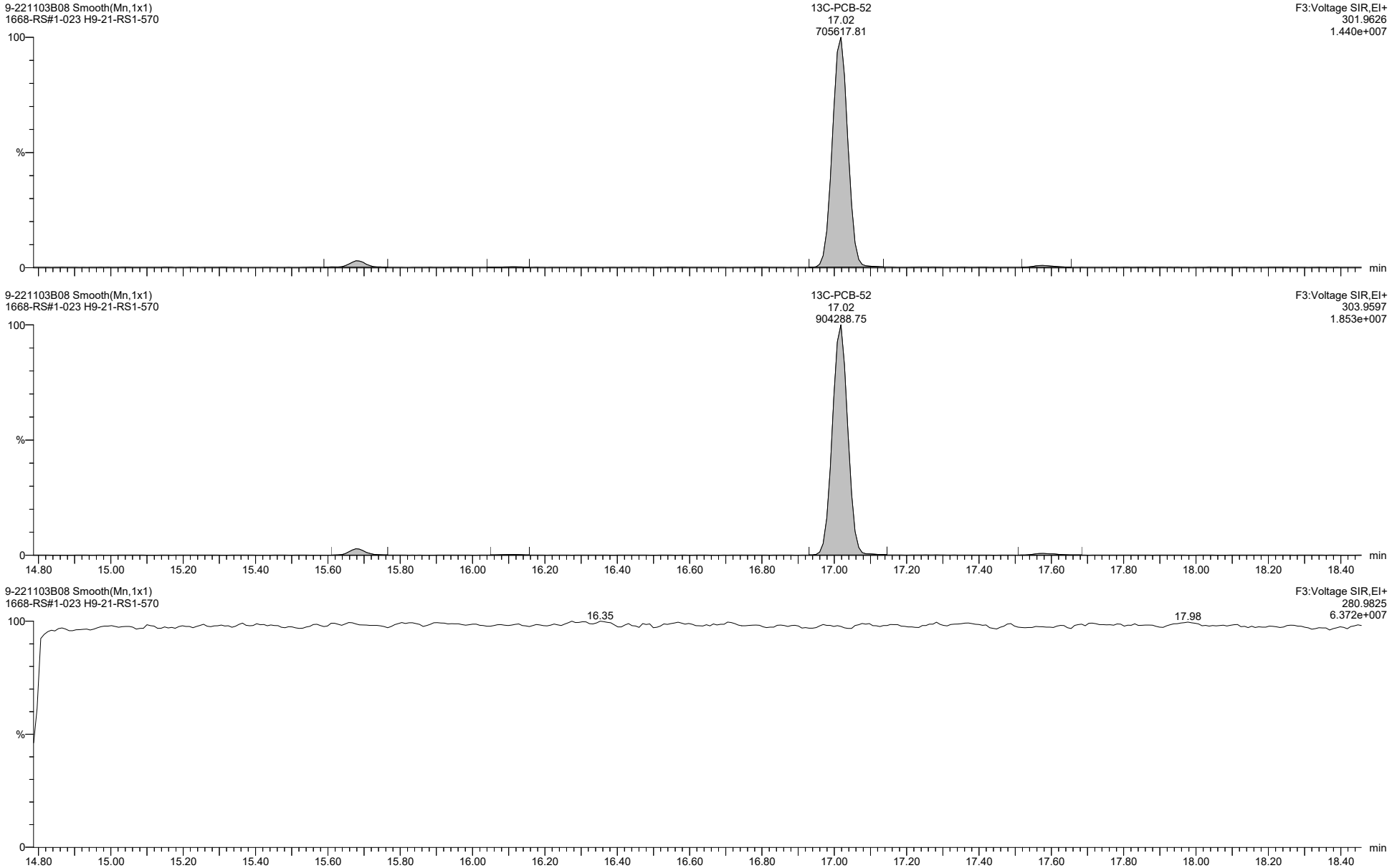
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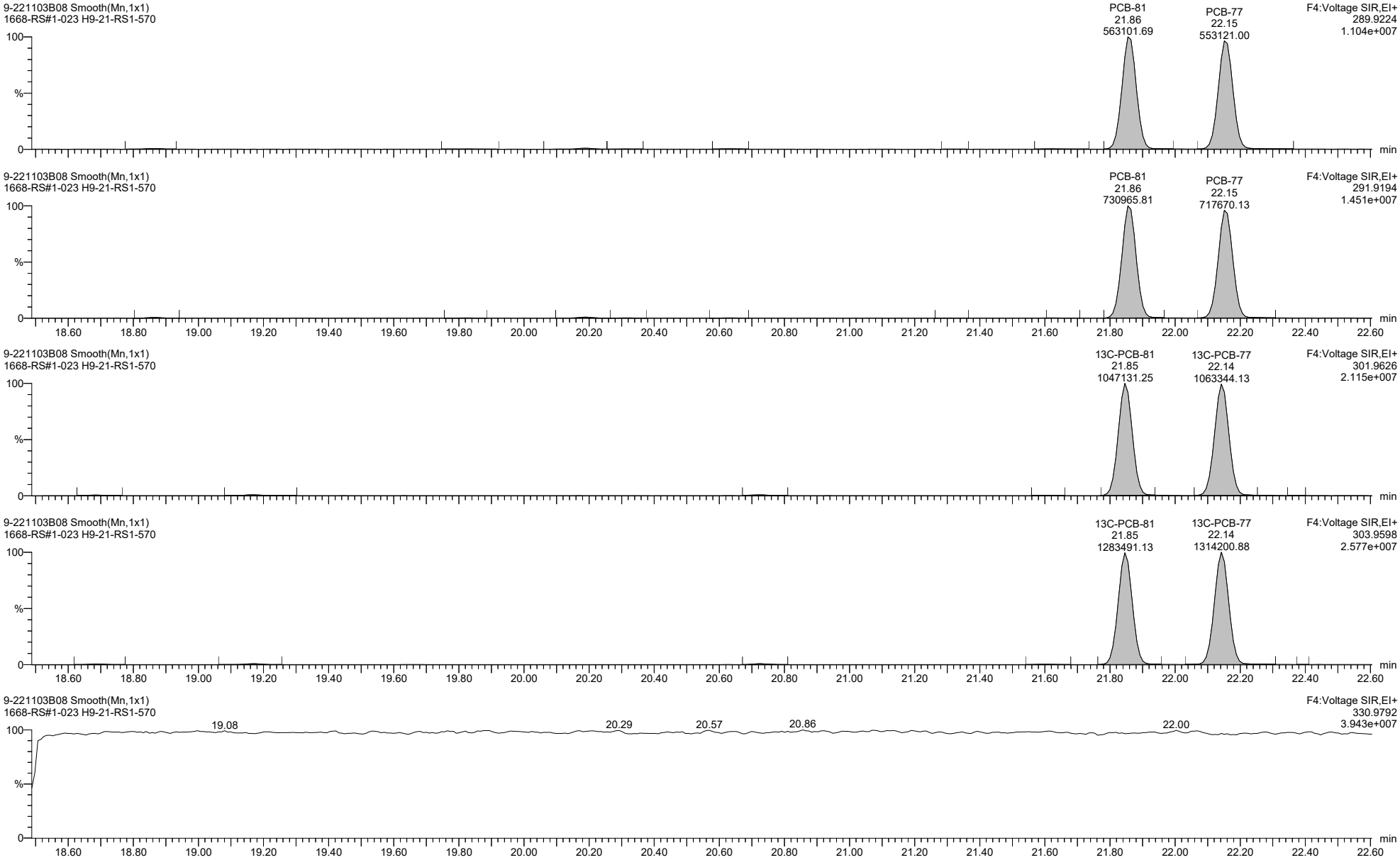


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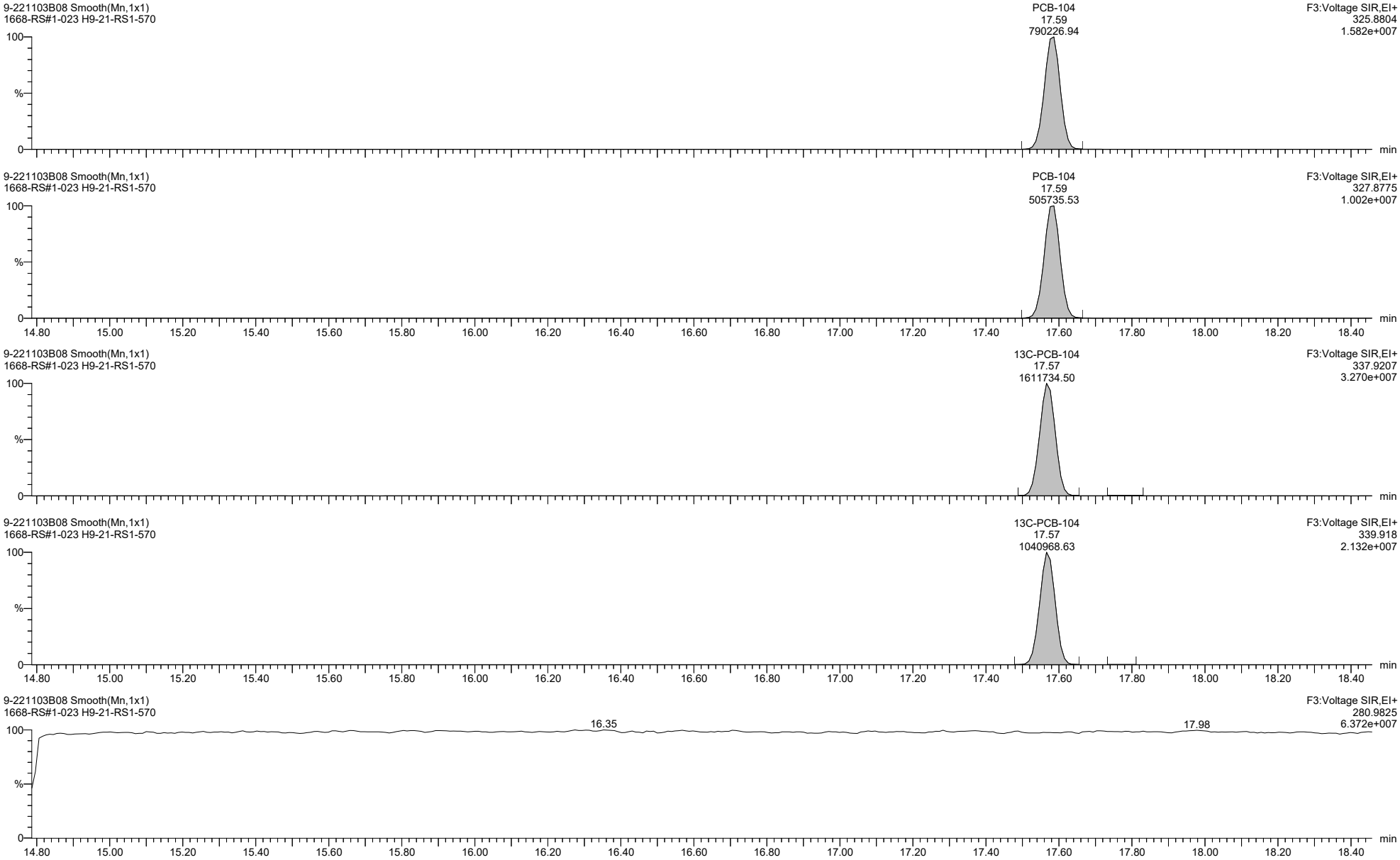


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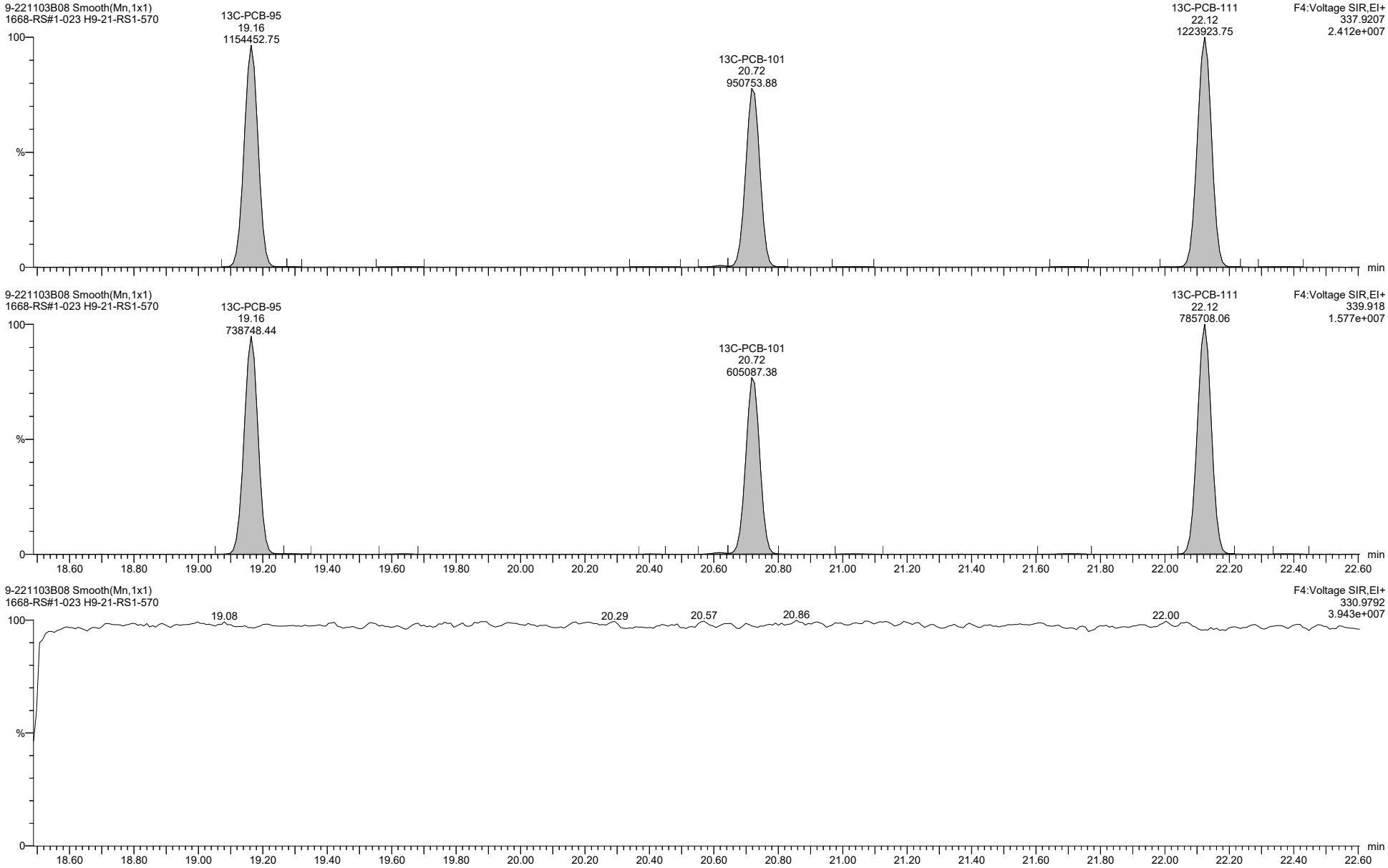


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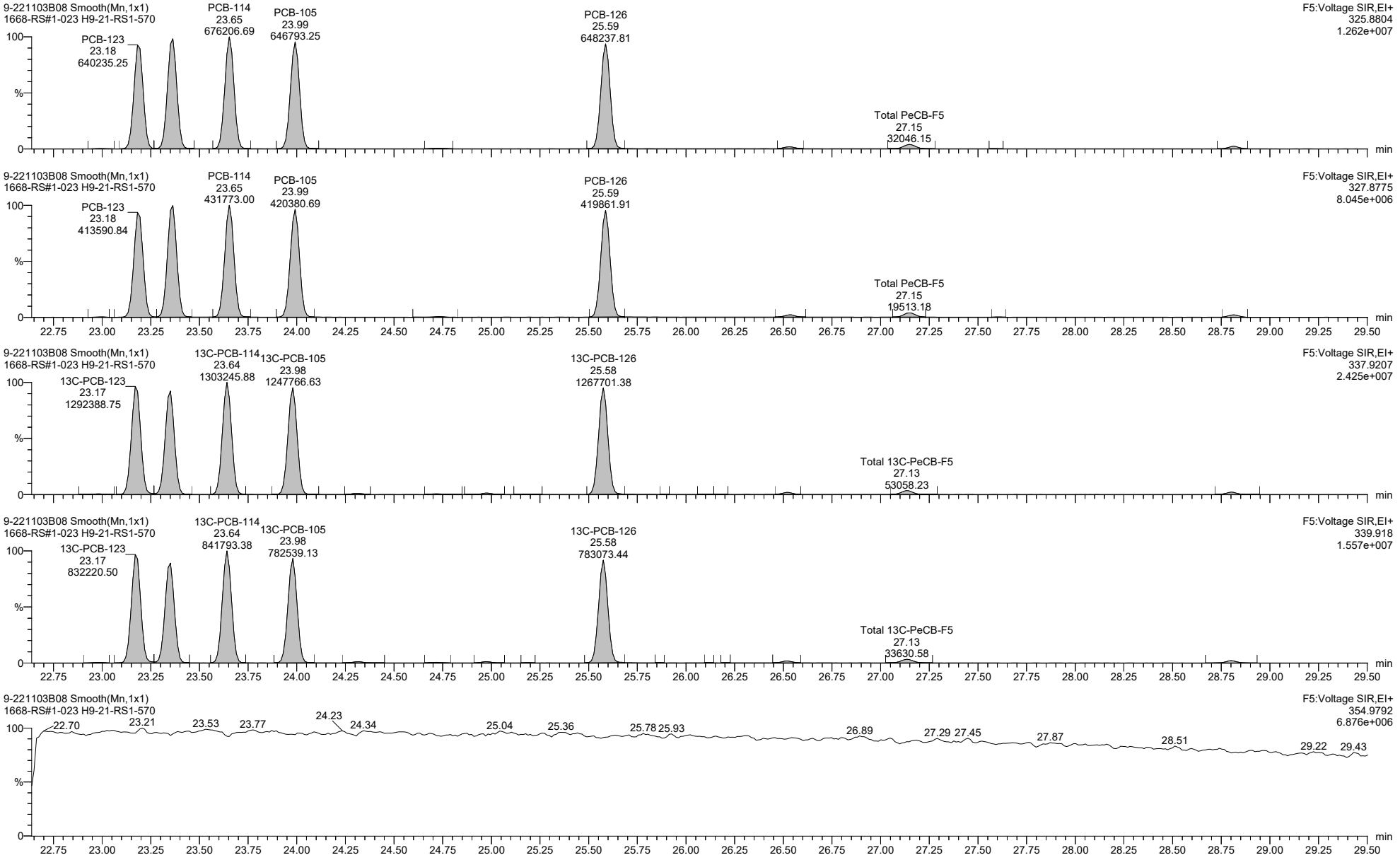


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Printed: Wednesday, November 09, 2022 15:44:24 Eastern Standard Time

Name: 9-221103B08, Date: 03-Nov-2022, Time: 22:27:49, ID: H9-21-RS1-570, Description: 1668-RS#1-023, Vial: Tray1:9

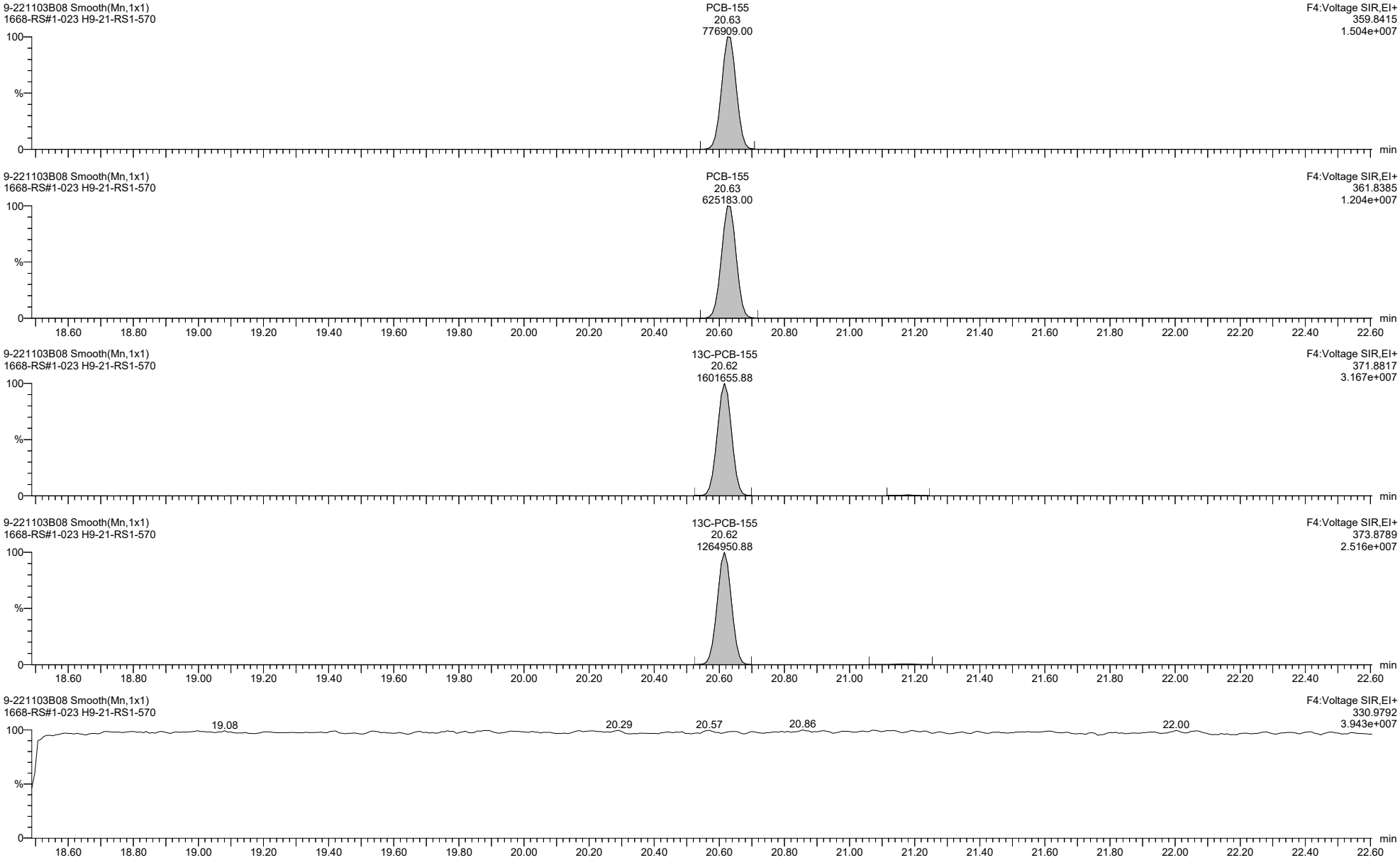


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

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Last Altered: Friday, November 04, 2022 09:59:29 Eastern Daylight Time
Printed: Wednesday, November 09, 2022 15:44:24 Eastern Standard Time

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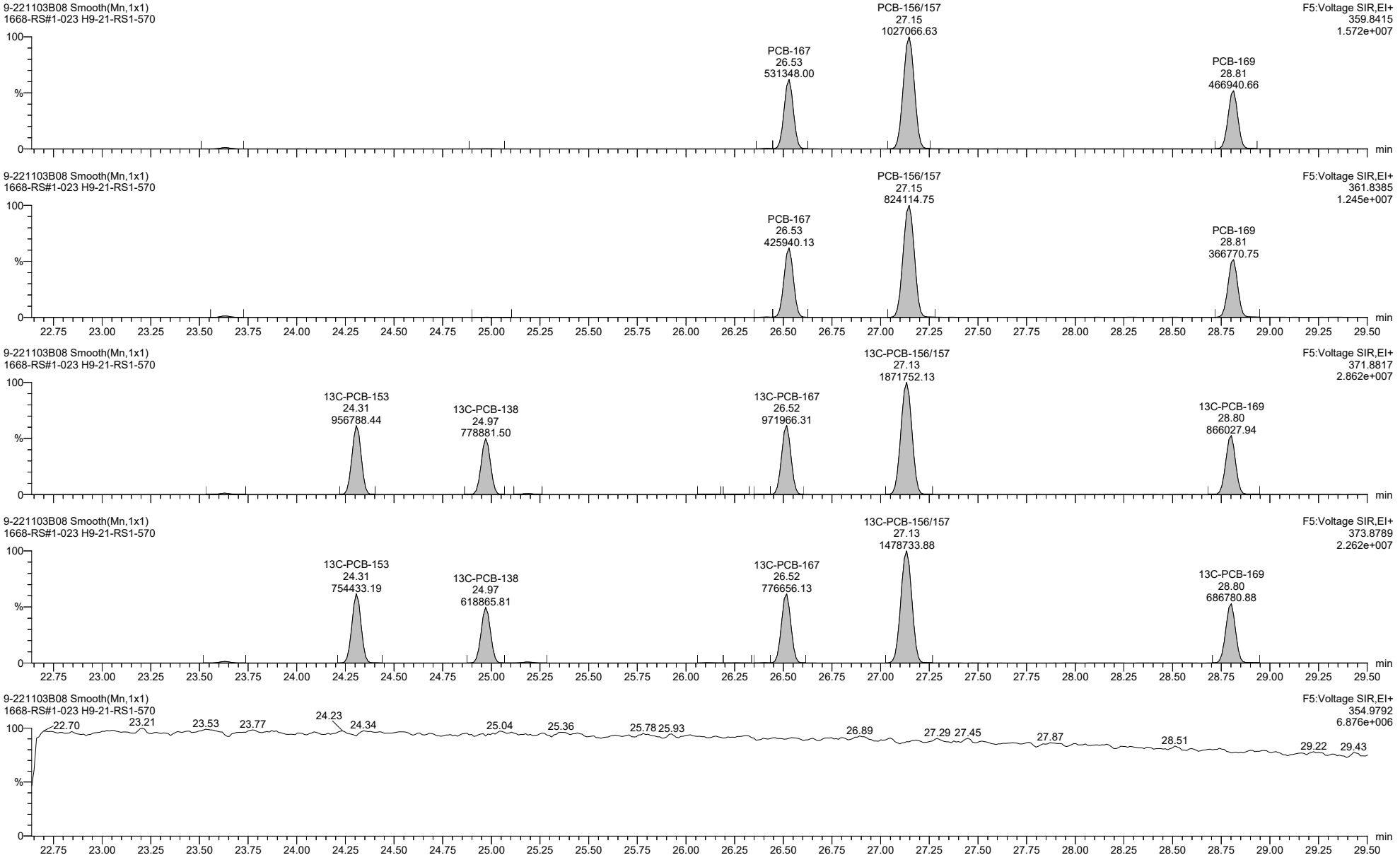


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

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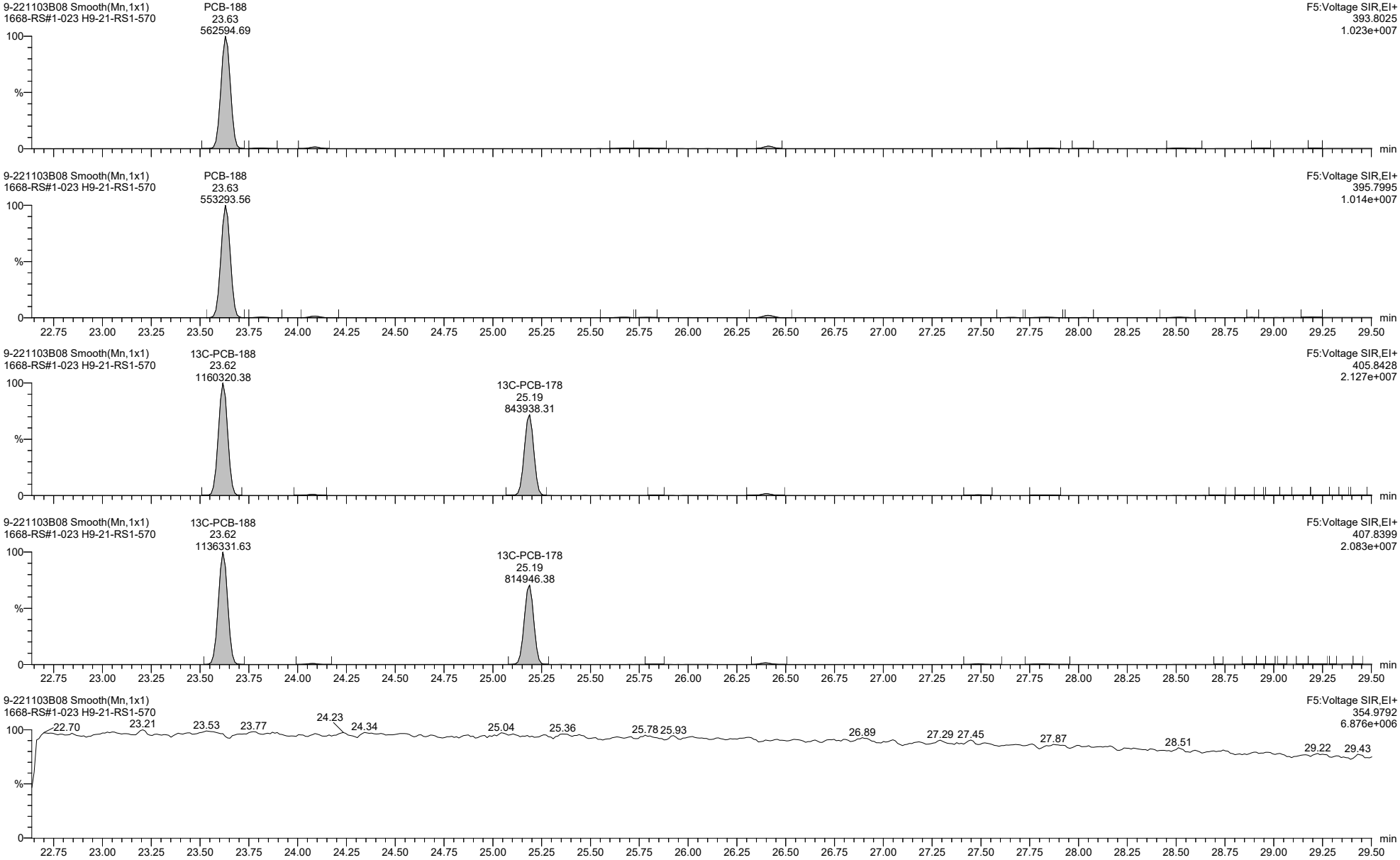


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

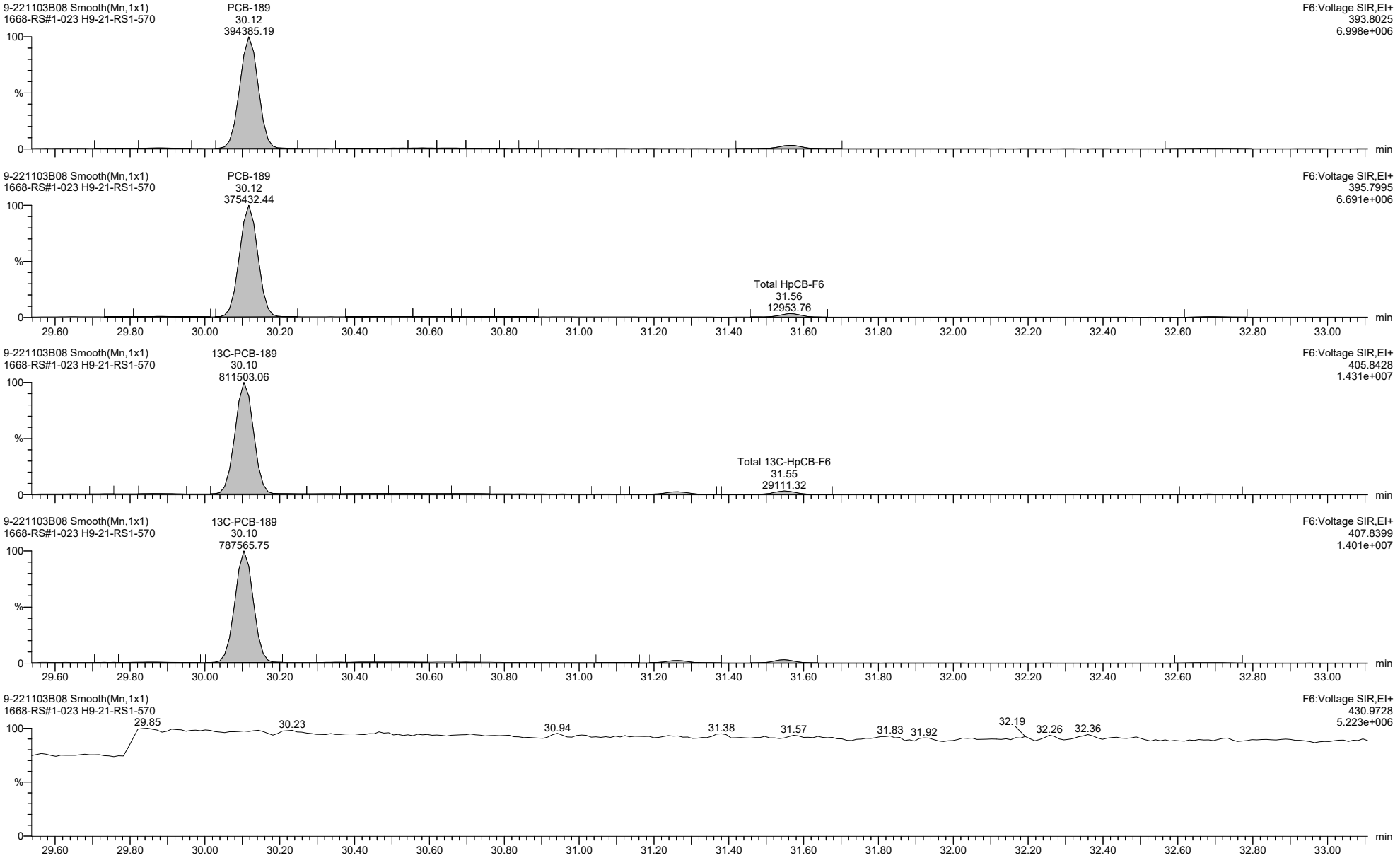
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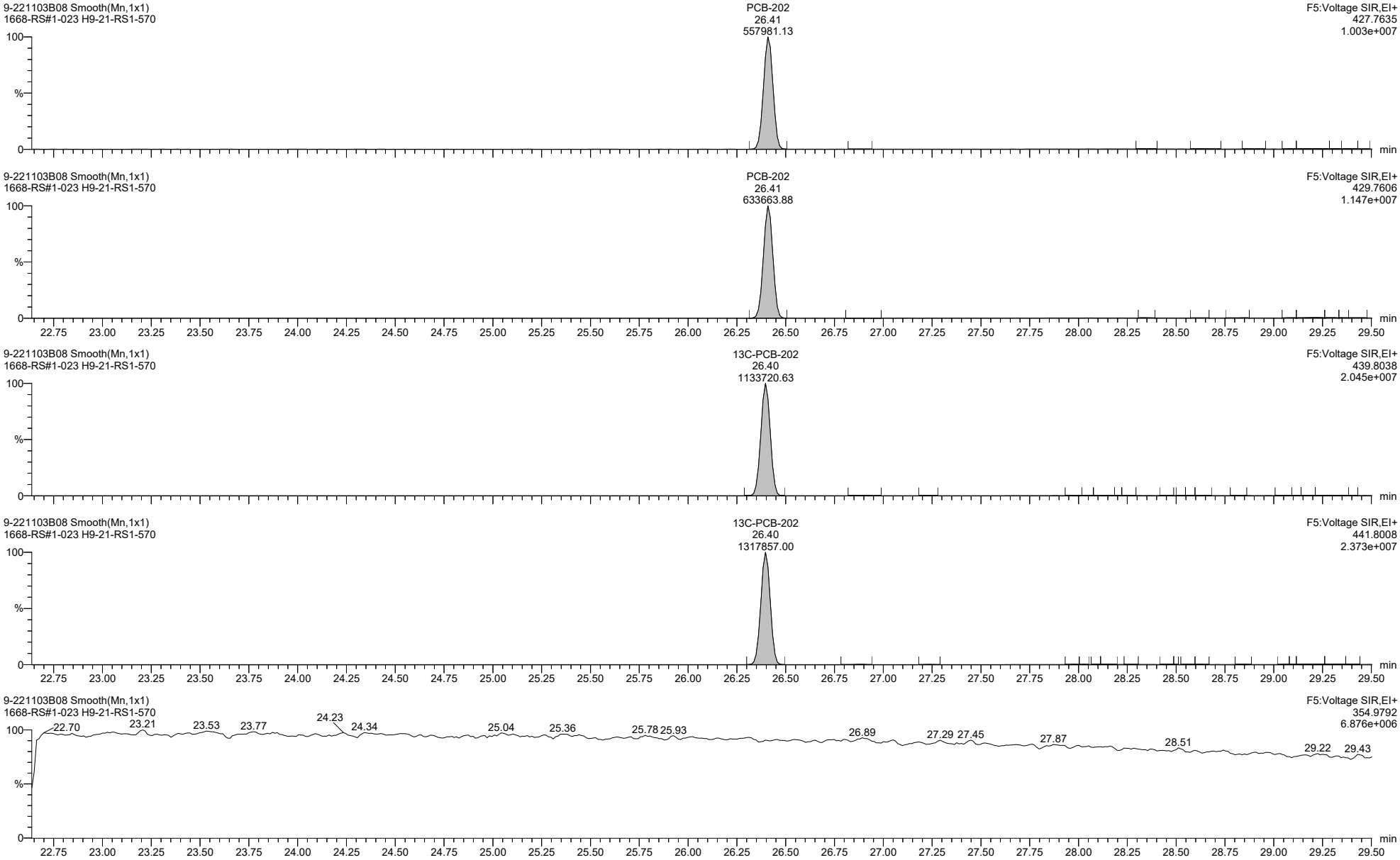


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

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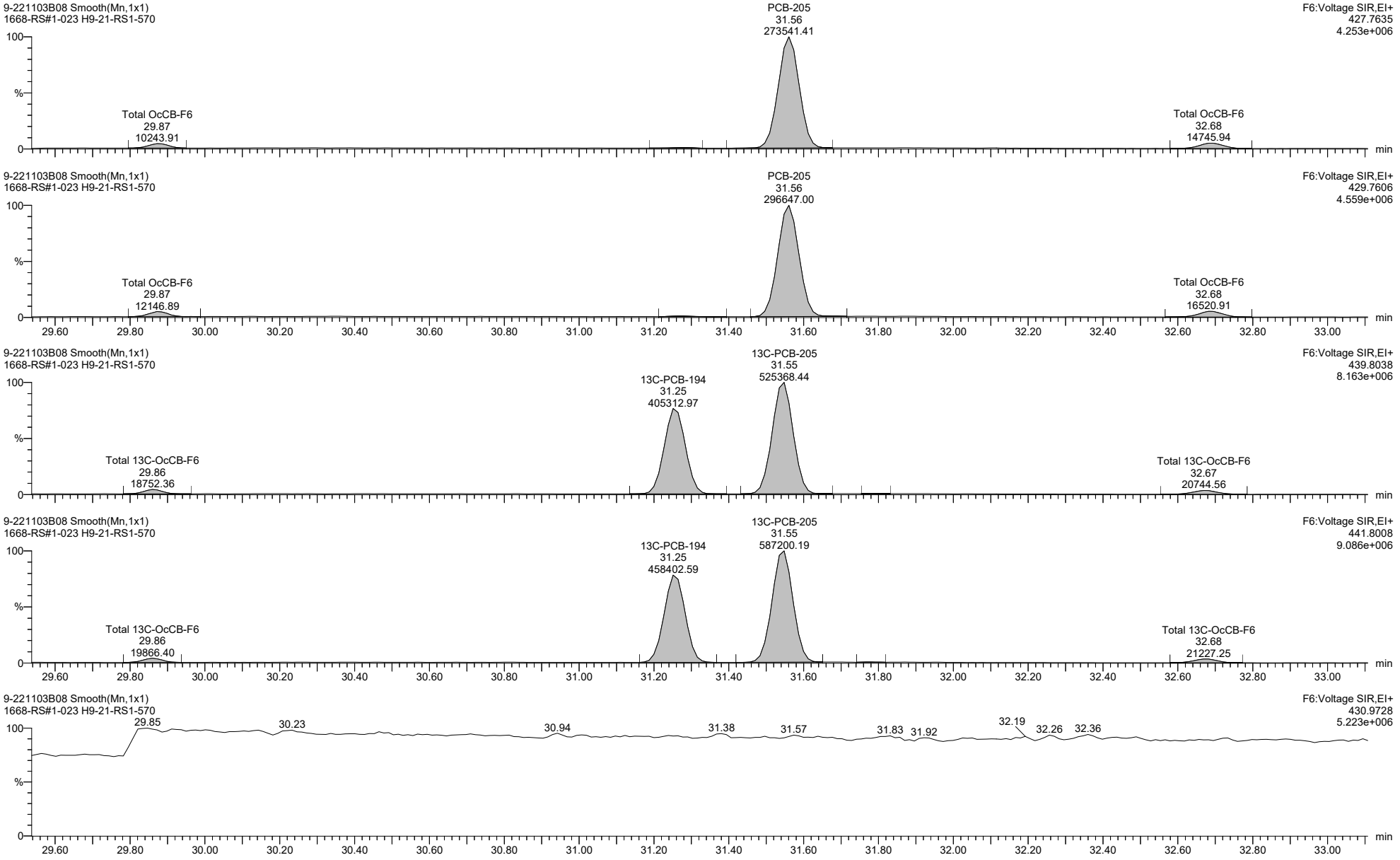


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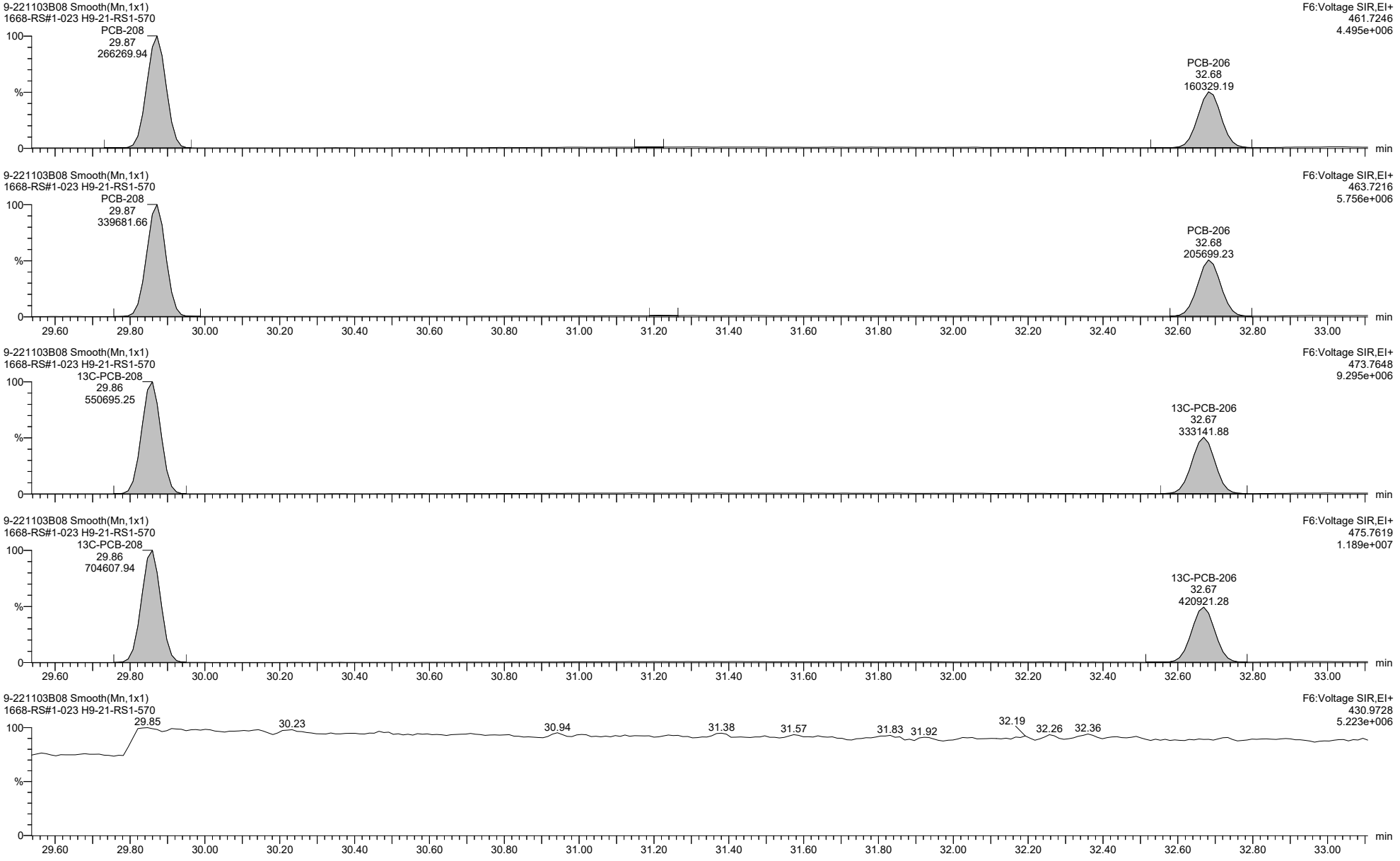


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

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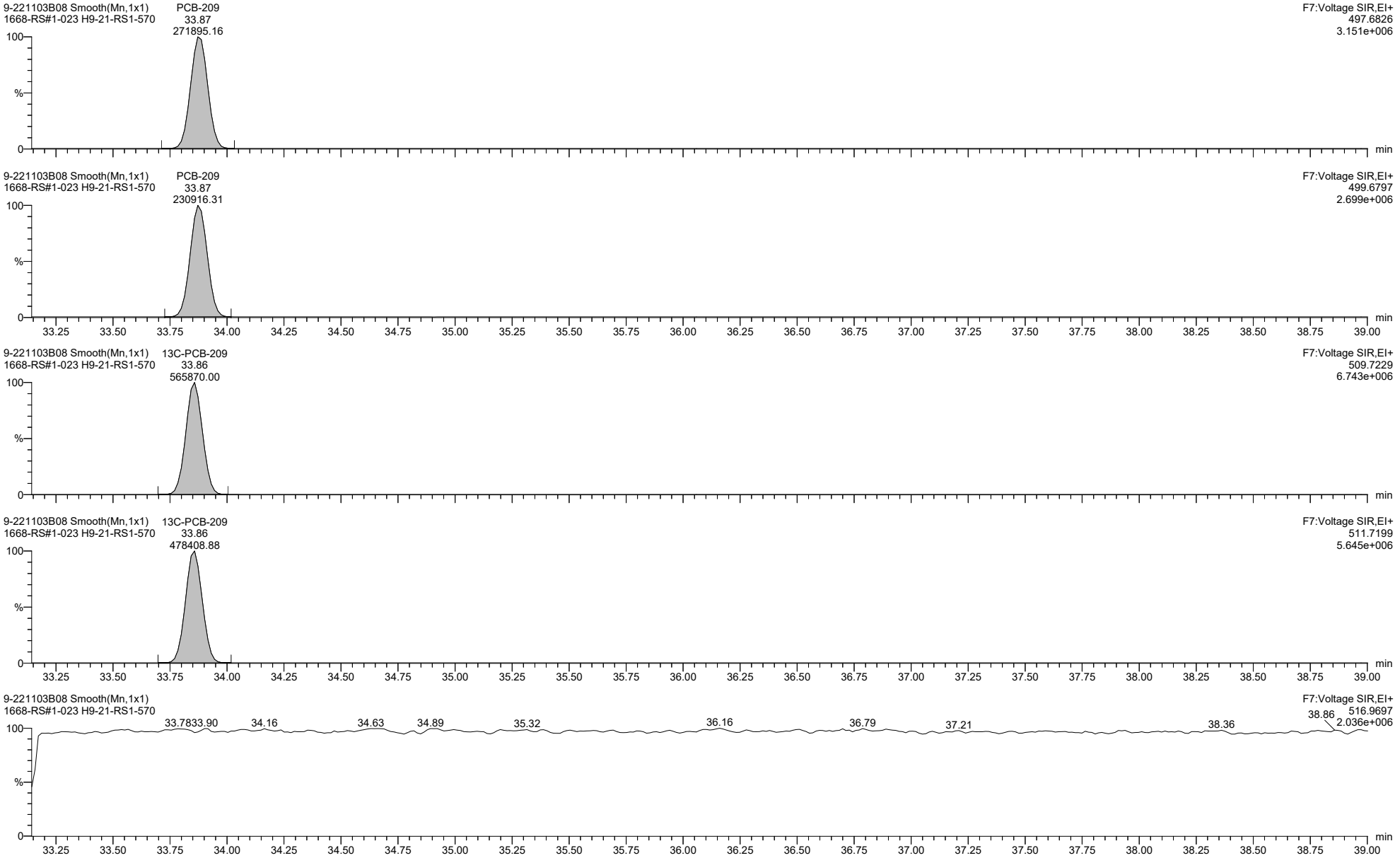


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

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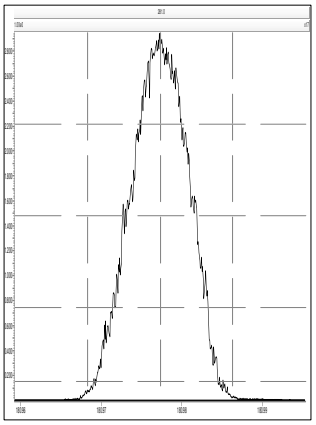
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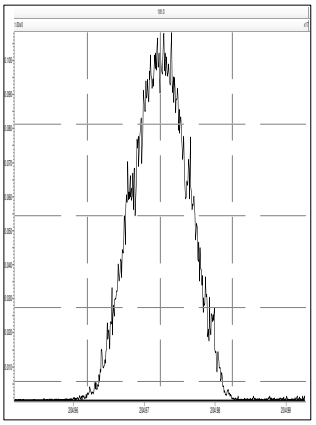
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Printed: Thursday, November 03, 2022 17:23:06 Eastern Daylight Time

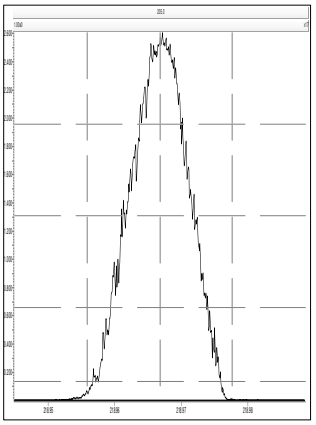
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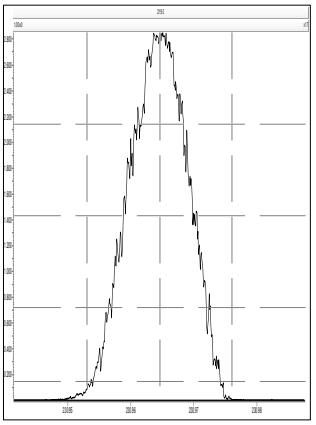
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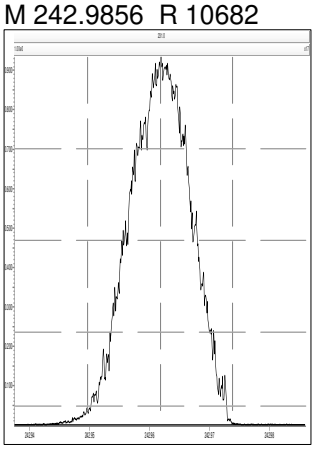
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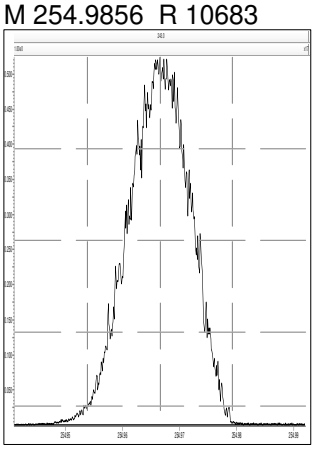
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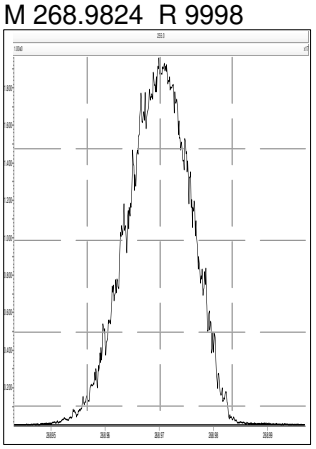
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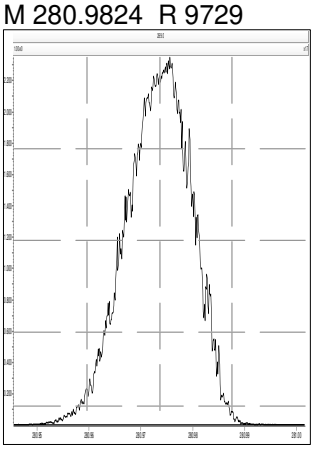
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M 268.9824 R 9998



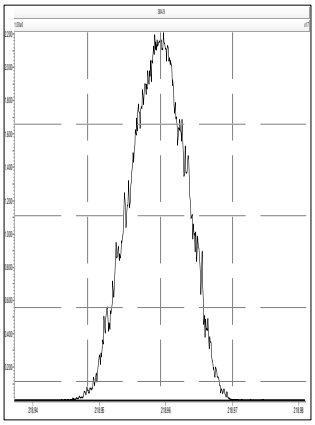
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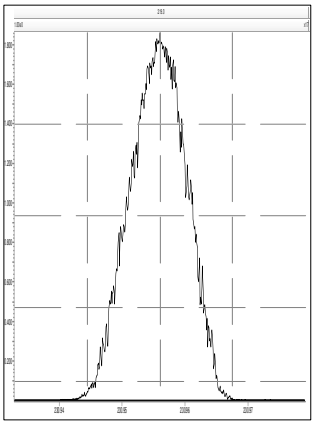
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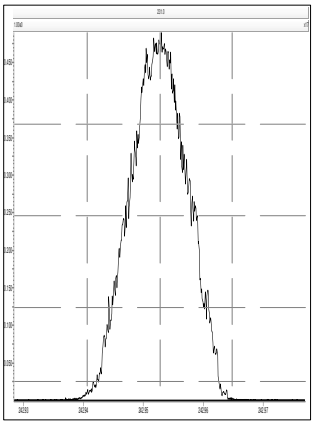
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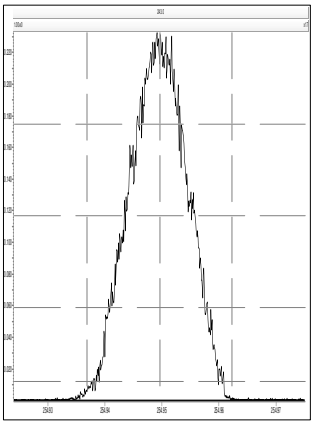
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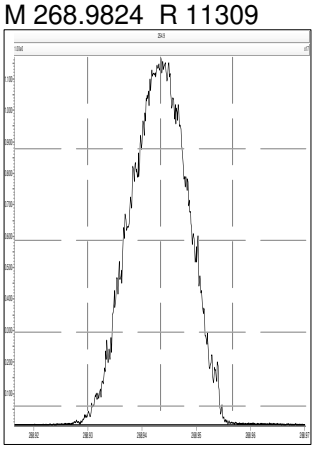
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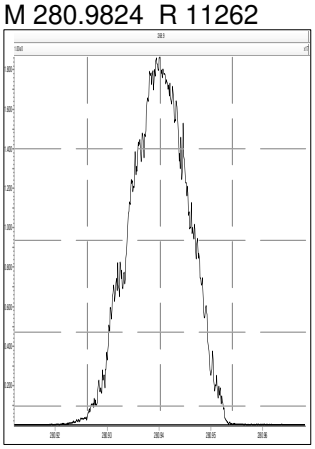
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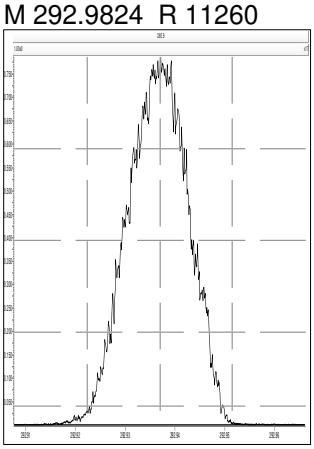
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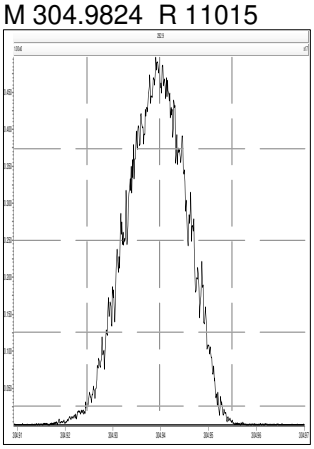
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M 292.9824 R 11260



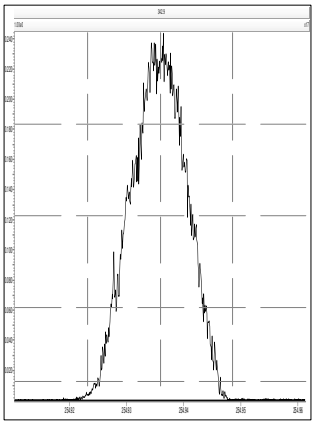
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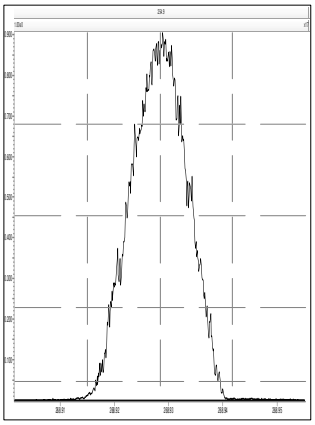
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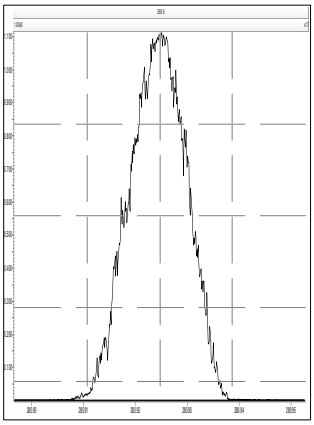
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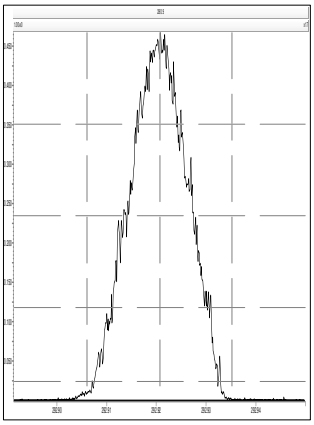
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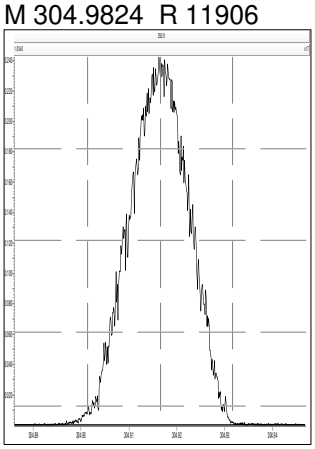
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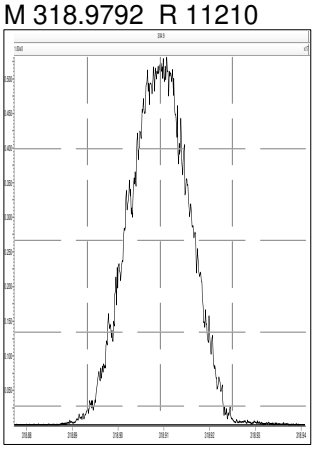
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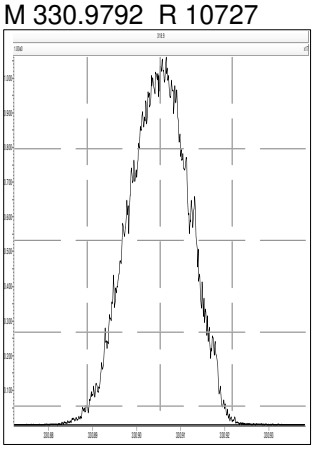
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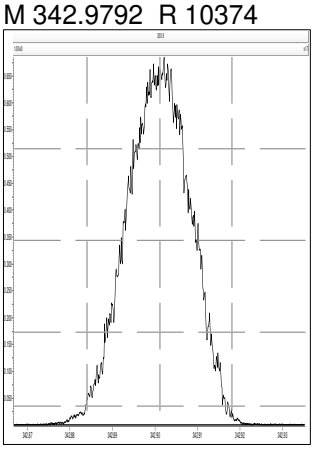
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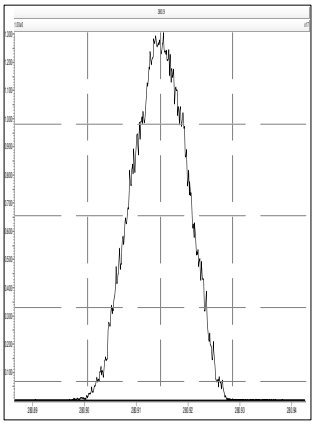
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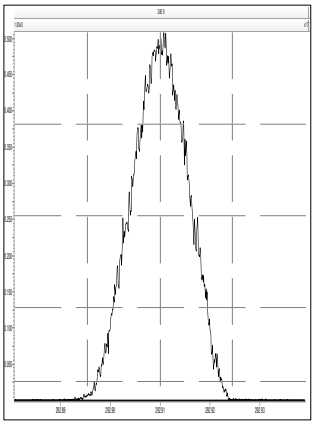
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Printed: Thursday, November 03, 2022 17:26:08 Eastern Daylight Time

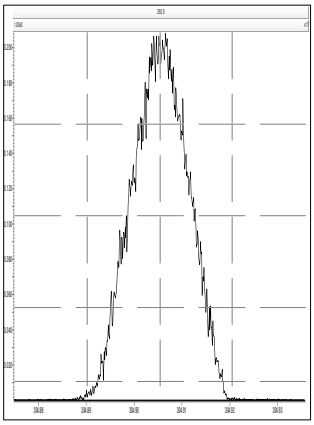
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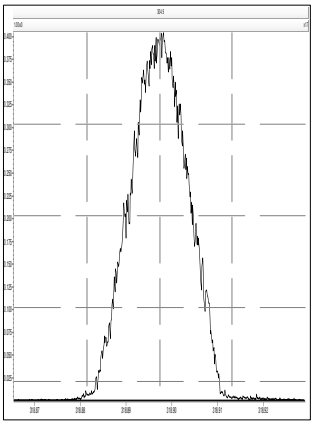
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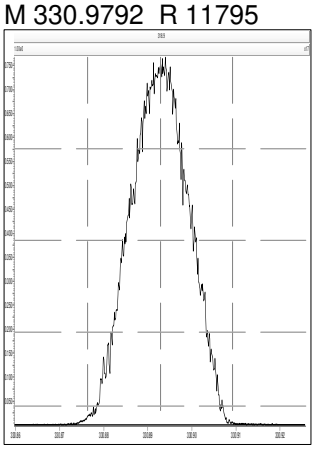
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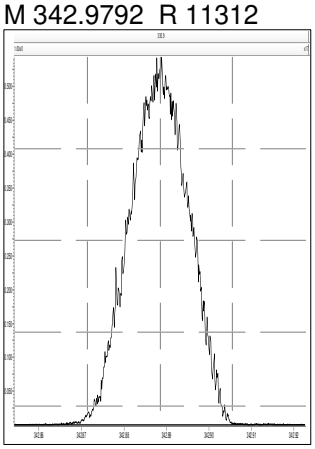
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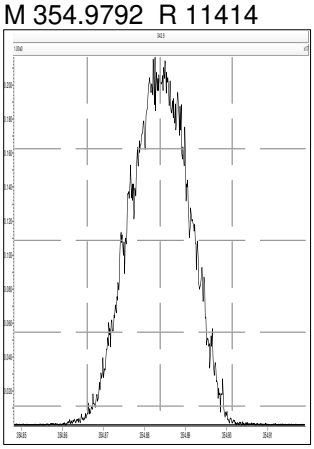
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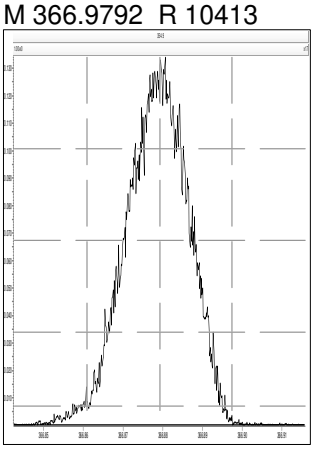
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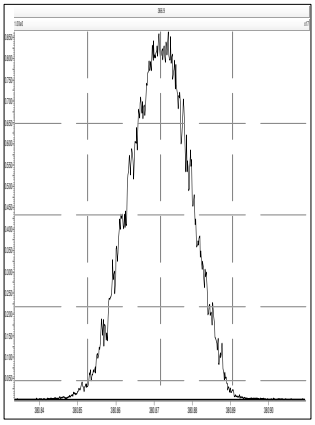
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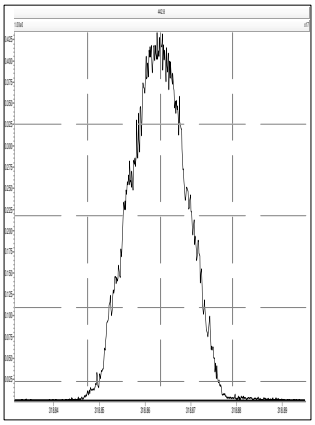
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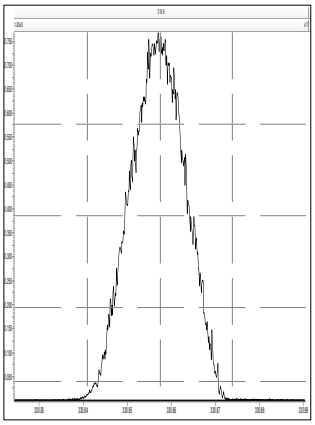
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Printed: Thursday, November 03, 2022 17:26:59 Eastern Daylight Time

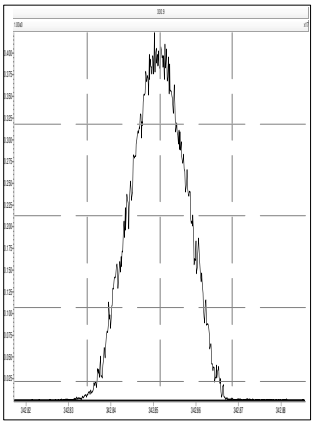
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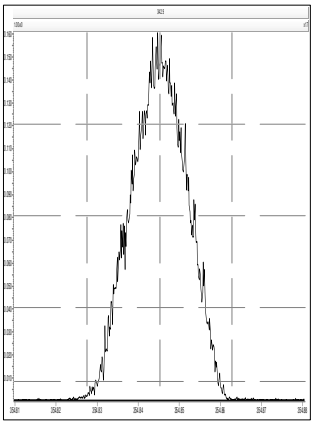
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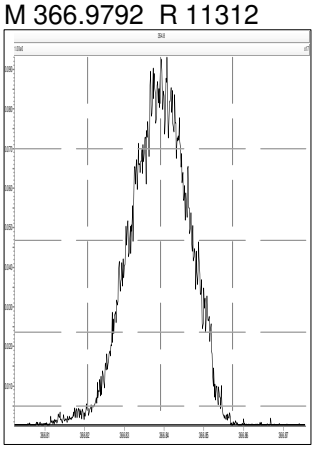
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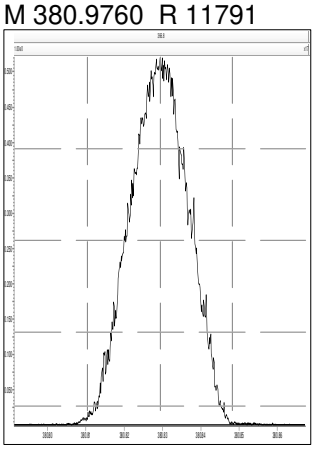
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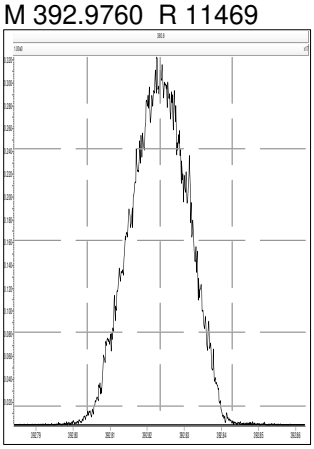
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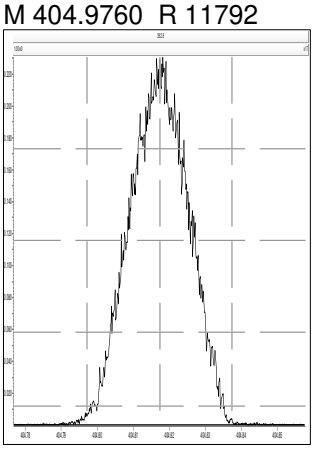
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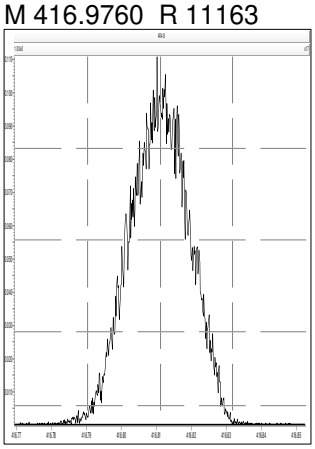
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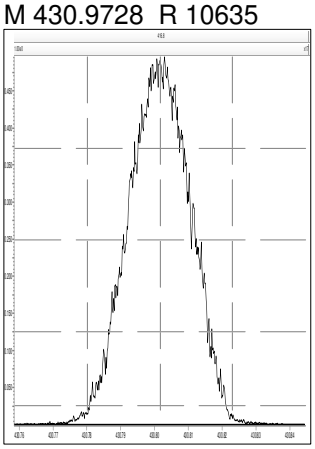
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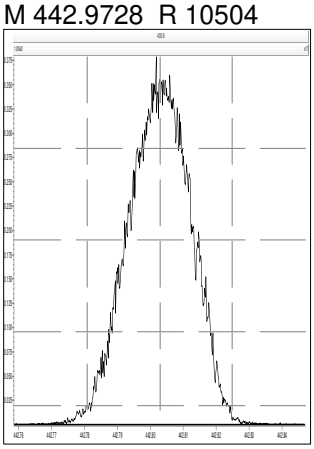
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M 430.9728 R 10635



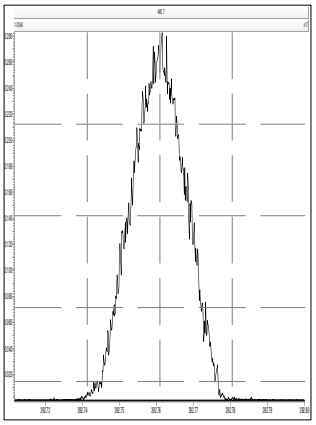
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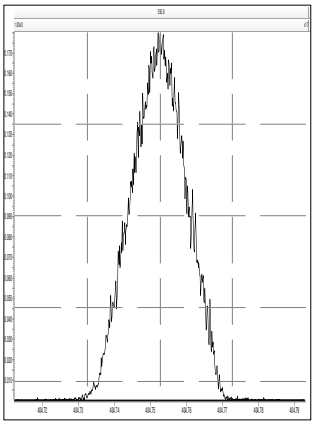
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Printed: Thursday, November 03, 2022 17:27:44 Eastern Daylight Time

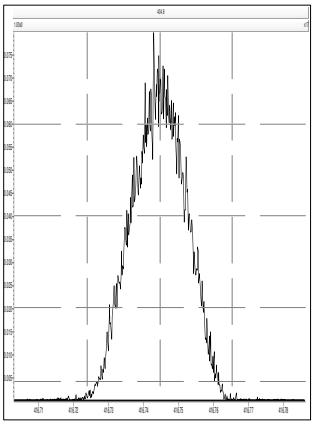
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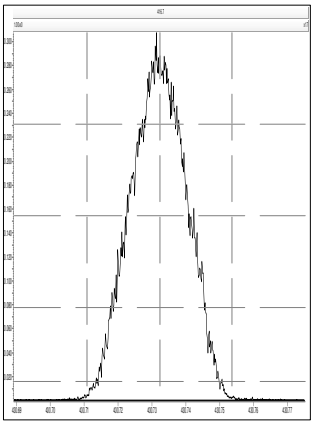
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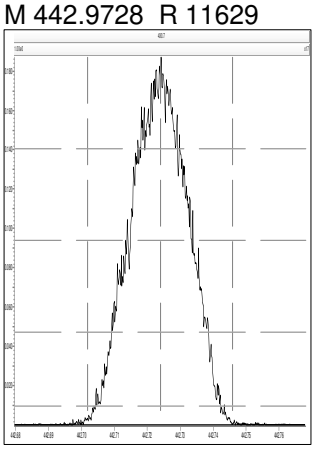
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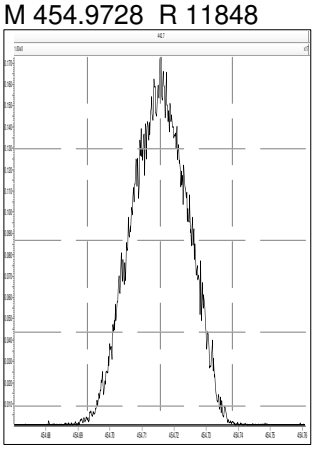
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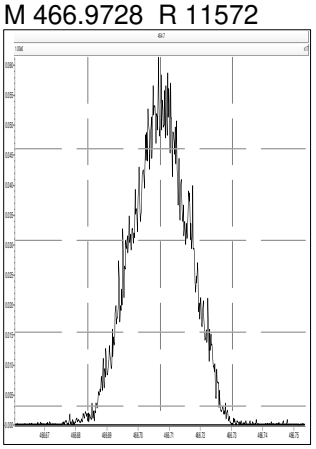
M 442.9728 R 11629



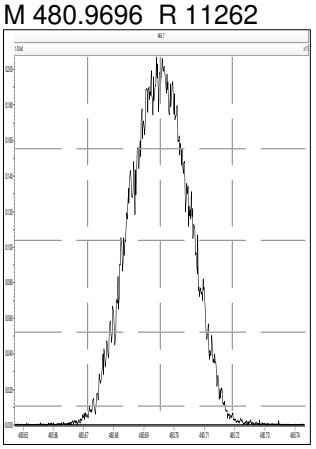
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M 466.9728 R 11572



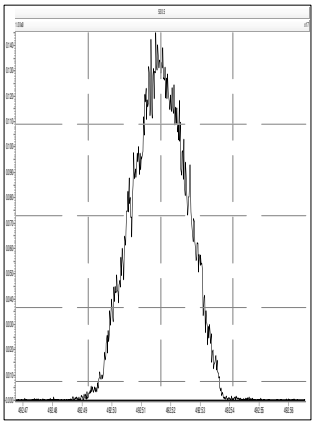
M 480.9696 R 11262



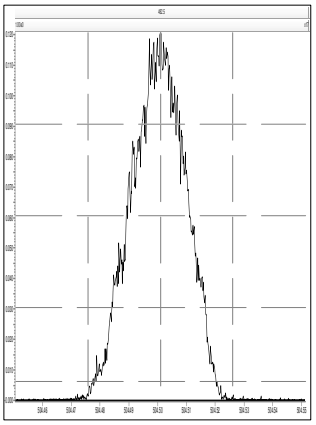
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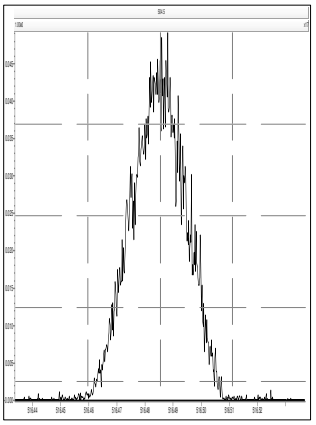
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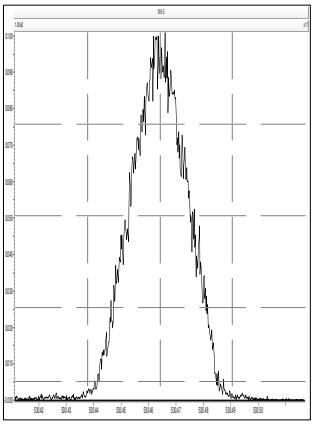
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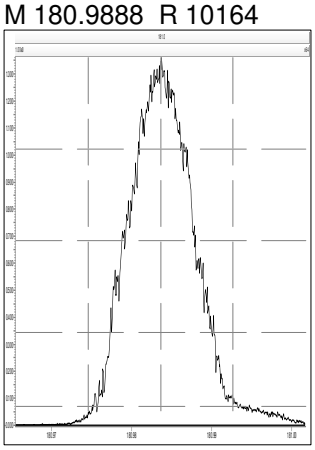


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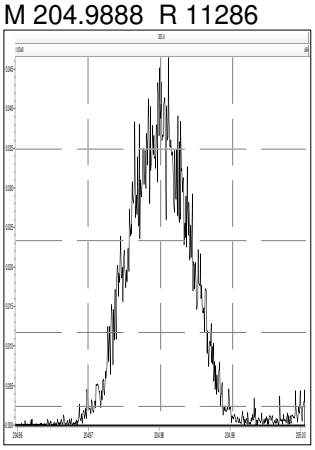


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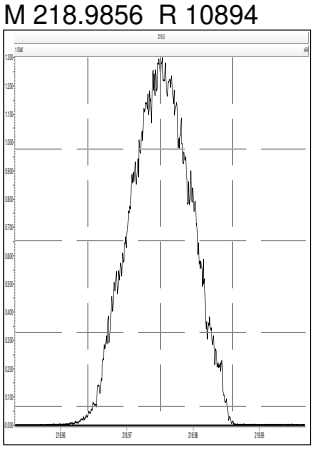
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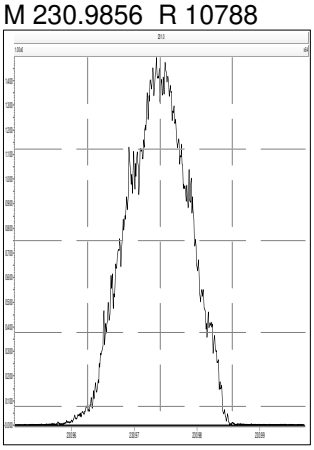
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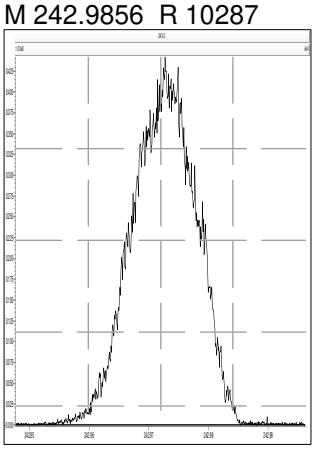
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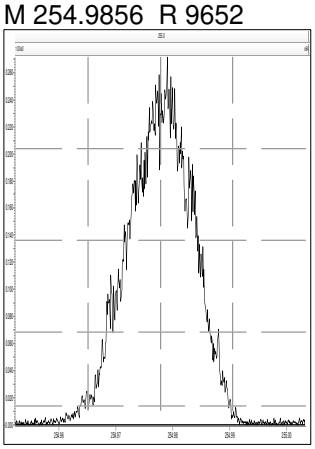
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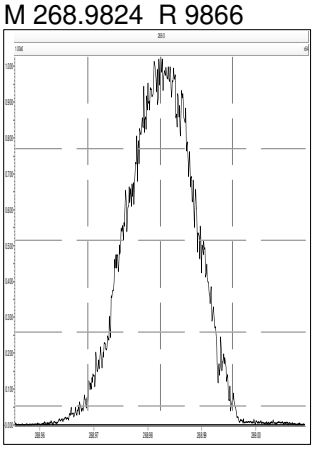
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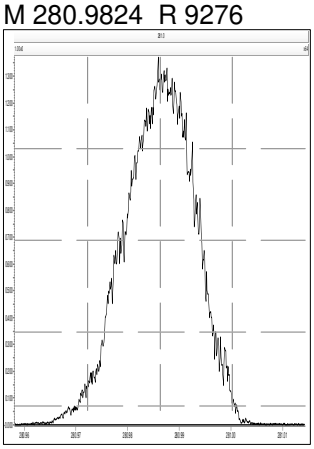
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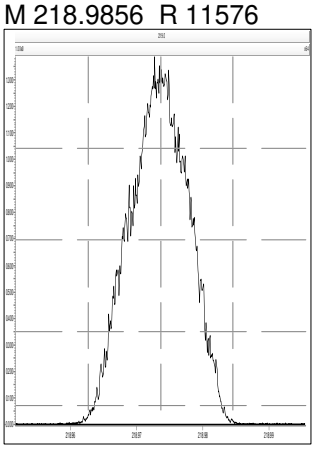
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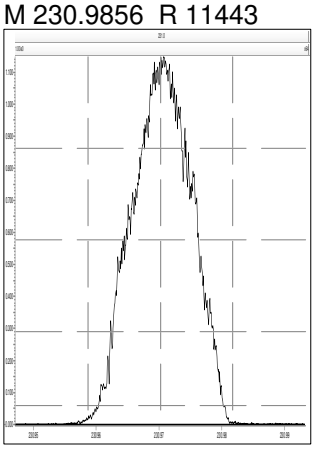
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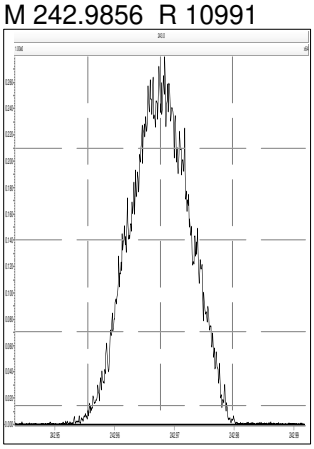
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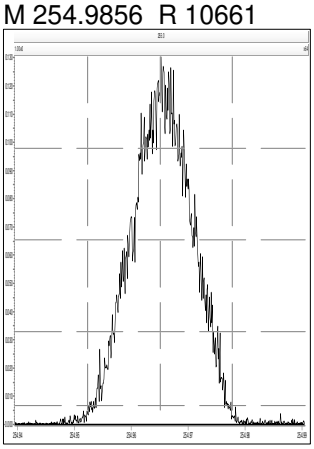
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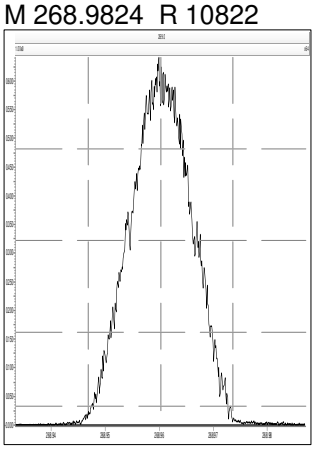
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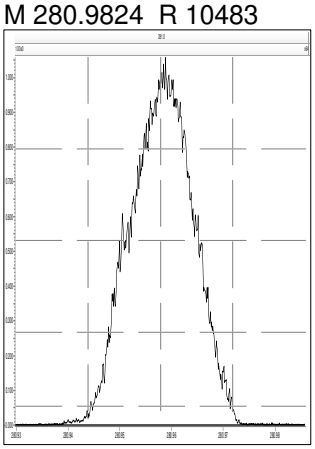
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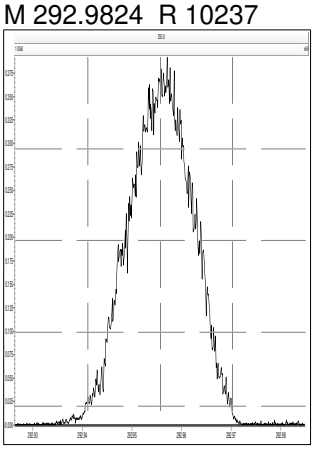
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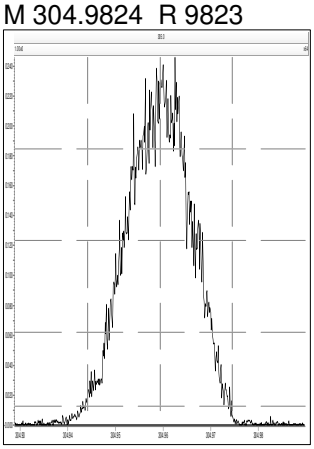
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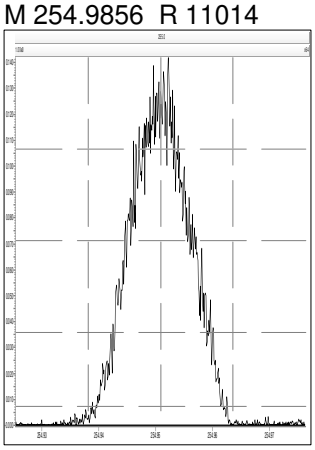
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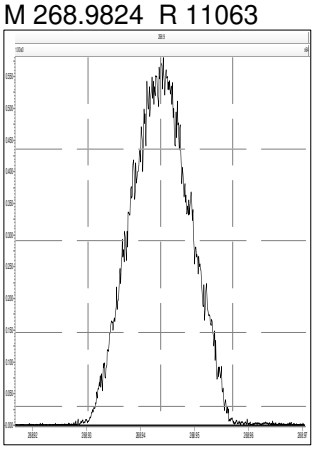
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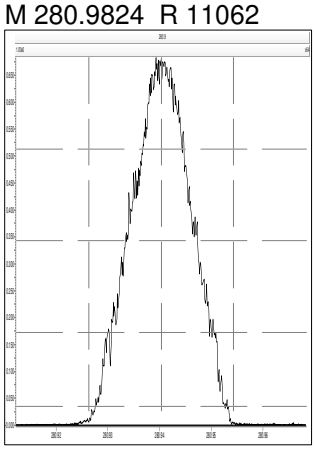
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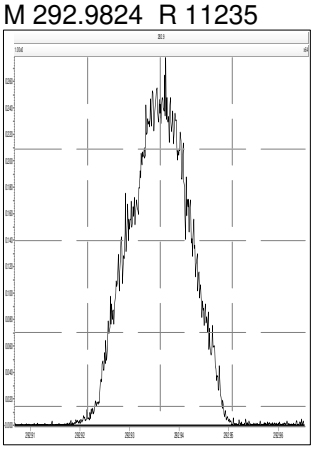
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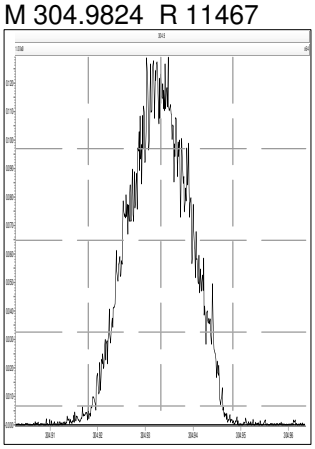
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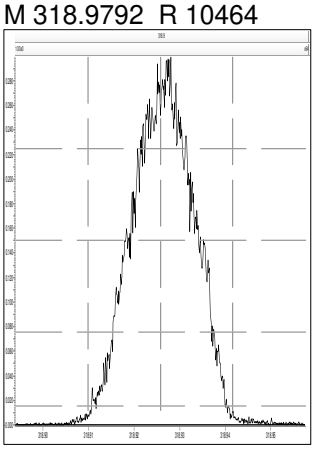
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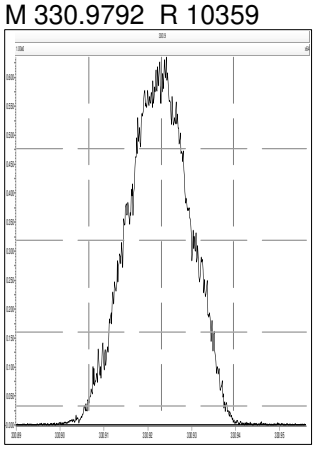
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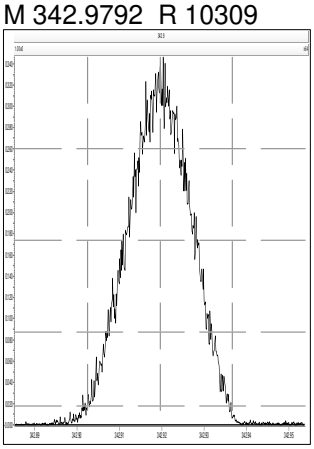
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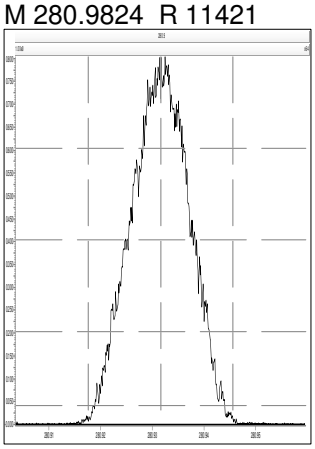
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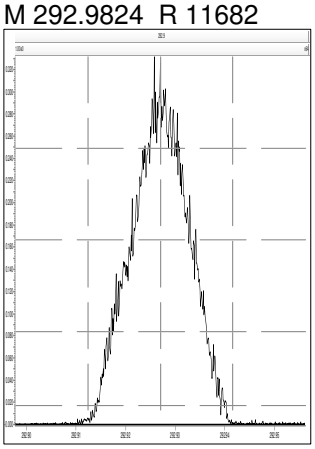
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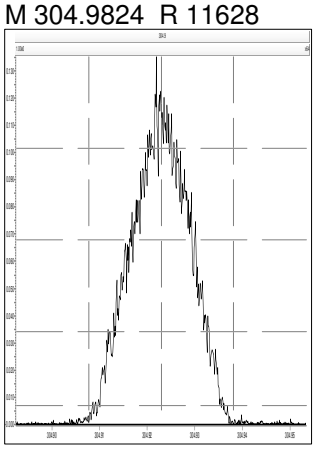
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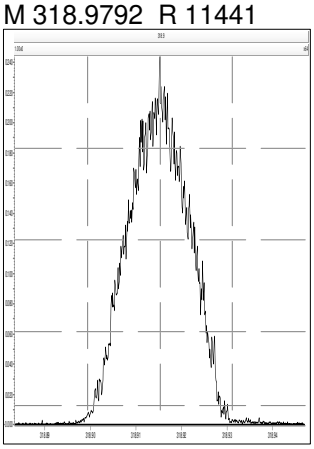
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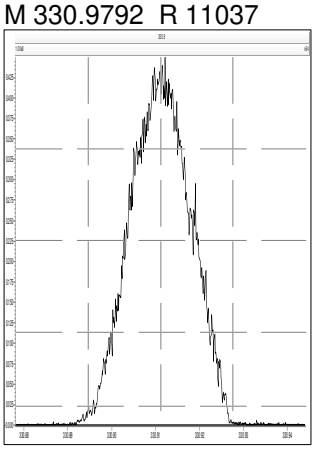
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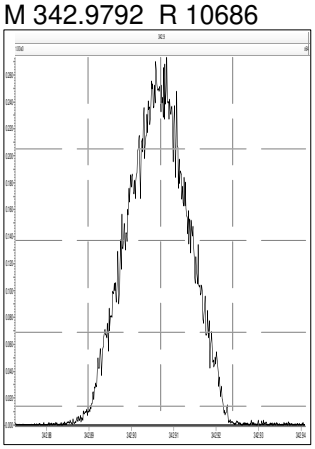
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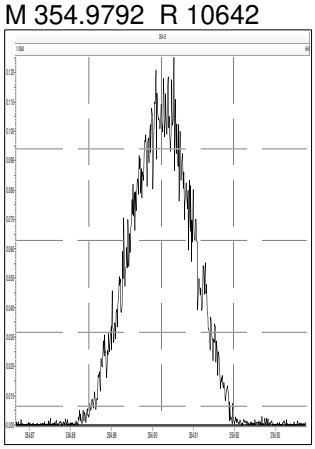
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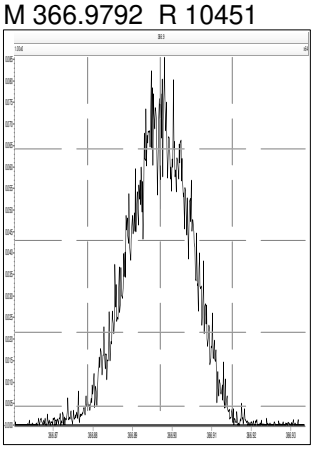
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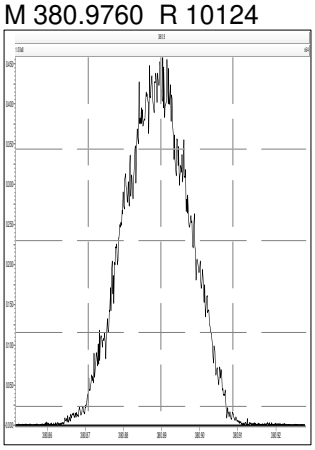
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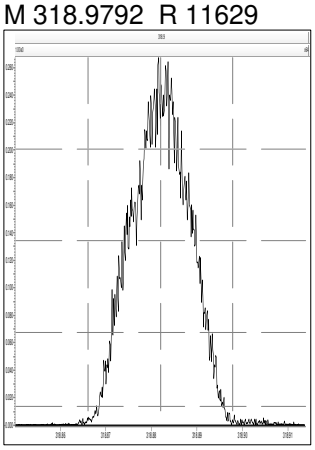
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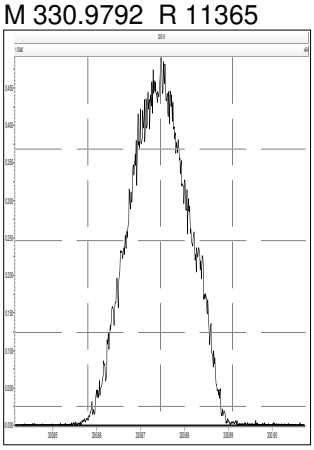
M 380.9760 R 10124



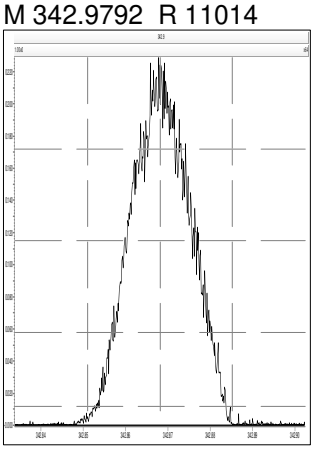
M 318.9792 R 11629



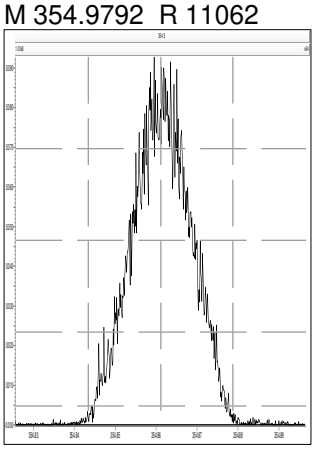
M 330.9792 R 11365



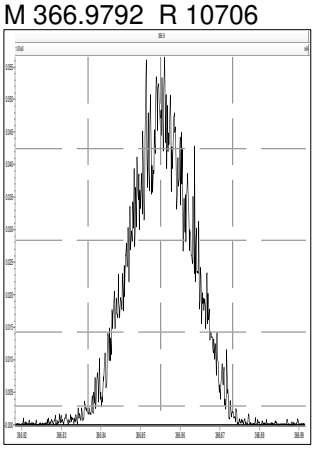
M 342.9792 R 11014



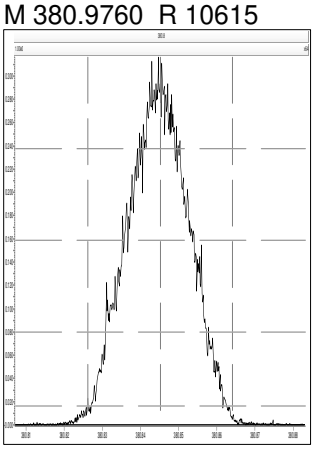
M 354.9792 R 11062



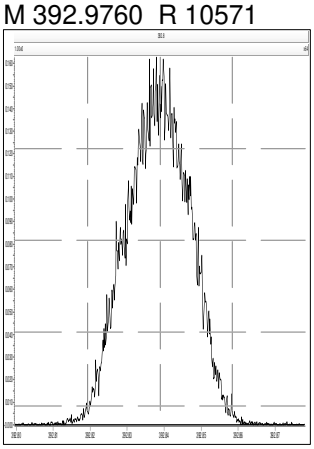
M 366.9792 R 10706



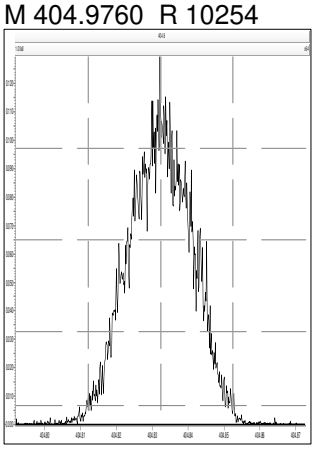
M 380.9760 R 10615



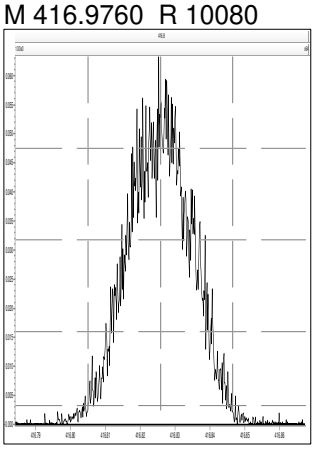
M 392.9760 R 10571



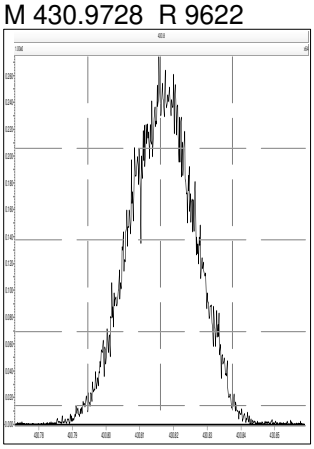
M 404.9760 R 10254



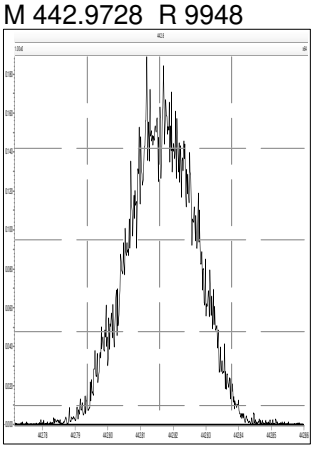
M 416.9760 R 10080



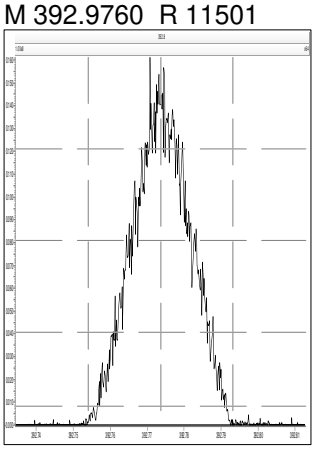
M 430.9728 R 9622



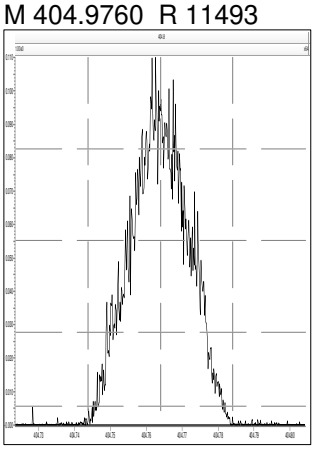
M 442.9728 R 9948



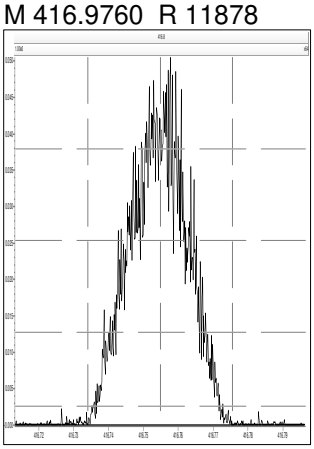
M 392.9760 R 11501



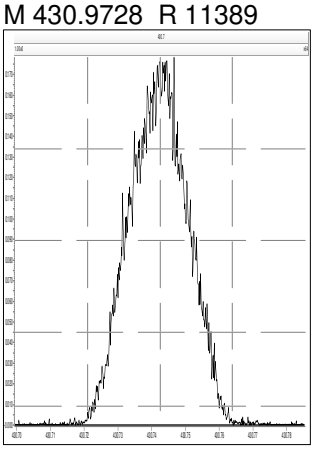
M 404.9760 R 11493



M 416.9760 R 11878

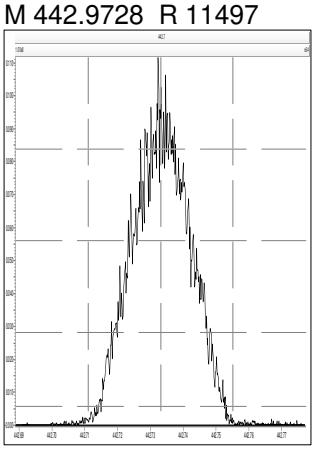


M 430.9728 R 11389

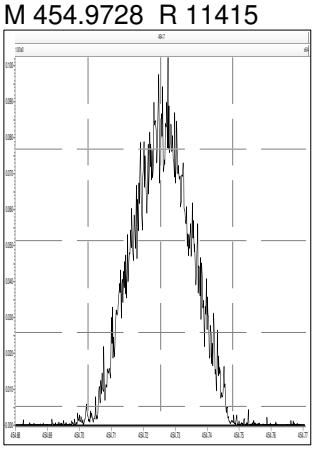


Printed: Friday, November 04, 2022 00:04:05 Eastern Daylight Time

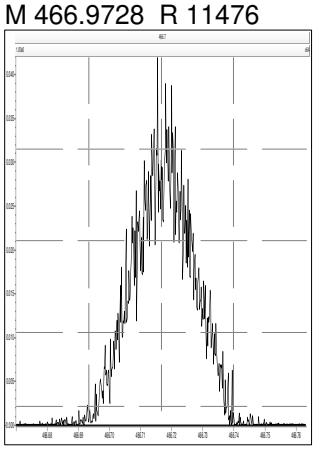
M 442.9728 R 11497



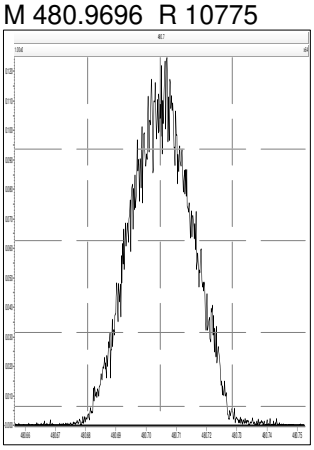
M 454.9728 R 11415



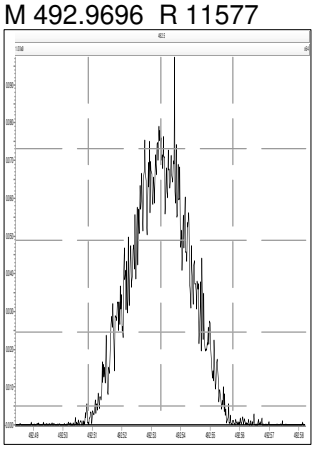
M 466.9728 R 11476



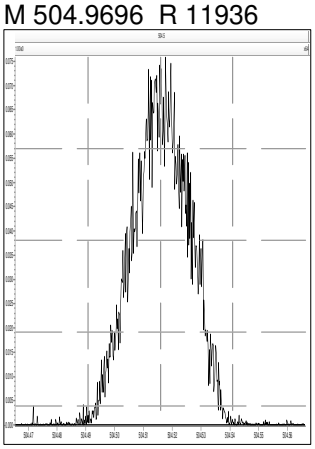
M 480.9696 R 10775



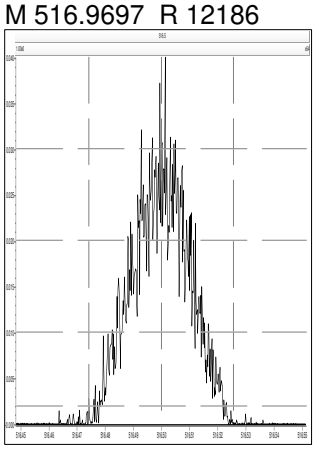
M 492.9696 R 11577



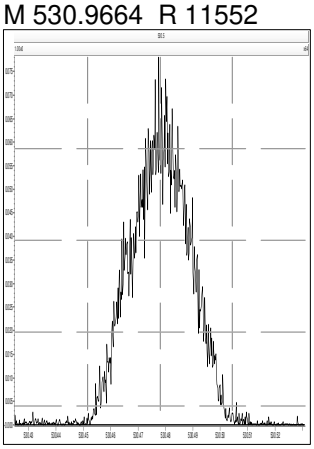
M 504.9696 R 11936



M 516.9697 R 12186



M 530.9664 R 11552



	File Name	Sample ID	File Text	MS File	Inlet File	Vial	Inject Volume
1	9-221117A01	H9-22-CCV-630	1668-CS#3-023	1668_octyl_1	1668_octyl_1	Tray1:1	1.000000
2	9-221117A02	H9-21-WDM-631	1668-CS#7-023	1668_octyl_1	1668_octyl_1	Tray1:2	1.000000
3	9-221117A03	WG3767420-2	LCS RW 5x	1668_octyl_1	1668_octyl_1	Tray1:4	1.000000
4	9-221117A04	WG3771384-2	LCS RW 5x	1668_octyl_1	1668_octyl_1	Tray1:12	1.000000
5	9-221117A05	TOLUENE	IB	1668_octyl_1	1668_octyl_1	Tray1:3	1.000000
6	9-221117A06	WG3767420-1	MB RW 5x	1668_octyl_1	1668_octyl_1	Tray1:5	1.000000
7	9-221117A07	WG3771384-1	MB RW 5x	1668_octyl_1	1668_octyl_1	Tray1:13	1.000000
8	9-221117A08	L2736690-4	SAMP	1668_octyl_1	1668_octyl_1	Tray1:14	1.000000
9	9-221117A09	L2736843-1	SAMP	1668_octyl_1	1668_octyl_1	Tray1:15	1.000000
10	9-221117A10	L2736843-4	SAMP	1668_octyl_1	1668_octyl_1	Tray1:16	1.000000
11	9-221117A11	L2737163-1	SAMP	1668_octyl_1	1668_octyl_1	Tray1:17	1.000000
12	9-221117A12	L2732941-1	RW 5x	1668_octyl_1	1668_octyl_1	Tray1:6	1.000000
13	9-221117A13	L2735559-1	RW 5x	1668_octyl_1	1668_octyl_1	Tray1:7	1.000000
14	9-221117A14	L2735559-6	RW 5x	1668_octyl_1	1668_octyl_1	Tray1:8	1.000000
15	9-221117A15	L2735559-9	RW 5x	1668_octyl_1	1668_octyl_1	Tray1:9	1.000000
16	9-221117A16	L2735559-13	RW 5x	1668_octyl_1	1668_octyl_1	Tray1:10	1.000000
17	9-221117A17	L2735559-14	RW 5x	1668_octyl_1	1668_octyl_1	Tray1:11	1.000000
18	9-221117A18	H9-22-CCV-632	1668-CS#3-023	1668_octyl_1	1668_octyl_1	Tray1:1	1.000000
19	9-221117A19	H9-21-WDM-633	1668-CS#7-023	1668_octyl_1	1668_octyl_1	Tray1:2	1.000000
20	9-221117A20	TOLUENE	IB	1668_octyl_1	1668_octyl_1	Tray1:3	1.000000
21	9-221117A21	L2735553-1	DIL 20x	1668_octyl_1	1668_octyl_1	Tray1:18	1.000000
22	9-221117A22	L2735553-2	DIL 20x	1668_octyl_1	1668_octyl_1	Tray1:19	1.000000
23	9-221117A23	L2735553-3	DIL 20x	1668_octyl_1	1668_octyl_1	Tray1:20	1.000000
24	9-221117A24	L2735553-4	DIL 20x	1668_octyl_1	1668_octyl_1	Tray1:21	1.000000
25	9-221117A25	L2735553-5	DIL 20x	1668_octyl_1	1668_octyl_1	Tray1:22	1.000000
26	9-221117A26	L2735553-6	DIL 20x	1668_octyl_1	1668_octyl_1	Tray1:23	1.000000
27	9-221117A27	L2735553-7	DIL 20x	1668_octyl_1	1668_octyl_1	Tray1:24	1.000000
28	9-221117A28	L2735553-8	DIL 20x	1668_octyl_1	1668_octyl_1	Tray1:25	1.000000
29	9-221117A29	L2732582-1	DIL 20x	1668_octyl_1	1668_octyl_1	Tray1:70	1.000000
30	9-221117A30	L2736249-1	DIL 20x	1668_octyl_1	1668_octyl_1	Tray1:71	1.000000
31	9-221117A31	L2736104-1	DIL 20x	1668_octyl_1	1668_octyl_1	Tray1:72	1.000000
32	9-221117A32	H9-22-CCV-634	1668-CS#3-023	1668_octyl_1	1668_octyl_1	Tray1:1	1.000000
33	---	---	---	---	---	---	0.000000
34	---	Column SPBOCTYL	Serial No 273027-01	---	---	---	0.000000
35	---	Detector	380	---	---	---	0.000000
36	---	OP	ES	---	---	---	0.000000

MP JSW Nov 18 A2 Rec ✓
MR ✓ CSS ✓
Win ✓
Chrom ✓
TDI ✓
A1 IS ✓
LM A9 sulfur A10
QC ✓
MB ✓
Rec ✓
CSS ✓

	File Name	Sample ID	File Text	Sample Type	Na Conc A	Na Conc B	Na Conc C	Na Conc D	Na Conc E	Na Conc F	Na Conc G	Na Conc H	FS Conc	CS Conc	ES Conc 1	ES Conc 2	IS Conc	Sample Size
1	9-221117A01	H9-22-CCV-630	1668-CS#3-023	QC	50	50	50	100	---	---	---	---	100	100	100	200	100	1.000
2	9-221117A02	H9-21-WDM-631	1668-CS#7-023	QC	25	50	75	100	150	200	250	300	100	100	100	200	100	1.000
3	9-221117A03	WG3767420-2	LCS RW 5x	QC	1000	1000	1000	2000	---	---	---	---	2000	2000	2000	4000	2000	1.000
4	9-221117A04	WG3771384-2	LCS	QC	1000	1000	1000	2000	---	---	---	---	2000	2000	2000	4000	2000	1.000
5	9-221117A06	WG3767420-1	MB RW 5x	QC	---	---	---	---	---	---	---	---	2000	2000	2000	4000	2000	1.000
6	9-221117A07	WG3771384-1	MB	QC	---	---	---	---	---	---	---	---	2000	2000	2000	4000	2000	1.000
7	9-221117A08	L2736690-4	SAMP	QC	---	---	---	---	---	---	---	---	2000	2000	2000	4000	2000	1.000
8	9-221117A09	L2736843-1	SAMP	QC	---	---	---	---	---	---	---	---	2000	2000	2000	4000	2000	1.000
9	9-221117A10	L2736843-4	SAMP	QC	---	---	---	---	---	---	---	---	2000	2000	2000	4000	2000	1.000
10	9-221117A11	L2737163-1	SAMP	QC	---	---	---	---	---	---	---	---	2000	2000	2000	4000	2000	1.000
11	9-221117A12	L2732941-1	RW 5x	QC	---	---	---	---	---	---	---	---	2000	2000	2000	4000	2000	1.000
12	9-221117A13	L2735559-1	RW 5x	QC	---	---	---	---	---	---	---	---	2000	2000	2000	4000	2000	1.000
13	9-221117A14	L2735559-6	RW 5x	QC	---	---	---	---	---	---	---	---	2000	2000	2000	4000	2000	1.000
14	9-221117A15	L2735559-9	RW 5x	QC	---	---	---	---	---	---	---	---	2000	2000	2000	4000	2000	1.000
15	9-221117A16	L2735559-13	RW 5x	QC	---	---	---	---	---	---	---	---	2000	2000	2000	4000	2000	1.000
16	9-221117A17	L2735559-14	RW 5x	QC	---	---	---	---	---	---	---	---	2000	2000	2000	4000	2000	1.000
17	9-221117A18	H9-22-CCV-632	1668-CS#3-023	QC	50	50	50	100	---	---	---	---	100	100	100	200	100	1.000
18	9-221117A19	H9-21-WDM-633	1668-CS#7-023	QC	25	50	75	100	150	200	250	300	100	100	100	200	100	1.000
19	9-221117A21	L2735553-1	DIL 20x	QC	---	---	---	---	---	---	---	---	2000	2000	2000	4000	2000	1.000
20	9-221117A22	L2735553-2	DIL 20x	QC	---	---	---	---	---	---	---	---	2000	2000	2000	4000	2000	1.000
21	9-221117A23	L2735553-3	DIL 20x	QC	---	---	---	---	---	---	---	---	2000	2000	2000	4000	2000	1.000
22	9-221117A24	L2735553-4	DIL 20x	QC	---	---	---	---	---	---	---	---	2000	2000	2000	4000	2000	1.000
23	9-221117A25	L2735553-5	DIL 20x	QC	---	---	---	---	---	---	---	---	2000	2000	2000	4000	2000	1.000
24	9-221117A26	L2735553-6	DIL 20x	QC	---	---	---	---	---	---	---	---	2000	2000	2000	4000	2000	1.000
25	9-221117A27	L2735553-7	DIL 20x	QC	---	---	---	---	---	---	---	---	2000	2000	2000	4000	2000	1.000
26	9-221117A28	L2735553-8	DIL 20x	QC	---	---	---	---	---	---	---	---	2000	2000	2000	4000	2000	1.000
27	9-221117A29	L2732582-1	DIL 20x	QC	---	---	---	---	---	---	---	---	2000	2000	2000	4000	2000	1.000
28	9-221117A30	L2736249-1	DIL 20x	QC	---	---	---	---	---	---	---	---	2000	2000	2000	4000	2000	1.000
29	9-221117A31	L2736104-1	DIL 20x	QC	---	---	---	---	---	---	---	---	2000	2000	2000	4000	2000	1.000
30	9-221117A32	H9-22-CCV-634	1668-CS#3-023	QC	50	50	50	100	---	---	---	---	100	100	100	200	100	1.000

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221117A-QC2.qld

Last Altered: Wednesday, November 23, 2022 10:46:40 Eastern Standard Time
Printed: Wednesday, November 23, 2022 10:47:51 Eastern Standard Time

Name: 9-221117A18, Date: 18-Nov-2022, Time: 01:36:40, ID: H9-22-CCV-632, Description: 1668-CS#3-023, Vial: Tray1:1

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
1	PCB-1		907242	692948	214295	3.23	NO	9.01	1.00	8.97	9.04	45.53584	91.1		1300	1316
2	PCB-3		932104	712685	219419	3.25	NO	10.54	1.00	10.51	10.57	45.15891	90.3		1300	1316
3	PCB-4		778006	469491	308515	1.52	NO	10.72	1.00	10.69	10.75	49.90297	99.8		1495	3481
4	PCB-15		977244	598260	378984	1.58	NO	14.40	1.00	14.36	14.43	50.49691	101.0		2062	4786
5	PCB-19		1120658	574884	545774	1.05	NO	12.73	1.00	12.70	12.76	47.44883	94.9		2335	2364
6	PCB-37		766790	389030	377759	1.03	NO	18.35	1.00	18.32	18.38	53.44788	106.9		3065	2875
7	PCB-54		1142231	487251	654980	0.74	NO	14.59	1.00	14.56	14.62	48.81008	97.6		1117	1067
8	PCB-81		794030	351623	442408	0.79	NO	21.91	1.00	21.88	21.94	51.45261	102.9		1688	2061
9	PCB-77		798259	350612	447647	0.78	NO	22.23	1.00	22.19	22.26	51.44110	102.9		1688	2061
10	PCB-104		1012237	618530	393707	1.57	NO	17.63	1.00	17.59	17.66	48.22456	96.4		1037	2293
11	PCB-123		648448	394604	253844	1.55	NO	23.20	1.00	23.16	23.23	52.92223	105.8		2507	3852
12	PCB-118		724527	444859	279669	1.59	NO	23.37	1.00	23.33	23.40	52.91140	105.8		2507	3852
13	PCB-114		682470	416724	265746	1.57	NO	23.67	1.00	23.64	23.70	53.03560	106.1		2507	3852
14	PCB-105		682349	417685	264664	1.58	NO	24.03	1.00	24.00	24.07	53.69714	107.4		2507	3852
15	PCB-126		668485	405792	262693	1.54	NO	25.63	1.00	25.59	25.66	52.18326	104.4		2507	3852
16	PCB-155		1012711	562505	450206	1.25	NO	20.59	1.00	20.55	20.62	49.28223	98.6		1017	863
17	PCB-167		620253	343323	276930	1.24	NO	26.51	1.00	26.48	26.54	49.40215	98.8		1591	2096
18	PCB-156/157		1221776	683650	538126	1.27	NO	27.15	1.00	27.12	27.18	98.46878	98.5		1591	2096
19	PCB-169		605839	337683	268156	1.26	NO	28.82	1.00	28.78	28.85	48.20984	96.4		1591	2096
20	PCB-188		790437	404590	385847	1.05	NO	23.60	1.00	23.56	23.63	49.05358	98.1		2004	1184
21	PCB-189		599645	300179	299466	1.00	NO	30.10	1.00	30.06	30.13	51.02493	102.0		1474	1519
22	PCB-202		859227	397806	461420	0.86	NO	26.38	1.00	26.34	26.41	48.06044	96.1		1130	1261
23	PCB-205		489093	229900	259194	0.89	NO	31.52	1.00	31.48	31.55	49.20557	98.4		727	767
24	PCB-208		522179	227643	294536	0.77	NO	29.81	1.00	29.78	29.85	47.37064	94.7		1126	2302
25	PCB-206		364972	158710	206262	0.77	NO	32.61	1.00	32.58	32.64	47.12935	94.3		1126	2302
26	PCB-209		456021	246783	209237	1.18	NO	33.76	1.00	33.73	33.80	51.23702	102.5		408	473
27	13C-PCB-31		1473266	766138	707127	1.08	NO	15.91	0.87	15.88	15.95	98.21652	98.2		19549	9174
28	13C-PCB-95		1333232	816103	517129	1.58	NO	19.23	1.09	19.20	19.26	115.08720	115.1		4765	3044
29	13C-PCB-153		1024549	562233	462316	1.22	NO	24.27	1.18	24.24	24.31	94.15808	94.2		3646	5396
30	13C-PCB-28		1658059	861918	796142	1.08	NO	16.08	0.94	16.05	16.11	86.05331	86.1		19549	9174
31	13C-PCB-111		1346128	820156	525972	1.56	NO	22.10	1.07	22.07	22.14	102.96489	103.0		4765	3044
32	13C-PCB-178		1086096	547500	538596	1.02	NO	25.16	1.01	25.12	25.19	109.41333	109.4		2555	3513
33	13C-PCB-1		1714906	1300760	414146	3.14	NO	8.99	0.75	8.96	9.03	92.37738	92.4		2816	12894
34	13C-PCB-3		1683448	1270076	413372	3.07	NO	10.53	0.88	10.49	10.56	93.83079	93.8		2816	12894
35	13C-PCB-4		1801008	1095999	705009	1.55	NO	10.70	0.90	10.67	10.74	96.02572	96.0		10067	2894
36	13C-PCB-15		1701550	1032099	669451	1.54	NO	14.39	1.20	14.35	14.42	88.15532	88.2		7145	3906
37	13C-PCB-19		2116501	1089356	1027145	1.06	NO	12.71	1.06	12.68	12.75	98.03073	98.0		32700	20619

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221117A-QC2.qld

Last Altered: Wednesday, November 23, 2022 10:46:40 Eastern Standard Time
Printed: Wednesday, November 23, 2022 10:47:51 Eastern Standard Time

Name: 9-221117A18, Date: 18-Nov-2022, Time: 01:36:40, ID: H9-22-CCV-632, Description: 1668-CS#3-023, Vial: Tray1:1

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
38	13C-PCB-37		1304993	678353	626640	1.08	NO	18.34	1.07	18.31	18.37	72.17604	72.2		19549	9174
39	13C-PCB-54		2675519	1177690	1497829	0.79	NO	14.58	0.85	14.55	14.61	100.62045	100.6		9144	5853
40	13C-PCB-81		1217565	541854	675711	0.80	NO	21.90	1.06	21.87	21.93	86.67793	86.7		5302	2620
41	13C-PCB-77		1238978	544862	694117	0.79	NO	22.22	1.07	22.18	22.25	86.80433	86.8		5302	2620
42	13C-PCB-104		1824218	1107347	716871	1.54	NO	17.61	1.03	17.57	17.64	106.06107	106.1		1866	1671
43	13C-PCB-123		1121868	686776	435092	1.58	NO	23.19	1.12	23.15	23.22	86.04939	86.0		3791	4404
44	13C-PCB-118		1060856	649163	411694	1.58	NO	23.35	1.13	23.32	23.39	88.30101	88.3		3791	4404
45	13C-PCB-114		1155185	710175	445009	1.60	NO	23.66	0.95	23.62	23.69	88.95114	89.0		3791	4404
46	13C-PCB-105		1081549	663212	418337	1.59	NO	24.02	0.96	23.99	24.05	87.44788	87.4		3791	4404
47	13C-PCB-126		1111290	681275	430015	1.58	NO	25.61	1.03	25.58	25.65	88.61659	88.6		3791	4404
48	13C-PCB-155		1855968	1032157	823812	1.25	NO	20.57	0.99	20.54	20.60	103.17851	103.2		1430	1638
49	13C-PCB-167		1075141	595530	479611	1.24	NO	26.48	1.06	26.45	26.52	103.59649	103.6		3646	5396
50	13C-PCB-156/157		2106472	1169589	936884	1.25	NO	27.14	1.09	27.10	27.17	213.07151	106.5		3646	5396
51	13C-PCB-169		1103250	612560	490690	1.25	NO	28.81	1.15	28.77	28.84	114.66255	114.7		3646	5396
52	13C-PCB-188		1510381	768604	741777	1.04	NO	23.58	0.94	23.55	23.62	108.35174	108.4		2555	3513
53	13C-PCB-189		1180321	611758	568564	1.08	NO	30.09	0.96	30.05	30.12	117.38647	117.4		2980	3737
54	13C-PCB-202		1862037	861147	1000890	0.86	NO	26.36	1.06	26.33	26.40	121.19415	121.2		1944	1491
55	13C-PCB-205		926840	440988	485852	0.91	NO	31.50	1.01	31.47	31.54	104.55838	104.6		1615	2012
56	13C-PCB-208		1056611	463263	593348	0.78	NO	29.80	0.95	29.77	29.84	106.26547	106.3		1478	1445
57	13C-PCB-206		736157	321555	414602	0.78	NO	32.60	1.04	32.56	32.63	117.24213	117.2		1478	1445
58	13C-PCB-209		964109	522803	441306	1.18	NO	33.73	1.08	33.70	33.77	114.64046	114.6		701	572
59	13C-PCB-9		2850210	1717015	1133195	1.52	NO	11.96	0.48	11.92	11.99	69.30077	69.3		10067	2894
60	13C-PCB-52		1180749	511595	669154	0.76	NO	17.08	0.68	17.04	17.11	72.27109	72.3		4682	4042
61	13C-PCB-101		1067754	647085	420668	1.54	NO	20.73	0.83	20.69	20.76	67.66057	67.7		4765	3044
62	13C-PCB-138		853741	476515	377226	1.26	NO	24.97	0.00	24.94	25.01	64.38677	64.4		3646	5396
63	13C-PCB-194		717930	341159	376771	0.91	NO	31.22	1.25	31.19	31.25	78.86545	78.9		1615	2012
64	Total MoCB-F1	3		1430504								26654.64683			1300	
65	Total DiCB-F1	2		490956								40442.48414			1495	
66	Total DiCB-F2	2		599423								2444.16752			2062	
67	Total TrCB-F1	1		574884								47.44883			2335	
68	Total TrCB-F3	7		1262962								1574968.769...			3065	
69	Total TeCB-F2	2		487573								2324.04365			1117	
70	Total TeCB-F4	9		713869								18757.19683			1688	
71	Total PeCB-F3	1		618530								48.22456			1037	
72	Total PeCB-F5	10		2123643								61739.33354			2507	
73	Total HxCB-F4	2		562924								675.99652			1017	
74	Total HxCB-F5	14		1429742								101250.96497			1591	

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221117A-QC2.qld

Last Altered: Wednesday, November 23, 2022 10:46:40 Eastern Standard Time
Printed: Wednesday, November 23, 2022 10:47:51 Eastern Standard Time

Name: 9-221117A18, Date: 18-Nov-2022, Time: 01:36:40, ID: H9-22-CCV-632, Description: 1668-CS#3-023, Vial: Tray1:1

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
75	Total HpCB-F5	12		1650788								2290361.774...			2004	
76	Total HpCB-F6	5		316174								30922.61451			1474	
77	Total OcCB-F5	8		418416								30346.99745			1130	
78	Total OcCB-F6	5		251329								43617.31748			727	
79	Total NoCB-F6	3		387030								1690.08319			1126	
80	Total DeCB-F7	1		246783								51.23702			408	
81	Total 13C-MoCB-F1	2		2570835								186.20816			2816	
82	Total 13C-DiCB-F1	3		2817637								165.75651			10067	
83	Total 13C-DiCB-F2	2		2025928								2393399.604...			7145	
84	Total 13C-TrCB-F1	2		1089815								1974.36861			32700	
85	Total 13C-TrCB-F3	3		2306409								256.44587			19549	
86	Total 13C-TeCB-F2	1		1177690								100.62045			9144	
87	Total 13C-TeCB-F3	6		534563								75.41186			4682	
88	Total 13C-TeCB-F4	7		1106063								27236.71201			5302	
89	Total 13C-PeCB-F3	3		1109200								2431.42915			1866	
90	Total 13C-PeCB-F4	7		2292571								288.58445			4765	
91	Total 13C-PeCB-F5	16		3479992								120585.59053			3791	
92	Total 13C-HxCB-F4	2		1038213								6312.24624			1430	
93	Total 13C-HxCB-F5	21		3456561								618.13722			3646	
94	Total 13C-HpCB-F5	8		1343147								38114.22550			2555	
95	Total 13C-HpCB-F6	5		651619								65024.79982			2980	
96	Total 13C-OcCB-F5	6		867648								7471.65477			1944	
97	Total 13C-OcCB-F6	5		811291								196.85306			1615	
98	Total 13C-NoCB-F6	3		786168								2583.69786			1478	
99	Total 13C-DeCB-F7	1		522803								114.64046			701	
100	Lockmass F1			0											664637	
101	Lockmass F2			0											204715	
102	Lockmass F3			0											584821	
103	Lockmass F4			0											419549	
104	Lockmass F5			0											98075	
105	Lockmass F6			0											152391	
106	Lockmass F7			0											38397	

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221117A-QC2.qld

Last Altered: Wednesday, November 23, 2022 10:46:40 Eastern Standard Time
Printed: Wednesday, November 23, 2022 10:47:51 Eastern Standard Time

Name: 9-221117A32, Date: 18-Nov-2022, Time: 11:38:46, ID: H9-22-CCV-634, Description: 1668-CS#3-023, Vial: Tray1:1

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
1	PCB-1		1031503	793881	237623	3.34	NO	9.01	1.00	8.97	9.04	45.99798	92.0		1564	1545
2	PCB-3		1021656	783817	237839	3.30	NO	10.54	1.00	10.51	10.57	44.94689	89.9		1564	1545
3	PCB-4		892424	537862	354562	1.52	NO	10.72	1.00	10.69	10.75	49.12092	98.2		1909	3444
4	PCB-15		1041785	636618	405167	1.57	NO	14.40	1.00	14.36	14.43	50.60276	101.2		1750	4310
5	PCB-19		1278074	649862	628212	1.03	NO	12.73	1.00	12.70	12.76	47.47775	95.0		2551	2285
6	PCB-37		783445	395490	387955	1.02	NO	18.35	1.00	18.32	18.38	50.22837	100.5		3039	2798
7	PCB-54		1277770	544727	733044	0.74	NO	14.60	1.00	14.56	14.63	48.79539	97.6		1128	1216
8	PCB-81		830285	363907	466378	0.78	NO	21.92	1.00	21.89	21.95	50.52096	101.0		2168	1979
9	PCB-77		811627	358790	452837	0.79	NO	22.23	1.00	22.19	22.26	49.44080	98.9		2168	1979
10	PCB-104		1099741	668989	430751	1.55	NO	17.63	1.00	17.59	17.66	49.82284	99.6		1235	3549
11	PCB-123		695673	419034	276638	1.51	NO	23.20	1.00	23.16	23.23	52.27172	104.5		3468	4240
12	PCB-118		753279	456303	296976	1.54	NO	23.37	1.00	23.33	23.40	49.97989	100.0		3468	4240
13	PCB-114		706808	428304	278504	1.54	NO	23.67	1.00	23.64	23.70	49.99911	100.0		3468	4240
14	PCB-105		717142	435987	281155	1.55	NO	24.03	1.00	24.00	24.06	51.85536	103.7		3468	4240
15	PCB-126		700857	430239	270618	1.59	NO	25.63	1.00	25.59	25.66	51.16728	102.3		3468	4240
16	PCB-155		1104008	611761	492248	1.24	NO	20.59	1.00	20.55	20.62	50.30953	100.6		1410	1657
17	PCB-167		657867	369171	288696	1.28	NO	26.51	1.00	26.48	26.54	49.35623	98.7		1642	1976
18	PCB-156/157		1290713	718212	572501	1.25	NO	27.15	1.00	27.12	27.18	98.65646	98.7		1642	1976
19	PCB-169		633872	355877	277995	1.28	NO	28.82	1.00	28.78	28.85	49.78633	99.6		1642	1976
20	PCB-188		854683	434235	420448	1.03	NO	23.60	1.00	23.56	23.63	48.85724	97.7		1801	1501
21	PCB-189		591689	300686	291003	1.03	NO	30.10	1.00	30.06	30.13	48.61370	97.2		1640	1968
22	PCB-202		911228	425986	485242	0.88	NO	26.38	1.00	26.34	26.41	47.10670	94.2		1375	847
23	PCB-205		498630	231150	267480	0.86	NO	31.52	1.00	31.48	31.55	49.16080	98.3		915	899
24	PCB-208		530183	231635	298547	0.78	NO	29.83	1.00	29.79	29.86	47.68078	95.4		1002	1940
25	PCB-206		368562	161850	206712	0.78	NO	32.62	1.00	32.59	32.66	47.77396	95.5		1002	1940
26	PCB-209		433617	234411	199206	1.18	NO	33.78	1.00	33.75	33.81	48.79284	97.6		407	415
27	13C-PCB-31		1622160	844772	777388	1.09	NO	15.91	0.87	15.88	15.95	96.57972	96.6		18649	11457
28	13C-PCB-95		1422175	864303	557871	1.55	NO	19.23	1.09	19.20	19.26	113.70241	113.7		3369	1888
29	13C-PCB-153		1125255	623712	501544	1.24	NO	24.27	1.18	24.24	24.31	98.31042	98.3		3500	3486
30	13C-PCB-28		1831204	946417	884787	1.07	NO	16.08	0.94	16.05	16.11	92.10182	92.1		18649	11457
31	13C-PCB-111		1409782	852209	557573	1.53	NO	22.10	1.07	22.07	22.14	100.18236	100.2		3369	1888
32	13C-PCB-178		1184420	603936	580484	1.04	NO	25.17	1.01	25.13	25.20	110.93105	110.9		3178	2287
33	13C-PCB-1		1930200	1463582	466618	3.14	NO	9.01	0.75	8.97	9.04	94.90383	94.9		2439	12687
34	13C-PCB-3		1853888	1404251	449637	3.12	NO	10.53	0.88	10.49	10.56	94.31597	94.3		2439	12687
35	13C-PCB-4		2098764	1277579	821185	1.56	NO	10.70	0.90	10.67	10.74	102.13903	102.1		9445	3122
36	13C-PCB-15		1810134	1102406	707728	1.56	NO	14.39	1.20	14.35	14.42	85.59936	85.6		10852	2846
37	13C-PCB-19		2412330	1253330	1159000	1.08	NO	12.71	1.06	12.68	12.75	101.98506	102.0		30802	14135

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221117A-QC2.qld

Last Altered: Wednesday, November 23, 2022 10:46:40 Eastern Standard Time
Printed: Wednesday, November 23, 2022 10:47:51 Eastern Standard Time

Name: 9-221117A32, Date: 18-Nov-2022, Time: 11:38:46, ID: H9-22-CCV-634, Description: 1668-CS#3-023, Vial: Tray1:1

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
38	13C-PCB-37		1418802	735791	683011	1.08	NO	18.34	1.07	18.31	18.37	76.04496	76.0		18649	11457
39	13C-PCB-54		2993903	1304740	1689164	0.77	NO	14.58	0.85	14.55	14.61	109.11384	109.1		7099	4283
40	13C-PCB-81		1296636	580502	716134	0.81	NO	21.90	1.06	21.87	21.93	85.75732	85.8		4660	3332
41	13C-PCB-77		1310694	587142	723552	0.81	NO	22.22	1.07	22.18	22.25	85.31306	85.3		4660	3332
42	13C-PCB-104		1918337	1162076	756260	1.54	NO	17.61	1.03	17.57	17.64	103.61929	103.6		1806	1872
43	13C-PCB-123		1218548	749839	468710	1.60	NO	23.19	1.12	23.15	23.22	86.83310	86.8		4620	3655
44	13C-PCB-118		1167648	717889	449758	1.60	NO	23.35	1.13	23.32	23.39	90.29372	90.3		4620	3655
45	13C-PCB-114		1269037	782343	486694	1.61	NO	23.66	0.95	23.62	23.69	90.78436	90.8		4620	3655
46	13C-PCB-105		1177070	736717	440353	1.67	NO	24.02	0.96	23.99	24.05	88.41826	88.4		4620	3655
47	13C-PCB-126		1188240	733012	455228	1.61	NO	25.61	1.03	25.58	25.65	88.02952	88.0		4620	3655
48	13C-PCB-155		1981971	1097744	884227	1.24	NO	20.58	0.99	20.55	20.61	102.36525	102.4		1168	1776
49	13C-PCB-167		1141401	637450	503951	1.26	NO	26.50	1.06	26.46	26.53	102.25003	102.3		3500	3486
50	13C-PCB-156/157		2221094	1232339	988756	1.25	NO	27.15	1.09	27.12	27.18	208.87288	104.4		3500	3486
51	13C-PCB-169		1117747	615825	501922	1.23	NO	28.80	1.15	28.77	28.84	108.00319	108.0		3500	3486
52	13C-PCB-188		1639707	830884	808822	1.03	NO	23.58	0.94	23.55	23.62	109.36059	109.4		3178	2287
53	13C-PCB-189		1222427	624658	597769	1.04	NO	30.08	0.96	30.05	30.12	113.02804	113.0		2843	2317
54	13C-PCB-202		2014709	948098	1066611	0.89	NO	26.36	1.06	26.33	26.40	121.91332	121.9		1758	1733
55	13C-PCB-205		945773	448564	497209	0.90	NO	31.50	1.01	31.47	31.54	102.58083	102.6		1667	2154
56	13C-PCB-208		1065829	464976	600853	0.77	NO	29.81	0.95	29.78	29.85	103.05995	103.1		1009	1145
57	13C-PCB-206		733367	321472	411895	0.78	NO	32.61	1.04	32.58	32.64	112.29486	112.3		1009	1145
58	13C-PCB-209		962665	522251	440413	1.19	NO	33.75	1.08	33.72	33.78	110.05565	110.1		551	365
59	13C-PCB-9		3122632	1887542	1235090	1.53	NO	11.96	0.48	11.92	11.99	75.92450	75.9		9445	3122
60	13C-PCB-52		1218411	522544	695866	0.75	NO	17.08	0.68	17.04	17.11	74.57628	74.6		4339	3133
61	13C-PCB-101		1149303	692164	457138	1.51	NO	20.74	0.83	20.70	20.77	72.82811	72.8		3369	1888
62	13C-PCB-138		918292	503349	414943	1.21	NO	24.97	0.00	24.94	25.01	69.25502	69.3		3500	3486
63	13C-PCB-194		746719	357576	389143	0.92	NO	31.22	1.25	31.19	31.25	82.02787	82.0		1667	2154
64	Total MoCB-F1	4		1609109								35311.23502			1564	
65	Total DiCB-F1	2		561419								45940.07426			1909	
66	Total DiCB-F2	2		638449								2475.29819			1750	
67	Total TrCB-F1	1		649862								47.47775			2551	
68	Total TrCB-F3	5		1318412								1660673.321...			3039	
69	Total TeCB-F2	3		547040								4587.15260			1128	
70	Total TeCB-F4	7		730627								14699.02428			2168	
71	Total PeCB-F3	1		668989								49.82284			1235	
72	Total PeCB-F5	11		2219146								70715.41955			3468	
73	Total HxCB-F4	2		612372								965.56244			1410	
74	Total HxCB-F5	14		1516952								114392.02533			1642	

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221117A-QC2.qld

Last Altered: Wednesday, November 23, 2022 10:46:40 Eastern Standard Time
Printed: Wednesday, November 23, 2022 10:47:51 Eastern Standard Time

Name: 9-221117A32, Date: 18-Nov-2022, Time: 11:38:46, ID: H9-22-CCV-634, Description: 1668-CS#3-023, Vial: Tray1:1

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
75	Total HpCB-F5	10		1759628								2454159.313...			1801	
76	Total HpCB-F6	5		317892								32976.81812			1640	
77	Total OcCB-F5	6		431710								13261.56803			1375	
78	Total OcCB-F6	4		255717								48894.77043			915	
79	Total NoCB-F6	3		394368								1875.15680			1002	
80	Total DeCB-F7	1		234411								48.79284			407	
81	Total 13C-MoCB-F1	3		2884834								36596.81508			2439	
82	Total 13C-DiCB-F1	3		3173612								178.68522			9445	
83	Total 13C-DiCB-F2	3		2176078								2589782.338...			10852	
84	Total 13C-TrCB-F1	3		1322156								108483.94822			30802	
85	Total 13C-TrCB-F3	4		2532681								7922.34110			18649	
86	Total 13C-TeCB-F2	1		1304740								109.11384			7099	
87	Total 13C-TeCB-F3	4		542112								77.35829			4339	
88	Total 13C-TeCB-F4	7		1193757								42159.84013			4660	
89	Total 13C-PeCB-F3	1		1162076								103.61929			1806	
90	Total 13C-PeCB-F4	11		2428560								292.61747			3369	
91	Total 13C-PeCB-F5	15		3820342								134143.01079			4620	
92	Total 13C-HxCB-F4	3		1103925								6996.15167			1168	
93	Total 13C-HxCB-F5	22		3664025								618.45567			3500	
94	Total 13C-HpCB-F5	7		1465687								42863.35395			3178	
95	Total 13C-HpCB-F6	5		670247								73531.79007			2843	
96	Total 13C-OcCB-F5	8		956187								9029.20342			1758	
97	Total 13C-OcCB-F6	4		839174								199.65579			1667	
98	Total 13C-NoCB-F6	4		788093								3255.38886			1009	
99	Total 13C-DeCB-F7	1		522251								110.05565			551	
100	Lockmass F1			0											644266	
101	Lockmass F2			0											193479	
102	Lockmass F3			0											487541	
103	Lockmass F4			0											355950	
104	Lockmass F5			0											94254	
105	Lockmass F6			0											146681	
106	Lockmass F7			0											36748	

Quantify Audit Report MassLynx V4.2 SCN1012

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221117A-QC2.qld

Last Altered: Wednesday, November 23, 2022 10:46:40 Eastern Standard Time
Printed: Wednesday, November 23, 2022 10:47:51 Eastern Standard Time

Date	Time	Event	Details	Comments
23-Nov-22	10:46:12	Peak deleted	Sample:9-221117A18, Compound:13C-NoCB-F6, RT:32.766	
23-Nov-22	10:46:12	Peak deleted	Sample:9-221117A18, Compound:13C-NoCB-F6, RT:32.895	
23-Nov-22	10:46:12	Peak deleted	Sample:9-221117A18, Compound:13C-NoCB-F6, RT:32.740	
23-Nov-22	10:46:39	Peak deleted	Sample:9-221117A18, Compound:13C-TeCB-F4, RT:22.105	
23-Nov-22	10:46:39	Peak deleted	Sample:9-221117A18, Compound:13C-TeCB-F4, RT:22.114	
23-Nov-22	10:46:44	Dataset Saved	Saved to 'I:\Organics Instrument\HIGHRES GCMS Complete...	
22-Nov-22	13:59:16	Process Extract		
22-Nov-22	13:59:16	Process Integrate		
22-Nov-22	13:59:17	Process Quantify		
22-Nov-22	13:59:21	Dataset Created		
22-Nov-22	14:01:22	Dataset Saved	Saved to 'I:\Organics Instrument\HIGHRES GCMS Complete...	

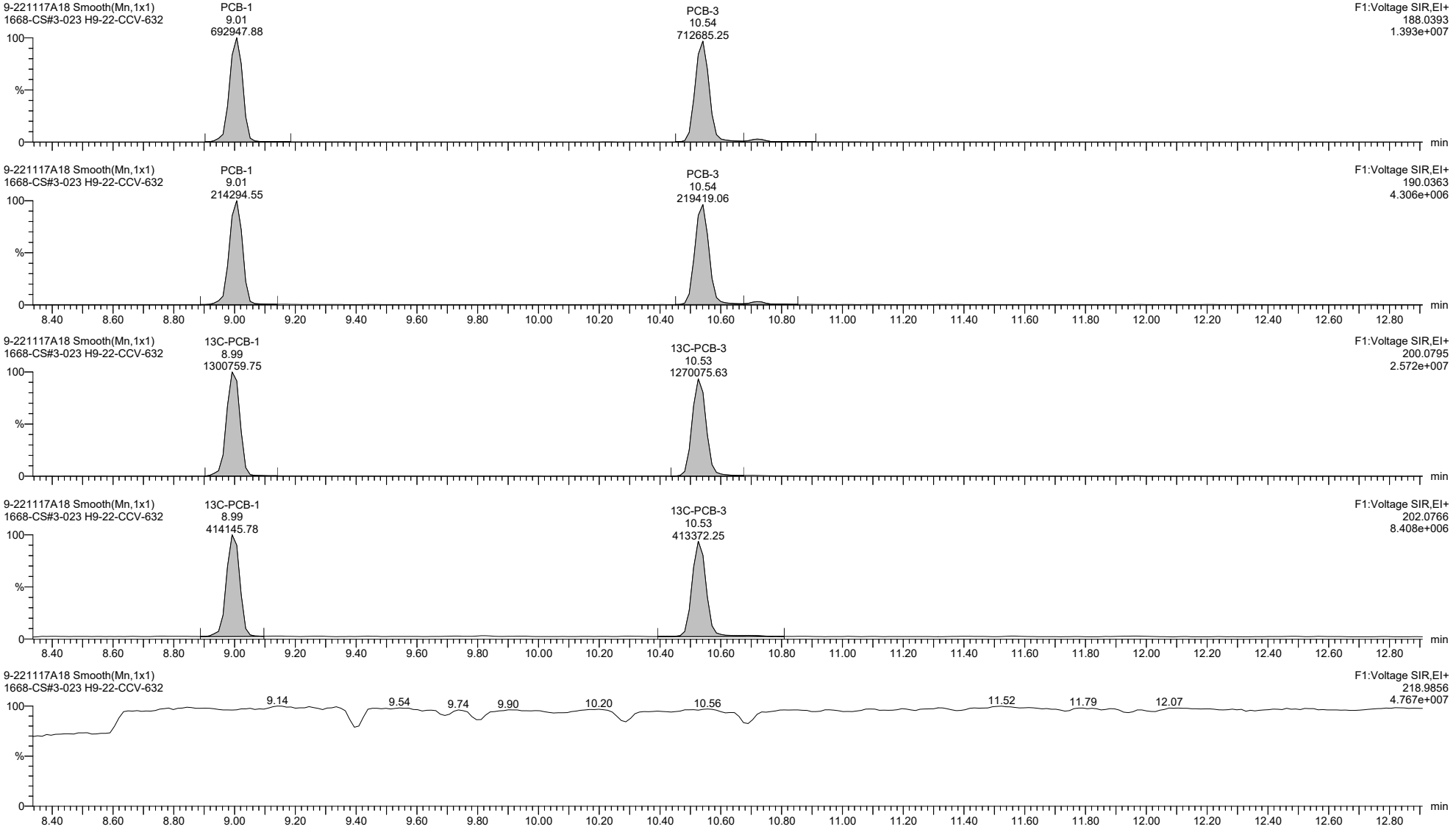
Quantify Sample Template Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221117A-QC2.qld

Last Altered: Wednesday, November 23, 2022 10:46:40 Eastern Standard Time
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Method: C:\MassLynx\PCB.PRO\MethDB\1668-OCTYL-1-ICAL-9-221103B.mdb 16 Nov 2022 10:47:30
Calibration: C:\MassLynx\PCB.PRO\CurveDB\9-221103B-PCB-ICAL.cdb 04 Nov 2022 09:45:08

Name: 9-221117A18, Date: 18-Nov-2022, Time: 01:36:40, ID: H9-22-CCV-632, Description: 1668-CS#3-023, Vial: Tray1:1

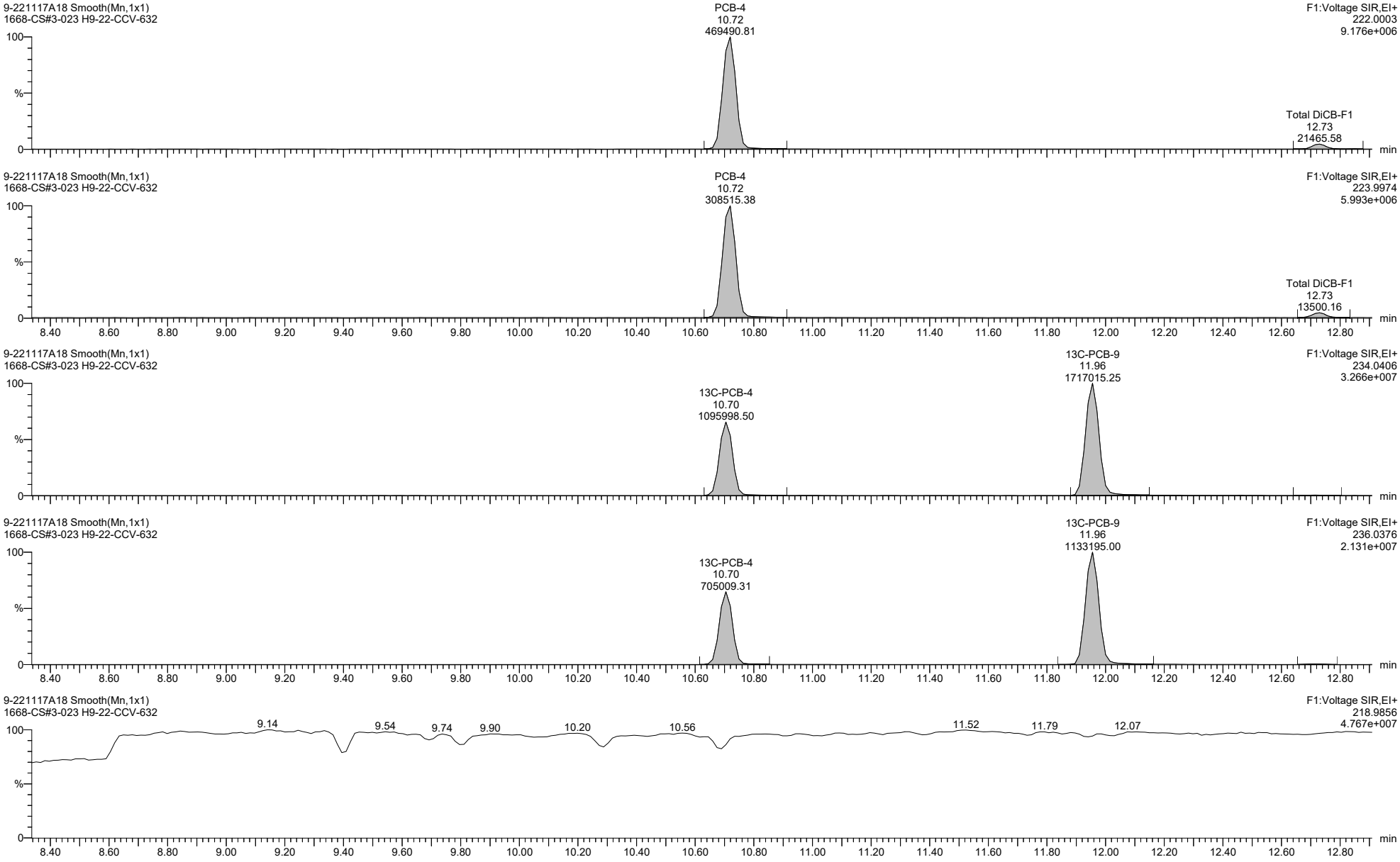


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221117A-QC2.qld

Last Altered: Wednesday, November 23, 2022 10:46:40 Eastern Standard Time
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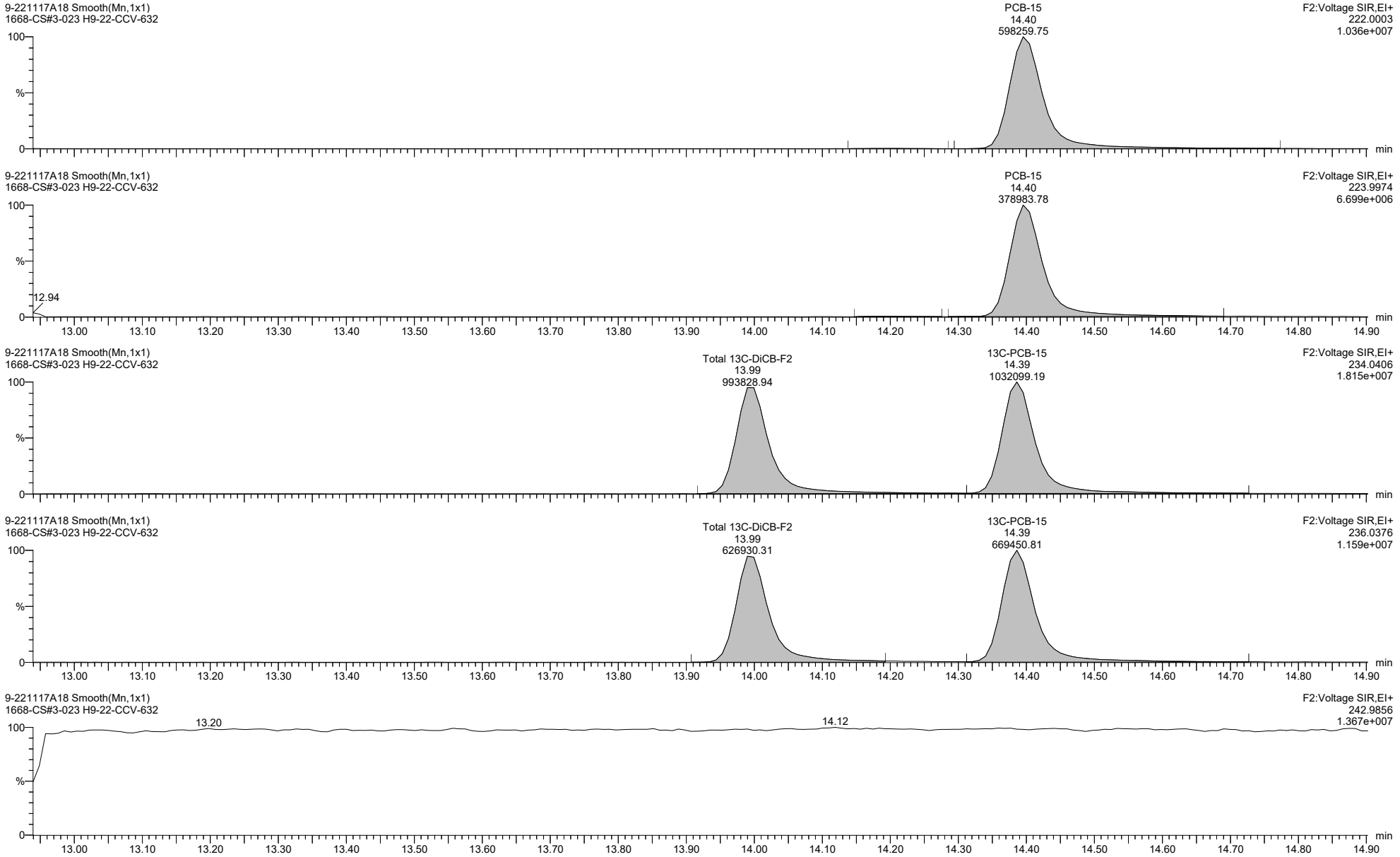


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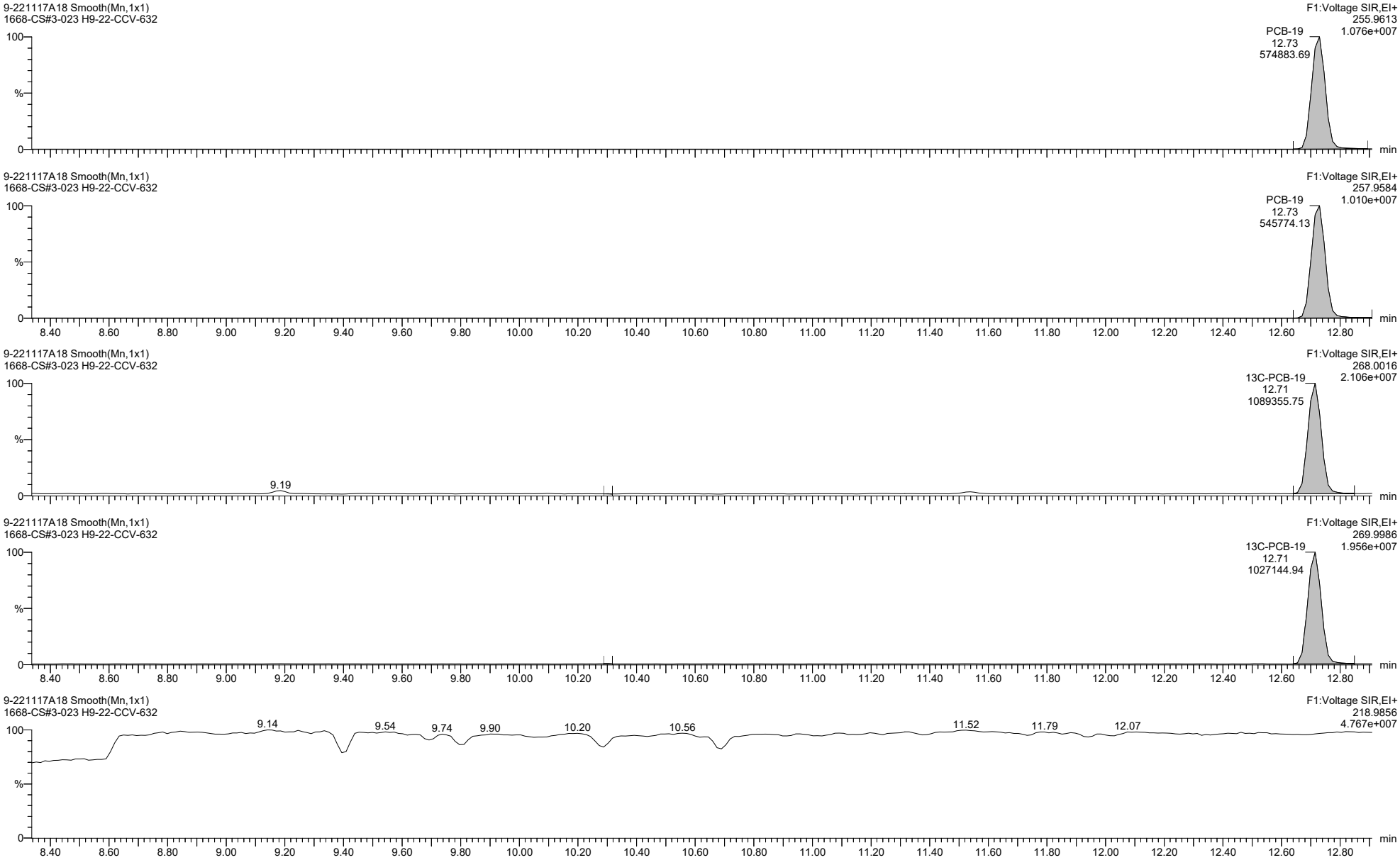


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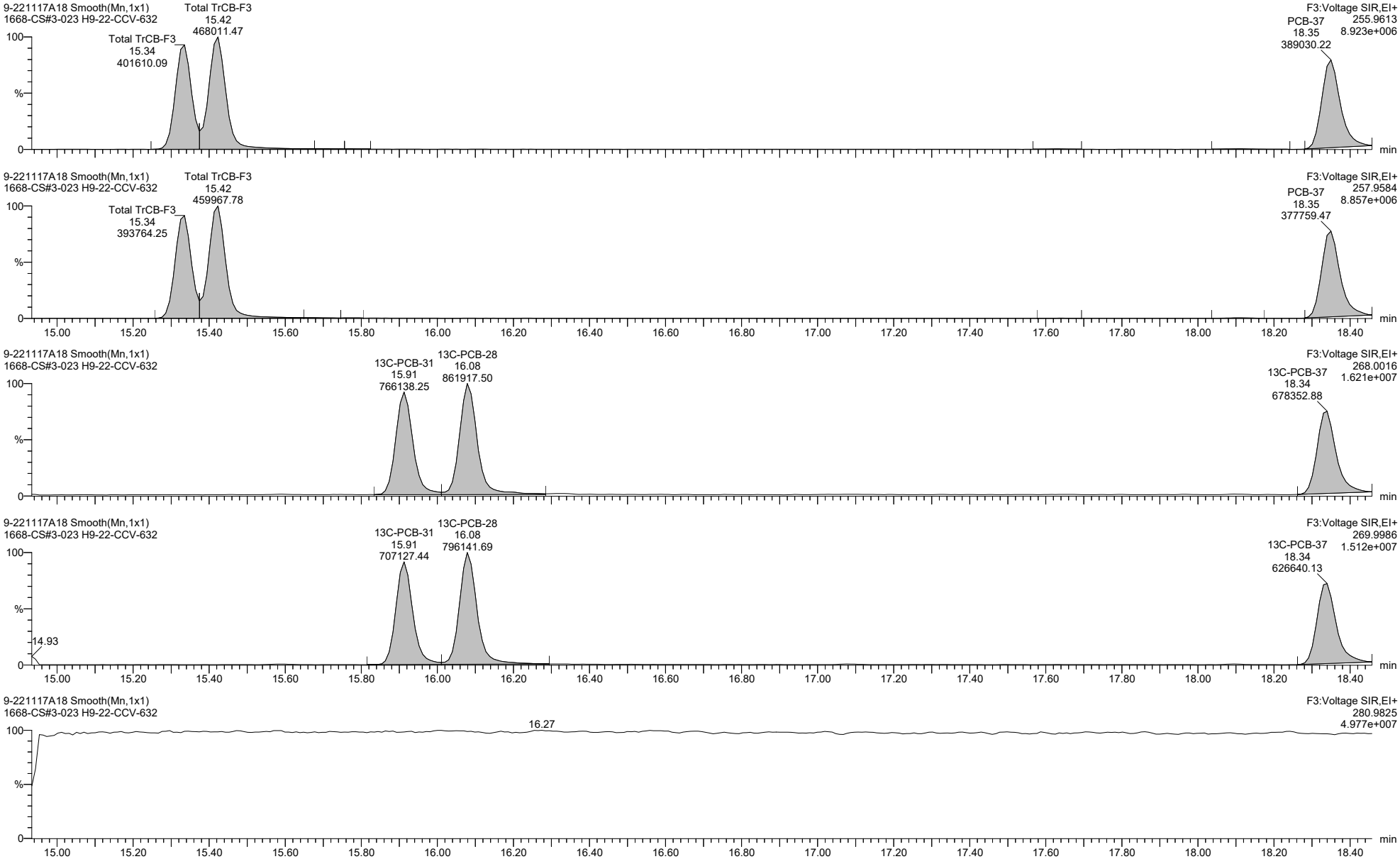


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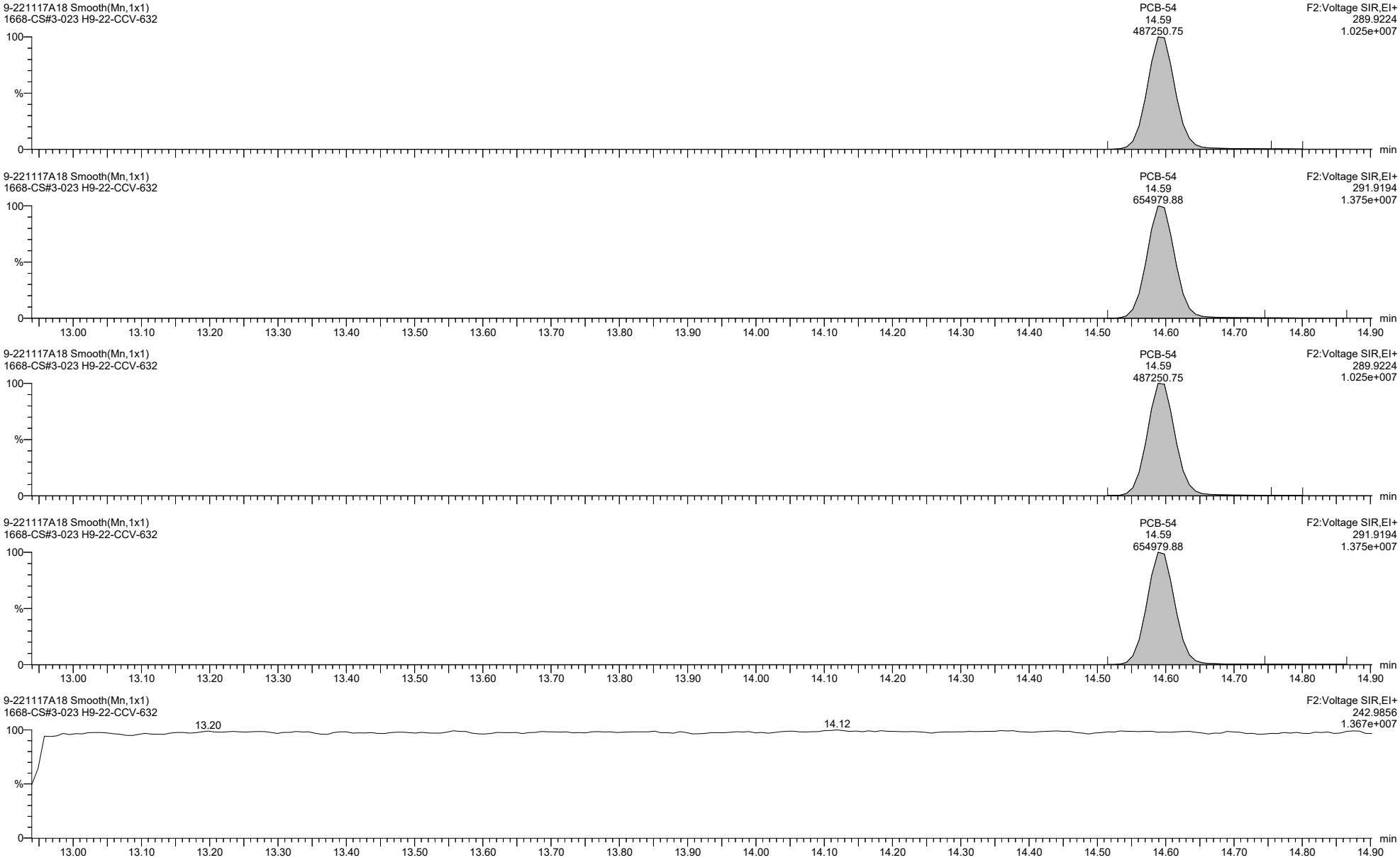


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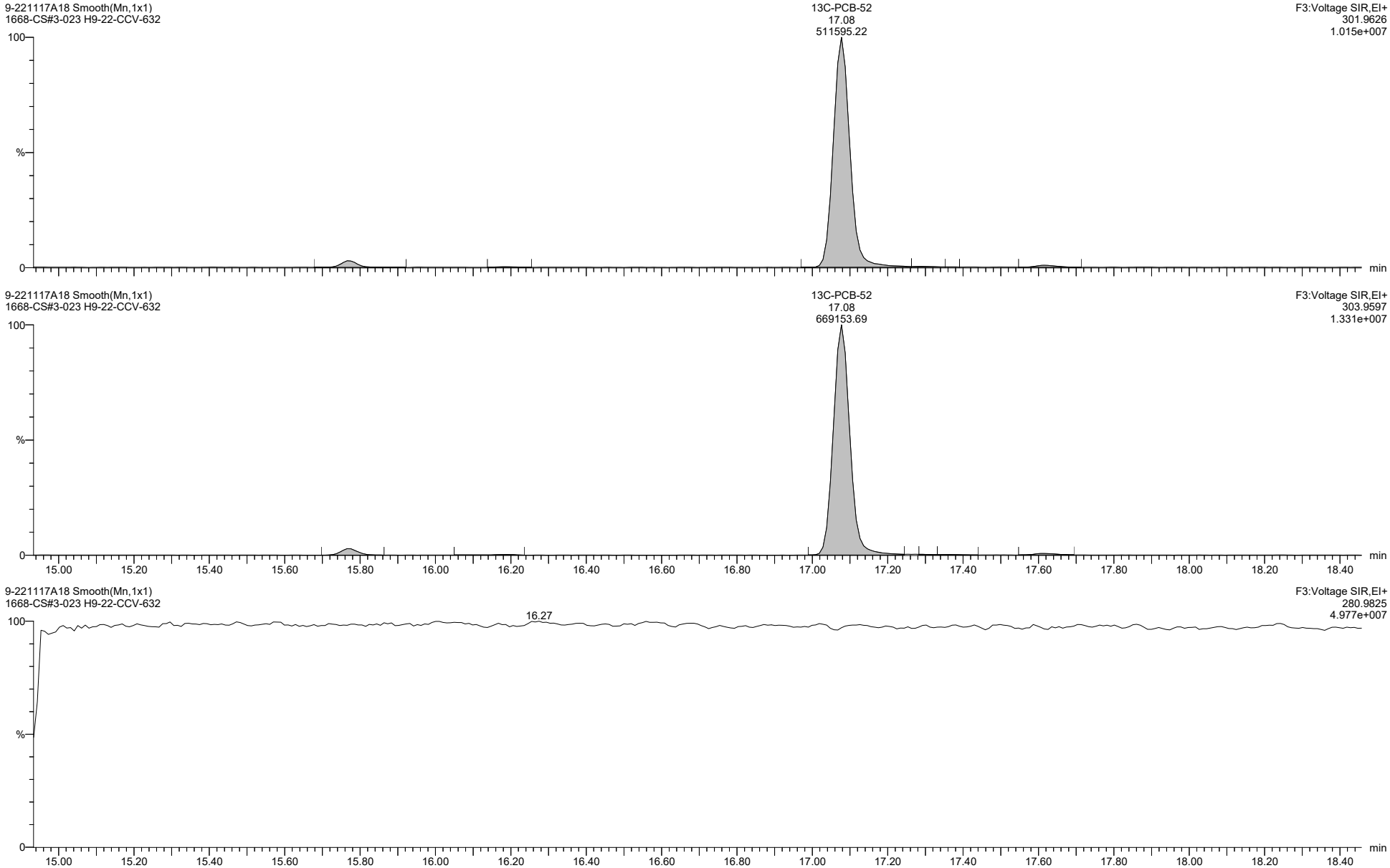


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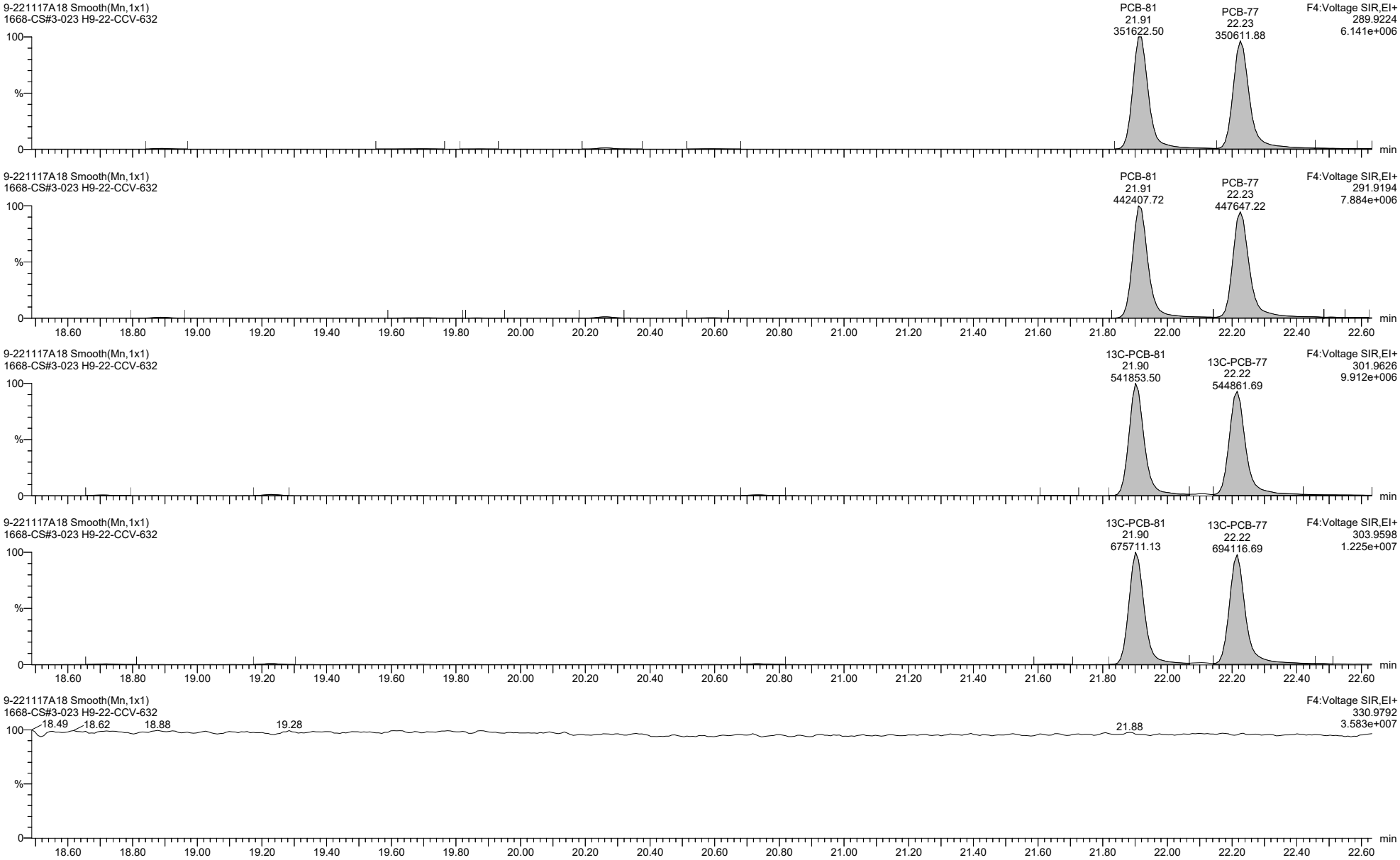


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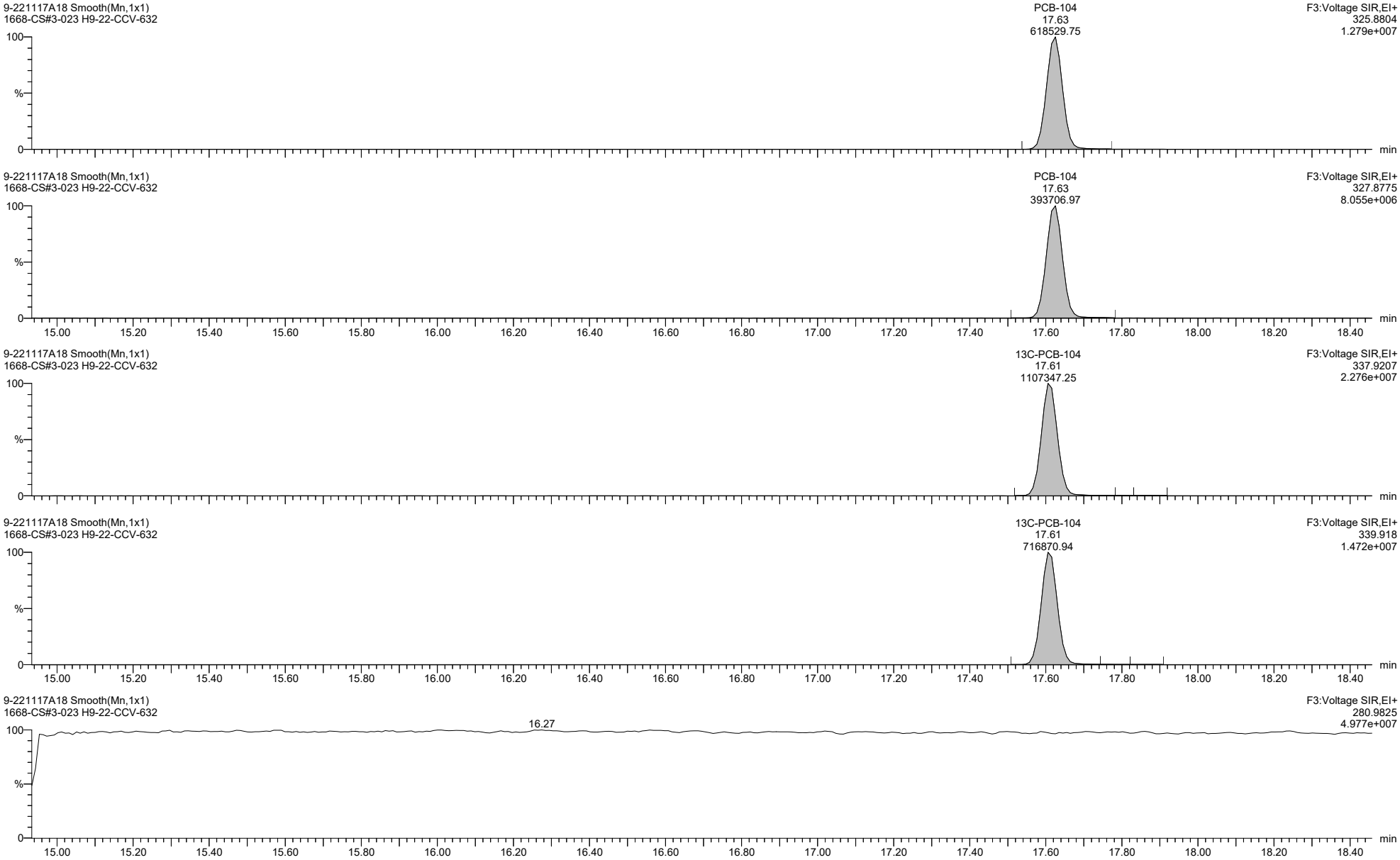


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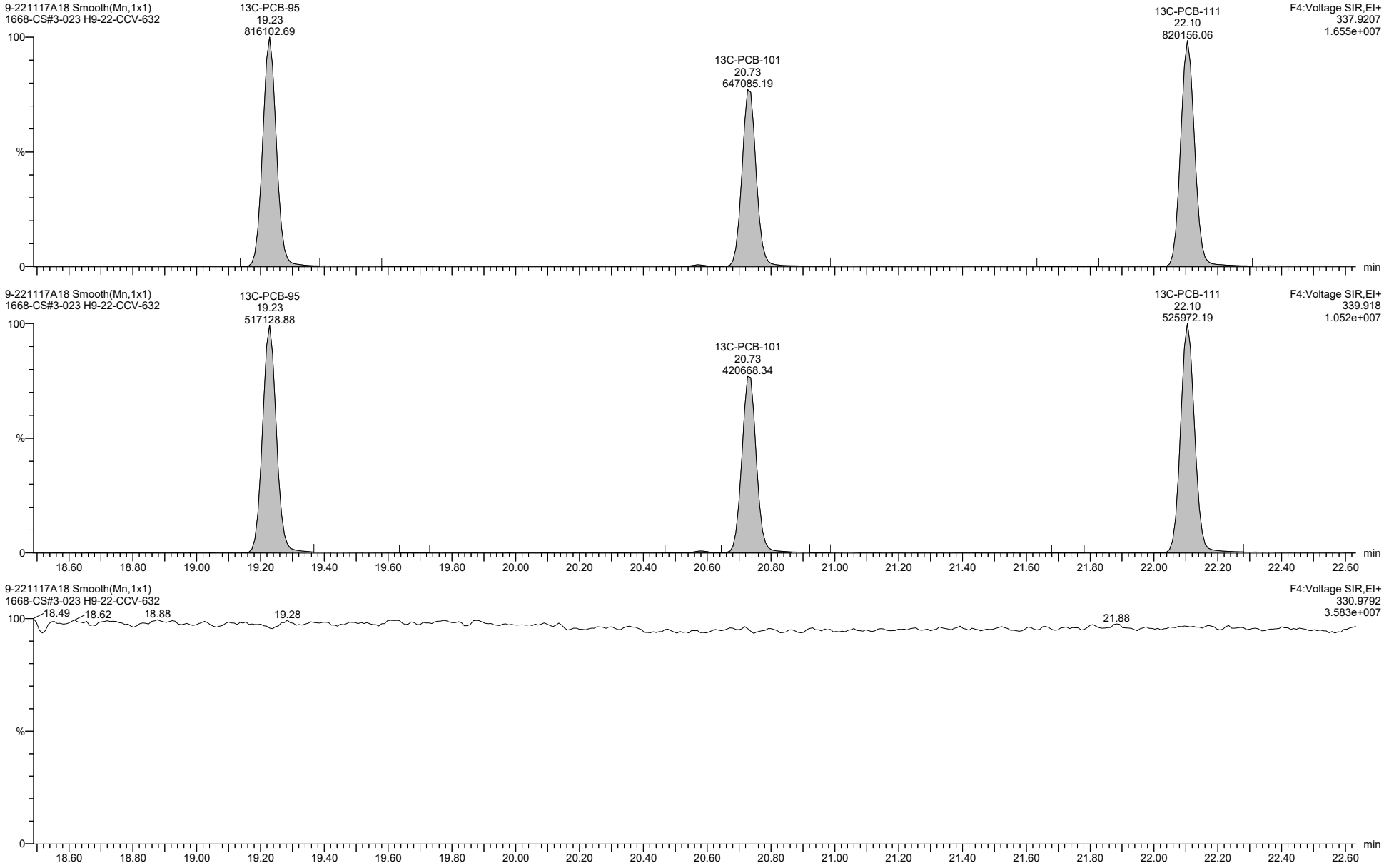


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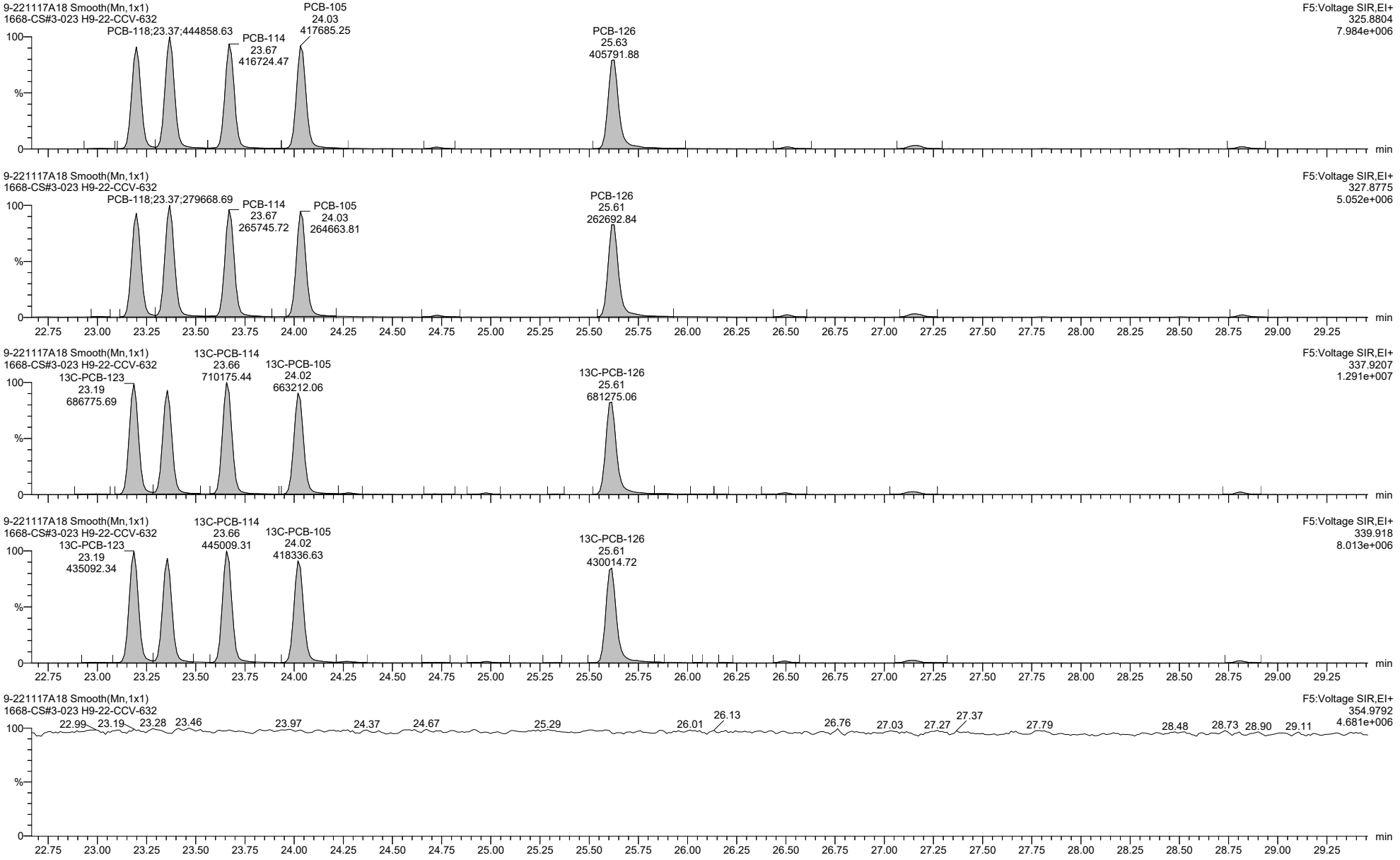


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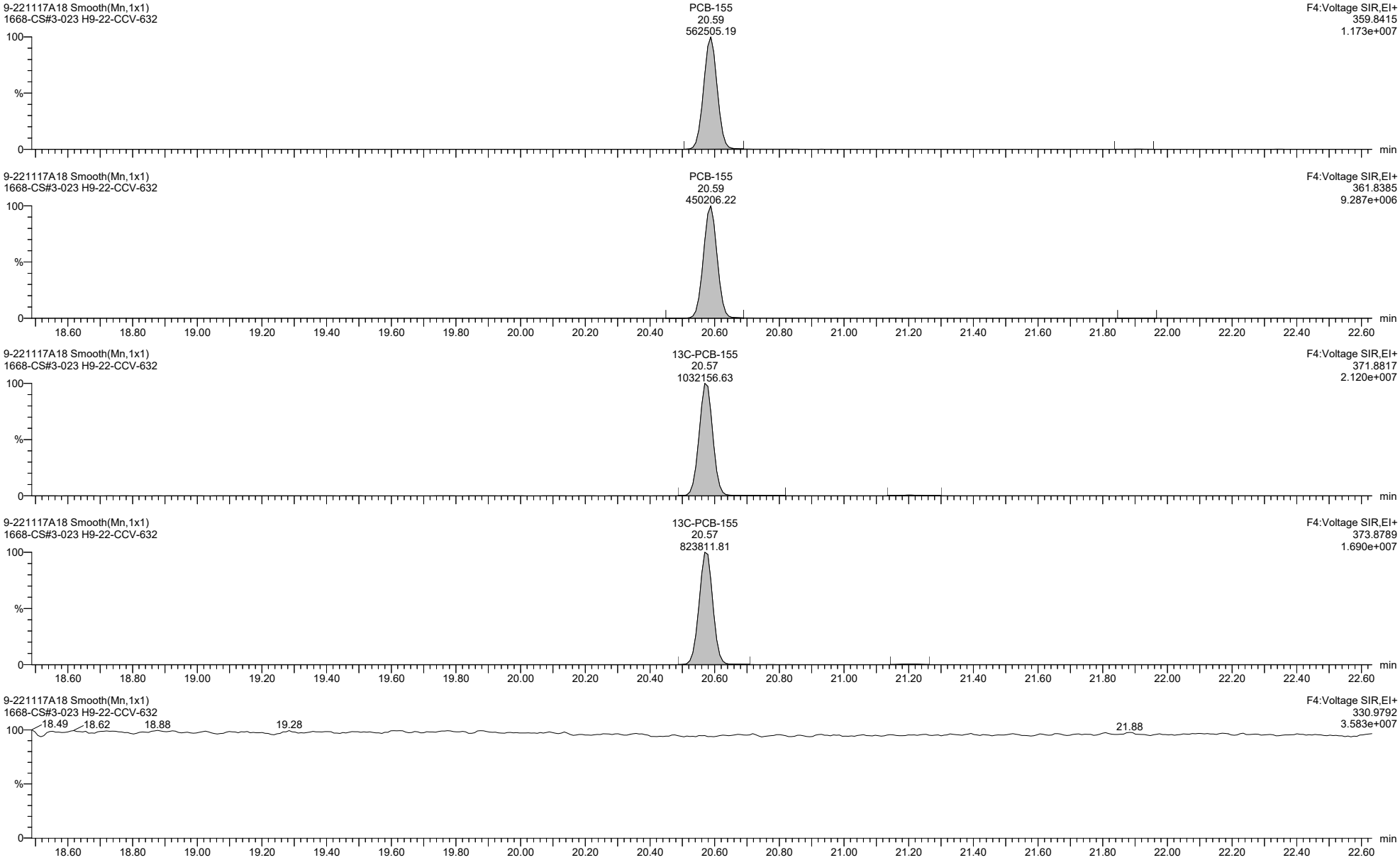


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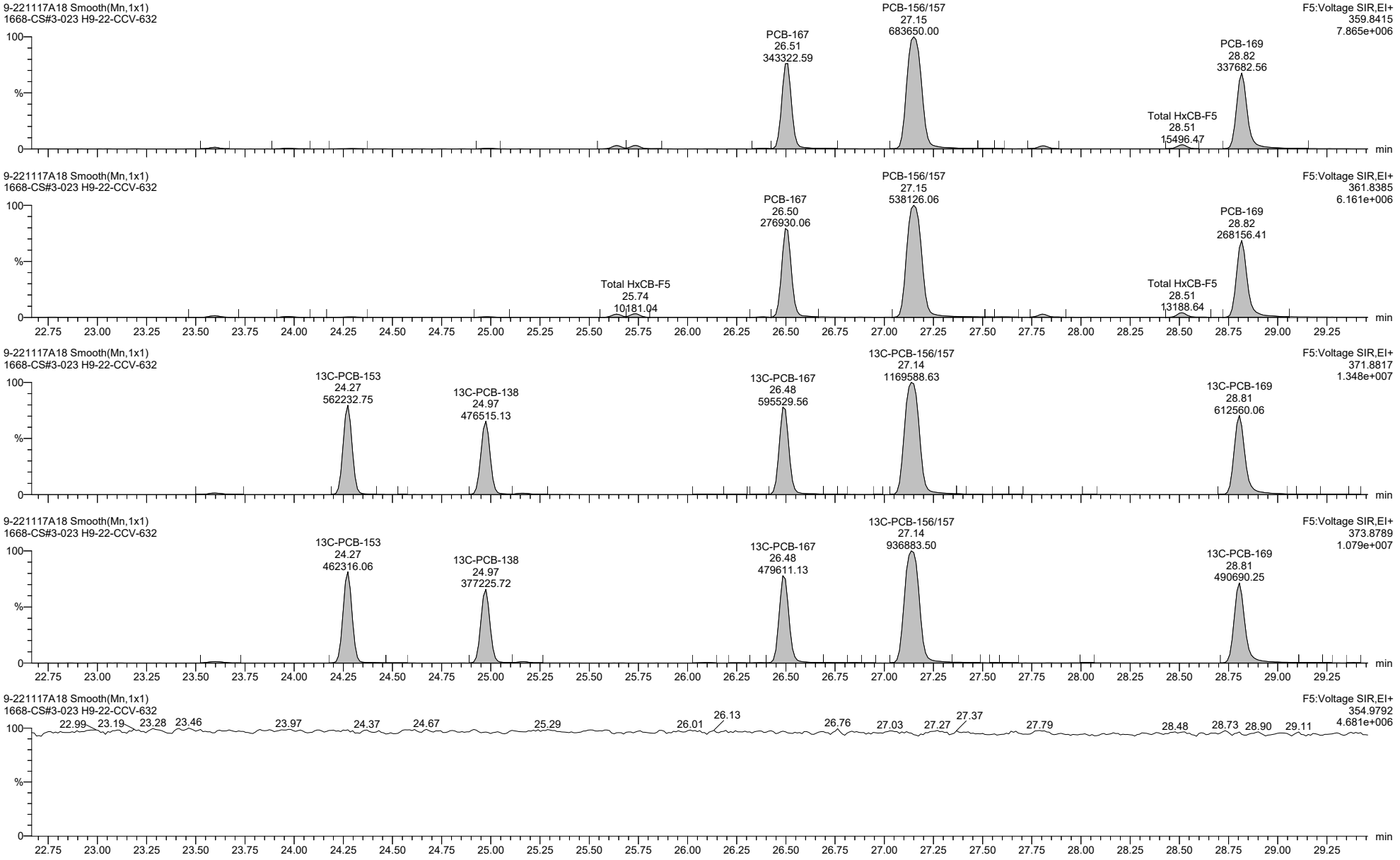


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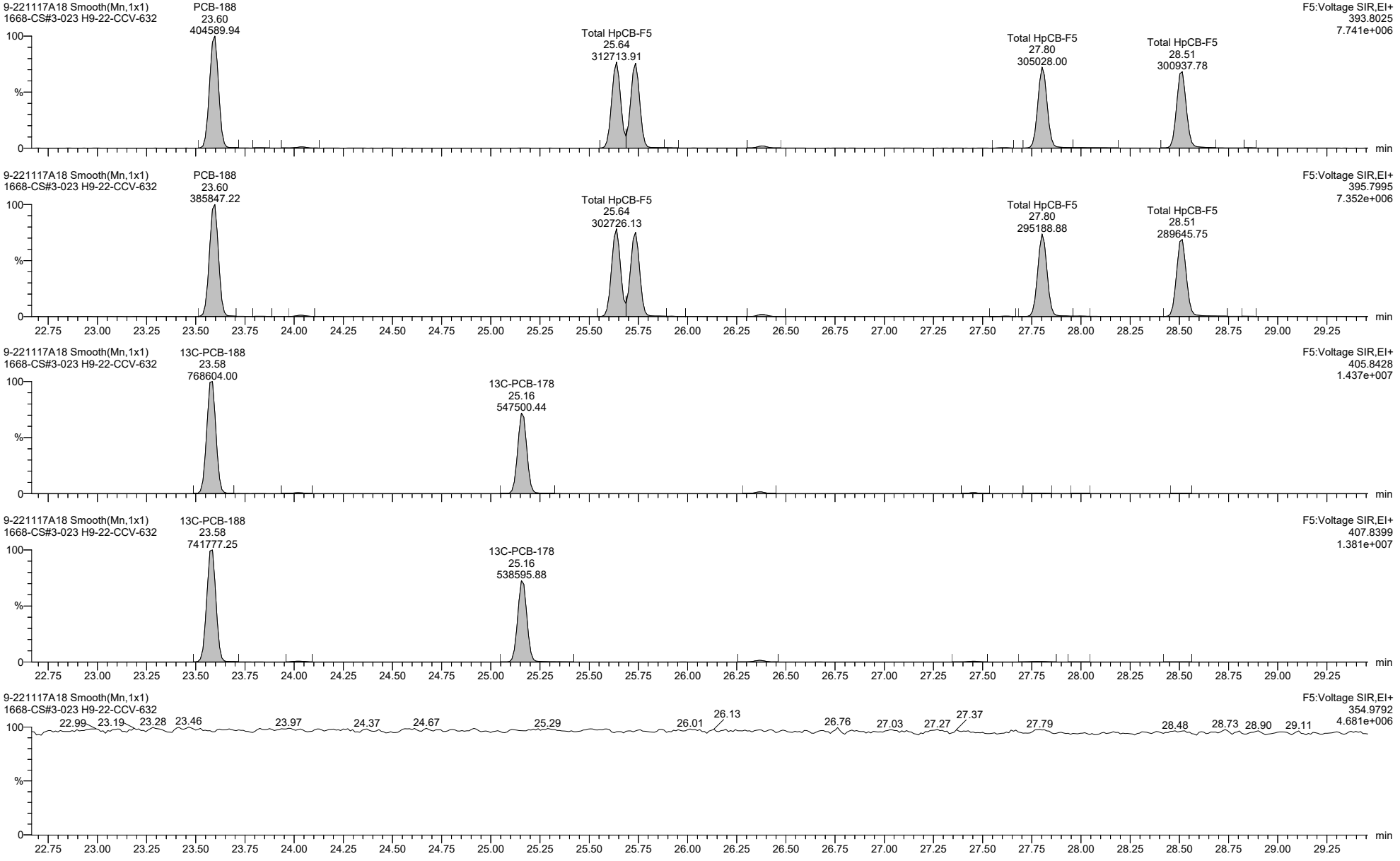


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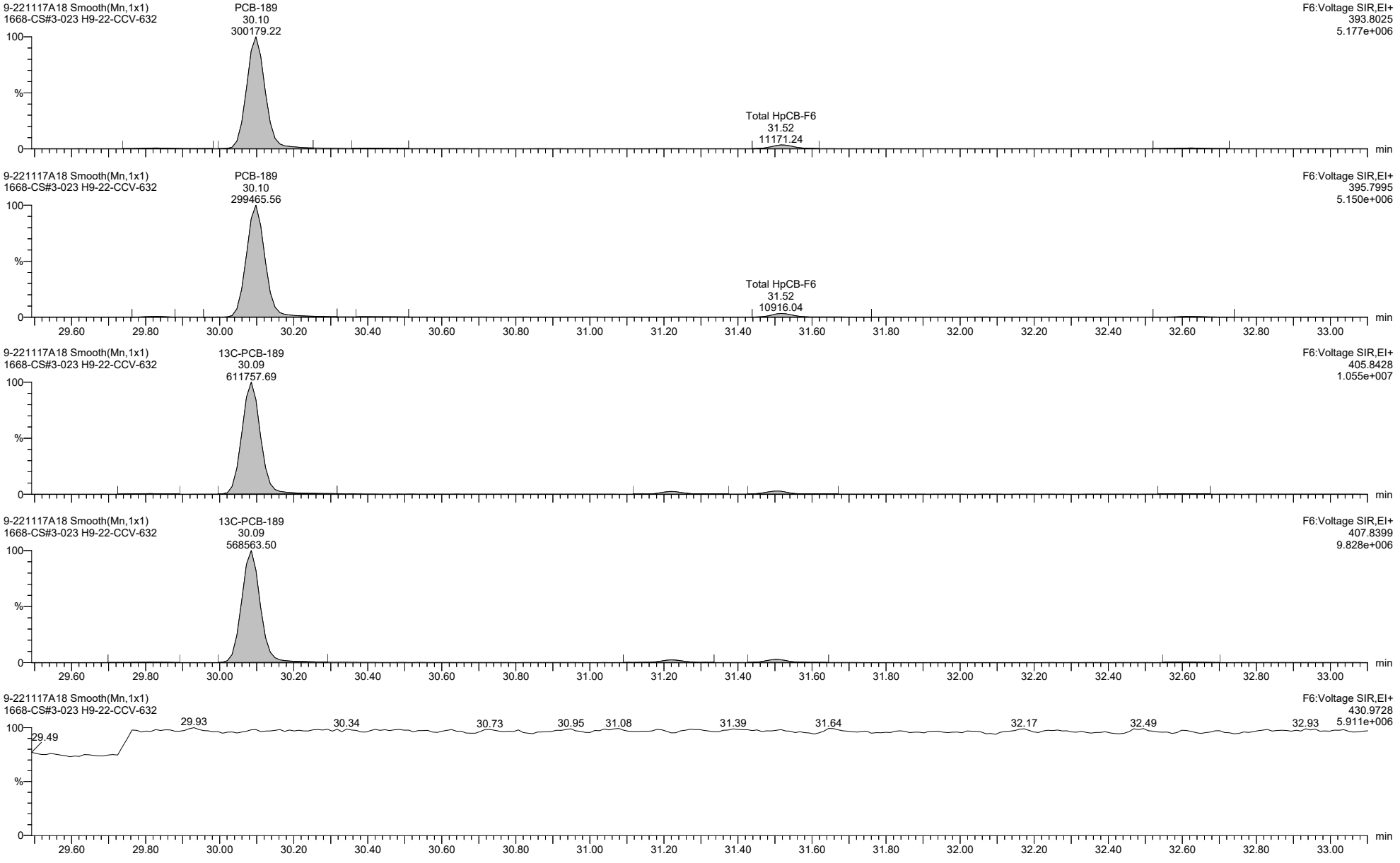


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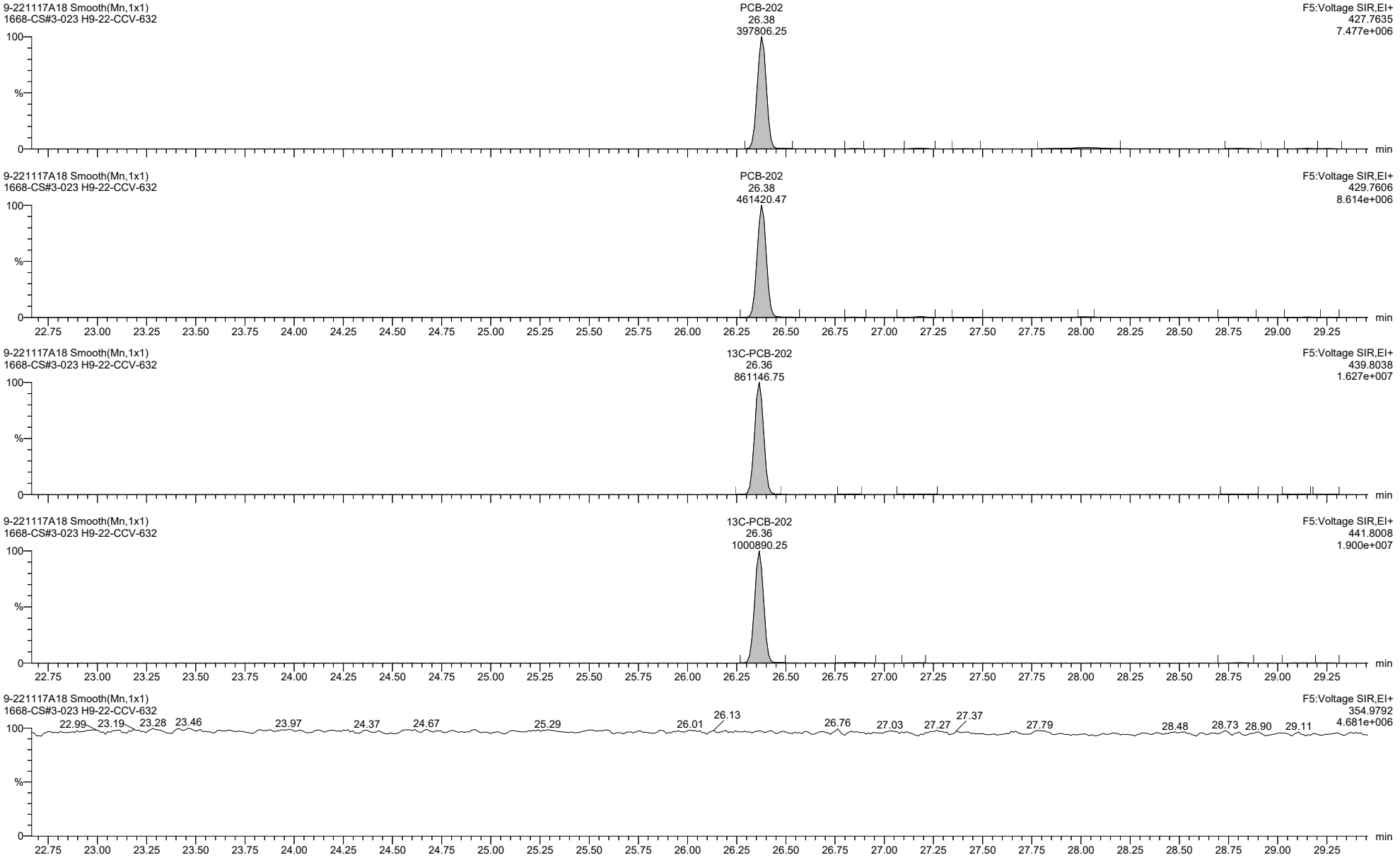


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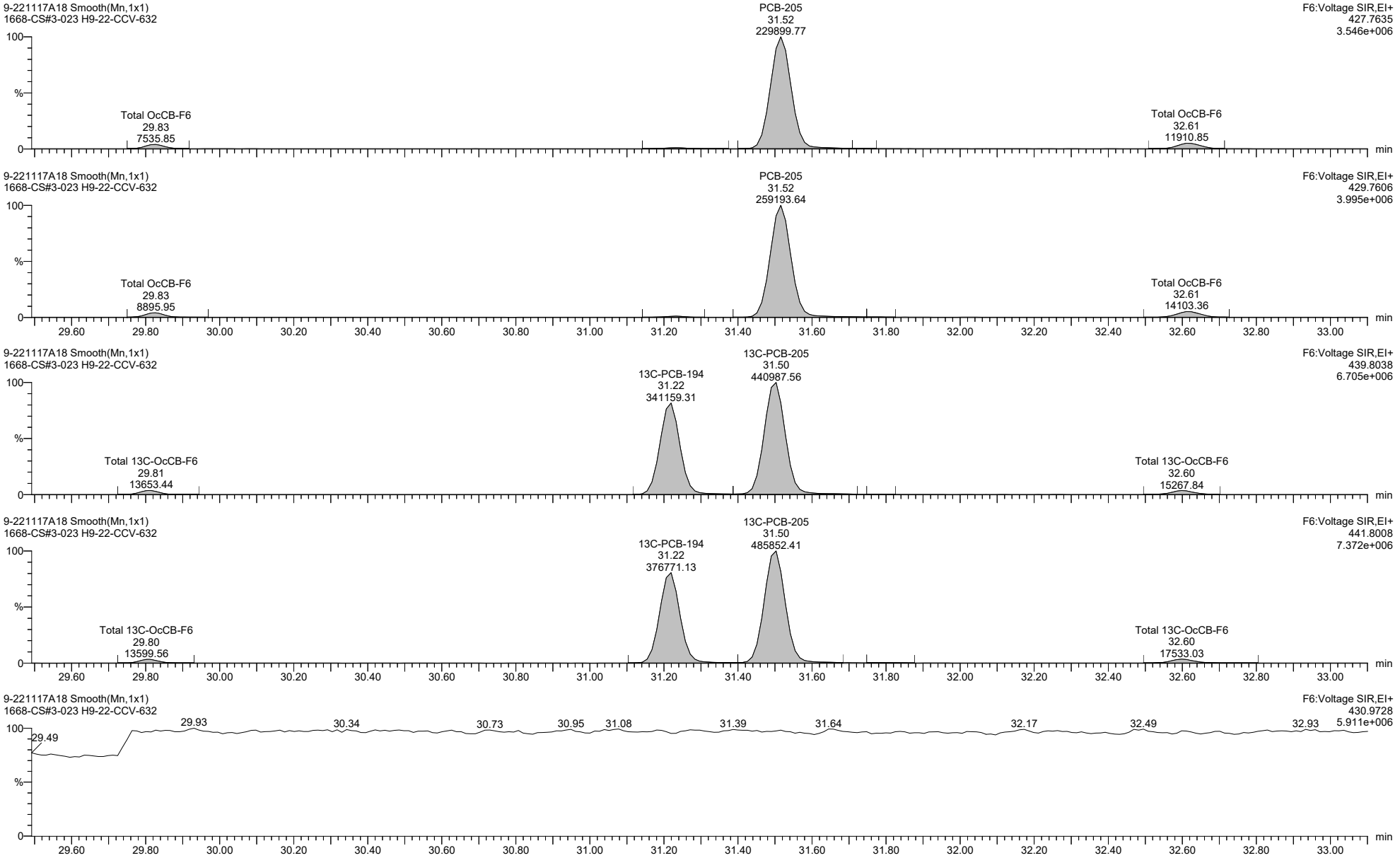


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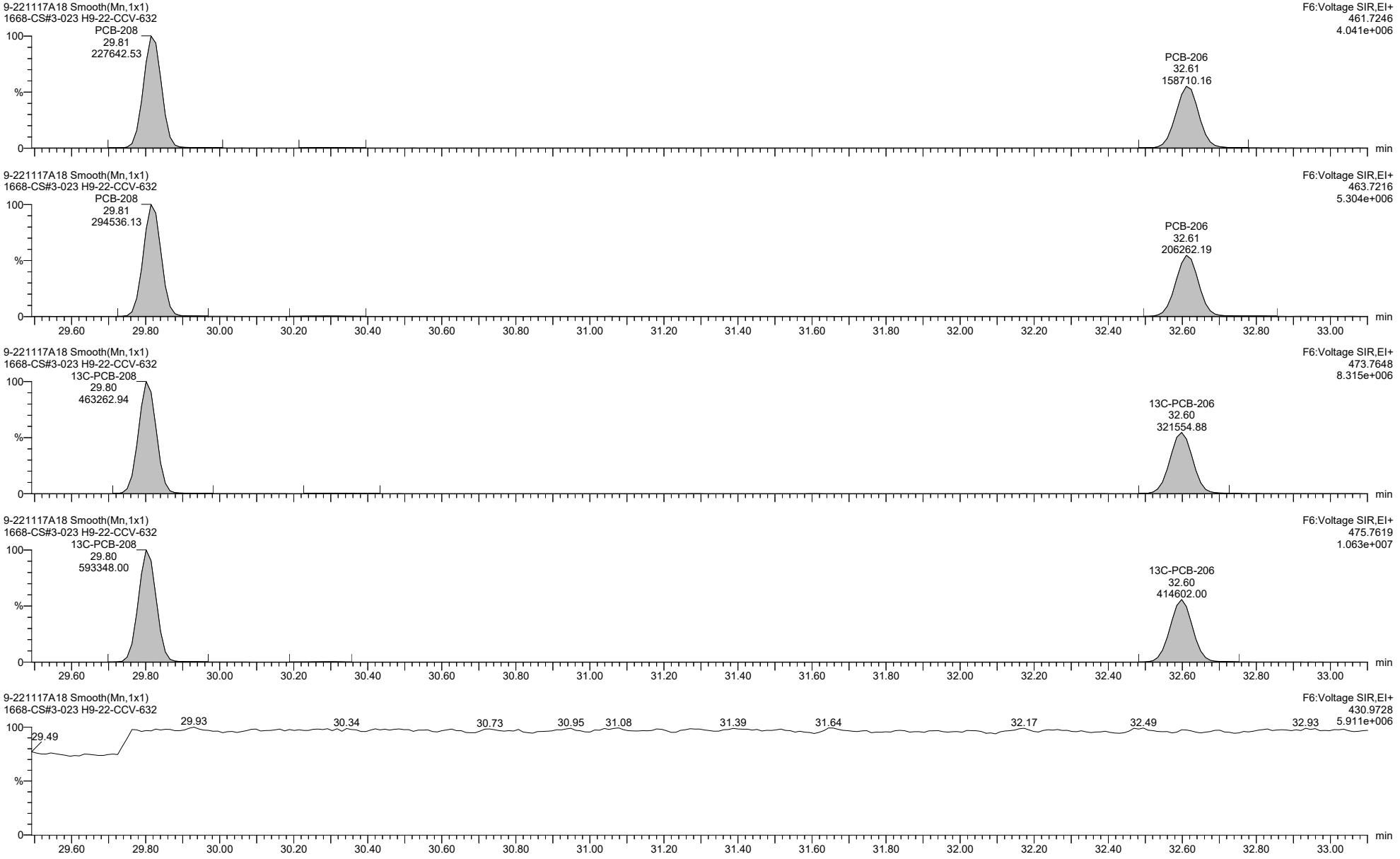


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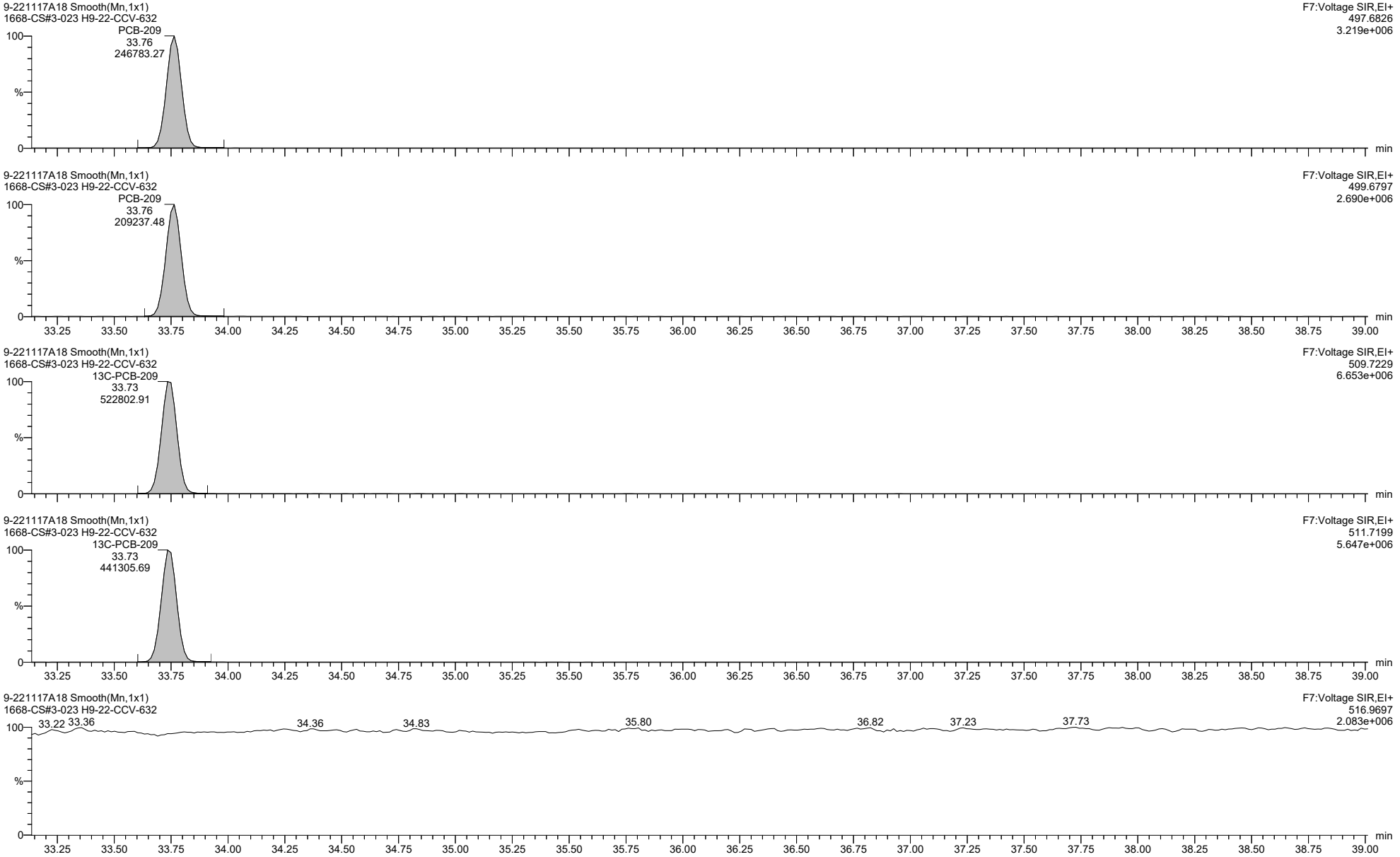


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221117A-QC2.qld

Last Altered: Wednesday, November 23, 2022 10:46:40 Eastern Standard Time
Printed: Wednesday, November 23, 2022 10:47:51 Eastern Standard Time

Name: 9-221117A18, Date: 18-Nov-2022, Time: 01:36:40, ID: H9-22-CCV-632, Description: 1668-CS#3-023, Vial: Tray1:1



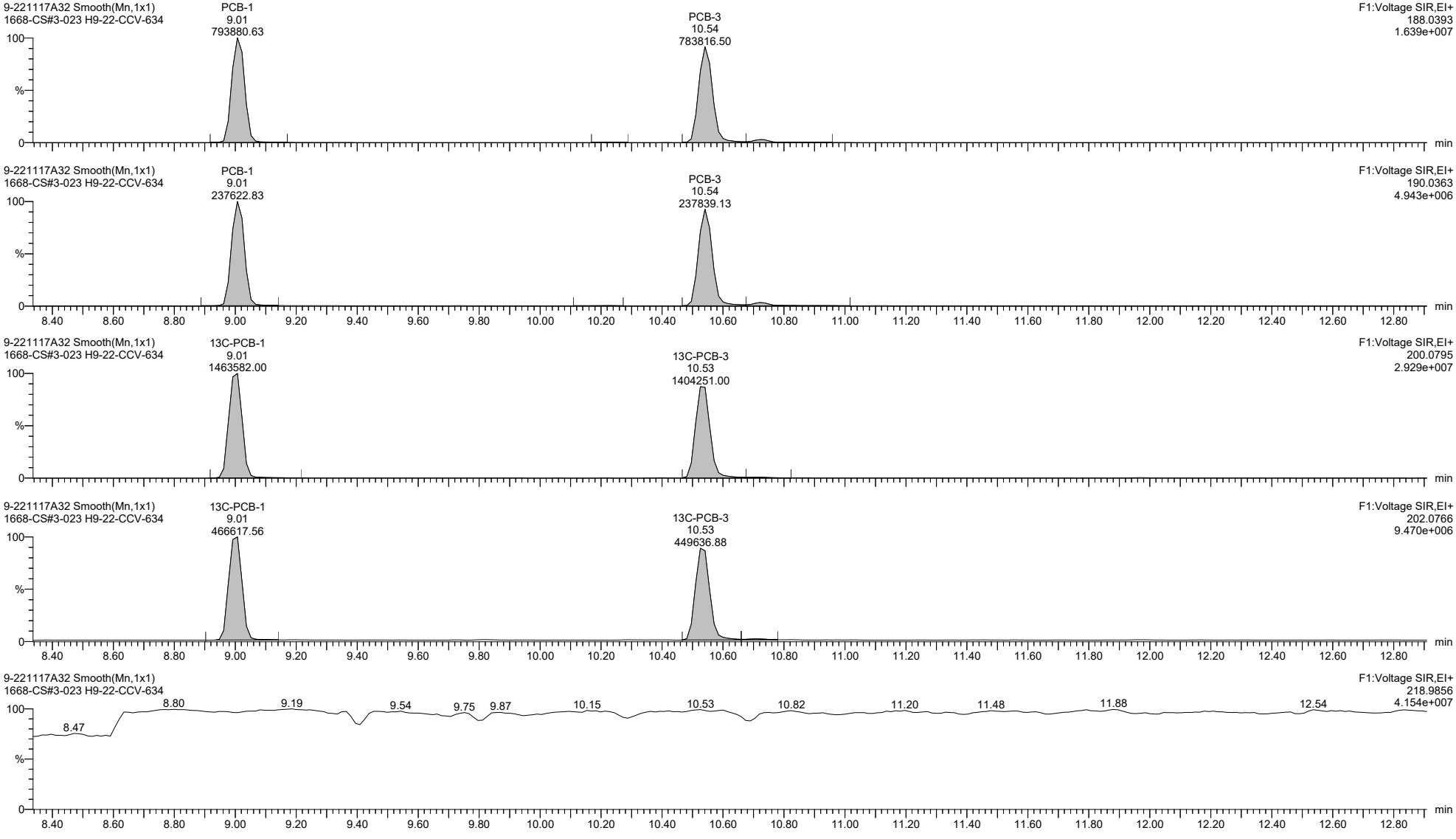
Quantify Sample Template Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221117A-QC2.qld

Last Altered: Wednesday, November 23, 2022 10:46:40 Eastern Standard Time
Printed: Wednesday, November 23, 2022 10:47:51 Eastern Standard Time

Method: C:\MassLynx\PCB.PRO\MethDB\1668-OCTYL-1-ICAL-9-221103B.mdb 16 Nov 2022 10:47:30
Calibration: C:\MassLynx\PCB.PRO\CurveDB\9-221103B-PCB-ICAL.cdb 04 Nov 2022 09:45:08

Name: 9-221117A32, Date: 18-Nov-2022, Time: 11:38:46, ID: H9-22-CCV-634, Description: 1668-CS#3-023, Vial: Tray1:1

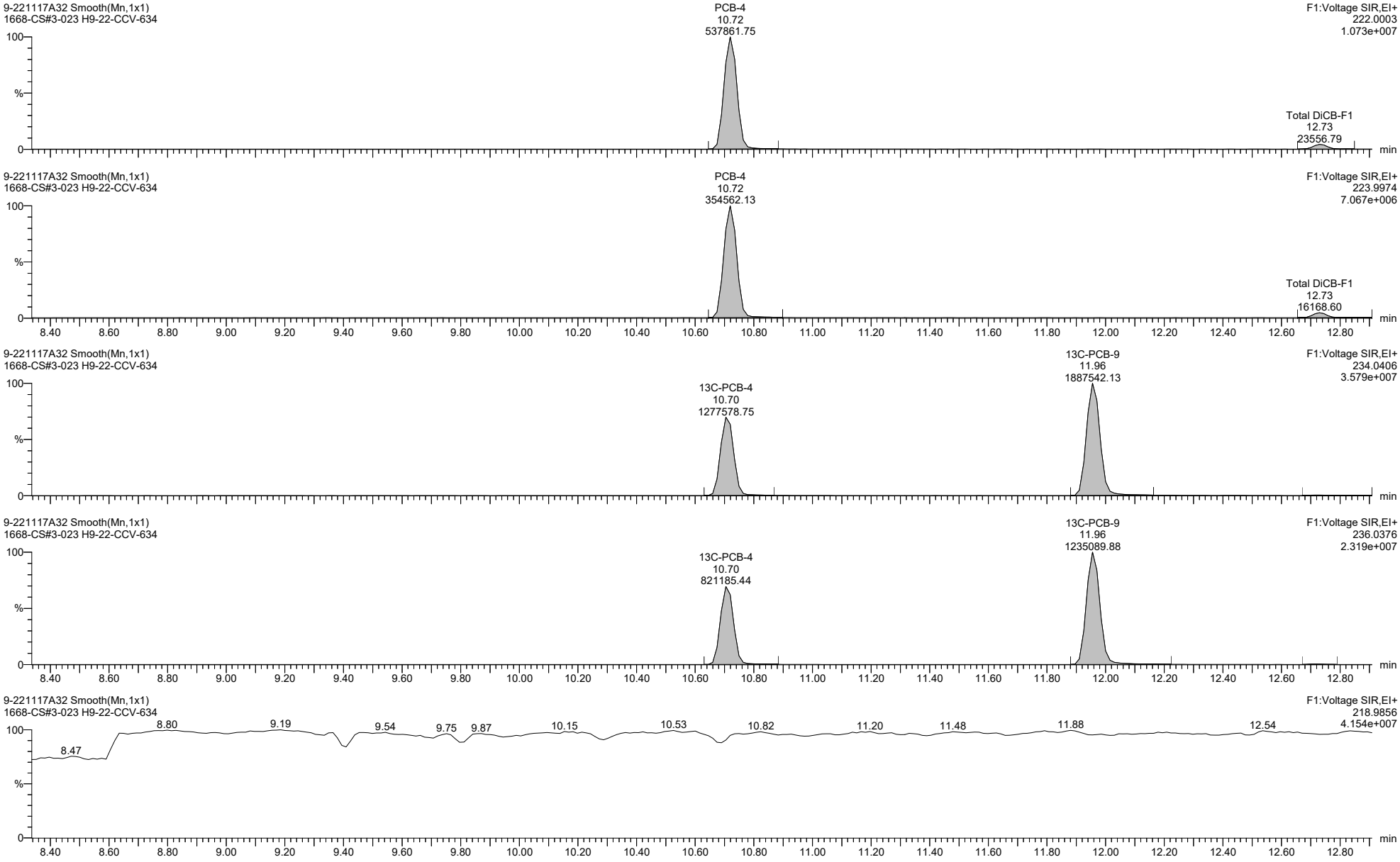


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221117A-QC2.qld

Last Altered: Wednesday, November 23, 2022 10:46:40 Eastern Standard Time
Printed: Wednesday, November 23, 2022 10:47:51 Eastern Standard Time

Name: 9-221117A32, Date: 18-Nov-2022, Time: 11:38:46, ID: H9-22-CCV-634, Description: 1668-CS#3-023, Vial: Tray1:1

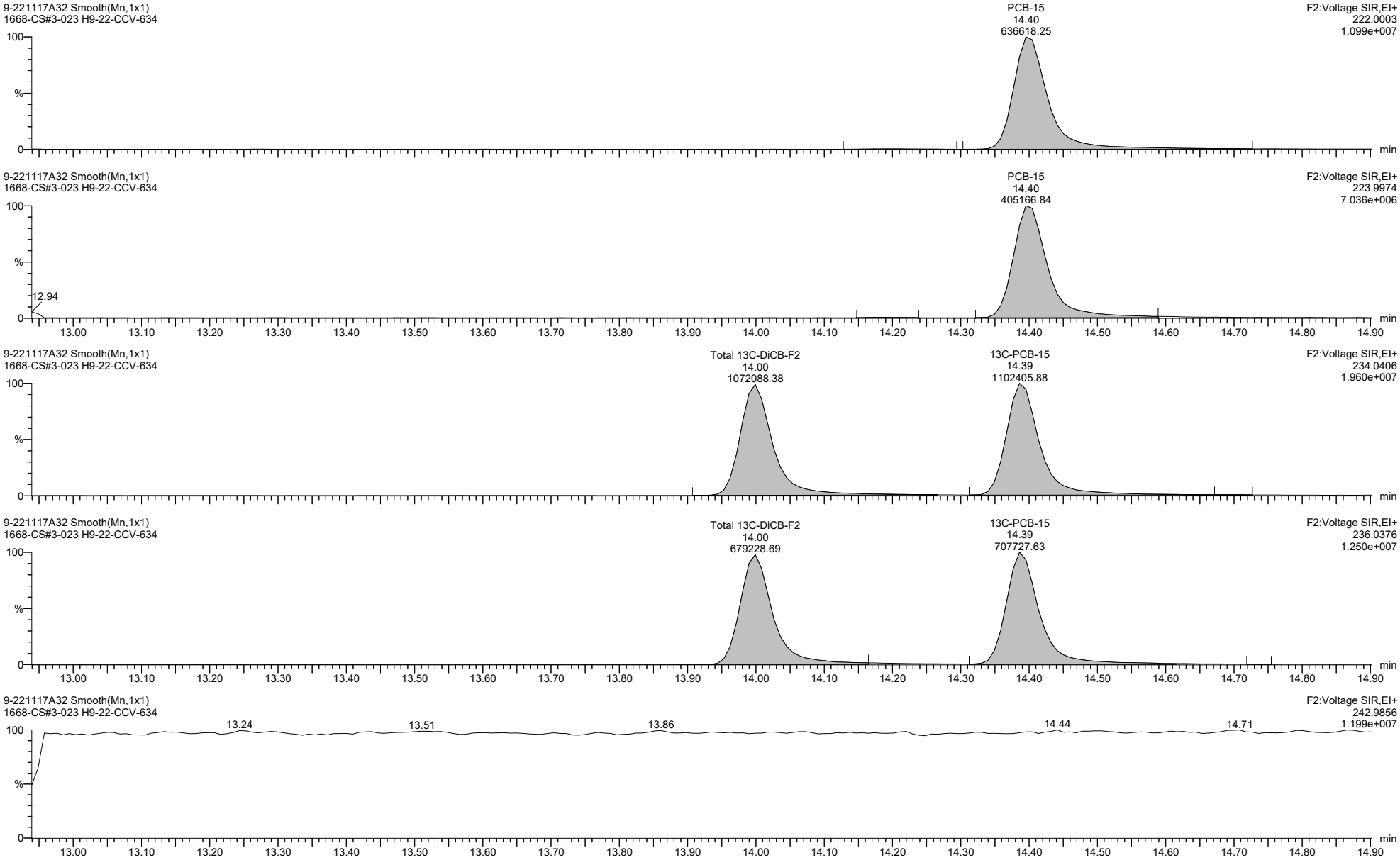


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221117A-QC2.qld

Last Altered: Wednesday, November 23, 2022 10:46:40 Eastern Standard Time
Printed: Wednesday, November 23, 2022 10:47:51 Eastern Standard Time

Name: 9-221117A32, Date: 18-Nov-2022, Time: 11:38:46, ID: H9-22-CCV-634, Description: 1668-CS#3-023, Vial: Tray1:1

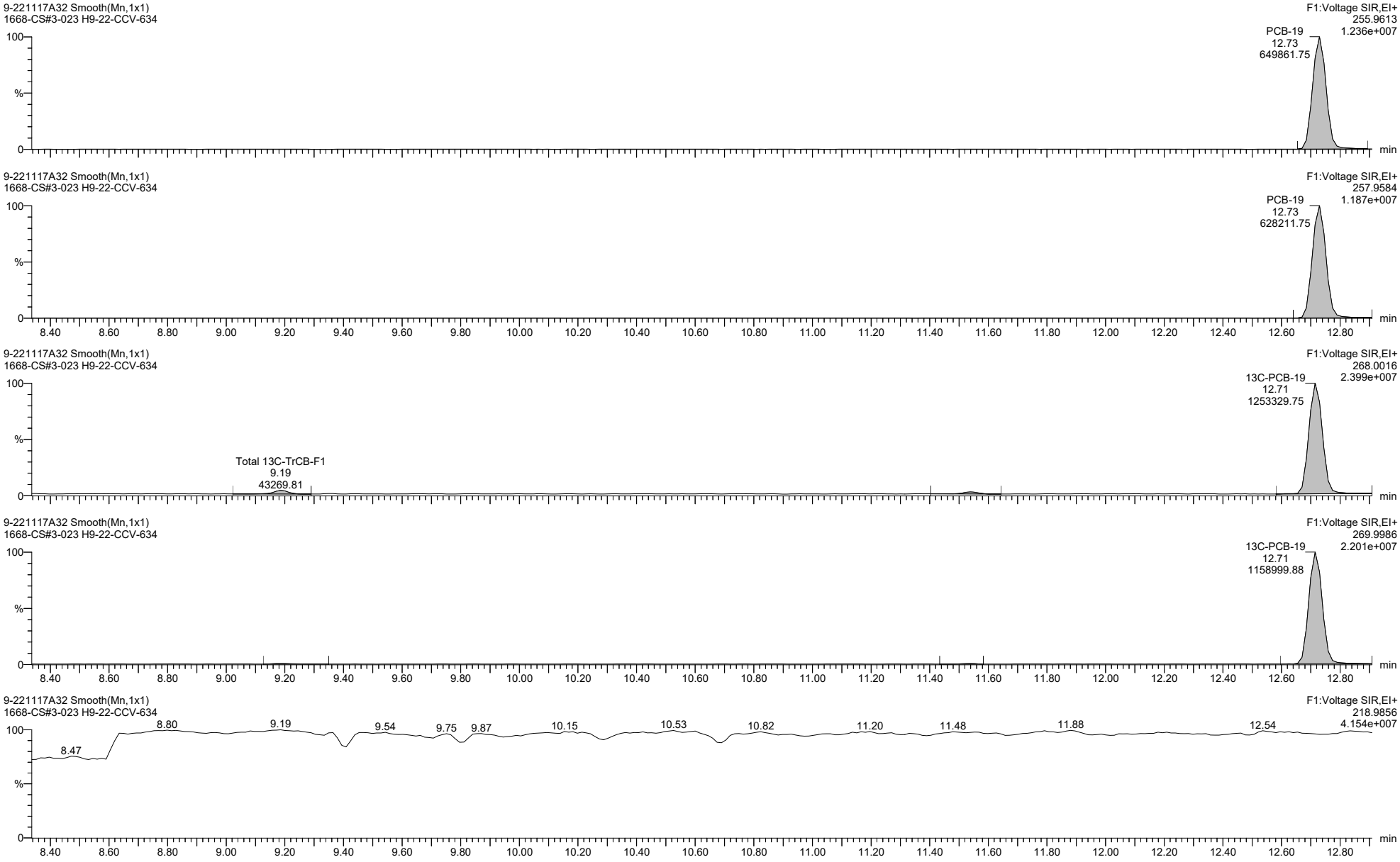


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221117A-QC2.qld

Last Altered: Wednesday, November 23, 2022 10:46:40 Eastern Standard Time
Printed: Wednesday, November 23, 2022 10:47:51 Eastern Standard Time

Name: 9-221117A32, Date: 18-Nov-2022, Time: 11:38:46, ID: H9-22-CCV-634, Description: 1668-CS#3-023, Vial: Tray1:1

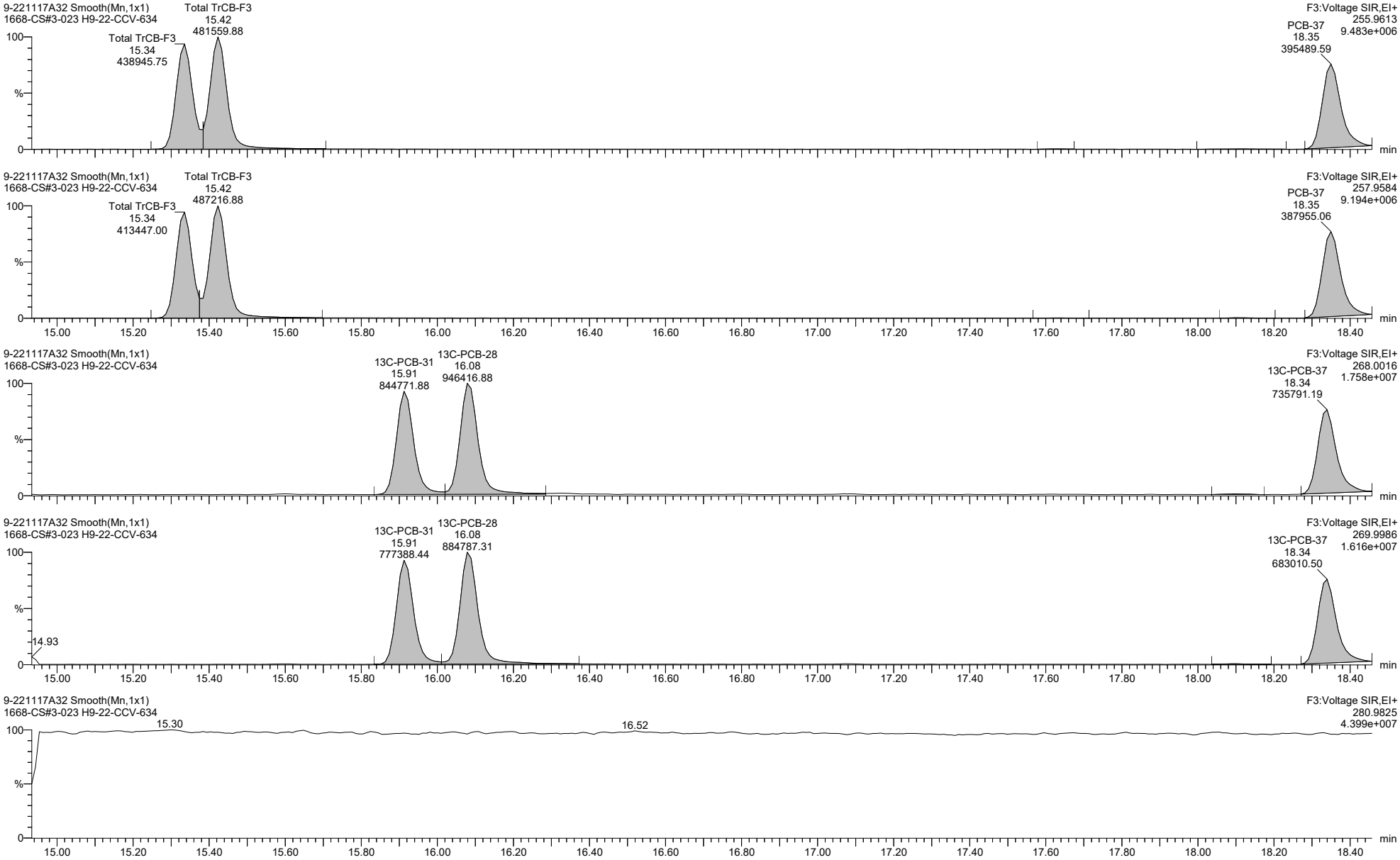


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221117A-QC2.qld

Last Altered: Wednesday, November 23, 2022 10:46:40 Eastern Standard Time
Printed: Wednesday, November 23, 2022 10:47:51 Eastern Standard Time

Name: 9-221117A32, Date: 18-Nov-2022, Time: 11:38:46, ID: H9-22-CCV-634, Description: 1668-CS#3-023, Vial: Tray1:1

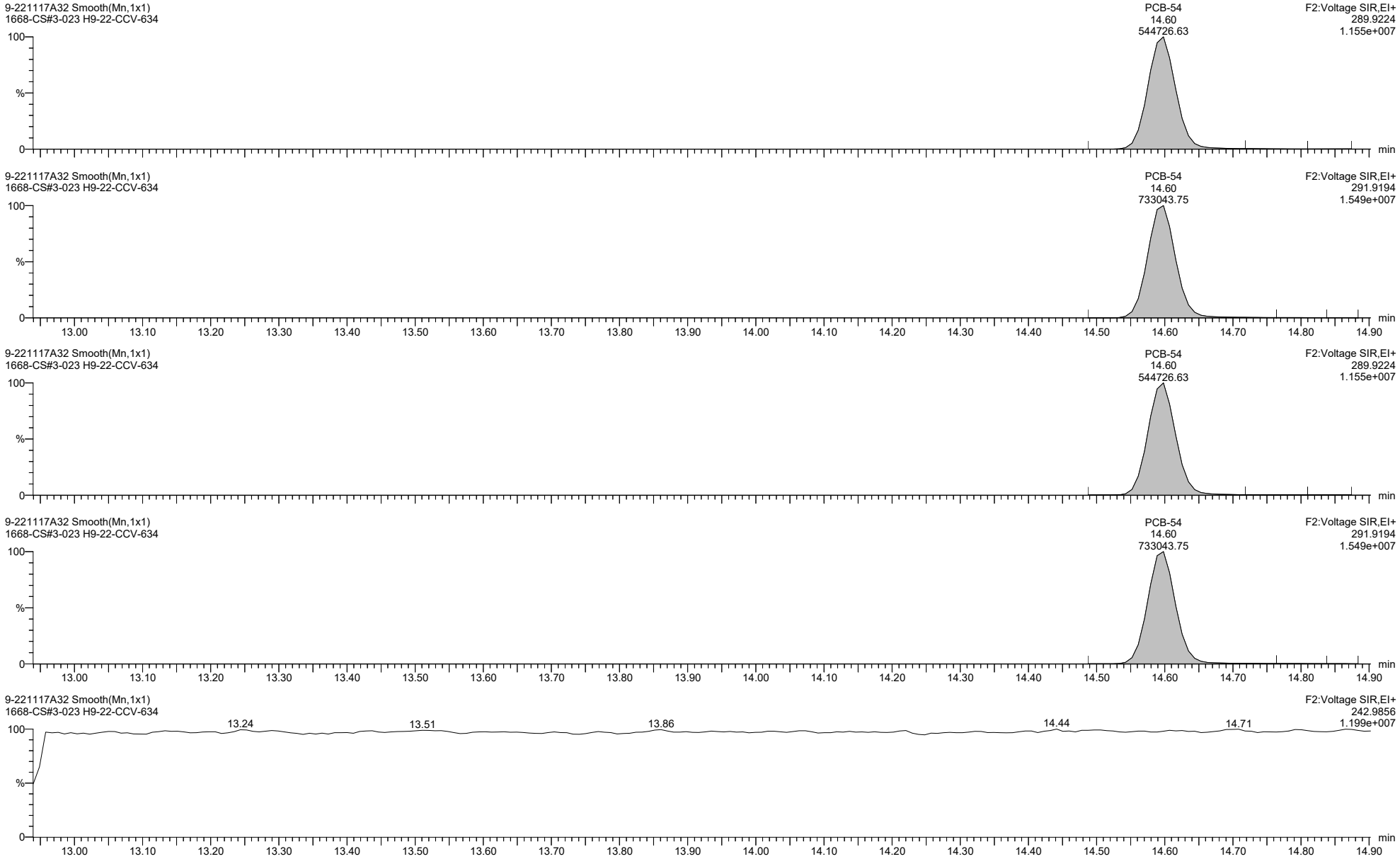


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221117A-QC2.qld

Last Altered: Wednesday, November 23, 2022 10:46:40 Eastern Standard Time
Printed: Wednesday, November 23, 2022 10:47:51 Eastern Standard Time

Name: 9-221117A32, Date: 18-Nov-2022, Time: 11:38:46, ID: H9-22-CCV-634, Description: 1668-CS#3-023, Vial: Tray1:1

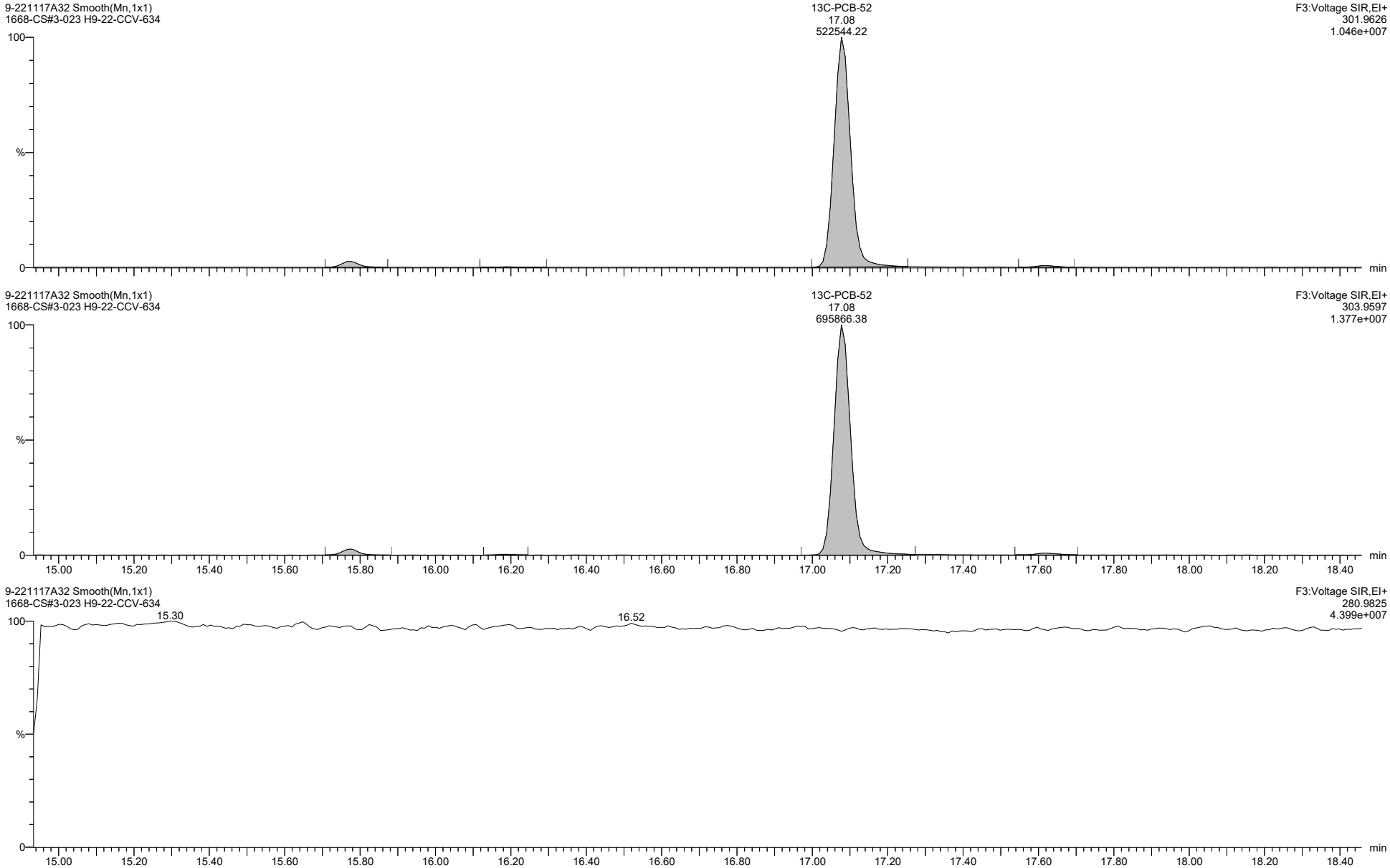


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221117A-QC2.qld

Last Altered: Wednesday, November 23, 2022 10:46:40 Eastern Standard Time
Printed: Wednesday, November 23, 2022 10:47:51 Eastern Standard Time

Name: 9-221117A32, Date: 18-Nov-2022, Time: 11:38:46, ID: H9-22-CCV-634, Description: 1668-CS#3-023, Vial: Tray1:1

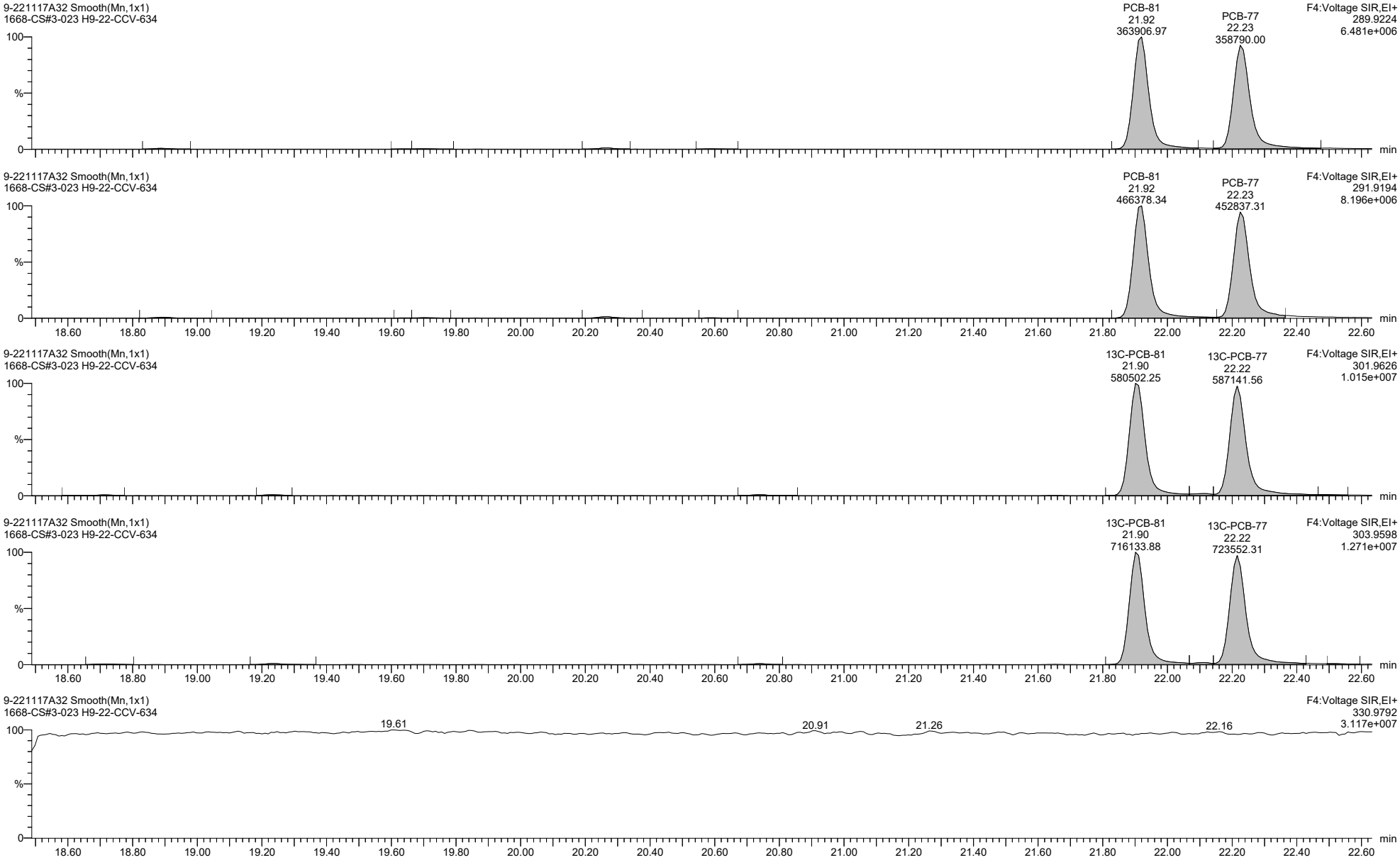


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221117A-QC2.qld

Last Altered: Wednesday, November 23, 2022 10:46:40 Eastern Standard Time
Printed: Wednesday, November 23, 2022 10:47:51 Eastern Standard Time

Name: 9-221117A32, Date: 18-Nov-2022, Time: 11:38:46, ID: H9-22-CCV-634, Description: 1668-CS#3-023, Vial: Tray1:1

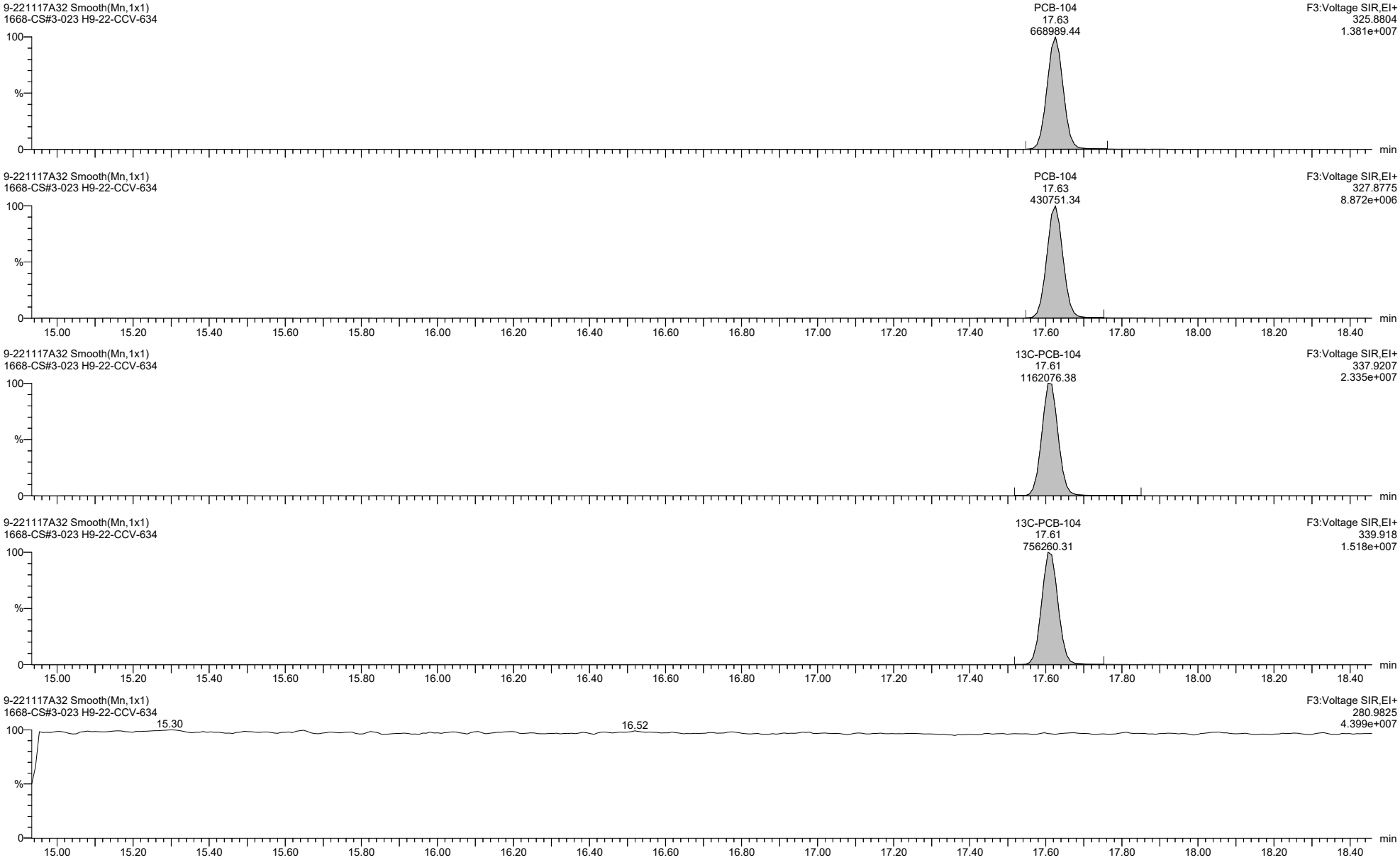


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

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Last Altered: Wednesday, November 23, 2022 10:46:40 Eastern Standard Time
Printed: Wednesday, November 23, 2022 10:47:51 Eastern Standard Time

Name: 9-221117A32, Date: 18-Nov-2022, Time: 11:38:46, ID: H9-22-CCV-634, Description: 1668-CS#3-023, Vial: Tray1:1

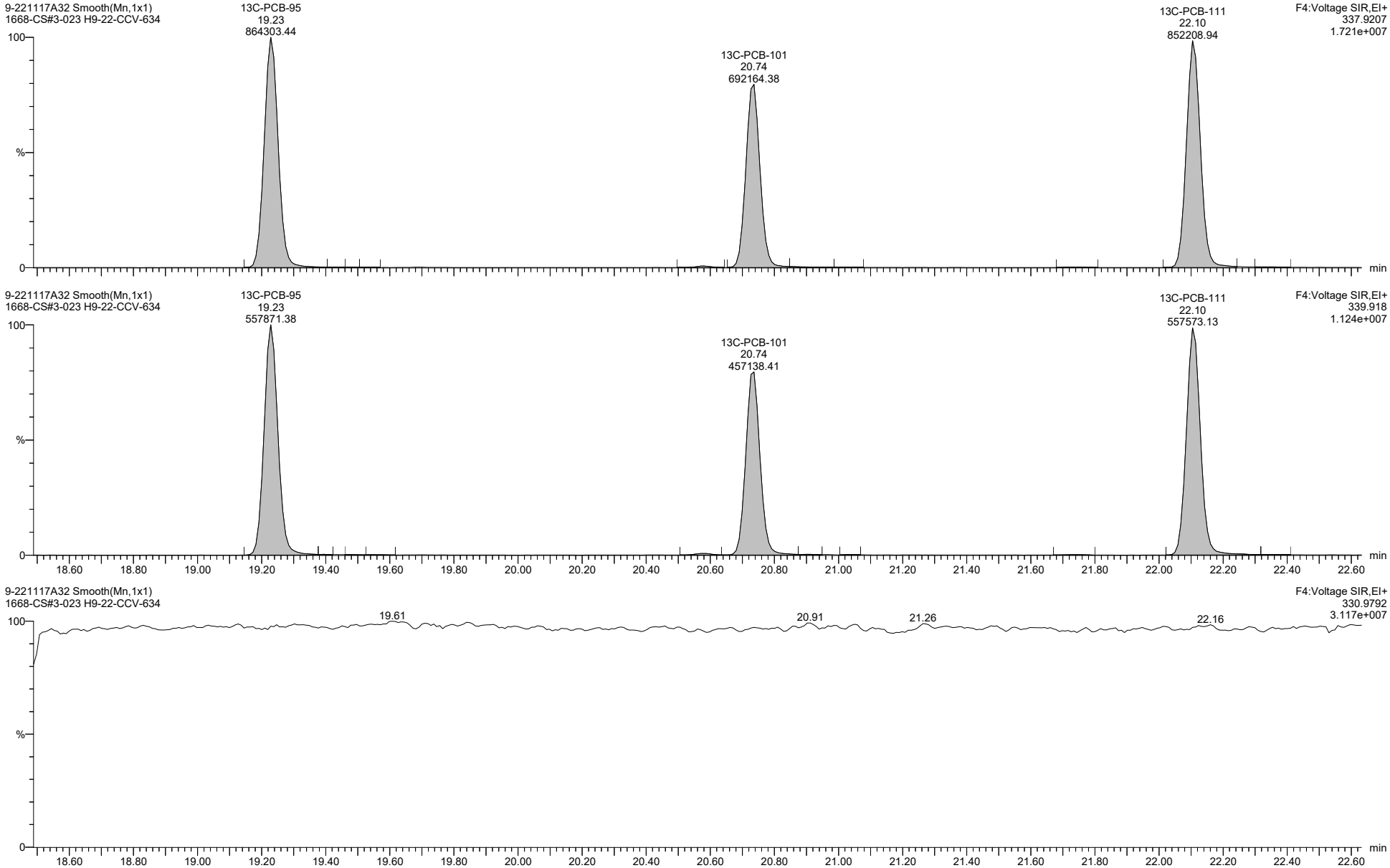


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221117A-QC2.qld

Last Altered: Wednesday, November 23, 2022 10:46:40 Eastern Standard Time
Printed: Wednesday, November 23, 2022 10:47:51 Eastern Standard Time

Name: 9-221117A32, Date: 18-Nov-2022, Time: 11:38:46, ID: H9-22-CCV-634, Description: 1668-CS#3-023, Vial: Tray1:1

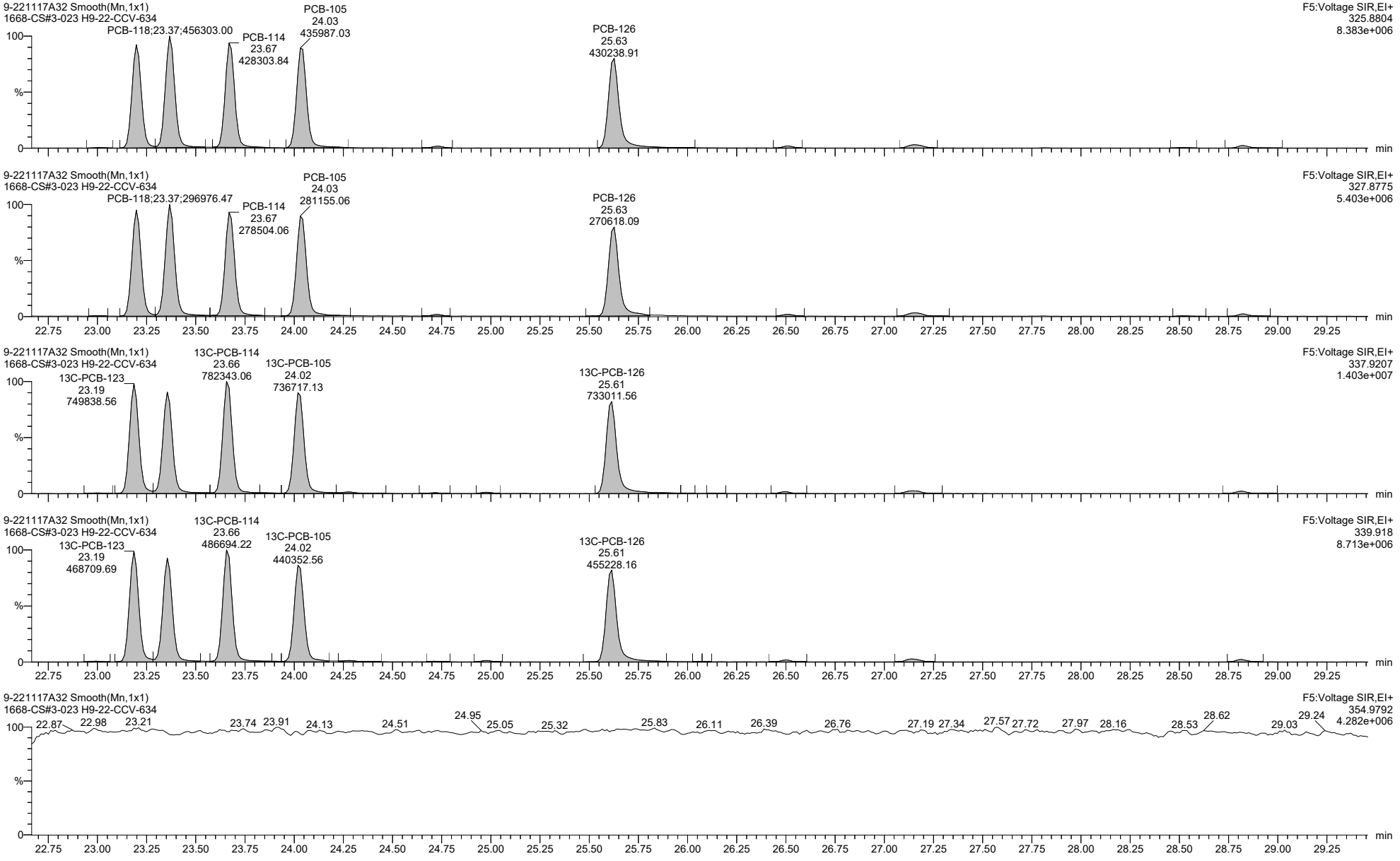


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

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Last Altered: Wednesday, November 23, 2022 10:46:40 Eastern Standard Time
Printed: Wednesday, November 23, 2022 10:47:51 Eastern Standard Time

Name: 9-221117A32, Date: 18-Nov-2022, Time: 11:38:46, ID: H9-22-CCV-634, Description: 1668-CS#3-023, Vial: Tray1:1

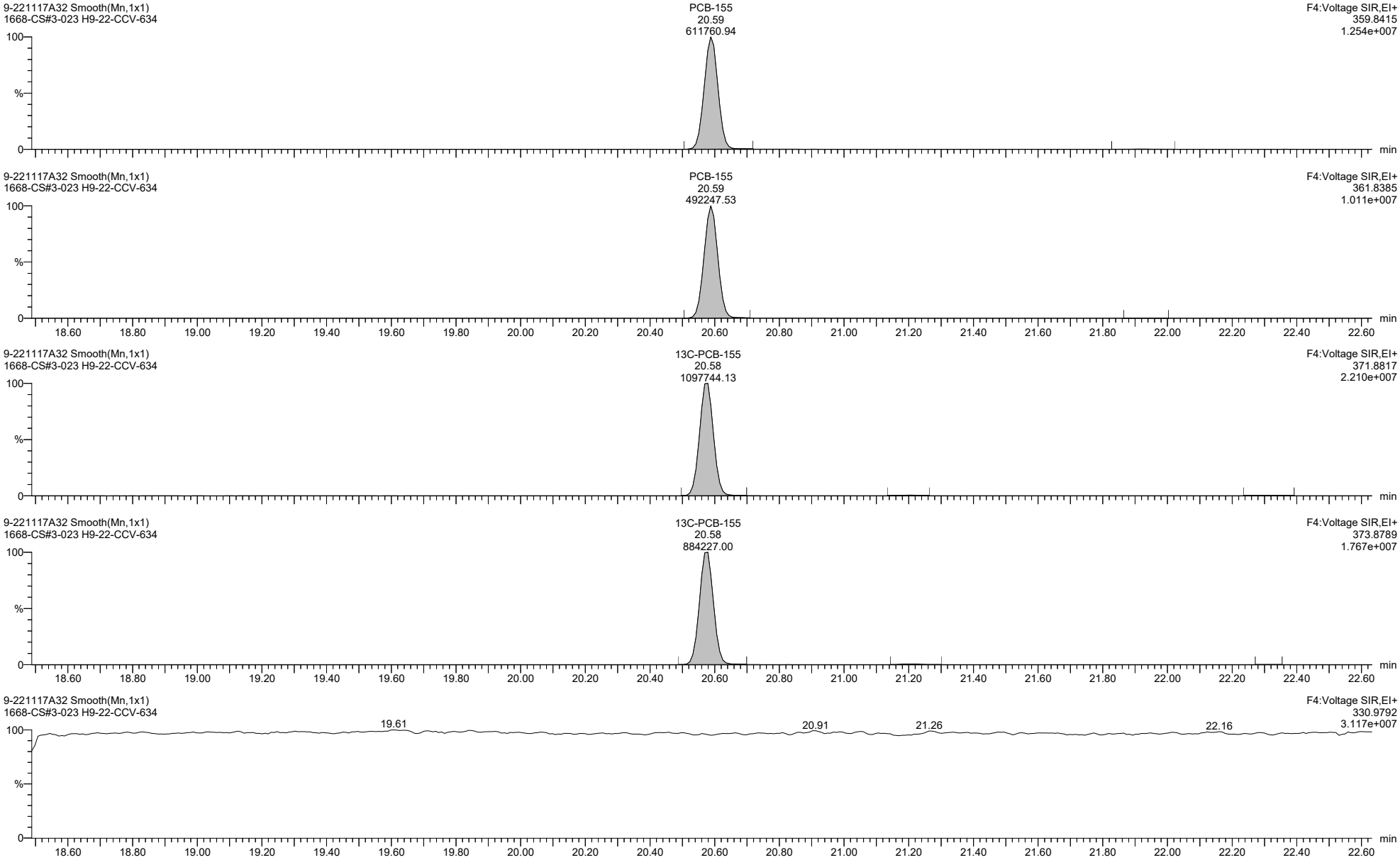


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

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Last Altered: Wednesday, November 23, 2022 10:46:40 Eastern Standard Time
Printed: Wednesday, November 23, 2022 10:47:51 Eastern Standard Time

Name: 9-221117A32, Date: 18-Nov-2022, Time: 11:38:46, ID: H9-22-CCV-634, Description: 1668-CS#3-023, Vial: Tray1:1

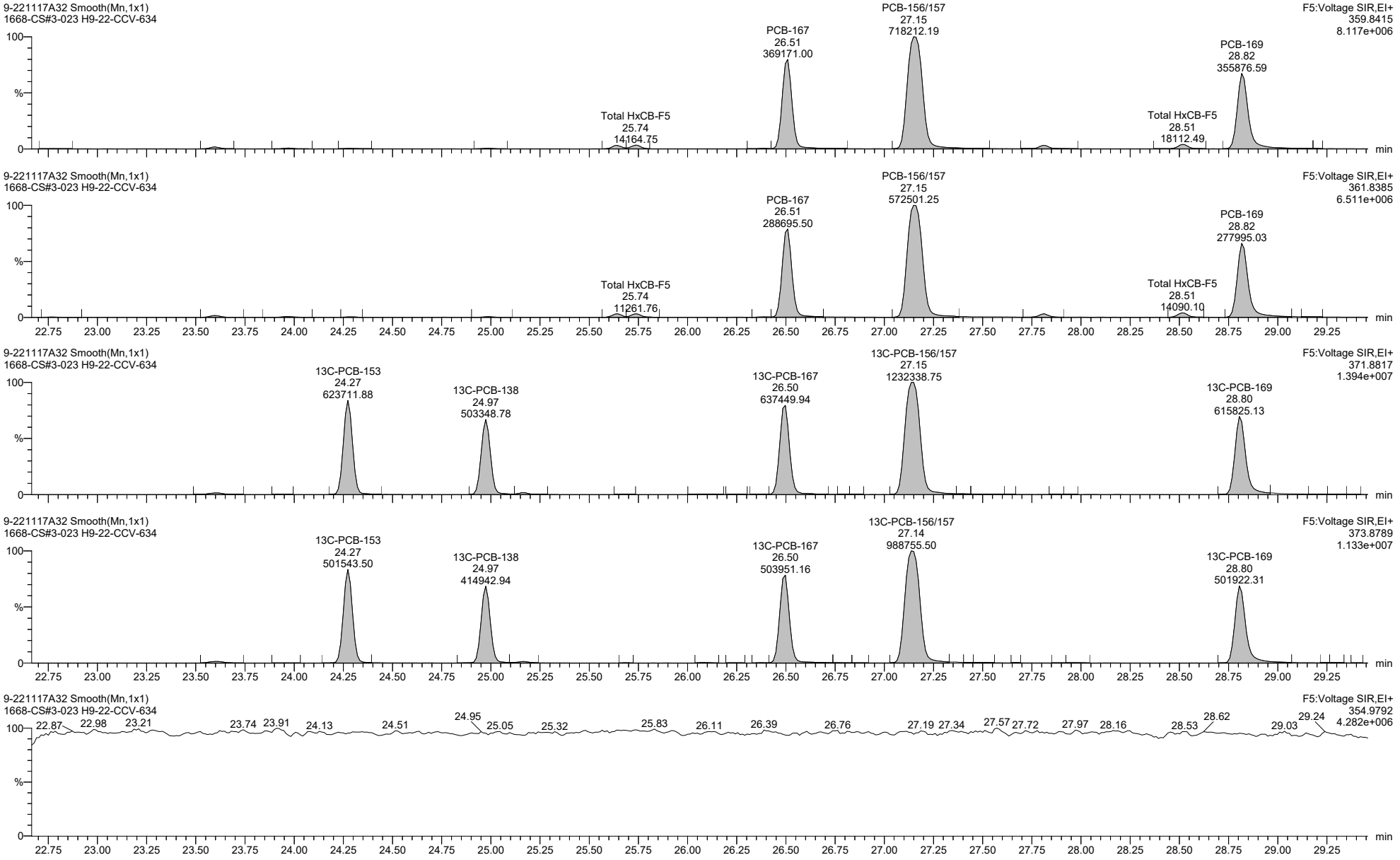


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

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Last Altered: Wednesday, November 23, 2022 10:46:40 Eastern Standard Time
Printed: Wednesday, November 23, 2022 10:47:51 Eastern Standard Time

Name: 9-221117A32, Date: 18-Nov-2022, Time: 11:38:46, ID: H9-22-CCV-634, Description: 1668-CS#3-023, Vial: Tray1:1

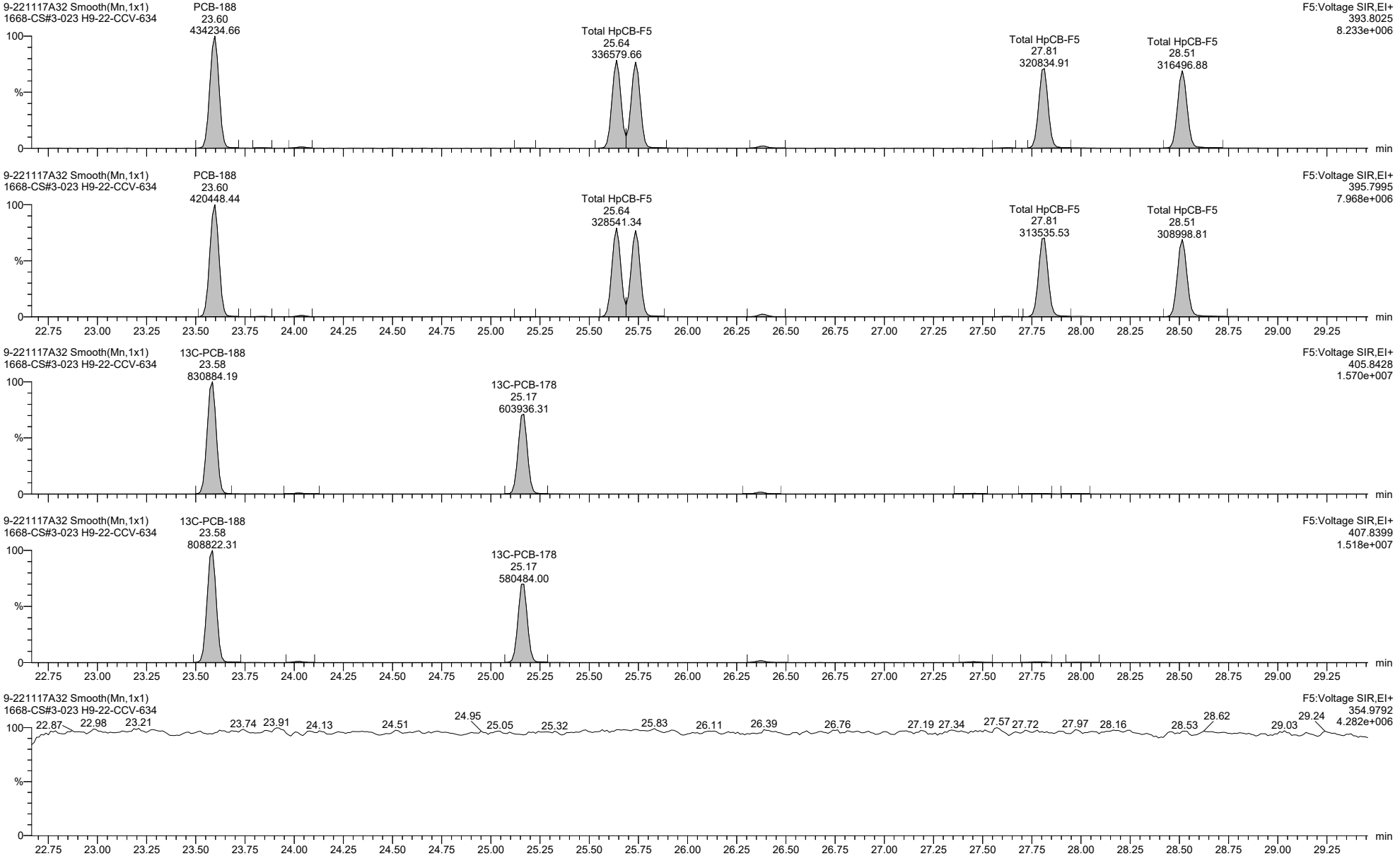


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

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Last Altered: Wednesday, November 23, 2022 10:46:40 Eastern Standard Time
Printed: Wednesday, November 23, 2022 10:47:51 Eastern Standard Time

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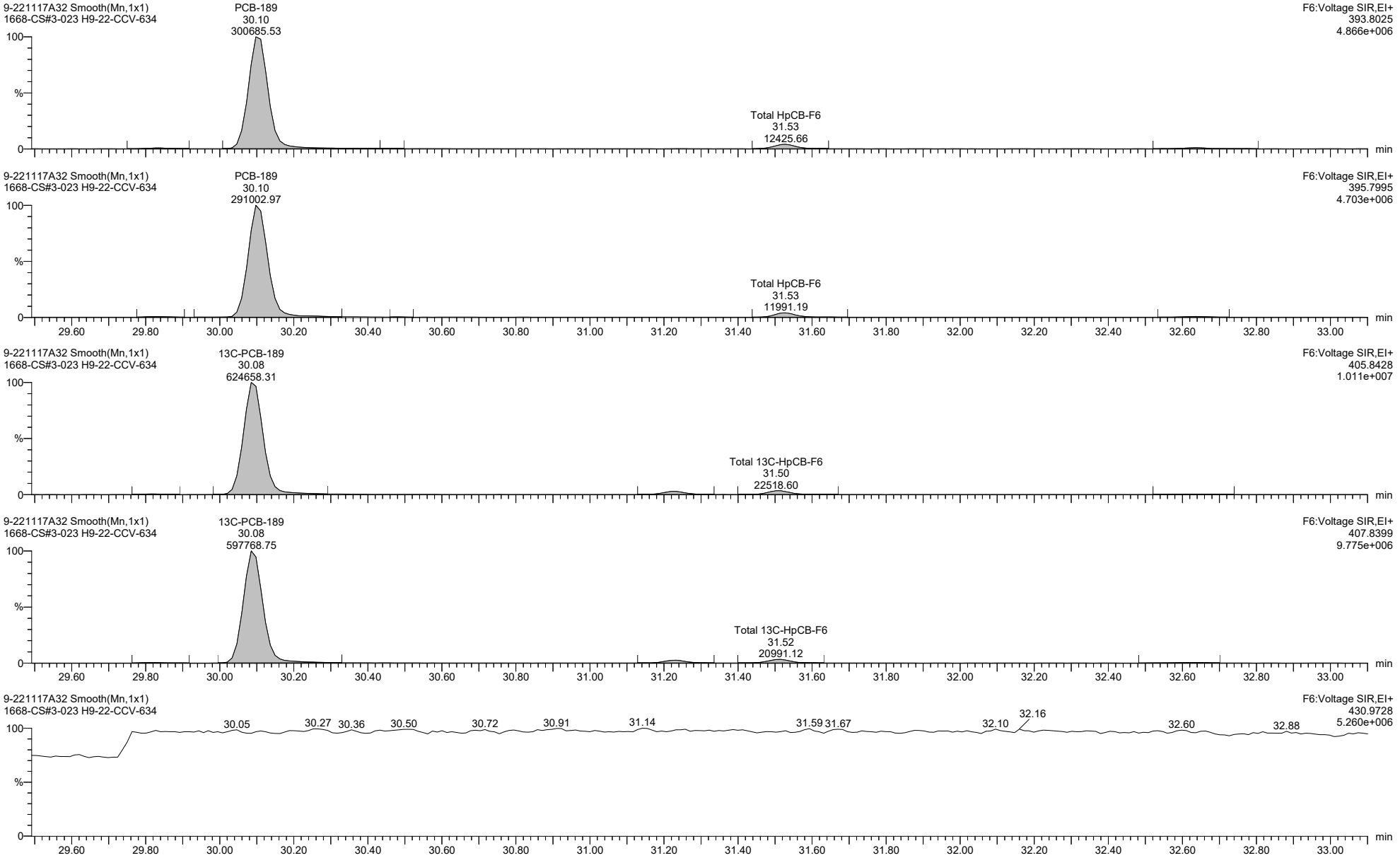


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221117A-QC2.qld

Last Altered: Wednesday, November 23, 2022 10:46:40 Eastern Standard Time
Printed: Wednesday, November 23, 2022 10:47:51 Eastern Standard Time

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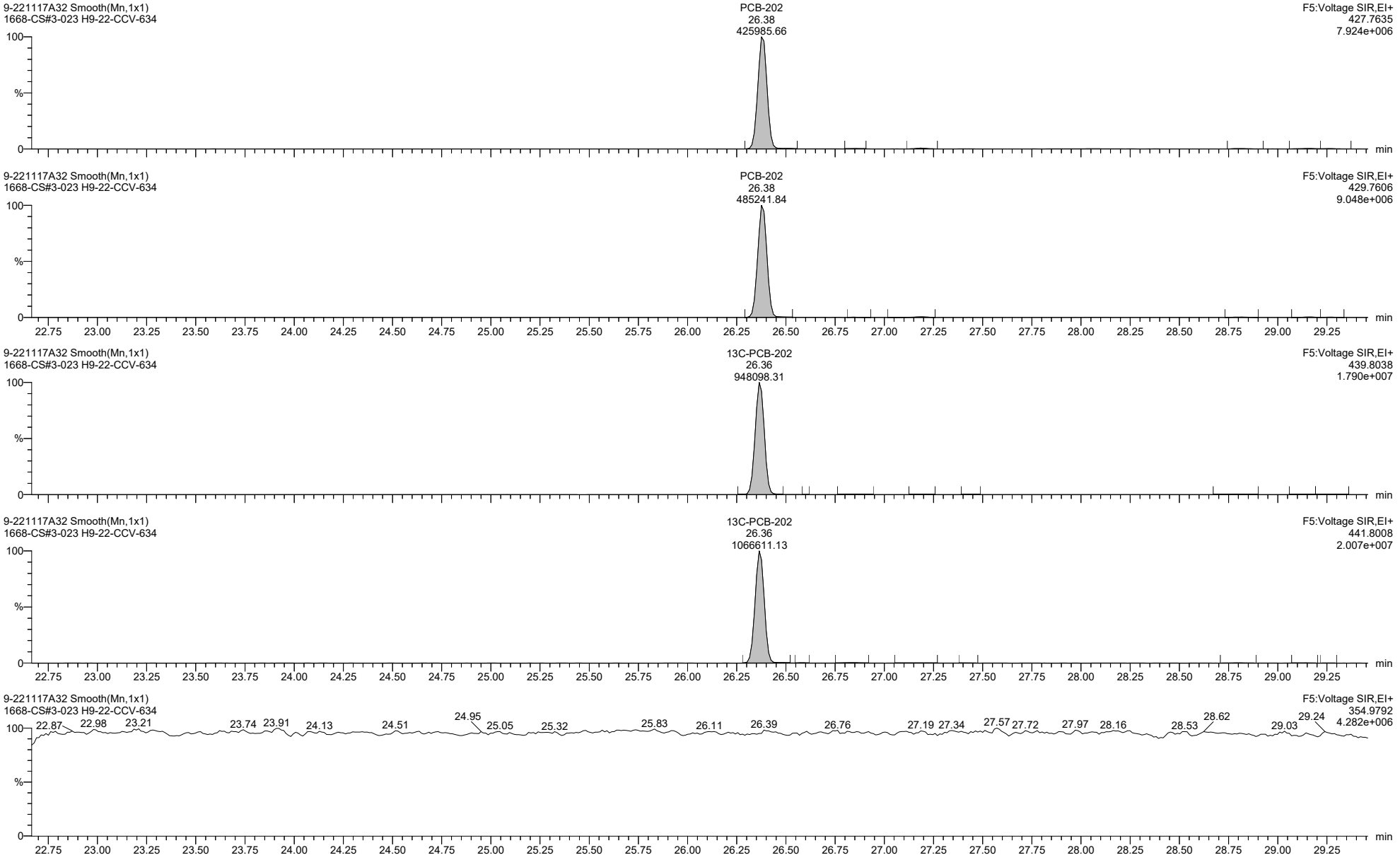


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

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Last Altered: Wednesday, November 23, 2022 10:46:40 Eastern Standard Time
Printed: Wednesday, November 23, 2022 10:47:51 Eastern Standard Time

Name: 9-221117A32, Date: 18-Nov-2022, Time: 11:38:46, ID: H9-22-CCV-634, Description: 1668-CS#3-023, Vial: Tray1:1

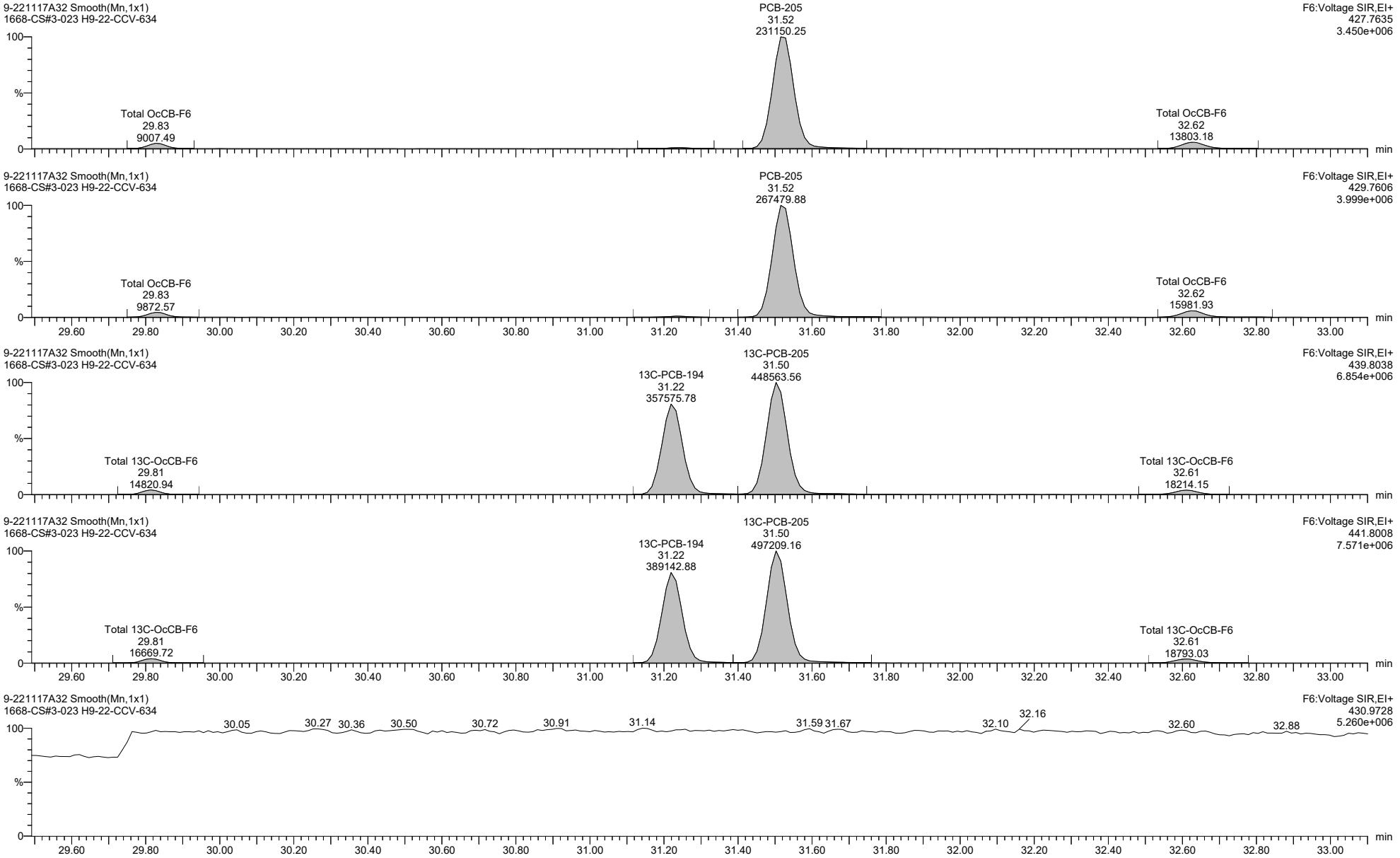


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221117A-QC2.qld

Last Altered: Wednesday, November 23, 2022 10:46:40 Eastern Standard Time
Printed: Wednesday, November 23, 2022 10:47:51 Eastern Standard Time

Name: 9-221117A32, Date: 18-Nov-2022, Time: 11:38:46, ID: H9-22-CCV-634, Description: 1668-CS#3-023, Vial: Tray1:1

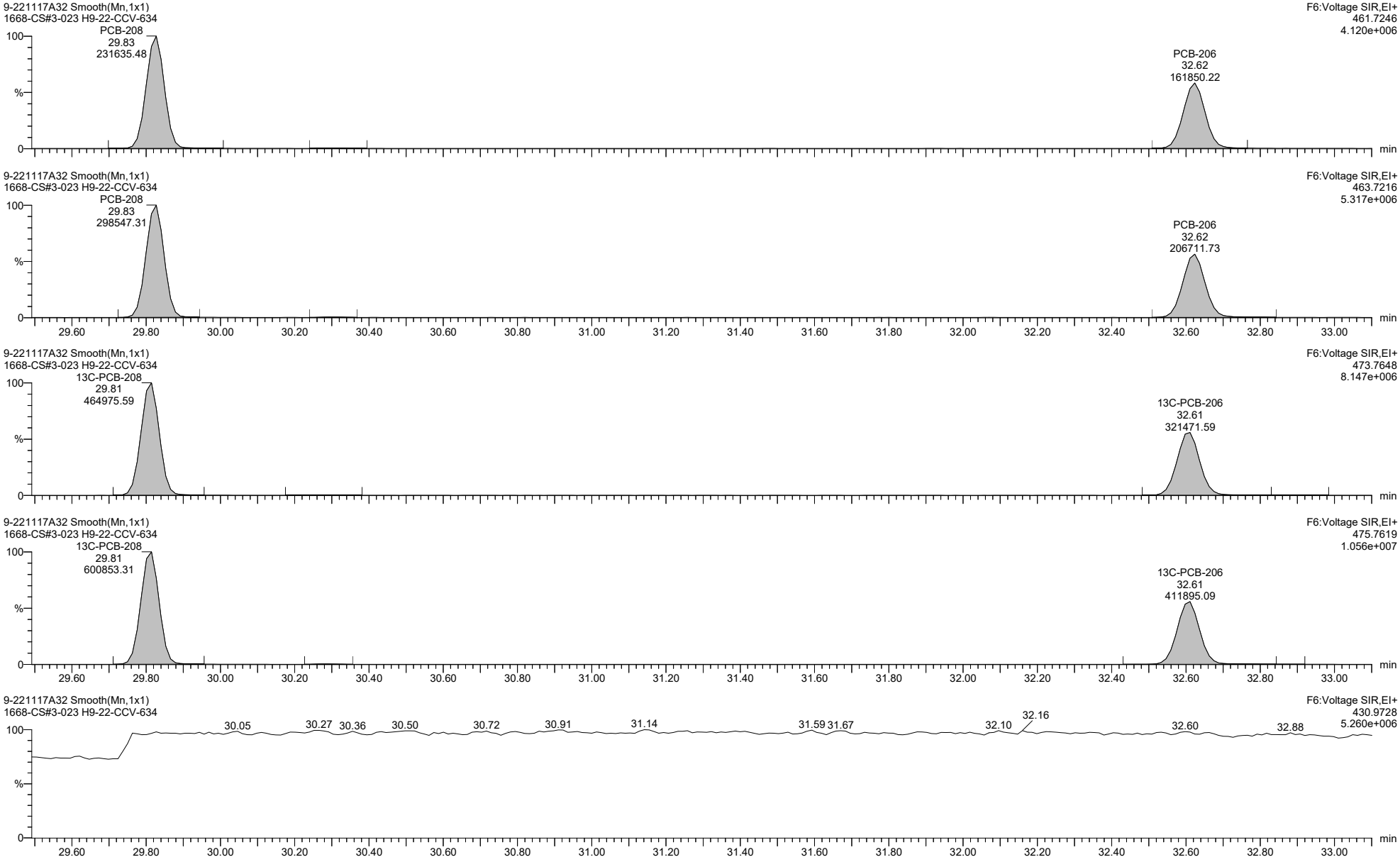


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221117A-QC2.qld

Last Altered: Wednesday, November 23, 2022 10:46:40 Eastern Standard Time
Printed: Wednesday, November 23, 2022 10:47:51 Eastern Standard Time

Name: 9-221117A32, Date: 18-Nov-2022, Time: 11:38:46, ID: H9-22-CCV-634, Description: 1668-CS#3-023, Vial: Tray1:1

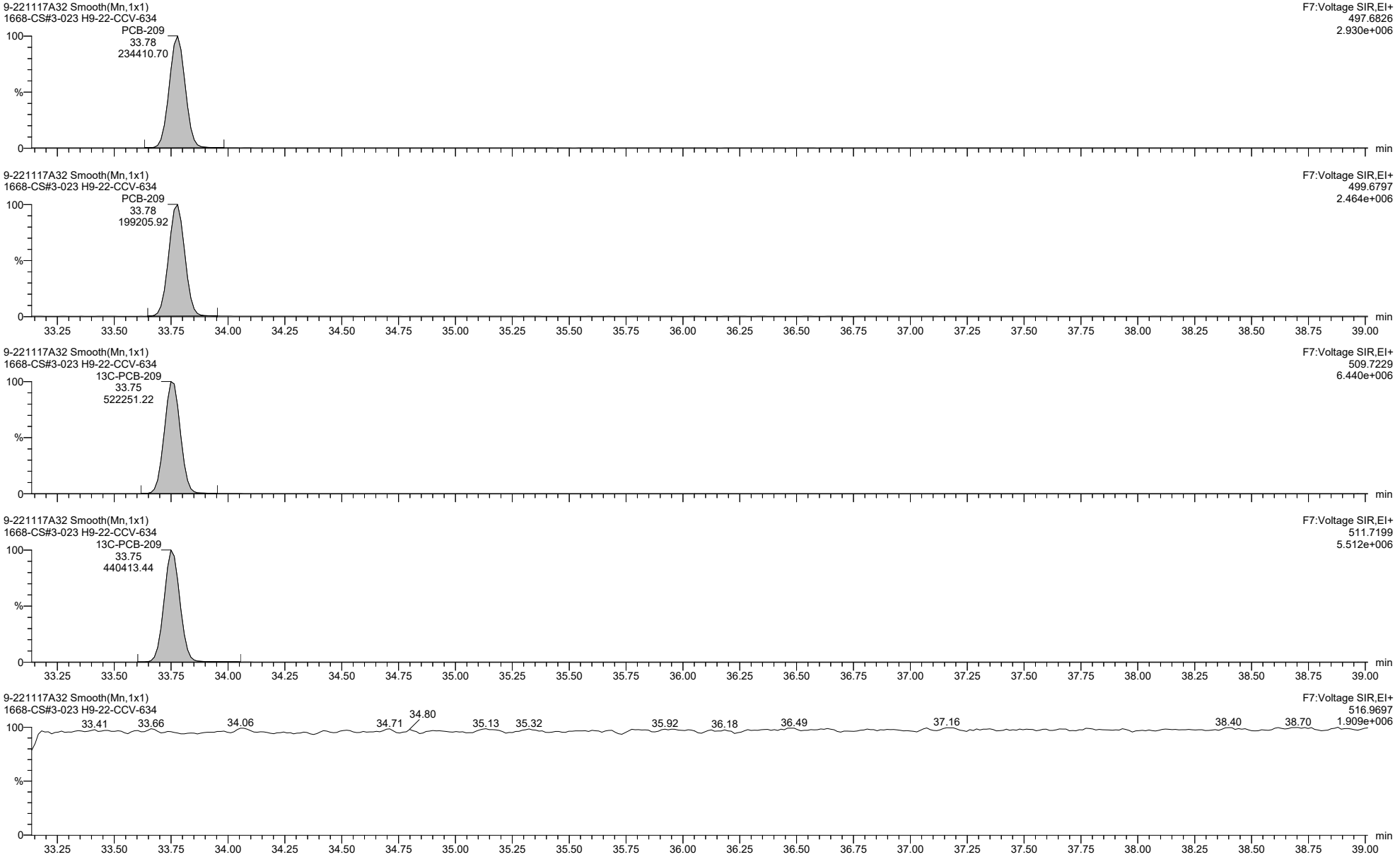


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221117A-QC2.qld

Last Altered: Wednesday, November 23, 2022 10:46:40 Eastern Standard Time
Printed: Wednesday, November 23, 2022 10:47:51 Eastern Standard Time

Name: 9-221117A32, Date: 18-Nov-2022, Time: 11:38:46, ID: H9-22-CCV-634, Description: 1668-CS#3-023, Vial: Tray1:1



Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221117A2-1121ES.qld

Last Altered: Tuesday, November 22, 2022 16:07:50 Eastern Standard Time
Printed: Wednesday, November 23, 2022 11:42:36 Eastern Standard Time

Method: C:\MassLynx\PCB.PRO\MethDB\1668_OCTYL_209-9-221117A1.mdb 17 Nov 2022 11:18:33
Calibration: 22 Nov 2022 16:07:50

Name: 9-221117A19, Date: 18-Nov-2022, Time: 02:30:40, ID: H9-21-WDM-633, Description: 1668-CS#7-023, Vial: Tray1:2

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
1	* PCB-1		786383	602131	184252	3.27	NO	9.01	1.00	8.97	9.04	22.39982	89.6		1362	1651
2	PCB-2		791899	608273	183626	3.31	NO	10.41	0.99	10.37	10.44	25.00000	100.0		1362	1651
3	PCB-3		815969	625847	190123	3.29	NO	10.54	1.00	10.51	10.57	22.99828	92.0		1362	1651
4	*PCB-4		680926	412493	268433	1.54	NO	10.72	1.00	10.69	10.75	24.04565	96.2		2005	3810
5	PCB-10		1107033	673611	433422	1.55	NO	10.82	1.01	10.79	10.86	25.00000	100.0		2005	3810
6	PCB-9		1050769	635649	415121	1.53	NO	11.97	1.12	11.94	12.00	25.00000	100.0		2005	3810
7	PCB-7		1124554	681877	442677	1.54	NO	12.07	1.13	12.04	12.11	25.00000	100.0		2005	3810
8	PCB-6		1076896	649293	427604	1.52	NO	12.24	1.14	12.20	12.27	25.00000	100.0		2005	3810
9	PCB-5		1045346	627243	418103	1.50	NO	12.45	1.16	12.41	12.48	25.00000	100.0		2005	3810
10	PCB-8		1207426	733261	474165	1.55	NO	12.51	1.17	12.47	12.54	25.00000	100.0		2005	3810
11	* PCB-14		808550	499161	309389	1.61	NO	13.47	0.94	13.44	13.51	25.00000	100.0		6075	6902
12	PCB-11		812707	497190	315517	1.58	NO	14.01	0.97	13.97	14.04	25.00000	100.0		6075	6902
13	PCB-13/12		1696719	1033624	663095	1.56	NO	14.20	0.99	14.17	14.24	50.00000	100.0		6075	6902
14	PCB-15		867850	532624	335227	1.59	NO	14.40	1.00	14.36	14.43	25.92736	103.7		6075	6902
15	* PCB-19		968423	489964	478459	1.02	NO	12.73	1.00	12.70	12.76	23.29301	93.2		2472	2152
16	* PCB-30/18		1386254	693070	693184	1.00	NO	13.77	1.08	13.74	13.80	50.00000	100.0	ES221121MB	1746	995
17	PCB-17		563716	285161	278554	1.02	NO	14.06	1.11	14.03	14.10	25.00000	100.0		1746	995
18	PCB-27		758138	382818	375320	1.02	NO	14.20	1.12	14.17	14.24	25.00000	100.0		1746	995
19	PCB-24		748777	376359	372417	1.01	NO	14.28	1.12	14.25	14.32	25.00000	100.0		1746	995
20	PCB-16		511836	258037	253799	1.02	NO	14.38	1.13	14.34	14.41	25.00000	100.0		1746	995
21	PCB-32		851351	427511	423840	1.01	NO	14.65	1.15	14.62	14.69	25.00000	100.0		1746	995
22	* PCB-34		725135	369661	355474	1.04	NO	15.34	0.84	15.30	15.37	25.00000	100.0		5020	5775
23	PCB-23		767645	388159	379486	1.02	NO	15.42	0.84	15.39	15.46	25.00000	100.0		5020	5775
24	PCB-29/26		1560892	791858	769034	1.03	NO	15.61	0.85	15.58	15.64	50.00000	100.0		5020	5775
25	PCB-25		773742	392440	381301	1.03	NO	15.75	0.86	15.71	15.78	25.00000	100.0		5020	5775
26	PCB-31		813721	409004	404717	1.01	NO	15.92	0.87	15.89	15.96	25.00000	100.0		5020	5775
27	PCB-28/20		1526597	768004	758594	1.01	NO	16.10	0.88	16.07	16.13	50.00000	100.0	ES221121MB	5020	5775
28	PCB-21/33		1535817	780091	755726	1.03	NO	16.24	0.89	16.20	16.27	50.00000	100.0		5020	5775
29	PCB-22		758842	384394	374448	1.03	NO	16.48	0.90	16.45	16.51	25.00000	100.0		5020	5775
30	PCB-36		817209	417610	399599	1.05	NO	17.28	0.94	17.25	17.32	25.00000	100.0	ES221121MB	5020	5775
31	PCB-39		734421	375622	358799	1.05	NO	17.50	0.95	17.46	17.53	25.00000	100.0		5020	5775
32	PCB-38		723294	366111	357183	1.02	NO	17.84	0.97	17.81	17.87	25.00000	100.0		5020	5775
33	PCB-35		673562	336971	336590	1.00	NO	18.10	0.99	18.07	18.14	25.00000	100.0		5020	5775
34	PCB-37		682527	348656	333872	1.04	NO	18.34	1.00	18.31	18.37	26.14137	104.6		5020	5775

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221117A2-1121ES.qld

Last Altered: Tuesday, November 22, 2022 16:07:50 Eastern Standard Time
Printed: Wednesday, November 23, 2022 11:42:36 Eastern Standard Time

Name: 9-221117A19, Date: 18-Nov-2022, Time: 02:30:40, ID: H9-21-WDM-633, Description: 1668-CS#7-023, Vial: Tray1:2

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
35	* PCB-54		2142355	906249	1236106	0.73	NO	14.60	1.00	14.56	14.63	51.65768	103.3		1217	1639
36	* PCB-50/53		1923539	834657	1088882	0.77	NO	15.79	1.08	15.75	15.82	100.00000	100.0		1952	1834
37	PCB-45/51		1863513	809802	1053711	0.77	NO	16.20	1.11	16.16	16.23	100.00000	100.0		1952	1834
38	PCB-46		815272	356667	458605	0.78	NO	16.37	1.12	16.34	16.41	50.00000	100.0		1952	1834
39	PCB-52		853316	372749	480568	0.78	NO	17.09	1.17	17.05	17.12	50.00000	100.0		1952	1834
40	PCB-73		1369720	599188	770532	0.78	NO	17.16	1.18	17.12	17.19	50.00000	100.0		1952	1834
41	PCB-43		746215	325133	421081	0.77	NO	17.22	1.18	17.19	17.26	50.00000	100.0		1952	1834
42	PCB-69/49		2163596	947127	1216469	0.78	NO	17.31	1.19	17.28	17.35	100.00000	100.0	ES221121MB	1952	1834
43	PCB-48		959309	419530	539779	0.78	NO	17.52	1.20	17.48	17.55	50.00000	100.0		1952	1834
44	PCB-44/47/65		2873552	1254885	1618667	0.78	NO	17.66	1.21	17.63	17.70	150.00000	100.0		1952	1834
45	PCB-59/62/75		3589059	1570547	2018512	0.78	NO	17.82	1.22	17.79	17.85	150.00000	100.0		1952	1834
46	PCB-42		770549	337622	432927	0.78	NO	17.96	1.23	17.92	17.99	50.00000	100.0		1952	1834
47	PCB-41/71/40		2713533	1180493	1533040	0.77	NO	18.22	1.25	18.19	18.26	150.00000	100.0		1952	1834
48	PCB-64		1102369	481759	620610	0.78	NO	18.35	1.26	18.32	18.38	50.00000	100.0		1952	1834
49	* PCB-72		1380520	612511	768009	0.80	NO	18.72	0.85	18.69	18.75	50.00000	100.0		9657	8654
50	PCB-68		1454936	643116	811821	0.79	NO	18.89	0.86	18.85	18.92	50.00000	100.0		9657	8654
51	PCB-57		1328025	591689	736335	0.80	NO	19.13	0.87	19.09	19.16	50.00000	100.0		9657	8654
52	PCB-58		1426098	632417	793681	0.80	NO	19.27	0.88	19.24	19.31	50.00000	100.0		9657	8654
53	PCB-67		1471539	655258	816281	0.80	NO	19.35	0.88	19.32	19.38	50.00000	100.0		9657	8654
54	PCB-63		1371507	607006	764501	0.79	NO	19.50	0.89	19.46	19.53	50.00000	100.0		9657	8654
55	PCB-61/70/74/76		5141622	2266644	2874978	0.79	NO	19.70	0.90	19.67	19.73	200.00000	100.0		9657	8654
56	PCB-66		1398351	621671	776681	0.80	NO	19.87	0.91	19.83	19.90	50.00000	100.0		9657	8654
57	PCB-55		1318117	580241	737876	0.79	NO	19.99	0.91	19.95	20.02	50.00000	100.0		9657	8654
58	PCB-56		1247141	552911	694231	0.80	NO	20.25	0.92	20.22	20.29	50.00000	100.0		9657	8654
59	PCB-60		1343432	593824	749608	0.79	NO	20.38	0.93	20.34	20.41	50.00000	100.0		9657	8654
60	PCB-80		1542352	688699	853653	0.81	NO	20.49	0.94	20.45	20.52	50.00000	100.0		9657	8654
61	PCB-79		1475332	653143	822189	0.79	NO	21.35	0.97	21.31	21.38	50.00000	100.0		9657	8654
62	PCB-78		1186071	523160	662910	0.79	NO	21.66	0.99	21.63	21.69	50.00000	100.0		9657	8654
63	PCB-81		1159783	517731	642052	0.81	NO	21.91	1.00	21.88	21.94	42.42576	84.9		9657	8654
64	PCB-77		1241638	554789	686849	0.81	NO	22.23	1.00	22.19	22.26	45.17011	90.3		9657	8654
65	* PCB-104		1673839	1019459	654380	1.56	NO	17.63	1.00	17.59	17.66	45.44705	90.9		1195	4043
66	PCB-96		1338054	817938	520116	1.57	NO	17.89	1.02	17.86	17.92	50.00000	100.0		1195	4043
67	* PCB-103		827634	499957	327678	1.53	NO	18.83	1.07	18.80	18.86	50.00000	100.0		4491	2747
68	PCB-94		799402	484591	314810	1.54	NO	18.99	1.08	18.95	19.02	50.00000	100.0		4491	2747
69	PCB-95		709509	429323	280186	1.53	NO	19.25	1.09	19.21	19.28	50.00000	100.0	ES221121MB	4491	2747
70	PCB-100/93/102/98		3277537	1987278	1290260	1.54	NO	19.29	1.10	19.26	19.33	200.00000	100.0	ES221121MB	4491	2747
71	PCB-88/91		1581920	967979	613942	1.58	NO	19.70	1.12	19.67	19.73	100.00000	100.0	ES221121MB	4491	2747

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Name: 9-221117A19, Date: 18-Nov-2022, Time: 02:30:40, ID: H9-21-WDM-633, Description: 1668-CS#7-023, Vial: Tray1:2

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
72	PCB-84		737702	446375	291327	1.53	NO	19.86	1.13	19.82	19.89	50.00000	100.0		4491	2747
73	PCB-89		653687	394627	259060	1.52	NO	20.11	1.14	20.07	20.14	50.00000	100.0		4491	2747
74	PCB-121		1159829	704880	454950	1.55	NO	20.19	1.15	20.16	20.22	50.00000	100.0		4491	2747
75	PCB-92		721555	437202	284353	1.54	NO	20.44	1.16	20.41	20.47	50.00000	100.0		4491	2747
76	PCB-113/90/101		2771878	1685755	1086123	1.55	NO	20.74	1.18	20.70	20.77	150.00000	100.0		4491	2747
77	PCB-83/99		1566747	949259	617489	1.54	NO	21.04	0.91	21.01	21.07	100.00000	100.0		4491	2747
78	PCB-112		1112132	672696	439436	1.53	NO	21.14	0.91	21.11	21.18	50.00000	100.0		4491	2747
79	PCB-109/119/86/97/125/87		5677353	3440233	2237119	1.54	NO	21.32	0.92	21.29	21.35	300.00000	100.0	ES221121MB	4491	2747
80	PCB-117/116/85/110/115		4947231	3016073	1931158	1.56	NO	21.75	0.94	21.72	21.79	250.00000	100.0	ES221121MB	4491	2747
81	PCB-82		650978	394942	256036	1.54	NO	22.04	0.95	22.01	22.07	50.00000	100.0		4491	2747
82	PCB-111		1164812	707280	457532	1.55	NO	22.11	0.95	22.08	22.15	50.00000	100.0		4491	2747
83	PCB-120		1167405	707854	459551	1.54	NO	22.36	0.96	22.33	22.40	50.00000	100.0	ES221121MB	4491	2747
84	* PCB-108/124		2392122	1453541	938581	1.55	NO	23.00	0.99	22.97	23.04	100.00000	100.0		4267	22419
85	PCB-107		1219596	734826	484770	1.52	NO	23.13	1.00	23.09	23.16	50.00000	100.0		4267	22419
86	PCB-123		1077784	653718	424066	1.54	NO	23.20	1.00	23.16	23.23	49.88123	99.8		4267	22419
87	PCB-106		1062833	637941	424892	1.50	NO	23.27	1.00	23.24	23.30	50.00000	100.0		4267	22419
88	PCB-118		1199446	723326	476120	1.52	NO	23.37	1.00	23.33	23.40	51.66626	103.3		4267	22419
89	PCB-122		828442	492539	335903	1.47	NO	23.57	1.00	23.54	23.61	50.00000	100.0		4267	22419
90	PCB-114		1248429	748485	499944	1.50	NO	23.67	1.00	23.64	23.70	56.41969	112.8		4267	22419
91	PCB-105		1062986	648119	414867	1.56	NO	24.03	1.00	24.00	24.06	47.77588	95.6		4267	22419
92	PCB-127		1188414	726050	462364	1.57	NO	24.72	1.03	24.69	24.75	50.00000	100.0		4267	22419
93	PCB-126		1102466	670394	432072	1.55	NO	25.61	1.00	25.58	25.65	50.59701	101.2		4267	22419
94	* PCB-155		1595743	888092	707651	1.25	NO	20.59	1.00	20.55	20.62	43.80152	87.6		1452	1541
95	PCB-152		1378006	762154	615852	1.24	NO	20.79	1.01	20.76	20.82	50.00000	100.0		1452	1541
96	PCB-150		1759687	982467	777220	1.26	NO	20.84	1.01	20.80	20.87	50.00000	100.0		1452	1541
97	PCB-136		1475181	823532	651649	1.26	NO	21.10	1.03	21.06	21.13	50.00000	100.0		1452	1541
98	PCB-145		1554143	863063	691080	1.25	NO	21.22	1.03	21.18	21.25	50.00000	100.0		1452	1541
99	PCB-148		1131885	630993	500893	1.26	NO	21.92	1.07	21.89	21.95	50.00000	100.0		1452	1541
100	PCB-151/135		2059451	1146531	912920	1.26	NO	22.33	1.09	22.29	22.36	100.00000	100.0	ES221121MB	1452	1541
101	PCB-154		1681062	936586	744476	1.26	NO	22.35	1.09	22.31	22.38	50.00000	100.0	ES221121MB	1452	1541
102	PCB-144		1111217	623278	487940	1.28	NO	22.58	1.10	22.54	22.61	50.00000	100.0		1452	1541
103	* PCB-147/149		1708580	948618	759962	1.25	NO	22.76	1.11	22.73	22.80	100.00000	100.0		4612	4716
104	PCB-134/143		1349151	746286	602864	1.24	NO	22.93	1.11	22.90	22.97	100.00000	100.0		4612	4716
105	PCB-139/140		1705666	948144	757522	1.25	NO	23.08	1.12	23.04	23.11	100.00000	100.0		4612	4716
106	PCB-131		617623	341828	275795	1.24	NO	23.22	0.88	23.19	23.26	50.00000	100.0		4612	4716
107	PCB-142		689281	383805	305476	1.26	NO	23.31	0.88	23.27	23.34	50.00000	100.0		4612	4716
108	PCB-132		751400	418033	333367	1.25	NO	23.48	0.89	23.44	23.51	50.00000	100.0		4612	4716

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
109	PCB-133		726292	403138	323154	1.25	NO	23.63	0.89	23.60	23.67	50.00000	100.0		4612	4716
110	PCB-165		996675	557051	439624	1.27	NO	23.84	0.90	23.80	23.87	50.00000	100.0		4612	4716
111	PCB-146		903105	503454	399652	1.26	NO	23.97	0.90	23.94	24.00	50.00000	100.0		4612	4716
112	PCB-161		990738	551836	438902	1.26	NO	24.04	0.91	24.01	24.08	50.00000	100.0		4612	4716
113	PCB-153/168		2022697	1126568	896129	1.26	NO	24.30	0.92	24.26	24.33	100.00000	100.0		4612	4716
114	PCB-141		785656	437451	348204	1.26	NO	24.43	0.92	24.40	24.46	50.00000	100.0		4612	4716
115	PCB-130		719318	397683	321635	1.24	NO	24.66	0.93	24.63	24.69	50.00000	100.0		4612	4716
116	PCB-137/164		1840006	1025140	814866	1.26	NO	24.83	0.94	24.80	24.86	100.00000	100.0	ES221121MB	4612	4716
117	PCB-138/163/129		1677497	930010	747486	1.24	NO	24.99	0.94	24.95	25.02	150.00000	100.0		4612	4716
118	PCB-160		1624505	906698	717807	1.26	NO	25.08	0.95	25.05	25.12	50.00000	100.0		4612	4716
119	PCB-158		1137772	633845	503928	1.26	NO	25.18	0.95	25.15	25.21	50.00000	100.0		4612	4716
120	PCB-128/166		1865855	1036903	828953	1.25	NO	25.65	0.97	25.62	25.68	100.00000	100.0		4612	4716
121	PCB-159		1120312	622312	498001	1.25	NO	26.11	0.99	26.08	26.14	50.00000	100.0		4612	4716
122	PCB-162		1060107	591293	468814	1.26	NO	26.25	0.99	26.22	26.29	50.00000	100.0		4612	4716
123	PCB-167		1061186	587312	473875	1.24	NO	26.51	1.00	26.48	26.54	46.34605	92.7		4612	4716
124	PCB-156/157		2035652	1128088	907563	1.24	NO	27.15	1.00	27.12	27.18	89.46343	89.5		4612	4716
125	PCB-169		924594	510759	413835	1.23	NO	28.82	1.00	28.78	28.85	42.30985	84.6		4612	4716
126	* PCB-188		1259653	640353	619300	1.03	NO	23.60	1.00	23.56	23.63	43.49491	87.0		2050	2450
127	PCB-179		1320073	669922	650151	1.03	NO	23.84	1.01	23.80	23.87	50.00000	100.0		2050	2450
128	PCB-184		1392959	705968	686990	1.03	NO	24.03	1.02	24.00	24.06	50.00000	100.0		2050	2450
129	PCB-176		1289798	652213	637585	1.02	NO	24.29	1.03	24.25	24.32	50.00000	100.0		2050	2450
130	PCB-186		1307837	658373	649464	1.01	NO	24.54	1.04	24.51	24.57	50.00000	100.0		2050	2450
131	PCB-178		927640	469218	458422	1.02	NO	25.18	1.07	25.15	25.21	50.00000	100.0		2050	2450
132	PCB-175		1003501	508703	494797	1.03	NO	25.49	1.08	25.46	25.53	50.00000	100.0		2050	2450
133	PCB-187		1093728	552842	540886	1.02	NO	25.64	1.09	25.61	25.67	50.00000	100.0		2050	2450
134	PCB-182		1031234	520311	510923	1.02	NO	25.74	1.09	25.70	25.77	50.00000	100.0		2050	2450
135	PCB-183		1087218	549763	537455	1.02	NO	25.95	1.10	25.92	25.99	50.00000	100.0		2050	2450
136	PCB-185		988904	499146	489758	1.02	NO	26.05	1.10	26.02	26.08	50.00000	100.0		2050	2450
137	PCB-174		1002307	506496	495811	1.02	NO	26.12	1.11	26.09	26.16	50.00000	100.0		2050	2450
138	PCB-177		986948	496758	490190	1.01	NO	26.36	1.12	26.33	26.40	50.00000	100.0		2050	2450
139	PCB-181		989531	500415	489116	1.02	NO	26.55	0.88	26.51	26.58	50.00000	100.0		2050	2450
140	PCB-171/173		1882600	949518	933082	1.02	NO	26.69	0.89	26.66	26.72	100.00000	100.0		2050	2450
141	PCB-172		1001704	506082	495622	1.02	NO	27.46	0.91	27.43	27.50	50.00000	100.0		2050	2450
142	PCB-192		1174382	591992	582390	1.02	NO	27.62	0.92	27.59	27.65	50.00000	100.0		2050	2450
143	PCB-180/193		2155715	1091453	1064262	1.03	NO	27.79	0.92	27.76	27.82	100.00000	100.0		2050	2450
144	PCB-191		1240901	630584	610316	1.03	NO	28.00	0.93	27.96	28.03	50.00000	100.0		2050	2450
145	PCB-170		918264	462436	455828	1.01	NO	28.51	0.95	28.48	28.55	50.00000	100.0		2050	2450

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
146	PCB-190		1385895	699003	686892	1.02	NO	28.78	0.96	28.75	28.81	50.00000	100.0		2050	2450
147	* PCB-189		926896	471039	455857	1.03	NO	30.10	1.00	30.06	30.13	47.30493	94.6		1699	3127
148	* PCB-202		2377882	1104039	1273843	0.87	NO	26.38	1.00	26.34	26.41	73.68212	98.2		2504	1121
149	PCB-201		2562618	1193084	1369534	0.87	NO	26.85	1.02	26.81	26.88	75.00000	100.0		2504	1121
150	PCB-204		2511515	1164851	1346663	0.87	NO	27.19	1.03	27.15	27.22	75.00000	100.0		2504	1121
151	PCB-197		2481395	1151134	1330261	0.87	NO	27.31	1.04	27.27	27.34	75.00000	100.0		2504	1121
152	PCB-200		2385939	1103883	1282056	0.86	NO	27.43	1.04	27.39	27.46	75.00000	100.0		2504	1121
153	PCB-198/199		3484481	1612338	1872143	0.86	NO	28.80	0.91	28.77	28.84	150.00000	100.0		2504	1121
154	PCB-196		1733567	798996	934572	0.85	NO	29.16	0.93	29.12	29.19	75.00000	100.0		2504	1121
155	PCB-203		1795684	829396	966289	0.86	NO	29.25	0.93	29.22	29.29	75.00000	100.0		2504	1121
156	* PCB-195		939926	445853	494073	0.90	NO	30.01	0.95	29.97	30.04	75.00000	100.0		1498	1803
157	PCB-194		982202	466706	515496	0.91	NO	31.23	0.99	31.20	31.27	75.00000	100.0		1498	1803
158	PCB-205		1113620	526091	587529	0.90	NO	31.53	1.00	31.49	31.56	66.39053	88.5		1498	1803
159	* PCB-208		1242757	540605	702153	0.77	NO	29.83	1.00	29.79	29.86	65.51411	87.4		1595	2854
160	PCB-207		1279324	557079	722245	0.77	NO	30.30	1.02	30.27	30.34	75.00000	100.0		1595	2854
161	PCB-206		871171	377314	493857	0.76	NO	32.62	1.00	32.59	32.66	64.15516	85.5		1595	2854
162	* PCB-209		1166562	629975	536587	1.17	NO	33.78	1.00	33.75	33.81	79.32461	105.8		442	566
163	13C-PCB-31		2554553	1320889	1233664	1.07	NO	15.91	0.87	15.88	15.95	95.48491	95.5		22470	12188
164	13C-PCB-95		2289899	1384985	904913	1.53	NO	19.23	1.09	19.20	19.26	113.79996	113.8		2959	2856
165	13C-PCB-153		1824706	1008135	816572	1.23	NO	24.27	1.18	24.24	24.31	93.68381	93.7		3378	3701
166	13C-PCB-28		2835072	1466389	1368683	1.07	NO	16.08	0.94	16.05	16.11	86.74823	86.7		22470	12188
167	13C-PCB-111		2416833	1473418	943416	1.56	NO	22.10	1.07	22.07	22.14	103.04754	103.0		2959	2856
168	13C-PCB-178		1932345	989053	943292	1.05	NO	25.16	1.01	25.12	25.19	110.44093	110.4		2737	1971
169	13C-PCB-1		3021228	2297577	723651	3.17	NO	8.99	0.75	8.96	9.03	99.51382	99.5		2208	12509
170	13C-PCB-3		2893929	2191853	702076	3.12	NO	10.53	0.88	10.49	10.56	98.65479	98.7		2208	12509
171	13C-PCB-4		3269980	1988989	1280991	1.55	NO	10.70	0.90	10.67	10.74	106.56145	106.6		8006	3811
172	13C-PCB-15		2943920	1789172	1154748	1.55	NO	14.39	1.20	14.35	14.42	93.24343	93.2		8586	3857
173	13C-PCB-19		3725420	1927157	1798263	1.07	NO	12.71	1.06	12.68	12.75	105.52619	105.5		33673	17811
174	13C-PCB-37		2375714	1229877	1145837	1.07	NO	18.33	1.07	18.30	18.36	77.48822	77.5		22470	12188
175	13C-PCB-54		4739673	2062559	2677114	0.77	NO	14.58	0.85	14.55	14.61	105.09856	105.1		9598	5005
176	13C-PCB-81		2157597	948717	1208881	0.78	NO	21.90	1.06	21.87	21.93	85.56317	85.6		3428	3294
177	13C-PCB-77		2195531	961069	1234462	0.78	NO	22.21	1.07	22.17	22.24	85.69992	85.7		3428	3294
178	13C-PCB-104		3199873	1921012	1278861	1.50	NO	17.61	1.03	17.57	17.64	103.65961	103.7		1645	1680
179	13C-PCB-123		1978663	1215985	762678	1.59	NO	23.19	1.12	23.15	23.22	84.57238	84.6		4167	2740
180	13C-PCB-118		1798240	1112471	685769	1.62	NO	23.35	1.13	23.32	23.39	83.41947	83.4		4167	2740
181	13C-PCB-114		1986314	1232153	754162	1.63	NO	23.66	0.95	23.62	23.69	85.24849	85.2		4167	2740
182	13C-PCB-105		1893567	1165808	727759	1.60	NO	24.02	0.96	23.99	24.05	85.33841	85.3		4167	2740

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Last Altered: Tuesday, November 22, 2022 16:07:50 Eastern Standard Time
Printed: Wednesday, November 23, 2022 11:42:36 Eastern Standard Time

Name: 9-221117A19, Date: 18-Nov-2022, Time: 02:30:40, ID: H9-21-WDM-633, Description: 1668-CS#7-023, Vial: Tray1:2

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
183	13C-PCB-126		1889779	1156621	733158	1.58	NO	25.60	1.03	25.57	25.64	84.00695	84.0		4167	2740
184	13C-PCB-155		3290987	1806429	1484558	1.22	NO	20.57	0.99	20.54	20.60	101.92919	101.9		1599	1395
185	13C-PCB-167		1960361	1089012	871349	1.25	NO	26.50	1.06	26.46	26.53	107.15872	107.2		3378	3701
186	13C-PCB-156/157		3863159	2140467	1722693	1.24	NO	27.14	1.09	27.10	27.17	221.74767	110.9		3378	3701
187	13C-PCB-169		1918607	1060485	858122	1.24	NO	28.80	1.15	28.77	28.84	113.15847	113.2		3378	3701
188	13C-PCB-188		2714239	1395274	1318965	1.06	NO	23.58	0.94	23.55	23.62	110.48082	110.5		2737	1971
189	13C-PCB-189		1967275	1021376	945899	1.08	NO	30.08	0.96	30.05	30.12	111.00557	111.0		4343	2593
190	13C-PCB-202		3361685	1587847	1773838	0.90	NO	26.36	1.06	26.33	26.40	124.13935	124.1		1652	1590
191	13C-PCB-205		1564718	742921	821797	0.90	NO	31.50	1.01	31.47	31.54	105.86238	105.9		1929	1936
192	13C-PCB-208		1818725	792249	1026477	0.77	NO	29.81	0.95	29.78	29.85	109.72099	109.7		1558	1964
193	13C-PCB-206		1290791	562884	727906	0.77	NO	32.61	1.04	32.58	32.64	123.25945	123.3		1558	1964
194	13C-PCB-209		1593302	872542	720760	1.21	NO	33.76	1.08	33.73	33.80	113.68775	113.7		868	610
195	13C-PCB-9		4663577	2839534	1824043	1.56	NO	11.96	0.48	11.92	11.99	100.00000	100.0		8006	3811
196	13C-PCB-52		2002549	860935	1141615	0.75	NO	17.08	0.68	17.04	17.11	100.00000	100.0		5458	3470
197	13C-PCB-101		1916142	1163360	752782	1.55	NO	20.73	0.83	20.69	20.76	100.00000	100.0		2959	2856
198	13C-PCB-138		1504440	826834	677607	1.22	NO	24.97	0.00	24.94	25.01	100.00000	100.0		3378	3701
199	13C-PCB-194		1196817	568969	627848	0.91	NO	31.22	1.25	31.19	31.25	100.00000	100.0		1929	1936
200	Total MoCB-F1	11		1890097								199659.42363			1362	
201	Total DiCB-F1	8		4439602								38475.88990			2005	
202	Total DiCB-F2	7		2590597								49693.28302			6075	
203	Total TrCB-F1	1		489964								23.29301			2472	
204	Total TrCB-F2	6		2422956								175.00000			1746	
205	Total TrCB-F3	21		6341332								346392.79444			5020	
206	Total TeCB-F2	1		906460								51.65768			1217	
207	Total TeCB-F3	18		9492364								9493.33046			1952	
208	Total TeCB-F4	25		11513789								440679.87725			9657	
209	Total PeCB-F3	2		1837398								95.44705			1195	
210	Total PeCB-F4	21		17965494								84315.71329			4491	
211	Total PeCB-F5	33		7821099								1172888.733...			4267	
212	Total HxCB-F4	13		7657032								1655.57923			1452	
213	Total HxCB-F5	38		16023961								651202.48455			4612	
214	Total HpCB-F5	29		13018969								345681.59889			2050	
215	Total HpCB-F6	1		583125								47.30493			1699	
216	Total OcCB-F5	15		8959028								3299.33402			2504	
217	Total OcCB-F6	8		1514446								452562.20168			1498	
218	Total NoCB-F6	4		1475510								1901.93049			1595	
219	Total DeCB-F7	1		629975								79.32461			442	

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Name: 9-221117A19, Date: 18-Nov-2022, Time: 02:30:40, ID: H9-21-WDM-633, Description: 1668-CS#7-023, Vial: Tray1:2

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
220	Total 13C-MoCB-F1	2		4529175								198.16861			2208	
221	Total 13C-DiCB-F1	4		4837641								207.26427			8006	
222	Total 13C-DiCB-F2	1		3499706								93.24343			8586	
223	Total 13C-TrCB-F1	1		1947555								105.52619			33673	
224	Total 13C-TrCB-F3	3		4062130								259.72136			22470	
225	Total 13C-TeCB-F2	1		2062559								105.09856			9598	
226	Total 13C-TeCB-F3	6		894219								103.92897			5458	
227	Total 13C-TeCB-F4	2		1946931								171.26309			3428	
228	Total 13C-PeCB-F3	1		1921913								103.65961			1645	
229	Total 13C-PeCB-F4	10		4038237								321.30479			2959	
230	Total 13C-PeCB-F5	5		6016746								422.58569			4167	
231	Total 13C-HxCB-F4	1		1820139								101.92919			1599	
232	Total 13C-HxCB-F5	13		6177622								668.20488			3378	
233	Total 13C-HpCB-F5	2		2437941								220.92175			2737	
234	Total 13C-HpCB-F6	1		1091822								111.00557			4343	
235	Total 13C-OcCB-F5	1		1597316								124.13935			1652	
236	Total 13C-OcCB-F6	9		1368753								225.27434			1929	
237	Total 13C-NoCB-F6	2		1356641								232.98044			1558	
238	Total 13C-DeCB-F7	1		872542								113.68775			868	
239	Lockmass F1			0											588231	
240	Lockmass F2			0											186446	
241	Lockmass F3			0											582691	
242	Lockmass F4			0											369740	
243	Lockmass F5			0											103969	
244	Lockmass F6			0											123850	
245	Lockmass F7			0											29823	

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Name: 9-221117A21, Date: 18-Nov-2022, Time: 03:53:24, ID: L2735553-1, Description: DIL 20x, Vial: Tray1:18

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
1	* PCB-1		505	235	270	0.87	YES	8.98	1.00	8.94	9.01	24.04534		ES221121MB	1347	1397
2	PCB-2		1052	780	272	2.86	NO	10.41	0.99	10.37	10.44	51.44032			1347	1397
3	PCB-3						YES								1347	1397
4	*PCB-4						YES								1480	4311
5	PCB-10						YES								1480	4311
6	PCB-9						YES								1480	4311
7	PCB-7						YES								1480	4311
8	PCB-6						YES								1480	4311
9	PCB-5						YES								1480	4311
10	PCB-8		2480	1796	684	2.63	YES	12.51	1.17	12.47	12.54	65.55212			1480	4311
11	* PCB-14						YES								2355	4923
12	PCB-11		11609	6470	5139	1.26	YES	14.01	0.97	13.97	14.04	419.93960			2355	4923
13	PCB-13/12						YES								2355	4923
14	PCB-15						YES								2355	4923
15	* PCB-19						YES								2700	1788
16	* PCB-30/18		3799	2048	1751	1.17	NO	13.82	1.09	13.79	13.86	151.53472			1901	2122
17	PCB-17		2490	1325	1166	1.14	NO	14.07	1.11	14.04	14.11	122.13605			1901	2122
18	PCB-27		763	469	294	1.59	YES	14.21	1.12	14.18	14.24	27.82791		ES221121MB	1901	2122
19	PCB-24						YES								1901	2122
20	PCB-16		1312	765	548	1.40	YES	14.37	1.13	14.33	14.40	70.87768			1901	2122
21	PCB-32		1848	930	918	1.01	NO	14.65	1.15	14.62	14.69	59.99720			1901	2122
22	* PCB-34						YES								2686	2141
23	PCB-23						YES								2686	2141
24	PCB-29/26		3569	1781	1788	1.00	NO	15.61	0.85	15.58	15.64	114.39199			2686	2141
25	PCB-25						YES								2686	2141
26	PCB-31		9449	4761	4688	1.02	NO	15.93	0.87	15.90	15.97	290.47390			2686	2141
27	PCB-28/20		40563	20593	19970	1.03	NO	16.10	0.88	16.07	16.13	1329.34474			2686	2141
28	PCB-21/33		8701	4626	4075	1.14	NO	16.25	0.89	16.22	16.29	283.45150			2686	2141
29	PCB-22		5600	2999	2602	1.15	NO	16.49	0.90	16.46	16.52	184.61766			2686	2141
30	PCB-36						YES								2686	2141
31	PCB-39						YES								2686	2141
32	PCB-38						YES								2686	2141
33	PCB-35						YES								2686	2141
34	PCB-37		1395	713	682	1.05	NO	18.36	1.00	18.33	18.39	53.47508			2686	2141
35	* PCB-54						YES								1151	1625
36	* PCB-50/53		3500	1515	1986	0.76	NO	15.79	1.08	15.75	15.82	177.47951			986	1596
37	PCB-45/51		2845	1435	1410	1.02	YES	16.20	1.11	16.16	16.23	148.90629			986	1596

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Name: 9-221117A21, Date: 18-Nov-2022, Time: 03:53:24, ID: L2735553-1, Description: DIL 20x, Vial: Tray1:18

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
38	PCB-46		631	210	421	0.50	YES	16.38	1.12	16.35	16.42	37.76118			986	1596
39	PCB-52		54005	23980	30025	0.80	NO	17.10	1.17	17.06	17.13	3086.18248			986	1596
40	PCB-73						YES								986	1596
41	PCB-43		910	350	560	0.63	YES	17.23	1.18	17.20	17.27	59.45633			986	1596
42	PCB-69/49		55007	24663	30343	0.81	NO	17.36	1.19	17.33	17.39	2479.49423			986	1596
43	PCB-48		4664	1971	2693	0.73	NO	17.52	1.20	17.48	17.55	237.09432			986	1596
44	PCB-44/47/65		61612	27227	34385	0.79	NO	17.66	1.21	17.63	17.70	3136.64419			986	1596
45	PCB-59/62/75		5579	2629	2950	0.89	YES	17.84	1.22	17.81	17.87	227.40968			986	1596
46	PCB-42		10295	4892	5403	0.91	YES	17.97	1.23	17.93	18.00	651.51084			986	1596
47	PCB-41/71/40		14431	6211	8220	0.76	NO	18.23	1.25	18.20	18.27	777.98895			986	1596
48	PCB-64		26000	11654	14346	0.81	NO	18.35	1.26	18.32	18.38	1150.09724			986	1596
49	* PCB-72		3572	1541	2031	0.76	NO	18.73	0.85	18.70	18.76	110.89479			1520	2842
50	PCB-68		3149	1490	1660	0.90	YES	18.90	0.86	18.86	18.93	92.78307			1520	2842
51	PCB-57						YES								1520	2842
52	PCB-58						YES								1520	2842
53	PCB-67						YES								1520	2842
54	PCB-63		4405	2004	2401	0.83	NO	19.51	0.89	19.47	19.54	137.65742			1520	2842
55	PCB-61/70/74/76		98712	43443	55270	0.79	NO	19.71	0.90	19.68	19.74	3291.75277			1520	2842
56	PCB-66		115374	51383	63991	0.80	NO	19.88	0.91	19.84	19.91	3536.61115			1520	2842
57	PCB-55						YES								1520	2842
58	PCB-56		16753	7538	9215	0.82	NO	20.26	0.92	20.23	20.30	575.80777			1520	2842
59	PCB-60		11734	4993	6741	0.74	NO	20.38	0.93	20.34	20.41	374.39254			1520	2842
60	PCB-80						YES								1520	2842
61	PCB-79		4791	2301	2490	0.92	YES	21.36	0.98	21.33	21.40	139.19775			1520	2842
62	PCB-78						YES								1520	2842
63	PCB-81						YES								1520	2842
64	PCB-77		3838	1624	2213	0.73	NO	22.24	1.00	22.21	22.28	120.50951		ES221121MB	1520	2842
65	* PCB-104						YES								1212	3343
66	PCB-96		1456	778	678	1.15	YES	17.88	1.02	17.85	17.91	47.53155			1212	3343
67	* PCB-103		5772	3349	2422	1.38	NO	18.83	1.07	18.80	18.86	280.35093			2402	3860
68	PCB-94		922	584	337	1.73	NO	18.99	1.08	18.95	19.02	46.35532			2402	3860
69	PCB-95		416183	251613	164569	1.53	NO	19.25	1.09	19.21	19.28	23581.80830			2402	3860
70	PCB-100/93/102/98		8347	5305	3042	1.74	NO	19.40	1.10	19.37	19.44	409.52448			2402	3860
71	PCB-88/91		30695	18417	12279	1.50	NO	19.70	1.12	19.67	19.73	1560.15450			2402	3860
72	PCB-84		23859	14306	9553	1.50	NO	19.86	1.13	19.82	19.89	1300.23340			2402	3860
73	PCB-89		1589	1082	507	2.14	YES	20.11	1.14	20.07	20.14	97.72517			2402	3860
74	PCB-121						YES								2402	3860

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Name: 9-221117A21, Date: 18-Nov-2022, Time: 03:53:24, ID: L2735553-1, Description: DIL 20x, Vial: Tray1:18

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
75	PCB-92		139203	84491	54712	1.54	NO	20.44	1.16	20.41	20.47	7755.89013			2402	3860
76	PCB-113/90/101		1269453	771277	498176	1.55	NO	20.75	1.18	20.71	20.78	55235.05934			2402	3860
77	PCB-83/99		253963	155628	98335	1.58	NO	21.05	0.91	21.02	21.08	13033.25078			2402	3860
78	PCB-112						YES								2402	3860
79	PCB-109/119/86/97/125/87		287538	173924	113614	1.53	NO	21.42	0.92	21.39	21.45	12216.62319		ES221121MJ	2402	3860
80	PCB-117/116/85/110/115		804217	494569	309648	1.60	NO	21.84	0.94	21.80	21.87	32676.23822		ES221121MJ	2402	3860
81	PCB-82		22666	13711	8955	1.53	NO	22.04	0.95	22.01	22.07	1399.76354			2402	3860
82	PCB-111		3710	2269	1441	1.57	NO	22.11	0.95	22.08	22.15	128.04724			2402	3860
83	PCB-120		17647	10824	6822	1.59	NO	22.34	0.96	22.30	22.37	607.70417		ES221121MB	2402	3860
84	* PCB-108/124		21688	13393	8295	1.61	NO	23.00	0.99	22.97	23.04	728.98187			2439	5826
85	PCB-107		86191	52978	33213	1.60	NO	23.14	1.00	23.10	23.17	2841.16245		ES221121MS	2439	5826
86	PCB-123		9510	5862	3649	1.61	NO	23.19	1.00	23.15	23.22	340.71003		ES221121MS	2439	5826
87	PCB-106						YES								2439	5826
88	PCB-118		689476	421934	267542	1.58	NO	23.37	1.00	23.33	23.40	21801.68809			2439	5826
89	PCB-122						YES								2439	5826
90	PCB-114		20662	11209	9453	1.19	YES	23.67	1.00	23.64	23.70	748.37387			2439	5826
91	PCB-105		129472	79315	50157	1.58	NO	24.03	1.00	24.00	24.07	4576.47333			2439	5826
92	PCB-127		1951	1475	475	3.10	YES	24.76	1.03	24.72	24.79	65.98743			2439	5826
93	PCB-126		14028	8932	5097	1.75	NO	25.64	1.00	25.61	25.67	512.50557			2439	5826
94	* PCB-155		315	185	130	1.42	NO	20.60	1.00	20.56	20.63	6.66348			985	1090
95	PCB-152						YES								985	1090
96	PCB-150		6460	4009	2451	1.64	YES	20.84	1.01	20.80	20.87	141.46887			985	1090
97	PCB-136		496341	274273	222068	1.24	NO	21.10	1.03	21.06	21.13	12965.23071			985	1090
98	PCB-145						YES								985	1090
99	PCB-148		4953	2604	2349	1.11	NO	21.92	1.07	21.89	21.95	168.62854			985	1090
100	PCB-151/135		2640695	1473490	1167206	1.26	NO	22.27	1.08	22.24	22.30	98819.38243			985	1090
101	PCB-154						YES								985	1090
102	PCB-144		347846	192063	155783	1.23	NO	22.57	1.10	22.53	22.60	12062.37557			985	1090
103	* PCB-147/149		3860844	2142621	1718223	1.25	NO	22.76	1.11	22.73	22.80	173051.43889			4122	2396
104	PCB-134/143		110174	61258	48916	1.25	NO	22.91	1.11	22.87	22.94	6253.81477			4122	2396
105	PCB-139/140		23433	12693	10741	1.18	NO	23.08	1.12	23.04	23.11	1052.11613			4122	2396
106	PCB-131		16909	8954	7955	1.13	NO	23.22	0.88	23.19	23.26	1048.29980			4122	2396
107	PCB-142						YES								4122	2396
108	PCB-132		763359	426104	337255	1.26	NO	23.48	0.89	23.44	23.51	38900.56005			4122	2396
109	PCB-133		76195	42306	33889	1.25	NO	23.63	0.89	23.60	23.67	4017.08454			4122	2396
110	PCB-165		15333	8077	7256	1.11	NO	23.84	0.90	23.80	23.87	589.08798			4122	2396
111	PCB-146		1140650	638539	502111	1.27	NO	23.97	0.90	23.94	24.00	48362.89879			4122	2396

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
112	PCB-161						YES								4122	2396
113	PCB-153/168		8535964	4744131	3791834	1.25	NO	24.29	0.92	24.25	24.32	323184.12429			4122	2396
114	PCB-141		1010806	563979	446826	1.26	NO	24.43	0.92	24.40	24.46	49264.45141			4122	2396
115	PCB-130		194463	109007	85457	1.28	NO	24.65	0.93	24.61	24.68	10351.77385			4122	2396
116	PCB-137/164		394259	219634	174625	1.26	NO	24.82	0.94	24.78	24.85	16409.32609			4122	2396
117	PCB-138/163/129		5855135	3255821	2599314	1.25	NO	24.99	0.94	24.95	25.02	400954.19734			4122	2396
118	PCB-160						YES								4122	2396
119	PCB-158		590647	325494	265153	1.23	NO	25.18	0.95	25.15	25.21	19877.92225			4122	2396
120	PCB-128/166		180860	100610	80250	1.25	NO	25.64	0.97	25.61	25.67	7423.22598			4122	2396
121	PCB-159		94904	52727	42177	1.25	NO	26.12	0.99	26.09	26.16	3243.73768			4122	2396
122	PCB-162		24007	14251	9756	1.46	YES	26.26	0.99	26.22	26.29	867.13914			4122	2396
123	PCB-167		211206	117413	93793	1.25	NO	26.50	1.00	26.46	26.53	6839.07106			4122	2396
124	PCB-156/157		306260	171477	134782	1.27	NO	27.14	1.00	27.10	27.17	10173.77154			4122	2396
125	PCB-169		3985	2435	1550	1.57	YES	28.82	1.00	28.78	28.85	146.51423		ES221121MB	4122	2396
126	* PCB-188		4029	1964	2065	0.95	NO	23.60	1.00	23.56	23.63	95.69046			2071	1739
127	PCB-179		930608	471957	458651	1.03	NO	23.83	1.01	23.79	23.86	25038.99908			2071	1739
128	PCB-184		2021	1101	920	1.20	NO	24.03	1.02	24.00	24.07	51.53355			2071	1739
129	PCB-176		332029	166631	165398	1.01	NO	24.29	1.03	24.25	24.32	9143.30153			2071	1739
130	PCB-186		222	58	164	0.35	YES	24.47	1.04	24.43	24.50	6.02846			2071	1739
131	PCB-178		619135	313768	305367	1.03	NO	25.17	1.07	25.13	25.20	23705.78367			2071	1739
132	PCB-175		122009	60666	61344	0.99	NO	25.49	1.08	25.46	25.53	4318.40084			2071	1739
133	PCB-187		5129411	2599560	2529851	1.03	NO	25.64	1.09	25.61	25.67	166573.73602			2071	1739
134	PCB-182						YES								2071	1739
135	PCB-183		1895102	961387	933715	1.03	NO	25.95	1.10	25.92	25.99	61910.49636			2071	1739
136	PCB-185		327979	166258	161721	1.03	NO	26.05	1.11	26.02	26.08	11779.86913			2071	1739
137	PCB-174		1964270	992413	971857	1.02	NO	26.12	1.11	26.09	26.16	69606.29248			2071	1739
138	PCB-177		1595827	810648	785178	1.03	NO	26.35	1.12	26.32	26.39	57430.12515			2071	1739
139	PCB-181		5369	2727	2642	1.03	NO	26.55	0.88	26.51	26.58	192.71214			2071	1739
140	PCB-171/173		678165	340628	337537	1.01	NO	26.68	0.89	26.64	26.71	25589.11472			2071	1739
141	PCB-172		503916	254700	249217	1.02	NO	27.46	0.91	27.43	27.50	17867.64025			2071	1739
142	PCB-192						YES								2071	1739
143	PCB-180/193		7701902	3886990	3814912	1.02	NO	27.80	0.92	27.77	27.84	253796.04904			2071	1739
144	PCB-191		158632	78800	79832	0.99	NO	27.98	0.93	27.95	28.02	4540.48340			2071	1739
145	PCB-170		2189662	1102846	1086816	1.01	NO	28.51	0.95	28.48	28.55	84694.98871			2071	1739
146	PCB-190		718004	359775	358229	1.00	NO	28.78	0.96	28.75	28.81	18401.13032			2071	1739
147	* PCB-189		79331	40611	38720	1.05	NO	30.10	1.00	30.06	30.13	3012.39557			1578	1918
148	* PCB-202		239390	110067	129323	0.85	NO	26.38	1.00	26.34	26.41	5701.06128			689	1012

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
149	PCB-201		192679	88168	104511	0.84	NO	26.85	1.02	26.81	26.88	4334.93195			689	1012
150	PCB-204		472	175	298	0.59	YES	27.17	1.03	27.14	27.21	10.84253			689	1012
151	PCB-197		64464	30150	34313	0.88	NO	27.31	1.04	27.27	27.34	1497.78864			689	1012
152	PCB-200		144524	67261	77263	0.87	NO	27.42	1.04	27.38	27.45	3492.31533			689	1012
153	PCB-198/199		1325268	612250	713018	0.86	NO	28.82	0.91	28.78	28.85	43855.84288			689	1012
154	PCB-196		626083	287579	338504	0.85	NO	29.16	0.93	29.12	29.19	20822.02471			689	1012
155	PCB-203		938667	428979	509688	0.84	NO	29.25	0.93	29.22	29.29	30137.94601			689	1012
156	* PCB-195		291126	137321	153805	0.89	NO	29.99	0.95	29.96	30.03	17857.45670			1160	935
157	PCB-194		616170	292188	323982	0.90	NO	31.23	0.99	31.20	31.27	36168.58112			1160	935
158	PCB-205		42537	20036	22501	0.89	NO	31.52	1.00	31.48	31.55	1950.30659			1160	935
159	* PCB-208		20513	8982	11531	0.78	NO	29.81	1.00	29.78	29.85	822.46006			829	1862
160	PCB-207		14952	6632	8320	0.80	NO	30.30	1.02	30.27	30.34	692.96995			829	1862
161	PCB-206		82807	36208	46599	0.78	NO	32.61	1.00	32.58	32.64	5105.00319			829	1862
162	* PCB-209		4827	2590	2237	1.16	NO	33.76	1.00	33.73	33.80	252.52595			225	293
163	13C-PCB-31						YES								21274	9893
164	13C-PCB-95						YES								1941	1526
165	13C-PCB-153		652	482	170	2.84	YES	24.27	1.18	24.24	24.31	25.68630	1.3		2555	1220
166	13C-PCB-28		68173	36142	32031	1.13	NO	16.09	0.94	16.06	16.12	1061.26182	53.1		21274	9893
167	13C-PCB-111		70566	41877	28689	1.46	NO	22.10	1.07	22.07	22.14	1485.69474	74.3		1941	1526
168	13C-PCB-178		60087	30534	29553	1.03	NO	25.16	1.01	25.12	25.19	1592.70070	79.6		2623	1244
169	13C-PCB-1		36142	27116	9026	3.00	NO	8.98	0.75	8.94	9.01	618.21672	30.9		1821	14852
170	13C-PCB-3		40269	30088	10181	2.96	NO	10.53	0.88	10.49	10.56	712.89536	35.6		1821	14852
171	13C-PCB-4		51224	30494	20731	1.47	NO	10.69	0.89	10.66	10.72	866.87872	43.3		7822	2864
172	13C-PCB-15		50069	30675	19394	1.58	NO	14.40	1.20	14.37	14.44	823.55042	41.2		10391	2906
173	13C-PCB-19		62855	32966	29889	1.10	NO	12.71	1.06	12.68	12.75	924.59806	46.2	ES221122MB	35536	16985
174	13C-PCB-37		47486	24002	23484	1.02	NO	18.35	1.07	18.32	18.38	787.97741	39.4		21274	9893
175	13C-PCB-54		84911	37931	46981	0.81	NO	14.58	0.85	14.55	14.61	957.90915	47.9		9211	4389
176	13C-PCB-81		50687	21490	29197	0.74	NO	21.91	1.06	21.88	21.94	992.56083	49.6		4343	2722
177	13C-PCB-77		50869	21547	29322	0.73	NO	22.23	1.07	22.19	22.26	980.48419	49.0		4343	2722
178	13C-PCB-104		73268	44778	28490	1.57	NO	17.61	1.03	17.57	17.64	1172.01742	58.6		1156	1119
179	13C-PCB-123		51122	30731	20392	1.51	NO	23.19	1.12	23.15	23.22	1078.97601	53.9		3093	1357
180	13C-PCB-118		48993	30454	18539	1.64	NO	23.35	1.13	23.32	23.39	1122.26991	56.1		3093	1357
181	13C-PCB-114		49567	31028	18539	1.67	NO	23.66	0.95	23.62	23.69	1050.45021	52.5		3093	1357
182	13C-PCB-105		48155	30681	17474	1.76	NO	24.02	0.96	23.99	24.05	1071.63450	53.6	ES221122MB	3093	1357
183	13C-PCB-126		47479	28901	18579	1.56	NO	25.61	1.03	25.58	25.65	1042.20903	52.1		3093	1357
184	13C-PCB-155		85404	47656	37749	1.26	NO	20.57	0.99	20.54	20.60	1306.16536	65.3		905	976
185	13C-PCB-167		52881	28904	23977	1.21	NO	26.50	1.06	26.46	26.53	1340.58970	67.0		2555	1220

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	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
186	13C-PCB-156/157		102217	57587	44630	1.29	NO	27.15	1.09	27.12	27.18	2721.10964	68.0		2555	1220
187	13C-PCB-169		47757	26566	21191	1.25	NO	28.80	1.15	28.77	28.84	1306.31864	65.3		2555	1220
188	13C-PCB-188		78926	40407	38519	1.05	NO	23.57	0.94	23.54	23.61	1489.92559	74.5		2623	1244
189	13C-PCB-189		52881	27216	25665	1.06	NO	30.08	0.96	30.05	30.12	1383.84623	69.2		2358	1301
190	13C-PCB-202		87480	42053	45427	0.93	NO	26.36	1.06	26.33	26.40	1498.19417	74.9		994	699
191	13C-PCB-205		40691	19392	21299	0.91	NO	31.50	1.01	31.47	31.54	1420.95290	71.0		556	825
192	13C-PCB-208		47826	20806	27021	0.77	NO	29.80	0.95	29.77	29.83	1489.23977	74.5		798	808
193	13C-PCB-206		30838	13874	16963	0.82	NO	32.60	1.04	32.56	32.63	1519.93853	76.0		798	808
194	13C-PCB-209		41417	22670	18746	1.21	NO	33.73	1.08	33.70	33.77	1525.34485	76.3		389	347
195	13C-PCB-9		179607	108170	71437	1.51	NO	11.96	0.48	11.92	11.99	3.85127	0.2		7822	2864
196	13C-PCB-52		78723	33450	45274	0.74	NO	17.08	0.68	17.04	17.11	3.93114	0.2		4671	2474
197	13C-PCB-101		77609	46821	30788	1.52	NO	20.73	0.83	20.69	20.76	4.05028	0.2		1941	1526
198	13C-PCB-138		64878	36241	28637	1.27	NO	24.97	0.00	24.94	25.01	4.31244	0.2		2555	1220
199	13C-PCB-194		46375	22118	24257	0.91	NO	31.22	1.25	31.19	31.25	3.87484	0.2		556	825
200	Total MoCB-F1	2		1015								75.48567			1347	
201	Total DiCB-F1	1		1796								65.55212			1480	
202	Total DiCB-F2	1		6470								419.93960			2355	
203	Total TrCB-F1			0											2700	
204	Total TrCB-F2	5		5535								432.37355			1901	
205	Total TrCB-F3	11		39238								8708.93460			2686	
206	Total TeCB-F2			0											1151	
207	Total TeCB-F3	12		106737								12170.02524			986	
208	Total TeCB-F4	17		163794								104818.62369			1520	
209	Total PeCB-F3	1		778								47.53155			1212	
210	Total PeCB-F4	18		2007797								164101.89663			2402	
211	Total PeCB-F5	31		1348862								2477592.680...			2439	
212	Total HxCB-F4	6		1946623								124163.74960			985	
213	Total HxCB-F5	33		13500268								2208250.039...			4122	
214	Total HpCB-F5	28		12614856								932210.13941			2071	
215	Total HpCB-F6	1		77477								3012.39557			1578	
216	Total OcCB-F5	10		1625062								110504.16435			689	
217	Total OcCB-F6	7		453893								81936.57712			1160	
218	Total NoCB-F6	3		51822								6620.43320			829	
219	Total DeCB-F7	1		2590								252.52595			225	
220	Total 13C-MoCB-F1	2		57204								1331.11208			1821	
221	Total 13C-DiCB-F1	2		138664								870.72999			7822	
222	Total 13C-DiCB-F2	1		32437								823.55042			10391	

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Name: 9-221117A21, Date: 18-Nov-2022, Time: 03:53:24, ID: L2735553-1, Description: DIL 20x, Vial: Tray1:18

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
223	Total 13C-TrCB-F1	1		205793								924.59806			35536	
224	Total 13C-TrCB-F3	2		60144								1849.23923			21274	
225	Total 13C-TeCB-F2	1		37931								957.90915			9211	
226	Total 13C-TeCB-F3	1		33450								3.93114			4671	
227	Total 13C-TeCB-F4	2		44447								1973.04501			4343	
228	Total 13C-PeCB-F3	1		44778								1172.01742			1156	
229	Total 13C-PeCB-F4	3		88832								1489.81490			1941	
230	Total 13C-PeCB-F5	5		156147								5365.53966			3093	
231	Total 13C-HxCB-F4	1		48182								1306.16536			905	
232	Total 13C-HxCB-F5	12		152314								5399.33402			2555	
233	Total 13C-HpCB-F5	2		73588								3082.62629			2623	
234	Total 13C-HpCB-F6	1		29718								1383.84623			2358	
235	Total 13C-OcCB-F5	1		42282								1498.19417			994	
236	Total 13C-OcCB-F6	4		42877								1425.35145			556	
237	Total 13C-NoCB-F6	2		34732								3009.17830			798	
238	Total 13C-DeCB-F7	1		22670								1525.34485			389	
239	Lockmass F1			0											659810	
240	Lockmass F2			0											179812	
241	Lockmass F3			0											525586	
242	Lockmass F4			0											434905	
243	Lockmass F5			0											109431	
244	Lockmass F6			0											122014	
245	Lockmass F7			0											30643	

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221117A2-1121ES.qld

Last Altered: Tuesday, November 22, 2022 16:07:50 Eastern Standard Time
Printed: Wednesday, November 23, 2022 11:42:36 Eastern Standard Time

Name: 9-221117A22, Date: 18-Nov-2022, Time: 04:35:41, ID: L2735553-2, Description: DIL 20x, Vial: Tray1:19

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
1	* PCB-1						YES								1523	1205
2	PCB-2						YES								1523	1205
3	PCB-3						YES								1523	1205
4	*PCB-4						YES								1602	3812
5	PCB-10						YES								1602	3812
6	PCB-9						YES								1602	3812
7	PCB-7						YES								1602	3812
8	PCB-6						YES								1602	3812
9	PCB-5						YES								1602	3812
10	PCB-8		2526	1715	811	2.12	YES	12.51	1.17	12.47	12.54	62.77115		ES221121MB	1602	3812
11	* PCB-14						YES								2433	4911
12	PCB-11		12556	8006	4550	1.76	NO	14.02	0.97	13.98	14.05	446.16540			2433	4911
13	PCB-13/12						YES								2433	4911
14	PCB-15						YES								2433	4911
15	* PCB-19						YES								2323	2601
16	* PCB-30/18		3285	1576	1709	0.92	NO	13.82	1.09	13.79	13.86	120.33709			1989	1859
17	PCB-17		1730	972	758	1.28	YES	14.06	1.11	14.03	14.10	77.91223			1989	1859
18	PCB-27						YES								1989	1859
19	PCB-24						YES								1989	1859
20	PCB-16		1132	609	523	1.17	NO	14.38	1.13	14.34	14.41	56.16229			1989	1859
21	PCB-32		925	549	376	1.46	YES	14.65	1.15	14.62	14.69	27.58139		ES221121MB	1989	1859
22	* PCB-34						YES								1969	2071
23	PCB-23						YES								1969	2071
24	PCB-29/26		2205	1219	986	1.24	YES	15.61	0.85	15.58	15.64	75.64446			1969	2071
25	PCB-25		491	268	223	1.20	YES	15.75	0.86	15.71	15.78	16.99464			1969	2071
26	PCB-31		8810	4381	4428	0.99	NO	15.92	0.87	15.89	15.96	289.83567			1969	2071
27	PCB-28/20		25898	13100	12798	1.02	NO	16.10	0.88	16.07	16.13	908.32154			1969	2071
28	PCB-21/33		4345	2242	2103	1.07	NO	16.25	0.89	16.21	16.28	151.47854			1969	2071
29	PCB-22		4190	2186	2004	1.09	NO	16.48	0.90	16.45	16.51	147.82242			1969	2071
30	PCB-36						YES								1969	2071
31	PCB-39						YES								1969	2071
32	PCB-38						YES								1969	2071
33	PCB-35						YES								1969	2071
34	PCB-37		1021	518	503	1.03	NO	18.35	1.00	18.32	18.38	41.86743			1969	2071
35	* PCB-54						YES								1079	1348
36	* PCB-50/53		1712	828	884	0.94	YES	15.79	1.08	15.75	15.82	88.58246			742	1560
37	PCB-45/51		1689	724	965	0.75	NO	16.19	1.11	16.15	16.22	90.22295			742	1560

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Last Altered: Tuesday, November 22, 2022 16:07:50 Eastern Standard Time
Printed: Wednesday, November 23, 2022 11:42:36 Eastern Standard Time

Name: 9-221117A22, Date: 18-Nov-2022, Time: 04:35:41, ID: L2735553-2, Description: DIL 20x, Vial: Tray1:19

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
38	PCB-46						YES								742	1560
39	PCB-52		31722	13065	18657	0.70	NO	17.09	1.17	17.05	17.12	1850.11009			742	1560
40	PCB-73						YES								742	1560
41	PCB-43						YES								742	1560
42	PCB-69/49		22445	9909	12537	0.79	NO	17.36	1.19	17.33	17.39	1032.58113			742	1560
43	PCB-48		2708	1235	1473	0.84	NO	17.52	1.20	17.48	17.55	140.50365			742	1560
44	PCB-44/47/65		27942	11790	16152	0.73	NO	17.66	1.21	17.63	17.70	1451.81706			742	1560
45	PCB-59/62/75		3224	1427	1797	0.79	NO	17.83	1.22	17.80	17.86	134.09832			742	1560
46	PCB-42		5099	2371	2728	0.87	NO	17.95	1.23	17.91	17.98	329.30706			742	1560
47	PCB-41/71/40		6928	2953	3975	0.74	NO	18.23	1.25	18.20	18.27	381.18993			742	1560
48	PCB-64		14277	6254	8023	0.78	NO	18.35	1.26	18.32	18.38	644.53857			742	1560
49	* PCB-72		1553	732	822	0.89	YES	18.73	0.85	18.70	18.76	53.24297			1853	2505
50	PCB-68		1097	307	790	0.39	YES	18.90	0.86	18.86	18.93	35.66055			1853	2505
51	PCB-57						YES								1853	2505
52	PCB-58						YES								1853	2505
53	PCB-67		621	361	261	1.38	YES	19.36	0.88	19.32	19.39	19.97381			1853	2505
54	PCB-63		2371	932	1439	0.65	YES	19.51	0.89	19.47	19.54	81.81155			1853	2505
55	PCB-61/70/74/76		54725	24244	30481	0.80	NO	19.70	0.90	19.67	19.73	2014.47177			1853	2505
56	PCB-66		52776	24687	28089	0.88	NO	19.87	0.91	19.83	19.90	1785.82318			1853	2505
57	PCB-55						YES								1853	2505
58	PCB-56		9534	4429	5105	0.87	NO	20.25	0.92	20.22	20.29	361.70538			1853	2505
59	PCB-60		7213	3206	4007	0.80	NO	20.38	0.93	20.34	20.41	254.05982			1853	2505
60	PCB-80						YES								1853	2505
61	PCB-79		1699	732	967	0.76	NO	21.36	0.97	21.32	21.39	54.50027			1853	2505
62	PCB-78						YES								1853	2505
63	PCB-81						YES								1853	2505
64	PCB-77		3123	1425	1698	0.84	NO	22.23	1.00	22.19	22.26	112.80959		ES221121MB	1853	2505
65	* PCB-104						YES								829	3763
66	PCB-96						YES								829	3763
67	* PCB-103		2925	1810	1115	1.62	NO	18.82	1.07	18.79	18.85	146.81695			2493	3589
68	PCB-94						YES								2493	3589
69	PCB-95		250976	152598	98378	1.55	NO	19.24	1.09	19.20	19.27	14693.90239			2493	3589
70	PCB-100/93/102/98		5192	2900	2291	1.27	YES	19.41	1.10	19.38	19.45	263.21154			2493	3589
71	PCB-88/91		14687	8750	5937	1.47	NO	19.69	1.12	19.66	19.72	771.32296			2493	3589
72	PCB-84		14319	8507	5812	1.46	NO	19.86	1.13	19.82	19.89	806.30291			2493	3589
73	PCB-89						YES								2493	3589
74	PCB-121						YES								2493	3589

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Name: 9-221117A22, Date: 18-Nov-2022, Time: 04:35:41, ID: L2735553-2, Description: DIL 20x, Vial: Tray1:19

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
75	PCB-92		77269	47373	29895	1.58	NO	20.44	1.16	20.41	20.47	4448.34742			2493	3589
76	PCB-113/90/101		610752	370300	240452	1.54	NO	20.75	1.18	20.71	20.78	27458.41265			2493	3589
77	PCB-83/99		108810	67234	41576	1.62	NO	21.05	0.91	21.02	21.08	5769.83334			2493	3589
78	PCB-112						YES								2493	3589
79	PCB-109/119/86/97/125/87		124554	75177	49377	1.52	NO	21.42	0.92	21.39	21.45	5467.99493		ES221121MJ	2493	3589
80	PCB-117/116/85/110/115		364113	218899	145215	1.51	NO	21.84	0.94	21.80	21.87	15286.49696		ES221121MJ	2493	3589
81	PCB-82		9972	6383	3589	1.78	NO	22.04	0.95	22.01	22.07	636.34014		ES221121MB	2493	3589
82	PCB-111		1324	950	374	2.54	YES	22.12	0.95	22.09	22.16	47.22038		ES221121MB	2493	3589
83	PCB-120		7901	4907	2994	1.64	NO	22.34	0.96	22.30	22.37	281.15486		ES221121MB	2493	3589
84	* PCB-108/124		11673	7261	4411	1.65	NO	23.00	0.99	22.97	23.04	405.39154			2948	3123
85	PCB-107		37339	22753	14586	1.56	NO	23.13	1.00	23.09	23.16	1271.78518		ES221121MS	2948	3123
86	PCB-123		3926	2604	1321	1.97	YES	23.19	1.00	23.15	23.22	146.75320		ES221121MS	2948	3123
87	PCB-106						YES								2948	3123
88	PCB-118		280019	171697	108322	1.59	NO	23.37	1.00	23.33	23.40	9205.00888			2948	3123
89	PCB-122						YES								2948	3123
90	PCB-114		8314	6827	1487	4.59	YES	23.66	1.00	23.62	23.69	330.90175			2948	3123
91	PCB-105		61550	37752	23798	1.59	NO	24.03	1.00	24.00	24.06	2327.09023			2948	3123
92	PCB-127		655	401	253	1.58	NO	24.76	1.03	24.72	24.79	22.88587		ES221121MB	2948	3123
93	PCB-126		6710	4111	2599	1.58	NO	25.64	1.00	25.61	25.67	263.76721		ES221121MB	2948	3123
94	* PCB-155						YES								1221	1081
95	PCB-152		829	545	284	1.92	YES	20.79	1.01	20.76	20.82	22.14018			1221	1081
96	PCB-150		2849	1539	1310	1.17	NO	20.83	1.01	20.80	20.86	59.57907			1221	1081
97	PCB-136		282637	157328	125309	1.26	NO	21.09	1.03	21.05	21.12	7051.33335			1221	1081
98	PCB-145		938	478	460	1.04	YES	21.20	1.03	21.17	21.23	22.21642			1221	1081
99	PCB-148		2379	1331	1049	1.27	NO	21.91	1.07	21.88	21.94	77.36963			1221	1081
100	PCB-151/135		1359310	756358	602953	1.25	NO	22.27	1.08	22.24	22.30	48583.09208			1221	1081
101	PCB-154						YES								1221	1081
102	PCB-144		165653	92071	73582	1.25	NO	22.57	1.10	22.53	22.60	5486.41969			1221	1081
103	* PCB-147/149		1827567	1017266	810301	1.26	NO	22.76	1.11	22.73	22.80	93343.73831			2394	1820
104	PCB-134/143		60647	32998	27649	1.19	NO	22.91	1.11	22.87	22.94	3922.79253			2394	1820
105	PCB-139/140		11019	5984	5035	1.19	NO	23.08	1.12	23.04	23.11	563.75109			2394	1820
106	PCB-131		7061	3737	3324	1.12	NO	23.22	0.88	23.19	23.26	498.82984			2394	1820
107	PCB-142						YES								2394	1820
108	PCB-132		358511	199295	159216	1.25	NO	23.48	0.89	23.44	23.51	20818.44052			2394	1820
109	PCB-133		36295	20824	15471	1.35	NO	23.63	0.89	23.60	23.67	2180.48906			2394	1820
110	PCB-165		8424	4254	4170	1.02	YES	23.84	0.90	23.80	23.87	368.79300			2394	1820
111	PCB-146		473270	261348	211922	1.23	NO	23.96	0.90	23.93	23.99	22865.88447			2394	1820

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Name: 9-221117A22, Date: 18-Nov-2022, Time: 04:35:41, ID: L2735553-2, Description: DIL 20x, Vial: Tray1:19

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
112	PCB-161						YES								2394	1820
113	PCB-153/168		3366847	1872094	1494752	1.25	NO	24.29	0.92	24.25	24.32	145257.89881			2394	1820
114	PCB-141		490779	271753	219026	1.24	NO	24.43	0.92	24.40	24.46	27256.55690			2394	1820
115	PCB-130		76522	41624	34898	1.19	NO	24.65	0.93	24.61	24.68	4641.75689			2394	1820
116	PCB-137/164		177010	97509	79501	1.23	NO	24.82	0.94	24.78	24.85	8395.07801			2394	1820
117	PCB-138/163/129		2288771	1271043	1017728	1.25	NO	24.99	0.94	24.95	25.02	178599.04273			2394	1820
118	PCB-160						YES								2394	1820
119	PCB-158		217989	118197	99792	1.18	NO	25.18	0.95	25.15	25.21	8359.80954			2394	1820
120	PCB-128/166		59115	31891	27223	1.17	NO	25.64	0.97	25.61	25.67	2764.80134			2394	1820
121	PCB-159		40036	22195	17842	1.24	NO	26.12	0.99	26.09	26.16	1559.30686			2394	1820
122	PCB-162		9241	4987	4254	1.17	NO	26.25	0.99	26.22	26.29	380.35094			2394	1820
123	PCB-167		81376	43742	37634	1.16	NO	26.50	1.00	26.46	26.53	3042.42719			2394	1820
124	PCB-156/157		119125	66939	52186	1.28	NO	27.13	1.00	27.09	27.16	4628.46806			2394	1820
125	PCB-169		1393	805	589	1.37	NO	28.82	1.00	28.78	28.85	56.02060		ES221121MB	2394	1820
126	* PCB-188		2376	1176	1200	0.98	NO	23.58	1.00	23.55	23.62	58.56953			1945	2324
127	PCB-179		472247	239700	232547	1.03	NO	23.83	1.01	23.79	23.86	13631.50744			1945	2324
128	PCB-184		910	512	399	1.28	YES	24.03	1.02	24.00	24.06	24.90075			1945	2324
129	PCB-176		142967	71455	71512	1.00	NO	24.27	1.03	24.24	24.31	4223.64807			1945	2324
130	PCB-186						YES								1945	2324
131	PCB-178		264954	135253	129700	1.04	NO	25.17	1.07	25.13	25.20	10883.36189			1945	2324
132	PCB-175		50265	25520	24745	1.03	NO	25.49	1.08	25.46	25.53	1908.62380			1945	2324
133	PCB-187		1976651	1007114	969537	1.04	NO	25.64	1.09	25.61	25.67	68864.15677			1945	2324
134	PCB-182						YES								1945	2324
135	PCB-183		742245	375549	366696	1.02	NO	25.94	1.10	25.91	25.97	26013.77828			1945	2324
136	PCB-185		144973	74152	70821	1.05	NO	26.04	1.10	26.00	26.07	5586.07177			1945	2324
137	PCB-174		851327	431454	419873	1.03	NO	26.12	1.11	26.09	26.16	32364.41180			1945	2324
138	PCB-177		602567	305961	296605	1.03	NO	26.35	1.12	26.32	26.39	23263.94861			1945	2324
139	PCB-181		2302	1187	1115	1.07	NO	26.55	0.88	26.51	26.58	88.64796			1945	2324
140	PCB-171/173		247561	125380	122180	1.03	NO	26.68	0.89	26.64	26.71	10021.33893			1945	2324
141	PCB-172		181856	92376	89480	1.03	NO	27.46	0.91	27.43	27.50	6917.70039			1945	2324
142	PCB-192						YES								1945	2324
143	PCB-180/193		2661848	1348541	1313307	1.03	NO	27.80	0.92	27.77	27.84	94100.99469			1945	2324
144	PCB-191		57420	28679	28741	1.00	NO	27.98	0.93	27.95	28.02	1763.19959			1945	2324
145	PCB-170		723979	370367	353612	1.05	NO	28.50	0.95	28.47	28.54	30042.14086			1945	2324
146	PCB-190		260650	131707	128942	1.02	NO	28.77	0.96	28.74	28.80	7166.36651			1945	2324
147	* PCB-189		28337	13966	14371	0.97	NO	30.10	1.00	30.06	30.13	1215.01294			1294	1354
148	* PCB-202		101394	47269	54125	0.87	NO	26.38	1.00	26.34	26.41	2431.93986			1005	898

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Printed: Wednesday, November 23, 2022 11:42:36 Eastern Standard Time

Name: 9-221117A22, Date: 18-Nov-2022, Time: 04:35:41, ID: L2735553-2, Description: DIL 20x, Vial: Tray1:19

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
149	PCB-201		74335	33840	40495	0.84	NO	26.85	1.02	26.81	26.88	1720.80458			1005	898
150	PCB-204						YES								1005	898
151	PCB-197		24411	10995	13416	0.82	NO	27.31	1.04	27.27	27.34	583.59517			1005	898
152	PCB-200		55808	25761	30047	0.86	NO	27.42	1.04	27.38	27.45	1387.58089			1005	898
153	PCB-198/199		479156	222681	256475	0.87	NO	28.82	0.92	28.78	28.85	16315.08103			1005	898
154	PCB-196		229845	106367	123478	0.86	NO	29.14	0.93	29.11	29.18	7865.28451			1005	898
155	PCB-203		348987	160822	188164	0.85	NO	29.25	0.93	29.22	29.29	11529.20571			1005	898
156	* PCB-195		94756	44829	49927	0.90	NO	29.99	0.95	29.96	30.03	5980.46991			992	639
157	PCB-194		208453	98039	110414	0.89	NO	31.23	0.99	31.20	31.27	12590.09058			992	639
158	PCB-205		14177	6769	7409	0.91	NO	31.52	1.00	31.48	31.55	701.48324			992	639
159	* PCB-208		9319	4002	5317	0.75	NO	29.81	1.00	29.78	29.85	389.32210			759	1682
160	PCB-207		6418	2815	3603	0.78	NO	30.29	1.02	30.26	30.32	306.38989			759	1682
161	PCB-206		31067	13008	18059	0.72	NO	32.61	1.00	32.58	32.64	1938.41712			759	1682
162	* PCB-209		2964	1551	1413	1.10	NO	33.75	1.00	33.72	33.78	160.59634			261	323
163	13C-PCB-31						YES								22771	9621
164	13C-PCB-95		190	82	108	0.76	YES	19.10	1.08	19.07	19.13	7.84572	0.4		1516	1667
165	13C-PCB-153		500	341	160	2.13	YES	24.29	1.18	24.25	24.32	21.00631	1.1		1282	1115
166	13C-PCB-28		60569	31869	28700	1.11	NO	16.08	0.94	16.05	16.11	868.54730	43.4		22771	9621
167	13C-PCB-111		58800	35325	23475	1.50	NO	22.10	1.07	22.07	22.14	1180.02555	59.0		1516	1667
168	13C-PCB-178		51249	25920	25329	1.02	NO	25.16	1.01	25.12	25.19	1392.83552	69.6		1977	1151
169	13C-PCB-1		47381	34782	12599	2.76	NO	8.98	0.75	8.94	9.01	764.92895	38.2		1505	12317
170	13C-PCB-3		44120	33900	10220	3.32	NO	10.53	0.88	10.49	10.56	737.19077	36.9		1505	12317
171	13C-PCB-4		54497	33686	20811	1.62	NO	10.69	0.89	10.66	10.72	870.45472	43.5		11782	3077
172	13C-PCB-15		50971	29319	21653	1.35	NO	14.40	1.20	14.37	14.44	791.29287	39.6		10152	4080
173	13C-PCB-19		75762	39567	36196	1.09	NO	12.71	1.06	12.68	12.75	1051.85631	52.6		33970	14823
174	13C-PCB-37		44370	22472	21898	1.03	NO	18.34	1.07	18.31	18.37	678.23034	33.9		22771	9621
175	13C-PCB-54		90705	40118	50588	0.79	NO	14.58	0.85	14.55	14.61	942.59392	47.1		7360	4506
176	13C-PCB-81		47781	20731	27049	0.77	NO	21.91	1.06	21.88	21.94	891.84582	44.6		3889	3046
177	13C-PCB-77		44219	18170	26049	0.70	NO	22.23	1.07	22.19	22.26	812.40396	40.6		3889	3046
178	13C-PCB-104		74543	44744	29799	1.50	NO	17.61	1.03	17.57	17.64	1136.58629	56.8		1705	1387
179	13C-PCB-123		48992	29523	19469	1.52	NO	23.19	1.12	23.15	23.22	985.60774	49.3		2156	1335
180	13C-PCB-118		47127	30106	17021	1.77	NO	23.35	1.13	23.32	23.39	1028.98514	51.4		2156	1335
181	13C-PCB-114		45110	28226	16884	1.67	NO	23.66	0.95	23.62	23.69	911.24322	45.6		2156	1335
182	13C-PCB-105		45020	27280	17740	1.54	NO	24.02	0.96	23.99	24.05	954.97343	47.7		2156	1335
183	13C-PCB-126		44127	27395	16731	1.64	NO	25.61	1.03	25.58	25.65	923.26487	46.2		2156	1335
184	13C-PCB-155		89421	48542	40878	1.19	NO	20.57	0.99	20.54	20.60	1303.56312	65.2		685	1063
185	13C-PCB-167		45800	24621	21179	1.16	NO	26.48	1.06	26.45	26.52	1190.48956	59.5		1282	1115

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221117A2-1121ES.qld

Last Altered: Tuesday, November 22, 2022 16:07:50 Eastern Standard Time
Printed: Wednesday, November 23, 2022 11:42:36 Eastern Standard Time

Name: 9-221117A22, Date: 18-Nov-2022, Time: 04:35:41, ID: L2735553-2, Description: DIL 20x, Vial: Tray1:19

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
186	13C-PCB-156/157		87394	48000	39394	1.22	NO	27.13	1.09	27.09	27.16	2385.43478	59.6		1282	1115
187	13C-PCB-169		43671	23213	20459	1.13	NO	28.80	1.15	28.77	28.84	1224.80703	61.2		1282	1115
188	13C-PCB-188		76029	39398	36631	1.08	NO	23.57	0.94	23.54	23.61	1471.60418	73.6		1977	1151
189	13C-PCB-189		46832	24339	22493	1.08	NO	30.08	0.96	30.05	30.12	1256.57649	62.8		2768	1523
190	13C-PCB-202		86860	41581	45279	0.92	NO	26.36	1.06	26.33	26.40	1525.25579	76.3		874	1306
191	13C-PCB-205		37706	17873	19833	0.90	NO	31.49	1.01	31.46	31.52	1292.94270	64.6		432	624
192	13C-PCB-208		45901	19406	26495	0.73	NO	29.80	0.95	29.77	29.83	1403.46197	70.2		417	731
193	13C-PCB-206		30469	12994	17475	0.74	NO	32.59	1.04	32.55	32.62	1474.64667	73.7		417	731
194	13C-PCB-209		39990	21743	18247	1.19	NO	33.73	1.08	33.70	33.77	1446.17825	72.3		364	293
195	13C-PCB-9		190297	116902	73394	1.59	NO	11.96	0.48	11.92	11.99	4.08049	0.2		11782	3077
196	13C-PCB-52		85461	36565	48896	0.75	NO	17.08	0.68	17.04	17.11	4.26763	0.2		4616	2663
197	13C-PCB-101		81421	49264	32157	1.53	NO	20.73	0.83	20.69	20.76	4.24921	0.2		1516	1667
198	13C-PCB-138		63275	35233	28042	1.26	NO	24.97	0.00	24.94	25.01	4.20590	0.2		1282	1115
199	13C-PCB-194		47228	23073	24154	0.96	NO	31.21	1.25	31.17	31.24	3.94612	0.2		432	624
200	Total MoCB-F1			0											1523	
201	Total DiCB-F1	1		1715								62.77115			1602	
202	Total DiCB-F2	1		8006								446.16540			2433	
203	Total TrCB-F1			0											2323	
204	Total TrCB-F2	4		3706								281.99300			1989	
205	Total TrCB-F3	10		26031								5338.00862			1969	
206	Total TeCB-F2			0											1079	
207	Total TeCB-F3	10		50555								6142.95122			742	
208	Total TeCB-F4	17		84885								53376.86112			1853	
209	Total PeCB-F3			0											829	
210	Total PeCB-F4	15		968970								82476.38257			2493	
211	Total PeCB-F5	26		582629								1079947.796...			2948	
212	Total HxCB-F4	8		1010259								62251.65773			1221	
213	Total HxCB-F5	32		5579900								959526.27048			2394	
214	Total HpCB-F5	21		4780721								368784.03503			1945	
215	Total HpCB-F6	1		26198								1215.01294			1294	
216	Total OcCB-F5	12		608571								43416.08493			1005	
217	Total OcCB-F6	5		151118								27528.26102			992	
218	Total NoCB-F6	3		19825								2634.12912			759	
219	Total DeCB-F7	1		1551								160.59634			261	
220	Total 13C-MoCB-F1	2		68682								1502.11973			1505	
221	Total 13C-DiCB-F1	2		150588								874.53520			11782	
222	Total 13C-DiCB-F2	1		29319								791.29287			10152	

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Name: 9-221117A22, Date: 18-Nov-2022, Time: 04:35:41, ID: L2735553-2, Description: DIL 20x, Vial: Tray1:19

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
223	Total 13C-TrCB-F1	1		234221								1051.85631			33970	
224	Total 13C-TrCB-F3	2		75017								1546.77763			22771	
225	Total 13C-TeCB-F2	1		40118								942.59392			7360	
226	Total 13C-TeCB-F3	3		37087								4.30937			4616	
227	Total 13C-TeCB-F4	2		38902								1704.24978			3889	
228	Total 13C-PeCB-F3	1		45109								1136.58629			1705	
229	Total 13C-PeCB-F4	5		85113								1192.25615			1516	
230	Total 13C-PeCB-F5	5		147731								4804.07440			2156	
231	Total 13C-HxCB-F4	1		48853								1303.56312			685	
232	Total 13C-HxCB-F5	15		133918								4827.76772			1282	
233	Total 13C-HpCB-F5	2		66417								2864.43970			1977	
234	Total 13C-HpCB-F6	1		26786								1256.57649			2768	
235	Total 13C-OcCB-F5	1		41798								1525.25579			874	
236	Total 13C-OcCB-F6	4		42433								1297.40612			432	
237	Total 13C-NoCB-F6	2		32400								2878.10865			417	
238	Total 13C-DeCB-F7	1		21743								1446.17825			364	
239	Lockmass F1			0											632965	
240	Lockmass F2			0											194902	
241	Lockmass F3			0											459484	
242	Lockmass F4			0											471626	
243	Lockmass F5			0											97104	
244	Lockmass F6			0											137014	
245	Lockmass F7			0											35379	

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Last Altered: Tuesday, November 22, 2022 16:07:50 Eastern Standard Time
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Name: 9-221117A23, Date: 18-Nov-2022, Time: 05:18:00, ID: L2735553-3, Description: DIL 20x, Vial: Tray1:20

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
1	* PCB-1						YES								1134	1275
2	PCB-2		1731	1183	548	2.16	YES	10.39	0.99	10.36	10.43	69.92085			1134	1275
3	PCB-3						YES								1134	1275
4	*PCB-4						YES								1454	3418
5	PCB-10						YES								1454	3418
6	PCB-9						YES								1454	3418
7	PCB-7						YES								1454	3418
8	PCB-6						YES								1454	3418
9	PCB-5						YES								1454	3418
10	PCB-8		4529	2749	1780	1.54	NO	12.51	1.17	12.47	12.54	110.43763		ES221121MB	1454	3418
11	* PCB-14						YES								2317	4232
12	PCB-11		52134	30804	21330	1.44	NO	14.01	0.97	13.97	14.04	1925.06481		ES221121MB	2317	4232
13	PCB-13/12						YES								2317	4232
14	PCB-15						YES								2317	4232
15	* PCB-19						YES								2105	2077
16	* PCB-30/18		7385	3427	3958	0.87	YES	13.81	1.09	13.78	13.85	260.94114			2034	2173
17	PCB-17		3842	1919	1923	1.00	NO	14.06	1.11	14.03	14.10	166.90850			2034	2173
18	PCB-27		1116	567	549	1.03	NO	14.19	1.12	14.16	14.23	36.06605			2034	2173
19	PCB-24						YES								2034	2173
20	PCB-16		1933	1038	895	1.16	NO	14.37	1.13	14.33	14.40	92.49119			2034	2173
21	PCB-32		3087	1524	1563	0.97	NO	14.64	1.15	14.61	14.68	88.82141			2034	2173
22	* PCB-34						YES								2602	3173
23	PCB-23						YES								2602	3173
24	PCB-29/26		5953	3045	2908	1.05	NO	15.60	0.85	15.57	15.63	184.72552			2602	3173
25	PCB-25		2293	1325	968	1.37	YES	15.75	0.86	15.71	15.78	71.77604			2602	3173
26	PCB-31		21942	10860	11081	0.98	NO	15.92	0.87	15.89	15.96	653.00464			2602	3173
27	PCB-28/20		70933	36013	34919	1.03	NO	16.09	0.88	16.06	16.12	2250.45991			2602	3173
28	PCB-21/33		13345	7023	6321	1.11	NO	16.25	0.89	16.21	16.28	420.84058			2602	3173
29	PCB-22		10132	5172	4961	1.04	NO	16.48	0.90	16.45	16.51	323.34870			2602	3173
30	PCB-36						YES								2602	3173
31	PCB-39						YES								2602	3173
32	PCB-38						YES								2602	3173
33	PCB-35						YES								2602	3173
34	PCB-37		2344	1221	1124	1.09	NO	18.35	1.00	18.32	18.38	86.97094			2602	3173
35	* PCB-54						YES								849	1450
36	* PCB-50/53		3589	1626	1963	0.83	NO	15.79	1.08	15.75	15.82	191.09506			1047	2154
37	PCB-45/51		4412	1865	2547	0.73	NO	16.19	1.11	16.15	16.22	242.47698			1047	2154

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Name: 9-221117A23, Date: 18-Nov-2022, Time: 05:18:00, ID: L2735553-3, Description: DIL 20x, Vial: Tray1:20

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
38	PCB-46		1133	440	692	0.64	YES	16.36	1.12	16.33	16.40	71.13618			1047	2154
39	PCB-52		124396	54751	69645	0.79	NO	17.09	1.17	17.05	17.12	7465.01019			1047	2154
40	PCB-73						YES								1047	2154
41	PCB-43		2151	669	1482	0.45	YES	17.23	1.18	17.20	17.27	147.63408			1047	2154
42	PCB-69/49		79063	35452	43611	0.81	NO	17.35	1.19	17.32	17.38	3742.52570			1047	2154
43	PCB-48		8828	3967	4861	0.82	NO	17.52	1.20	17.48	17.55	471.22883			1047	2154
44	PCB-44/47/65		88883	38839	50043	0.78	NO	17.65	1.21	17.62	17.69	4751.76243			1047	2154
45	PCB-59/62/75		9866	4375	5491	0.80	NO	17.83	1.22	17.80	17.86	422.30217			1047	2154
46	PCB-42		16418	7167	9250	0.77	NO	17.96	1.23	17.92	17.99	1091.05644			1047	2154
47	PCB-41/71/40		21443	9303	12141	0.77	NO	18.22	1.25	18.19	18.26	1213.98155			1047	2154
48	PCB-64		45012	20256	24756	0.82	NO	18.34	1.26	18.31	18.37	2090.90095			1047	2154
49	* PCB-72		5171	2238	2933	0.76	NO	18.72	0.85	18.69	18.75	188.96694			1542	2576
50	PCB-68		4008	1817	2192	0.83	NO	18.88	0.86	18.84	18.91	138.99761			1542	2576
51	PCB-57						YES								1542	2576
52	PCB-58						YES								1542	2576
53	PCB-67						YES								1542	2576
54	PCB-63		8060	3764	4296	0.88	NO	19.50	0.89	19.46	19.53	296.48721			1542	2576
55	PCB-61/70/74/76		163540	72301	91239	0.79	NO	19.70	0.90	19.67	19.73	6419.03100			1542	2576
56	PCB-66		181559	80228	101332	0.79	NO	19.87	0.91	19.83	19.90	6550.71891			1542	2576
57	PCB-55						YES								1542	2576
58	PCB-56		26660	11815	14845	0.80	NO	20.25	0.92	20.22	20.29	1078.53868			1542	2576
59	PCB-60		25409	11273	14136	0.80	NO	20.37	0.93	20.33	20.40	954.23873			1542	2576
60	PCB-80						YES								1542	2576
61	PCB-79		7088	2934	4155	0.71	NO	21.35	0.97	21.31	21.38	242.40594			1542	2576
62	PCB-78						YES								1542	2576
63	PCB-81		708	359	349	1.03	YES	21.92	1.00	21.89	21.95	25.05412		ES221121MB	1542	2576
64	PCB-77		6982	2953	4029	0.73	NO	22.23	1.00	22.19	22.26	267.64686			1542	2576
65	* PCB-104						YES								1016	3402
66	PCB-96		2248	1390	858	1.62	NO	17.88	1.02	17.85	17.91	78.94784		ES221121MB	1016	3402
67	* PCB-103		7003	4288	2715	1.58	NO	18.82	1.07	18.79	18.85	376.67895			2796	4387
68	PCB-94						YES								2796	4387
69	PCB-95		591353	358303	233050	1.54	NO	19.24	1.09	19.20	19.27	37100.95777			2796	4387
70	PCB-100/93/102/98		12093	7291	4802	1.52	NO	19.40	1.10	19.37	19.44	656.96852			2796	4387
71	PCB-88/91		43885	26749	17136	1.56	NO	19.69	1.12	19.66	19.72	2469.76138			2796	4387
72	PCB-84		38158	22929	15229	1.51	NO	19.86	1.13	19.82	19.89	2302.52983			2796	4387
73	PCB-89		2192	1083	1109	0.98	YES	20.10	1.14	20.06	20.13	149.24060			2796	4387
74	PCB-121						YES								2796	4387

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Name: 9-221117A23, Date: 18-Nov-2022, Time: 05:18:00, ID: L2735553-3, Description: DIL 20x, Vial: Tray1:20

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
75	PCB-92		194617	119559	75058	1.59	NO	20.43	1.16	20.40	20.46	12006.24930			2796	4387
76	PCB-113/90/101		1600348	978431	621918	1.57	NO	20.74	1.18	20.70	20.77	77100.63992			2796	4387
77	PCB-83/99		328870	200303	128567	1.56	NO	21.04	0.91	21.01	21.07	18687.54450			2796	4387
78	PCB-112						YES								2796	4387
79	PCB-109/119/86/97/125/87		374375	229164	145210	1.58	NO	21.41	0.92	21.38	21.44	17611.98388		ES221121MJ	2796	4387
80	PCB-117/116/85/110/115		1015606	622803	392803	1.59	NO	21.83	0.94	21.79	21.86	45690.88258		ES221121MJ	2796	4387
81	PCB-82		31119	19281	11838	1.63	NO	22.04	0.95	22.01	22.07	2127.93834			2796	4387
82	PCB-111		3271	1846	1425	1.30	YES	22.10	0.95	22.07	22.14	125.01855			2796	4387
83	PCB-120		17993	10710	7283	1.47	NO	22.34	0.96	22.30	22.37	686.07795		ES221121MB	2796	4387
84	* PCB-108/124		28145	17111	11034	1.55	NO	23.00	0.99	22.97	23.04	1047.48270			3683	3286
85	PCB-107		110495	67498	42997	1.57	NO	23.13	1.00	23.09	23.16	4032.94387		ES221121MS	3683	3286
86	PCB-123		15244	9121	6123	1.49	NO	23.17	1.00	23.14	23.21	605.24085		ES221121MS	3683	3286
87	PCB-106						YES								3683	3286
88	PCB-118		884886	536601	348285	1.54	NO	23.35	1.00	23.32	23.39	32142.53101			3683	3286
89	PCB-122		6156	3582	2574	1.39	NO	23.57	1.00	23.54	23.61	330.75563			3683	3286
90	PCB-114		20929	13184	7744	1.70	NO	23.66	1.00	23.62	23.69	844.54548			3683	3286
91	PCB-105		191503	117143	74360	1.58	NO	24.03	1.00	24.00	24.06	7663.62327			3683	3286
92	PCB-127						YES								3683	3286
93	PCB-126		15093	9118	5974	1.53	NO	25.64	1.00	25.61	25.67	633.52488		ES221121MB	3683	3286
94	* PCB-155		1030	547	483	1.13	NO	20.58	1.00	20.55	20.61	26.11823			1130	1232
95	PCB-152						YES								1130	1232
96	PCB-150		7852	4468	3384	1.32	NO	20.84	1.01	20.80	20.87	206.13432			1130	1232
97	PCB-136		628286	345649	282636	1.22	NO	21.09	1.03	21.05	21.12	19675.30051			1130	1232
98	PCB-145		1712	1507	205	7.37	YES	21.19	1.03	21.16	21.22	50.88677			1130	1232
99	PCB-148		6643	3753	2890	1.30	NO	21.92	1.07	21.89	21.95	271.11771			1130	1232
100	PCB-151/135		3049319	1681297	1368022	1.23	NO	22.26	1.08	22.23	22.30	136801.56196			1130	1232
101	PCB-154						YES								1130	1232
102	PCB-144		406824	224800	182024	1.24	NO	22.57	1.10	22.53	22.60	16912.87388			1130	1232
103	* PCB-147/149		4440678	2464768	1975909	1.25	NO	22.76	1.11	22.73	22.80	245574.33278			3578	2334
104	PCB-134/143		135145	75428	59716	1.26	NO	22.91	1.11	22.87	22.94	9464.70580			3578	2334
105	PCB-139/140		28589	15348	13241	1.16	NO	23.06	1.12	23.03	23.10	1583.72277			3578	2334
106	PCB-131		19671	11611	8061	1.44	YES	23.21	0.88	23.18	23.24	1504.70172			3578	2334
107	PCB-142						YES								3578	2334
108	PCB-132		869771	485094	384677	1.26	NO	23.48	0.89	23.44	23.51	54685.53259			3578	2334
109	PCB-133		88979	49334	39645	1.24	NO	23.62	0.89	23.59	23.65	5787.80563			3578	2334
110	PCB-165		18294	9903	8391	1.18	NO	23.83	0.90	23.79	23.86	867.15021			3578	2334
111	PCB-146		1217652	674238	543414	1.24	NO	23.96	0.90	23.93	23.99	63697.71683			3578	2334

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
112	PCB-161						YES								3578	2334
113	PCB-153/168		8926367	4955860	3970507	1.25	NO	24.27	0.92	24.24	24.31	416977.80246			3578	2334
114	PCB-141		1212825	674133	538692	1.25	NO	24.42	0.92	24.38	24.45	72929.78343			3578	2334
115	PCB-130		216567	119869	96699	1.24	NO	24.65	0.93	24.61	24.68	14223.65181			3578	2334
116	PCB-137/164		456030	253782	202248	1.25	NO	24.82	0.94	24.78	24.85	23417.64963		ES221121MJ	3578	2334
117	PCB-138/163/129		6290124	3484844	2805280	1.24	NO	24.97	0.94	24.94	25.01	531444.35908			3578	2334
118	PCB-160						YES								3578	2334
119	PCB-158		628009	348592	279417	1.25	NO	25.17	0.95	25.13	25.20	26076.53412			3578	2334
120	PCB-128/166		162048	88933	73115	1.22	NO	25.64	0.97	25.61	25.67	8206.07510			3578	2334
121	PCB-159		93837	51894	41943	1.24	NO	26.12	0.99	26.09	26.16	3957.05338			3578	2334
122	PCB-162		23873	13244	10629	1.25	NO	26.24	0.99	26.21	26.28	1063.88241			3578	2334
123	PCB-167		228086	127955	100131	1.28	NO	26.50	1.00	26.46	26.53	9207.89821			3578	2334
124	PCB-156/157		341464	192371	149093	1.29	NO	27.13	1.00	27.09	27.16	13721.78283			3578	2334
125	PCB-169		4216	2541	1675	1.52	YES	28.80	1.00	28.77	28.84	193.13143		ES221121MB	3578	2334
126	* PCB-188		4660	2370	2290	1.03	NO	23.58	1.00	23.55	23.62	139.38407			2234	3317
127	PCB-179		1052070	532113	519957	1.02	NO	23.83	1.01	23.79	23.86	33775.81144			2234	3317
128	PCB-184		1885	918	968	0.95	NO	24.03	1.02	24.00	24.06	57.36236			2234	3317
129	PCB-176		348781	176060	172720	1.02	NO	24.27	1.03	24.24	24.31	11460.13279			2234	3317
130	PCB-186						YES								2234	3317
131	PCB-178		631940	319054	312886	1.02	NO	25.17	1.07	25.13	25.20	28870.56383			2234	3317
132	PCB-175		125164	63726	61438	1.04	NO	25.49	1.08	25.46	25.53	5285.90896			2234	3317
133	PCB-187		4843579	2452517	2391062	1.03	NO	25.63	1.09	25.59	25.66	187679.19590			2234	3317
134	PCB-182						YES								2234	3317
135	PCB-183		1873131	948779	924351	1.03	NO	25.94	1.10	25.91	25.97	73014.74148			2234	3317
136	PCB-185		297856	148966	148890	1.00	NO	26.04	1.10	26.00	26.07	12764.71708			2234	3317
137	PCB-174		1980029	1005168	974861	1.03	NO	26.12	1.11	26.09	26.16	83720.06599			2234	3317
138	PCB-177		1576720	798448	778272	1.03	NO	26.35	1.12	26.32	26.39	67704.78063			2234	3317
139	PCB-181		6232	3258	2974	1.10	NO	26.53	0.88	26.50	26.57	266.90085			2234	3317
140	PCB-171/173		689160	349662	339498	1.03	NO	26.68	0.89	26.64	26.71	31027.80893			2234	3317
141	PCB-172		477596	241101	236494	1.02	NO	27.45	0.91	27.42	27.48	20205.98487			2234	3317
142	PCB-192		513	186	327	0.57	YES	27.61	0.92	27.58	27.64	18.52322			2234	3317
143	PCB-180/193		7147344	3632349	3514995	1.03	NO	27.79	0.92	27.76	27.82	281023.27321			2234	3317
144	PCB-191		144942	73135	71807	1.02	NO	27.98	0.93	27.95	28.02	4950.10878			2234	3317
145	PCB-170		2027130	1031311	995818	1.04	NO	28.50	0.95	28.47	28.54	93556.26709			2234	3317
146	PCB-190		688851	348367	340484	1.02	NO	28.77	0.96	28.74	28.80	21064.62437			2234	3317
147	* PCB-189		75191	38573	36618	1.05	NO	30.08	1.00	30.05	30.12	3159.20380			1501	1665
148	* PCB-202		239645	112268	127377	0.88	NO	26.36	1.00	26.33	26.40	6535.98039			903	1052

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
149	PCB-201		182007	85021	96987	0.88	NO	26.83	1.02	26.80	26.87	4709.18631			903	1052
150	PCB-204		517	311	205	1.52	YES	27.16	1.03	27.13	27.19	13.63769			903	1052
151	PCB-197		56714	26825	29889	0.90	NO	27.29	1.04	27.26	27.33	1515.42761			903	1052
152	PCB-200		134122	62699	71424	0.88	NO	27.42	1.04	27.38	27.45	3727.19401			903	1052
153	PCB-198/199		1190160	551462	638698	0.86	NO	28.80	0.91	28.77	28.84	45293.71058			903	1052
154	PCB-196		549705	255500	294205	0.87	NO	29.14	0.93	29.11	29.18	21024.68130			903	1052
155	PCB-203		815721	380337	435383	0.87	NO	29.24	0.93	29.21	29.27	30119.81862			903	1052
156	* PCB-195		275399	129986	145413	0.89	NO	29.99	0.95	29.96	30.03	19427.14523			887	834
157	PCB-194		600014	283030	316985	0.89	NO	31.22	0.99	31.19	31.25	40504.32783			887	834
158	PCB-205		41418	20015	21403	0.94	NO	31.50	1.00	31.47	31.54	2203.79128			887	834
159	* PCB-208		23894	10852	13042	0.83	NO	29.81	1.00	29.78	29.85	1224.16147			694	1810
160	PCB-207		16800	7338	9462	0.78	NO	30.29	1.02	30.26	30.32	949.16422			694	1810
161	PCB-206		88303	38208	50096	0.76	NO	32.60	1.00	32.56	32.63	6194.18803			694	1810
162	* PCB-209		8835	4774	4061	1.18	NO	33.75	1.00	33.72	33.78	530.42305			208	344
163	13C-PCB-31						YES								17218	8163
164	13C-PCB-95						YES								1083	1041
165	13C-PCB-153		841	449	392	1.15	NO	24.29	1.18	24.25	24.32	40.46889	2.0		895	1098
166	13C-PCB-28		57360	29965	27395	1.09	NO	16.08	0.94	16.05	16.11	904.60096	45.2		17218	8163
167	13C-PCB-111		53403	32168	21235	1.51	NO	22.10	1.07	22.06	22.13	1207.33376	60.4		1083	1041
168	13C-PCB-178		43668	22346	21322	1.05	NO	25.16	1.01	25.12	25.19	1270.69586	63.5		2269	1054
169	13C-PCB-1		50668	37972	12696	2.99	NO	8.98	0.75	8.94	9.01	857.38729	42.9		2144	14295
170	13C-PCB-3		41807	32487	9320	3.49	NO	10.51	0.88	10.48	10.54	732.17487	36.6		2144	14295
171	13C-PCB-4		55535	34318	21216	1.62	NO	10.69	0.90	10.66	10.72	929.73491	46.5		10008	2503
172	13C-PCB-15		49050	28817	20232	1.42	NO	14.39	1.20	14.35	14.42	798.12201	39.9		6975	3035
173	13C-PCB-19		75501	38770	36731	1.06	NO	12.71	1.06	12.68	12.75	1098.69314	54.9		38415	20259
174	13C-PCB-37		49051	24117	24933	0.97	NO	18.34	1.07	18.31	18.37	824.58735	41.2		17218	8163
175	13C-PCB-54		91286	38650	52636	0.73	NO	14.58	0.85	14.55	14.61	1043.28572	52.2		8427	5635
176	13C-PCB-81		44607	20270	24337	0.83	NO	21.90	1.06	21.87	21.93	937.97433	46.9		4903	2109
177	13C-PCB-77		41674	17421	24253	0.72	NO	22.22	1.07	22.18	22.25	862.52842	43.1		4903	2109
178	13C-PCB-104		68086	40840	27246	1.50	NO	17.61	1.03	17.57	17.64	1169.51220	58.5		1351	1376
179	13C-PCB-123		46129	28660	17469	1.64	NO	23.17	1.12	23.14	23.21	1045.45052	52.3		1558	1262
180	13C-PCB-118		42649	26012	16638	1.56	NO	23.34	1.13	23.31	23.38	1049.06144	52.5		1558	1262
181	13C-PCB-114		44490	27365	17125	1.60	NO	23.64	0.95	23.61	23.68	1012.44484	50.6		1558	1262
182	13C-PCB-105		42534	26449	16085	1.64	NO	24.01	0.96	23.97	24.04	1016.40856	50.8		1558	1262
183	13C-PCB-126		41324	25792	15532	1.66	NO	25.60	1.03	25.57	25.64	974.03683	48.7		1558	1262
184	13C-PCB-155		71239	40491	30748	1.32	NO	20.57	0.99	20.54	20.60	1169.92745	58.5		850	880
185	13C-PCB-167		42416	23686	18730	1.26	NO	26.48	1.06	26.45	26.52	1180.46399	59.0		895	1098

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	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
186	13C-PCB-156/157		84499	46292	38207	1.21	NO	27.14	1.09	27.10	27.17	2469.45822	61.7		895	1098
187	13C-PCB-169		38327	20806	17522	1.19	NO	28.80	1.15	28.77	28.84	1150.92339	57.5		895	1098
188	13C-PCB-188		62673	31536	31138	1.01	NO	23.57	0.94	23.54	23.61	1298.84416	64.9		2269	1054
189	13C-PCB-189		47792	24651	23142	1.07	NO	30.07	0.96	30.04	30.11	1373.01114	68.7		2684	1222
190	13C-PCB-202		76386	35179	41207	0.85	NO	26.35	1.06	26.32	26.39	1436.16537	71.8		891	796
191	13C-PCB-205		35064	16816	18247	0.92	NO	31.49	1.01	31.46	31.52	1210.45628	60.5		594	638
192	13C-PCB-208		37429	16281	21148	0.77	NO	29.79	0.95	29.76	29.82	1152.15685	57.6		664	1161
193	13C-PCB-206		27102	11990	15112	0.79	NO	32.59	1.04	32.55	32.62	1320.55840	66.0		664	1161
194	13C-PCB-209		36091	19242	16849	1.14	NO	33.73	1.08	33.70	33.77	1314.01642	65.7		398	320
195	13C-PCB-9		181555	112604	68952	1.63	NO	11.94	0.48	11.91	11.97	3.89305	0.2		10008	2503
196	13C-PCB-52		77707	32928	44780	0.74	NO	17.07	0.68	17.03	17.10	3.88043	0.2		3737	2918
197	13C-PCB-101		72275	43527	28748	1.51	NO	20.73	0.83	20.69	20.76	3.77190	0.2		1083	1041
198	13C-PCB-138		59098	32768	26329	1.24	NO	24.96	0.00	24.93	25.00	3.92821	0.2		895	1098
199	13C-PCB-194		46911	22121	24790	0.89	NO	31.21	1.25	31.17	31.24	3.91962	0.2		594	638
200	Total MoCB-F1	2		1261								781.14423			1134	
201	Total DiCB-F1	1		2749								110.43763			1454	
202	Total DiCB-F2	1		30804								1925.06481			2317	
203	Total TrCB-F1			0											2105	
204	Total TrCB-F2	5		8475								645.22829			2034	
205	Total TrCB-F3	11		71312								15114.96110			2602	
206	Total TeCB-F2			0											849	
207	Total TeCB-F3	12		178710								21901.11054			1047	
208	Total TeCB-F4	19		253338								149571.31683			1542	
209	Total PeCB-F3	1		1390								78.94784			1016	
210	Total PeCB-F4	16		2610182								232625.88195			2796	
211	Total PeCB-F5	33		1698342								3059294.306...			3683	
212	Total HxCB-F4	7		2262021								173943.99337			1130	
213	Total HxCB-F5	33		14615102								2650375.168...			3578	
214	Total HpCB-F5	25		12165233								1038497.196...			2234	
215	Total HpCB-F6	1		73121								3159.20380			1501	
216	Total OcCB-F5	9		1474647								113365.34264			903	
217	Total OcCB-F6	6		437022								86531.37343			887	
218	Total NoCB-F6	3		56397								8367.51371			694	
219	Total DeCB-F7	1		4774								530.42305			208	
220	Total 13C-MoCB-F1	2		70459								1589.56216			2144	
221	Total 13C-DiCB-F1	3		147758								933.67337			10008	
222	Total 13C-DiCB-F2	1		28817								798.12201			6975	

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Printed: Wednesday, November 23, 2022 11:42:36 Eastern Standard Time

Name: 9-221117A23, Date: 18-Nov-2022, Time: 05:18:00, ID: L2735553-3, Description: DIL 20x, Vial: Tray1:20

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
223	Total 13C-TrCB-F1	1		227831								1098.69314			38415	
224	Total 13C-TrCB-F3	2		70104								1729.18832			17218	
225	Total 13C-TeCB-F2	1		38650								1043.28572			8427	
226	Total 13C-TeCB-F3	2		33098								3.90073			3737	
227	Total 13C-TeCB-F4	2		37691								1800.50275			4903	
228	Total 13C-PeCB-F3	1		41068								1169.51220			1351	
229	Total 13C-PeCB-F4	6		76245								1211.24245			1083	
230	Total 13C-PeCB-F5	5		137673								5097.40219			1558	
231	Total 13C-HxCB-F4	1		40660								1169.92745			850	
232	Total 13C-HxCB-F5	10		125913								4846.44760			895	
233	Total 13C-HpCB-F5	2		55447								2569.54002			2269	
234	Total 13C-HpCB-F6	1		27451								1373.01114			2684	
235	Total 13C-OcCB-F5	1		35499								1436.16537			891	
236	Total 13C-OcCB-F6	4		40288								1214.78404			594	
237	Total 13C-NoCB-F6	2		28271								2472.71525			664	
238	Total 13C-DeCB-F7	1		19242								1314.01642			398	
239	Lockmass F1			0											603072	
240	Lockmass F2			0											195656	
241	Lockmass F3			0											563544	
242	Lockmass F4			0											448819	
243	Lockmass F5			0											108116	
244	Lockmass F6			0											125558	
245	Lockmass F7			0											40776	

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Name: 9-221117A24, Date: 18-Nov-2022, Time: 06:00:18, ID: L2735553-4, Description: DIL 20x, Vial: Tray1:21

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
1	* PCB-1						YES								1068	1505
2	PCB-2		1623	1367	256	5.34	YES	10.41	0.99	10.37	10.44	52.87472			1068	1505
3	PCB-3						YES								1068	1505
4	*PCB-4						YES								1619	4562
5	PCB-10						YES								1619	4562
6	PCB-9						YES								1619	4562
7	PCB-7						YES								1619	4562
8	PCB-6						YES								1619	4562
9	PCB-5						YES								1619	4562
10	PCB-8		5700	3315	2385	1.39	NO	12.51	1.17	12.47	12.54	114.94836			1619	4562
11	* PCB-14						YES								2034	4163
12	PCB-11		56927	35898	21028	1.71	NO	14.02	0.97	13.98	14.05	1817.62074			2034	4163
13	PCB-13/12						YES								2034	4163
14	PCB-15						YES								2034	4163
15	* PCB-19						YES								2002	1903
16	* PCB-30/18		11542	5728	5815	0.99	NO	13.82	1.09	13.79	13.86	341.52215			1418	1114
17	PCB-17		3049	1300	1749	0.74	YES	14.06	1.11	14.03	14.10	110.92297			1418	1114
18	PCB-27		750	402	348	1.16	NO	14.20	1.12	14.17	14.24	20.29862			1418	1114
19	PCB-24						YES								1418	1114
20	PCB-16		1585	705	880	0.80	YES	14.37	1.13	14.33	14.40	63.50969		ES221121MB	1418	1114
21	PCB-32		3728	1812	1916	0.95	NO	14.64	1.15	14.61	14.68	89.81195			1418	1114
22	* PCB-34						YES								2686	2125
23	PCB-23						YES								2686	2125
24	PCB-29/26		7554	3780	3774	1.00	NO	15.61	0.85	15.58	15.64	189.87457			2686	2125
25	PCB-25		3432	1854	1578	1.17	NO	15.75	0.86	15.71	15.78	87.01372			2686	2125
26	PCB-31		35042	17447	17595	0.99	NO	15.92	0.87	15.89	15.96	844.82028			2686	2125
27	PCB-28/20		60323	30396	29927	1.02	NO	16.10	0.88	16.07	16.13	1550.38696			2686	2125
28	PCB-21/33		9825	4565	5260	0.87	YES	16.25	0.89	16.22	16.29	251.00309			2686	2125
29	PCB-22		10549	5367	5182	1.04	NO	16.48	0.90	16.45	16.51	272.72556			2686	2125
30	PCB-36						YES								2686	2125
31	PCB-39						YES								2686	2125
32	PCB-38						YES								2686	2125
33	PCB-35						YES								2686	2125
34	PCB-37		2612	1454	1158	1.26	YES	18.34	1.00	18.31	18.37	78.50939			2686	2125
35	* PCB-54						YES								977	1167
36	* PCB-50/53		1736	671	1066	0.63	YES	15.79	1.08	15.75	15.82	74.38754			854	2356
37	PCB-45/51		2672	1148	1524	0.75	NO	16.19	1.11	16.15	16.22	118.17486			854	2356

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Printed: Wednesday, November 23, 2022 11:42:36 Eastern Standard Time

Name: 9-221117A24, Date: 18-Nov-2022, Time: 06:00:18, ID: L2735553-4, Description: DIL 20x, Vial: Tray1:21

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
38	PCB-46		399	140	259	0.54	YES	16.38	1.12	16.35	16.42	20.17589			854	2356
39	PCB-52		71386	31478	39908	0.79	NO	17.09	1.17	17.05	17.12	3447.16448			854	2356
40	PCB-73						YES								854	2356
41	PCB-43		1313	623	690	0.90	YES	17.22	1.18	17.19	17.26	72.48231			854	2356
42	PCB-69/49		45137	19919	25218	0.79	NO	17.36	1.19	17.33	17.39	1719.27546			854	2356
43	PCB-48		4196	2030	2165	0.94	YES	17.52	1.20	17.48	17.55	180.22378			854	2356
44	PCB-44/47/65		46254	20636	25617	0.81	NO	17.66	1.21	17.63	17.70	1989.80019			854	2356
45	PCB-59/62/75		4569	2046	2523	0.81	NO	17.83	1.22	17.80	17.86	157.38254			854	2356
46	PCB-42		5994	2661	3332	0.80	NO	17.96	1.23	17.92	17.99	320.51413			854	2356
47	PCB-41/71/40		7992	3498	4494	0.78	NO	18.22	1.25	18.19	18.26	364.10511			854	2356
48	PCB-64		22993	9944	13049	0.76	NO	18.35	1.26	18.32	18.38	859.47684			854	2356
49	* PCB-72		2452	1219	1233	0.99	YES	18.73	0.85	18.70	18.76	67.93256			2805	1957
50	PCB-68		1618	848	770	1.10	YES	18.89	0.86	18.85	18.92	42.52610			2805	1957
51	PCB-57		582	160	422	0.38	YES	19.13	0.87	19.09	19.16	16.75312			2805	1957
52	PCB-58						YES								2805	1957
53	PCB-67		1470	700	770	0.91	YES	19.34	0.88	19.31	19.37	38.21001			2805	1957
54	PCB-63		3472	1382	2091	0.66	NO	19.50	0.89	19.46	19.53	96.84048			2805	1957
55	PCB-61/70/74/76		115913	50605	65308	0.77	NO	19.69	0.90	19.66	19.72	3449.16239			2805	1957
56	PCB-66		79294	34525	44770	0.77	NO	19.87	0.91	19.83	19.90	2168.93517			2805	1957
57	PCB-55		841	396	445	0.89	YES	20.02	0.91	19.99	20.06	24.40700			2805	1957
58	PCB-56		13429	5892	7537	0.78	NO	20.25	0.92	20.22	20.29	411.86172			2805	1957
59	PCB-60		11096	4946	6151	0.80	NO	20.38	0.93	20.34	20.41	315.92107			2805	1957
60	PCB-80						YES								2805	1957
61	PCB-79		1180	548	632	0.87	NO	21.35	0.97	21.31	21.38	30.58706			2805	1957
62	PCB-78		677	157	520	0.30	YES	21.73	0.99	21.69	21.76	21.81753		ES221121MB	2805	1957
63	PCB-81		517	275	242	1.14	YES	21.93	1.00	21.90	21.96	14.34396		ES221121MB	2805	1957
64	PCB-77		5523	2694	2829	0.95	YES	22.23	1.00	22.19	22.26	154.94329			2805	1957
65	* PCB-104						YES								957	3230
66	PCB-96						YES								957	3230
67	* PCB-103		2520	1334	1186	1.13	YES	18.82	1.07	18.79	18.85	107.76875			1707	4283
68	PCB-94						YES								1707	4283
69	PCB-95		181957	110681	71276	1.55	NO	19.24	1.09	19.20	19.27	9078.08250			1707	4283
70	PCB-100/93/102/98		2266	1545	721	2.14	YES	19.41	1.10	19.38	19.45	97.87831			1707	4283
71	PCB-88/91		16397	9438	6959	1.36	NO	19.70	1.12	19.67	19.73	733.81948			1707	4283
72	PCB-84		14460	8644	5816	1.49	NO	19.86	1.13	19.82	19.89	693.84487			1707	4283
73	PCB-89						YES								1707	4283
74	PCB-121						YES								1707	4283

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Name: 9-221117A24, Date: 18-Nov-2022, Time: 06:00:18, ID: L2735553-4, Description: DIL 20x, Vial: Tray1:21

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
75	PCB-92		59872	36441	23431	1.56	NO	20.43	1.16	20.40	20.46	2937.22996			1707	4283
76	PCB-113/90/101		382947	232184	150763	1.54	NO	20.75	1.18	20.71	20.78	14671.34344			1707	4283
77	PCB-83/99		97870	59132	38738	1.53	NO	21.05	0.91	21.02	21.08	4422.47110			1707	4283
78	PCB-112						YES								1707	4283
79	PCB-109/119/86/97/125/87		92423	56592	35831	1.58	NO	21.42	0.92	21.39	21.45	3457.57107		ES221121MJ	1707	4283
80	PCB-117/116/85/110/115		306651	185366	121286	1.53	NO	21.83	0.94	21.79	21.86	10970.75744		ES221121MJ	1707	4283
81	PCB-82		6689	4061	2628	1.54	NO	22.03	0.95	22.00	22.06	363.73411		ES221121MB	1707	4283
82	PCB-111		1035	638	397	1.61	NO	22.10	0.95	22.06	22.13	31.44148		ES221121MB	1707	4283
83	PCB-120		5032	2807	2225	1.26	YES	22.34	0.96	22.30	22.37	152.56931		ES221121MB	1707	4283
84	* PCB-108/124		10972	6137	4835	1.27	YES	23.00	0.99	22.97	23.04	324.72160			2502	3547
85	PCB-107		31584	18873	12711	1.48	NO	23.13	1.00	23.09	23.16	916.70932		ES221121MS	2502	3547
86	PCB-123		3554	1945	1609	1.21	YES	23.19	1.00	23.15	23.22	106.17535		ES221121MS	2502	3547
87	PCB-106						YES								2502	3547
88	PCB-118		237407	143902	93504	1.54	NO	23.37	1.00	23.33	23.40	6224.66175			2502	3547
89	PCB-122		2628	1469	1158	1.27	YES	23.57	1.00	23.54	23.61	112.27535			2502	3547
90	PCB-114		5904	3125	2779	1.12	YES	23.66	1.00	23.62	23.69	192.23778			2502	3547
91	PCB-105		58759	34965	23795	1.47	NO	24.03	1.00	24.00	24.06	1769.34437		ES221121MB	2502	3547
92	PCB-127						YES								2502	3547
93	PCB-126		4442	2751	1691	1.63	NO	25.65	1.00	25.62	25.68	134.20506			2502	3547
94	* PCB-155						YES								1140	964
95	PCB-152						YES								1140	964
96	PCB-150		1710	892	818	1.09	NO	20.84	1.01	20.80	20.87	35.20141			1140	964
97	PCB-136		166349	92905	73444	1.26	NO	21.09	1.03	21.05	21.12	4084.70843			1140	964
98	PCB-145						YES								1140	964
99	PCB-148		1297	707	590	1.20	NO	21.91	1.07	21.88	21.94	41.50064			1140	964
100	PCB-151/135		718286	399834	318453	1.26	NO	22.27	1.08	22.24	22.30	25267.50197			1140	964
101	PCB-154						YES								1140	964
102	PCB-144		83892	47083	36808	1.28	NO	22.57	1.10	22.53	22.60	2734.67879			1140	964
103	* PCB-147/149		953016	530465	422551	1.26	NO	22.76	1.11	22.73	22.80	40558.52293			1880	1827
104	PCB-134/143		34247	18946	15302	1.24	NO	22.91	1.11	22.87	22.94	1845.79933			1880	1827
105	PCB-139/140		6090	3420	2670	1.28	NO	23.06	1.12	23.03	23.10	259.62790			1880	1827
106	PCB-131		3843	2120	1723	1.23	NO	23.21	0.88	23.18	23.24	226.24072			1880	1827
107	PCB-142						YES								1880	1827
108	PCB-132		197970	109965	88005	1.25	NO	23.48	0.89	23.44	23.51	9578.89547			1880	1827
109	PCB-133		19619	10776	8844	1.22	NO	23.63	0.89	23.60	23.67	982.11323			1880	1827
110	PCB-165		4793	2763	2031	1.36	NO	23.83	0.90	23.79	23.86	174.85585			1880	1827
111	PCB-146		255968	142840	113127	1.26	NO	23.96	0.90	23.93	23.99	10304.67967			1880	1827

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Name: 9-221117A24, Date: 18-Nov-2022, Time: 06:00:18, ID: L2735553-4, Description: DIL 20x, Vial: Tray1:21

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
112	PCB-161						YES								1880	1827
113	PCB-153/168		1765873	982894	782979	1.26	NO	24.27	0.92	24.24	24.31	63481.30677			1880	1827
114	PCB-141		283105	156559	126547	1.24	NO	24.42	0.92	24.38	24.45	13100.95737			1880	1827
115	PCB-130		47783	26831	20952	1.28	NO	24.65	0.93	24.61	24.68	2415.12003			1880	1827
116	PCB-137/164		104209	57624	46585	1.24	NO	24.82	0.94	24.78	24.85	4118.16309			1880	1827
117	PCB-138/163/129		1283629	712406	571223	1.25	NO	24.97	0.94	24.94	25.01	83461.49609			1880	1827
118	PCB-160						YES								1880	1827
119	PCB-158		117247	66039	51208	1.29	NO	25.18	0.95	25.15	25.21	3746.56714			1880	1827
120	PCB-128/166		62446	14915	47531	0.31	YES	25.64	0.97	25.61	25.67	2433.57544			1880	1827
121	PCB-159		21195	12316	8878	1.39	NO	26.12	0.99	26.09	26.16	687.81528			1880	1827
122	PCB-162		5556	3271	2284	1.43	YES	26.24	0.99	26.21	26.28	190.53537			1880	1827
123	PCB-167		46951	25670	21280	1.21	NO	26.50	1.00	26.46	26.53	1428.87903			1880	1827
124	PCB-156/157		69382	38877	30505	1.27	NO	27.13	1.00	27.09	27.16	2151.08086			1880	1827
125	PCB-169		689	301	388	0.78	YES	28.82	1.00	28.78	28.85	24.80219		ES221121MB	1880	1827
126	* PCB-188		1222	618	604	1.02	NO	23.58	1.00	23.55	23.62	29.89340			2264	1302
127	PCB-179		228335	114986	113349	1.01	NO	23.83	1.01	23.79	23.86	6034.52514			2264	1302
128	PCB-184						YES								2264	1302
129	PCB-176		64127	33075	31052	1.07	NO	24.27	1.03	24.24	24.31	1734.54437			2264	1302
130	PCB-186						YES								2264	1302
131	PCB-178		123804	63277	60527	1.05	NO	25.17	1.07	25.13	25.20	4656.09329			2264	1302
132	PCB-175		23804	12580	11224	1.12	NO	25.49	1.08	25.46	25.53	827.57234			2264	1302
133	PCB-187		900577	459810	440767	1.04	NO	25.63	1.09	25.59	25.66	28726.30224			2264	1302
134	PCB-182						YES								2264	1302
135	PCB-183		345025	172414	172611	1.00	NO	25.94	1.10	25.91	25.97	11071.37791			2264	1302
136	PCB-185		57126	29222	27904	1.05	NO	26.04	1.10	26.00	26.07	2015.33795			2264	1302
137	PCB-174		450496	229919	220577	1.04	NO	26.12	1.11	26.09	26.16	15680.42710			2264	1302
138	PCB-177		306152	156867	149285	1.05	NO	26.35	1.12	26.32	26.39	10822.08280			2264	1302
139	PCB-181		1742	1013	729	1.39	YES	26.55	0.88	26.51	26.58	61.41049			2264	1302
140	PCB-171/173		134195	67908	66287	1.02	NO	26.68	0.89	26.64	26.71	4973.65680			2264	1302
141	PCB-172		90737	46451	44286	1.05	NO	27.46	0.91	27.43	27.50	3160.19657			2264	1302
142	PCB-192						YES								2264	1302
143	PCB-180/193		1324431	673299	651132	1.03	NO	27.80	0.92	27.77	27.84	42868.25328			2264	1302
144	PCB-191		26191	12935	13256	0.98	NO	27.98	0.93	27.95	28.02	736.35694			2264	1302
145	PCB-170		390747	199081	191667	1.04	NO	28.50	0.95	28.47	28.54	14845.54983			2264	1302
146	PCB-190		136978	68540	68438	1.00	NO	28.77	0.96	28.74	28.80	3448.16497			2264	1302
147	* PCB-189		13808	7207	6601	1.09	NO	30.08	1.00	30.05	30.12	481.42783			1026	1558
148	* PCB-202		49828	23213	26615	0.87	NO	26.38	1.00	26.34	26.41	1098.48431			855	827

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Last Altered: Tuesday, November 22, 2022 16:07:50 Eastern Standard Time
Printed: Wednesday, November 23, 2022 11:42:36 Eastern Standard Time

Name: 9-221117A24, Date: 18-Nov-2022, Time: 06:00:18, ID: L2735553-4, Description: DIL 20x, Vial: Tray1:21

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
149	PCB-201		35781	15941	19840	0.80	NO	26.85	1.02	26.81	26.88	748.76103			855	827
150	PCB-204		177	92	86	1.07	YES	27.20	1.03	27.16	27.23	3.78736			855	827
151	PCB-197		10583	5119	5464	0.94	NO	27.29	1.04	27.26	27.33	228.70882			855	827
152	PCB-200		27664	12960	14703	0.88	NO	27.42	1.04	27.38	27.45	621.75747			855	827
153	PCB-198/199		233524	108245	125279	0.86	NO	28.80	0.91	28.77	28.84	7187.80355			855	827
154	PCB-196		101180	46724	54456	0.86	NO	29.14	0.93	29.11	29.18	3129.85848			855	827
155	PCB-203		150535	69672	80863	0.86	NO	29.25	0.93	29.22	29.29	4495.53025			855	827
156	* PCB-195		48835	23412	25423	0.92	NO	29.99	0.95	29.96	30.03	2786.18407			713	582
157	PCB-194		107298	50908	56390	0.90	NO	31.22	0.99	31.19	31.25	5858.18918			713	582
158	PCB-205		7298	3357	3941	0.85	NO	31.50	1.00	31.47	31.54	314.43960			713	582
159	* PCB-208		5043	2254	2789	0.81	NO	29.81	1.00	29.78	29.85	206.19170			884	1688
160	PCB-207		3426	1548	1878	0.82	NO	30.29	1.02	30.26	30.32	154.90597			884	1688
161	PCB-206		17376	7582	9795	0.77	NO	32.60	1.00	32.56	32.63	979.11701			884	1688
162	* PCB-209		1358	674	684	0.98	YES	33.76	1.00	33.73	33.80	66.31059			202	372
163	13C-PCB-31						YES								25179	9652
164	13C-PCB-95						YES								1241	1861
165	13C-PCB-153		348	223	125	1.78	YES	24.26	1.18	24.23	24.29	12.98230	0.6		1299	1395
166	13C-PCB-28		72167	34290	37877	0.91	NO	16.08	0.94	16.05	16.11	1145.40040	57.3		25179	9652
167	13C-PCB-111		65768	39544	26223	1.51	NO	22.10	1.07	22.06	22.13	1453.54837	72.7		1241	1861
168	13C-PCB-178		55203	28338	26864	1.05	NO	25.16	1.01	25.12	25.19	1551.98387	77.6		1812	1742
169	13C-PCB-1		57928	44409	13519	3.29	NO	8.98	0.75	8.94	9.01	1006.63397	50.3		1636	11818
170	13C-PCB-3		56706	43226	13480	3.21	NO	10.53	0.88	10.49	10.56	1019.86521	51.0		1636	11818
171	13C-PCB-4		67152	40458	26694	1.52	NO	10.69	0.89	10.66	10.72	1154.51053	57.7		8807	3287
172	13C-PCB-15		56725	33216	23509	1.41	NO	14.40	1.20	14.37	14.44	947.87180	47.4		9099	3735
173	13C-PCB-19		88194	44441	43753	1.02	NO	12.71	1.06	12.68	12.75	1317.97517	65.9		34817	16371
174	13C-PCB-37		60550	31816	28734	1.11	NO	18.34	1.07	18.31	18.37	1024.41442	51.2		25179	9652
175	13C-PCB-54		106857	45086	61771	0.73	NO	14.58	0.85	14.55	14.61	1229.05917	61.5		6210	4303
176	13C-PCB-81		56868	26543	30325	0.88	NO	21.91	1.06	21.88	21.94	1168.98935	58.4		3944	2445
177	13C-PCB-77		56942	25999	30943	0.84	NO	22.22	1.07	22.18	22.25	1152.12634	57.6		3944	2445
178	13C-PCB-104		77677	46616	31061	1.50	NO	17.61	1.03	17.57	17.64	1304.34729	65.2		1148	927
179	13C-PCB-123		61307	38881	22425	1.73	NO	23.19	1.12	23.15	23.22	1358.28312	67.9		2068	1287
180	13C-PCB-118		59086	36579	22506	1.63	NO	23.35	1.13	23.32	23.39	1420.77967	71.0		2068	1287
181	13C-PCB-114		55137	34917	20220	1.73	NO	23.66	0.95	23.62	23.69	1226.61803	61.3		2068	1287
182	13C-PCB-105		56527	35258	21269	1.66	NO	24.02	0.96	23.99	24.05	1320.52393	66.0		2068	1287
183	13C-PCB-126		57415	36653	20762	1.77	NO	25.61	1.03	25.58	25.65	1322.98707	66.1		2068	1287
184	13C-PCB-155		90853	50882	39971	1.27	NO	20.57	0.99	20.54	20.60	1458.60728	72.9		914	726
185	13C-PCB-167		56264	30907	25357	1.22	NO	26.48	1.06	26.45	26.52	1512.88610	75.6		1299	1395

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Name: 9-221117A24, Date: 18-Nov-2022, Time: 06:00:18, ID: L2735553-4, Description: DIL 20x, Vial: Tray1:21

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
186	13C-PCB-156/157		109523	59320	50203	1.18	NO	27.14	1.09	27.10	27.17	3092.45862	77.3		1299	1395
187	13C-PCB-169		48794	27599	21195	1.30	NO	28.80	1.15	28.77	28.84	1415.62742	70.8		1299	1395
188	13C-PCB-188		76597	38319	38278	1.00	NO	23.57	0.94	23.54	23.61	1533.67086	76.7		1812	1742
189	13C-PCB-189		57593	29726	27866	1.07	NO	30.08	0.96	30.05	30.12	1598.56143	79.9		2824	1262
190	13C-PCB-202		94501	45044	49457	0.91	NO	26.36	1.06	26.33	26.40	1716.60663	85.8		785	921
191	13C-PCB-205		43299	21221	22078	0.96	NO	31.49	1.01	31.46	31.52	1459.30392	73.0		679	464
192	13C-PCB-208		46901	19927	26974	0.74	NO	29.80	0.95	29.77	29.83	1409.49734	70.5		794	940
193	13C-PCB-206		33739	14409	19330	0.75	NO	32.58	1.04	32.55	32.62	1604.95269	80.2		794	940
194	13C-PCB-209		44364	24319	20045	1.21	NO	33.73	1.08	33.70	33.77	1576.92065	78.8		310	273
195	13C-PCB-9		176793	108390	68403	1.58	NO	11.96	0.48	11.92	11.99	3.79093	0.2		8807	3287
196	13C-PCB-52		77213	33330	43884	0.76	NO	17.08	0.68	17.04	17.11	3.85575	0.2		3985	2807
197	13C-PCB-101		73932	44559	29373	1.52	NO	20.73	0.83	20.69	20.76	3.85837	0.2		1241	1861
198	13C-PCB-138		61168	34563	26604	1.30	NO	24.96	0.00	24.93	25.00	4.06581	0.2		1299	1395
199	13C-PCB-194		48050	23029	25021	0.92	NO	31.21	1.25	31.17	31.24	4.01484	0.2		679	464
200	Total MoCB-F1	1		1367								52.87472			1068	
201	Total DiCB-F1	1		3315								114.94836			1619	
202	Total DiCB-F2	1		35898								1817.62074			2034	
203	Total TrCB-F1			0											2002	
204	Total TrCB-F2	5		9948								626.06538			1418	
205	Total TrCB-F3	10		68399								9558.58732			2686	
206	Total TeCB-F2			0											977	
207	Total TeCB-F3	12		94795								9323.16311			854	
208	Total TeCB-F4	21		120870								39669.66616			2805	
209	Total PeCB-F3			0											957	
210	Total PeCB-F4	15		710362								50543.61364			1707	
211	Total PeCB-F5	24		490186								906274.35249			2502	
212	Total HxCB-F4	5		541421								32163.59123			1140	
213	Total HxCB-F5	31		2979785								374940.59958			1880	
214	Total HpCB-F5	21		2349001								167046.03393			2264	
215	Total HpCB-F6	1		12518								481.42783			1026	
216	Total OcCB-F5	9		282026								17652.45413			855	
217	Total OcCB-F6	4		78459								13284.77969			713	
218	Total NoCB-F6	3		11384								1340.21468			884	
219	Total DeCB-F7	1		674								66.31059			202	
220	Total 13C-MoCB-F1	2		87635								2026.49919			1636	
221	Total 13C-DiCB-F1	2		148848								1158.30146			8807	
222	Total 13C-DiCB-F2	1		33216								947.87180			9099	

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Name: 9-221117A24, Date: 18-Nov-2022, Time: 06:00:18, ID: L2735553-4, Description: DIL 20x, Vial: Tray1:21

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
223	Total 13C-TrCB-F1	1		238974								1317.97517			34817	
224	Total 13C-TrCB-F3	2		66106								2169.81482			25179	
225	Total 13C-TeCB-F2	1		45086								1229.05917			6210	
226	Total 13C-TeCB-F3	3		33574								3.92995			3985	
227	Total 13C-TeCB-F4	2		52542								2321.11569			3944	
228	Total 13C-PeCB-F3	1		46682								1304.34729			1148	
229	Total 13C-PeCB-F4	6		84926								1457.61974			1241	
230	Total 13C-PeCB-F5	5		188774								6649.19183			2068	
231	Total 13C-HxCB-F4	1		51403								1458.60728			914	
232	Total 13C-HxCB-F5	11		154572								6039.39209			1299	
233	Total 13C-HpCB-F5	2		68186								3085.65473			1812	
234	Total 13C-HpCB-F6	1		32384								1598.56143			2824	
235	Total 13C-OcCB-F5	1		45361								1716.60663			785	
236	Total 13C-OcCB-F6	5		45688								1463.79723			679	
237	Total 13C-NoCB-F6	2		34336								3014.45003			794	
238	Total 13C-DeCB-F7	1		24319								1576.92065			310	
239	Lockmass F1			0											472347	
240	Lockmass F2			0											151155	
241	Lockmass F3			0											478314	
242	Lockmass F4			0											387114	
243	Lockmass F5			0											99375	
244	Lockmass F6			0											153526	
245	Lockmass F7			0											34043	

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Name: 9-221117A25, Date: 18-Nov-2022, Time: 06:42:36, ID: L2735553-5, Description: DIL 20x, Vial: Tray1:22

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
1	* PCB-1						YES								1191	1471
2	PCB-2		1823	1293	530	2.44	YES	10.39	0.99	10.36	10.43	86.13876			1191	1471
3	PCB-3		786	448	338	1.32	YES	10.53	1.00	10.49	10.56	29.64933			1191	1471
4	*PCB-4						YES								1746	3320
5	PCB-10						YES								1746	3320
6	PCB-9						YES								1746	3320
7	PCB-7						YES								1746	3320
8	PCB-6						YES								1746	3320
9	PCB-5						YES								1746	3320
10	PCB-8		2884	1650	1234	1.34	NO	12.49	1.17	12.46	12.52	77.50062			1746	3320
11	* PCB-14						YES								1812	4312
12	PCB-11		60123	36225	23898	1.52	NO	13.99	0.97	13.96	14.02	2146.47895			1812	4312
13	PCB-13/12						YES								1812	4312
14	PCB-15						YES								1812	4312
15	* PCB-19						YES								2786	2174
16	* PCB-30/18		3093	1621	1472	1.10	NO	13.81	1.09	13.77	13.84	118.20830			1070	1736
17	PCB-17		1537	734	804	0.91	NO	14.05	1.11	14.02	14.09	72.25186			1070	1736
18	PCB-27						YES								1070	1736
19	PCB-24						YES								1070	1736
20	PCB-16		659	271	388	0.70	YES	14.36	1.13	14.33	14.39	34.10258		ES221121MB	1070	1736
21	PCB-32		1021	394	627	0.63	YES	14.63	1.15	14.60	14.67	31.76712			1070	1736
22	* PCB-34						YES								2318	2075
23	PCB-23						YES								2318	2075
24	PCB-29/26		4325	2269	2057	1.10	NO	15.60	0.85	15.57	15.63	137.20538			2318	2075
25	PCB-25		1408	594	814	0.73	YES	15.73	0.86	15.69	15.76	45.05942			2318	2075
26	PCB-31		22381	11318	11063	1.02	NO	15.91	0.87	15.88	15.95	680.90908			2318	2075
27	PCB-28/20		34071	17033	17039	1.00	NO	16.09	0.88	16.06	16.12	1105.03774			2318	2075
28	PCB-21/33		4061	2490	1571	1.58	YES	16.24	0.89	16.20	16.27	130.93154			2318	2075
29	PCB-22		5322	2879	2443	1.18	NO	16.47	0.90	16.44	16.50	173.61193			2318	2075
30	PCB-36						YES								2318	2075
31	PCB-39						YES								2318	2075
32	PCB-38						YES								2318	2075
33	PCB-35						YES								2318	2075
34	PCB-37		2669	1228	1442	0.85	YES	18.33	1.00	18.30	18.36	101.23661			2318	2075
35	* PCB-54						YES								974	1139
36	* PCB-50/53		548	179	369	0.48	YES	15.78	1.08	15.74	15.81	29.37829			624	1004
37	PCB-45/51		825	375	451	0.83	NO	16.17	1.11	16.13	16.20	45.66168			624	1004

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Name: 9-221117A25, Date: 18-Nov-2022, Time: 06:42:36, ID: L2735553-5, Description: DIL 20x, Vial: Tray1:22

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
38	PCB-46		235	83	152	0.55	YES	16.35	1.12	16.32	16.39	14.84773			624	1004
39	PCB-52		35627	15157	20470	0.74	NO	17.08	1.17	17.04	17.11	2152.49080			624	1004
40	PCB-73						YES								624	1004
41	PCB-43						YES								624	1004
42	PCB-69/49		27861	12295	15566	0.79	NO	17.35	1.19	17.32	17.38	1327.79838			624	1004
43	PCB-48		1980	929	1050	0.88	NO	17.50	1.20	17.46	17.53	106.38639			624	1004
44	PCB-44/47/65		25629	11237	14392	0.78	NO	17.65	1.21	17.62	17.69	1379.43951			624	1004
45	PCB-59/62/75		2880	1268	1612	0.79	NO	17.83	1.22	17.80	17.86	124.09662			624	1004
46	PCB-42		2082	945	1137	0.83	NO	17.95	1.23	17.91	17.98	139.29383			624	1004
47	PCB-41/71/40		2671	1265	1406	0.90	YES	18.21	1.25	18.18	18.25	152.23104			624	1004
48	PCB-64		15334	6670	8664	0.77	NO	18.33	1.26	18.30	18.36	717.13878			624	1004
49	* PCB-72		1322	648	674	0.96	YES	18.71	0.85	18.68	18.74	43.78326			2167	2306
50	PCB-68		1203	599	604	0.99	YES	18.89	0.86	18.85	18.92	37.80603			2167	2306
51	PCB-57						YES								2167	2306
52	PCB-58						YES								2167	2306
53	PCB-67						YES								2167	2306
54	PCB-63		2453	1044	1409	0.74	NO	19.48	0.89	19.44	19.51	81.77562			2167	2306
55	PCB-61/70/74/76		76905	33439	43466	0.77	NO	19.68	0.90	19.65	19.72	2735.59479			2167	2306
56	PCB-66		49959	22292	27667	0.81	NO	19.86	0.91	19.82	19.89	1633.56960			2167	2306
57	PCB-55		1155	359	796	0.45	YES	20.02	0.91	19.99	20.06	40.05562			2167	2306
58	PCB-56		5567	2198	3368	0.65	YES	20.25	0.92	20.21	20.28	204.08203			2167	2306
59	PCB-60		6845	3093	3751	0.82	NO	20.38	0.93	20.34	20.41	232.95281			2167	2306
60	PCB-80						YES								2167	2306
61	PCB-79		793	396	397	1.00	YES	21.35	0.98	21.31	21.38	24.58071			2167	2306
62	PCB-78						YES								2167	2306
63	PCB-81						YES								2167	2306
64	PCB-77		3147	1424	1723	0.83	NO	22.21	1.00	22.17	22.24	105.92055		ES221121MB	2167	2306
65	* PCB-104						YES								844	2299
66	PCB-96						YES								844	2299
67	* PCB-103						YES								1569	3489
68	PCB-94						YES								1569	3489
69	PCB-95		87043	53826	33217	1.62	NO	19.23	1.09	19.20	19.26	5234.33937			1569	3489
70	PCB-100/93/102/98						YES								1569	3489
71	PCB-88/91		9593	5819	3774	1.54	NO	19.68	1.12	19.65	19.72	517.46472			1569	3489
72	PCB-84		7633	4855	2778	1.75	NO	19.85	1.13	19.81	19.88	441.47388			1569	3489
73	PCB-89						YES								1569	3489
74	PCB-121		274	147	127	1.15	YES	20.17	1.15	20.14	20.21	10.09310			1569	3489

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221117A2-1121ES.qld

Last Altered: Tuesday, November 22, 2022 16:07:50 Eastern Standard Time
Printed: Wednesday, November 23, 2022 11:42:36 Eastern Standard Time

Name: 9-221117A25, Date: 18-Nov-2022, Time: 06:42:36, ID: L2735553-5, Description: DIL 20x, Vial: Tray1:22

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
75	PCB-92		32527	19912	12615	1.58	NO	20.42	1.16	20.39	20.45	1923.36731			1569	3489
76	PCB-113/90/101		199222	121201	78021	1.55	NO	20.73	1.18	20.69	20.76	9199.64129			1569	3489
77	PCB-83/99		64305	39472	24833	1.59	NO	21.03	0.91	21.00	21.07	3502.37389			1569	3489
78	PCB-112						YES								1569	3489
79	PCB-109/119/86/97/125/87		52600	32398	20202	1.60	NO	21.40	0.92	21.37	21.44	2371.78729		ES221121MJ	1569	3489
80	PCB-117/116/85/110/115		181431	109827	71604	1.53	NO	21.82	0.94	21.78	21.85	7823.60623		ES221121MJ	1569	3489
81	PCB-82		2723	1534	1189	1.29	YES	22.02	0.95	21.99	22.06	178.48672		ES221121MB	1569	3489
82	PCB-111		978	577	401	1.44	NO	22.10	0.95	22.07	22.14	35.80857		ES221121MB	1569	3489
83	PCB-120		2489	1427	1062	1.34	NO	22.35	0.96	22.31	22.38	90.97528			1569	3489
84	* PCB-108/124		6558	3920	2637	1.49	NO	22.99	0.99	22.96	23.03	233.93062			2362	3970
85	PCB-107		18562	10909	7653	1.43	NO	23.11	1.00	23.08	23.15	649.38482		ES221121MS	2362	3970
86	PCB-123		3071	1798	1273	1.41	NO	23.16	1.00	23.13	23.20	109.87662		ES221121MS	2362	3970
87	PCB-106						YES								2362	3970
88	PCB-118		144382	86634	57748	1.50	NO	23.35	1.00	23.32	23.39	4754.83063			2362	3970
89	PCB-122						YES								2362	3970
90	PCB-114						YES								2362	3970
91	PCB-105		38078	23376	14702	1.59	NO	24.02	1.00	23.99	24.05	1336.69524		ES221121MB	2362	3970
92	PCB-127						YES								2362	3970
93	PCB-126		2456	1329	1127	1.18	YES	25.61	1.00	25.58	25.65	92.96320		ES221121MB	2362	3970
94	* PCB-155		197	101	96	1.05	YES	20.55	1.00	20.52	20.58	5.08621			876	882
95	PCB-152						YES								876	882
96	PCB-150		1131	775	356	2.18	YES	20.83	1.01	20.80	20.86	30.22702			876	882
97	PCB-136		73609	40242	33367	1.21	NO	21.08	1.03	21.04	21.11	2346.65062			876	882
98	PCB-145						YES								876	882
99	PCB-148		1438	795	643	1.24	NO	21.91	1.07	21.88	21.94	59.74042			876	882
100	PCB-151/135		328233	180306	147928	1.22	NO	22.26	1.08	22.23	22.30	14990.86292			876	882
101	PCB-154						YES								876	882
102	PCB-144		40193	21934	18259	1.20	NO	22.56	1.10	22.52	22.59	1701.04693			876	882
103	* PCB-147/149		464252	258304	205949	1.25	NO	22.75	1.11	22.72	22.78	24160.94240			1419	1675
104	PCB-134/143		16246	8985	7261	1.24	NO	22.90	1.11	22.86	22.93	1070.76439			1419	1675
105	PCB-139/140		2426	1499	927	1.62	YES	23.05	1.12	23.02	23.09	126.45094			1419	1675
106	PCB-131		2152	988	1164	0.85	YES	23.21	0.88	23.18	23.24	154.88970			1419	1675
107	PCB-142						YES								1419	1675
108	PCB-132		103971	57610	46361	1.24	NO	23.46	0.89	23.43	23.50	6151.84511			1419	1675
109	PCB-133		11286	6114	5171	1.18	NO	23.62	0.89	23.59	23.65	690.83652			1419	1675
110	PCB-165		2192	1209	983	1.23	NO	23.83	0.90	23.79	23.86	97.76989			1419	1675
111	PCB-146		139980	78319	61661	1.27	NO	23.95	0.90	23.91	23.98	6891.14665			1419	1675

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Name: 9-221117A25, Date: 18-Nov-2022, Time: 06:42:36, ID: L2735553-5, Description: DIL 20x, Vial: Tray1:22

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
112	PCB-161						YES								1419	1675
113	PCB-153/168		913165	511065	402100	1.27	NO	24.27	0.92	24.24	24.31	40143.33997			1419	1675
114	PCB-141		129931	72991	56940	1.28	NO	24.42	0.92	24.38	24.45	7352.67999			1419	1675
115	PCB-130		26293	14951	11342	1.32	NO	24.64	0.93	24.60	24.67	1625.10417			1419	1675
116	PCB-137/164		53198	29625	23573	1.26	NO	24.81	0.94	24.77	24.84	2570.84087		ES221121MJ	1419	1675
117	PCB-138/163/129		650143	360732	289412	1.25	NO	24.97	0.94	24.94	25.01	51693.24243			1419	1675
118	PCB-160						YES								1419	1675
119	PCB-158		61018	33657	27360	1.23	NO	25.17	0.95	25.13	25.20	2384.32512			1419	1675
120	PCB-128/166		58760	33217	25543	1.30	NO	25.68	0.97	25.64	25.71	2800.26476			1419	1675
121	PCB-159		9858	5607	4251	1.32	NO	26.11	0.99	26.08	26.14	391.20370			1419	1675
122	PCB-162		3149	1819	1330	1.37	NO	26.24	0.99	26.21	26.28	132.08254			1419	1675
123	PCB-167		23595	13349	10246	1.30	NO	26.48	1.00	26.45	26.52	891.02270			1419	1675
124	PCB-156/157		36649	21066	15583	1.35	NO	27.13	1.00	27.09	27.16	1436.41788			1419	1675
125	PCB-169		607	218	389	0.56	YES	28.79	1.00	28.76	28.83	25.37328		ES221121MB	1419	1675
126	* PCB-188		1005	491	514	0.95	NO	23.57	1.00	23.54	23.61	29.58259			1389	1207
127	PCB-179		107380	55113	52267	1.05	NO	23.81	1.01	23.78	23.85	3426.31854			1389	1207
128	PCB-184						YES								1389	1207
129	PCB-176		30231	15166	15065	1.01	NO	24.27	1.03	24.24	24.31	987.25772			1389	1207
130	PCB-186						YES								1389	1207
131	PCB-178		61035	30770	30265	1.02	NO	25.16	1.07	25.12	25.19	2771.41931			1389	1207
132	PCB-175		10463	5447	5016	1.09	NO	25.48	1.08	25.45	25.52	439.16695			1389	1207
133	PCB-187		423275	214909	208366	1.03	NO	25.63	1.09	25.59	25.66	16301.03917			1389	1207
134	PCB-182						YES								1389	1207
135	PCB-183		155024	78170	76854	1.02	NO	25.93	1.10	25.90	25.96	6005.96799			1389	1207
136	PCB-185		25775	12985	12791	1.02	NO	26.04	1.11	26.00	26.07	1097.87584			1389	1207
137	PCB-174		202275	101233	101042	1.00	NO	26.11	1.11	26.08	26.14	8500.48753			1389	1207
138	PCB-177		142592	72248	70345	1.03	NO	26.34	1.12	26.31	26.37	6085.59619			1389	1207
139	PCB-181		581	234	347	0.67	YES	26.53	0.88	26.50	26.57	24.72487			1389	1207
140	PCB-171/173		61178	30494	30684	0.99	NO	26.67	0.89	26.63	26.70	2737.60066			1389	1207
141	PCB-172		42730	22050	20680	1.07	NO	27.45	0.91	27.42	27.48	1796.79003			1389	1207
142	PCB-192						YES								1389	1207
143	PCB-180/193		646462	329096	317367	1.04	NO	27.79	0.92	27.76	27.82	25262.91052			1389	1207
144	PCB-191		12824	6035	6789	0.89	YES	27.97	0.93	27.94	28.00	435.30160			1389	1207
145	PCB-170		189546	96471	93075	1.04	NO	28.49	0.95	28.46	28.52	8694.58468			1389	1207
146	PCB-190		64395	32629	31766	1.03	NO	28.76	0.96	28.72	28.79	1957.16004			1389	1207
147	* PCB-189		7200	3390	3810	0.89	YES	30.09	1.00	30.05	30.12	304.79041			973	1166
148	* PCB-202		27135	12810	14325	0.89	NO	26.36	1.00	26.33	26.40	749.61999			700	952

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Name: 9-221117A25, Date: 18-Nov-2022, Time: 06:42:36, ID: L2735553-5, Description: DIL 20x, Vial: Tray1:22

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
149	PCB-201		15596	7594	8002	0.95	NO	26.84	1.02	26.80	26.87	403.62944			700	952
150	PCB-204						YES								700	952
151	PCB-197		5448	2611	2837	0.92	NO	27.29	1.04	27.26	27.33	145.61054			700	952
152	PCB-200		13456	6102	7354	0.83	NO	27.40	1.04	27.37	27.44	374.03833			700	952
153	PCB-198/199		111420	49700	61721	0.81	NO	28.80	0.92	28.77	28.84	4241.36667			700	952
154	PCB-196		47018	22280	24738	0.90	NO	29.13	0.93	29.10	29.16	1798.76770			700	952
155	PCB-203		76205	34432	41773	0.82	NO	29.24	0.93	29.21	29.27	2814.51435			700	952
156	* PCB-195		23610	11151	12459	0.89	NO	29.98	0.95	29.95	30.02	1665.92580			449	728
157	PCB-194		49383	23442	25941	0.90	NO	31.22	0.99	31.19	31.25	3334.47038			449	728
158	PCB-205		3115	1469	1646	0.89	NO	31.50	1.00	31.47	31.54	161.40727			449	728
159	* PCB-208		3304	1390	1914	0.73	NO	29.80	1.00	29.77	29.84	155.19474			878	1960
160	PCB-207		2114	893	1220	0.73	NO	30.27	1.02	30.23	30.30	109.63957			878	1960
161	PCB-206		9595	4157	5438	0.76	NO	32.60	1.00	32.56	32.63	619.30400			878	1960
162	* PCB-209		1578	794	784	1.01	NO	33.73	1.00	33.70	33.77	88.88677			169	339
163	13C-PCB-31						YES								23705	10196
164	13C-PCB-95						YES								1130	1424
165	13C-PCB-153		218	134	84	1.60	YES	24.25	1.18	24.22	24.28	10.14169	0.5		979	1240
166	13C-PCB-28		62809	30729	32081	0.96	NO	16.07	0.94	16.04	16.10	1148.82529	57.4		23705	10196
167	13C-PCB-111		58254	35541	22713	1.56	NO	22.09	1.07	22.05	22.12	1366.51470	68.3		1130	1424
168	13C-PCB-178		50143	24914	25229	0.99	NO	25.14	1.01	25.11	25.18	1395.40434	69.8		2000	1411
169	13C-PCB-1		35754	26462	9292	2.85	NO	8.96	0.75	8.93	9.00	632.94488	31.6		1350	11852
170	13C-PCB-3		43270	32456	10814	3.00	NO	10.51	0.88	10.48	10.54	792.79411	39.6		1350	11852
171	13C-PCB-4		50389	30899	19490	1.59	NO	10.69	0.90	10.66	10.72	882.53884	44.1		8259	2283
172	13C-PCB-15		50731	30386	20345	1.49	NO	14.38	1.20	14.34	14.41	863.60298	43.2		11014	3250
173	13C-PCB-19		67172	35426	31746	1.12	NO	12.70	1.06	12.67	12.73	1022.63626	51.1		32199	15058
174	13C-PCB-37		47982	24562	23421	1.05	NO	18.32	1.07	18.29	18.35	935.52806	46.8		23705	10196
175	13C-PCB-54		81162	34077	47085	0.72	NO	14.56	0.85	14.53	14.59	1075.81204	53.8		8332	3530
176	13C-PCB-81		47743	20962	26781	0.78	NO	21.89	1.06	21.86	21.93	1041.66036	52.1		4044	2317
177	13C-PCB-77		47463	20917	26546	0.79	NO	22.21	1.07	22.17	22.24	1019.28541	51.0		4044	2317
178	13C-PCB-104		62826	38242	24584	1.56	NO	17.60	1.03	17.56	17.63	1119.73201	56.0		1014	1047
179	13C-PCB-123		51188	31341	19847	1.58	NO	23.17	1.12	23.14	23.21	1203.70727	60.2		1823	1514
180	13C-PCB-118		47042	27625	19417	1.42	NO	23.34	1.13	23.31	23.38	1200.61187	60.0		1823	1514
181	13C-PCB-114		49018	29737	19282	1.54	NO	23.65	0.95	23.61	23.68	1157.43911	57.9		1823	1514
182	13C-PCB-105		48488	30719	17768	1.73	NO	24.01	0.96	23.97	24.04	1202.25535	60.1		1823	1514
183	13C-PCB-126		45823	28675	17148	1.67	NO	25.60	1.03	25.57	25.64	1120.70624	56.0		1823	1514
184	13C-PCB-155		69978	38810	31168	1.25	NO	20.56	0.99	20.53	20.59	1192.43038	59.6		1103	622
185	13C-PCB-167		45343	25546	19797	1.29	NO	26.47	1.06	26.44	26.51	1206.82630	60.3		979	1240

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Name: 9-221117A25, Date: 18-Nov-2022, Time: 06:42:36, ID: L2735553-5, Description: DIL 20x, Vial: Tray1:22

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
186	13C-PCB-156/157		86636	47672	38964	1.22	NO	27.11	1.09	27.08	27.15	2421.34581	60.5		979	1240
187	13C-PCB-169		42032	23806	18226	1.31	NO	28.79	1.15	28.76	28.83	1207.05065	60.4		979	1240
188	13C-PCB-188		63708	32371	31337	1.03	NO	23.56	0.94	23.53	23.59	1262.62651	63.1		2000	1411
189	13C-PCB-189		47436	25797	21639	1.19	NO	30.07	0.96	30.04	30.11	1303.25703	65.2		2649	1263
190	13C-PCB-202		75412	33757	41655	0.81	NO	26.35	1.06	26.32	26.39	1355.93490	67.8		900	705
191	13C-PCB-205		36010	17094	18916	0.90	NO	31.48	1.01	31.44	31.51	1251.14163	62.6		746	661
192	13C-PCB-208		40828	17762	23066	0.77	NO	29.79	0.95	29.76	29.82	1264.90009	63.2		835	613
193	13C-PCB-206		29455	12822	16633	0.77	NO	32.57	1.04	32.54	32.61	1444.45751	72.2		835	613
194	13C-PCB-209		38469	20999	17470	1.20	NO	33.73	1.08	33.70	33.77	1409.62940	70.5		355	372
195	13C-PCB-9		173542	104955	68587	1.53	NO	11.94	0.48	11.91	11.97	3.72122	0.2		8259	2283
196	13C-PCB-52		67001	29451	37550	0.78	NO	17.07	0.68	17.03	17.10	3.34577	0.2		5102	2449
197	13C-PCB-101		69656	42222	27434	1.54	NO	20.72	0.83	20.68	20.75	3.63521	0.2		1130	1424
198	13C-PCB-138		61796	33533	28263	1.19	NO	24.96	0.00	24.93	25.00	4.10758	0.2		979	1240
199	13C-PCB-194		46610	22450	24160	0.93	NO	31.19	1.25	31.16	31.23	3.89449	0.2		746	661
200	Total MoCB-F1	2		1741								115.78808			1191	
201	Total DiCB-F1	1		1650								77.50062			1746	
202	Total DiCB-F2	1		36225								2146.47895			1812	
203	Total TrCB-F1			0											2786	
204	Total TrCB-F2	4		3020								256.32986			1070	
205	Total TrCB-F3	10		39406								5096.09977			2318	
206	Total TeCB-F2			0											974	
207	Total TeCB-F3	11		50401								6188.76303			624	
208	Total TeCB-F4	17		74990								24884.54635			2167	
209	Total PeCB-F3			0											844	
210	Total PeCB-F4	16		398377								46757.39778			1569	
211	Total PeCB-F5	19		344556								694400.85263			2362	
212	Total HxCB-F4	6		244151								19133.61412			876	
213	Total HxCB-F5	28		1540429								215570.08754			1419	
214	Total HpCB-F5	20		1106663								93877.32601			1389	
215	Total HpCB-F6	1		6326								304.79041			973	
216	Total OcCB-F5	7		135529								10527.54701			700	
217	Total OcCB-F6	5		36503								8061.97914			449	
218	Total NoCB-F6	3		6440								884.13832			878	
219	Total DeCB-F7	1		794								88.88677			169	
220	Total 13C-MoCB-F1	2		58918								1425.73899			1350	
221	Total 13C-DiCB-F1	2		135854								886.26006			8259	
222	Total 13C-DiCB-F2	1		30870								863.60298			11014	

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	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
223	Total 13C-TrCB-F1	1		215892								1022.63626			32199	
224	Total 13C-TrCB-F3	2		71226								2084.35335			23705	
225	Total 13C-TeCB-F2	1		34077								1075.81204			8332	
226	Total 13C-TeCB-F3	4		31020								3.46866			5102	
227	Total 13C-TeCB-F4	2		41879								2060.94577			4044	
228	Total 13C-PeCB-F3	1		38242								1119.73201			1014	
229	Total 13C-PeCB-F4	3		77979								1370.24362			1130	
230	Total 13C-PeCB-F5	5		153022								5884.71983			1823	
231	Total 13C-HxCB-F4	1		39121								1192.43038			1103	
232	Total 13C-HxCB-F5	11		132396								4850.55423			979	
233	Total 13C-HpCB-F5	2		59359								2658.03085			2000	
234	Total 13C-HpCB-F6	1		28118								1303.25703			2649	
235	Total 13C-OcCB-F5	1		34400								1355.93490			900	
236	Total 13C-OcCB-F6	5		40512								1255.55866			746	
237	Total 13C-NoCB-F6	2		30767								2709.35760			835	
238	Total 13C-DeCB-F7	1		20999								1409.62940			355	
239	Lockmass F1			0											605223	
240	Lockmass F2			0											170359	
241	Lockmass F3			0											480375	
242	Lockmass F4			0											416603	
243	Lockmass F5			0											104335	
244	Lockmass F6			0											124043	
245	Lockmass F7			0											32653	

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221117A2-1121ES.qld

Last Altered: Tuesday, November 22, 2022 16:07:50 Eastern Standard Time
Printed: Wednesday, November 23, 2022 11:42:36 Eastern Standard Time

Name: 9-221117A26, Date: 18-Nov-2022, Time: 07:24:56, ID: L2735553-6, Description: DIL 20x, Vial: Tray1:23

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
1	* PCB-1						YES								1296	1696
2	PCB-2		2116	1474	643	2.29	YES	10.39	0.99	10.36	10.43	82.82010			1296	1696
3	PCB-3						YES								1296	1696
4	*PCB-4						YES								1355	4571
5	PCB-10						YES								1355	4571
6	PCB-9						YES								1355	4571
7	PCB-7						YES								1355	4571
8	PCB-6		1381	965	416	2.32	YES	12.24	1.14	12.20	12.27	35.78447		ES221121MB	1355	4571
9	PCB-5						YES								1355	4571
10	PCB-8		10083	5998	4085	1.47	NO	12.51	1.17	12.47	12.54	233.00706		ES221121MB	1355	4571
11	* PCB-14						YES								1498	4660
12	PCB-11		81057	49262	31794	1.55	NO	14.00	0.97	13.97	14.03	2373.02714			1498	4660
13	PCB-13/12						YES								1498	4660
14	PCB-15		1368	520	849	0.61	YES	14.41	1.00	14.38	14.45	38.90270			1498	4660
15	* PCB-19						YES								2085	1897
16	* PCB-30/18		6061	3123	2937	1.06	NO	13.82	1.09	13.79	13.86	195.12624			1681	1398
17	PCB-17		4028	2097	1931	1.09	NO	14.06	1.11	14.03	14.10	159.46882			1681	1398
18	PCB-27						YES								1681	1398
19	PCB-24						YES								1681	1398
20	PCB-16						YES								1681	1398
21	PCB-32		2161	1018	1142	0.89	NO	14.64	1.15	14.61	14.68	56.63012			1681	1398
22	* PCB-34						YES								2880	2431
23	PCB-23						YES								2880	2431
24	PCB-29/26		11922	6232	5691	1.10	NO	15.61	0.85	15.58	15.64	328.24971			2880	2431
25	PCB-25		4861	2460	2401	1.02	NO	15.75	0.86	15.71	15.78	134.98881			2880	2431
26	PCB-31		80011	39972	40040	1.00	NO	15.93	0.87	15.90	15.97	2112.79627			2880	2431
27	PCB-28/20		133195	67453	65741	1.03	NO	16.10	0.88	16.07	16.13	3749.50344			2880	2431
28	PCB-21/33		20271	9291	10980	0.85	YES	16.25	0.89	16.21	16.28	567.22858			2880	2431
29	PCB-22		20041	9582	10459	0.92	NO	16.49	0.90	16.46	16.52	567.47773			2880	2431
30	PCB-36						YES								2880	2431
31	PCB-39						YES								2880	2431
32	PCB-38						YES								2880	2431
33	PCB-35						YES								2880	2431
34	PCB-37		7636	4286	3350	1.28	YES	18.35	1.00	18.32	18.38	251.38186			2880	2431
35	* PCB-54						YES								843	1291
36	* PCB-50/53						YES								935	1297
37	PCB-45/51		1728	670	1058	0.63	YES	16.19	1.11	16.15	16.22	83.50348			935	1297

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Printed: Wednesday, November 23, 2022 11:42:36 Eastern Standard Time

Name: 9-221117A26, Date: 18-Nov-2022, Time: 07:24:56, ID: L2735553-6, Description: DIL 20x, Vial: Tray1:23

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
38	PCB-46						YES								935	1297
39	PCB-52		114240	50650	63589	0.80	NO	17.10	1.17	17.06	17.13	6027.69265			935	1297
40	PCB-73						YES								935	1297
41	PCB-43		3260	915	2345	0.39	YES	17.23	1.18	17.20	17.27	196.70861			935	1297
42	PCB-69/49		87339	37638	49701	0.76	NO	17.36	1.19	17.33	17.39	3635.02795			935	1297
43	PCB-48		5216	2252	2964	0.76	NO	17.52	1.20	17.48	17.55	244.79552			935	1297
44	PCB-44/47/65		70574	30509	40065	0.76	NO	17.66	1.21	17.63	17.70	3317.34852			935	1297
45	PCB-59/62/75		8750	3979	4772	0.83	NO	17.84	1.22	17.81	17.87	329.31389			935	1297
46	PCB-42		5694	2513	3181	0.79	NO	17.96	1.23	17.92	17.99	332.70687			935	1297
47	PCB-41/71/40		4265	1855	2410	0.77	NO	18.25	1.25	18.22	18.29	212.30557			935	1297
48	PCB-64		60134	26156	33978	0.77	NO	18.35	1.26	18.32	18.38	2456.04980			935	1297
49	* PCB-72		3495	1301	2194	0.59	YES	18.73	0.85	18.70	18.76	100.17890			2155	2927
50	PCB-68		2360	1093	1267	0.86	NO	18.90	0.86	18.86	18.93	64.17891			2155	2927
51	PCB-57						YES								2155	2927
52	PCB-58						YES								2155	2927
53	PCB-67		1822	958	864	1.11	YES	19.35	0.88	19.32	19.38	48.98647			2155	2927
54	PCB-63		9103	3767	5336	0.71	NO	19.50	0.89	19.46	19.53	262.62097			2155	2927
55	PCB-61/70/74/76		297407	130599	166808	0.78	NO	19.70	0.90	19.67	19.73	9154.74789			2155	2927
56	PCB-66		215239	93808	121431	0.77	NO	19.88	0.91	19.84	19.91	6090.30843			2155	2927
57	PCB-55						YES								2155	2927
58	PCB-56		13735	6383	7352	0.87	NO	20.26	0.92	20.23	20.30	435.75989			2155	2927
59	PCB-60		34336	15291	19045	0.80	NO	20.38	0.93	20.34	20.41	1011.26801			2155	2927
60	PCB-80						YES								2155	2927
61	PCB-79		917	512	405	1.26	YES	21.36	0.98	21.33	21.40	24.59650		ES221121MB	2155	2927
62	PCB-78						YES								2155	2927
63	PCB-81		549	259	290	0.89	YES	21.92	1.00	21.89	21.95	15.87939		ES221121MB	2155	2927
64	PCB-77		7931	3268	4663	0.70	NO	22.25	1.00	22.22	22.29	228.62728		ES221121MB	2155	2927
65	* PCB-104						YES								1020	3304
66	PCB-96						YES								1020	3304
67	* PCB-103		2507	1493	1014	1.47	NO	18.83	1.07	18.80	18.86	107.66565			1821	3506
68	PCB-94						YES								1821	3506
69	PCB-95		174819	106547	68272	1.56	NO	19.24	1.09	19.20	19.27	8757.01294			1821	3506
70	PCB-100/93/102/98						YES								1821	3506
71	PCB-88/91		19005	11548	7457	1.55	NO	19.70	1.12	19.67	19.73	853.96946			1821	3506
72	PCB-84		19413	11619	7793	1.49	NO	19.86	1.13	19.82	19.89	935.25138			1821	3506
73	PCB-89						YES								1821	3506
74	PCB-121						YES								1821	3506

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Name: 9-221117A26, Date: 18-Nov-2022, Time: 07:24:56, ID: L2735553-6, Description: DIL 20x, Vial: Tray1:23

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
75	PCB-92		68080	41368	26712	1.55	NO	20.44	1.16	20.41	20.47	3353.32630			1821	3506
76	PCB-113/90/101		371628	226915	144713	1.57	NO	20.75	1.18	20.71	20.78	14294.88759			1821	3506
77	PCB-83/99		134806	82167	52639	1.56	NO	21.05	0.91	21.02	21.08	6115.96331			1821	3506
78	PCB-112						YES								1821	3506
79	PCB-109/119/86/97/125/87		102875	63071	39805	1.58	NO	21.42	0.92	21.39	21.45	3864.04089		ES221121MJ	1821	3506
80	PCB-117/116/85/110/115		364105	221379	142725	1.55	NO	21.84	0.94	21.80	21.87	13078.54355		ES221121MJ	1821	3506
81	PCB-82		2465	2130	335	6.35	YES	22.03	0.95	22.00	22.06	134.59631			1821	3506
82	PCB-111						YES								1821	3506
83	PCB-120		4951	2686	2265	1.19	YES	22.35	0.96	22.32	22.39	150.72037			1821	3506
84	* PCB-108/124		12086	6983	5103	1.37	NO	23.00	0.99	22.97	23.04	359.11970			2501	2957
85	PCB-107		37035	22093	14942	1.48	NO	23.14	1.00	23.10	23.17	1079.24159		ES221121MS	2501	2957
86	PCB-123		5391	3659	1732	2.11	YES	23.19	1.00	23.15	23.22	163.96638		ES221121MS	2501	2957
87	PCB-106						YES								2501	2957
88	PCB-118		319741	195280	124461	1.57	NO	23.37	1.00	23.33	23.40	8764.75349			2501	2957
89	PCB-122		3602	2248	1354	1.66	NO	23.58	1.00	23.55	23.62	154.54300			2501	2957
90	PCB-114		7199	4077	3122	1.31	YES	23.67	1.00	23.64	23.70	229.40268			2501	2957
91	PCB-105		90450	54775	35675	1.54	NO	24.03	1.00	24.00	24.06	2864.66569		ES221121MB	2501	2957
92	PCB-127		1200	360	840	0.43	YES	24.77	1.03	24.74	24.80	35.89394		ES221121MB	2501	2957
93	PCB-126		3199	1824	1375	1.33	NO	25.64	1.00	25.61	25.67	103.46121		ES221121MB	2501	2957
94	* PCB-155						YES								979	1179
95	PCB-152						YES								979	1179
96	PCB-150		1025	662	363	1.82	YES	20.84	1.01	20.80	20.87	21.67681			979	1179
97	PCB-136		130959	72116	58842	1.23	NO	21.10	1.03	21.06	21.13	3303.78484			979	1179
98	PCB-145						YES								979	1179
99	PCB-148		1478	680	798	0.85	YES	21.92	1.07	21.89	21.95	48.58962			979	1179
100	PCB-151/135		544013	301275	242738	1.24	NO	22.27	1.08	22.24	22.30	19661.23395			979	1179
101	PCB-154						YES								979	1179
102	PCB-144		67078	36989	30089	1.23	NO	22.57	1.10	22.53	22.60	2246.49397			979	1179
103	* PCB-147/149		749080	416942	332138	1.26	NO	22.76	1.11	22.73	22.80	33120.55458			2224	1927
104	PCB-134/143		25790	14526	11264	1.29	NO	22.91	1.11	22.87	22.94	1444.09313			2224	1927
105	PCB-139/140		4556	2391	2165	1.10	NO	23.06	1.12	23.03	23.10	201.78895			2224	1927
106	PCB-131		3757	2257	1500	1.50	YES	23.21	0.88	23.18	23.24	229.78578			2224	1927
107	PCB-142						YES								2224	1927
108	PCB-132		175249	97809	77440	1.26	NO	23.48	0.89	23.44	23.51	8809.67419			2224	1927
109	PCB-133		16211	9060	7151	1.27	NO	23.63	0.89	23.60	23.67	843.10290			2224	1927
110	PCB-165		3714	1953	1761	1.11	NO	23.84	0.90	23.80	23.87	140.76246			2224	1927
111	PCB-146		221516	124391	97126	1.28	NO	23.97	0.91	23.94	24.00	9264.93738			2224	1927

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Name: 9-221117A26, Date: 18-Nov-2022, Time: 07:24:56, ID: L2735553-6, Description: DIL 20x, Vial: Tray1:23

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
112	PCB-161						YES								2224	1927
113	PCB-153/168		1423488	790082	633406	1.25	NO	24.29	0.92	24.25	24.32	53165.22419			2224	1927
114	PCB-141		204001	113828	90173	1.26	NO	24.43	0.92	24.40	24.46	9807.86776			2224	1927
115	PCB-130		38538	21023	17515	1.20	NO	24.65	0.93	24.61	24.68	2023.67781			2224	1927
116	PCB-137/164		82976	45460	37516	1.21	NO	24.82	0.94	24.78	24.85	3406.71501		ES221121MJ	2224	1927
117	PCB-138/163/129		997268	555666	441602	1.26	NO	24.99	0.94	24.95	25.02	67366.86965			2224	1927
118	PCB-160						YES								2224	1927
119	PCB-158		91773	50995	40778	1.25	NO	25.18	0.95	25.15	25.21	3046.73031			2224	1927
120	PCB-128/166		91953	50403	41550	1.21	NO	25.70	0.97	25.67	25.73	3723.01706			2224	1927
121	PCB-159		14865	8011	6855	1.17	NO	26.12	0.99	26.09	26.16	501.20217			2224	1927
122	PCB-162		5404	3021	2382	1.27	NO	26.25	0.99	26.22	26.29	192.54520			2224	1927
123	PCB-167		39767	21423	18344	1.17	NO	26.50	1.00	26.46	26.53	1284.62757			2224	1927
124	PCB-156/157		62756	34598	28158	1.23	NO	27.14	1.00	27.10	27.17	2068.00908			2224	1927
125	PCB-169		1014	567	446	1.27	NO	28.82	1.00	28.78	28.85	36.11084		ES221121MB	2224	1927
126	* PCB-188		863	437	426	1.02	NO	23.58	1.00	23.55	23.62	20.22012			1198	1449
127	PCB-179		171807	86688	85119	1.02	NO	23.83	1.01	23.79	23.86	4545.99542			1198	1449
128	PCB-184						YES								1198	1449
129	PCB-176		52712	26834	25878	1.04	NO	24.29	1.03	24.25	24.32	1427.49703			1198	1449
130	PCB-186						YES								1198	1449
131	PCB-178		89724	45239	44484	1.02	NO	25.17	1.07	25.13	25.20	3378.42154			1198	1449
132	PCB-175		16828	8795	8034	1.09	NO	25.49	1.08	25.46	25.53	585.74660			1198	1449
133	PCB-187		664643	336456	328187	1.03	NO	25.64	1.09	25.61	25.67	21225.86513			1198	1449
134	PCB-182						YES								1198	1449
135	PCB-183		235309	119957	115353	1.04	NO	25.95	1.10	25.92	25.99	7559.78112			1198	1449
136	PCB-185		45750	23112	22638	1.02	NO	26.05	1.11	26.02	26.08	1615.91613			1198	1449
137	PCB-174		309909	159993	149916	1.07	NO	26.12	1.11	26.09	26.16	10799.90193			1198	1449
138	PCB-177		200606	101793	98813	1.03	NO	26.35	1.12	26.32	26.39	7099.64988			1198	1449
139	PCB-181		1707	847	860	0.99	NO	26.55	0.88	26.51	26.58	60.25798			1198	1449
140	PCB-171/173		94495	48077	46418	1.04	NO	26.68	0.89	26.64	26.71	3506.45729			1198	1449
141	PCB-172		64737	32755	31983	1.02	NO	27.46	0.91	27.43	27.50	2257.36586			1198	1449
142	PCB-192						YES								1198	1449
143	PCB-180/193		965322	489492	475830	1.03	NO	27.80	0.92	27.77	27.84	31282.18789			1198	1449
144	PCB-191		19635	9715	9919	0.98	NO	27.98	0.93	27.95	28.02	552.68306			1198	1449
145	PCB-170		272610	139212	133398	1.04	NO	28.50	0.95	28.47	28.54	10369.56509			1198	1449
146	PCB-190		92231	47218	45013	1.05	NO	28.77	0.96	28.74	28.80	2324.51778			1198	1449
147	* PCB-189		10134	5331	4803	1.11	NO	30.10	1.00	30.06	30.13	376.53361			874	1466
148	* PCB-202		40509	19435	21074	0.92	NO	26.38	1.00	26.34	26.41	924.92787			698	721

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Name: 9-221117A26, Date: 18-Nov-2022, Time: 07:24:56, ID: L2735553-6, Description: DIL 20x, Vial: Tray1:23

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
149	PCB-201		24674	11435	13239	0.86	NO	26.85	1.02	26.81	26.88	533.18500			698	721
150	PCB-204						YES								698	721
151	PCB-197		7950	3614	4335	0.83	NO	27.31	1.04	27.27	27.34	177.40935			698	721
152	PCB-200		21139	9675	11464	0.84	NO	27.42	1.04	27.38	27.45	490.62577			698	721
153	PCB-198/199		169348	78124	91224	0.86	NO	28.82	0.91	28.78	28.85	5382.67049			698	721
154	PCB-196		70648	32879	37770	0.87	NO	29.16	0.93	29.12	29.19	2256.76773			698	721
155	PCB-203		112747	51964	60784	0.85	NO	29.25	0.93	29.22	29.29	3476.97517			698	721
156	* PCB-195		34136	16032	18104	0.89	NO	29.99	0.95	29.96	30.03	2011.14842			630	663
157	PCB-194		70388	33079	37310	0.89	NO	31.23	0.99	31.20	31.27	3968.49689			630	663
158	PCB-205		4738	2331	2407	0.97	NO	31.52	1.00	31.48	31.55	209.46017			630	663
159	* PCB-208		6671	2821	3850	0.73	NO	29.81	1.00	29.78	29.85	265.26608			1030	1635
160	PCB-207		2905	1367	1538	0.89	YES	30.29	1.02	30.26	30.32	128.69372			1030	1635
161	PCB-206		16236	7025	9211	0.76	NO	32.61	1.00	32.58	32.64	906.06493			1030	1635
162	* PCB-209		2729	1506	1223	1.23	NO	33.75	1.00	33.72	33.78	133.57914			217	292
163	13C-PCB-31						YES								23721	8247
164	13C-PCB-95						YES								1370	1412
165	13C-PCB-153		353	195	158	1.24	NO	24.26	1.18	24.23	24.29	13.61534	0.7		1190	945
166	13C-PCB-28		72166	35441	36726	0.96	NO	16.09	0.94	16.06	16.12	1113.02223	55.7		23721	8247
167	13C-PCB-111		68333	41507	26826	1.55	NO	22.10	1.07	22.07	22.14	1481.27495	74.1		1370	1412
168	13C-PCB-178		58656	29579	29077	1.02	NO	25.16	1.01	25.12	25.19	1626.17866	81.3		1682	1047
169	13C-PCB-1		47432	36400	11033	3.30	NO	8.98	0.75	8.94	9.01	815.44518	40.8		1877	9786
170	13C-PCB-3		48000	35514	12487	2.84	NO	10.53	0.88	10.49	10.56	854.07431	42.7		1877	9786
171	13C-PCB-4		58599	36629	21970	1.67	NO	10.70	0.90	10.67	10.74	996.69998	49.8		10431	2197
172	13C-PCB-15		61865	38211	23654	1.62	NO	14.40	1.20	14.36	14.43	1022.72726	51.1	ES221122MB	9344	2348
173	13C-PCB-19		81422	44218	37204	1.19	NO	12.71	1.06	12.68	12.75	1203.77887	60.2		35169	12773
174	13C-PCB-37		55282	29768	25513	1.17	NO	18.34	1.07	18.31	18.37	908.85745	45.4		23721	8247
175	13C-PCB-54		91936	39249	52687	0.75	NO	14.58	0.85	14.55	14.61	1027.55751	51.4		6045	4197
176	13C-PCB-81		54604	23791	30813	0.77	NO	21.91	1.06	21.88	21.94	1100.92010	55.0		4608	2702
177	13C-PCB-77		55415	24239	31176	0.78	NO	22.23	1.07	22.19	22.26	1099.71821	55.0		4608	2702
178	13C-PCB-104		79112	48108	31004	1.55	NO	17.61	1.03	17.57	17.64	1302.96965	65.1		1054	1140
179	13C-PCB-123		60222	36752	23470	1.57	NO	23.19	1.12	23.15	23.22	1308.66149	65.4		1897	1513
180	13C-PCB-118		56515	35116	21399	1.64	NO	23.35	1.13	23.32	23.39	1332.89823	66.6		1897	1513
181	13C-PCB-114		56344	35272	21071	1.67	NO	23.66	0.95	23.62	23.69	1229.41495	61.5		1897	1513
182	13C-PCB-105		53744	33157	20586	1.61	NO	24.02	0.96	23.99	24.05	1231.42043	61.6		1897	1513
183	13C-PCB-126		53627	33574	20053	1.67	NO	25.61	1.03	25.58	25.65	1211.99856	60.6		1897	1513
184	13C-PCB-155		88431	49212	39218	1.25	NO	20.57	0.99	20.54	20.60	1392.48441	69.6		903	1068
185	13C-PCB-167		53007	29450	23557	1.25	NO	26.48	1.06	26.45	26.52	1405.52182	70.3		1190	945

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221117A2-1121ES.qld

Last Altered: Tuesday, November 22, 2022 16:07:50 Eastern Standard Time
Printed: Wednesday, November 23, 2022 11:42:36 Eastern Standard Time

Name: 9-221117A26, Date: 18-Nov-2022, Time: 07:24:56, ID: L2735553-6, Description: DIL 20x, Vial: Tray1:23

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
186	13C-PCB-156/157		103043	58866	44176	1.33	NO	27.14	1.09	27.10	27.17	2869.10762	71.7		1190	945
187	13C-PCB-169		49302	28041	21261	1.32	NO	28.80	1.15	28.77	28.84	1410.51362	70.5		1190	945
188	13C-PCB-188		79985	41203	38782	1.06	NO	23.57	0.94	23.54	23.61	1579.28784	79.0		1682	1047
189	13C-PCB-189		54044	27760	26284	1.06	NO	30.08	0.96	30.05	30.12	1479.24623	74.0		3167	1728
190	13C-PCB-202		91244	42515	48729	0.87	NO	26.36	1.06	26.33	26.40	1634.43487	81.7		653	641
191	13C-PCB-205		42199	20247	21952	0.92	NO	31.50	1.01	31.47	31.54	1421.33976	71.1		598	585
192	13C-PCB-208		48220	21685	26535	0.82	NO	29.80	0.95	29.77	29.83	1448.22720	72.4		760	691
193	13C-PCB-206		34066	15166	18900	0.80	NO	32.60	1.04	32.56	32.63	1619.47103	81.0		760	691
194	13C-PCB-209		44267	24523	19744	1.24	NO	33.73	1.08	33.70	33.77	1572.46770	78.6		239	173
195	13C-PCB-9		178702	106005	72697	1.46	NO	11.96	0.48	11.92	11.99	3.83186	0.2		10431	2197
196	13C-PCB-52		79459	34615	44843	0.77	NO	17.08	0.68	17.04	17.11	3.96788	0.2		3902	2564
197	13C-PCB-101		75378	44530	30847	1.44	NO	20.73	0.83	20.69	20.76	3.93383	0.2		1370	1412
198	13C-PCB-138		62029	34201	27827	1.23	NO	24.97	0.00	24.94	25.01	4.12304	0.2		1190	945
199	13C-PCB-194		48081	22932	25148	0.91	NO	31.22	1.25	31.19	31.25	4.01738	0.2		598	585
200	Total MoCB-F1	1		1474								82.82010			1296	
201	Total DiCB-F1	2		6963								268.79153			1355	
202	Total DiCB-F2	2		49782								2411.92984			1498	
203	Total TrCB-F1			0											2085	
204	Total TrCB-F2	3		6239								411.22518			1681	
205	Total TrCB-F3	12		145155								18077.78388			2880	
206	Total TeCB-F2			0											843	
207	Total TeCB-F3	12		157310								17596.03652			935	
208	Total TeCB-F4	16		271594								48295.59584			2155	
209	Total PeCB-F3			0											1020	
210	Total PeCB-F4	15		784098								77240.49430			1821	
211	Total PeCB-F5	25		711787								1342231.517...			2501	
212	Total HxCB-F4	5		411721								25281.77919			979	
213	Total HxCB-F5	29		2407334								296747.17167			2224	
214	Total HpCB-F5	20		1681715								119506.59797			1198	
215	Total HpCB-F6	1		9441								376.53361			874	
216	Total OcCB-F5	8		207232								13487.77668			698	
217	Total OcCB-F6	5		52261								11372.41599			630	
218	Total NoCB-F6	3		11212								1300.02473			1030	
219	Total DeCB-F7	1		1506								133.57914			217	
220	Total 13C-MoCB-F1	2		71913								1669.51949			1877	
221	Total 13C-DiCB-F1	2		142633								1000.53184			10431	
222	Total 13C-DiCB-F2	1		38211								1022.72726			9344	

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Name: 9-221117A26, Date: 18-Nov-2022, Time: 07:24:56, ID: L2735553-6, Description: DIL 20x, Vial: Tray1:23

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
223	Total 13C-TrCB-F1	1		235601								1203.77887			35169	
224	Total 13C-TrCB-F3	2		83011								2021.87968			23721	
225	Total 13C-TeCB-F2	1		39249								1027.55751			6045	
226	Total 13C-TeCB-F3	2		34852								3.98615			3902	
227	Total 13C-TeCB-F4	2		48030								2200.63831			4608	
228	Total 13C-PeCB-F3	1		48166								1302.96965			1054	
229	Total 13C-PeCB-F4	4		86300								1485.28894			1370	
230	Total 13C-PeCB-F5	5		178732								6314.39365			1897	
231	Total 13C-HxCB-F4	1		49726								1392.48441			903	
232	Total 13C-HxCB-F5	13		152963								5704.37518			1190	
233	Total 13C-HpCB-F5	2		72610								3205.46650			1682	
234	Total 13C-HpCB-F6	1		30480								1479.24623			3167	
235	Total 13C-OcCB-F5	1		42951								1634.43487			653	
236	Total 13C-OcCB-F6	4		44882								1425.92553			598	
237	Total 13C-NoCB-F6	2		36851								3067.69823			760	
238	Total 13C-DeCB-F7	1		24523								1572.46770			239	
239	Lockmass F1			0											624107	
240	Lockmass F2			0											213436	
241	Lockmass F3			0											533180	
242	Lockmass F4			0											402666	
243	Lockmass F5			0											87000	
244	Lockmass F6			0											129945	
245	Lockmass F7			0											34892	

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Last Altered: Tuesday, November 22, 2022 16:07:50 Eastern Standard Time
Printed: Wednesday, November 23, 2022 11:42:36 Eastern Standard Time

Name: 9-221117A27, Date: 18-Nov-2022, Time: 08:07:13, ID: L2735553-7, Description: DIL 20x, Vial: Tray1:24

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
1	* PCB-1						YES								1067	1654
2	PCB-2		1027	724	302	2.40	YES	10.39	0.99	10.36	10.43	47.27304		ES221121MB	1067	1654
3	PCB-3						YES								1067	1654
4	*PCB-4						YES								1863	3573
5	PCB-10						YES								1863	3573
6	PCB-9						YES								1863	3573
7	PCB-7						YES								1863	3573
8	PCB-6						YES								1863	3573
9	PCB-5						YES								1863	3573
10	PCB-8						YES								1863	3573
11	* PCB-14						YES								2025	4127
12	PCB-11		61733	35748	25985	1.38	NO	14.01	0.97	13.97	14.04	2245.14062			2025	4127
13	PCB-13/12						YES								2025	4127
14	PCB-15						YES								2025	4127
15	* PCB-19						YES								1866	2688
16	* PCB-30/18		1521	845	676	1.25	YES	13.82	1.09	13.79	13.86	56.47657		ES221121MB	1603	2055
17	PCB-17						YES								1603	2055
18	PCB-27						YES								1603	2055
19	PCB-24						YES								1603	2055
20	PCB-16						YES								1603	2055
21	PCB-32						YES								1603	2055
22	* PCB-34						YES								2282	2142
23	PCB-23						YES								2282	2142
24	PCB-29/26		1401	681	720	0.95	NO	15.60	0.85	15.57	15.63	46.78717			2282	2142
25	PCB-25						YES								2282	2142
26	PCB-31		7411	3537	3874	0.91	NO	15.92	0.87	15.89	15.96	237.41154			2282	2142
27	PCB-28/20		8812	4395	4418	0.99	NO	16.10	0.88	16.07	16.13	300.93705		ES221121MB	2282	2142
28	PCB-21/33						YES								2282	2142
29	PCB-22		2631	1122	1509	0.74	YES	16.48	0.90	16.45	16.51	90.37160			2282	2142
30	PCB-36						YES								2282	2142
31	PCB-39						YES								2282	2142
32	PCB-38						YES								2282	2142
33	PCB-35						YES								2282	2142
34	PCB-37		1071	442	629	0.70	YES	18.36	1.00	18.33	18.39	42.75802		ES221121MB	2282	2142
35	* PCB-54						YES								786	1320
36	* PCB-50/53						YES								833	1297
37	PCB-45/51		662	322	340	0.95	YES	16.18	1.11	16.14	16.21	34.87264			833	1297

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Last Altered: Tuesday, November 22, 2022 16:07:50 Eastern Standard Time
Printed: Wednesday, November 23, 2022 11:42:36 Eastern Standard Time

Name: 9-221117A27, Date: 18-Nov-2022, Time: 08:07:13, ID: L2735553-7, Description: DIL 20x, Vial: Tray1:24

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
38	PCB-46						YES								833	1297
39	PCB-52		18589	7874	10715	0.73	NO	17.08	1.17	17.04	17.11	1069.40227			833	1297
40	PCB-73						YES								833	1297
41	PCB-43						YES								833	1297
42	PCB-69/49		7657	3088	4569	0.68	NO	17.35	1.19	17.32	17.38	347.46432			833	1297
43	PCB-48		673	199	474	0.42	YES	17.51	1.20	17.47	17.54	34.43893			833	1297
44	PCB-44/47/65		10177	4444	5733	0.78	NO	17.65	1.21	17.62	17.69	521.58141			833	1297
45	PCB-59/62/75		741	487	255	1.91	YES	17.83	1.22	17.80	17.86	30.42212			833	1297
46	PCB-42		1499	674	825	0.82	NO	17.95	1.23	17.91	17.98	95.50318			833	1297
47	PCB-41/71/40						YES								833	1297
48	PCB-64		5069	2293	2776	0.83	NO	18.34	1.26	18.31	18.37	225.72537			833	1297
49	* PCB-72						YES								1503	2189
50	PCB-68						YES								1503	2189
51	PCB-57						YES								1503	2189
52	PCB-58						YES								1503	2189
53	PCB-67						YES								1503	2189
54	PCB-63						YES								1503	2189
55	PCB-61/70/74/76		26586	11925	14661	0.81	NO	19.69	0.90	19.66	19.72	915.95291			1503	2189
56	PCB-66		13210	6390	6820	0.94	YES	19.87	0.91	19.83	19.90	418.35548			1503	2189
57	PCB-55						YES								1503	2189
58	PCB-56		3632	1685	1946	0.87	NO	20.25	0.92	20.22	20.29	128.95375			1503	2189
59	PCB-60		2174	1028	1146	0.90	YES	20.37	0.93	20.33	20.40	71.65897		ES221121MB	1503	2189
60	PCB-80						YES								1503	2189
61	PCB-79		999	496	503	0.99	YES	21.35	0.97	21.31	21.38	29.97464		ES221121MB	1503	2189
62	PCB-78						YES								1503	2189
63	PCB-81						YES								1503	2189
64	PCB-77		2639	1049	1589	0.66	NO	22.24	1.00	22.21	22.28	88.79682		ES221121MB	1503	2189
65	* PCB-104						YES								1073	2922
66	PCB-96						YES								1073	2922
67	* PCB-103						YES								2003	2541
68	PCB-94						YES								2003	2541
69	PCB-95		111553	68355	43198	1.58	NO	19.23	1.09	19.20	19.26	6224.02405			2003	2541
70	PCB-100/93/102/98						YES								2003	2541
71	PCB-88/91		4906	2759	2147	1.29	YES	19.69	1.12	19.66	19.72	245.53255			2003	2541
72	PCB-84		5105	2936	2169	1.35	NO	19.85	1.13	19.81	19.88	273.95573			2003	2541
73	PCB-89						YES								2003	2541
74	PCB-121						YES								2003	2541

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Printed: Wednesday, November 23, 2022 11:42:36 Eastern Standard Time

Name: 9-221117A27, Date: 18-Nov-2022, Time: 08:07:13, ID: L2735553-7, Description: DIL 20x, Vial: Tray1:24

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
75	PCB-92		38760	23586	15174	1.55	NO	20.42	1.16	20.39	20.45	2126.49027			2003	2541
76	PCB-113/90/101		256148	156312	99837	1.57	NO	20.74	1.18	20.70	20.77	10974.55510			2003	2541
77	PCB-83/99		39731	24482	15249	1.61	NO	21.03	0.91	21.00	21.07	2007.76800			2003	2541
78	PCB-112						YES								2003	2541
79	PCB-109/119/86/97/125/87		46094	27975	18118	1.54	NO	21.41	0.92	21.38	21.44	1928.38680		ES221121MJ	2003	2541
80	PCB-117/116/85/110/115		162716	100043	62673	1.60	NO	21.82	0.94	21.78	21.85	6510.09168		ES221121MJ	2003	2541
81	PCB-82		1727	1183	544	2.18	YES	22.03	0.95	22.00	22.06	105.02418			2003	2541
82	PCB-111						YES								2003	2541
83	PCB-120		2224	1263	961	1.31	YES	22.34	0.96	22.30	22.37	75.40434		ES221121MB	2003	2541
84	* PCB-108/124		4024	2312	1712	1.35	NO	22.98	0.99	22.95	23.01	133.18370			1893	2963
85	PCB-107		13547	8192	5355	1.53	NO	23.13	1.00	23.09	23.16	439.71152		ES221121MS	1893	2963
86	PCB-123		1001	559	442	1.27	YES	23.17	1.00	23.14	23.21	34.22038		ES221121MS	1893	2963
87	PCB-106						YES								1893	2963
88	PCB-118		85232	51532	33700	1.53	NO	23.35	1.00	23.32	23.39	2666.35366			1893	2963
89	PCB-122						YES								1893	2963
90	PCB-114		919	753	166	4.53	YES	23.66	1.00	23.62	23.69	32.05910			1893	2963
91	PCB-105		20557	12734	7823	1.63	NO	24.02	1.00	23.99	24.05	756.22558			1893	2963
92	PCB-127						YES								1893	2963
93	PCB-126		2998	1862	1135	1.64	NO	25.63	1.00	25.59	25.66	115.23357		ES221121MB	1893	2963
94	* PCB-155						YES								996	1096
95	PCB-152						YES								996	1096
96	PCB-150		1174	564	610	0.92	YES	20.83	1.01	20.80	20.86	27.42277			996	1096
97	PCB-136		127690	70644	57046	1.24	NO	21.08	1.03	21.04	21.11	3558.16922			996	1096
98	PCB-145						YES								996	1096
99	PCB-148		1105	499	606	0.82	YES	21.90	1.07	21.87	21.93	40.13422			996	1096
100	PCB-151/135		595556	329289	266267	1.24	NO	22.26	1.08	22.23	22.30	23774.74805			996	1096
101	PCB-154						YES								996	1096
102	PCB-144		59949	33448	26501	1.26	NO	22.56	1.10	22.52	22.59	2217.67055			996	1096
103	* PCB-147/149		724024	403193	320831	1.26	NO	22.75	1.11	22.72	22.78	34741.87495			3076	1486
104	PCB-134/143		25871	13994	11877	1.18	NO	22.90	1.11	22.86	22.93	1572.11079			3076	1486
105	PCB-139/140		4801	3037	1764	1.72	YES	23.06	1.12	23.03	23.10	230.77502			3076	1486
106	PCB-131		2797	1608	1189	1.35	NO	23.20	0.88	23.16	23.23	185.60963			3076	1486
107	PCB-142						YES								3076	1486
108	PCB-132		139157	77187	61969	1.25	NO	23.46	0.89	23.43	23.50	7591.67835			3076	1486
109	PCB-133		14224	8115	6109	1.33	NO	23.62	0.89	23.59	23.65	802.79420			3076	1486
110	PCB-165		3200	1739	1460	1.19	NO	23.83	0.90	23.79	23.86	131.59353			3076	1486
111	PCB-146		184024	102744	81280	1.26	NO	23.95	0.90	23.91	23.98	8352.97918			3076	1486

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221117A2-1121ES.qld

Last Altered: Tuesday, November 22, 2022 16:07:50 Eastern Standard Time
Printed: Wednesday, November 23, 2022 11:42:36 Eastern Standard Time

Name: 9-221117A27, Date: 18-Nov-2022, Time: 08:07:13, ID: L2735553-7, Description: DIL 20x, Vial: Tray1:24

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
112	PCB-161						YES								3076	1486
113	PCB-153/168		1303774	728084	575690	1.26	NO	24.27	0.92	24.24	24.31	52845.38760			3076	1486
114	PCB-141		216109	118481	97628	1.21	NO	24.42	0.92	24.38	24.45	11275.78155			3076	1486
115	PCB-130		34878	19505	15374	1.27	NO	24.64	0.93	24.60	24.67	1987.65948			3076	1486
116	PCB-137/164		80350	44646	35703	1.25	NO	24.80	0.94	24.77	24.84	3580.14669		ES221121MJ	3076	1486
117	PCB-138/163/129		958743	531559	427184	1.24	NO	24.97	0.94	24.94	25.01	70285.77900			3076	1486
118	PCB-160						YES								3076	1486
119	PCB-158		88374	49174	39200	1.25	NO	25.17	0.95	25.13	25.20	3184.00321			3076	1486
120	PCB-128/166		20230	11174	9057	1.23	NO	25.63	0.97	25.59	25.66	888.91837			3076	1486
121	PCB-159		14528	8106	6423	1.26	NO	26.11	0.99	26.08	26.14	531.59939			3076	1486
122	PCB-162		3037	1619	1418	1.14	NO	26.23	0.99	26.20	26.26	117.42539			3076	1486
123	PCB-167		29652	16073	13580	1.18	NO	26.48	1.00	26.45	26.52	1031.35426			3076	1486
124	PCB-156/157		44417	24174	20242	1.19	NO	27.11	1.00	27.08	27.15	1609.78320			3076	1486
125	PCB-169		1053	473	579	0.82	YES	28.78	1.00	28.75	28.81	40.47867		ES221121MB	3076	1486
126	* PCB-188		823	375	448	0.84	YES	23.57	1.00	23.54	23.61	21.99281			1467	1402
127	PCB-179		178826	93252	85574	1.09	NO	23.81	1.01	23.78	23.85	5106.04135			1467	1402
128	PCB-184						YES								1467	1402
129	PCB-176		46315	23271	23045	1.01	NO	24.26	1.03	24.23	24.29	1353.49541			1467	1402
130	PCB-186						YES								1467	1402
131	PCB-178		95989	49458	46531	1.06	NO	25.16	1.07	25.12	25.19	3900.27029			1467	1402
132	PCB-175		14185	7235	6949	1.04	NO	25.48	1.08	25.45	25.52	532.79258			1467	1402
133	PCB-187		650942	329022	321920	1.02	NO	25.61	1.09	25.58	25.65	22432.93395			1467	1402
134	PCB-182						YES								1467	1402
135	PCB-183		215037	107998	107040	1.01	NO	25.93	1.10	25.90	25.96	7455.04226			1467	1402
136	PCB-185		40548	20678	19870	1.04	NO	26.03	1.10	25.99	26.06	1545.48142			1467	1402
137	PCB-174		310257	156984	153273	1.02	NO	26.11	1.11	26.08	26.14	11667.39127			1467	1402
138	PCB-177		230876	116054	114822	1.01	NO	26.34	1.12	26.31	26.37	8817.33190			1467	1402
139	PCB-181		1401	482	919	0.52	YES	26.52	0.88	26.49	26.55	53.37667			1467	1402
140	PCB-171/173		86736	43969	42767	1.03	NO	26.67	0.89	26.63	26.70	3473.16248			1467	1402
141	PCB-172		62072	30917	31155	0.99	NO	27.45	0.91	27.42	27.48	2335.66163			1467	1402
142	PCB-192						YES								1467	1402
143	PCB-180/193		866619	438224	428395	1.02	NO	27.79	0.92	27.76	27.82	30305.37680			1467	1402
144	PCB-191		19211	10139	9072	1.12	NO	27.97	0.93	27.94	28.00	583.53766			1467	1402
145	PCB-170		291395	149396	141999	1.05	NO	28.49	0.95	28.46	28.52	11960.98528			1467	1402
146	PCB-190		98767	49979	48788	1.02	NO	28.76	0.96	28.72	28.79	2686.16758			1467	1402
147	* PCB-189		10485	5565	4920	1.13	NO	30.08	1.00	30.05	30.12	389.53565			1178	1241
148	* PCB-202		31382	14525	16857	0.86	NO	26.36	1.00	26.33	26.40	832.36970			683	868

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Last Altered: Tuesday, November 22, 2022 16:07:50 Eastern Standard Time
Printed: Wednesday, November 23, 2022 11:42:36 Eastern Standard Time

Name: 9-221117A27, Date: 18-Nov-2022, Time: 08:07:13, ID: L2735553-7, Description: DIL 20x, Vial: Tray1:24

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
149	PCB-201		18196	8461	9735	0.87	NO	26.83	1.02	26.80	26.87	440.27465			683	868
150	PCB-204						YES								683	868
151	PCB-197		5088	2207	2881	0.77	NO	27.29	1.04	27.26	27.33	127.12646			683	868
152	PCB-200		18065	8594	9471	0.91	NO	27.40	1.04	27.37	27.44	469.45277			683	868
153	PCB-198/199		143855	67863	75992	0.89	NO	28.80	0.91	28.77	28.84	5119.63417			683	868
154	PCB-196		55315	26042	29273	0.89	NO	29.13	0.93	29.10	29.16	1978.43012			683	868
155	PCB-203		82805	39128	43678	0.90	NO	29.24	0.93	29.21	29.27	2859.24208			683	868
156	* PCB-195		37634	17762	19872	0.89	NO	29.98	0.95	29.95	30.02	2482.60235			806	765
157	PCB-194		67323	31916	35406	0.90	NO	31.22	0.99	31.19	31.25	4249.92830			806	765
158	PCB-205		5397	2284	3113	0.73	YES	31.50	1.00	31.47	31.54	247.80802			806	765
159	* PCB-208		2579	1074	1505	0.71	NO	29.80	1.00	29.77	29.83	110.05277			927	1722
160	PCB-207		1313	667	646	1.03	YES	30.28	1.02	30.24	30.31	62.96462		ES221121MB	927	1722
161	PCB-206		8090	3511	4579	0.77	NO	32.60	1.00	32.56	32.63	494.99531			927	1722
162	* PCB-209		345	156	189	0.83	YES	33.73	1.00	33.70	33.77	19.06185		ES221121MB	225	316
163	13C-PCB-31						YES								22444	9857
164	13C-PCB-95						YES								2087	1055
165	13C-PCB-153		333	223	110	2.02	YES	24.25	1.18	24.22	24.28	14.04835	0.7		1938	2350
166	13C-PCB-28		65134	35831	29303	1.22	YES	16.08	0.94	16.05	16.11	1006.54246	50.3		22444	9857
167	13C-PCB-111		57996	34127	23869	1.43	NO	22.10	1.07	22.06	22.13	1231.30651	61.6		2087	1055
168	13C-PCB-178		50924	25741	25184	1.02	NO	25.14	1.01	25.11	25.18	1433.68705	71.7		2423	1243
169	13C-PCB-1		38972	29465	9507	3.10	NO	8.96	0.75	8.93	9.00	676.73618	33.8		1252	12259
170	13C-PCB-3		42145	32314	9830	3.29	NO	10.51	0.88	10.48	10.54	757.43134	37.9		1252	12259
171	13C-PCB-4		50461	30487	19974	1.53	NO	10.69	0.90	10.66	10.72	866.92409	43.3		9566	3104
172	13C-PCB-15		49801	28459	21342	1.33	NO	14.40	1.21	14.37	14.44	831.56379	41.6		9779	3320
173	13C-PCB-19		72979	39111	33868	1.15	NO	12.70	1.06	12.67	12.73	1089.80663	54.5		32566	11932
174	13C-PCB-37		45570	23471	22099	1.06	NO	18.34	1.07	18.31	18.37	750.66523	37.5		22444	9857
175	13C-PCB-54		86924	35924	51000	0.70	NO	14.56	0.85	14.53	14.59	973.45608	48.7		7464	4548
176	13C-PCB-81		50826	23106	27720	0.83	NO	21.90	1.06	21.87	21.93	1003.63811	50.2		5311	2688
177	13C-PCB-77		47472	21211	26260	0.81	NO	22.22	1.07	22.18	22.25	922.68092	46.1		5311	2688
178	13C-PCB-104		71872	43169	28703	1.50	NO	17.60	1.03	17.56	17.63	1159.34311	58.0		1103	914
179	13C-PCB-123		53555	32773	20782	1.58	NO	23.17	1.12	23.14	23.21	1139.81146	57.0		2684	2916
180	13C-PCB-118		49521	31067	18453	1.68	NO	23.34	1.13	23.31	23.38	1143.89106	57.2		2684	2916
181	13C-PCB-114		51470	31288	20182	1.55	NO	23.64	0.95	23.61	23.68	1099.93523	55.0		2684	2916
182	13C-PCB-105		46271	28677	17594	1.63	NO	24.01	0.96	23.97	24.04	1038.36313	51.9		2684	2916
183	13C-PCB-126		45122	27952	17170	1.63	NO	25.60	1.03	25.57	25.64	998.78690	49.9		2684	2916
184	13C-PCB-155		80059	44680	35379	1.26	NO	20.56	0.99	20.53	20.59	1234.69743	61.7		957	1007
185	13C-PCB-167		49231	27876	21355	1.31	NO	26.47	1.06	26.44	26.51	1325.59657	66.3		1938	2350

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Printed: Wednesday, November 23, 2022 11:42:36 Eastern Standard Time

Name: 9-221117A27, Date: 18-Nov-2022, Time: 08:07:13, ID: L2735553-7, Description: DIL 20x, Vial: Tray1:24

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
186	13C-PCB-156/157		93690	51690	42001	1.23	NO	27.13	1.09	27.09	27.16	2649.07383	66.2		1938	2350
187	13C-PCB-169		45670	25290	20380	1.24	NO	28.79	1.15	28.76	28.83	1326.83097	66.3		1938	2350
188	13C-PCB-188		70154	36946	33208	1.11	NO	23.56	0.94	23.53	23.59	1406.60238	70.3		2423	1243
189	13C-PCB-189		54050	27537	26513	1.04	NO	30.07	0.96	30.04	30.11	1502.29816	75.1		3144	1254
190	13C-PCB-202		78546	37106	41440	0.90	NO	26.35	1.06	26.32	26.39	1428.76717	71.4		875	886
191	13C-PCB-205		40632	18774	21858	0.86	NO	31.49	1.01	31.46	31.52	1332.19283	66.6		753	658
192	13C-PCB-208		44938	19882	25056	0.79	NO	29.79	0.95	29.76	29.82	1313.79338	65.7		851	984
193	13C-PCB-206		31070	13118	17952	0.73	NO	32.59	1.04	32.55	32.62	1437.79493	71.9		851	984
194	13C-PCB-209		39259	21264	17995	1.18	NO	33.72	1.08	33.69	33.75	1357.50068	67.9		266	204
195	13C-PCB-9		176922	107303	69619	1.54	NO	11.94	0.48	11.91	11.97	3.79369	0.2		9566	3104
196	13C-PCB-52		79302	33560	45742	0.73	NO	17.07	0.68	17.03	17.10	3.96006	0.2		3405	2943
197	13C-PCB-101		76963	46559	30404	1.53	NO	20.72	0.83	20.68	20.75	4.01655	0.2		2087	1055
198	13C-PCB-138		61083	34353	26730	1.29	NO	24.95	0.00	24.92	24.98	4.06020	0.2		1938	2350
199	13C-PCB-194		49393	23639	25754	0.92	NO	31.21	1.25	31.17	31.24	4.12706	0.2		753	658
200	Total MoCB-F1	1		724								47.27304			1067	
201	Total DiCB-F1			0											1863	
202	Total DiCB-F2	1		35748								2245.14062			2025	
203	Total TrCB-F1			0											1866	
204	Total TrCB-F2	1		845								56.47657			1603	
205	Total TrCB-F3	6		10455								1536.02365			2282	
206	Total TeCB-F2			0											786	
207	Total TeCB-F3	8		19380								2359.41022			833	
208	Total TeCB-F4	10		31393								19340.09329			1503	
209	Total PeCB-F3			0											1073	
210	Total PeCB-F4	12		409836								32740.75724			2003	
211	Total PeCB-F5	22		189545								372180.00657			1893	
212	Total HxCB-F4	5		434443								29618.14482			996	
213	Total HxCB-F5	29		2235438								359985.45957			3076	
214	Total HpCB-F5	22		1631479								122674.75162			1467	
215	Total HpCB-F6	1		9490								389.53565			1178	
216	Total OcCB-F5	9		166958								12355.95412			683	
217	Total OcCB-F6	4		52363								9036.98201			806	
218	Total NoCB-F6	3		5251								668.01271			927	
219	Total DeCB-F7	1		156								19.06185			225	
220	Total 13C-MoCB-F1	2		61779								1434.16752			1252	
221	Total 13C-DiCB-F1	2		137790								870.71779			9566	
222	Total 13C-DiCB-F2	1		28459								831.56379			9779	

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Printed: Wednesday, November 23, 2022 11:42:36 Eastern Standard Time

Name: 9-221117A27, Date: 18-Nov-2022, Time: 08:07:13, ID: L2735553-7, Description: DIL 20x, Vial: Tray1:24

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
223	Total 13C-TrCB-F1	1		232449								1089.80663			32566	
224	Total 13C-TrCB-F3	2		76692								1757.20770			22444	
225	Total 13C-TeCB-F2	1		35924								973.45608			7464	
226	Total 13C-TeCB-F3	1		33560								3.96006			3405	
227	Total 13C-TeCB-F4	2		45617								1926.31903			5311	
228	Total 13C-PeCB-F3	1		43169								1159.34311			1103	
229	Total 13C-PeCB-F4	3		80866								1235.36011			2087	
230	Total 13C-PeCB-F5	5		156090								5420.78779			2684	
231	Total 13C-HxCB-F4	1		45046								1234.69743			957	
232	Total 13C-HxCB-F5	18		143167								5322.05173			1938	
233	Total 13C-HpCB-F5	2		64578								2840.28943			2423	
234	Total 13C-HpCB-F6	1		30563								1502.29816			3144	
235	Total 13C-OcCB-F5	1		37546								1428.76717			875	
236	Total 13C-OcCB-F6	5		43764								1336.79103			753	
237	Total 13C-NoCB-F6	2		33000								2751.58831			851	
238	Total 13C-DeCB-F7	1		21264								1357.50068			266	
239	Lockmass F1			0											719534	
240	Lockmass F2			0											183351	
241	Lockmass F3			0											472178	
242	Lockmass F4			0											382694	
243	Lockmass F5			0											88329	
244	Lockmass F6			0											133278	
245	Lockmass F7			0											29850	

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Printed: Wednesday, November 23, 2022 11:42:36 Eastern Standard Time

Name: 9-221117A28, Date: 18-Nov-2022, Time: 08:49:33, ID: L2735553-8, Description: DIL 20x, Vial: Tray1:25

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
1	* PCB-1						YES								997	1486
2	PCB-2						YES								997	1486
3	PCB-3						YES								997	1486
4	*PCB-4						YES								1471	4077
5	PCB-10						YES								1471	4077
6	PCB-9						YES								1471	4077
7	PCB-7						YES								1471	4077
8	PCB-6						YES								1471	4077
9	PCB-5						YES								1471	4077
10	PCB-8						YES								1471	4077
11	* PCB-14						YES								2694	5126
12	PCB-11		28716	18108	10608	1.71	NO	14.02	0.97	13.98	14.05	943.14953			2694	5126
13	PCB-13/12						YES								2694	5126
14	PCB-15						YES								2694	5126
15	* PCB-19						YES								2482	2282
16	* PCB-30/18		1242	618	624	0.99	NO	13.81	1.09	13.78	13.85	40.14422		ES221121MB	1976	1790
17	PCB-17		494	300	194	1.55	YES	14.07	1.11	14.04	14.11	19.62663		ES221121MB	1976	1790
18	PCB-27						YES								1976	1790
19	PCB-24						YES								1976	1790
20	PCB-16						YES								1976	1790
21	PCB-32						YES								1976	1790
22	* PCB-34						YES								2486	2625
23	PCB-23						YES								2486	2625
24	PCB-29/26		1399	800	599	1.34	YES	15.60	0.85	15.57	15.63	38.00895		ES221121MB	2486	2625
25	PCB-25						YES								2486	2625
26	PCB-31		6408	3590	2818	1.27	YES	15.93	0.87	15.90	15.97	166.92714			2486	2625
27	PCB-28/20		8498	4541	3957	1.15	NO	16.10	0.88	16.07	16.13	235.99271			2486	2625
28	PCB-21/33						YES								2486	2625
29	PCB-22		1797	840	958	0.88	YES	16.49	0.90	16.46	16.52	50.20765			2486	2625
30	PCB-36		426	141	285	0.50	YES	17.34	0.95	17.31	17.37	11.04855			2486	2625
31	PCB-39						YES								2486	2625
32	PCB-38						YES								2486	2625
33	PCB-35						YES								2486	2625
34	PCB-37		893	422	472	0.89	NO	18.38	1.00	18.35	18.41	29.01070			2486	2625
35	* PCB-54						YES								1123	1408
36	* PCB-50/53						YES								677	1700
37	PCB-45/51		486	187	299	0.63	YES	16.19	1.11	16.15	16.22	22.25591			677	1700

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Name: 9-221117A28, Date: 18-Nov-2022, Time: 08:49:33, ID: L2735553-8, Description: DIL 20x, Vial: Tray1:25

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
38	PCB-46						YES								677	1700
39	PCB-52		16732	7125	9607	0.74	NO	17.09	1.17	17.05	17.12	837.42576			677	1700
40	PCB-73						YES								677	1700
41	PCB-43		327	180	147	1.22	YES	17.21	1.18	17.18	17.25	18.68821			677	1700
42	PCB-69/49		7917	3526	4391	0.80	NO	17.36	1.19	17.33	17.39	312.54306			677	1700
43	PCB-48		612	241	371	0.65	YES	17.53	1.20	17.49	17.56	27.24468			677	1700
44	PCB-44/47/65		10305	4689	5616	0.83	NO	17.66	1.21	17.63	17.70	459.47024			677	1700
45	PCB-59/62/75		1200	510	690	0.74	NO	17.84	1.22	17.81	17.87	42.83334			677	1700
46	PCB-42		1778	744	1034	0.72	NO	17.96	1.23	17.92	17.99	98.56749			677	1700
47	PCB-41/71/40						YES								677	1700
48	PCB-64		4693	2103	2590	0.81	NO	18.34	1.26	18.31	18.37	181.80808			677	1700
49	* PCB-72						YES								1532	2901
50	PCB-68						YES								1532	2901
51	PCB-57						YES								1532	2901
52	PCB-58						YES								1532	2901
53	PCB-67						YES								1532	2901
54	PCB-63						YES								1532	2901
55	PCB-61/70/74/76		27331	11530	15801	0.73	NO	19.69	0.90	19.66	19.72	856.26541			1532	2901
56	PCB-66		15890	7064	8826	0.80	NO	19.88	0.91	19.84	19.91	457.61153			1532	2901
57	PCB-55						YES								1532	2901
58	PCB-56		3994	1669	2324	0.72	NO	20.25	0.92	20.22	20.29	128.95785			1532	2901
59	PCB-60		2222	915	1307	0.70	NO	20.38	0.93	20.34	20.41	66.62067			1532	2901
60	PCB-80						YES								1532	2901
61	PCB-79		811	450	361	1.24	YES	21.35	0.97	21.31	21.38	22.14354		ES221121MB	1532	2901
62	PCB-78						YES								1532	2901
63	PCB-81						YES								1532	2901
64	PCB-77		2787	1246	1540	0.81	NO	22.24	1.00	22.21	22.28	81.42194		ES221121MB	1532	2901
65	* PCB-104						YES								1045	3317
66	PCB-96						YES								1045	3317
67	* PCB-103		2030	1034	997	1.04	YES	18.82	1.07	18.79	18.85	93.10681			1496	3177
68	PCB-94						YES								1496	3177
69	PCB-95		125052	76483	48569	1.57	NO	19.24	1.09	19.20	19.27	6688.84732			1496	3177
70	PCB-100/93/102/98						YES								1496	3177
71	PCB-88/91		4749	2768	1981	1.40	NO	19.70	1.12	19.67	19.73	227.87892			1496	3177
72	PCB-84		5056	3326	1729	1.92	YES	19.86	1.13	19.82	19.89	260.09016			1496	3177
73	PCB-89						YES								1496	3177
74	PCB-121						YES								1496	3177

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Name: 9-221117A28, Date: 18-Nov-2022, Time: 08:49:33, ID: L2735553-8, Description: DIL 20x, Vial: Tray1:25

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
75	PCB-92		41399	25341	16058	1.58	NO	20.43	1.16	20.40	20.46	2177.38404			1496	3177
76	PCB-113/90/101		273790	164656	109134	1.51	NO	20.74	1.18	20.70	20.77	11245.62820			1496	3177
77	PCB-83/99		40786	24555	16231	1.51	NO	21.05	0.91	21.02	21.08	1975.89194			1496	3177
78	PCB-112						YES								1496	3177
79	PCB-109/119/86/97/125/87		48186	29782	18405	1.62	NO	21.41	0.92	21.38	21.44	1932.63054		ES221121MJ	1496	3177
80	PCB-117/116/85/110/115		177483	107742	69741	1.54	NO	21.83	0.94	21.79	21.86	6807.42380		ES221121MJ	1496	3177
81	PCB-82		3026	1947	1080	1.80	YES	22.03	0.95	22.00	22.06	176.42142		ES221121MB	1496	3177
82	PCB-111		1095	450	646	0.70	YES	22.10	0.95	22.07	22.14	35.69146		ES221121MB	1496	3177
83	PCB-120		2699	1385	1315	1.05	YES	22.35	0.96	22.31	22.38	87.75466		ES221121MB	1496	3177
84	* PCB-108/124		4838	3111	1726	1.80	YES	23.00	0.99	22.97	23.04	153.49597			2598	2917
85	PCB-107		15548	9954	5594	1.78	NO	23.13	1.00	23.09	23.16	483.80447		ES221121MB	2598	2917
86	PCB-123		879	546	333	1.64	NO	23.19	1.00	23.15	23.22	29.80548		ES221121MB	2598	2917
87	PCB-106						YES								2598	2917
88	PCB-118		94994	58228	36766	1.58	NO	23.37	1.00	23.33	23.40	2802.72347			2598	2917
89	PCB-122		1482	1199	283	4.24	YES	23.57	1.00	23.54	23.61	67.87343			2598	2917
90	PCB-114		2447	1611	836	1.93	YES	23.66	1.00	23.62	23.69	81.16106			2598	2917
91	PCB-105		20502	13269	7234	1.83	YES	24.03	1.00	24.00	24.06	673.06468			2598	2917
92	PCB-127						YES								2598	2917
93	PCB-126		2481	1411	1071	1.32	NO	25.63	1.00	25.59	25.66	82.12664		ES221121MB	2598	2917
94	* PCB-155						YES								1012	912
95	PCB-152						YES								1012	912
96	PCB-150		1307	616	691	0.89	YES	20.84	1.01	20.80	20.87	29.20191			1012	912
97	PCB-136		143925	79789	64135	1.24	NO	21.09	1.03	21.05	21.12	3835.29739			1012	912
98	PCB-145						YES								1012	912
99	PCB-148		1229	549	680	0.81	YES	21.91	1.07	21.88	21.94	42.68544			1012	912
100	PCB-151/135		662343	364669	297674	1.23	NO	22.27	1.08	22.24	22.30	25285.44717			1012	912
101	PCB-154						YES								1012	912
102	PCB-144		63679	35484	28196	1.26	NO	22.57	1.10	22.53	22.60	2252.72634			1012	912
103	* PCB-147/149		776011	433705	342306	1.27	NO	22.76	1.11	22.73	22.80	33531.54592			2846	1829
104	PCB-134/143		30420	16706	13714	1.22	NO	22.90	1.11	22.86	22.93	1664.63036			2846	1829
105	PCB-139/140		4513	2537	1976	1.28	NO	23.06	1.12	23.03	23.10	195.34673			2846	1829
106	PCB-131		3480	1794	1686	1.06	NO	23.21	0.88	23.18	23.24	208.01600			2846	1829
107	PCB-142						YES								2846	1829
108	PCB-132		150132	83513	66619	1.25	NO	23.48	0.89	23.44	23.51	7375.52819			2846	1829
109	PCB-133		15025	8662	6362	1.36	NO	23.63	0.89	23.60	23.67	763.62620			2846	1829
110	PCB-165		3259	1829	1430	1.28	NO	23.83	0.90	23.79	23.86	120.69520			2846	1829
111	PCB-146		199439	111628	87811	1.27	NO	23.96	0.90	23.93	23.99	8151.99243			2846	1829

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

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Name: 9-221117A28, Date: 18-Nov-2022, Time: 08:49:33, ID: L2735553-8, Description: DIL 20x, Vial: Tray1:25

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
112	PCB-161						YES								2846	1829
113	PCB-153/168		1456743	811321	645421	1.26	NO	24.27	0.92	24.24	24.31	53170.76661			2846	1829
114	PCB-141		235283	131269	104014	1.26	NO	24.42	0.92	24.38	24.45	11054.77100			2846	1829
115	PCB-130		36531	20805	15726	1.32	NO	24.65	0.93	24.61	24.68	1874.67706			2846	1829
116	PCB-137/164		79452	43861	35591	1.23	NO	24.82	0.94	24.78	24.85	3187.91914			2846	1829
117	PCB-138/163/129		1022952	571072	451880	1.26	NO	24.97	0.94	24.94	25.01	67531.41176			2846	1829
118	PCB-160						YES								2846	1829
119	PCB-158		93706	51885	41821	1.24	NO	25.17	0.95	25.13	25.20	3040.20840			2846	1829
120	PCB-128/166		77170	42447	34723	1.22	NO	25.69	0.97	25.65	25.72	3053.45059			2846	1829
121	PCB-159		15179	8501	6678	1.27	NO	26.12	0.99	26.09	26.16	500.14840			2846	1829
122	PCB-162		3083	1762	1321	1.33	NO	26.24	0.99	26.21	26.28	107.36499			2846	1829
123	PCB-167		33176	18683	14493	1.29	NO	26.50	1.00	26.46	26.53	1000.43246			2846	1829
124	PCB-156/157		47392	26886	20505	1.31	NO	27.13	1.00	27.09	27.16	1528.03159			2846	1829
125	PCB-169		1021	575	446	1.29	NO	28.79	1.00	28.76	28.83	37.38792		ES221121MB	2846	1829
126	* PCB-188						YES								2017	1378
127	PCB-179		201863	101698	100165	1.02	NO	23.83	1.01	23.79	23.86	5222.64853			2017	1378
128	PCB-184						YES								2017	1378
129	PCB-176		50085	25701	24384	1.05	NO	24.27	1.03	24.24	24.31	1326.22289			2017	1378
130	PCB-186						YES								2017	1378
131	PCB-178		107790	53920	53870	1.00	NO	25.17	1.07	25.13	25.20	3968.54658			2017	1378
132	PCB-175		16855	8082	8773	0.92	NO	25.48	1.08	25.45	25.52	573.65913			2017	1378
133	PCB-187		734093	370376	363717	1.02	NO	25.63	1.09	25.59	25.66	22923.12288			2017	1378
134	PCB-182						YES								2017	1378
135	PCB-183		247782	124507	123275	1.01	NO	25.94	1.10	25.91	25.97	7783.67390			2017	1378
136	PCB-185		45879	23268	22611	1.03	NO	26.04	1.10	26.00	26.07	1584.49072			2017	1378
137	PCB-174		318685	161643	157042	1.03	NO	26.12	1.11	26.09	26.16	10859.07040			2017	1378
138	PCB-177		253555	129641	123914	1.05	NO	26.35	1.12	26.32	26.39	8774.23729			2017	1378
139	PCB-181		1038	760	278	2.73	YES	26.55	0.88	26.51	26.58	35.82439			2017	1378
140	PCB-171/173		96672	49413	47258	1.05	NO	26.68	0.89	26.64	26.71	3507.54313			2017	1378
141	PCB-172		70012	35545	34467	1.03	NO	27.45	0.91	27.42	27.48	2387.07642			2017	1378
142	PCB-192						YES								2017	1378
143	PCB-180/193		1009622	513419	496203	1.03	NO	27.79	0.92	27.76	27.82	31991.12983			2017	1378
144	PCB-191		21563	10540	11023	0.96	NO	27.98	0.93	27.95	28.02	593.48618			2017	1378
145	PCB-170		321093	161895	159198	1.02	NO	28.50	0.95	28.47	28.54	11942.49179			2017	1378
146	PCB-190		106491	52835	53656	0.98	NO	28.77	0.96	28.74	28.80	2624.30632			2017	1378
147	* PCB-189		12389	6202	6187	1.00	NO	30.10	1.00	30.06	30.13	428.11999			1183	1108
148	* PCB-202		39680	18697	20983	0.89	NO	26.36	1.00	26.33	26.40	930.37760			603	752

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	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
149	PCB-201		24817	11843	12974	0.91	NO	26.83	1.02	26.80	26.87	534.60892			603	752
150	PCB-204						YES								603	752
151	PCB-197		7324	3490	3835	0.91	NO	27.29	1.04	27.26	27.33	162.94544			603	752
152	PCB-200		19253	9406	9847	0.96	NO	27.42	1.04	27.38	27.45	445.46846			603	752
153	PCB-198/199		170137	78388	91749	0.85	NO	28.80	0.91	28.77	28.84	5391.00368			603	752
154	PCB-196		67398	30599	36799	0.83	NO	29.14	0.93	29.11	29.18	2146.27346			603	752
155	PCB-203		88932	40116	48815	0.82	NO	29.24	0.93	29.21	29.27	2734.04543			603	752
156	* PCB-195		39187	18569	20619	0.90	NO	29.99	0.95	29.96	30.03	2301.59554			918	698
157	PCB-194		79145	36457	42688	0.85	NO	31.23	0.99	31.20	31.27	4448.38665			918	698
158	PCB-205		6935	3069	3865	0.79	NO	31.50	1.00	31.47	31.54	287.48145			918	698
159	* PCB-208		2585	1257	1328	0.95	YES	29.81	1.00	29.78	29.85	100.39559			646	2021
160	PCB-207		1778	709	1069	0.66	NO	30.29	1.02	30.26	30.32	79.79269			646	2021
161	PCB-206		9205	4200	5005	0.84	NO	32.61	1.00	32.58	32.64	549.37703			646	2021
162	* PCB-209		650	310	340	0.91	YES	33.76	1.00	33.73	33.80	31.87744			231	307
163	13C-PCB-31						YES								24147	12195
164	13C-PCB-95						YES								1620	1494
165	13C-PCB-153		583	312	271	1.15	NO	24.26	1.18	24.23	24.29	22.58817	1.1		1211	1537
166	13C-PCB-28		71854	39191	32663	1.20	YES	16.09	0.94	16.06	16.12	1123.98958	56.2		24147	12195
167	13C-PCB-111		65067	39762	25305	1.57	NO	22.10	1.07	22.07	22.14	1423.79298	71.2		1620	1494
168	13C-PCB-178		56728	27842	28885	0.96	NO	25.16	1.01	25.12	25.19	1547.81535	77.4		1745	1347
169	13C-PCB-1		45722	33592	12129	2.77	NO	8.98	0.75	8.94	9.01	768.66293	38.4		1940	11731
170	13C-PCB-3		51077	39279	11799	3.33	NO	10.51	0.88	10.48	10.54	888.73701	44.4		1940	11731
171	13C-PCB-4		59092	36686	22406	1.64	NO	10.69	0.90	10.66	10.72	982.87402	49.1		7574	2478
172	13C-PCB-15		55145	33937	21208	1.60	NO	14.41	1.21	14.38	14.45	891.48080	44.6		7201	2861
173	13C-PCB-19		80153	39304	40850	0.96	NO	12.71	1.06	12.68	12.75	1158.83326	57.9		37314	13707
174	13C-PCB-37		56036	30279	25758	1.18	NO	18.35	1.07	18.32	18.38	934.39041	46.7		24147	12195
175	13C-PCB-54		104807	42911	61896	0.69	NO	14.58	0.85	14.55	14.61	1188.10567	59.4		8144	4795
176	13C-PCB-81		53424	23937	29487	0.81	NO	21.90	1.06	21.87	21.93	1087.29684	54.4		4809	2856
177	13C-PCB-77		54672	25291	29381	0.86	NO	22.22	1.07	22.18	22.25	1095.22537	54.8		4809	2856
178	13C-PCB-104		75520	46238	29282	1.58	NO	17.61	1.03	17.57	17.64	1255.56238	62.8		1252	1342
179	13C-PCB-123		54028	32732	21296	1.54	NO	23.19	1.12	23.15	23.22	1185.15567	59.3		1589	1535
180	13C-PCB-118		52508	31713	20795	1.52	NO	23.34	1.13	23.31	23.38	1250.08459	62.5		1589	1535
181	13C-PCB-114		54122	34405	19717	1.75	NO	23.66	0.95	23.62	23.69	1192.09515	59.6		1589	1535
182	13C-PCB-105		51848	31976	19872	1.61	NO	24.02	0.96	23.99	24.05	1199.21680	60.0		1589	1535
183	13C-PCB-126		52411	33439	18973	1.76	NO	25.61	1.03	25.58	25.65	1195.71776	59.8		1589	1535
184	13C-PCB-155		83718	47096	36622	1.29	NO	20.57	0.99	20.54	20.60	1330.72188	66.5		831	850
185	13C-PCB-167		56784	31926	24858	1.28	NO	26.48	1.06	26.45	26.52	1481.82849	74.1		1211	1537

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221117A2-1121ES.qld

Last Altered: Tuesday, November 22, 2022 16:07:50 Eastern Standard Time
Printed: Wednesday, November 23, 2022 11:42:36 Eastern Standard Time

Name: 9-221117A28, Date: 18-Nov-2022, Time: 08:49:33, ID: L2735553-8, Description: DIL 20x, Vial: Tray1:25

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
186	13C-PCB-156/157		105313	58847	46466	1.27	NO	27.13	1.09	27.09	27.16	2885.87616	72.1		1211	1537
187	13C-PCB-169		47967	25968	21999	1.18	NO	28.80	1.15	28.77	28.84	1350.58205	67.5		1211	1537
188	13C-PCB-188		78964	40658	38306	1.06	NO	23.57	0.94	23.54	23.61	1534.42740	76.7		1745	1347
189	13C-PCB-189		58110	30222	27888	1.08	NO	30.07	0.96	30.04	30.11	1565.33411	78.3		2796	1755
190	13C-PCB-202		88853	42549	46304	0.92	NO	26.35	1.06	26.32	26.39	1566.39932	78.3		834	1114
191	13C-PCB-205		45004	20792	24212	0.86	NO	31.49	1.01	31.46	31.52	1454.23922	72.7		1094	775
192	13C-PCB-208		49371	21494	27877	0.77	NO	29.80	0.95	29.77	29.83	1422.56714	71.1		777	1059
193	13C-PCB-206		31856	14636	17220	0.85	NO	32.60	1.04	32.56	32.63	1452.86279	72.6		777	1059
194	13C-PCB-209		44175	24330	19845	1.23	NO	33.73	1.08	33.70	33.77	1505.46807	75.3		257	345
195	13C-PCB-9		182741	109378	73362	1.49	NO	11.94	0.48	11.91	11.97	3.91847	0.2		7574	2478
196	13C-PCB-52		78342	34357	43985	0.78	NO	17.08	0.68	17.04	17.11	3.91214	0.2		5932	3083
197	13C-PCB-101		74672	45273	29399	1.54	NO	20.73	0.83	20.69	20.76	3.89701	0.2		1620	1494
198	13C-PCB-138		63027	34442	28585	1.20	NO	24.96	0.00	24.93	25.00	4.18940	0.2		1211	1537
199	13C-PCB-194		50117	24361	25756	0.95	NO	31.21	1.25	31.17	31.24	4.18750	0.2		1094	775
200	Total MoCB-F1			0											997	
201	Total DiCB-F1			0											1471	
202	Total DiCB-F2	1		18108								943.14953			2694	
203	Total TrCB-F1			0											2482	
204	Total TrCB-F2	2		918								59.77085			1976	
205	Total TrCB-F3	6		10334								531.19570			2486	
206	Total TeCB-F2			0											1123	
207	Total TeCB-F3	10		19360								2214.36903			677	
208	Total TeCB-F4	10		32644								21885.66799			1532	
209	Total PeCB-F3			0											1045	
210	Total PeCB-F4	13		439466								31708.74925			1496	
211	Total PeCB-F5	22		221260								437901.85609			2598	
212	Total HxCB-F4	6		481245								31839.99630			1012	
213	Total HxCB-F5	29		2436314								302684.25531			2846	
214	Total HpCB-F5	20		1827000								125318.47210			2017	
215	Total HpCB-F6	1		11136								428.11999			1183	
216	Total OcCB-F5	9		192914								12877.10144			603	
217	Total OcCB-F6	4		58520								9496.69443			918	
218	Total NoCB-F6	5		6418								2039.07516			646	
219	Total DeCB-F7	1		310								31.87744			231	
220	Total 13C-MoCB-F1	2		72871								1657.39995			1940	
221	Total 13C-DiCB-F1	2		146065								986.79249			7574	
222	Total 13C-DiCB-F2	1		33937								891.48080			7201	

Quantify Sample Summary Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221117A2-1121ES.qld

Last Altered: Tuesday, November 22, 2022 16:07:50 Eastern Standard Time
Printed: Wednesday, November 23, 2022 11:42:36 Eastern Standard Time

Name: 9-221117A28, Date: 18-Nov-2022, Time: 08:49:33, ID: L2735553-8, Description: DIL 20x, Vial: Tray1:25

	Target Analyte	#Hom	Total Area	Ion1 Area	Ion2 Area	Ra	Ra Fail=Y...	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
223	Total 13C-TrCB-F1	1		241181								1158.83326			37314	
224	Total 13C-TrCB-F3	2		69470								2058.37998			24147	
225	Total 13C-TeCB-F2	1		42911								1188.10567			8144	
226	Total 13C-TeCB-F3	1		34357								3.91214			5932	
227	Total 13C-TeCB-F4	2		49690								2182.52221			4809	
228	Total 13C-PeCB-F3	1		46238								1255.56238			1252	
229	Total 13C-PeCB-F4	4		85761								1427.84152			1620	
230	Total 13C-PeCB-F5	5		168737								6022.26997			1589	
231	Total 13C-HxCB-F4	1		47429								1330.72188			831	
232	Total 13C-HxCB-F5	12		153761								5746.51950			1211	
233	Total 13C-HpCB-F5	2		69899								3082.24275			1745	
234	Total 13C-HpCB-F6	1		33738								1565.33411			2796	
235	Total 13C-OcCB-F5	1		43014								1566.39932			834	
236	Total 13C-OcCB-F6	4		46782								1458.99929			1094	
237	Total 13C-NoCB-F6	2		36130								2875.42993			777	
238	Total 13C-DeCB-F7	1		24330								1505.46807			257	
239	Lockmass F1			0											10284...	
240	Lockmass F2			0											199016	
241	Lockmass F3			0											538253	
242	Lockmass F4			0											381526	
243	Lockmass F5			0											105133	
244	Lockmass F6			0											128237	
245	Lockmass F7			0											36036	

Quantify Sample Report **MassLynx V4.2 SCN1012**

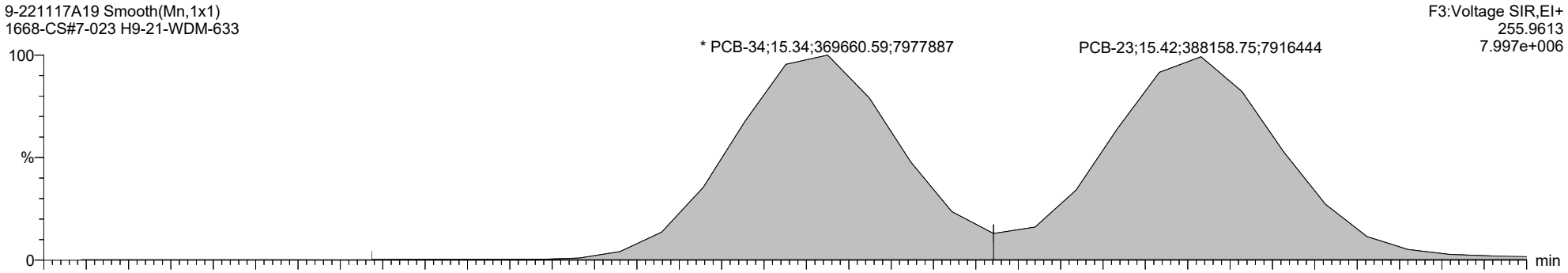
Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221117A2-1121ES.qld

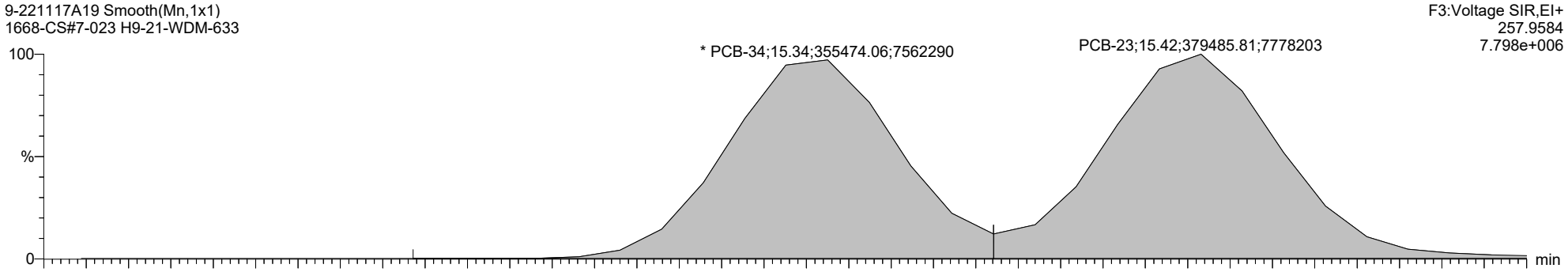
Last Altered: Tuesday, November 22, 2022 16:07:50 Eastern Standard Time
Printed: Wednesday, November 23, 2022 11:42:36 Eastern Standard Time

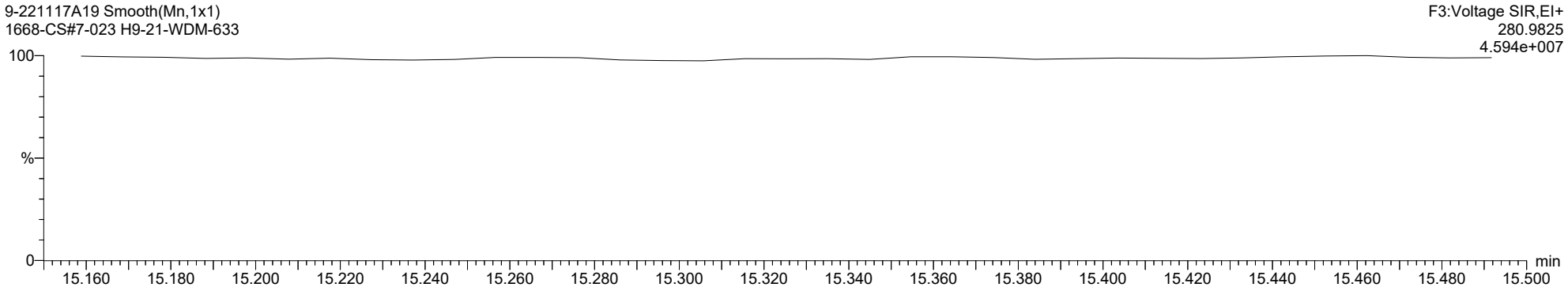
Method: C:\MassLynx\PCB.PRO\MethDB\1668_OCTYL_209-9-221117A1.mdb 17 Nov 2022 11:18:33
Calibration: 22 Nov 2022 16:07:50

Name: 9-221117A19, Date: 18-Nov-2022, Time: 02:30:40, ID: H9-21-WDM-633, Description: 1668-CS#7-023, Vial: Tray1:2

*** PCB-34**

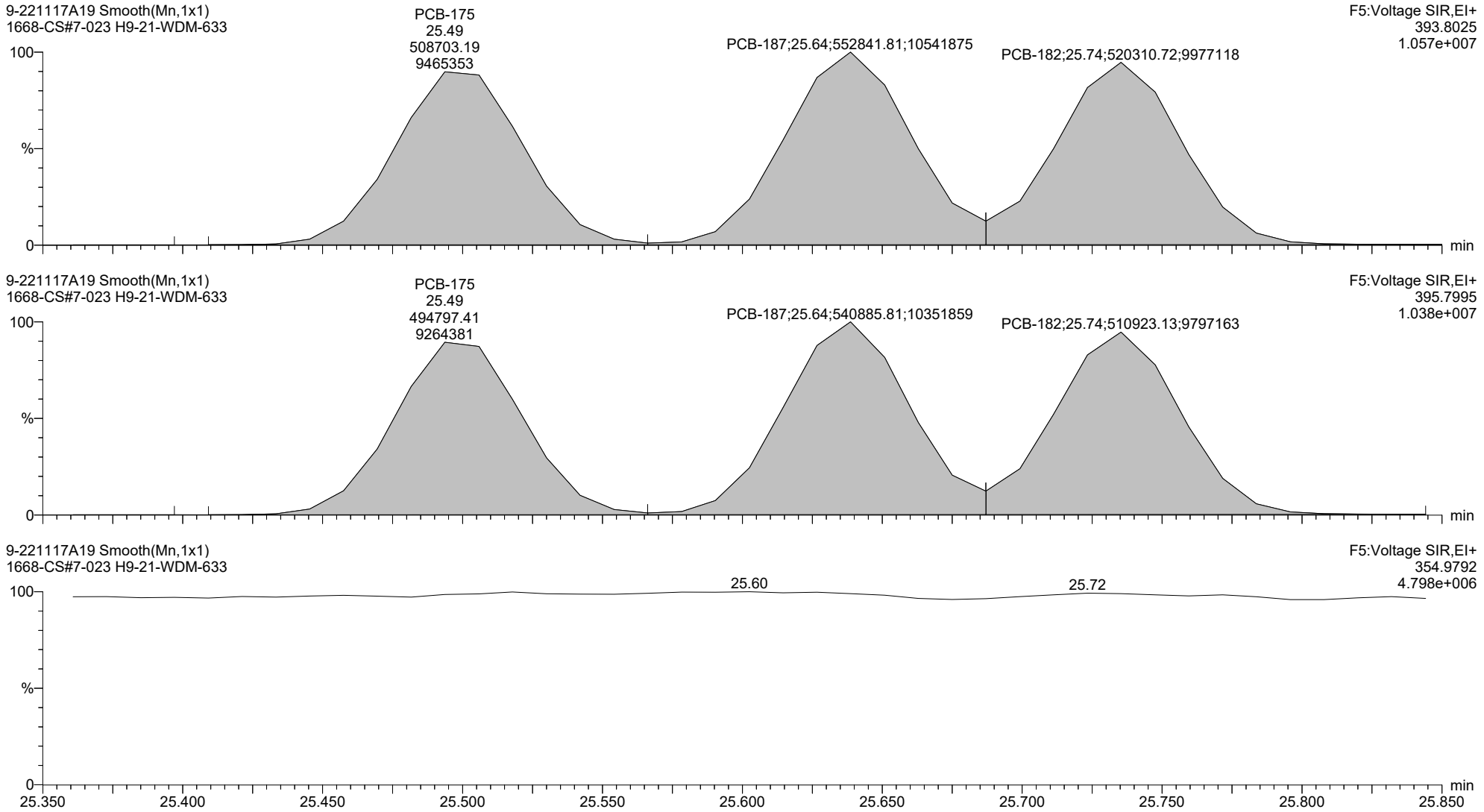






Name: 9-221117A19, Date: 18-Nov-2022, Time: 02:30:40, ID: H9-21-WDM-633, Description: 1668-CS#7-023, Vial: Tray1:2

PCB-187



Quantify Audit Report MassLynx V4.2 SCN1012

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221117A2-1121ES.qld

Last Altered: Tuesday, November 22, 2022 16:07:50 Eastern Standard Time
Printed: Wednesday, November 23, 2022 11:42:36 Eastern Standard Time

Date	Time	Event	Details	Comments
22-Nov-22	13:53:24	Pre modification peak	Sample:9-221117A29, Compound:13C-TrCB-F3, RT:18.310	
22-Nov-22	13:53:24	Peak modified	Sample:9-221117A29, Compound:13C-TrCB-F3, RT:18.310	ES221122MB
22-Nov-22	13:53:46	Pre modification peak	Sample:9-221117A29, Compound:13C-MoCB-F1, RT:8.977	
22-Nov-22	13:53:46	Peak modified	Sample:9-221117A29, Compound:13C-MoCB-F1, RT:8.977	ES221122MB
22-Nov-22	13:54:06	Pre modification peak	Sample:9-221117A21, Compound:13C-PeCB-F5, RT:24.020	
22-Nov-22	13:54:06	Peak modified	Sample:9-221117A21, Compound:13C-PeCB-F5, RT:24.020	ES221122MB
22-Nov-22	13:54:19	Pre modification peak	Sample:9-221117A21, Compound:13C-TrCB-F1, RT:12.715	
22-Nov-22	13:54:19	Peak modified	Sample:9-221117A21, Compound:13C-TrCB-F1, RT:12.715	ES221122MB
22-Nov-22	13:54:44	Pre modification peak	Sample:9-221117A26, Compound:13C-DiCB-F2, RT:14.395	
22-Nov-22	13:54:44	Peak modified	Sample:9-221117A26, Compound:13C-DiCB-F2, RT:14.395	ES221122MB
22-Nov-22	13:54:44	Pre modification peak	Sample:9-221117A26, Compound:13C-DiCB-F2, RT:14.395	
22-Nov-22	13:54:44	Peak modified	Sample:9-221117A26, Compound:13C-DiCB-F2, RT:14.395	ES221122MB
22-Nov-22	13:54:59	Dataset Saved	Saved to 'I:\Organics Instrument\HIGHRES GCMS Complete...	
22-Nov-22	16:07:31	Method modified		
22-Nov-22	16:07:50	Process Calibrate		
22-Nov-22	16:07:50	Process Quantify		
22-Nov-22	16:08:07	Dataset Saved	Saved to 'I:\Organics Instrument\HIGHRES GCMS Complete...	
21-Nov-22	20:37:08	Pre modification peak	Sample:9-221117A19, Compound:TrCB-F2, RT:13.769	
21-Nov-22	20:37:08	Peak modified	Sample:9-221117A19, Compound:TrCB-F2, RT:13.769	ES221121MB
21-Nov-22	20:37:08	Pre modification peak	Sample:9-221117A19, Compound:TrCB-F2, RT:13.677	
21-Nov-22	20:37:08	Peak modified	Sample:9-221117A19, Compound:TrCB-F2, RT:13.677	ES221121MB
21-Nov-22	20:37:08	Pre modification peak	Sample:9-221117A19, Compound:TrCB-F2, RT:13.769	
21-Nov-22	20:37:08	Peak modified	Sample:9-221117A19, Compound:TrCB-F2, RT:13.769	ES221121MB
21-Nov-22	20:37:08	Pre modification peak	Sample:9-221117A19, Compound:TrCB-F2, RT:12.939	
21-Nov-22	20:37:08	Peak modified	Sample:9-221117A19, Compound:TrCB-F2, RT:12.939	ES221121MB
21-Nov-22	20:37:37	Pre modification peak	Sample:9-221117A19, Compound:TrCB-F3, RT:16.098	
21-Nov-22	20:37:37	Peak modified	Sample:9-221117A19, Compound:TrCB-F3, RT:16.098	ES221121MB
21-Nov-22	20:37:37	Pre modification peak	Sample:9-221117A19, Compound:TrCB-F3, RT:14.934	
21-Nov-22	20:37:37	Peak modified	Sample:9-221117A19, Compound:TrCB-F3, RT:14.934	ES221121MB
21-Nov-22	20:37:37	Pre modification peak	Sample:9-221117A19, Compound:TrCB-F3, RT:16.098	
21-Nov-22	20:37:37	Peak modified	Sample:9-221117A19, Compound:TrCB-F3, RT:16.098	ES221121MB
21-Nov-22	20:37:37	Pre modification peak	Sample:9-221117A19, Compound:TrCB-F3, RT:14.934	
21-Nov-22	20:37:37	Peak modified	Sample:9-221117A19, Compound:TrCB-F3, RT:14.934	ES221121MB
21-Nov-22	20:37:57	Pre modification peak	Sample:9-221117A19, Compound:TeCB-F3, RT:14.934	
21-Nov-22	20:37:57	Peak modified	Sample:9-221117A19, Compound:TeCB-F3, RT:14.934	ES221121MB
21-Nov-22	20:37:57	Pre modification peak	Sample:9-221117A19, Compound:TeCB-F3, RT:17.312	
21-Nov-22	20:37:57	Peak modified	Sample:9-221117A19, Compound:TeCB-F3, RT:17.312	ES221121MB
21-Nov-22	20:37:57	Pre modification peak	Sample:9-221117A19, Compound:TeCB-F3, RT:14.934	
21-Nov-22	20:37:57	Peak modified	Sample:9-221117A19, Compound:TeCB-F3, RT:14.934	ES221121MB
21-Nov-22	20:37:57	Pre modification peak	Sample:9-221117A19, Compound:TeCB-F3, RT:17.312	
21-Nov-22	20:37:57	Peak modified	Sample:9-221117A19, Compound:TeCB-F3, RT:17.312	ES221121MB
21-Nov-22	20:38:35	Pre modification peak	Sample:9-221117A19, Compound:PeCB-F4, RT:18.489	
21-Nov-22	20:38:35	Peak modified	Sample:9-221117A19, Compound:PeCB-F4, RT:18.489	ES221121MB
21-Nov-22	20:38:35	Pre modification peak	Sample:9-221117A19, Compound:PeCB-F4, RT:18.489	
21-Nov-22	20:38:35	Peak modified	Sample:9-221117A19, Compound:PeCB-F4, RT:18.489	ES221121MB
21-Nov-22	20:38:35	Pre modification peak	Sample:9-221117A19, Compound:PeCB-F4, RT:19.293	
21-Nov-22	20:38:35	Peak modified	Sample:9-221117A19, Compound:PeCB-F4, RT:19.293	ES221121MB
21-Nov-22	20:38:35	Pre modification peak	Sample:9-221117A19, Compound:PeCB-F4, RT:18.489	
21-Nov-22	20:38:35	Peak modified	Sample:9-221117A19, Compound:PeCB-F4, RT:18.489	ES221121MB
21-Nov-22	20:38:35	Pre modification peak	Sample:9-221117A19, Compound:PeCB-F4, RT:18.489	
21-Nov-22	20:38:35	Peak modified	Sample:9-221117A19, Compound:PeCB-F4, RT:18.489	ES221121MB
21-Nov-22	20:38:35	Pre modification peak	Sample:9-221117A19, Compound:PeCB-F4, RT:18.489	
21-Nov-22	20:38:35	Peak modified	Sample:9-221117A19, Compound:PeCB-F4, RT:18.489	ES221121MB

Quantify Audit Report MassLynx V4.2 SCN1012

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221117A2-1121ES.qld

Last Altered: Tuesday, November 22, 2022 16:07:50 Eastern Standard Time
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Date	Time	Event	Details	Comments
21-Nov-22	20:38:35	Pre modification peak	Sample:9-221117A19, Compound:PeCB-F4, RT:18.489	
21-Nov-22	20:38:35	Peak modified	Sample:9-221117A19, Compound:PeCB-F4, RT:18.489	ES221121MB
21-Nov-22	20:38:35	Pre modification peak	Sample:9-221117A19, Compound:PeCB-F4, RT:19.293	
21-Nov-22	20:38:35	Peak modified	Sample:9-221117A19, Compound:PeCB-F4, RT:19.293	ES221121MB
21-Nov-22	20:38:49	Pre modification peak	Sample:9-221117A19, Compound:PeCB-F4, RT:18.489	
21-Nov-22	20:38:49	Peak modified	Sample:9-221117A19, Compound:PeCB-F4, RT:18.489	ES221121MB
21-Nov-22	20:38:49	Pre modification peak	Sample:9-221117A19, Compound:PeCB-F4, RT:19.691	
21-Nov-22	20:38:49	Peak modified	Sample:9-221117A19, Compound:PeCB-F4, RT:19.691	ES221121MB
21-Nov-22	20:38:49	Pre modification peak	Sample:9-221117A19, Compound:PeCB-F4, RT:18.489	
21-Nov-22	20:38:49	Peak modified	Sample:9-221117A19, Compound:PeCB-F4, RT:18.489	ES221121MB
21-Nov-22	20:38:49	Pre modification peak	Sample:9-221117A19, Compound:PeCB-F4, RT:19.700	
21-Nov-22	20:38:49	Peak modified	Sample:9-221117A19, Compound:PeCB-F4, RT:19.700	ES221121MB
21-Nov-22	20:39:06	Pre modification peak	Sample:9-221117A19, Compound:PeCB-F4, RT:21.319	
21-Nov-22	20:39:06	Peak modified	Sample:9-221117A19, Compound:PeCB-F4, RT:21.319	ES221121MB
21-Nov-22	20:39:06	Pre modification peak	Sample:9-221117A19, Compound:PeCB-F4, RT:18.489	
21-Nov-22	20:39:06	Peak modified	Sample:9-221117A19, Compound:PeCB-F4, RT:18.489	ES221121MB
21-Nov-22	20:39:06	Pre modification peak	Sample:9-221117A19, Compound:PeCB-F4, RT:21.319	
21-Nov-22	20:39:06	Peak modified	Sample:9-221117A19, Compound:PeCB-F4, RT:21.319	ES221121MB
21-Nov-22	20:39:06	Pre modification peak	Sample:9-221117A19, Compound:PeCB-F4, RT:18.489	
21-Nov-22	20:39:06	Peak modified	Sample:9-221117A19, Compound:PeCB-F4, RT:18.489	ES221121MB
21-Nov-22	20:39:27	Pre modification peak	Sample:9-221117A19, Compound:PeCB-F4, RT:21.753	
21-Nov-22	20:39:27	Peak modified	Sample:9-221117A19, Compound:PeCB-F4, RT:21.753	ES221121MB
21-Nov-22	20:39:27	Pre modification peak	Sample:9-221117A19, Compound:PeCB-F4, RT:18.489	
21-Nov-22	20:39:27	Peak modified	Sample:9-221117A19, Compound:PeCB-F4, RT:18.489	ES221121MB
21-Nov-22	20:39:27	Pre modification peak	Sample:9-221117A19, Compound:PeCB-F4, RT:18.489	
21-Nov-22	20:39:27	Peak modified	Sample:9-221117A19, Compound:PeCB-F4, RT:18.489	ES221121MB
21-Nov-22	20:39:27	Pre modification peak	Sample:9-221117A19, Compound:PeCB-F4, RT:18.489	
21-Nov-22	20:39:27	Peak modified	Sample:9-221117A19, Compound:PeCB-F4, RT:18.489	ES221121MB
21-Nov-22	20:39:27	Pre modification peak	Sample:9-221117A19, Compound:PeCB-F4, RT:21.753	
21-Nov-22	20:39:27	Peak modified	Sample:9-221117A19, Compound:PeCB-F4, RT:21.753	ES221121MB
21-Nov-22	20:39:27	Pre modification peak	Sample:9-221117A19, Compound:PeCB-F4, RT:18.489	
21-Nov-22	20:39:27	Peak modified	Sample:9-221117A19, Compound:PeCB-F4, RT:18.489	ES221121MB
21-Nov-22	20:39:52	Pre modification peak	Sample:9-221117A19, Compound:HxCB-F4, RT:22.345	
21-Nov-22	20:39:52	Peak modified	Sample:9-221117A19, Compound:HxCB-F4, RT:22.345	ES221121MB
21-Nov-22	20:39:52	Pre modification peak	Sample:9-221117A19, Compound:HxCB-F4, RT:22.327	
21-Nov-22	20:39:52	Peak modified	Sample:9-221117A19, Compound:HxCB-F4, RT:22.327	ES221121MB
21-Nov-22	20:39:52	Pre modification peak	Sample:9-221117A19, Compound:HxCB-F4, RT:22.345	
21-Nov-22	20:39:52	Peak modified	Sample:9-221117A19, Compound:HxCB-F4, RT:22.345	ES221121MB
21-Nov-22	20:39:52	Pre modification peak	Sample:9-221117A19, Compound:HxCB-F4, RT:22.327	
21-Nov-22	20:39:52	Peak modified	Sample:9-221117A19, Compound:HxCB-F4, RT:22.327	ES221121MB
21-Nov-22	20:40:09	Pre modification peak	Sample:9-221117A19, Compound:HxCB-F5, RT:24.829	
21-Nov-22	20:40:09	Peak modified	Sample:9-221117A19, Compound:HxCB-F5, RT:24.829	ES221121MB
21-Nov-22	20:40:09	Pre modification peak	Sample:9-221117A19, Compound:HxCB-F5, RT:22.666	
21-Nov-22	20:40:09	Peak modified	Sample:9-221117A19, Compound:HxCB-F5, RT:22.666	ES221121MB
21-Nov-22	20:40:09	Pre modification peak	Sample:9-221117A19, Compound:HxCB-F5, RT:22.666	
21-Nov-22	20:40:09	Peak modified	Sample:9-221117A19, Compound:HxCB-F5, RT:22.666	ES221121MB
21-Nov-22	20:40:09	Pre modification peak	Sample:9-221117A19, Compound:HxCB-F5, RT:24.829	
21-Nov-22	20:40:09	Peak modified	Sample:9-221117A19, Compound:HxCB-F5, RT:24.829	ES221121MB
21-Nov-22	20:40:23	Dataset Saved	Saved to 'C:\MassLynx\PCB.PRO\Results\9-221117A2-1121E...	
21-Nov-22	20:40:41	Pre modification peak	Sample:9-221117A21, Compound:MoCB-F1, RT:8.977	
21-Nov-22	20:40:41	Peak modified	Sample:9-221117A21, Compound:MoCB-F1, RT:8.977	ES221121MB
21-Nov-22	20:40:53	Peak added	Sample:9-221117A27, Compound:MoCB-F1, RT:10.392	ES221121MBa
21-Nov-22	20:41:08	Peak modified	Sample:9-221117A27, Compound:MoCB-F1, RT:10.392	ES221121MB

Quantify Audit Report MassLynx V4.2 SCN1012

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221117A2-1121ES.qld

Last Altered: Tuesday, November 22, 2022 16:07:50 Eastern Standard Time
Printed: Wednesday, November 23, 2022 11:42:36 Eastern Standard Time

Date	Time	Event	Details	Comments
21-Nov-22	20:41:22	Peak added	Sample:9-221117A30, Compound:MoCB-F1, RT:9.007	ES221121MB
21-Nov-22	20:41:28	Dataset Saved	Saved to 'C:\MassLynx\PCB.PRO\Results\9-221117A2-1121E...	
21-Nov-22	21:04:28	Peak added	Sample:9-221117A22, Compound:DiCB-F1, RT:12.506	ES221121MB
21-Nov-22	21:04:37	Pre modification peak	Sample:9-221117A23, Compound:DiCB-F1, RT:12.506	
21-Nov-22	21:04:37	Peak modified	Sample:9-221117A23, Compound:DiCB-F1, RT:12.506	ES221121MB
21-Nov-22	21:04:51	Pre modification peak	Sample:9-221117A26, Compound:DiCB-F1, RT:12.506	
21-Nov-22	21:04:51	Peak modified	Sample:9-221117A26, Compound:DiCB-F1, RT:12.506	ES221121MB
21-Nov-22	21:04:51	Pre modification peak	Sample:9-221117A26, Compound:DiCB-F1, RT:12.238	
21-Nov-22	21:04:51	Peak modified	Sample:9-221117A26, Compound:DiCB-F1, RT:12.238	ES221121MB
21-Nov-22	21:05:20	Pre modification peak	Sample:9-221117A29, Compound:DiCB-F1, RT:10.690	
21-Nov-22	21:05:20	Peak modified	Sample:9-221117A29, Compound:DiCB-F1, RT:10.690	ES221121MB
21-Nov-22	21:05:20	Pre modification peak	Sample:9-221117A29, Compound:DiCB-F1, RT:10.690	
21-Nov-22	21:05:20	Peak modified	Sample:9-221117A29, Compound:DiCB-F1, RT:10.690	ES221121MB
21-Nov-22	21:05:28	Pre modification peak	Sample:9-221117A29, Compound:DiCB-F1, RT:12.223	
21-Nov-22	21:05:28	Peak modified	Sample:9-221117A29, Compound:DiCB-F1, RT:12.223	ES221121MB
21-Nov-22	21:05:36	Pre modification peak	Sample:9-221117A30, Compound:DiCB-F1, RT:10.719	
21-Nov-22	21:05:36	Peak modified	Sample:9-221117A30, Compound:DiCB-F1, RT:10.719	ES221121MB
21-Nov-22	21:05:49	Peak deleted	Sample:9-221117A30, Compound:DiCB-F1, RT:11.941	
21-Nov-22	21:05:49	Peak deleted	Sample:9-221117A30, Compound:DiCB-F1, RT:11.970	
21-Nov-22	21:05:56	Pre modification peak	Sample:9-221117A30, Compound:DiCB-F1, RT:12.506	
21-Nov-22	21:05:56	Peak modified	Sample:9-221117A30, Compound:DiCB-F1, RT:12.506	ES221121MB
21-Nov-22	21:05:56	Pre modification peak	Sample:9-221117A30, Compound:DiCB-F1, RT:12.238	
21-Nov-22	21:05:56	Peak modified	Sample:9-221117A30, Compound:DiCB-F1, RT:12.238	ES221121MB
21-Nov-22	21:06:22	Pre modification peak	Sample:9-221117A31, Compound:DiCB-F1, RT:12.521	
21-Nov-22	21:06:22	Peak modified	Sample:9-221117A31, Compound:DiCB-F1, RT:12.521	ES221121MB
21-Nov-22	21:06:22	Peak added	Sample:9-221117A31, Compound:DiCB-F1, RT:12.462	ES221121MB
21-Nov-22	21:06:22	Pre modification peak	Sample:9-221117A31, Compound:DiCB-F1, RT:12.521	
21-Nov-22	21:06:22	Peak modified	Sample:9-221117A31, Compound:DiCB-F1, RT:12.521	ES221121MB
21-Nov-22	21:06:22	Peak added	Sample:9-221117A31, Compound:DiCB-F1, RT:12.462	ES221121MB
21-Nov-22	21:07:29	Dataset Saved	Saved to 'C:\MassLynx\PCB.PRO\Results\9-221117A2-1121E...	
21-Nov-22	21:07:57	Pre modification peak	Sample:9-221117A23, Compound:DiCB-F2, RT:13.999	
21-Nov-22	21:07:57	Peak modified	Sample:9-221117A23, Compound:DiCB-F2, RT:13.999	ES221121MB
21-Nov-22	21:07:57	Pre modification peak	Sample:9-221117A23, Compound:DiCB-F2, RT:14.008	
21-Nov-22	21:07:57	Peak modified	Sample:9-221117A23, Compound:DiCB-F2, RT:14.008	ES221121MB
21-Nov-22	21:08:13	Pre modification peak	Sample:9-221117A29, Compound:DiCB-F2, RT:13.999	
21-Nov-22	21:08:13	Peak modified	Sample:9-221117A29, Compound:DiCB-F2, RT:13.999	ES221121MB
21-Nov-22	21:08:13	Pre modification peak	Sample:9-221117A29, Compound:DiCB-F2, RT:12.939	
21-Nov-22	21:08:13	Peak modified	Sample:9-221117A29, Compound:DiCB-F2, RT:12.939	ES221121MB
21-Nov-22	21:08:20	Peak added	Sample:9-221117A29, Compound:DiCB-F2, RT:14.414	ES221121MB
21-Nov-22	21:08:49	Pre modification peak	Sample:9-221117A29, Compound:TrCB-F1, RT:12.715	
21-Nov-22	21:08:49	Peak modified	Sample:9-221117A29, Compound:TrCB-F1, RT:12.715	ES221121MB
21-Nov-22	21:08:49	Pre modification peak	Sample:9-221117A29, Compound:TrCB-F1, RT:12.715	
21-Nov-22	21:08:49	Peak modified	Sample:9-221117A29, Compound:TrCB-F1, RT:12.715	ES221121MB
21-Nov-22	21:08:58	Dataset Saved	Saved to 'C:\MassLynx\PCB.PRO\Results\9-221117A2-1121E...	
21-Nov-22	21:09:09	Peak added	Sample:9-221117A21, Compound:TrCB-F2, RT:14.211	ES221121MB
21-Nov-22	21:09:17	Pre modification peak	Sample:9-221117A22, Compound:TrCB-F2, RT:14.653	
21-Nov-22	21:09:17	Peak modified	Sample:9-221117A22, Compound:TrCB-F2, RT:14.653	ES221121MB
21-Nov-22	21:09:26	Pre modification peak	Sample:9-221117A24, Compound:TrCB-F2, RT:14.368	
21-Nov-22	21:09:26	Peak modified	Sample:9-221117A24, Compound:TrCB-F2, RT:14.368	ES221121MB
21-Nov-22	21:09:37	Peak added	Sample:9-221117A25, Compound:TrCB-F2, RT:14.358	ES221121MB
21-Nov-22	21:09:52	Pre modification peak	Sample:9-221117A27, Compound:TrCB-F2, RT:13.824	
21-Nov-22	21:09:52	Peak modified	Sample:9-221117A27, Compound:TrCB-F2, RT:13.824	ES221121MB
21-Nov-22	21:09:52	Pre modification peak	Sample:9-221117A27, Compound:TrCB-F2, RT:12.939	

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Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221117A2-1121ES.qld

Last Altered: Tuesday, November 22, 2022 16:07:50 Eastern Standard Time
Printed: Wednesday, November 23, 2022 11:42:36 Eastern Standard Time

Date	Time	Event	Details	Comments
21-Nov-22	21:09:52	Peak modified	Sample:9-221117A27, Compound:TrCB-F2, RT:12.939	ES221121MB
21-Nov-22	21:09:59	Peak added	Sample:9-221117A28, Compound:TrCB-F2, RT:13.815	ES221121MB
21-Nov-22	21:09:59	Peak added	Sample:9-221117A28, Compound:TrCB-F2, RT:14.064	ES221121MB
21-Nov-22	21:10:16	Method modified		
21-Nov-22	21:10:24	Process Calibrate		
21-Nov-22	21:10:24	Process Quantify		
21-Nov-22	21:10:37	Dataset Saved	Saved to 'C:\MassLynx\PCB.PRO\Results\9-221117A2-1121E...	
21-Nov-22	21:10:58	Pre modification peak	Sample:9-221117A27, Compound:TrCB-F3, RT:16.098	
21-Nov-22	21:10:58	Peak modified	Sample:9-221117A27, Compound:TrCB-F3, RT:16.098	ES221121MB
21-Nov-22	21:11:04	Peak added	Sample:9-221117A27, Compound:TrCB-F3, RT:18.340	ES221121MB
21-Nov-22	21:11:04	Peak added	Sample:9-221117A27, Compound:TrCB-F3, RT:18.360	ES221121MB
21-Nov-22	21:11:15	Peak added	Sample:9-221117A28, Compound:TrCB-F3, RT:15.609	ES221121MB
21-Nov-22	21:11:50	Method modified		
21-Nov-22	21:11:58	Process Calibrate		
21-Nov-22	21:11:58	Process Quantify		
21-Nov-22	21:12:52	Peak deleted	Sample:9-221117A21, Compound:TrCB-F3, RT:17.919	
21-Nov-22	21:12:58	Peak modified	Sample:9-221117A21, Compound:TrCB-F3, RT:17.890	
21-Nov-22	21:13:18	Pre modification peak	Sample:9-221117A19, Compound:TrCB-F3, RT:17.283	
21-Nov-22	21:13:18	Peak modified	Sample:9-221117A19, Compound:TrCB-F3, RT:17.283	ES221121MB
21-Nov-22	21:13:18	Pre modification peak	Sample:9-221117A19, Compound:TrCB-F3, RT:17.283	
21-Nov-22	21:13:18	Peak modified	Sample:9-221117A19, Compound:TrCB-F3, RT:17.283	ES221121MB
21-Nov-22	21:13:56	Dataset Saved	Saved to 'C:\MassLynx\PCB.PRO\Results\9-221117A2-1121E...	
21-Nov-22	21:15:19	Method modified		
21-Nov-22	21:15:26	Process Calibrate		
21-Nov-22	21:15:27	Process Quantify		
21-Nov-22	21:16:02	Dataset Saved	Saved to 'C:\MassLynx\PCB.PRO\Results\9-221117A2-1121E...	
21-Nov-22	21:16:30	Pre modification peak	Sample:9-221117A27, Compound:TeCB-F4, RT:20.385	
21-Nov-22	21:16:30	Peak modified	Sample:9-221117A27, Compound:TeCB-F4, RT:20.385	ES221121MB
21-Nov-22	21:17:09	Pre modification peak	Sample:9-221117A21, Compound:TeCB-F4, RT:22.262	
21-Nov-22	21:17:09	Peak modified	Sample:9-221117A21, Compound:TeCB-F4, RT:22.262	ES221121MB
21-Nov-22	21:17:09	Pre modification peak	Sample:9-221117A21, Compound:TeCB-F4, RT:22.410	
21-Nov-22	21:17:09	Peak modified	Sample:9-221117A21, Compound:TeCB-F4, RT:22.410	ES221121MB
21-Nov-22	21:17:32	Pre modification peak	Sample:9-221117A23, Compound:TeCB-F4, RT:21.901	
21-Nov-22	21:17:32	Peak modified	Sample:9-221117A23, Compound:TeCB-F4, RT:21.901	ES221121MB
21-Nov-22	21:17:52	Pre modification peak	Sample:9-221117A24, Compound:TeCB-F4, RT:21.753	
21-Nov-22	21:17:52	Peak modified	Sample:9-221117A24, Compound:TeCB-F4, RT:21.753	ES221121MB
21-Nov-22	21:17:52	Pre modification peak	Sample:9-221117A24, Compound:TeCB-F4, RT:21.901	
21-Nov-22	21:17:52	Peak modified	Sample:9-221117A24, Compound:TeCB-F4, RT:21.901	ES221121MB
21-Nov-22	21:18:10	Pre modification peak	Sample:9-221117A26, Compound:TeCB-F4, RT:21.356	
21-Nov-22	21:18:10	Peak modified	Sample:9-221117A26, Compound:TeCB-F4, RT:21.356	ES221121MB
21-Nov-22	21:18:10	Pre modification peak	Sample:9-221117A26, Compound:TeCB-F4, RT:21.365	
21-Nov-22	21:18:10	Peak modified	Sample:9-221117A26, Compound:TeCB-F4, RT:21.365	ES221121MB
21-Nov-22	21:18:30	Pre modification peak	Sample:9-221117A26, Compound:TeCB-F4, RT:21.920	
21-Nov-22	21:18:30	Peak modified	Sample:9-221117A26, Compound:TeCB-F4, RT:21.920	ES221121MB
21-Nov-22	21:18:45	Pre modification peak	Sample:9-221117A27, Compound:TeCB-F4, RT:21.347	
21-Nov-22	21:18:45	Peak modified	Sample:9-221117A27, Compound:TeCB-F4, RT:21.347	ES221121MB
21-Nov-22	21:19:00	Pre modification peak	Sample:9-221117A28, Compound:TeCB-F4, RT:21.337	
21-Nov-22	21:19:00	Peak modified	Sample:9-221117A28, Compound:TeCB-F4, RT:21.337	ES221121MB
21-Nov-22	21:19:19	Pre modification peak	Sample:9-221117A30, Compound:TeCB-F4, RT:21.337	
21-Nov-22	21:19:19	Peak modified	Sample:9-221117A30, Compound:TeCB-F4, RT:21.337	ES221121MB
21-Nov-22	21:19:19	Pre modification peak	Sample:9-221117A30, Compound:TeCB-F4, RT:21.365	
21-Nov-22	21:19:19	Peak modified	Sample:9-221117A30, Compound:TeCB-F4, RT:21.365	ES221121MB
21-Nov-22	21:19:52	Pre modification peak	Sample:9-221117A22, Compound:TeCB-F4, RT:18.489	

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Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221117A2-1121ES.qld

Last Altered: Tuesday, November 22, 2022 16:07:50 Eastern Standard Time
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Date	Time	Event	Details	Comments
21-Nov-22	21:19:52	Peak modified	Sample:9-221117A22, Compound:TeCB-F4, RT:18.489	ES221121MB
21-Nov-22	21:19:52	Pre modification peak	Sample:9-221117A22, Compound:TeCB-F4, RT:22.262	
21-Nov-22	21:19:52	Peak modified	Sample:9-221117A22, Compound:TeCB-F4, RT:22.262	ES221121MB
21-Nov-22	21:20:33	Pre modification peak	Sample:9-221117A25, Compound:TeCB-F4, RT:22.216	
21-Nov-22	21:20:33	Peak modified	Sample:9-221117A25, Compound:TeCB-F4, RT:22.216	ES221121MB
21-Nov-22	21:20:43	Pre modification peak	Sample:9-221117A26, Compound:TeCB-F4, RT:22.234	
21-Nov-22	21:20:43	Peak modified	Sample:9-221117A26, Compound:TeCB-F4, RT:22.234	ES221121MB
21-Nov-22	21:20:53	Pre modification peak	Sample:9-221117A27, Compound:TeCB-F4, RT:22.225	
21-Nov-22	21:20:53	Peak modified	Sample:9-221117A27, Compound:TeCB-F4, RT:22.225	ES221121MB
21-Nov-22	21:21:09	Peak added	Sample:9-221117A28, Compound:TeCB-F4, RT:22.244	ES221121MB
21-Nov-22	21:21:09	Pre modification peak	Sample:9-221117A28, Compound:TeCB-F4, RT:18.489	
21-Nov-22	21:21:09	Peak modified	Sample:9-221117A28, Compound:TeCB-F4, RT:18.489	ES221121MB
21-Nov-22	21:21:09	Pre modification peak	Sample:9-221117A28, Compound:TeCB-F4, RT:22.244	
21-Nov-22	21:21:09	Peak modified	Sample:9-221117A28, Compound:TeCB-F4, RT:22.244	ES221121MB
21-Nov-22	21:21:27	Pre modification peak	Sample:9-221117A30, Compound:TeCB-F4, RT:22.216	
21-Nov-22	21:21:27	Peak modified	Sample:9-221117A30, Compound:TeCB-F4, RT:22.216	ES221121MB
21-Nov-22	21:21:27	Pre modification peak	Sample:9-221117A30, Compound:TeCB-F4, RT:22.216	
21-Nov-22	21:21:27	Peak modified	Sample:9-221117A30, Compound:TeCB-F4, RT:22.216	ES221121MB
21-Nov-22	21:21:50	Pre modification peak	Sample:9-221117A22, Compound:TeCB-F4, RT:22.253	
21-Nov-22	21:21:50	Peak modified	Sample:9-221117A22, Compound:TeCB-F4, RT:22.253	ES221121MB
21-Nov-22	21:21:50	Peak modified	Sample:9-221117A22, Compound:TeCB-F4, RT:22.225	ES221121MB
21-Nov-22	21:22:07	Pre modification peak	Sample:9-221117A21, Compound:TeCB-F4, RT:22.253	
21-Nov-22	21:22:07	Peak modified	Sample:9-221117A21, Compound:TeCB-F4, RT:22.253	ES221121MB
21-Nov-22	21:22:07	Peak modified	Sample:9-221117A21, Compound:TeCB-F4, RT:22.244	ES221121MB
21-Nov-22	21:23:18	Dataset Saved	Saved to 'C:\MassLynx\PCB.PRO\Results\9-221117A2-1121E...	
21-Nov-22	21:23:38	Peak added	Sample:9-221117A23, Compound:PeCB-F3, RT:17.880	ES221121MA
21-Nov-22	21:23:54	Peak modified	Sample:9-221117A23, Compound:PeCB-F3, RT:17.880	ES221121MB
21-Nov-22	21:24:28	Peak added	Sample:9-221117A30, Compound:PeCB-F4, RT:19.404	ES221121MA
21-Nov-22	21:24:53	Pre modification peak	Sample:9-221117A21, Compound:PeCB-F4, RT:21.420	
21-Nov-22	21:24:53	Peak modified	Sample:9-221117A21, Compound:PeCB-F4, RT:21.420	ES221121MJ
21-Nov-22	21:24:53	Pre modification peak	Sample:9-221117A21, Compound:PeCB-F4, RT:18.489	
21-Nov-22	21:24:53	Peak modified	Sample:9-221117A21, Compound:PeCB-F4, RT:18.489	ES221121MJ
21-Nov-22	21:24:53	Pre modification peak	Sample:9-221117A21, Compound:PeCB-F4, RT:21.420	
21-Nov-22	21:24:53	Peak modified	Sample:9-221117A21, Compound:PeCB-F4, RT:21.420	ES221121MJ
21-Nov-22	21:24:53	Pre modification peak	Sample:9-221117A21, Compound:PeCB-F4, RT:18.489	
21-Nov-22	21:24:53	Peak modified	Sample:9-221117A21, Compound:PeCB-F4, RT:18.489	ES221121MJ
21-Nov-22	21:25:05	Pre modification peak	Sample:9-221117A22, Compound:PeCB-F4, RT:21.420	
21-Nov-22	21:25:05	Peak modified	Sample:9-221117A22, Compound:PeCB-F4, RT:21.420	ES221121MJ
21-Nov-22	21:25:05	Pre modification peak	Sample:9-221117A22, Compound:PeCB-F4, RT:18.489	
21-Nov-22	21:25:05	Peak modified	Sample:9-221117A22, Compound:PeCB-F4, RT:18.489	ES221121MJ
21-Nov-22	21:25:05	Pre modification peak	Sample:9-221117A22, Compound:PeCB-F4, RT:21.420	
21-Nov-22	21:25:05	Peak modified	Sample:9-221117A22, Compound:PeCB-F4, RT:21.420	ES221121MJ
21-Nov-22	21:25:05	Pre modification peak	Sample:9-221117A22, Compound:PeCB-F4, RT:18.489	
21-Nov-22	21:25:05	Peak modified	Sample:9-221117A22, Compound:PeCB-F4, RT:18.489	ES221121MJ
21-Nov-22	21:25:17	Pre modification peak	Sample:9-221117A23, Compound:PeCB-F4, RT:21.411	
21-Nov-22	21:25:17	Peak modified	Sample:9-221117A23, Compound:PeCB-F4, RT:21.411	ES221121MJ
21-Nov-22	21:25:17	Pre modification peak	Sample:9-221117A23, Compound:PeCB-F4, RT:18.489	
21-Nov-22	21:25:17	Peak modified	Sample:9-221117A23, Compound:PeCB-F4, RT:18.489	ES221121MJ
21-Nov-22	21:25:17	Pre modification peak	Sample:9-221117A23, Compound:PeCB-F4, RT:21.411	
21-Nov-22	21:25:17	Peak modified	Sample:9-221117A23, Compound:PeCB-F4, RT:21.411	ES221121MJ
21-Nov-22	21:25:17	Pre modification peak	Sample:9-221117A23, Compound:PeCB-F4, RT:18.489	
21-Nov-22	21:25:17	Peak modified	Sample:9-221117A23, Compound:PeCB-F4, RT:18.489	ES221121MJ
21-Nov-22	21:25:27	Pre modification peak	Sample:9-221117A24, Compound:PeCB-F4, RT:21.411	

Date	Time	Event	Details	Comments
21-Nov-22	21:25:27	Peak modified	Sample:9-221117A24, Compound:PeCB-F4, RT:21.411	ES221121MJ
21-Nov-22	21:25:27	Pre modification peak	Sample:9-221117A24, Compound:PeCB-F4, RT:18.489	
21-Nov-22	21:25:27	Peak modified	Sample:9-221117A24, Compound:PeCB-F4, RT:18.489	ES221121MJ
21-Nov-22	21:25:27	Pre modification peak	Sample:9-221117A24, Compound:PeCB-F4, RT:21.420	
21-Nov-22	21:25:27	Peak modified	Sample:9-221117A24, Compound:PeCB-F4, RT:21.420	ES221121MJ
21-Nov-22	21:25:27	Pre modification peak	Sample:9-221117A24, Compound:PeCB-F4, RT:18.489	
21-Nov-22	21:25:27	Peak modified	Sample:9-221117A24, Compound:PeCB-F4, RT:18.489	ES221121MJ
21-Nov-22	21:25:37	Pre modification peak	Sample:9-221117A25, Compound:PeCB-F4, RT:21.402	
21-Nov-22	21:25:37	Peak modified	Sample:9-221117A25, Compound:PeCB-F4, RT:21.402	ES221121MJ
21-Nov-22	21:25:37	Pre modification peak	Sample:9-221117A25, Compound:PeCB-F4, RT:18.489	
21-Nov-22	21:25:37	Peak modified	Sample:9-221117A25, Compound:PeCB-F4, RT:18.489	ES221121MJ
21-Nov-22	21:25:37	Pre modification peak	Sample:9-221117A25, Compound:PeCB-F4, RT:21.402	
21-Nov-22	21:25:37	Peak modified	Sample:9-221117A25, Compound:PeCB-F4, RT:21.402	ES221121MJ
21-Nov-22	21:25:37	Pre modification peak	Sample:9-221117A25, Compound:PeCB-F4, RT:18.489	
21-Nov-22	21:25:37	Peak modified	Sample:9-221117A25, Compound:PeCB-F4, RT:18.489	ES221121MJ
21-Nov-22	21:25:48	Pre modification peak	Sample:9-221117A26, Compound:PeCB-F4, RT:21.420	
21-Nov-22	21:25:48	Peak modified	Sample:9-221117A26, Compound:PeCB-F4, RT:21.420	ES221121MJ
21-Nov-22	21:25:48	Pre modification peak	Sample:9-221117A26, Compound:PeCB-F4, RT:18.489	
21-Nov-22	21:25:48	Peak modified	Sample:9-221117A26, Compound:PeCB-F4, RT:18.489	ES221121MJ
21-Nov-22	21:25:48	Pre modification peak	Sample:9-221117A26, Compound:PeCB-F4, RT:21.420	
21-Nov-22	21:25:48	Peak modified	Sample:9-221117A26, Compound:PeCB-F4, RT:21.420	ES221121MJ
21-Nov-22	21:25:48	Pre modification peak	Sample:9-221117A26, Compound:PeCB-F4, RT:18.489	
21-Nov-22	21:25:48	Peak modified	Sample:9-221117A26, Compound:PeCB-F4, RT:18.489	ES221121MJ
21-Nov-22	21:25:57	Pre modification peak	Sample:9-221117A27, Compound:PeCB-F4, RT:21.402	
21-Nov-22	21:25:57	Peak modified	Sample:9-221117A27, Compound:PeCB-F4, RT:21.402	ES221121MJ
21-Nov-22	21:25:57	Pre modification peak	Sample:9-221117A27, Compound:PeCB-F4, RT:18.489	
21-Nov-22	21:25:57	Peak modified	Sample:9-221117A27, Compound:PeCB-F4, RT:18.489	ES221121MJ
21-Nov-22	21:25:57	Pre modification peak	Sample:9-221117A27, Compound:PeCB-F4, RT:21.411	
21-Nov-22	21:25:57	Peak modified	Sample:9-221117A27, Compound:PeCB-F4, RT:21.411	ES221121MJ
21-Nov-22	21:25:57	Pre modification peak	Sample:9-221117A27, Compound:PeCB-F4, RT:18.489	
21-Nov-22	21:25:57	Peak modified	Sample:9-221117A27, Compound:PeCB-F4, RT:18.489	ES221121MJ
21-Nov-22	21:26:07	Pre modification peak	Sample:9-221117A28, Compound:PeCB-F4, RT:21.411	
21-Nov-22	21:26:07	Peak modified	Sample:9-221117A28, Compound:PeCB-F4, RT:21.411	ES221121MJ
21-Nov-22	21:26:07	Pre modification peak	Sample:9-221117A28, Compound:PeCB-F4, RT:18.489	
21-Nov-22	21:26:07	Peak modified	Sample:9-221117A28, Compound:PeCB-F4, RT:18.489	ES221121MJ
21-Nov-22	21:26:07	Pre modification peak	Sample:9-221117A28, Compound:PeCB-F4, RT:21.411	
21-Nov-22	21:26:07	Peak modified	Sample:9-221117A28, Compound:PeCB-F4, RT:21.411	ES221121MJ
21-Nov-22	21:26:07	Pre modification peak	Sample:9-221117A28, Compound:PeCB-F4, RT:18.489	
21-Nov-22	21:26:07	Peak modified	Sample:9-221117A28, Compound:PeCB-F4, RT:18.489	ES221121MJ
21-Nov-22	21:26:17	Pre modification peak	Sample:9-221117A29, Compound:PeCB-F4, RT:21.337	
21-Nov-22	21:26:17	Peak modified	Sample:9-221117A29, Compound:PeCB-F4, RT:21.337	ES221121MJ
21-Nov-22	21:26:17	Pre modification peak	Sample:9-221117A29, Compound:PeCB-F4, RT:18.489	
21-Nov-22	21:26:17	Peak modified	Sample:9-221117A29, Compound:PeCB-F4, RT:18.489	ES221121MJ
21-Nov-22	21:26:17	Pre modification peak	Sample:9-221117A29, Compound:PeCB-F4, RT:21.337	
21-Nov-22	21:26:17	Peak modified	Sample:9-221117A29, Compound:PeCB-F4, RT:21.337	ES221121MJ
21-Nov-22	21:26:17	Pre modification peak	Sample:9-221117A29, Compound:PeCB-F4, RT:18.489	
21-Nov-22	21:26:17	Peak modified	Sample:9-221117A29, Compound:PeCB-F4, RT:18.489	ES221121MJ
21-Nov-22	21:26:28	Pre modification peak	Sample:9-221117A30, Compound:PeCB-F4, RT:21.402	
21-Nov-22	21:26:28	Peak modified	Sample:9-221117A30, Compound:PeCB-F4, RT:21.402	ES221121MJ
21-Nov-22	21:26:28	Pre modification peak	Sample:9-221117A30, Compound:PeCB-F4, RT:18.489	
21-Nov-22	21:26:28	Peak modified	Sample:9-221117A30, Compound:PeCB-F4, RT:18.489	ES221121MJ
21-Nov-22	21:26:28	Pre modification peak	Sample:9-221117A30, Compound:PeCB-F4, RT:21.411	
21-Nov-22	21:26:28	Peak modified	Sample:9-221117A30, Compound:PeCB-F4, RT:21.411	ES221121MJ

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Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221117A2-1121ES.qld

Last Altered: Tuesday, November 22, 2022 16:07:50 Eastern Standard Time
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Date	Time	Event	Details	Comments
21-Nov-22	21:26:28	Pre modification peak	Sample:9-221117A30, Compound:PeCB-F4, RT:18.489	
21-Nov-22	21:26:28	Peak modified	Sample:9-221117A30, Compound:PeCB-F4, RT:18.489	ES221121MJ
21-Nov-22	21:26:41	Pre modification peak	Sample:9-221117A31, Compound:PeCB-F4, RT:21.430	
21-Nov-22	21:26:41	Peak modified	Sample:9-221117A31, Compound:PeCB-F4, RT:21.430	ES221121MJ
21-Nov-22	21:26:41	Pre modification peak	Sample:9-221117A31, Compound:PeCB-F4, RT:18.489	
21-Nov-22	21:26:41	Peak modified	Sample:9-221117A31, Compound:PeCB-F4, RT:18.489	ES221121MJ
21-Nov-22	21:26:41	Pre modification peak	Sample:9-221117A31, Compound:PeCB-F4, RT:21.430	
21-Nov-22	21:26:41	Peak modified	Sample:9-221117A31, Compound:PeCB-F4, RT:21.430	ES221121MJ
21-Nov-22	21:26:41	Pre modification peak	Sample:9-221117A31, Compound:PeCB-F4, RT:18.489	
21-Nov-22	21:26:41	Peak modified	Sample:9-221117A31, Compound:PeCB-F4, RT:18.489	ES221121MJ
21-Nov-22	21:27:47	Dataset Saved	Saved to 'C:\MassLynx\PCB.PRO\Results\9-221117A2-1121E...	
21-Nov-22	21:28:20	Pre modification peak	Sample:9-221117A21, Compound:PeCB-F4, RT:18.489	
21-Nov-22	21:28:20	Peak modified	Sample:9-221117A21, Compound:PeCB-F4, RT:18.489	ES221121MJ
21-Nov-22	21:28:20	Pre modification peak	Sample:9-221117A21, Compound:PeCB-F4, RT:21.837	
21-Nov-22	21:28:20	Peak modified	Sample:9-221117A21, Compound:PeCB-F4, RT:21.837	ES221121MJ
21-Nov-22	21:28:20	Pre modification peak	Sample:9-221117A21, Compound:PeCB-F4, RT:18.489	
21-Nov-22	21:28:20	Peak modified	Sample:9-221117A21, Compound:PeCB-F4, RT:18.489	ES221121MJ
21-Nov-22	21:28:20	Pre modification peak	Sample:9-221117A21, Compound:PeCB-F4, RT:21.624	
21-Nov-22	21:28:20	Peak modified	Sample:9-221117A21, Compound:PeCB-F4, RT:21.624	ES221121MJ
21-Nov-22	21:28:20	Pre modification peak	Sample:9-221117A21, Compound:PeCB-F4, RT:21.837	
21-Nov-22	21:28:20	Peak modified	Sample:9-221117A21, Compound:PeCB-F4, RT:21.837	ES221121MJ
21-Nov-22	21:28:20	Pre modification peak	Sample:9-221117A21, Compound:PeCB-F4, RT:18.489	
21-Nov-22	21:28:20	Peak modified	Sample:9-221117A21, Compound:PeCB-F4, RT:18.489	ES221121MJ
21-Nov-22	21:28:43	Pre modification peak	Sample:9-221117A22, Compound:PeCB-F4, RT:21.624	
21-Nov-22	21:28:43	Peak modified	Sample:9-221117A22, Compound:PeCB-F4, RT:21.624	ES221121MJ
21-Nov-22	21:28:43	Pre modification peak	Sample:9-221117A22, Compound:PeCB-F4, RT:21.827	
21-Nov-22	21:28:43	Peak modified	Sample:9-221117A22, Compound:PeCB-F4, RT:21.827	ES221121MJ
21-Nov-22	21:28:43	Pre modification peak	Sample:9-221117A22, Compound:PeCB-F4, RT:18.489	
21-Nov-22	21:28:43	Peak modified	Sample:9-221117A22, Compound:PeCB-F4, RT:18.489	ES221121MJ
21-Nov-22	21:28:43	Pre modification peak	Sample:9-221117A22, Compound:PeCB-F4, RT:18.489	
21-Nov-22	21:28:43	Peak modified	Sample:9-221117A22, Compound:PeCB-F4, RT:18.489	ES221121MJ
21-Nov-22	21:28:43	Pre modification peak	Sample:9-221117A22, Compound:PeCB-F4, RT:21.837	
21-Nov-22	21:28:43	Peak modified	Sample:9-221117A22, Compound:PeCB-F4, RT:21.837	ES221121MJ
21-Nov-22	21:28:43	Pre modification peak	Sample:9-221117A22, Compound:PeCB-F4, RT:18.489	
21-Nov-22	21:28:43	Peak modified	Sample:9-221117A22, Compound:PeCB-F4, RT:18.489	ES221121MJ
21-Nov-22	21:29:03	Pre modification peak	Sample:9-221117A23, Compound:PeCB-F4, RT:18.489	
21-Nov-22	21:29:03	Peak modified	Sample:9-221117A23, Compound:PeCB-F4, RT:18.489	ES221121MJ
21-Nov-22	21:29:03	Pre modification peak	Sample:9-221117A23, Compound:PeCB-F4, RT:21.827	
21-Nov-22	21:29:03	Peak modified	Sample:9-221117A23, Compound:PeCB-F4, RT:21.827	ES221121MJ
21-Nov-22	21:29:03	Pre modification peak	Sample:9-221117A23, Compound:PeCB-F4, RT:18.489	
21-Nov-22	21:29:03	Peak modified	Sample:9-221117A23, Compound:PeCB-F4, RT:18.489	ES221121MJ
21-Nov-22	21:29:03	Pre modification peak	Sample:9-221117A23, Compound:PeCB-F4, RT:18.489	
21-Nov-22	21:29:03	Peak modified	Sample:9-221117A23, Compound:PeCB-F4, RT:18.489	ES221121MJ
21-Nov-22	21:29:03	Pre modification peak	Sample:9-221117A23, Compound:PeCB-F4, RT:21.827	
21-Nov-22	21:29:03	Peak modified	Sample:9-221117A23, Compound:PeCB-F4, RT:21.827	ES221121MJ
21-Nov-22	21:29:03	Pre modification peak	Sample:9-221117A23, Compound:PeCB-F4, RT:18.489	
21-Nov-22	21:29:03	Peak modified	Sample:9-221117A23, Compound:PeCB-F4, RT:18.489	ES221121MJ
21-Nov-22	21:29:20	Pre modification peak	Sample:9-221117A24, Compound:PeCB-F4, RT:18.489	
21-Nov-22	21:29:20	Peak modified	Sample:9-221117A24, Compound:PeCB-F4, RT:18.489	ES221121MJ
21-Nov-22	21:29:20	Pre modification peak	Sample:9-221117A24, Compound:PeCB-F4, RT:21.827	
21-Nov-22	21:29:20	Peak modified	Sample:9-221117A24, Compound:PeCB-F4, RT:21.827	ES221121MJ
21-Nov-22	21:29:20	Pre modification peak	Sample:9-221117A24, Compound:PeCB-F4, RT:18.489	
21-Nov-22	21:29:20	Peak modified	Sample:9-221117A24, Compound:PeCB-F4, RT:18.489	ES221121MJ

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Last Altered: Tuesday, November 22, 2022 16:07:50 Eastern Standard Time
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Date	Time	Event	Details	Comments
21-Nov-22	21:29:20	Pre modification peak	Sample:9-221117A24, Compound:PeCB-F4, RT:18.489	
21-Nov-22	21:29:20	Peak modified	Sample:9-221117A24, Compound:PeCB-F4, RT:18.489	ES221121MJ
21-Nov-22	21:29:20	Pre modification peak	Sample:9-221117A24, Compound:PeCB-F4, RT:21.827	
21-Nov-22	21:29:20	Peak modified	Sample:9-221117A24, Compound:PeCB-F4, RT:21.827	ES221121MJ
21-Nov-22	21:29:20	Pre modification peak	Sample:9-221117A24, Compound:PeCB-F4, RT:18.489	
21-Nov-22	21:29:20	Peak modified	Sample:9-221117A24, Compound:PeCB-F4, RT:18.489	ES221121MJ
21-Nov-22	21:29:40	Pre modification peak	Sample:9-221117A25, Compound:PeCB-F4, RT:18.489	
21-Nov-22	21:29:40	Peak modified	Sample:9-221117A25, Compound:PeCB-F4, RT:18.489	ES221121MJ
21-Nov-22	21:29:40	Pre modification peak	Sample:9-221117A25, Compound:PeCB-F4, RT:21.818	
21-Nov-22	21:29:40	Peak modified	Sample:9-221117A25, Compound:PeCB-F4, RT:21.818	ES221121MJ
21-Nov-22	21:29:40	Pre modification peak	Sample:9-221117A25, Compound:PeCB-F4, RT:18.489	
21-Nov-22	21:29:40	Peak modified	Sample:9-221117A25, Compound:PeCB-F4, RT:18.489	ES221121MJ
21-Nov-22	21:29:40	Pre modification peak	Sample:9-221117A25, Compound:PeCB-F4, RT:21.587	
21-Nov-22	21:29:40	Peak modified	Sample:9-221117A25, Compound:PeCB-F4, RT:21.587	ES221121MJ
21-Nov-22	21:29:40	Pre modification peak	Sample:9-221117A25, Compound:PeCB-F4, RT:21.818	
21-Nov-22	21:29:40	Peak modified	Sample:9-221117A25, Compound:PeCB-F4, RT:21.818	ES221121MJ
21-Nov-22	21:29:40	Pre modification peak	Sample:9-221117A25, Compound:PeCB-F4, RT:18.489	
21-Nov-22	21:29:40	Peak modified	Sample:9-221117A25, Compound:PeCB-F4, RT:18.489	ES221121MJ
21-Nov-22	21:30:02	Pre modification peak	Sample:9-221117A26, Compound:PeCB-F4, RT:21.633	
21-Nov-22	21:30:02	Peak modified	Sample:9-221117A26, Compound:PeCB-F4, RT:21.633	ES221121MJ
21-Nov-22	21:30:02	Pre modification peak	Sample:9-221117A26, Compound:PeCB-F4, RT:21.837	
21-Nov-22	21:30:02	Peak modified	Sample:9-221117A26, Compound:PeCB-F4, RT:21.837	ES221121MJ
21-Nov-22	21:30:02	Pre modification peak	Sample:9-221117A26, Compound:PeCB-F4, RT:18.489	
21-Nov-22	21:30:02	Peak modified	Sample:9-221117A26, Compound:PeCB-F4, RT:18.489	ES221121MJ
21-Nov-22	21:30:02	Pre modification peak	Sample:9-221117A26, Compound:PeCB-F4, RT:18.489	
21-Nov-22	21:30:02	Peak modified	Sample:9-221117A26, Compound:PeCB-F4, RT:18.489	ES221121MJ
21-Nov-22	21:30:02	Pre modification peak	Sample:9-221117A26, Compound:PeCB-F4, RT:21.837	
21-Nov-22	21:30:02	Peak modified	Sample:9-221117A26, Compound:PeCB-F4, RT:21.837	ES221121MJ
21-Nov-22	21:30:02	Pre modification peak	Sample:9-221117A26, Compound:PeCB-F4, RT:18.489	
21-Nov-22	21:30:02	Peak modified	Sample:9-221117A26, Compound:PeCB-F4, RT:18.489	ES221121MJ
21-Nov-22	21:30:20	Pre modification peak	Sample:9-221117A27, Compound:PeCB-F4, RT:18.489	
21-Nov-22	21:30:20	Peak modified	Sample:9-221117A27, Compound:PeCB-F4, RT:18.489	ES221121MJ
21-Nov-22	21:30:20	Pre modification peak	Sample:9-221117A27, Compound:PeCB-F4, RT:21.818	
21-Nov-22	21:30:20	Peak modified	Sample:9-221117A27, Compound:PeCB-F4, RT:21.818	ES221121MJ
21-Nov-22	21:30:20	Pre modification peak	Sample:9-221117A27, Compound:PeCB-F4, RT:18.489	
21-Nov-22	21:30:20	Peak modified	Sample:9-221117A27, Compound:PeCB-F4, RT:18.489	ES221121MJ
21-Nov-22	21:30:20	Pre modification peak	Sample:9-221117A27, Compound:PeCB-F4, RT:18.489	
21-Nov-22	21:30:20	Peak modified	Sample:9-221117A27, Compound:PeCB-F4, RT:18.489	ES221121MJ
21-Nov-22	21:30:20	Pre modification peak	Sample:9-221117A27, Compound:PeCB-F4, RT:21.818	
21-Nov-22	21:30:20	Peak modified	Sample:9-221117A27, Compound:PeCB-F4, RT:21.818	ES221121MJ
21-Nov-22	21:30:20	Pre modification peak	Sample:9-221117A27, Compound:PeCB-F4, RT:18.489	
21-Nov-22	21:30:20	Peak modified	Sample:9-221117A27, Compound:PeCB-F4, RT:18.489	ES221121MJ
21-Nov-22	21:30:36	Pre modification peak	Sample:9-221117A28, Compound:PeCB-F4, RT:18.489	
21-Nov-22	21:30:36	Peak modified	Sample:9-221117A28, Compound:PeCB-F4, RT:18.489	ES221121MJ
21-Nov-22	21:30:36	Pre modification peak	Sample:9-221117A28, Compound:PeCB-F4, RT:21.827	
21-Nov-22	21:30:36	Peak modified	Sample:9-221117A28, Compound:PeCB-F4, RT:21.827	ES221121MJ
21-Nov-22	21:30:36	Pre modification peak	Sample:9-221117A28, Compound:PeCB-F4, RT:21.615	
21-Nov-22	21:30:36	Peak modified	Sample:9-221117A28, Compound:PeCB-F4, RT:21.615	ES221121MJ
21-Nov-22	21:30:36	Pre modification peak	Sample:9-221117A28, Compound:PeCB-F4, RT:21.827	
21-Nov-22	21:30:36	Peak modified	Sample:9-221117A28, Compound:PeCB-F4, RT:21.827	ES221121MJ
21-Nov-22	21:30:36	Pre modification peak	Sample:9-221117A28, Compound:PeCB-F4, RT:18.489	
21-Nov-22	21:30:36	Peak modified	Sample:9-221117A28, Compound:PeCB-F4, RT:18.489	ES221121MJ
21-Nov-22	21:30:56	Pre modification peak	Sample:9-221117A29, Compound:PeCB-F4, RT:18.489	

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Date	Time	Event	Details	Comments
21-Nov-22	21:30:56	Peak modified	Sample:9-221117A29, Compound:PeCB-F4, RT:18.489	ES221121MJ
21-Nov-22	21:30:56	Pre modification peak	Sample:9-221117A29, Compound:PeCB-F4, RT:21.818	
21-Nov-22	21:30:56	Peak modified	Sample:9-221117A29, Compound:PeCB-F4, RT:21.818	ES221121MJ
21-Nov-22	21:30:56	Pre modification peak	Sample:9-221117A29, Compound:PeCB-F4, RT:18.489	
21-Nov-22	21:30:56	Peak modified	Sample:9-221117A29, Compound:PeCB-F4, RT:18.489	ES221121MJ
21-Nov-22	21:30:56	Pre modification peak	Sample:9-221117A29, Compound:PeCB-F4, RT:18.489	
21-Nov-22	21:30:56	Peak modified	Sample:9-221117A29, Compound:PeCB-F4, RT:18.489	ES221121MJ
21-Nov-22	21:30:56	Pre modification peak	Sample:9-221117A29, Compound:PeCB-F4, RT:21.818	
21-Nov-22	21:30:56	Peak modified	Sample:9-221117A29, Compound:PeCB-F4, RT:21.818	ES221121MJ
21-Nov-22	21:30:56	Pre modification peak	Sample:9-221117A29, Compound:PeCB-F4, RT:18.489	
21-Nov-22	21:30:56	Peak modified	Sample:9-221117A29, Compound:PeCB-F4, RT:18.489	ES221121MJ
21-Nov-22	21:31:14	Pre modification peak	Sample:9-221117A30, Compound:PeCB-F4, RT:21.818	
21-Nov-22	21:31:14	Peak modified	Sample:9-221117A30, Compound:PeCB-F4, RT:21.818	ES221121MJ
21-Nov-22	21:31:14	Pre modification peak	Sample:9-221117A30, Compound:PeCB-F4, RT:18.489	
21-Nov-22	21:31:14	Peak modified	Sample:9-221117A30, Compound:PeCB-F4, RT:18.489	ES221121MJ
21-Nov-22	21:31:14	Pre modification peak	Sample:9-221117A30, Compound:PeCB-F4, RT:18.489	
21-Nov-22	21:31:14	Peak modified	Sample:9-221117A30, Compound:PeCB-F4, RT:18.489	ES221121MJ
21-Nov-22	21:31:14	Pre modification peak	Sample:9-221117A30, Compound:PeCB-F4, RT:21.818	
21-Nov-22	21:31:14	Peak modified	Sample:9-221117A30, Compound:PeCB-F4, RT:21.818	ES221121MJ
21-Nov-22	21:31:14	Pre modification peak	Sample:9-221117A30, Compound:PeCB-F4, RT:18.489	
21-Nov-22	21:31:14	Peak modified	Sample:9-221117A30, Compound:PeCB-F4, RT:18.489	ES221121MJ
21-Nov-22	21:31:32	Pre modification peak	Sample:9-221117A31, Compound:PeCB-F4, RT:21.615	
21-Nov-22	21:31:32	Peak modified	Sample:9-221117A31, Compound:PeCB-F4, RT:21.615	ES221121MJ
21-Nov-22	21:31:32	Pre modification peak	Sample:9-221117A31, Compound:PeCB-F4, RT:21.837	
21-Nov-22	21:31:32	Peak modified	Sample:9-221117A31, Compound:PeCB-F4, RT:21.837	ES221121MJ
21-Nov-22	21:31:32	Pre modification peak	Sample:9-221117A31, Compound:PeCB-F4, RT:18.489	
21-Nov-22	21:31:32	Peak modified	Sample:9-221117A31, Compound:PeCB-F4, RT:18.489	ES221121MJ
21-Nov-22	21:31:32	Pre modification peak	Sample:9-221117A31, Compound:PeCB-F4, RT:18.489	
21-Nov-22	21:31:32	Peak modified	Sample:9-221117A31, Compound:PeCB-F4, RT:18.489	ES221121MJ
21-Nov-22	21:31:32	Pre modification peak	Sample:9-221117A31, Compound:PeCB-F4, RT:21.837	
21-Nov-22	21:31:32	Peak modified	Sample:9-221117A31, Compound:PeCB-F4, RT:21.837	ES221121MJ
21-Nov-22	21:31:32	Pre modification peak	Sample:9-221117A31, Compound:PeCB-F4, RT:18.489	
21-Nov-22	21:31:32	Peak modified	Sample:9-221117A31, Compound:PeCB-F4, RT:18.489	ES221121MJ
21-Nov-22	21:31:38	Dataset Saved	Saved to 'C:\MassLynx\PCB.PRO\Results\9-221117A2-1121E...	
21-Nov-22	21:31:50	Pre modification peak	Sample:9-221117A19, Compound:PeCB-F4, RT:22.364	
21-Nov-22	21:31:50	Peak modified	Sample:9-221117A19, Compound:PeCB-F4, RT:22.364	ES221121MB
21-Nov-22	21:31:50	Pre modification peak	Sample:9-221117A19, Compound:PeCB-F4, RT:22.364	
21-Nov-22	21:31:50	Peak modified	Sample:9-221117A19, Compound:PeCB-F4, RT:22.364	ES221121MB
21-Nov-22	21:32:34	Method modified		
21-Nov-22	21:32:45	Process Calibrate		
21-Nov-22	21:32:46	Process Quantify		
21-Nov-22	21:33:11	Pre modification peak	Sample:9-221117A21, Compound:PeCB-F4, RT:22.336	
21-Nov-22	21:33:11	Peak modified	Sample:9-221117A21, Compound:PeCB-F4, RT:22.336	ES221121MB
21-Nov-22	21:33:11	Pre modification peak	Sample:9-221117A21, Compound:PeCB-F4, RT:22.336	
21-Nov-22	21:33:11	Peak modified	Sample:9-221117A21, Compound:PeCB-F4, RT:22.336	ES221121MB
21-Nov-22	21:33:24	Pre modification peak	Sample:9-221117A22, Compound:PeCB-F4, RT:22.336	
21-Nov-22	21:33:24	Peak modified	Sample:9-221117A22, Compound:PeCB-F4, RT:22.336	ES221121MB
21-Nov-22	21:33:24	Pre modification peak	Sample:9-221117A22, Compound:PeCB-F4, RT:22.336	
21-Nov-22	21:33:24	Peak modified	Sample:9-221117A22, Compound:PeCB-F4, RT:22.336	ES221121MB
21-Nov-22	21:33:42	Pre modification peak	Sample:9-221117A22, Compound:PeCB-F4, RT:22.040	
21-Nov-22	21:33:42	Peak modified	Sample:9-221117A22, Compound:PeCB-F4, RT:22.040	ES221121MB
21-Nov-22	21:33:42	Peak added	Sample:9-221117A22, Compound:PeCB-F4, RT:22.123	ES221121MB
21-Nov-22	21:34:00	Pre modification peak	Sample:9-221117A23, Compound:PeCB-F4, RT:22.336	

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Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221117A2-1121ES.qld

Last Altered: Tuesday, November 22, 2022 16:07:50 Eastern Standard Time
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Date	Time	Event	Details	Comments
21-Nov-22	21:34:00	Peak modified	Sample:9-221117A23, Compound:PeCB-F4, RT:22.336	ES221121MB
21-Nov-22	21:34:00	Pre modification peak	Sample:9-221117A23, Compound:PeCB-F4, RT:22.336	
21-Nov-22	21:34:00	Peak modified	Sample:9-221117A23, Compound:PeCB-F4, RT:22.336	ES221121MB
21-Nov-22	21:34:18	Pre modification peak	Sample:9-221117A24, Compound:PeCB-F4, RT:22.031	
21-Nov-22	21:34:18	Peak modified	Sample:9-221117A24, Compound:PeCB-F4, RT:22.031	ES221121MB
21-Nov-22	21:34:18	Peak added	Sample:9-221117A24, Compound:PeCB-F4, RT:22.096	ES221121MB
21-Nov-22	21:34:18	Pre modification peak	Sample:9-221117A24, Compound:PeCB-F4, RT:22.096	
21-Nov-22	21:34:18	Peak modified	Sample:9-221117A24, Compound:PeCB-F4, RT:22.096	ES221121MB
21-Nov-22	21:34:18	Pre modification peak	Sample:9-221117A24, Compound:PeCB-F4, RT:22.031	
21-Nov-22	21:34:18	Peak modified	Sample:9-221117A24, Compound:PeCB-F4, RT:22.031	ES221121MB
21-Nov-22	21:34:36	Pre modification peak	Sample:9-221117A24, Compound:PeCB-F4, RT:22.336	
21-Nov-22	21:34:36	Peak modified	Sample:9-221117A24, Compound:PeCB-F4, RT:22.336	ES221121MB
21-Nov-22	21:34:36	Pre modification peak	Sample:9-221117A24, Compound:PeCB-F4, RT:22.336	
21-Nov-22	21:34:36	Peak modified	Sample:9-221117A24, Compound:PeCB-F4, RT:22.336	ES221121MB
21-Nov-22	21:34:36	Pre modification peak	Sample:9-221117A24, Compound:PeCB-F4, RT:22.271	
21-Nov-22	21:34:36	Peak modified	Sample:9-221117A24, Compound:PeCB-F4, RT:22.271	ES221121MB
21-Nov-22	21:34:53	Peak added	Sample:9-221117A25, Compound:PeCB-F4, RT:22.040	ES221121MB
21-Nov-22	21:34:53	Peak added	Sample:9-221117A25, Compound:PeCB-F4, RT:22.086	ES221121MB
21-Nov-22	21:35:13	Pre modification peak	Sample:9-221117A27, Compound:PeCB-F4, RT:22.336	
21-Nov-22	21:35:13	Peak modified	Sample:9-221117A27, Compound:PeCB-F4, RT:22.336	ES221121MB
21-Nov-22	21:35:28	Pre modification peak	Sample:9-221117A28, Compound:PeCB-F4, RT:22.105	
21-Nov-22	21:35:28	Peak modified	Sample:9-221117A28, Compound:PeCB-F4, RT:22.105	ES221121MB
21-Nov-22	21:35:28	Pre modification peak	Sample:9-221117A28, Compound:PeCB-F4, RT:22.031	
21-Nov-22	21:35:28	Peak modified	Sample:9-221117A28, Compound:PeCB-F4, RT:22.031	ES221121MB
21-Nov-22	21:35:39	Pre modification peak	Sample:9-221117A28, Compound:PeCB-F4, RT:22.345	
21-Nov-22	21:35:39	Peak modified	Sample:9-221117A28, Compound:PeCB-F4, RT:22.345	ES221121MB
21-Nov-22	21:35:39	Pre modification peak	Sample:9-221117A28, Compound:PeCB-F4, RT:22.345	
21-Nov-22	21:35:39	Peak modified	Sample:9-221117A28, Compound:PeCB-F4, RT:22.345	ES221121MB
21-Nov-22	21:35:52	Pre modification peak	Sample:9-221117A29, Compound:PeCB-F4, RT:22.336	
21-Nov-22	21:35:52	Peak modified	Sample:9-221117A29, Compound:PeCB-F4, RT:22.336	ES221121MB
21-Nov-22	21:35:52	Pre modification peak	Sample:9-221117A29, Compound:PeCB-F4, RT:22.345	
21-Nov-22	21:35:52	Peak modified	Sample:9-221117A29, Compound:PeCB-F4, RT:22.345	ES221121MB
21-Nov-22	21:36:16	Pre modification peak	Sample:9-221117A31, Compound:PeCB-F4, RT:22.345	
21-Nov-22	21:36:16	Peak modified	Sample:9-221117A31, Compound:PeCB-F4, RT:22.345	ES221121MB
21-Nov-22	21:36:16	Pre modification peak	Sample:9-221117A31, Compound:PeCB-F4, RT:22.345	
21-Nov-22	21:36:16	Peak modified	Sample:9-221117A31, Compound:PeCB-F4, RT:22.345	ES221121MB
21-Nov-22	21:37:25	Dataset Saved	Saved to 'C:\MassLynx\PCB.PRO\Results\9-221117A2-1121E...	
21-Nov-22	21:38:02	Pre modification peak	Sample:9-221117A21, Compound:PeCB-F5, RT:23.125	
21-Nov-22	21:38:02	Peak modified	Sample:9-221117A21, Compound:PeCB-F5, RT:23.125	ES221121MS
21-Nov-22	21:38:02	Peak added	Sample:9-221117A21, Compound:PeCB-F5, RT:23.186	ES221121MS
21-Nov-22	21:38:02	Pre modification peak	Sample:9-221117A21, Compound:PeCB-F5, RT:23.138	
21-Nov-22	21:38:02	Peak modified	Sample:9-221117A21, Compound:PeCB-F5, RT:23.138	ES221121MS
21-Nov-22	21:38:02	Peak added	Sample:9-221117A21, Compound:PeCB-F5, RT:23.186	ES221121MS
21-Nov-22	21:38:25	Pre modification peak	Sample:9-221117A22, Compound:PeCB-F5, RT:23.125	
21-Nov-22	21:38:25	Peak modified	Sample:9-221117A22, Compound:PeCB-F5, RT:23.125	ES221121MS
21-Nov-22	21:38:25	Peak added	Sample:9-221117A22, Compound:PeCB-F5, RT:23.186	ES221121MS
21-Nov-22	21:38:25	Pre modification peak	Sample:9-221117A22, Compound:PeCB-F5, RT:23.125	
21-Nov-22	21:38:25	Peak modified	Sample:9-221117A22, Compound:PeCB-F5, RT:23.125	ES221121MS
21-Nov-22	21:38:25	Peak added	Sample:9-221117A22, Compound:PeCB-F5, RT:23.186	ES221121MS
21-Nov-22	21:38:51	Pre modification peak	Sample:9-221117A23, Compound:PeCB-F5, RT:23.125	
21-Nov-22	21:38:51	Peak modified	Sample:9-221117A23, Compound:PeCB-F5, RT:23.125	ES221121MS
21-Nov-22	21:38:51	Peak added	Sample:9-221117A23, Compound:PeCB-F5, RT:23.174	ES221121MS
21-Nov-22	21:38:51	Pre modification peak	Sample:9-221117A23, Compound:PeCB-F5, RT:23.125	

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Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221117A2-1121ES.qld

Last Altered: Tuesday, November 22, 2022 16:07:50 Eastern Standard Time
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Date	Time	Event	Details	Comments
21-Nov-22	21:38:51	Peak modified	Sample:9-221117A23, Compound:PeCB-F5, RT:23.125	ES221121MS
21-Nov-22	21:38:51	Peak added	Sample:9-221117A23, Compound:PeCB-F5, RT:23.174	ES221121MS
21-Nov-22	21:39:25	Pre modification peak	Sample:9-221117A24, Compound:PeCB-F5, RT:23.125	
21-Nov-22	21:39:25	Peak modified	Sample:9-221117A24, Compound:PeCB-F5, RT:23.125	ES221121MS
21-Nov-22	21:39:25	Peak added	Sample:9-221117A24, Compound:PeCB-F5, RT:23.186	ES221121MS
21-Nov-22	21:39:25	Pre modification peak	Sample:9-221117A24, Compound:PeCB-F5, RT:23.125	
21-Nov-22	21:39:25	Peak modified	Sample:9-221117A24, Compound:PeCB-F5, RT:23.125	ES221121MS
21-Nov-22	21:39:25	Peak added	Sample:9-221117A24, Compound:PeCB-F5, RT:23.186	ES221121MS
21-Nov-22	21:39:46	Pre modification peak	Sample:9-221117A25, Compound:PeCB-F5, RT:23.113	
21-Nov-22	21:39:46	Peak modified	Sample:9-221117A25, Compound:PeCB-F5, RT:23.113	ES221121MS
21-Nov-22	21:39:46	Peak added	Sample:9-221117A25, Compound:PeCB-F5, RT:23.162	ES221121MS
21-Nov-22	21:39:46	Pre modification peak	Sample:9-221117A25, Compound:PeCB-F5, RT:23.113	
21-Nov-22	21:39:46	Peak modified	Sample:9-221117A25, Compound:PeCB-F5, RT:23.113	ES221121MS
21-Nov-22	21:39:46	Peak added	Sample:9-221117A25, Compound:PeCB-F5, RT:23.162	ES221121MS
21-Nov-22	21:40:07	Pre modification peak	Sample:9-221117A26, Compound:PeCB-F5, RT:23.137	
21-Nov-22	21:40:07	Peak modified	Sample:9-221117A26, Compound:PeCB-F5, RT:23.137	ES221121MS
21-Nov-22	21:40:07	Peak added	Sample:9-221117A26, Compound:PeCB-F5, RT:23.186	ES221121MS
21-Nov-22	21:40:07	Pre modification peak	Sample:9-221117A26, Compound:PeCB-F5, RT:23.137	
21-Nov-22	21:40:07	Peak modified	Sample:9-221117A26, Compound:PeCB-F5, RT:23.137	ES221121MS
21-Nov-22	21:40:07	Peak added	Sample:9-221117A26, Compound:PeCB-F5, RT:23.186	ES221121MS
21-Nov-22	21:40:40	Pre modification peak	Sample:9-221117A27, Compound:PeCB-F5, RT:23.113	
21-Nov-22	21:40:40	Peak modified	Sample:9-221117A27, Compound:PeCB-F5, RT:23.113	ES221121MS
21-Nov-22	21:40:40	Peak added	Sample:9-221117A27, Compound:PeCB-F5, RT:23.174	ES221121MS
21-Nov-22	21:40:40	Pre modification peak	Sample:9-221117A27, Compound:PeCB-F5, RT:23.125	
21-Nov-22	21:40:40	Peak modified	Sample:9-221117A27, Compound:PeCB-F5, RT:23.125	ES221121MS
21-Nov-22	21:40:40	Peak added	Sample:9-221117A27, Compound:PeCB-F5, RT:23.174	ES221121MS
21-Nov-22	21:41:15	Pre modification peak	Sample:9-221117A28, Compound:PeCB-F5, RT:23.137	
21-Nov-22	21:41:15	Peak modified	Sample:9-221117A28, Compound:PeCB-F5, RT:23.137	ES221121MB
21-Nov-22	21:41:15	Peak added	Sample:9-221117A28, Compound:PeCB-F5, RT:23.186	ES221121MB
21-Nov-22	21:41:15	Pre modification peak	Sample:9-221117A28, Compound:PeCB-F5, RT:23.125	
21-Nov-22	21:41:15	Peak modified	Sample:9-221117A28, Compound:PeCB-F5, RT:23.125	ES221121MB
21-Nov-22	21:41:15	Peak added	Sample:9-221117A28, Compound:PeCB-F5, RT:23.186	ES221121MB
21-Nov-22	21:41:35	Peak modified	Sample:9-221117A28, Compound:PeCB-F5, RT:23.186	ES221121MB
21-Nov-22	21:41:35	Peak modified	Sample:9-221117A28, Compound:PeCB-F5, RT:23.186	ES221121MB
21-Nov-22	21:42:29	Pre modification peak	Sample:9-221117A29, Compound:PeCB-F5, RT:23.113	
21-Nov-22	21:42:29	Peak modified	Sample:9-221117A29, Compound:PeCB-F5, RT:23.113	ES221121MB
21-Nov-22	21:42:29	Peak added	Sample:9-221117A29, Compound:PeCB-F5, RT:23.162	ES221121MB
21-Nov-22	21:42:29	Pre modification peak	Sample:9-221117A29, Compound:PeCB-F5, RT:23.113	
21-Nov-22	21:42:29	Peak modified	Sample:9-221117A29, Compound:PeCB-F5, RT:23.113	ES221121MB
21-Nov-22	21:42:29	Peak added	Sample:9-221117A29, Compound:PeCB-F5, RT:23.162	ES221121MB
21-Nov-22	21:42:44	Pre modification peak	Sample:9-221117A30, Compound:PeCB-F5, RT:23.174	
21-Nov-22	21:42:44	Peak modified	Sample:9-221117A30, Compound:PeCB-F5, RT:23.174	ES221121MB
21-Nov-22	21:43:53	Dataset Saved	Saved to 'C:\MassLynx\PCB.PRO\Results\9-221117A2-1121E...	
21-Nov-22	21:44:28	Pre modification peak	Sample:9-221117A24, Compound:PeCB-F5, RT:24.031	
21-Nov-22	21:44:28	Peak modified	Sample:9-221117A24, Compound:PeCB-F5, RT:24.031	ES221121MB
21-Nov-22	21:44:28	Pre modification peak	Sample:9-221117A24, Compound:PeCB-F5, RT:24.031	
21-Nov-22	21:44:28	Peak modified	Sample:9-221117A24, Compound:PeCB-F5, RT:24.031	ES221121MB
21-Nov-22	21:44:40	Pre modification peak	Sample:9-221117A25, Compound:PeCB-F5, RT:24.020	
21-Nov-22	21:44:40	Peak modified	Sample:9-221117A25, Compound:PeCB-F5, RT:24.020	ES221121MB
21-Nov-22	21:44:40	Pre modification peak	Sample:9-221117A25, Compound:PeCB-F5, RT:24.020	
21-Nov-22	21:44:40	Peak modified	Sample:9-221117A25, Compound:PeCB-F5, RT:24.020	ES221121MB
21-Nov-22	21:44:51	Pre modification peak	Sample:9-221117A26, Compound:PeCB-F5, RT:24.031	
21-Nov-22	21:44:51	Peak modified	Sample:9-221117A26, Compound:PeCB-F5, RT:24.031	ES221121MB

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Last Altered: Tuesday, November 22, 2022 16:07:50 Eastern Standard Time
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Date	Time	Event	Details	Comments
21-Nov-22	21:44:51	Pre modification peak	Sample:9-221117A26, Compound:PeCB-F5, RT:24.031	
21-Nov-22	21:44:51	Peak modified	Sample:9-221117A26, Compound:PeCB-F5, RT:24.031	ES221121MB
21-Nov-22	21:45:19	Pre modification peak	Sample:9-221117A22, Compound:PeCB-F5, RT:24.757	
21-Nov-22	21:45:19	Peak modified	Sample:9-221117A22, Compound:PeCB-F5, RT:24.757	ES221121MB
21-Nov-22	21:45:32	Pre modification peak	Sample:9-221117A26, Compound:PeCB-F5, RT:24.769	
21-Nov-22	21:45:32	Peak modified	Sample:9-221117A26, Compound:PeCB-F5, RT:24.769	ES221121MB
21-Nov-22	21:45:45	Peak deleted	Sample:9-221117A30, Compound:PeCB-F5, RT:24.708	
21-Nov-22	21:45:45	Peak deleted	Sample:9-221117A30, Compound:PeCB-F5, RT:24.720	
21-Nov-22	21:46:00	Pre modification peak	Sample:9-221117A22, Compound:PeCB-F5, RT:25.687	
21-Nov-22	21:46:00	Peak modified	Sample:9-221117A22, Compound:PeCB-F5, RT:25.687	ES221121MB
21-Nov-22	21:46:00	Pre modification peak	Sample:9-221117A22, Compound:PeCB-F5, RT:25.627	
21-Nov-22	21:46:00	Peak modified	Sample:9-221117A22, Compound:PeCB-F5, RT:25.627	ES221121MB
21-Nov-22	21:46:10	Pre modification peak	Sample:9-221117A23, Compound:PeCB-F5, RT:25.627	
21-Nov-22	21:46:10	Peak modified	Sample:9-221117A23, Compound:PeCB-F5, RT:25.627	ES221121MB
21-Nov-22	21:46:30	Pre modification peak	Sample:9-221117A25, Compound:PeCB-F5, RT:25.687	
21-Nov-22	21:46:30	Peak modified	Sample:9-221117A25, Compound:PeCB-F5, RT:25.687	ES221121MB
21-Nov-22	21:46:30	Pre modification peak	Sample:9-221117A25, Compound:PeCB-F5, RT:25.615	
21-Nov-22	21:46:30	Peak modified	Sample:9-221117A25, Compound:PeCB-F5, RT:25.615	ES221121MB
21-Nov-22	21:46:30	Pre modification peak	Sample:9-221117A25, Compound:PeCB-F5, RT:25.615	
21-Nov-22	21:46:30	Peak modified	Sample:9-221117A25, Compound:PeCB-F5, RT:25.615	ES221121MB
21-Nov-22	21:47:14	Pre modification peak	Sample:9-221117A26, Compound:PeCB-F5, RT:25.747	
21-Nov-22	21:47:14	Peak modified	Sample:9-221117A26, Compound:PeCB-F5, RT:25.747	ES221121MB
21-Nov-22	21:47:14	Pre modification peak	Sample:9-221117A26, Compound:PeCB-F5, RT:25.639	
21-Nov-22	21:47:14	Peak modified	Sample:9-221117A26, Compound:PeCB-F5, RT:25.639	ES221121MB
21-Nov-22	21:47:29	Peak modified	Sample:9-221117A26, Compound:PeCB-F5, RT:25.639	ES221121MB
21-Nov-22	21:47:39	Pre modification peak	Sample:9-221117A27, Compound:PeCB-F5, RT:25.639	
21-Nov-22	21:47:39	Peak modified	Sample:9-221117A27, Compound:PeCB-F5, RT:25.639	ES221121MB
21-Nov-22	21:47:39	Pre modification peak	Sample:9-221117A27, Compound:PeCB-F5, RT:22.666	
21-Nov-22	21:47:39	Peak modified	Sample:9-221117A27, Compound:PeCB-F5, RT:22.666	ES221121MB
21-Nov-22	21:47:47	Pre modification peak	Sample:9-221117A28, Compound:PeCB-F5, RT:25.639	
21-Nov-22	21:47:47	Peak modified	Sample:9-221117A28, Compound:PeCB-F5, RT:25.639	ES221121MB
21-Nov-22	21:47:58	Pre modification peak	Sample:9-221117A29, Compound:PeCB-F5, RT:25.675	
21-Nov-22	21:47:58	Peak modified	Sample:9-221117A29, Compound:PeCB-F5, RT:25.675	ES221121MB
21-Nov-22	21:47:58	Pre modification peak	Sample:9-221117A29, Compound:PeCB-F5, RT:25.603	
21-Nov-22	21:47:58	Peak modified	Sample:9-221117A29, Compound:PeCB-F5, RT:25.603	ES221121MB
21-Nov-22	21:48:08	Peak deleted	Sample:9-221117A30, Compound:PeCB-F5, RT:26.025	
21-Nov-22	21:48:08	Peak deleted	Sample:9-221117A30, Compound:PeCB-F5, RT:25.880	
21-Nov-22	21:48:08	Peak deleted	Sample:9-221117A30, Compound:PeCB-F5, RT:25.663	
21-Nov-22	21:48:08	Peak deleted	Sample:9-221117A30, Compound:PeCB-F5, RT:25.590	
21-Nov-22	21:48:08	Peak deleted	Sample:9-221117A30, Compound:PeCB-F5, RT:25.663	
21-Nov-22	21:48:08	Peak deleted	Sample:9-221117A30, Compound:PeCB-F5, RT:25.639	
21-Nov-22	21:48:16	Pre modification peak	Sample:9-221117A31, Compound:PeCB-F5, RT:25.627	
21-Nov-22	21:48:16	Peak modified	Sample:9-221117A31, Compound:PeCB-F5, RT:25.627	ES221121MB
21-Nov-22	21:48:21	Dataset Saved	Saved to 'C:\MassLynx\PCB.PRO\Results\9-221117A2-1121E...	
21-Nov-22	21:48:50	Pre modification peak	Sample:9-221117A30, Compound:HxCB-F4, RT:18.489	
21-Nov-22	21:48:50	Peak modified	Sample:9-221117A30, Compound:HxCB-F4, RT:18.489	ES221121MB
21-Nov-22	21:48:50	Pre modification peak	Sample:9-221117A30, Compound:HxCB-F4, RT:22.262	
21-Nov-22	21:48:50	Peak modified	Sample:9-221117A30, Compound:HxCB-F4, RT:22.262	ES221121MB
21-Nov-22	21:49:23	Pre modification peak	Sample:9-221117A23, Compound:HxCB-F5, RT:24.817	
21-Nov-22	21:49:23	Peak modified	Sample:9-221117A23, Compound:HxCB-F5, RT:24.817	ES221121MJ
21-Nov-22	21:49:23	Pre modification peak	Sample:9-221117A23, Compound:HxCB-F5, RT:22.666	
21-Nov-22	21:49:23	Peak modified	Sample:9-221117A23, Compound:HxCB-F5, RT:22.666	ES221121MJ
21-Nov-22	21:49:38	Pre modification peak	Sample:9-221117A25, Compound:HxCB-F5, RT:24.805	

Quantify Audit Report MassLynx V4.2 SCN1012

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221117A2-1121ES.qld

Last Altered: Tuesday, November 22, 2022 16:07:50 Eastern Standard Time
Printed: Wednesday, November 23, 2022 11:42:36 Eastern Standard Time

Date	Time	Event	Details	Comments
21-Nov-22	21:49:38	Peak modified	Sample:9-221117A25, Compound:HxCB-F5, RT:24.805	ES221121MJ
21-Nov-22	21:49:38	Pre modification peak	Sample:9-221117A25, Compound:HxCB-F5, RT:22.666	
21-Nov-22	21:49:38	Peak modified	Sample:9-221117A25, Compound:HxCB-F5, RT:22.666	ES221121MJ
21-Nov-22	21:49:38	Pre modification peak	Sample:9-221117A25, Compound:HxCB-F5, RT:24.805	
21-Nov-22	21:49:38	Peak modified	Sample:9-221117A25, Compound:HxCB-F5, RT:24.805	ES221121MJ
21-Nov-22	21:49:38	Pre modification peak	Sample:9-221117A25, Compound:HxCB-F5, RT:22.666	
21-Nov-22	21:49:38	Peak modified	Sample:9-221117A25, Compound:HxCB-F5, RT:22.666	ES221121MJ
21-Nov-22	21:49:52	Pre modification peak	Sample:9-221117A26, Compound:HxCB-F5, RT:24.817	
21-Nov-22	21:49:52	Peak modified	Sample:9-221117A26, Compound:HxCB-F5, RT:24.817	ES221121MJ
21-Nov-22	21:49:52	Pre modification peak	Sample:9-221117A26, Compound:HxCB-F5, RT:22.666	
21-Nov-22	21:49:52	Peak modified	Sample:9-221117A26, Compound:HxCB-F5, RT:22.666	ES221121MJ
21-Nov-22	21:49:52	Pre modification peak	Sample:9-221117A26, Compound:HxCB-F5, RT:24.817	
21-Nov-22	21:49:52	Peak modified	Sample:9-221117A26, Compound:HxCB-F5, RT:24.817	ES221121MJ
21-Nov-22	21:49:52	Pre modification peak	Sample:9-221117A26, Compound:HxCB-F5, RT:22.666	
21-Nov-22	21:49:52	Peak modified	Sample:9-221117A26, Compound:HxCB-F5, RT:22.666	ES221121MJ
21-Nov-22	21:50:01	Pre modification peak	Sample:9-221117A27, Compound:HxCB-F5, RT:24.805	
21-Nov-22	21:50:01	Peak modified	Sample:9-221117A27, Compound:HxCB-F5, RT:24.805	ES221121MJ
21-Nov-22	21:50:01	Pre modification peak	Sample:9-221117A27, Compound:HxCB-F5, RT:22.666	
21-Nov-22	21:50:01	Peak modified	Sample:9-221117A27, Compound:HxCB-F5, RT:22.666	ES221121MJ
21-Nov-22	21:50:16	Pre modification peak	Sample:9-221117A29, Compound:HxCB-F5, RT:24.805	
21-Nov-22	21:50:16	Peak modified	Sample:9-221117A29, Compound:HxCB-F5, RT:24.805	ES221121MJ
21-Nov-22	21:50:16	Pre modification peak	Sample:9-221117A29, Compound:HxCB-F5, RT:22.666	
21-Nov-22	21:50:16	Peak modified	Sample:9-221117A29, Compound:HxCB-F5, RT:22.666	ES221121MJ
21-Nov-22	21:50:16	Pre modification peak	Sample:9-221117A29, Compound:HxCB-F5, RT:24.805	
21-Nov-22	21:50:16	Peak modified	Sample:9-221117A29, Compound:HxCB-F5, RT:24.805	ES221121MJ
21-Nov-22	21:50:16	Pre modification peak	Sample:9-221117A29, Compound:HxCB-F5, RT:22.666	
21-Nov-22	21:50:16	Peak modified	Sample:9-221117A29, Compound:HxCB-F5, RT:22.666	ES221121MJ
21-Nov-22	21:50:22	Pre modification peak	Sample:9-221117A30, Compound:HxCB-F5, RT:22.666	
21-Nov-22	21:50:22	Peak modified	Sample:9-221117A30, Compound:HxCB-F5, RT:22.666	ES221121MJ
21-Nov-22	21:50:22	Pre modification peak	Sample:9-221117A30, Compound:HxCB-F5, RT:24.805	
21-Nov-22	21:50:22	Peak modified	Sample:9-221117A30, Compound:HxCB-F5, RT:24.805	ES221121MJ
21-Nov-22	21:50:36	Pre modification peak	Sample:9-221117A31, Compound:HxCB-F5, RT:24.829	
21-Nov-22	21:50:36	Peak modified	Sample:9-221117A31, Compound:HxCB-F5, RT:24.829	ES221121MJ
21-Nov-22	21:50:36	Pre modification peak	Sample:9-221117A31, Compound:HxCB-F5, RT:22.666	
21-Nov-22	21:50:36	Peak modified	Sample:9-221117A31, Compound:HxCB-F5, RT:22.666	ES221121MJ
21-Nov-22	21:50:36	Pre modification peak	Sample:9-221117A31, Compound:HxCB-F5, RT:24.829	
21-Nov-22	21:50:36	Peak modified	Sample:9-221117A31, Compound:HxCB-F5, RT:24.829	ES221121MJ
21-Nov-22	21:50:36	Pre modification peak	Sample:9-221117A31, Compound:HxCB-F5, RT:22.666	
21-Nov-22	21:50:36	Peak modified	Sample:9-221117A31, Compound:HxCB-F5, RT:22.666	ES221121MJ
21-Nov-22	21:51:48	Pre modification peak	Sample:9-221117A21, Compound:HxCB-F5, RT:28.817	
21-Nov-22	21:51:48	Peak modified	Sample:9-221117A21, Compound:HxCB-F5, RT:28.817	ES221121MB
21-Nov-22	21:51:48	Pre modification peak	Sample:9-221117A21, Compound:HxCB-F5, RT:28.817	
21-Nov-22	21:51:48	Peak modified	Sample:9-221117A21, Compound:HxCB-F5, RT:28.817	ES221121MB
21-Nov-22	21:52:08	Pre modification peak	Sample:9-221117A22, Compound:HxCB-F5, RT:28.817	
21-Nov-22	21:52:08	Peak modified	Sample:9-221117A22, Compound:HxCB-F5, RT:28.817	ES221121MB
21-Nov-22	21:52:08	Pre modification peak	Sample:9-221117A22, Compound:HxCB-F5, RT:28.817	
21-Nov-22	21:52:08	Peak modified	Sample:9-221117A22, Compound:HxCB-F5, RT:28.817	ES221121MB
21-Nov-22	21:52:20	Pre modification peak	Sample:9-221117A23, Compound:HxCB-F5, RT:28.805	
21-Nov-22	21:52:20	Peak modified	Sample:9-221117A23, Compound:HxCB-F5, RT:28.805	ES221121MB
21-Nov-22	21:52:20	Pre modification peak	Sample:9-221117A23, Compound:HxCB-F5, RT:28.805	
21-Nov-22	21:52:20	Peak modified	Sample:9-221117A23, Compound:HxCB-F5, RT:28.805	ES221121MB
21-Nov-22	21:52:30	Pre modification peak	Sample:9-221117A24, Compound:HxCB-F5, RT:28.817	
21-Nov-22	21:52:30	Peak modified	Sample:9-221117A24, Compound:HxCB-F5, RT:28.817	ES221121MB

Quantify Audit Report MassLynx V4.2 SCN1012

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221117A2-1121ES.qld

Last Altered: Tuesday, November 22, 2022 16:07:50 Eastern Standard Time
Printed: Wednesday, November 23, 2022 11:42:36 Eastern Standard Time

Date	Time	Event	Details	Comments
21-Nov-22	21:52:30	Pre modification peak	Sample:9-221117A24, Compound:HxCB-F5, RT:28.817	
21-Nov-22	21:52:30	Peak modified	Sample:9-221117A24, Compound:HxCB-F5, RT:28.817	ES221121MB
21-Nov-22	21:52:37	Pre modification peak	Sample:9-221117A25, Compound:HxCB-F5, RT:28.793	
21-Nov-22	21:52:37	Peak modified	Sample:9-221117A25, Compound:HxCB-F5, RT:28.793	ES221121MB
21-Nov-22	21:52:47	Pre modification peak	Sample:9-221117A26, Compound:HxCB-F5, RT:28.817	
21-Nov-22	21:52:47	Peak modified	Sample:9-221117A26, Compound:HxCB-F5, RT:28.817	ES221121MB
21-Nov-22	21:52:47	Pre modification peak	Sample:9-221117A26, Compound:HxCB-F5, RT:28.817	
21-Nov-22	21:52:47	Peak modified	Sample:9-221117A26, Compound:HxCB-F5, RT:28.817	ES221121MB
21-Nov-22	21:53:04	Pre modification peak	Sample:9-221117A27, Compound:HxCB-F5, RT:28.781	
21-Nov-22	21:53:04	Peak modified	Sample:9-221117A27, Compound:HxCB-F5, RT:28.781	ES221121MB
21-Nov-22	21:53:04	Pre modification peak	Sample:9-221117A27, Compound:HxCB-F5, RT:28.781	
21-Nov-22	21:53:04	Peak modified	Sample:9-221117A27, Compound:HxCB-F5, RT:28.781	ES221121MB
21-Nov-22	21:53:17	Pre modification peak	Sample:9-221117A28, Compound:HxCB-F5, RT:28.793	
21-Nov-22	21:53:17	Peak modified	Sample:9-221117A28, Compound:HxCB-F5, RT:28.793	ES221121MB
21-Nov-22	21:53:17	Pre modification peak	Sample:9-221117A28, Compound:HxCB-F5, RT:28.793	
21-Nov-22	21:53:17	Peak modified	Sample:9-221117A28, Compound:HxCB-F5, RT:28.793	ES221121MB
21-Nov-22	21:53:28	Pre modification peak	Sample:9-221117A29, Compound:HxCB-F5, RT:28.781	
21-Nov-22	21:53:28	Peak modified	Sample:9-221117A29, Compound:HxCB-F5, RT:28.781	ES221121MB
21-Nov-22	21:53:28	Pre modification peak	Sample:9-221117A29, Compound:HxCB-F5, RT:28.781	
21-Nov-22	21:53:28	Peak modified	Sample:9-221117A29, Compound:HxCB-F5, RT:28.781	ES221121MB
21-Nov-22	21:53:41	Pre modification peak	Sample:9-221117A31, Compound:HxCB-F5, RT:28.817	
21-Nov-22	21:53:41	Peak modified	Sample:9-221117A31, Compound:HxCB-F5, RT:28.817	ES221121MB
21-Nov-22	21:53:41	Pre modification peak	Sample:9-221117A31, Compound:HxCB-F5, RT:28.817	
21-Nov-22	21:53:41	Peak modified	Sample:9-221117A31, Compound:HxCB-F5, RT:28.817	ES221121MB
21-Nov-22	21:54:45	Dataset Saved	Saved to 'C:\MassLynx\PCB.PRO\Results\9-221117A2-1121E...	
21-Nov-22	21:56:23	Pre modification peak	Sample:9-221117A27, Compound:NoCB-F6, RT:30.291	
21-Nov-22	21:56:23	Peak modified	Sample:9-221117A27, Compound:NoCB-F6, RT:30.291	ES221121MB
21-Nov-22	21:56:49	Pre modification peak	Sample:9-221117A27, Compound:DeCB-F7, RT:33.137	
21-Nov-22	21:56:49	Peak modified	Sample:9-221117A27, Compound:DeCB-F7, RT:33.137	ES221121MB
21-Nov-22	21:56:49	Pre modification peak	Sample:9-221117A27, Compound:DeCB-F7, RT:33.720	
21-Nov-22	21:56:49	Peak modified	Sample:9-221117A27, Compound:DeCB-F7, RT:33.720	ES221121MB
21-Nov-22	21:56:49	Pre modification peak	Sample:9-221117A27, Compound:DeCB-F7, RT:33.735	
21-Nov-22	21:56:49	Peak modified	Sample:9-221117A27, Compound:DeCB-F7, RT:33.735	ES221121MB
21-Nov-22	21:56:49	Pre modification peak	Sample:9-221117A27, Compound:DeCB-F7, RT:33.633	
21-Nov-22	21:56:49	Peak modified	Sample:9-221117A27, Compound:DeCB-F7, RT:33.633	ES221121MB
21-Nov-22	21:56:58	Dataset Saved	Saved to 'C:\MassLynx\PCB.PRO\Results\9-221117A2-1121E...	
18-Nov-22	12:25:51	Process Extract		
18-Nov-22	12:25:52	Process Integrate		
18-Nov-22	12:25:54	Process Calibrate		
18-Nov-22	12:25:54	Process Quantify		
18-Nov-22	12:26:05	Dataset Created		
18-Nov-22	12:27:35	Dataset Saved	Saved to 'I:\Organics Instrument\HIGHRES GCMS Complete...	
18-Nov-22	12:47:32	Method modified		
18-Nov-22	12:47:45	Process Calibrate		
18-Nov-22	12:47:45	Process Quantify		
18-Nov-22	12:47:56	Method Saved	Saved to 'C:\MassLynx\PCB.PRO\MethDB\1668_OCTYL_209...	
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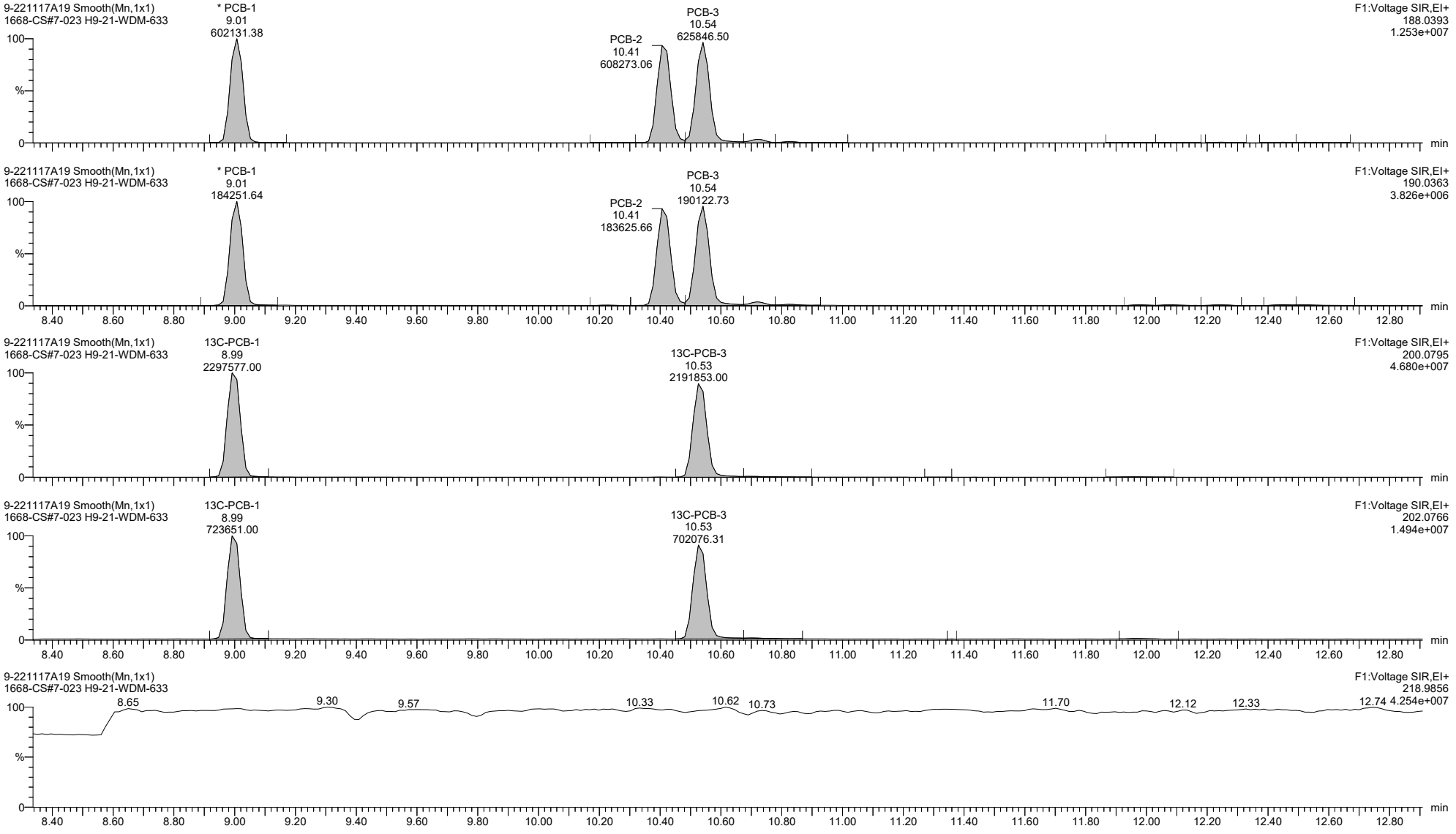
Quantify Sample Template Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221117A2-1121ES.qld

Last Altered: Tuesday, November 22, 2022 16:07:50 Eastern Standard Time
Printed: Wednesday, November 23, 2022 11:42:36 Eastern Standard Time

Method: C:\MassLynx\PCB.PRO\MethDB\1668_OCTYL_209-9-221117A1.mdb 17 Nov 2022 11:18:33
Calibration: 22 Nov 2022 16:07:50

Name: 9-221117A19, Date: 18-Nov-2022, Time: 02:30:40, ID: H9-21-WDM-633, Description: 1668-CS#7-023, Vial: Tray1:2

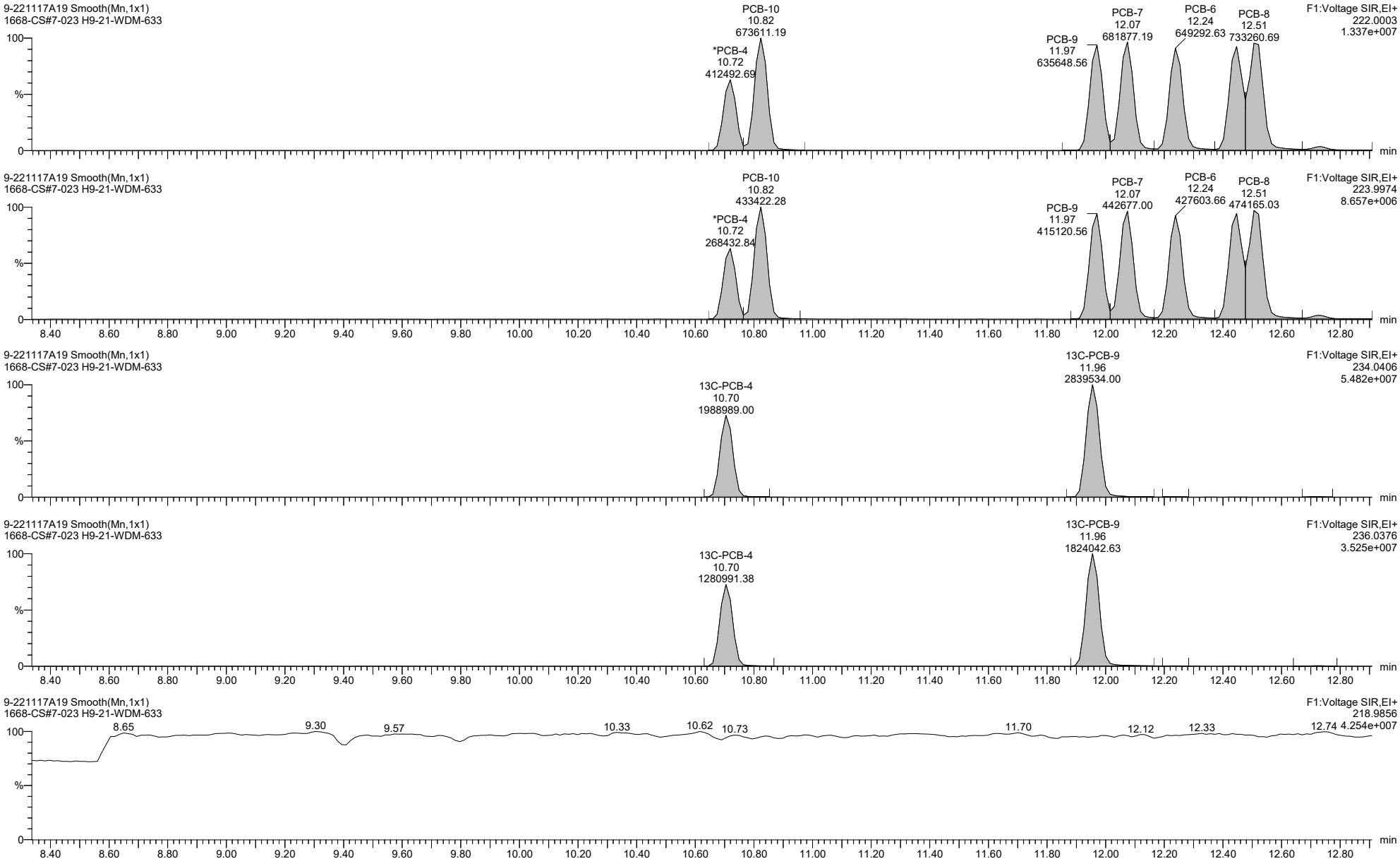


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221117A2-1121ES.qld

Last Altered: Tuesday, November 22, 2022 16:07:50 Eastern Standard Time
Printed: Wednesday, November 23, 2022 11:42:36 Eastern Standard Time

Name: 9-221117A19, Date: 18-Nov-2022, Time: 02:30:40, ID: H9-21-WDM-633, Description: 1668-CS#7-023, Vial: Tray1:2

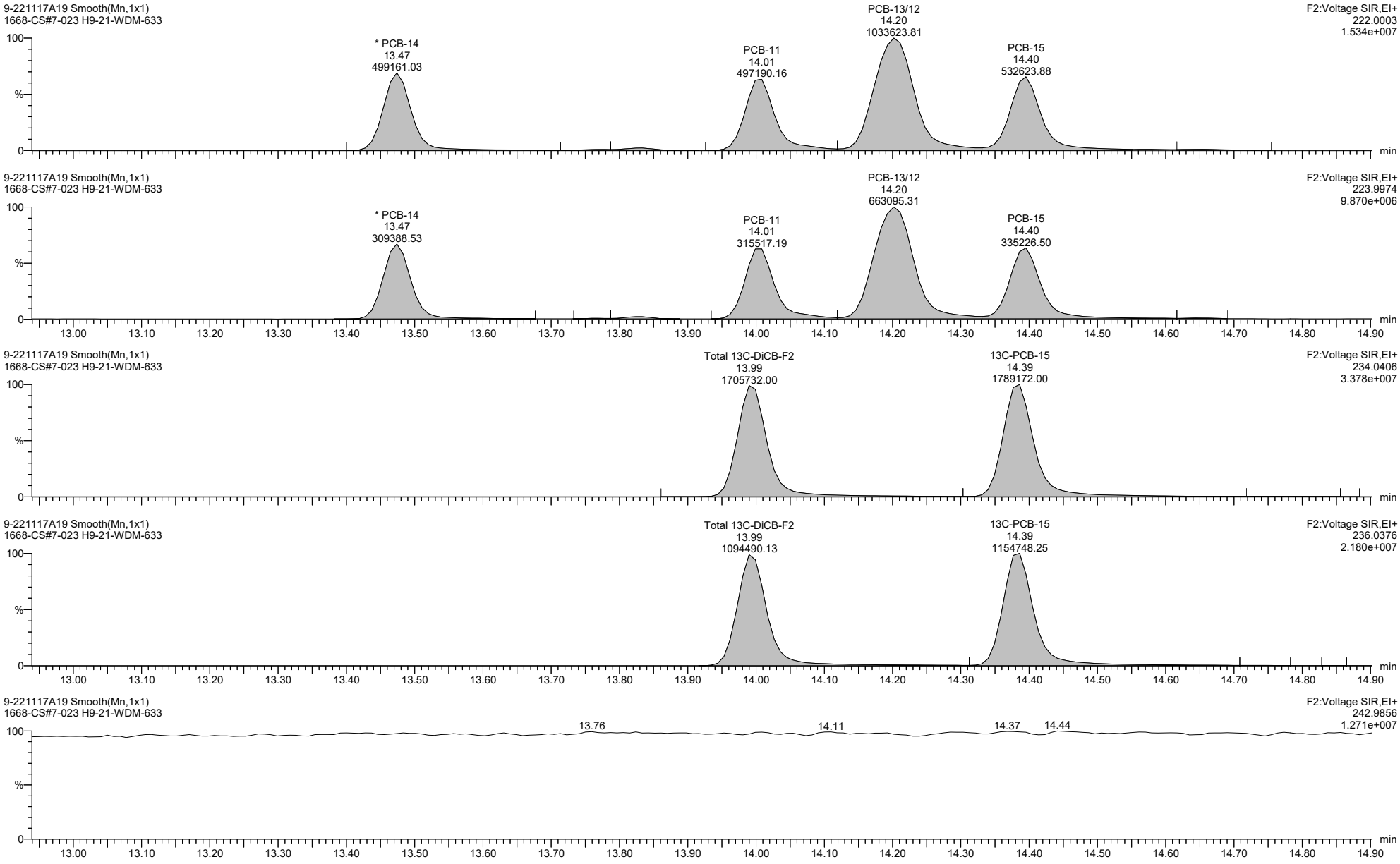


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221117A2-1121ES.qld

Last Altered: Tuesday, November 22, 2022 16:07:50 Eastern Standard Time
Printed: Wednesday, November 23, 2022 11:42:36 Eastern Standard Time

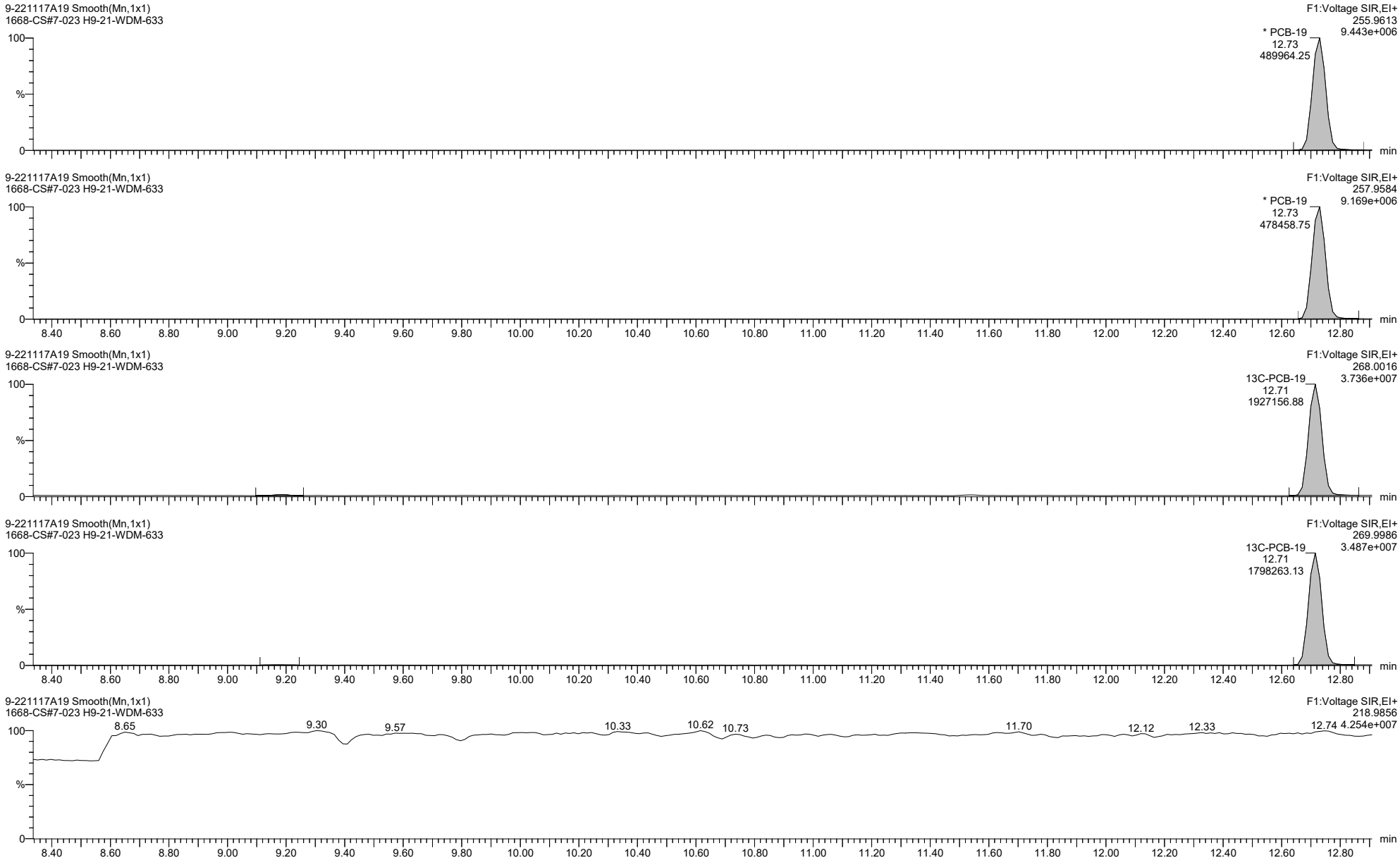
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Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221117A2-1121ES.qld

Last Altered: Tuesday, November 22, 2022 16:07:50 Eastern Standard Time
Printed: Wednesday, November 23, 2022 11:42:36 Eastern Standard Time

Name: 9-221117A19, Date: 18-Nov-2022, Time: 02:30:40, ID: H9-21-WDM-633, Description: 1668-CS#7-023, Vial: Tray1:2

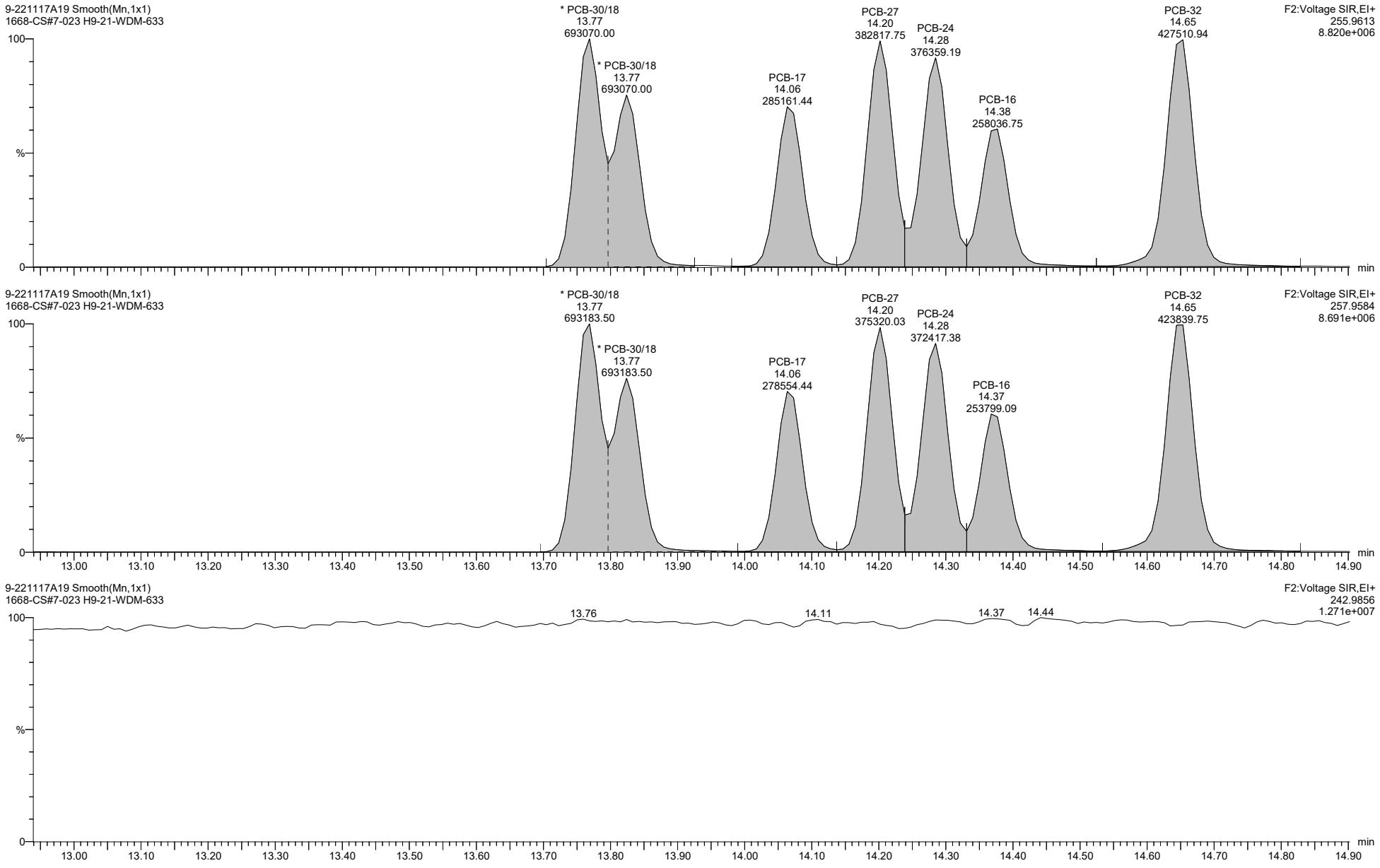


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

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Last Altered: Tuesday, November 22, 2022 16:07:50 Eastern Standard Time
Printed: Wednesday, November 23, 2022 11:42:36 Eastern Standard Time

Name: 9-221117A19, Date: 18-Nov-2022, Time: 02:30:40, ID: H9-21-WDM-633, Description: 1668-CS#7-023, Vial: Tray1:2

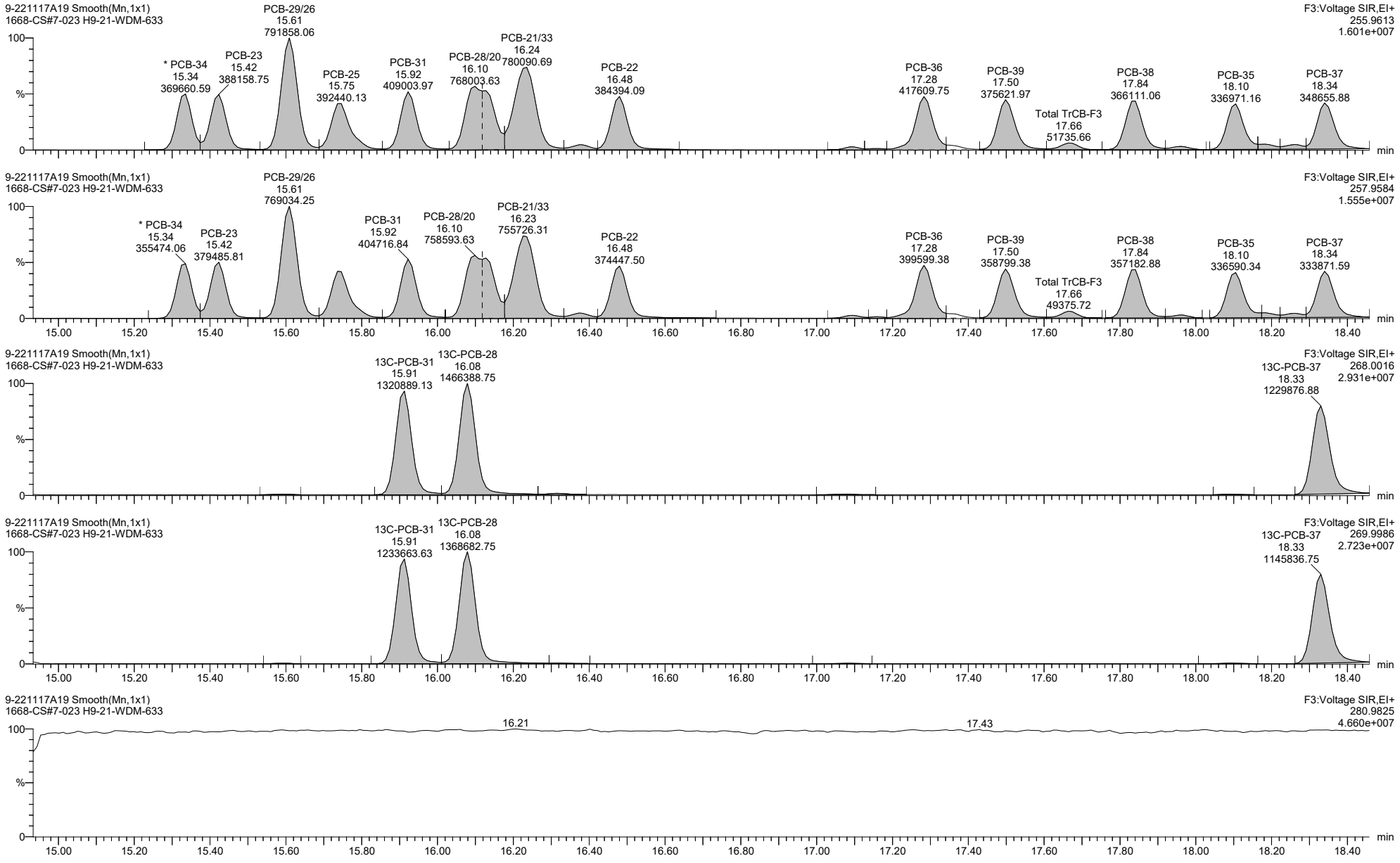


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

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Last Altered: Tuesday, November 22, 2022 16:07:50 Eastern Standard Time
Printed: Wednesday, November 23, 2022 11:42:36 Eastern Standard Time

Name: 9-221117A19, Date: 18-Nov-2022, Time: 02:30:40, ID: H9-21-WDM-633, Description: 1668-CS#7-023, Vial: Tray1:2

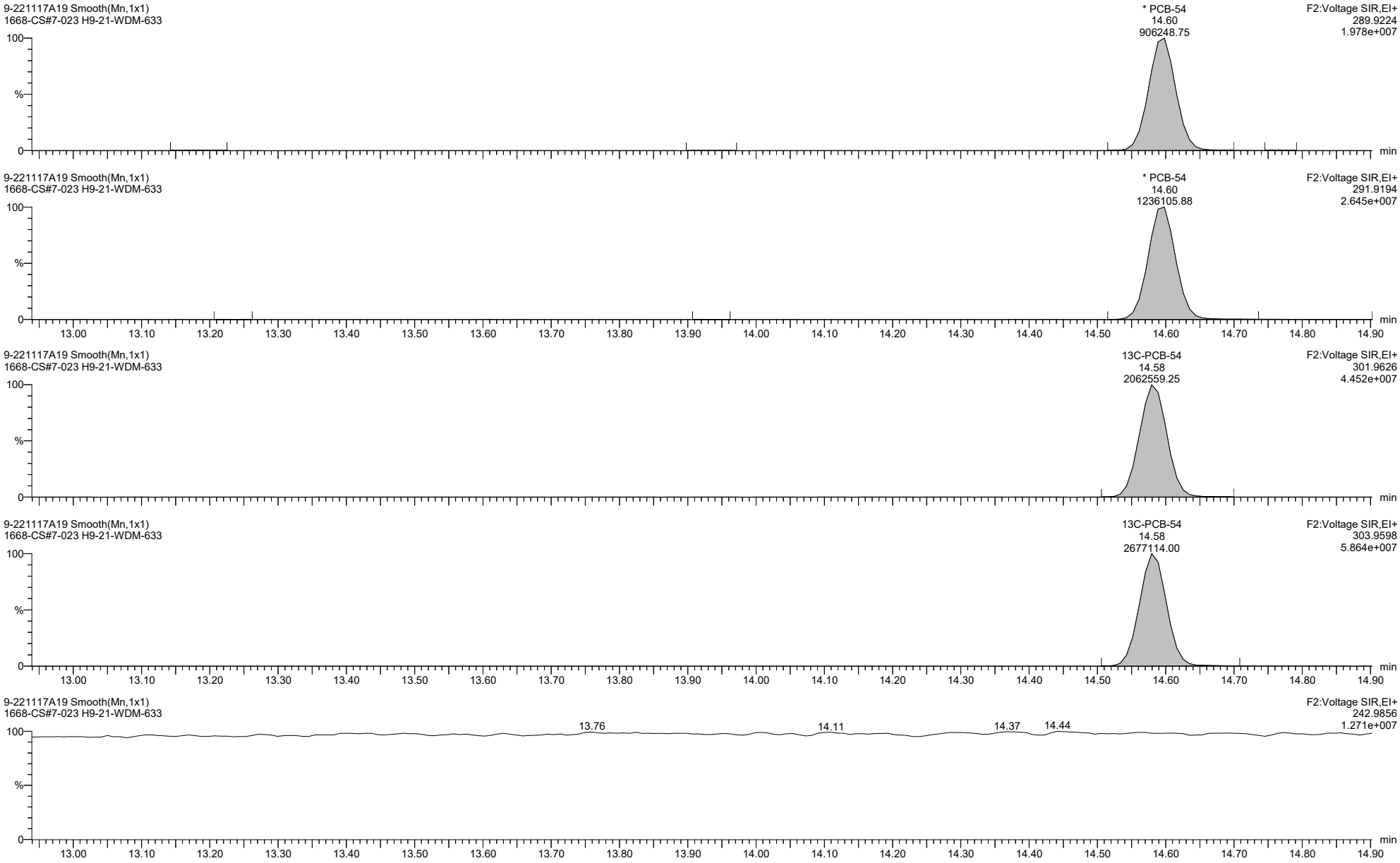


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

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Last Altered: Tuesday, November 22, 2022 16:07:50 Eastern Standard Time
Printed: Wednesday, November 23, 2022 11:42:36 Eastern Standard Time

Name: 9-221117A19, Date: 18-Nov-2022, Time: 02:30:40, ID: H9-21-WDM-633, Description: 1668-CS#7-023, Vial: Tray1:2

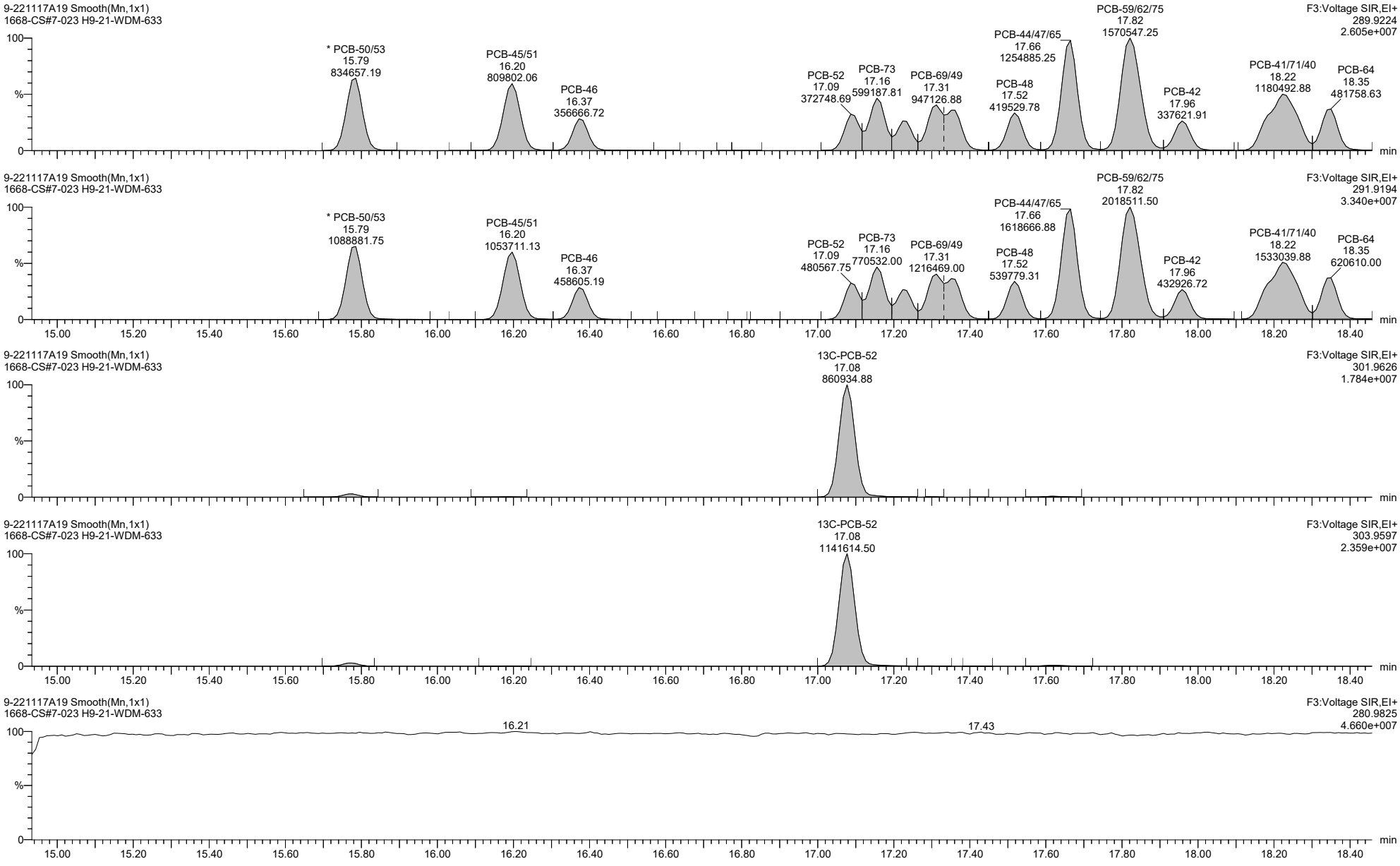


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

Dataset: I:\Organics Instrument\HIGHRES GCMS Completed Results Files\HR-9\2211\9-221117A2-1121ES.qld

Last Altered: Tuesday, November 22, 2022 16:07:50 Eastern Standard Time
Printed: Wednesday, November 23, 2022 11:42:36 Eastern Standard Time

Name: 9-221117A19, Date: 18-Nov-2022, Time: 02:30:40, ID: H9-21-WDM-633, Description: 1668-CS#7-023, Vial: Tray1:2

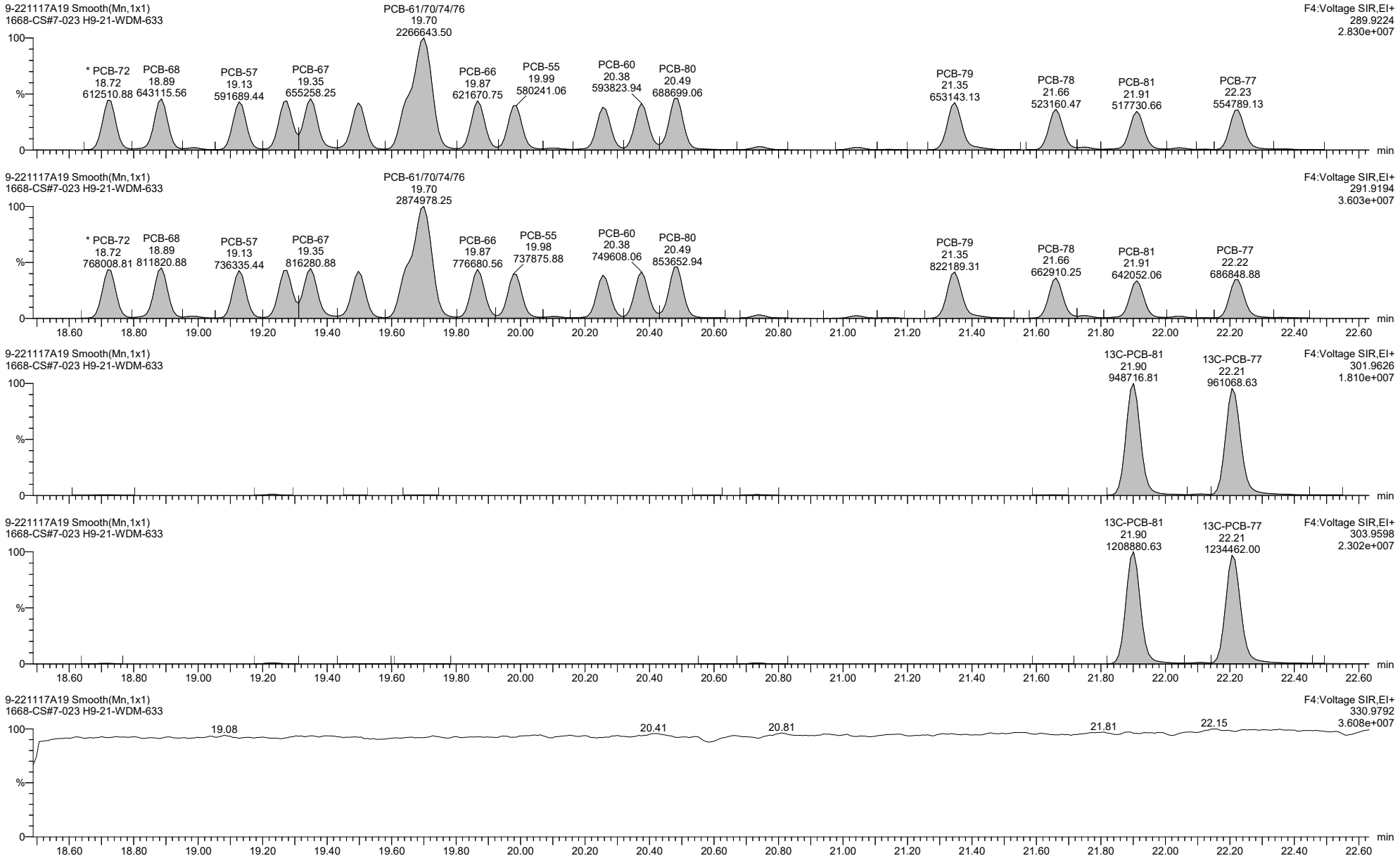


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

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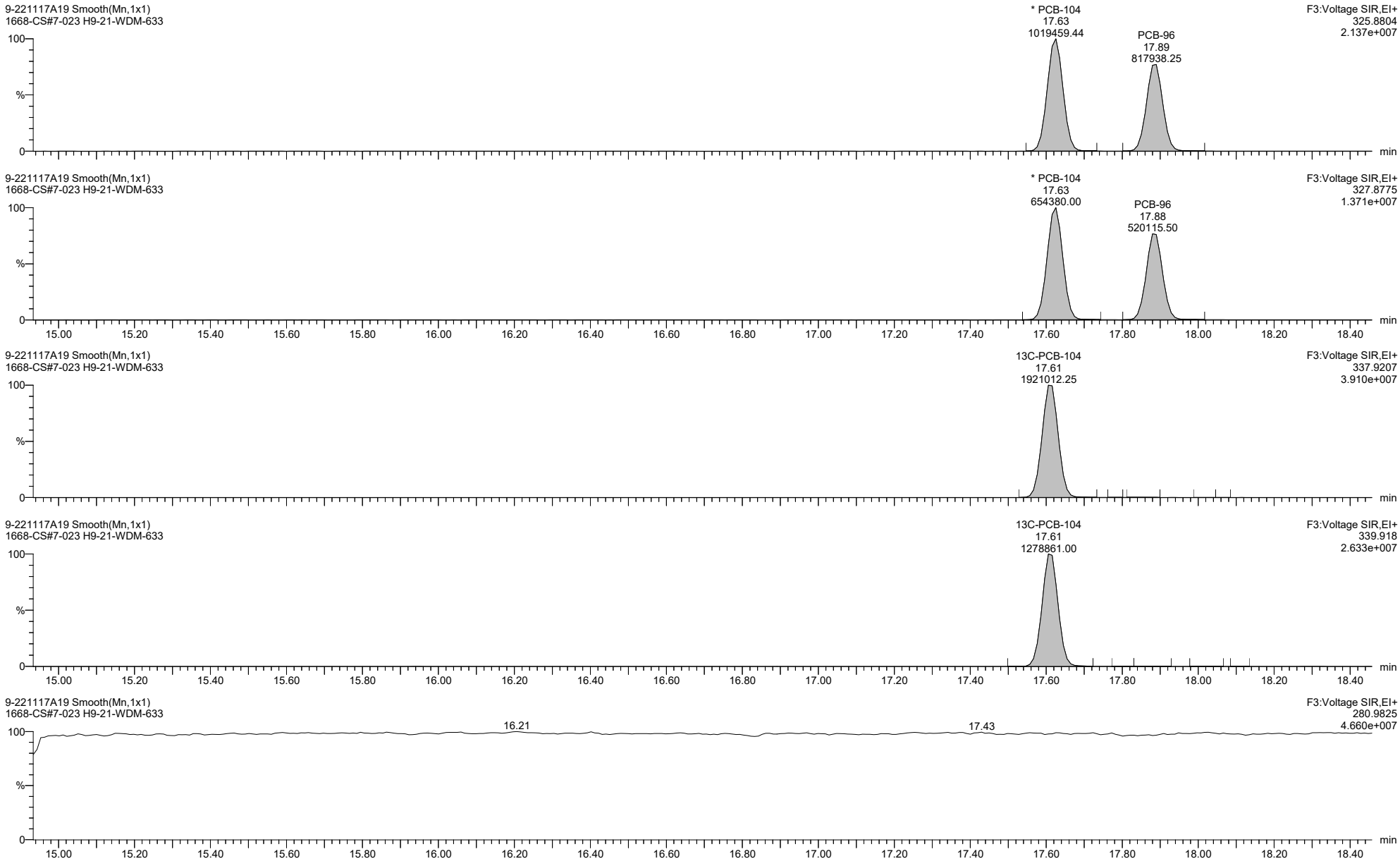


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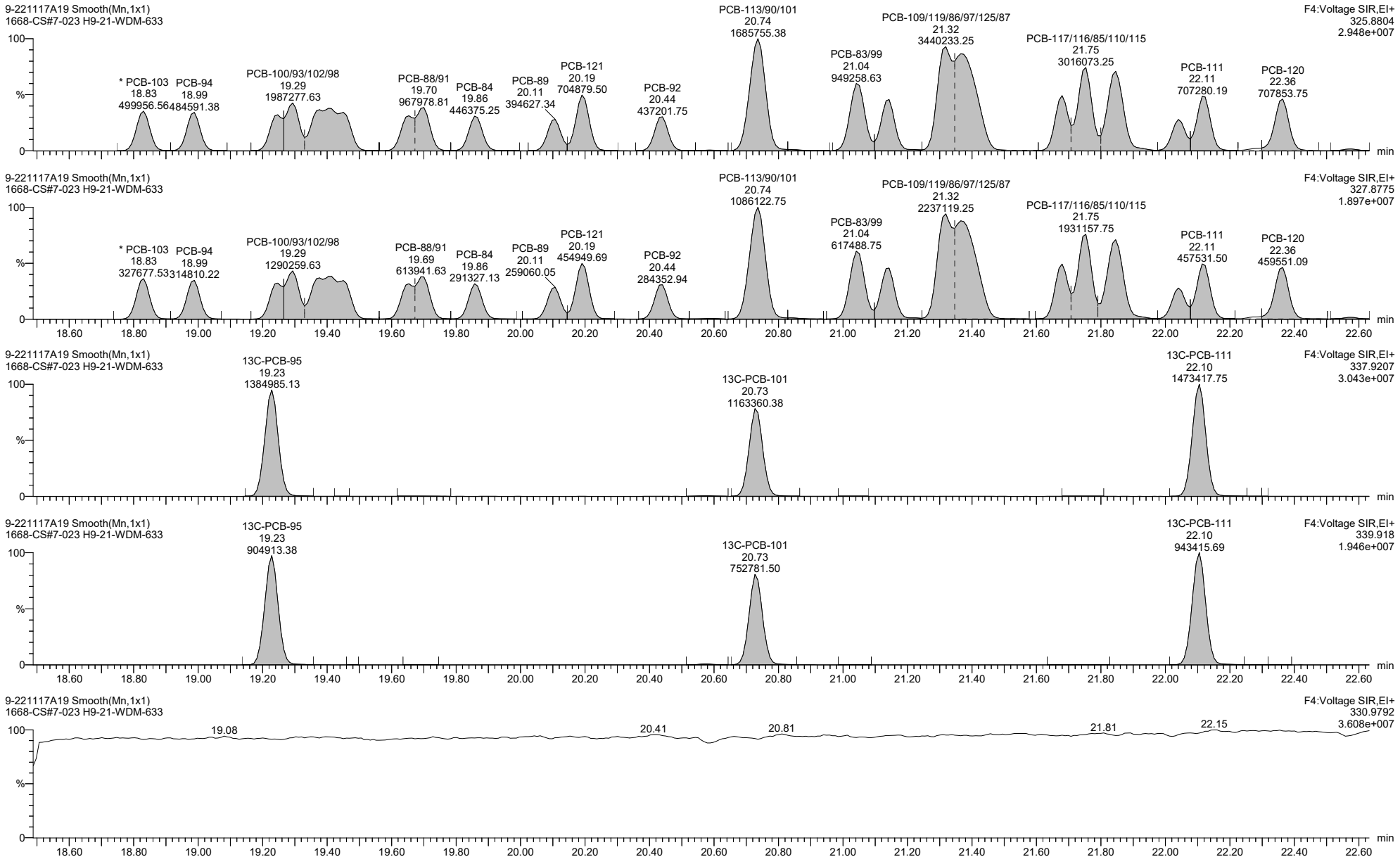


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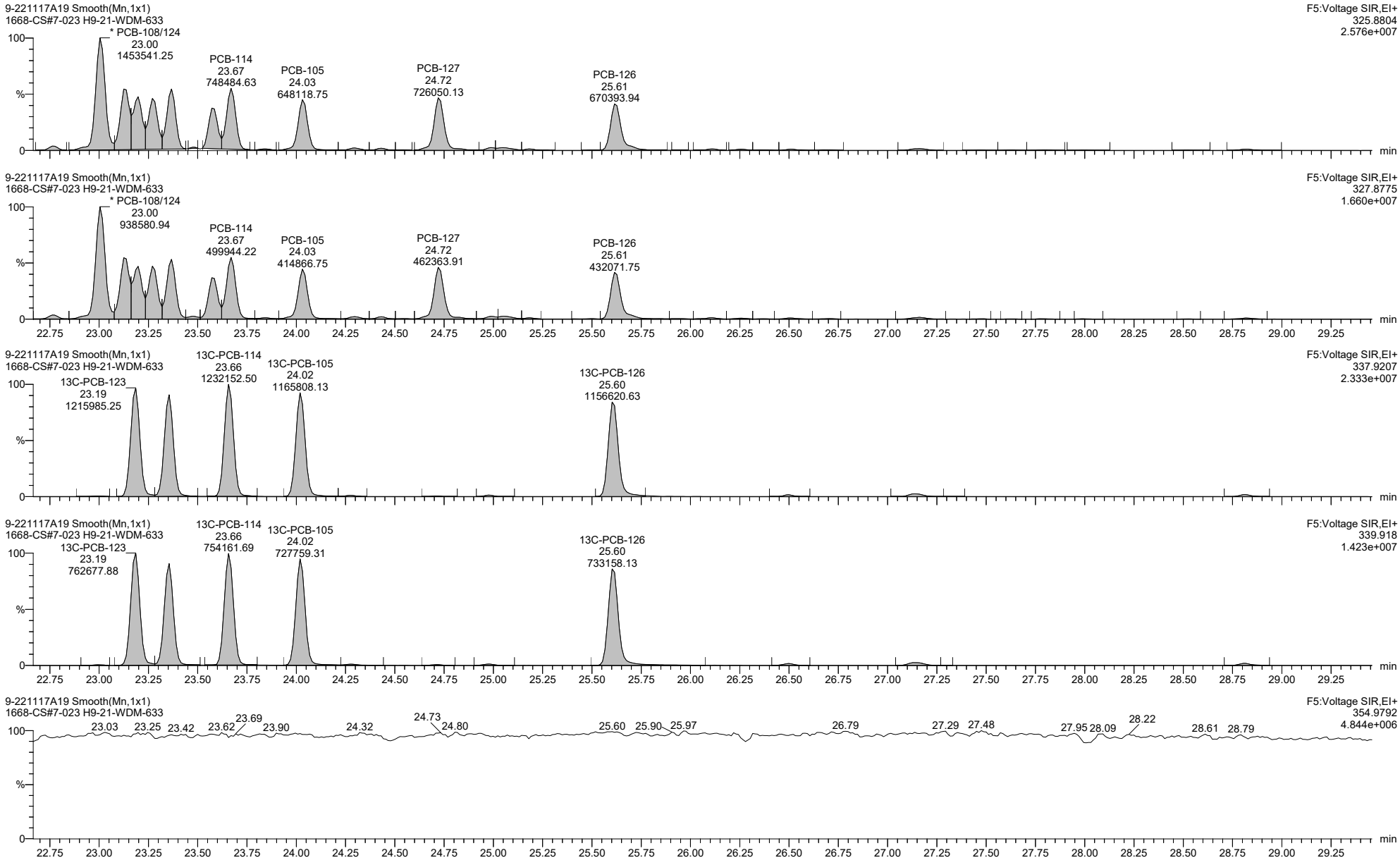


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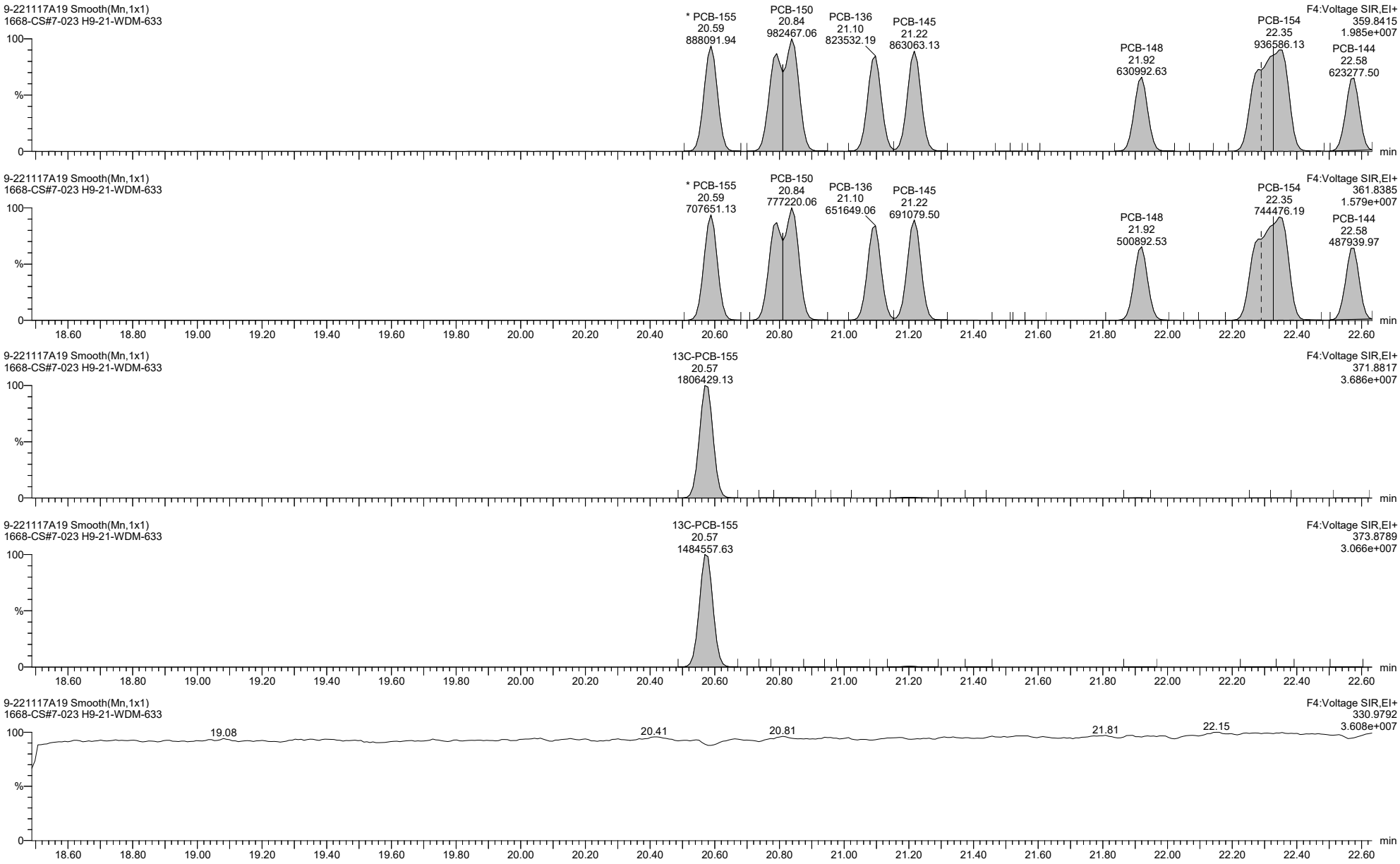


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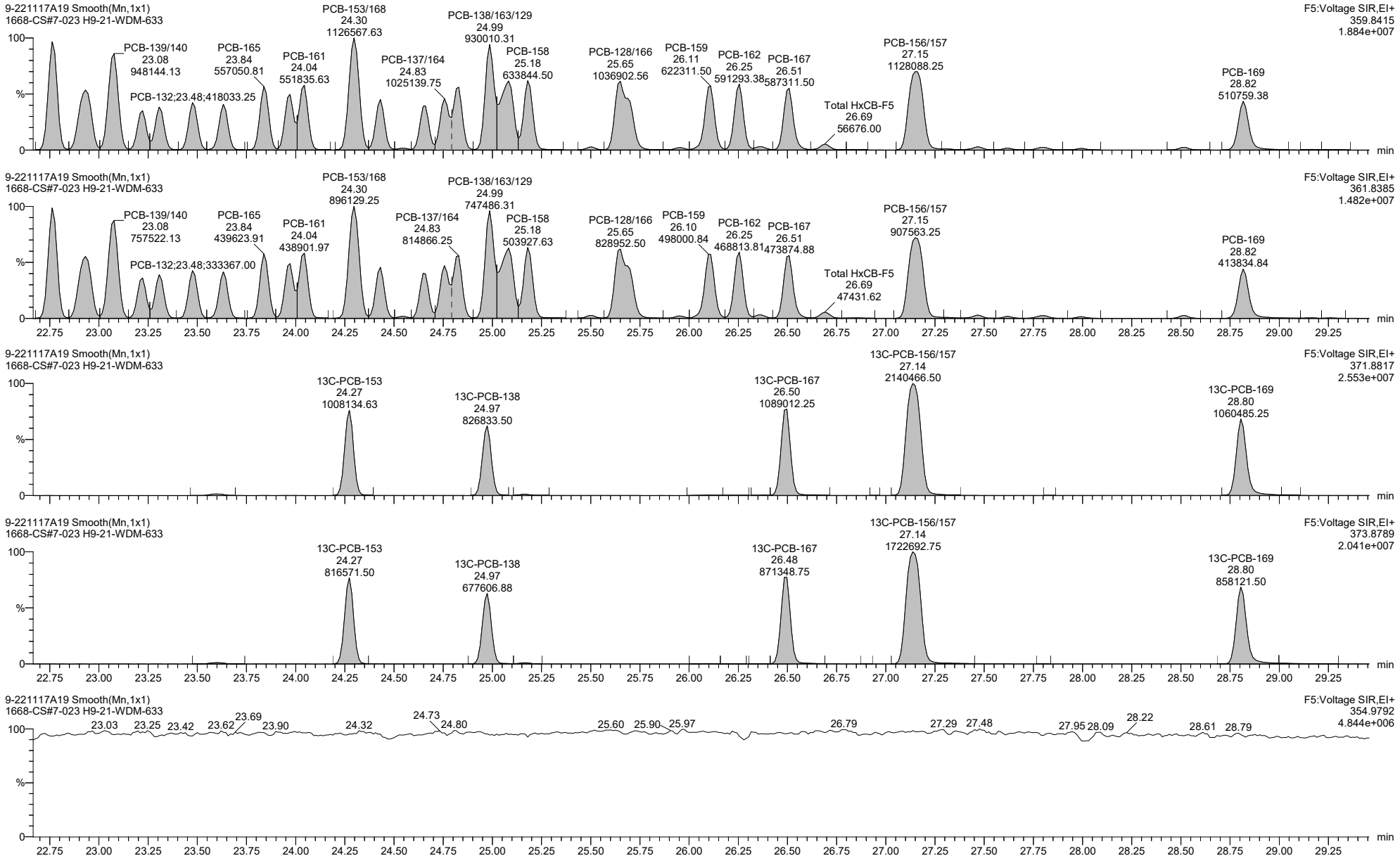


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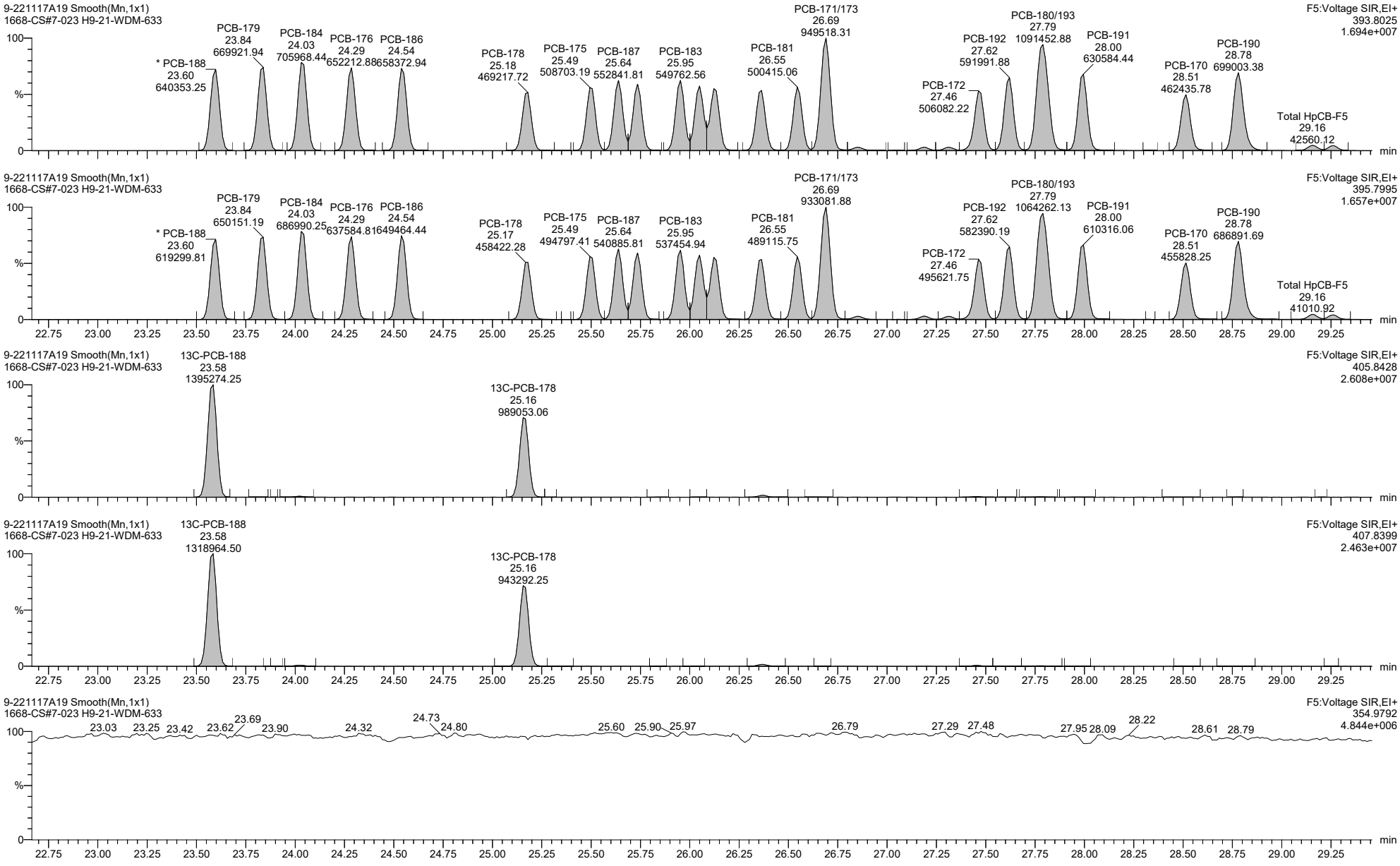
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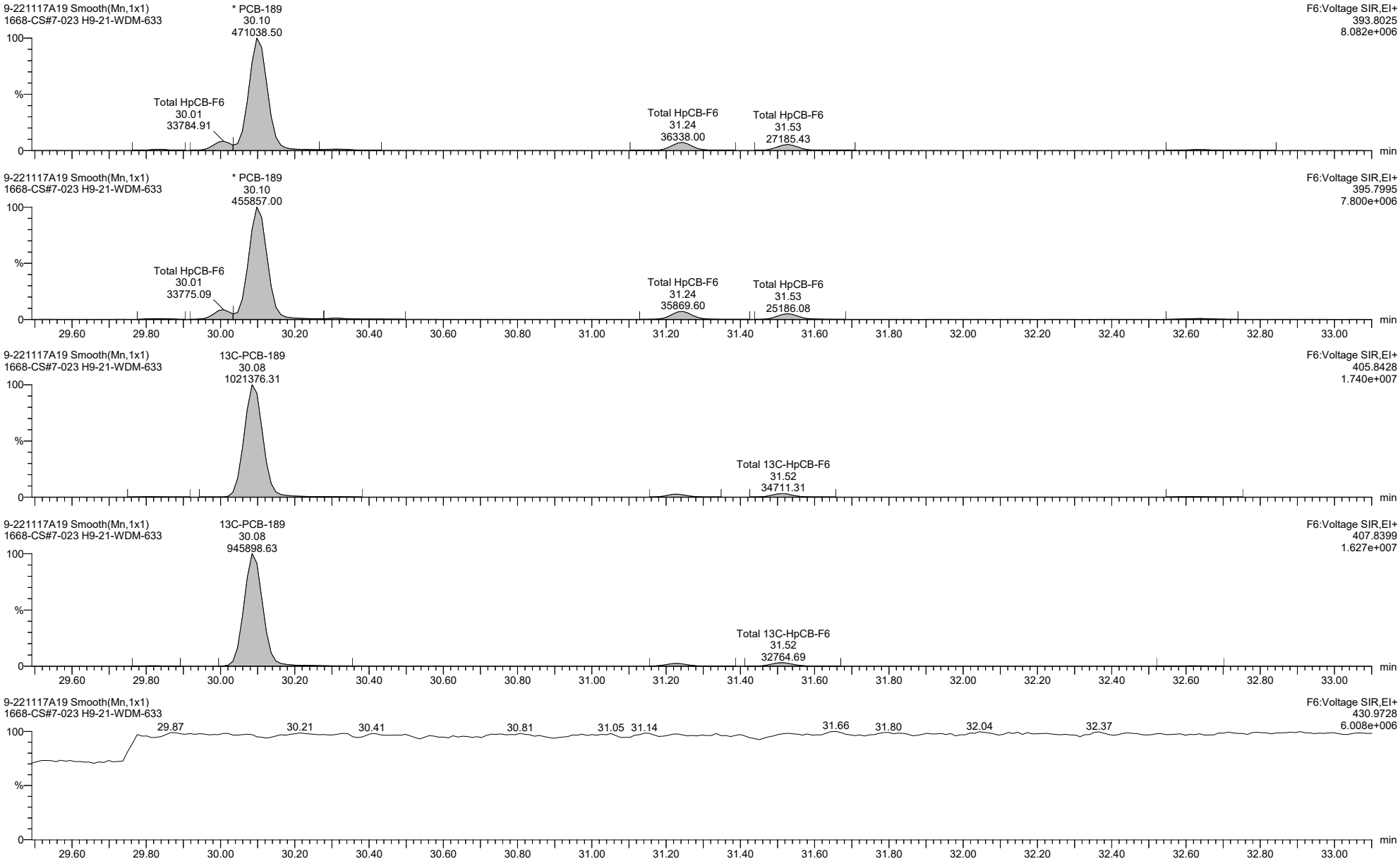


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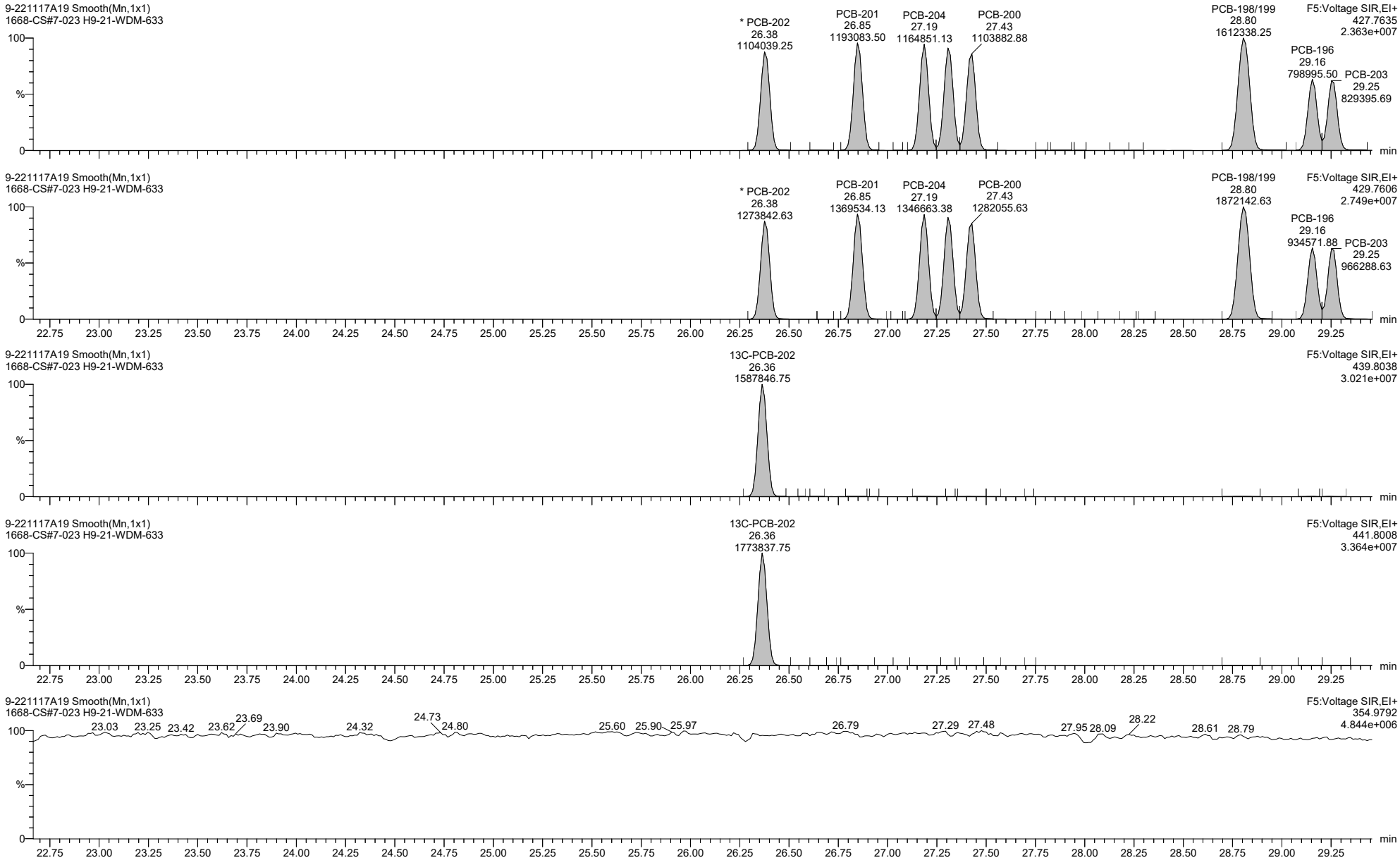
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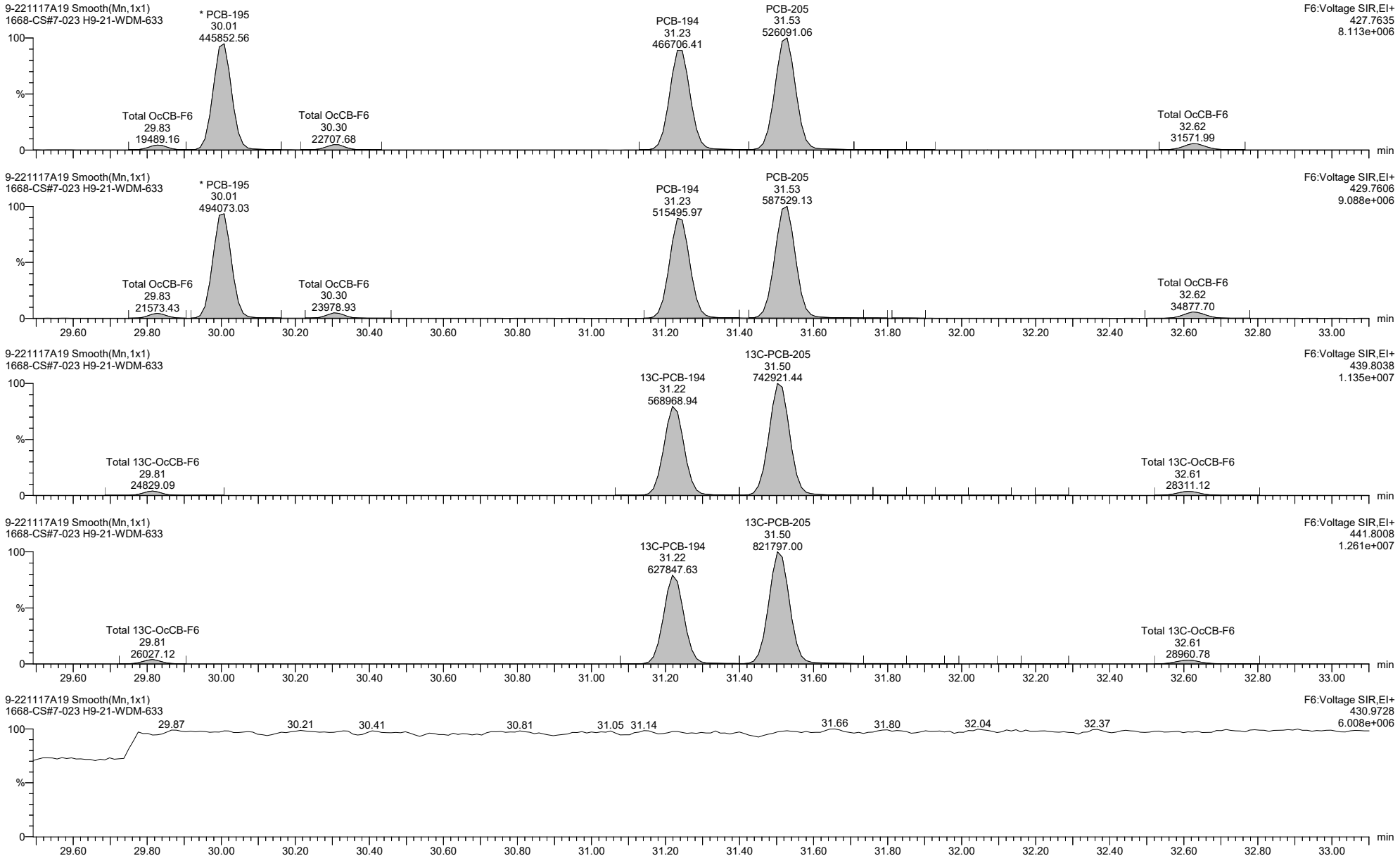


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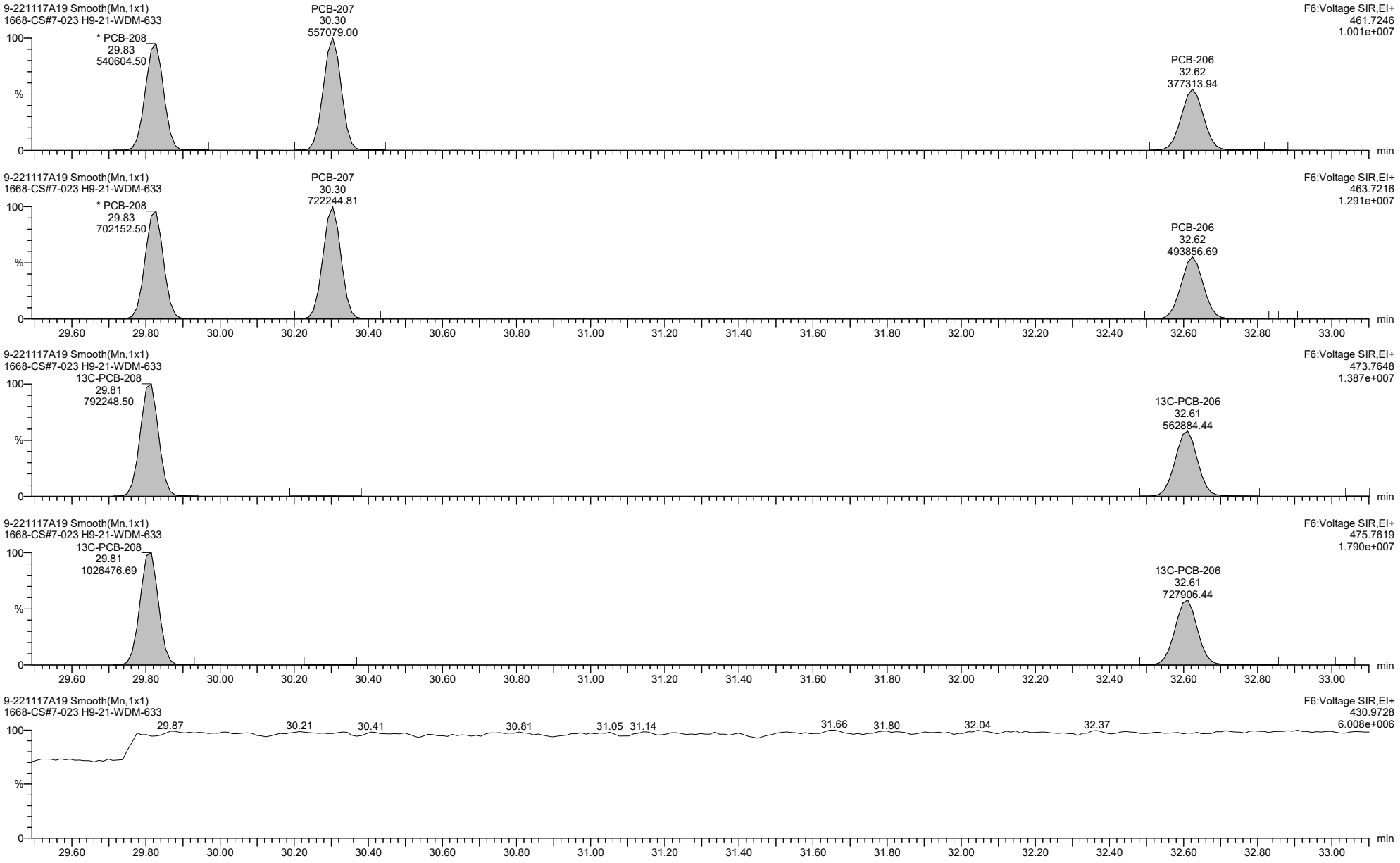


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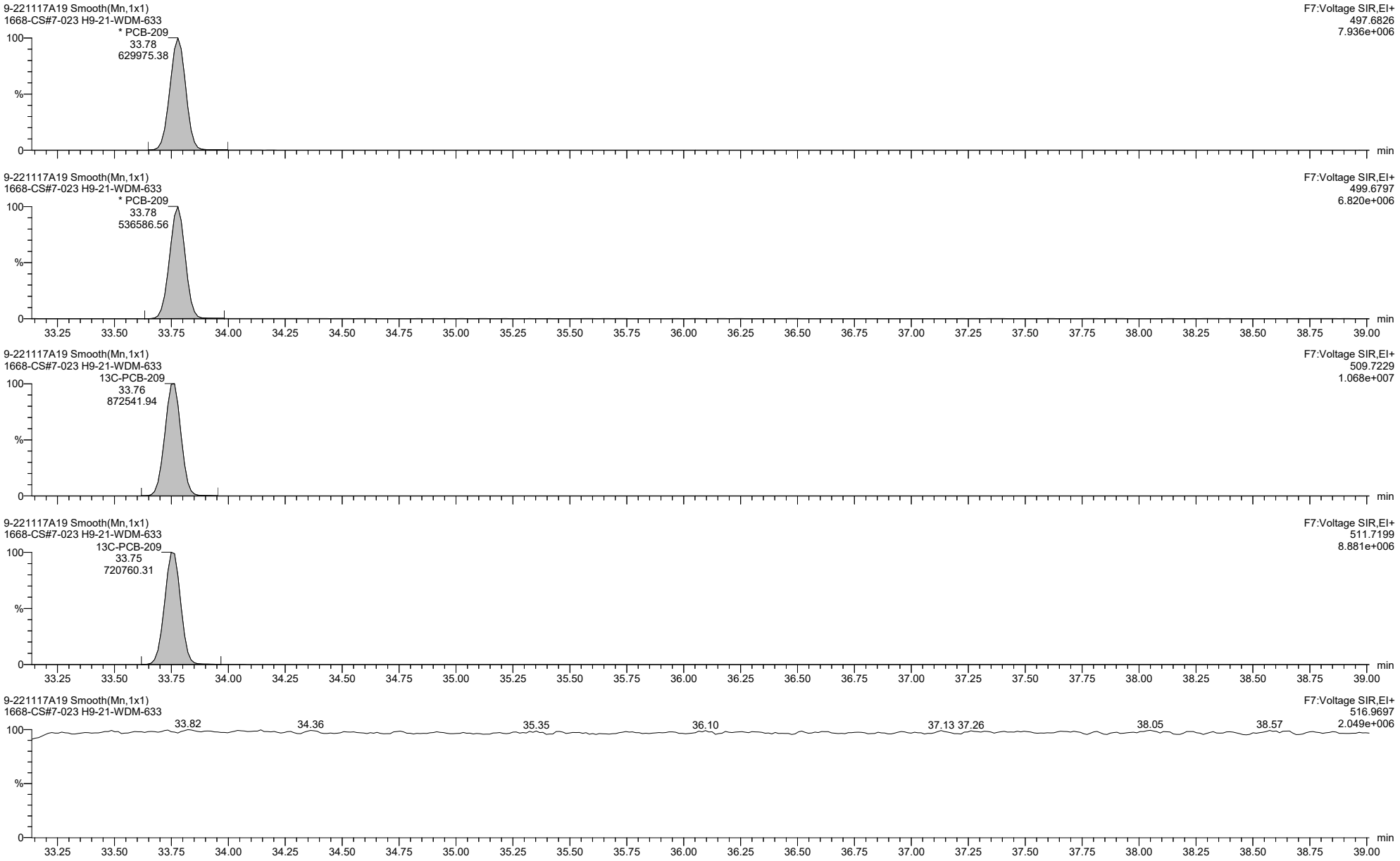


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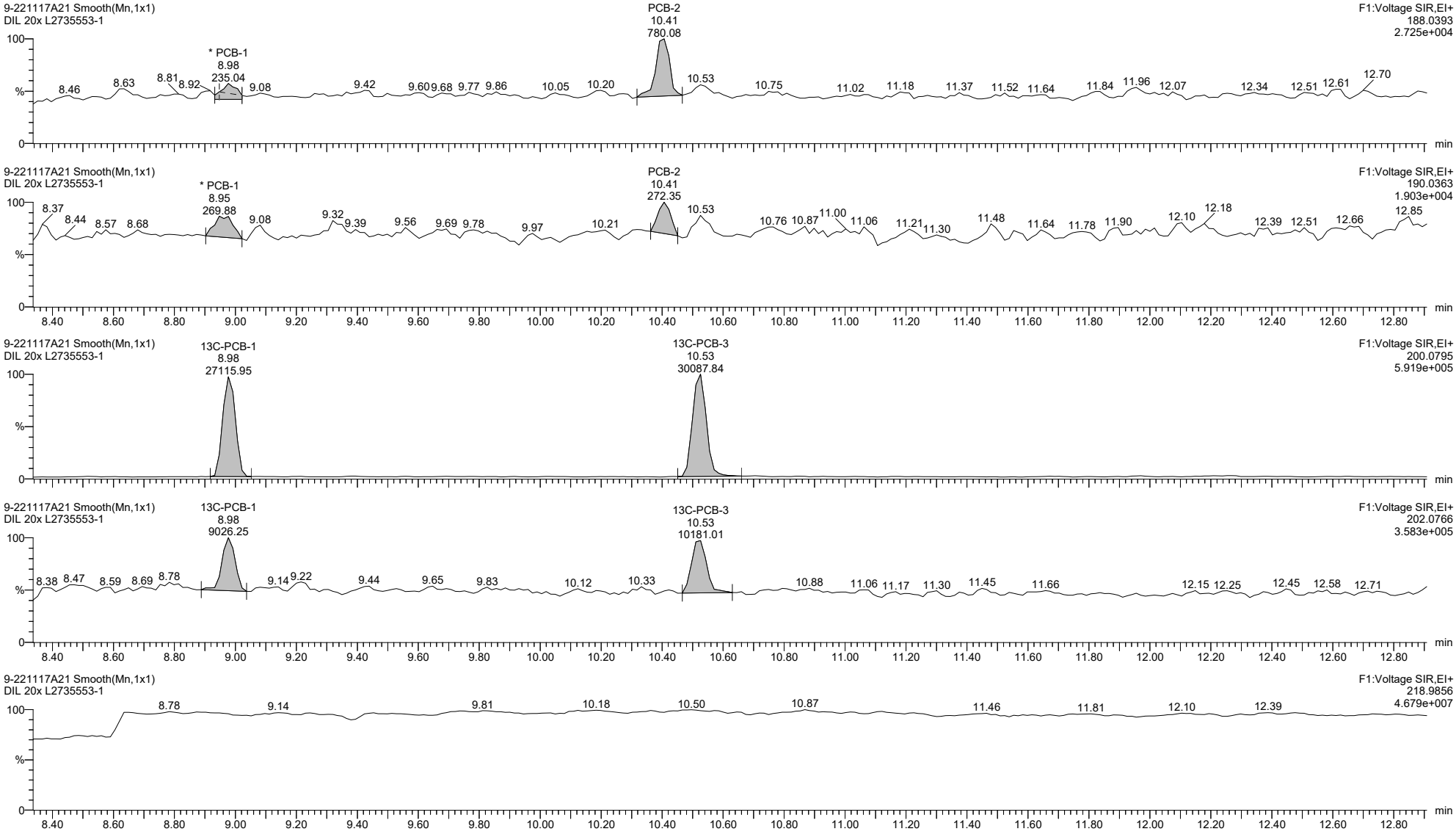
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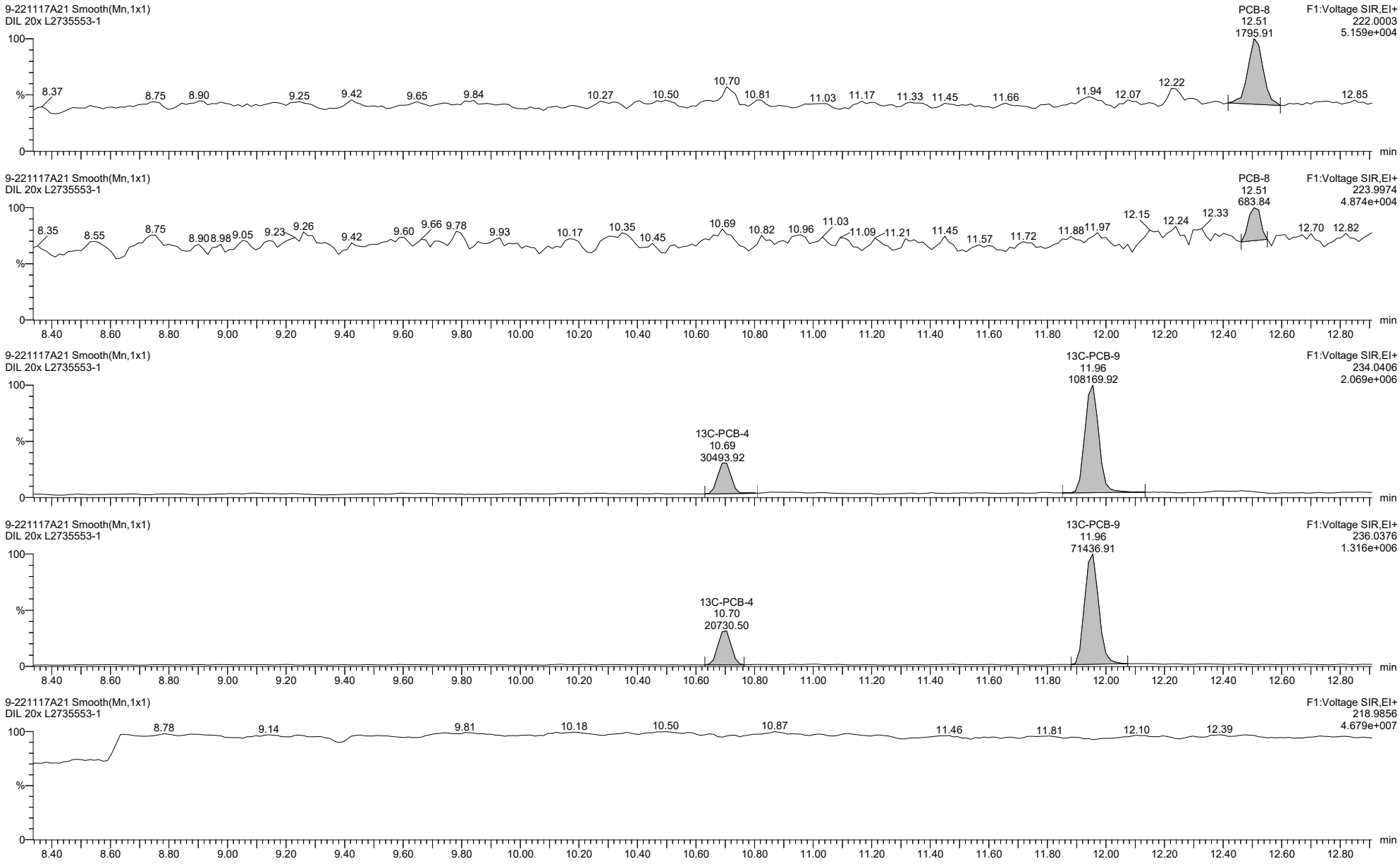


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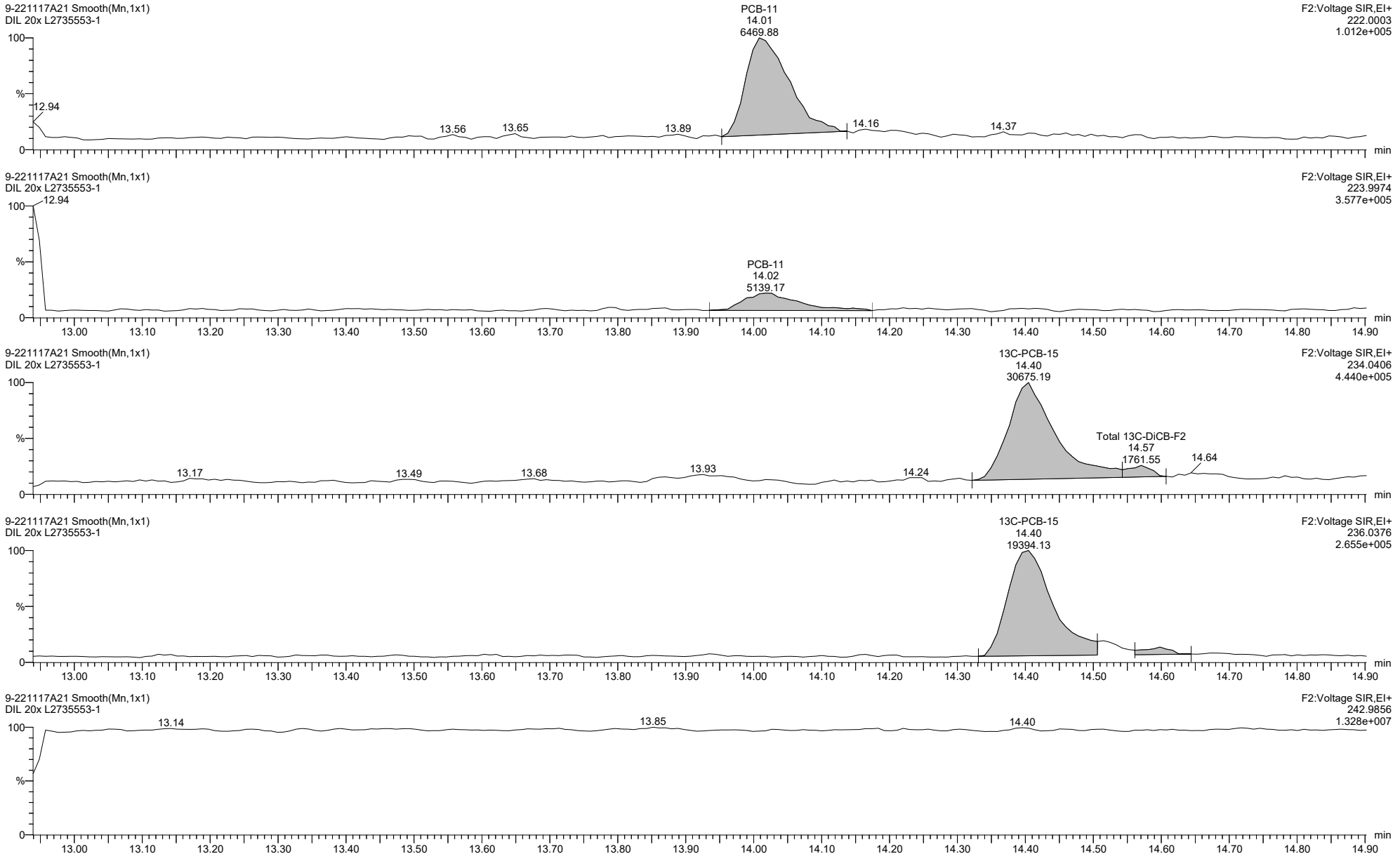


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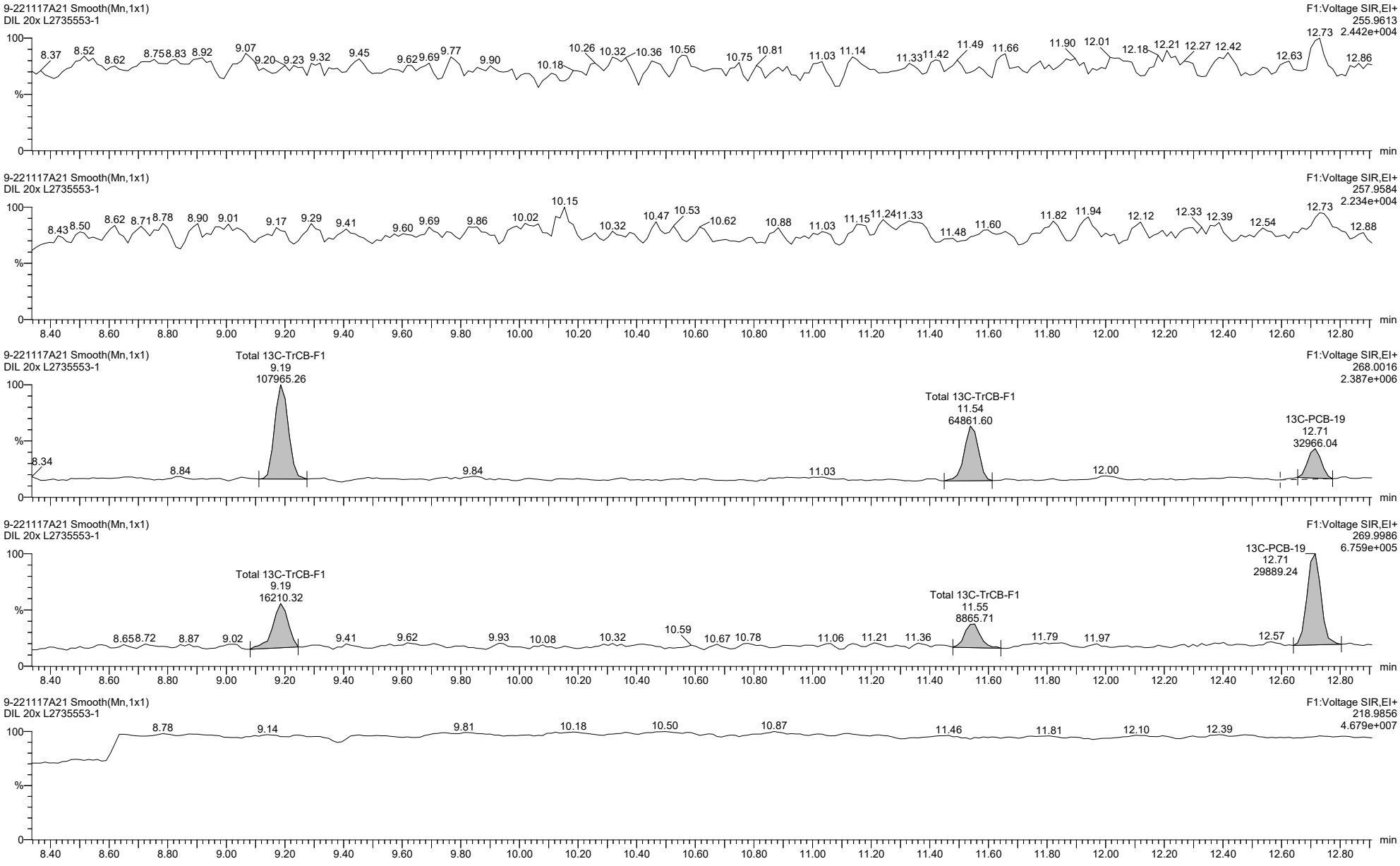


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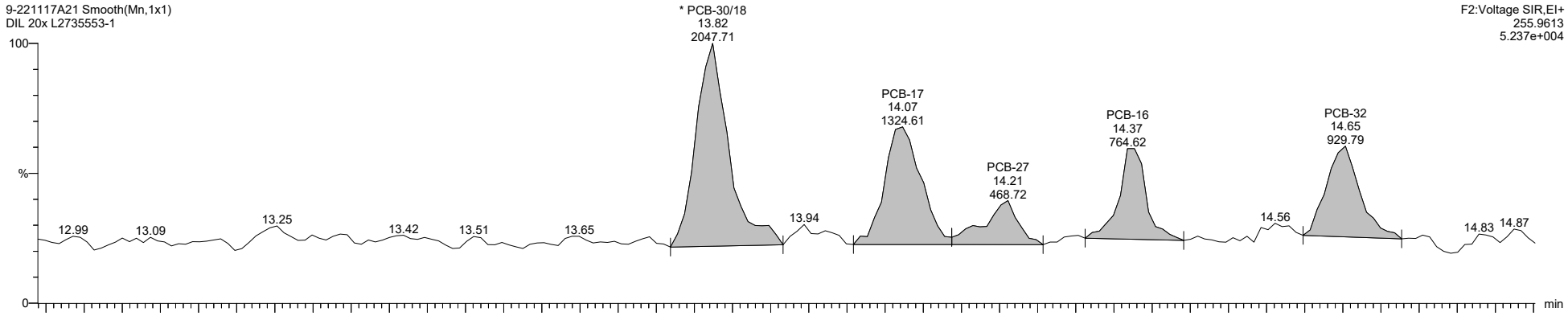


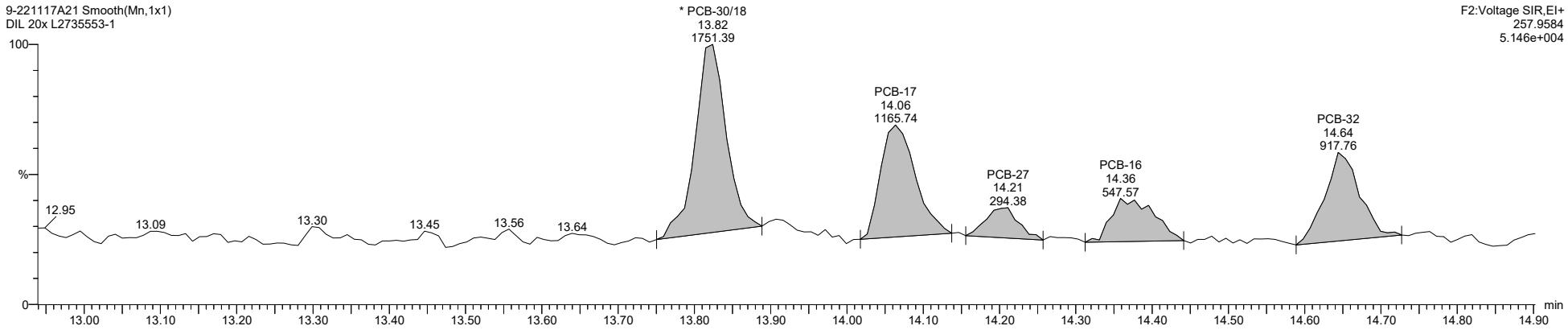
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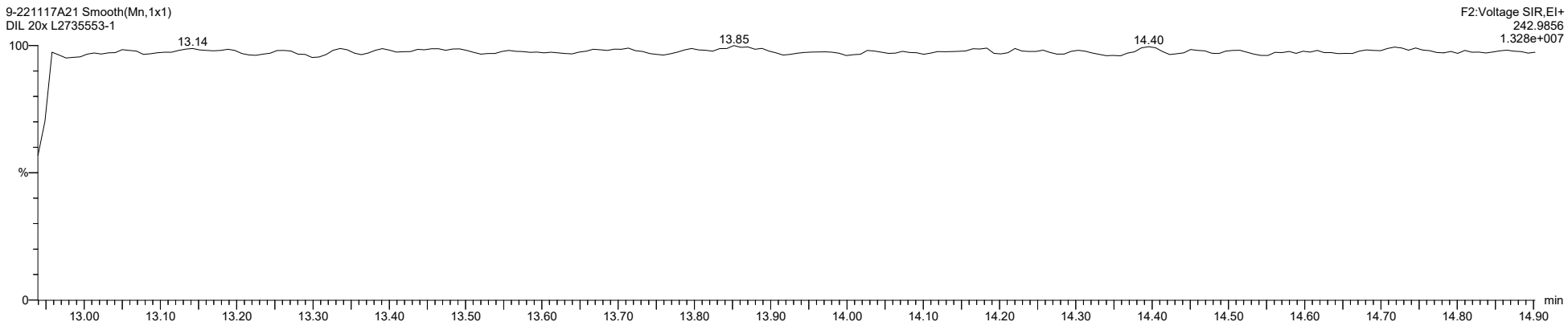
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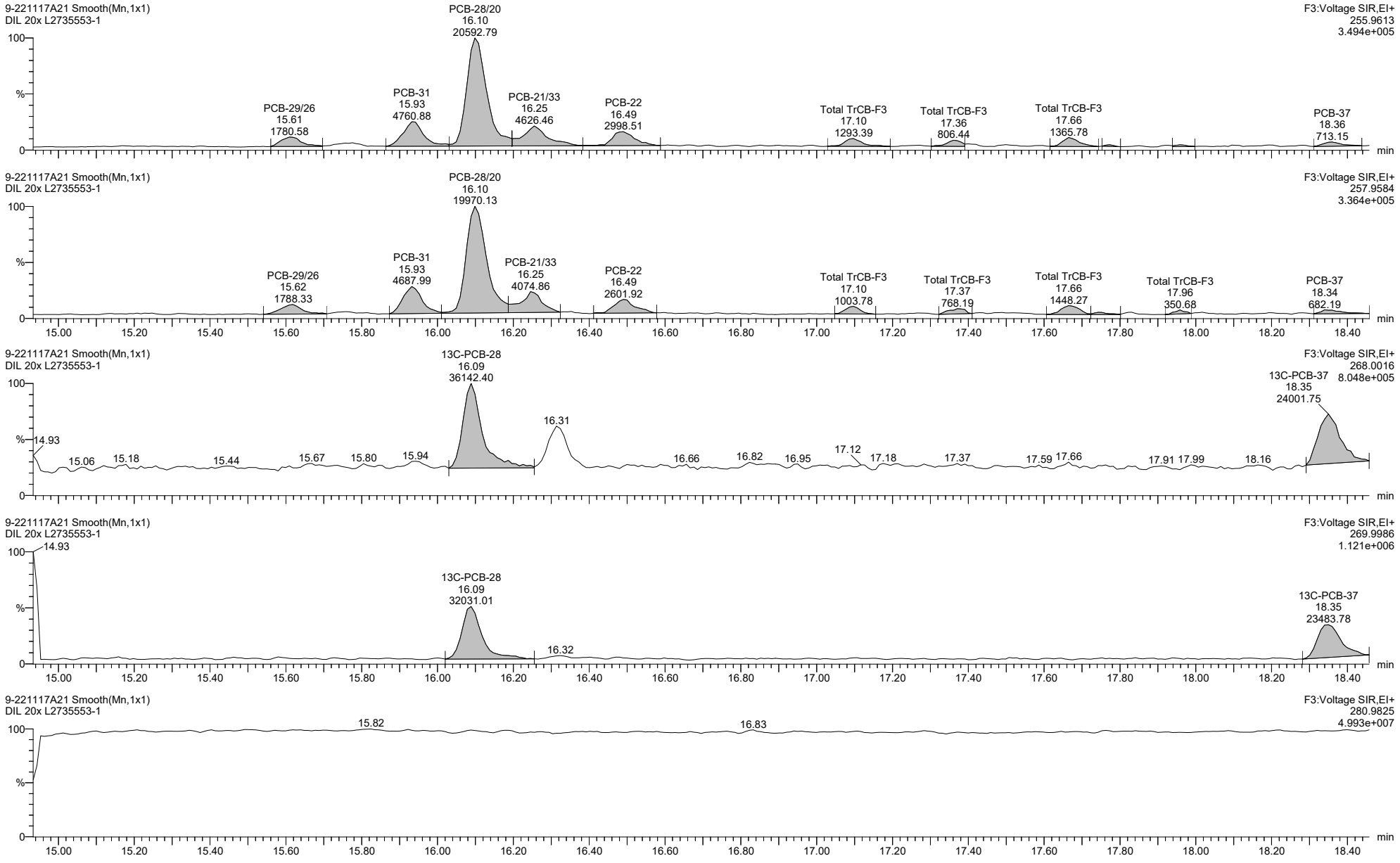


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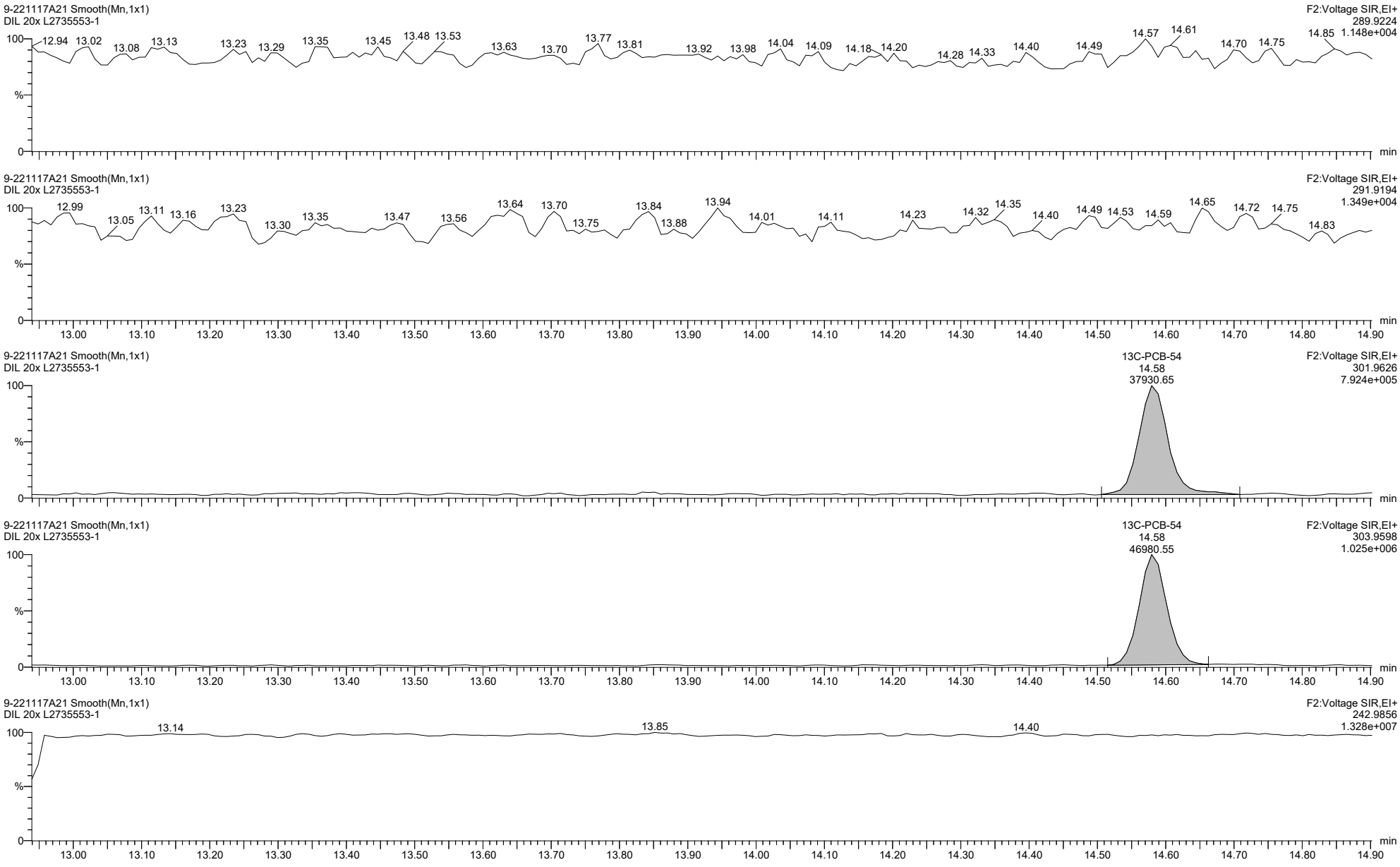


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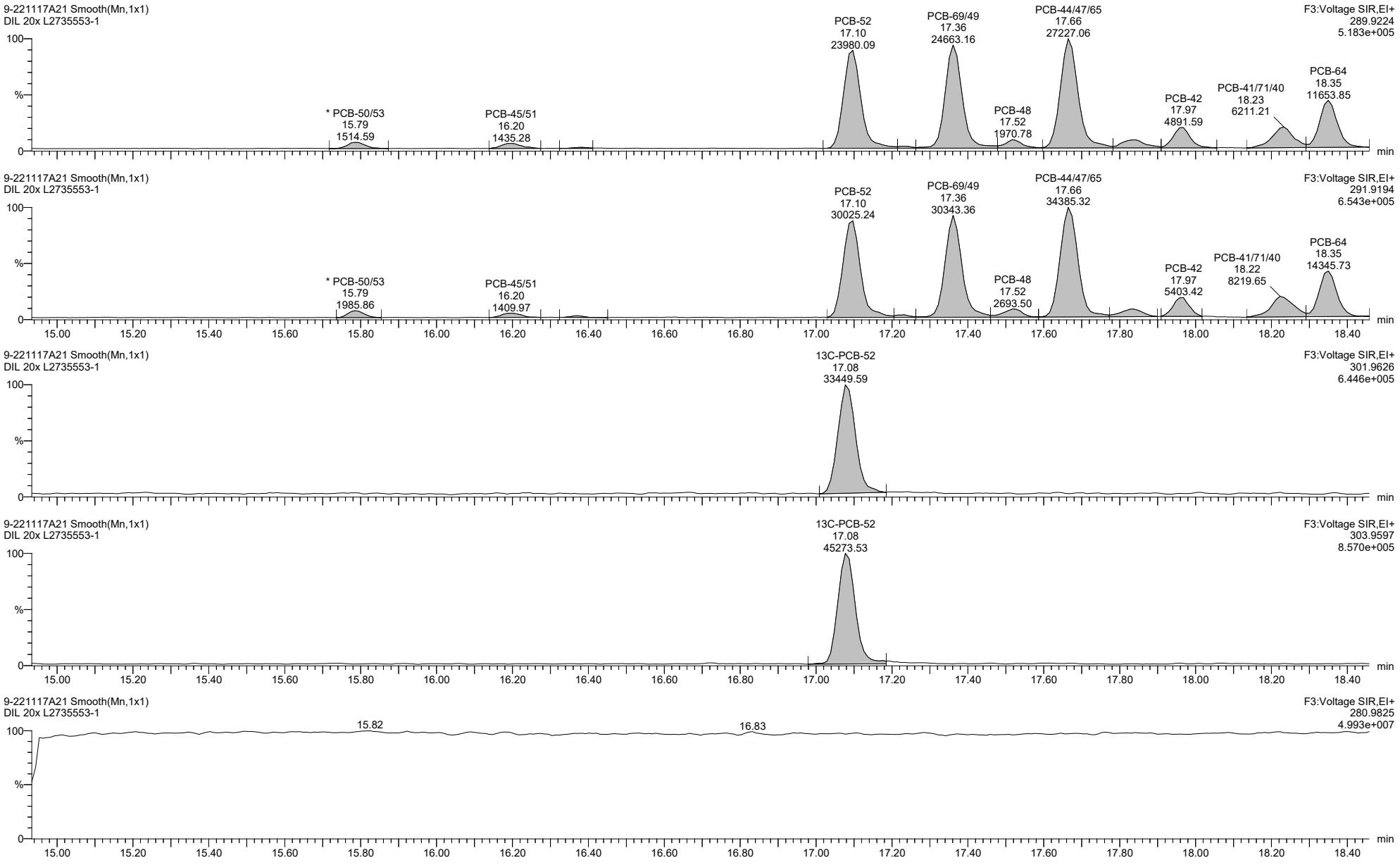


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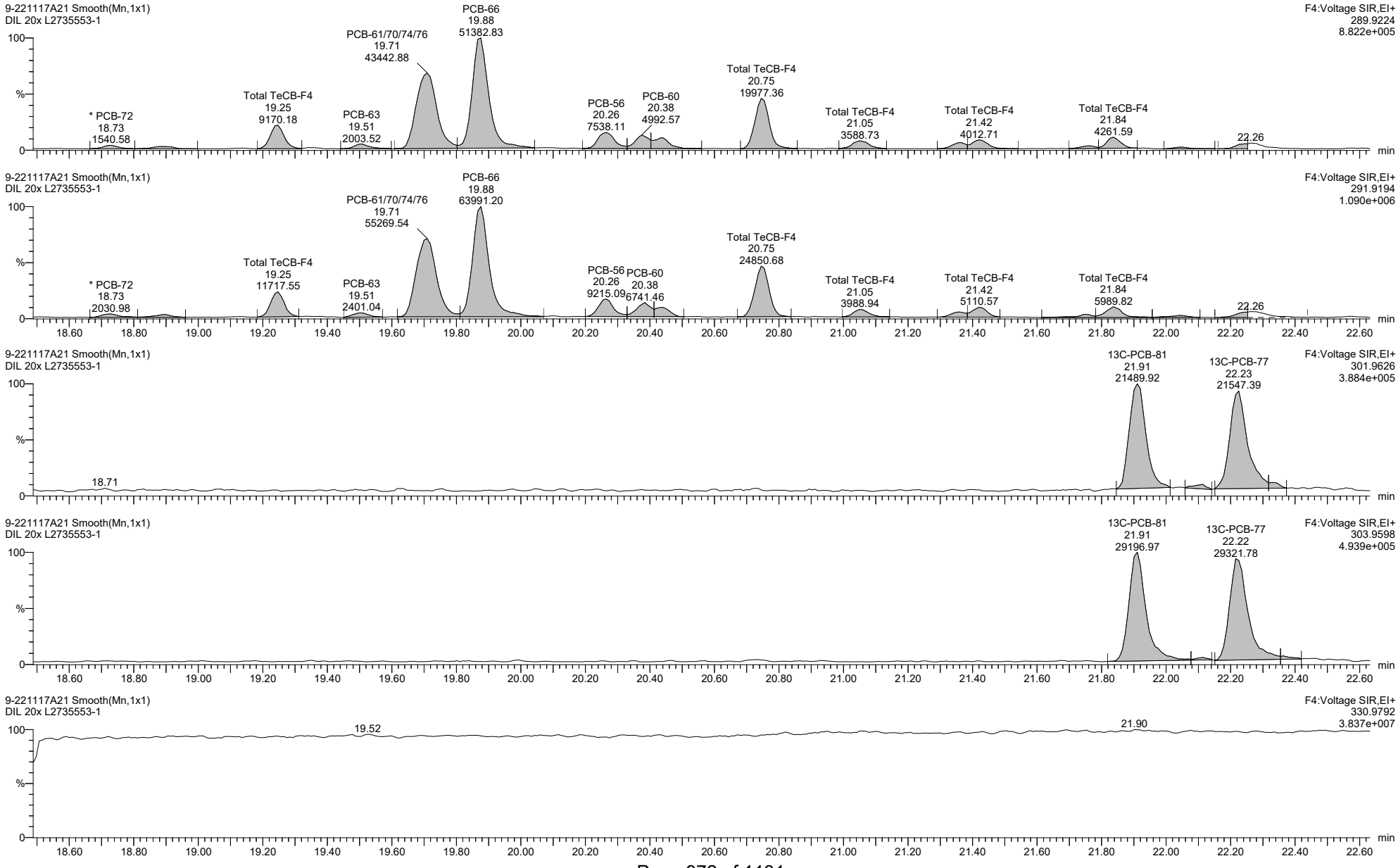


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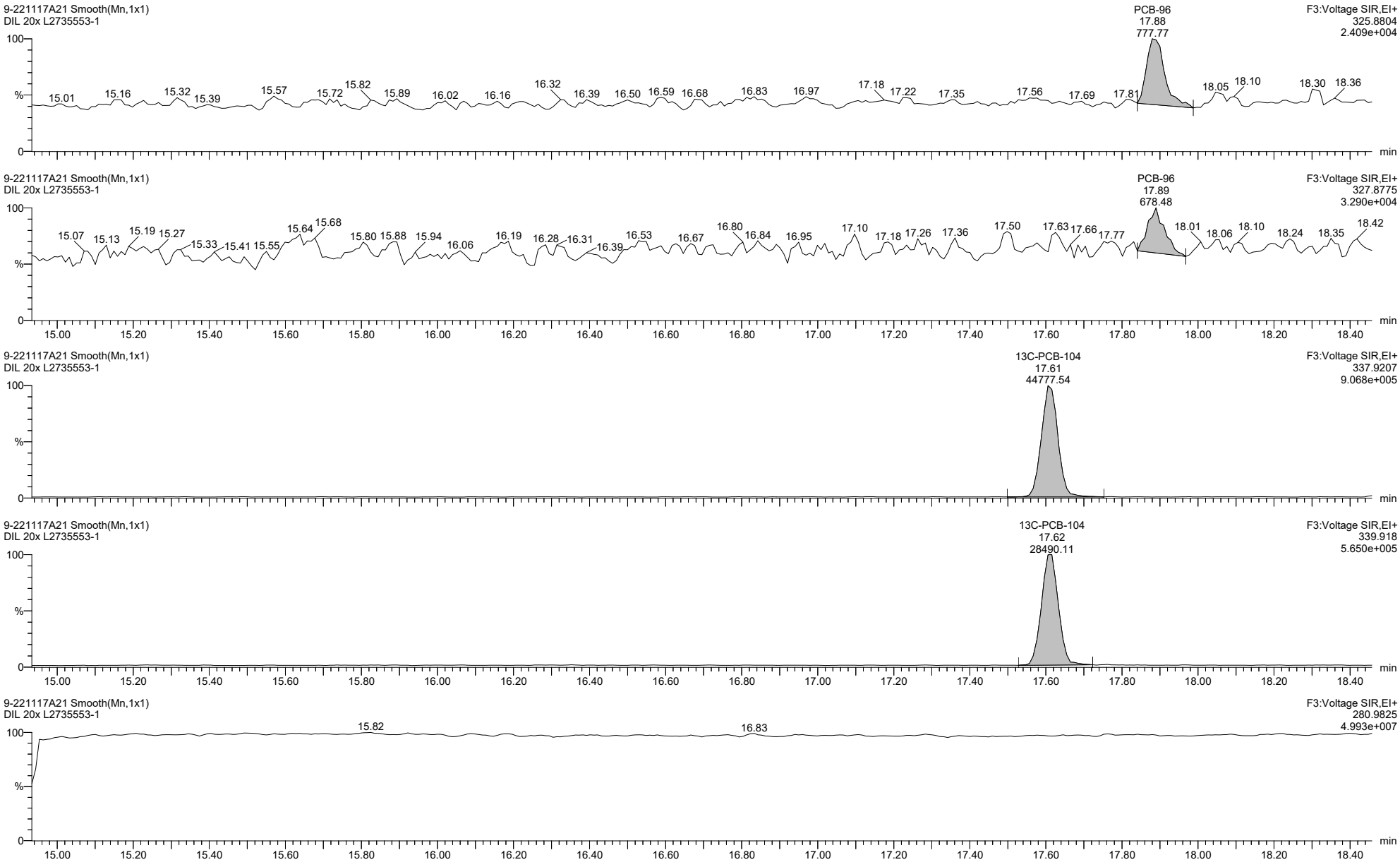


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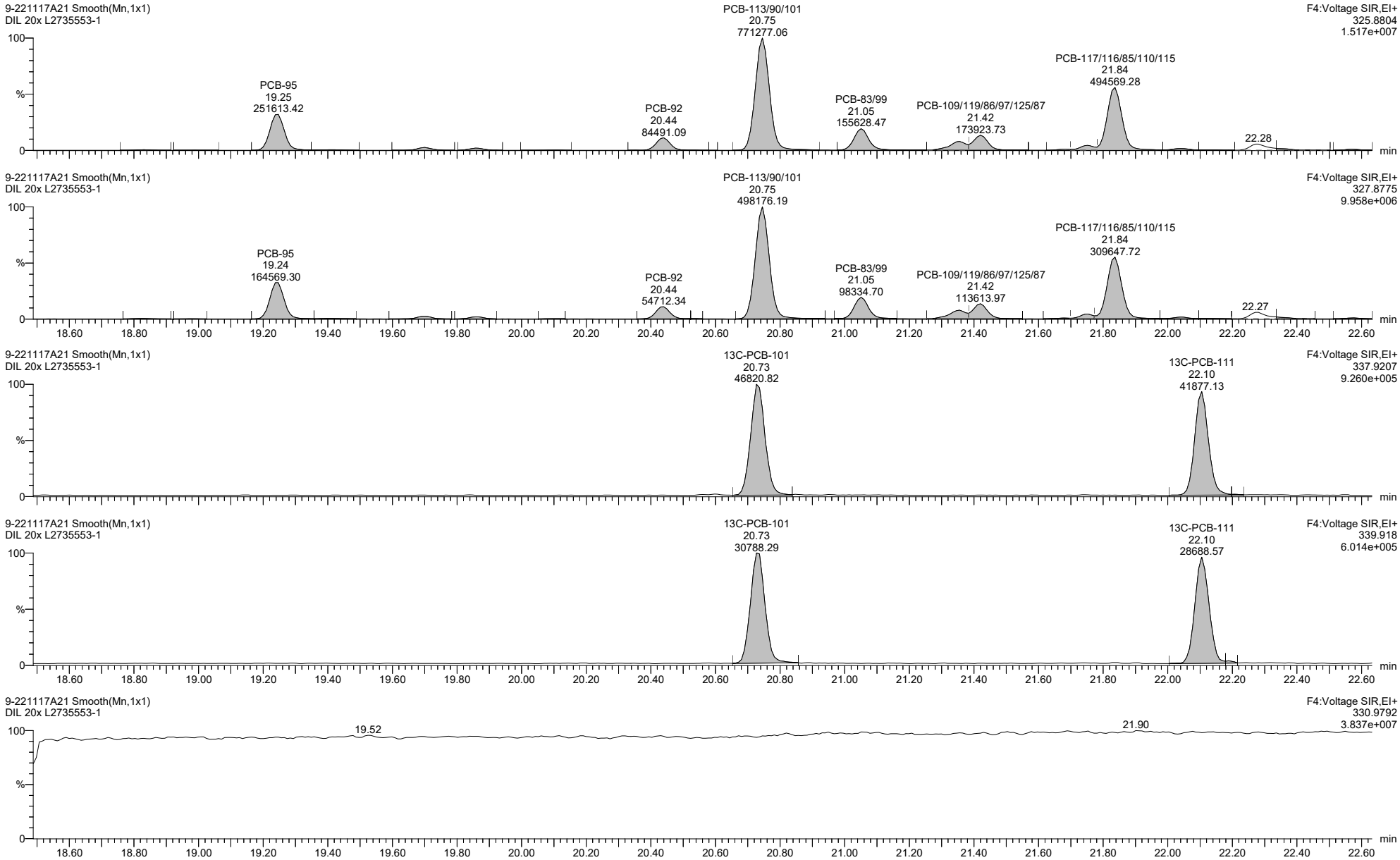


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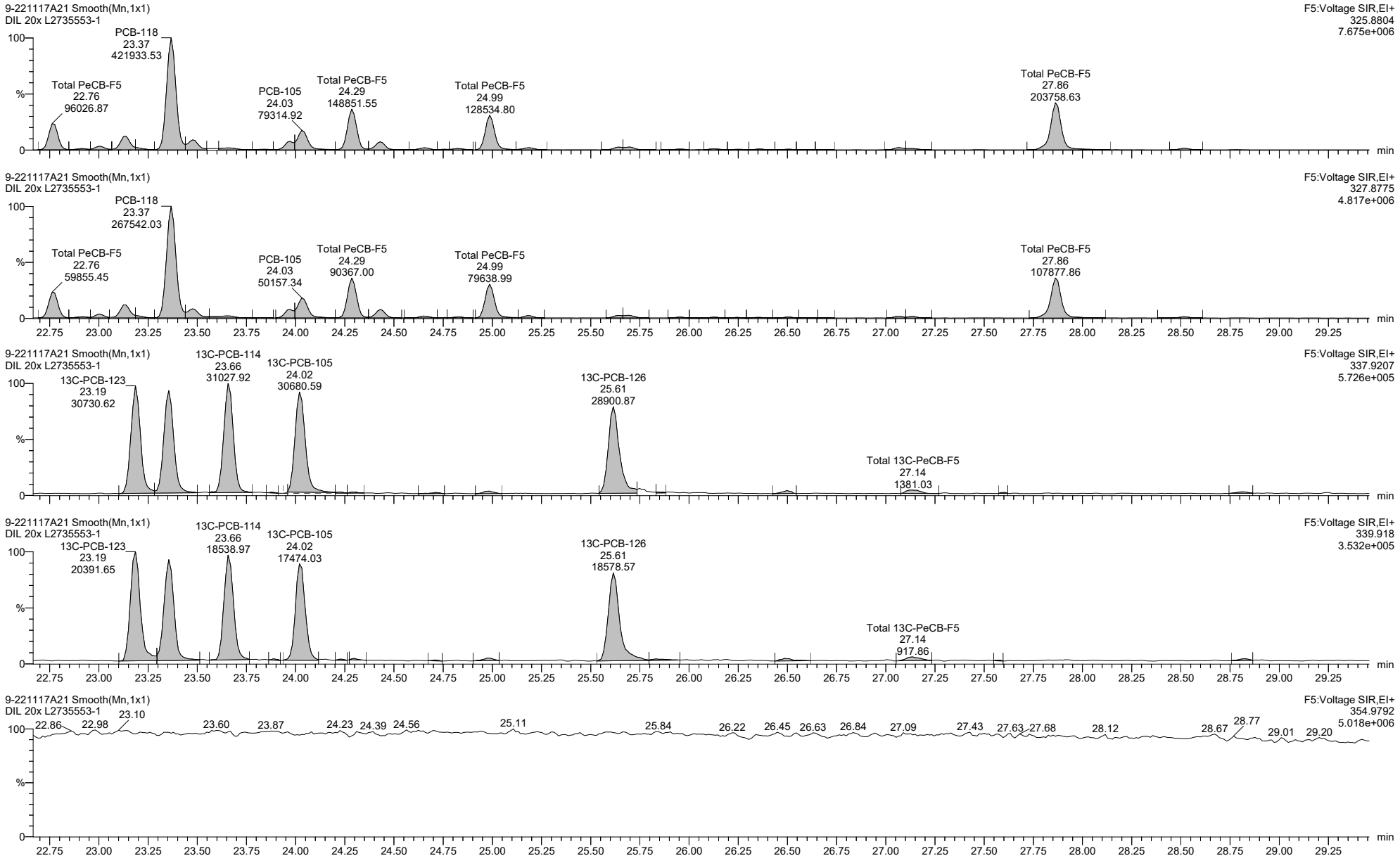


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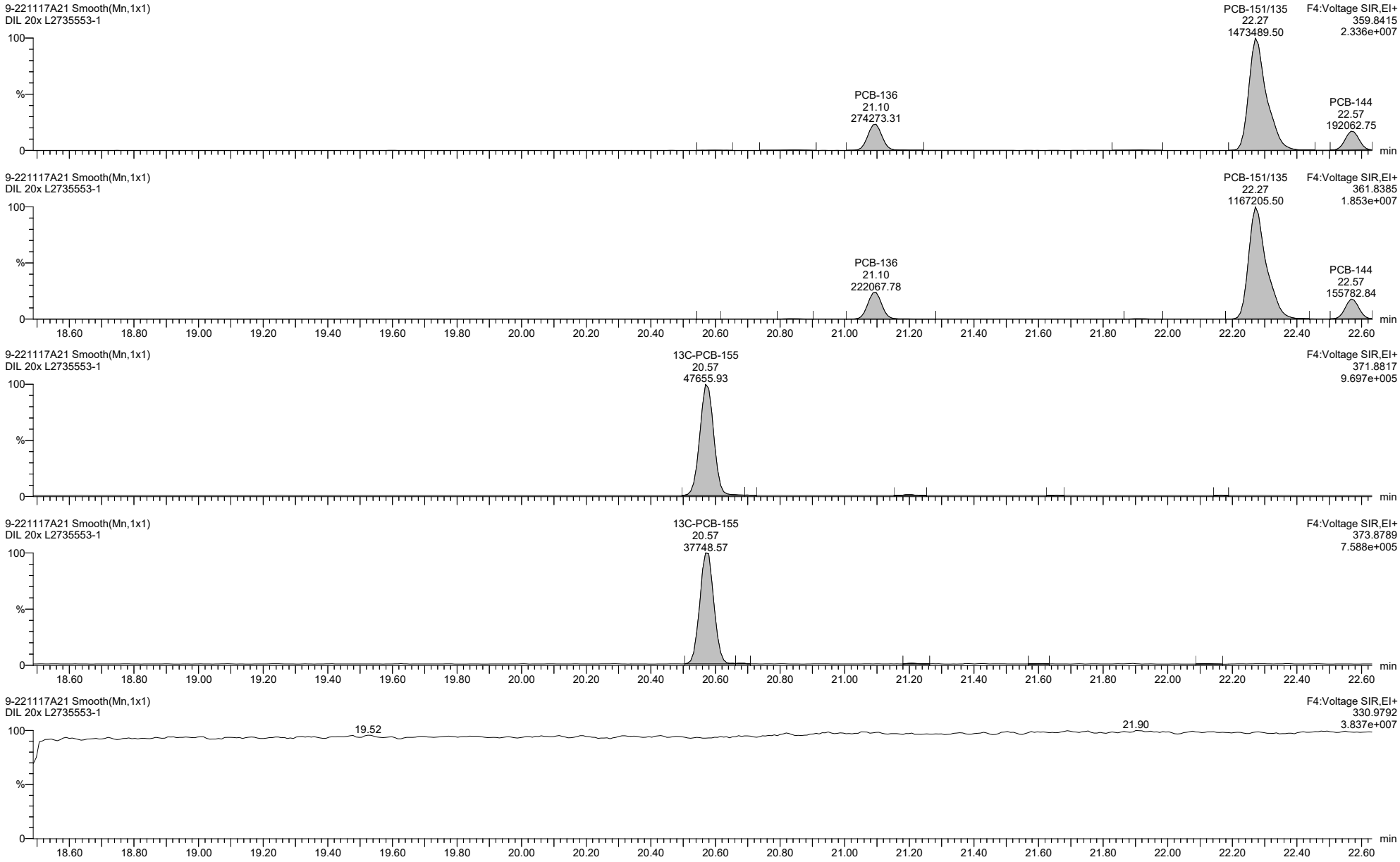


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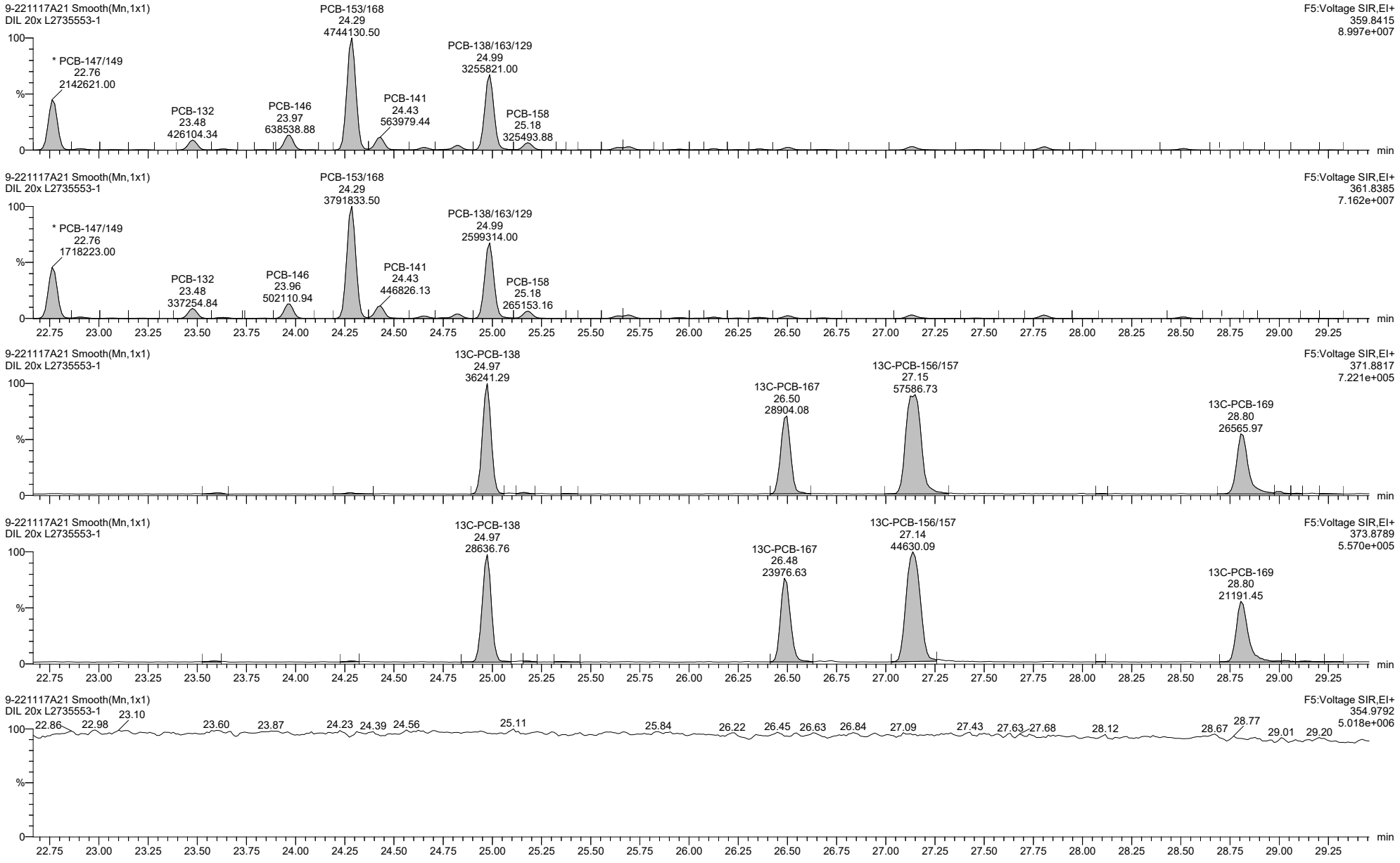


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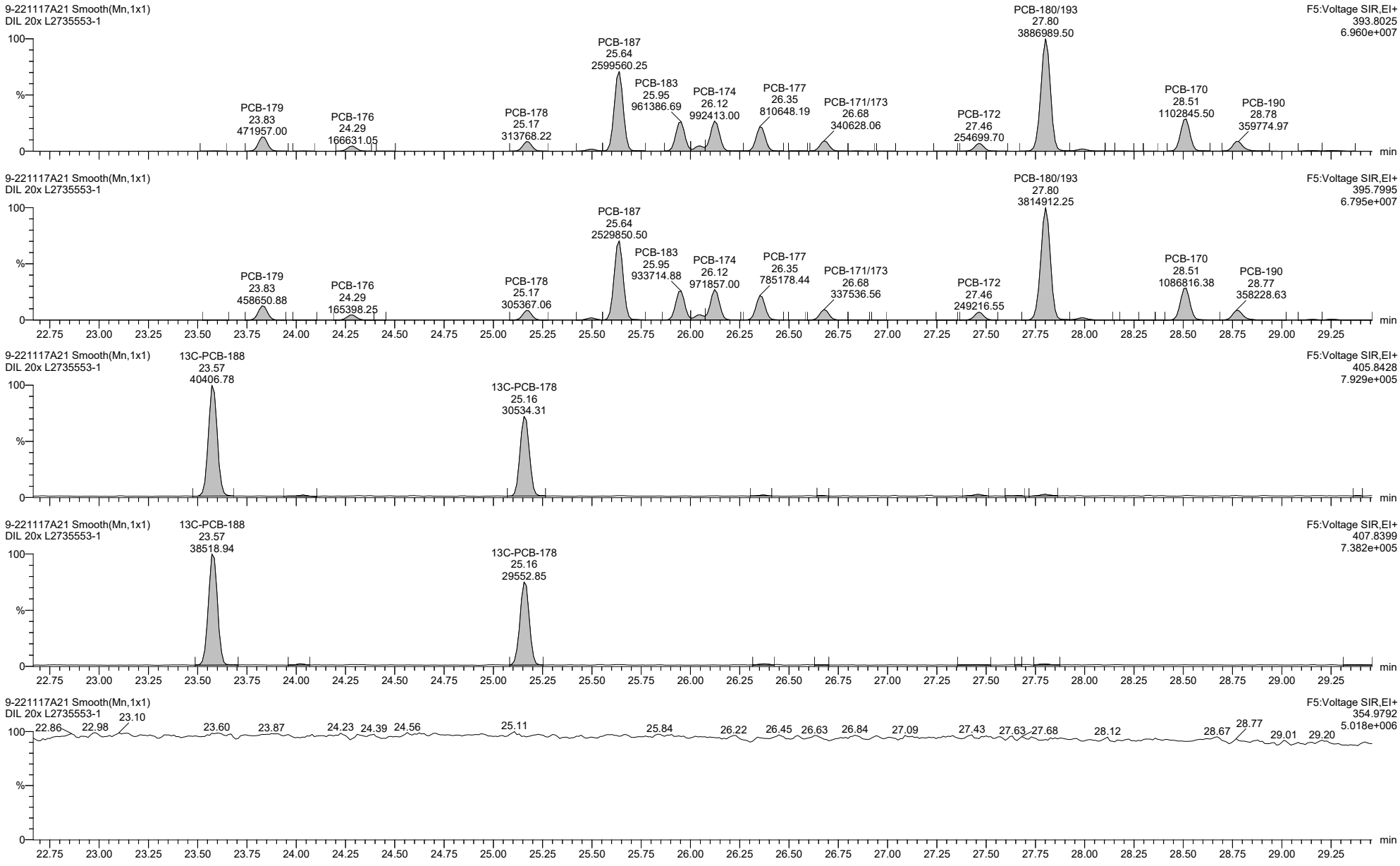


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

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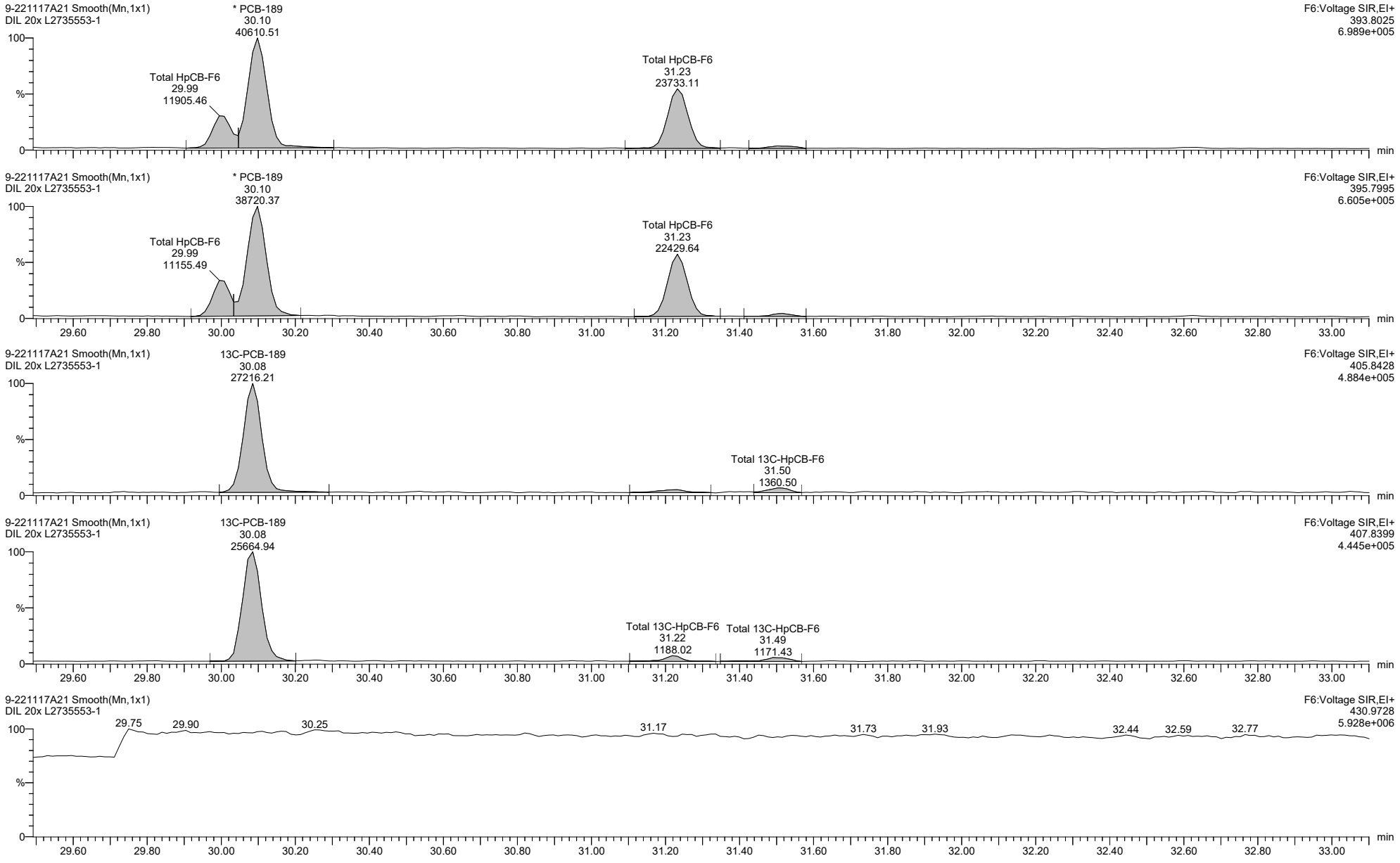


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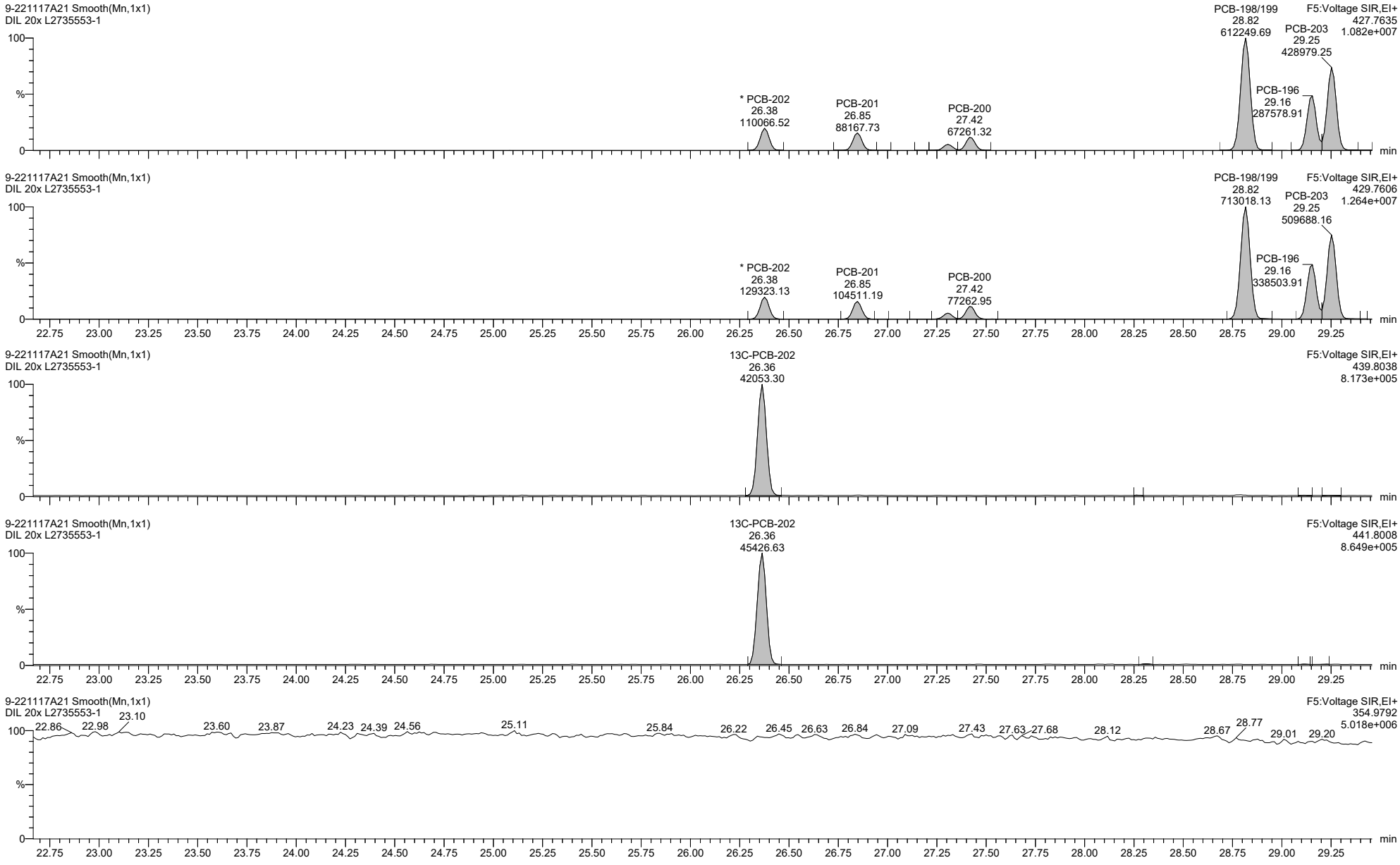


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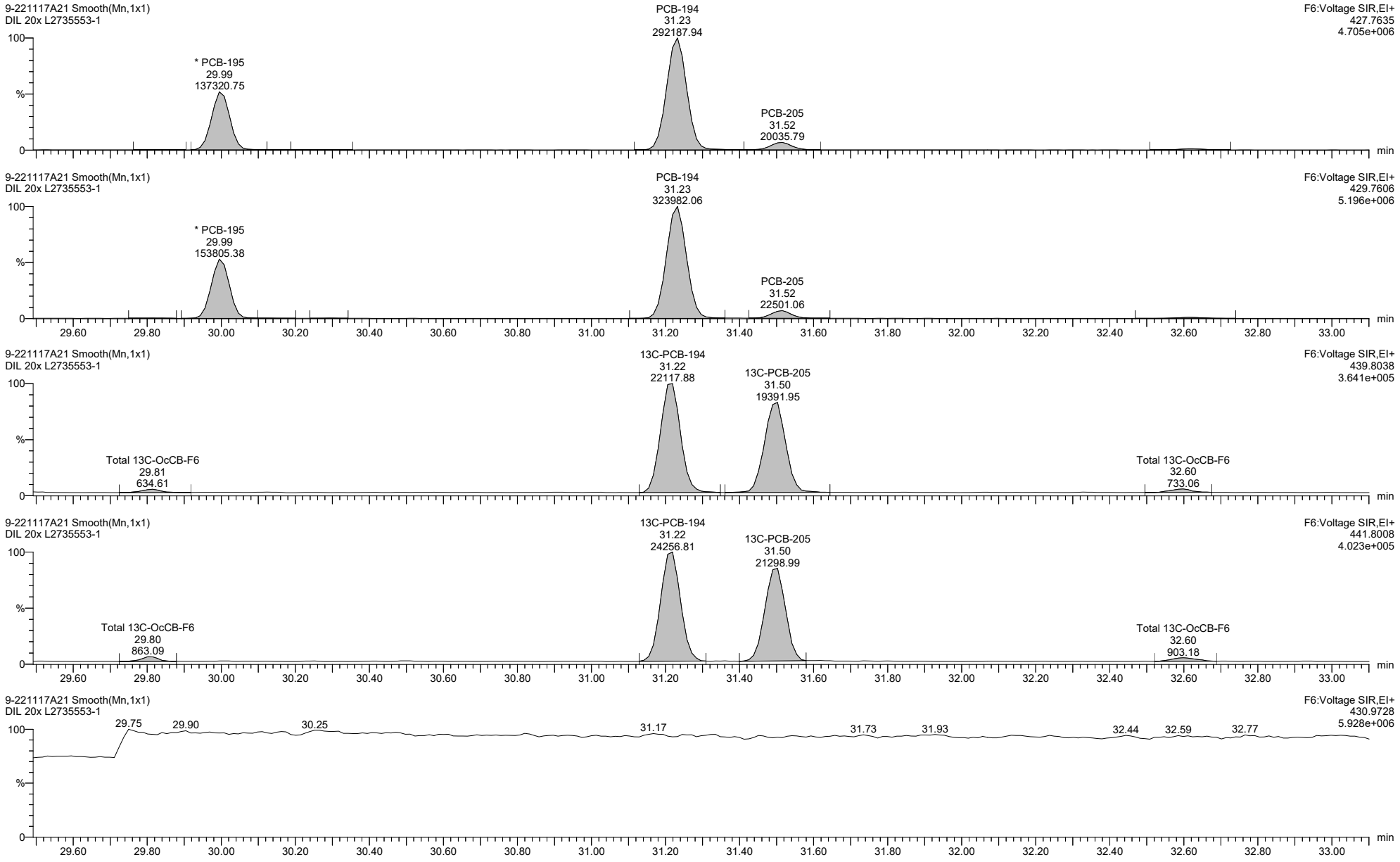


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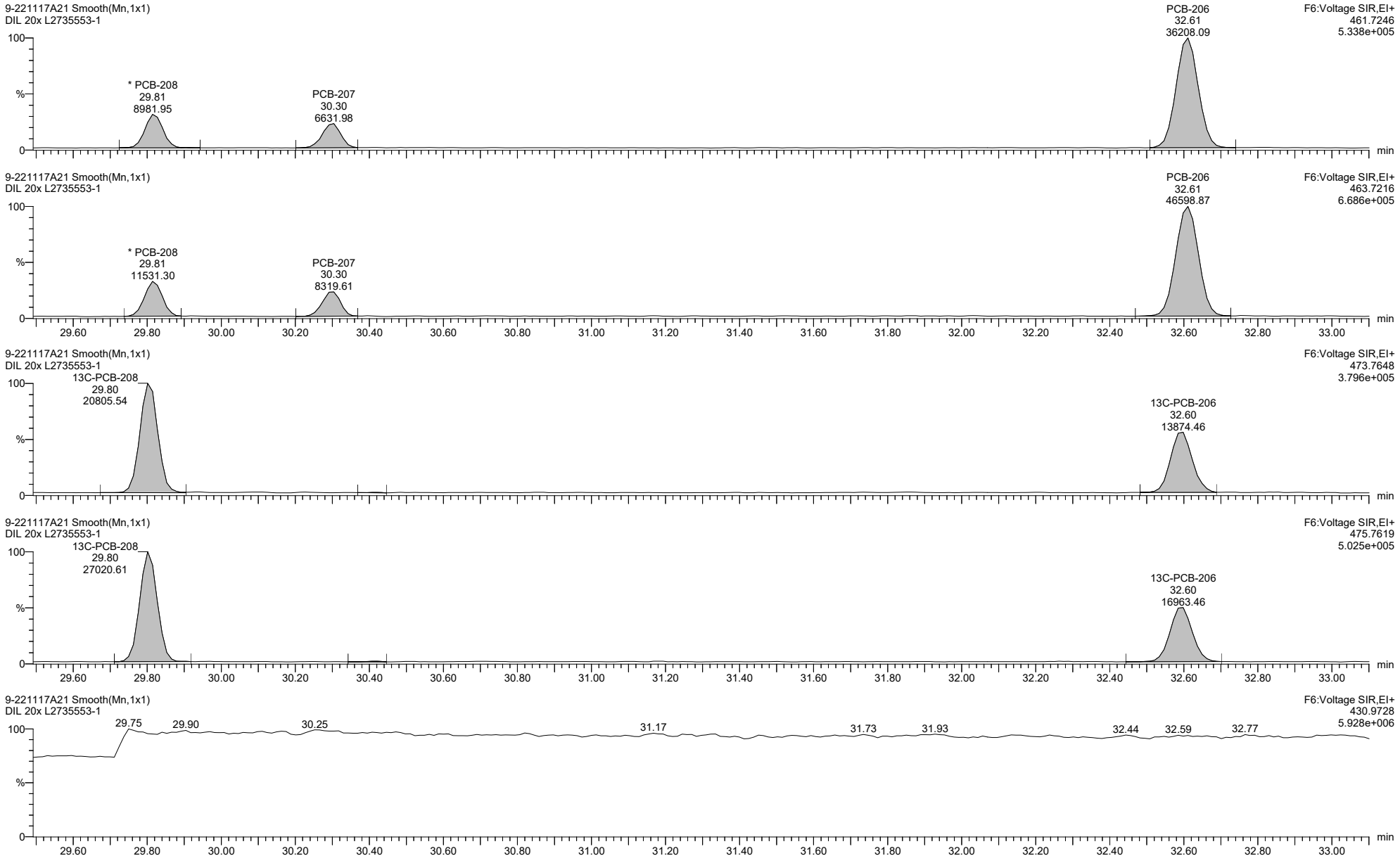


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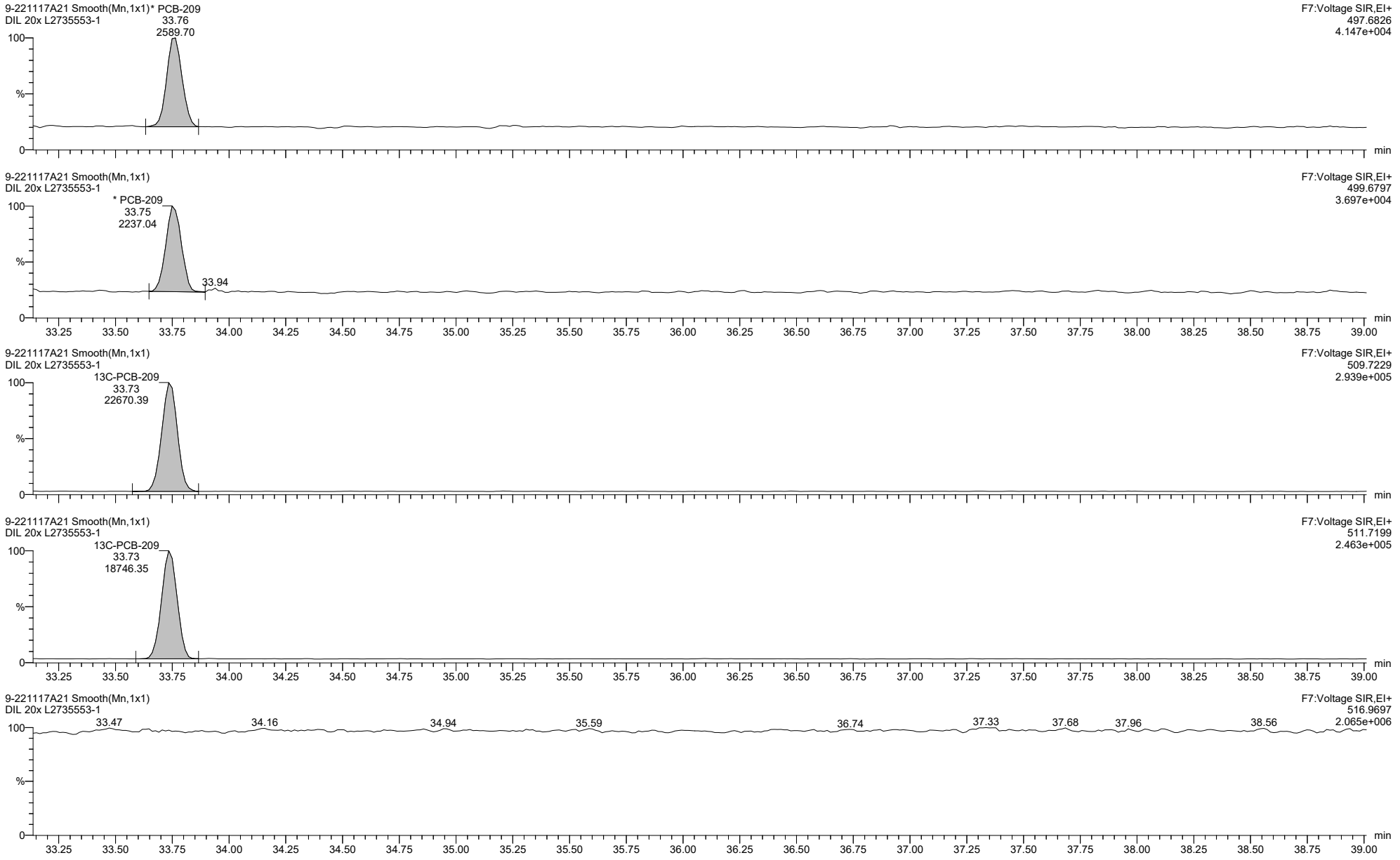


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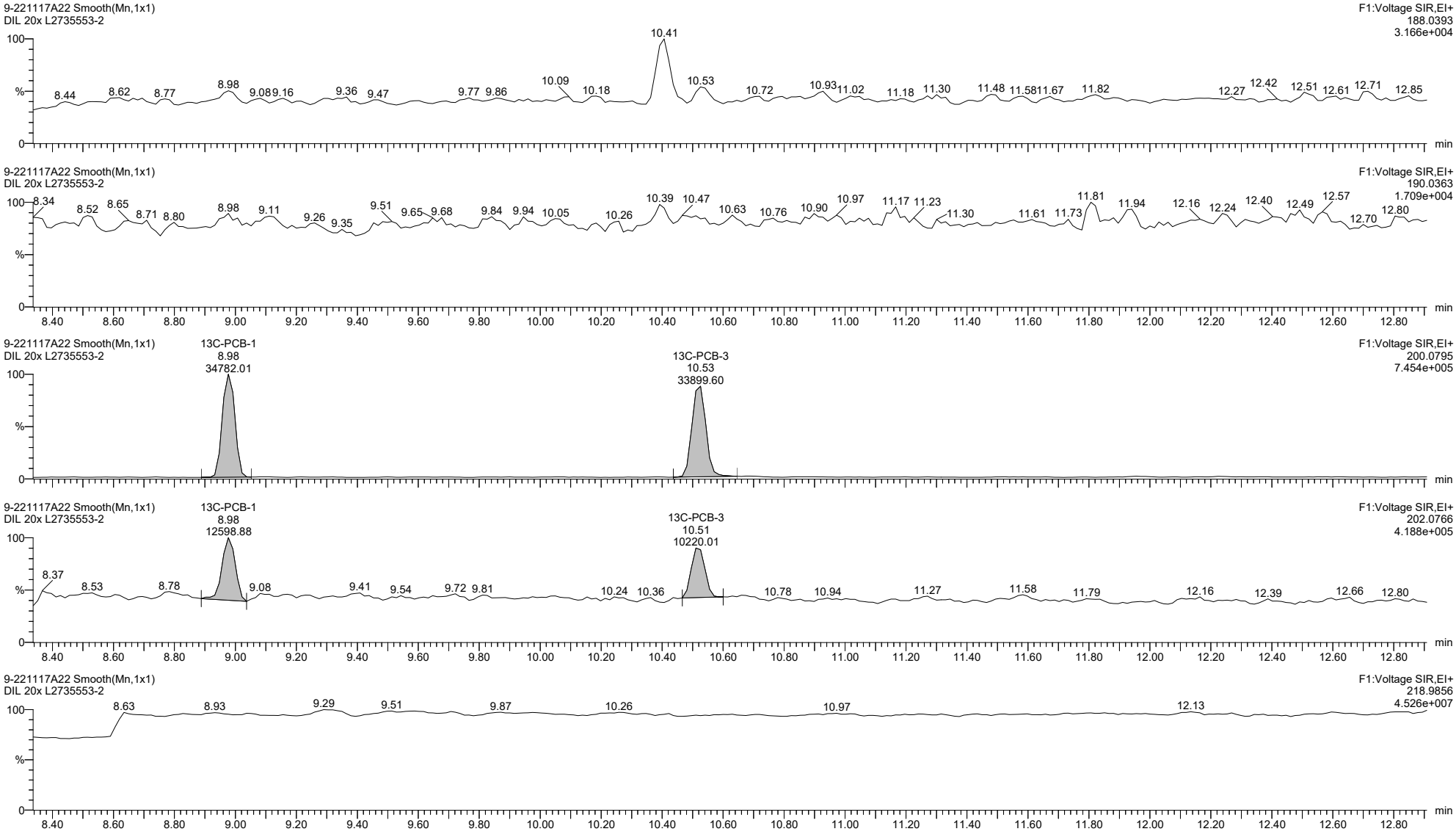
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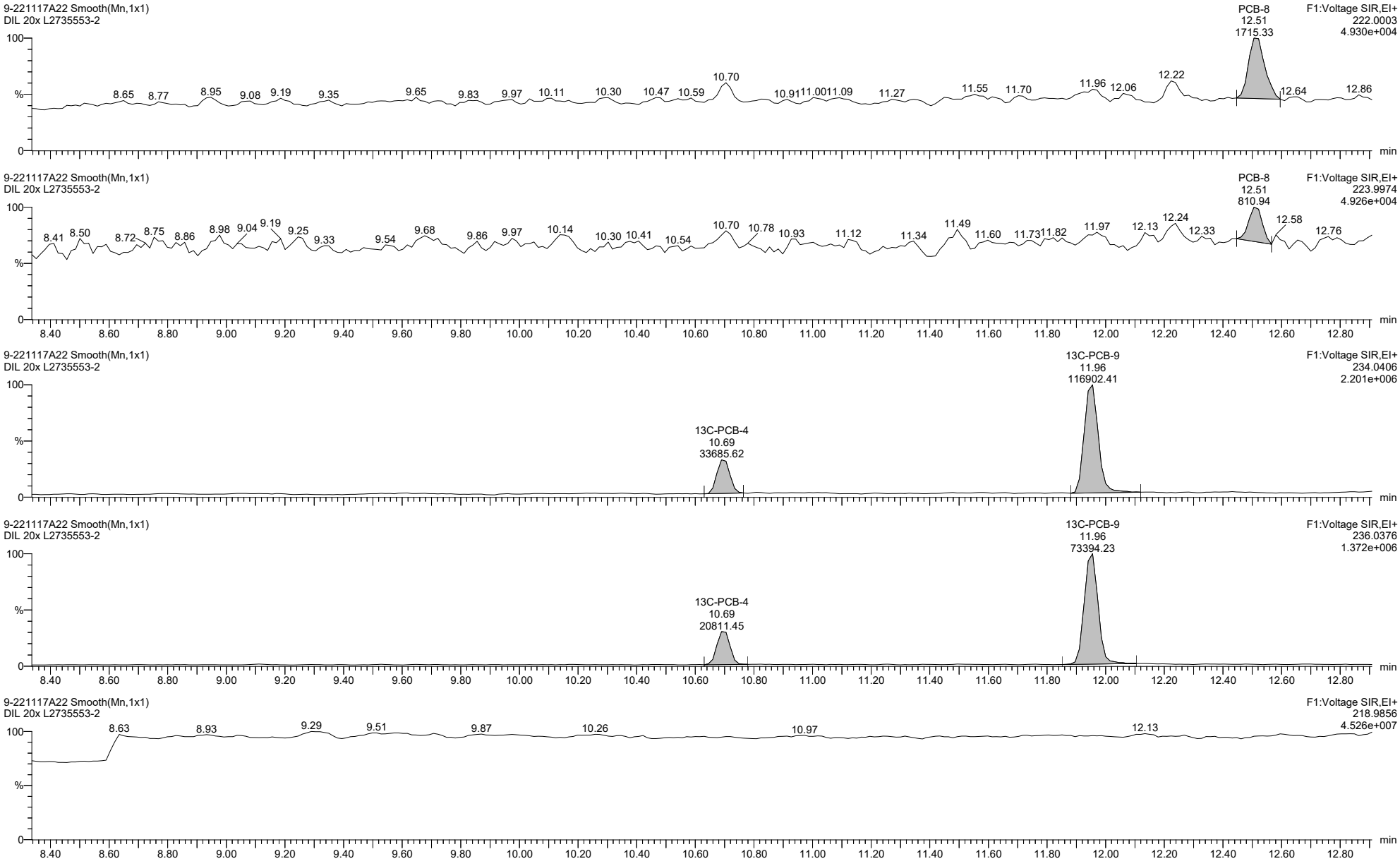


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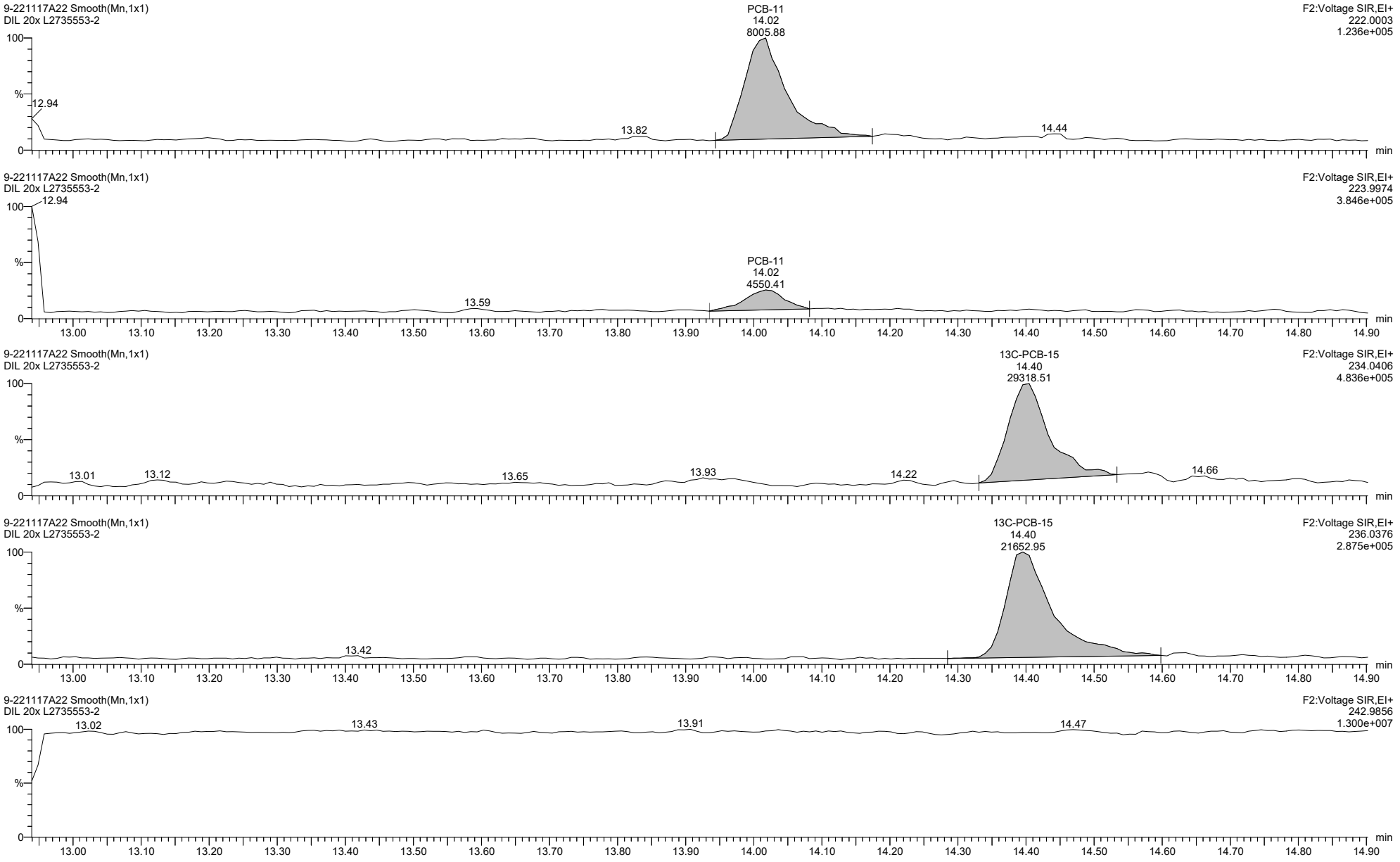


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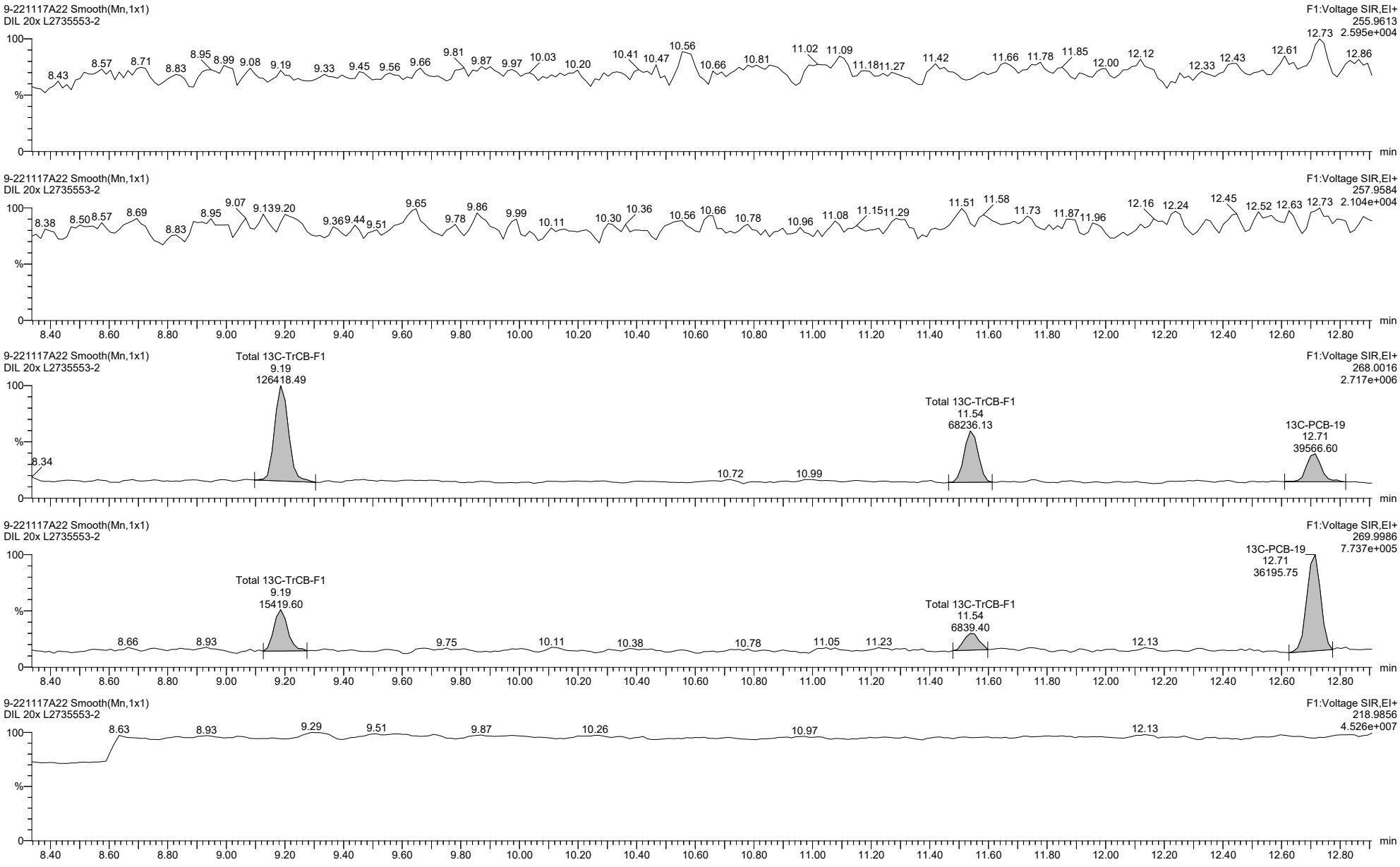


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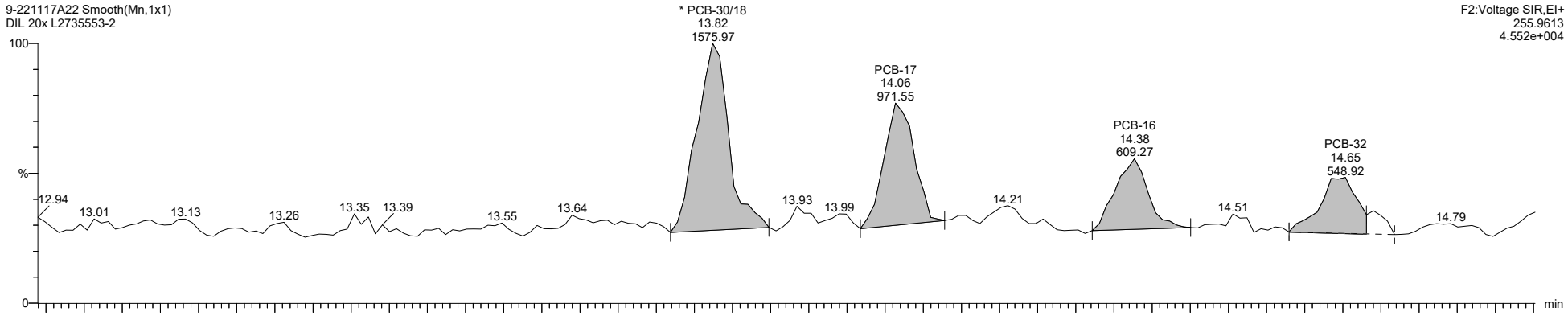


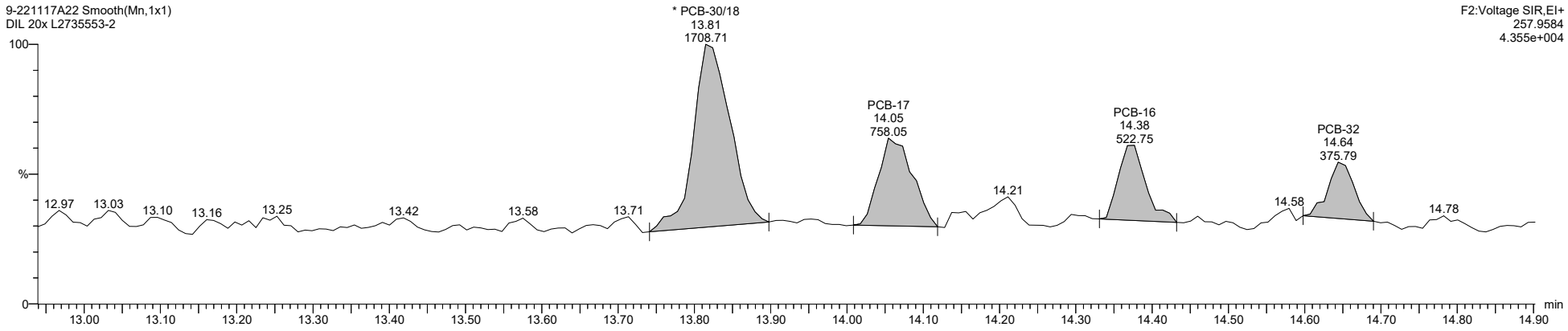
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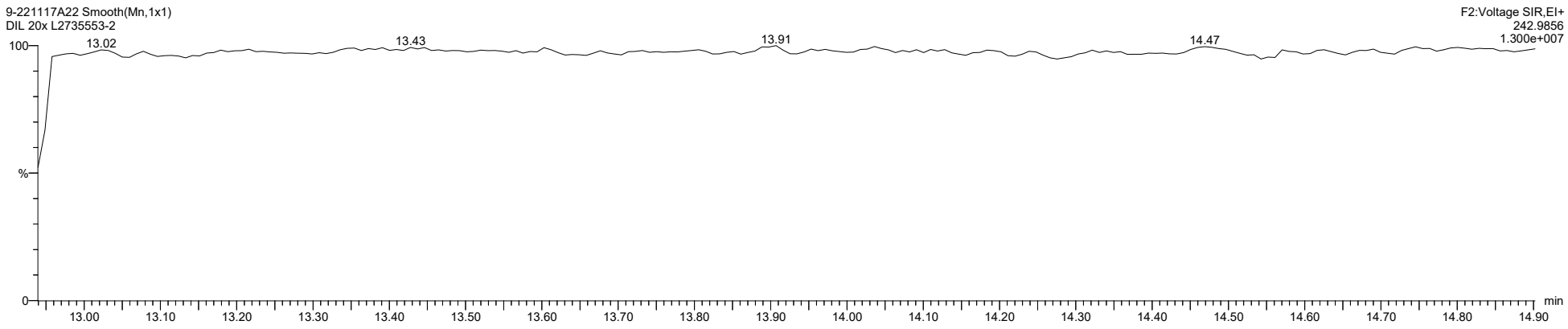
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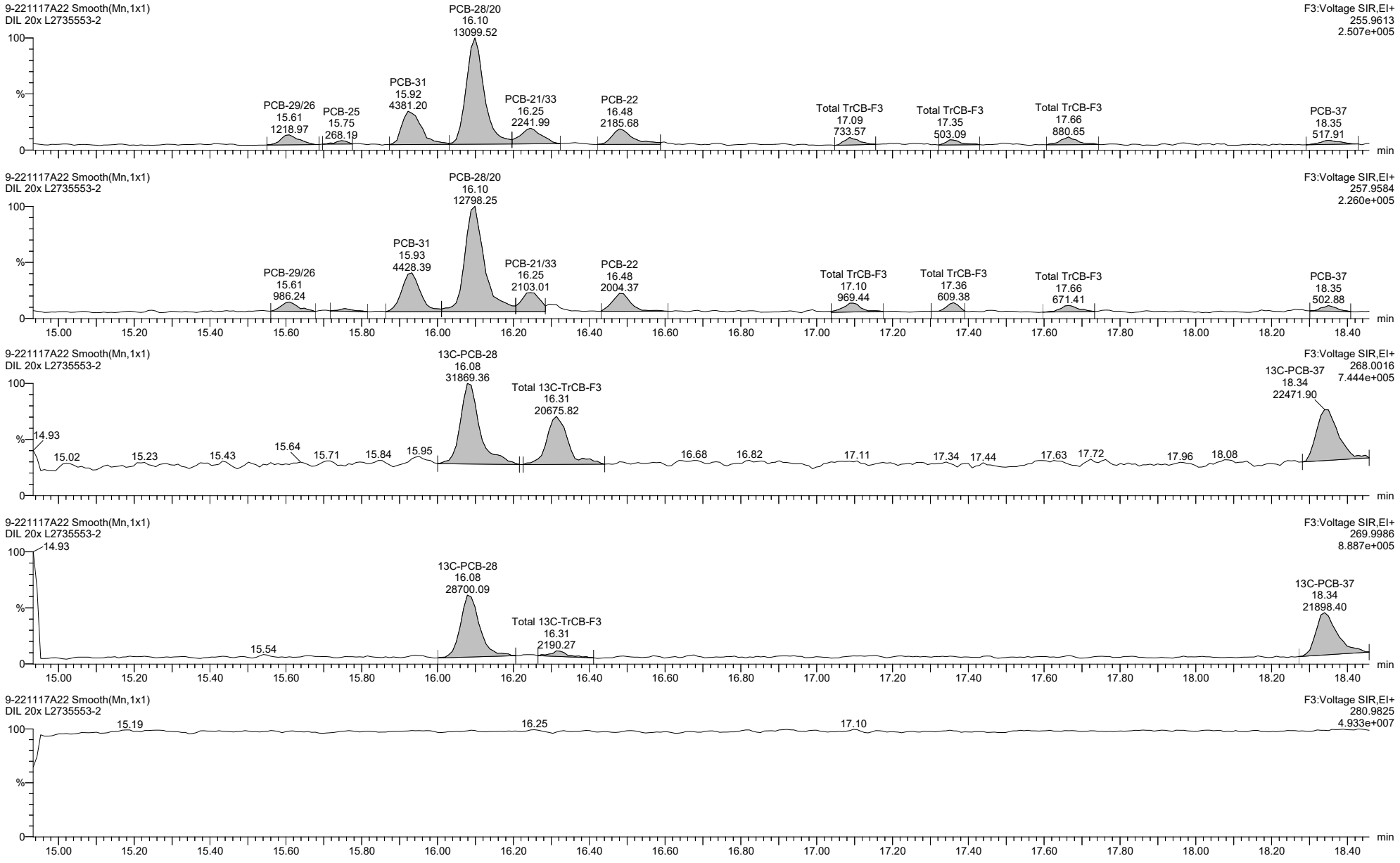




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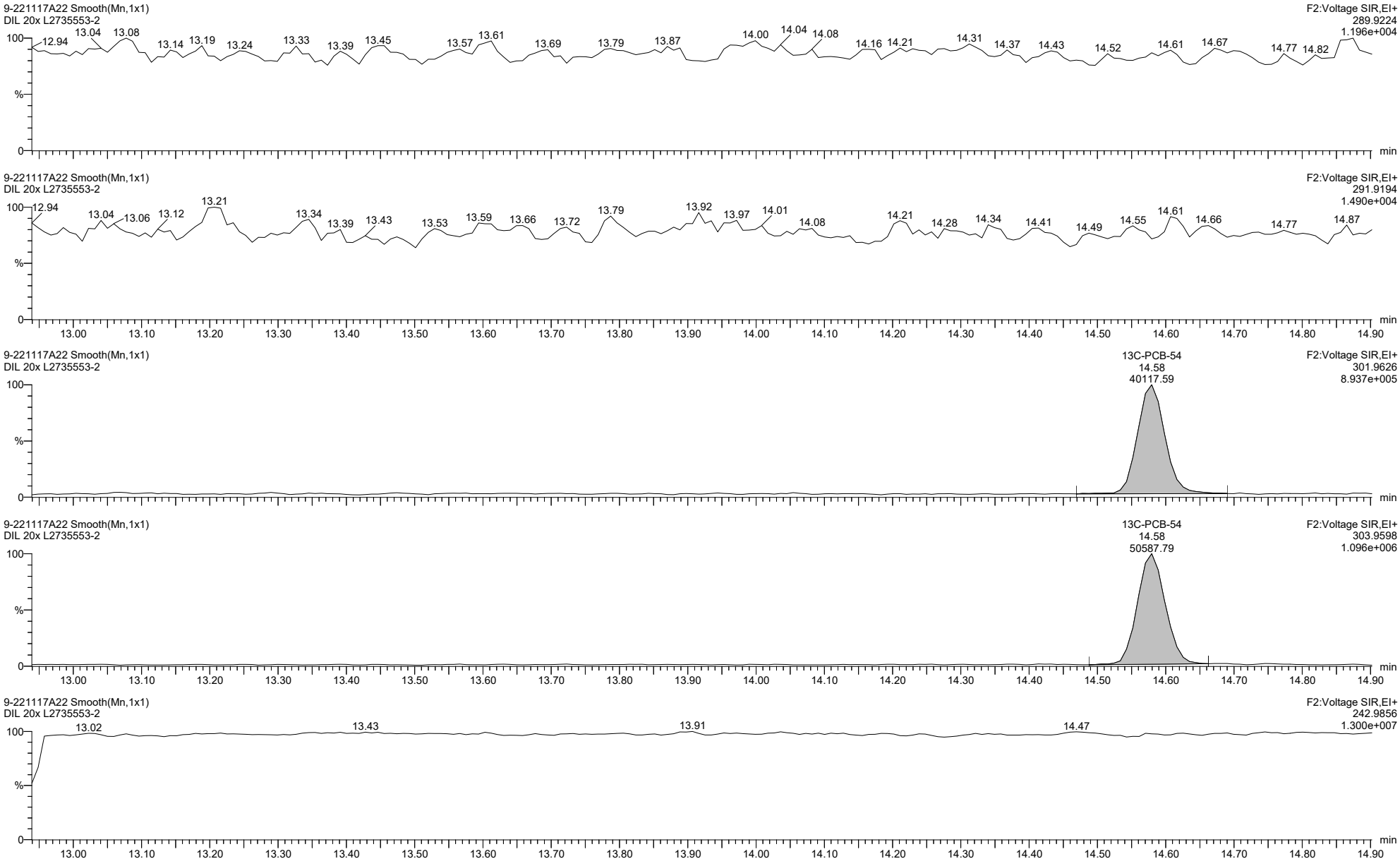


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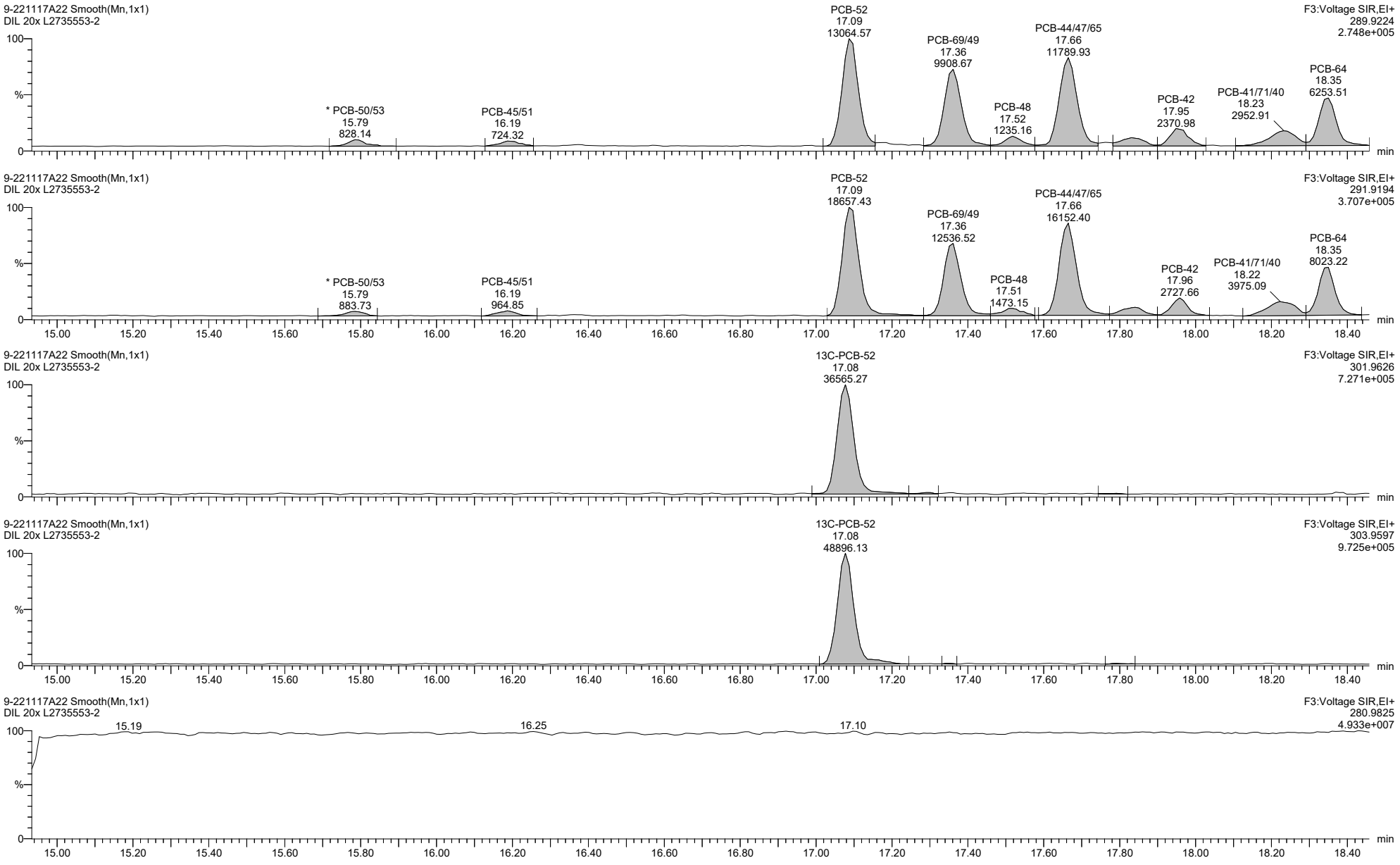


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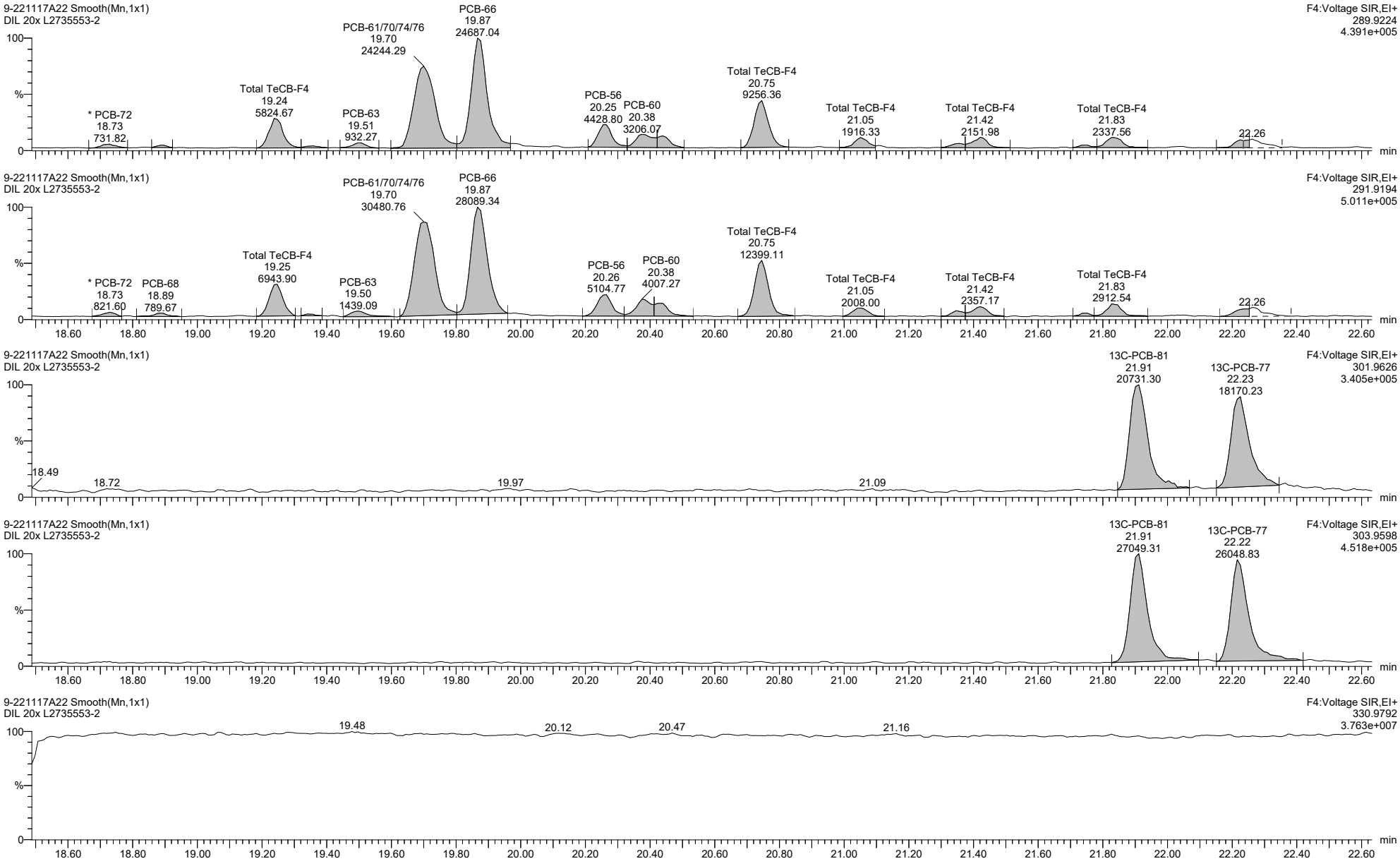


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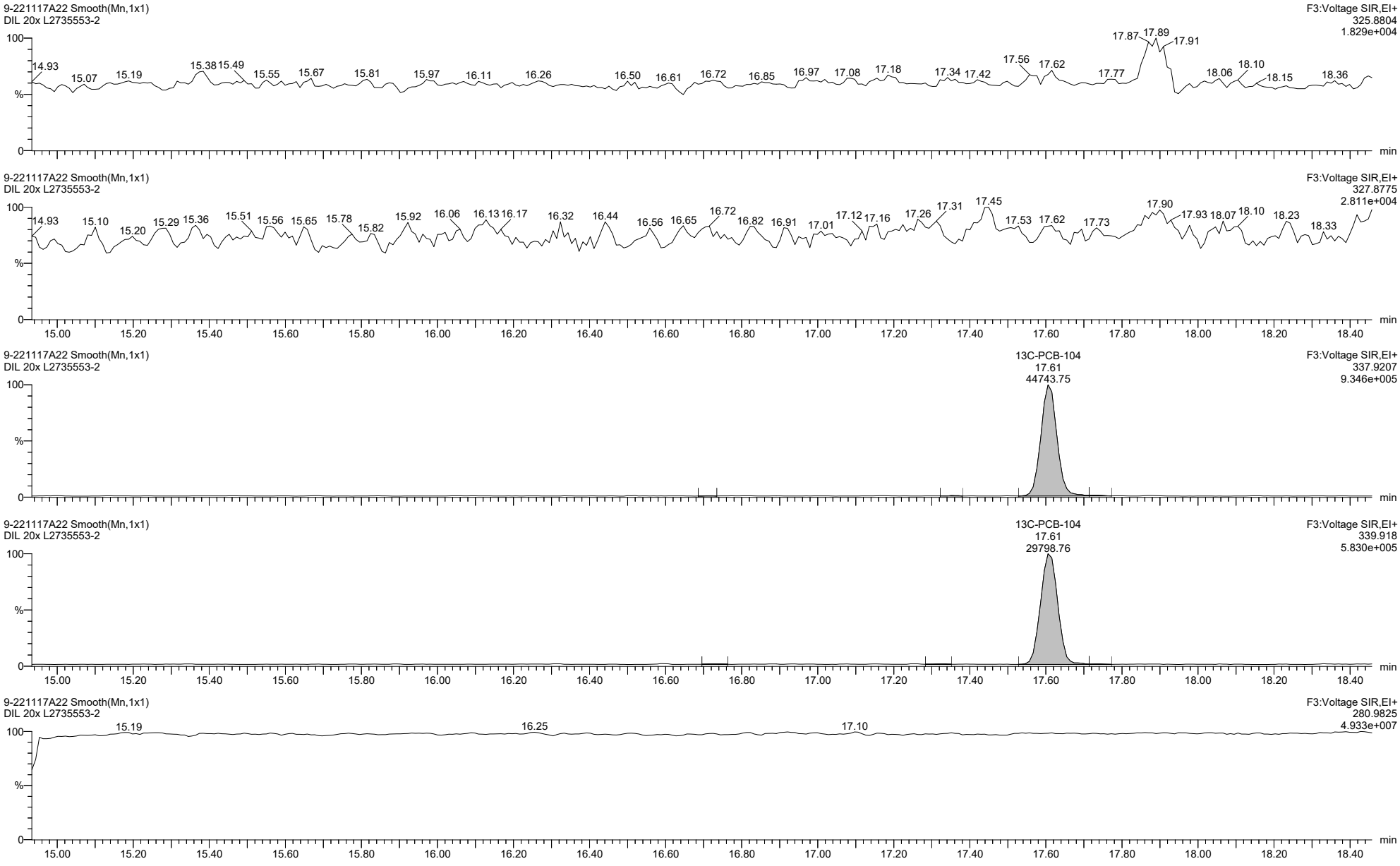


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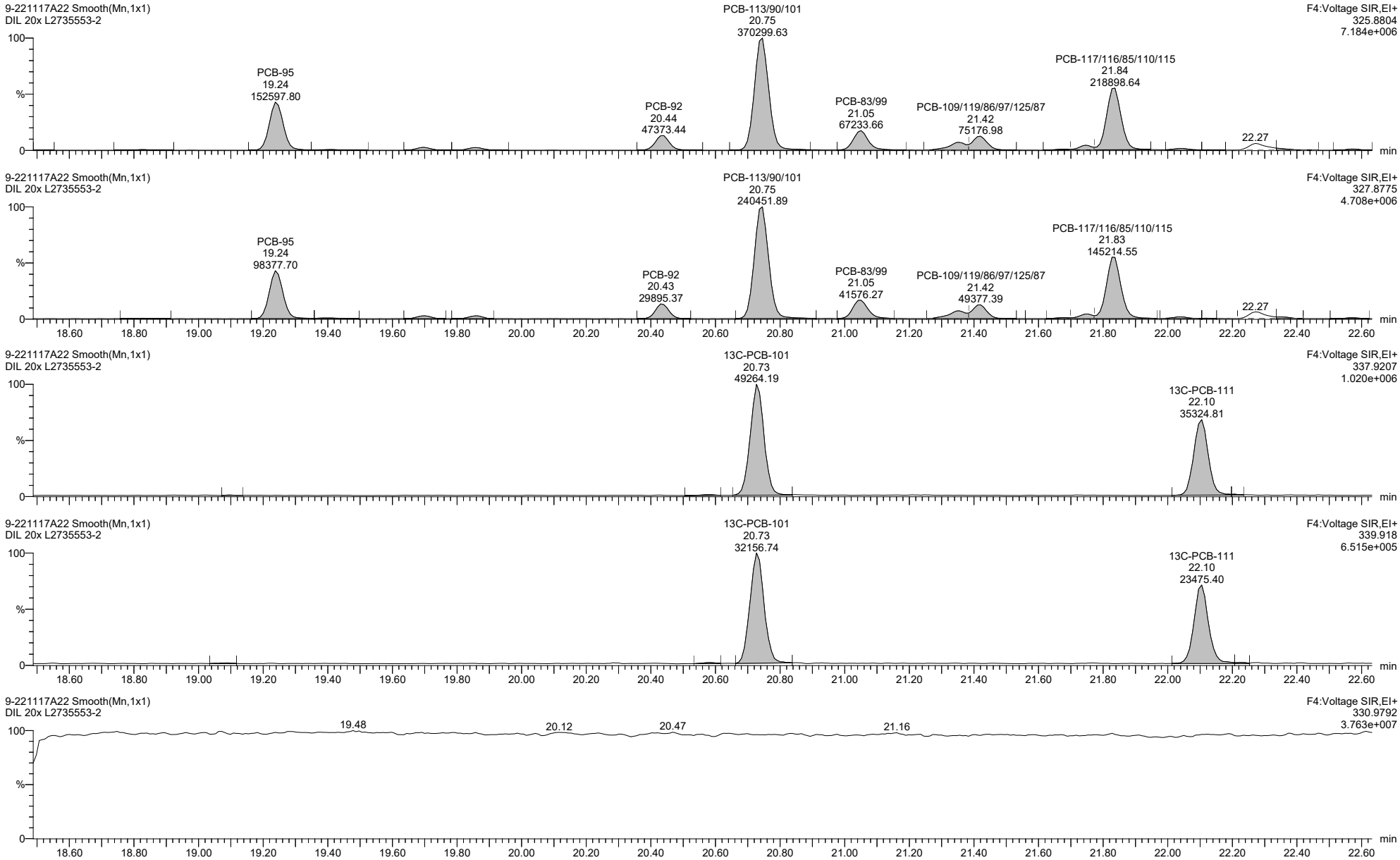


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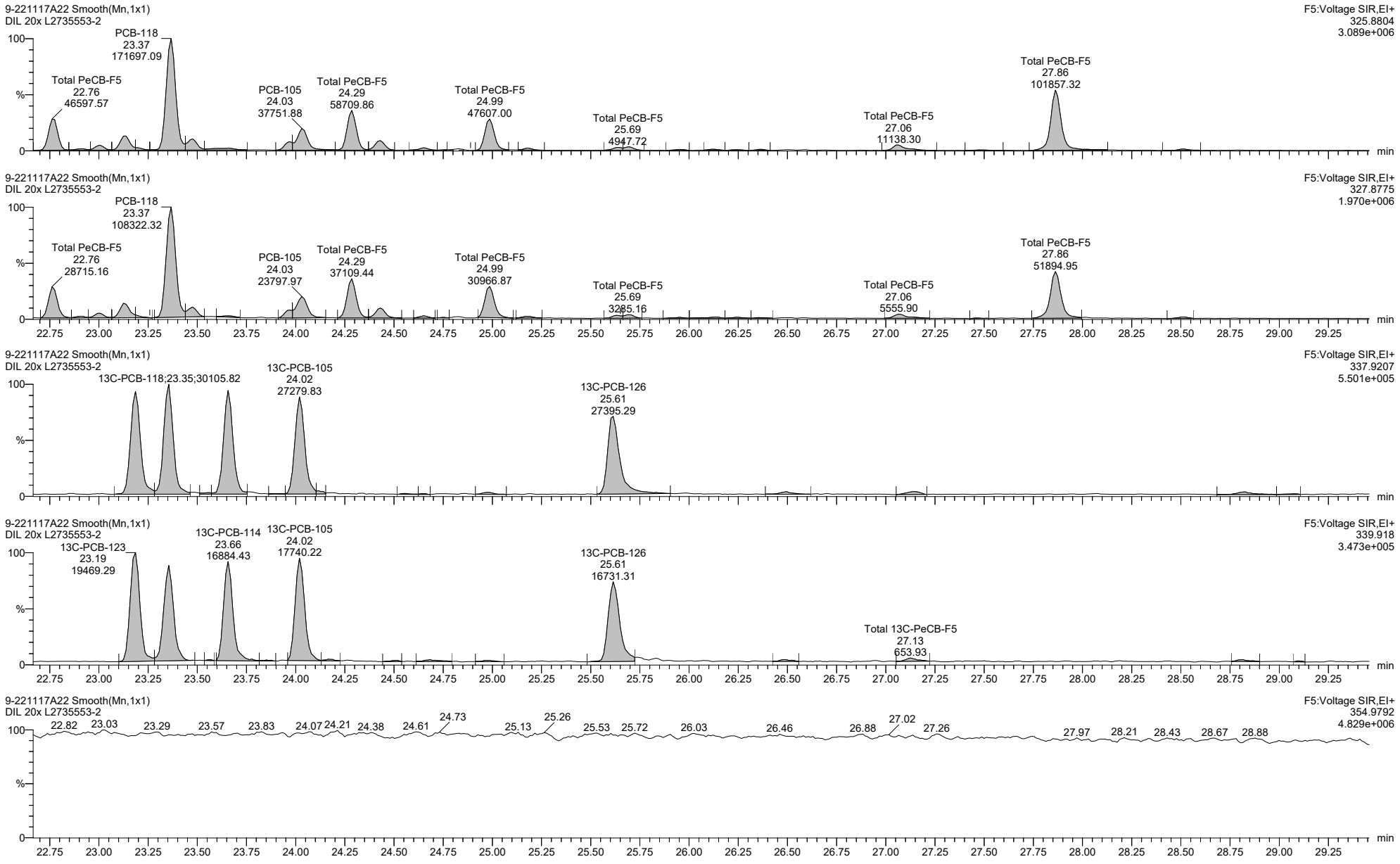


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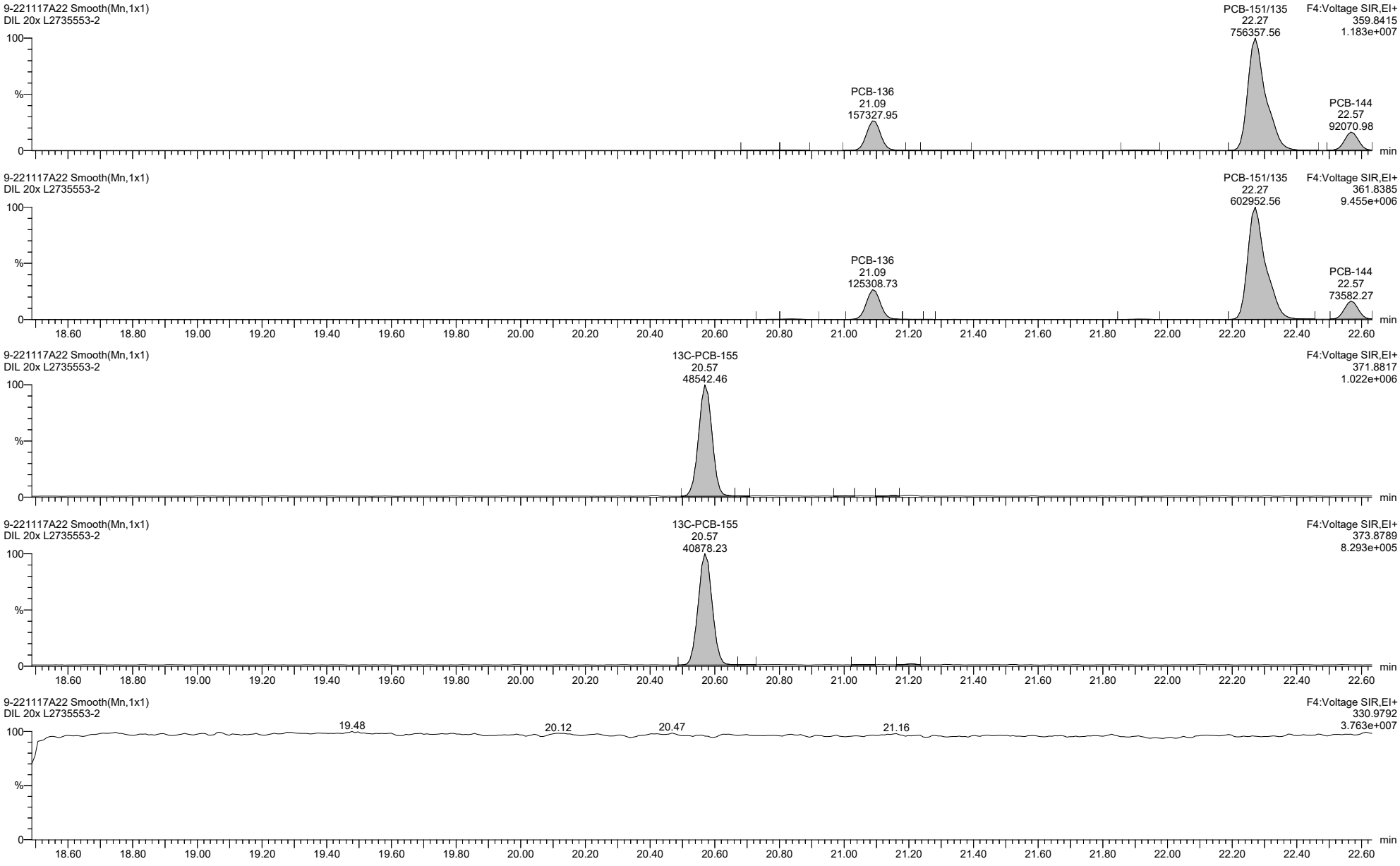


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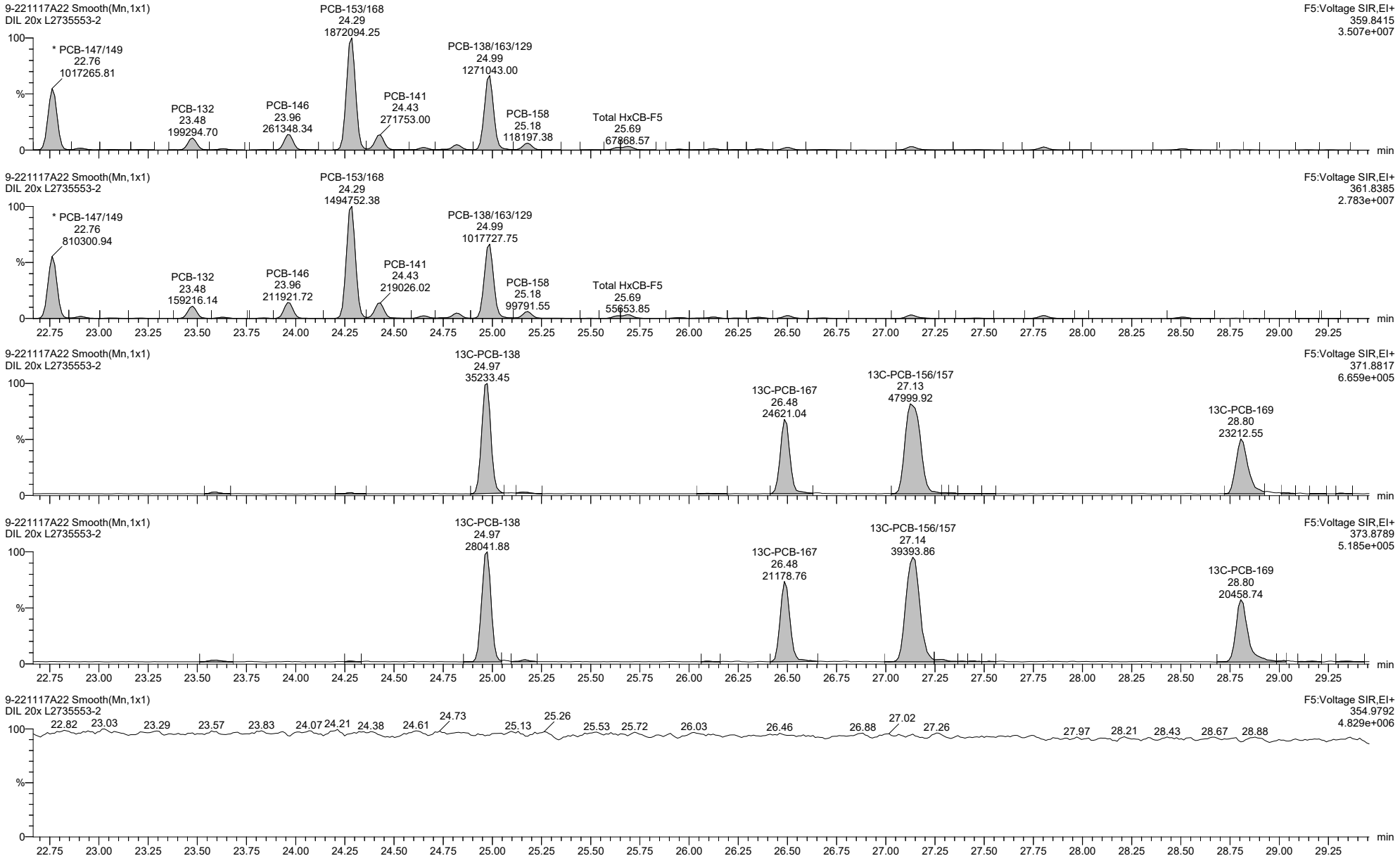


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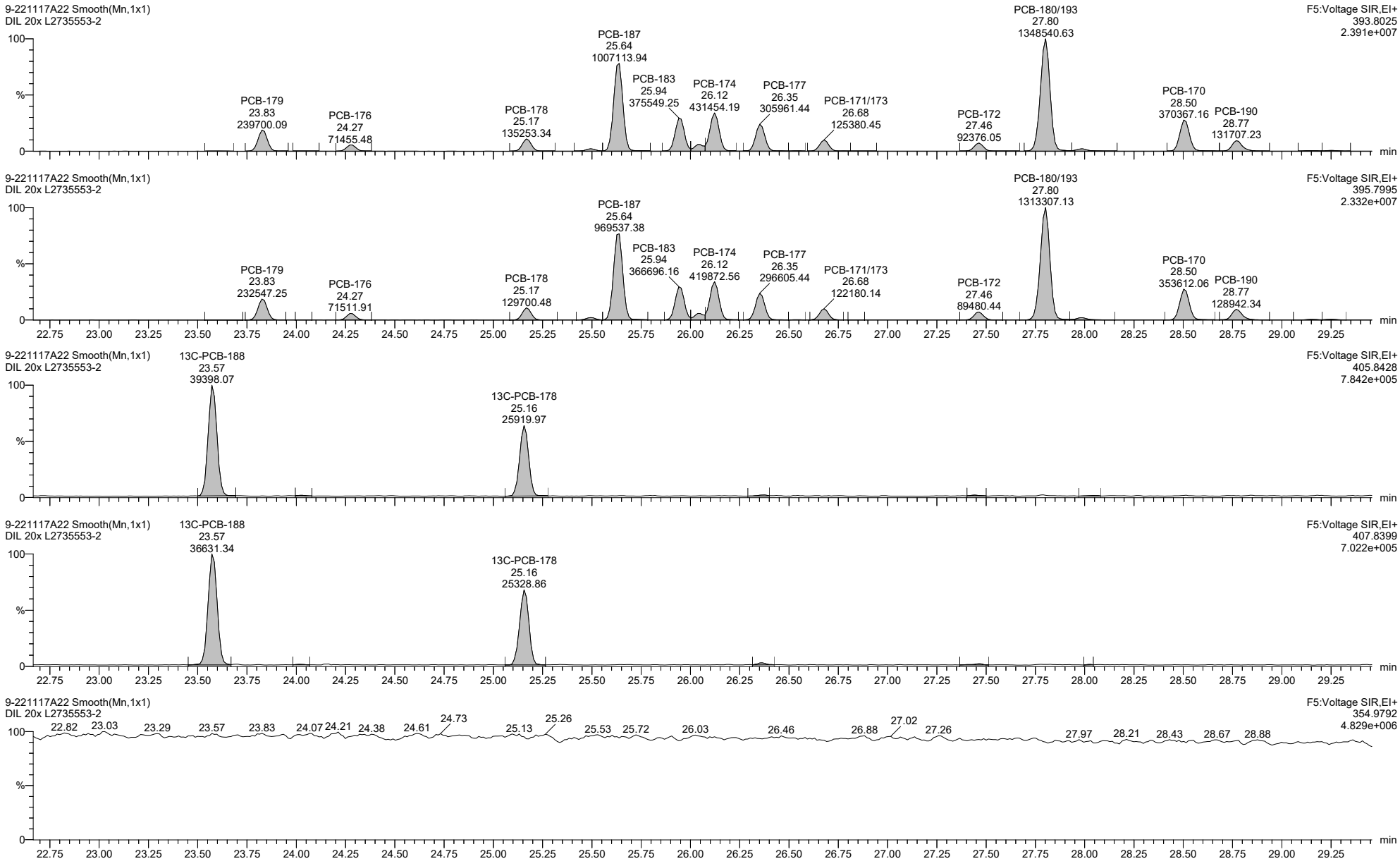
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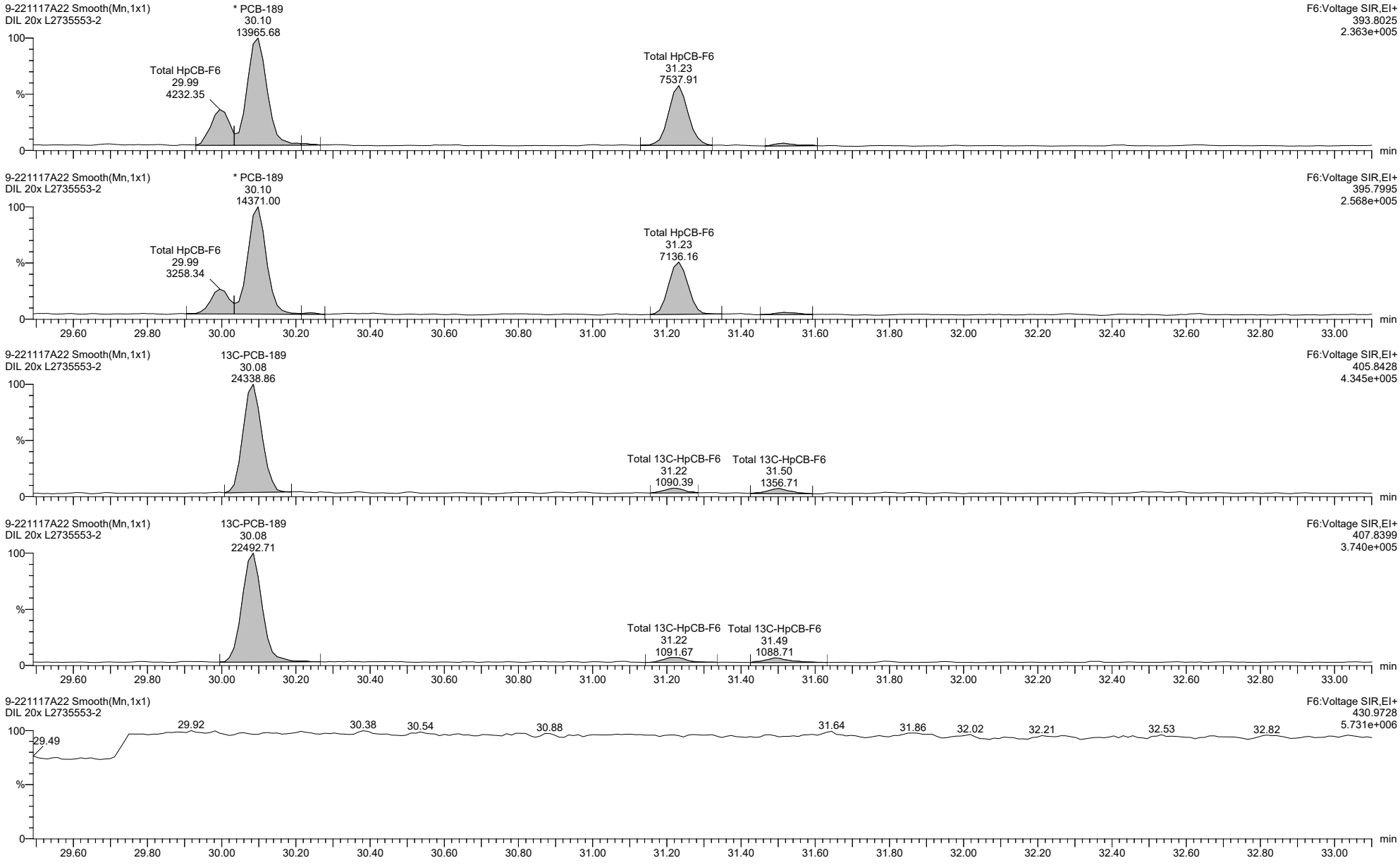


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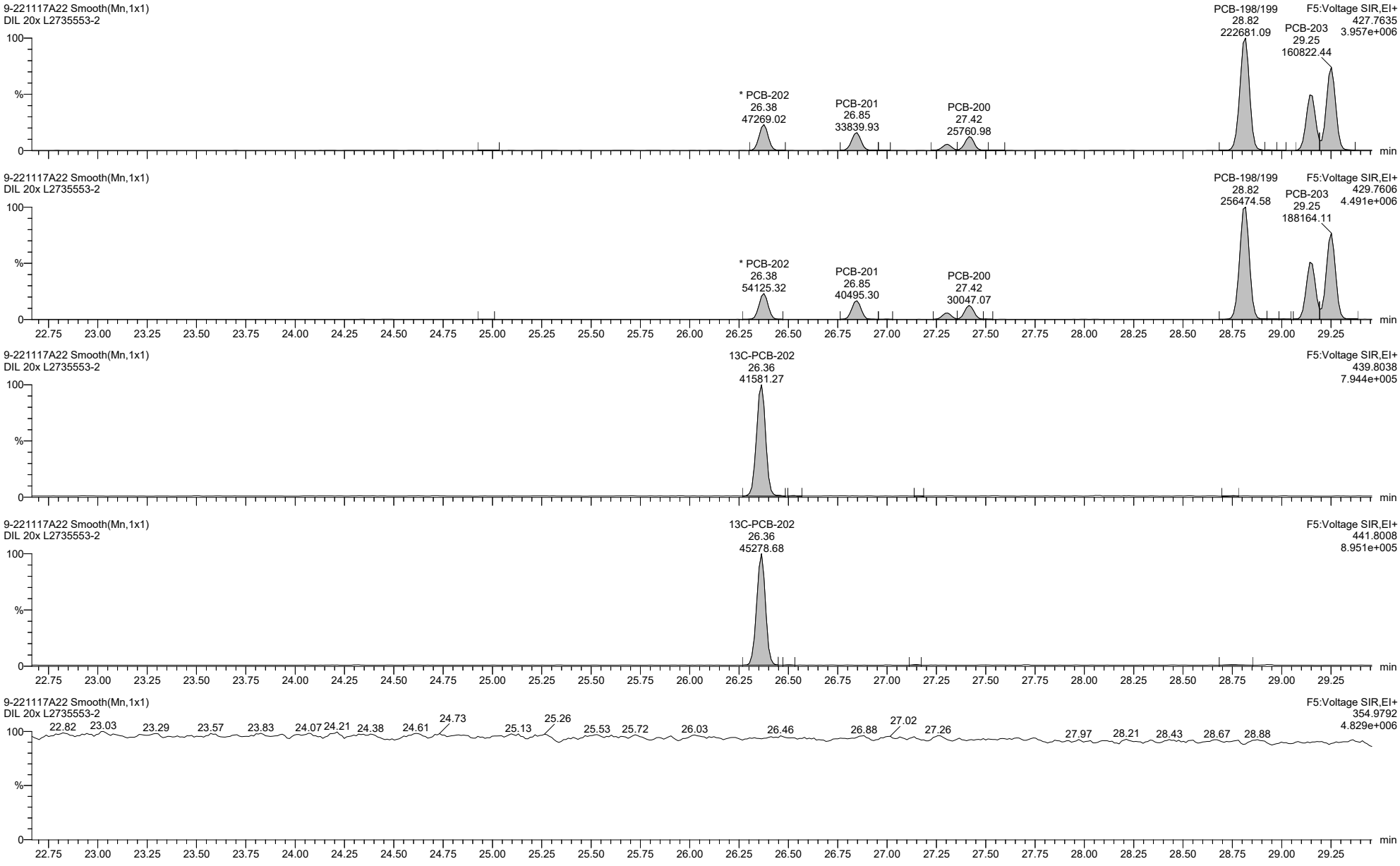


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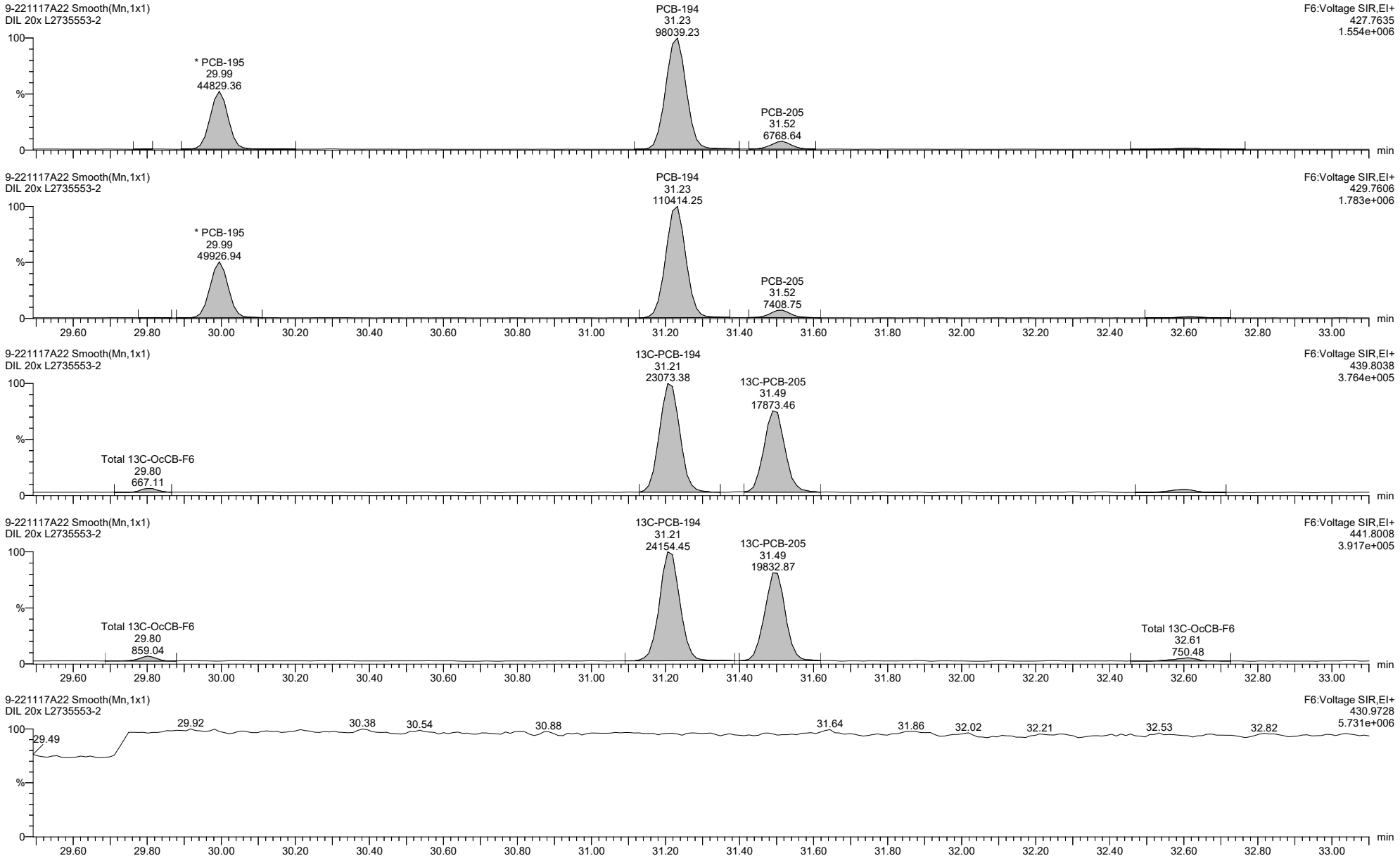


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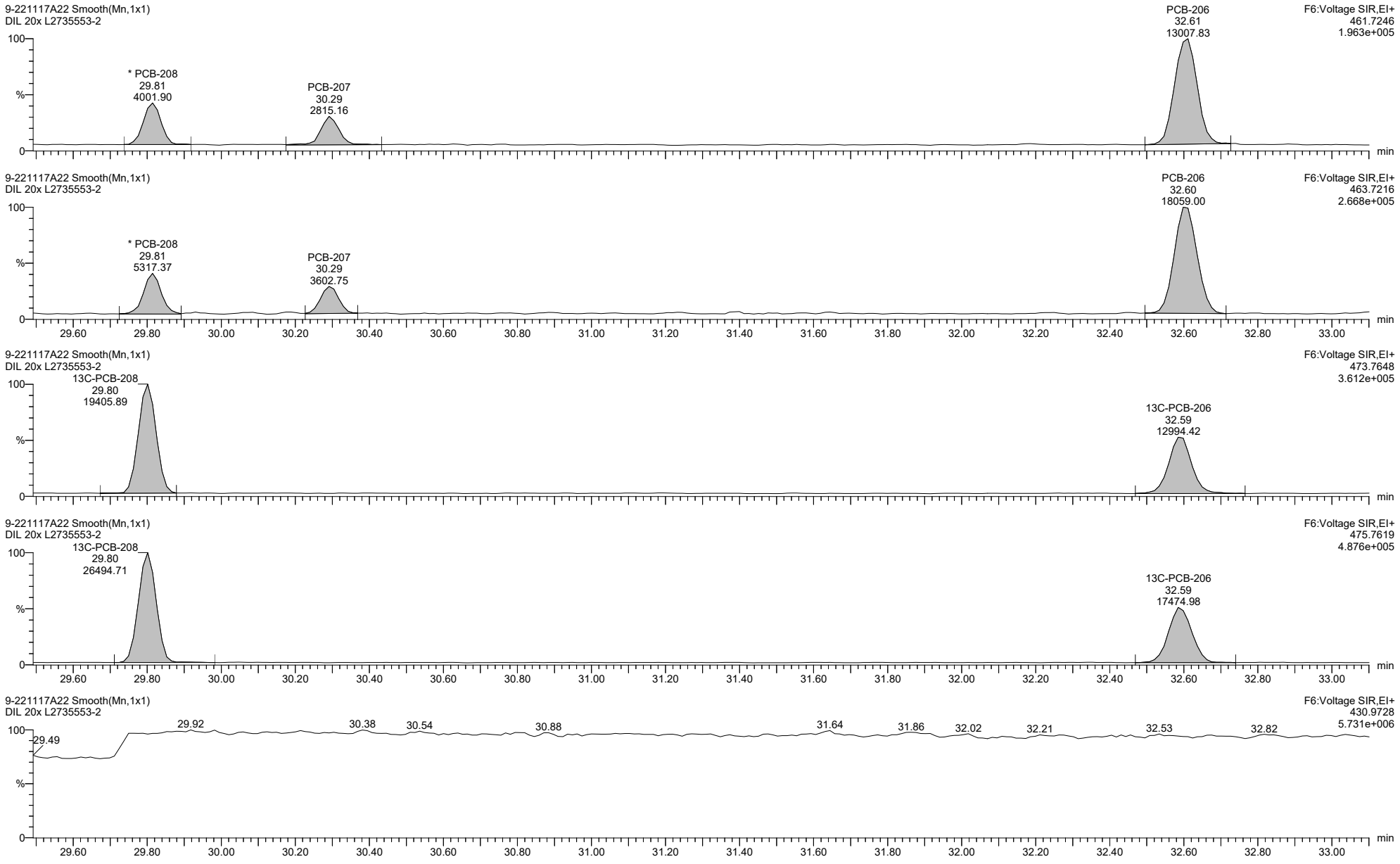


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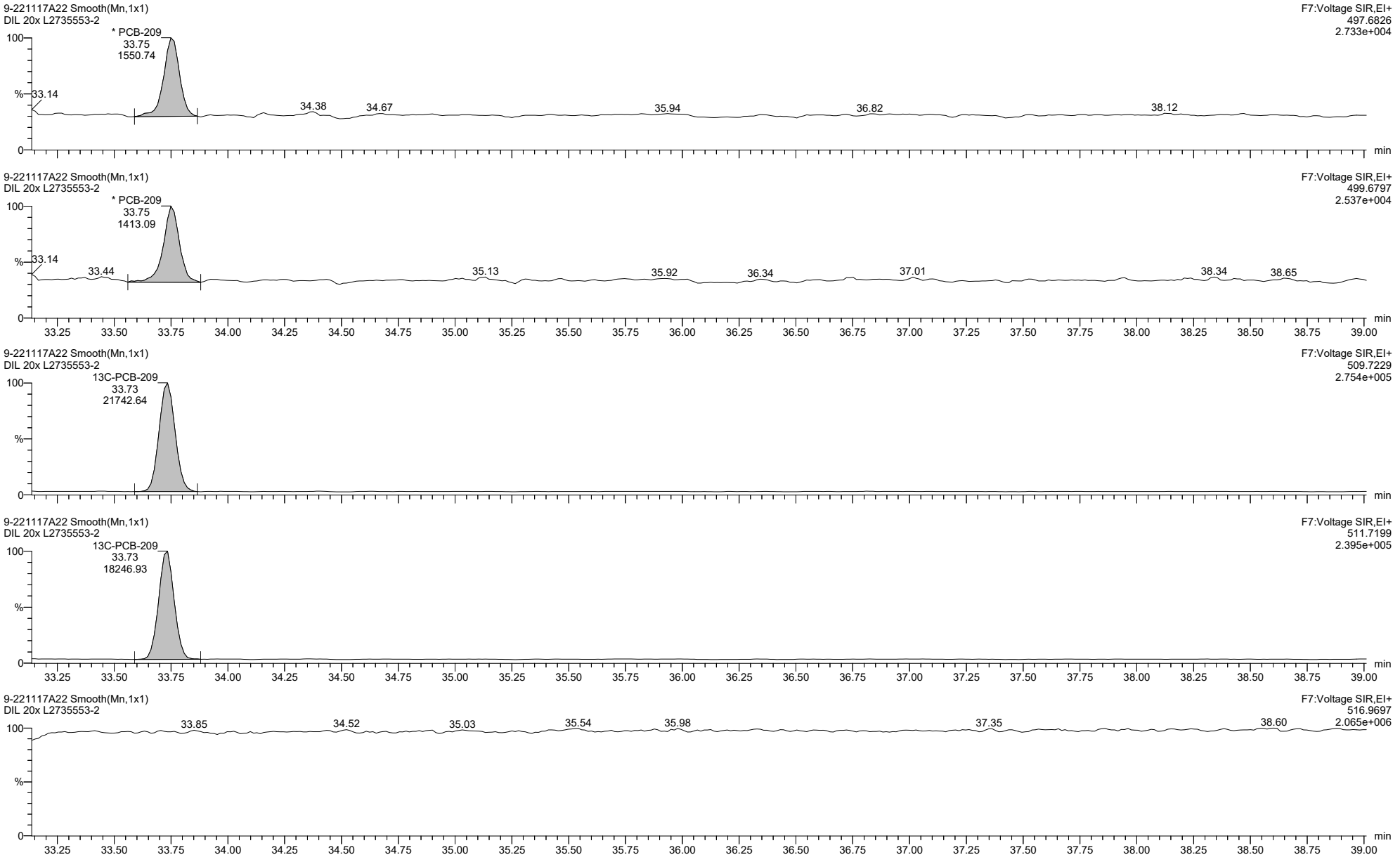


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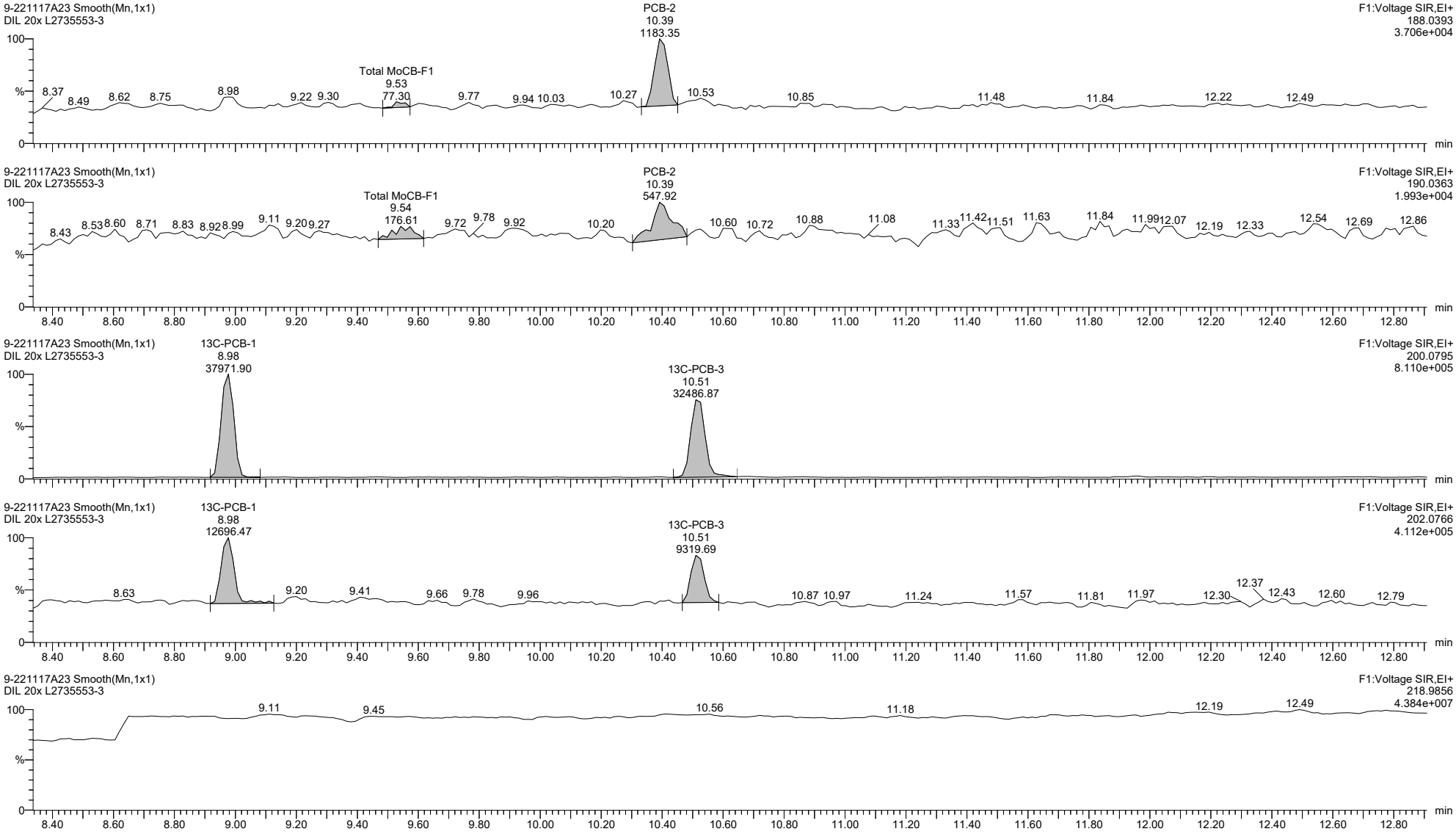
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Printed: Wednesday, November 23, 2022 11:42:36 Eastern Standard Time

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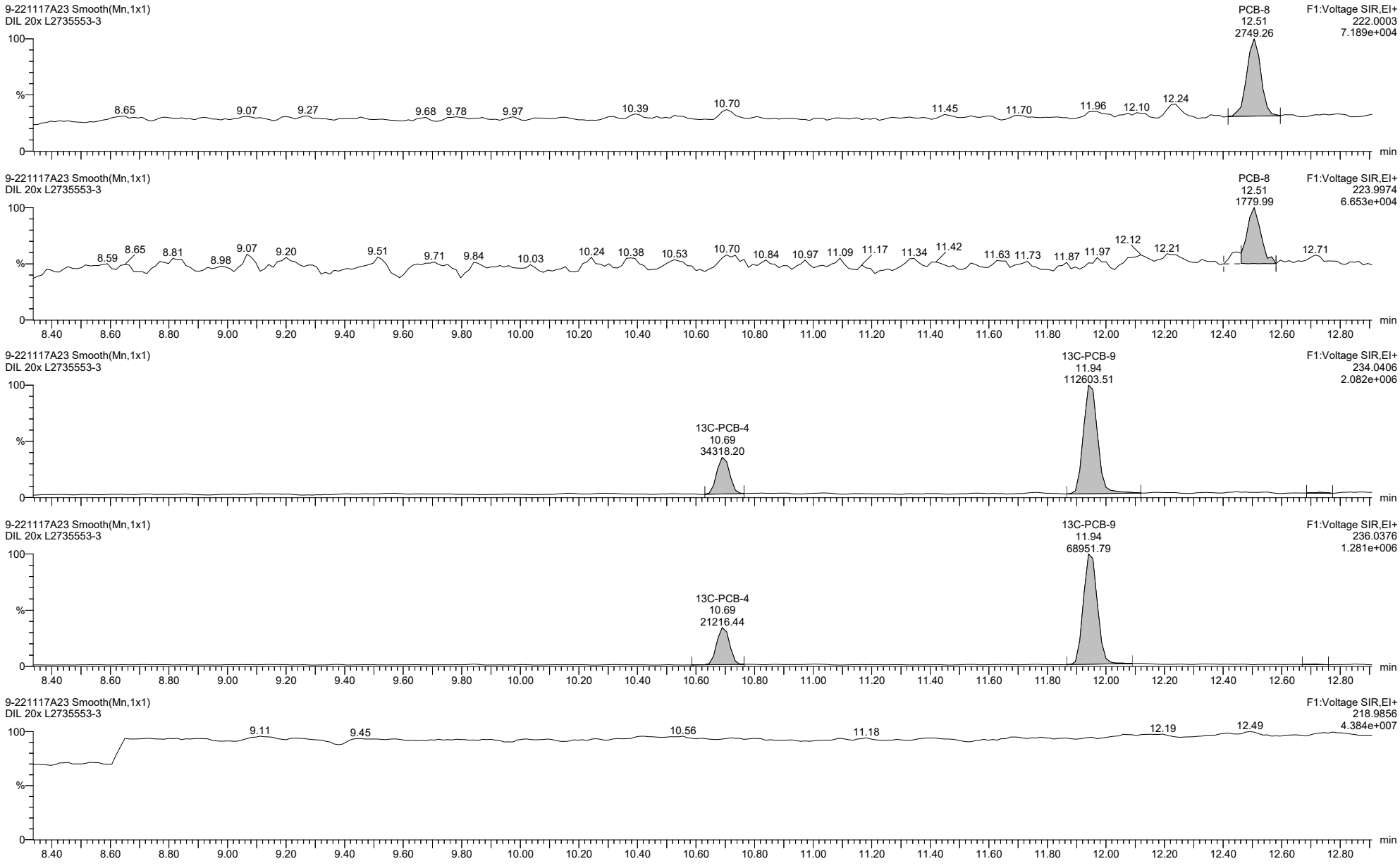


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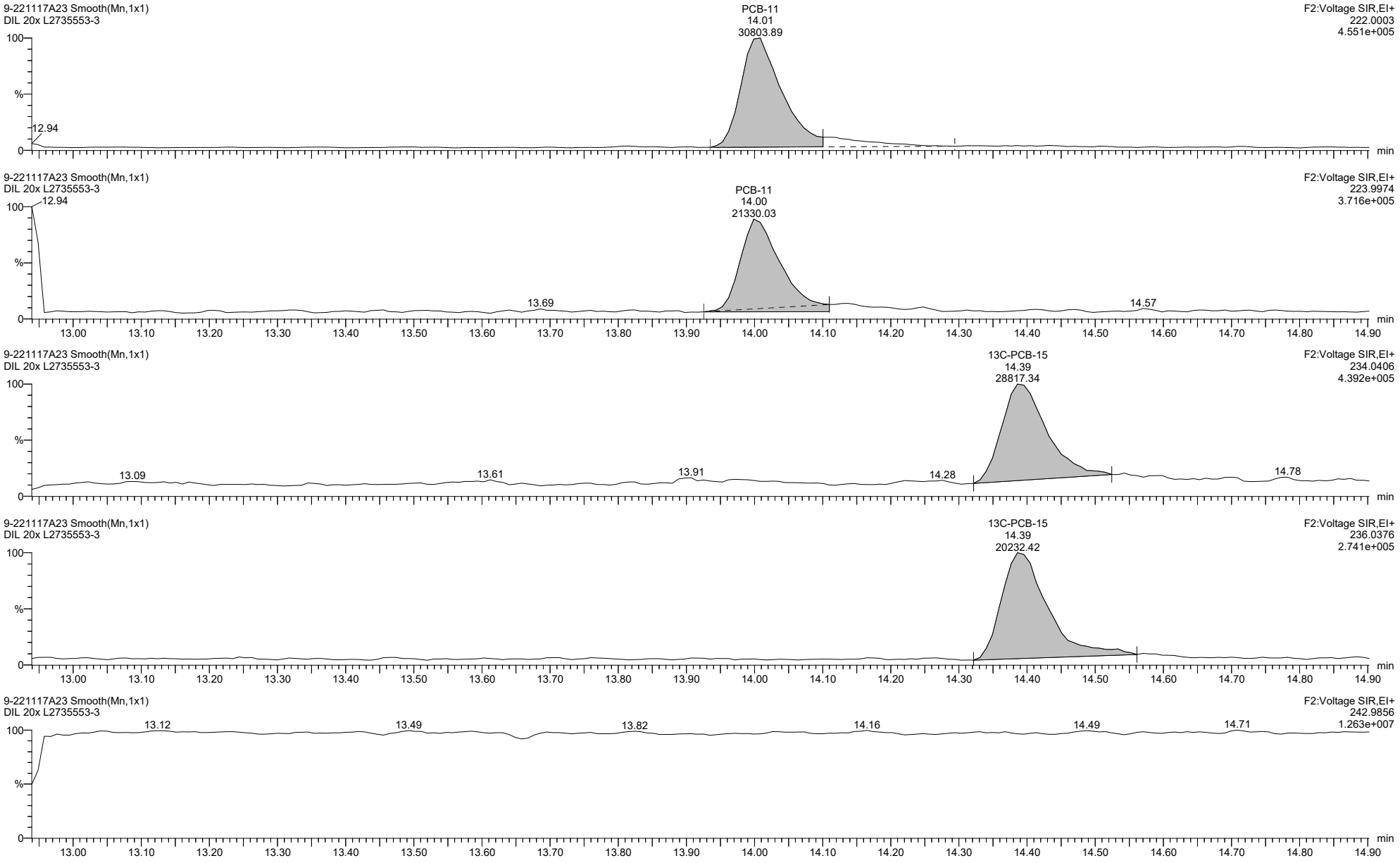
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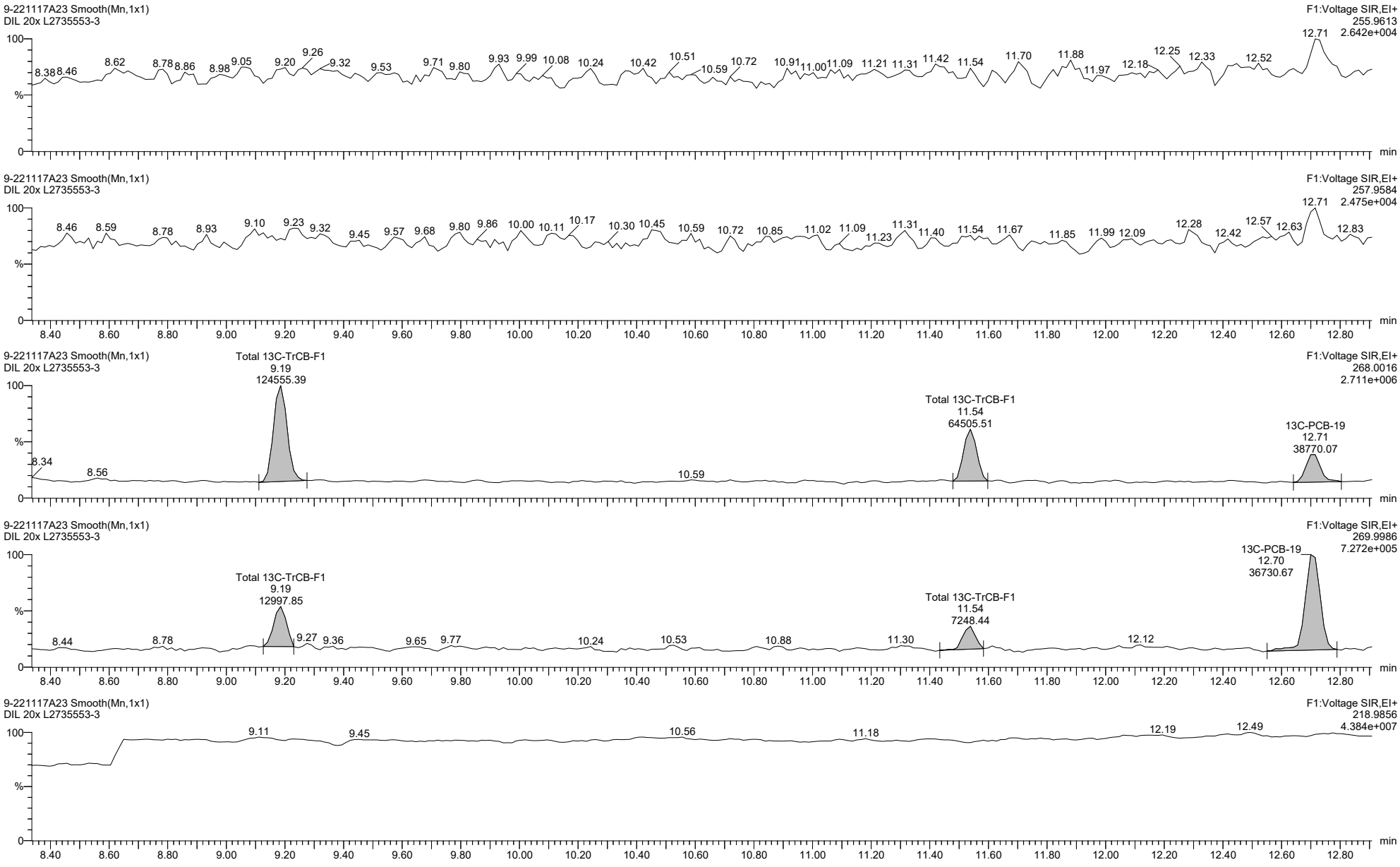


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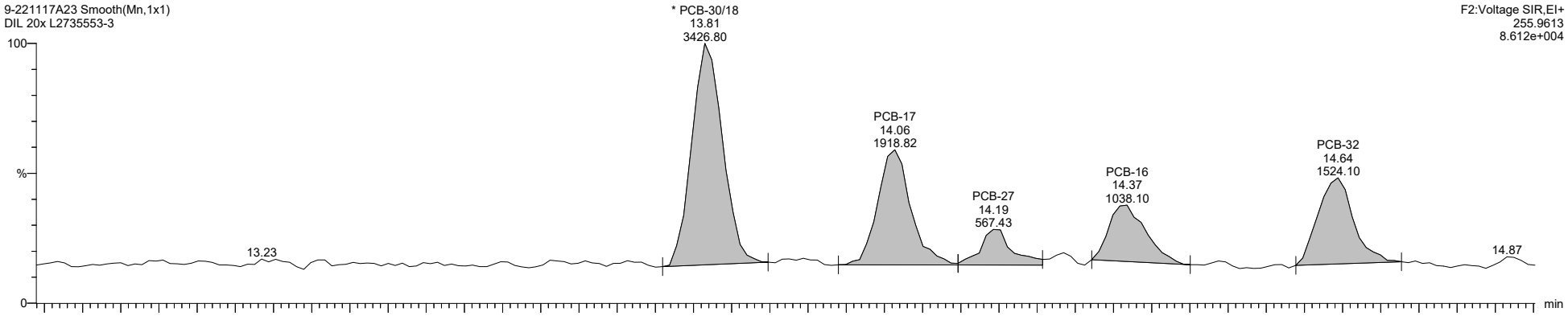


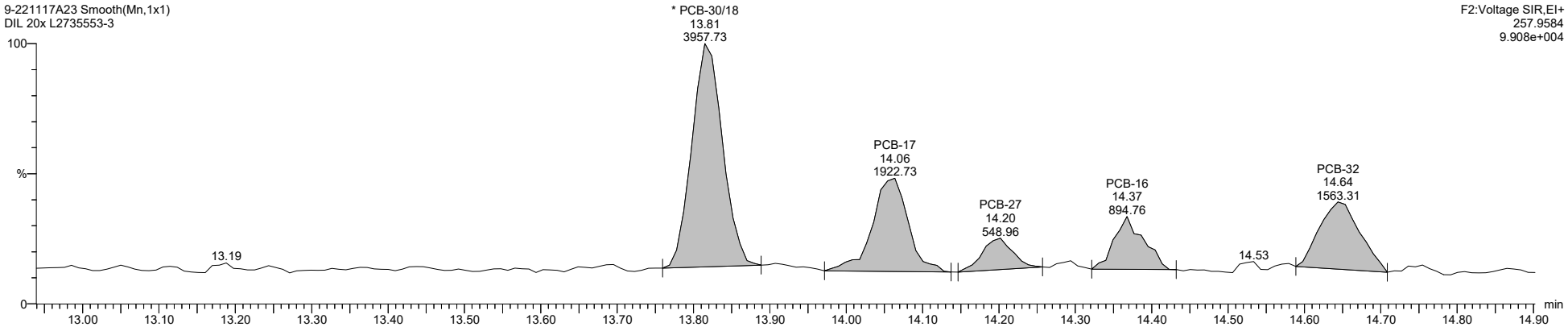
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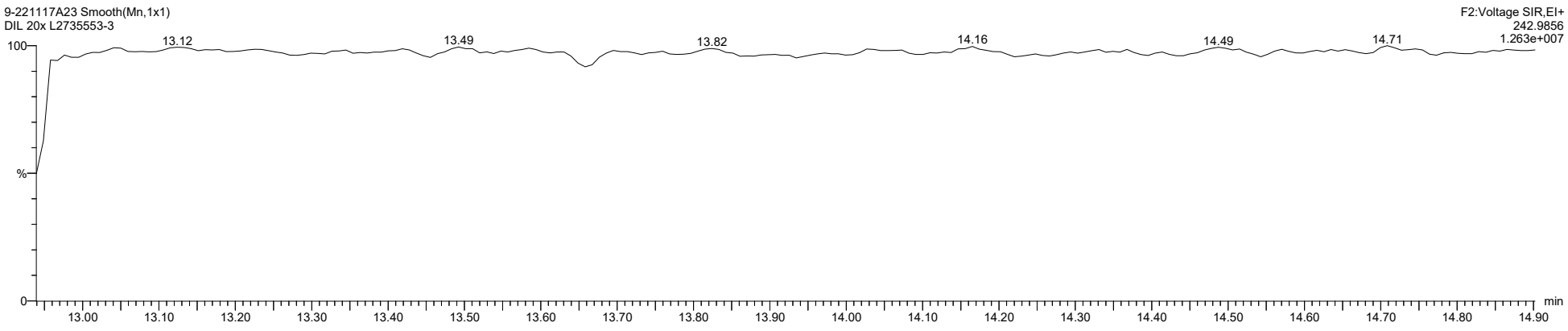
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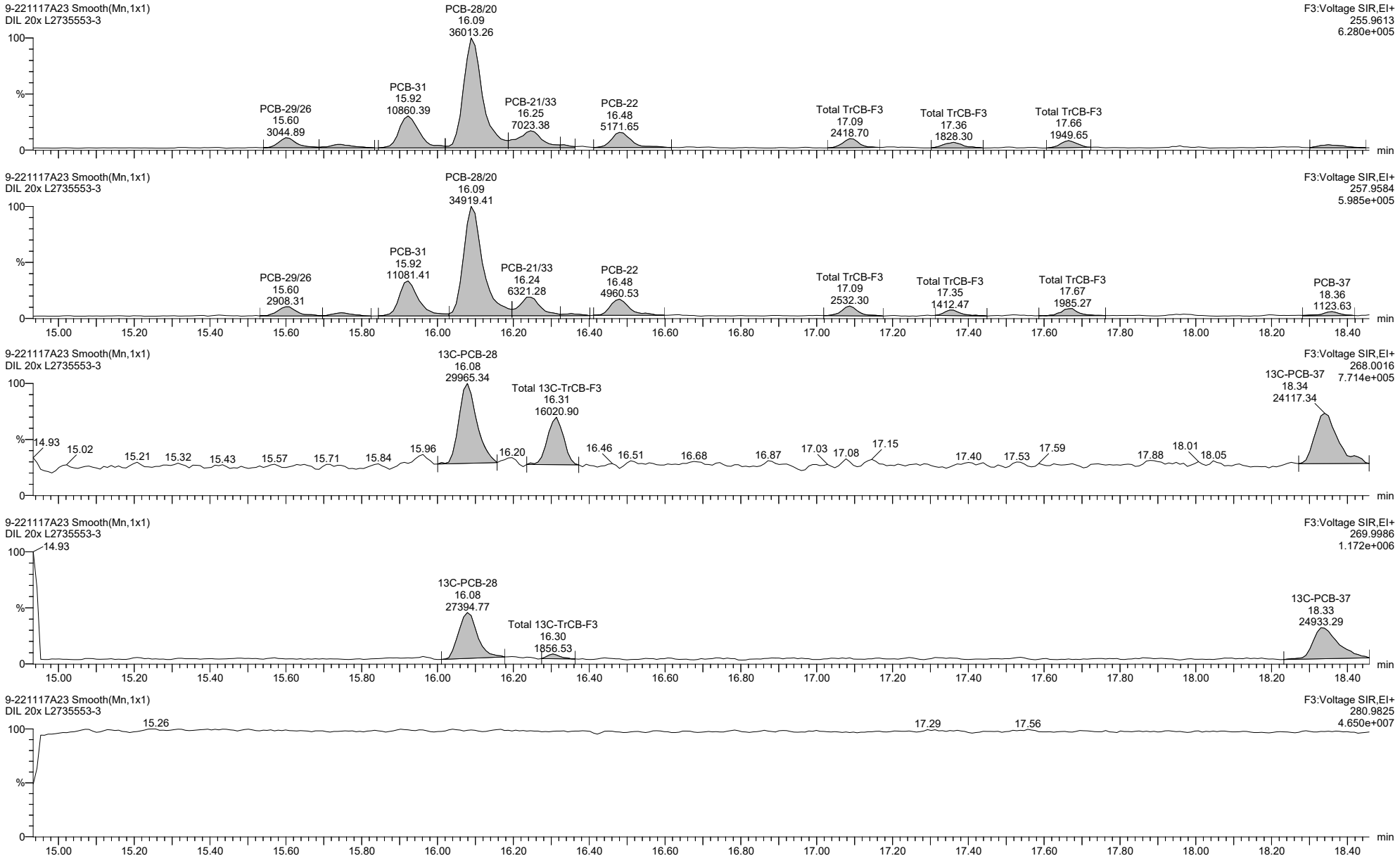




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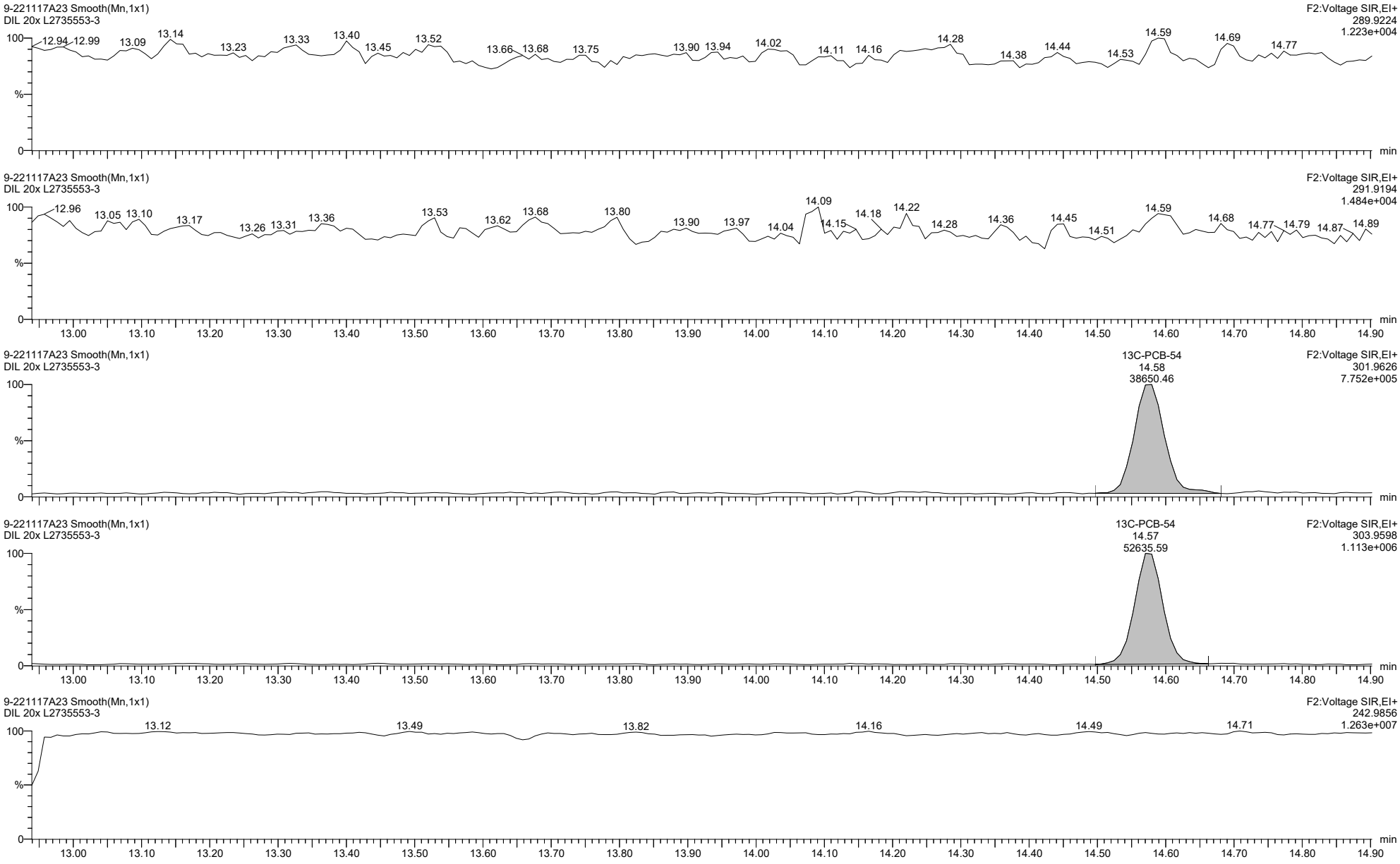


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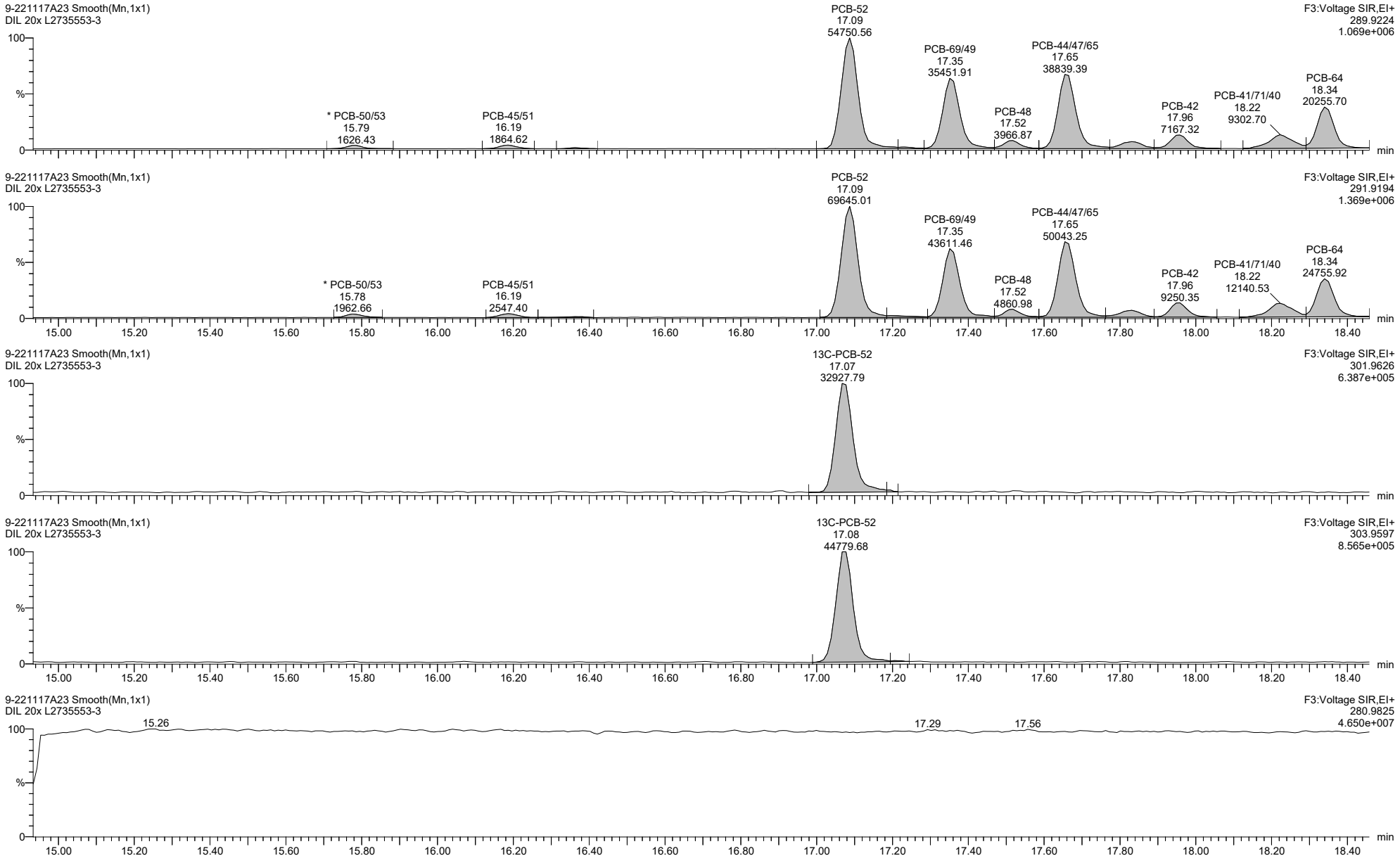


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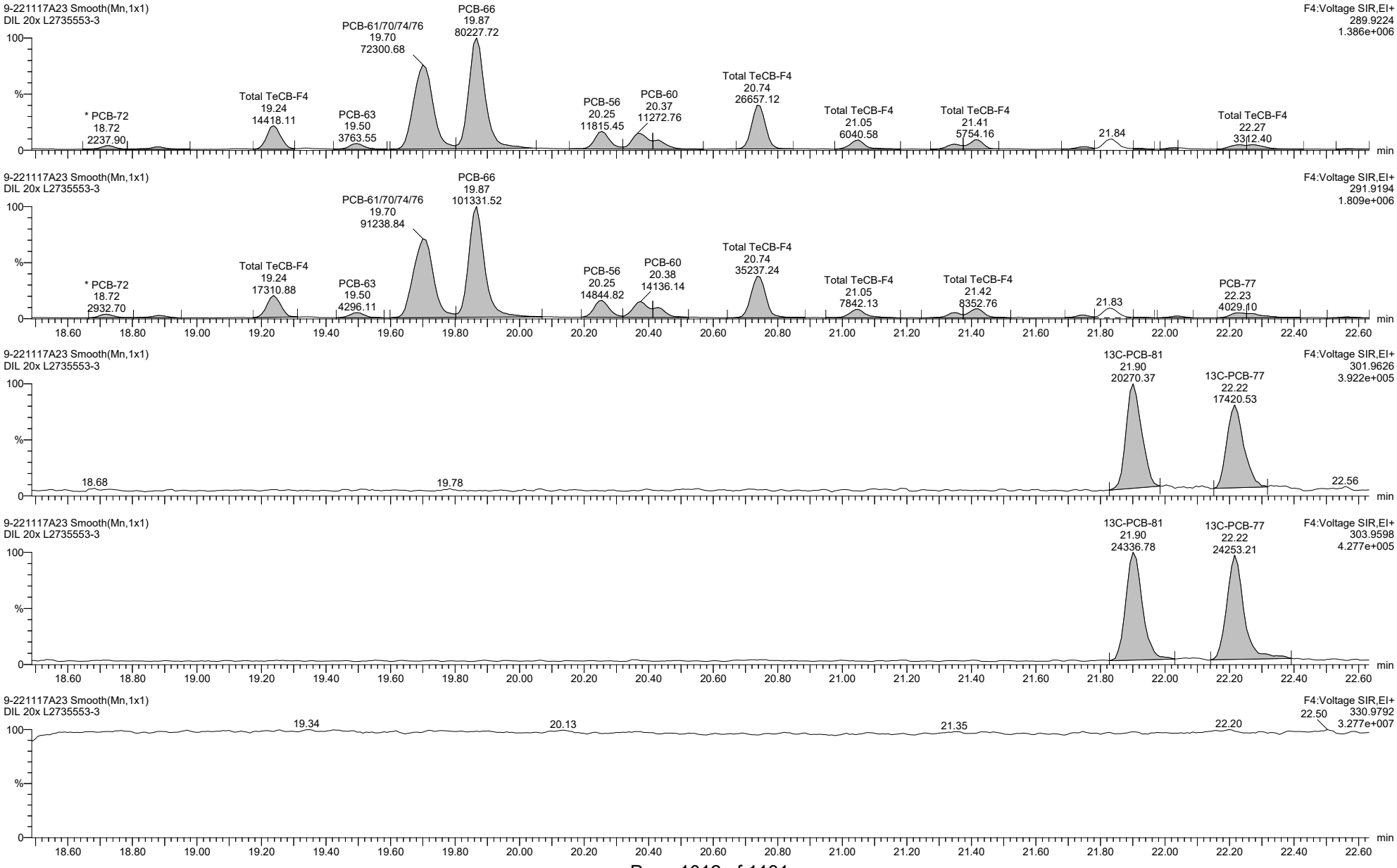


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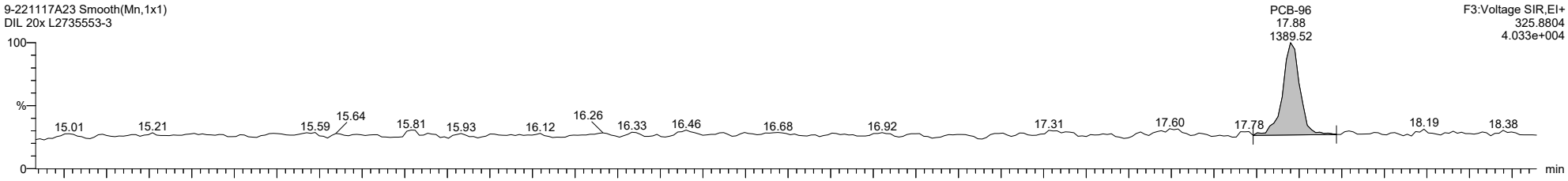
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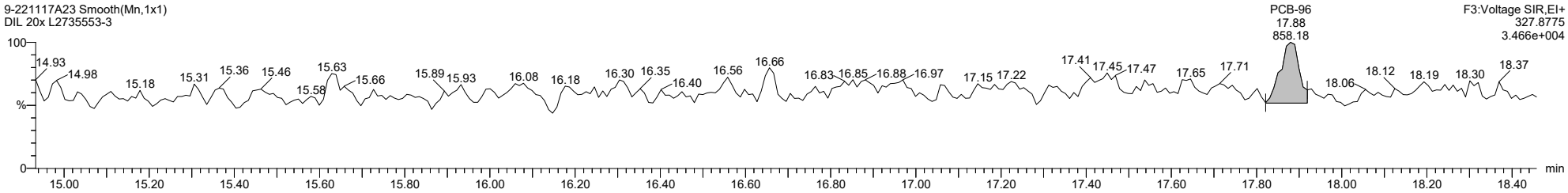


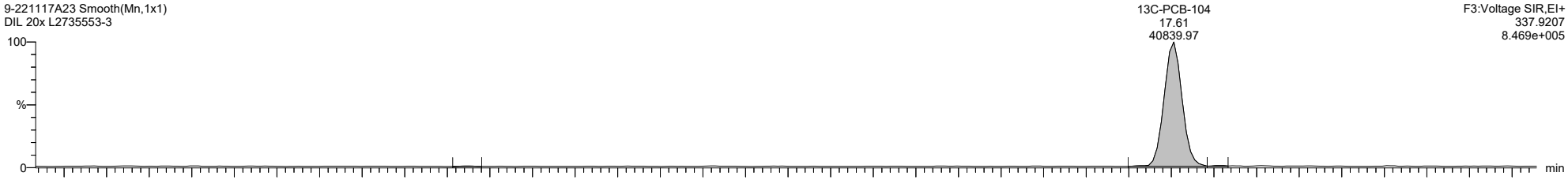
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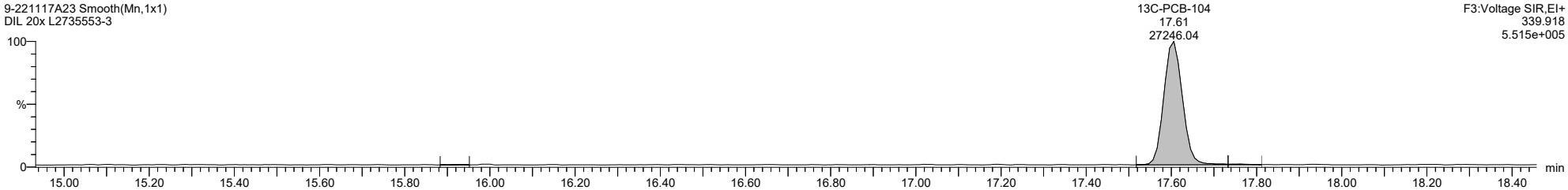
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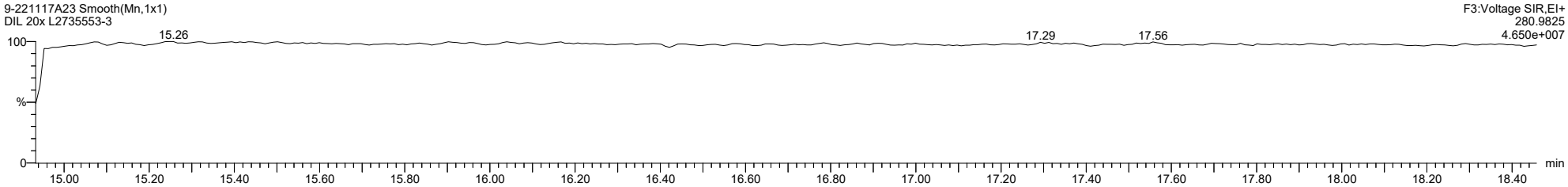
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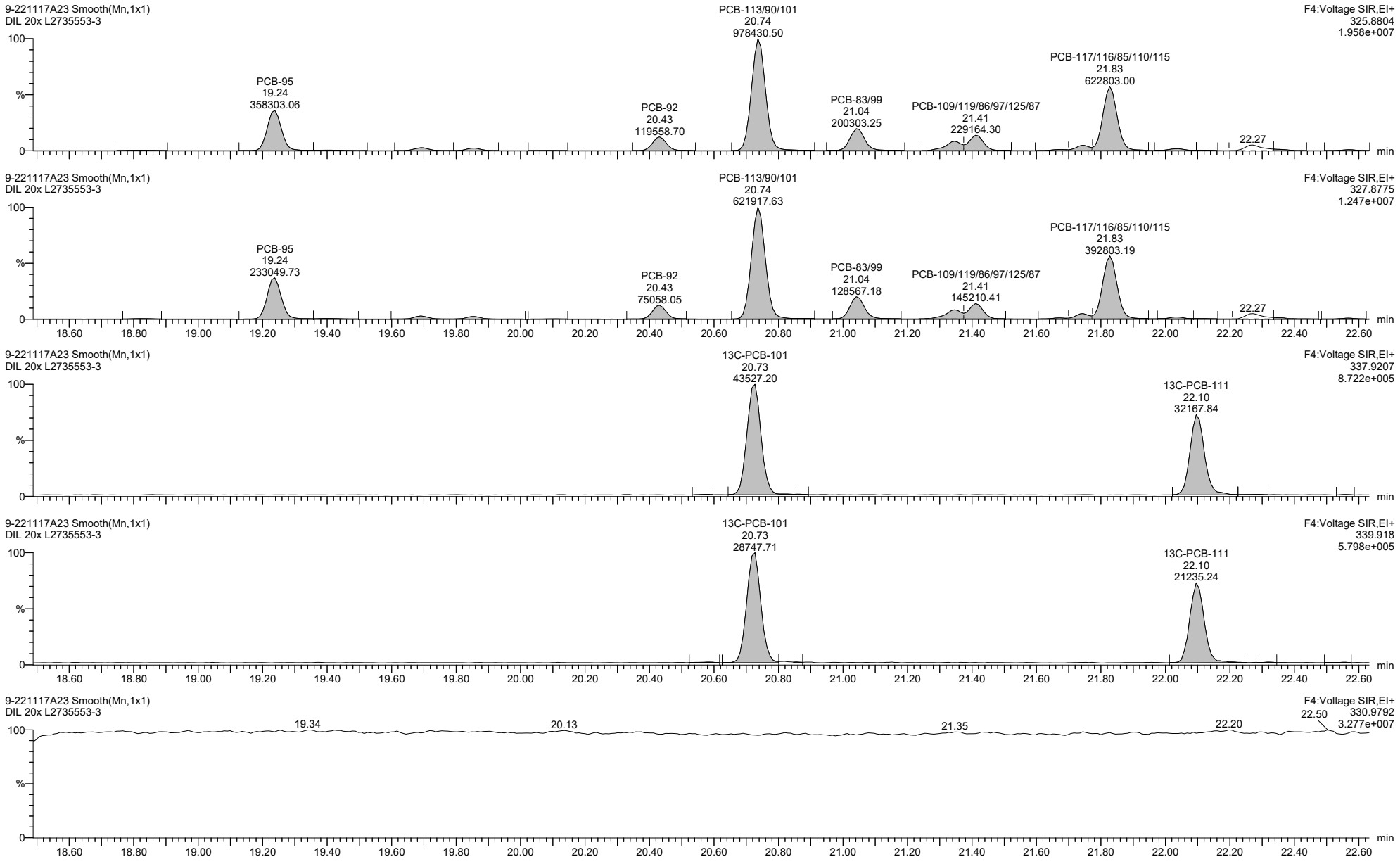




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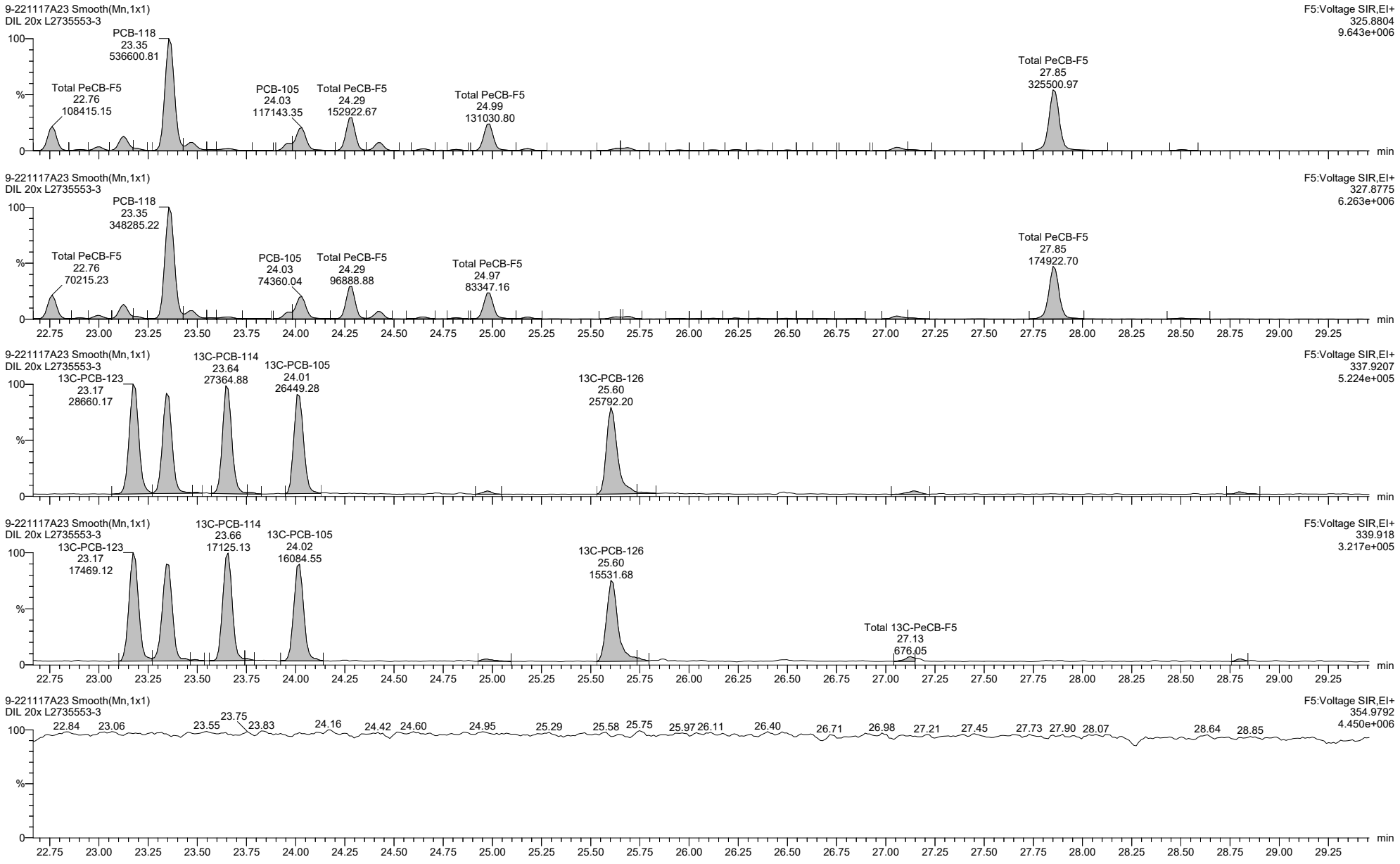


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

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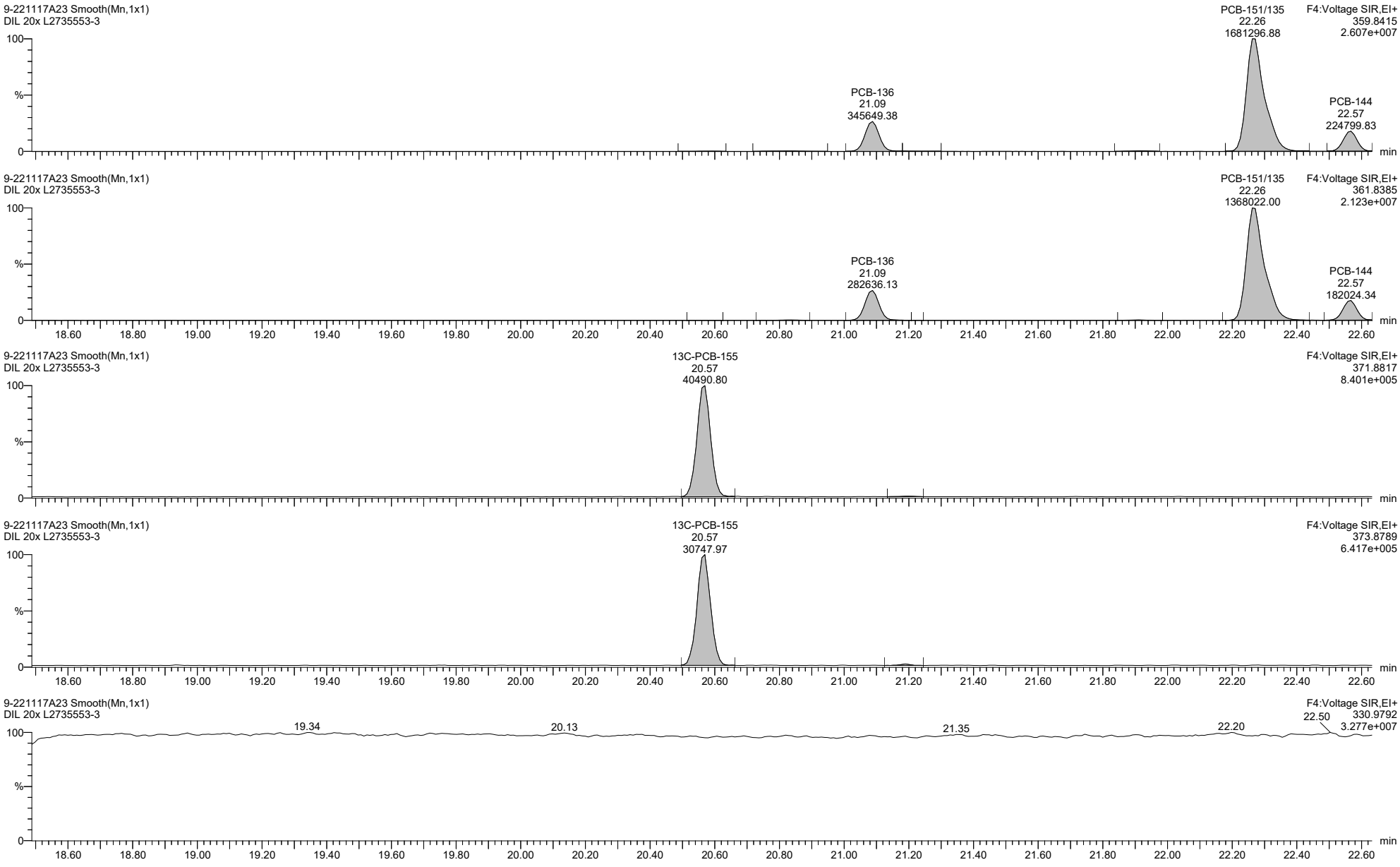
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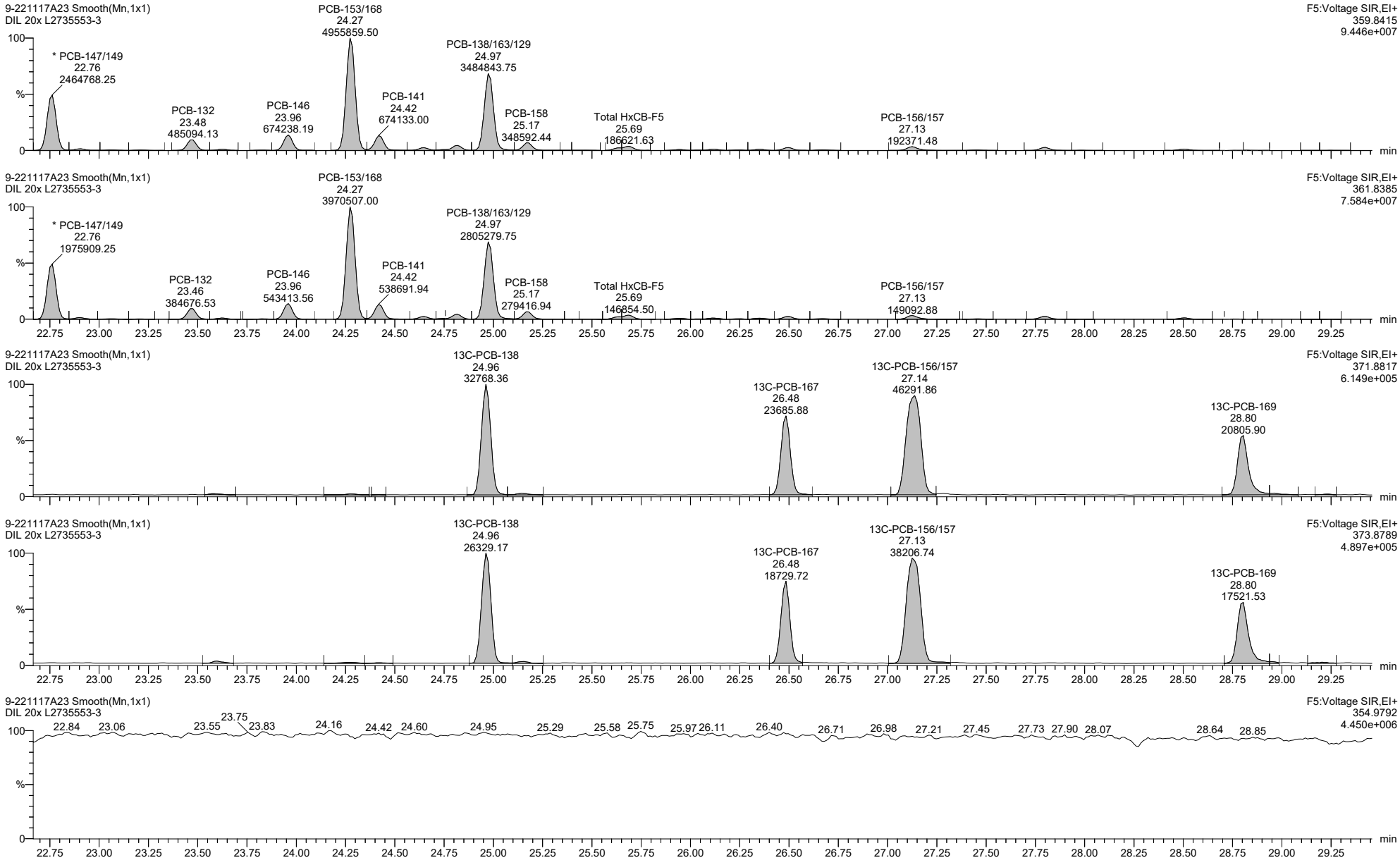


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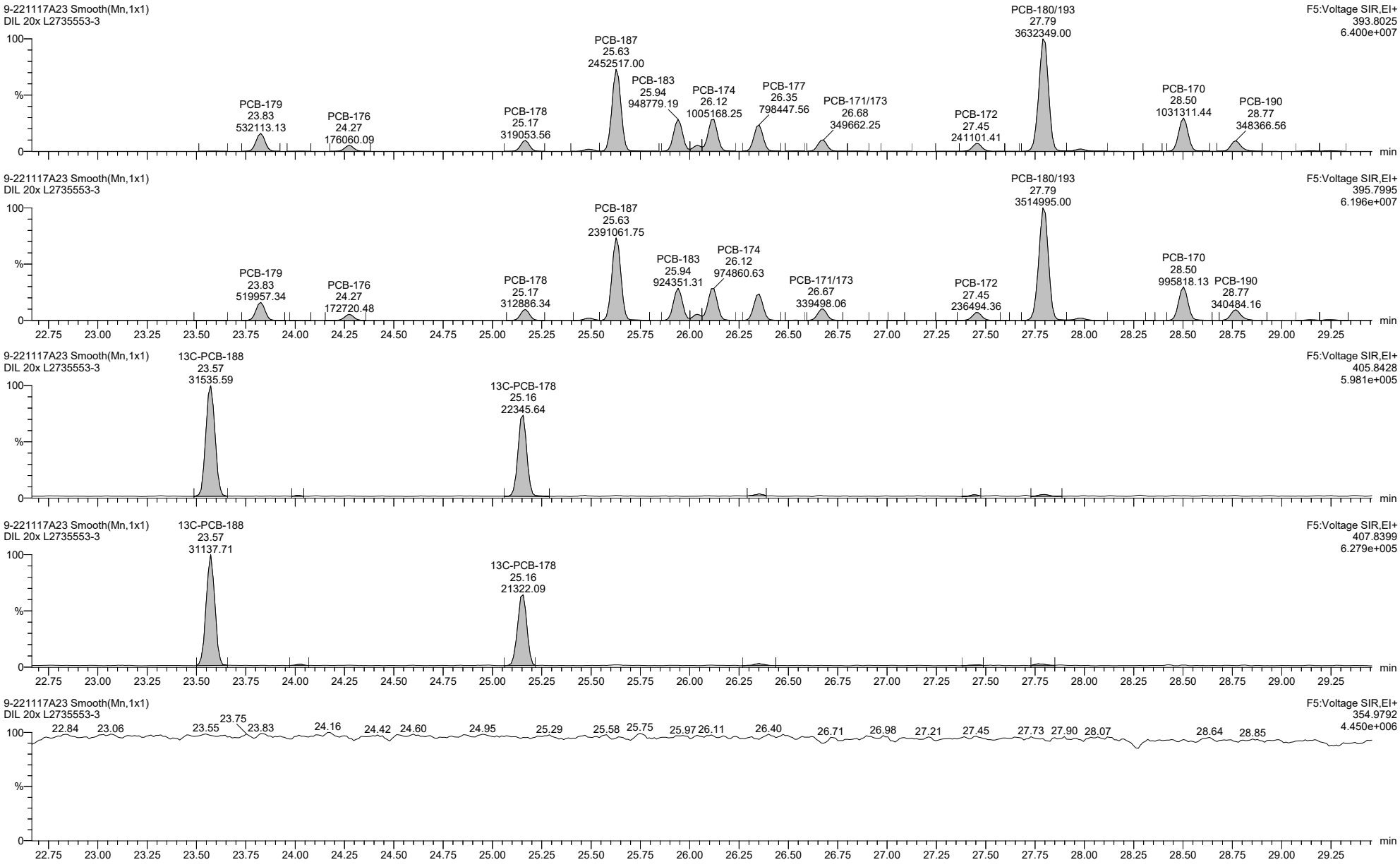


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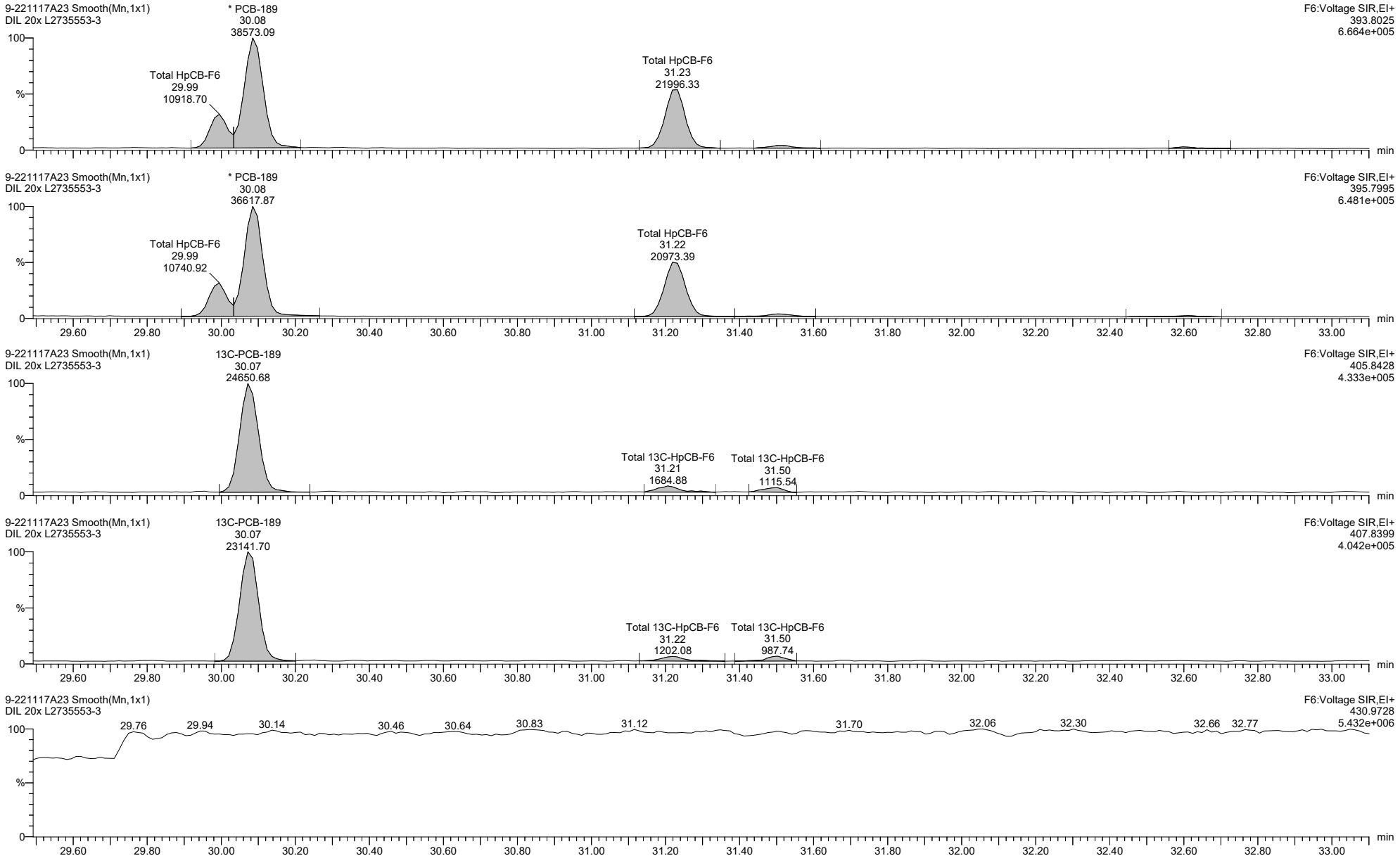


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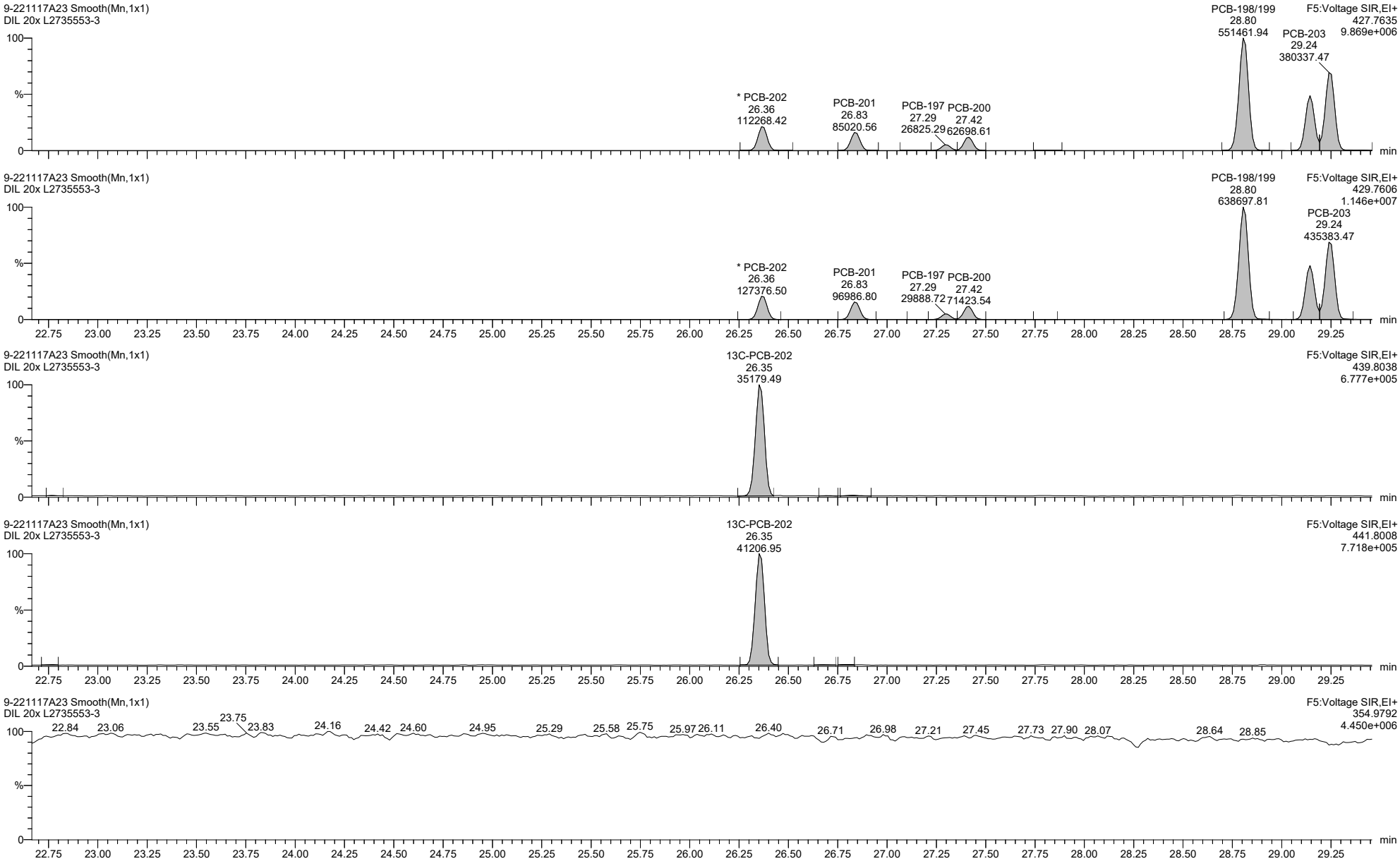


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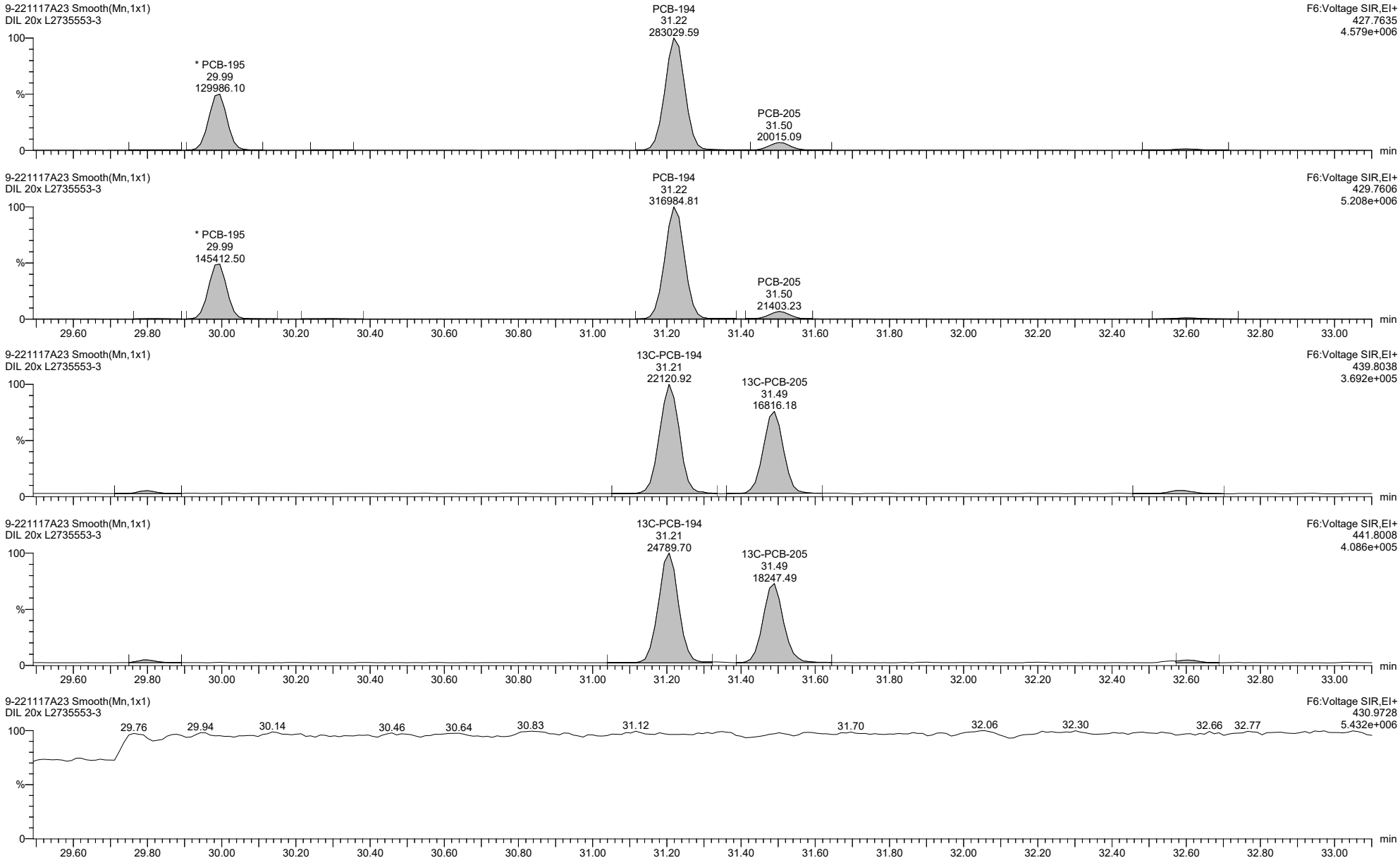
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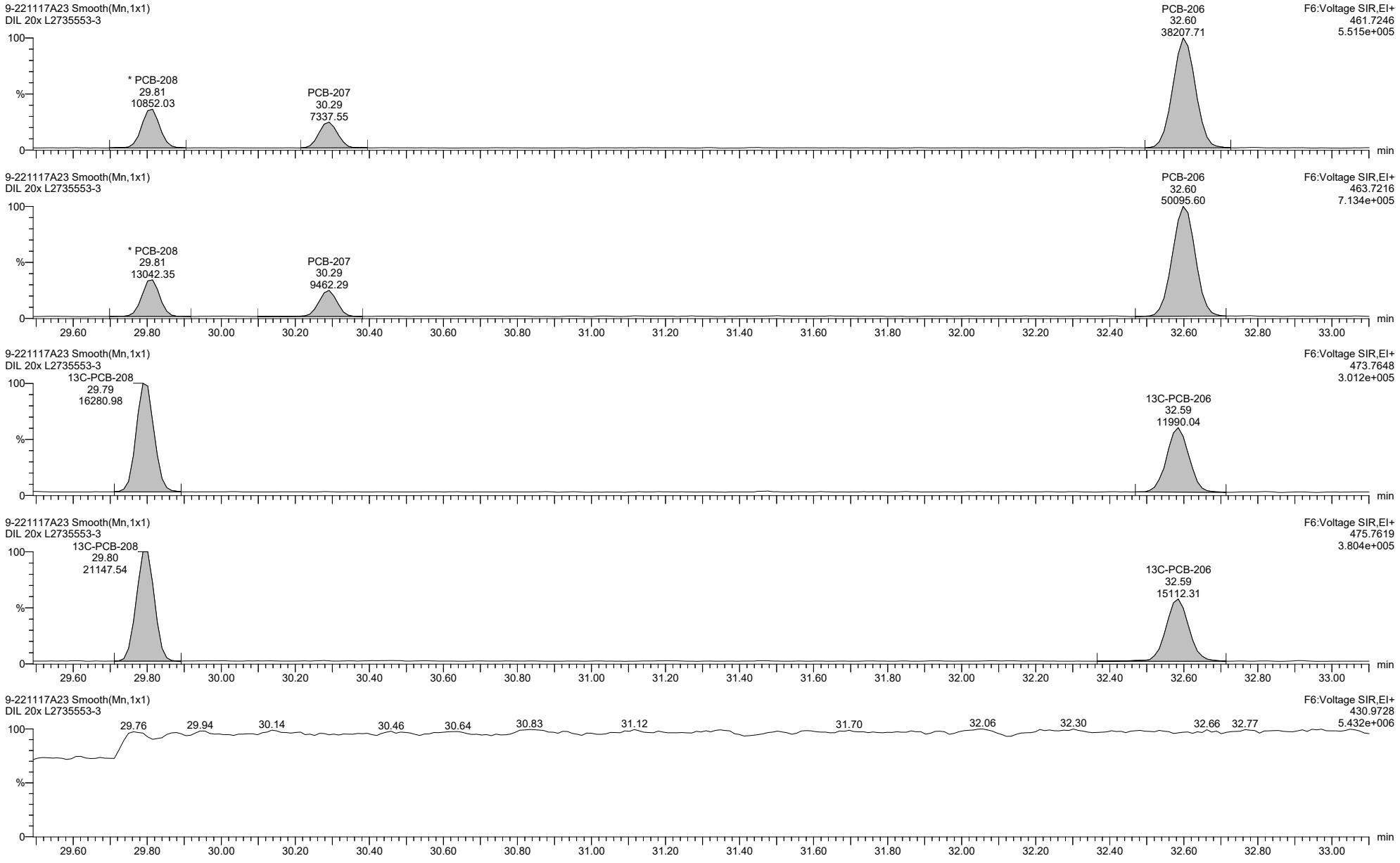


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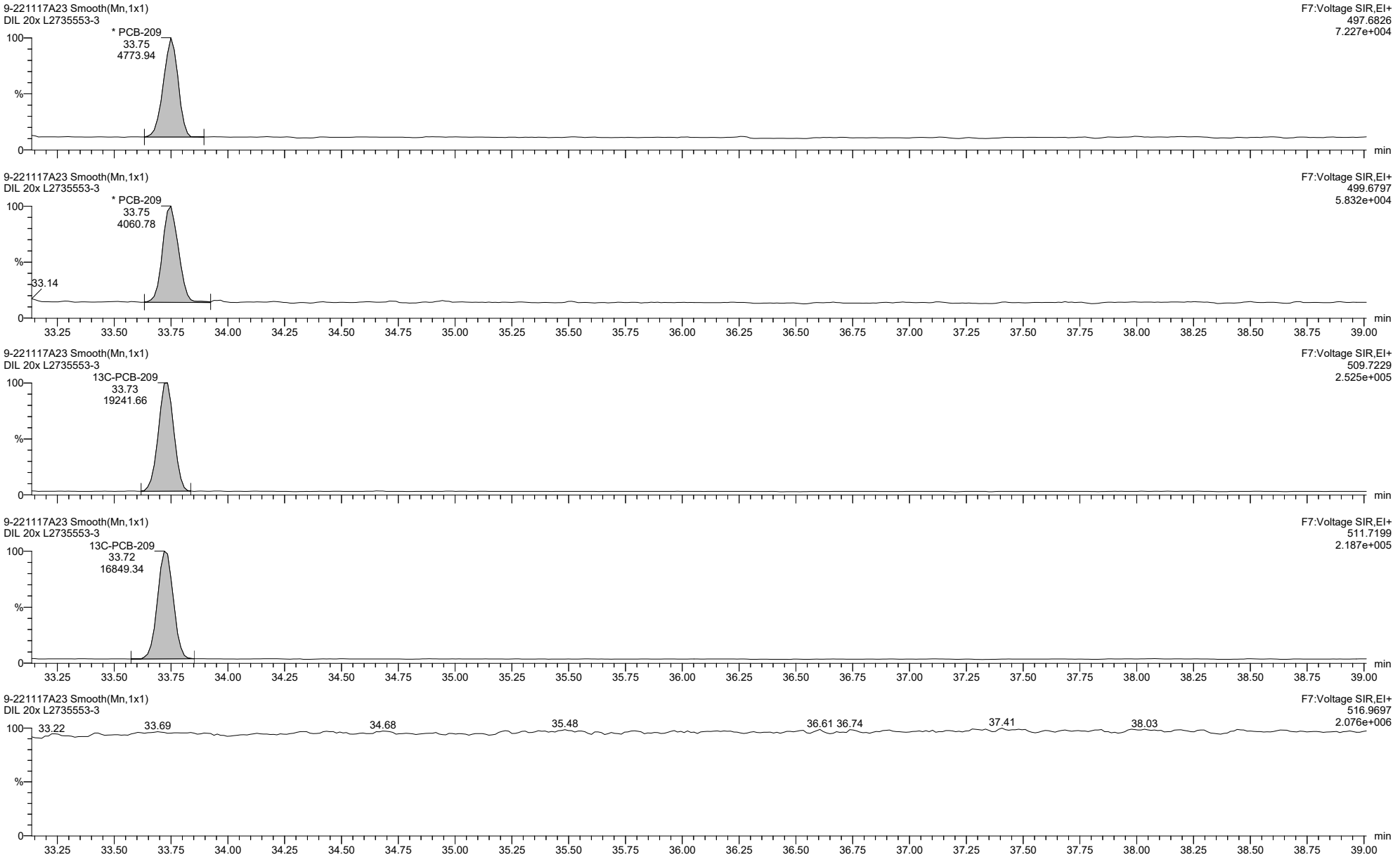
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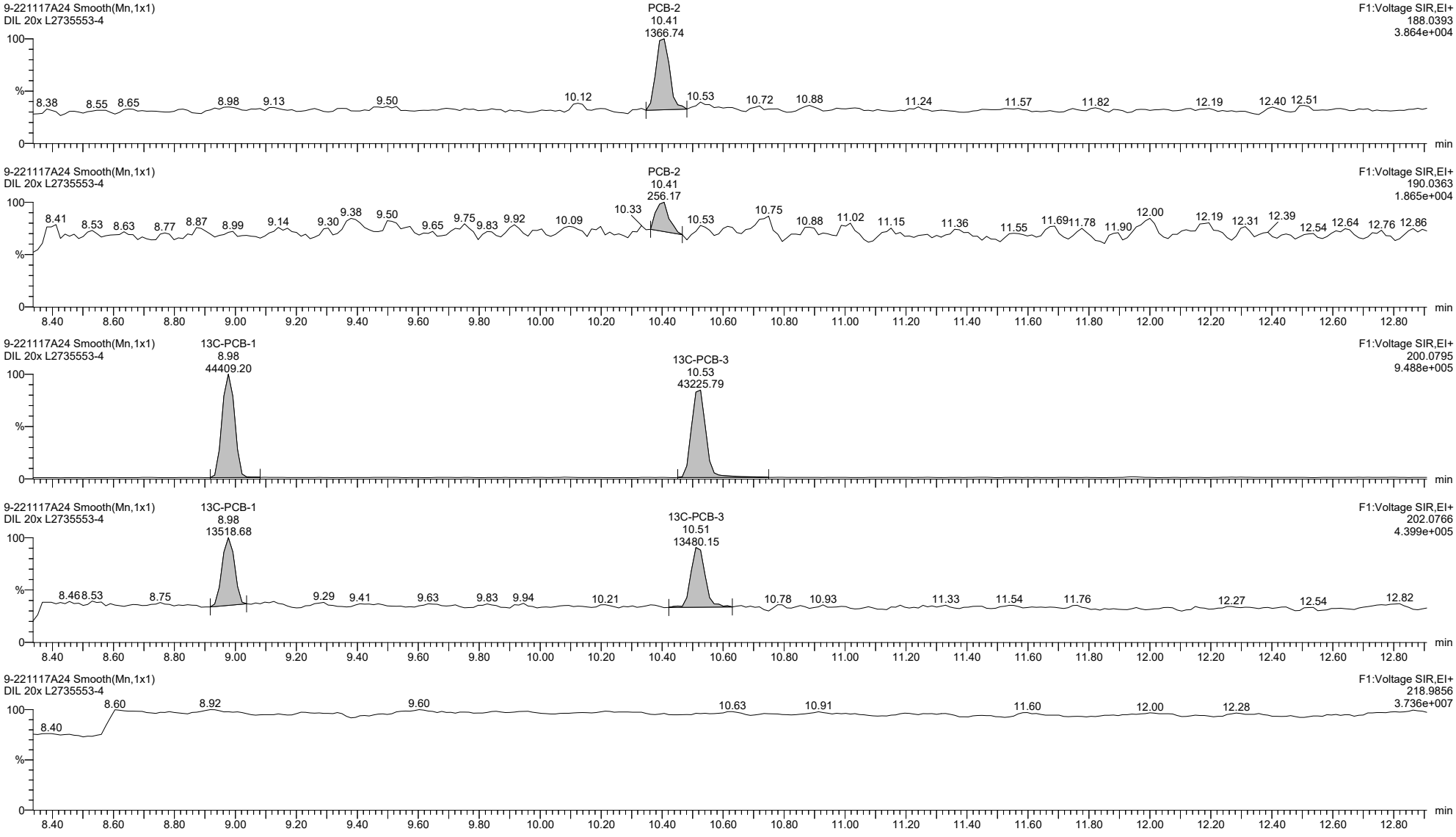
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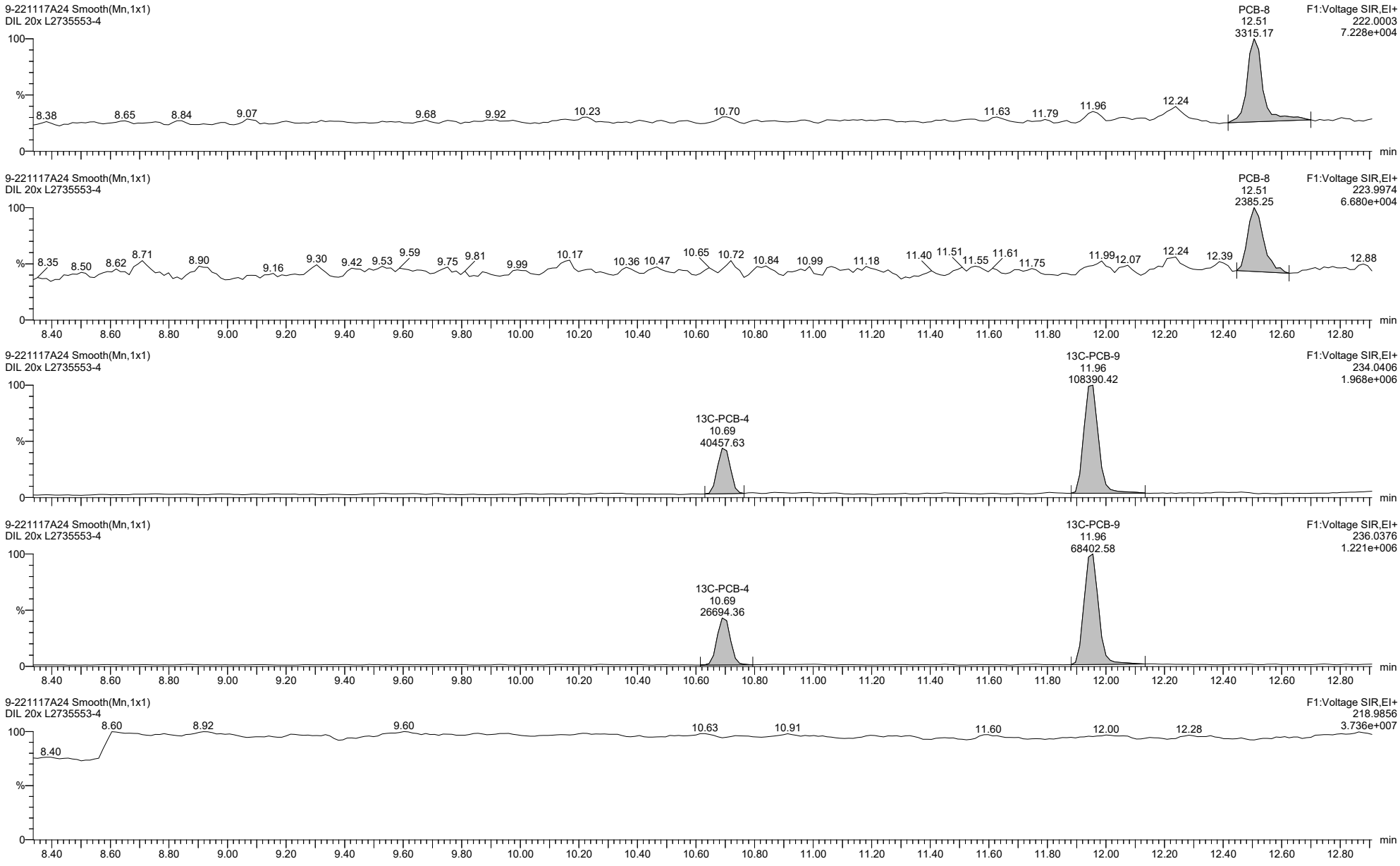


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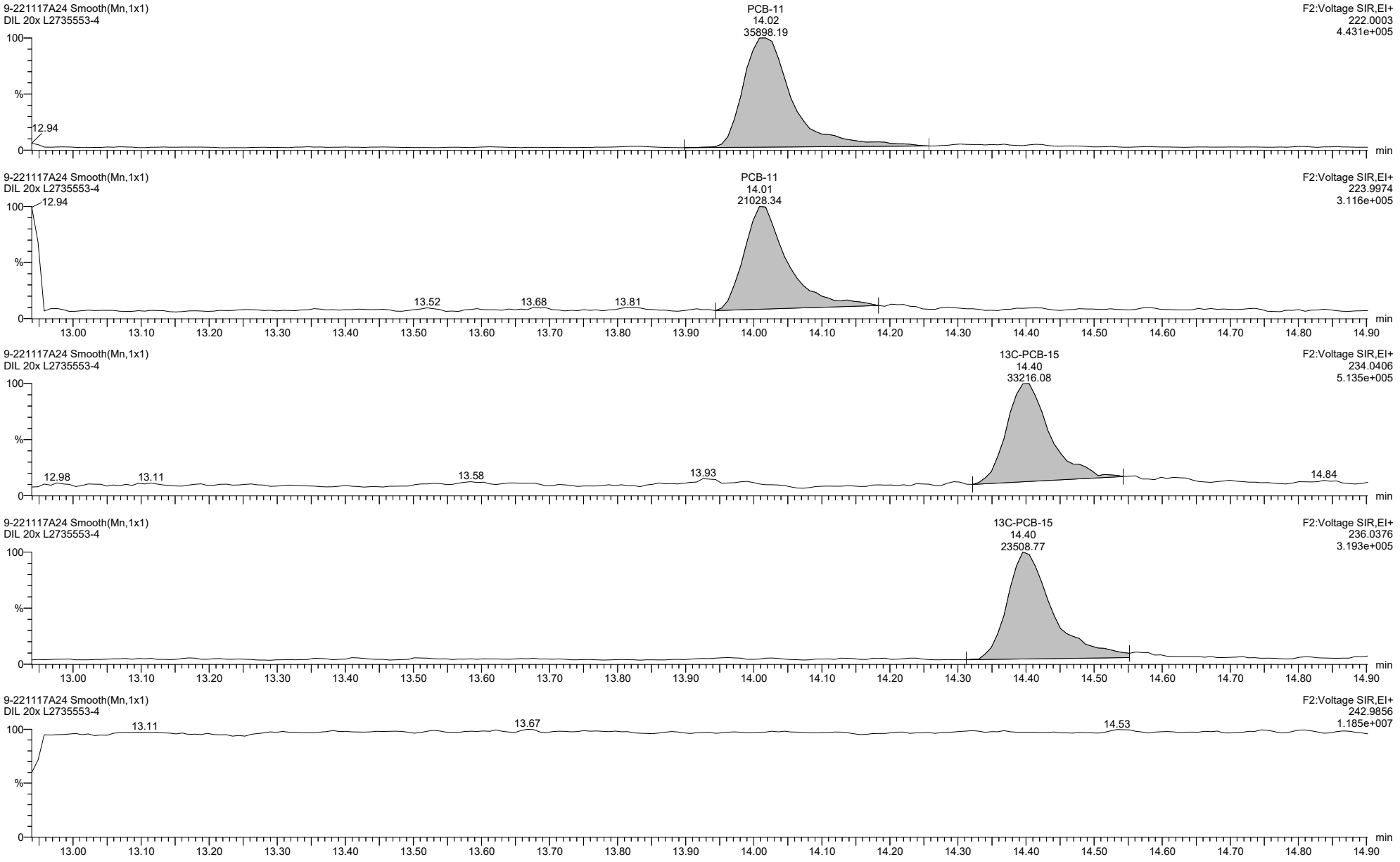


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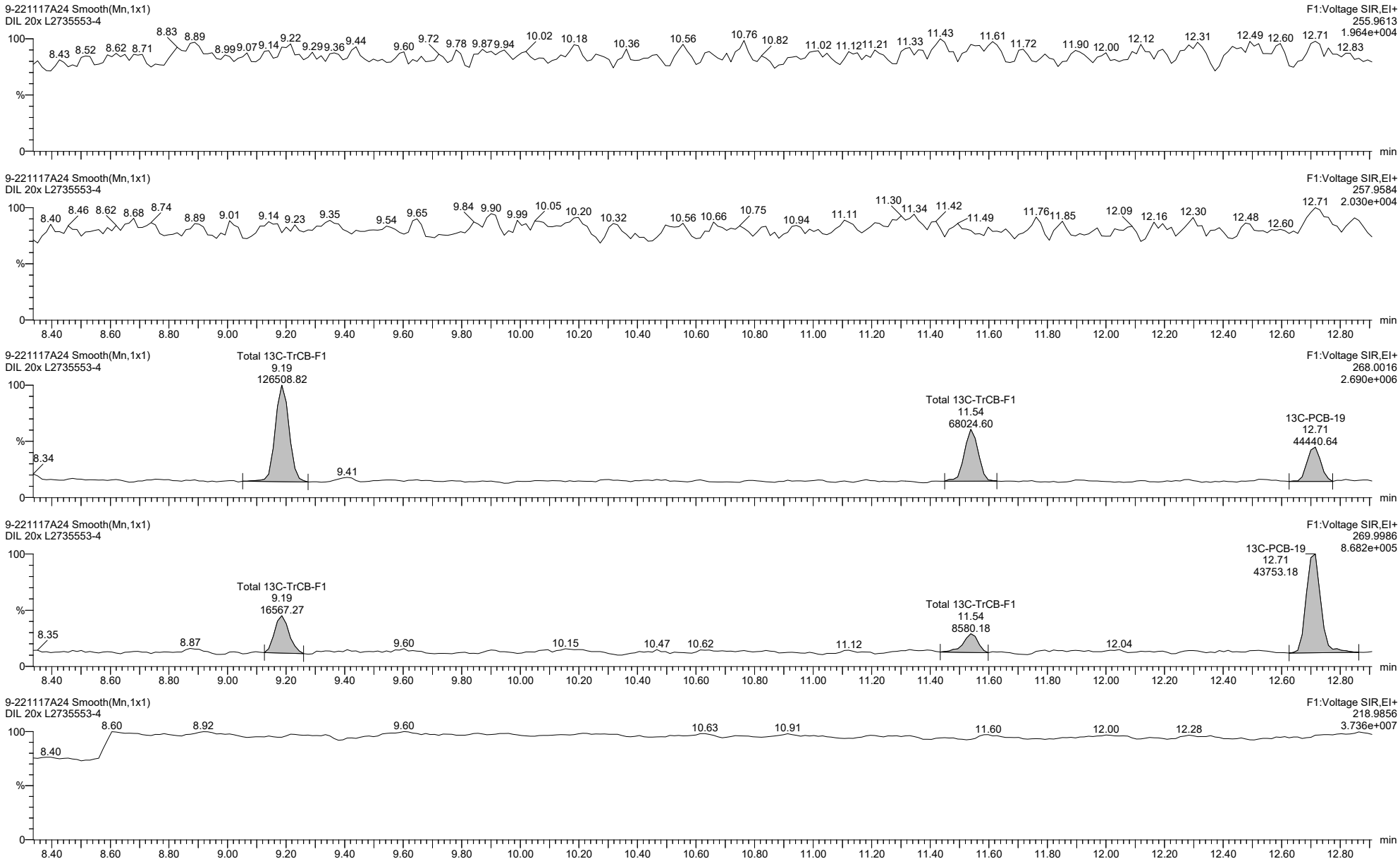


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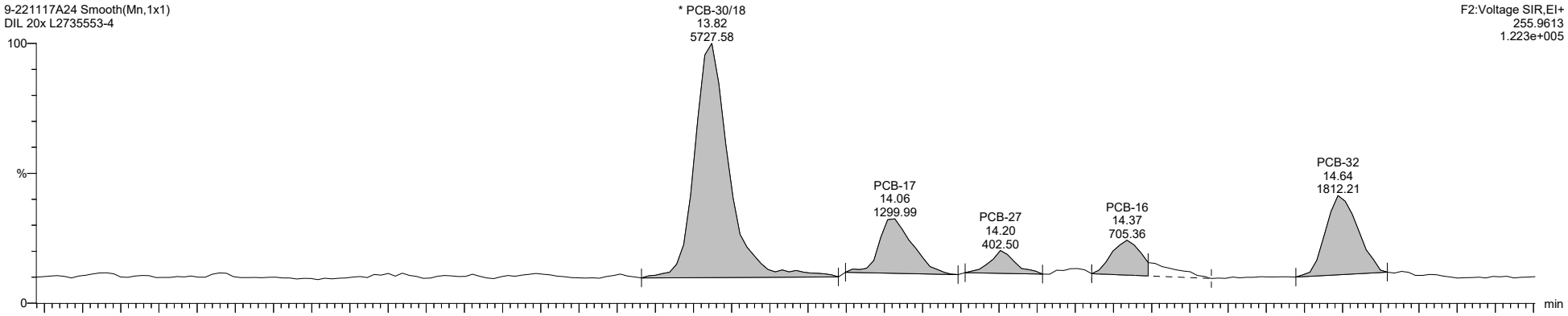


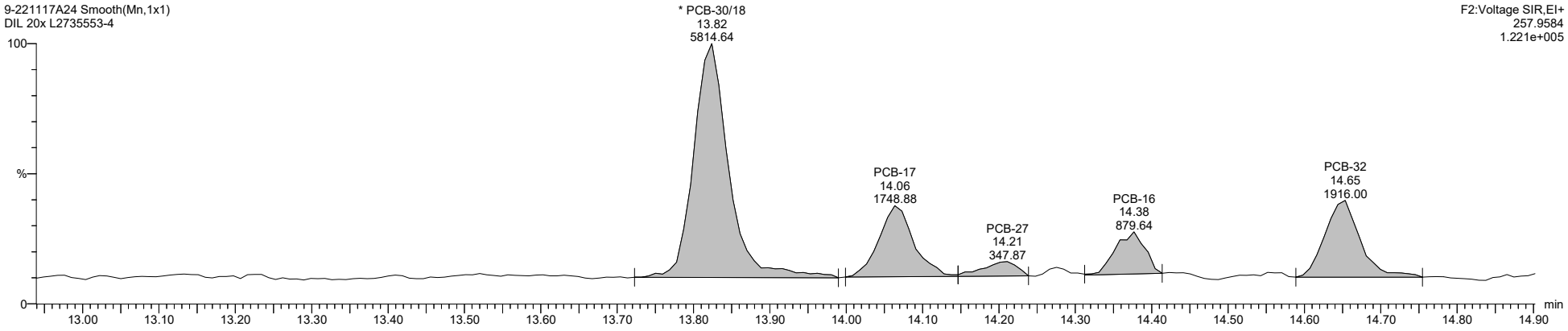
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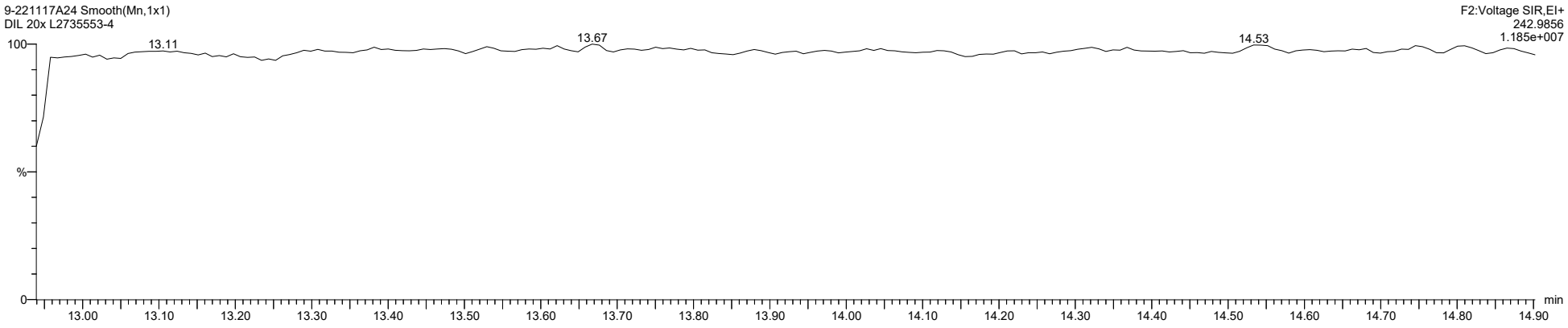
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Printed: Wednesday, November 23, 2022 11:42:36 Eastern Standard Time

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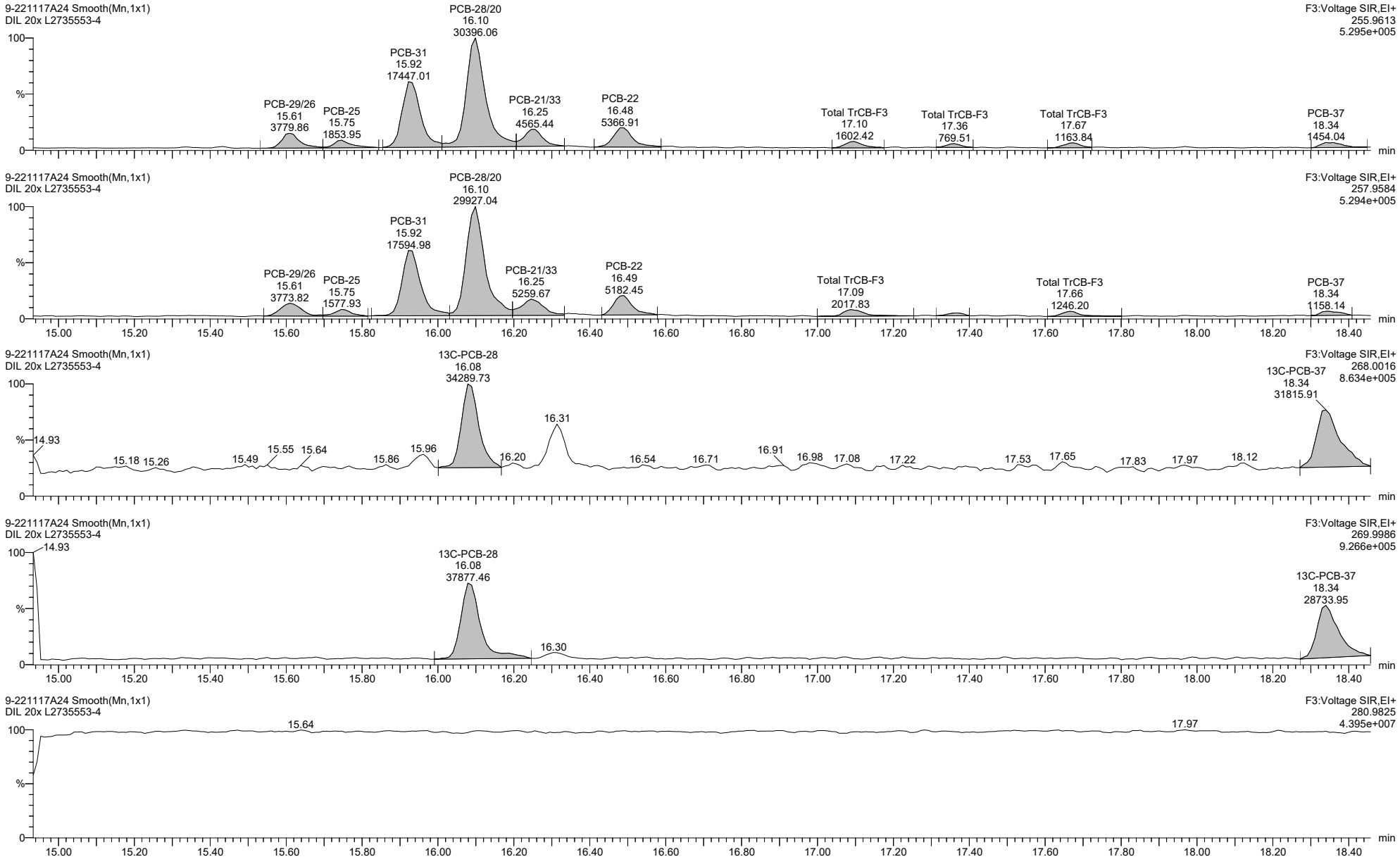


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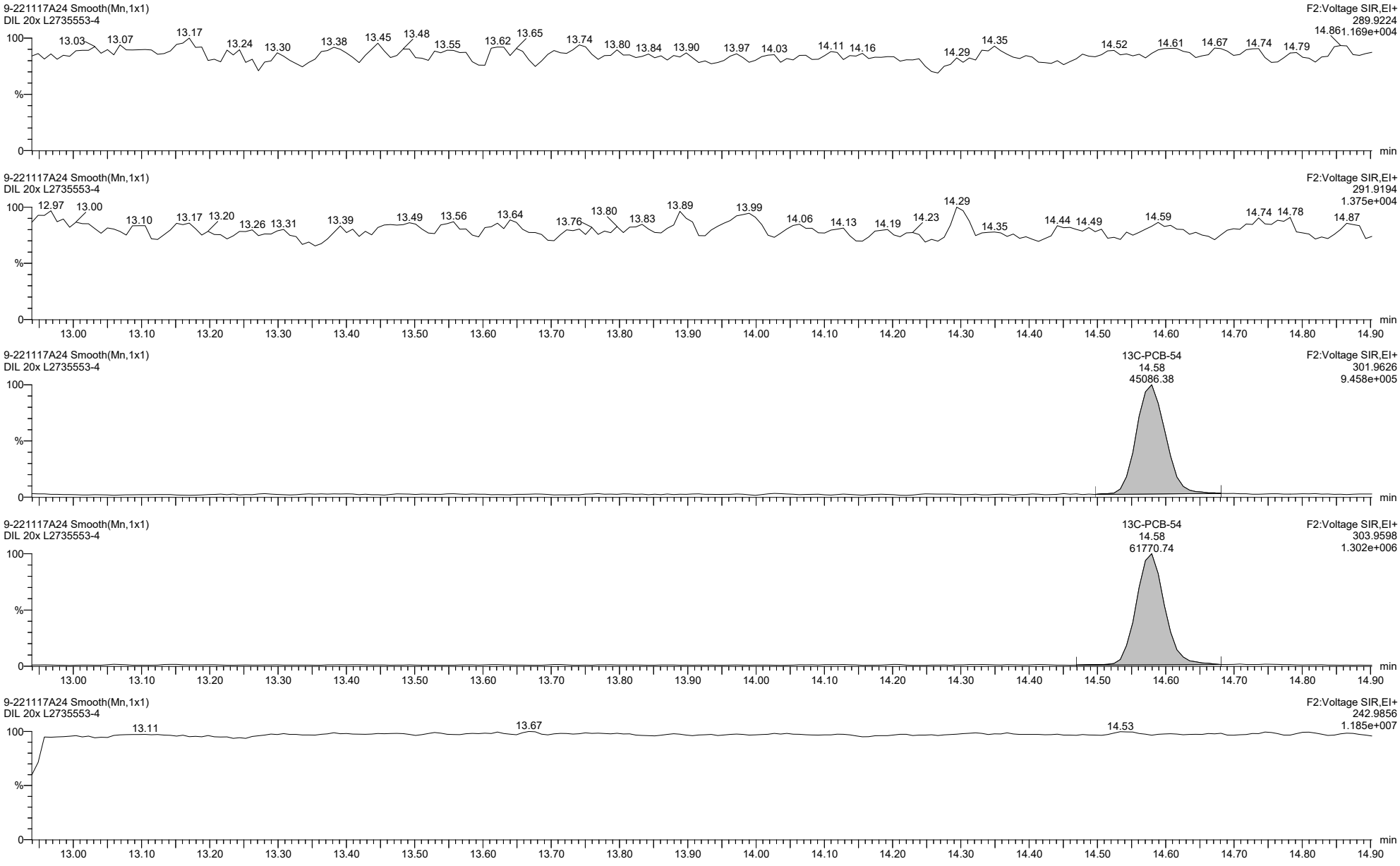


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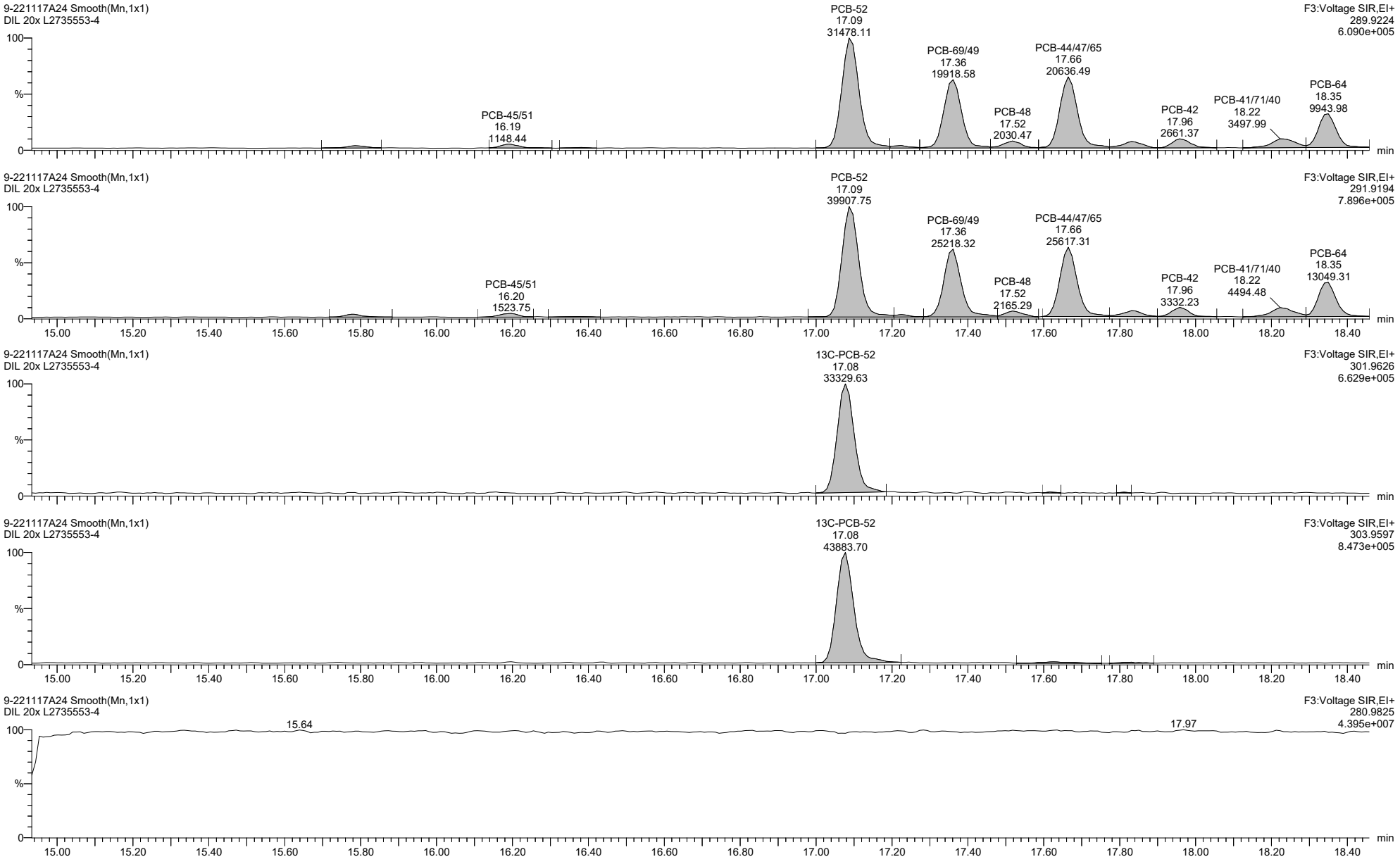
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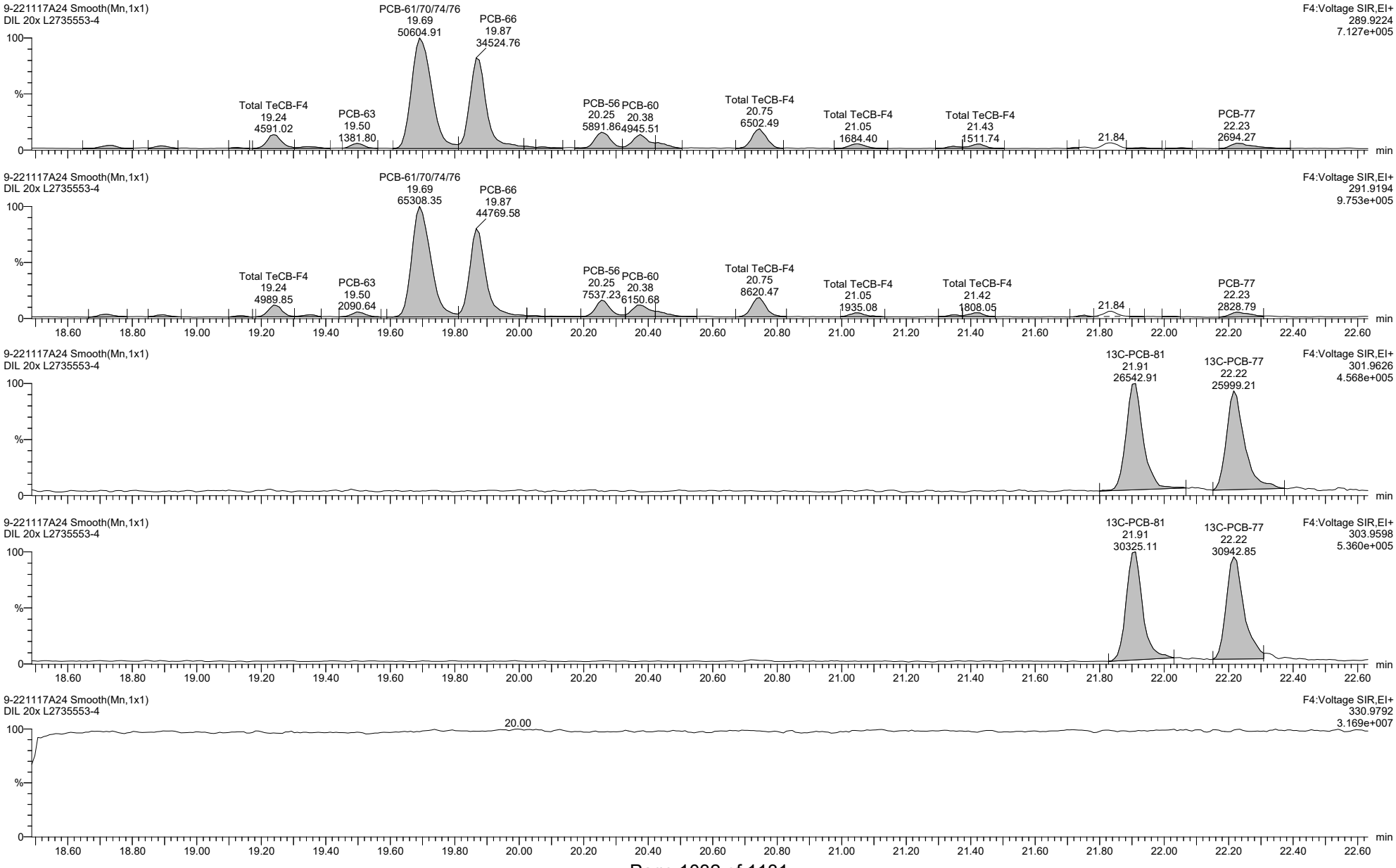


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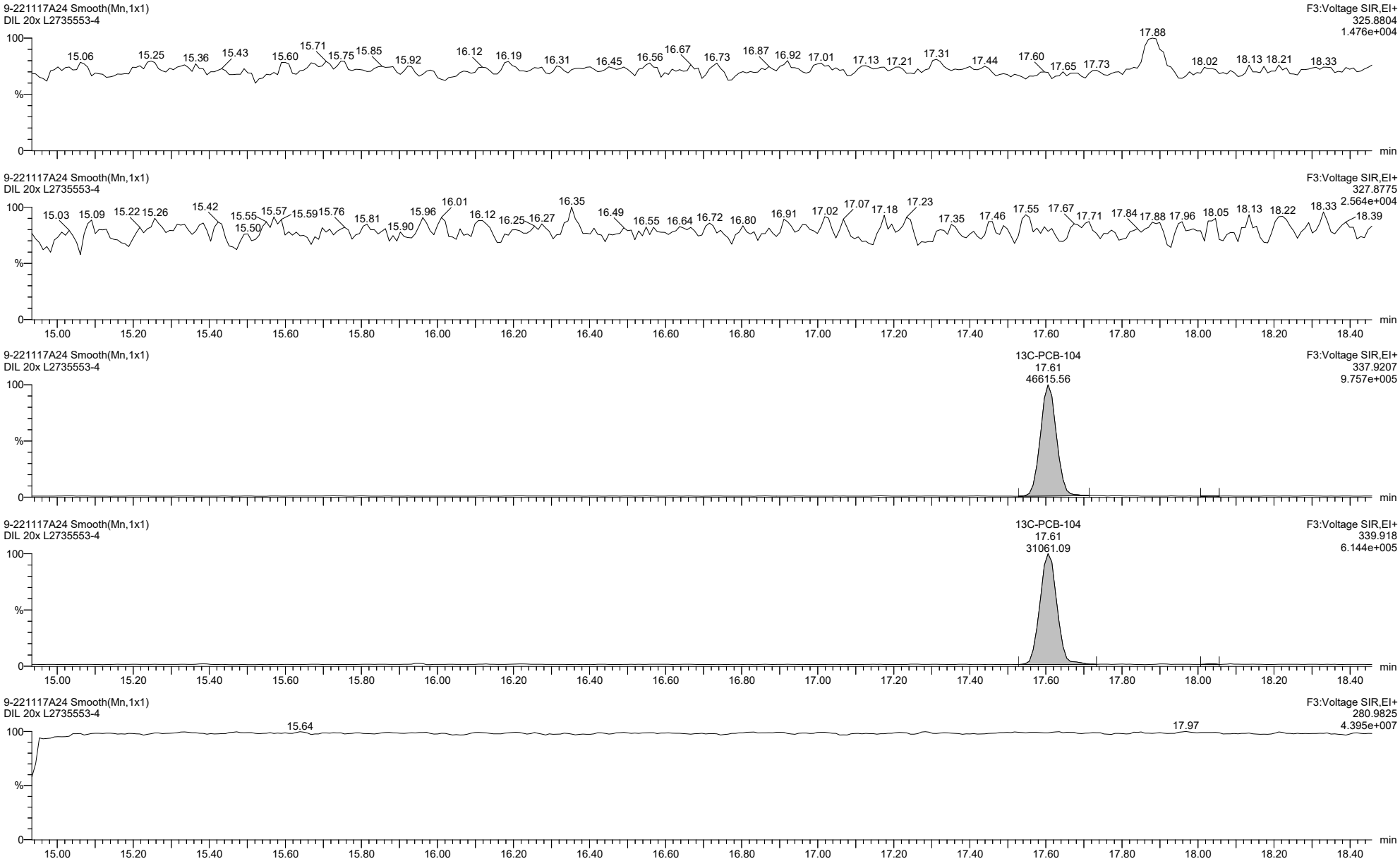
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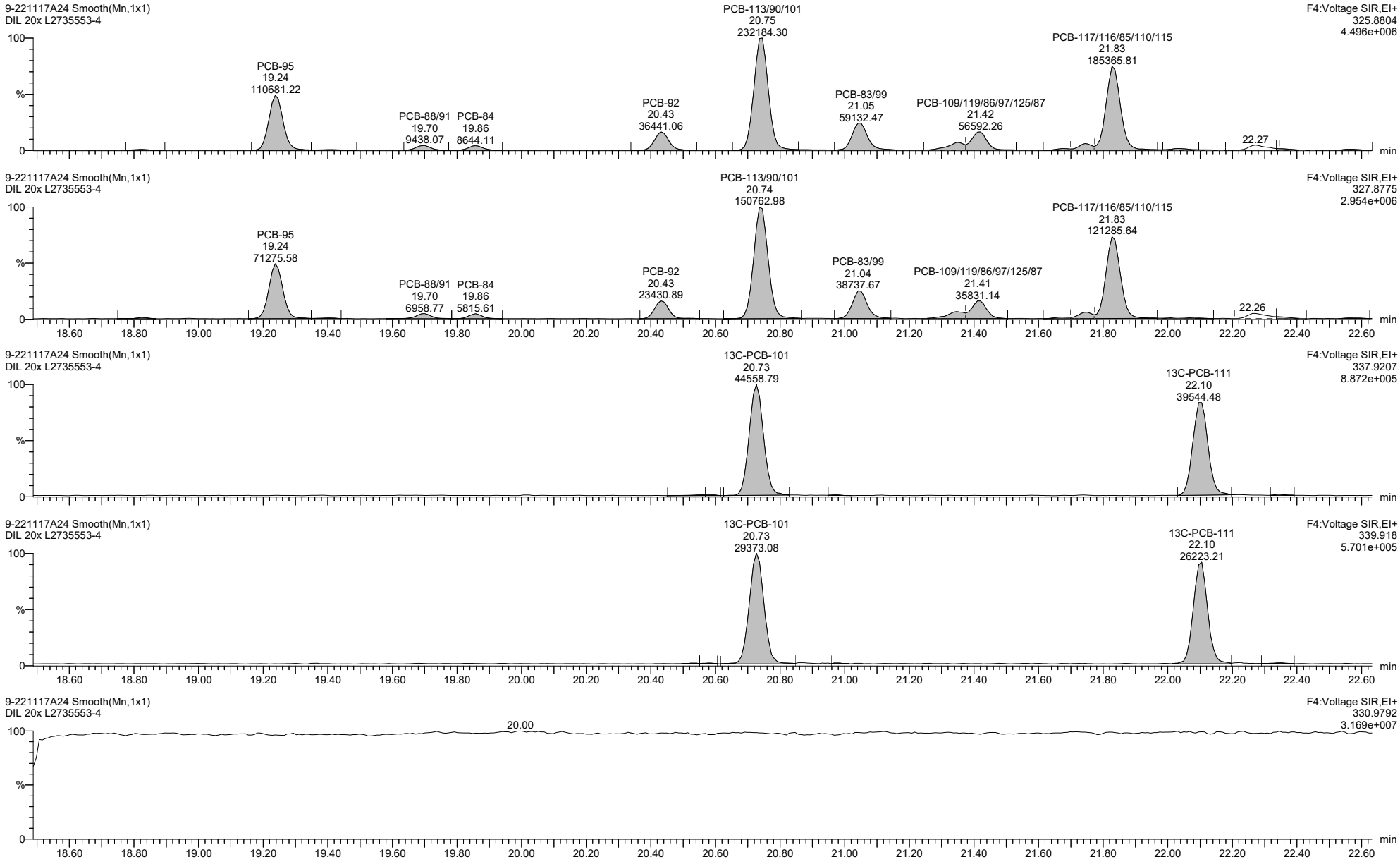
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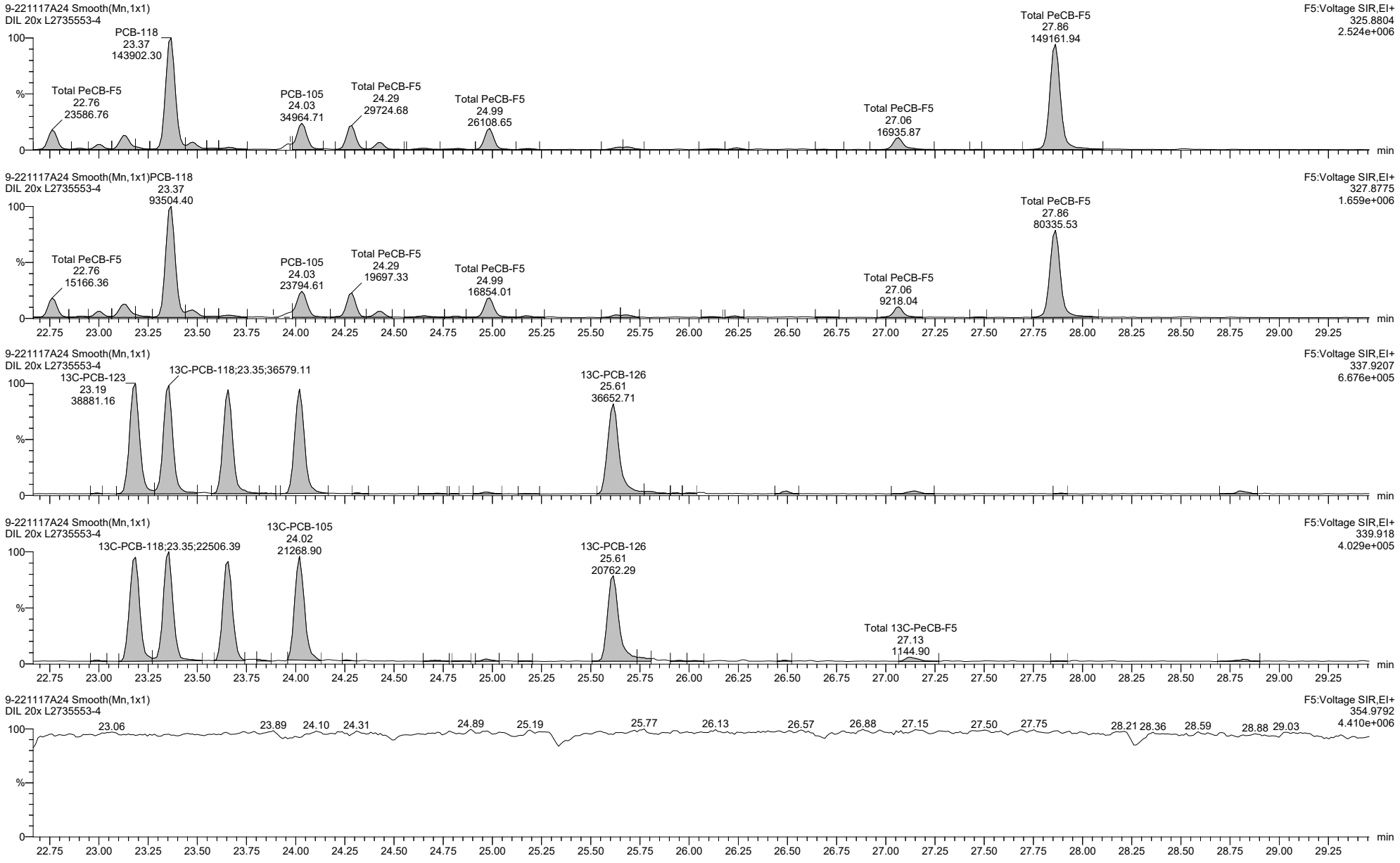


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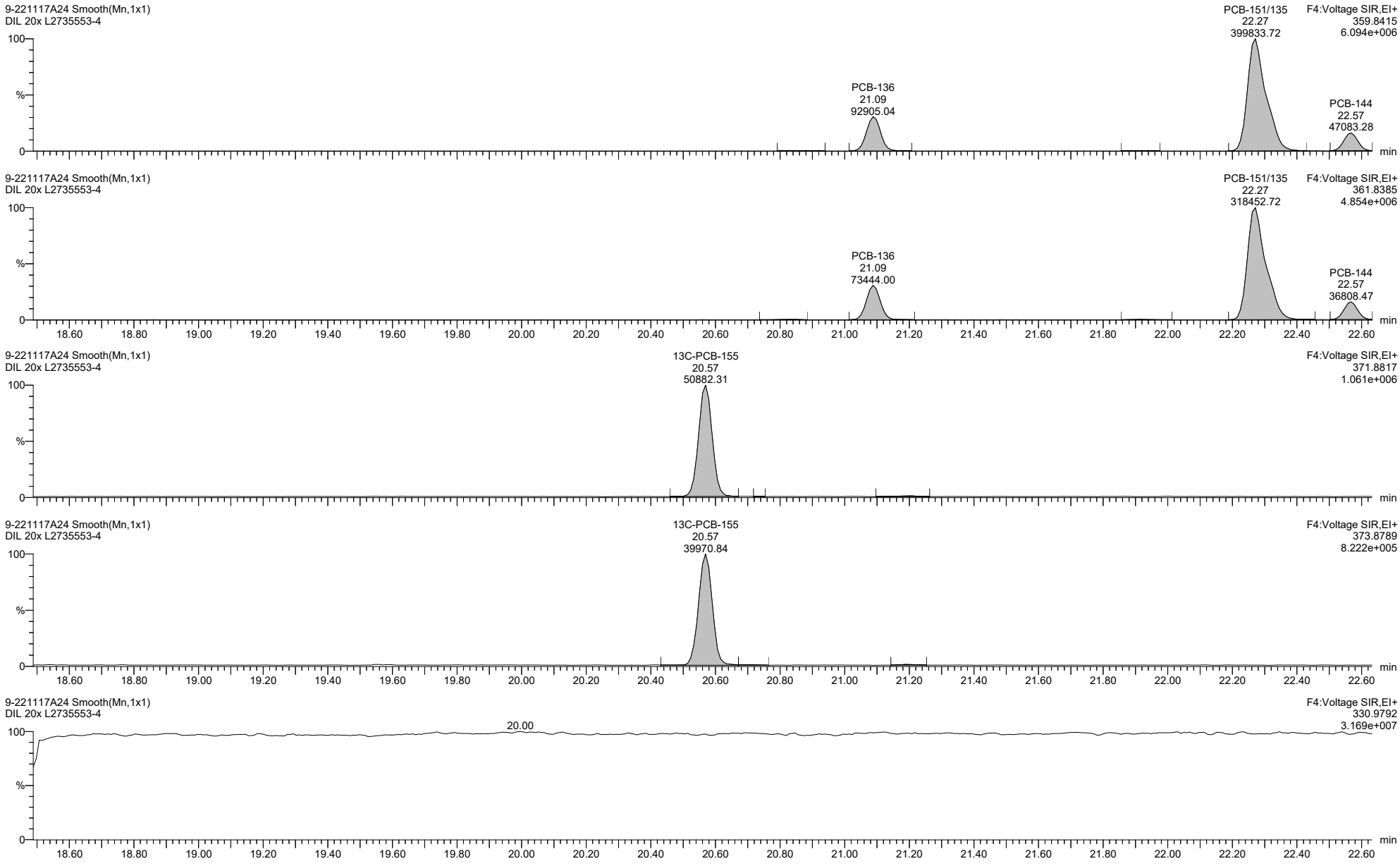


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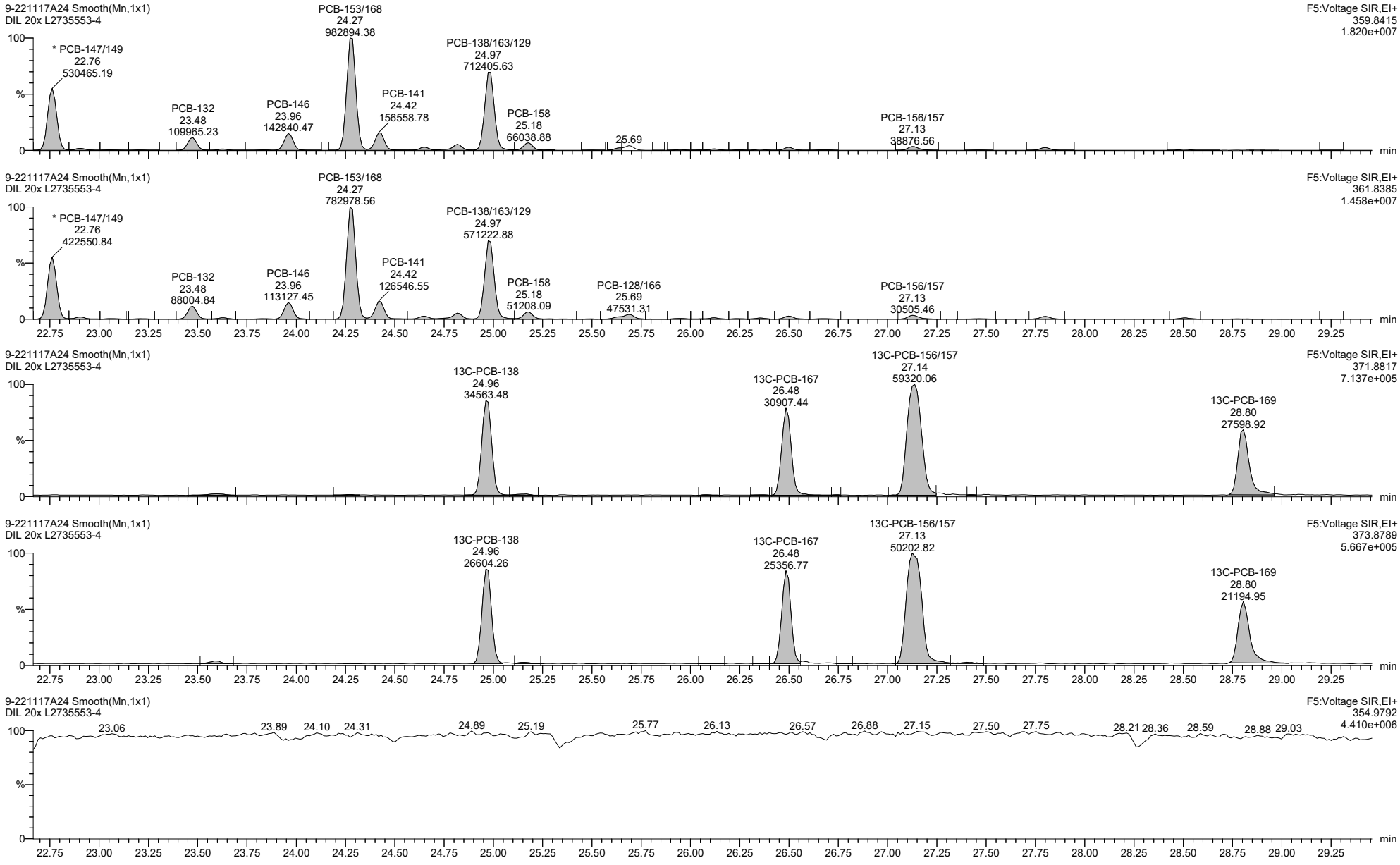
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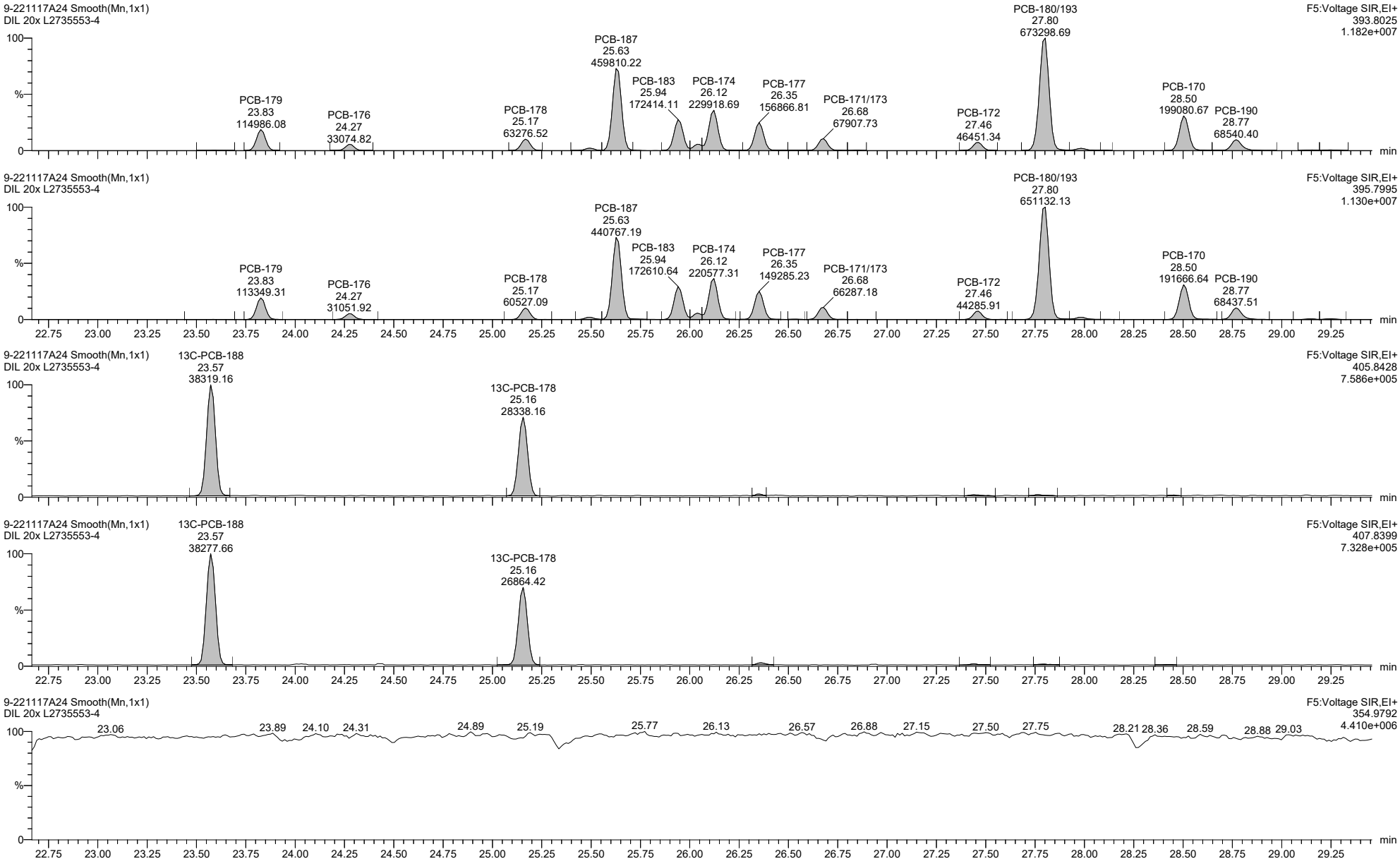
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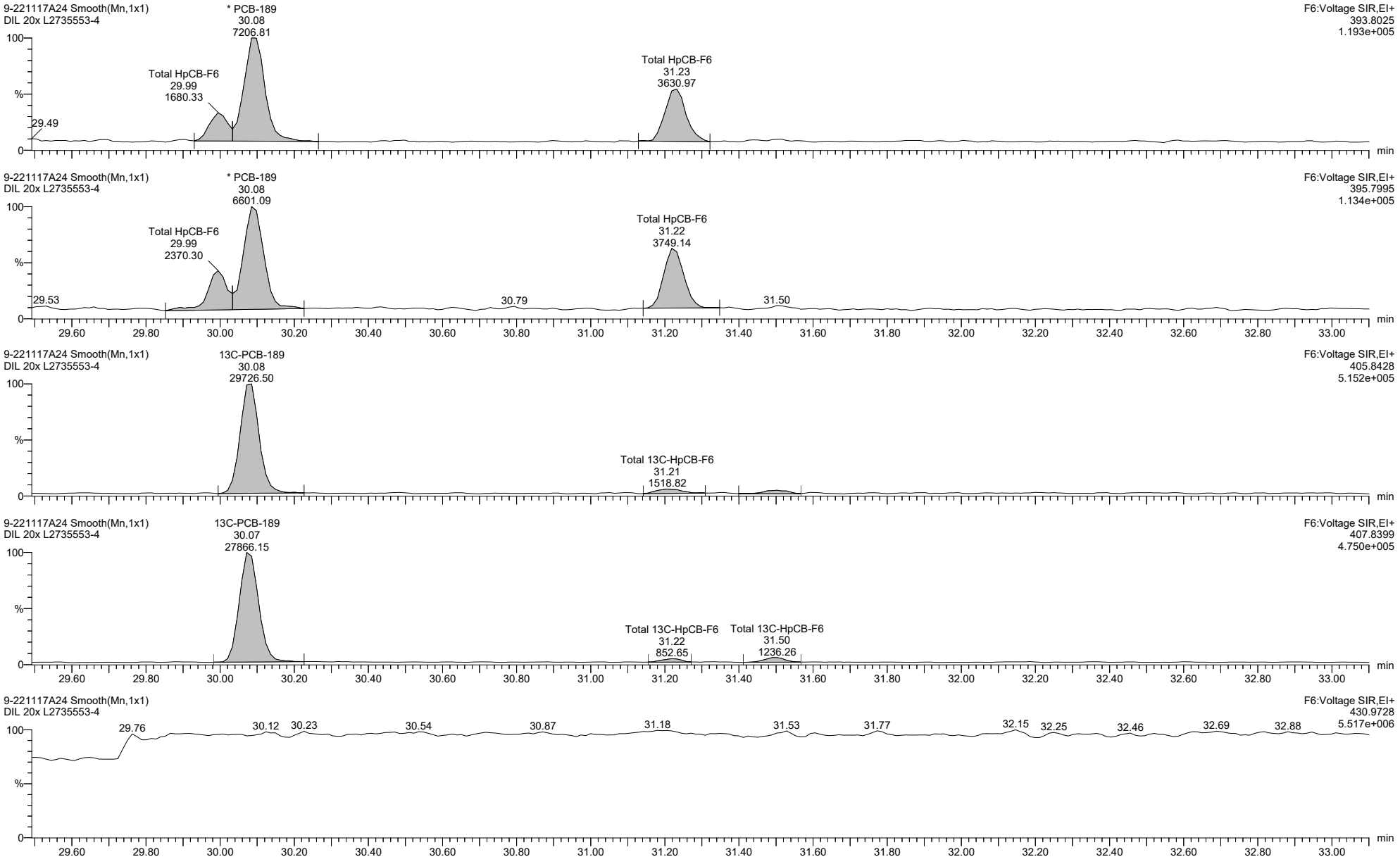
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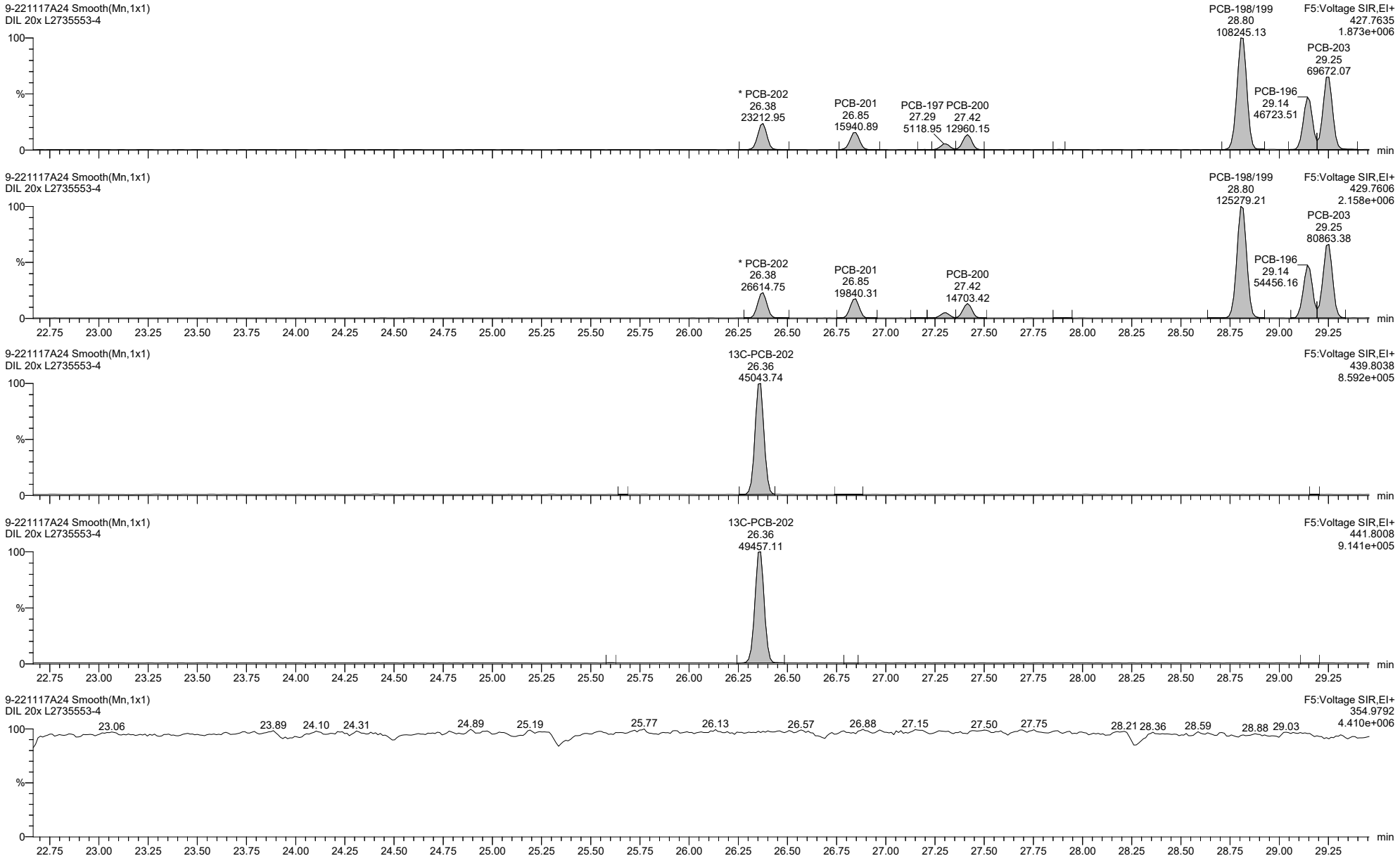
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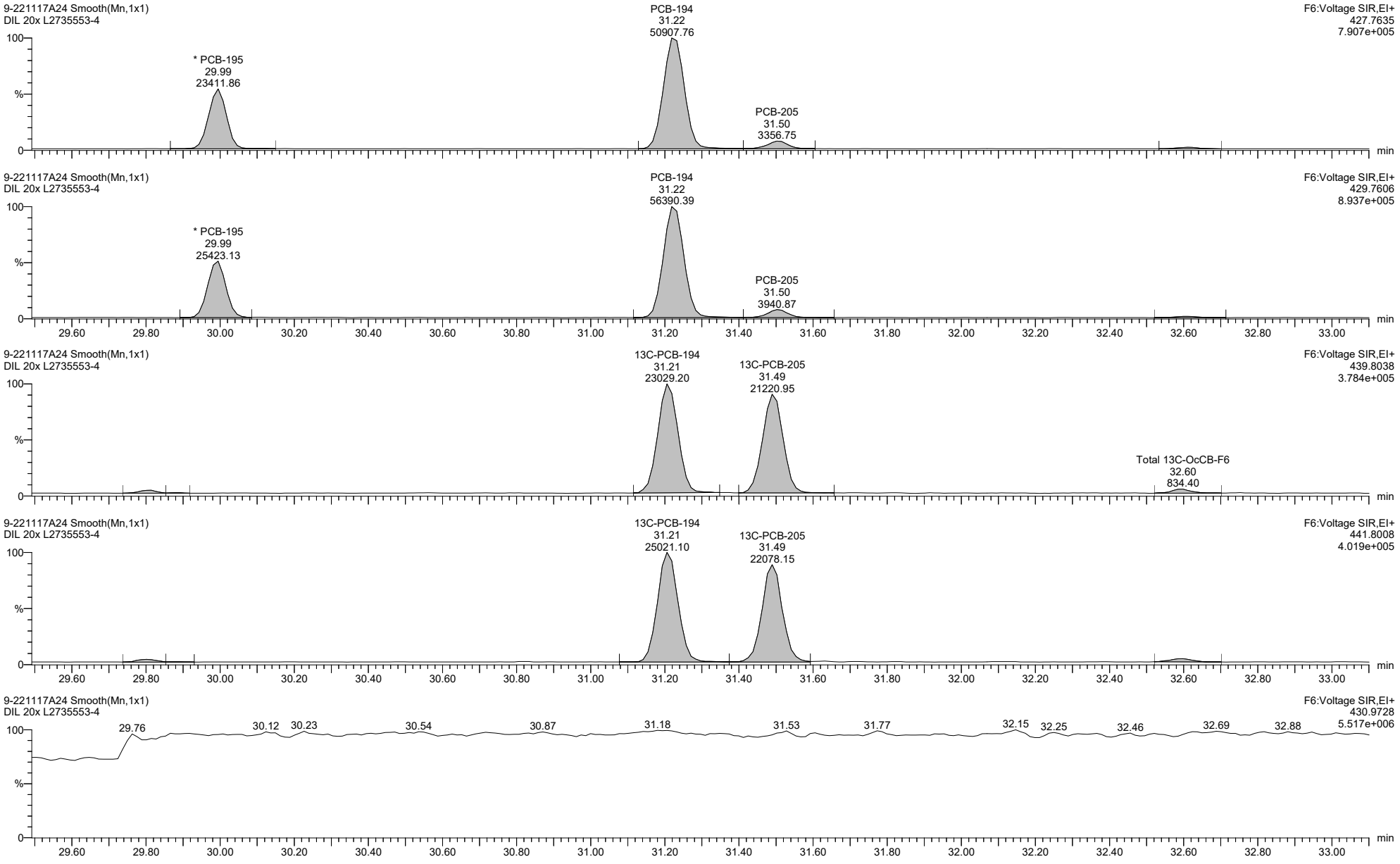
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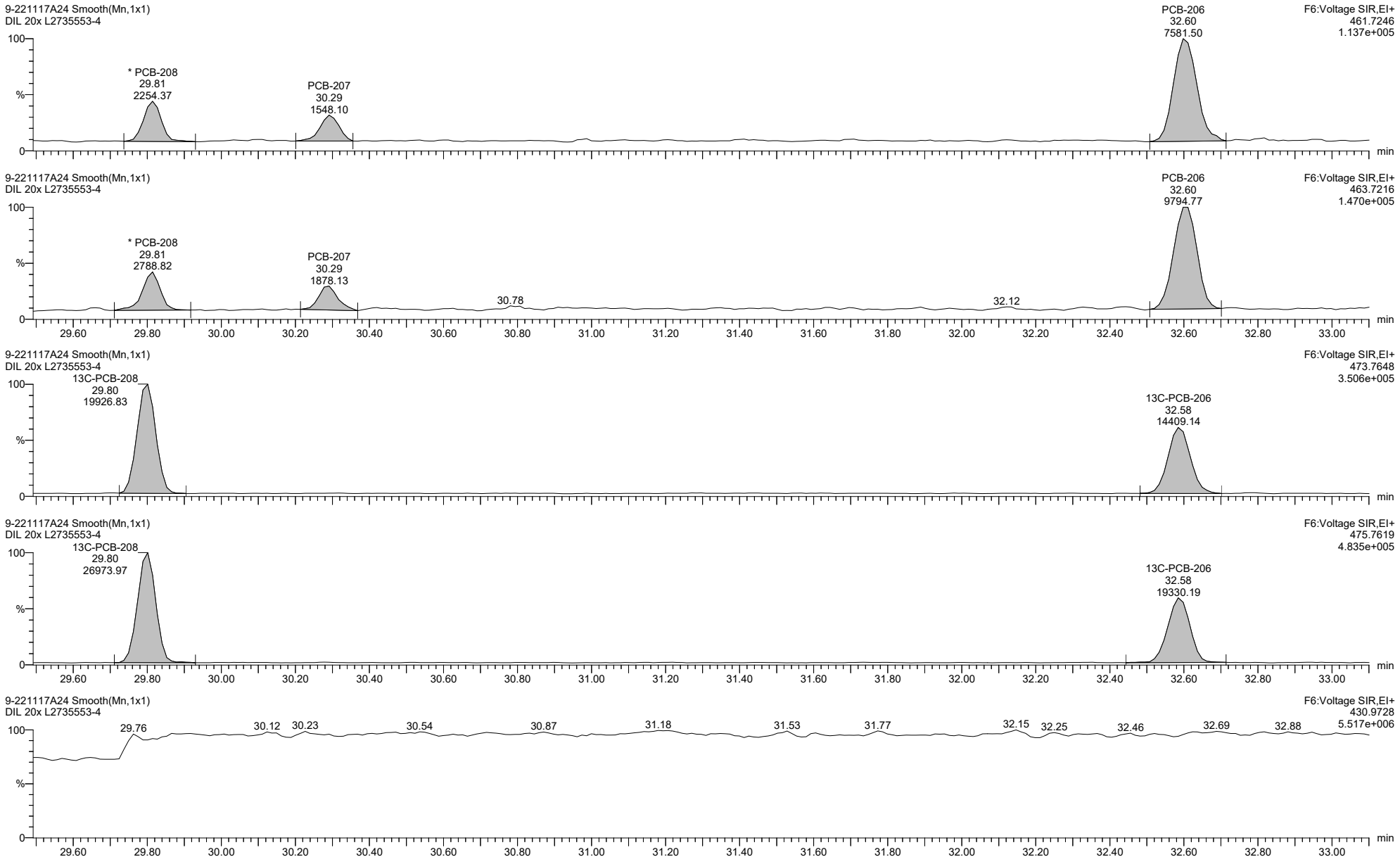


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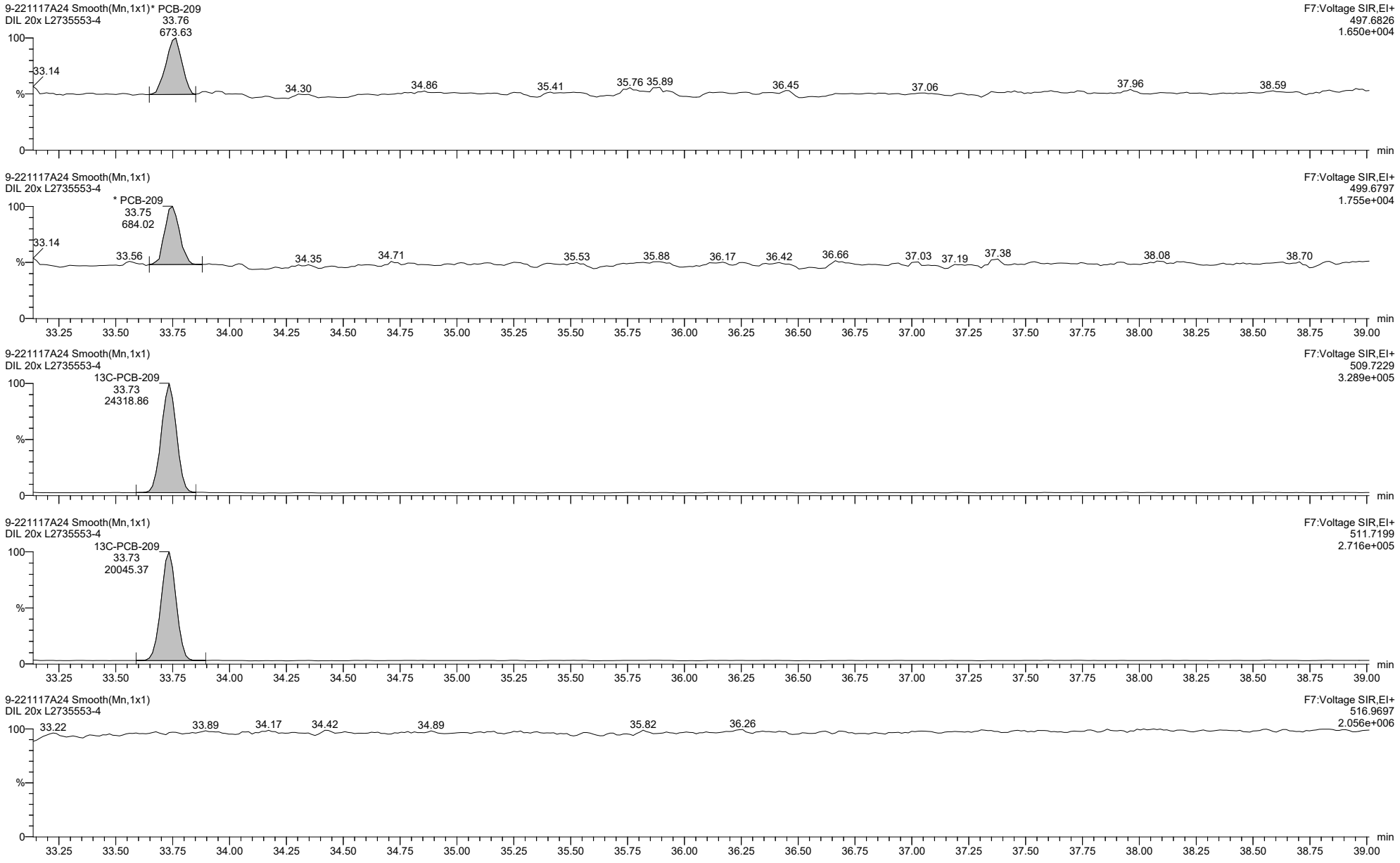


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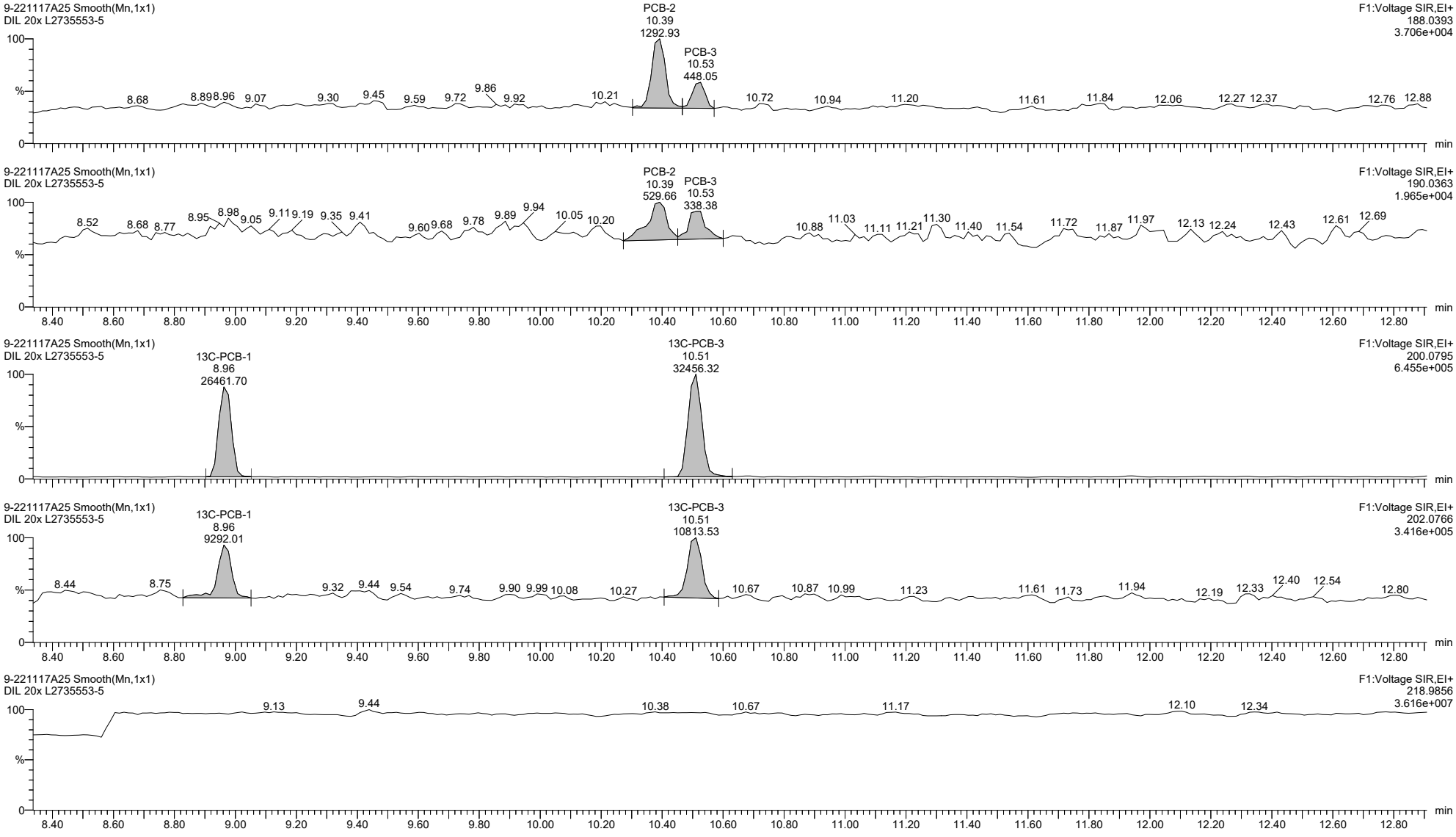
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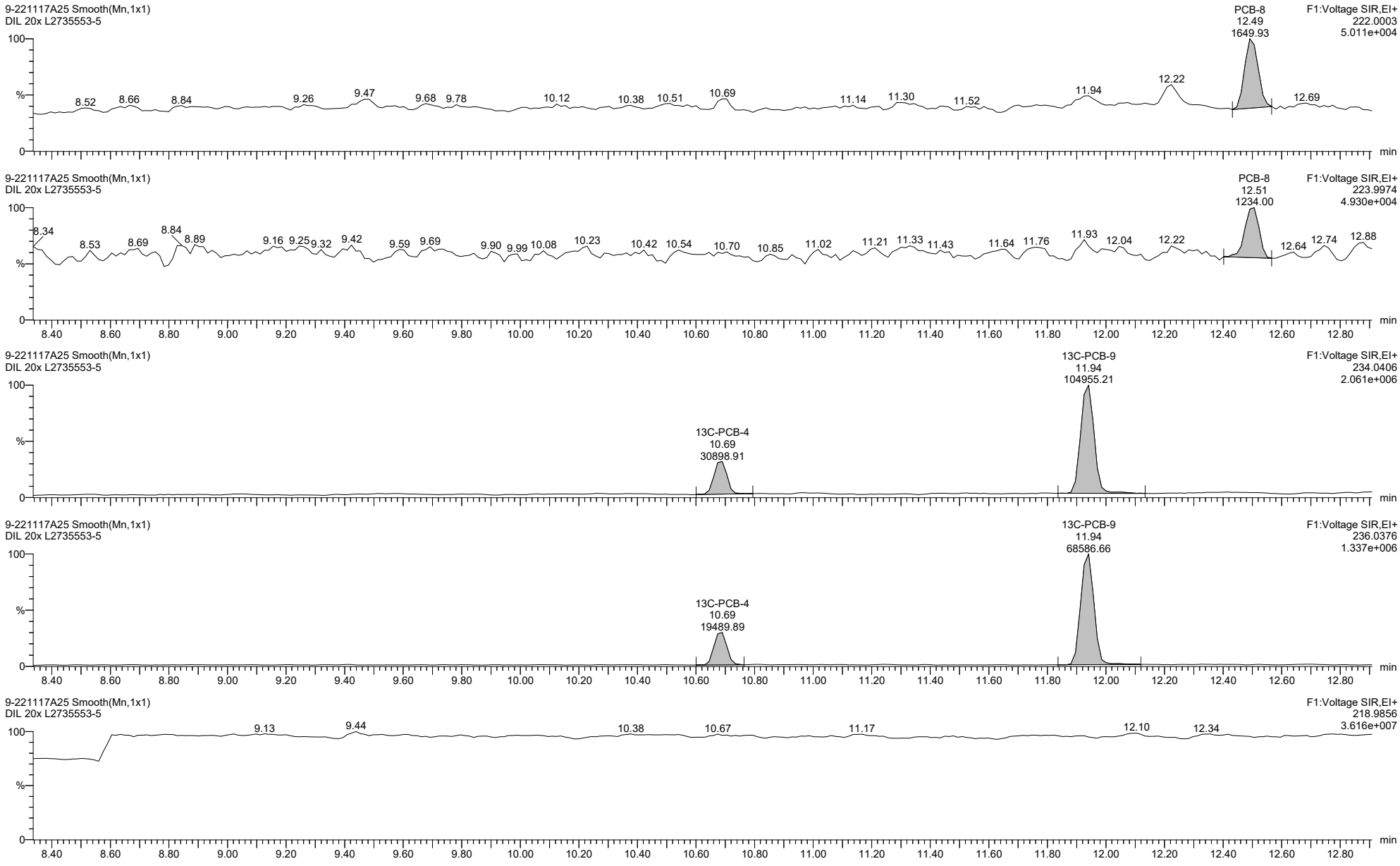


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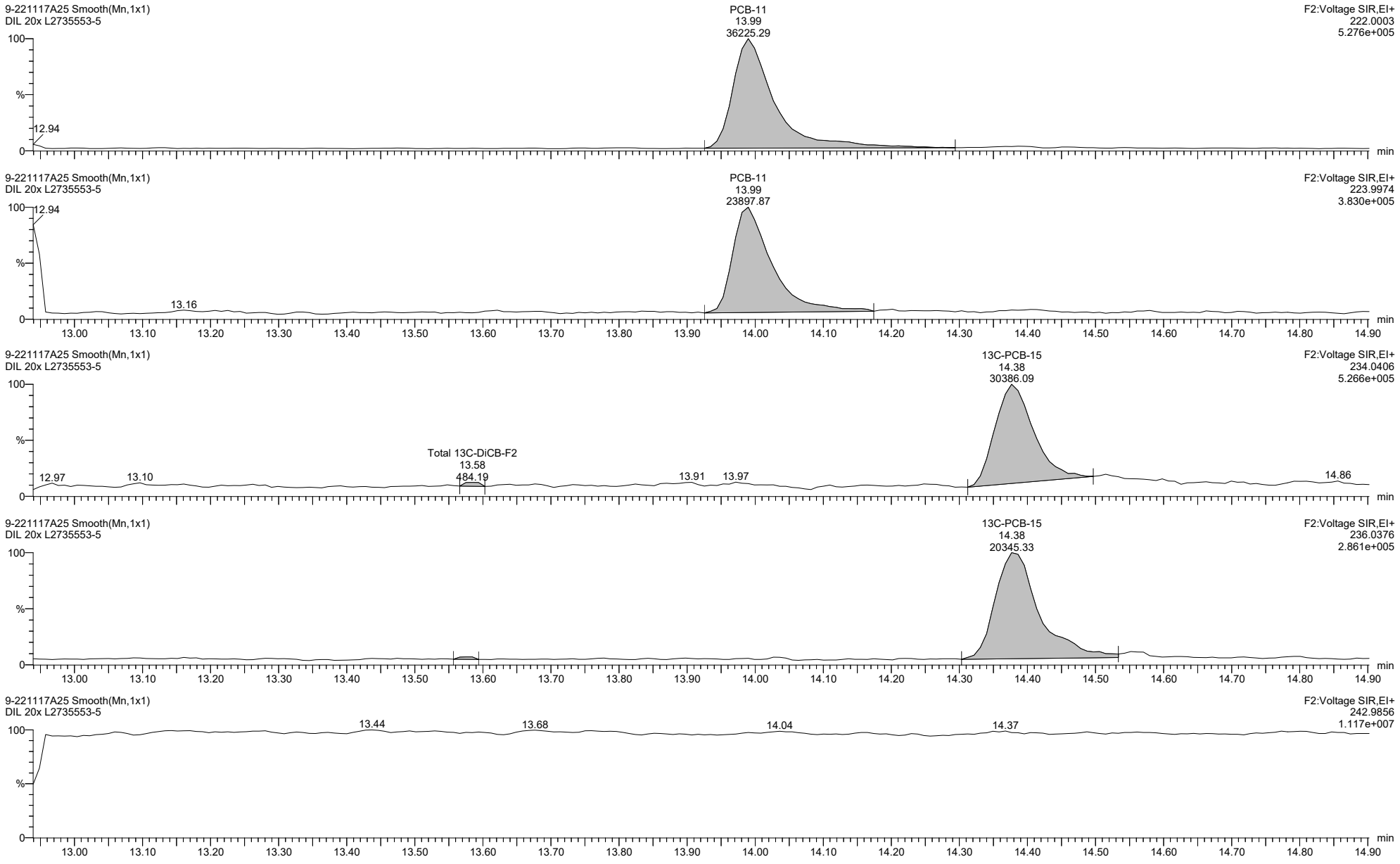


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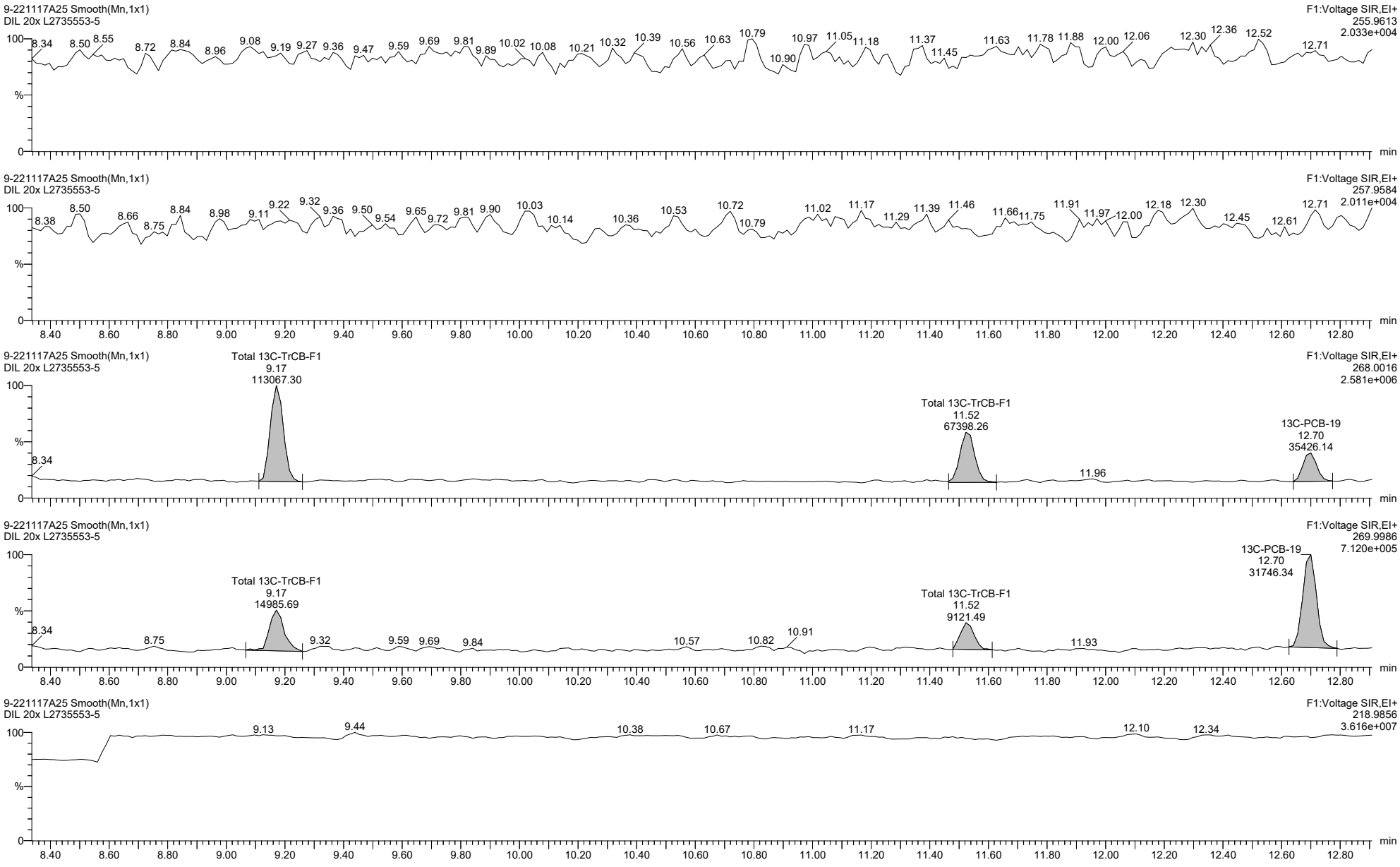


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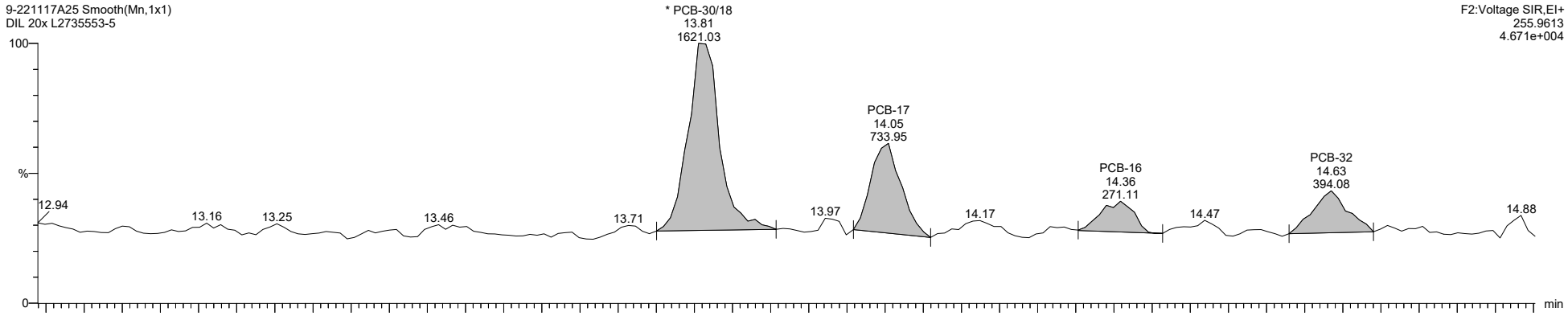
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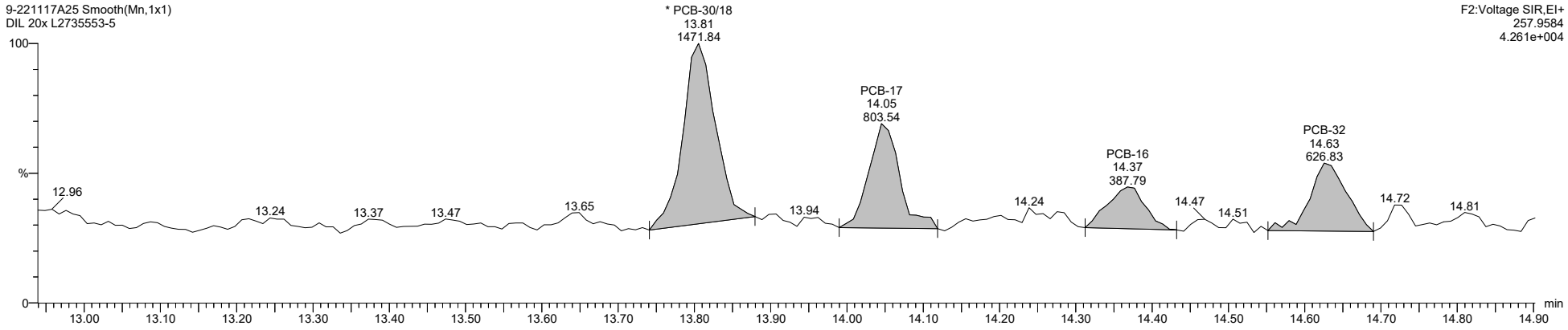


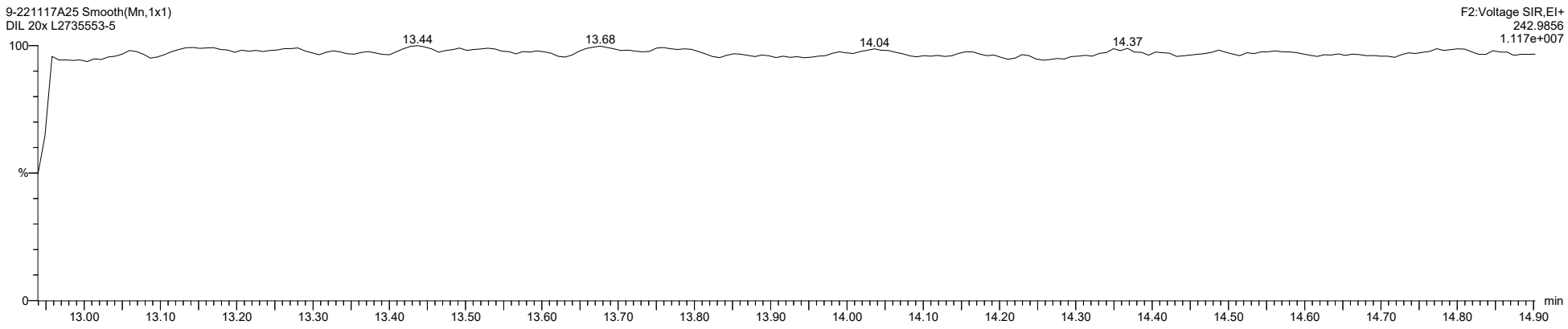
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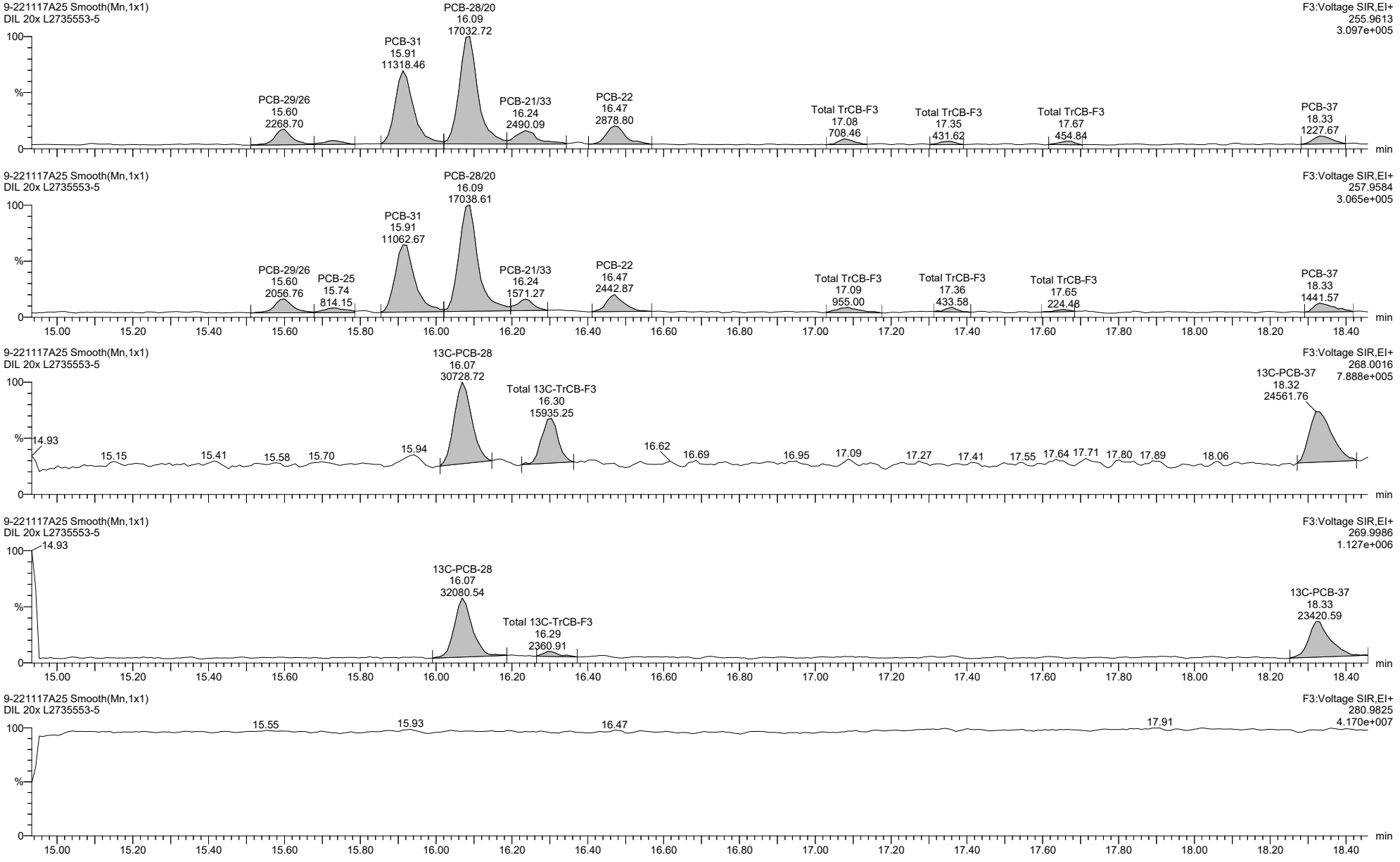


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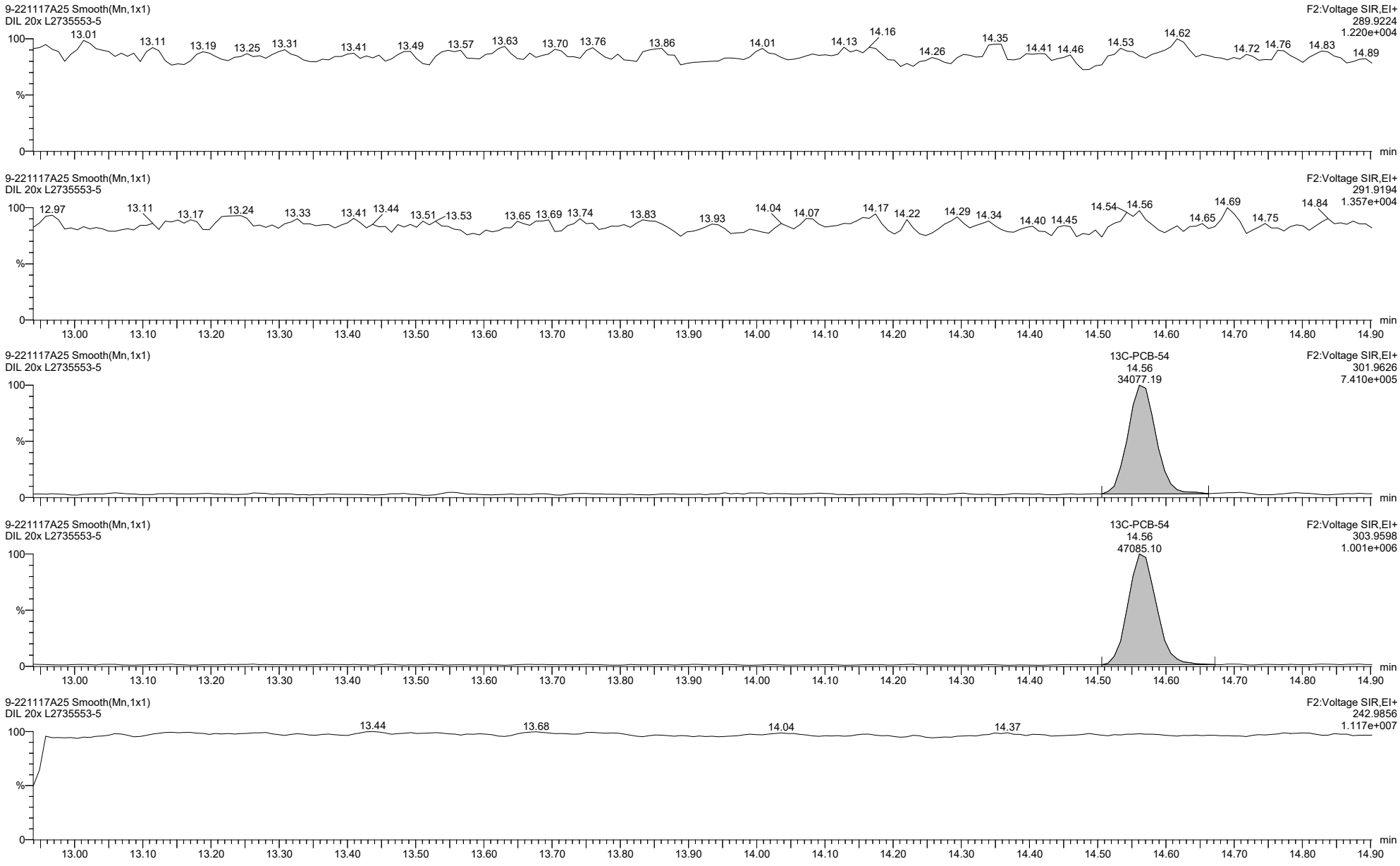


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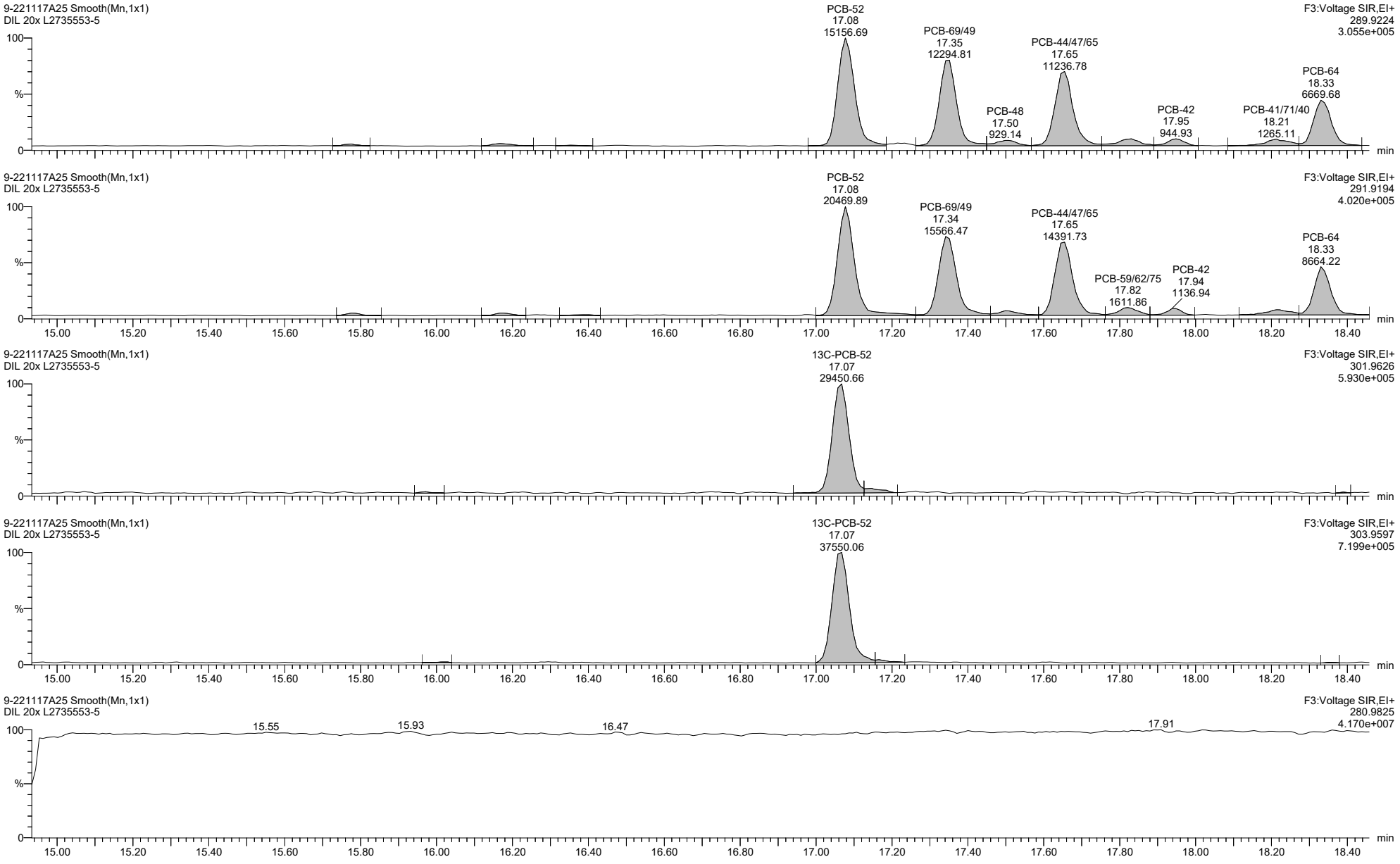


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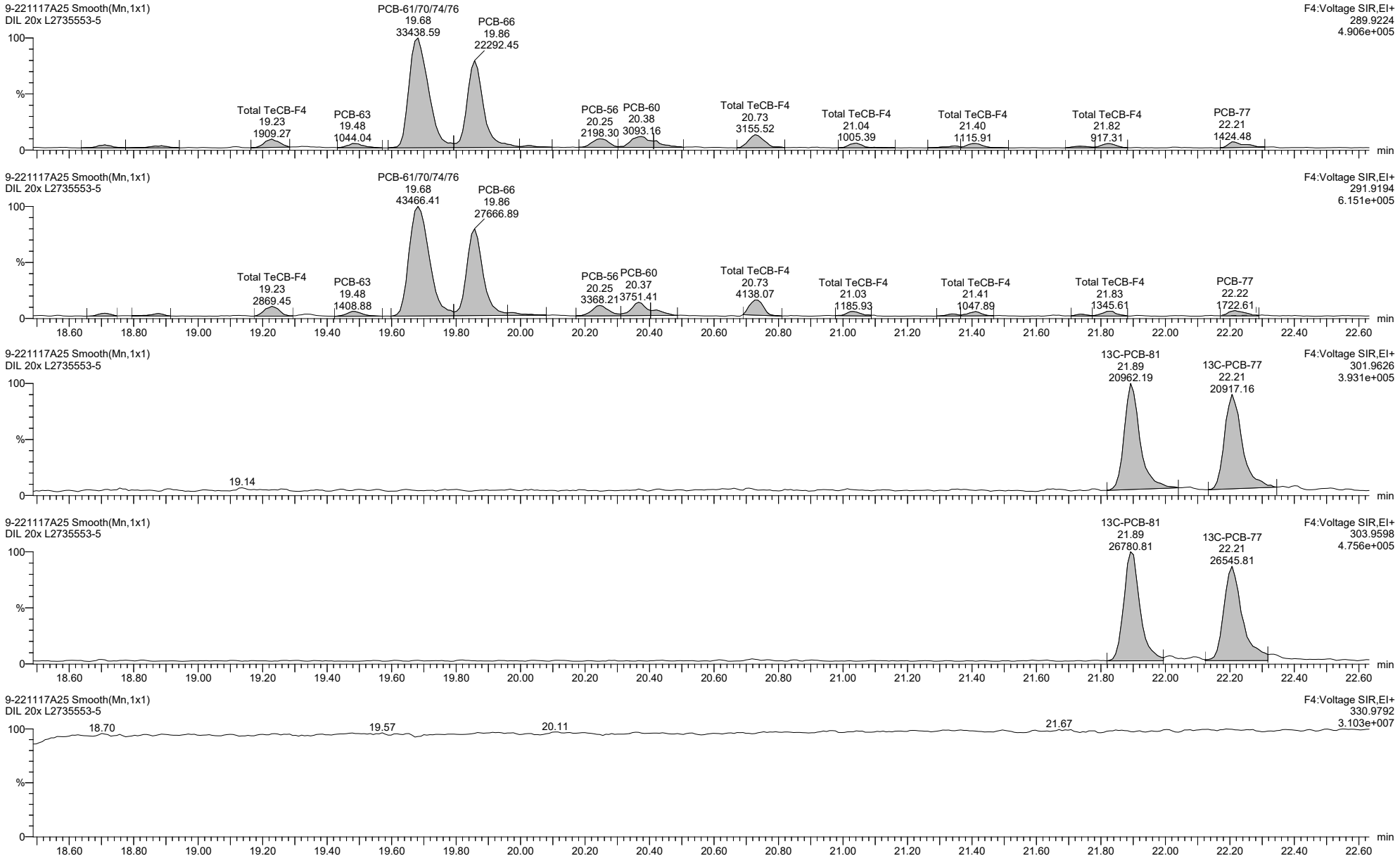
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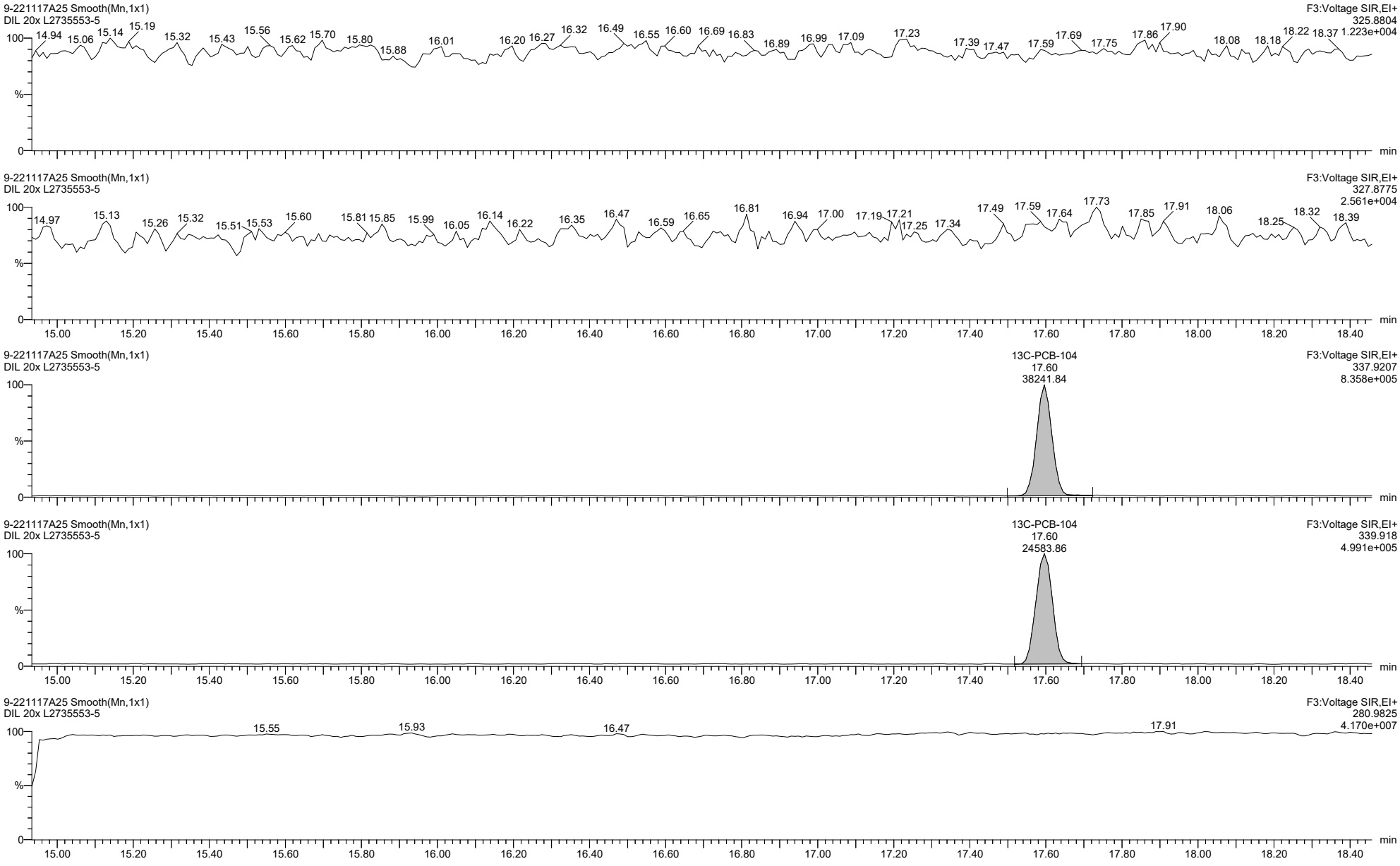


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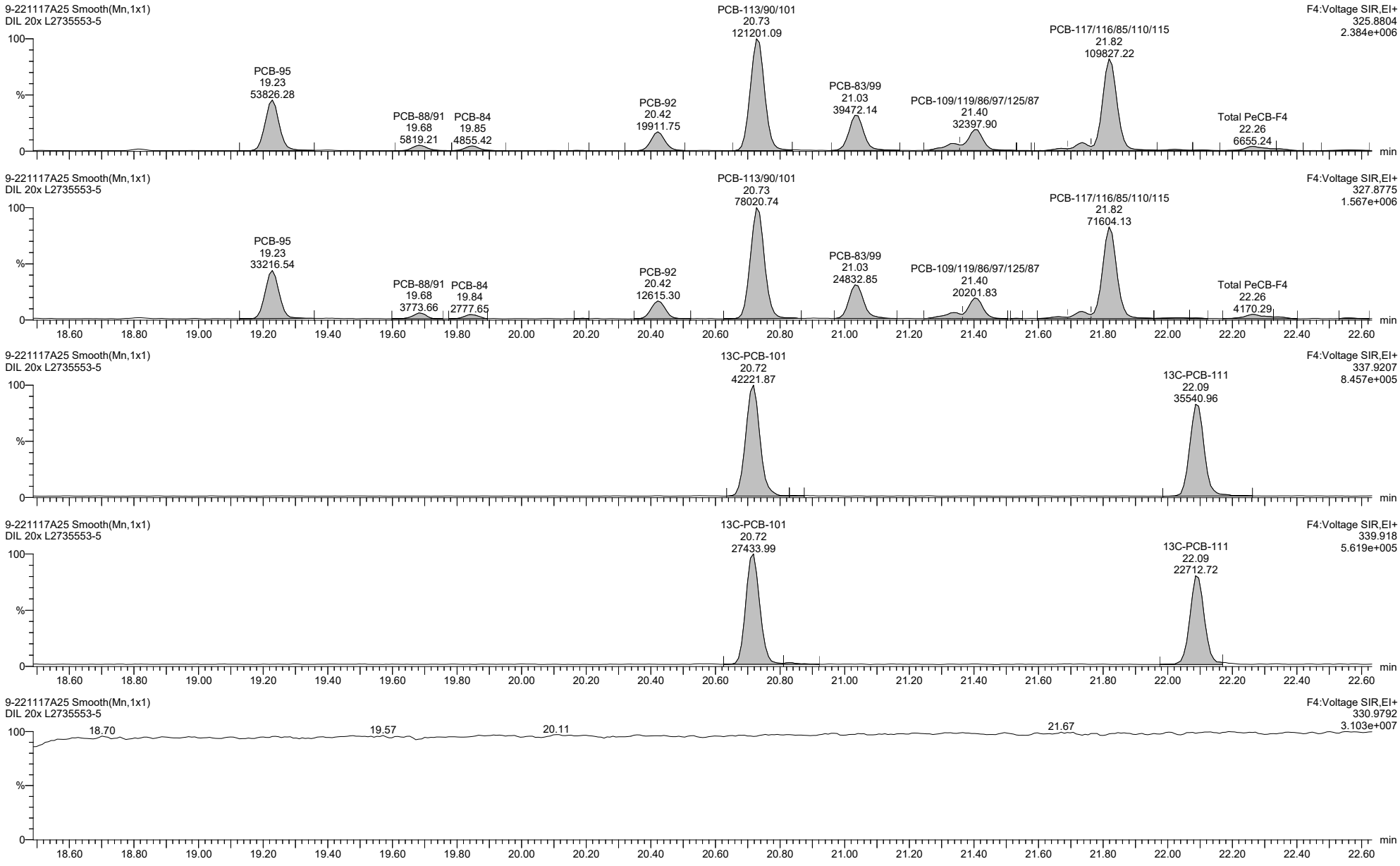


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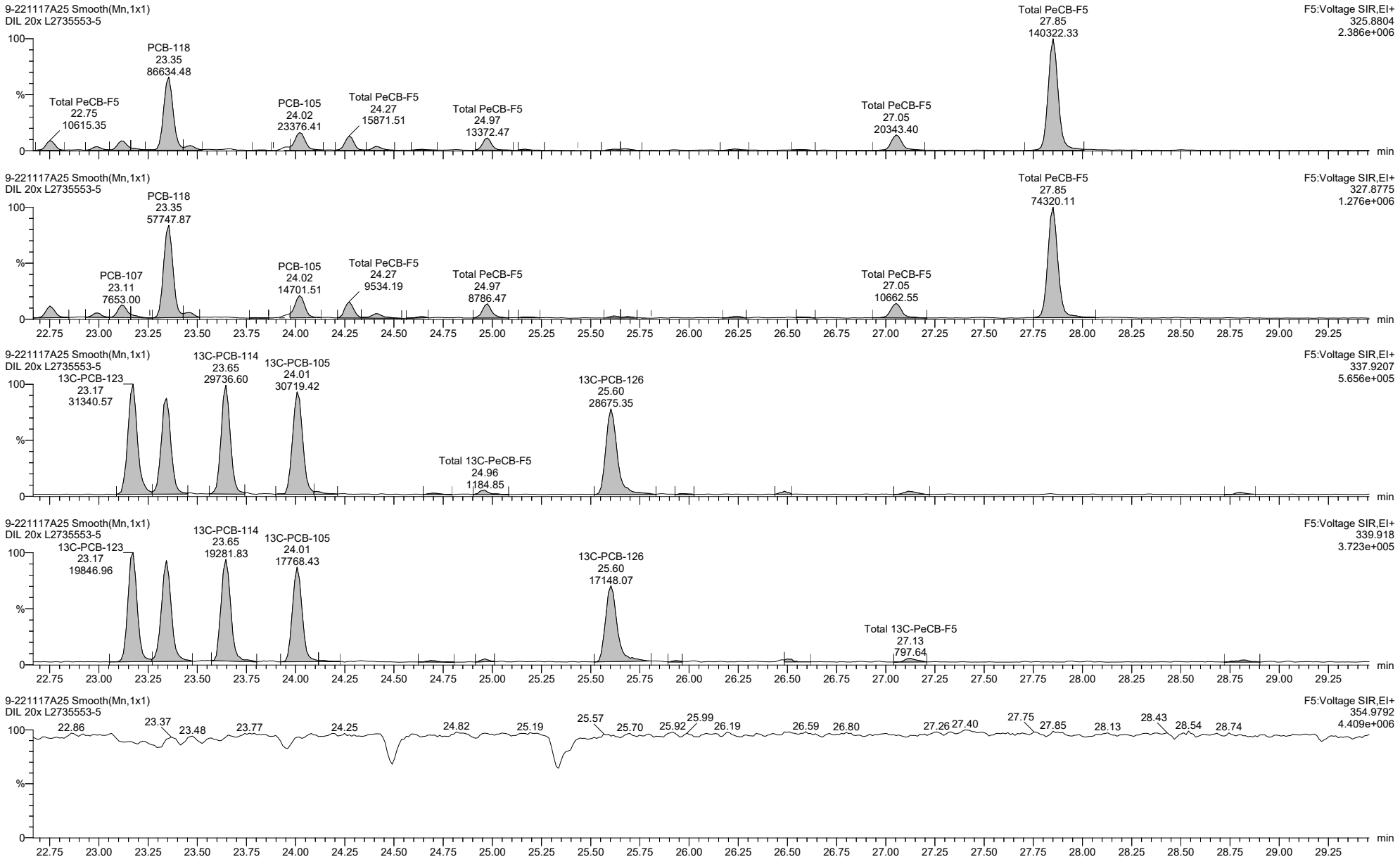


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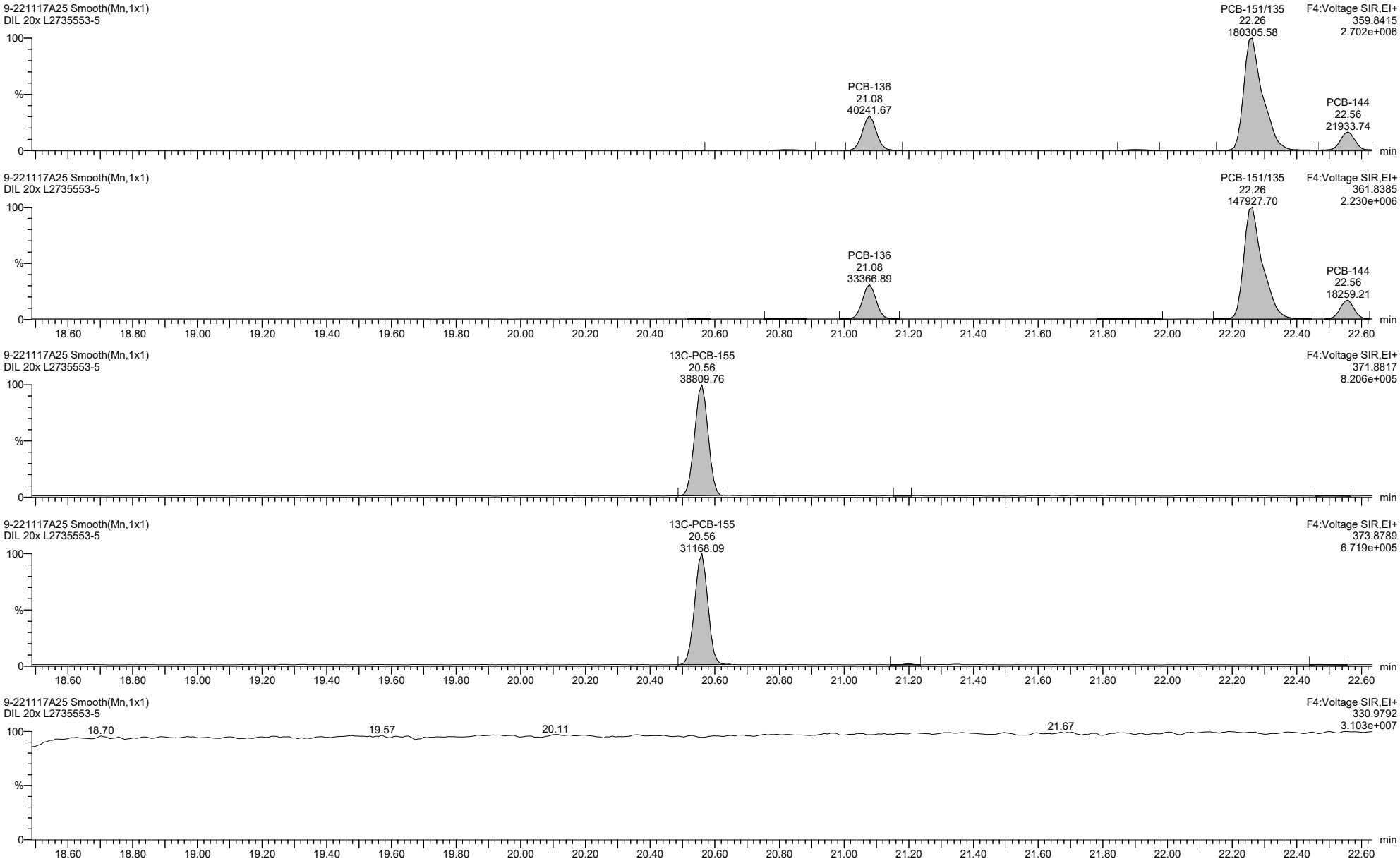


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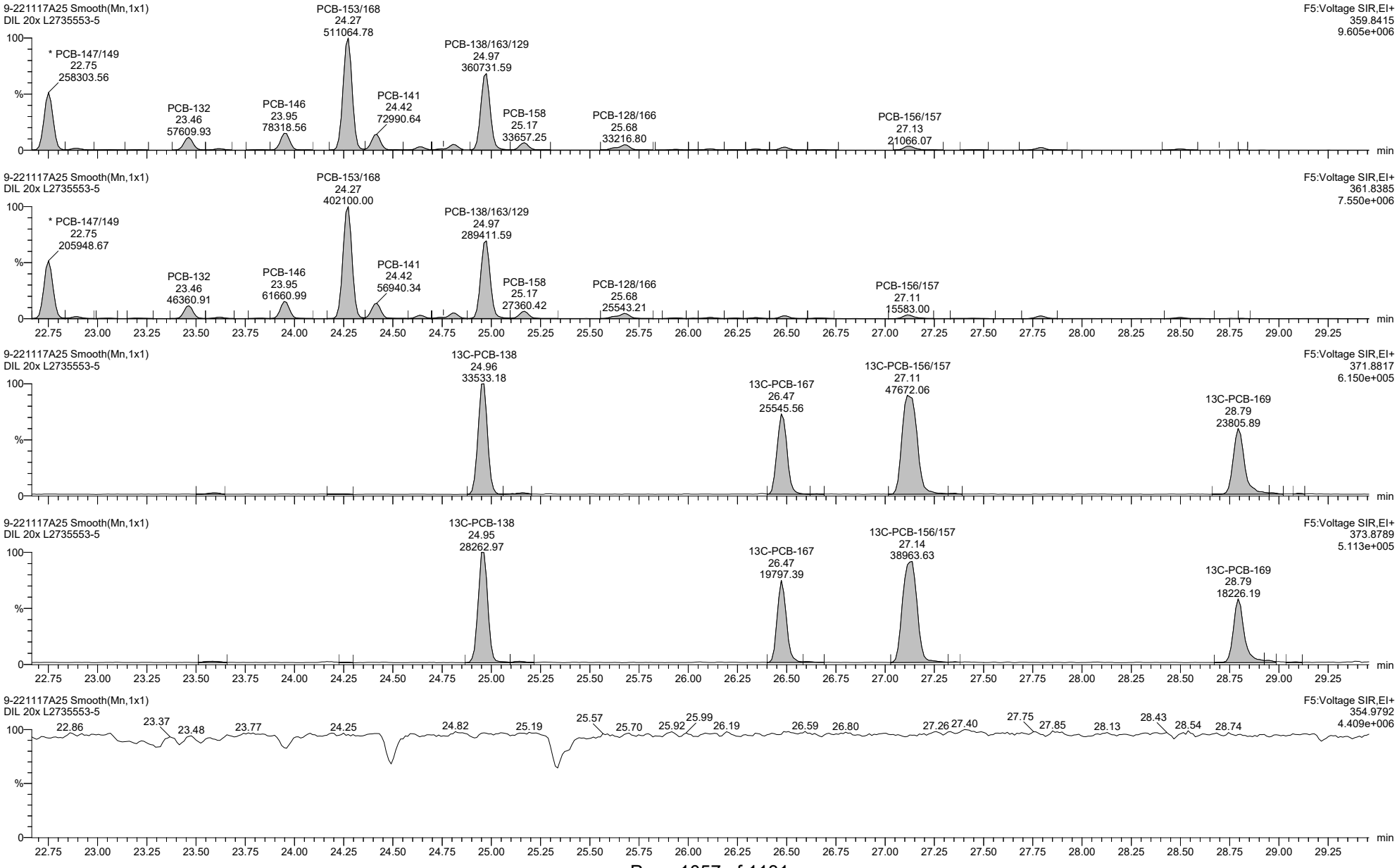


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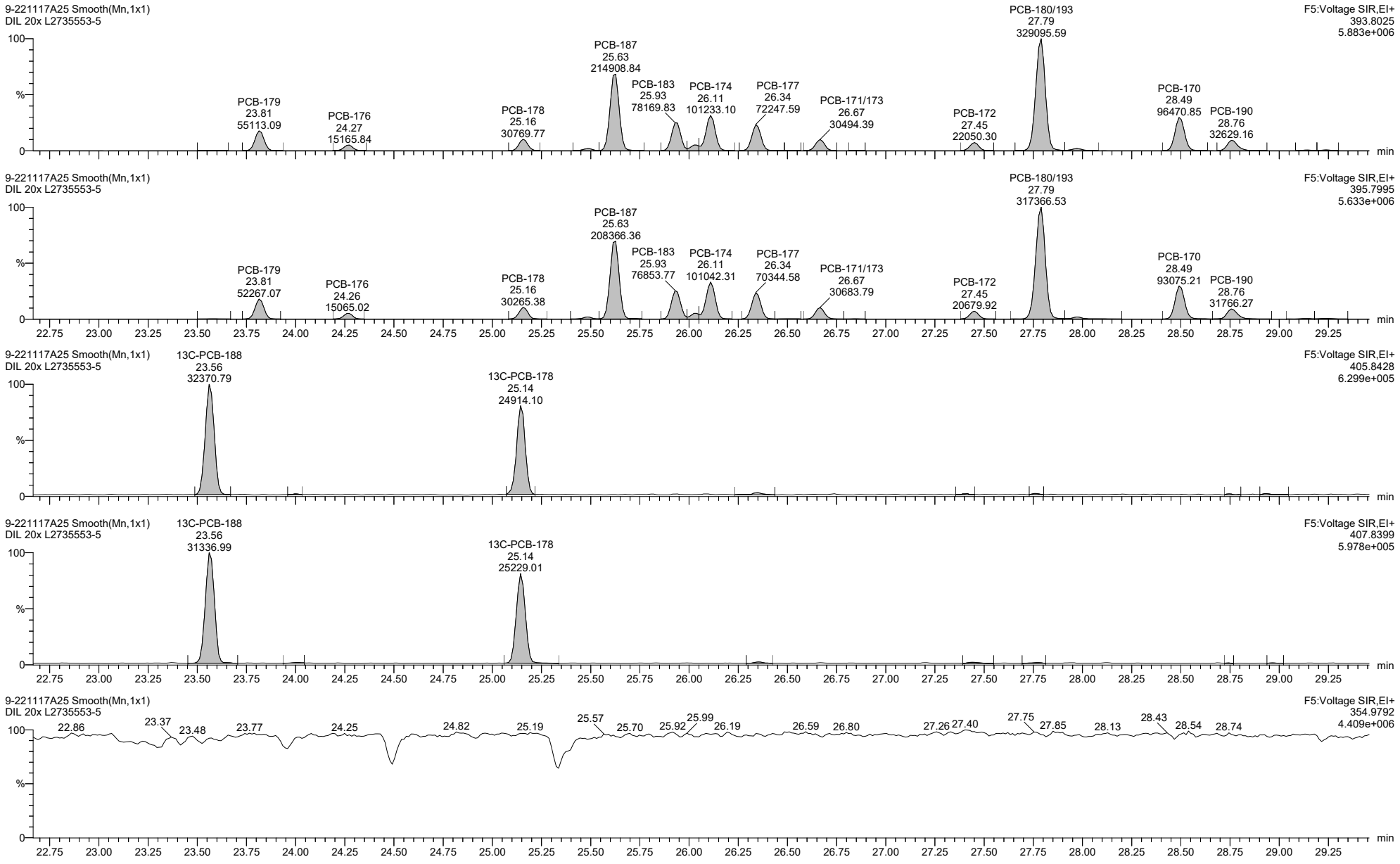
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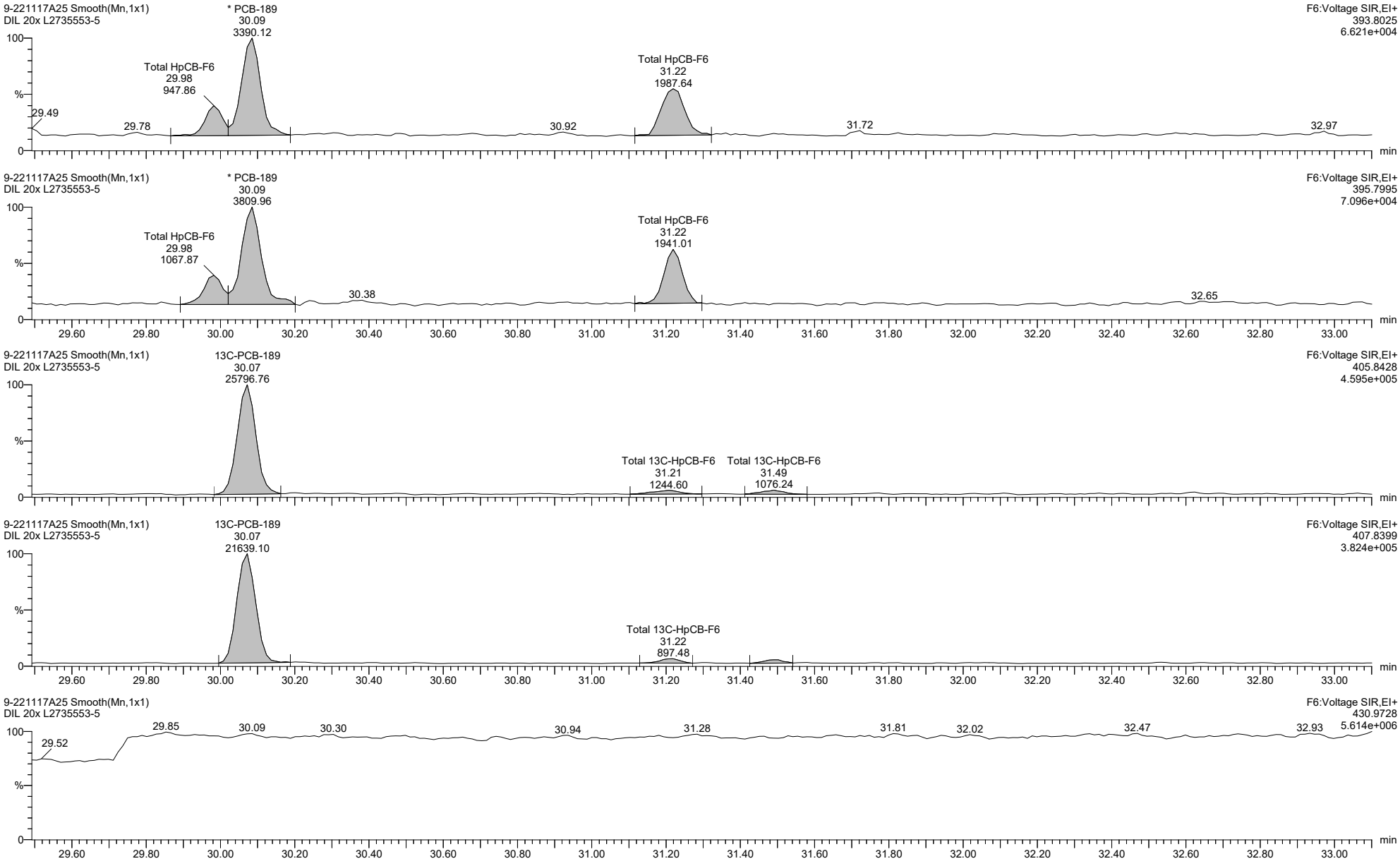
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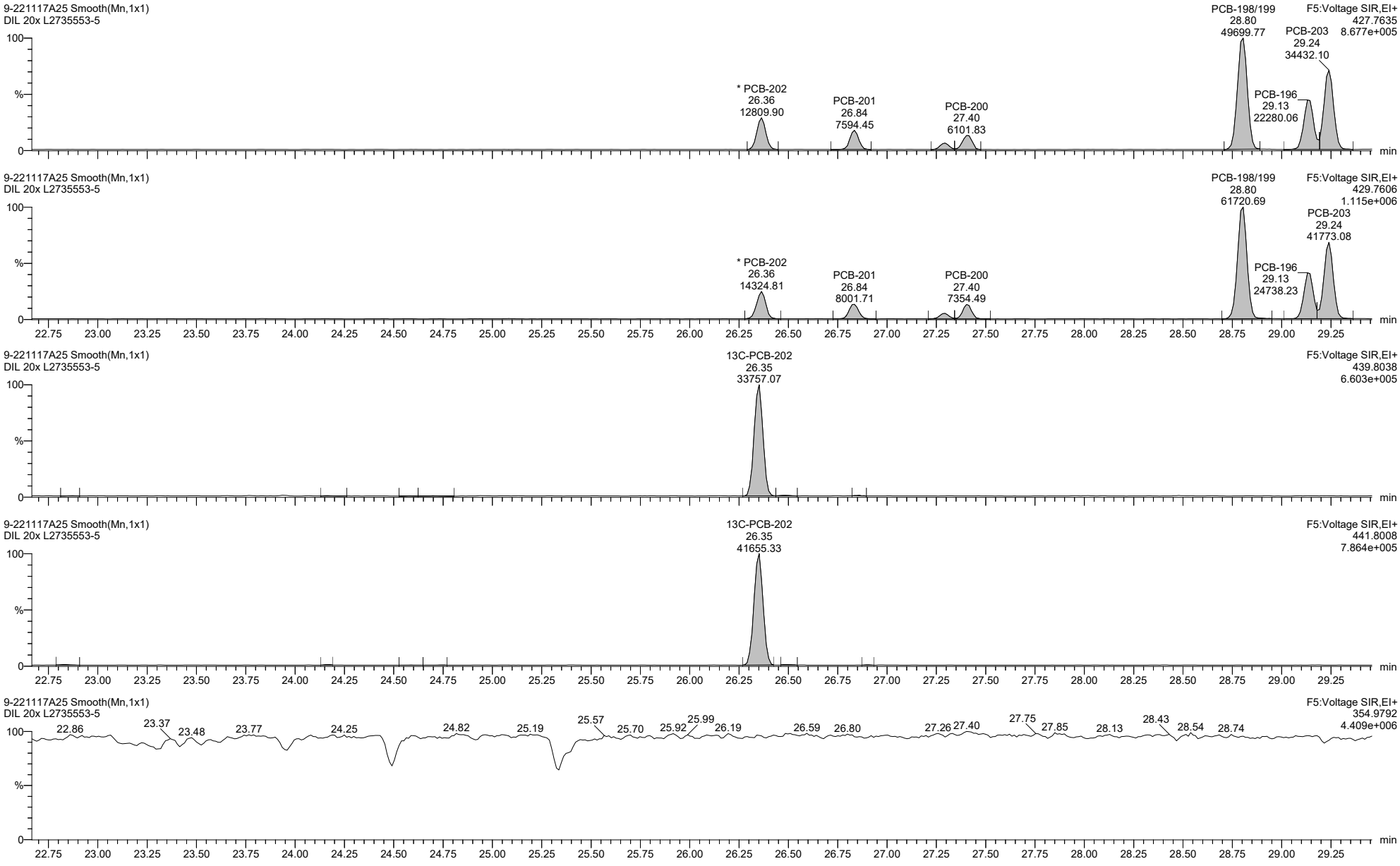
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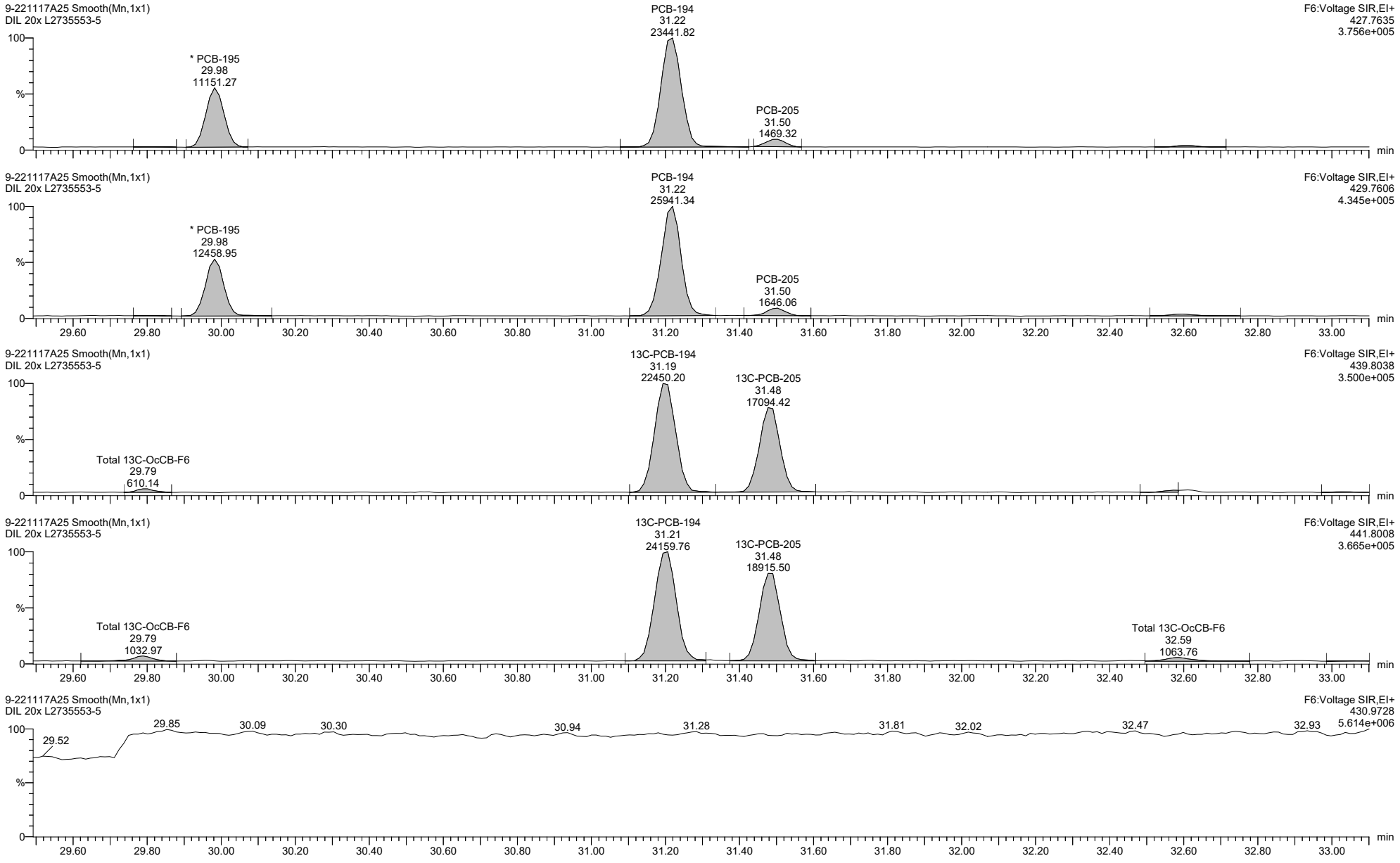


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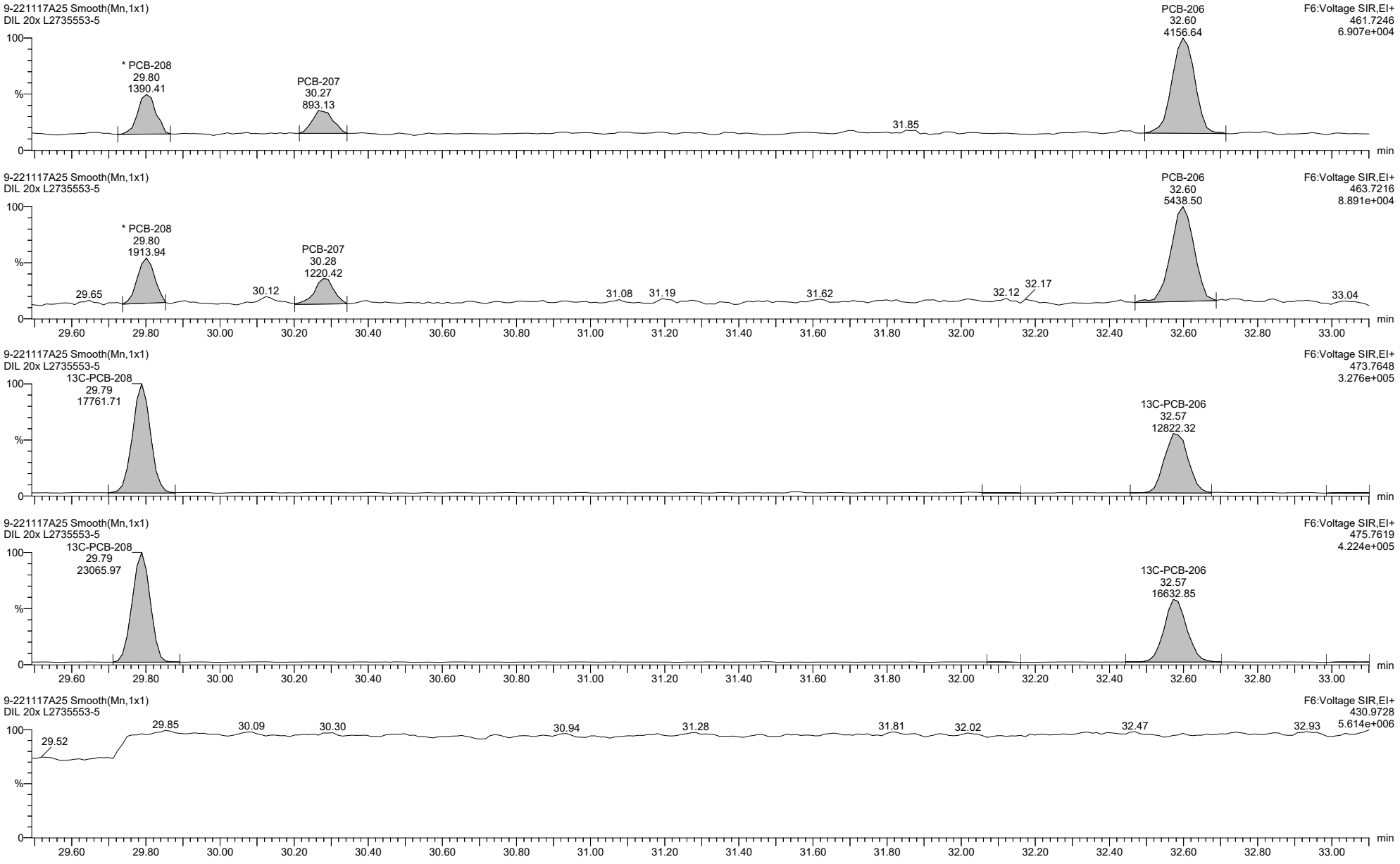
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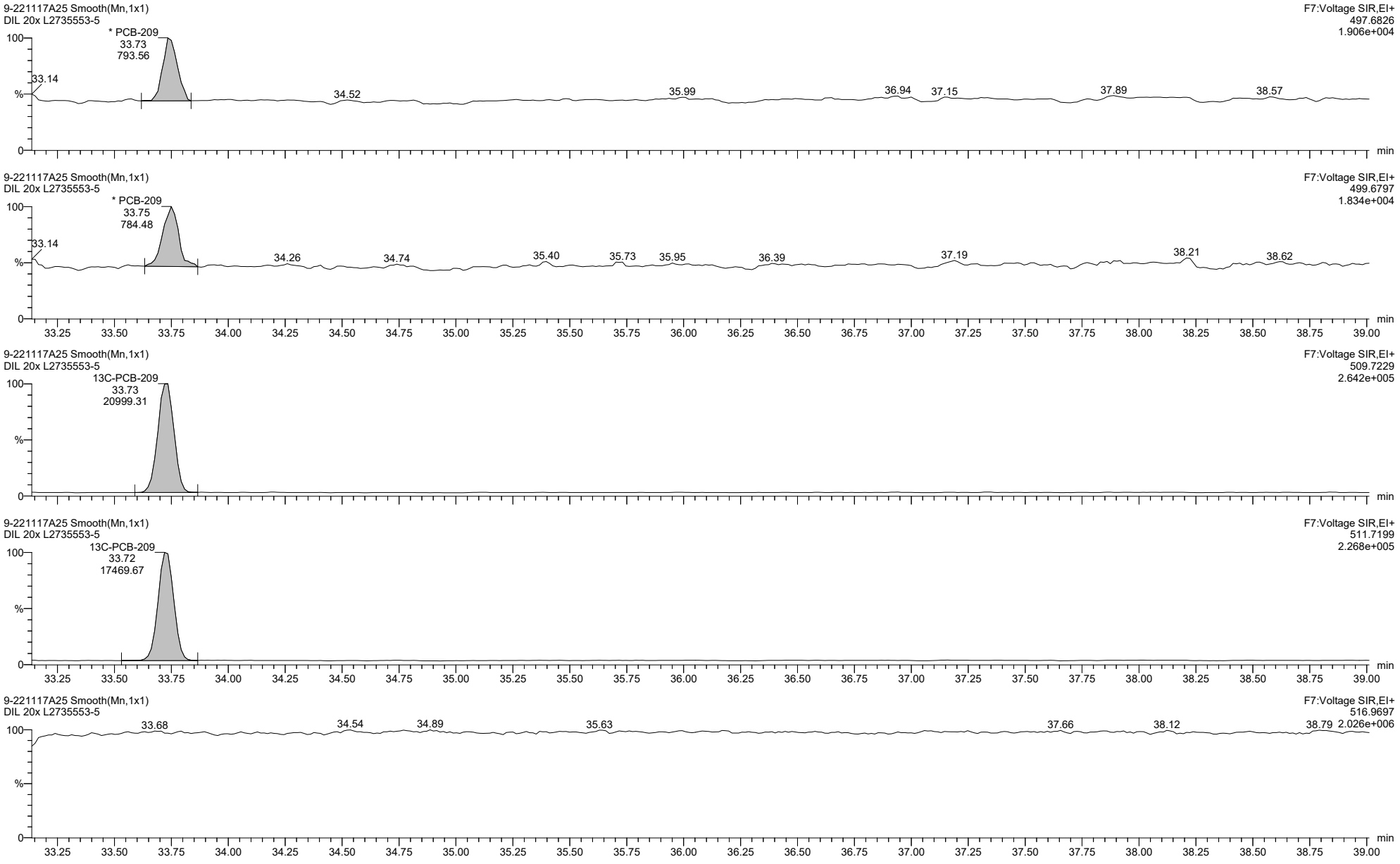


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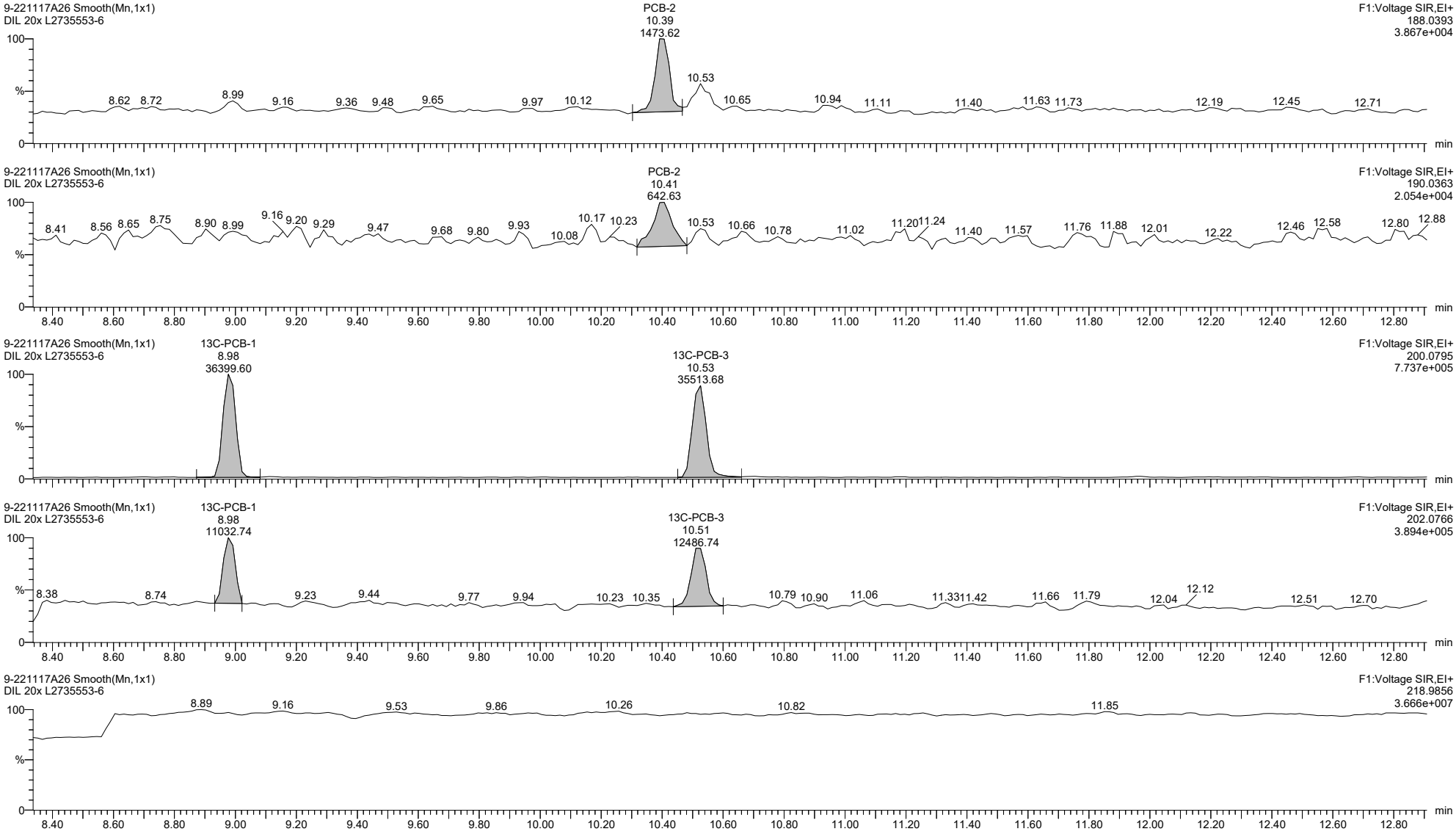
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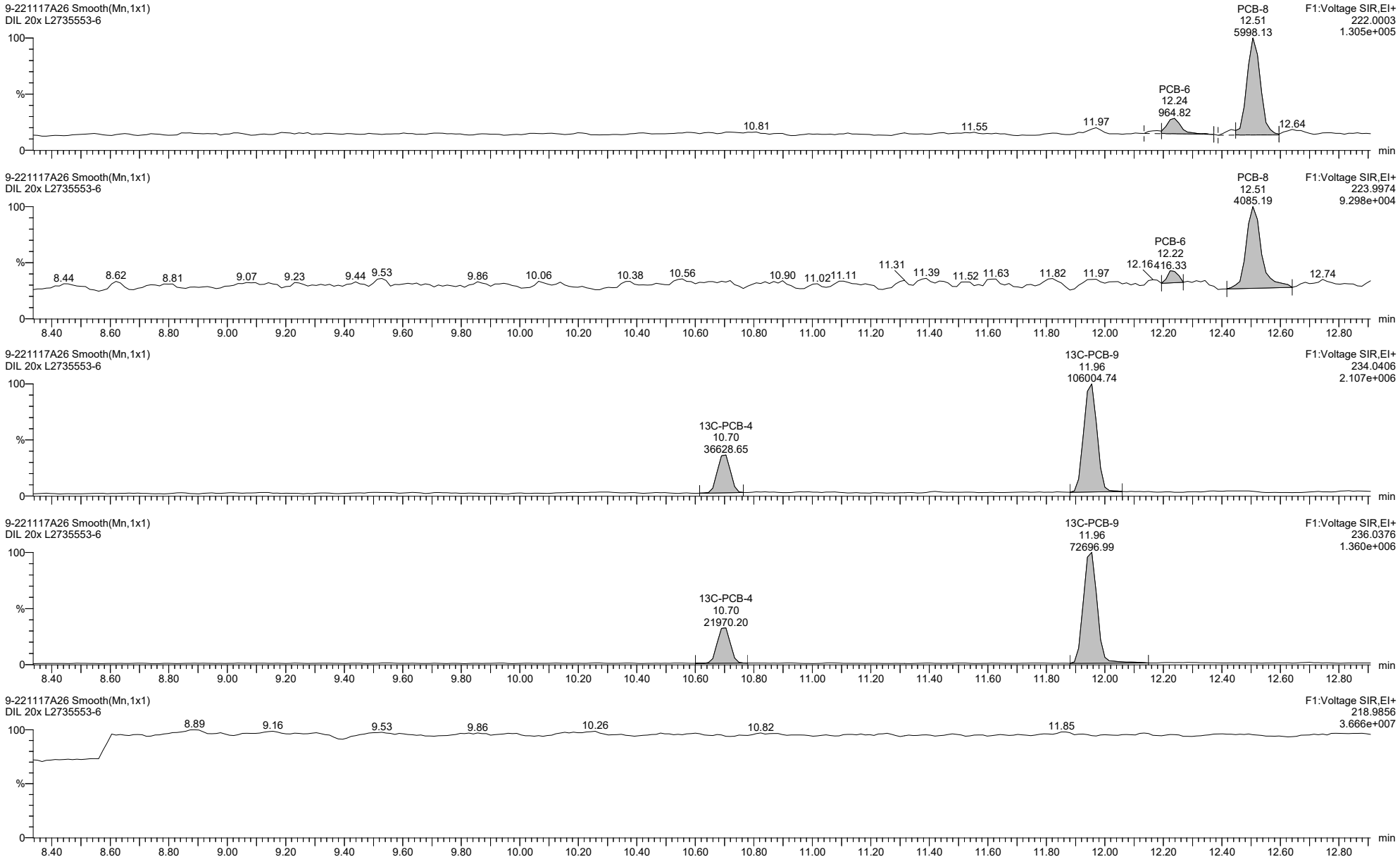


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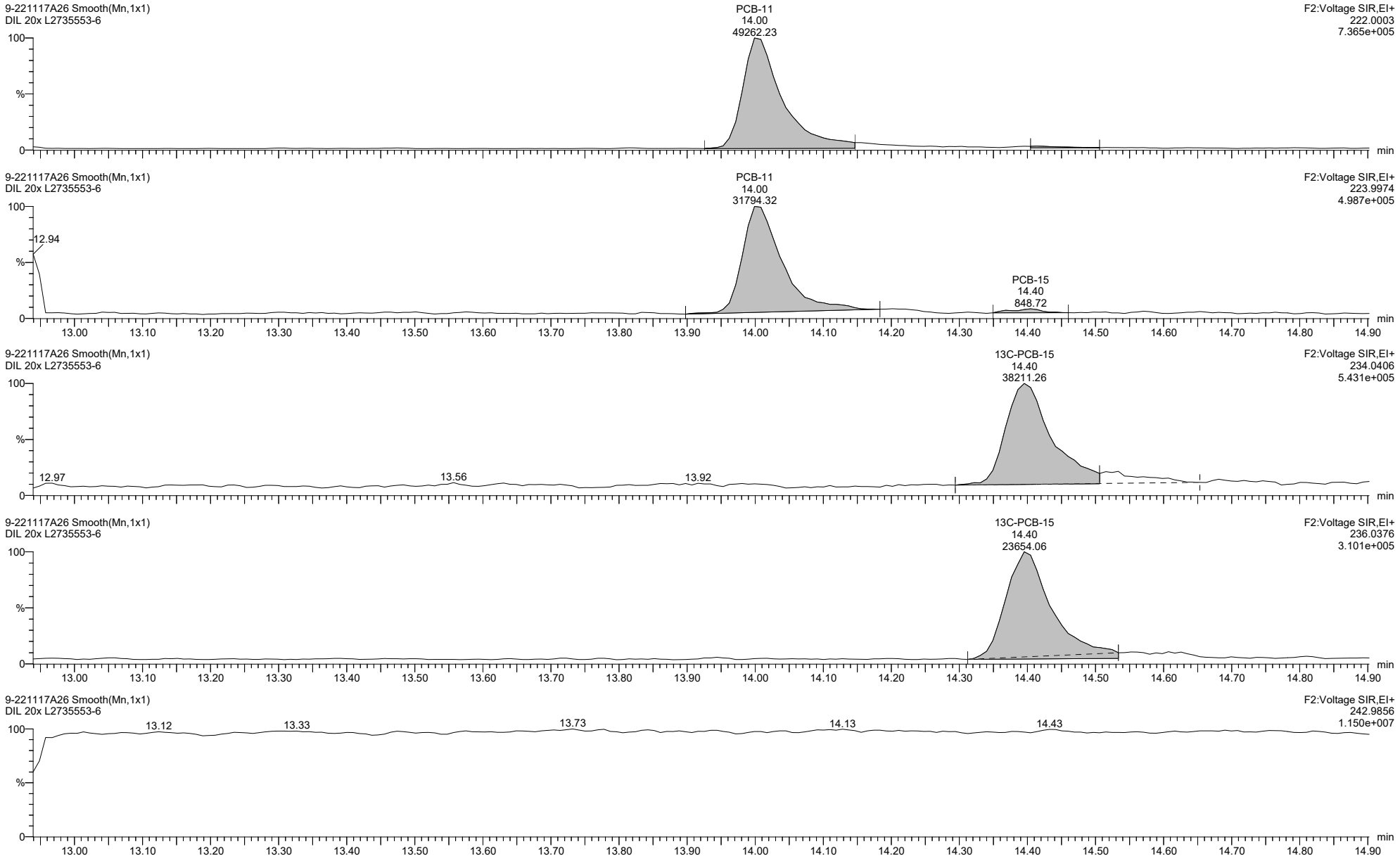


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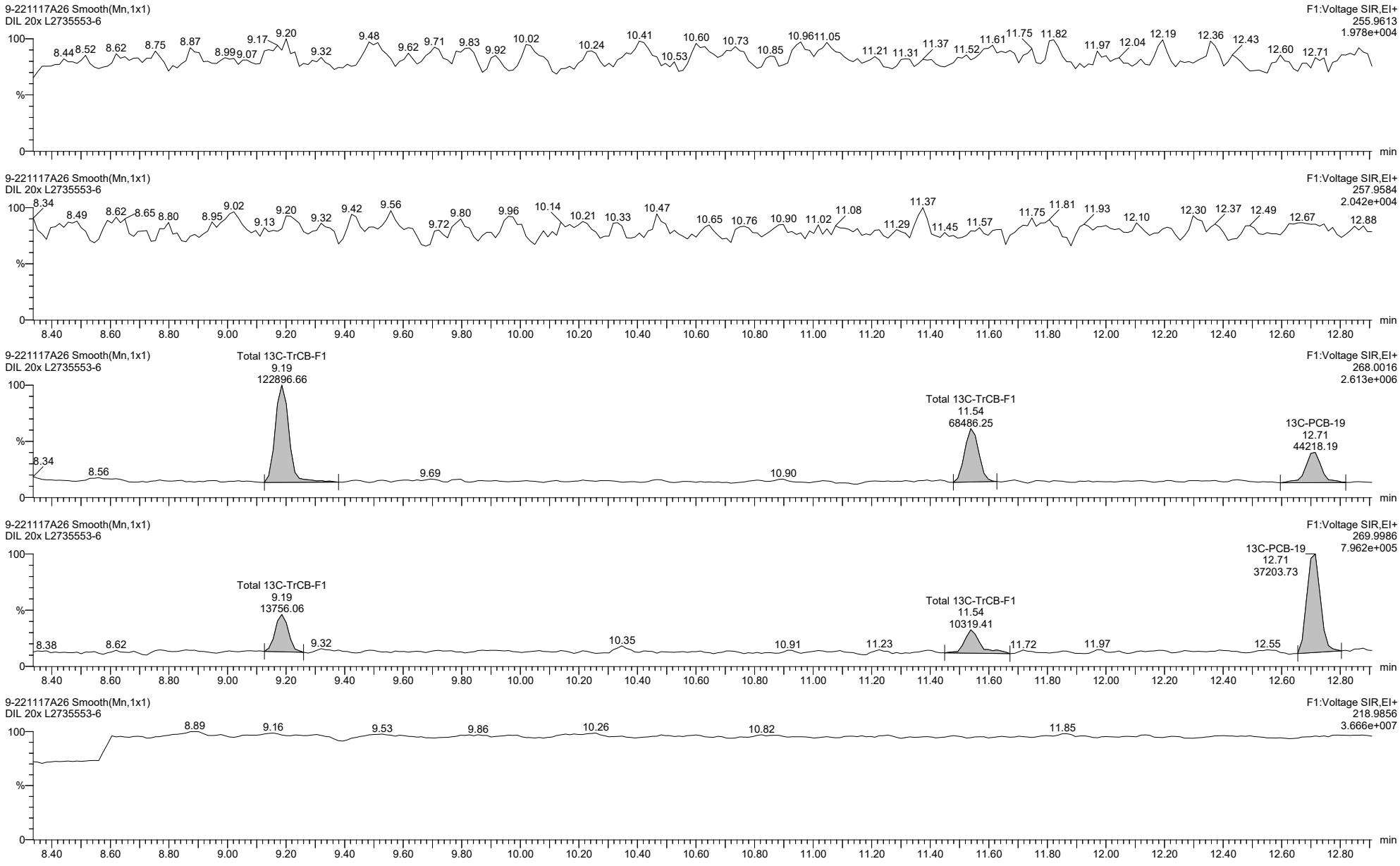


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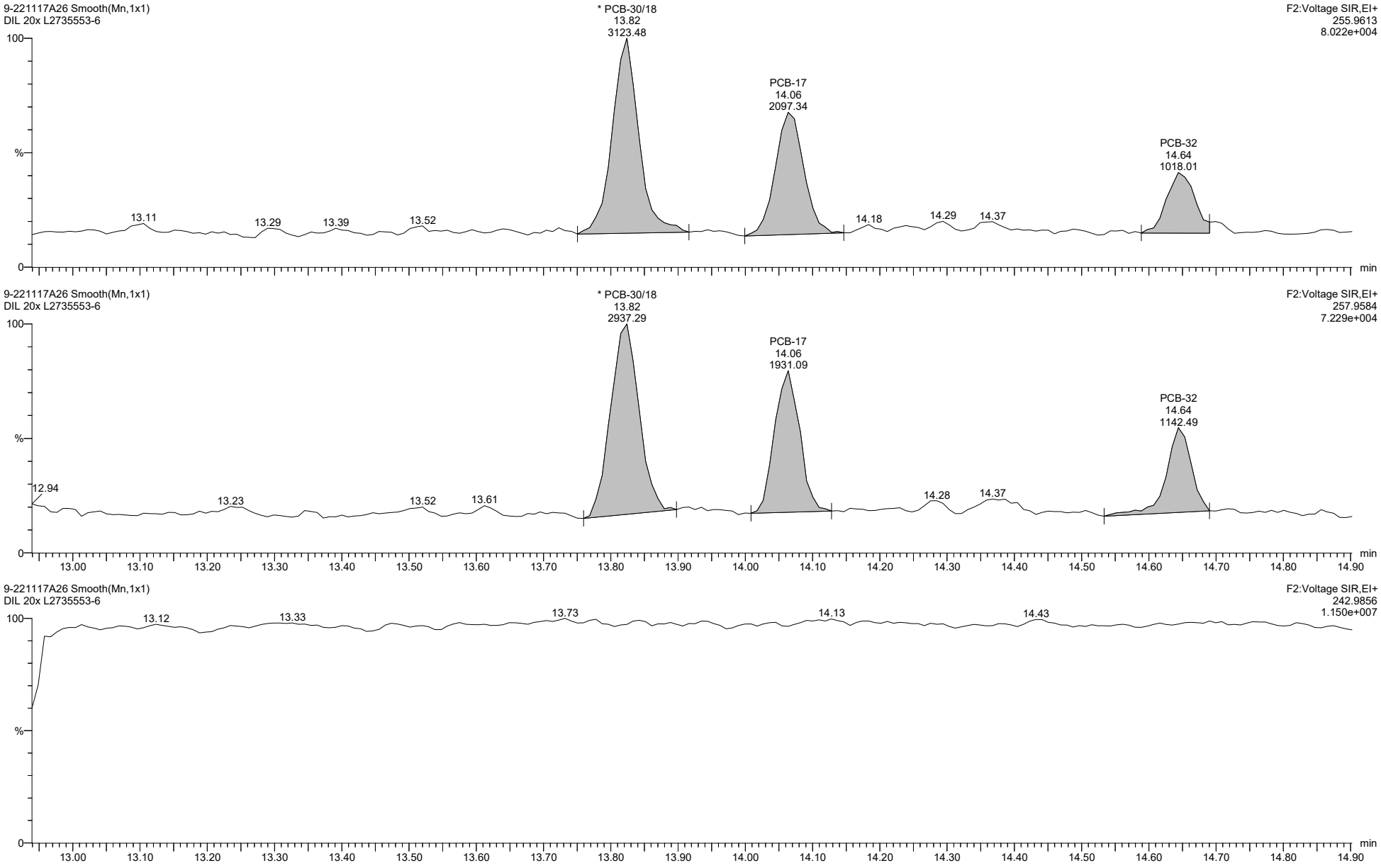


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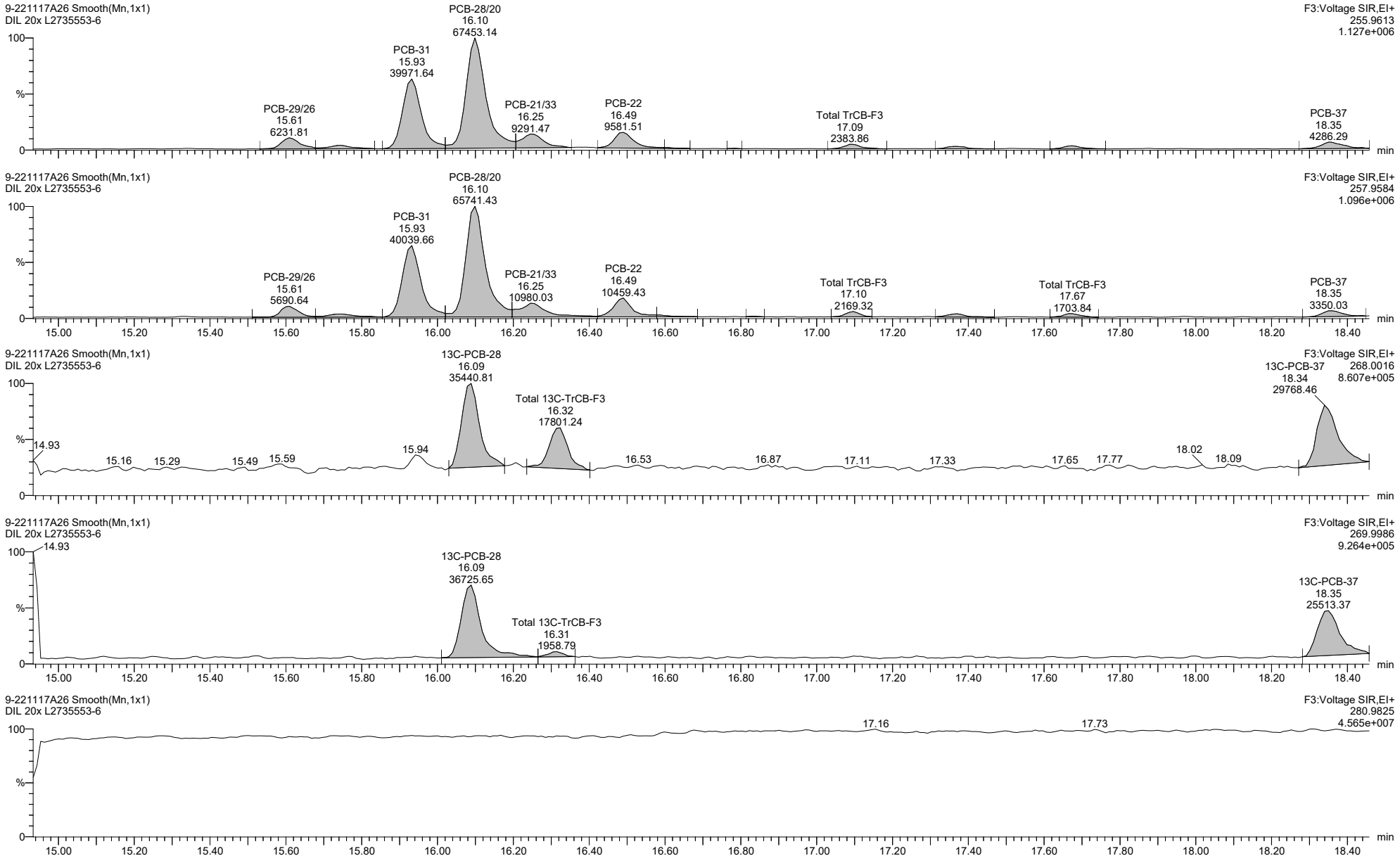
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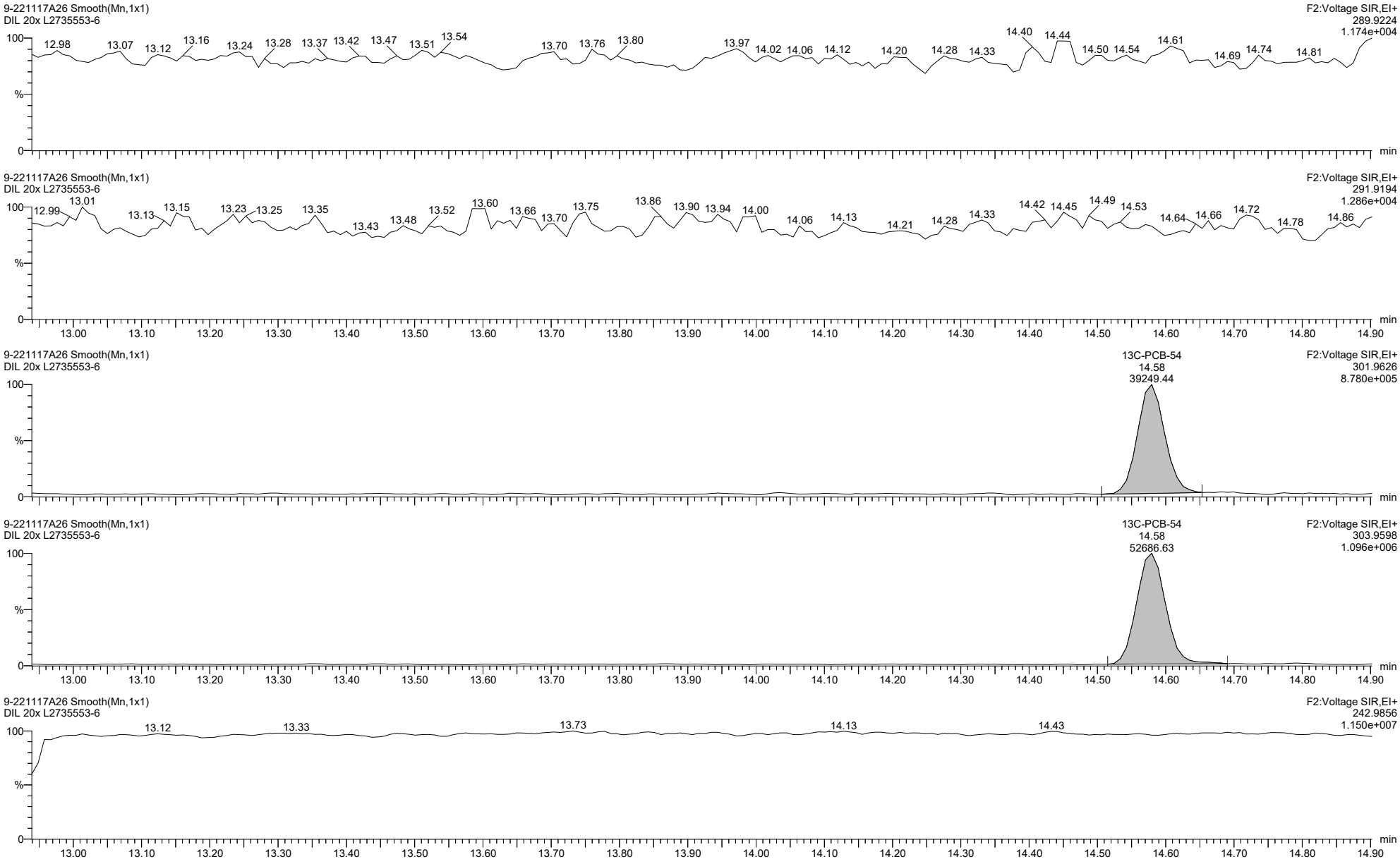


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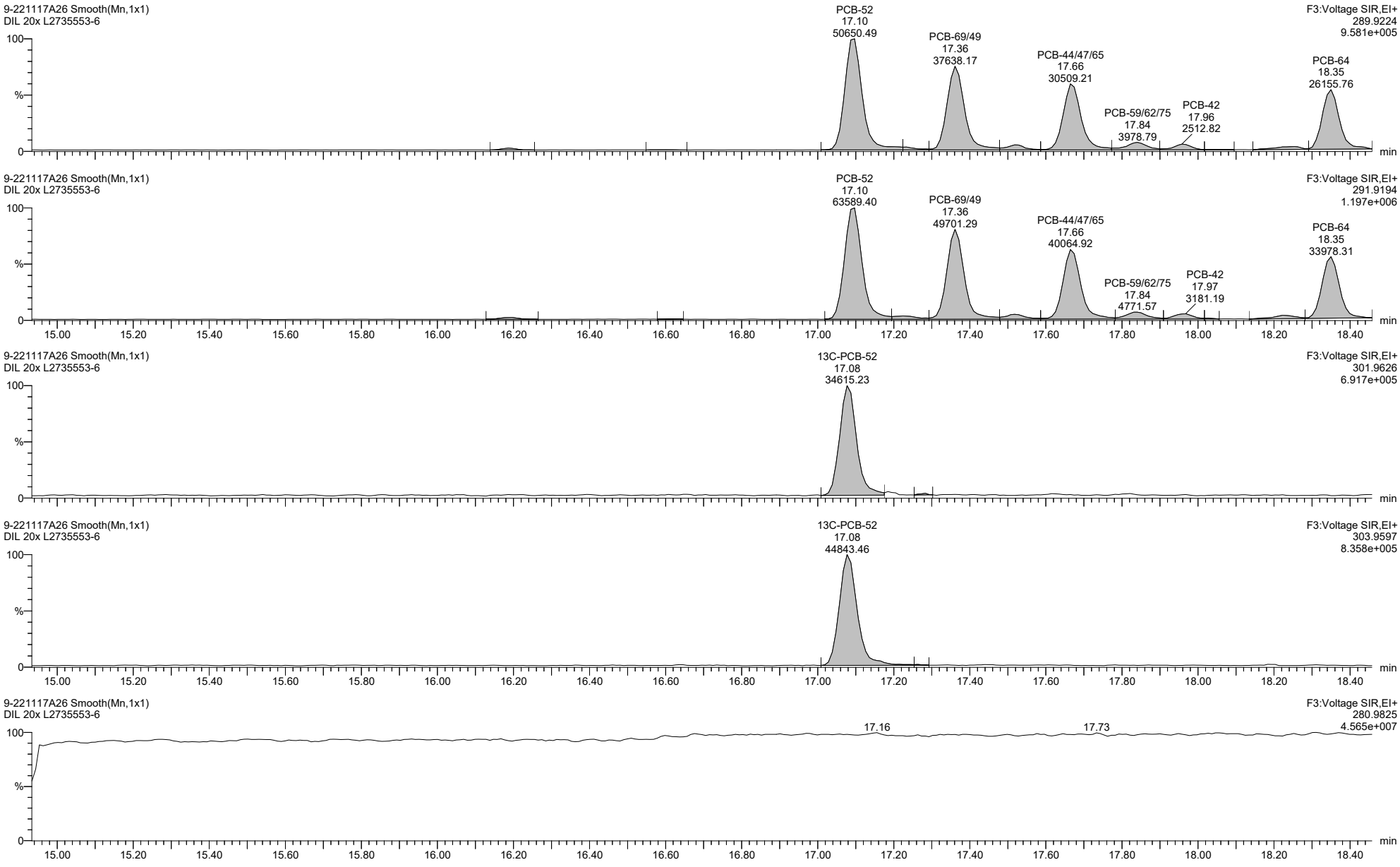


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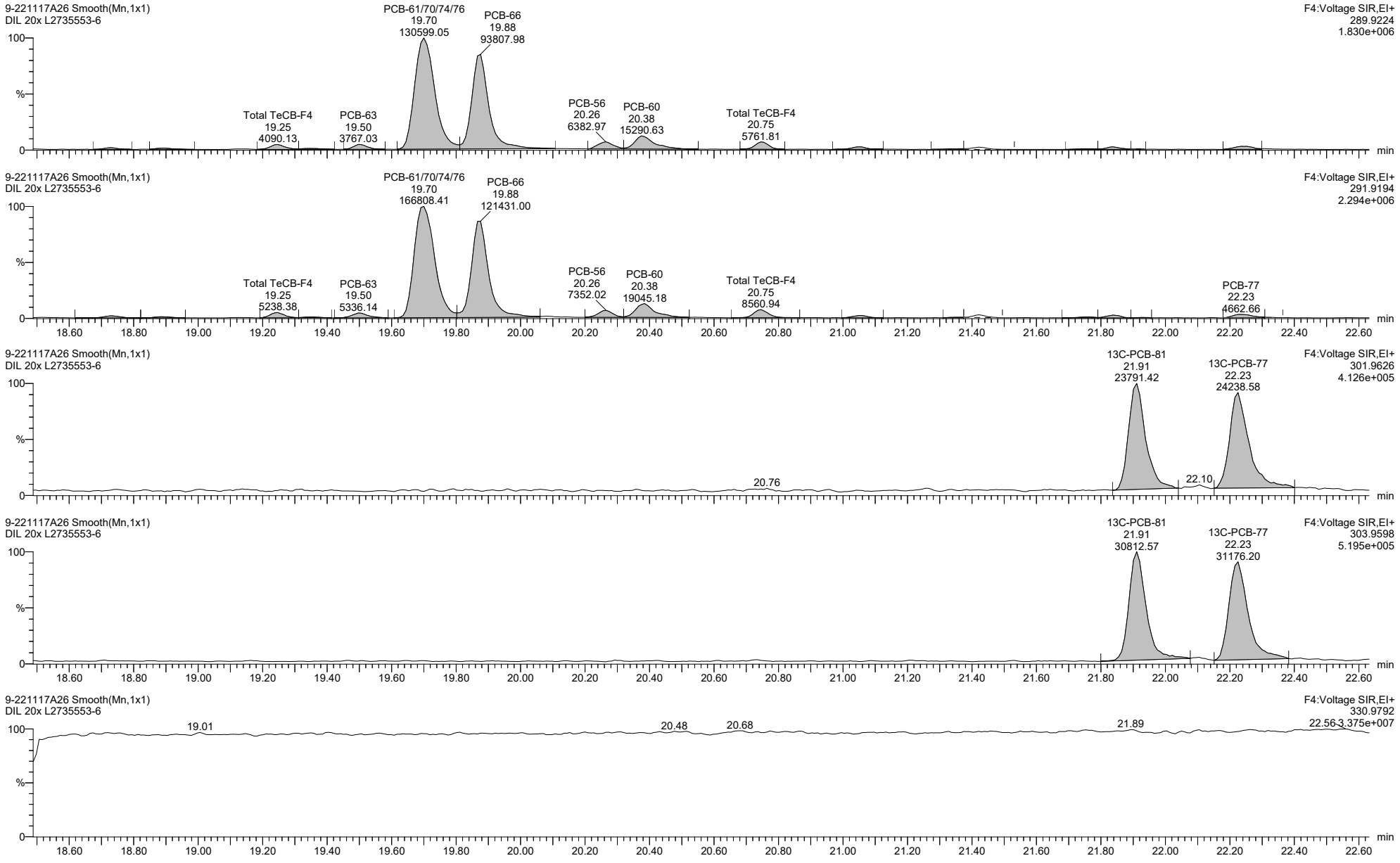


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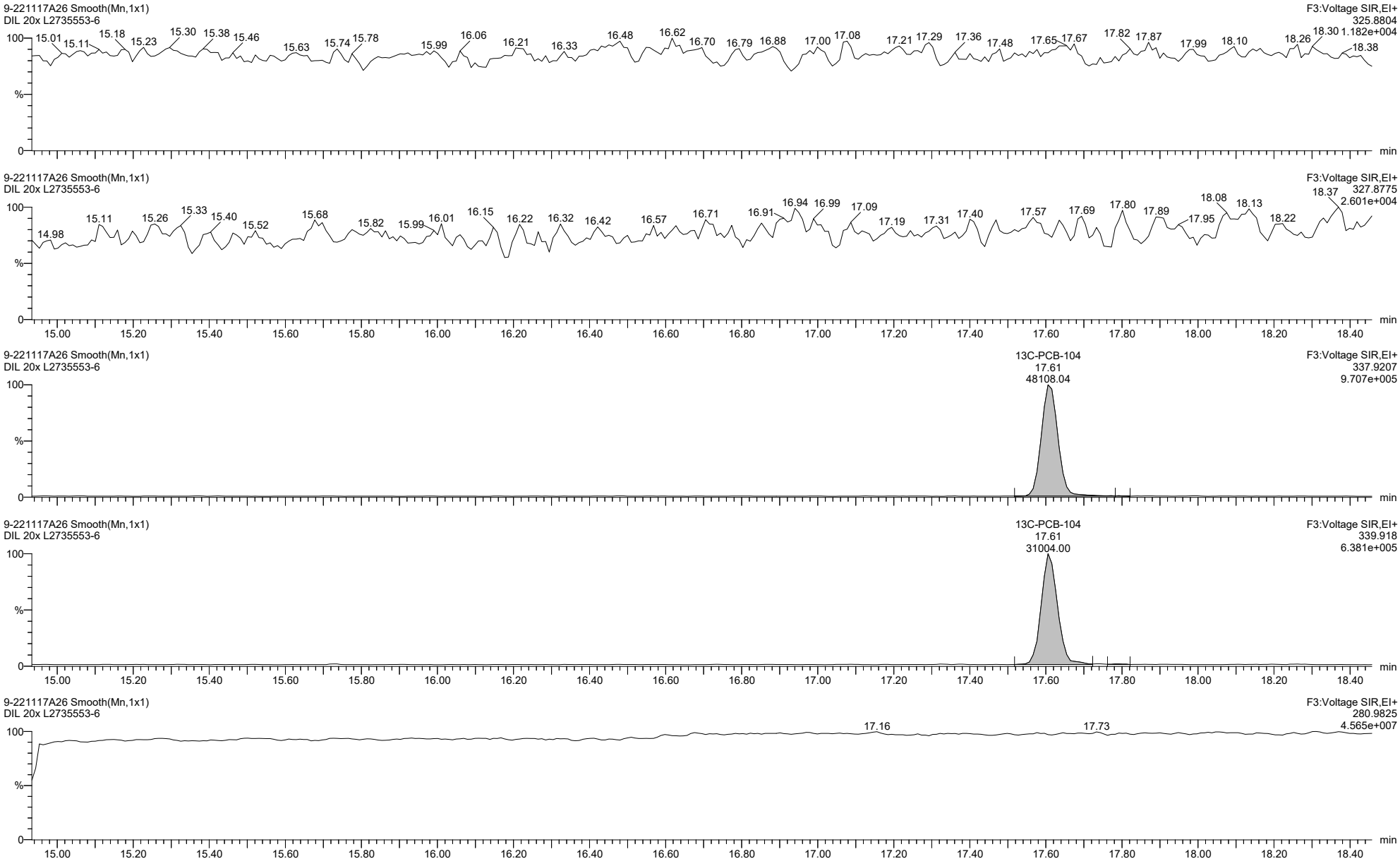
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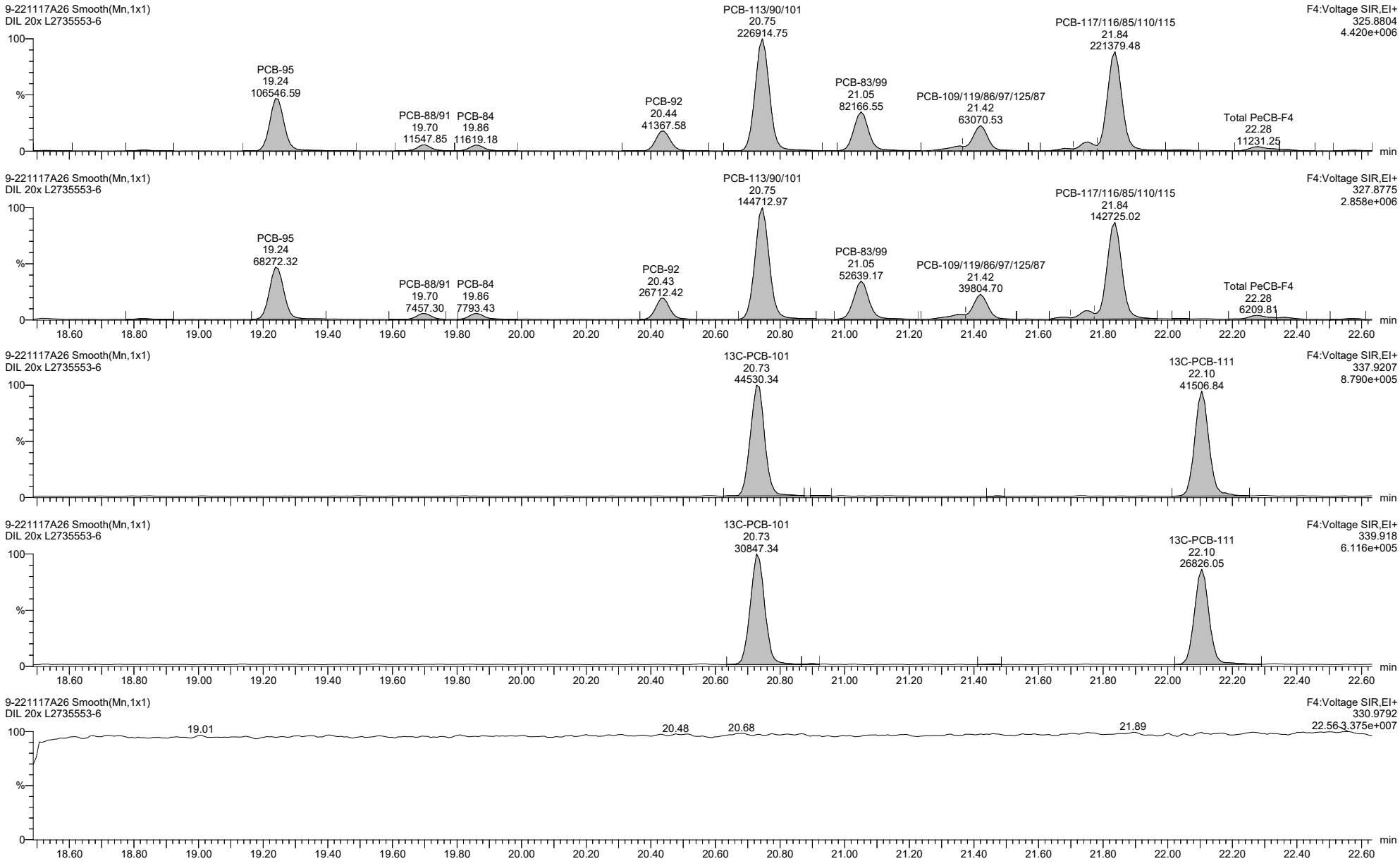


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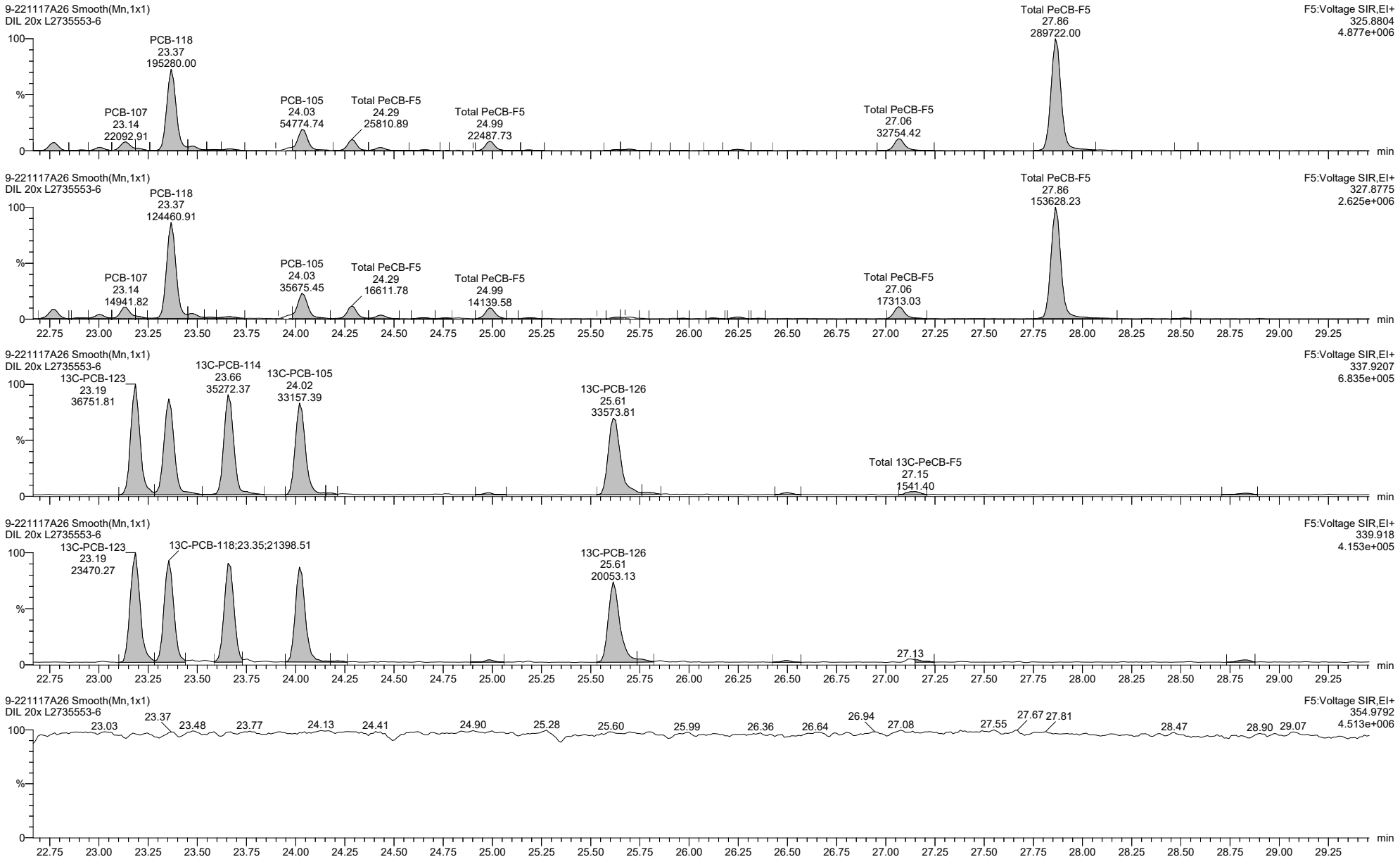
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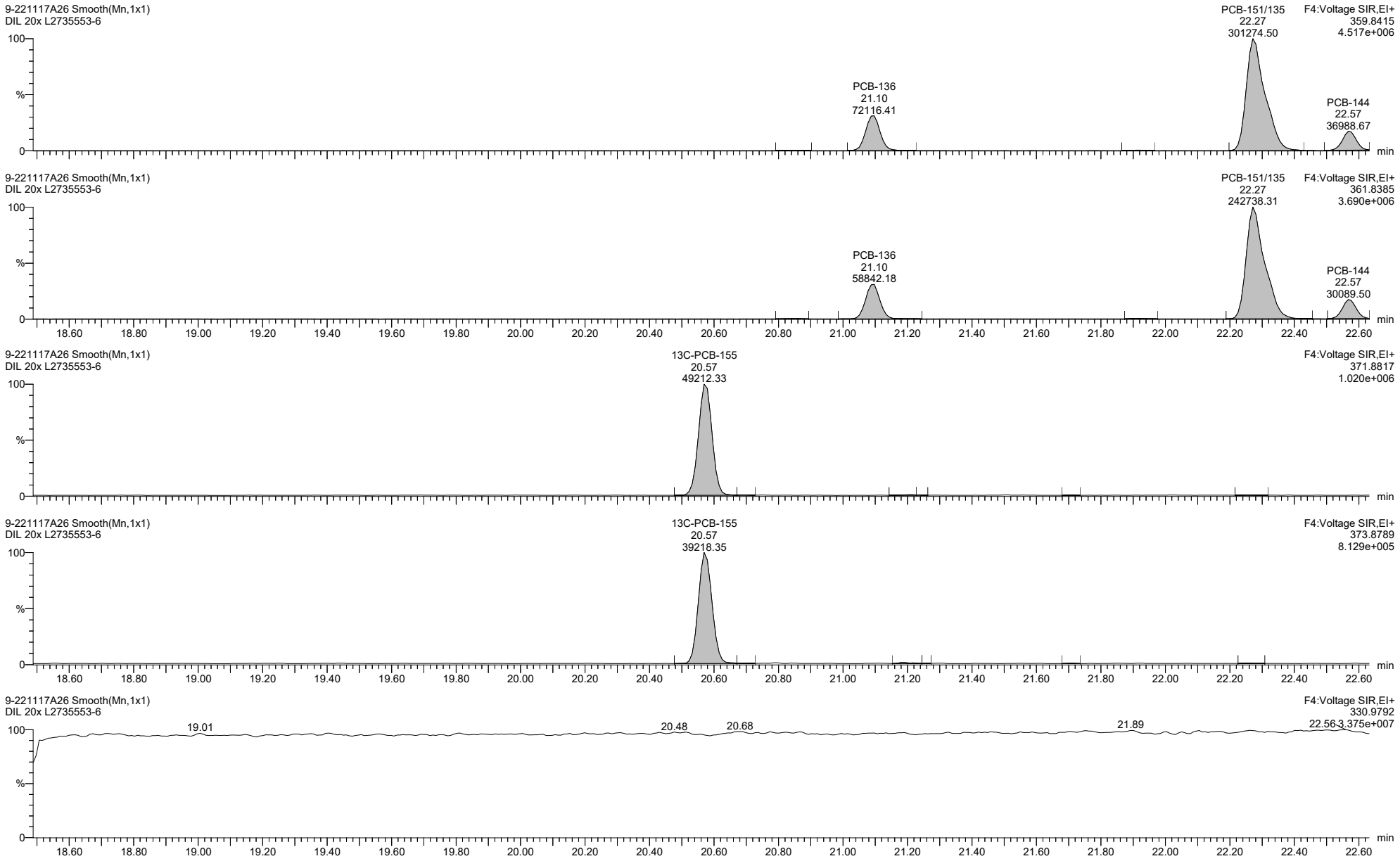


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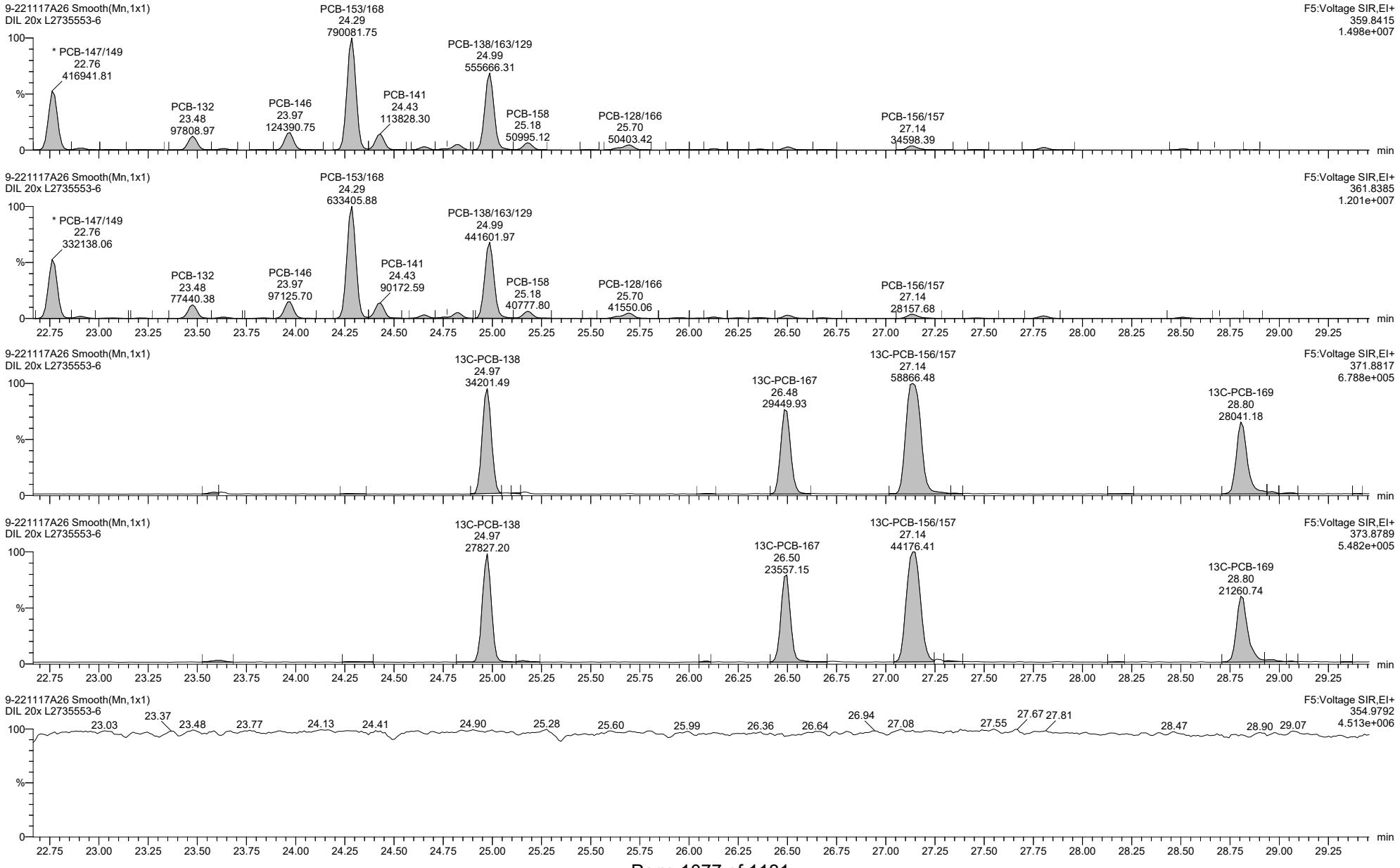


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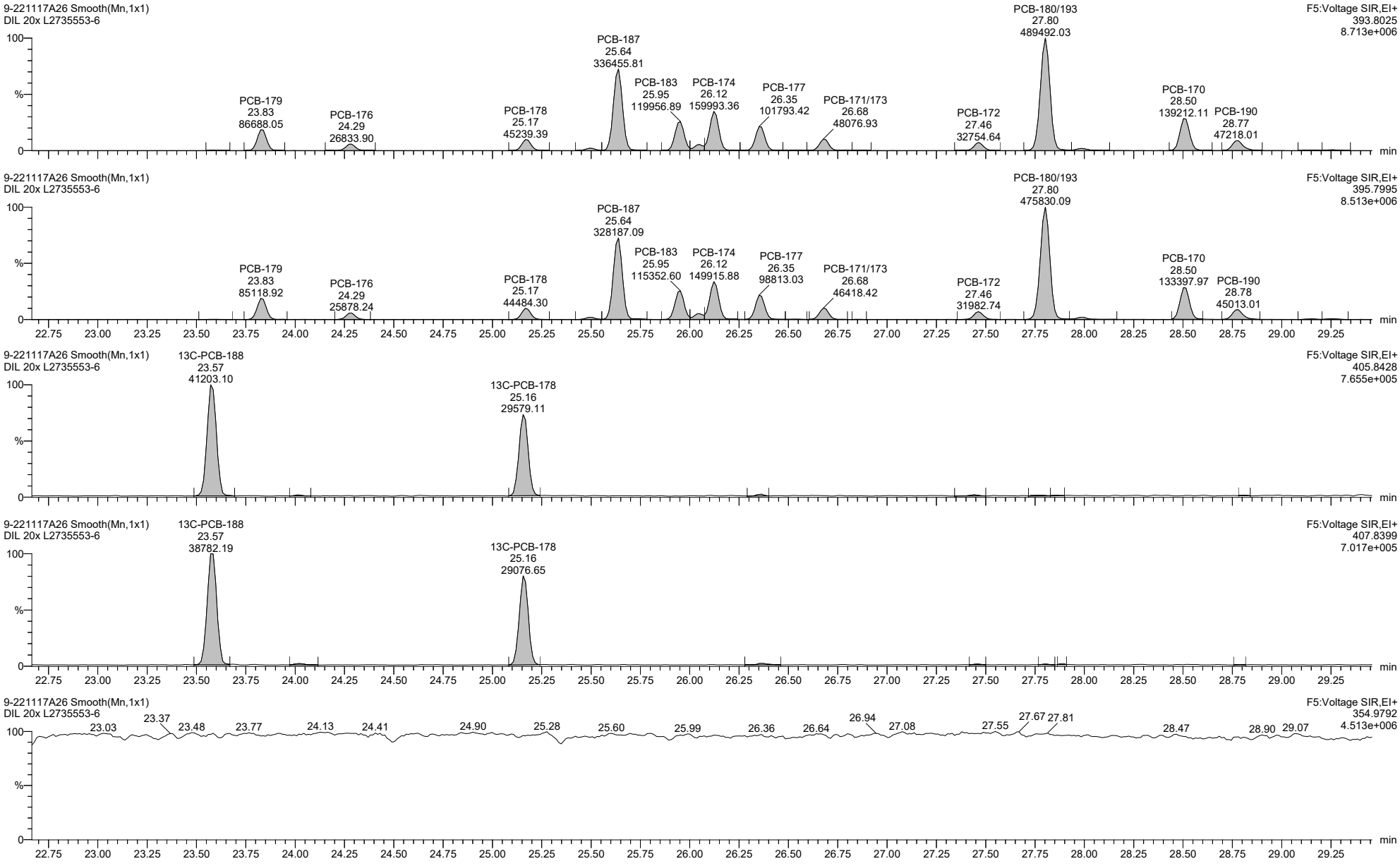


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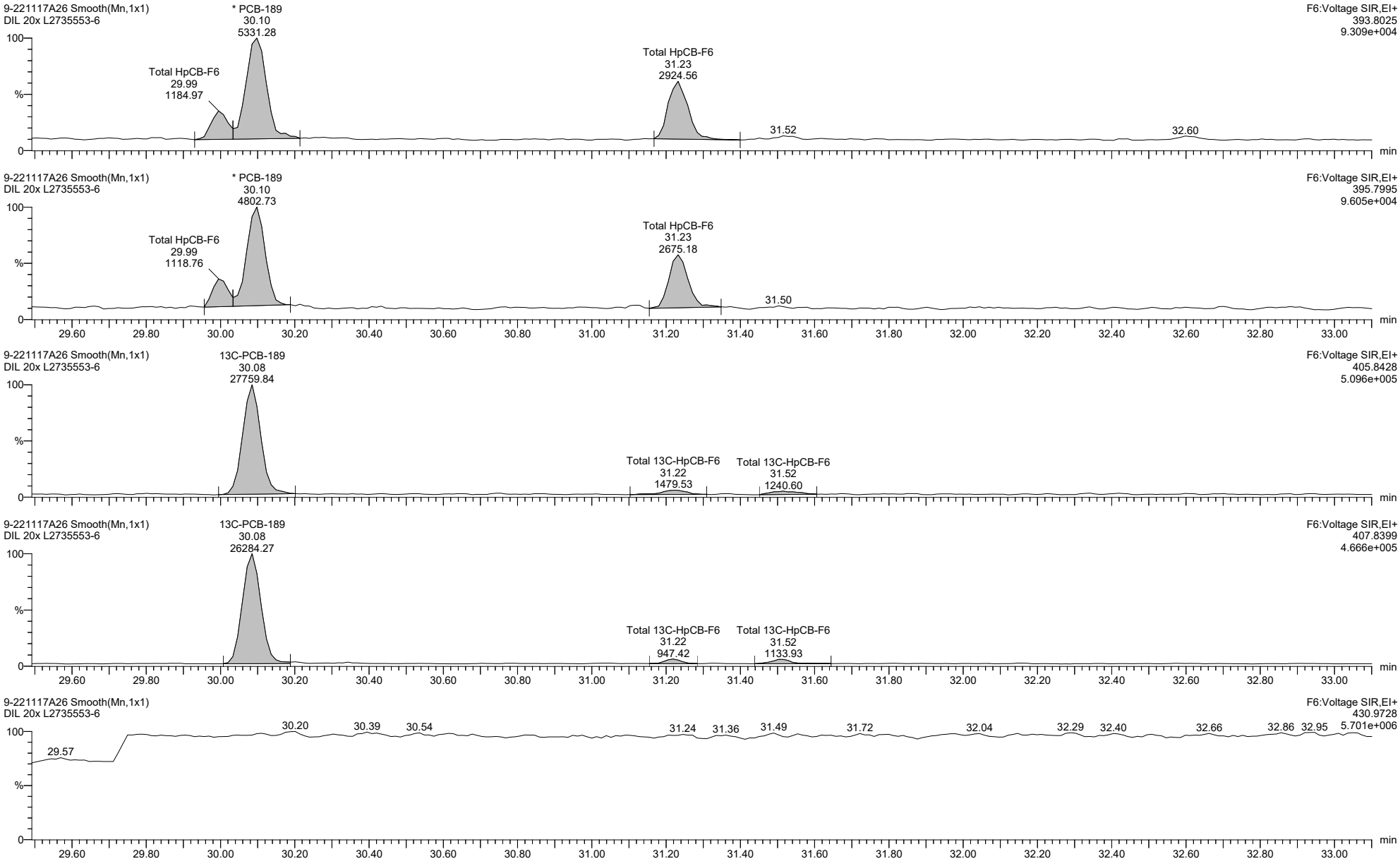


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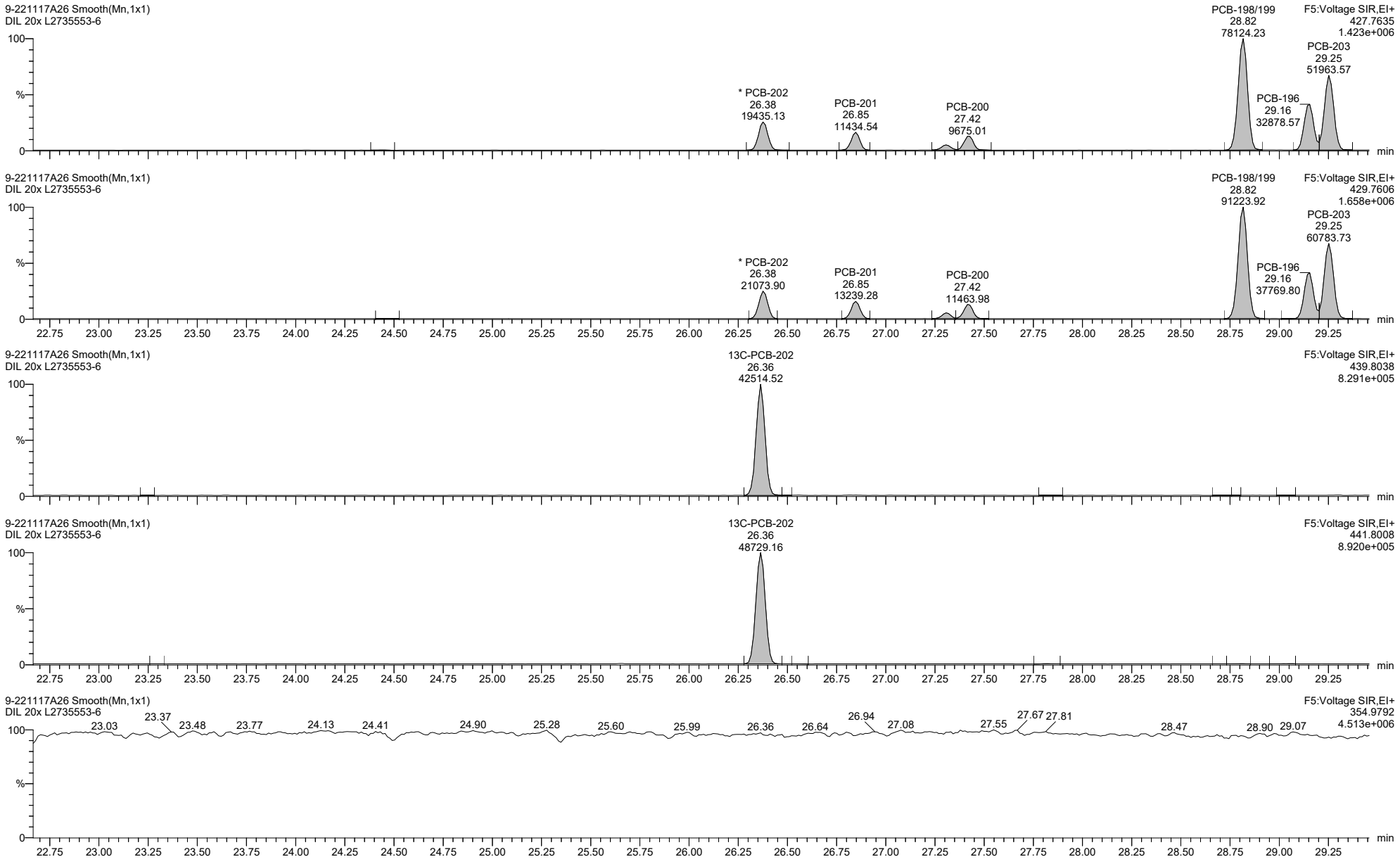


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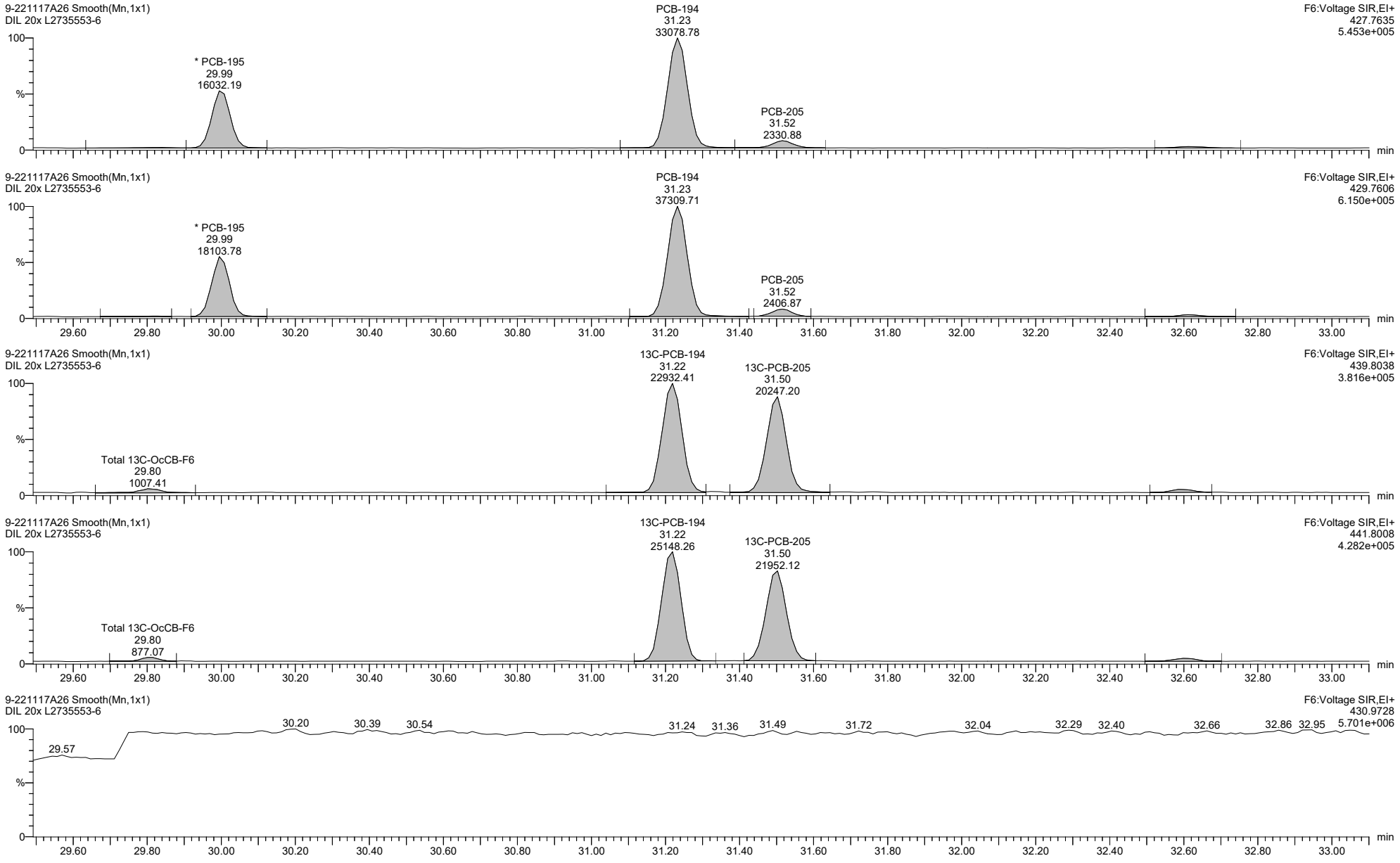
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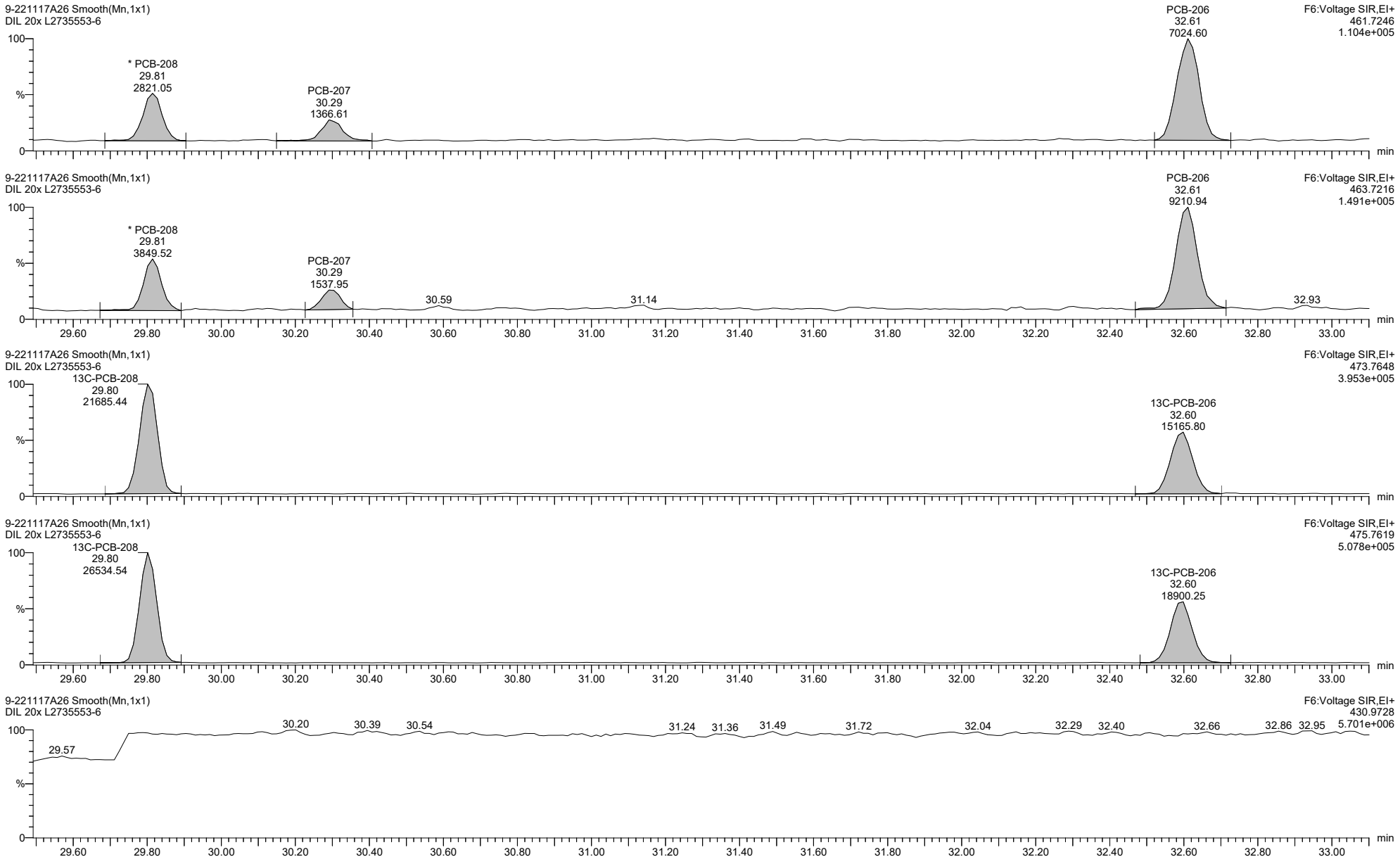
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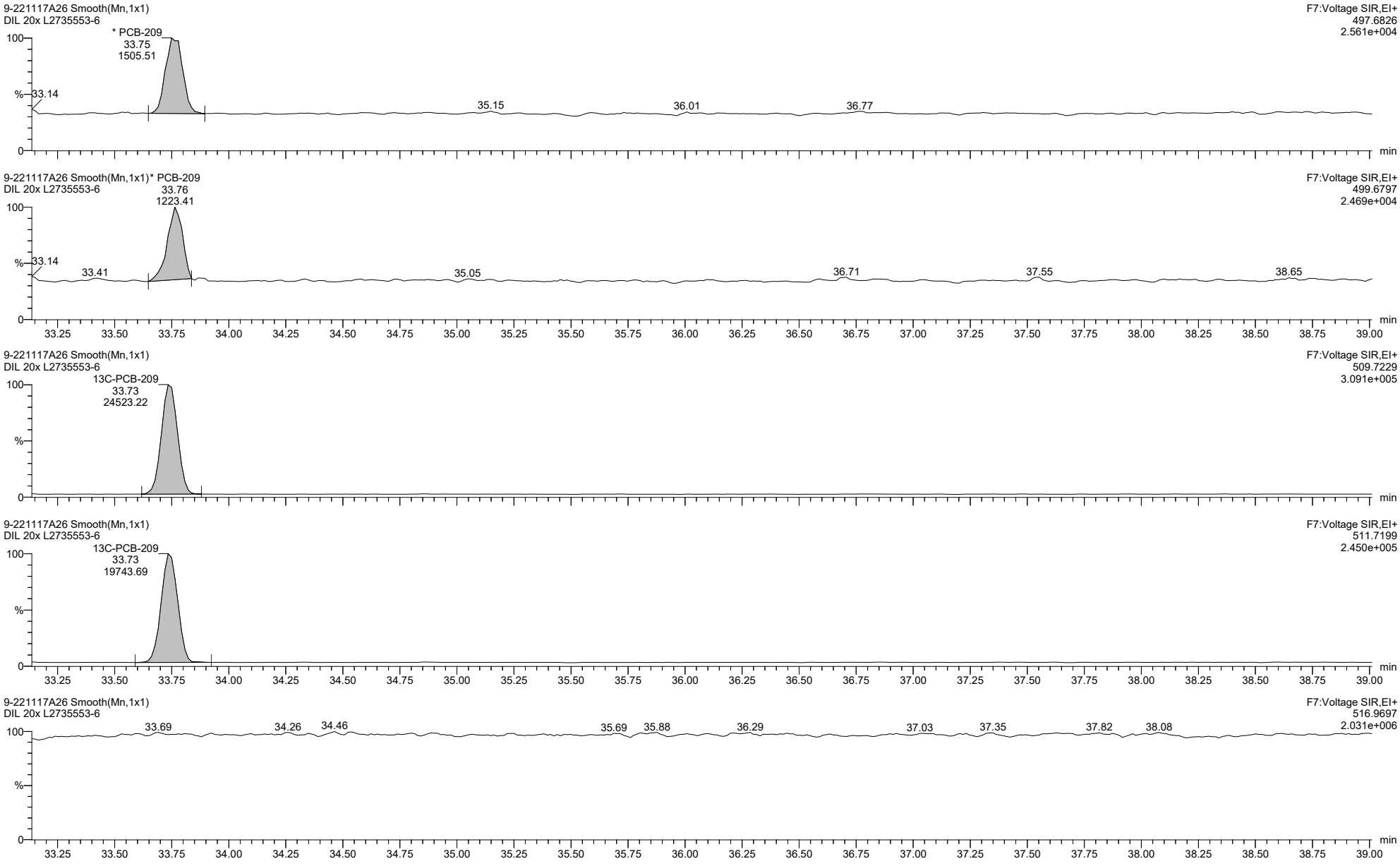
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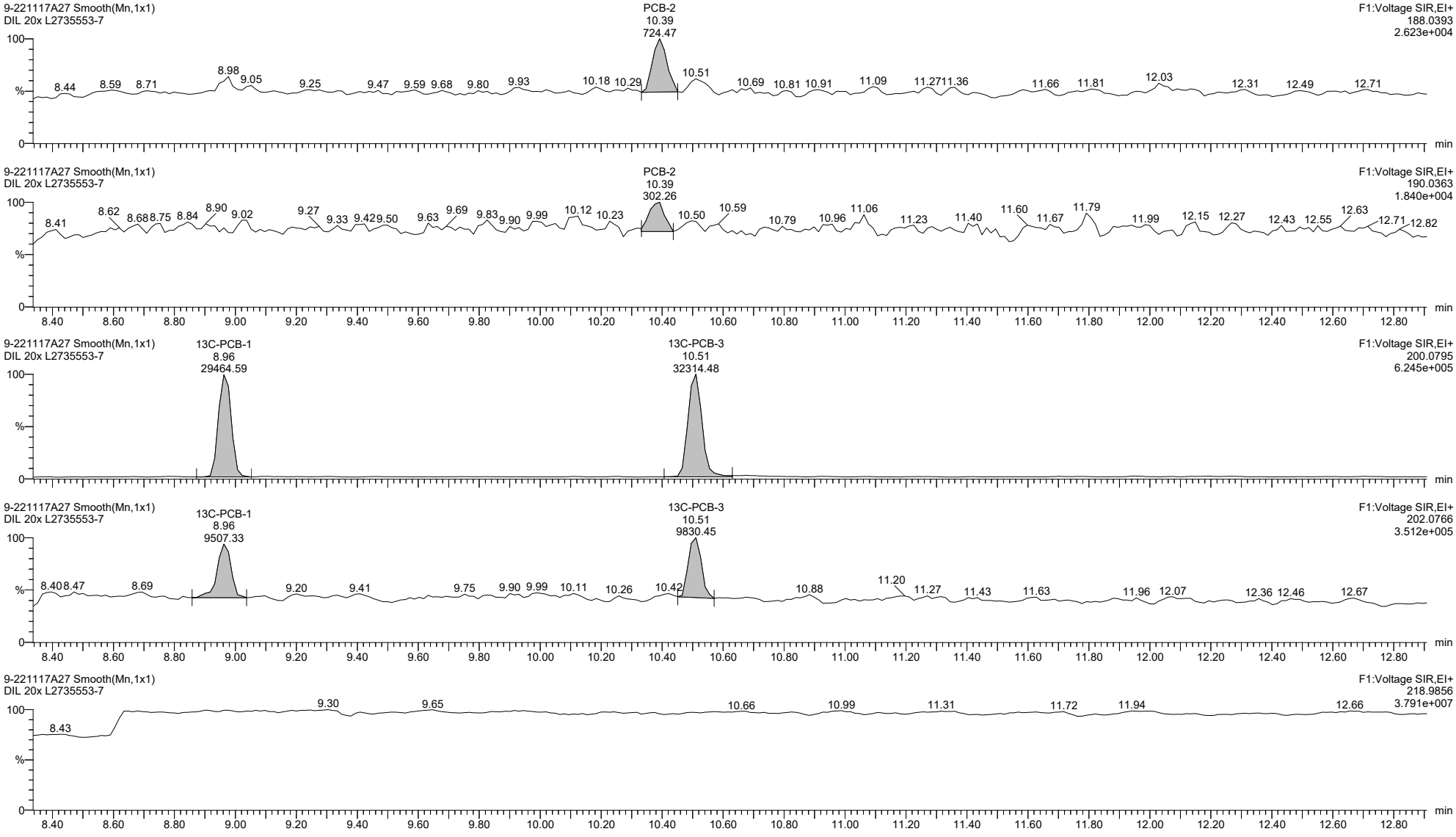
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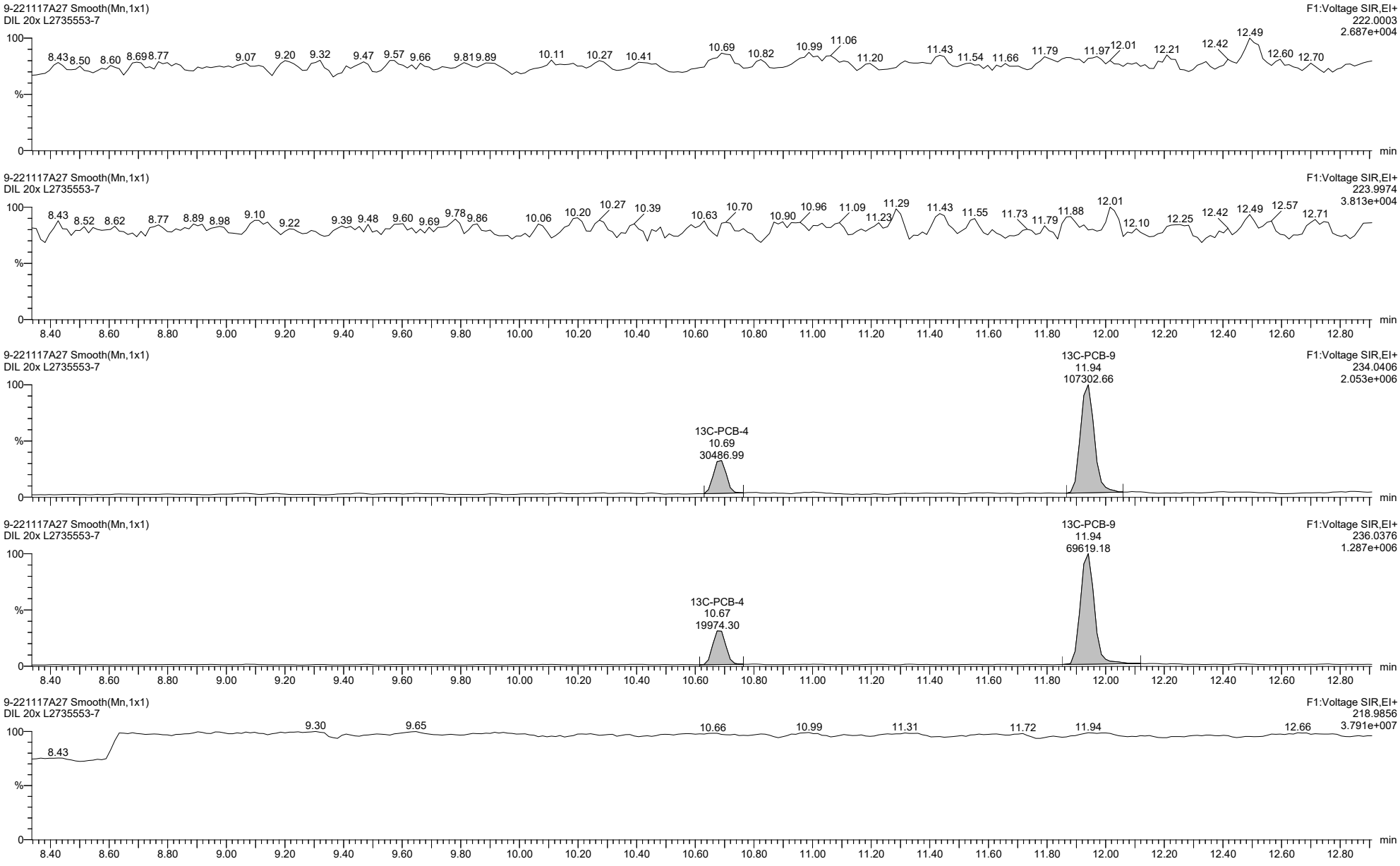


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Printed: Wednesday, November 23, 2022 11:42:36 Eastern Standard Time

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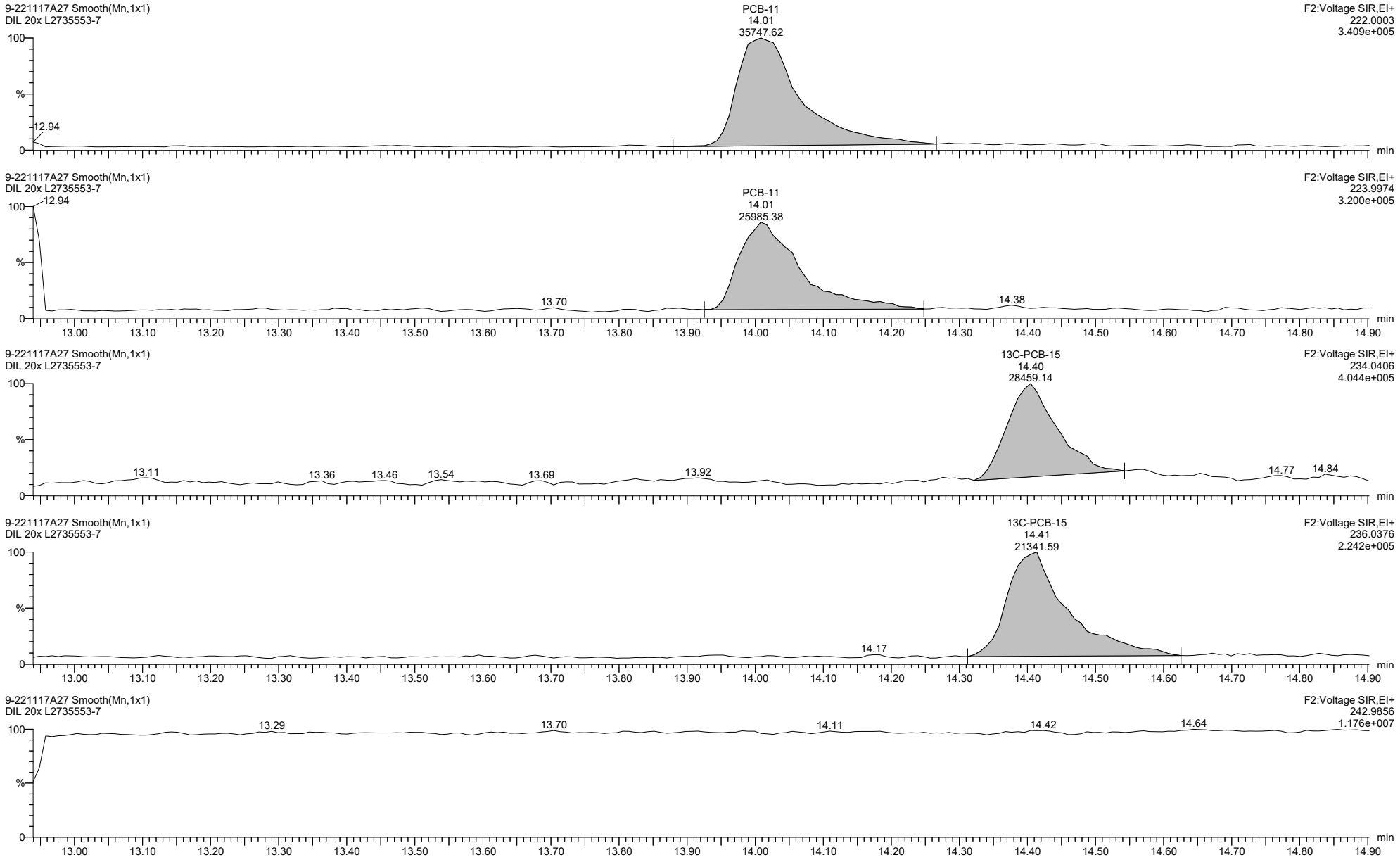


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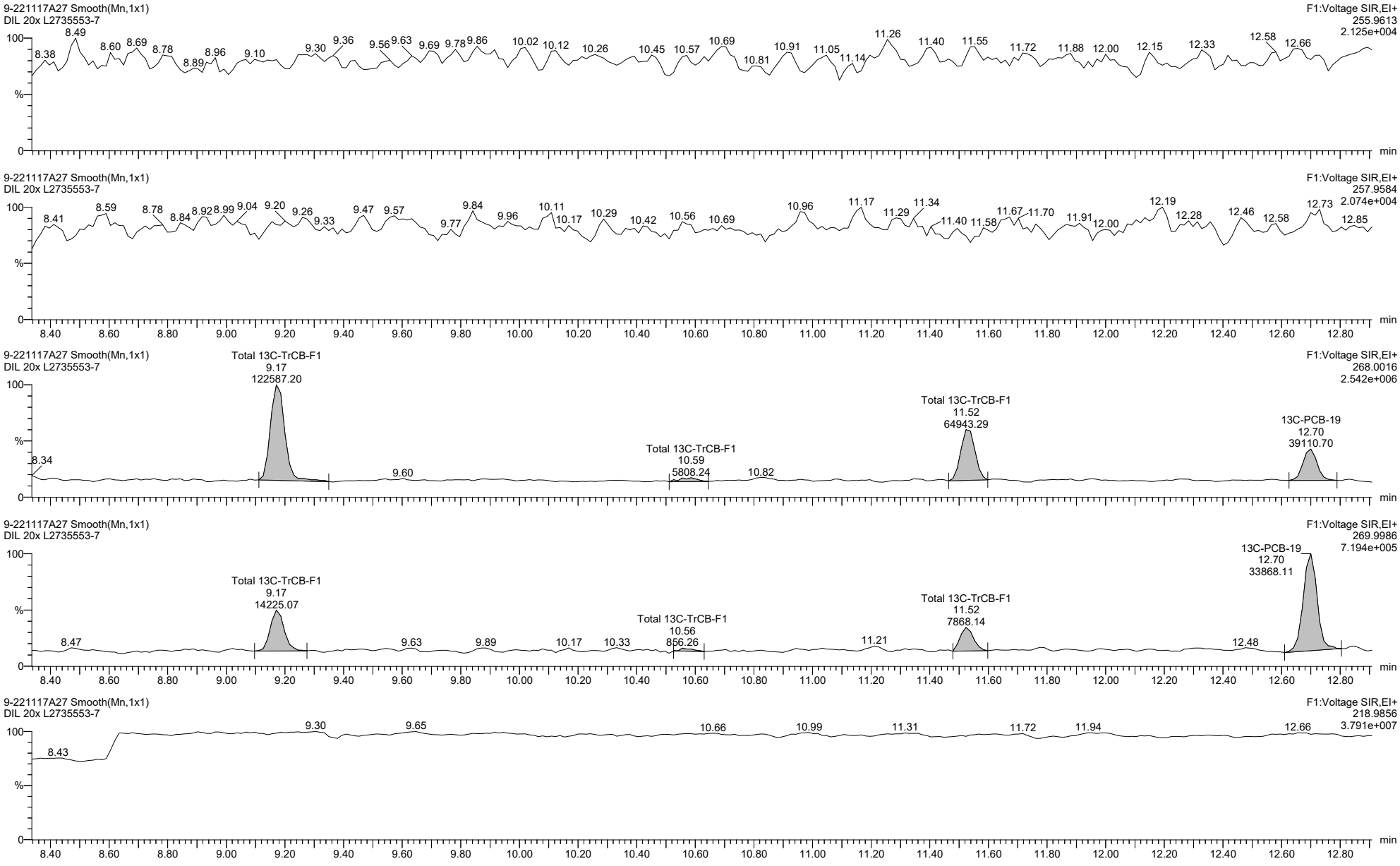


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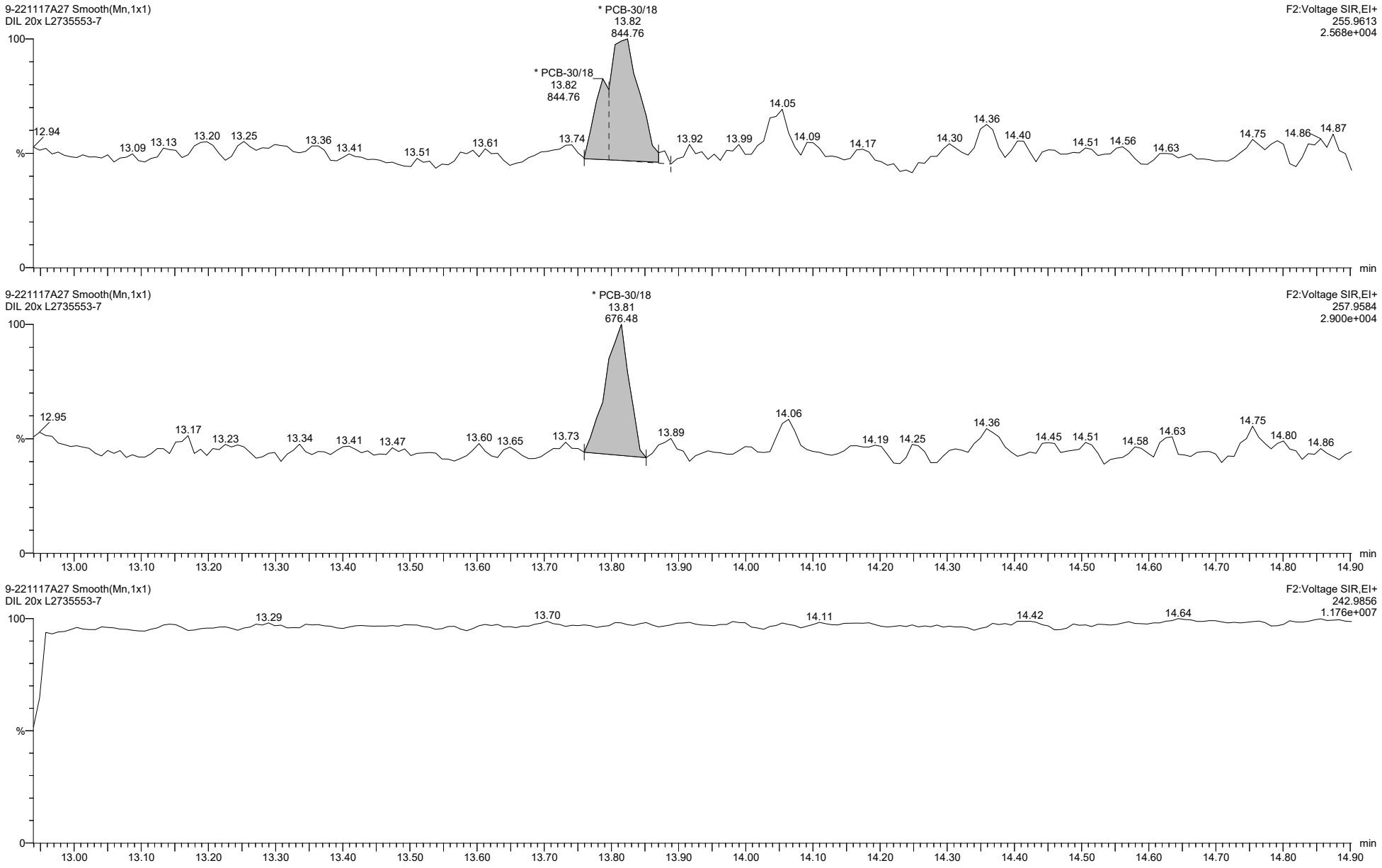


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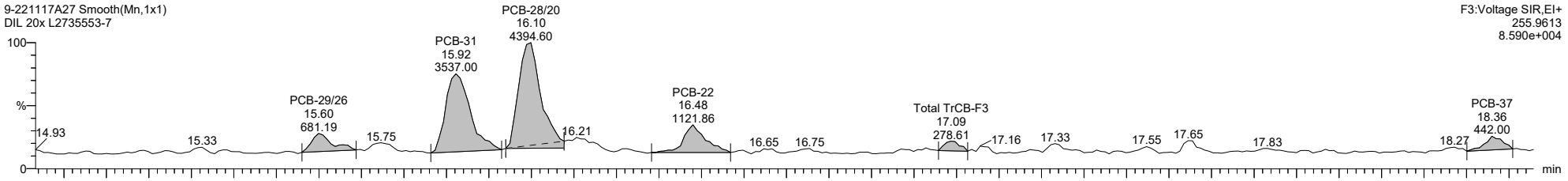


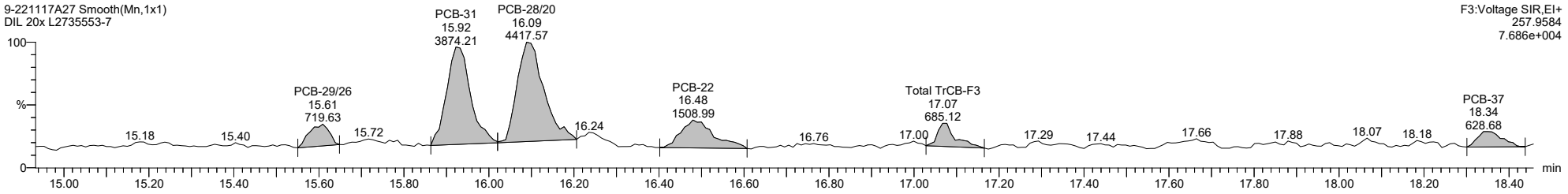
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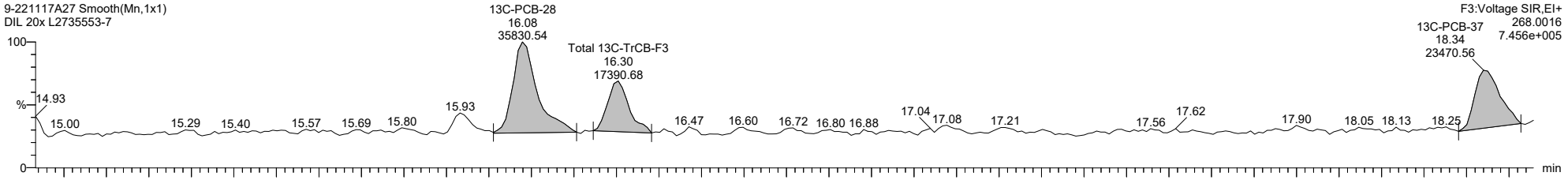
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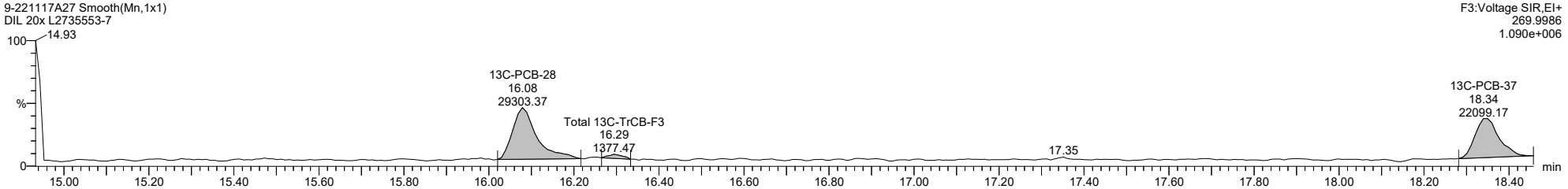
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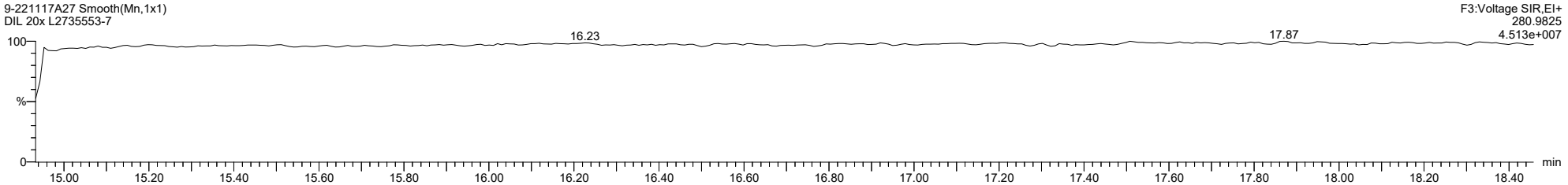
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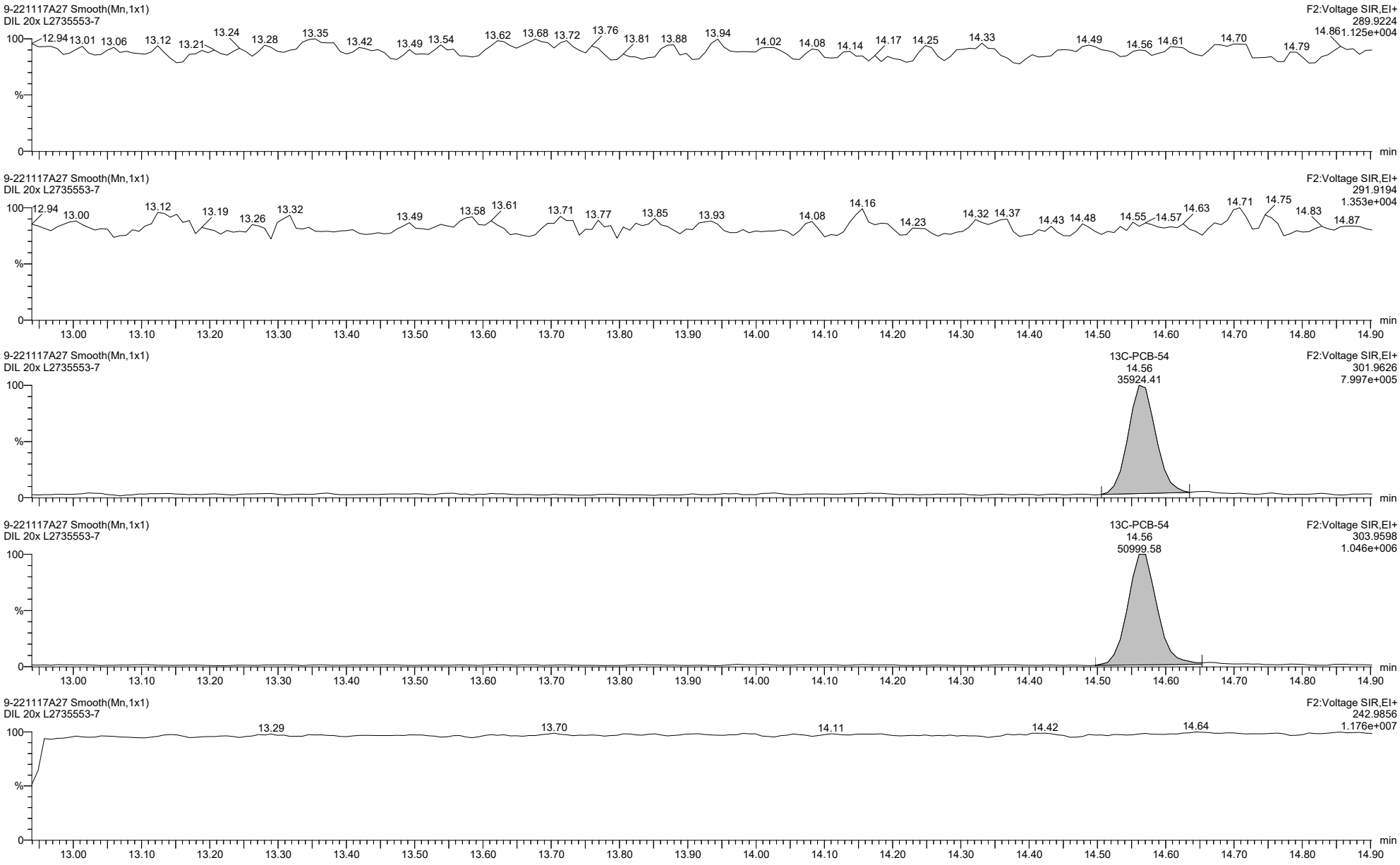


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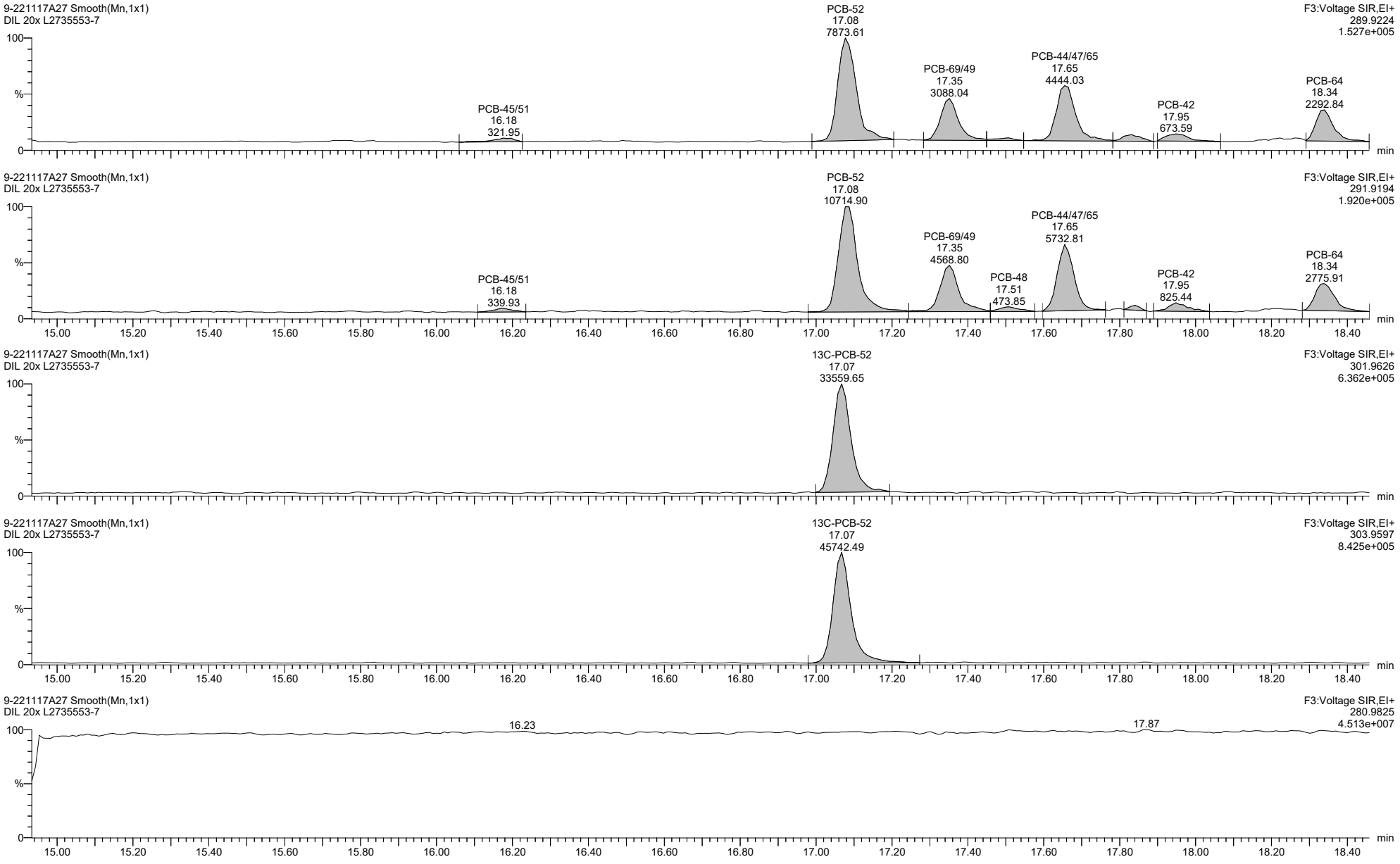


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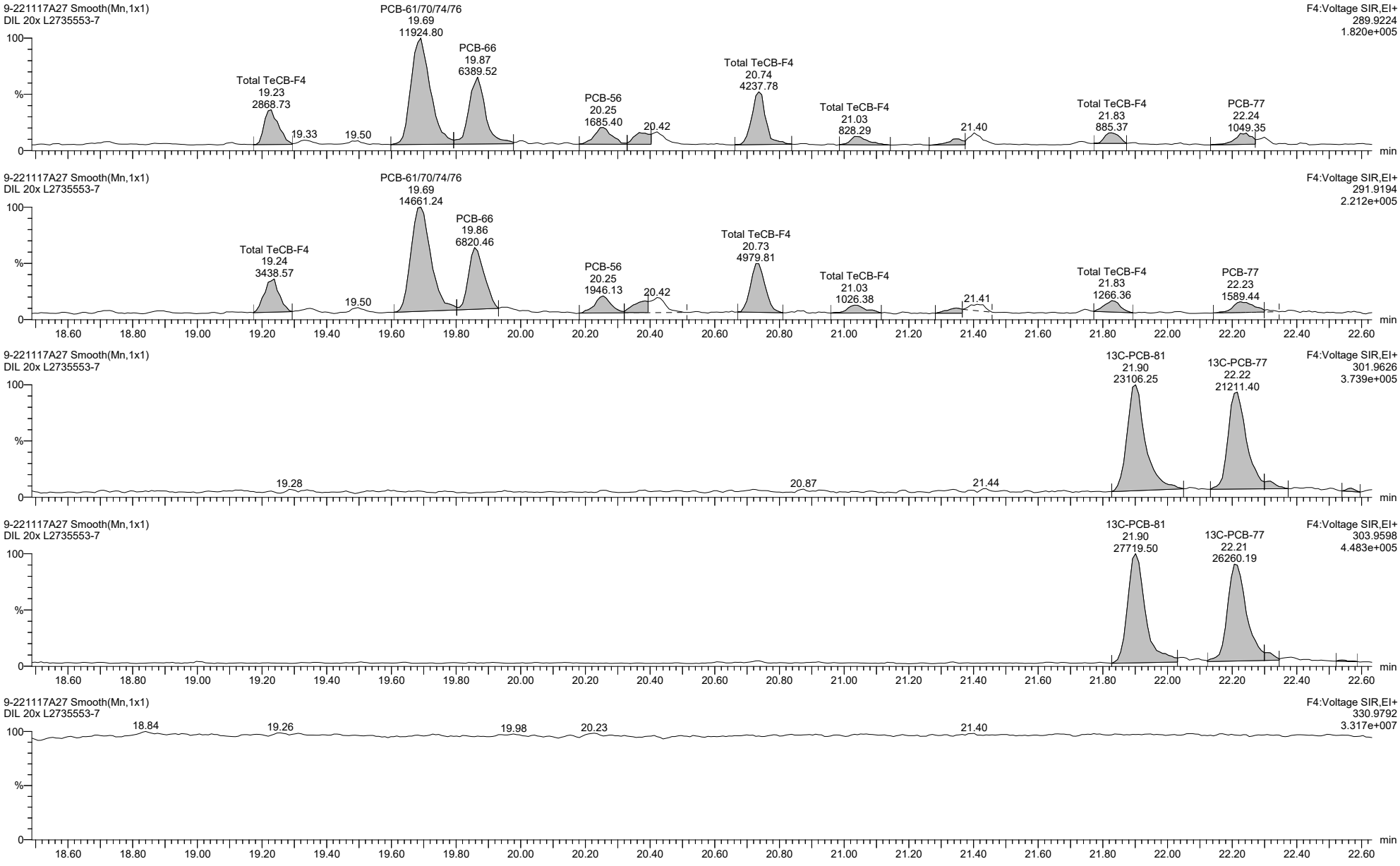
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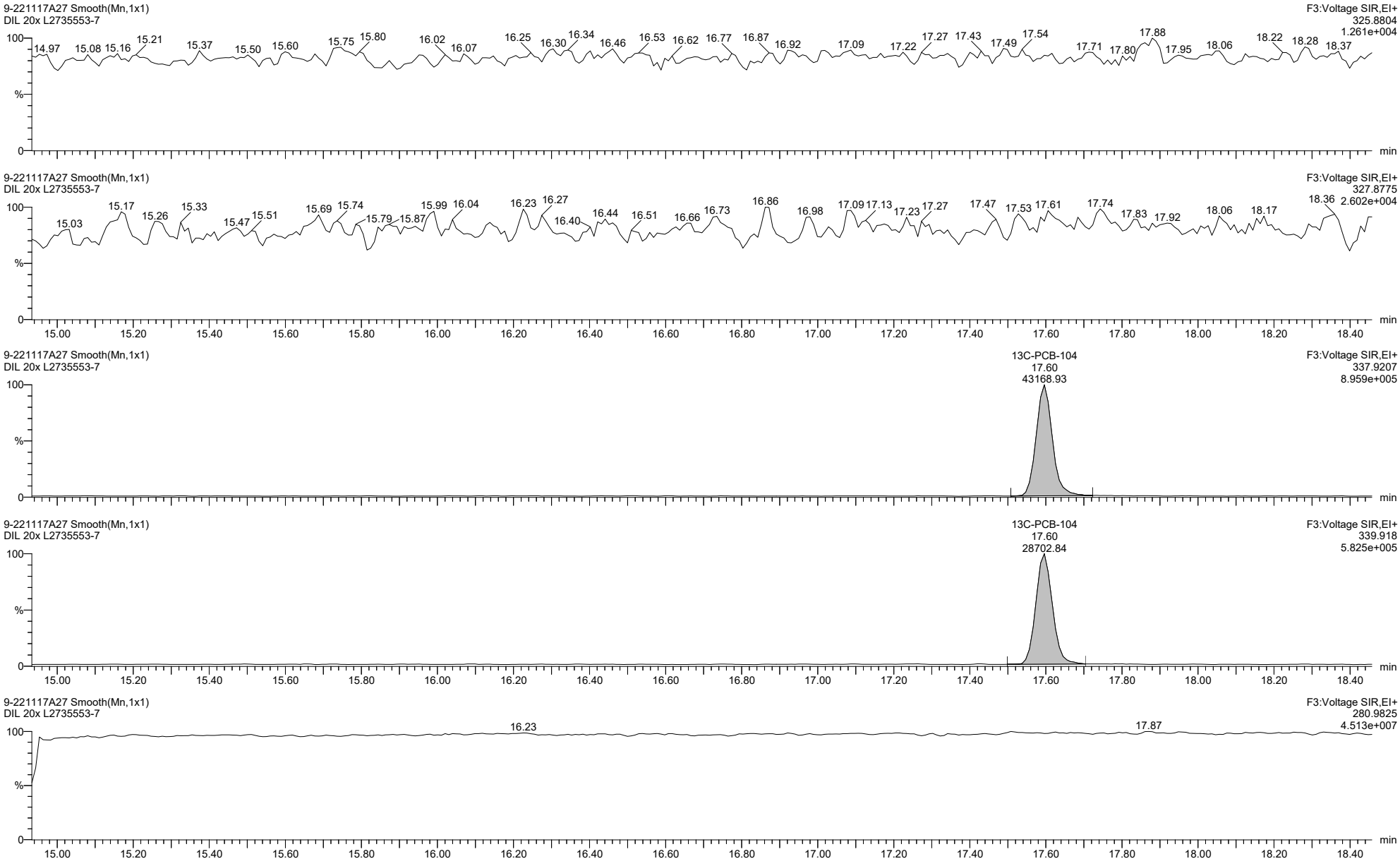
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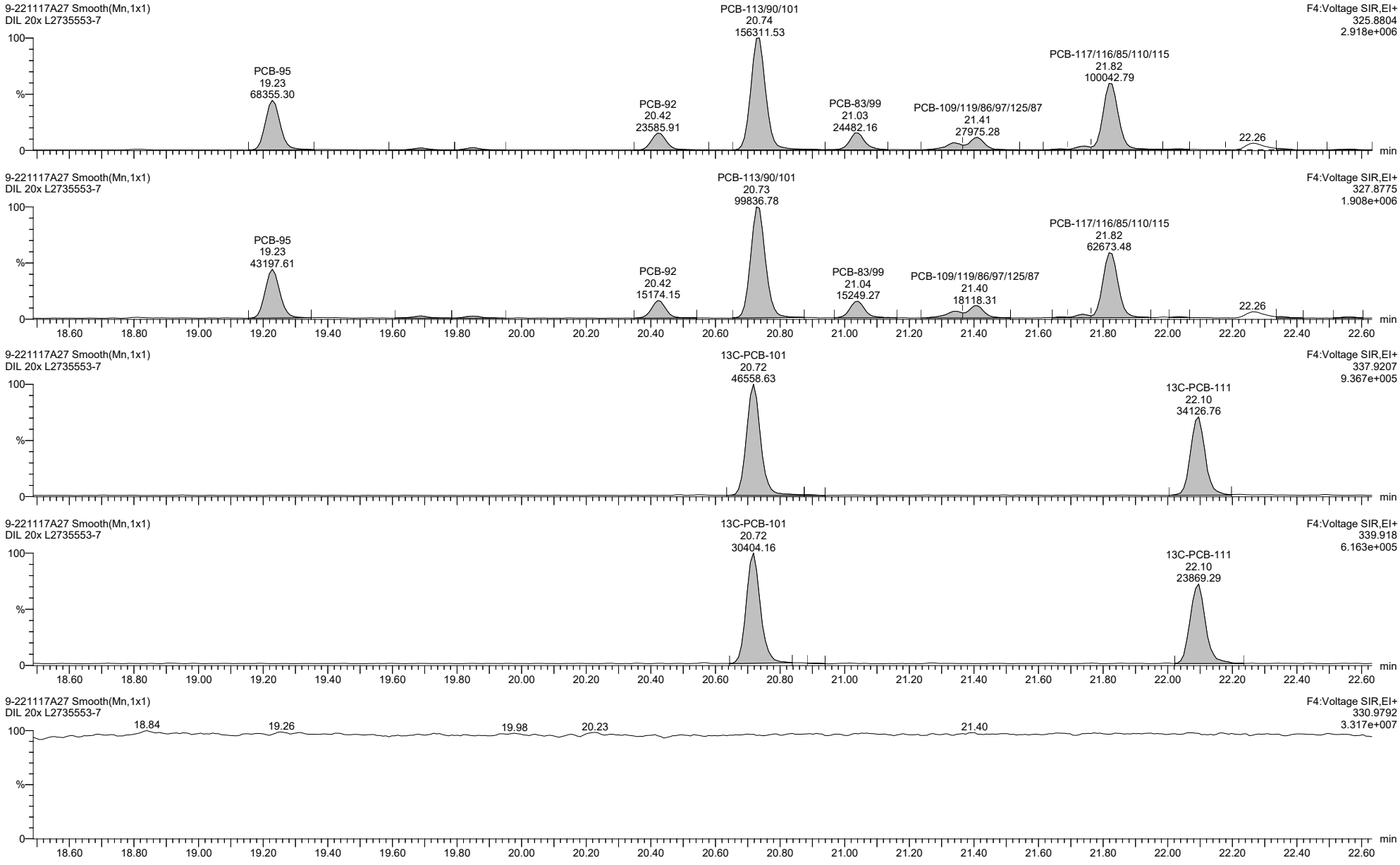


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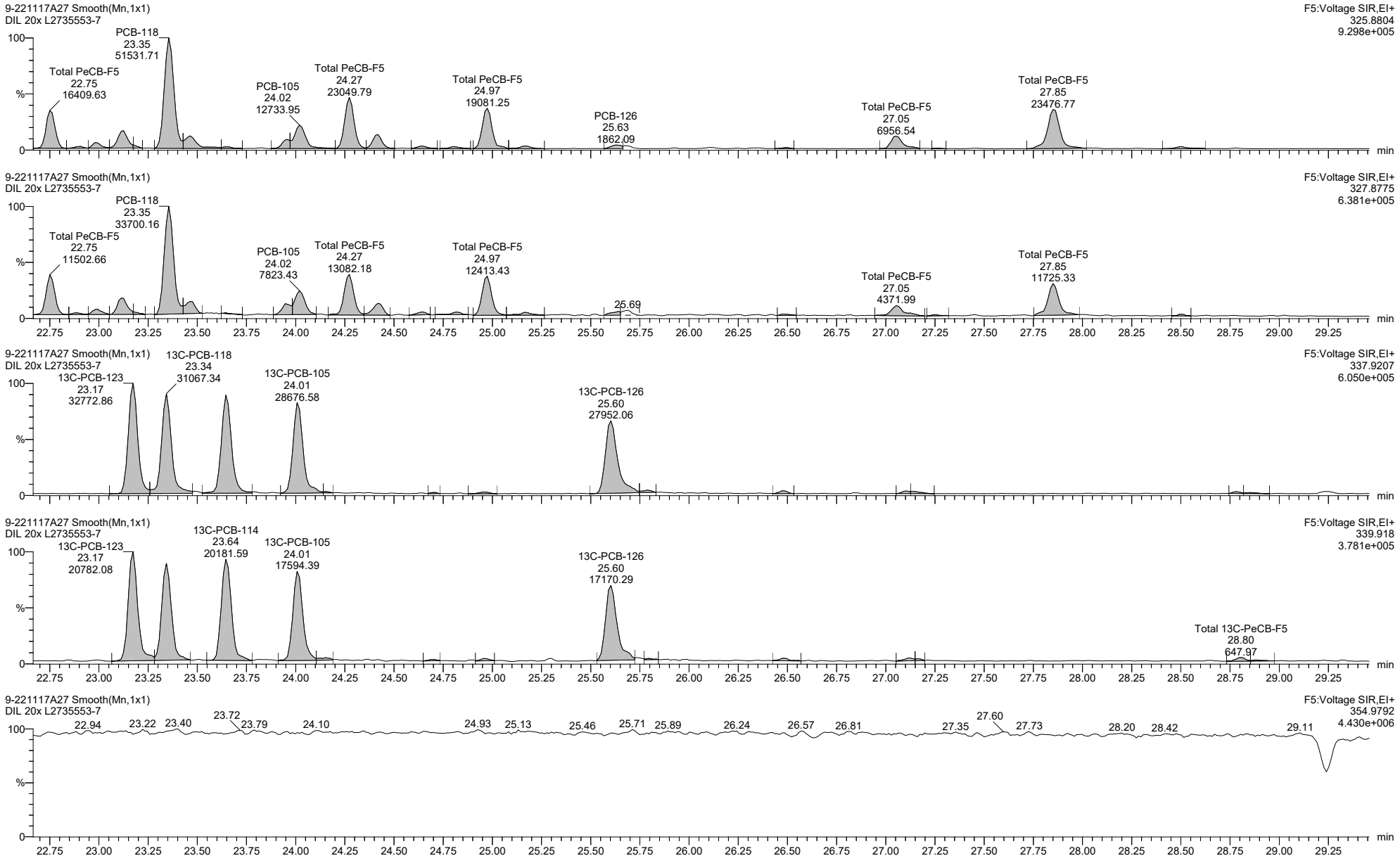


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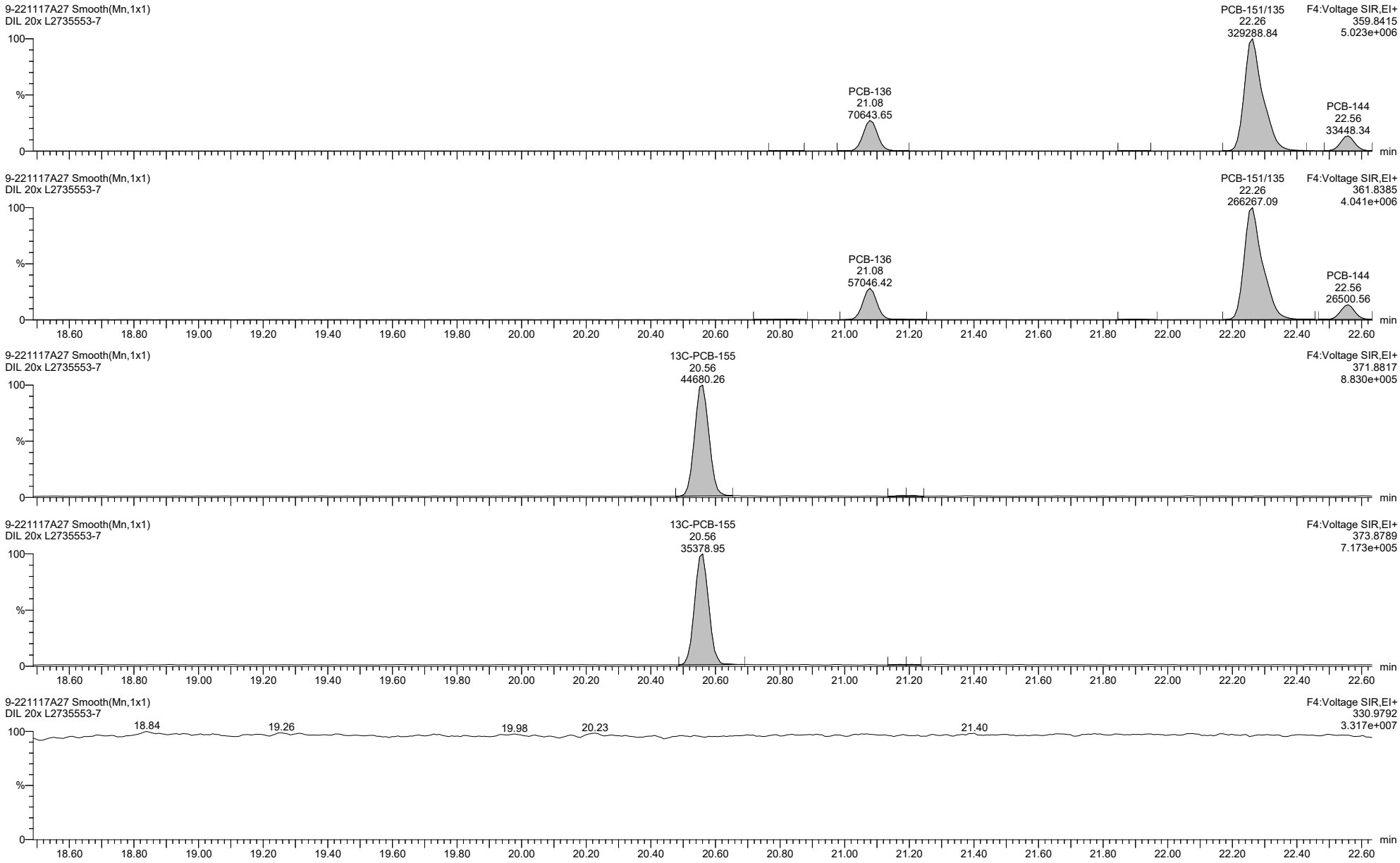
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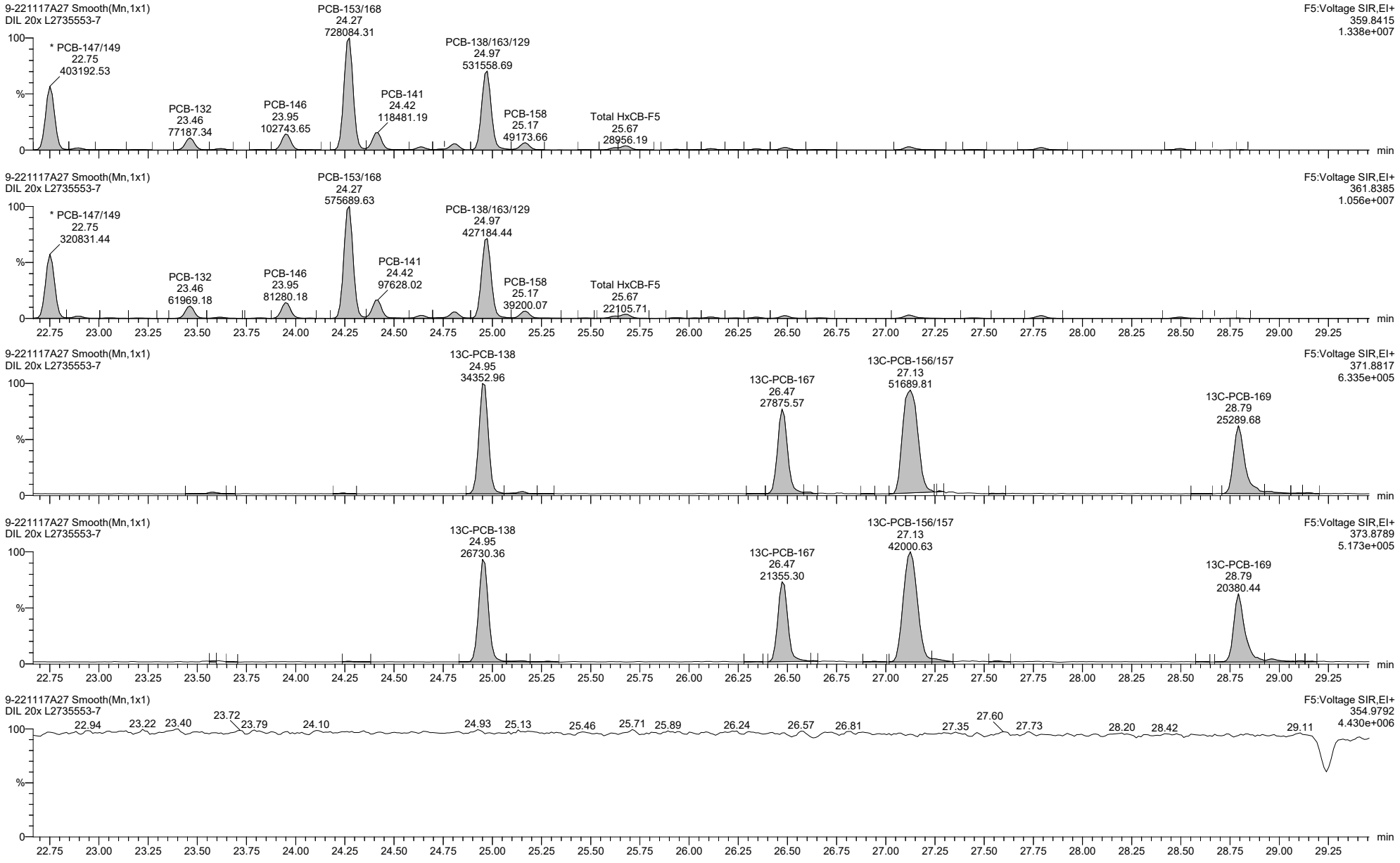


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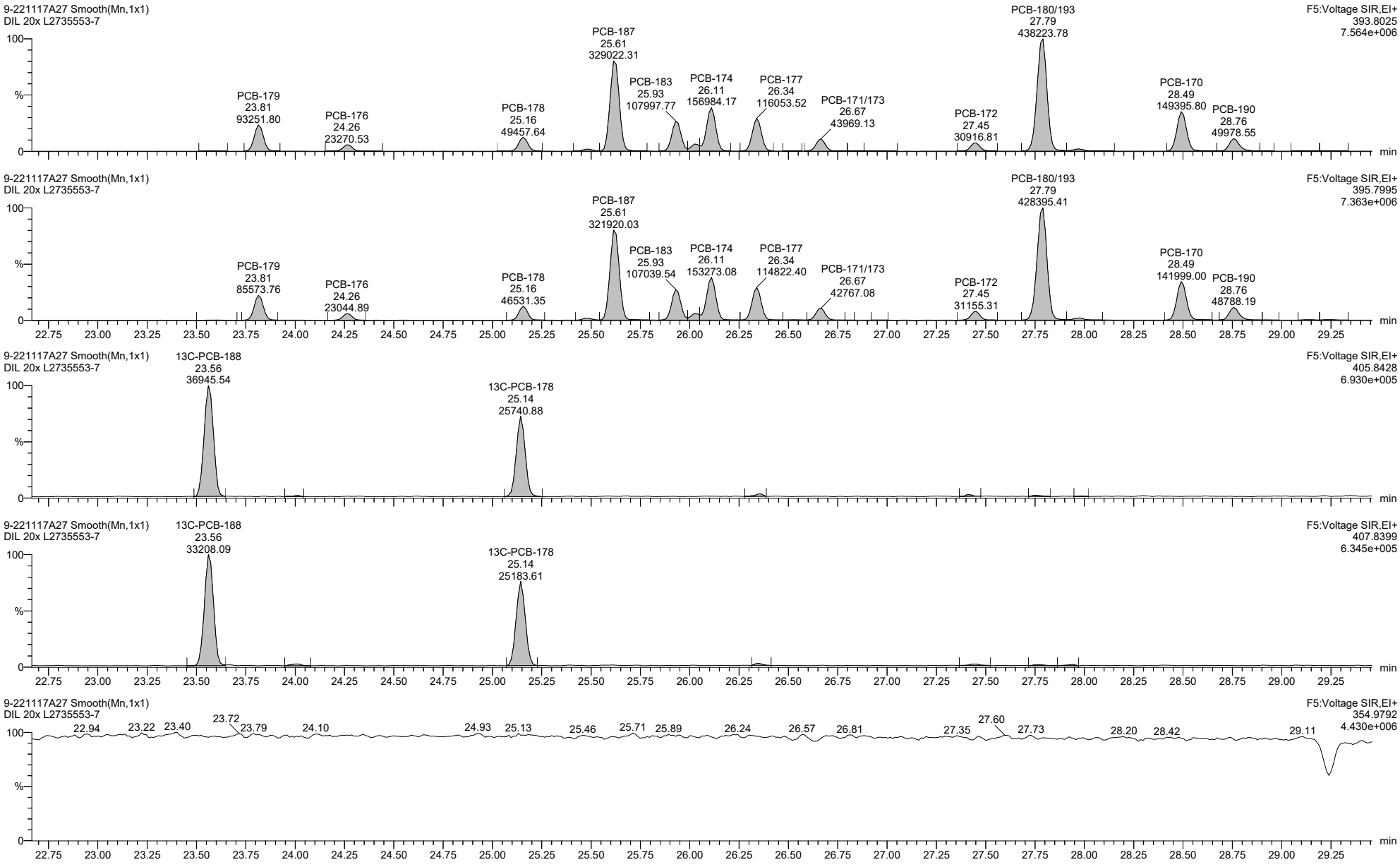
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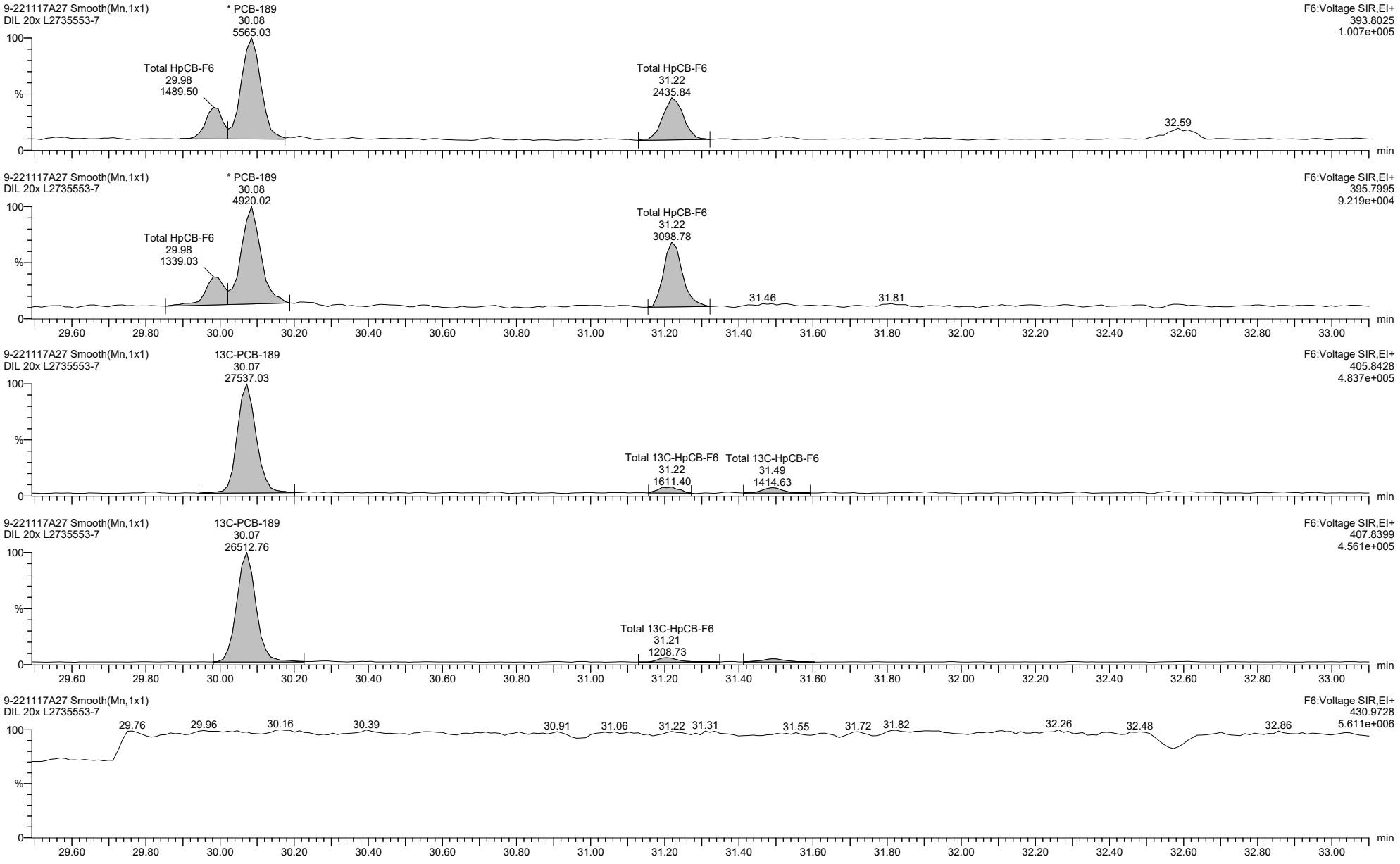


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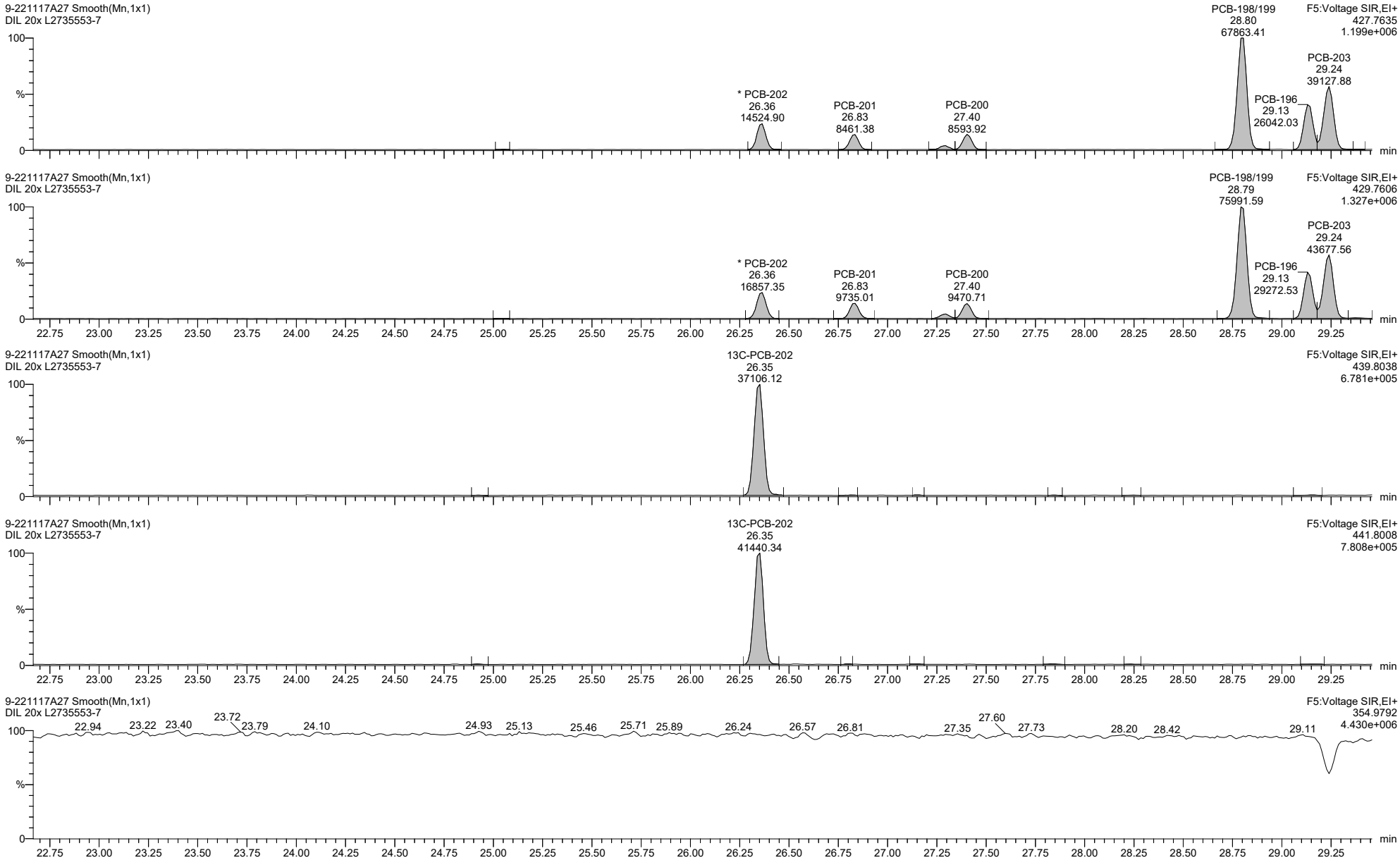
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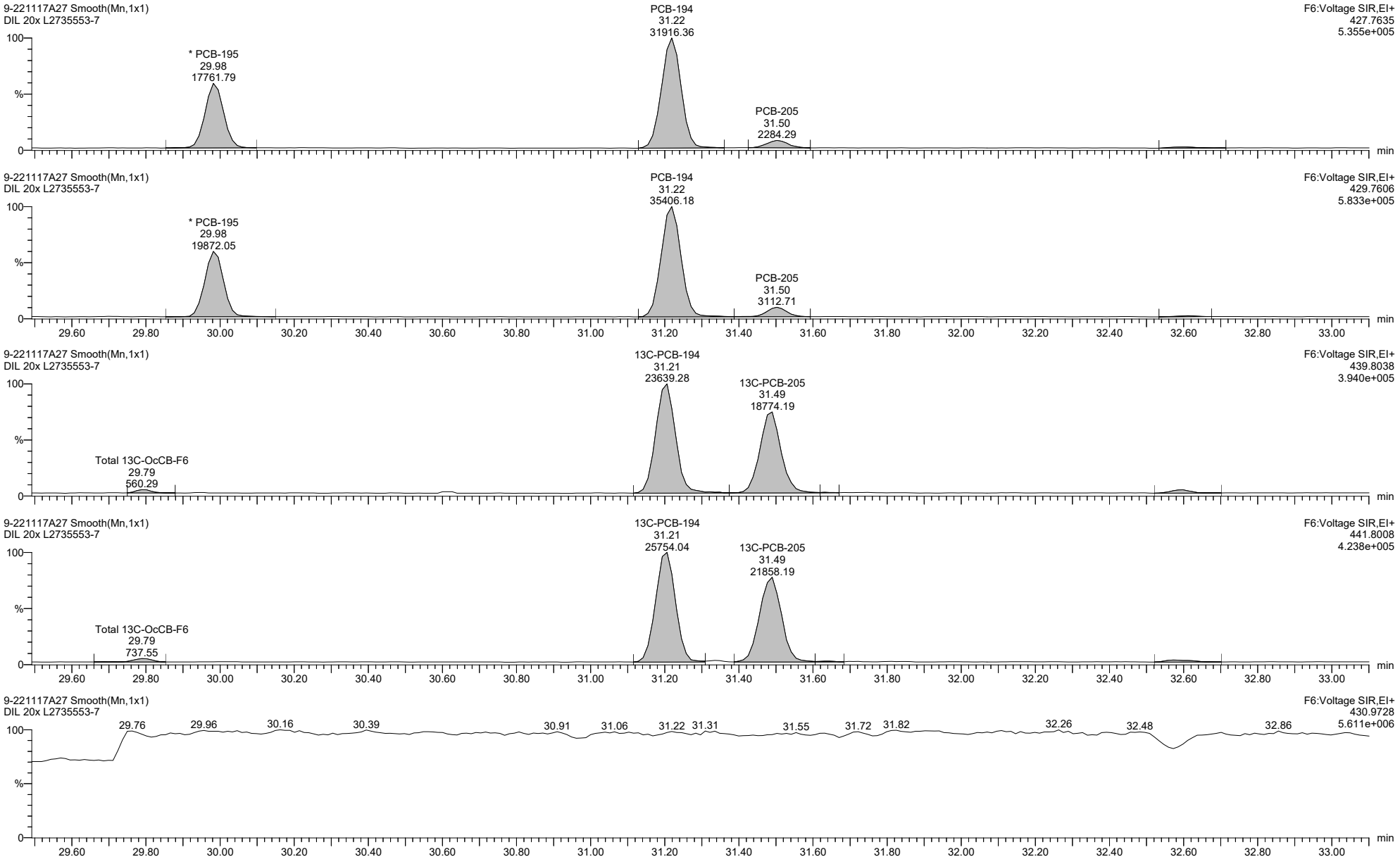


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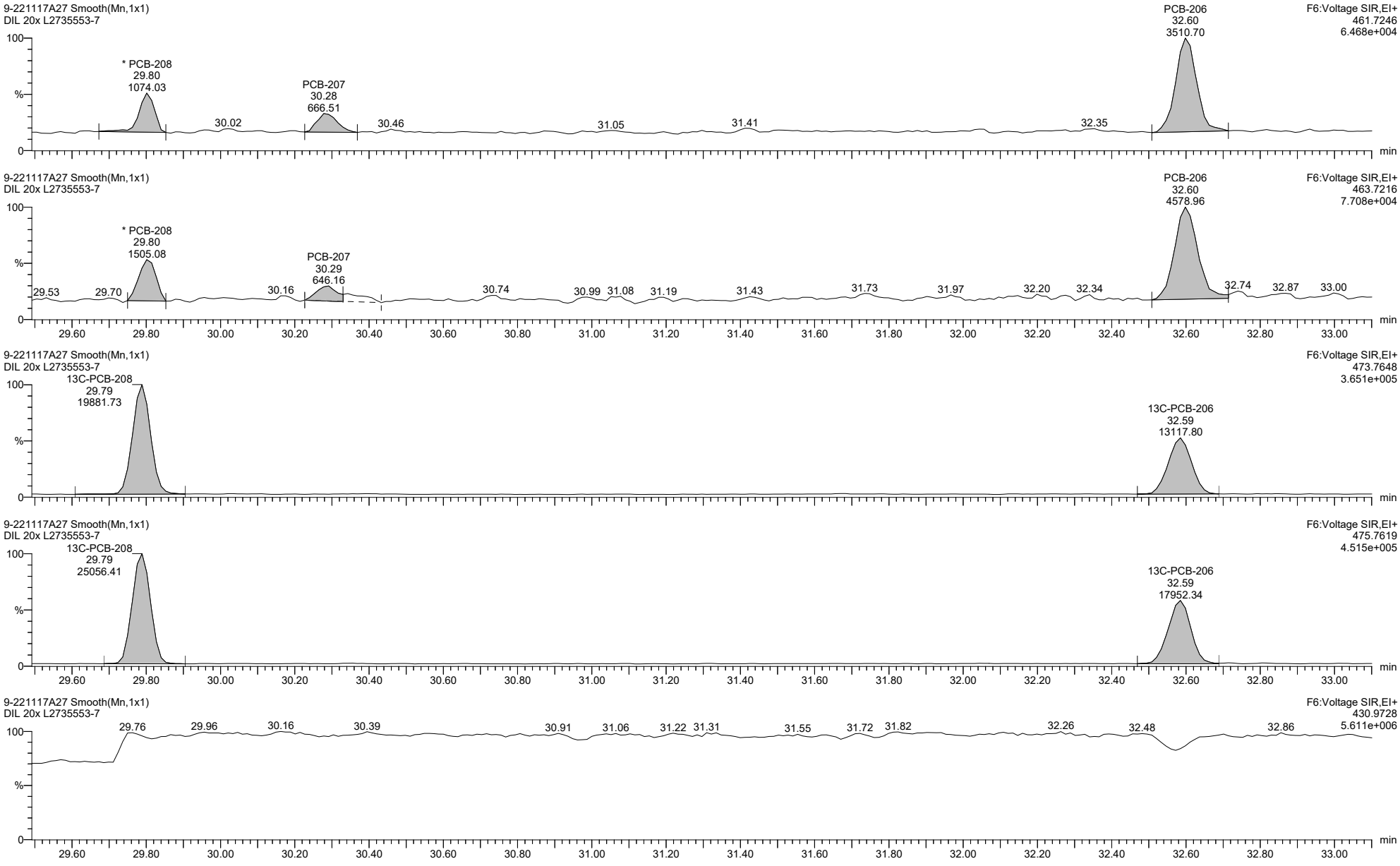


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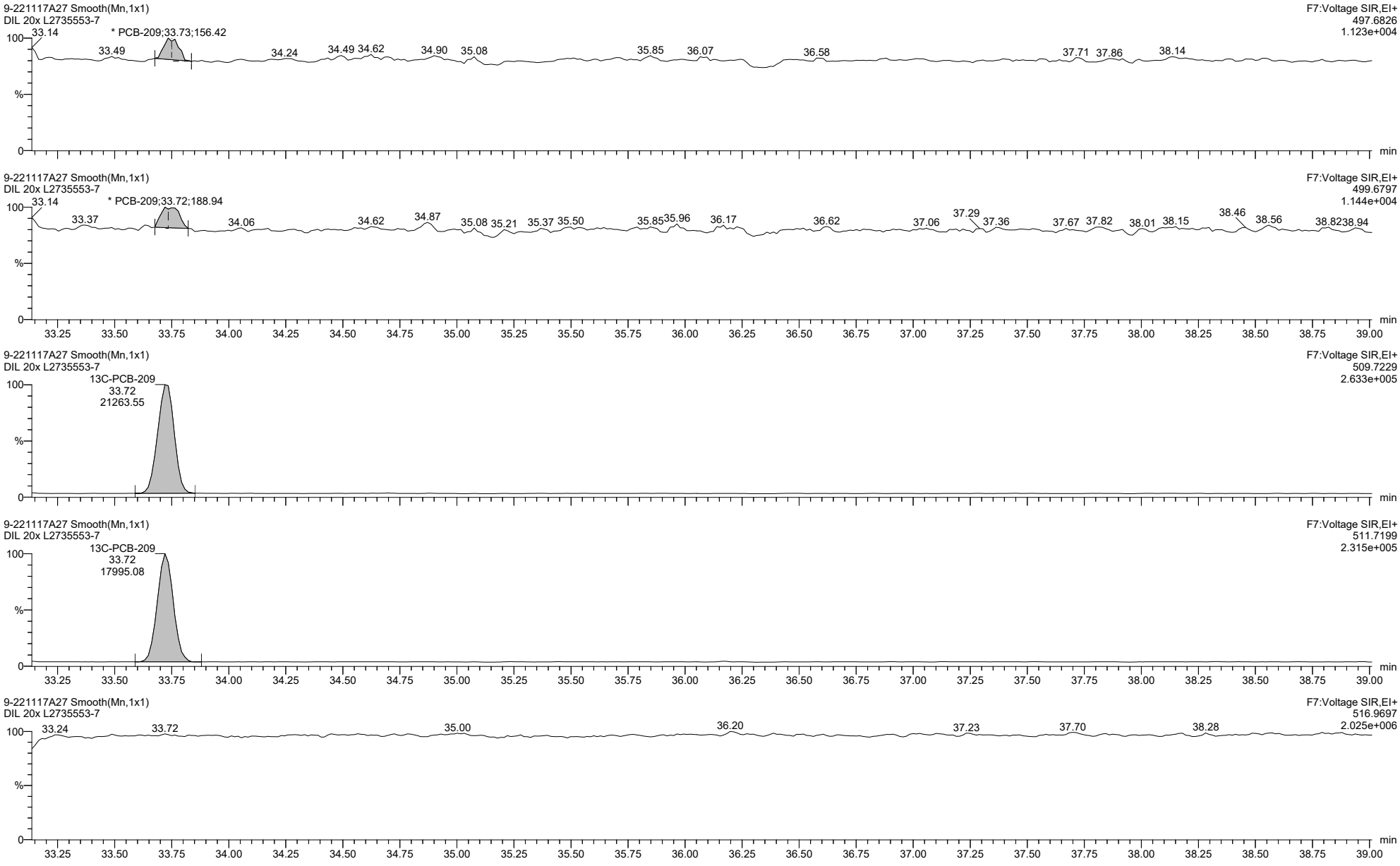


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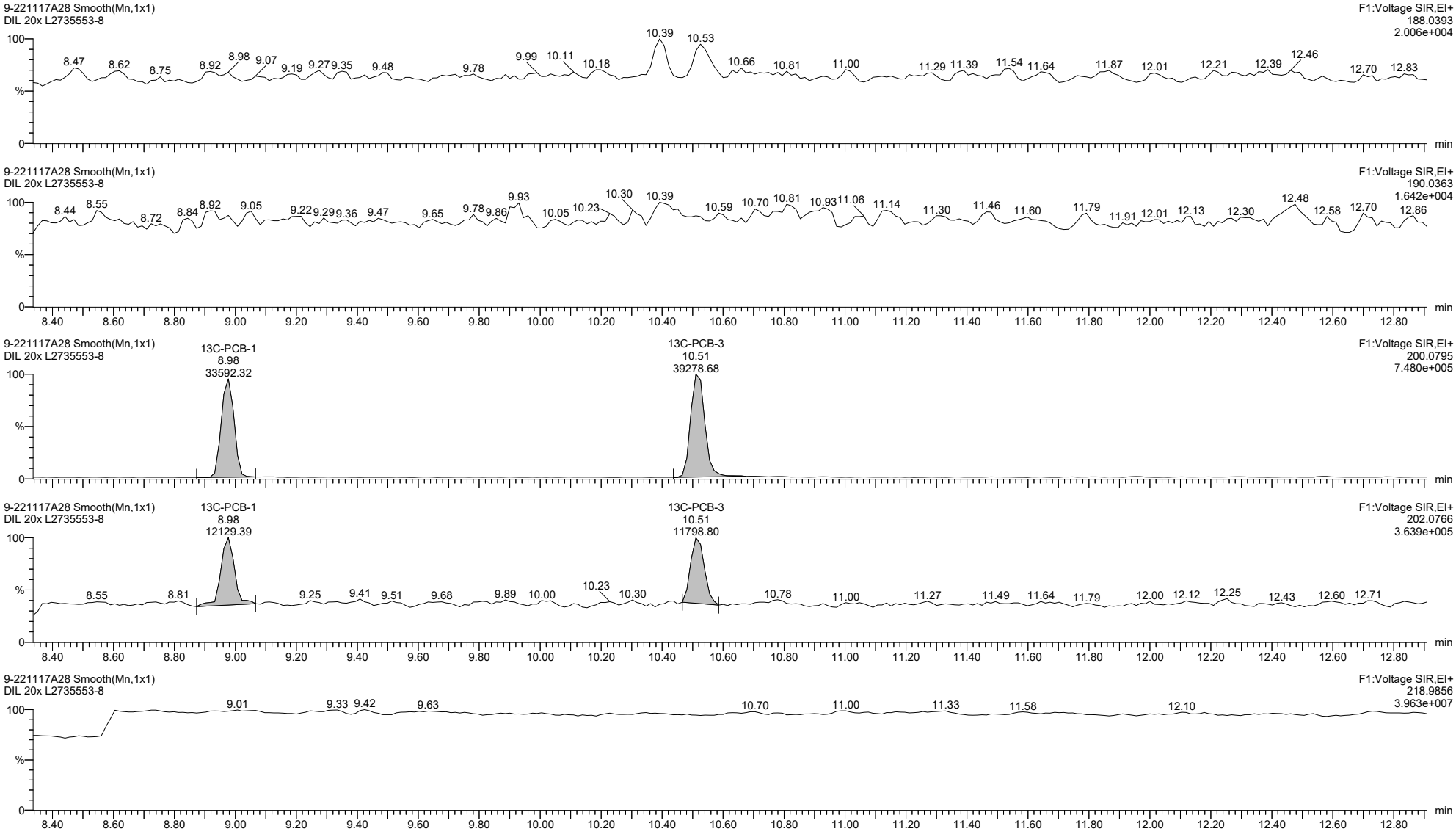
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Calibration: 22 Nov 2022 16:07:50

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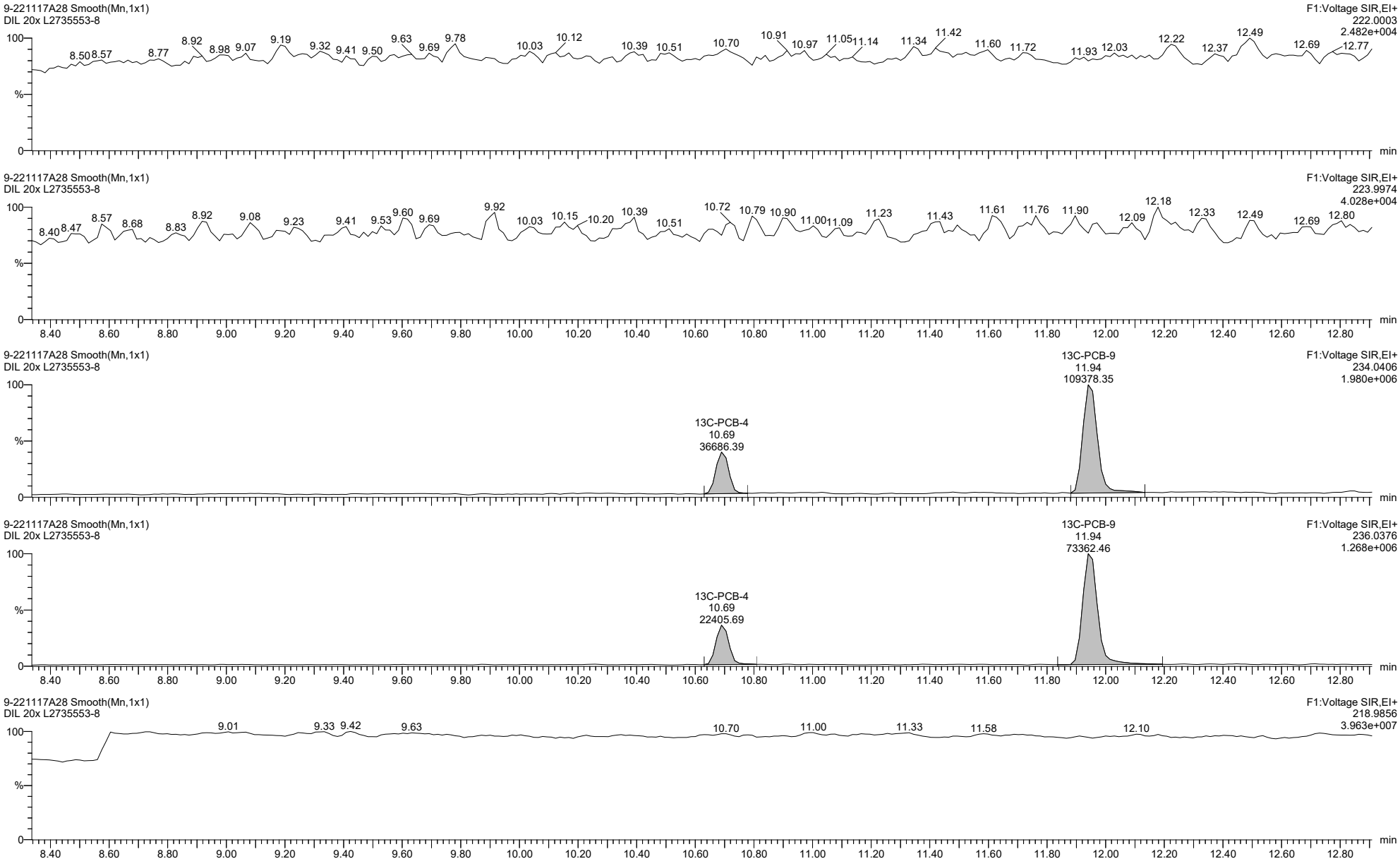


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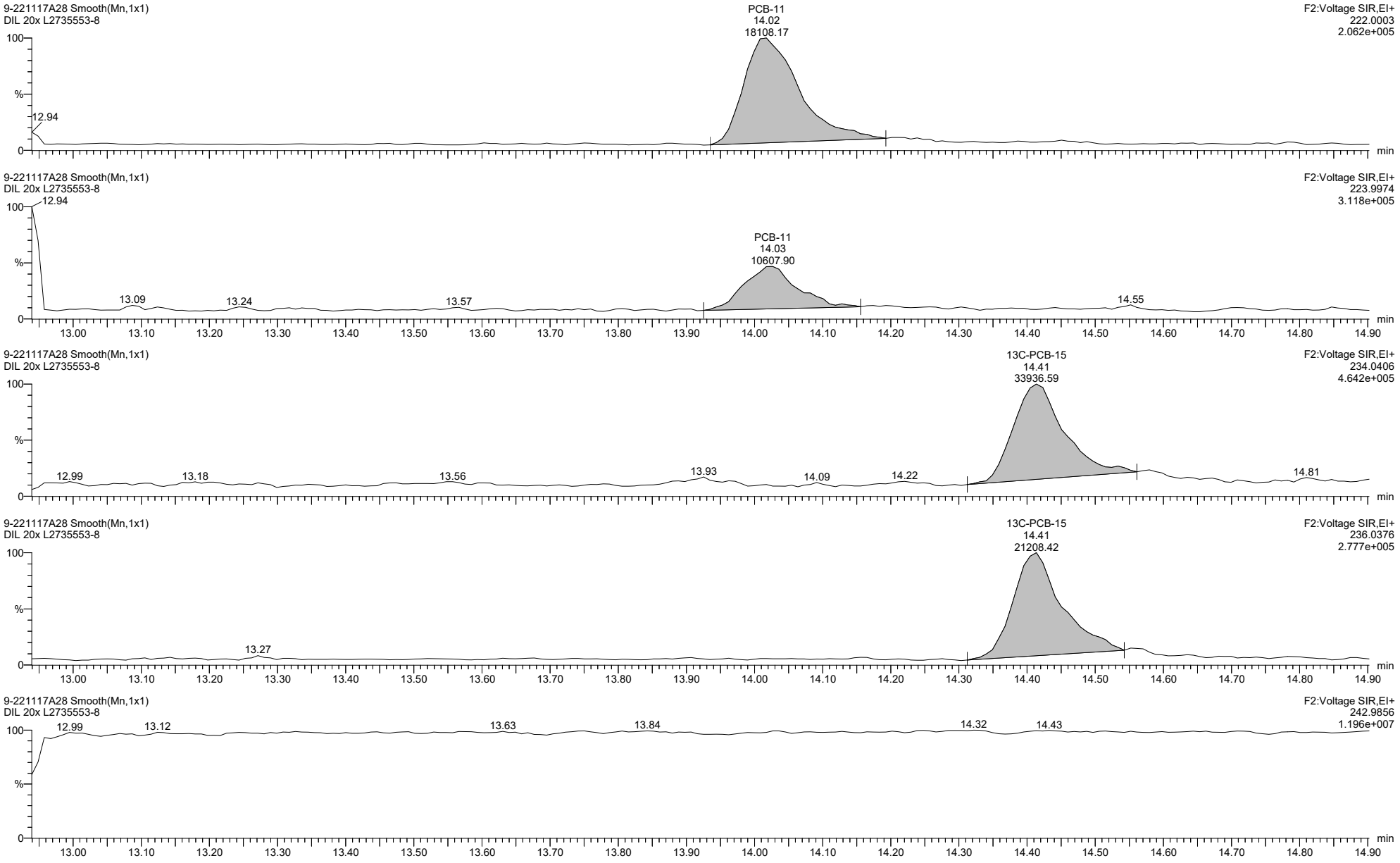


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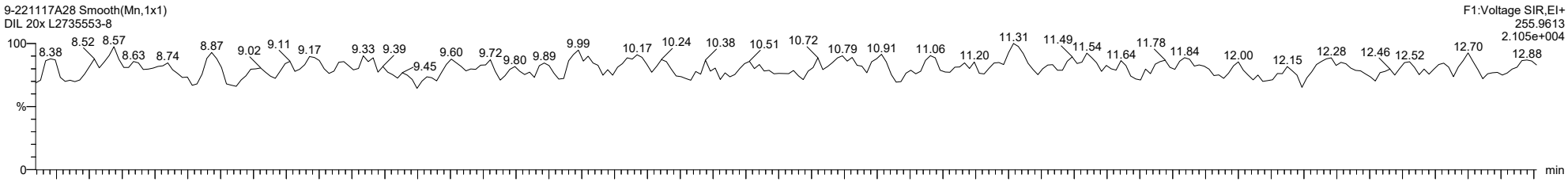
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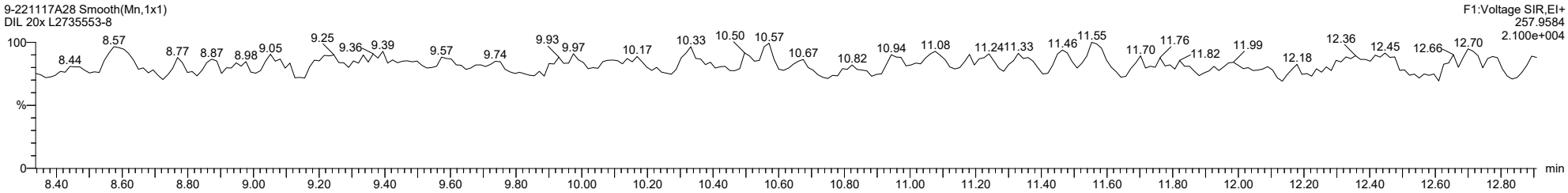


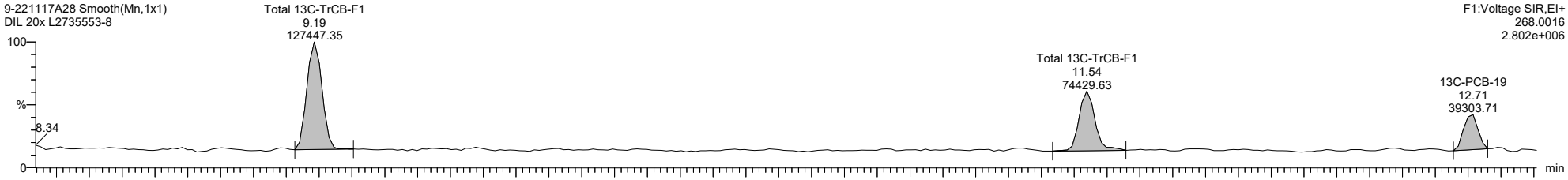
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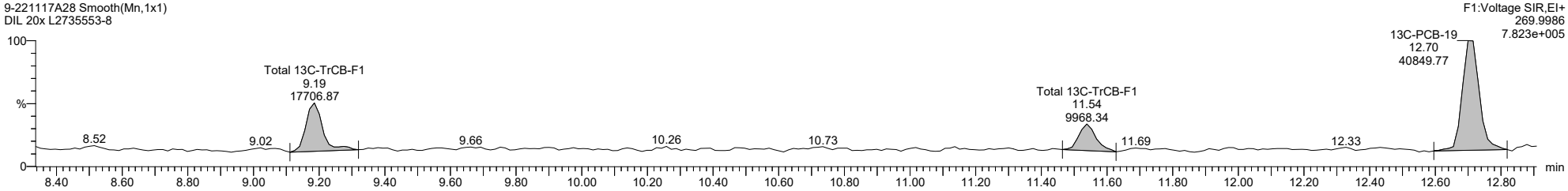
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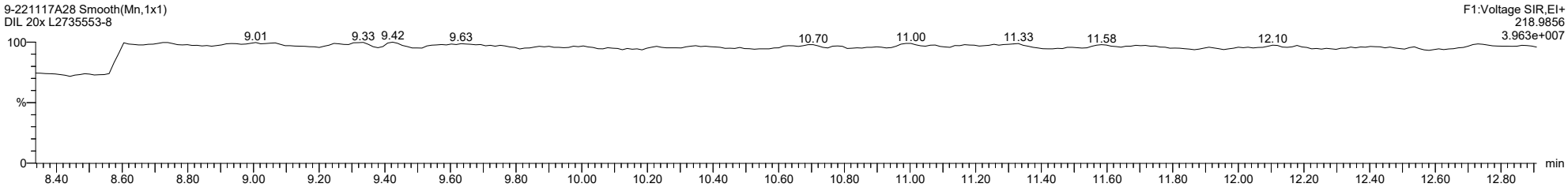
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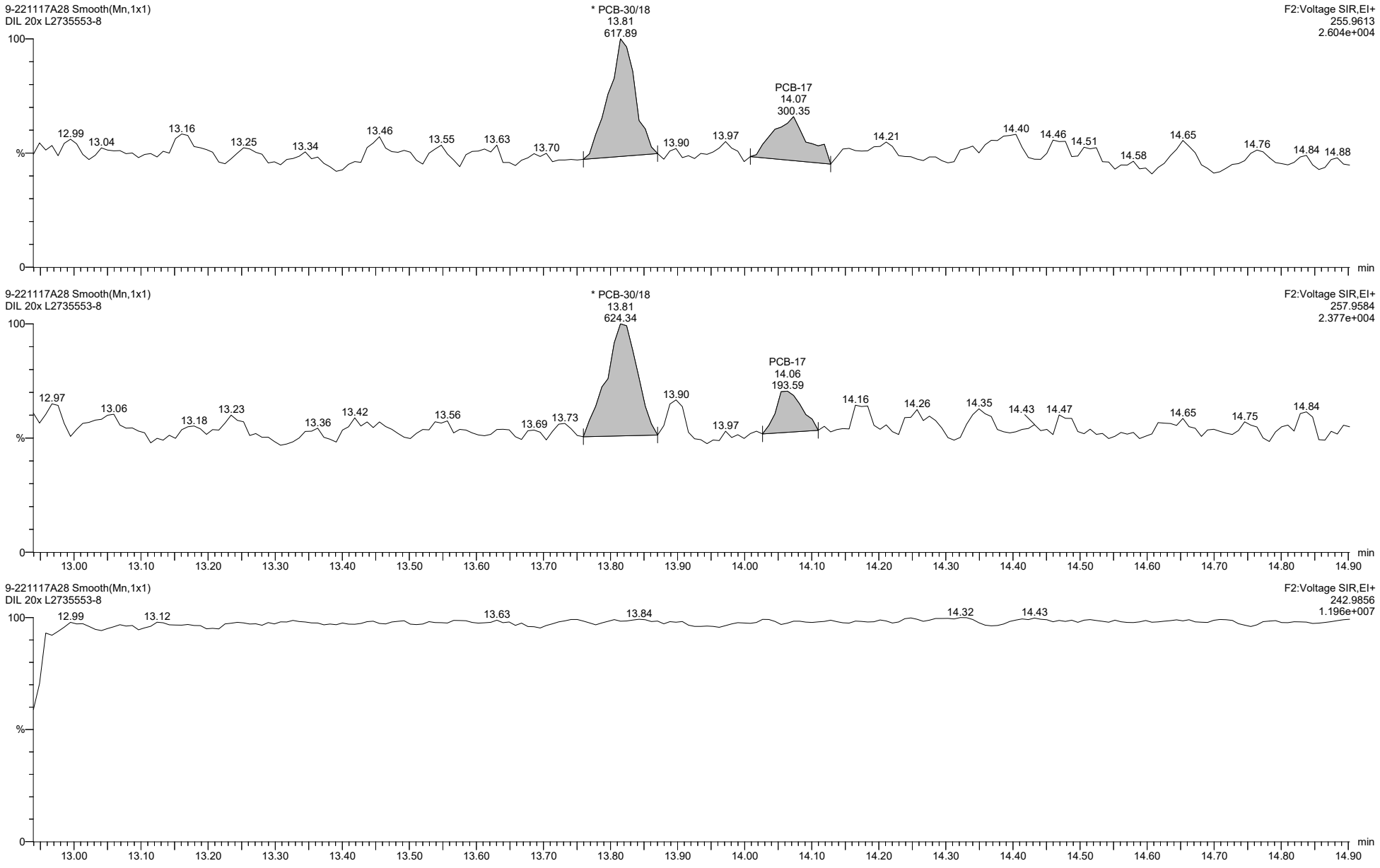


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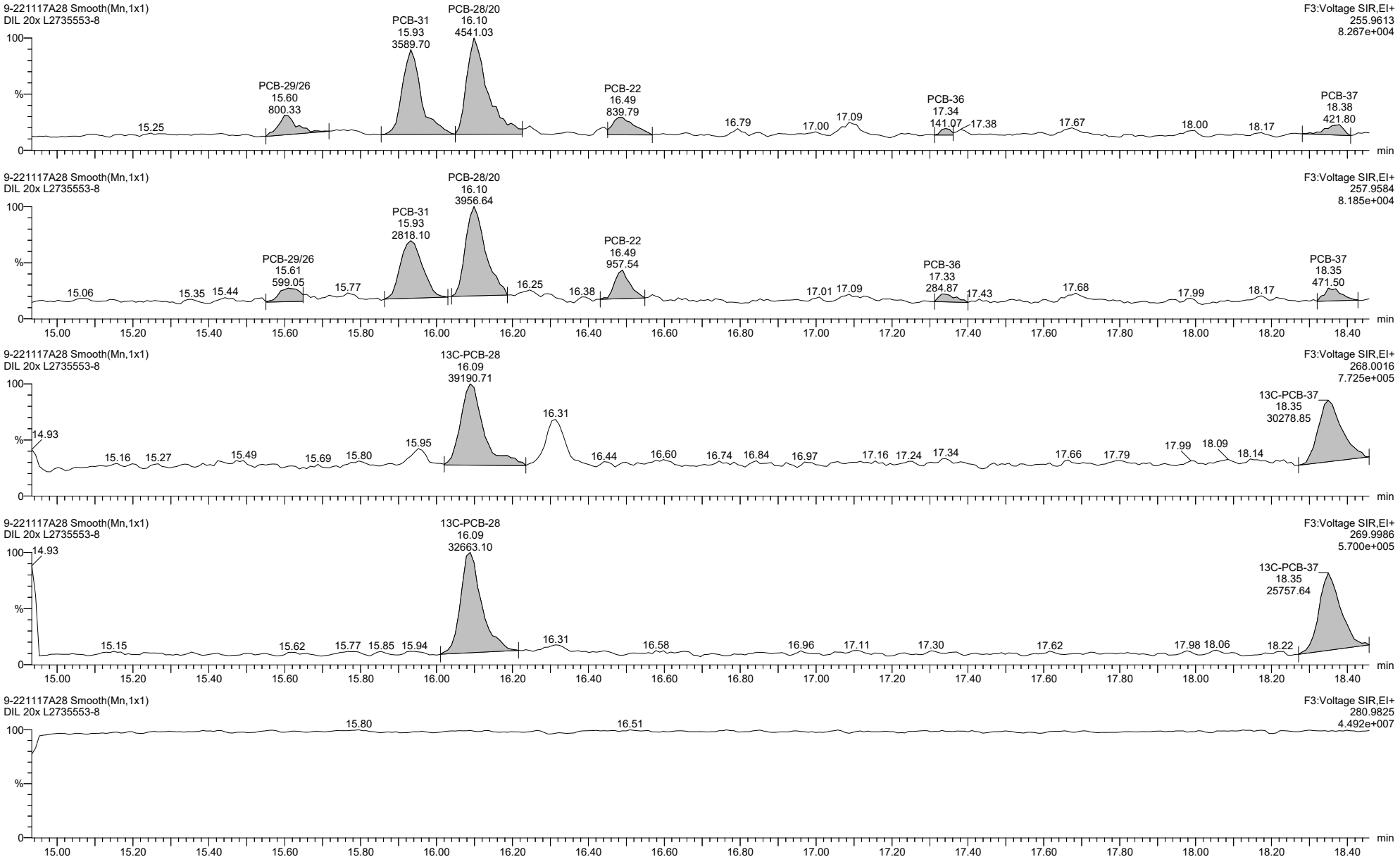
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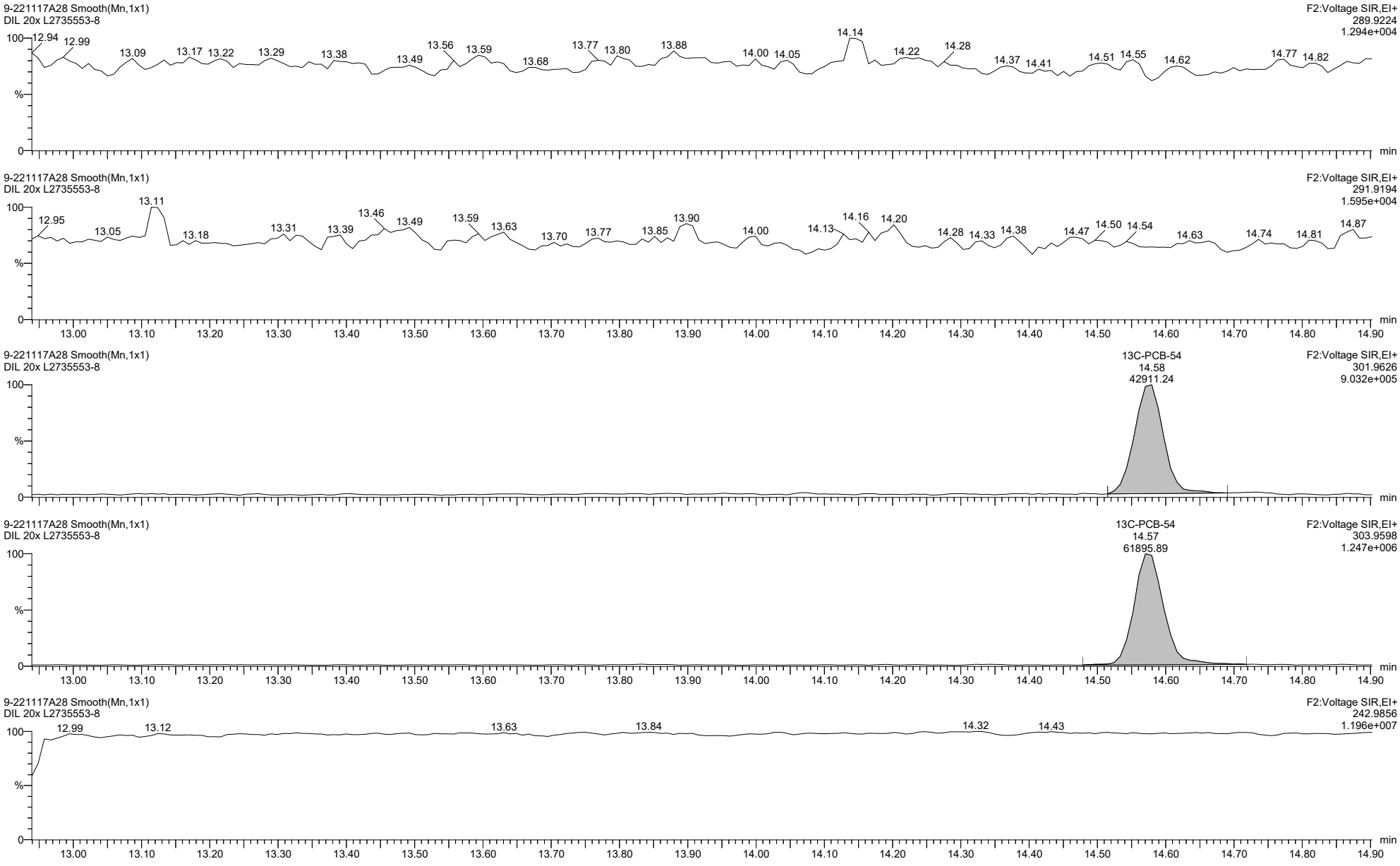


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

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Printed: Wednesday, November 23, 2022 11:42:36 Eastern Standard Time

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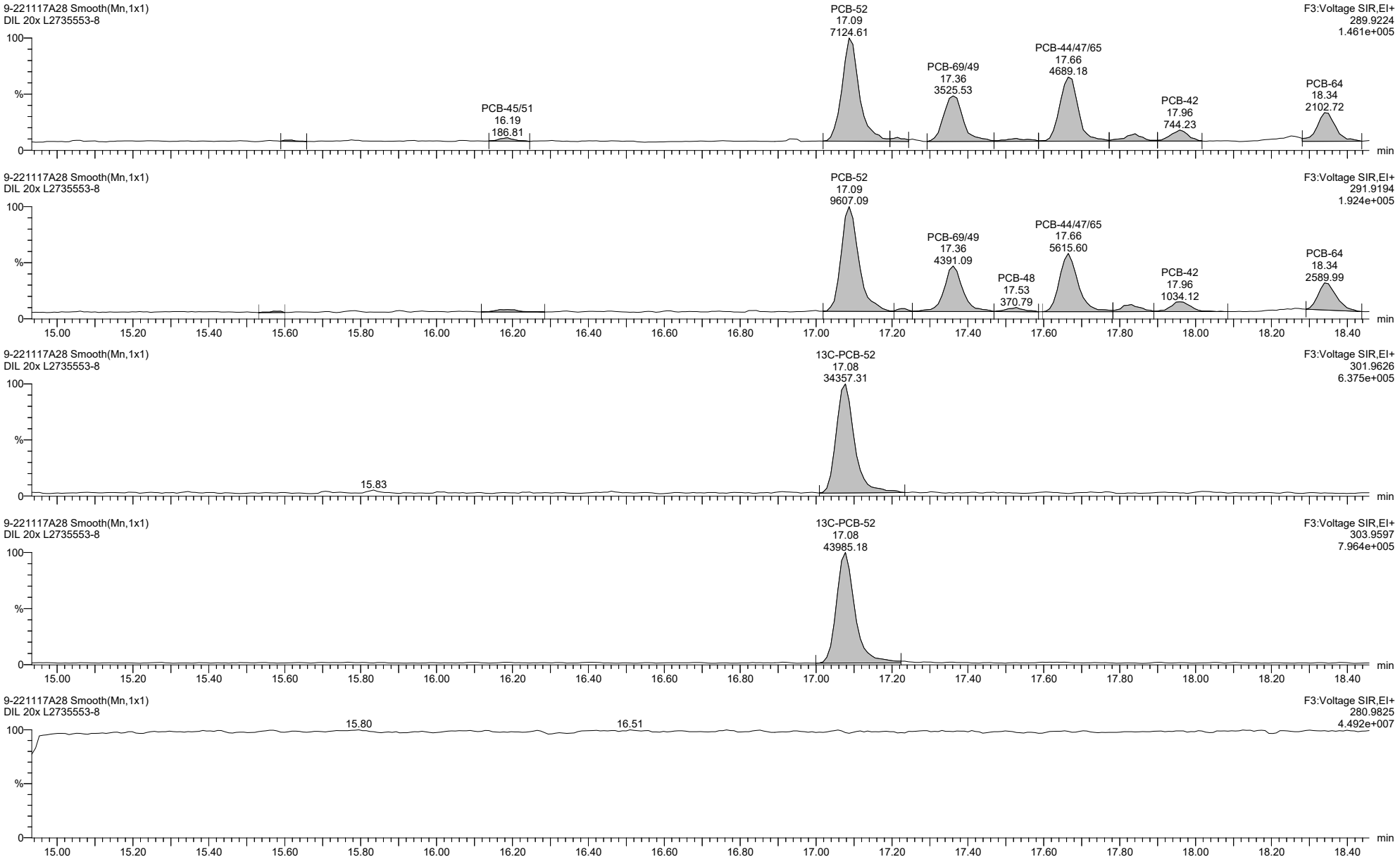


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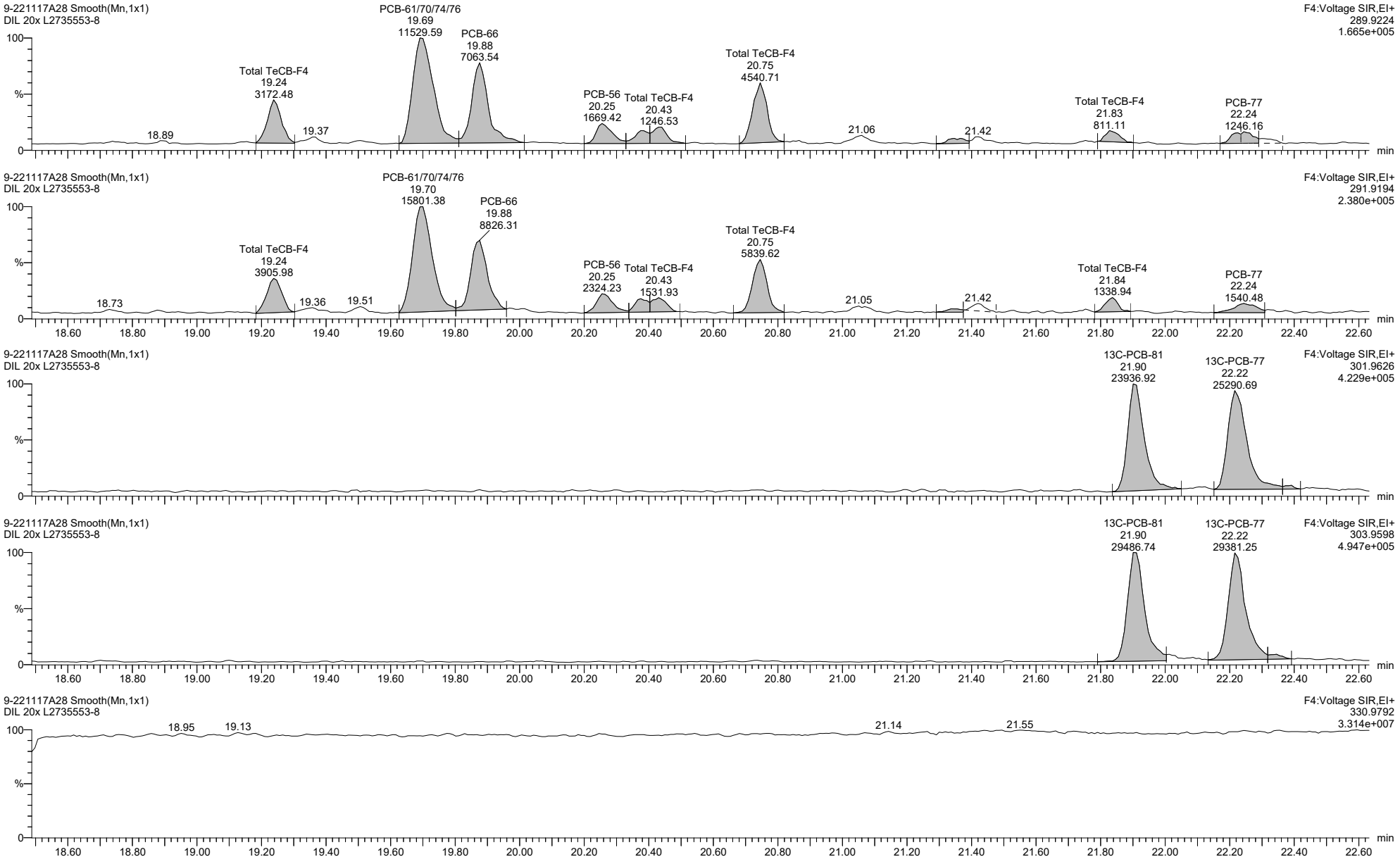


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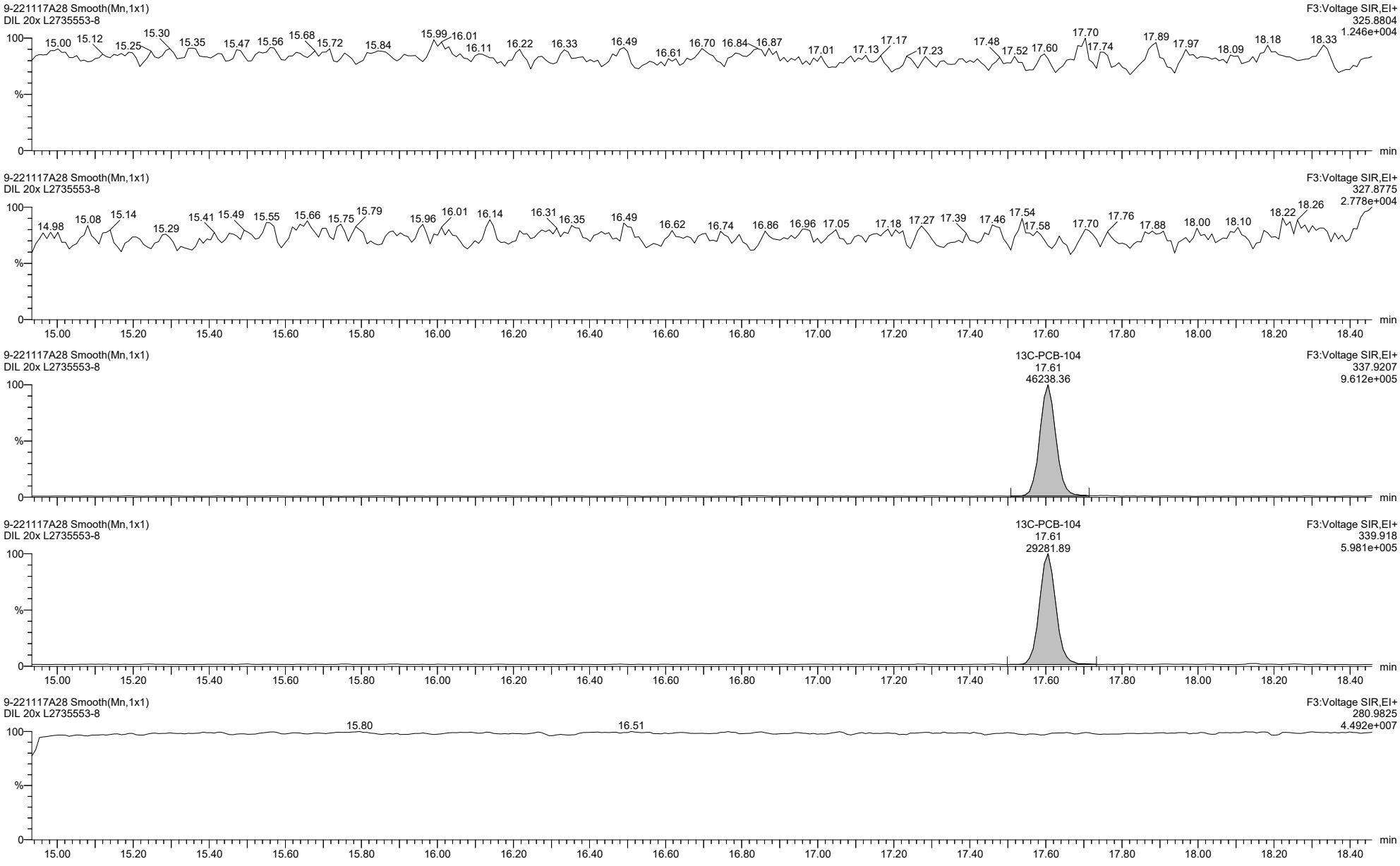


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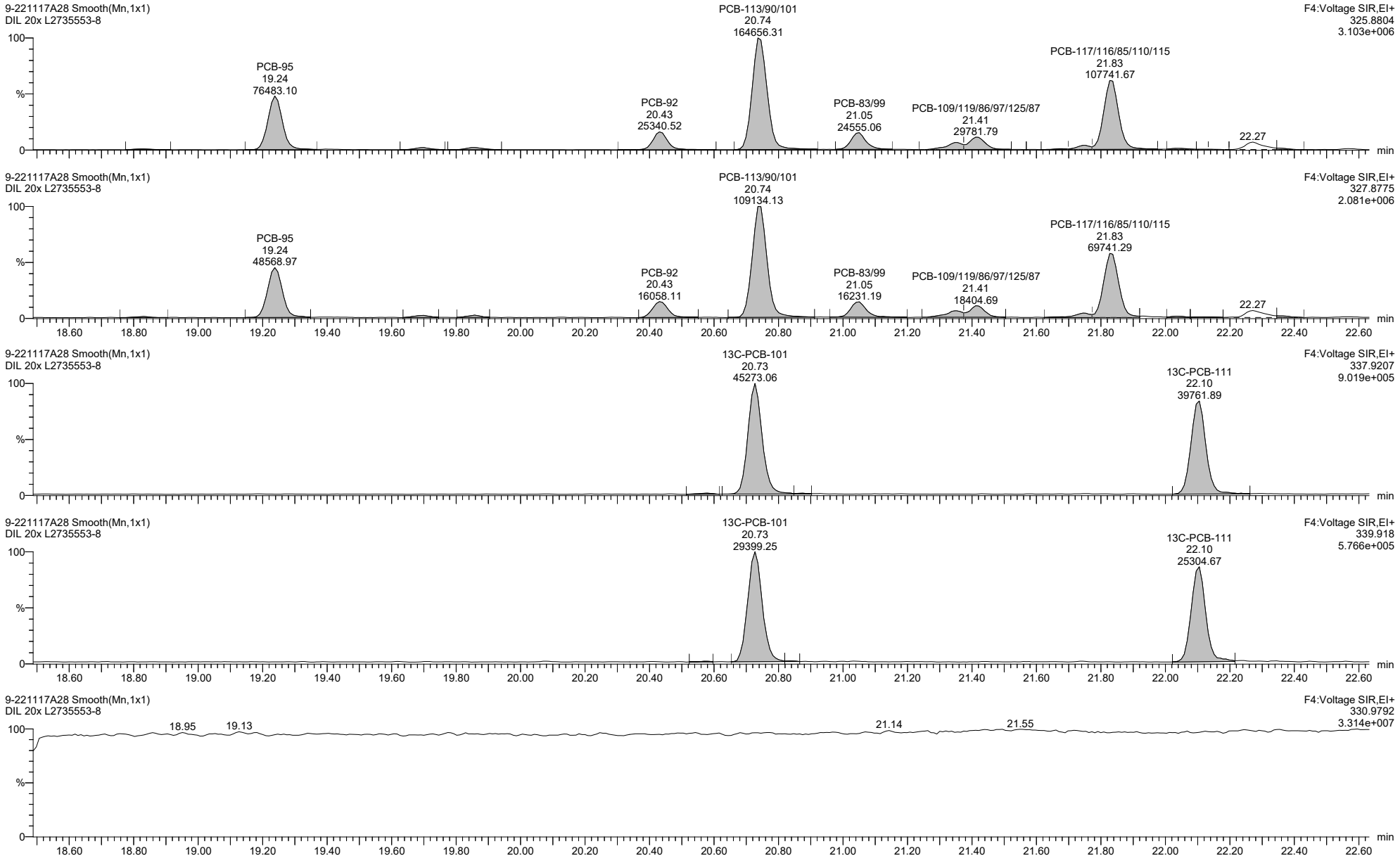


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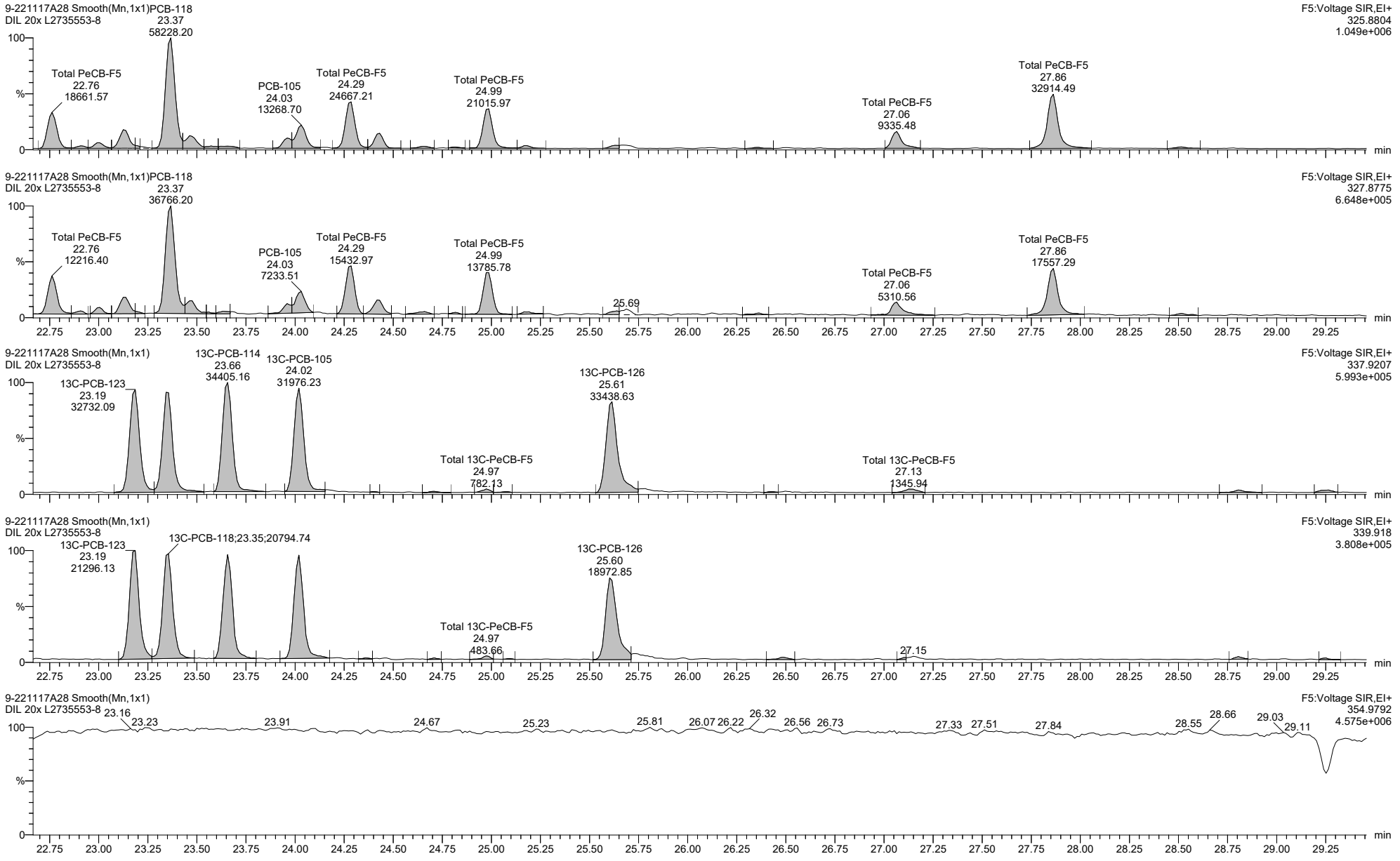


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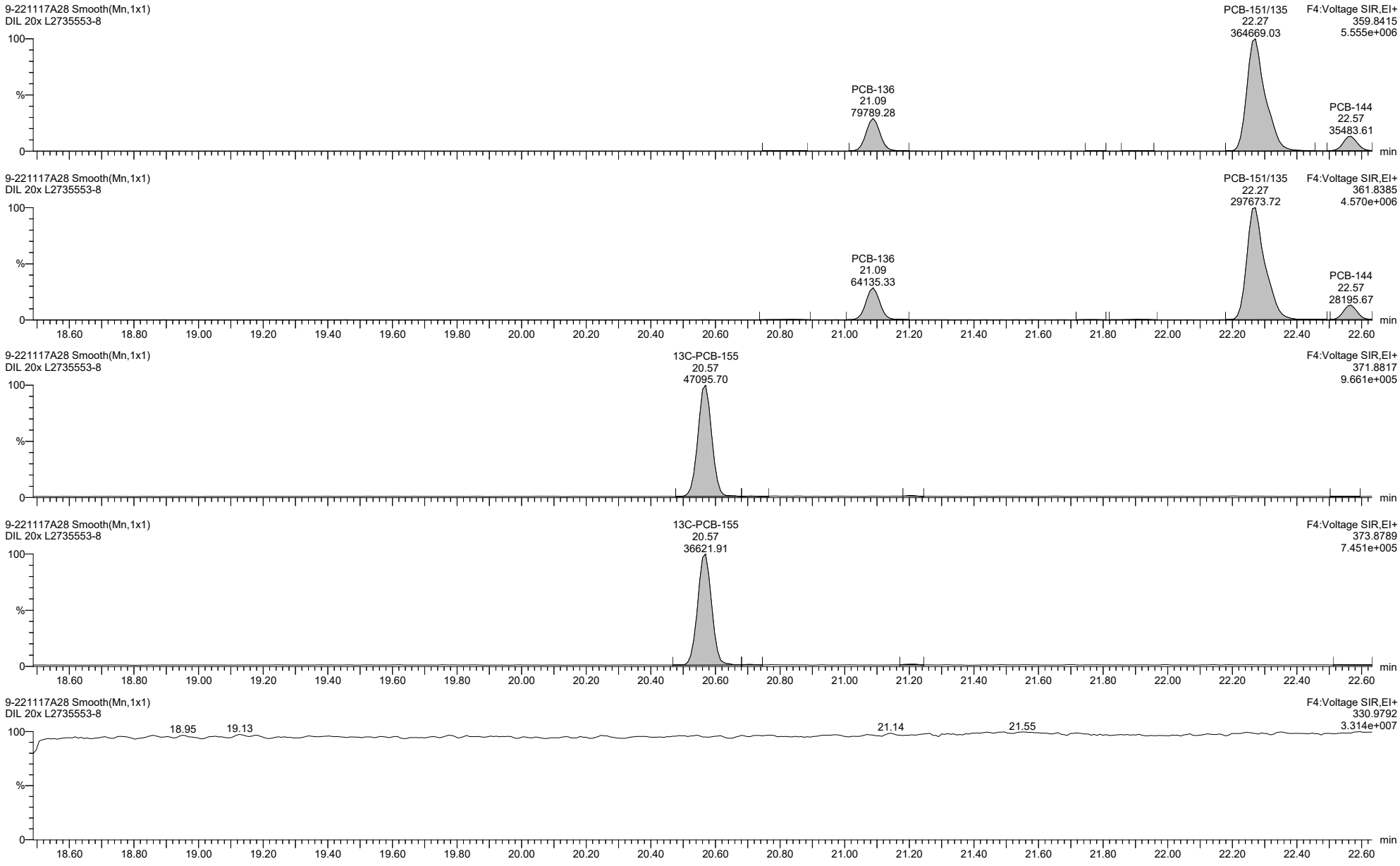


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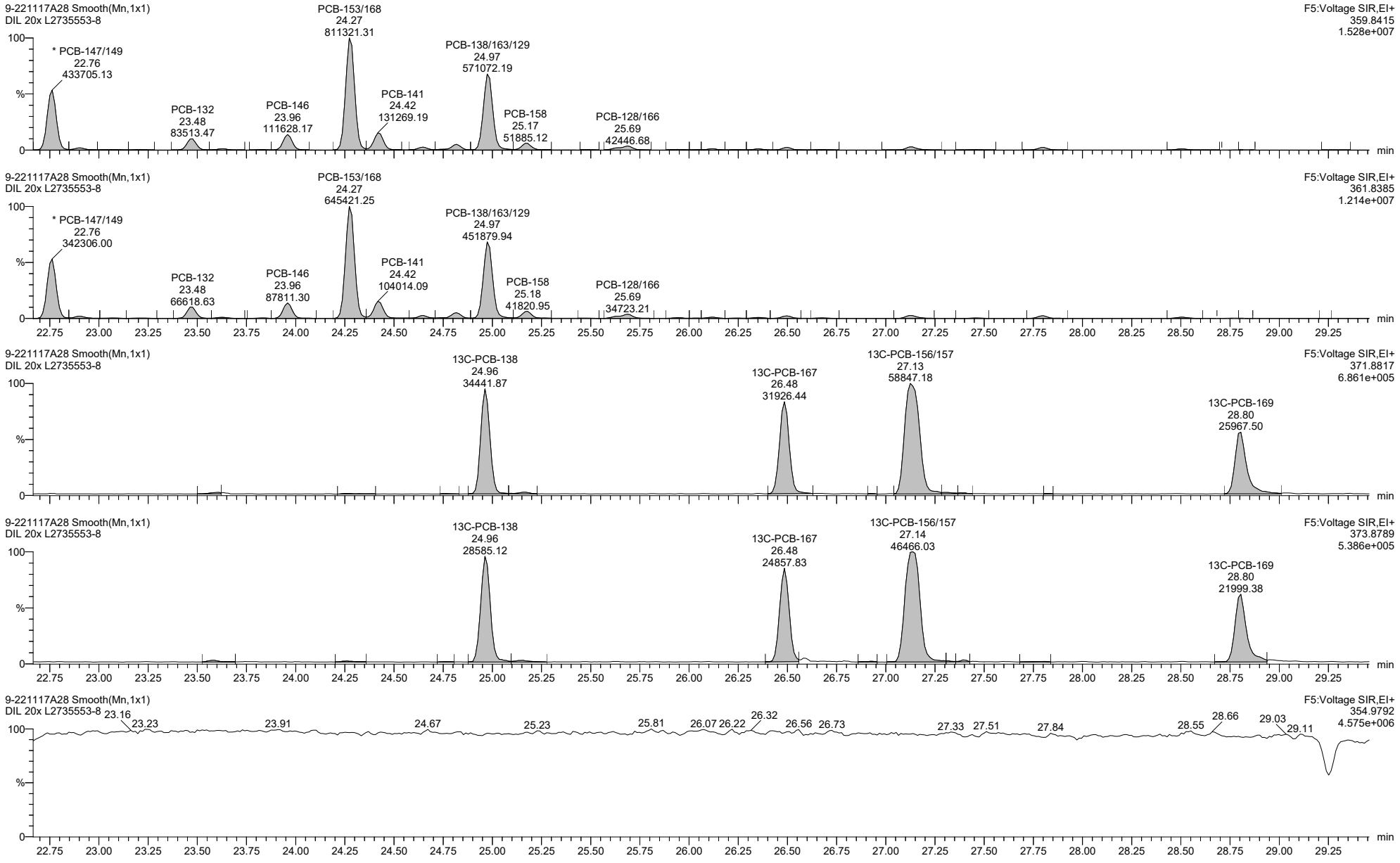
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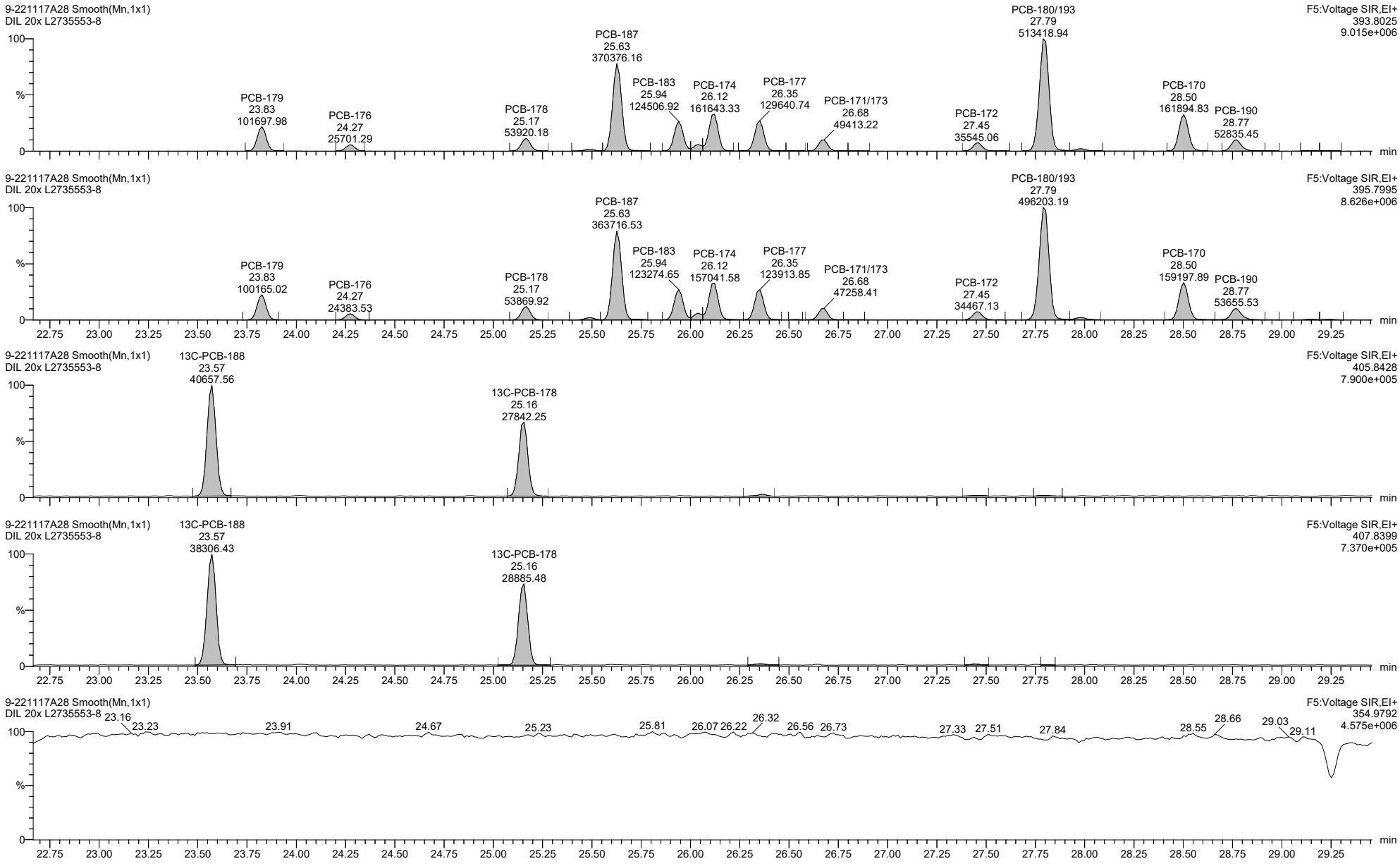
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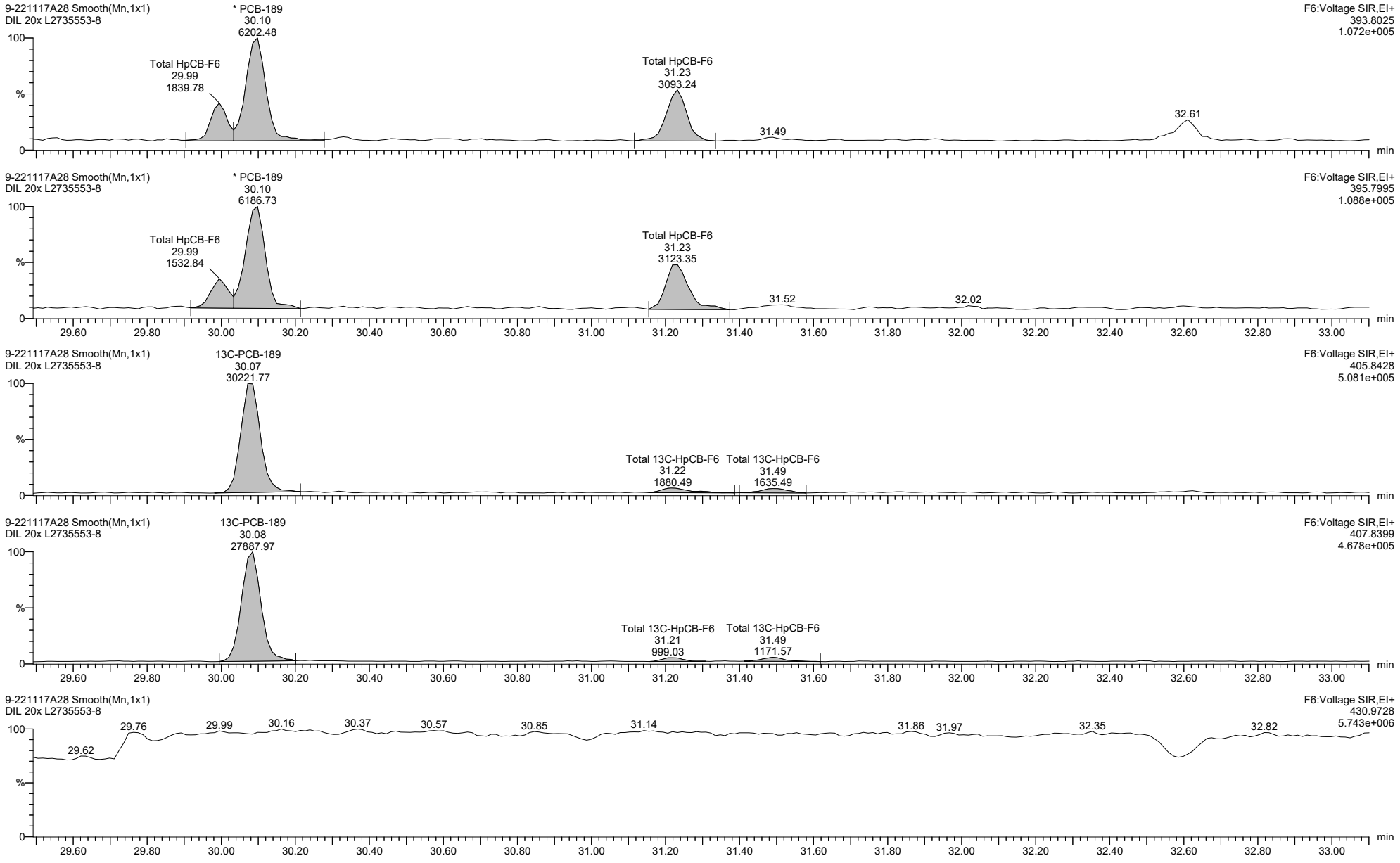
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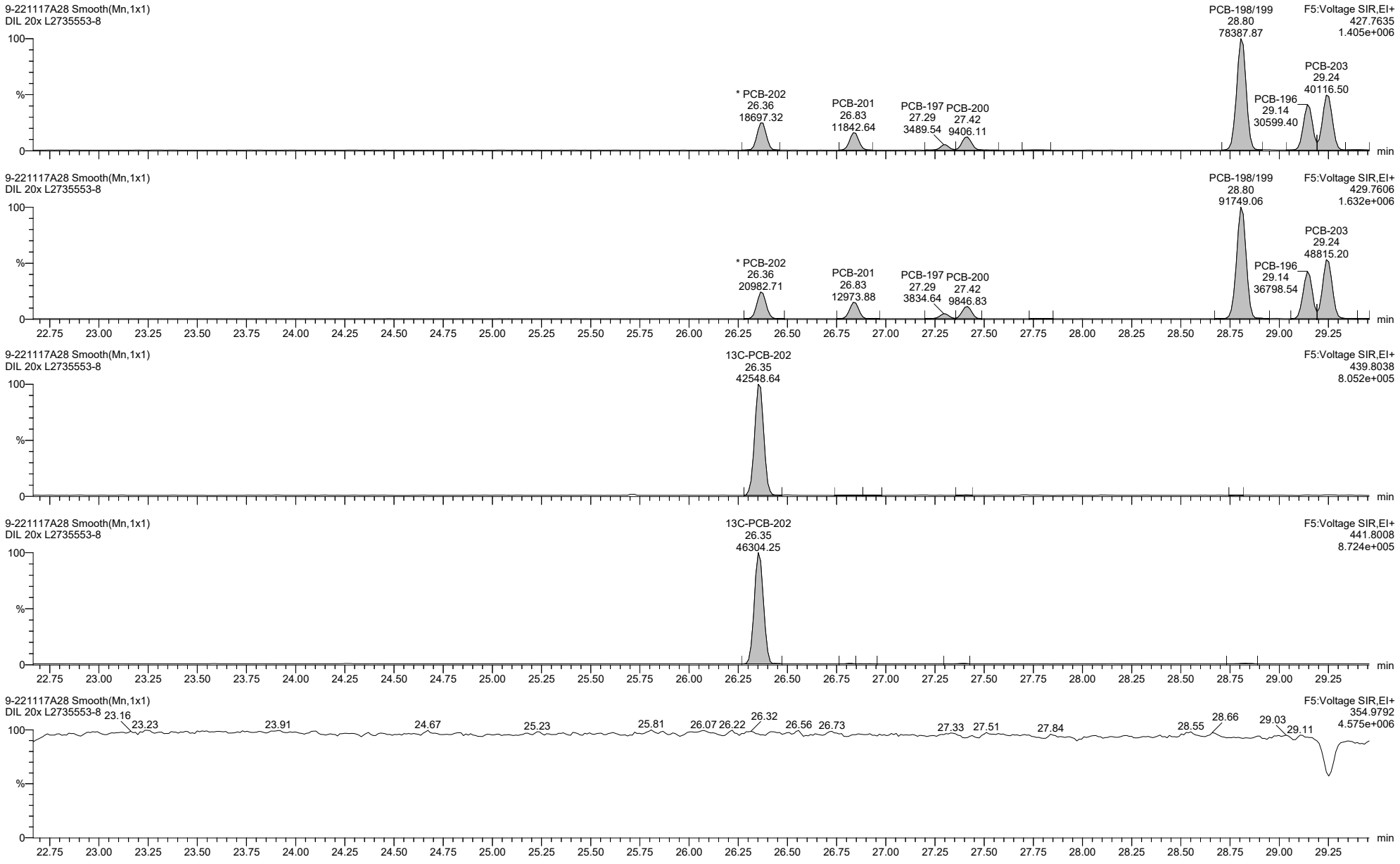
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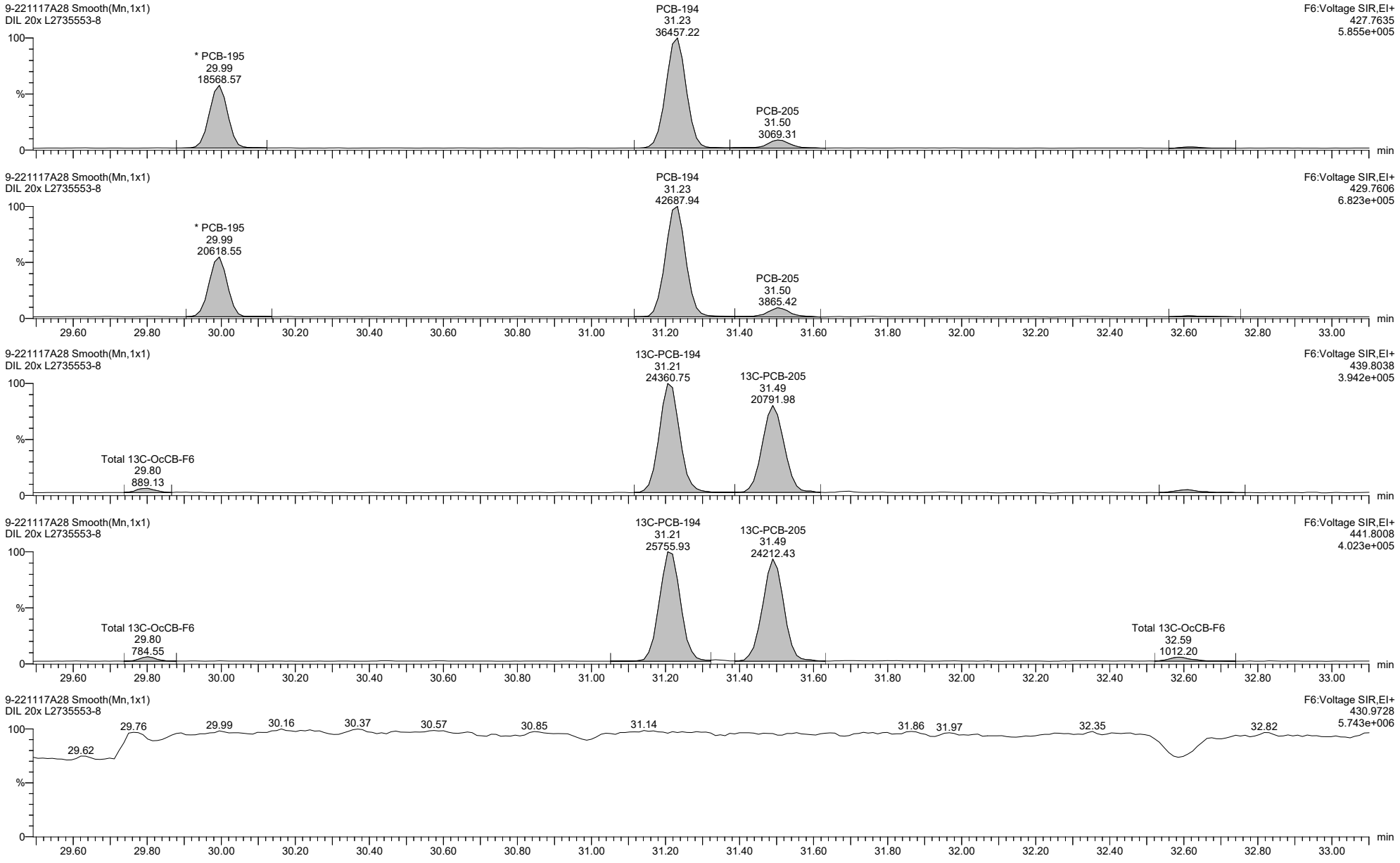


Quantify Sample Template Report **MassLynx V4.2 SCN1012**

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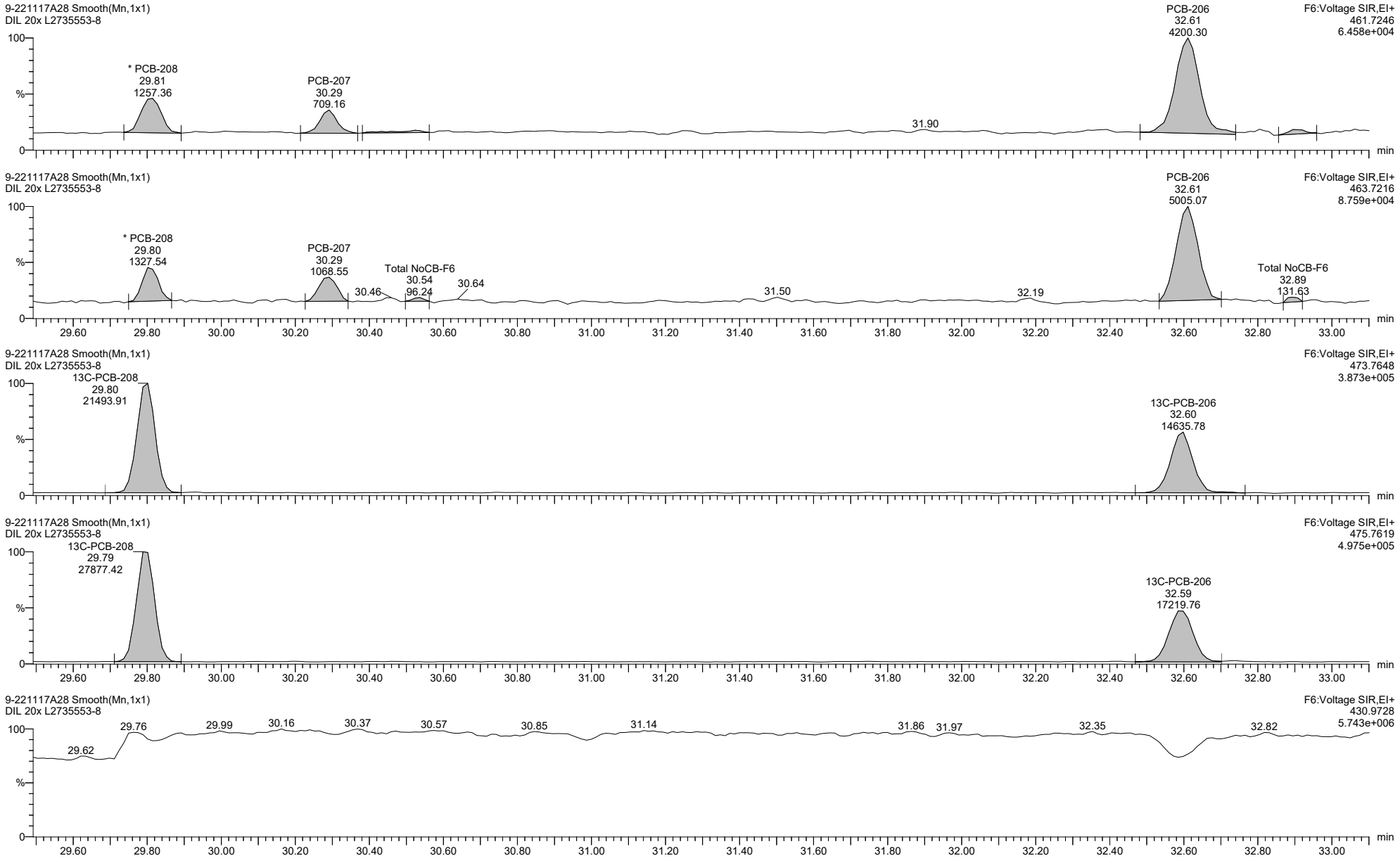


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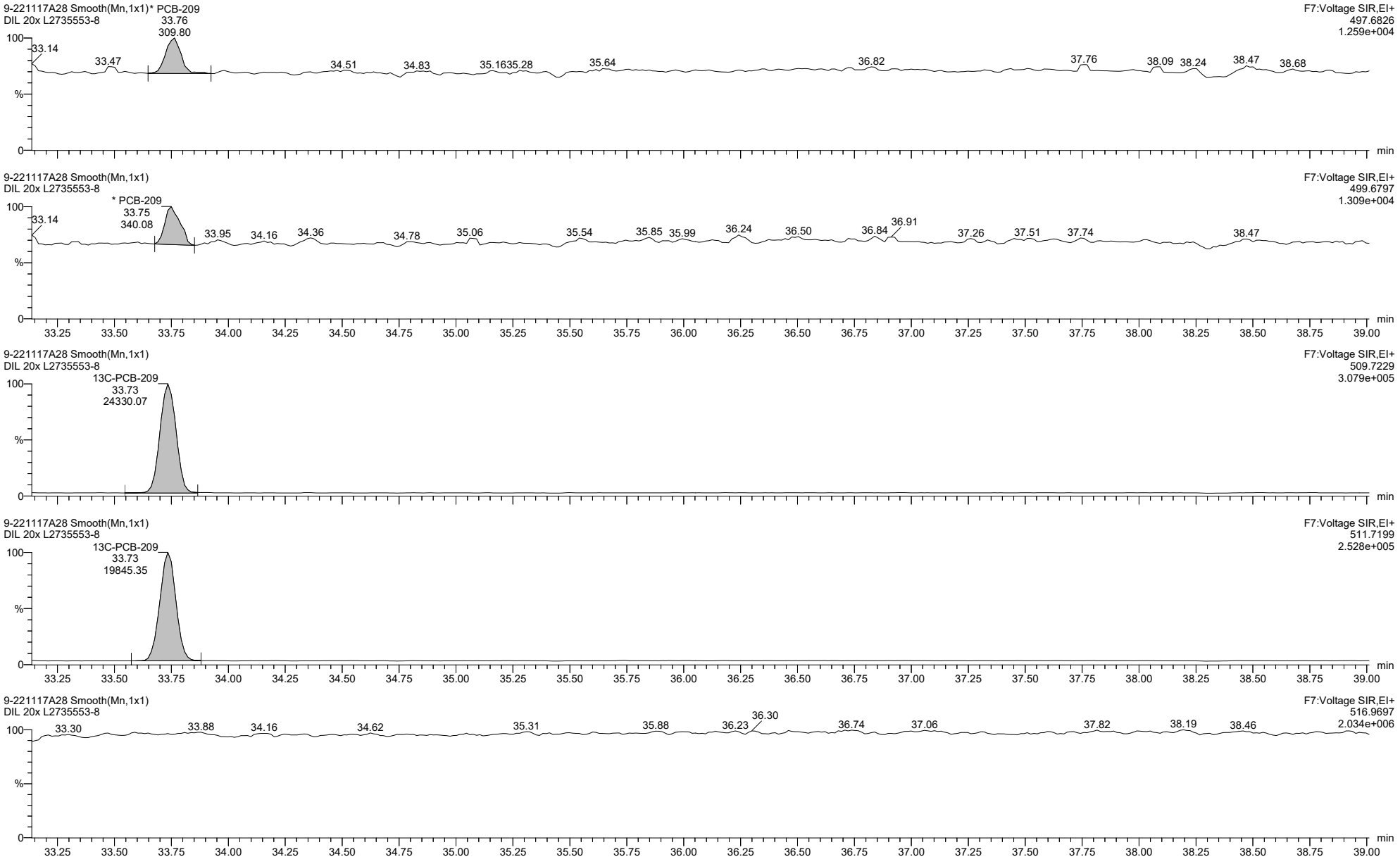
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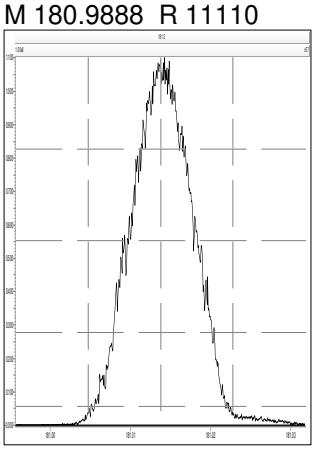


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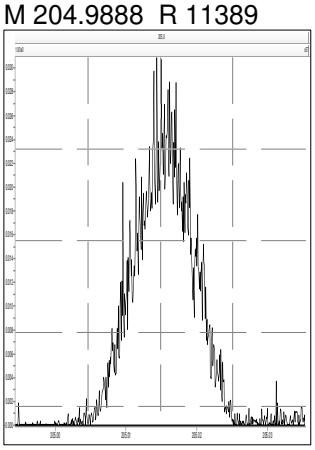


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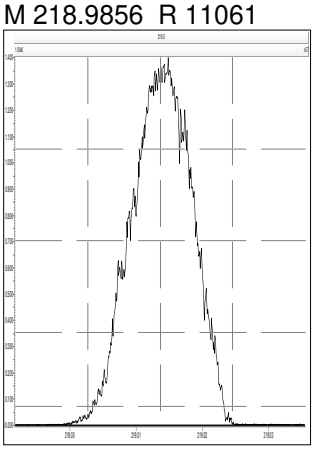
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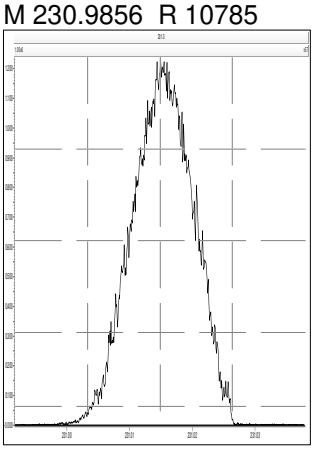
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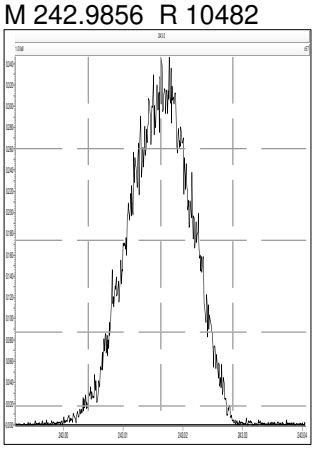
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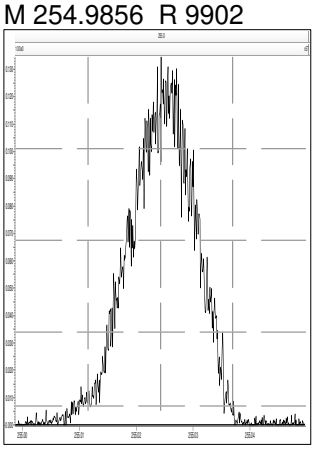
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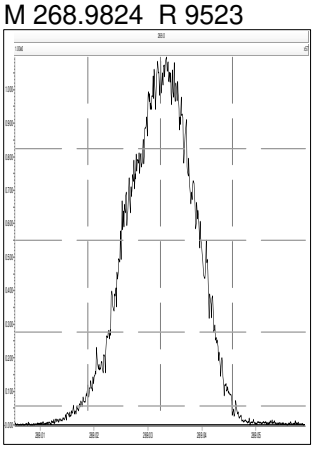
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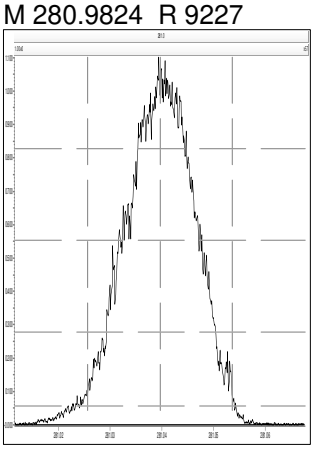
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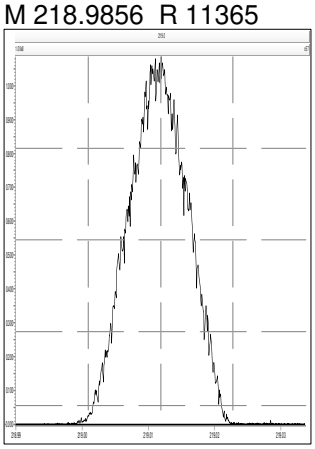
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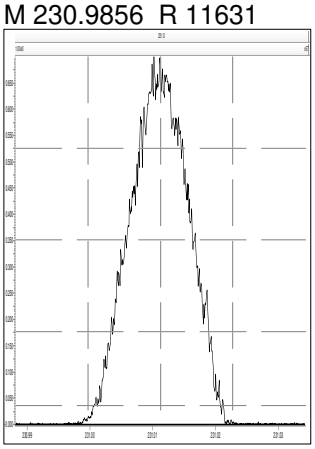
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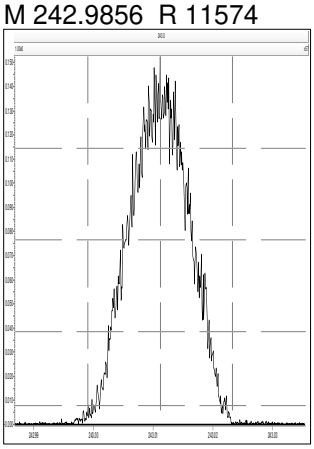
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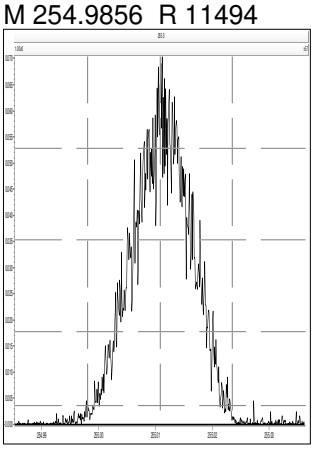
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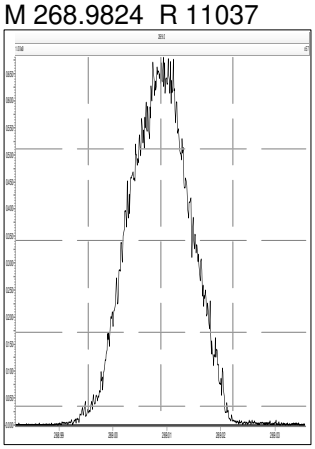
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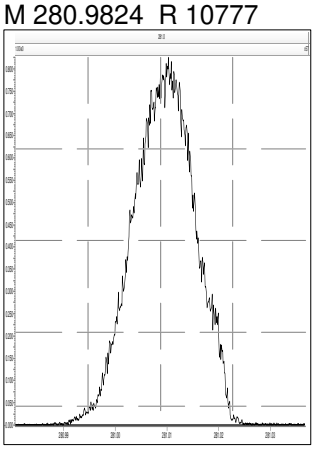
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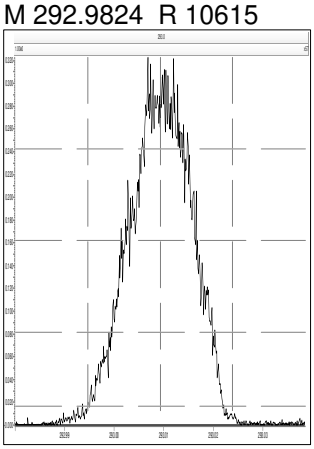
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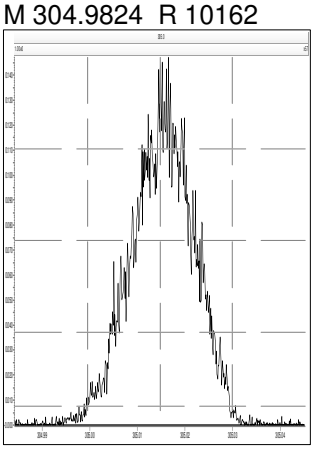
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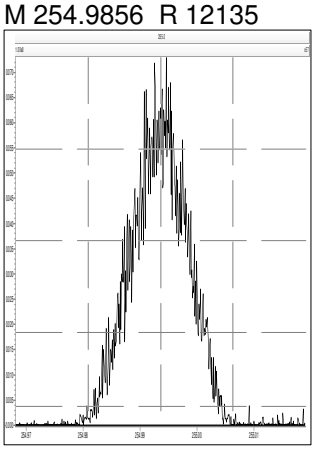
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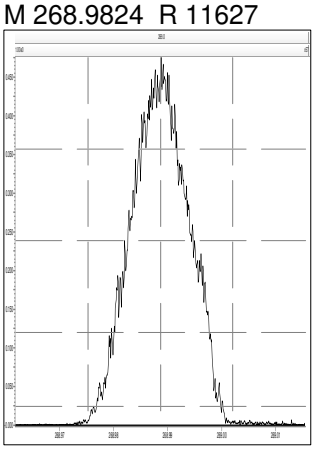
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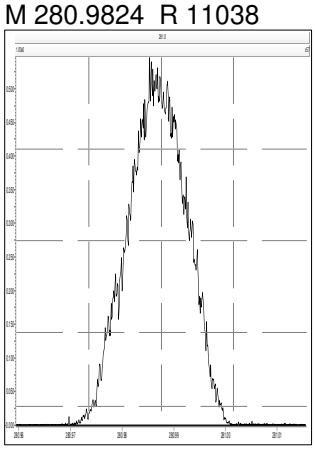
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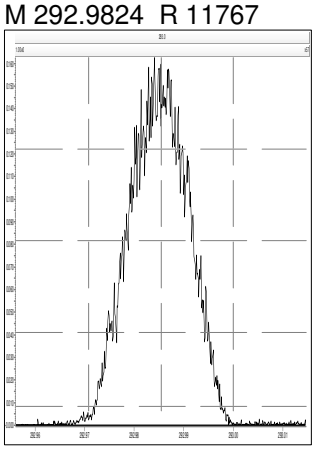
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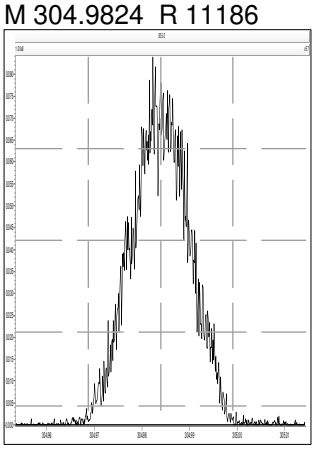
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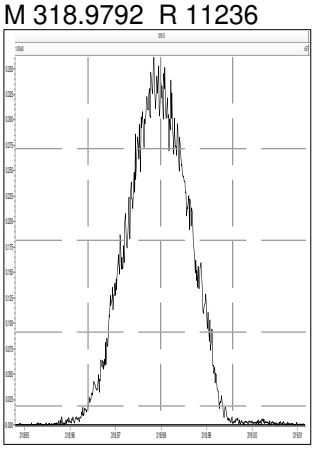
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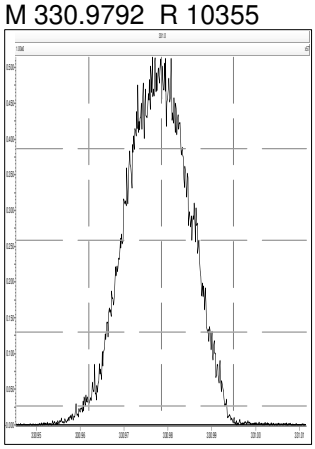
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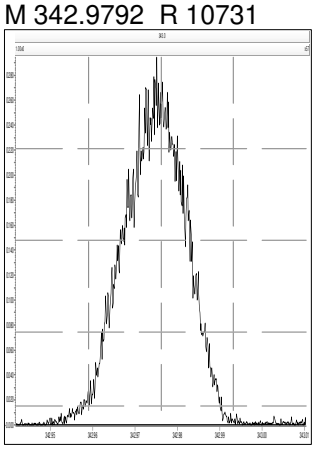
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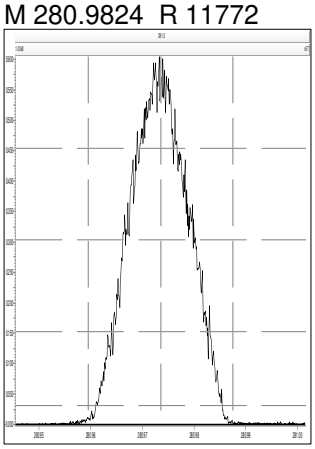
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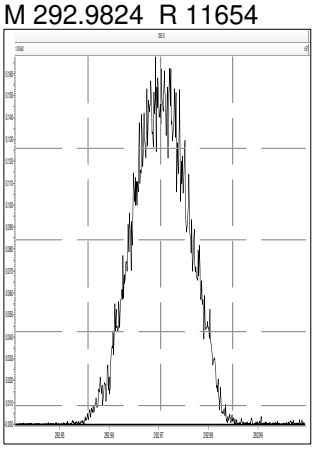
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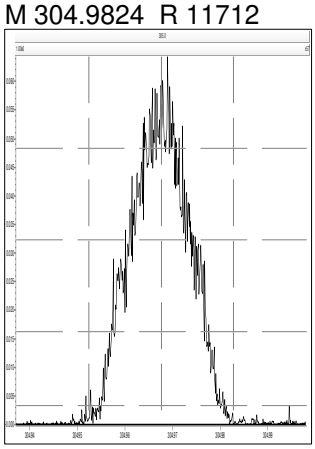
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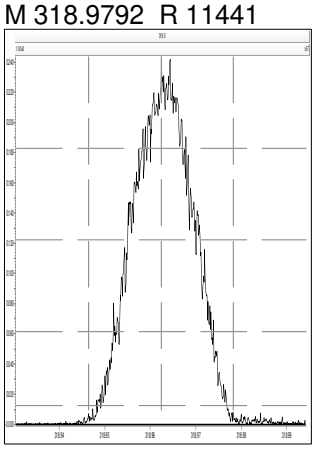
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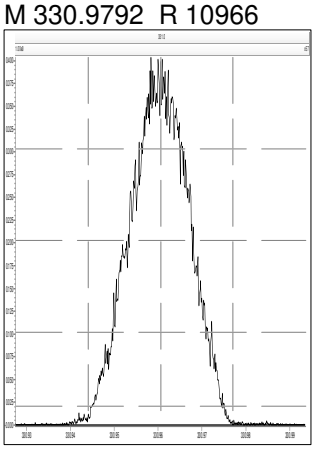
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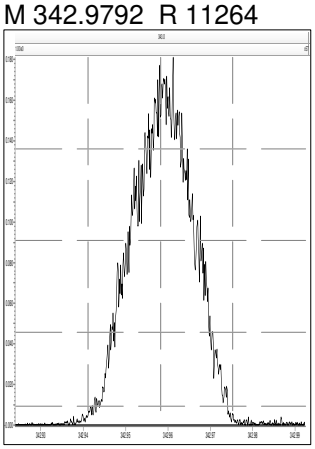
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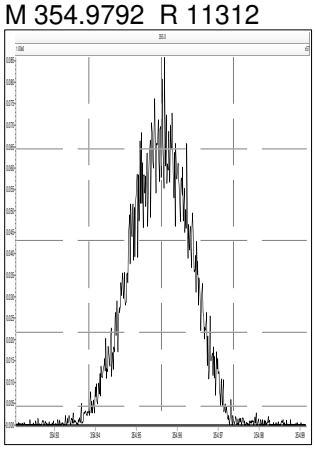
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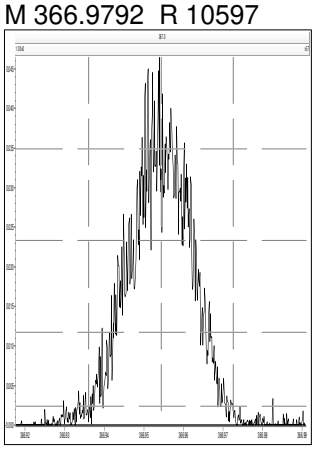
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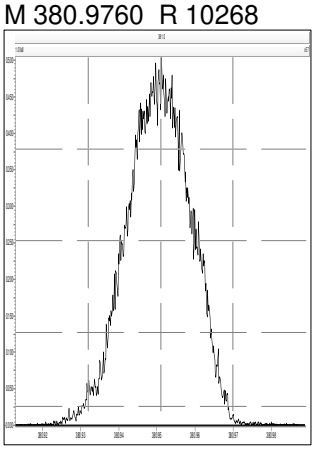
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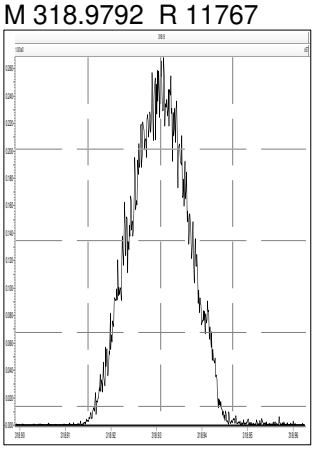
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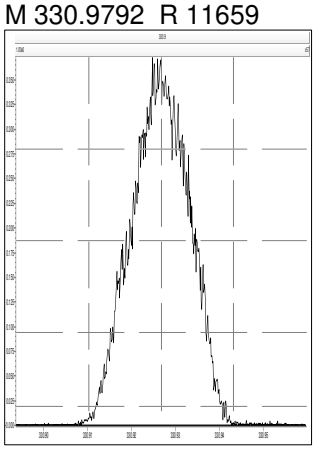
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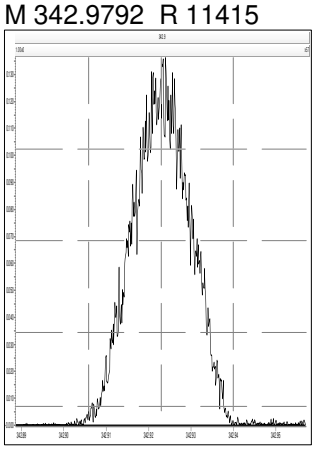
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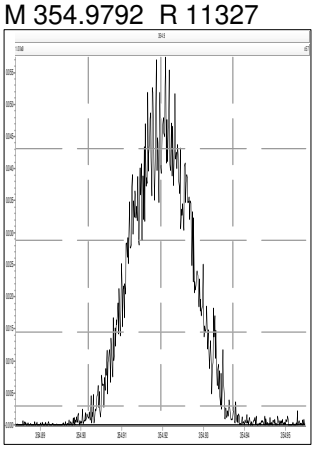
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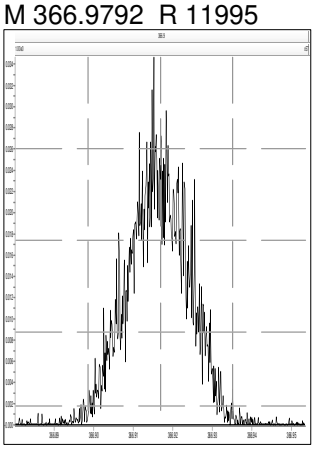
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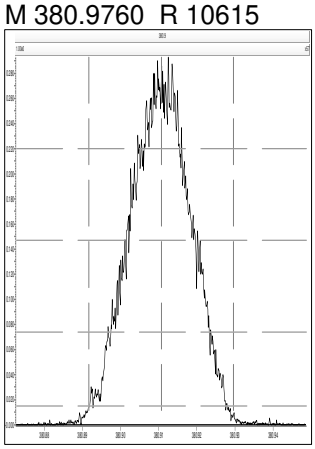
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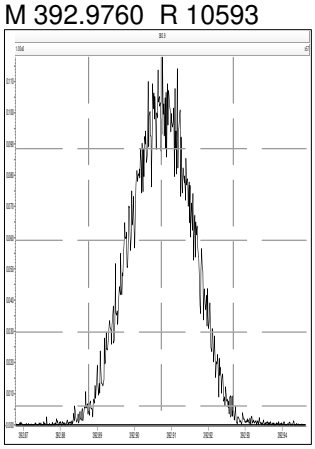
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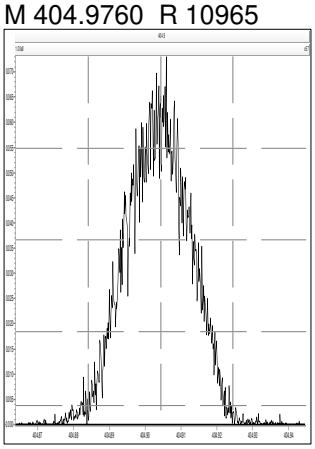
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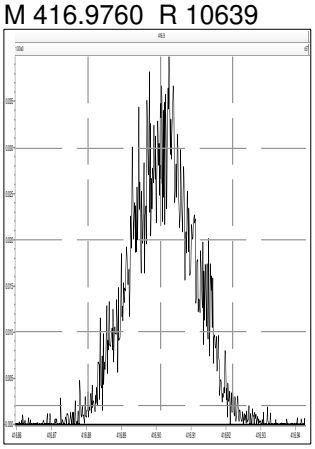
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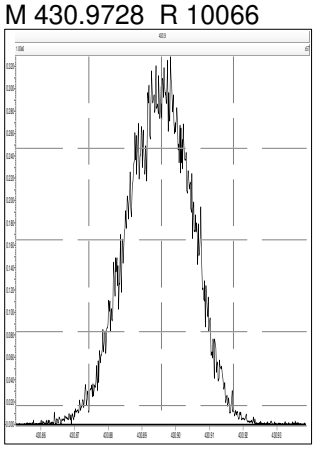
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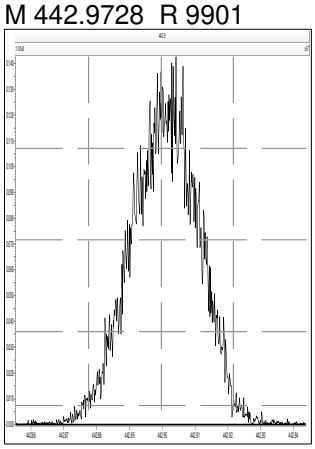
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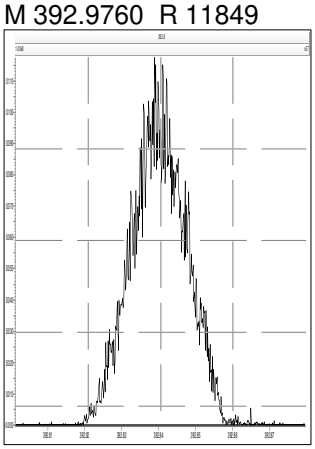
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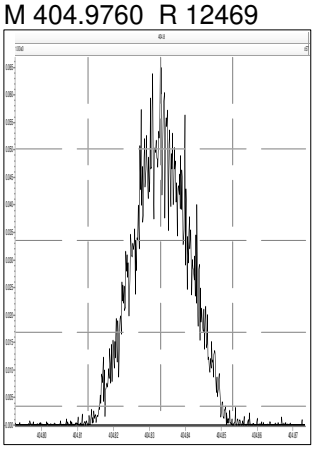
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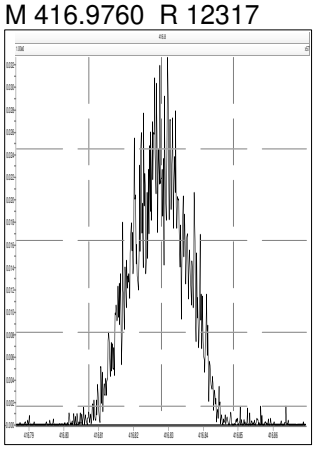
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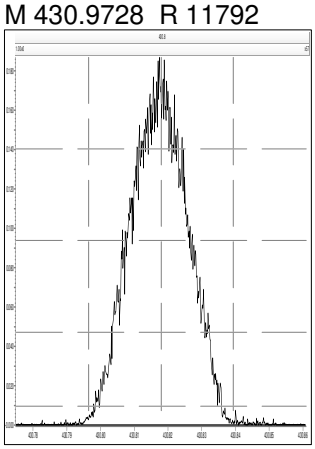
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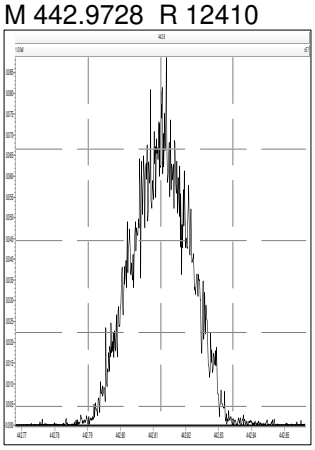
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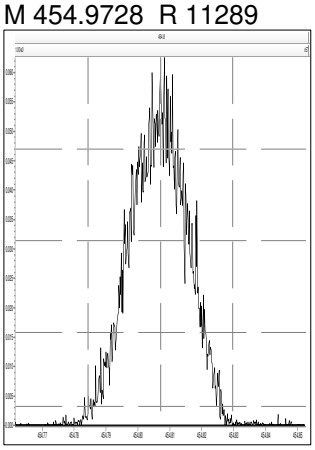
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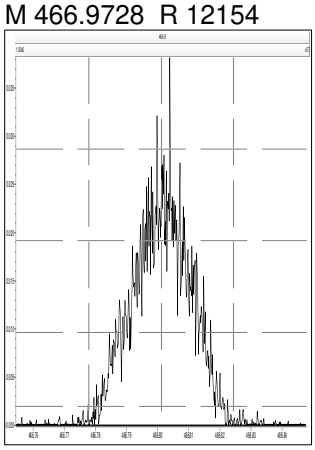
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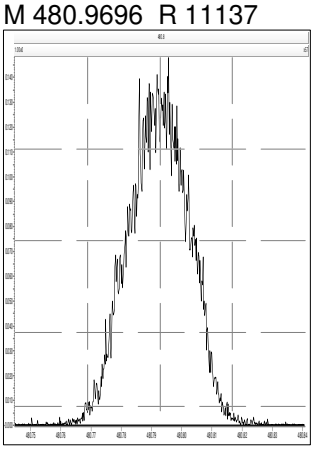
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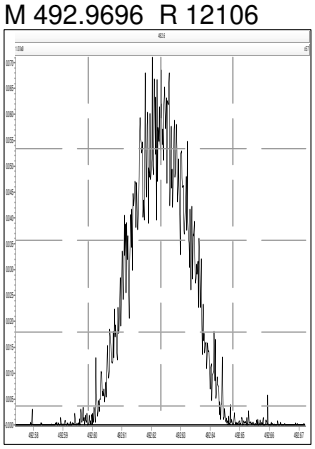
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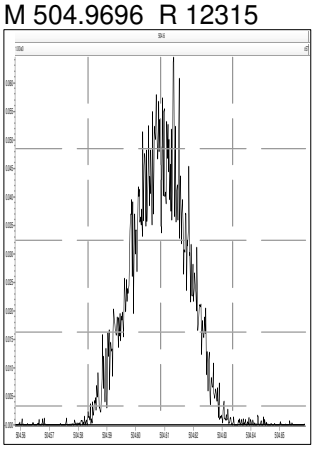
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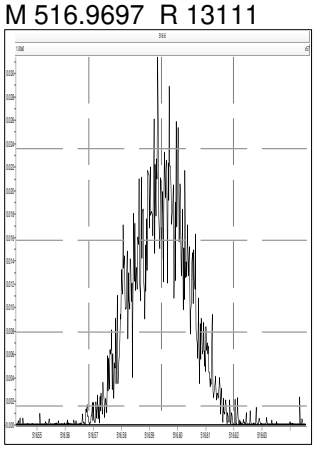
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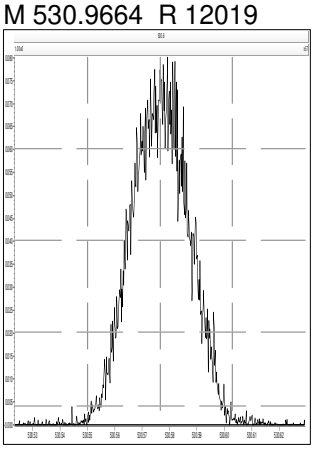
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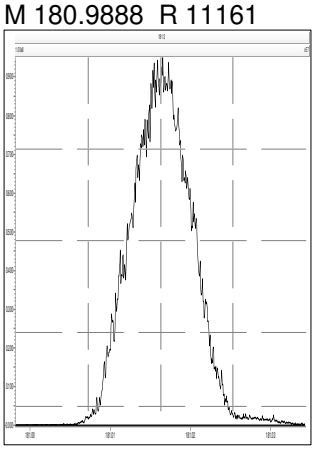


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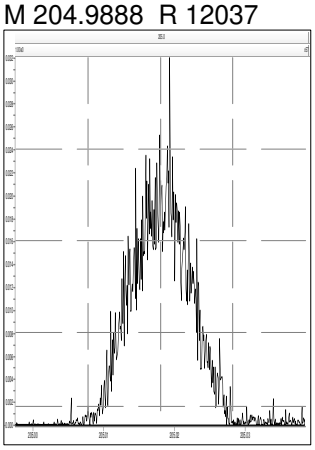


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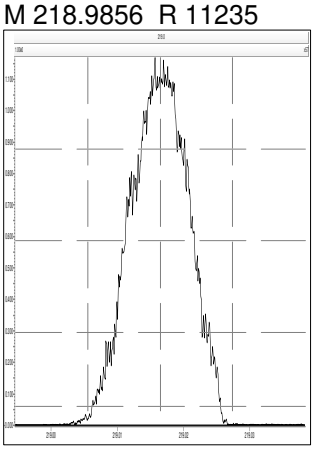
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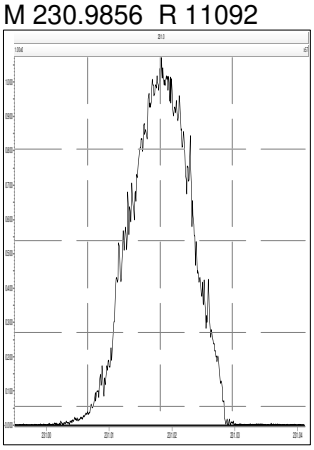
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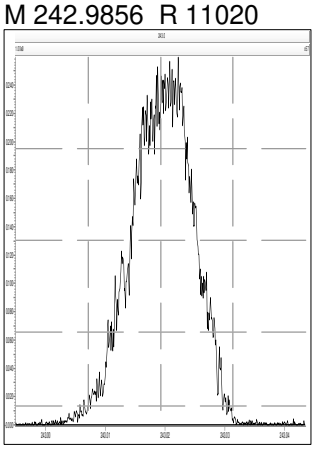
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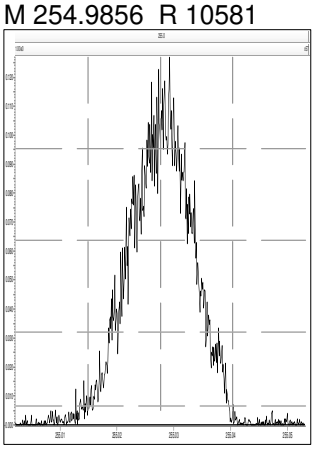
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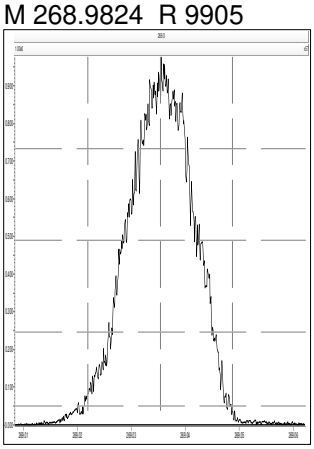
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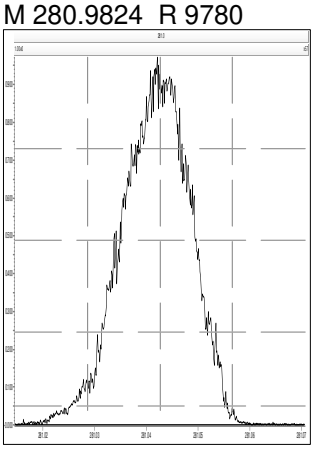
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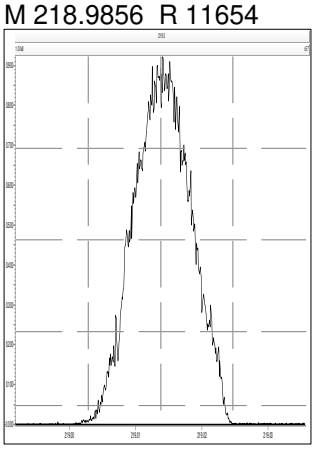
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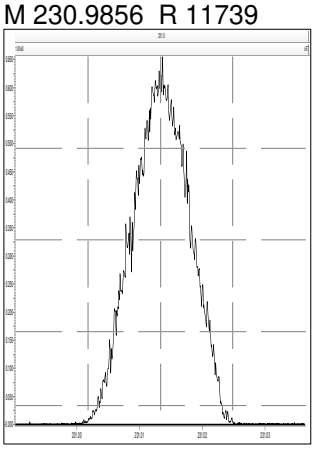
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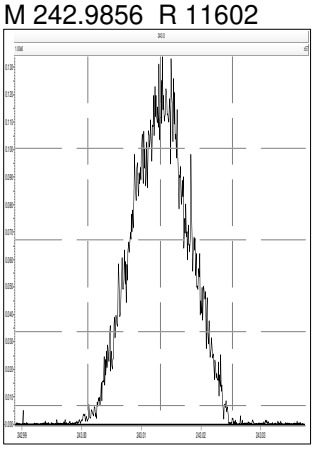
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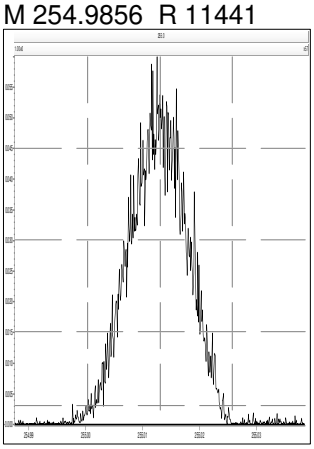
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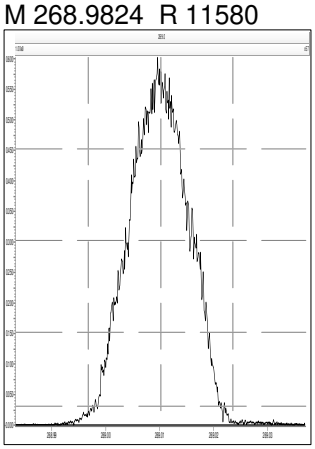
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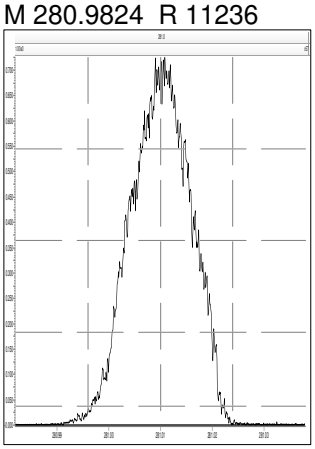
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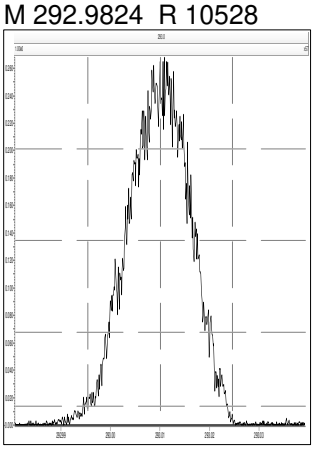
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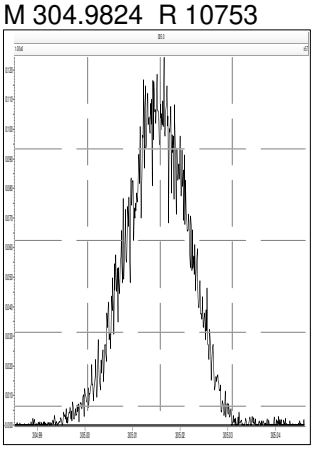
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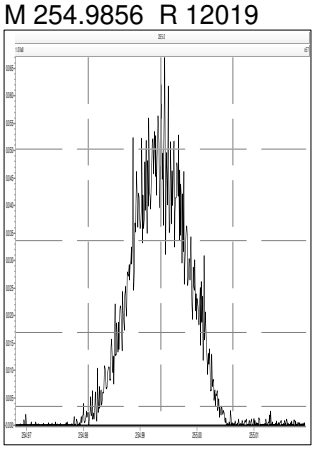
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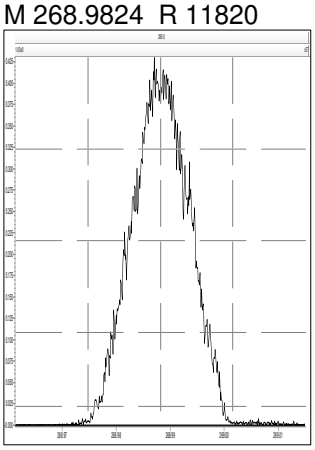
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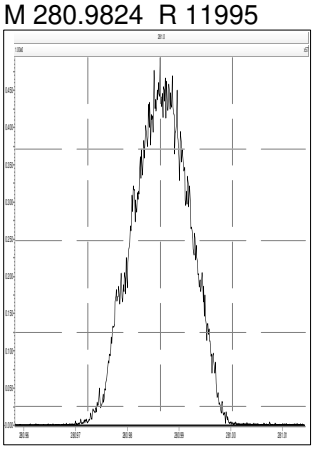
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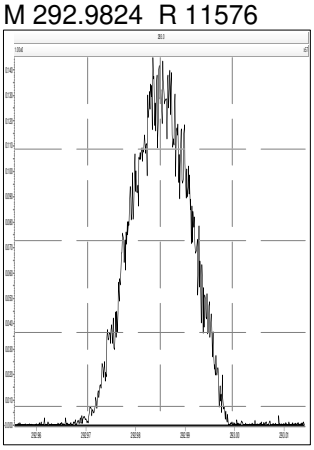
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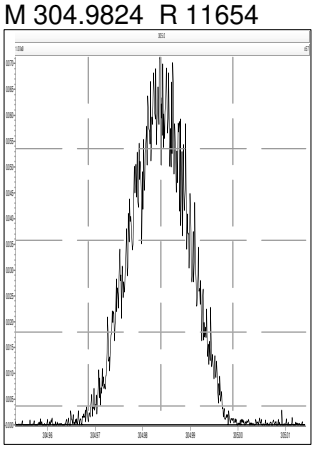
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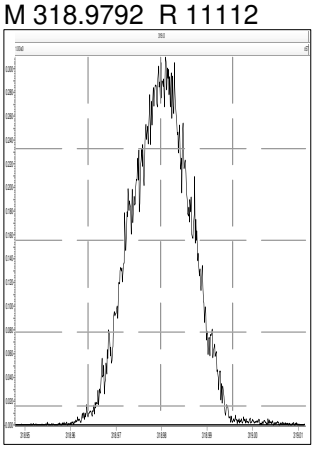
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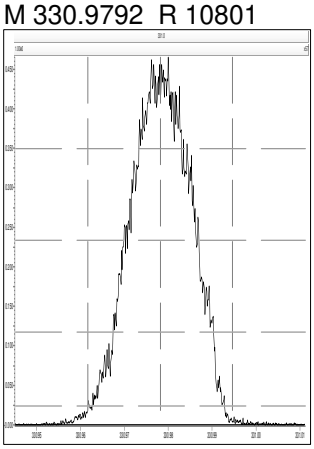
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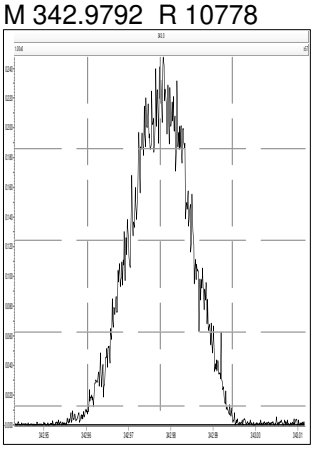
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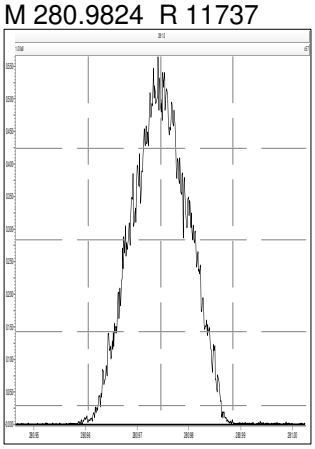
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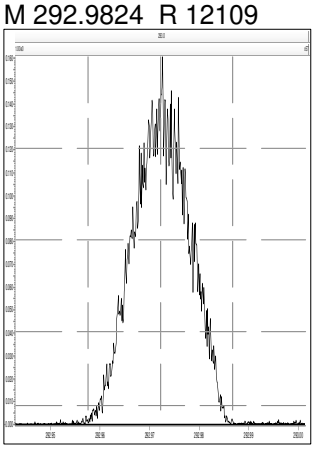
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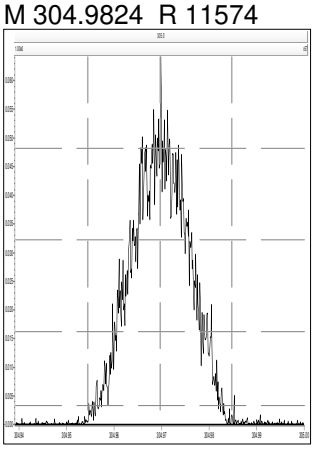
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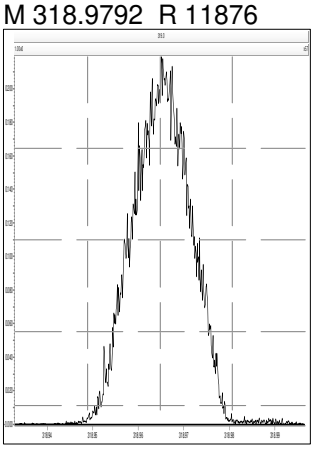
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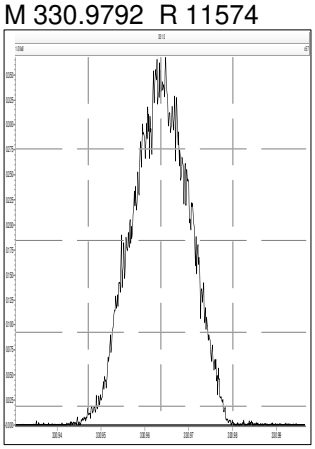
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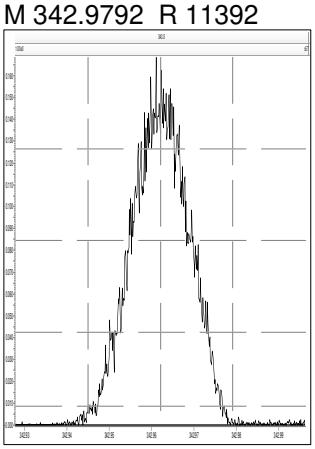
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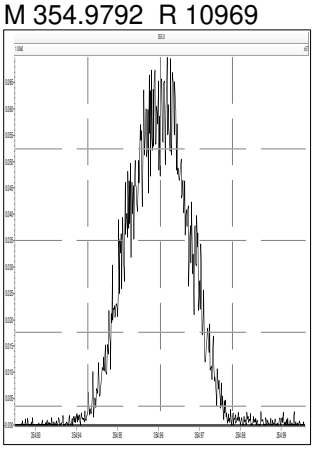
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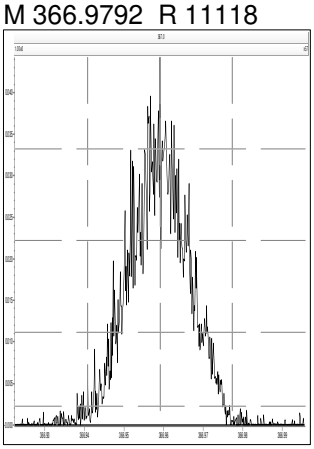
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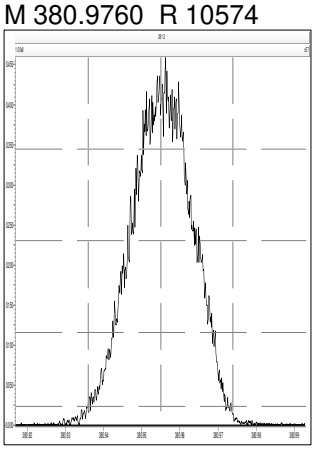
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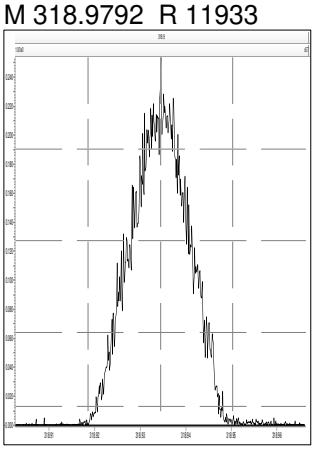
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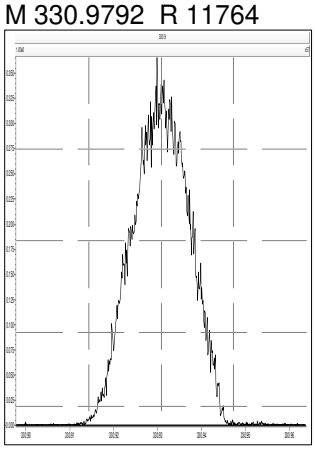
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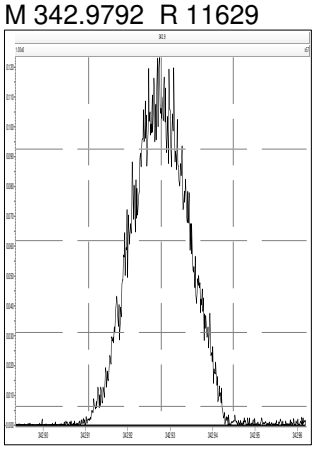
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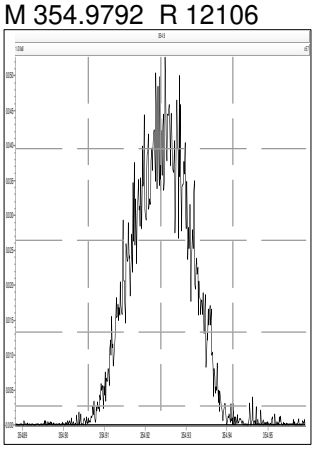
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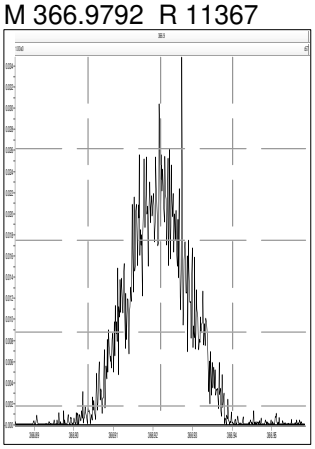
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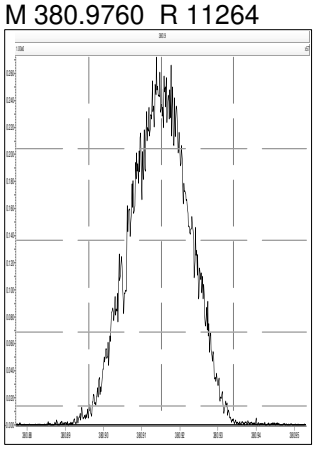
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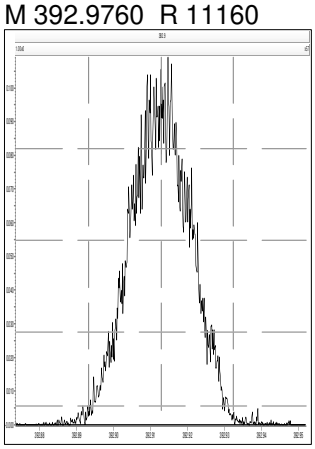
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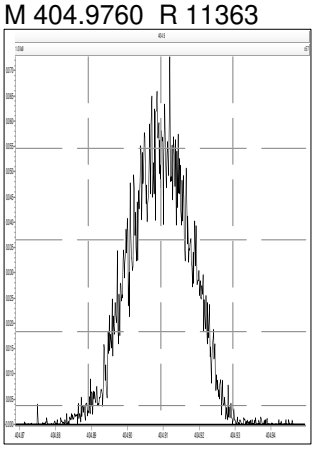
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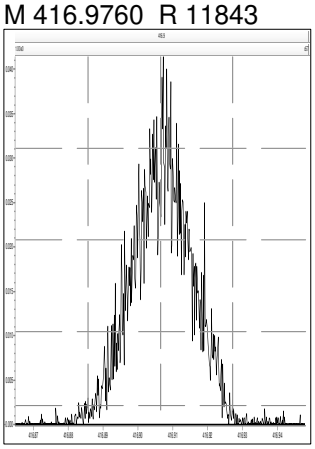
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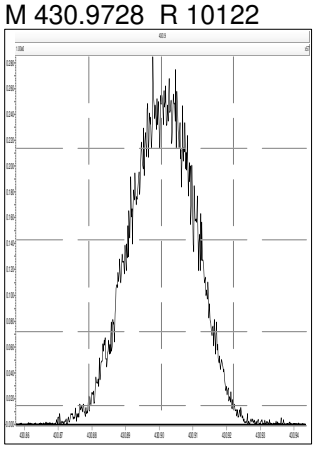
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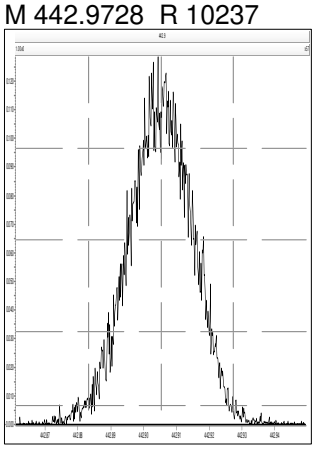
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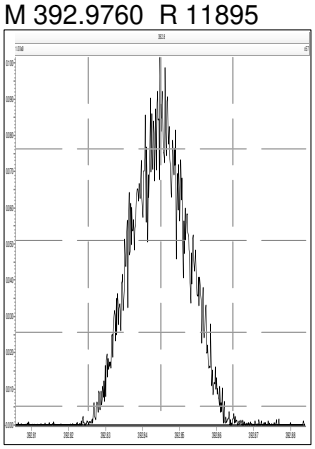
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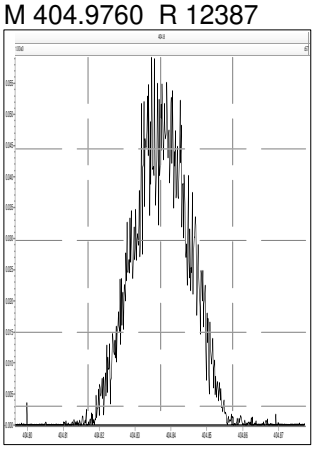
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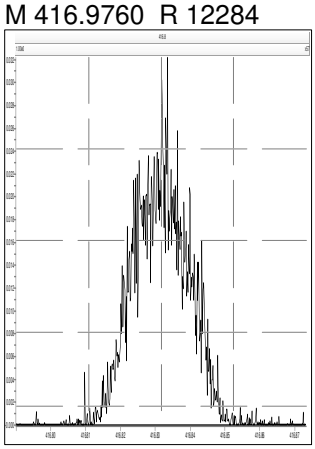
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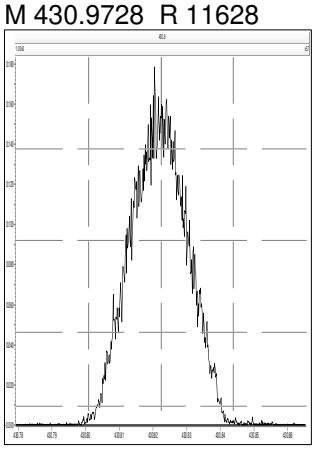
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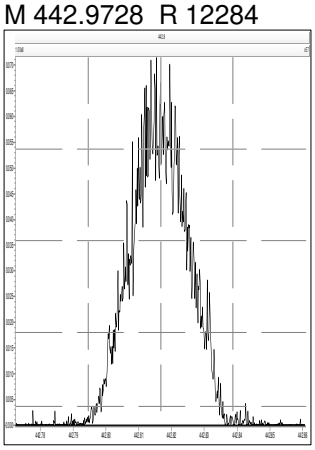


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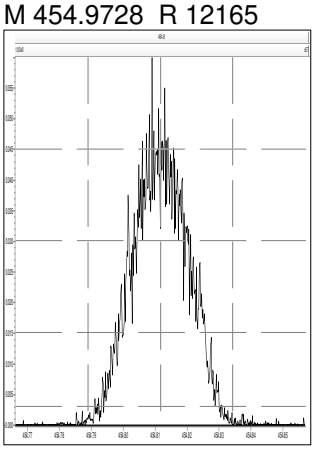


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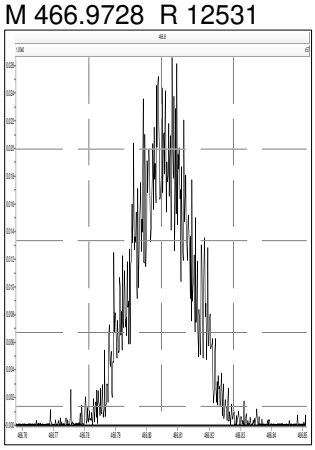
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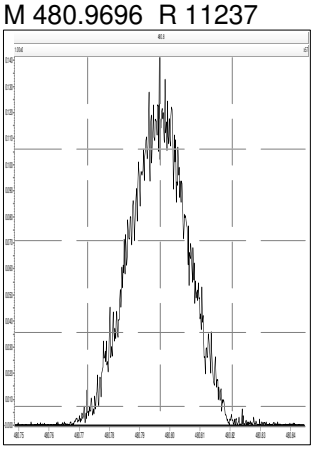
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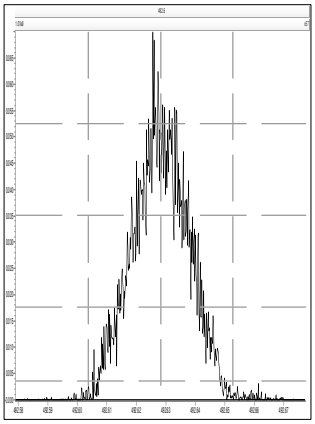
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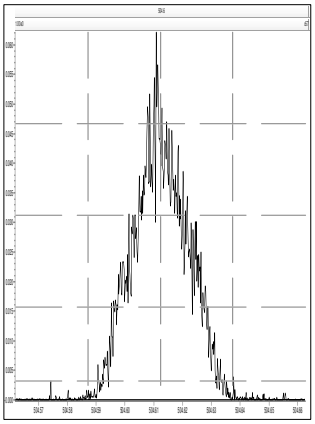
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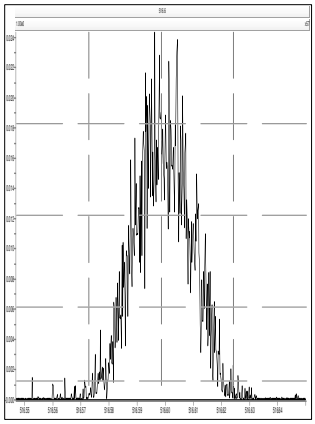
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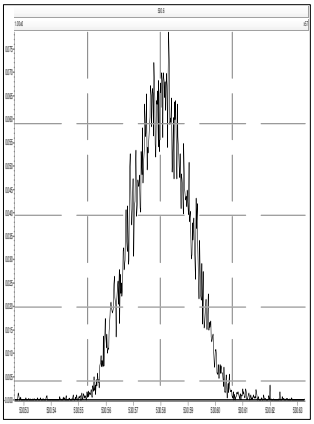
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M 516.9697 R 12958



M 530.9664 R 11849



JOHNSON LAKE FISH TISSUE MONITORING

APPENDIX J: LABORATORY ANALYTICAL REPORT FOR LIPIDS

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

September 30, 2022 **Analytical Report for Service Request No:** K2207713

Scott Maharry
GRETTE ASSOCIATES LLC
2102 N 30th, Ste A
Tacoma, WA 98403

RE: Johnson Lake Fish Tissue Monitoring Study / 305.025

Dear Scott,

Enclosed are the results of the sample(s) submitted to our laboratory July 08, 2022
For your reference, these analyses have been assigned our service request number **K2207713.**

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

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

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental



Luke Rahn
Project Manager

ALS Environmental
ALS Group USA, Corp
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T : +1 360 577 7222
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www.alsglobal.com

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Acronyms

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

Inorganic Data Qualifiers

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

Metals Data Qualifiers

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

Organic Data Qualifiers

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

Additional Petroleum Hydrocarbon Specific Qualifiers

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

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

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

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Case Narrative

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

Client: GRETTE ASSOCIATES LLC
Service Request: K2207713
Project: Johnson Lake Fish Tissue Monitoring Study
Date Received: 07/08/2022 - 07/26/2022
Sample Matrix: Fish Tissue

CASE NARRATIVE

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

Sample Receipt:

Fifty nine fish tissue samples were received for analysis at ALS Environmental on 07/08/2022 - 07/26/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Semivoa GC:

Method NOAA LIPID, 09/29/2022:The Relative Percent Difference (RPD) for the replicate analysis of Lipids in sample LargeRough-WB-1 were non-calculated as the DUP and TRP were non-detect.

Metals:

No significant anomalies were noted with this analysis.

Sub Data

Method 1668C is not contained in this report. Due to ALS Burlingtons turnaround time requirements the analytical results will not be complete for an additional 6-8 weeks. The fish tissue samples have been sent to their facility and when analytical results are complete, they will be added to this report with a different service request number.

Approved by  Date 09/30/2022

Chain of Custody

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
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www.alsglobal.com

LIPIDS

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
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www.alsglobal.com

Analytical Report

Client:	GRETTE ASSOCIATES LLC	**Service Request:**	K2207713
Project:	Johnson Lake Fish Tissue Monitoring Study/305.025	**Date Collected:**	07/06/22
Sample Matrix:	Fish Tissue	**Date Received:**	07/08/22 14:35
Sample Name:	LargeRough-WB-1	**Units:**	Percent
Lab Code:	K2207713-004	**Basis:**	Wet

Lipids

Analysis Method: NOAA LIPID
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lipids, Total	**9.5**	0.22	-	1	09/29/22 06:39	9/29/22	

Analytical Report

Client:	GRETTE ASSOCIATES LLC	**Service Request:**	K2207713
Project:	Johnson Lake Fish Tissue Monitoring Study/305.025	**Date Collected:**	07/06/22 08:08
Sample Matrix:	Fish Tissue	**Date Received:**	07/08/22 14:35
Sample Name:	LargeRough-Fillet-1	**Units:**	Percent
Lab Code:	K2207713-008	**Basis:**	Wet

Lipids

Analysis Method: NOAA LIPID
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lipids, Total	**3.5**	0.23	-	1	09/29/22 06:39	9/29/22	

Analytical Report

Client:	GRETTE ASSOCIATES LLC	**Service Request:**	K2207713
Project:	Johnson Lake Fish Tissue Monitoring Study/305.025	**Date Collected:**	07/06/22
Sample Matrix:	Fish Tissue	**Date Received:**	07/08/22 14:35
Sample Name:	LargeRough-WB-1-DUP	**Units:**	Percent
Lab Code:	K2207713-012	**Basis:**	Wet

Lipids

Analysis Method: NOAA LIPID
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lipids, Total	**7.3**	0.22	-	1	09/29/22 06:39	9/29/22	

Analytical Report

Client:	GRETTE ASSOCIATES LLC	**Service Request:**	K2207713
Project:	Johnson Lake Fish Tissue Monitoring Study/305.025	**Date Collected:**	07/06/22
Sample Matrix:	Fish Tissue	**Date Received:**	07/08/22 14:35
Sample Name:	MediumRough-WB-1	**Units:**	Percent
Lab Code:	K2207713-016	**Basis:**	Wet

Lipids

Analysis Method: NOAA LIPID
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lipids, Total	**3.8**	0.24	-	1	09/29/22 06:39	9/29/22	

Analytical Report

Client:	GRETTE ASSOCIATES LLC	**Service Request:**	K2207713
Project:	Johnson Lake Fish Tissue Monitoring Study/305.025	**Date Collected:**	07/05/22
Sample Matrix:	Fish Tissue	**Date Received:**	07/08/22 14:35
Sample Name:	MediumRough-WB-J1	**Units:**	Percent
Lab Code:	K2207713-020	**Basis:**	Wet

Lipids

Analysis Method: NOAA LIPID
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lipids, Total	**3.2**	0.23	-	1	09/29/22 06:39	9/29/22	

Analytical Report

Client:	GRETTE ASSOCIATES LLC	**Service Request:**	K2207713
Project:	Johnson Lake Fish Tissue Monitoring Study/305.025	**Date Collected:**	07/05/22
Sample Matrix:	Fish Tissue	**Date Received:**	07/08/22 14:35
Sample Name:	MediumRough-WB-J2	**Units:**	Percent
Lab Code:	K2207713-024	**Basis:**	Wet

Lipids

Analysis Method: NOAA LIPID
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lipids, Total	**2.4**	0.23	-	1	09/29/22 06:39	9/29/22	

Analytical Report

Client:	GRETTE ASSOCIATES LLC	**Service Request:**	K2207713
Project:	Johnson Lake Fish Tissue Monitoring Study/305.025	**Date Collected:**	07/06/22 14:30
Sample Matrix:	Fish Tissue	**Date Received:**	07/08/22 14:35
Sample Name:	Small-WB-Stick1	**Units:**	Percent
Lab Code:	K2207713-039	**Basis:**	Wet

Lipids

Analysis Method: NOAA LIPID
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lipids, Total	**4.1**	0.24	-	1	09/29/22 06:39	9/29/22	

Analytical Report

Client:	GRETTE ASSOCIATES LLC	**Service Request:**	K2207713
Project:	Johnson Lake Fish Tissue Monitoring Study/305.025	**Date Collected:**	07/05/22
Sample Matrix:	Fish Tissue	**Date Received:**	07/08/22 14:35
Sample Name:	Small-WB-Stick2	**Units:**	Percent
Lab Code:	K2207713-050	**Basis:**	Wet

Lipids

Analysis Method: NOAA LIPID
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lipids, Total	**2.4**	0.24	-	1	09/29/22 06:39	9/29/22	

Analytical Report

Client:	GRETTE ASSOCIATES LLC	**Service Request:**	K2207713
Project:	Johnson Lake Fish Tissue Monitoring Study/305.025	**Date Collected:**	NA
Sample Matrix:	Fish Tissue	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	Percent
Lab Code:	KQ2216621-04	**Basis:**	Wet

Lipids

Analysis Method: NOAA LIPID
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lipids, Total	ND U	0.22	-	1	09/29/22 06:39	9/29/22	

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

Client:	GRETTE ASSOCIATES LLC	**Service Request:**	K2207713
Project	Johnson Lake Fish Tissue Monitoring Study/305.025	**Date Collected:**	07/06/22
Sample Matrix:	Fish Tissue	**Date Received:**	07/08/22
		Date Analyzed:	09/29/22

Triplicate Sample Summary
Lipids

Sample Name:	LargeRough-WB-1	**Units:**	Percent
Lab Code:	K2207713-004	**Basis:**	Wet
Analysis Method:	NOAA LIPID		
Prep Method:	EPA 3541		

Analyte Name	MRL	MDL	Sample Result	Duplicate KQ2216621-01 Result	Triplicate KQ2216621-02 Result	Average	RSD	RSD Limit
Lipids, Total	0.22	-	9.5	ND	ND	NC	NC	20

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

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

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	GRETTE ASSOCIATES LLC	**Service Request:**	K2207713
Project:	Johnson Lake Fish Tissue Monitoring Study/305.025	**Date Analyzed:**	09/29/22
Sample Matrix:	Fish Tissue	**Date Extracted:**	09/29/22

Lab Control Sample Summary
Lipids

Analysis Method:	NOAA LIPID	**Units:**	Percent
Prep Method:	EPA 3541	**Basis:**	Wet
		Analysis Lot:	779584

Lab Control Sample
KQ2216621-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Lipids, Total	82.0	100	82	70-130

Client:	GRETTE ASSOCIATES LLC	**Service Request:**	K2207713
Project:	Johnson Lake Fish Tissue Monitoring Study/305.025	**Date Analyzed:**	09/29/22 06:39
Sample Matrix:	Fish Tissue	**Date Extracted:**	09/29/22

Method Blank Summary
Lipids

Sample Name:	Method Blank	**Instrument ID:**	K-Balance-30
Lab Code:	KQ2216621-04	**File ID:**	
Analysis Method:	NOAA LIPID	**Analysis Lot:**	779584
Prep Method:	EPA 3541	**Extraction Lot:**	407196

This Method Blank applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
LargeRough-WB-1	K2207713-004		09/29/22 06:39
LargeRough-Fillet-1	K2207713-008		09/29/22 06:39
LargeRough-WB-1-DUP	K2207713-012		09/29/22 06:39
MediumRough-WB-1	K2207713-016		09/29/22 06:39
MediumRough-WB-J1	K2207713-020		09/29/22 06:39
MediumRough-WB-J2	K2207713-024		09/29/22 06:39
Small-WB-Stick1	K2207713-039		09/29/22 06:39
Small-WB-Stick2	K2207713-050		09/29/22 06:39
LargeRough-WB-1DUP	KQ2216621-01		09/29/22 06:39
LargeRough-WB-1TRP	KQ2216621-02		09/29/22 06:39
Lab Control Sample	KQ2216621-03		09/29/22 06:39

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	GRETTE ASSOCIATES LLC	**Service Request:**	K2207713
Project:	Johnson Lake Fish Tissue Monitoring Study/305.025	**Date Analyzed:**	09/29/22 06:39
Sample Matrix:	Fish Tissue	**Date Extracted:**	09/29/22

Lab Control Sample Summary
Lipids

Sample Name:	Lab Control Sample	**Instrument ID:**	K-Balance-30
Lab Code:	KQ2216621-03	**File ID:**	
Analysis Method:	NOAA LIPID	**Analysis Lot:**	779584
Prep Method:	EPA 3541	**Extraction Lot:**	407196

This Lab Control Sample applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
LargeRough-WB-1	K2207713-004		09/29/22 06:39
LargeRough-Fillet-1	K2207713-008		09/29/22 06:39
LargeRough-WB-1-DUP	K2207713-012		09/29/22 06:39
MediumRough-WB-1	K2207713-016		09/29/22 06:39
MediumRough-WB-J1	K2207713-020		09/29/22 06:39
MediumRough-WB-J2	K2207713-024		09/29/22 06:39
Small-WB-Stick1	K2207713-039		09/29/22 06:39
Small-WB-Stick2	K2207713-050		09/29/22 06:39
LargeRough-WB-1DUP	KQ2216621-01		09/29/22 06:39
LargeRough-WB-1TRP	KQ2216621-02		09/29/22 06:39
Method Blank	KQ2216621-04		09/29/22 06:39

Client: GRETTE ASSOCIATES LLC **Service Request:**K2207713
Project: Johnson Lake Fish Tissue Monitoring Study/305.025

Analysis Run Log
Lipids

Analysis Method: NOAA LIPID **Analysis Lot:**779584
Instrument ID:K-Balance-30

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
	LargeRough-WB-1-DUP	K2207713-012	9/29/2022	06:39	
	LargeRough-WB-1	KQ2216621-02	9/29/2022	06:39	
	Small-WB-Stick1	K2207713-039	9/29/2022	06:39	
	Small-WB-Stick2	K2207713-050	9/29/2022	06:39	
	Lab Control Sample	KQ2216621-03	9/29/2022	06:39	
	Method Blank	KQ2216621-04	9/29/2022	06:39	
	LargeRough-WB-1 DUP	KQ2216621-01	9/29/2022	06:39	
	LargeRough-WB-1	K2207713-004	9/29/2022	06:39	
	MediumRough-WB-J2	K2207713-024	9/29/2022	06:39	
	MediumRough-WB-J1	K2207713-020	9/29/2022	06:39	
	MediumRough-WB-1	K2207713-016	9/29/2022	06:39	
	LargeRough-Fillet-1	K2207713-008	9/29/2022	06:39	

Prep Summary Report

Client: GRETTE ASSOCIATES LLC **Service Request:**K2207713
Project: Johnson Lake Fish Tissue Monitoring Study/305.025
Sample Matrix: Fish Tissue

Lipids

Prep Method: EPA 3541 **Extraction Lot:** 407196
Analytical Method: NOAA LIPID **Extraction Date:** 09/29/22 06:39

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Amount	Percent Solids
LargeRough-WB-1	K2207713-004	7/6/22	7/8/22	2.251 g	10 mL	
LargeRough-Fillet-1	K2207713-008	7/6/22	7/8/22	2.155 g	10 mL	
LargeRough-WB-1-DUP	K2207713-012	7/6/22	7/8/22	2.236 g	10 mL	
MediumRough-WB-1	K2207713-016	7/6/22	7/8/22	2.092 g	10 mL	
MediumRough-WB-J1	K2207713-020	7/5/22	7/8/22	2.130 g	10 mL	
MediumRough-WB-J2	K2207713-024	7/5/22	7/8/22	2.131 g	10 mL	
Small-WB-Stick1	K2207713-039	7/6/22	7/8/22	2.085 g	10 mL	
Small-WB-Stick2	K2207713-050	7/5/22	7/8/22	2.100 g	10 mL	
Duplicate	KQ2216621-01DUP	7/6/22	7/8/22	2.104 g	10 mL	
LargeRough-WB-1TRP	KQ2216621-02TRP	7/6/22	7/8/22	2.243 g	10 mL	
Lab Control Sample	KQ2216621-03LCS	NA	NA	0.8810 g	10 mL	
Method Blank	KQ2216621-04MB	NA	NA	2.2510 g	10 mL	

Raw Data

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

LIPIDS

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
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www.alsglobal.com

Preparation Information Benchsheet

Prep Run#: 407196
Team: Semivoa GC/JCARBAJAL
Prep WorkFlow: OrgExtT(14)
Prep Method: EPA 3541
Status: Draft
Prep Date/Time: 9/28/22 09:38 AM
Number of Copies to make: 1

#	Lab Code	Client ID	B#	√	Method /Test	Matrix	Amt. Ext. g	pH	Int. Vol mL	Final Vol mL	Surr Amt	Spike Amt
1	**KQ2216621-04**	MB	—	—	NOAA LIPID / LIPIDS	Tissue	2.251	N/A			N/A	—
2	**KQ2216621-03**	LCS	—	—	NOAA LIPID / LIPIDS	Tissue	0.881					1mL
3	**KQ2216621-01**	K2207713-004 DUP	.02	√	NOAA LIPID / LIPIDS	Tissue	*					
4	**KQ2216621-02**	K2207713-004 TRP	.02	√	NOAA LIPID / LIPIDS	Tissue						
5	**K2207713-004**	LargeRough-WB-1	.02	√	NOAA LIPID / LIPIDS	Fish Tissue						
6	**K2207713-008**	LargeRough-Fillet-1	.02	√	NOAA LIPID / LIPIDS	Fish Tissue						
7	**K2207713-012**	LargeRough-WB-1-DUP	.02	√	NOAA LIPID / LIPIDS	Fish Tissue						
8	**K2207713-016**	MediumRough-WB-1	.02	√	NOAA LIPID / LIPIDS	Fish Tissue						
9	**K2207713-020**	MediumRough-WB-J1	.02	√	NOAA LIPID / LIPIDS	Fish Tissue						
10	**K2207713-024**	MediumRough-WB-J2	.02	√	NOAA LIPID / LIPIDS	Fish Tissue						
11	**K2207713-039**	Small-WB-Stick1	.02	√	NOAA LIPID / LIPIDS	Fish Tissue						
12	**K2207713-050**	Small-WB-Stick2	.02	√	NOAA LIPID / LIPIDS	Fish Tissue						

Comments: * See attached pre-prep information RUN Creation #779584

Surrogate ID: No Surrogate. Spike ID: [Corn Oil] SVMP005-90W · 2/4/23

Witnessed By: 9-29-22

Analyst: AD Assisted By:

ALS Environmental

Extraction Analyst Notes

Service Request: K2207213 Prep Group: KQ2216621

Topic	Notes	Initials/Date
No Anomalies: □		
Sample Anomalies: □		
Organics Present (sticks, leafs, bugs): □		
Fuel Odors: □		
Sulfur Odors, Precipitate: □		
General Notes:		

Pre-Prep Information Benchsheet

Prep Run #: 407196 **Container Lot No:** 071221-1BNS **Prep Due Date:**

#	Lab Code	Bottle	Test Name	Weight	Sample Comments	Test Comments
1	K2207713-004	.02	LIPIDS : NOAA LIPID/	2.251g		CLUKKEN K-Balance-53
2	K2207713-004 DUP KQ2216621-01	.02	LIPIDS : NOAA LIPID/	2.104g		CLUKKEN K-Balance-53
3	K2207713-004 TRP KQ2216621-02	.02	LIPIDS : NOAA LIPID/	2.243g		CLUKKEN K-Balance-53
4	K2207713-008	.02	LIPIDS : NOAA LIPID/	2.155g		CLUKKEN K-Balance-53
5	K2207713-012	.02	LIPIDS : NOAA LIPID/	2.236g		CLUKKEN K-Balance-53
6	K2207713-016	.02	LIPIDS : NOAA LIPID/	2.092g		CLUKKEN K-Balance-53
7	K2207713-020	.02	LIPIDS : NOAA LIPID/	2.130g		CLUKKEN K-Balance-53
8	K2207713-024	.02	LIPIDS : NOAA LIPID/	2.131g		CLUKKEN K-Balance-53
9	K2207713-039	.02	LIPIDS : NOAA LIPID/	2.085g		CLUKKEN K-Balance-53
10	K2207713-050	.02	LIPIDS : NOAA LIPID/	2.100g		CLUKKEN K-Balance-53

9.28.22

Relinquished By:	Date/Time: 9/28/22 9:41	Received By:	Date/Time: 1100

ALS Environmental

Appendix from EXT-3541
Extracting Lipids in Tissue
EPA Method 3541

Service Request # K2207213 **Work Group #** KQ2216621

DCM Lot # UN1593 Sulfate Lot # 2021222SS Glass Wool Lot# 3402199

Syringe Volume(s) and ID: EP-46

Soxtherm/s unit I.D# KSOX-11,09,10

Soxtherm Start (time/date/initial): 06:59 9.29.22 WS

Soxtherm Stop (time/date/initial): 09:59 9.29.22 WS

Pipette (5mL) Lot # 243211647

N-Evap (time/date/initial): 0535 9/30/22 VW N-Evap Thermometer ID: X-SUM-010
Temp as measured: 20 °C Correction factor: 0.0 °C Adjusted temp: 20 °C

Oven In (time/date/initial): 0748 9/30/22 VW Oven Temp: 70°

Oven Out (time/date/initial): 1000 9/30/22 VW Oven Temp: 70°

Pipette (2 mL) Lot # 01072021

Archived Extract Storage: Lennon

Bench Sheet Review Check List	
☑	Hold times met; if no, reason: frozen tissue
☑	Prep date, time, method, department, product code correct
☑	Spike information and Q.C. correct (insufficient volume or mass recorded if no Q.C.)
☑	Weights/Volumes and units correct on raw and final bench sheets
☑	Sample IDs have been checked - bottle numbers appended if required
☑	Names present for: started by, completed by, relinquished by, and witnessed by
☑	Extract storage recorded
☑	Additional prep sheet completely filled out (NA or line out blanks)
☑	All clean-ups have been noted on additional prep sheet

Benchsheet

Service Request #: KQ2216621, K2207713 **Run #:** 779584
Test: LIPIDS **Balance ID:**
Method: NOAA LIPID

Pan ID:	Lab Code:	Wet Wt. (g)	Dish (g)	Dish + Lipid Wt. (g)	% Lipids	MB Corr	RPD	MRL
	KQ2216621-04MB	2.2510	1.2157	1.2158	0.0	0.0001		0.22
	KQ2216621-03LCS	0.8810	1.2134	1.3587	82	0.0001		0.57
	K2207713-004DUP	2.104	1.2109	1.2118	0.19	0.0001	NC	0.24
	K2207713-004TRP	2.243	1.2170	1.2179	0.18	0.0001	NC	0.22
	K2207713-004	2.251	1.2159	1.2586	9.5	0.0001		0.22
	K2207713-008	2.155	1.2096	1.2247	3.5	0.0001		0.23
	K2207713-012	2.236	1.2040	1.2369	7.3	0.0001		0.22
	K2207713-016	2.092	1.2194	1.2353	3.8	0.0001		0.24
	K2207713-020	2.130	1.2201	1.2338	3.2	0.0001		0.23
	K2207713-024	2.131	1.2190	1.2294	2.4	0.0001		0.23
	K2207713-039	2.085	1.1950	1.2123	4.1	0.0001		0.24
	K2207713-050	2.100	1.2186	1.2288	2.4	0.0001		0.24

N-Evap ID	Date	Time
Sox-11,09,10	9/29/2022	06:39
K-Oven-15	9/30/2022	07:48

Comments: Completed: VW 9/30/2022 K-Oven- 15

Benchsheet

Service Request #: KQ2216621, K2207713 **Run #:** 779584
Test: LIPIDS **Balance ID:**
Method: NOAA LIPID

Pan ID:	Lab Code:	Wet Wt. (g)	Dish (g)	Dish + Lipid Wt. (g)	% Lipids	MB Corr	RPD	MRL
	KQ2216621-04MB	2.2510	1.7157	1.2158		0.0000		0.05
	KQ2216621-03LCS	0.8810	1.2134	1.3587		0.0000		0.05
	K2207713-004DUP	2.104	1.2109	1.2118		0.0000		0.05
	K2207713-004TRP	2.243	1.2170	1.2179		0.0000		0.05
	K2207713-004	2.251	1.7159	1.2586		0.0000		0.05
	K2207713-008	2.155	1.2096	1.7247		0.0000		0.05
	K2207713-012	2.236	1.2040	1.2369		0.0000		0.05
	K2207713-016	2.092	1.2194	1.7353		0.0000		0.05
	K2207713-020	2.130	1.2201	1.2338		0.0000		0.05
	K2207713-024	2.131	1.2190	1.2294		0.0000		0.05
	K2207713-039	2.085	1.1950	1.2123		0.0000		0.05
	K2207713-050	2.100	1.2186	1.2288		0.0000		0.05

N-Evap ID **Date** **Time**

JOHNSON LAKE FISH TISSUE MONITORING

APPENDIX K: LABORATORY ANALYTICAL REPORT FOR LARGEMOUTH BASS

ALS Environmental
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September 14, 2022 **Analytical Report for Service Request No:** K2207715

Scott Maharry
GRETTE ASSOCIATES LLC
2102 N 30th, Ste A
Tacoma, WA 98403

RE: Johnson Lake Fish Tissue Monitoring Study / 305.025

Dear Scott,

Enclosed are the results of the sample(s) submitted to our laboratory July 08, 2022
For your reference, these analyses have been assigned our service request number **K2207715.**

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

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

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental



Luke Rahn
Project Manager

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Acronyms

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

Inorganic Data Qualifiers

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

Metals Data Qualifiers

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

Organic Data Qualifiers

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

Additional Petroleum Hydrocarbon Specific Qualifiers

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

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

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

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Case Narrative

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

Client:	GRETTE ASSOCIATES LLC	**Service Request:**	K2207715
Project:	Johnson Lake Fish Tissue Monitoring Study	**Date Received:**	07/08/2022 - 08/12/2022
Sample Matrix:	Fish Tissue, Water		

CASE NARRATIVE

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

Sample Receipt:

One fish tissue, water samples was received for analysis at ALS Environmental on 07/08/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The sample was stored at minimum in accordance with the analytical method requirements.

Semivoa GC:

No significant anomalies were noted with this analysis.

Subcontracted Analytical Parameters:

PCB Congeners by EPA Method 1668C

The analysis for PCB Congeners was performed at ALS Burlington, Ontario Laboratory. The data for this analysis is included in the corresponding section of this report.

Approved by  Date 09/14/2022

Chain of Custody

ALS Environmental—Kelso Laboratory
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K2207115

Chain of Custody Record

Grette Associates, LLC

Grette Associates, LLC 2102 North 30th Tacoma, WA 98403 / 253-573-9300

Project: Johnson Lake Fish Tissue Monitoring Study
Number: 305.025
Client: Owens-Brockway
Samplers: CW/JLD/JD
Date: July 5-8, 2022

Sample Number	Species	Date	Time	Analysis	Notes
SWF-7-01	Stickleback	07/05/22	1226		← For Analysis
SWF-7-02	Stickleback	07/05/22	1256		List Please See
SWF-7-03	Stickleback	07/05/22	1312		Attached Quote!
SWF-1-04	Fathead Minnow	07/05/22	1418		
RF-1-05	Common Carp	07/05/22	1424		
RF-1-06	Common Carp	07/05/22	1555		
RF-1-07	Common Carp	07/05/22	1604		
RF-1-08	Common Carp	07/05/22	1613		
RF-1-09	Common Carp	07/05/22	1628		
LF-07-10	Common Carp	07/06/22	0808		
LF-07-11	Common Carp	07/06/22	0808		
LF-07-12	Common Carp	07/06/22	0808		
LF-07-13	Common Carp	07/06/22	0808		
LF-07-14	Common Carp	07/06/22	0808		
LF-07-15	Common Carp	07/06/22	0808		
LF-07-16	Common Carp	07/06/22	0808		
SF-01-17	Stickleback	07/06/22	1009		
SF-01-18	Stickleback	07/06/22	1009		
SF-07-19	Stickleback	07/06/22	1430		
SF-07-20	Stickleback	07/06/22	1430		
SF-07-21	Stickleback	07/06/22	1430		
SF-07-22	Stickleback	07/06/22	1430		
SF-07-23	Stickleback	07/06/22	1430		
SF-07-24	Stickleback	07/06/22	1430		
SF-07-25	Stickleback	07/06/22	1430		
SF-07-26	Stickleback	07/06/22	1430		
SF-07-27	Stickleback	07/06/22	1430		
SF-07-28	Stickleback	07/06/22	1430		
SF-07-29	Stickleback	07/06/22	1430		
SF-07-30	Stickleback	07/06/22	1430		

Bag
Container #: 3
Airbill #:
Container ____ of ____

Quality Control
Recorder _____
Checked by _____

Custody Tracking

Relinquished	Date/Time	Received	Intact?
	7/8/22	M. Merrigan ALS 1435 7/8/22	

Chain of Custody Record

Grette Associates, LLC

Grette Associates, LLC 2102 North 30th Tacoma, WA 98403 / 253-573-9300

Project: Johnson Lake Fish Tissue Monitoring Study
Number: 305.025
Client: Owens-Brockway
Samplers: CW/JLD/JD
Date: July 5-8, 2022

Sample Number	Species	Date	Time	Analysis	Notes
SF-07-31	Stickleback	07/06/22	1430		
SF-07-32	Stickleback	07/06/22	1430		
SF-07-33	Stickleback	07/06/22	1430		
SF-07-34	Stickleback	07/06/22	1430		
SF-07-35	Stickleback	07/06/22	1430		
SF-07-36	Stickleback	07/06/22	1430		
SF-07-37	Stickleback	07/06/22	1430		
SF-07-38	Stickleback	07/06/22	1430		
LF-02-39	Common Carp	07/07/22	0800		
RF-02-40	Fathead Minnow	07/07/22	1110		
RF-01-41	Large mouth Bass	07/08/22	0805		
RF-01-42	Common Carp	07/08/22	0805		
LF-01-43	Common Carp	07/08/22	0805		
LF-01-44	Common Carp	07/08/22	0805		
LF-01-45	Common Carp	07/08/22	0945		
RF-01-46	Common Carp	07/08/22	1053		

Bag
Container #: 3
Airbill #:
Container ____ of ____

Quality Control
Recorder _____
Checked by _____

Custody Tracking

Relinquished	Date/Time	Received	Intact?
		M. Mulligan 7/8/22 1435	

PM LR

Cooler Receipt and Preservation Form

Client Grette Associates Service Request K22 07715

Received: 7/8/22 Opened: 7/8/22 By: mm Unloaded: 7/8/22 By: mm

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

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number NA	Filed
	3.7	IR02					

4. Was a Temperature Blank present in cooler? (NA) Y N If yes, notate the temperature in the appropriate column above:
   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
5. Were samples received within the method specified temperature ranges? (NA) Y N
   If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. (NA) Y N

If applicable, tissue samples were received: (*Frozen*) *Partially Thawed* *Thawed*

6. Packing material: *Inserts* (*Baggies*) *Bubble Wrap* *Gel Packs* *Wet Ice* *Dry Ice* *Sleeves* _____
7. Were custody papers properly filled out (ink, signed, etc.)? NA (Y) N
8. Were samples received in good condition (unbroken) NA (Y) N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA (Y) N
10. Did all sample labels and tags agree with custody papers? NA (Y) N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA (Y) N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* (NA) Y N
13. Were VOA vials received without headspace? *Indicate in the table below.* (NA) Y N
14. Was C12/Res negative? (NA) Y N
15. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? (NA) Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

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

Notes, Discrepancies, Resolutions: _____

Cooler Receipt and Preservation Form

Client _____ Service Request *K22*0707715

Notes, Discrepancies & Resolutions:

only these samples on this SR
K2207715-001: GF-01-41
analyses: Composit & homogen
K2207715-002: GF-01-41/Game-Bass Fillet
log for: Cong 1668, Lipids, 7471B & Frz dry
K2207715-003: GF-01-41/Game-Bass Carcase
log for: Cong 1668, Lipids, 7471B & Frz dry

Page _____ ***of*** _____

Total Solids

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Analytical Report

Client:	GRETTE ASSOCIATES LLC	**Service Request:**	K2207715
Project:	Johnson Lake Fish Tissue Monitoring Study/305.025	**Date Collected:**	07/6/22
Sample Matrix:	Fish Tissue	**Date Received:**	07/8/22
Analysis Method:	Freeze Dry	**Units:**	Percent
Prep Method:	None	**Basis:**	Wet

Total Solids

Sample Name	Lab Code	Result	MRL	MDL	Dil.	Date Analyzed	Q
GF-01-41/Game-Bass fillet	K2207715-002	**18.8**	-	-	1	08/12/22 15:30	
GF-01-41/Game-Bass Carcass	K2207715-003	**33.4**	-	-	1	08/12/22 15:30	

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

Client:	GRETTE ASSOCIATES LLC	**Service Request:**	K2207715
Project	Johnson Lake Fish Tissue Monitoring Study/305.025	**Date Collected:**	07/06/22
Sample Matrix:	Fish Tissue	**Date Received:**	07/08/22
		Date Analyzed:	08/12/22

Replicate Sample Summary
Inorganic Parameters

Sample Name:	GF-01-41/Game-Bass fillet	**Units:**	Percent
Lab Code:	K2207715-002	**Basis:**	Wet

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample K2207715-002DUP Result	Average	RPD	RPD Limit
Total Solids	Freeze Dry	-	-	18.8	19.0	18.9	1	20

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

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

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

LIPIDS

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Analytical Report

Client:	GRETTE ASSOCIATES LLC	**Service Request:**	K2207715
Project:	Johnson Lake Fish Tissue Monitoring Study/305.025	**Date Collected:**	07/06/22 14:30
Sample Matrix:	Fish Tissue	**Date Received:**	07/08/22 14:35
Sample Name:	GF-01-41/Game-Bass fillet	**Units:**	Percent
Lab Code:	K2207715-002	**Basis:**	Wet

Lipids

Analysis Method: NOAA LIPID
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lipids, Total	**0.29**	0.24	-	1	08/29/22 07:33	8/24/22	

Analytical Report

Client:	GRETTE ASSOCIATES LLC	**Service Request:**	K2207715
Project:	Johnson Lake Fish Tissue Monitoring Study/305.025	**Date Collected:**	07/06/22 14:30
Sample Matrix:	Fish Tissue	**Date Received:**	07/08/22 14:35
Sample Name:	GF-01-41/Game-Bass Carcass	**Units:**	Percent
Lab Code:	K2207715-003	**Basis:**	Wet

Lipids

Analysis Method: NOAA LIPID
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lipids, Total	**0.46**	0.24	-	1	08/29/22 07:33	8/24/22	

Analytical Report

Client:	GRETTE ASSOCIATES LLC	**Service Request:**	K2207715
Project:	Johnson Lake Fish Tissue Monitoring Study/305.025	**Date Collected:**	NA
Sample Matrix:	Fish Tissue	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	Percent
Lab Code:	KQ2213440-04	**Basis:**	Wet

Lipids

Analysis Method: NOAA LIPID
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lipids, Total	ND U	0.23	-	1	08/29/22 07:33	8/24/22	

Client:	GRETTE ASSOCIATES LLC	**Service Request:**	K2207715
Project:	Johnson Lake Fish Tissue Monitoring Study/305.025	**Date Analyzed:**	08/29/22
Sample Matrix:	Fish Tissue	**Date Extracted:**	08/24/22

Lab Control Sample Summary
Lipids

Analysis Method:	NOAA LIPID	**Units:**	Percent
Prep Method:	EPA 3541	**Basis:**	Wet
		Analysis Lot:	775652

Lab Control Sample
KQ2213440-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Lipids, Total	95.0	100	95	70-130

Client:	GRETTE ASSOCIATES LLC	**Service Request:**	K2207715
Project:	Johnson Lake Fish Tissue Monitoring Study/305.025	**Date Analyzed:**	08/29/22 07:33
Sample Matrix:	Fish Tissue	**Date Extracted:**	08/24/22

Method Blank Summary
Lipids

Sample Name:	Method Blank	**Instrument ID:**	K-Balance-30
Lab Code:	KQ2213440-04	**File ID:**	
Analysis Method:	NOAA LIPID	**Analysis Lot:**	775652
Prep Method:	EPA 3541	**Extraction Lot:**	404429

This Method Blank applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
GF-01-41/Game-Bass fillet	K2207715-002		08/29/22 07:33
GF-01-41/Game-Bass Carcass	K2207715-003		08/29/22 07:33
Lab Control Sample	KQ2213440-03		08/29/22 07:33

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	GRETTE ASSOCIATES LLC	**Service Request:**	K2207715
Project:	Johnson Lake Fish Tissue Monitoring Study/305.025	**Date Analyzed:**	08/29/22 07:33
Sample Matrix:	Fish Tissue	**Date Extracted:**	08/24/22

Lab Control Sample Summary
Lipids

Sample Name:	Lab Control Sample	**Instrument ID:**	K-Balance-30
Lab Code:	KQ2213440-03	**File ID:**	
Analysis Method:	NOAA LIPID	**Analysis Lot:**	775652
Prep Method:	EPA 3541	**Extraction Lot:**	404429

This Lab Control Sample applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
GF-01-41/Game-Bass fillet	K2207715-002		08/29/22 07:33
GF-01-41/Game-Bass Carcass	K2207715-003		08/29/22 07:33
Method Blank	KQ2213440-04		08/29/22 07:33

Client: GRETTE ASSOCIATES LLC **Service Request:**K2207715
Project: Johnson Lake Fish Tissue Monitoring Study/305.025

Analysis Run Log
Lipids

Analysis Method: NOAA LIPID **Analysis Lot:**775652
Instrument ID:K-Balance-30

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
	GF-01-41/Game-Bass fillet	K2207715-002	8/29/2022	07:33	
	Lab Control Sample	KQ2213440-03	8/29/2022	07:33	
	ZZZZZZZ	ZZZZZZZ	8/29/2022	07:33	
	ZZZZZZZ	ZZZZZZZ	8/29/2022	07:33	
	ZZZZZZZ	ZZZZZZZ	8/29/2022	07:33	
	ZZZZZZZ	ZZZZZZZ	8/29/2022	07:33	
	ZZZZZZZ	ZZZZZZZ	8/29/2022	07:33	
	Method Blank	KQ2213440-04	8/29/2022	07:33	
	GF-01-41/Game-Bass Carcass	K2207715-003	8/29/2022	07:33	
	ZZZZZZZ	ZZZZZZZ	8/29/2022	07:33	

Prep Summary Report

Client: GRETTE ASSOCIATES LLC **Service Request:**K2207715
Project: Johnson Lake Fish Tissue Monitoring Study/305.025
Sample Matrix: Fish Tissue

Lipids

Prep Method: EPA 3541 **Extraction Lot:** 404429
Analytical Method: NOAA LIPID **Extraction Date:** 08/24/22 09:14

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Amount	Percent Solids
GF-01-41/Game-Bass fillet	K2207715-002	7/6/22	7/8/22	2.061 g	10 mL	
GF-01-41/Game-Bass Carcass	K2207715-003	7/6/22	7/8/22	2.056 g	10 mL	
Lab Control Sample	KQ2213440-03LCS	NA	NA	0.9760 g	10 mL	
Method Blank	KQ2213440-04MB	NA	NA	2.1720 g	10 mL	

Subcontract Lab Results

ALS Environmental—Kelso Laboratory
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ALS Environmental - Kelso
ATTN: Luke Rahn
1317 South 13th Avenue
Kelso WA 98626

Date Received: 18-AUG-22
Report Date: 14-SEP-22 12:54 (MT)
Version: FINAL

Client Phone: 360-577-7222

Certificate of Analysis

Lab Work Order #: L2729169

Project P.O. #: 51K2207715
Job Reference: K2207715
C of C Numbers:
Legal Site Desc:

Michael Challis
Project Manager

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ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2729169-1 GF-01-41/GAME-BASS FILLET							
Sampled By: Client on 06-JUL-22 @ 14:30							
Matrix: Fish tissue							
All PCB congeners by GC/HRMS							
PCB 1	1.30	M,J,R	0.72	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 2	<0.78	M,U	0.78	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 3	<0.75	[U]	0.75	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 4	3.4	J,R	2.1	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 10	<1.0	[U]	1.0	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 9	<1.1	[U]	1.1	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 7	<1.1	[U]	1.1	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 6	3.2	J,R	1.1	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 5	<1.3	[U]	1.3	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 8	17.0	J,R	0.89	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 14	<1.5	[U]	1.5	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 11	51.3	M	1.4	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 13/12	<1.4	[U]	1.4	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 15	3.1	J,R	1.2	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 19	1.68	[J]	0.51	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 30/18	28.1		0.69	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 17	15.5	[J]	0.78	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 27	1.70	J,R	0.63	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 24	<0.64	[U]	0.64	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 16	5.80	J,R	0.77	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 32	9.62	[J]	0.54	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 34	<1.2	[U]	1.2	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 23	<1.1	[U]	1.1	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 29/26	17.4	[J]	1.1	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 25	6.83	[J]	0.98	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 31	125		0.99	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 28/20	307		1.1	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 21/33	29.7		1.0	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 22	38.0		1.1	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 36	<1.0	[U]	1.0	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 39	<1.2	[U]	1.2	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 38	<1.0	[U]	1.0	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 35	<1.2	[U]	1.2	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 37	10.5	[J]	1.1	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 54	<0.16	[U]	0.16	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 50/53	13.5	[J]	0.38	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 45/51	18.6	[J]	0.39	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 46	2.00	J,R	0.42	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 52	673		0.40	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 73	<0.25	[U]	0.25	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 43	16.5	[J]	0.43	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 69/49	374		0.29	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 48	50.0		0.35	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 44/47/65	422		0.31	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 59/62/75	40.1		0.26	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 42	83.6		0.37	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 41/71/40	81.3		0.36	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 64	246		0.25	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 72	6.02	[J]	0.94	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 68	5.75	[J]	0.88	pg/g wwt	25-AUG-22	01-SEP-22	R5859338

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2729169-1 GF-01-41/GAME-BASS FILLET							
Sampled By: Client on 06-JUL-22 @ 14:30							
Matrix: Fish tissue							
All PCB congeners by GC/HRMS							
PCB 57	<1.0	[U]	1.0	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 58	<0.91	[U]	0.91	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 67	6.34	[J]	0.82	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 63	36.3		0.93	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 61/70/74/76	1050		0.89	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 66	878		0.90	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 55	<0.93	[U]	0.93	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 56	103		0.91	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 60	158		0.91	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 80	<0.74	[U]	0.74	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 79	3.10	[J]	0.76	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 78	<0.92	[U]	0.92	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 81	<0.88	[U]	0.88	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 77	21.0	J,R	0.97	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 104	<0.17	[U]	0.17	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 96	1.06	M,J	0.33	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 103	5.71	[J]	0.75	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 94	<0.77	[U]	0.77	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 95	327	M	0.88	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 100/93/102/98	8.80	M,J,R	0.67	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 88/91	60.1		0.73	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 84	42.7		0.77	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 89	1.60	J,R	0.89	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 121	<0.50	[U]	0.50	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 92	148		0.80	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 113/90/101	685		0.57	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 83/99	530		0.71	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 112	<0.47	[U]	0.47	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 109/119/86/97/125/87	287	M	0.54	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 117/116/85/110/115	702	M	0.51	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 82	42.0	R	0.84	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 111	1.60	J,R	0.45	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 120	6.18	[J]	0.44	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 108/124	19.4	[J]	0.85	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 107	58.8	M	0.68	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 123	8.40	M,J	0.84	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 106	<0.93	[U]	0.93	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 118	657		0.80	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 122	10.2	[J]	1.1	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 114	18.5	[J]	0.84	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 105	254		0.84	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 127	<0.82	[U]	0.82	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 126	3.6	M,J,R	1.0	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 155	0.160	J,R	0.087	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 152	0.21	M,J,R	0.18	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 150	0.69	M,J,R	0.16	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 136	54.7		0.18	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 145	0.18	[J]	0.17	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 148	0.89	J,R	0.23	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 151/135	410		0.24	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 154	<0.17	[U]	0.17	pg/g wwt	25-AUG-22	01-SEP-22	R5859338

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ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2729169-1 GF-01-41/GAME-BASS FILLET							
Sampled By: Client on 06-JUL-22 @ 14:30							
Matrix: Fish tissue							
All PCB congeners by GC/HRMS							
PCB 144	47.0		0.25	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 147/149	789		0.91	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 134/143	29.5		1.1	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 139/140	9.03	[J]	0.88	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 131	4.4	[J]	1.1	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 142	<1.2	[U]	1.2	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 132	200		1.0	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 133	32.0		1.0	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 165	3.26	[J]	0.76	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 146	319		0.83	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 161	<0.70	[U]	0.70	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 168/153	1930		0.72	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 141	298		0.89	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 130	76.0		1.1	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 137/164	109		0.76	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 138/163/129	1710		0.88	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 160	<0.67	[U]	0.67	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 158	97.6		0.60	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 128/166	144		0.77	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 159	10.0	J,R	0.64	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 162	6.72	[J]	0.68	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 167	47.7		0.65	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 156/157	87.7		0.96	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 169	6.50	M,J,R	0.88	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 188	0.90	[J]	0.24	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 179	106		0.31	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 184	0.79	[J]	0.28	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 176	27.6		0.31	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 186	<0.32	[U]	0.32	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 178	104		0.44	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 175	17.8	[J]	0.42	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 187	782		0.38	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 182	<0.38	[U]	0.38	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 183	273		0.39	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 185	38.1	M	0.47	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 174	239	M	0.38	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 177	216		0.43	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 181	1.20	J,R	0.43	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 171/173	109		0.45	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 172	87.0		0.43	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 192	<0.36	[U]	0.36	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 180/193	1120		0.35	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 191	19.2	[J]	0.32	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 170	373		0.46	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 190	79.5		0.29	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 189	12.3	[J]	0.25	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 202	43.0		0.096	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 201	19.1	[J]	0.13	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 204	0.21	J,R	0.13	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 197	7.90	[J]	0.13	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 200	12.7	[J]	0.14	pg/g wwt	25-AUG-22	01-SEP-22	R5859338

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2729169-1 GF-01-41/GAME-BASS FILLET							
Sampled By: Client on 06-JUL-22 @ 14:30							
Matrix: Fish tissue							
All PCB congeners by GC/HRMS							
PCB 198/199	272		0.19	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 196	95.9		0.19	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 203	173		0.19	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 195	57.9		0.28	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 194	151		0.26	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 205	7.77	[J]	0.29	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 208	18.0	[J]	0.32	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 207	6.62	[J]	0.38	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 206	63.9		0.61	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
PCB 209	18.7	[J]	0.12	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
Surrogate: 13C12 PCB 1	14.0		5-145	%	25-AUG-22	01-SEP-22	R5859338
Surrogate: 13C12 PCB 3	19.0		5-145	%	25-AUG-22	01-SEP-22	R5859338
Surrogate: 13C12 PCB 4	21.0		5-145	%	25-AUG-22	01-SEP-22	R5859338
Surrogate: 13C12 PCB 15	41.0		5-145	%	25-AUG-22	01-SEP-22	R5859338
Surrogate: 13C12 PCB 19	38.0		5-145	%	25-AUG-22	01-SEP-22	R5859338
Surrogate: 13C12 PCB 37	42.0		5-145	%	25-AUG-22	01-SEP-22	R5859338
Surrogate: 13C12 PCB 54	40.0		5-145	%	25-AUG-22	01-SEP-22	R5859338
Surrogate: 13C12 PCB 81	58.0		10-145	%	25-AUG-22	01-SEP-22	R5859338
Surrogate: 13C12 PCB 77	57.0		10-145	%	25-AUG-22	01-SEP-22	R5859338
Surrogate: 13C12 PCB 104	63.0		10-145	%	25-AUG-22	01-SEP-22	R5859338
Surrogate: 13C12 PCB 123	59.0		10-145	%	25-AUG-22	01-SEP-22	R5859338
Surrogate: 13C12 PCB 118	58.0		10-145	%	25-AUG-22	01-SEP-22	R5859338
Surrogate: 13C12 PCB 114	60.0		10-145	%	25-AUG-22	01-SEP-22	R5859338
Surrogate: 13C12 PCB 105	58.0		10-145	%	25-AUG-22	01-SEP-22	R5859338
Surrogate: 13C12 PCB 126	54.0		10-145	%	25-AUG-22	01-SEP-22	R5859338
Surrogate: 13C12 PCB 155	63.0		10-145	%	25-AUG-22	01-SEP-22	R5859338
Surrogate: 13C12 PCB 167	63.0		10-145	%	25-AUG-22	01-SEP-22	R5859338
Surrogate: 13C12 PCB 156/157	59.0		10-145	%	25-AUG-22	01-SEP-22	R5859338
Surrogate: 13C12 PCB 169	54.0		10-145	%	25-AUG-22	01-SEP-22	R5859338
Surrogate: 13C12 PCB 188	70.0		10-145	%	25-AUG-22	01-SEP-22	R5859338
Surrogate: 13C12 PCB 189	51.0		10-145	%	25-AUG-22	01-SEP-22	R5859338
Surrogate: 13C12 PCB 202	70.0		10-145	%	25-AUG-22	01-SEP-22	R5859338
Surrogate: 13C12 PCB 205	55.0		10-145	%	25-AUG-22	01-SEP-22	R5859338
Surrogate: 13C12 PCB 208	74.0		10-145	%	25-AUG-22	01-SEP-22	R5859338
Surrogate: 13C12 PCB 206	67.0		10-145	%	25-AUG-22	01-SEP-22	R5859338
Surrogate: 13C12 PCB 209	60.0		10-145	%	25-AUG-22	01-SEP-22	R5859338
Surrogate: 13C12 PCB 28	47.0		5-145	%	25-AUG-22	01-SEP-22	R5859338
Surrogate: 13C12 PCB 111	65.0		10-145	%	25-AUG-22	01-SEP-22	R5859338
Surrogate: 13C12 PCB 178	59.0		10-145	%	25-AUG-22	01-SEP-22	R5859338
Total MonoCB	1.30	[J]	0.72	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
Total DiCB	78.0	[J]	0.89	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
Total TriCB	597	[J]	0.51	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
Total TetraCB	4290	[J]	0.16	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
Total PentaCB	3880	[J]	0.17	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
Total HexaCB	6420	[J]	0.087	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
Total HeptaCB	3610	[J]	0.24	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
Total OctaCB	840	[J]	0.096	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
Total NonaCB	88.5	[J]	0.32	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
DecaCB	18.7	[J]	0.12	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
Total PCB	19800	[J]	1.0	pg/g wwt	25-AUG-22	01-SEP-22	R5859338
Lower Bound PCB TEQ (WHO 2005)	0.0326			pg/g wwt	25-AUG-22	01-SEP-22	R5859338

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2729169-1 GF-01-41/GAME-BASS FILLET							
Sampled By: Client on 06-JUL-22 @ 14:30							
Matrix: Fish tissue							
All PCB congeners by GC/HRMS							
Mid Point PCB TEQ (WHO 2005)	0.590			pg/g wwt	25-AUG-22	01-SEP-22	R5859338
Upper Bound PCB TEQ (WHO 2005)	0.590			pg/g wwt	25-AUG-22	01-SEP-22	R5859338
L2729169-2 GF-01-41/GAME-BASS CARCASS							
Sampled By: Client on 06-JUL-22 @ 14:30							
Matrix: Fish tissue							
All PCB congeners by GC/HRMS							
PCB 1	1.00	[J]	0.17	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 2	11.4	[J]	0.22	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 3	2.45	[J]	0.26	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 4	16.0	[J]	0.51	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 10	0.95	J,R	0.39	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 9	4.80	J,R	0.39	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 7	3.70	[J]	0.38	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 6	18.8		0.40	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 5	<0.45	[U]	0.45	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 8	87.8		0.35	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 14	<0.90	[U]	0.90	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 11	295		0.87	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 13/12	14.3	M,J	0.84	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 15	9.0	J,R	1.0	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 19	13.6	[J]	0.16	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 30/18	307		0.57	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 17	166		0.64	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 27	25.8		0.51	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 24	6.12	[J]	0.53	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 16	80.2		0.66	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 32	84.3		0.45	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 34	12.3	[J]	1.7	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 23	<1.5	[U]	1.5	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 29/26	224		1.5	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 25	83.9		1.4	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 31	1500		1.4	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 28/20	3520		1.5	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 21/33	294		1.4	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 22	459		1.6	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 36	115		1.5	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 39	12.0	J,R	1.6	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 38	6.3	[J]	1.5	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 35	<1.7	[U]	1.7	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 37	103		1.9	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 54	0.710	M,J,R	0.076	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 50/53	135		0.24	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 45/51	177		0.24	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 46	24.6		0.27	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 52	6230		0.25	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 73	<0.16	[U]	0.16	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 43	160		0.28	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 69/49	3780		0.19	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 48	462		0.23	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 44/47/65	4130		0.21	pg/g wwt	25-AUG-22	02-SEP-22	R5859338

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2729169-2 GF-01-41/GAME-BASS CARCASS							
Sampled By: Client on 06-JUL-22 @ 14:30							
Matrix: Fish tissue							
All PCB congeners by GC/HRMS							
PCB 59/62/75	374		0.17	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 42	875		0.24	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 41/71/40	765		0.23	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 64	2390		0.16	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 72	70.9		2.6	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 68	44.0		2.4	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 57	20.7		2.7	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 58	<2.6	[U]	2.6	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 67	72.5		2.2	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 63	418		2.6	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 61/70/74/76	12100		2.5	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 66	9640		2.5	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 55	<2.5	[U]	2.5	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 56	1200		2.5	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 60	1870		2.6	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 80	<2.1	[U]	2.1	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 79	43.6	M	2.2	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 78	<2.6	[U]	2.6	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 81	15.1	[J]	2.8	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 77	283		2.9	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 104	<0.091	[U]	0.091	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 96	9.64	[J]	0.16	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 103	50.4		0.92	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 94	7.82	[J]	0.94	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 95	3240		1.1	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 100/93/102/98	93.9		0.84	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 88/91	676		0.92	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 84	461		0.95	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 89	16.6	[J]	1.1	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 121	2.80	J,R	0.62	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 92	1530		0.99	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 113/90/101	6980		0.72	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 83/99	5730		0.90	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 112	<0.57	[U]	0.57	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 109/119/86/97/125/87	3150	M	0.67	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 117/116/85/110/115	7040	M	0.63	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 82	410		1.0	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 111	14.4	[J]	0.56	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 120	56.8		0.55	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 108/124	236		1.4	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 107	647	M	1.1	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 123	176	M	1.3	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 106	<1.5	[U]	1.5	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 118	7230		1.2	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 122	106		1.8	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 114	213		1.4	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 105	2990		1.3	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 127	11.0	J,R	1.3	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 126	38.0	M,R	1.7	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 155	1.35	[J]	0.079	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 152	2.00	J,R	0.15	pg/g wwt	25-AUG-22	02-SEP-22	R5859338

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2729169-2 GF-01-41/GAME-BASS CARCASS							
Sampled By: Client on 06-JUL-22 @ 14:30							
Matrix: Fish tissue							
All PCB congeners by GC/HRMS							
PCB 150	8.28	[J]	0.13	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 136	684		0.15	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 145	<0.14	[U]	0.14	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 148	14.3	[J]	0.19	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 151/135	4880	M	0.20	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 154	97.3	M	0.13	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 144	528		0.20	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 147/149	8130		0.91	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 134/143	252		1.1	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 139/140	103		0.89	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 131	47.1		1.1	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 142	<1.2	[U]	1.2	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 132	2050		1.0	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 133	351		1.0	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 165	34.9		0.76	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 146	3420		0.84	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 161	<0.69	[U]	0.69	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 168/153	20800		0.71	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 141	3070		0.89	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 130	840		1.1	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 137/164	1180	M	0.77	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 138/163/129	18400		0.89	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 160	<0.66	[U]	0.66	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 158	1260		0.58	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 128/166	1620		0.76	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 159	132		0.64	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 162	78.8		0.68	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 167	587		0.64	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 156/157	1020		0.91	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 169	80.0	R	0.83	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 188	9.79	[J]	0.33	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 179	1100		0.38	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 184	4.89	[J]	0.34	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 176	296		0.37	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 186	<0.38	[U]	0.38	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 178	1330		0.51	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 175	195		0.51	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 187	8160		0.45	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 182	<0.44	[U]	0.44	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 183	2880		0.47	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 185	360	R	0.50	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 174	2670		0.49	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 177	2320		0.51	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 181	16.0	J,R	0.52	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 171/173	1250		0.54	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 172	962		0.51	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 192	<0.44	[U]	0.44	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 180/193	13200		0.43	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 191	212		0.39	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 170	4650		0.56	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 190	1010		0.35	pg/g wwt	25-AUG-22	02-SEP-22	R5859338

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2729169-2 GF-01-41/GAME-BASS CARCASS							
Sampled By: Client on 06-JUL-22 @ 14:30							
Matrix: Fish tissue							
All PCB congeners by GC/HRMS							
PCB 189	162		0.44	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 202	510		0.17	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 201	226		0.18	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 204	1.25	[J]	0.18	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 197	71.5		0.19	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 200	125		0.20	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 198/199	3000		0.28	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 196	1140		0.29	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 203	1990		0.27	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 195	897		0.43	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 194	2090		0.40	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 205	98.0		0.32	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 208	230		0.22	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 207	79.1		0.25	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 206	807		0.37	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
PCB 209	235		0.096	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
Surrogate: 13C12 PCB 1	48.0		5-145	%	25-AUG-22	02-SEP-22	R5859338
Surrogate: 13C12 PCB 3	51.0		5-145	%	25-AUG-22	02-SEP-22	R5859338
Surrogate: 13C12 PCB 4	54.0		5-145	%	25-AUG-22	02-SEP-22	R5859338
Surrogate: 13C12 PCB 15	58.0		5-145	%	25-AUG-22	02-SEP-22	R5859338
Surrogate: 13C12 PCB 19	61.0		5-145	%	25-AUG-22	02-SEP-22	R5859338
Surrogate: 13C12 PCB 37	61.0		5-145	%	25-AUG-22	02-SEP-22	R5859338
Surrogate: 13C12 PCB 54	67.0		5-145	%	25-AUG-22	02-SEP-22	R5859338
Surrogate: 13C12 PCB 81	77.0		10-145	%	25-AUG-22	02-SEP-22	R5859338
Surrogate: 13C12 PCB 77	73.0		10-145	%	25-AUG-22	02-SEP-22	R5859338
Surrogate: 13C12 PCB 104	75.0		10-145	%	25-AUG-22	02-SEP-22	R5859338
Surrogate: 13C12 PCB 123	80.0		10-145	%	25-AUG-22	02-SEP-22	R5859338
Surrogate: 13C12 PCB 118	84.0		10-145	%	25-AUG-22	02-SEP-22	R5859338
Surrogate: 13C12 PCB 114	79.0		10-145	%	25-AUG-22	02-SEP-22	R5859338
Surrogate: 13C12 PCB 105	80.0		10-145	%	25-AUG-22	02-SEP-22	R5859338
Surrogate: 13C12 PCB 126	72.0		10-145	%	25-AUG-22	02-SEP-22	R5859338
Surrogate: 13C12 PCB 155	73.0		10-145	%	25-AUG-22	02-SEP-22	R5859338
Surrogate: 13C12 PCB 167	74.0		10-145	%	25-AUG-22	02-SEP-22	R5859338
Surrogate: 13C12 PCB 156/157	73.0		10-145	%	25-AUG-22	02-SEP-22	R5859338
Surrogate: 13C12 PCB 169	71.0		10-145	%	25-AUG-22	02-SEP-22	R5859338
Surrogate: 13C12 PCB 188	75.0		10-145	%	25-AUG-22	02-SEP-22	R5859338
Surrogate: 13C12 PCB 189	77.0		10-145	%	25-AUG-22	02-SEP-22	R5859338
Surrogate: 13C12 PCB 202	77.0		10-145	%	25-AUG-22	02-SEP-22	R5859338
Surrogate: 13C12 PCB 205	77.0		10-145	%	25-AUG-22	02-SEP-22	R5859338
Surrogate: 13C12 PCB 208	75.0		10-145	%	25-AUG-22	02-SEP-22	R5859338
Surrogate: 13C12 PCB 206	77.0		10-145	%	25-AUG-22	02-SEP-22	R5859338
Surrogate: 13C12 PCB 209	80.0		10-145	%	25-AUG-22	02-SEP-22	R5859338
Surrogate: 13C12 PCB 28	78.0		5-145	%	25-AUG-22	02-SEP-22	R5859338
Surrogate: 13C12 PCB 111	78.0		10-145	%	25-AUG-22	02-SEP-22	R5859338
Surrogate: 13C12 PCB 178	87.0		10-145	%	25-AUG-22	02-SEP-22	R5859338
Total MonoCB	14.9	[J]	0.17	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
Total DiCB	450	[J]	0.35	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
Total TriCB	7010	[J]	0.16	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
Total TetraCB	45300	[J]	0.076	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
Total PentaCB	41100	[J]	0.091	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
Total HexaCB	69700	[J]	0.079	pg/g wwt	25-AUG-22	02-SEP-22	R5859338

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2729169-2 GF-01-41/GAME-BASS CARCASS							
Sampled By: Client on 06-JUL-22 @ 14:30							
Matrix: Fish tissue							
All PCB congeners by GC/HRMS							
Total HeptaCB	40800	[J]	0.33	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
Total OctaCB	10100	[J]	0.17	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
Total NonaCB	1120	[J]	0.22	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
DecaCB	235	[J]	0.096	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
Total PCB	216000	[J]	1.0	pg/g wwt	25-AUG-22	02-SEP-22	R5859338
Lower Bound PCB TEQ (WHO 2005)	0.404			pg/g wwt	25-AUG-22	02-SEP-22	R5859338
Mid Point PCB TEQ (WHO 2005)	6.60			pg/g wwt	25-AUG-22	02-SEP-22	R5859338
Upper Bound PCB TEQ (WHO 2005)	6.60			pg/g wwt	25-AUG-22	02-SEP-22	R5859338

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

Reference Information

Sample Parameter Qualifier Key:

Qualifier	Description
G	QC result did not meet ALS DQO. Refer to narrative comments for further information.
J,G	QC result did not meet ALS DQO. Refer to narrative comments for further information. Duplicate expressed in terms of absolute difference.
J,R	The analyte was detected below the calibrated range but above the EDL, and the ion abundance ratio(s) did not meet the acceptance criteria. Value is an estimated maximum.
M	A peak has been manually integrated.
M,J	A peak has been manually integrated, and the analyte was detected below the calibrated range but above the EDL.
M,J,R	A peak has been manually integrated, the analyte was detected below the calibrated range but above the EDL, and the ion abundance ratio(s) did not meet the acceptance criteria. Value is an estimated maximum.
M,R	A peak has been manually integrated, and the ion abundance ratio(s) did not meet the acceptance criteria. Value is an estimated maximum.
M,U	A peak has been manually integrated, and the analyte was not detected above the EDL.
R	The ion abundance ratio(s) did not meet the acceptance criteria. Value is an estimated maximum.
[J]	The analyte was detected below the calibrated range but above the EDL.
[U]	The analyte was not detected above the EDL.

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
PCB-1668C-O2-HRMS-BU	Tissue	All PCB congeners by GC/HRMS	USEPA 1668C

Samples are extracted by liquid/liquid extraction and the targets are isolated via multiple cleanup steps then analyzed by gas chromatography/high-resolution mass spectrometry using an SPB-Octyl column by isotope dilution.

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location
BU	ALS ENVIRONMENTAL - BURLINGTON, ONTARIO, CANADA

Chain of Custody Numbers:

GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.
mg/kg - milligrams per kilogram based on dry weight of sample
mg/kg wwt - milligrams per kilogram based on wet weight of sample
mg/kg lwt - milligrams per kilogram based on lipid-adjusted weight
mg/L - unit of concentration based on volume, parts per million.
< - Less than.
D.L. - The reporting limit.
N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.
UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.
Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.

Quality Control Report

Workorder: L2729169 Report Date: 14-SEP-22

Client: ALS Environmental - Kelso
1317 South 13th Avenue
Kelso WA 98626
Contact: Luke Rahn

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PCB-1668C-O2-HRMS-BU	**Tissue**							
Batch R5859338								
WG3758388-4 DUP		**L2729169-1**						
PCB 1		1.30	1.30		pg/g wwt	0.0	50	01-SEP-22
PCB 2		<0.78	1.34	G	pg/g wwt	N/A	50	01-SEP-22
PCB 3		<0.75	<0.53	RPD-NA	pg/g wwt	N/A	50	01-SEP-22
PCB 4		3.4	3.5		pg/g wwt	2.9	50	01-SEP-22
PCB 10		<1.0	<0.83	RPD-NA	pg/g wwt	N/A	50	01-SEP-22
PCB 9		<1.1	<0.88	RPD-NA	pg/g wwt	N/A	50	01-SEP-22
PCB 7		<1.1	<0.87	RPD-NA	pg/g wwt	N/A	50	01-SEP-22
PCB 6		3.2	2.60		pg/g wwt	21	50	01-SEP-22
PCB 5		<1.3	<1.1	RPD-NA	pg/g wwt	N/A	50	01-SEP-22
PCB 8		17.0	15.2		pg/g wwt	11	50	01-SEP-22
PCB 14		<1.5	<1.7	RPD-NA	pg/g wwt	N/A	50	01-SEP-22
PCB 11		51.3	60.2		pg/g wwt	16	50	01-SEP-22
PCB 13/12		<1.4	<1.6	RPD-NA	pg/g wwt	N/A	50	01-SEP-22
PCB 15		3.1	5.4	J	pg/g wwt	2.3	3	01-SEP-22
PCB 19		1.68	1.31		pg/g wwt	25	50	01-SEP-22
PCB 30/18		28.1	26.1		pg/g wwt	7.4	50	01-SEP-22
PCB 17		15.5	15.2		pg/g wwt	2.0	50	01-SEP-22
PCB 27		1.70	2.52		pg/g wwt	39	50	01-SEP-22
PCB 24		<0.64	0.43	RPD-NA	pg/g wwt	N/A	50	01-SEP-22
PCB 16		5.80	6.30		pg/g wwt	8.3	50	01-SEP-22
PCB 32		9.62	8.65		pg/g wwt	11	50	01-SEP-22
PCB 34		<1.2	<1.1	RPD-NA	pg/g wwt	N/A	50	01-SEP-22
PCB 23		<1.1	<0.92	RPD-NA	pg/g wwt	N/A	50	01-SEP-22
PCB 29/26		17.4	15.7		pg/g wwt	10	50	01-SEP-22
PCB 25		6.83	6.01		pg/g wwt	13	50	01-SEP-22
PCB 31		125	102		pg/g wwt	20	50	01-SEP-22
PCB 28/20		307	244		pg/g wwt	23	50	01-SEP-22
PCB 21/33		29.7	29.3		pg/g wwt	1.4	50	01-SEP-22
PCB 22		38.0	31.2		pg/g wwt	20	50	01-SEP-22
PCB 36		<1.0	7.25	RPD-NA	pg/g wwt	<0.87	50	01-SEP-22
PCB 39		<1.2	<0.99	RPD-NA	pg/g wwt	N/A	50	01-SEP-22
PCB 38		<1.0	<0.86	RPD-NA	pg/g wwt	N/A	50	01-SEP-22
PCB 35		<1.2	1.60	RPD-NA	pg/g wwt	N/A	50	01-SEP-22

COMMENTS: The relative percent differences (RPD) between the sample and duplicate were above the method control limit for some targets.The

Quality Control Report

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PCB-1668C-O2-HRMS-BU	**Tissue**							
Batch R5859338								
WG3758388-4 DUP		**L2729169-1**						
PCB 37		10.5	11.0		pg/g wwt	4.7	50	01-SEP-22
PCB 54		<0.16	<0.15	RPD-NA	pg/g wwt	N/A	50	01-SEP-22
PCB 50/53		13.5	10.6		pg/g wwt	24	50	01-SEP-22
PCB 45/51		18.6	15.8		pg/g wwt	16	50	01-SEP-22
PCB 46		2.00	2.04		pg/g wwt	2.0	50	01-SEP-22
PCB 52		673	481		pg/g wwt	33	50	01-SEP-22
PCB 73		<0.25	<0.48	RPD-NA	pg/g wwt	N/A	50	01-SEP-22
PCB 43		16.5	12.5		pg/g wwt	28	50	01-SEP-22
PCB 69/49		374	268		pg/g wwt	33	50	01-SEP-22
PCB 48		50.0	37.2		pg/g wwt	29	50	01-SEP-22
PCB 44/47/65		422	309		pg/g wwt	31	50	01-SEP-22
PCB 59/62/75		40.1	28.0		pg/g wwt	36	50	01-SEP-22
PCB 42		83.6	61.5		pg/g wwt	30	50	01-SEP-22
PCB 41/71/40		81.3	58.0		pg/g wwt	33	50	01-SEP-22
PCB 64		246	177		pg/g wwt	33	50	01-SEP-22
PCB 72		6.02	3.90		pg/g wwt	43	50	01-SEP-22
PCB 68		5.75	4.43		pg/g wwt	26	50	01-SEP-22
PCB 57		<1.0	<0.71	RPD-NA	pg/g wwt	N/A	50	01-SEP-22
PCB 58		<0.91	<0.64	RPD-NA	pg/g wwt	N/A	50	01-SEP-22
PCB 67		6.34	4.50		pg/g wwt	34	50	01-SEP-22
PCB 63		36.3	26.4		pg/g wwt	32	50	01-SEP-22
PCB 61/70/74/76		1050	750		pg/g wwt	33	50	01-SEP-22
PCB 66		878	641		pg/g wwt	31	50	01-SEP-22
PCB 55		<0.93	<0.66	RPD-NA	pg/g wwt	N/A	50	01-SEP-22
PCB 56		103	81.4		pg/g wwt	23	50	01-SEP-22
PCB 60		158	118		pg/g wwt	29	50	01-SEP-22
PCB 80		<0.74	<0.52	RPD-NA	pg/g wwt	N/A	50	01-SEP-22
PCB 79		3.10	1.90		pg/g wwt	48	50	01-SEP-22
PCB 78		<0.92	<0.65	RPD-NA	pg/g wwt	N/A	50	01-SEP-22
PCB 81		<0.88	<0.62	RPD-NA	pg/g wwt	N/A	50	01-SEP-22
PCB 77		21.0	17.7		pg/g wwt	17	50	01-SEP-22
PCB 104		<0.17	<0.11	RPD-NA	pg/g wwt	N/A	50	01-SEP-22
PCB 96		1.06	0.59	J	pg/g wwt	0.47	0.66	01-SEP-22
PCB 103		5.71	3.91		pg/g wwt	37	50	01-SEP-22

Quality Control Report

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PCB-1668C-O2-HRMS-BU	**Tissue**							
Batch	**R5859338**							
WG3758388-4	**DUP**	**L2729169-1**						
PCB 94		<0.77	<0.84	RPD-NA	pg/g wwt	N/A	50	01-SEP-22
PCB 95		327	223		pg/g wwt	38	50	01-SEP-22
PCB 100/93/102/98		8.80	6.99		pg/g wwt	23	50	01-SEP-22
PCB 88/91		60.1	40.5		pg/g wwt	39	50	01-SEP-22
PCB 84		42.7	27.8		pg/g wwt	42	50	01-SEP-22
PCB 89		1.60	<0.98	RPD-NA	pg/g wwt	N/A	50	01-SEP-22
PCB 121		<0.50	<0.55	RPD-NA	pg/g wwt	N/A	50	01-SEP-22
PCB 92		148	103		pg/g wwt	36	50	01-SEP-22
PCB 113/90/101		685	477		pg/g wwt	36	50	01-SEP-22
PCB 83/99		530	374		pg/g wwt	35	50	01-SEP-22
PCB 112		<0.47	<0.52	RPD-NA	pg/g wwt	N/A	50	01-SEP-22
PCB 109/119/86/97/125/87		287	198		pg/g wwt	37	50	01-SEP-22
PCB 117/116/85/110/115		702	476		pg/g wwt	38	50	01-SEP-22
PCB 82		42.0	27.0		pg/g wwt	43	50	01-SEP-22
PCB 111		1.60	<0.50	G	pg/g wwt	N/A	50	01-SEP-22
PCB 120		6.18	3.75		pg/g wwt	49	50	01-SEP-22
PCB 108/124		19.4	12.0		pg/g wwt	47	50	01-SEP-22
PCB 107		58.8	42.8		pg/g wwt	31	50	01-SEP-22
PCB 123		8.40	5.50		pg/g wwt	42	50	01-SEP-22
PCB 106		<0.93	<0.59	RPD-NA	pg/g wwt	N/A	50	01-SEP-22
PCB 118		657	452		pg/g wwt	37	50	01-SEP-22
PCB 122		10.2	7.00		pg/g wwt	37	50	01-SEP-22
PCB 114		18.5	11.0	G	pg/g wwt	51	50	01-SEP-22
PCB 105		254	183		pg/g wwt	32	50	01-SEP-22
PCB 127		<0.82	<0.52	RPD-NA	pg/g wwt	N/A	50	01-SEP-22
PCB 126		3.6	4.60		pg/g wwt	24	50	01-SEP-22
PCB 155		0.160	0.58	J,G	pg/g wwt	0.42	0.32	01-SEP-22
PCB 152		0.21	<0.35	RPD-NA	pg/g wwt	N/A	50	01-SEP-22
PCB 150		0.69	0.71		pg/g wwt	2.4	50	01-SEP-22
PCB 136		54.7	38.4		pg/g wwt	35	50	01-SEP-22
PCB 145		0.18	<0.33	RPD-NA	pg/g wwt	N/A	50	01-SEP-22
PCB 148		0.89	0.92		pg/g wwt	3.3	50	01-SEP-22
PCB 151/135		410	293		pg/g wwt	33	50	01-SEP-22
PCB 154		<0.17	<0.34	RPD-NA	pg/g wwt	N/A	50	01-SEP-22

Quality Control Report

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PCB-1668C-O2-HRMS-BU	**Tissue**							
Batch R5859338								
WG3758388-4 DUP		**L2729169-1**						
PCB 144		47.0	33.3		pg/g wwt	34	50	01-SEP-22
PCB 147/149		789	589		pg/g wwt	29	50	01-SEP-22
PCB 134/143		29.5	22.5		pg/g wwt	27	50	01-SEP-22
PCB 139/140		9.03	6.85		pg/g wwt	27	50	01-SEP-22
PCB 131		4.4	2.00	J,G	pg/g wwt	2.39	2.2	01-SEP-22
PCB 142		<1.2	<0.86	RPD-NA	pg/g wwt	N/A	50	01-SEP-22
PCB 132		200	119	G	pg/g wwt	51	50	01-SEP-22
PCB 133		32.0	23.8		pg/g wwt	29	50	01-SEP-22
PCB 165		3.26	2.10		pg/g wwt	43	50	01-SEP-22
PCB 146		319	235		pg/g wwt	30	50	01-SEP-22
PCB 161		<0.70	<0.51	RPD-NA	pg/g wwt	N/A	50	01-SEP-22
PCB 168/153		1930	1460		pg/g wwt	28	50	01-SEP-22
PCB 141		298	228		pg/g wwt	27	50	01-SEP-22
PCB 130		76.0	61.2		pg/g wwt	22	50	01-SEP-22
PCB 137/164		109	81.2		pg/g wwt	29	50	01-SEP-22
PCB 138/163/129		1710	1280		pg/g wwt	29	50	01-SEP-22
PCB 160		<0.67	<0.50	RPD-NA	pg/g wwt	N/A	50	01-SEP-22
PCB 158		97.6	56.7	G	pg/g wwt	53	50	01-SEP-22
PCB 128/166		144	110		pg/g wwt	27	50	01-SEP-22
PCB 159		10.0	10.4		pg/g wwt	3.9	50	01-SEP-22
PCB 162		6.72	5.44		pg/g wwt	21	50	01-SEP-22
PCB 167		47.7	34.6		pg/g wwt	32	50	01-SEP-22
PCB 156/157		87.7	60.0		pg/g wwt	38	50	01-SEP-22
PCB 169		6.50	4.61		pg/g wwt	34	50	01-SEP-22
PCB 188		0.90	0.65		pg/g wwt	32	50	01-SEP-22
PCB 179		106	80.0		pg/g wwt	28	50	01-SEP-22
PCB 184		0.79	1.07		pg/g wwt	30	50	01-SEP-22
PCB 176		27.6	20.1		pg/g wwt	31	50	01-SEP-22
PCB 186		<0.32	<0.26	RPD-NA	pg/g wwt	N/A	50	01-SEP-22
PCB 178		104	56.5	G	pg/g wwt	59	50	01-SEP-22
PCB 175		17.8	13.6		pg/g wwt	27	50	01-SEP-22
PCB 187		782	590		pg/g wwt	28	50	01-SEP-22
PCB 182		<0.38	<0.31	RPD-NA	pg/g wwt	N/A	50	01-SEP-22
PCB 183		273	205		pg/g wwt	28	50	01-SEP-22

Quality Control Report

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PCB-1668C-O2-HRMS-BU	**Tissue**							
Batch R5859338								
WG3758388-4 DUP		**L2729169-1**						
PCB 185		38.1	29.9		pg/g wwt	24	50	01-SEP-22
PCB 174		239	179		pg/g wwt	29	50	01-SEP-22
PCB 177		216	164		pg/g wwt	27	50	01-SEP-22
PCB 181		1.20	0.77		pg/g wwt	44	50	01-SEP-22
PCB 171/173		109	80.9		pg/g wwt	30	50	01-SEP-22
PCB 172		87.0	64.3		pg/g wwt	30	50	01-SEP-22
PCB 192		<0.36	<0.30	RPD-NA	pg/g wwt	N/A	50	01-SEP-22
PCB 180/193		1120	845		pg/g wwt	28	50	01-SEP-22
PCB 191		19.2	12.8		pg/g wwt	40	50	01-SEP-22
PCB 170		373	210	G	pg/g wwt	56	50	01-SEP-22
PCB 190		79.5	50.6		pg/g wwt	44	50	01-SEP-22
PCB 189		12.3	9.02		pg/g wwt	31	50	01-SEP-22
PCB 202		43.0	30.9		pg/g wwt	33	50	01-SEP-22
PCB 201		19.1	12.5		pg/g wwt	42	50	01-SEP-22
PCB 204		0.21	<0.17	RPD-NA	pg/g wwt	N/A	50	01-SEP-22
PCB 197		7.90	6.09		pg/g wwt	26	50	01-SEP-22
PCB 200		12.7	9.27		pg/g wwt	31	50	01-SEP-22
PCB 198/199		272	191		pg/g wwt	35	50	01-SEP-22
PCB 196		95.9	77.1		pg/g wwt	22	50	01-SEP-22
PCB 203		173	136		pg/g wwt	24	50	01-SEP-22
PCB 195		57.9	40.1		pg/g wwt	36	50	01-SEP-22
PCB 194		151	119		pg/g wwt	24	50	01-SEP-22
PCB 205		7.77	5.50		pg/g wwt	34	50	01-SEP-22
PCB 208		18.0	12.7		pg/g wwt	35	50	01-SEP-22
PCB 207		6.62	5.00		pg/g wwt	28	50	01-SEP-22
PCB 206		63.9	47.3		pg/g wwt	30	50	01-SEP-22
PCB 209		18.7	14.3		pg/g wwt	27	50	01-SEP-22
Total MonoCB		1.30	2.64	J	pg/g wwt	1.34	1.44	01-SEP-22
Total DiCB		78.0	86.9		pg/g wwt	11	50	01-SEP-22
Total TriCB		597	509		pg/g wwt	16	50	01-SEP-22
Total TetraCB		4290	3110		pg/g wwt	32	50	01-SEP-22
Total PentaCB		3880	2680		pg/g wwt	37	50	01-SEP-22
Total HexaCB		6420	4760		pg/g wwt	30	50	01-SEP-22
Total HeptaCB		3610	2610		pg/g wwt	32	50	01-SEP-22

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PCB-1668C-O2-HRMS-BU	**Tissue**							
Batch R5859338								
WG3758388-4 DUP		**L2729169-1**						
Total OctaCB		840	627		pg/g wwt	29	50	01-SEP-22
Total NonaCB		88.5	65.0		pg/g wwt	31	50	01-SEP-22
DecaCB		18.7	14.3		pg/g wwt	27	50	01-SEP-22
Total PCB		19800	14500		pg/g wwt	31	50	01-SEP-22
COMMENTS: The relative percent differences (RPD) between the sample and duplicate were above the method control limit for some targets.The sample is not homogeneous.								
WG3758388-2 LCS								
PCB 1			103.0		%		60-135	01-SEP-22
PCB 3			99.0		%		60-135	01-SEP-22
PCB 4			101.0		%		60-135	01-SEP-22
PCB 15			96.0		%		60-135	01-SEP-22
PCB 19			103.0		%		60-135	01-SEP-22
PCB 37			100.0		%		60-135	01-SEP-22
PCB 54			99.0		%		60-135	01-SEP-22
PCB 81			96.0		%		60-135	01-SEP-22
PCB 77			95.0		%		60-135	01-SEP-22
PCB 104			91.0		%		60-135	01-SEP-22
PCB 123			94.0		%		60-135	01-SEP-22
PCB 118			95.0		%		60-135	01-SEP-22
PCB 114			97.0		%		60-135	01-SEP-22
PCB 105			92.0		%		60-135	01-SEP-22
PCB 126			92.0		%		60-135	01-SEP-22
PCB 155			94.0		%		60-135	01-SEP-22
PCB 167			94.0		%		60-135	01-SEP-22
PCB 156/157			92.0		%		60-135	01-SEP-22
PCB 169			94.0		%		60-135	01-SEP-22
PCB 188			91.0		%		60-135	01-SEP-22
PCB 189			97.0		%		60-135	01-SEP-22
PCB 202			95.0		%		60-135	01-SEP-22
PCB 205			94.0		%		60-135	01-SEP-22
PCB 208			90.0		%		60-135	01-SEP-22
PCB 206			89.0		%		60-135	01-SEP-22
PCB 209			106.0		%		60-135	01-SEP-22
WG3758388-1 MB								
PCB 1			0.49	J,R	pg/g wwt		16.666	01-SEP-22

Quality Control Report

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PCB-1668C-O2-HRMS-BU	**Tissue**							
Batch R5859338								
WG3758388-1 MB								
PCB 2			<0.38	[U]	pg/g wwt		16.666	01-SEP-22
PCB 3			<0.41	[U]	pg/g wwt		16.666	01-SEP-22
PCB 4			<1.0	[U]	pg/g wwt		16.666	01-SEP-22
PCB 10			<0.63	[U]	pg/g wwt		16.666	01-SEP-22
PCB 9			<0.66	[U]	pg/g wwt		16.666	01-SEP-22
PCB 7			<0.65	[U]	pg/g wwt		16.666	01-SEP-22
PCB 6			<0.66	[U]	pg/g wwt		16.666	01-SEP-22
PCB 5			<0.79	[U]	pg/g wwt		16.666	01-SEP-22
PCB 8			1.10	J,R	pg/g wwt		16.666	01-SEP-22
PCB 14			<0.97	[U]	pg/g wwt		16.666	01-SEP-22
PCB 11			6.00	J,R	pg/g wwt		16.666	01-SEP-22
PCB 13/12			<0.88	[U]	pg/g wwt		16.666	01-SEP-22
PCB 15			0.97	[J]	pg/g wwt		16.666	01-SEP-22
PCB 19			<0.23	[U]	pg/g wwt		16.666	01-SEP-22
PCB 30/18			1.00	J,R	pg/g wwt		16.666	01-SEP-22
PCB 17			0.54	M,J,R	pg/g wwt		16.666	01-SEP-22
PCB 27			<0.28	[U]	pg/g wwt		16.666	01-SEP-22
PCB 24			<0.28	[U]	pg/g wwt		16.666	01-SEP-22
PCB 16			0.39	M,J,R	pg/g wwt		16.666	01-SEP-22
PCB 32			<0.24	[U]	pg/g wwt		16.666	01-SEP-22
PCB 34			<0.46	[U]	pg/g wwt		16.666	01-SEP-22
PCB 23			<0.40	[U]	pg/g wwt		16.666	01-SEP-22
PCB 29/26			<0.41	[U]	pg/g wwt		16.666	01-SEP-22
PCB 25			<0.37	[U]	pg/g wwt		16.666	01-SEP-22
PCB 31			1.60	J,R	pg/g wwt		16.666	01-SEP-22
PCB 28/20			2.64	M,J	pg/g wwt		16.666	01-SEP-22
PCB 21/33			1.96	M,J	pg/g wwt		16.666	01-SEP-22
PCB 22			0.45	J,R	pg/g wwt		16.666	01-SEP-22
PCB 36			<0.38	[U]	pg/g wwt		16.666	01-SEP-22
PCB 39			<0.43	[U]	pg/g wwt		16.666	01-SEP-22
PCB 38			<0.38	[U]	pg/g wwt		16.666	01-SEP-22
PCB 35			<0.43	[U]	pg/g wwt		16.666	01-SEP-22
PCB 37			<0.44	[U]	pg/g wwt		16.666	01-SEP-22

Quality Control Report

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PCB-1668C-O2-HRMS-BU	**Tissue**							
Batch R5859338								
WG3758388-1 MB								
PCB 54			<0.092	[U]	pg/g wwt		16.666	01-SEP-22
PCB 50/53			<0.23	[U]	pg/g wwt		16.666	01-SEP-22
PCB 45/51			0.53	J,R	pg/g wwt		16.666	01-SEP-22
PCB 46			<0.25	[U]	pg/g wwt		16.666	01-SEP-22
PCB 52			2.00	J,R	pg/g wwt		16.666	01-SEP-22
PCB 73			<0.15	[U]	pg/g wwt		16.666	01-SEP-22
PCB 43			<0.26	[U]	pg/g wwt		16.666	01-SEP-22
PCB 69/49			0.78	J,R	pg/g wwt		16.666	01-SEP-22
PCB 48			0.34	[J]	pg/g wwt		16.666	01-SEP-22
PCB 44/47/65			3.50	[J]	pg/g wwt		16.666	01-SEP-22
PCB 59/62/75			<0.16	[U]	pg/g wwt		16.666	01-SEP-22
PCB 42			0.27	J,R	pg/g wwt		16.666	01-SEP-22
PCB 41/71/40			1.08	M,J	pg/g wwt		16.666	01-SEP-22
PCB 64			0.74	M,J	pg/g wwt		16.666	01-SEP-22
PCB 72			<0.24	[U]	pg/g wwt		16.666	01-SEP-22
PCB 68			<0.22	[U]	pg/g wwt		16.666	01-SEP-22
PCB 57			<0.25	[U]	pg/g wwt		16.666	01-SEP-22
PCB 58			<0.23	[U]	pg/g wwt		16.666	01-SEP-22
PCB 67			<0.20	[U]	pg/g wwt		16.666	01-SEP-22
PCB 63			<0.23	[U]	pg/g wwt		16.666	01-SEP-22
PCB 61/70/74/76			1.20	M,J,R	pg/g wwt		16.666	01-SEP-22
PCB 66			0.40	[J]	pg/g wwt		16.666	01-SEP-22
PCB 55			<0.23	[U]	pg/g wwt		16.666	01-SEP-22
PCB 56			<0.23	[U]	pg/g wwt		16.666	01-SEP-22
PCB 60			<0.23	[U]	pg/g wwt		16.666	01-SEP-22
PCB 80			<0.18	[U]	pg/g wwt		16.666	01-SEP-22
PCB 79			<0.19	[U]	pg/g wwt		16.666	01-SEP-22
PCB 78			<0.23	[U]	pg/g wwt		16.666	01-SEP-22
PCB 81			<0.23	[U]	pg/g wwt		16.666	01-SEP-22
PCB 77			<0.25	[U]	pg/g wwt		16.666	01-SEP-22
PCB 104			<0.064	[U]	pg/g wwt		16.666	01-SEP-22
PCB 96			<0.12	[U]	pg/g wwt		16.666	01-SEP-22
PCB 103			<0.23	[U]	pg/g wwt		16.666	01-SEP-22

Quality Control Report

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PCB-1668C-O2-HRMS-BU	**Tissue**							
Batch	**R5859338**							
WG3758388-1	**MB**							
PCB 94			<0.24	[U]	pg/g wwt		16.666	01-SEP-22
PCB 95			1.32	[J]	pg/g wwt		16.666	01-SEP-22
PCB 100/93/102/98			<0.21	[U]	pg/g wwt		16.666	01-SEP-22
PCB 88/91			<0.22	[U]	pg/g wwt		16.666	01-SEP-22
PCB 84			<0.24	[U]	pg/g wwt		16.666	01-SEP-22
PCB 89			<0.27	[U]	pg/g wwt		16.666	01-SEP-22
PCB 121			<0.15	[U]	pg/g wwt		16.666	01-SEP-22
PCB 92			<0.24	[U]	pg/g wwt		16.666	01-SEP-22
PCB 113/90/101			1.16	[J]	pg/g wwt		16.666	01-SEP-22
PCB 83/99			0.56	M,J,R	pg/g wwt		16.666	01-SEP-22
PCB 112			<0.14	[U]	pg/g wwt		16.666	01-SEP-22
PCB 109/119/86/97/125/87			1.01	M,J	pg/g wwt		16.666	01-SEP-22
PCB 117/116/85/110/115			1.77	M,J	pg/g wwt		16.666	01-SEP-22
PCB 82			<0.26	[U]	pg/g wwt		16.666	01-SEP-22
PCB 111			<0.14	[U]	pg/g wwt		16.666	01-SEP-22
PCB 120			<0.14	[U]	pg/g wwt		16.666	01-SEP-22
PCB 108/124			<0.16	[U]	pg/g wwt		16.666	01-SEP-22
PCB 107			<0.13	[U]	pg/g wwt		16.666	01-SEP-22
PCB 123			<0.16	[U]	pg/g wwt		16.666	01-SEP-22
PCB 106			<0.18	[U]	pg/g wwt		16.666	01-SEP-22
PCB 118			0.84	J,R	pg/g wwt		16.666	01-SEP-22
PCB 122			<0.21	[U]	pg/g wwt		16.666	01-SEP-22
PCB 114			<0.15	[U]	pg/g wwt		16.666	01-SEP-22
PCB 105			0.38	J,R	pg/g wwt		16.666	01-SEP-22
PCB 127			<0.16	[U]	pg/g wwt		16.666	01-SEP-22
PCB 126			<0.18	[U]	pg/g wwt		16.666	01-SEP-22
PCB 155			<0.048	[U]	pg/g wwt		16.666	01-SEP-22
PCB 152			<0.083	[U]	pg/g wwt		16.666	01-SEP-22
PCB 150			<0.073	[U]	pg/g wwt		16.666	01-SEP-22
PCB 136			0.110	M,J,R	pg/g wwt		16.666	01-SEP-22
PCB 145			<0.078	[U]	pg/g wwt		16.666	01-SEP-22
PCB 148			<0.10	[U]	pg/g wwt		16.666	01-SEP-22
PCB 151/135			<0.11	[U]	pg/g wwt		16.666	01-SEP-22

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PCB-1668C-O2-HRMS-BU	**Tissue**							
Batch R5859338								
WG3758388-1 MB								
PCB 154			<0.079	[U]	pg/g wwt		16.666	01-SEP-22
PCB 144			<0.11	[U]	pg/g wwt		16.666	01-SEP-22
PCB 147/149			0.43	J,R	pg/g wwt		16.666	01-SEP-22
PCB 134/143			<0.18	[U]	pg/g wwt		16.666	01-SEP-22
PCB 139/140			<0.15	[U]	pg/g wwt		16.666	01-SEP-22
PCB 131			<0.18	[U]	pg/g wwt		16.666	01-SEP-22
PCB 142			<0.19	[U]	pg/g wwt		16.666	01-SEP-22
PCB 132			0.44	J,R	pg/g wwt		16.666	01-SEP-22
PCB 133			<0.17	[U]	pg/g wwt		16.666	01-SEP-22
PCB 165			<0.12	[U]	pg/g wwt		16.666	01-SEP-22
PCB 146			0.17	J,R	pg/g wwt		16.666	01-SEP-22
PCB 161			<0.12	[U]	pg/g wwt		16.666	01-SEP-22
PCB 168/153			0.69	[J]	pg/g wwt		16.666	01-SEP-22
PCB 141			0.20	J,R	pg/g wwt		16.666	01-SEP-22
PCB 130			<0.18	[U]	pg/g wwt		16.666	01-SEP-22
PCB 137/164			<0.13	[U]	pg/g wwt		16.666	01-SEP-22
PCB 138/163/129			0.84	J,R	pg/g wwt		16.666	01-SEP-22
PCB 160			<0.11	[U]	pg/g wwt		16.666	01-SEP-22
PCB 158			0.100	[J]	pg/g wwt		16.666	01-SEP-22
PCB 128/166			<0.13	[U]	pg/g wwt		16.666	01-SEP-22
PCB 159			<0.11	[U]	pg/g wwt		16.666	01-SEP-22
PCB 162			<0.11	[U]	pg/g wwt		16.666	01-SEP-22
PCB 167			<0.11	[U]	pg/g wwt		16.666	01-SEP-22
PCB 156/157			<0.14	[U]	pg/g wwt		33.334	01-SEP-22
PCB 169			<0.13	[U]	pg/g wwt		16.666	01-SEP-22
PCB 188			<0.061	[U]	pg/g wwt		16.666	01-SEP-22
PCB 179			<0.069	[U]	pg/g wwt		16.666	01-SEP-22
PCB 184			<0.063	[U]	pg/g wwt		16.666	01-SEP-22
PCB 176			<0.069	[U]	pg/g wwt		16.666	01-SEP-22
PCB 186			<0.071	[U]	pg/g wwt		16.666	01-SEP-22
PCB 178			<0.097	[U]	pg/g wwt		16.666	01-SEP-22
PCB 175			<0.095	[U]	pg/g wwt		16.666	01-SEP-22
PCB 187			0.180	J,R	pg/g wwt		16.666	01-SEP-22

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PCB-1668C-O2-HRMS-BU	**Tissue**							
Batch R5859338								
WG3758388-1 MB								
PCB 182			<0.084	[U]	pg/g wwt		16.666	01-SEP-22
PCB 183			0.120	J,R	pg/g wwt		16.666	01-SEP-22
PCB 185			<0.10	[U]	pg/g wwt		16.666	01-SEP-22
PCB 174			<0.084	[U]	pg/g wwt		16.666	01-SEP-22
PCB 177			<0.095	[U]	pg/g wwt		16.666	01-SEP-22
PCB 181			<0.095	[U]	pg/g wwt		16.666	01-SEP-22
PCB 171/173			<0.10	[U]	pg/g wwt		16.666	01-SEP-22
PCB 172			<0.095	[U]	pg/g wwt		16.666	01-SEP-22
PCB 192			<0.081	[U]	pg/g wwt		16.666	01-SEP-22
PCB 180/193			0.270	J,R	pg/g wwt		16.666	01-SEP-22
PCB 191			<0.072	[U]	pg/g wwt		16.666	01-SEP-22
PCB 170			<0.10	[U]	pg/g wwt		16.666	01-SEP-22
PCB 190			<0.064	[U]	pg/g wwt		16.666	01-SEP-22
PCB 189			<0.088	[U]	pg/g wwt		16.666	01-SEP-22
PCB 202			0.059	[J]	pg/g wwt		16.666	01-SEP-22
PCB 201			<0.045	[U]	pg/g wwt		16.666	01-SEP-22
PCB 204			<0.045	[U]	pg/g wwt		16.666	01-SEP-22
PCB 197			<0.048	[U]	pg/g wwt		16.666	01-SEP-22
PCB 200			<0.049	[U]	pg/g wwt		16.666	01-SEP-22
PCB 198/199			<0.069	[U]	pg/g wwt		16.666	01-SEP-22
PCB 196			<0.069	[U]	pg/g wwt		16.666	01-SEP-22
PCB 203			<0.066	[U]	pg/g wwt		16.666	01-SEP-22
PCB 195			<0.084	[U]	pg/g wwt		16.666	01-SEP-22
PCB 194			0.240	M,J,R	pg/g wwt		16.666	01-SEP-22
PCB 205			<0.061	[U]	pg/g wwt		16.666	01-SEP-22
PCB 208			<0.11	[U]	pg/g wwt		16.666	01-SEP-22
PCB 207			<0.12	[U]	pg/g wwt		16.666	01-SEP-22
PCB 206			<0.18	[U]	pg/g wwt		16.666	01-SEP-22
PCB 209			0.150	J,R	pg/g wwt		16.666	01-SEP-22
Surrogate: 13C12 PCB 1			17.0		%		5-145	01-SEP-22
Surrogate: 13C12 PCB 3			22.0		%		5-145	01-SEP-22
Surrogate: 13C12 PCB 4			25.0		%		5-145	01-SEP-22
Surrogate: 13C12 PCB 15			37.0		%		5-145	01-SEP-22

Quality Control Report

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PCB-1668C-O2-HRMS-BU	**Tissue**							
Batch	**R5859338**							
WG3758388-1	**MB**							
Surrogate: 13C12 PCB 19			37.0		%		5-145	01-SEP-22
Surrogate: 13C12 PCB 37			38.0		%		5-145	01-SEP-22
Surrogate: 13C12 PCB 54			43.0		%		5-145	01-SEP-22
Surrogate: 13C12 PCB 81			64.0		%		10-145	01-SEP-22
Surrogate: 13C12 PCB 77			62.0		%		10-145	01-SEP-22
Surrogate: 13C12 PCB 104			68.0		%		10-145	01-SEP-22
Surrogate: 13C12 PCB 123			67.0		%		10-145	01-SEP-22
Surrogate: 13C12 PCB 118			67.0		%		10-145	01-SEP-22
Surrogate: 13C12 PCB 114			70.0		%		10-145	01-SEP-22
Surrogate: 13C12 PCB 105			68.0		%		10-145	01-SEP-22
Surrogate: 13C12 PCB 126			67.0		%		10-145	01-SEP-22
Surrogate: 13C12 PCB 155			66.0		%		10-145	01-SEP-22
Surrogate: 13C12 PCB 167			72.0		%		10-145	01-SEP-22
Surrogate: 13C12 PCB 156/157			76.0		%		10-145	01-SEP-22
Surrogate: 13C12 PCB 169			74.0		%		10-145	01-SEP-22
Surrogate: 13C12 PCB 188			76.0		%		10-145	01-SEP-22
Surrogate: 13C12 PCB 189			81.0		%		10-145	01-SEP-22
Surrogate: 13C12 PCB 202			81.0		%		10-145	01-SEP-22
Surrogate: 13C12 PCB 205			79.0		%		10-145	01-SEP-22
Surrogate: 13C12 PCB 208			74.0		%		10-145	01-SEP-22
Surrogate: 13C12 PCB 206			79.0		%		10-145	01-SEP-22
Surrogate: 13C12 PCB 209			80.0		%		10-145	01-SEP-22
Surrogate: 13C12 PCB 28			14.0		%		5-145	01-SEP-22
Surrogate: 13C12 PCB 111			19.0		%		10-145	01-SEP-22
Surrogate: 13C12 PCB 178			25.0		%		10-145	01-SEP-22
Total MonoCB			0.49	[J]	pg/g wwt		33.333	01-SEP-22
Total DiCB			8.07	[J]	pg/g wwt		66.667	01-SEP-22
Total TriCB			8.58	[J]	pg/g wwt		66.667	01-SEP-22
Total TetraCB			10.8	[J]	pg/g wwt		133.333	01-SEP-22
Total PentaCB			7.04	[J]	pg/g wwt		133.333	01-SEP-22
Total HexaCB			2.98	[J]	pg/g wwt		133.333	01-SEP-22
Total HeptaCB			0.570	[J]	pg/g wwt		66.667	01-SEP-22
Total OctaCB			0.299	[J]	pg/g wwt		66.667	01-SEP-22
Total NonaCB			<0.11	[U]	pg/g wwt		33.333	01-SEP-22

Quality Control Report

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PCB-1668C-O2-HRMS-BU	**Tissue**							
Batch R5859338								
WG3758388-1 MB								
DecaCB			0.150	[J]	pg/g wwt		33.333	01-SEP-22
Total PCB			39.0	[J]	pg/g wwt		266.667	01-SEP-22

Legend:

Limit	ALS Control Limit (Data Quality Objectives)
DUP	Duplicate
RPD	Relative Percent Difference
N/A	Not Available
LCS	Laboratory Control Sample
SRM	Standard Reference Material
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ADE	Average Desorption Efficiency
MB	Method Blank
IRM	Internal Reference Material
CRM	Certified Reference Material
CCV	Continuing Calibration Verification
CVS	Calibration Verification Standard
LCSD	Laboratory Control Sample Duplicate

Sample Parameter Qualifier Definitions:

Qualifier	Description
G	QC result did not meet ALS DQO. Refer to narrative comments for further information.
J	Duplicate results and limits are expressed in terms of absolute difference.
J,G	QC result did not meet ALS DQO. Refer to narrative comments for further information. Duplicate expressed in terms of absolute difference.
J,R	The analyte was detected below the calibrated range but above the EDL, and the ion abundance ratio(s) did not meet the acceptance criteria. Value is an estimated maximum.
M,J	A peak has been manually integrated, and the analyte was detected below the calibrated range but above the EDL.
M,J,R	A peak has been manually integrated, the analyte was detected below the calibrated range but above the EDL, and the ion abundance ratio(s) did not meet the acceptance criteria. Value is an estimated maximum.
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.
[J]	The analyte was detected below the calibrated range but above the EDL.
[U]	The analyte was not detected above the EDL.

Hold Time Exceedances:

All test results reported with this submission were conducted within ALS recommended hold times.

ALS recommended hold times may vary by province. They are assigned to meet known provincial and/or federal government requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by the US EPA, APHA Standard Methods, or Environment Canada (where available). For more information, please contact ALS.

The ALS Quality Control Report is provided to ALS clients upon request. ALS includes comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against pre-determined data quality objectives to provide confidence in the accuracy of associated test results.

Please note that this report may contain QC results from anonymous Sample Duplicates and Matrix Spikes that do not originate from this Work Order.

ALS Environmental Chain of Custody

1317 South 13th Avenue • Kelso, WA 98626 • 1-360-577-7222 • FAX 1-360-636-1068

ALS Contact: Luke Rahn

Project Number: K2207715
Project Manager: Luke Rahn
QAP: LAB QAP

Lab Code	Sample ID	# of Cont.	Matrix	Sample Date	Sample Time	Lab ID	Cl Biphen Cong 1668C
K2207715-002	GF-01-41/Game-Bass fillet	minimum 20gram	Fish Tissue	7/6/22	1430	Burlington ALS	X
K2207715-003	GF-01-41/Game-Bass Carcass	↓	Fish Tissue	7/6/22	1430	Burlington ALS	X

L2729169-COFC

Test Comments

Cl Biphen Cong - 1668C	K2207715-003	Use carcass homogenate for this analysis
Cl Biphen Cong - 1668C	K2207715-002	Use fillet homogenate for this analysis

Special Instructions/Comments
Please provide the electronic (PDF and EDD) report to the following e-mail address: ALKLS.Data@alsglobal.com.

H - Test is On Hold P - Test is Authorized for Prep Only

Turnaround Requirements
____ **RUSH** (Surcharges Apply)
PLEASE CIRCLE WORK DAYS
1 2 3 4 5
X **STANDARD**
Requested FAX Date: _____
Requested Report Date: 08/10/22

Report Requirements
____ I. Results Only
____ II. Results + QC Summaries
____ III. Results + QC and Calibration Summaries
____ IV. Data Validation Report with Raw Data
PQL/MDL/J Y
EDD N

Invoice Information
PO# 51K2207715
Bill to

Relinquished By: [signature] 8/17/22 Received By: [signature] 8/18/22 13:00 3.3°C Airbill Number:

Service Request Number(s): K2207715

ALS Inc.

Analysis for:

~~1668A~~/Cl Biphen Cong

1668C ccl 8/12

ALIQUOT DATA

Service Request #		Wet Wt. (g)		Tare Wt. (g)		Matrix
K2207715-2		5.316		14.690		Fish Tissue
2DUP		5.220		14.484		
2MS		5.180		14.550		
2MSD		5.257		14.291		
3		5.186		14.586		

ccl 8/11



L2729169-COFC

Comments	
Balance ID: 53	Date Balance Checked: 8/12/22
Analyst:	Date: 8/12/22
Reviewed:	Date:

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Raw Data

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

Total Solids

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

Benchsheet

Service Request #:	**K2207715, KQ2213516**	**Run #:**	**773838**
Test:	**Frz Dry**	**Balance ID:**	**K-Balance-53**
Method:	**Frz Dry**		

Matrix	Lab Code	Tare (g)	Wet Wt. (g)	Tare + Dry Wt. (g)	Dry Weight (g)	% Total Solids	RPD
Fish Tissue	K2207715-002	17.436	10.156	19.347	1.91	18.8	
Fish Tissue	K2207715-002DUP	17.218	10.205	19.161	1.94	19.0	1
Fish Tissue	K2207715-003	17.300	10.491	20.800	3.50	33.4	

	FreezeDryer ID	Date In	Time In	Date Out	Time Out	Thermometer ID
FreezeDry		8/12/2022	15:30	8/15/2022	09:05	

Cal EQID	Cal Start Value	Cal End Value	Start Date	Start Time	End Date	End Time

Comments: CCL 8/12 reviewed 8/15/2022 JC

Pre-Prep Information Benchsheet

Prep Run #: 404503 **Container Lot No:** 110920-1SR **Prep Due Date:** Jul-12-2022

#	Lab Code	Bottle	Test Name	Weight	Sample Comments	Test Comments
1	K2207715-002	.02	LIPIDS : NOAA LIPID/	2.061g		CLUKKEN K-Balance-53
2	K2207715-002 DUP KQ2213519-01	.02	LIPIDS : NOAA LIPID/	2.014g		CLUKKEN K-Balance-53
3	K2207715-002 TRP KQ2213519-02	.02	LIPIDS : NOAA LIPID/	2.166g		CLUKKEN K-Balance-53
4	K2207715-003	.02	LIPIDS : NOAA LIPID/	2.056g		CLUKKEN K-Balance-53

Relinquished By:	Date/Time: 8/12/22	Received By:	Date/Time:

Service Request Number(s): K2207715
ALS Inc.
Analysis for:
~~1668A~~/Cl Biphen Cong

1668C CCL 8/12

ALIQUOT DATA

Service Request #		Wet Wt. (g)		Tare Wt. (g)		Matrix
K2207715-2		5.316		14.690		Fish Tissue
2DUP		5.220		14.484		
2MS		5.180		14.550		
2MSD		5.257		14.291		
3		5.186		14.586		
			CCL 8/11			

Comments	
Balance ID: 53	Date Balance Checked: 8/12/22
Analyst:	Date: 8/12/22
Reviewed:	Date: 8.15.22

ALS Inc.

Service Request Number(s): K2207715

TISSUE HOMOGENIZATION

Laboratory ID	Initial Weight (g)	Tare of Jar (g)	Weight of Sample* (g)	Date Homogenized		
K2207715-1	626.72	—	—	8/12/22		
2	—	208.93	230.86			
3	—	312.34	338.39			
			cel 8/12			

Comments:

* The weight of sample is after homogenization.

Balance ID: 52 Date Balance Checked: 8/12/22

Analyst:	Date: 8/12/22
Reviewed:	Date: 8.15.22

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ALS Inc.

Service Request Number(s): K2207715

Rinsate and Homogenization Blank Data

Laboratory ID	Amount (mL)	Date	Time	Preservative
Rinsate Blank	250	8/12/22	9:15	HNO_3
↓	1000	↓	↓	None
Homogenization Blank	250	↓	10:42	HNO_3
↓	1000	↓	↓	None
		CCL 8/12		

Comments: One Rinsate Blank per Batch of Samples. One Homgenization Blank Per 8 hour shift.

Analyst:	Date: 8/12/22
Reviewed: MC	Date: 8.15.22

LIPIDS

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

Preparation Information Benchsheet

Prep Run#: 404429
Team: Semivoa GC/ADUNN
Number of Copies to make: 2

Prep WorkFlow: OrgExtT(14)
Prep Method: EPA 3541

Status: Prepped
Prep Date/Time: 8/11/22 14:40

#	Lab Code	Client ID	B#	Method /Test	pH	Matrix	Amt. Ext.	Final Vol	Sample Description
1	KQ2213440-04	MB		NOAA LIPID/LIPIDS		Tissue	2.1720g	10.00mL	
2	KQ2213440-03	LCS		NOAA LIPID/LIPIDS		Tissue	0.9760g	10.00mL	
3	K2207715-002	GF-01-41/Game-Bass fillet	.02	NOAA LIPID/LIPIDS		Fish Tissue	2.061g	10.00mL	CLUKKEN K-Balance-53
4	K2207715-003	GF-01-41/Game-Bass Carcass	.02	NOAA LIPID/LIPIDS		Fish Tissue	2.056g	10.00mL	CLUKKEN K-Balance-53
5	K2208439-015	14-TTA03	.02	NOAA LIPID/LIPIDS		Animal Tissue	2.038g	10.00mL	CLUKKEN K-Balance-53
6	K2208439-016	14-TTI01	.02	NOAA LIPID/LIPIDS		Animal Tissue	2.172g	10.00mL	CLUKKEN K-Balance-53
7	K2208439-017	14-TTI02	.02	NOAA LIPID/LIPIDS		Animal Tissue	2.164g	10.00mL	CLUKKEN K-Balance-53
8	KQ2213440-01	K2208439-017 DUP	.02	NOAA LIPID/LIPIDS		Tissue	2.101g	10.00mL	CLUKKEN K-Balance-53
9	KQ2213440-02	K2208439-017 TRP	.02	NOAA LIPID/LIPIDS		Tissue	2.117g	10.00mL	CLUKKEN K-Balance-53
10	K2208439-018	14-TTI03	.02	NOAA LIPID/LIPIDS		Animal Tissue	2.091g	10.00mL	CLUKKEN K-Balance-53

Spiking Solutions

Name: Corn Oil Inventory ID 222442 Logbook Ref: 10-SVMP-005 90W Expires On: 02/04/2023

KQ2213440-03 1,000.00µL

Preparation Steps

Step: Weigh
Started: 8/11/22 14:40
Finished: 8/11/22 14:55
By: ADUNN
Comments

Step: Extraction
Started: 8/24/22 09:14
Finished: 8/24/22 12:42
By: ADUNN
Comments

Step: Final Volume
Started: 8/25/22 07:41
Finished: 8/25/22 07:41
By: JCARBAJAL
Comments

Comments: _____

Reviewed By: _____ Date: 8/29/22

Chain of Custody

Relinquished By: _____ Date: _____

Received By: _____ Date: _____

Extracts Examined
Yes No

Preparation Information Benchsheet

Prep Run#: 404429
Team: Semivoa GC/ADUNN
Number of Copies to make: 2

Prep WorkFlow: OrgExtT(14)
Prep Method: EPA 3541

Status: Draft
Prep Date/Time: 8/11/22 14:40 PM

#	Lab Code	Client ID	B#	√	Method /Test	Matrix	Amt. Ext. G	pH	Int. Vol mL	Final Vol mL	Surr Amt uL	Spike Amt uL
1	**KQ2213440-04**	MB	—	—	NOAA LIPID / LIPIDS	Tissue	2.172	N/A			—	—
2	**KQ2213440-03**	LCS	—	—	NOAA LIPID / LIPIDS	Tissue	0.976				—	1000
3	**K2207715-002**	GF-01-41/Game-Bass fillet	.02	✓	NOAA LIPID / LIPIDS	Fish Tissue	*				—	—
4	**K2207715-003**	GF-01-41/Game-Bass Carcass	.02	✓	NOAA LIPID / LIPIDS	Fish Tissue					—	—
5	**K2208439-015**	14-TTA03	.02	✓	NOAA LIPID / LIPIDS	Animal Tissue					—	—
6	**K2208439-016**	14-TTI01	.02	✓	NOAA LIPID / LIPIDS	Animal Tissue					—	—
7	**K2208439-017**	14-TTI02	.02	✓	NOAA LIPID / LIPIDS	Animal Tissue					—	—
8	**KQ2213440-01**	K2208439-017 DUP	.02	✓	NOAA LIPID / LIPIDS	Tissue					—	—
9	**KQ2213440-02**	K2208439-017 TRP	.02	✓	NOAA LIPID / LIPIDS	Tissue					—	—
10	**K2208439-018**	14-TTI03	.02	✓	NOAA LIPID / LIPIDS	Animal Tissue					—	—

Run#775646

Comments: * SEE PDF PREP INFO SHEET

Surrogate ID: —

Spike ID: [CORN OIL] SVMP005-90W - 2/4/23

Witnessed By: AD

Analyst: WSV

Assisted By:

Pre-Prep Information Benchsheet

Prep Run #: ~~404503~~ 404429 **Container Lot No:** 110920-1SR **Prep Due Date:** Jul-12-2022

#	Lab Code	Bottle	Test Name	Weight	Sample Comments	Test Comments
1	K2207715-002	.02	LIPIDS : NOAA LIPID/	2.061g		CLUKKEN K-Balance-53
2	~~K2207715-002 DUP~~ KQ2213519-01	~~.02~~	~~LIPIDS : NOAA LIPID/~~	~~2.014g~~		CLUKKEN K-Balance-53
3	~~K2207715-002 TRP~~ KQ2213519-02	~~.02~~	~~LIPIDS : NOAA LIPID/~~	~~2.166g~~		CLUKKEN K-Balance-53
4	K2207715-003	.02	LIPIDS : NOAA LIPID/	2.056g		CLUKKEN K-Balance-53

QC NOT USED - AD

Relinquished By:	Date/Time: 8/12/22 11:39	Received By: AD	Date/Time: 8.24.22 08:18

Pre-Prep Information Benchsheet

Prep Run #: 404429 **Container Lot No:** 110920-1SR **Prep Due Date:** Jul-27-2022

#	Lab Code	Bottle	Test Name	Weight	Sample Comments	Test Comments
1	K2208439-015	.02	LIPIDS : NOAA LIPID/	2.038g		CLUKKEN K-Balance-53
2	K2208439-016	.02	LIPIDS : NOAA LIPID/	2.172g		CLUKKEN K-Balance-53
3	K2208439-017	.02	LIPIDS : NOAA LIPID/	2.164g		CLUKKEN K-Balance-53
4	K2208439-017 DUP KQ2213440-01	.02	LIPIDS : NOAA LIPID/	2.101g		CLUKKEN K-Balance-53
5	K2208439-017 TRP KQ2213440-02	.02	LIPIDS : NOAA LIPID/	2.117g		CLUKKEN K-Balance-53
6	K2208439-018	.02	LIPIDS : NOAA LIPID/	2.091g		CLUKKEN K-Balance-53

Relinquished By:	Date/Time: 8/11/22 14:47	Received By:	Date/Time: 8-24-22 08:18

ALS Environmental

Extraction Analyst Notes

Service Request: K2207715, 0439 Prep Group: 404429

Topic	Notes	Initials/Date
No Anomalies: □		
Sample Anomalies: □		
Organics Present (sticks, leafs, bugs): □		
Fuel Odors: □		
Sulfur Odors, Precipitate: □		
General Notes:		

Reviewed by: Jonathon Walter 12/19/18

EXT-NOTES r.0

ALS Environmental

Appendix from EXT-3541
Extracting Lipids in Tissue
EPA Method 3541

Service Request # K2207715, 8439 **Work Group #** KQ2213440

DCM Lot # 223120 Sulfate Lot # 20242255 Glass Wool Lot# 34021999

Syringe Volume(s) and ID: —

Soxtherm/s unit I.D# 7, 8

Soxtherm Start (time/date/initial): 09:14 - 8/24/22 - AD

Soxtherm Stop (time/date/initial): 12:42 - 8/24/22 - AD

Pipette (5mL) Lot # 24321647

N-Evap (time/date/initial): 07:41 8/25/22 N-Evap Thermometer ID: X-SUN-001
Temp as measured: 20 °C Correction factor: 0.0 °C Adjusted temp: 20 °C

Oven In (time/date/initial): 0733 8/29/22 VW Oven Temp: 70°

Oven Out (time/date/initial): 0855 8/29/22 VW Oven Temp: 70°

Pipette (2 mL) Lot # 01072021

Archived Extract Storage: The Who

Bench Sheet Review Check List
☑ Hold times met; if no, reason: _____
☑ Prep date, time, method, department, product code correct
☑ Spike information and Q.C. correct (insufficient volume or mass recorded if no Q.C.)
☑ Weights/Volumes and units correct on raw and final bench sheets
☑ Sample IDs have been checked - bottle numbers appended if required
☑ Names present for: started by, completed by, relinquished by, and witnessed by
☑ Extract storage recorded
☑ Additional prep sheet completely filled out (NA or line out blanks)
☑ All clean-ups have been noted on additional prep sheet

Benchsheet

Service Request #: KQ2213440, K2207715, K2208439 **Run #:** 775652
Test: LIPIDS **Balance ID:**
Method: NOAA LIPID

Pan ID:	Lab Code:	Wet Wt. (g)	Dish (g)	Dish + Lipid Wt. (g)	% Lipids	MB Corr	RPD	MRL
	KQ2213440-04MB	2.1720	1.1964	1.1966	0.0	0.0002		0.23
	KQ2213440-03LCS	0.9760	1.2078	1.3929	95	0.0002		0.51
	K2207715-002	2.061	1.2023	1.2037	0.29	0.0002		0.24
	K2207715-003	2.056	1.2089	1.2110	0.46	0.0002		0.24
	K2208439-015	2.038	1.2064	1.2081	0.37	0.0002		0.25
	K2208439-016	2.172	1.1959	1.1970	0.21	0.0002		0.23
	K2208439-017	2.164	1.1996	1.2006	0.18	0.0002		0.23
	K2208439-017DUP	2.101	1.2105	1.2115	0.19	0.0002	NC	0.24
	K2208439-017TRP	2.117	1.1932	1.1943	0.21	0.0002	NC	0.24
	K2208439-018	2.091	1.2064	1.2069	0.072	0.0002		0.24

N-Evap ID	Date	Time
X-SVM-001	8/29/2022	07:33

Comments: Completed by VW 8.29.22

Benchsheet

Service Request #: KQ2213440, K2207715, K2208439 **Run #:** 775652
Test: LIPIDS **Balance ID:**
Method: NOAA LIPID

Pan ID:	Lab Code:	Wet Wt. (g)	Dish (g)	Dish + Lipid Wt. (g)	% Lipids	MB Corr	RPD	MRL
	KQ2213440-04MB	2.1720	1.1964	1.1966		0.0000		0.05
	KQ2213440-03LCS	0.9760	1.2078	1.3929		0.0000		0.05
	K2207715-002	2.061	1.2023	1.2037		0.0000		0.05
	K2207715-003	2.056	1.2089	1.2110		0.0000		0.05
	K2208439-015	2.038	1.2064	1.2081		0.0000		0.05
	K2208439-016	2.172	1.1959	1.1970		0.0000		0.05
	K2208439-017	2.164	1.1996	1.2006		0.0000		0.05
	K2208439-017DUP	2.101	1.2105	1.2115		0.0000		0.05
	K2208439-017TRP	2.117	1.1932	1.1943		0.0000		0.05
	K2208439-018	2.091	1.2064	1.2069		0.0000		0.05

N-Evap ID **Date** **Time**

JOHNSON LAKE FISH TISSUE MONITORING

APPENDIX L: APPROVED SAMPLING AND ANALYSIS PLAN

JOHNSON LAKE FISH TISSUE MONITORING STUDY

SAMPLING AND ANALYSIS PLAN

PREPARED FOR:

OWENS-BROCKWAY GLASS CONTAINER INC.
5850 NE 92ND DRIVE
PORTLAND, OR, 97222

PREPARED BY:

GRETTE ASSOCIATES LLC
2102 NORTH 30TH STREET, SUITE A
TACOMA, WASHINGTON 98403
(253) 573-9300

APRIL 28, 2022

Grette Associates LLC
ENVIRONMENTAL CONSULTANTS

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Attachment B. ODEQ May 25, 2017 SAP approval and comments
Attachment C. ALS Standard Operating Procedure MET-TISP (5/29/16) – Fish Tissue Sample Preparation
Attachment D. ODEQ January 29, 2018 Letter and Comments
Attachment E. Johnson Lake Quality Assurance Project Plan

1 INTRODUCTION

This Sampling and Analysis Plan (SAP) has been prepared to describe the Johnson Lake fish tissue monitoring study, consistent with the *Remediation Operations & Maintenance Plan* (O&M Plan)*, Sediment Remedial Action* (DOF 2012b), hereafter "O&M Plan." In support of this SAP, the approved Scientific Take Permit from the Oregon Department of Fish and Wildlife (ODFW) is included as Attachment A. Approval of the 2017 SAP by comment letter from Oregon Department of Environmental Quality (DEQ), comments which are incorporated herein, are included as Attachment B. The analytical laboratories (ALS Global) standard operating procedures for fish tissue sample preparation are attached as Attachment C. DEQ comments from the 2017 collection and sampling effort are included as Attachment D.

The 2022 Johnson Lake fish tissue monitoring study is a requirement of the O&M Plan in response to the results of the 2017 monitoring effort showing contaminant levels in fish samples exceeding the levels specified in the 2007 Record of Decision for the site cleanup.

1.1 PROJECT SITE DESCRIPTION AND BACKGROUND

Owens-Brockway Glass Containers Inc. (Owens) owns and operates a glass manufacturing plant located at 5850 NE 92nd Drive, Portland, Oregon (the "Property"). Owens' Property is approximately 43 acres in size and is located on the south shore of Johnson Lake. Johnson Lake extends over 18 acres and is directly connected to the Whitaker Slough, which in turn flows to the Columbia Slough. Johnson Lake is bounded to the south by the Owens Property and to the west and east by other industrial facilities and highways. The Owens Property and Johnson Lake are collectively referred to as the "Site."

Sediments in Johnson Lake were found to contain polychlorinated biphenyls (PCBs), as described in the *Johnson Lake Investigation Work Plan* (ARCADIS 2004a), *Site Investigation Report* (ARCADIS 2004b), and *Johnson Lake Risk Assessment* (Environ and ARCADIS 2004). Based on the previous investigations and a Feasibility study prepared in 2006, DEQ selected a final remedy for the site in the Record of Decision (October 2007) and Record of Decision Amendment (July 2009). The 2007 Record of Decision and the 2009 Amendment are referred to collectively in this document as the ROD.

1.2 REMEDIATION ACTIVITIES

As described in the ROD, the final remedy for cleanup of the PCBs and other contaminants at the site consisted of the following tasks.

1. Surface soils from the low-lying area were excavated.
2. Excavated soils were disposed of at an off-site landfill.
3. The excavated area was covered with clean soil and revegetated.
4. A stormwater bio-swale (swale) was constructed.
5. A thin layer cap was placed over Johnson Lake sediments.

All of the above-listed tasks have been completed and are addressed in detail in the two Site completion reports:

- *Project Completion Report, Soil Remediation Action*, March 22, 2011 (DOF and Environ 2011) (Tasks 1 through 4)

- *Project Completion Report, Sediment Remedial Action,* September 24, 2012 (DOF 2012a) (Task 5).

1.3 SAMPLING AND ANALYSIS PLAN (SAP)

1.3.1 Purpose

The purpose of this SAP is to describe the Johnson Lake fish tissue monitoring study and build upon previous study efforts. The objective of this study is to evaluate the level of PCBs in fish tissue sampled from Johnson Lake, consistent with the O&M Plan (DOF 2012b). The ROD included the following objective with respect to PCBs in fish tissue, "Prevent human consumption of fish tissue with tissue concentrations of greater than 0.003 ug/kg PCB congener 126". Fish tissue results will be compared with this concentration.

In 2017, a collection and sampling field effort was completed, and all field and lab data were included in a monitoring report submitted to DEQ in January of 2018. As PCBs were still present in fish tissue at levels exceeding the ROD standard, further efforts to collect fish tissue in 2022 will be conducted and will include information provided in the 2018 report as well as a summary of results from the 2017 and 2004 events for comparison (DEQ 2018). This SAP addresses comments from DEQ regarding the 2017 sampling efforts.

1.3.2 Scope

The SAP describes the procedures for the following:

- Description of the lake area as a whole;

- Fish collection (including environmental data collection);

- Tissue sampling (for fish categories with fillet samples), decontamination, and packaging;

- Laboratory Analysis (EPA Method 1668C; NOAA or Bligh and Dyer (1959) for lipids), and;

- Quality Assurance.

1.3.3 Organization

The sampling and analysis for the Johnson Lake fish tissue monitoring study is based on the monitoring report requirements as described in the O&M Plan (DOF 2012b), with additional input as provided during discussions between Rob Webb of DOF ("Project Engineer"), Susan Sholl of Owens, Scott Maharry of Grette Associates, and DEQ personnel in early 2017. Further monitoring

report requirements will be incorporated based on comments from DEQ in the 2018 comment letter. The additional field sampling requirements specified by DEQ in the 2018 comment letter (Attachment D) include:

- level of sampling effort must be sufficient to ensure the required number of fish specified in the OMP (and herein) are collected and that fish are collected throughout the lake;
- fish in each category must adequately represent that category;
- use of a full range of available gear types to collect the targeted fish species in each sample category.

The comments from the 2018 DEQ letter related to laboratory procedures and reporting include:

- the evaluation of results should consider total PCB, PCB TEQ, and lipid normalized total PCB concentrations in addition to PCB congener 126 concentrations to support evaluation of data trends over time;
- laboratory protocols for sample preparation should specify that composite homogenates of fish tissue are created using equal mass from each individually homogenized fish sample;
- composite samples of each fish should be of the same type (species) and size (age) class, and;
- consistent with EPA Guidelines (EPA 2000), the differences between lengths of individuals in a composite sample and the average of the lengths should not exceed 10 percent and at least one replicate should also be analyzed.

The monitoring report for the 2022 fish tissue sampling effort will include, at a minimum, the following:

- the date of the fish tissue collection;
- location of fish collection;
- fish tissue PCB concentrations;
    - reported both as total PCB and by congener;
    - reported both on the basis of mass and lipid content;
    - reported as total PCB, PCB TEQ and, lipid normalized total PCB concentrations in addition to PCB congener 126 concentrations
- a summary of the results from the 2017 and 2004 sampling events;
- descriptions of the fish collected (number, species, length, mass) and which fish constituted which composite, and;

- results of cap inspection with photos (2017, to be provided by the Project Engineer).

2 DESCRIPTION OF JOHNSON LAKE

2.1 INSPECTION OF AREAS NEAR OUTFALLS TO JOHNSON LAKE

During the course of the fish sampling program, inspection of the areas near the outfalls to Johnson Lake will occur. Inspection of the outfalls will include recording of observations related to increased turbidity, discoloration, or algae growth. Photographs of the outfalls and immediately surrounding areas will be taken and included in the monitoring report.

2.2 INSPECTION OF WARNING SIGNS

In addition to the outfall inspections above, the condition and effectiveness of the fish warning signs installed around the perimeter of Johnson Lake will be assessed. For safety, multiple monitoring staff will participate in this assessment. In addition to recording observations of the signs and surrounding areas, photographs of the signs will be taken and included in the monitoring report.

3 FISH SAMPLING

3.1 FISH COLLECTION

The following fish collection program is consistent with the O&M Plan (DOF 2012b) as well as phone and email communication between the Project Engineer and DEQ personnel in early 2017 and the 2018 DEQ comment letter.

The fish collection will be conducted on foot or from a small vessel(s) using a waveform electro-shocker, traditional hook and line methods, and nets or seining. Fish will be collected from a variety of locations around and within the lake, as practicable, and where fish can be collected to represent general fish tissue concentrations lake-wide. Composite samples of each fish collected shall adequately represent the sampling category and be of the same type (species) and size (age) class. The collection will be consistent with EPA Guidelines (Guidance for Assessing Chemical Contaminant Data for Use in Fish Advisories, Volume 1 Fish Sampling and Analysis; EPA 2000), in a manner such that individual fish comprising a single composite sample should be of similar size (the smallest individual in a single composite should be no less than 75% of the total length of the largest individual).

The lake has been remediated with a thin-layer cap, as described in Section 1.2. Fish collection methods must not damage the cap. The Project Engineer advises that the cap is resilient enough for sampling methods which could require biologists to walk on it, including seining (R. Webb, personal communication).

Fish collection will target the following categories of fish. The goal for each category is to collect enough fish for the lab to composite five samples of the same fish type (fillets) and size range (whole fish) into a single composite sample for each category.

- Game fish fillets: One composite sample will target fish typically consumed by humans (e.g., largemouth bass).
- Panfish fillets: One composite sample will target panfish (e.g., bluegills); panfish tend to be smaller than game fish and may be consumed by humans.
- Rough fish fillets: One composite sample will target rough fish that are not typically targeted by humans but may be consumed by humans (e.g., suckers, carp).
- Large whole-fish: One composite sample will target fish greater than 350 mm in length that may be consumed by humans and large wildlife species[1].
- Small whole-fish: One composite sample will target fish <125 mm in length that may be consumed by smaller wildlife species.

[1] The Large Whole-Fish category in the O&M Plan references target fish between 125 and 300 mm. In a comment letter dated March 29, 2022 (DEQ ECSI # 2086), DEQ stated that "the large whole-fish tissue type in the O&M Plan should be updated to reflect fish >350 mm in length consistent with the RI and Baseline Risk Assessment."

All game and pan fish collected that are greater than 125 mm will be retained for potential analysis. Due to the scarcity of these fish in Johnson Lake, the analysis of individual fish may be required.

During the 2017 collection effort, a single white sturgeon (*Acipenser transmontanus*) approximately six feet in length was observed in Johnson Lake. The sturgeon was not harmed during the field collection and may still be present in the lake. If this is the case, interactions with the sturgeon will be avoided to the extent practicable. The sturgeon will be included in the list of potential bycatch species in the application for a Scientific Taking Permit obtained from ODFW for the project. The ODFW Scientific Taking Permit is included as Attachment A.

For replicate samples (minimum one replicate sample), the relative difference between the average length of individuals within any replicate sample and the average of the average lengths of individuals in all replicate samples should not exceed 10 percent. Replicate composite samples should be as similar to each other as possible. In addition to being members of the same species, individuals within each composite should be of similar length (size). The relative difference between the average length (size) of individuals within any composite sample from a given site and the average of the average lengths (sizes) of individuals in all composite samples from that site should not exceed 10 percent.

Where possible, fish should be of a harvestable size and weight. Samples collected will be representative of fish likely to be consumed by humans and large enough that this exposure would be reasonable.

Due to habitat limitations and low oxygen conditions previously documented in Johnson Lake, it may not be practicable to collect and analyze the numbers and types of fish samples described above as there may not be a significant fish population in the lake. A good faith effort (four days moving about the lake on foot or by boat, attempting to electroshock or otherwise collect fish that are present) will be made to characterize fish PCB concentrations that are representative of those existing in Johnson Lake. In the event that adequate fish are not collected from each category, a second 4-day collection and sampling effort will be made over the same period at a later date during 2022. In the event a second 4-day collection and sampling effort is required, DEQ will be provided advance notice. This approach is consistent with the O&M Plan (DOF 2012b).

The previous sampling indicates that small fish do not inhabit the center of the lake (ARCADIS 2004b). As such, the collection of small whole-fish composites (<125 mm) will prioritize perimeter sampling zones 6, 7, and 8 to evaluate small home range species closest to the Owens facility.

Sampling methods will include the use of a backpack electro shocker with dip nets, passive nets (e.g., gill net, Fyke net), beach seine, and hook and line angling.

Fish collected at each sample location will be enumerated by species, photographed, categorized (game fish, panfish, rough fish), and measured/weighed. A record will be kept of all fish collected, including species type, length, weight, method of capture, and whether selected for sampling or released. Fish collected during sampling from a specific location within the lake will be temporarily held in a decontaminated cooler filled with water from Johnson Lake. Once sampling activities from that area are complete, fish targeted for tissue analysis will be euthanized via CO_2

immersion (dry ice added to holding water), measured/weighed, wrapped in aluminum foil, placed in individually-labeled plastic bags, and stored on ice in collection bags for transport to ALS Global laboratories in Kelso, Washington for analysis. In the event that multiple areas of the lake are sampled concurrently (e.g., angling in one area while a gill net is deployed in another), fish from different areas of the lake will be kept in separate coolers and not mixed. Fish that are kept for analysis will be held on ice for the duration of the 4-day sampling event, and delivered to ALS Laboratories after the completion of sampling activities on the fourth day.

In an effort to implement humane practices, larger fish will be dispatched by stunning the fish with an appropriately sized blunt tool just above the eyes on the back of the skull followed by pithing using a sharp, decontaminated knife. Any fish not required for tissue analysis will be returned to the location in the lake from which they were collected prior to euthanasia.

If fish in any category continue to be collected after the goal of five individuals and replicate samples has been met, they may be used to replace previously collected fish to get a more spatially-representative sample of fish tissue in each category. This will be noted on field forms.

Five specimens of the same fish species shall be collected to form into a single whole-body composite sample. An additional five specimens of the same species should be collected to form a single fillet composite sample. This allows for more accurate whole-body estimates and allows for correct implementation of Section 11.2.4.1 Whole Fish Tissue in the attached ALS Standard Operating Procedure. If there are not enough fish collected to develop both whole body and fillet composites, whole body composites shall be the priority. This is consistent with the goals of both DEQ and the Oregon Health Authority to ensure risk is not underestimated for people that typically eat the whole fish.

While five fish per composite is the goal, if fewer than five fish of a species are collected, potential compositing with a smaller number of fish or the analysis of individual fish will be considered. In this case, decisions regarding compositing of type and sizes of fish will be made with DEQ coordination.

Fish will not be composited across species, in accordance with the EPA Guidance for Fish Sampling (EPA 2000).

Each sampling location will be recorded using a dGPS. This will include locations where any fish collection was not successful. Water temperature, turbidity, and dissolved oxygen levels will be collected in the middle water column at each sample location, along with weather conditions.

3.2 TISSUE SAMPLE COLLECTION, DECONTAMINATION, AND PACKAGING

Filleting of fish and compositing of samples will be done in the analytical laboratory, not in the field. When preparing euthanized fish for transport to the lab, care will be taken to avoid cross-contamination. Nitrile gloves and aluminum foil work surfaces will be changed regularly to avoid contamination.

Individual fish will be rinsed with analyte-free-ionized water, wrapped in aluminum foil, bagged, labeled, and placed in an ice cooler for shipment to the analytical laboratory.

The analytical laboratory will composite the fillet and whole-fish samples into the single composite samples for each category (Section 3). Each fish tissue sample composite will be created using equal mass from each individually homogenized fish aliquot, in accordance with the analytical laboratory's Tissue Sample Preparation Standard Operating Procedure (MET-TISP, dated 5/29/16; Attachment C). Filleting of fish will be done in accordance with the procedures in Attachment C as well as the procedures in Section 7.2.2.7 in EPA Guidance for Assessing Chemical Contaminant Data for Use in Fish Advisories: Volume 1 - Fish Sampling and Analysis (EPA 2000).

3.3 SAMPLE TRANSPORT AND CHAIN OF CUSTODY PROCEDURES

After collected and bagged/labeled, fish will be placed in the ice coolers and packed for shipping. The field representative will log each sample sent for analysis on a chain of custody (COC) form, noting sample identification code, date and time of collection, requested testing, and comments as appropriate.

All fish captured during the sampling effort(s) will be given a unique identifier. The sample code will allow individual fish to be correlated to the data collected, as well as determine which individual fish are included in composited samples in the lab. The sample identification scheme is described below.

- The first two letters of the sample identification code will identify the category of fish sampled or if the fish was returned to the lake, i.e., fish returned (FR), game fish (GF), pan fish (PF), rough fish (RF), large whole fish (LF), and small whole fish (SF);
- The first set of numbers in the sample code will be; the area of the lake from which the fish was captured;
- The second set of numbers in the sample code will be a sequential count of the fish captured
- If the fish is to be used as a replicate, a letter code (R) will follow the sequential number.

Two example fish sample codes are as follows:

GF-05-09-R;

where, "GF" = Game Fish, "05" = Area 5 within Johnson Lake, "09" = the ninth fish captured during the sampling effort, "R" = this is a replicate sample.

LF-02-15;

where, "LF" = Large Whole Fish, "02" = Area 2 within Johnson Lake, "15" = the fifteenth fish captured during the sampling effort.

Chain-of-custody procedures will commence in the field and will track the delivery of the samples to the laboratory. Upon transfer of possession to the testing laboratory, the chain-of-custody forms will be signed by the persons transferring custody of the samples.

4 LABORATORY ANALYSIS

4.1 TESTING FACILITIES

The collected fish will be delivered to and processed at ALS Global in Kelso, WA. The processed samples will then be shipped to ALS's laboratory in Houston, Texas, for analysis.

4.2 LABORATORY CHAIN OF CUSTODY

A laboratory chain-of-custody record for each set of samples will be maintained throughout all sampling, processing, and analytical activities. Information tracked by the laboratory chain-of-custody records include a sample identification number, date and time of sample receipt, analytical parameters required, location and conditions of storage, date and time of removal from and return to storage, the signature of the person removing and returning the sample, the reason for removing from storage, and final disposition of the sample.

4.3 CHEMICALS OF CONCERN (CHEMICALS OF INTEREST) SCREENING

The evaluation of results shall consider total PCB, PCB TEQ, and lipid normalized total PCB concentrations in addition to PCB congener 126 concentrations to support evaluation of data trends over time (DEQ 2018). They will also be reported relative to tissue mass and tissue lipid content.

4.4 TESTING METHODS

PCB congeners will be analyzed using EPA method 1668C. The storage temperature for this analysis is 4°C, holding time is 14 days.

Table 1. Sample holding time and storage criteria

Sample Type	EPA Method	Holding Time	Temperature	Sample condition
Fish tissue	1668C	14 days until extraction	4° C	fillets (with belly flap attached); whole fish
Fish tissue (lipids)	NOAA or Bligh and Dyer (1959)	14 days until extraction	4° C	fillets (with belly flap attached); whole fish

5 QUALITY ASSURANCE AND DATA VALIDATION

All sampling and analysis will be done in accordance with the existing DEQ-approved Quality Assurance Project Plan (QAPP) for the Johnson Lake Remediation Project (Arcadis 2004, Johnson Lake Investigation Work Plan, Appendix B, Quality Assurance Project Plan), as well as comments provided in the DEQ 2018 response letter to DOF. The Project QAPP is included as Attachment E.

All field data forms and chain-of-custody forms will be reviewed by the field lead prior to demobilization from the site to ensure completeness and correctness. The field lead will also be responsible for all fish species identification and for ensuring that each fish receives the proper sample identification code.

The field sampling team will attempt to collect replicate and duplicate samples concurrent with sampling activities for laboratory QA/QC. These attempts will be made to an extent practicable during the field efforts and through the course of sampling.

All laboratory QA/QC forms will be included as an appendix to the final report including method blanks, laboratory control samples, and calibration data.

6 REFERENCES

ARCADIS. 2004a. Johnson Lake Investigation Work Plan, Revision 2. Prepared for Owens-Brockway Glass Container, Inc. Portland Oregon, by ARCADIS G&M, Inc., Cleveland, Ohio. January 29, 2004.

ARCADIS. 2004b. Johnson Lake Site Investigation Report. Prepared for Owens-Brockway Glass Container, Inc. Portland Oregon, by ARCADIS G&M, Inc., Cleveland, Ohio. July 15, 2004.

ARCADIS. 2004c. Johnson Lake Investigation Work Plan, Revision 2, Appendix B, Quality Assurance Project Plan. Prepared for Owens-Brockway Glass Container, Inc. Portland Oregon, by ARCADIS G&M, Inc., Cleveland, Ohio. January 29, 2004.

Dalton, Olmsted & Fuglevand, Inc. (DOF) and Environ. 2011. Project Completion Report – Soil Remediation Action. Johnson Lake, Portland, Oregon. Prepared for Owens-Brockway Glass Container Inc. March 22, 2011.

Dalton, Olmsted & Fuglevand, Inc. (DOF). 2012a. Project Completion Report – Sediment Remedial Action. Johnson Lake, Portland, Oregon. Prepared for Owens-Brockway Glass Container Inc. September 24, 2012.

Dalton, Olmsted & Fuglevand, Inc. (DOF). 2012b. Remediation Operations & Maintenance Plan (O & M Plan): Sediment Remedial Action. Johnson Lake, Portland, Oregon. Prepared for Owens-Brockway Glass Container Inc. December 20, 2012.

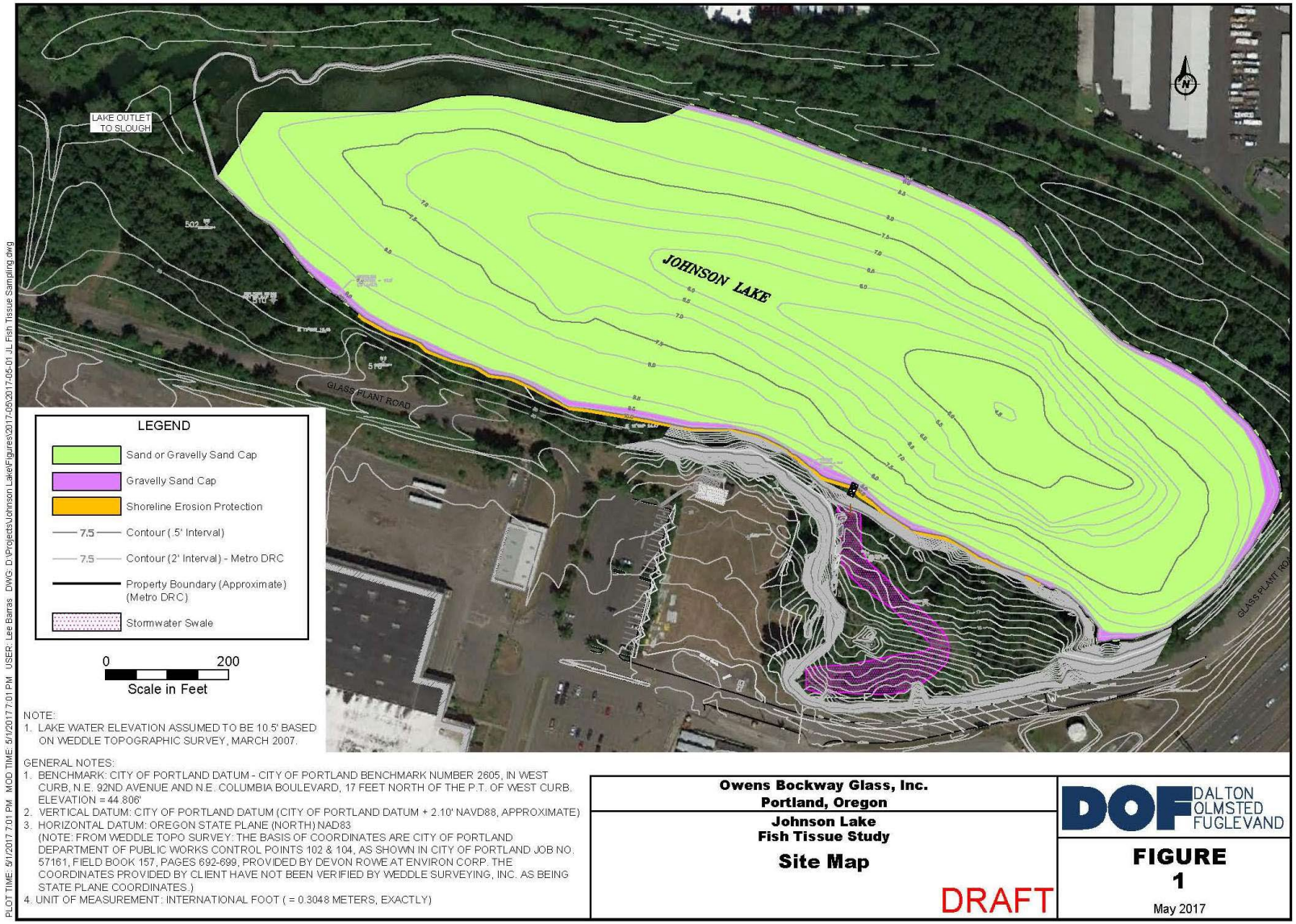
Grette Assoc. 2018. Revised Johnson Lake Fish Tissue Monitoring Study – Monitoring Report

Oregon Department of Environmental Quality. (DEQ). 2018. Johnson Lake Fish Monitoring Study Comment Response Letter. Prepared for Dalton Olmsted Fuglevand

United States Environmental Protection Agency. (EPA). 2000. EPA Guidance for Assessing Chemical Contaminant Data for Use in Fish Advisories. Vol. 1 Fish Sampling and Analysis. Third edition. Office of Water. EPA 823-B-00-007.

Webb, R. personal communication. Phone call with M. Shelton, April 26, 2017.

Figure 1: Site Map of Johnson Lake



JOHNSON LAKE FISH TISSUE MONITORING STUDY

SAMPLING AND ANALYSIS PLAN
ATTACHMENT A: ODFW SCIENTIFIC TAKING PERMIT

Oregon
Kate Brown, Governor

Department of Fish and Wildlife
Fish Division
4034 Fairview Industrial Drive SE
Salem, OR 97302
(503) 947-6201
FAX (503) 947-6202
www.dfw.state.or.us/

2022 - SCIENTIFIC TAKING PERMIT - FISH

Permit Applicant: **Scott Maharry**
Organization: **Grette Associates, LLC**

Permit Number: **26458**
Project Title: **Johnson Lake Sediment Remedial Action: Fish Tissue Monitoring Study**
Dates Valid: **04/05/2022 – 10/05/2022**

Federal Authorization: **This permit does not provide any federal authorization for ESA listed fish species.**

Principal Investigator: **Scott Maharry**

Co-Investigator(s): **Janae Dinkins, Donny Neel, Chad Wallin**

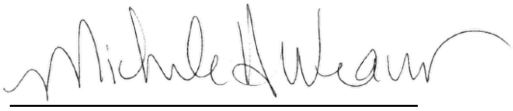
PI Signature:_____ CI Signature(s): _____

Terms and Conditions of This Permit:

1. The Permit Holder, Principal Investigator, Co-Investigator, and all people working under their supervision shall at all times observe and comply with all federal and state laws, including the Endangered Species Act of 1973, as amended, and lawful regulations issued thereunder, which relate to threatened or endangered plant or animal species while performing activities described in the permit application. ODFW's approval of this permit does not certify that Permittee's activities described in its application are lawful under the federal ESA. Permittee's compliance with permit conditions is not in lieu of compliance with any federal requirements related to the federal Endangered Species Act. General conditions of Oregon Revised Statutes and Oregon Administrative Rules apply to this permit that cannot be used in lieu of any permit required by federal law or regulation. Permission to sample in areas where federally protected fish may occur is contingent upon the permittee obtaining necessary authorization from the appropriate federal agency and acting in accordance with the conditions established by the federal government. If a condition on this permit conflicts with a condition on a federal permit or authorization, then the permittee must comply with the more restrictive condition.
2. This permit is not transferable and must be carried while collecting. The Principal Investigator and all Co-Investigators must sign their own copy of the permit.
3. Persons not named on the permit may assist in collecting only while accompanied by the Principal Investigator or Co-investigator(s) listed above.
4. Access to private property is contingent on landowner permission. This permit does not authorize trespassing.
5. This permit is not valid in any refuge, park, city, wildlife area, or area closed to collection without written approval of manager or administrator. When collecting from state parks, please contact Oregon Parks and Recreation Department to inquire about the need for a scientific research collection permit from them - https://oprdpermits.org/
6. Sampling must be coordinated with local Oregon Department of Fish and Wildlife District Fish Biologists (contact list attached in permit). All requirements contained in the district biologist comments section of the application must be followed and you must notify them prior to sampling in their districts. Oregon State Police must also be notified prior to sampling, preferably by contacting local offices. http://www.oregon.gov/osp/Pages/contact_us.aspx or else the Northern (503-375-3555) or Southern

(541-776-6111) non-emergency dispatch after hours.

7. An annual activity/collection report associated with this permit must be submitted to ODFW by December 31, 2022 via **https://apps.nmfs.noaa.gov/.** Renewal of this permit will not be issued until ODFW reviews and approves the annual activity/collection report. All fish, crayfish, and mussel take must be recorded in the annual report. Take is defined as harass, harm, pursue, hunt, shoot, wound, kill, trap, control, capture, or collect, or to attempt to engage in any such conduct.
8. May only conduct research and monitoring activities as described in Project Description, Supplemental Information, and Location/Take Information sections of the attached APPS permit. Actual distribution of take among sites is authorized as described in the APPS permit application. All numbers of fish authorized in this permit and the attached APPS permit take table are annual totals.
9. Unless an exception has been granted for your project, indirect mortality may not exceed 3% (electrofishing) or 1% (other methods). Mortality rates are calculated as a percentage of total catch, not to exceed the number as described in the take tables in the permit application. In the event that mortality for any species exceeds this rate, the permittee should contact ODFW ESA staff, Fish.Research@odfw.oregon.gov (503-947-6254 or 541-464-2185) prior to any further activity.
10. If electrofishing, protocols must follow the guidelines established by the National Marine Fisheries Service (NMFS) in June 2000, including no shocking if water temperatures exceed 64.4°F. http://www.westcoast.fisheries.noaa.gov/publications/reference_documents/esa_refs/section4d/electro2000.pdf
11. If the water temperature exceeds 70°F at the capture site, all capturing and handling must stop in stream habitats that contain any salmon, steelhead, trout, or lamprey species.
12. Follow FDA approved protocols and use only FDA approved substances for anesthetizing fish.
    a) **MS-222** may not be used where fish may be subject to sport harvest fisheries within 21 days;
    b) **Clove oil** may not be used at all;
    c) **AQUI-S®** may be used as an alternative to MS-222. To use AQUI-S® 20E as an immediate release sedative in freshwater fish for field-based activities, permit holder must sign up to participate in USFWS-AADAP INAD 11-741 and must comply with the requirements as set forth in the INAD Study Protocol for AQUI-S® 20E https://www.fws.gov/fisheries/aadap/inads/AQUI-S20E-INAD-11-741.html
    d) **Carbon dioxide** can be used as a fish anesthetic as per FDA rules and requires no withdrawal time;
    e) **Electro-anesthesia** can be used as a fish anesthetic as an alternative to chemicals, and requires no withdrawal time.
13. If sampling in multiple sub-basins (4th field HUCs), we recommend that after each sampling event concludes all gear is cleaned and/or allowed to completely dry to prevent the spread of invasive species.
14. If you approach your permitted take or percent indirect mortality at a location and still have sampling to conduct, or would like to revise your sampling methods or procedures; please contact the ODFW ESA staff as soon as possible to request a permit modification so that you can continue your project.

ISSUED BY:  ISSUED DATE:March 31, 2022

Endangered Species Act Specialists
Holly Huchko (541)464-2185
Michele Weaver (503)947-6254

Distribution: Michael Hayworth, Ben Walczak-ODFW

OREGON FISH BIOLOGISTS CONTACT DETAILS updated 01.05.22

ODFW District Biologist	Phone	E-mail	Watershed District	Office
Ben Walczak	(971) 673-6013	Ben.Walczak@odfw.oregon.gov	North Willamette-Cascade Unit	Clackamas
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Vacant*	(541) 296-4628	Vacant	Mid-Columbia	The Dalles
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Vacant*	(541) 388-6363 x233	Vacant	Deschutes-Upper	Bend
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Dave Banks	(541) 573-6582	David.T.Banks@odfw.oregon.gov	Malheur	Hines

ODFW District Biologist	Phone	E-mail	Watershed District	Office
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Pete Samarin*	(541) 826-8774 x222	Peter.A.Samarin@odfw.oregon.gov	Rogue	Central Point
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Jeremy Romer*	(541) 726-3515 x34	Jeremy.D.Romer@odfw.oregon.gov	South Willamette	Springfield
Scott Groth	(541) 888-5515	Scott.D.Groth@odfw.oregon.gov	Marine Invertebrates	Charleston
Christian Heath	(541) 867-0300 x266	Christian.T.Heath@odfw.oregon.gov	Marine Fish	Newport
Cristen Don	(541) 867-7701 x228	Cristen.N.Don@odfw.oregon.gov	Marine Reserves	Newport
Art Martin	(971) 673-6061	Art.C.Martin@odfw.oregon.gov	Columbia River	Clackamas
Kelly Reis	(541) 726-3515 x29	Kelly.E.Reis@odfw.oregon.gov	Willamette BiOp	Springfield[i]

* = Assistant District Biologist

File Number: 26458

Applicant/Holder

Name: Scott Maharry
Title: Senior Biologist
Affiliation: Grette Associates, LLC
Address: 2102 North 30th Street
City,State,Zip: Tacoma, WA 98403
Phone Number: (253)573-9300
Fax Number: (253)573-9321
Email: scottm@gretteassociates.com

Project Information

File Number:	26458
Application Status:	**Application Complete - Issued**
Project Title:	Renew: Johnson Lake Sediment Remedial Action: Fish Tissue Monitoring Study
Project Status:	Renewal
Previous Federal or State Permit/Authorization:	21341
Permit/Authorization Requested:	• Oregon Scientific Taking Permit for Fish and Marine and Freshwater Invertebrates - Issued
Where will activities occur?	Oregon (including Columbia River and offshore waters)
State department of fish and game/wildlife:	N/A

Research Timeframe:	**Start:** 04/05/2022 **End:** 10/05/2022
Sampling Season/Project Duration:	The field sampling component of the project is anticipated to occur over four consecutive days in April of 2022 and if adequate species are not collected another 4 day field effort will be completed before October 2022
Project Type:	Monitoring

Project Description

Purpose: The following is a summarization of the ongoing study at Johnson Lake and includes a project description and purpose in support of the wildlife scientific taking permit. The permit is required to collect specimens of freshwater fish in Oregon for the completion of the scientific fish study on Johnson Lake in Portland, Oregon, Multnomah County.

Purpose:
Owens-Brockway Glass Container, Inc. (Owens) owns and operates a glass manufacturing plant located at 5850 NE 92nd Drive, Portland, Oregon. Johnson Lake lies to the north of the Owens' plant site, with a buffer area of trees and shrubs lying between the plant and Johnson Lake. Owens' Property includes the majority of the lakeshore and much of the lake itself. The site is comprised of the Owens' Property and the remainder of Johnson Lake that is not owned by Owens.
Sediments in Johnson Lake were found to contain polychlorinated biphenyls (PCBs), as described in the Johnson Lake Investigation Work Plan (ARCADIS 2004a), Site Investigation Report (ARCADIS 2004b), and Johnson Lake Risk Assessment (Environ and ARCADIS 2004). Based on the previous investigations and a Feasibility study prepared in 2006, the Oregon Department of Environmental Quality (DEQ) selected a final remedy for the site in the Record of Decision (October 2007) and Record Decision Amendment (July 2009).
The final remedy for cleanup of the PCBs and other contaminants at the Site, as described in the ROD, consisted of the following tasks.
1. Surface soils from the low-lying area will be excavated.
2. Excavated soils will be consolidated in a containment area or disposed of at an off-site landfill.
3. The excavated area will be covered with clean soil and revegetated.
4. A stormwater bio-swale (swale) will be constructed.
5. A thin layer cap will be placed over Johnson Lake sediments.
All tasks, including the off-site landfill disposal for excavated PCB-containing soil, were completed in 2012.

The objective of this study is to evaluate the level of PCBs in fish tissue sampled from Johnson Lake, consistent with the Remediation Operations & Maintenance Plan, Sediment Remedial Action (DOF 2012b). The ROD included the following objective with respect to PCBs in fish tissue, "Prevent human consumption of fish tissue with tissue concentrations of greater than 0.003 ug/kg PCB congener 126". Fish tissue results will be compared with this concentration.
In 2017, a collection and sampling field effort was completed, and all field and lab data were included in a monitoring report submitted to DEQ in January of 2018. Based on the results of this study, PCBs were found to still be present in fish tissue at levels exceeding the ROD standard. Therefore, further efforts to collect fish tissue in 2022 (year 10) will be conducted to further assess levels of PCBs in fish tissue.
The 2022 Johnson Lake fish tissue monitoring study is a requirement of the O&M Plan in response to the results of the 2017 monitoring effort showing contaminant levels in fish samples exceeding the levels specified in the 2007 Record of Decision for the site cleanup. The purpose and objective of this study are to build upon the previous efforts in continuing to evaluate the level of PCBs in fish tissue sampled from Johnson Lake, consistent with the O&M Plan. (DOF, 2012b)

Description: Description:

The fish collection will be conducted on foot or from a small vessel(s) using a waveform electro-shocker, traditional hook and line methods, and nets or seining. Fish will be collected from a variety of locations around the lake, as practicable, and where fish can be collected to represent general fish tissue concentrations lake-wide.

The fish collection will target the following categories of fish. The goal for each category is to collect enough fish for the lab to composite 2 to 5 samples of the same fish type (fillets) and size range (whole fish) into a single composite sample for each category.

• Game fish fillets: One composite sample will target fish typically consumed by humans (e.g., largemouth bass).
• Panfish fillets: One composite sample will target panfish (e.g., bluegills); panfish tend to be smaller than gamefish and may be consumed by humans.
• Rough fish fillets: One composite sample will target rough fish that are not typically targeted by humans but may be consumed by humans (e.g., suckers, carp).
• Large whole fish: One composite sample will target fish between 125 and 300 mm in length that may be consumed by large wildlife species.
• Small whole fish: One composite sample will target fish <125 mm in length that may be consumed by smaller wildlife species.

Due to habitat limitations and low oxygen conditions previously documented in Johnson Lake, collecting and analyzing the numbers and types of fish samples described above may not be practicable during the initial four-day field effort. A good faith effort (four days moving about the lake on foot or by boat, attempting to electroshock or otherwise collect fish that are present) will be made to characterize fish PCB concentrations that are representative of those existing in Johnson Lake. In the event that adequate fish are not collected from each category, a second 4-day collection and sampling effort will be made over the same period at a later date during 2022. This approach is consistent with the O&M Plan (DOF 2012b).

During the 2017 field effort, Grette biologists encountered an approximately six-foot length, White sturgeon. All efforts were made during the 2017 study to avoid catching or otherwise harassing the fish. It is possible that this sturgeon may still be present in Johnson Lake during the 2022 field effort. While efforts will be made to avoid catching this particular fish, placement of gill nets and other passive sampling equipment may result in the capture of the sturgeon. The sturgeon has been included in the table of species anticipated to be collected in anticipation of this.

Supplemental Information

Methods:

The fish collection will be conducted on foot or from a small vessel(s) using a waveform electro-shocker, traditional hook and line methods, and nets or seining. Fish will be collected from a variety of locations around and within the lake, as practicable, and where fish can be collected to represent general fish tissue concentrations lake-wide. Composite samples of each fish collected shall adequately represent the sampling category and be of the same type (species) and size (age) class. The collection will be consistent with EPA Guidelines (Guidance for Assessing Chemical Contaminant Data for Use in Fish Advisories, Volume 1 Fish Sampling and Analysis) (EPA, 2015), in a manner such that the differences between lengths of individuals in a composite sample and the average of the lengths shall not exceed 10 percent, and at least one replicate shall also be analyzed. (DEQ 2018)

Fish collected at each sample location will be enumerated by species, categorized (game fish, panfish, rough fish), and measured. Fish collected during sampling from a specific location within the lake will be temporarily held in a decontaminated cooler filled with water from Johnson Lake. Once sampling activities from that area are complete, fish targeted for tissue analysis will be euthanized via CO_2 immersion (dry ice added to holding water), wrapped in aluminum foil, and stored on ice in collection bags for transport to ALS Global laboratories in Kelso, Washington for analysis. In an effort to implement humane practices, larger fish will be dispatched by stunning the fish with an appropriately sized blunt tool just above the eyes on the back of the skull. Any fish not required for tissue analysis will be returned to the location in the lake from which they were collected prior to CO_2 immersion.

Based on previous sampling in Johnson Lake (ARCADIS 2004b), it is unlikely that more than five fish of any fillet category or >125 mm will be collected during the course of sampling. If fish in any category continue to be collected after the goal of five individuals has been met, they may be used to replace previously collected

	fish in order to get a more spatially-representative sample of fish tissue in each category. This will be noted on field forms. Each sampling location will be recorded using a dGPS. This will include locations where fish collection was not successful. Water temperature and dissolved oxygen levels at will be collected at each sample location in the middle water column. Weather conditions (precipitation) also will be recorded.
Intentional Lethal Take:	Fish targeted for tissue analysis will be euthanized via CO2 immersion (dry ice added to holding water), or dispatched in the most humane method. Fish not targeted for analysis will be returned to the lake in the location where they were captured prior to CO2 immersion.
Anticipated Effects on Animals:	Fish targeted for tissue analysis will be humanely euthanized. While upland wildlife may be temporarily disturbed during sampling efforts, no permanent wildlife impacts are anticipated.
Measures to Minimize Effects:	Only fish needed to fulfill the O&M sample requirements will be euthanized. All other fish will be returned to the lake in the location where they were captured. Care will be taken to avoid disturbance of native vegetation surrounding the lake while accessing the lake for sampling activities.
Disposition of Tissues:	Whole fish will be bagged, labeled and placed on ice in a cooler. The cooler will be transported to the laboratory where the samples will be processed for analysis. After analysis, the laboratory will dispose of the tissue samples in accordance with their Standard Operating Procedures.
Public Availability of Product/Publications:	

District Biologist Comments

Date	From	Comments
03/23/2022	Michael Hayworth	The North Willamette District does not have any concerns regarding the proposed sampling. Please inform us of any novel or unexpected species discovered in your efforts. Good Luck!

Federal Information

No Federal comments or authorizations.

Location/Take Information

Freshwater Location

Research Area: Pacific Ocean **State:** OR **Sub Basin (4th Field HUC):** Lower Willamette **Stream Name:** Johnson Lake **Latitude:** 45.565416 **Longitude:** -122.563001
Sale in Oregon of species taken: None
Location Description: Owens-Brockway Glass Container, Inc. 5850 NE 92nd Drive Portland, OR

Take Information

Line	Ver	Species	Listing Unit/Stock	Production /Origin	Life Stage	Sex	Expected Take	Indirect Mort	Take Action	Observe /Collect Method	Procedure	Transport Record	Begin Date	End Date

1		Bass, Largemouth	NA	Natural	All	Male and Female	10	0	Intentional (Directed) Mortality	Electrofishing, Backpack	Anesthetize; Tissue sample (other internal tissues)	N/A	4/5/2022	10/5/2022
2		Bluegill	NA	Natural	All	Male and Female	10	0	Intentional (Directed) Mortality	Electrofishing, Backpack	Anesthetize; Tissue sample (other internal tissues)	N/A	4/5/2022	10/5/2022
3		Carp, Common	NA	Natural	All	Male and Female	10	0	Intentional (Directed) Mortality	Electrofishing, Backpack	Anesthetize; Tissue sample (other internal tissues)	N/A	4/5/2022	10/5/2022
4		Sucker (unknown)	NA	Natural	All	Male and Female	10	0	Intentional (Directed) Mortality	Electrofishing, Backpack	Anesthetize; Tissue sample (other internal tissues)	N/A	4/5/2022	10/5/2022
5		Stickleback, Threespine	NA	Natural	All	Male and Female	5	0	Intentional (Directed) Mortality	Electrofishing, Backpack	Anesthetize; Tissue sample (other internal tissues)	N/A	4/5/2022	10/5/2022
6		Sculpin (unknown)	NA	Natural	All	Male and Female	5	0	Intentional (Directed) Mortality	Electrofishing, Backpack	Anesthetize; Tissue sample (other internal tissues)	N/A	4/5/2022	10/5/2022
7		Pumpkinseed	NA	Natural	All	Male and Female	5	0	Intentional (Directed) Mortality	Electrofishing, Backpack	Anesthetize; Tissue sample (other internal tissues)	N/A	4/5/2022	10/5/2022
8		Dace (unknown)	NA	Natural	All	Male and Female	5	0	Intentional (Directed) Mortality	Electrofishing, Backpack	Anesthetize; Tissue sample (other internal tissues)	N/A	4/5/2022	10/5/2022
9		Shiner (unknown)	NA	Natural	All	Male and Female	5	0	Intentional (Directed) Mortality	Electrofishing, Backpack	Anesthetize; Tissue sample (other internal tissues)	N/A	4/5/2022	10/5/2022

10		Bass, Smallmouth	NA	Natural	All	Male and Female	10	0	Intentional (Directed) Mortality	Electrofishing, Backpack	Anesthetize; Tissue sample (other internal tissues)	N/A	4/5/2022	10/5/2022
11		Bass, Largemouth	NA	Natural	All	Male and Female	10	0	Intentional (Directed) Mortality	Angling (Rod and Reel)	Anesthetize; Tissue sample (other internal tissues)	N/A	4/5/2022	10/5/2022
12		Bluegill	NA	Natural	All	Male and Female	10	0	Intentional (Directed) Mortality	Angling (Rod and Reel)	Anesthetize; Tissue sample (other internal tissues)	N/A	4/5/2022	10/5/2022
13		Carp, Common	NA	Natural	All	Male and Female	10	0	Intentional (Directed) Mortality	Angling (Rod and Reel)	Anesthetize; Tissue sample (other internal tissues)	N/A	4/5/2022	10/5/2022
14		Sucker (unknown)	NA	Natural	All	Male and Female	10	0	Intentional (Directed) Mortality	Angling (Rod and Reel)	Anesthetize; Tissue sample (other internal tissues)	N/A	4/5/2022	10/5/2022
15		Stickleback, Threespine	NA	Natural	All	Male and Female	5	0	Intentional (Directed) Mortality	Angling (Rod and Reel)	Anesthetize; Tissue sample (other internal tissues)	N/A	4/5/2022	10/5/2022
16		Sculpin (unknown)	NA	Natural	All	Male and Female	5	0	Intentional (Directed) Mortality	Angling (Rod and Reel)	Anesthetize; Tissue sample (other internal tissues)	N/A	4/5/2022	10/5/2022
17		Pumpkinseed	NA	Natural	All	Male and Female	5	0	Intentional (Directed) Mortality	Angling (Rod and Reel)	Anesthetize; Tissue sample (other internal tissues)	N/A	4/5/2022	10/5/2022
18		Dace (unknown)	NA	Natural	All	Male and Female	5	0	Intentional (Directed) Mortality	Angling (Rod and Reel)	Anesthetize; Tissue sample (other internal tissues)	N/A	4/5/2022	10/5/2022

19		Shiner (unknown)	NA	Natural	All	Male and Female	5	0	Intentional (Directed) Mortality	Angling (Rod and Reel)	Anesthetize; Tissue sample (other internal tissues)	N/A	4/5/2022	10/5/2022
20		Bass, Smallmouth	NA	Natural	All	Male and Female	10	0	Intentional (Directed) Mortality	Angling (Rod and Reel)	Anesthetize; Tissue sample (other internal tissues)	N/A	4/5/2022	10/5/2022
21		Bass, Largemouth	NA	Natural	All	Male and Female	10	0	Intentional (Directed) Mortality	Seine, Beach	Anesthetize; Tissue sample (other internal tissues)	N/A	4/5/2022	10/5/2022
22		Bluegill	NA	Natural	All	Male and Female	10	0	Intentional (Directed) Mortality	Seine, Beach	Anesthetize; Tissue sample (other internal tissues)	N/A	4/5/2022	10/5/2022
23		Carp, Common	NA	Natural	All	Male and Female	10	0	Intentional (Directed) Mortality	Seine, Beach	Anesthetize; Tissue sample (other internal tissues)	N/A	4/5/2022	10/5/2022
24		Sucker (unknown)	NA	Natural	All	Male and Female	10	0	Intentional (Directed) Mortality	Seine, Beach	Anesthetize; Tissue sample (other internal tissues)	N/A	4/5/2022	10/5/2022
25		Stickleback, Threespine	NA	Natural	All	Male and Female	5	0	Intentional (Directed) Mortality	Seine, Beach	Anesthetize; Tissue sample (other internal tissues)	N/A	4/5/2022	10/5/2022
26		Sculpin (unknown)	NA	Natural	All	Male and Female	5	0	Intentional (Directed) Mortality	Seine, Beach	Anesthetize; Tissue sample (other internal tissues)	N/A	4/5/2022	10/5/2022
27		Pumpkinseed	NA	Natural	All	Male and Female	5	0	Intentional (Directed) Mortality	Seine, Beach	Anesthetize; Tissue sample (other internal tissues)	N/A	4/5/2022	10/5/2022

28		Dace (unknown)	NA	Natural	All	Male and Female	5	0	Intentional (Directed) Mortality	Seine, Beach	Anesthetize; Tissue sample (other internal tissues)	N/A	4/5/2022	10/5/2022
29		Shiner (unknown)	NA	Natural	All	Male and Female	5	0	Intentional (Directed) Mortality	Seine, Beach	Anesthetize; Tissue sample (other internal tissues)	N/A	4/5/2022	10/5/2022
30		Bass, Smallmouth	NA	Natural	All	Male and Female	10	0	Intentional (Directed) Mortality	Seine, Beach	Anesthetize; Tissue sample (other internal tissues)	N/A	4/5/2022	10/5/2022
31		Bass, Largemouth	NA	Natural	All	Male and Female	10	0	Intentional (Directed) Mortality	Net, Gill/Trammel	Anesthetize; Tissue sample (other internal tissues)	N/A	4/5/2022	10/5/2022
32		Bluegill	NA	Natural	All	Male and Female	10	0	Intentional (Directed) Mortality	Net, Gill/Trammel	Anesthetize; Tissue sample (other internal tissues)	N/A	4/5/2022	10/5/2022
33		Carp, Common	NA	Natural	All	Male and Female	10	0	Intentional (Directed) Mortality	Net, Gill/Trammel	Anesthetize; Tissue sample (other internal tissues)	N/A	4/5/2022	10/5/2022
34		Sucker (unknown)	NA	Natural	All	Male and Female	10	0	Intentional (Directed) Mortality	Net, Gill/Trammel	Anesthetize; Tissue sample (other internal tissues)	N/A	4/5/2022	10/5/2022
35		Stickleback, Threespine	NA	Natural	All	Male and Female	5	0	Intentional (Directed) Mortality	Angling (Rod and Reel)	Anesthetize; Tissue sample (other internal tissues)	N/A	4/5/2022	10/5/2022
36		Sculpin (unknown)	NA	Natural	All	Male and Female	5	0	Intentional (Directed) Mortality	Net, Gill/Trammel	Anesthetize; Tissue sample (other internal tissues)	N/A	4/5/2022	10/5/2022

37		Pumpkinseed	NA	Natural	All	Male and Female	5	0	Intentional (Directed) Mortality	Net, Gill/Trammel	Anesthetize; Tissue sample (other internal tissues)	N/A	4/5/2022	10/5/2022
38		Dace (unknown)	NA	Natural	All	Male and Female	5	0	Intentional (Directed) Mortality	Net, Gill/Trammel	Anesthetize; Tissue sample (other internal tissues)	N/A	4/5/2022	10/5/2022
39		Shiner (unknown)	NA	Natural	All	Male and Female	5	0	Intentional (Directed) Mortality	Net, Gill/Trammel	Anesthetize; Tissue sample (other internal tissues)	N/A	4/5/2022	10/5/2022
40		Bass, Smallmouth	NA	Natural	All	Male and Female	10	0	Intentional (Directed) Mortality	Net, Gill/Trammel	Anesthetize; Tissue sample (other internal tissues)	N/A	4/5/2022	10/5/2022
41		Sturgeon, white	NA	Natural	Adult	Male and Female	1	0	Capture/Handle/Release Animal	Electrofishing, Backpack	Anesthetize; Tissue sample (other internal tissues)	N/A	4/5/2022	10/5/2022
42		Sturgeon, white	NA	Natural	Adult	Male and Female	1	0	Capture/Handle/Release Animal	Hook and line/angler/rod and reel	Anesthetize; Tissue sample (other internal tissues)	N/A	4/5/2022	10/5/2022
43		Sturgeon, white	NA	Natural	Adult	Male and Female	1	0	Capture/Handle/Release Animal	Seine, Beach	Anesthetize; Tissue sample (other internal tissues)	N/A	4/5/2022	10/5/2022
44		Sturgeon, white	NA	Natural	Adult	Male and Female	1	0	Capture/Handle/Release Animal	Net, Gill	Anesthetize; Tissue sample (other internal tissues)	N/A	4/5/2022	10/5/2022

Project Contacts

Primary Contact: Scott J Maharry

Principal Investigator: Scott J Maharry

Other Personnel

Name	Role(s)
Janae Dinkins	Co-Investigator
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Chad A Wallin	Co-Investigator

Status

Application Status: Application Complete
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• Oregon Scientific Taking Permit for Fish and Marine and Freshwater Invertebrates

Current Status: Issued **Status Date:** March 31, 2022
Date State Approved: March 31, 2022
Expire Date: December 31, 2022

Attachments

Application Archive - P26458T14Issued.pdf (Added Mar 31, 2022)

Modification Requests

This section is currently empty.

Reports

Report Required

Nbr	Report Type	Report Period		Date Due	Status	Date Received
		Start Date	End Date			
1	Annual-Year End	04/05/2022	12/31/2022	12/31/2022	N/A	

JOHNSON LAKE FISH TISSUE MONITORING STUDY

SAMPLING AND ANALYSIS PLAN

ATTACHMENT B: ODEQ MAY 25, 2017, SAP APPROVAL AND COMMENTS

JOHNSON LAKE FISH TISSUE MONITORING STUDY

SAMPLING AND ANALYSIS PLAN

ATTACHMENT C: ALS STANDARD OPERATING PROCEDURE MET-TISP (5/29/16) – TISSUE SAMPLE PREPARATION

ALS Standard Operating Procedure

DOCUMENT TITLE:	TISSUE SAMPLE PREPARATION
REFERENCED METHOD:	N/A
SOP ID:	MET-TISP
REVISION NUMBER:	10
EFFECTIVE DATE:	5/29/2016



TISSUE SAMPLE PREPARATION

ALS-KELSO

SOP ID:	MET-TISP	Rev. Number:	10	Effective Date:	5/29/16

Approved By: _____ Date: 5/11/16
Department Manager/Technical Director – Jeff Coronado

Approved By: _____ Date: 5/11/16
QA Manager – Carl Degner

Approved By: _____ Date: 5/12/16
Laboratory Director – Jeff Grindstaff

Issue Date: _____	Doc Control ID#: _____	Issued To: _____

ANNUAL REVIEW

SIGNATURES BELOW INDICATE NO PROCEDURAL CHANGES HAVE BEEN MADE TO THE SOP SINCE THE APPROVAL DATE ABOVE. THIS SOP IS VALID FOR TWELVE ADDITIONAL MONTHS FROM DATE OF THE LAST SIGNATURE UNLESS INACTIVATED OR REPLACED BY SUBSEQUENT REVISIONS.

Signature	Title	Date
Signature	Title	Date
Signature	Title	Date
Signature	Title	Date

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TISSUE SAMPLE PREPARATION

1. SCOPE AND APPLICATION

1.1. This standard operating procedure describes procedures for the initial preparation of tissue samples prior to sample analysis. Customer-specific contracts or statement of works (SOWs) with alternate procedures will take precedence over this SOP.

1.2. This SOP is intended to provide guidance for the preliminary preparation of tissue samples prior to the sample aliquoting and analytical preparation described in individual analytical SOPs. The procedures described in this SOP also apply to compositing and subsampling of tissue samples for analyses to be subcontracted.

2. METHOD SUMMARY

2.1. Tissue samples are inherently heterogeneous requiring special considerations in order to obtain a truly representative sample aliquot for analysis. This SOP provides guidance for handling tissue samples prior to the sample preparation steps described in analytical SOPs. This SOP applies to samples delivered to the lab in whole body form or in the form of pre-dissected tissues.

2.2. The sample handling strategy must consider:

- what analyses are to be performed (metals, organics, or both, and VOC or non-VOC),
- how much sample is available
- are the analyses to be performed on individual samples or composite homogenates,
- are the analyses to be performed on whole body, edible portions or specific organs, and
- are any of the analyses going to be subcontracted which may require subsampling.

2.3. Proper preparation and handling of tissue samples is required to obtain a representative sample, avoid contamination, and to ensure loss of sample and target constituents is minimized.

3. DEFINITIONS

3.1. Sample: The material presented to the laboratory for analysis or testing.

3.2. Sample Aliquot: A representative part or portion of a sample for analysis which is a fraction of the whole sample. See subsampling also.

3.3. Compositing: The process by which sample aliquots from two or more samples are united to form a combined sample which is subsequently analyzed.

3.4. Subsampling: The process by which a representative portion is obtained from a whole sample.

3.5. Service Request: The service request (SR) is a document prepared at the time of sample receipt and summarizes sample analysis and reporting instructions about a customer's sample(s).

3.6. QAPP: Quality Assurance Project Plan document provided by the client specifically written for their project.

3.7. VOC Analyses: Volatile organic compounds (VOC) analyses, including halogenated and aromatic volatile organic compounds and gasoline range organics (GRO) analyses.

3.8. Non-VOC Analyses: Any analysis other than a VOC analysis.

4. INTERFERENCES

4.1. If precautions are not taken, cross-contamination can occur when handling tissue samples in large quantities. Equipment must be thoroughly cleaned as described in this SOP and related SOPs. Also, the SOP describes the use of homogenization and rinsate blanks to monitor any possible contamination.

4.2. For organics samples, polypropylene and polyethylene (plastic) surfaces, implements, and containers are a potential source of adsorption and contamination and should not be used. Gloves should be talc free and of non-contaminating materials.

5. SAFETY

5.1. All appropriate safety precautions for handling solvents, reagents and samples must be taken when performing this procedure. This includes the use of personnel protective equipment, such as, safety glasses, lab coat and the correct gloves.

5.2. Chemicals, reagents and standards must be handled as described in the ALS safety policies, approved methods and in MSDSs where available. Refer to the ALS Environmental, Health and Safety Manual and the appropriate MSDS prior to beginning this method.

6. SAMPLE COLLECTION, CONTAINERS, PRESERVATION AND STORAGE

6.1. Refer to the determinative method.

7. STANDARDS, REAGENTS, AND CONSUMABLE MATERIALS

7.1. Not applicable to this procedure.

8. APPARATUS AND EQUIPMENT

Note: Refer to the Procedure section for specific equipment used based on the determinative analysis to be performed. The use of implements and surfaces may vary depending on the analyses to be performed.

8.1. Hobart Food Chopper, or comparable device.

8.2. Tissumizer.

8.3. Waring blender, or similar device.

8.4. Freeze-drier, Labonco or equivalent.

8.5. Glass or PTFE cutting boards.

8.6. Knives and cutting implements – refer to Procedure section.

8.7. Standard laboratory glassware (beakers, scintillation vials, etc.)

8.8. VOA vial – pre-cleaned, 40ml with Teflon-lined cap.

8.9. Pre-cleaned glass jars with PTFE lined lids, various sizes.

8.10. Gloves: Should be talc free and of non-contaminating materials.

8.11. Heavy duty aluminum foil.

9. PREVENTIVE MAINTENANCE

9.1. No specific maintenance steps are needed other than normal cleaning and inspection of apparatus.

9.2. For organics samples, polypropylene and polyethylene (plastic) surfaces, implements, and containers are a potential source of adsorption and contamination and should not be used. Gloves should be talc free and of non-contaminating materials.

10. RESPONSIBILITIES

10.1. It is the responsibility of the analyst to perform the analysis according to this SOP and to complete all documentation required for data review. Analysis and interpretation of the results are performed by personnel in the laboratory who have demonstrated the ability to generate acceptable results utilizing this SOP. This demonstration is in accordance with the training program of the laboratory. Final review and sign-off of the data is performed by the department supervisor/manager or designee.

10.2. Sample custodians, together with project chemists and department supervisors, are responsible for documenting any required sample preparation (including the percent solids or percent lipids determination if required) on the service request. All personnel preparing tissue samples should be familiar with the contents of this document prior to commencing work.

10.3. Tissue sample preparation is to be performed only by lab analysts instructed in the proper handling techniques outlined in this SOP. It is the responsibility of the analyst to perform this procedure to complete all documentation required for data review.

11. PROCEDURE

11.1. Sample Login

Any special sample handling must be noted on the service request and on a label attached to the sample itself. During sample receiving, a sample custodian must follow the procedures described in Section 11.1.1.

11.1.1. Tissue Samples with Limited Quantity

An assessment of the required sample quantity should be made by the project chemist when taking delivery of the sample. This assessment must take into consideration the tests, the required detection limits and the necessary quality assurance samples. If the quantity of sample given to the laboratory is insufficient for the analyses requested, the sample custodian will, along with the project chemist estimate the total amount of sample available. A "LIMITED SAMPLE VOLUME" tag is attached to the sample on which is recorded the estimated sample quantity.

In some cases it may be beneficial to perform sample preparations as described in this SOP prior to estimating the sample amount. In this case, the analyst preparing the sample will provide the project chemist with an estimate of the amount available.

The project chemist must determine if limited sample quantity exists and set the priorities for the analyses and, if possible, estimate the quantity of sample to be *used for each test*. This information is to be documented and placed in the project file and on the service request to communicate to the laboratory staff. For example, 8081 use 10 g; metals use 1g.

NOTE. Samples that are quantity limited and require multiple analyses must be identified as soon as possible. Optimally, this should happen during sample login; however, discovery at any time should trigger appropriate actions as described in Section 11.1.1.

11.2. Sample Homogenization

This section outlines the steps for preparing homogenous samples of whole fish, edible fish (fillets), edible shellfish, worm composite homogenates, eggs, and plant tissues.

11.2.1. Samples for Organics Analyses:

Equipment used for the processing of tissue samples for organics analyses should be of stainless steel, anodized aluminum, glass or polytetrafluorethylene (PTFE). Polypropylene and polyethylene (plastic) surfaces, implements, and containers are a potential source of adsorption and contamination and should not be used. Gloves should be talc free and of non-contaminating materials. Filleting should be done on glass or PTFE cutting boards that are cleaned properly between samples or on cutting boards that are covered with heavy duty aluminum foil (hexane rinsed) that is changed between samples. Tissue should be handled with precleaned, high quality, corrosion-resistant stainless steel instruments. Fillets or homogenate should be stored in cleaned glass jars of suitable dimensions with PTFE lined lids. If the sample is to be analyzed for VOCs, the homogenization steps should be performed on sample tissue that is partially frozen or chilled. An aliquot of the homogenate should be placed in a clean 40ml voa vial and libeled "FOR VOA ANALYSIS ONLY".

Prior to handling each sample, utensils, cutting boards and containers should be washed in a detergent hot water solution and rinsed with tap water, hexane, and DI water. Pre-cleaned, certified sample containers may be used without further cleaning. If the sample is to be analyzed for VOCs, methanol is substituted for the rinsing of implements with acetone and the hexane rinsing of the aluminum foil. Exposure to solvent vapors must be minimized.

11.2.2. Samples for Metals Analyses:

Equipment used in the processing of samples for metals analyses should be of PTFE, ceramic, polypropylene or polyethylene. Filleting should be performed on PTFE cutting boards which are cleaned after each sample. Knives with titanium or high quality stainless steel blades may be used for tissue resections. Tissue should be stored in glass jars with PTFE lined lids.

Prior to sample handling, utensils, cutting boards and containers should be washed in a detergent hot water solution, rinsed with tap water, 25% HCL (except metal utensils), and DI water. Pre-cleaned, certified sample containers may be used without further cleaning.

11.2.3. Samples for both Metals and Organics Analyses:

If the sample is to be prepared for both organics and metals, care must be taken to use equipment and cleaning procedures that are non-contaminating for both. Quartz, ceramic, glass and PTFE are recommended materials for sample processing equipment. Knives with titanium or high quality stainless steel blades may be used for tissue resections. Glass or PTFE cutting boards should be used. If the sample is to be analyzed for VOC's, the homogenization steps should be performed on sample tissue that is partially frozen or chilled. An aliquot of the homogenate should be placed in a clean 40ml voa vial and labeled "FOR VOA ANALYSIS ONLY".

Prior to handling each sample, utensils, cutting boards and containers should be washed in a detergent hot water solution and rinsed with tap water, acetone, methanol, or hexane (as appropriate), and DI water. Precleaned, certified sample containers may be used without further cleaning. Non-metallic surfaces and utensils should also be rinsed with 25% HCL followed by DI water. If the sample is to be analyzed for VOCs, methanol is substituted for the rinsing of implements with acetone. Exposure to solvent vapors must be minimized.

11.2.4. Sample Preparation

Each tissue sample may be homogenized in the original glass bottle container if there is sufficient space to allow thorough mixing. If homogenization is not achievable in the original container, place the entire sample contents into a clean glass jar. Generally, liquids contained in the container are to be considered part of the sample. If the sample requires size reduction prior to homogenization, chop the sample into the 1-2" chunks using a titanium or stainless steel bladed knife. Large samples may require the use of industrial food processors such as a Hobart Food Chopper, or comparable device. Size-reduced chunks of tissue are thoroughly homogenized to a paste-like consistency using a Tissumizer, Waring blender, or similar device until it reaches a paste-like consistency. Transfer the sample paste to a glass jar for storage and freeze until ready for sample extraction. The new sample

container is labeled with the sample I.D., the word "homogenized", initialed, and dated.

11.2.4.1.Whole Fish Tissue

Samples may be frozen in the field or in the laboratory. While still partially frozen, rinse the fish with DI water to remove extraneous materials and liquids. Cut the fish into appropriate size chunks and mechanically macerate the sample using cutting tools appropriate for the size of the sample and the analysis type. If necessary, process fish tissue chunks through the Hobart Food Chopper. To ensure thorough mixing, divide the ground sample into quarters, mix opposite quarters and then mix halves. Homogenize sample using a Tissumizer or Waring blender until it reaches a paste-like consistency. Transfer the sample paste to a glass jar for storage and freeze until ready for sample extraction. The new sample container is labeled with the sample I.D., the word "homogenized", initialed, and dated.

11.2.4.2.Edible Fish Tissue

If the client or QAPP indicates that only edible tissue be analyzed, the fish must be filleted. If the sample arrives pre-filleted, the sample tissue may be frozen before processing. If the sample is not yet filleted, the sample should remain chilled until the filleting is completed. Freezing can result in the contamination of edible tissues from the bursting of internal organs. Fish having ruptured internal organs should be noted on the prep benchsheet and the Project Chemist consulted. Rinse the fish with DI water to remove extraneous materials and liquids. Remove scales from scaled fish or skin from non-scaled fish. Rinse the fish again prior to filleting. A separate or clean cutting board should be used for filleting. Gloves should be changed between samples. Carefully remove the fillets from the carcass by following the steps outlined in Appendix A. Care should be taken to avoid contaminating fillet with inadvertent puncture of internal organs. Cut the fillet tissue into appropriate size chunks and mechanically macerate the sample using cutting and grinding tools appropriate for the size of the sample and the analysis type. Proper selection of maceration equipment must consider the potential contaminants, sample size/volume and amount of tissue likely to be lost in using the equipment.

Divide the ground sample into quarters, mix opposite quarters and then mix halves. Again homogenize the sample using an appropriate blending mixer. Continue repeating this process until the sample is truly homogenous and no chunks of tissue remain. Freeze sample until ready for extraction.

11.2.4.3.Shellfish Tissue

Shellfish should be frozen as soon as possible after receipt by the laboratory unless samples can be prepared within 48 hours of sampling. Edible portions of various shellfish are described below and resection described in Appendix B. Thawing of frozen shellfish samples should be kept to a minimum during tissue removal to avoid loss of liquids. Shellfish should be rinsed with DI water prior to tissue removal to dislodge external debris. When multiple

organisms constitute a single sample, the edible tissues are collected, composited and homogenized.

11.2.4.3.1.Bivalve mollusks (oysters, clams, mussels, and scallops).

Bivalves are typically prepared by severing the adductor muscle, prying open the shell, and removing all of the soft tissue. The soft tissue includes viscera, meat, and body fluids.

11.2.4.3.2.Crabs

Edible tissue includes all leg and claw meat, back shell meat and body cavity meat. Internal organs generally are removed. If the crab is soft shelled, the entire crab is used in the sample.

11.2.4.3.3.Shrimp and Crayfish - Edible tissue includes the tail meat.

11.2.4.3.4.Lobster - Edible tissue includes the tail and claw meat.

11.2.4.4.Worms

Samples are typically supplied to the lab in sample jars containing multiple organisms. Liquid and specimens constitute the entire sample and are blended together typically in the sample container. When a worm sample containing dirt particles or significant amounts of water is encountered, the technician should contact the project chemist to seek guidance from the client.

11.2.4.5.Eggs

Avian eggs are typically removed from the shell and blended. Aquatic eggs are blended including the soft shell.

11.2.4.6.Internal Organs Extraction

Organs such as livers or kidneys must be identified and removed by an experienced sample technician following clear written resection procedures or other guidance provided by the client.

11.2.4.7.Plant Tissue

Plant tissue should be handled using the size reduction, homogenization and implement cleaning steps outlined in Sections 11.2.1, 11.2.2, 11.2.3, and 11.2.4. Where these procedures are inappropriate, specific written procedures or guidance from the client is recommended.

If drying is requested by the client or is project-specified, a subsample for mercury analysis is taken from the wet sample, and then the plant tissue is dried at 60˚C prior to homogenization.

11.2.4.8.Small Mammals and Rodents

11.2.4.8.1. There are two primary concerns in working with small mammals and rodents: safety and sample homogenization.

11.2.4.8.2. Small mammals are potential carriers of lethal viruses, such as hantavirus and rabies, and bacteria that can be contracted through inhalation or direct contact. Typically, these organisms are excreted in the feces and distributed on the air as the fecal matter dries. During the sample preparation process, tissue is typically freeze-dried in order to calculate a percent solids value and to analyze for metals. As such, it is possible to increase the potential for dispersion of the bacteria or viruses after the sample is homogenized and processed. Prior to processing, all samples should be stored frozen.

11.2.4.8.3. Prior to sample homogenization, instructions should be received from the client regarding the processing of the hide. For organics, it is recommended that the hides be left on the carcass and the entire sample be homogenized. For metals, there is a potential for accumulation in the hair. As a non-digestible portion of the rodent, inclusion of the hair may result in a high bias if the data is to be used in estimating bioaccumulation up the food chain. Skinning may be a preferred alternative when metals are the primary chemicals of concern.

11.2.4.8.4. Homogenization should be done while the carcass is still partially frozen.

11.2.4.8.5. If the hide is to be included in the homogenization, snip the feet from the animal using stainless steel scissors.

The tail should be removed if it will prevent complete homogenization of the sample (e.g., the tail of a mouse or rat may result in incomplete homogenization and should not be included with the sample). Remove seeds, grasses, and mud from the hide.

11.2.4.8.6. If the hide is to be removed from the carcass, make an incision through the skin on the back of the neck (do not cut into the muscle). In most cases, the hide can be removed by pulling the incision horizontally along the back in one direction, and over the ears, head and snout in the opposite direction. The eyes are usually lost during this procedure. Continue to skin the animal by peeling the hide over the hind legs, off the underside of the animal, and around the front legs. The hide is removed at the hind legs and the snout. Care should be taken not to tear the connective tissue under the hide. Fat should be scraped from the hide when possible and included with the sample. Rinse the skinned carcass with DI water to remove any hair or dirt that has accumulated during the skinning procedure.

11.2.4.8.7. Homogenize the sample using a stainless steel Waring blender. Select a blender cup that is sized in accordance with the amount of sample to be homogenized. That is, small samples should be homogenized using small blender cups. This will improve the overall homogenization and recovery of the sample. Continue to mix the

sample into a paste like consistency. Make sure no chunks of muscle, hide, or bone are distributed in the sample. Transfer the sample paste to a glass jar for storage and freeze. The new sample container is labeled "homogenized", initialed, and dated.

11.2.5. General Provision for Handling Large Sample Mass

In some cases, large specimens will be received by the laboratory for homogenization prior to chemical analysis. For the purpose of this SOP, 'large' is defined as requiring preliminary size reduction to allow sequential processing of the sample. Sub-samples of the whole specimen should be cut to a size appropriate for the blender, mixer, or grinder that will be used. After each individual fraction is processed, the homogenized material is added to a reservoir large enough to hold all fractions as they accumulate. The reservoir will be constructed of a material suitable for the analytical application as defined under Section 10.2.3. For very large specimens (i.e. >20 pounds), high grade stainless steel containers are used (large bowls or small drums).

Blending of the combined fractions to achieve a whole homogenous material is achieved via manual mixing. In general, this is accomplished using a high grade stainless steel paddle or spoon of appropriate size (i.e. relative to the whole homogenate). Very large specimens (i.e. >20 pounds) generally require secondary processing through the grinder, particularly when large amounts of skin, bone, and/or cartilage is present. In these cases, the Hobart grinder is generally used.

11.3. Compositing

Each sample is to be logged in and receive a lab code. Additionally, the sample composite also is assigned a lab code. The compositing process is to be performed by trained staff. It is to be performed in an area free of contamination. It is imperative that the samples are treated in a manner consistent with the requirements of the tests to be performed on the composited sample. Compositing of homogenates should be performed according to this SOP or specific instructions provided by the client.

11.3.1. Documentation (use applicable bench sheet)

The analyst preparing the composite will document

- that homogenization was done before removing an aliquot,
- the quantity of each (field or discrete) sample used for the composite,
- the date and time of compositing, and
- any other pertinent observations.

11.3.2. Tissue Samples with Limited Quantity

Samples and sample composites that are quantity limited will be handled by the same procedure as described in Section 10.1.1

11.3.3. Compositing Procedure

11.3.3.1.Each tissue sample is first homogenized as per instructions in Section 11.2.

11.3.3.2. An equal weight of sample aliquot from each of the homogenized samples is weighed into a clean glass sample bottle. The amount to be weighed of each sample will depend upon the number of analyses to be performed on the composite and if the quantity of any individual sample is limited.

11.3.3.3. The mixture of the individual sample aliquots is thoroughly homogenized in the glass container. The composite sample bottle is labeled with:

- the name of the composite,
- the lab code of the composite,
- the analyst's initials
- the date of composite preparation
- The composite sample and the remaining (individual, discrete) samples are stored frozen until analysis.

11.3.4. Tissue Samples Requiring VOC Analyses

A separate aliquot of the composite homogenate should be placed in 40ml voa vial container for later analysis by the VOA department. Each container should be labeled with the lab identifier, date, initials, and "FOR VOA ANALYSIS ONLY". To minimize losses of volatile constituents, the sample should be kept as cold as possible, the work should be completed as quickly as possible, and the VOA vial filled to the top to minimize head space.

11.4. Sub-sampling

The sample is first thoroughly homogenized as per Section 11.2. A sample aliquot is removed and placed into a clean glass container of appropriate size and labeled as follows:

- the name of the sample,
- the lab code of the sample,
- "homogenized" written on the label,
- the purpose of the sub-sample (e.g. "dioxin subsample")
- the analyst's initials
- the date.

11.5. Freeze-Drying

11.5.1. Depending on project specifications, samples may require freeze-drying. Freeze-drying may be performed on a separate portion of sample to determine % Freeze-Dried Solids, or may be done on the analytical subsample for certain tests. The analyst should obtain direction from the supervisor and/or Project Chemist.

11.5.2. Weigh 5-8 g of sample (wet weight) into a scintillation vial. Freeze the sample for at least 2 hours.

11.5.3. Remove the sample from the freezer and place in the freeze drier for at least 24 hours or longer if necessary for the particular sample matrix.

11.5.4. Record the measurements on the applicable bench sheet.

11.5.5. When freeze drying samples that require PFOA/PFOA, aluminum foil must be placed on the container before putting the lid on, after the freeze drying process and before freezing the sample.

12. QA/QC REQUIREMENTS

12.1. A rinsate blank should be prepared to accompany each batch of tissue samples. The blank is comprised of a collection of DI water rinses of cleaned equipment (knives, cutting boards and mixers/grinders) ***prior*** to the commencement of sample batch preparation. If contamination of the samples is suspected, the rinsate blank is extracted and analyzed for contaminants. The rinsate blank should be labeled with the extraction date and the associated SR numbers and stored at 4˚ C. In the event that contamination is suspected, the rinsate blank can be analyzed to confirm the presence of contaminants in the tissue preparation process.

12.2. A homogenization blank is prepared to determine if the homogenization equipment was effectively cleaned between samples. Unless a project plan specifies otherwise, the laboratory prepares two homogenization blanks with each shift of sample preparation. One is a 500 mL aliquot for Metals testing and the other is a 1000 mL aliquot for Organics testing. Any requirements other than the labs default procedure must be defined in the project plan and communicated to the laboratory.

12.2.1. Some project quality plans may require homogenization blanks between each sample. Following the blending of a tissue sample decontaminate the Hobart mixer (model HCM62) by following these steps:

- Wash the bowl, blade assembly, and lid with soap and hot water.
- Rinse all parts with deionized water.
- Move to fume hood and hexane rinse all parts.
- Allow excess hexane to evaporate.

12.2.2. Reassemble the mixer and make ready for the next sample.

12.2.3. Fill the bowl with deionized water and turn the mixer on for the approximately average time used for the type of samples being processed.

12.2.4. Aliquot the deionized water to bottles appropriate for the testing being conducted and preserve accordingly. If insufficient sample volume is produced for the required testing, repeat the procedure after the next tissue sample is homogenized.

13. DATA REDUCTION AND REPORTING

13.1. Sample handling documentation must include information about sample homogenization (was it done or not), compositing, and sub-sampling. The established and applicable data bench sheets provide a means for recording this information. Completed bench sheets listing the sample handling information are filed in the project file with the raw data.

14. CONTINGENCIES FOR HANDLING OUT-OF-CONTROL OR UNACCEPTABLE DATA

14.1. Refer to the SOP for *Non Conformance and Corrective Action (CE-QA008)* for procedures for corrective action. Personnel at all levels and positions in the laboratory are to be alert to identifying problems and nonconformities when errors, deficiencies, or out-of-control situations are detected.

14.2. Handling out-of-control or unacceptable data

14.2.1. On-the-spot corrective actions that are routinely made by analysts and result in acceptable analyses should be documented as normal operating procedures, and no specific documentation need be made other than notations in laboratory maintenance logbooks, runlogs, for example.

14.2.2. Some examples when documentation of a nonconformity is required using a Nonconformity and Corrective Action Report (NCAR):

- Quality control results outside acceptance limits for accuracy and precision
- Method blanks or continuing calibration blanks (CCBs) with target analytes above acceptable levels
- Sample holding time missed due to laboratory error or operations
- Deviations from SOPs or project requirements
- Laboratory analysis errors impacting sample or QC results
- Miscellaneous laboratory errors (spilled sample, incorrect spiking, etc)
- Sample preservation or handling discrepancies due to laboratory or operations error

15. METHOD PERFORMANCE

15.1. Refer to determinative methods.

16. POLLUTION PREVENTION AND WASTE MANAGEMENT

16.1. It is the laboratory's practice to minimize the amount of solvents, acids, and reagents used to perform this method wherever feasibly possible. Standards are prepared in volumes consistent with methodology and only the amount needed for routine laboratory use is kept on site. The threat to the environment from solvents and/or reagents used in this method can be minimized when recycled or disposed of properly.

16.2. The laboratory will comply with all Federal, State, and local regulations governing waste management, particularly the hazardous waste identification rules and land disposal restrictions as specified in the ALS Environmental Health and Safety Manual.

16.3. This method uses non-halogenated solvents and any waste generated from this solvent must be collected. The solvent will then be added to the hazardous waste storage area and disposed of in accordance with Federal and State regulations.

17. TRAINING

17.1. Training outline – Training Plan

17.1.1. Review literature (see references section). Read and understand the SOP. Also review the applicable MSDS for all reagents and standards used. Following these reviews, observe the procedure as performed by an experienced analyst at least three times.

17.1.2. The next training step is to assist in the procedure under the guidance of an experienced analyst until the supervisor feels the new employee can work independently. During this period, the analyst is expected to transition from a role of assisting, to performing the procedure with minimal oversight from an experienced analyst.

17.2. Training is documented following ADM-TRAIN, ALS-Kelso Training Procedure.

When the analyst training is documented by the supervisor on internal training documentation forms, the supervisor is acknowledging that the analyst has read and understands this SOP and that adequate training has been given to the analyst to competently perform the analysis independently.

18. METHOD MODIFICATIONS

18.1. This section is not applicable because this procedure is a laboratory developed method.

19. REFERENCES

19.1. Kateman and L. Buydens, *Quality Control in Analytical Chemistry*, Second Edition, John Wiley & Sons, Inc., New York, NY, 1993: Chapter 2 on Sampling and especially sections 2.5 (Sample Quality) and 2.7 (Handling of Samples).

19.2. *Guidance For Assessing Chemical Contaminant Data For Use In Fish Advisories;* Volume 1; Fish Sampling and Analysis, 3rd Edition; USEPA Office of Water; EPA 823-B-00-007; Nov 2000.

19.3. *Recommended Protocols for Measuring Selected Environmental Variables in Puget Sound*; Tetra Tech, Inc.; final report TC-3991-04 Recommended Guidelines for Measuring Organic Compounds in Puget Sound Sediment and Tissue Samples Revision April 1996.

19.4. *PCB's and Mirex In Fish Tissue and Clams* New York State Department of Health Wadsworth Center For Laboratories and Research; Albany, N.Y. 10/6/81

19.5. *Draft Method 1613-Tissue*; Determination of PCDDs and PCDFs in Fish and Other Tissue Using Method 1613; USEPA Office of Water June 1993.

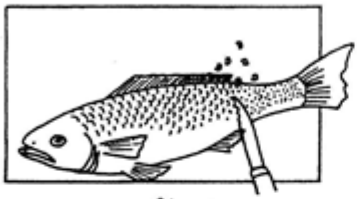
20. CHANGES SINCE THE LAST REVISION

20.1. Signature page: Updated Quality Assurance manager.
20.2. Added the sentence in Section 11.5.5.

APPENDIX A
Fish Filleting Procedure

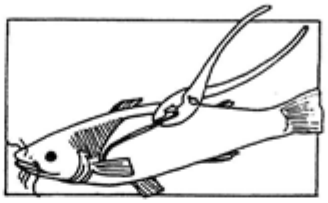
1 Scaled Fish

After removing the scales (by scraping with the edge of a knife) and rinsing the fish:



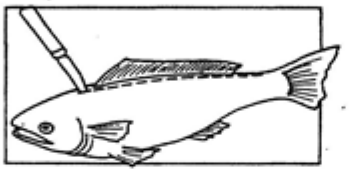
1b Scaleless Fish

Grasp the skin at the base of the head (preferably with pliers) and pull toward the tail.



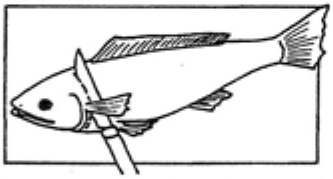
Note: This step applies only for catfish and other scaleless species.

2



Make a shallow cut through the skin (on either side of the dorsal fin) from the top of the head to the base of the tail.

3



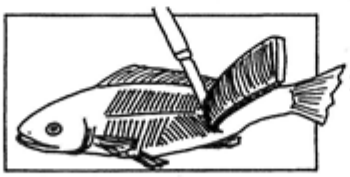
Make a cut behind the entire length of the gill cover, cutting through the skin and flesh to the bone.

4



Make a shallow cut along the belly from the base of the pectoral fin to the tail. A single cut is made from behind the gill cover to the anus and then a cut is made on both sides of the anal fin. Do not cut into the gut cavity as this may contaminate fillet tissues.

5



Remove the fillet.

Source: U.S. EPA, 1991d.

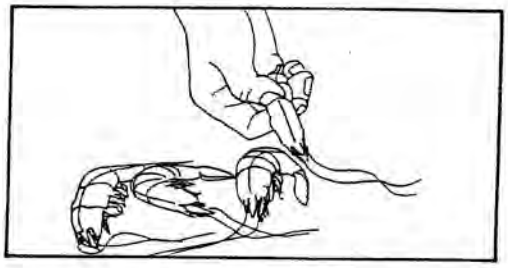
Figure 7-3. Illustration of basic fish filleting procedure.

APPENDIX B
General Procedure for Removing Edible Tissues from Shellfish

Heading, peeling and deveining shrimp

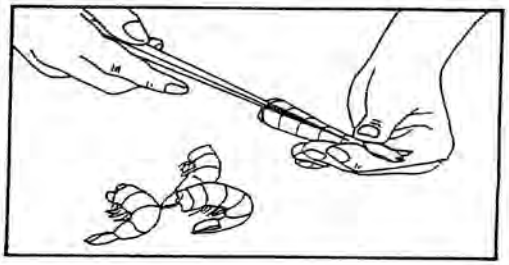
1

To head a shrimp, hold it in one hand. With your thumb behind shrimp head, push head off. Be sure to push just the head off so that you do not lose any meat.



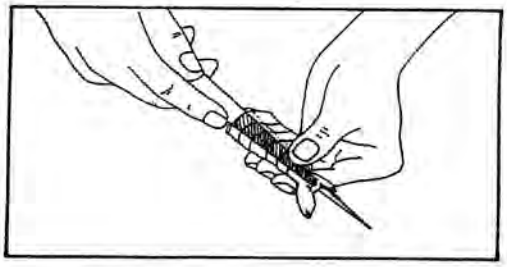
2

If using a deveiner, insert it at head end, just above the vein.



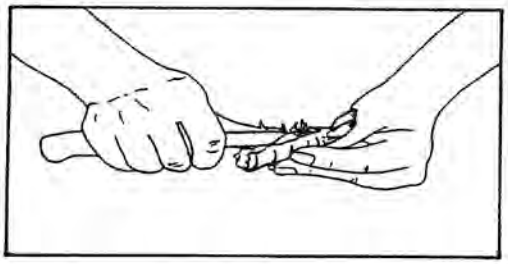
3

Push through shrimp to the tail and split and remove shell. This removes vein at the same time.



4

If you prefer to use a paring knife, shell shrimp with your fingers or knife. Then use knife to gently remove vein.



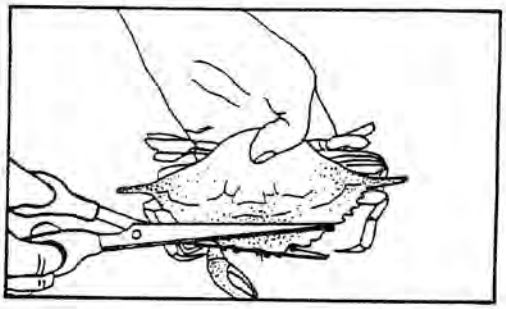
Source: UNC Sea Grant Publication UNC-SG-88-02

G-3

Cleaning soft-shell crabs

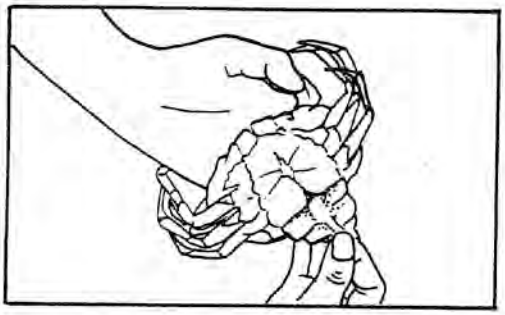
1

Hold crab in one hand and cut across body just behind eyes to remove eyes and mouth.



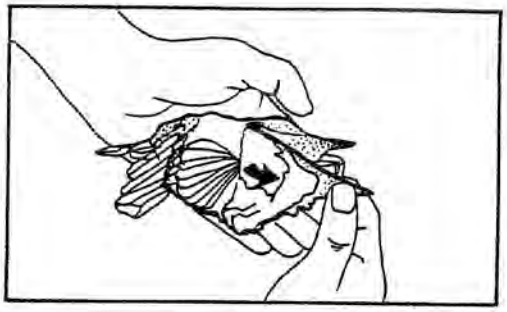
2

Turn crab on its back. Lift and remove apron and vein attached to it.



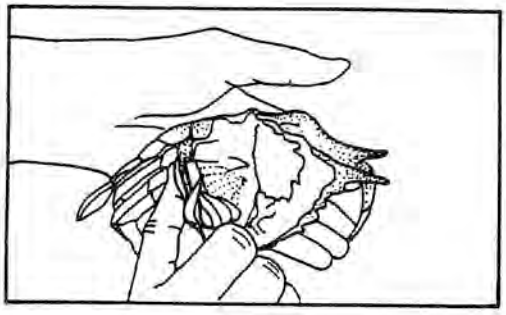
3

Turn crab over and lift one side of top shell.



4

With a small knife, scrape off grayish-feathery gills. Repeat procedure on other side.



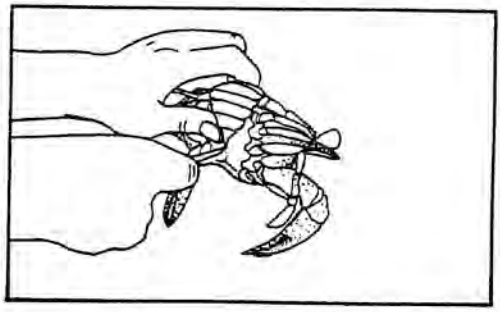
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Cleaning hard-shell crabs

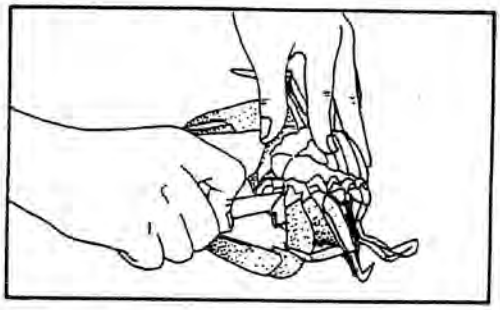
1

Hold crab in one hand. Turn crab over and stab straight down at point of apron with a knife.



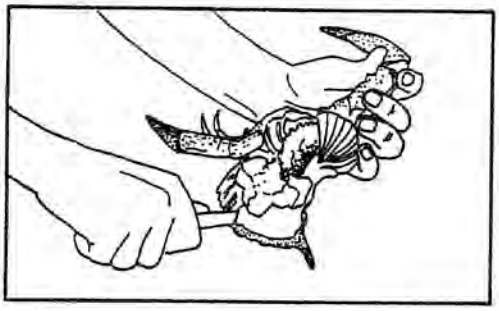
2

Make two cuts from this point to form a V-pattern that will remove mouth.



3

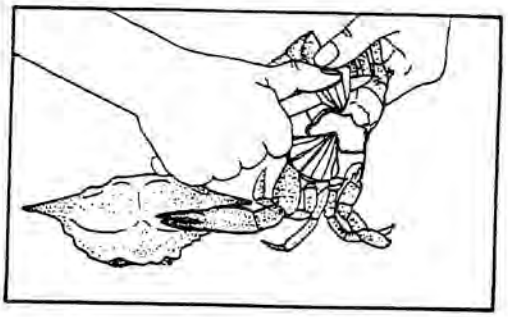
Do not remove knife after making second cut. Firmly press crab shell to cutting surface without breaking back shell. With other hand, grasp crab by legs and claws on the side where you are holding knife, and pull up. This should pull crab body free from back shell.



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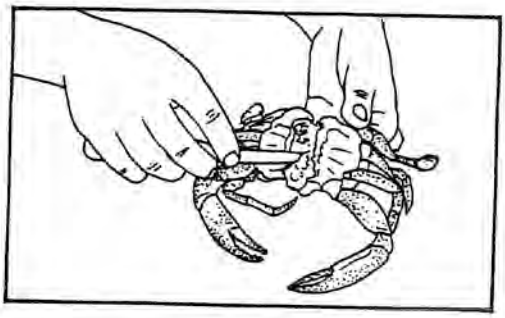
4

Remove gray, feathery gills, which are attached just above legs. Cut and scrape upward to remove gills.



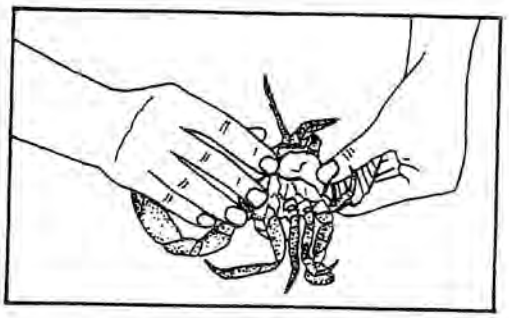
5

Remove all loose material—viscera and eggs—from body cavity.



6

If apron did not come loose with shell, remove it.



Source: UNC Sea Grant Publication UNC-SG-88-02

Shucking oysters

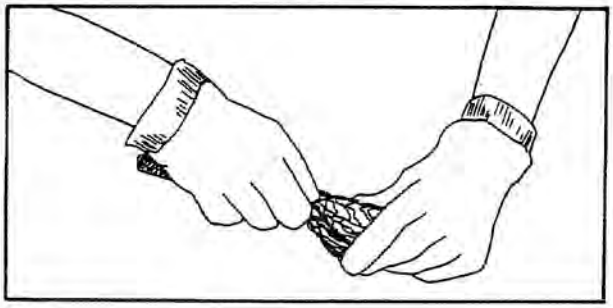
1

Oyster shells are especially sharp; be sure to wear gloves to protect your hands. Chip off a small piece of shell from the thin lip of the oyster until there is a small opening.



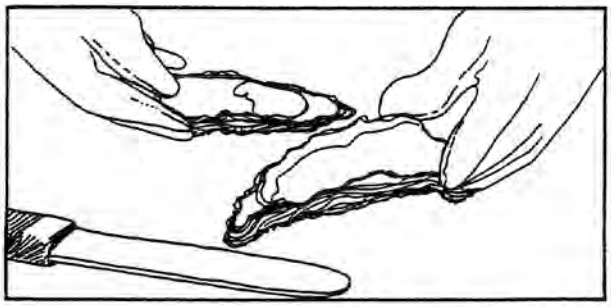
2

Insert knife blade into the opening and cut muscle free from top and bottom shells.



3

Remove oyster meat from the shell.



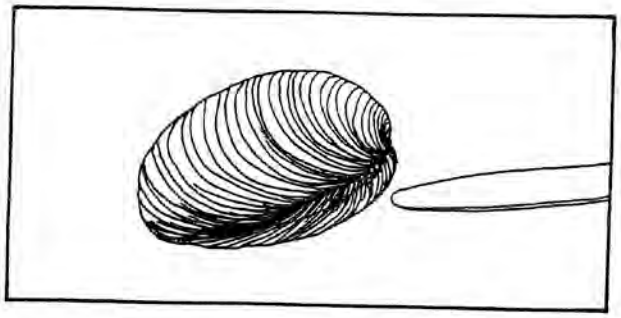
Source: UNC Sea Grant Publication UNC-SG-88-02

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Shucking clams

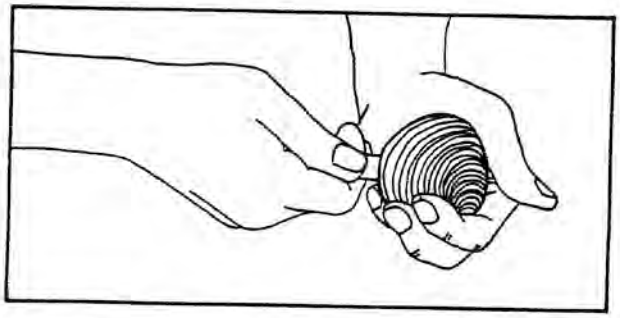
1

In the back of clam near the hinge is a black ligament. Toward the front where ligament ends is a weak spot. Insert your knife at this spot.



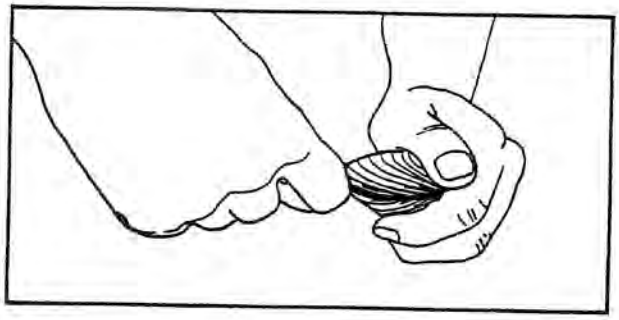
2

Inside are two muscles. Run the knife around the shell to sever both muscles.



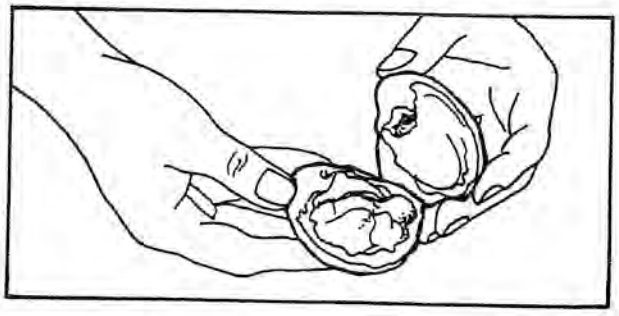
3

Now insert the knife blade into the front of the shell and separate the two shells.



4

Scrape the meat free from the top and bottom shell.



Source: UNC Sea Grant Publication UNC-SG-88-02

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JOHNSON LAKE FISH TISSUE MONITORING STUDY

SAMPLING AND ANALYSIS PLAN

ATTACHMENT D: ODEQ JANUARY 29, 2018, LETTER AND COMMENTS

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Kate Brown, Governor

Department of Environmental Quality
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FAX (503) 229-5471
TTY 711

January 29, 2018

Mr. Rob Webb, Principal Engineer
Dalton Olmsted Fuglevand
1236 Finn Hill Road
Poulsbo, WA 98370

RE: 2016 Johnson Lake Fish Tissue Monitoring Study
ECSI # 2086

Dear Rob:

Thank you for providing the *Revised Johnson Lake Fish Tissue Monitoring Study – Monitoring Report* (dated January 19, 2018) documenting the results of fish tissue monitoring conducted in Johnson Lake, located west of I205 adjacent to the Owens Brockway Glass Container, Inc. facility (5850 NE 92nd Drive in Portland, Oregon). This report was submitted as part of the long-term monitoring of the remedial action implemented by Owens Brockway Glass Container, Inc. as described in the *Remediation Operations and Maintenance Plan-Sediment Remedial Action (OMP)* (December 20, 2012). The revised version addresses comments provided by DEQ (letter dated December 18, 2017) and DEQ approves the revised report.

As noted in our previous letter, because PCBs are still present in fish tissue in Johnson Lake at levels that exceed protective concentrations for human consumption, warning signs must be maintained and fish must be sampled again in 2022. Documentation of the 2022 fish tissue sampling event should include the information provided in the 2018 revised report as well as a summary of the results from the 2017 and 2004 events for comparison. In addition, the 2022 sampling effort and evaluation should incorporate the following:

1. The level of effort detailed in the 2018 report was not sufficient to meet data quality objectives specified in the OMP. The level of sample collection effort at the 2022 sampling event should be sufficient to ensure that the required number of fish specified in the OMP are collected and that fish are collected throughout the lake. Fish in each category must adequately represent that category; e.g., samples representing fish likely to be consumed by humans should be large enough that this exposure would be reasonable. This may require sampling with different gear types at multiple times during 2022 to collect fish when lake conditions support capture. The use of a full range of available gear types (e.g. beach seining and gill nets) is not precluded by the presence of algae and vegetation, but rather is used to ensure success in these conditions. Gear can be modified to exclude non-target species such as sturgeon and turtles.

2. The evaluation of results should consider total PCB, PCB TEQ, and lipid normalized total PCB concentrations in addition to PCB congener 126 concentrations to support evaluation of data trends over time.

3. The revised report did not clearly indicate that composite homogenates of fish tissue were created using equal mass from each individually homogenized fish sample. Lab protocols for sample preparation should specify this procedure will be followed.

4. Composite samples of each fish should be of the same type (species) and size (age) class. Consistent with EPA Guidelines (Guidance for Assessing Chemical Contaminant Data for Use in Fish Advisories, Volume 1 Fish Sampling and Analysis) the differences between lengths of individuals in a composite sample and the average of the lengths should not exceed 10 percent and at least one replicate should also be analyzed.

I am retiring at the end of this month. The new project manager for this site is Heidi Nelson. Please notify Heidi at (503) 229-6802 of any activities that have potential to expose underlying contaminated sediment in the lake and any necessary maintenance that is warranted. While it is a long way out, a draft sampling plan for the 2022 fish sampling event should be submitted to Heidi no later than 60 days in advance of the planned sampling.

Sincerely,



Jennifer Sutter, Project Manager
NWR Cleanup and Tanks

Cc: Sue Sholl, Owens Illinois
Susan Smith, Owens Illinois
Rebecca Hillwig, Oregon Health Authority
Tim Dean, City of Portland
Heidi Nelson, DEQ NWR Cleanup
Jennifer Peterson, DEQ NWR Cleanup
ECSI File #2086

DEQ-DC1

JOHNSON LAKE FISH TISSUE MONITORING STUDY

SAMPLING AND ANALYSIS PLAN

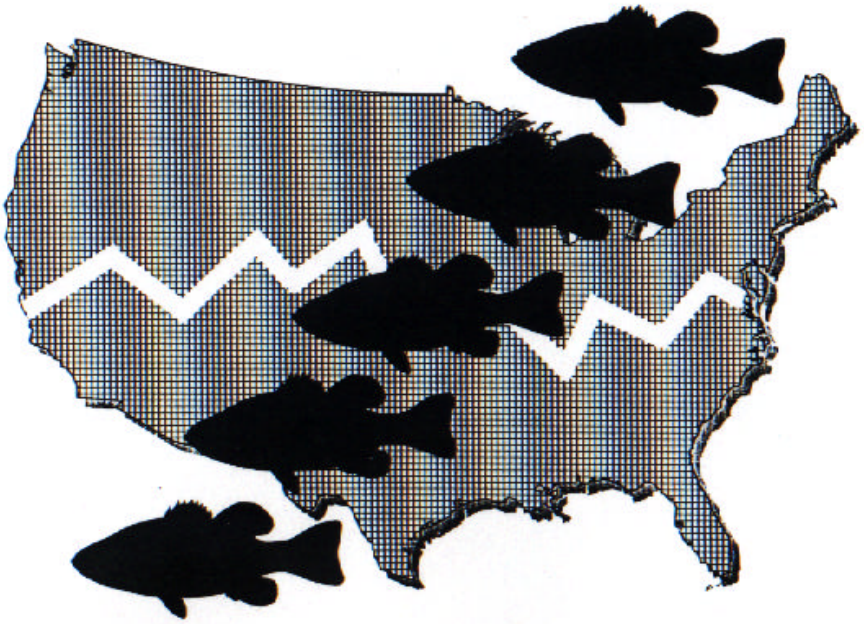
ATTACHMENT E: QUALITY ASSURANCE PROJECT PLAN

United States
Environmental Protection
Agency

Office of Water
4305T
Washington, DC 20460

EPA-823-R-02-005

Quality Assurance Project Plan for Sample Collection Activities for a National Study of Chemical Residues in Lake Fish Tissue



Prepared for:

Leanne Stahl, National Study Manager
U.S. Environmental Protection Agency, Office of Science and Technology
1200 Pennsylvania Avenue, NW (MC 4305T)
Washington, D.C. 20460

Prepared by:

Tetra Tech, Inc.
10045 Red Run Boulevard, Suite 110
Owings Mills, MD 21117

May 2000

Quality Assurance Project Plan

for Sample Collection Activities for a

National Study of Chemical Residues in Lake Fish Tissue

Prepared for:

Leanne Stahl, Work Assignment Manager
U.S. Environmental Protection Agency, Office of Science and Technology
1200 Pennsylvania Avenue, NW (MC 4305)
Washington, D.C. 20460

Prepared by:

Tetra Tech, Inc.
10045 Red Run Boulevard, Suite 110
Owings Mills, MD 21117

May 22, 2000
Final

This quality assurance project plan (QAPP) has been prepared according to guidance provided in the document *EPA Requirements for Quality Assurance Project Plans* (EPA QA/R-5, U.S. Environmental Protection Agency, Quality Assurance Division, Washington, DC, Interim Final, November 1999) to ensure that environmental and related data collected, compiled, and/or generated for this project are complete, accurate, and of the type, quantity, and quality required for their intended use. The work conducted by Tetra Tech will be in conformance with the quality assurance program described in the quality management plan for Tetra Tech's Fairfax Group and with the procedures detailed in this QAPP.

Approvals:

Esther C. Peters, Ph.D. — 5/30/00 (Date)
Quality Assurance Officer
Tetra Tech, Inc.

William Telliard — 5-23-00 (Date)
Quality Assurance Manager
USEPA, Office of Science & Technology

Blaine D. Snyder — 6/5/00 (Date)
Work Assignment Leader
Tetra Tech, Inc.

Leanne Stahl — 6-8-00 (Date)
Work Assignment Manager
USEPA, Office of Science & Technology

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A. PROJECT MANAGEMENT

1.0 PROJECT/TASK ORGANIZATION

This Quality Assurance Project Plan (QAPP) describes the quality assurance (QA) and quality control (QC) activities/procedures that will be used while collecting samples for the National Study of Chemical Residues in Lake Fish Tissue (hereafter referred to as the National Fish Tissue Study) from 1999 through 2002. The purpose of this document is to present the methods and procedures that will be used for the collection of fish tissue from lakes and reservoirs throughout the United States and the quality assurance procedures that will be employed. This document addresses *only* the sample collection effort of the National Fish Tissue Study.

This QAPP was prepared according to guidance presented in the document *EPA Requirements for Quality Assurance Project Plans*, EPA QA/R-5 (USEPA 1999a). Reference to the QAPP elements described in the guidance document are included herein. The sample collection methods, procedures and protocols follow the guidelines and recommendations of *Guidance For Assessing Chemical Contaminant Data For Use in Fish Advisories. Volume I: Fish Sampling and Analysis, Second Edition* (USEPA 1995)[or subsequent updates].

The project team organization provides the framework for conducting the sample collection task to meet study objectives. The organizational structure and function also facilitate project performance and adherence to QC procedures and QA requirements. Key roles are filled by those persons responsible for ensuring the collection and processing of valid data and for routinely assessing the data for precision and accuracy, as well as the persons responsible for approving and accepting final products and deliverables. The project and QA personnel include staff from USEPA and other participating federal agencies, selected state resource agencies, Native American tribes, and Tetra Tech. The project organizational chart is presented in Figure 1, and includes relationships and lines of communication among key project team members.

The **USEPA Project Manager** is Leanne Stahl, who will supervise the assigned project personnel to provide for their efficient utilization by directing their efforts either directly or indirectly. As Project Manager she will also have the following responsibilities:

- providing oversight for study design, site selection, and adherence to design objectives,
- reviewing and approving the project work plan, QAPP, and other materials developed to support the project, and
- coordinating with contractors, reviewers and USEPA Regions/States/Tribes to ensure technical quality and contract adherence.

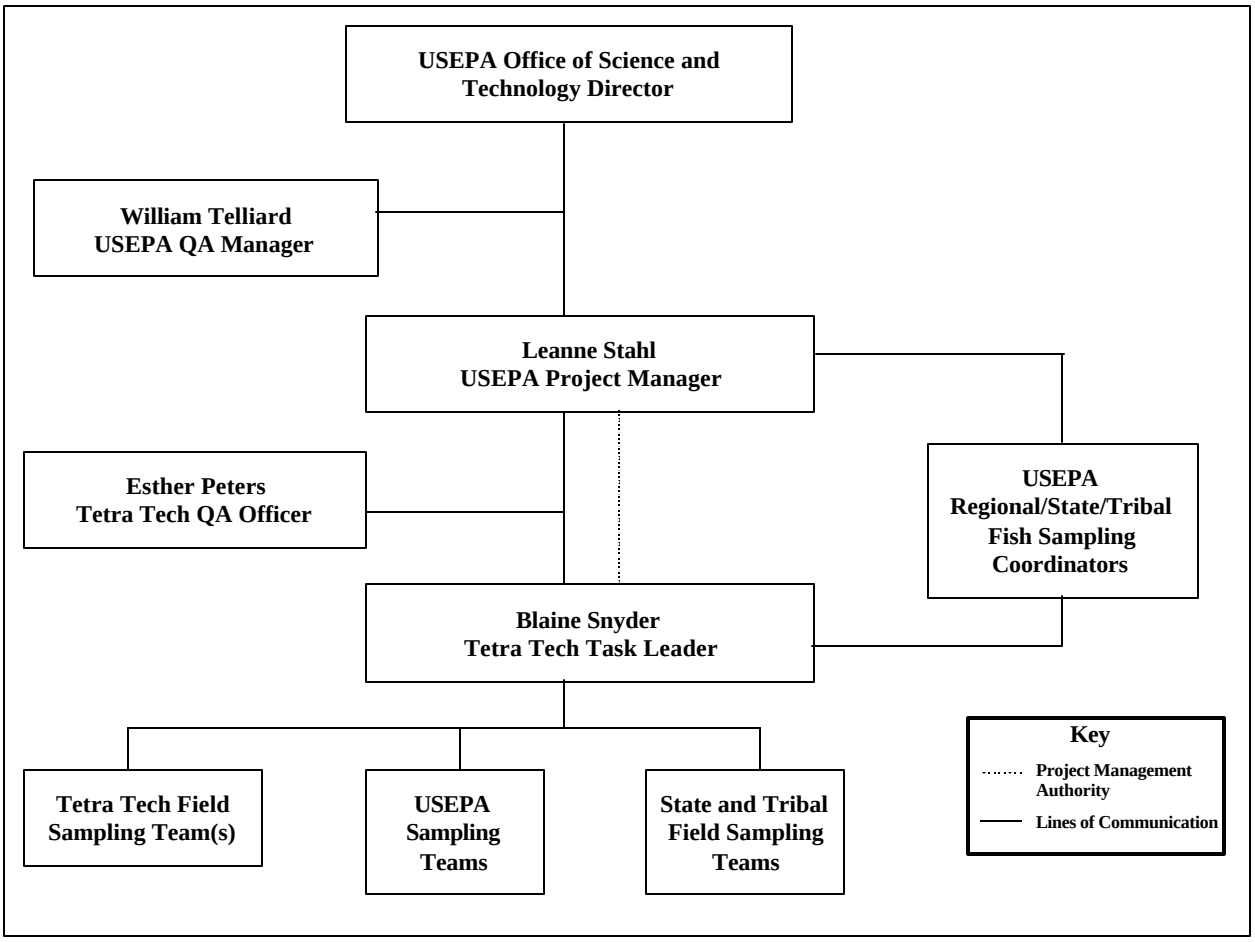


Figure 1. Organizational Diagram for the National Study of Chemical Residues in Lake Fish Tissue.

The **USEPA Quality Assurance Manager** is William Telliard, who will be responsible for reviewing and approving all Quality Assurance Project Plans (QAPPs). Additional USEPA QA Manager responsibilities include the following:

- reviewing and evaluating field procedures,
- conducting external performance and system audits of the procedures, and
- participating in Agency QA reviews of the study.

The **Tetra Tech Task Leader** is Blaine Snyder, who will participate in study design and site selection processes. Other specific responsibilities of the Task Leader include the following:

- coordinating project assignments in establishing priorities and scheduling,

- ensuring completion of high-quality projects within established budgets and time schedules,
- providing guidance, technical advice, and performance evaluations to those assigned to the project,
- implementing corrective actions and providing professional advice to staff,
- preparing and/or reviewing preparation of project deliverables, and
- providing support to USEPA in interacting with the project team (including the sample control center), technical reviewers, and USEPA Regions/States/Tribes to ensure technical quality requirements are met in accordance with project design objectives.

The **Tetra Tech Quality Assurance (QA) Officer** is Esther Peters, whose primary responsibilities include the following:

- monitoring quality control (QC) activities to determine conformance,
- reviewing the QAPP for completeness and noting inconsistencies,
- providing support to USEPA and the Tetra Tech Task Leader in preparation of the work plan and QAPP and in their distribution, and
- approving the QAPP.

The **Regional Fish Sampling Coordinators or QA/QC Field Officers** will be responsible for performing evaluations to ensure that QA/QC protocols are maintained throughout the sample collection and preparation processes. The evaluations will include reviewing all required documentation for completeness and seeing that any problems encountered outside normal operating conditions are documented and addressed, and verifying all other QA/QC procedures identified in the QAPP are followed. The USEPA Project Manager and the Tetra Tech Task Leader will coordinate and oversee the orientation of the Regional Fish Sampling Coordinators or QA/QC Field Officers responsible for USEPA Regional/State/Tribal Field Sampling Teams.

Field Sampling Teams will be composed of:

- USEPA field staff, and/or
- State and Tribal field personnel, and/or
- Contractor-affiliated field staff (including subcontracted organizations or universities).

The Task Leader will direct and supervise the contractor-affiliated Field Sampling Teams and provide for their efficient utilization by directing their efforts. Both agency and contractor-affiliated field personnel are responsible for performing the field work, including collection, preparation, and shipment of fish tissue samples and completion of field sampling records. The Field Sampling Teams will include scientific staff with specialization and technical competence in field sampling activities to effectively and efficiently perform the required work. They must perform all work in adherence with the project work plan and QAPP, including maintenance of sample custody and related documentation. Custody procedures are required to ensure the integrity of the samples with respect to prevention of contamination and maintenance of proper sample identification during handling. In this role, Field Sampling Teams are responsible for:

- receiving and inspecting the sample containers,
- completing and signing appropriate field records,
- assigning tracking numbers to each sample,
- verifying the completeness and accuracy of chain-of-custody documentation,
- controlling and monitoring access to samples while in their custody, and
- initiating shipment of the samples to appropriate destinations.

2.0 PROBLEM DEFINITION/BACKGROUND

The USEPA Office of Water conducted a national screening-level investigation in 1987 (USEPA 1992) to determine the prevalence of selected bioaccumulative pollutants in fish and to correlate elevated fish tissue contaminant levels with pollutant sources. Gamefish and bottom-dwelling fishes were collected from 388 locations across the country thought to be influenced by various point and nonpoint sources. These fish tissue samples were analyzed to determine levels of 60 target analytes, including dioxins and furans, PCBs, pesticides and herbicides, mercury, and several other organic compounds. Results of the 1987 study indicated that target analytes were present in fish tissue at many of the sampling sites, and some of the contaminants (e.g., PCBs, dieldrin, mirex, and combined chlordane) occurred at levels posing potential human health risks.

The Office of Science and Technology (OST) within the Office of Water has initiated work on a new four-year national study of chemical residues in fish tissue, which is designed to expand the scope of the 1987 study. In October 1998, USEPA convened a two-day workshop of more than 50 scientists from state, federal, and tribal agencies to obtain technical input on sampling design, target analytes, sampling methods and data management. Input from scientists at the workshop and other technical experts that participated in numerous study planning meetings was used to develop a final study design (USEPA 1999b). The contemporary study is statistically designed and will provide screening-level data on fish tissue contaminants from a greater number of waterbodies than were sampled in 1987.

This study broadens the scope of the 1987 study (USEPA 1992) which focused on chemical residues in fish tissue near point source discharges. The new study will:

- provide information on the national distribution of selected persistent, bioaccumulative, and toxic (PBT) chemical residues in gamefish and bottom-dwelling fish in lakes and reservoirs of the coterminous United States (excluding the Great Lakes and the Great Salt Lake),
- include lakes and reservoirs selected according to a probability design,
- involve the collection of fish from those randomly selected lakes and reservoirs over a four-year survey period (1999-2002),
- not be used to set fish consumption advisories; however, states and Native American tribes may choose to initiate a detailed fish study in a particular lake based on the screening contaminant concentrations provided by the national study, and
- include the analysis of fish tissue for PBT chemicals selected from USEPA's multimedia candidate PBT list of 451 chemicals and from a list of 130 chemicals from several contemporary fish and bioaccumulation studies. A final target analyte list of 274 PBT chemicals (including breakdown products and PCB congeners) was compiled based on input from study design workshop participants and a review team of analytical experts convened in October 1998 and March 1999, respectively.

Lakes and reservoirs were chosen as the target population because they:

- are accumulative environments where contamination is detectable,
- provide important sport fisheries nationwide,
- offer other recreational (non-fishing) access and opportunities, and
- occur in agricultural, urban, and less-developed areas, so that associations with each primary use may be determined.

Lakes and reservoirs are the focus of this study rather than other waterbody types because:

- Fish consumption advisories represent 15.8% of the Nation's total lake acres (plus 100% of the Great Lakes), compared to 6.8% of the Nation's total river miles (USEPA 1999c). [**Note:** The Great Lakes will not be included in this study because substantial fish tissue contaminant information is available and continues to be collected in ongoing Great Lakes monitoring programs.]

- Estuaries are currently being studied by USEPA's Environmental Monitoring and Assessment Program (EMAP). EMAP has sampled fish from East and Gulf Coast estuaries, and will include fish contamination in its Year 2000 initiative on West Coast estuaries.

The specific objective of the new National Fish Tissue Study is *to estimate the national distribution of the mean levels of selected persistent, bioaccumulative, and toxic chemical residues in fish tissue from lakes and reservoirs of the continental United States.*

In so doing, the study will provide the following types of information:

- information to meet objectives of the President's Clean Water Action Plan (CWAP) and to specifically respond to the following action item:
  - CWAP Key Action #1: USEPA and NOAA will conduct a national survey of mercury and other contaminants in fish and shellfish throughout the country, and will coordinate the effort with states and tribes to maximize geographic coverage. The shellfish survey will be based on the data obtained by NOAA's ongoing Mussel Watch Project.
- information about persistent, bioaccumulative, and toxic chemicals (PBTs) for the Agency's PBT Initiative that addresses the following objective:
  - The PBT Initiative seeks to identify areas of concern for human and/or ecological health. Study of fish tissue may reveal where PBTs not previously considered a problem are present at levels of concern.
- data to answer important questions concerning the national occurrence of fish tissue contamination, such as the following:
  - What is the national extent of selected chemical contaminants in fish from lakes and reservoirs of the coterminous United States (excluding the Great Lakes)?
  - Are contaminant levels in fish high enough to warrant further investigation?

3.0 PROJECT/TASK DESCRIPTION

The study design reflects the study goal and objectives defined by USEPA. The study goal can be stated simply — to determine the extent to which fish in waters of the United States are contaminated with persistent, bioaccumulative, and toxic chemicals (PBTs). The project field sampling task presented and discussed in this document involves only those methods and

procedures used to collect and ship fish tissue samples for the National Fish Tissue Study. The Analytical Activities QAPP for the National Fish Tissue Study discusses the following study topics and tasks: sample preparation, compositing and homogenization; target analytes; analytical methods; and sample analysis.

In consultation with the USEPA Office of Science and Technology, Tetra Tech will coordinate with USEPA headquarters and regional staff, state resource agencies, and Native American tribes to collect fish tissue samples from randomly selected lakes and reservoirs in the continental United States. With a combined network of partners and contractors, USEPA anticipates the sampling of approximately 500 lakes across the country (Appendix A) during the four-year sampling duration of the study (1999-2002). The fish tissue samples will be collected based on a probability design to provide information on national distribution of the mean levels of contaminants in fish. This random selection of lakes and reservoirs is important for fulfilling the study design objectives, but adds complexity to field sampling logistics. Sampling Teams will need to be prepared to mobilize and sample fish from lakes in all parts of the country. The following elements will also add to the complexity of the field effort, and must be considered when planning field logistics:

- Field teams should consist of (at a minimum) one experienced fisheries biologist, one field technician, and a quality control specialist, all of whom must have experience with the array of fisheries sampling gear types to be used. In some cases the senior fisheries biologist may serve in dual capacities, assuming responsibility for site quality control (QC).

- The national study will include two groups of target fishes — predator/gamefish and bottom-dwelling fish species (Section 8.1).

- Samples must consist of a composite of fish (e.g., 5 individuals that will collectively provide greater than 560 grams of edible tissue for predators and 560 grams of total body tissue for bottom-dwellers) of the same target species and be the same relative size from each sampling location (Section 8.2).

- The optimum sampling window may be restricted due to biological, physical, and meteorological conditions and factors (Section 7.2).

Each Sampling Team, in the combined network of samplers, will collect, prepare for shipment, and ship all fish tissue samples to a designated location according to the methods and procedures described in this QAPP and approved by the USEPA Project Manager. The USEPA Project Manager will be notified immediately by the Tetra Tech Task Leader and/or the USEPA Regional/State/Tribal Fish Sampling Coordinators of any problems related to successful completion of field efforts.

Field sampling activities began in the fall of 1999, will continue in 2000 and 2001 during the summer and fall, and will conclude in the fall of 2002. Due to the effort required to initiate the

study (e.g., project coordination and development of study materials such as the study design document, QAPP, and training materials), fewer lakes were sampled in year one than will be sampled during other sampling years. In addition, some states indicated that they were unable to participate in sampling during the first year, but will have adequate time to prepare for sampling in subsequent years of the study. Data summaries for the four-year period of study and the final study report are scheduled to be completed in 2003. Implementation of the field sampling task will proceed with several milestones, as presented in Table 1.

All activities associated with fish tissue sample collection will be conducted consistent with the requirements and procedures specified in this QAPP as approved by the USEPA Project Manager. Annual sampling activities will conclude with the development of a field collection effort summary (i.e., detailed listing of all sampling participants, sampling locations, and specimens collected) by Tetra Tech and reviewed by the USEPA Project Manager. The summaries will be used to document and report back to USEPA Regional/State/Tribal participants the collective sampling progress for each study year.

Table 1. Project Time Line for Milestones Associated with Fish Tissue Sample Collection Activities.

Activities and Milestones (1999 - 2002)	1999						2000 - 2002											
	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Develop QAPP and project sampling plan for field efforts							[2000 only]											
Conduct orientation for sampling and field QC personnel in EPA Regions							[2000 unless further need arises]											
Sampling of lakes and shipment of samples to analytical laboratory																		
Field collection effort summaries and report-back to regions, states, and tribes																		

4.0 QUALITY OBJECTIVES AND CRITERIA FOR MEASUREMENT DATA

4.1 Project Quality Objectives

Data of known and documented quality are essential to the success of any monitoring or sampling program. Data quality objectives (DQOs) are qualitative and quantitative statements that clarify the intended use of the data, define the type of data needed to support the decision, identify the conditions under which the data should be collected, and specify tolerable limits on the probability of making a decision error due to uncertainty in the data. DQOs are developed by data users to specify the data quality needed to support specific decisions. Sources of error or uncertainty include the following:

- Sampling error: The difference between sample values and *in situ* true values from unknown biases due to collection methods and sampling design,
- Measurement error: The difference between sample values and *in situ* true values associated with the measurement process,
- Natural variation: Natural spatial heterogeneity and temporal variability in population abundance and distribution, and
- Error sources or biases associated with compositing, sample handling, storage, and preservation.

This QAPP addresses only fish tissue sample collection activities, so the relevant quality objectives are primarily related to sample handling issues. One exception involves the measurement of lake pH. Study DQOs for pH will require that meters are calibrated to a known standard as per manufacturer's specifications (Appendix C). Types of field sampling data needed for this project are listed in Table 2. Discussion of conventional data quality indicators, i.e., precision, accuracy, completeness, representativeness, and comparability, follows in this section. Methods and procedures described in this document are intended to reduce the magnitude of the sources of uncertainty (and their frequency of occurrence) by applying the following approaches:

- use of standardized sample collection and handling procedures, and
- use of trained scientists to perform the sample collection and handling activities.

Table 2. Types of Field Data to Be Collected in Association with Fish Tissue Sample Collection.

Data Type	Measurement Endpoint(s) or Units
Fish specimen	Species-level taxonomic identification
Fish length	Millimeters (mm), total length
Composite classification	Predator or bottom-dwelling species
pH	nearest 0.1 pH units
Estimated maximum lake depth	Meters

4.2 Measurement Performance Criteria

Measurement performance criteria are quantitative statistics that are used to interpret the degree of acceptability or utility of the data to the user. These criteria, also known as data quality indicators (DQIs), include the following:

- precision,
- accuracy,
- representativeness,
- completeness, and
- comparability.

Precision

Precision is a measure of internal method consistency. It is demonstrated by the degree of agreement between individual measurements (or values) of the same property of a sample, measured under similar conditions. As the analytical testing is beyond the scope of this QAPP, no specific criteria are required for this parameter. However, sufficient sample volumes (i.e., the five-fish composites described in Section 8.2) will be collected to allow for the assessment of precision during analytical laboratory testing.

For this study, all fish in a lake cannot be sampled, and the laboratory analytical process is not perfect. The combined variability introduced by the sampling at a lake, the compositing of fish, the subsampling of the composite for analysis, and the chemical analysis itself can be considered the "index" variability. The detection limits and analytical precision are one part of the analytical process that can be specified ahead of time (however analytical processes are not part of this QAPP). The orientation and training of sampling crews, and the process that they use to collect fish from a lake can also be standardized. Besides standardizing training, this dimension of variability cannot be reduced. The general rule of thumb is that if the combined index variability is less than 10% of the total variability, it will have little impact on the ability to estimate status. For this study the best way to develop an estimate of index variability is to simply revisit a subset, 10% of the sites, and repeat the

lake sampling procedure, compositing and analytical analyses. Sampling teams should plan to obtain duplicate fish samples from 10% of the target lakes and reservoirs in their state during the four-year study period.

Accuracy

Accuracy is defined as the degree of agreement between an observed value and an accepted reference or true value. For example, accuracy of pH meters used for this study will be assured through proper calibration to known standards, i.e., buffer solutions (Appendix C). Accuracy is a combination of random error (precision) and systematic error (bias), introduced during sampling and analytical operations. Bias is the systematic distortion of a measurement process that causes errors in one direction, so that the expected sample measurement is always greater or lesser to the same degree than the sample's true value. As mentioned previously, since analytical testing is beyond the scope of this QAPP, no accuracy criteria are identified here. However, proper sample handling procedures (Section 9.1) will be followed to minimize sample contamination.

Representativeness

Representativeness expresses the degree to which data accurately and precisely represent a characteristic of a population, parameter, variations at a sampling point, a process condition, or an environmental condition.

Representativeness of the target species (Section 8.1) for this fish tissue sampling effort was established based on:

- the recommendation of USEPA's *Guidance for Assessing Chemical Contaminant Data for Use in Fish Advisories, Volume 1: Fish Sampling and Analysis, Second Edition* (USEPA 1995),
- the input from federal, state, and tribal scientists on the draft design of the National Study of Chemical Residues in Lake Fish Tissue, obtained primarily during the October 1998 workshop (USEPA 1999b), and
- approval by the USEPA Project Manager.

The representative goal for the sample collection effort will be satisfied by using experienced field biologists to ensure that the sample types and locations specified for the study are the samples actually collected.

Completeness

Completeness is defined as the percentage of measurements made that are judged to be valid according to specific criteria and entered into the data management system. To optimize completeness, every

effort is made to avoid sample and/or data loss. Accidents during sample transport or lab activities that cause the loss of the original samples will result in irreparable loss of data, which will reduce the ability to perform analyses, integrate results, and prepare reports. Samples will be stored and transported in unbreakable (plastic) containers (i.e., insulated ice chests). All sample processing (i.e., compositing, filleting, homogenization) will occur in a controlled environment within the laboratory, not in the field. The assignment of a set of specific sample numbers (Section 6.0) that have undergone chain-of-custody inspection makes it less likely for the sample preparation laboratory to overlook samples when preparing them for processing.

Percent completeness (%C) for measurement parameters can be defined as follows:

$$\% C = \frac{v}{T} \times 100$$

Where v = the number of measurements judged valid and
T = the total number of measurements.

Completeness, in the case of this project, is the number of valid samples collected relative to the number of samples that are planned to be collected. The completeness goal for this project is 90%. It should be noted that sample locations and numbers may change over the course of the four-year study, based on local conditions (e.g., accessibility of target lakes) and the availability of target fishes (e.g., natural biological abundance or distribution). Any and all changes must be approved by the USEPA Project Manager, and approved changes must be considered when assessing completeness. The completeness goal is achieved when 90% or more of the available samples from the final list of target lakes found to contain target fishes are collected and shipped with no errors in documentation or sample handling procedures.

Comparability

Comparability is an expression of the confidence with which one data set can be compared with another. Comparability is dependent on the proper design of the sampling program and on adherence to accepted sampling techniques, standard operating procedures, and quality assurance guidelines. For the fish tissue collection task, comparability of data will be accomplished by standardizing the sampling season, the field sampling methods, and the field training as follows:

- All samples will be collected during the late summer-fall (August-November).

- All samples will be collected and prepared for shipment according to standard operating procedures contained in this QAPP. These procedures are consistent with the recommendations of USEPA's *Guidance for Assessing Chemical Contaminant Data for Use in Fish Advisories, Volume 1: Fish Sampling and Analysis, Second Edition* (USEPA 1995)[or subsequent updates].

- All field personnel involved with sampling will have adequate training and appropriate experience (Section 5.0).

5.0 SPECIAL TRAINING REQUIREMENTS/CERTIFICATION

Each Field Sampling Team is required to have the necessary knowledge and experience to perform all field activities. This includes both knowledge and experience in the collection and identification of fishes, in the use of fisheries sampling gear specified for the study and in the operation of small boats. It also includes training in project-specific sample collection and handling procedures. The field sampling crews will be primarily composed of state, tribal, and regional fisheries biologists or contracted biologists with a strong technical background in fisheries sampling activities. Each Field Sampling Team should consist of (at a minimum) one experienced fisheries biologist, one field technician, and a quality control specialist, all of whom must have experience with the array of fisheries sampling gear types to be used. In some cases the senior fisheries biologist may serve in dual capacities, assuming responsibility for site quality control.

This field sampling QAPP, the field sampling plan, and orientation materials will be distributed to all USEPA Regional/State/Tribal Fish Sampling Coordinators, who will, in turn, distribute it to all sampling personnel. Project orientation sessions will be set up by EPA Regions to distribute and discuss training materials. Materials will include detailed instructions for each field procedure (i.e., sampling of target fish, proper handling of the sample, shipping, and chain of custody) and visual training tools based on information from this QAPP. The focus of the orientation will be on sample collection methods, specific details of sample preparation, and strict adherence to the study's protocols. USEPA Regional/State/Tribal Fish Sampling Coordinators and Field Team Leaders will be required to view the training materials, read the QAPP, and verify in writing that they read or viewed the materials and understood the procedures and requirements. If sampling personnel change (i.e., new USEPA Regional/State/Tribal Fish Sampling Coordinators or new Field Team Leaders) during the course of the four-year study, the orientation process will have to be reinitiated for that particular new team.

6.0 DOCUMENTATION AND RECORDS

Thorough documentation of all field sample collection and handling activities is necessary for proper processing in the laboratory and, ultimately, for the interpretation of study results. Field sample collection and handling will be documented in writing (for each sampling site) using the following forms and labels:

- a Field Record Form that contains information about each individual specimen and lake site (Appendix B),

- a Sample Identification Label that accompanies and identifies each sample (Appendix B),

- a Chain-of-Custody Label that seals each sample container (provided by the sample control center), and
- a Chain-of-Custody Form that provides constant tracking information for all samples (Appendix B).

A detailed description of each sample collected by each Field Sampling Team will be recorded on a Field Record Form (Appendix B). The form will document the sampling date, time, sampler's name, sampling site location/description, and sample description (count and length of each specimen). Also, the 10% subset of lakes and reservoirs that are sampled as duplicates will be noted as such on the form. The Field Record Form will also contain a unique tracking code (i.e., composite sample identification code) that will be used to identify each record. The ten-character code will include:

- state of collection (two-character abbreviation),
- year of collection (two-number abbreviation),
- lake identification number (four-digit code from Appendix A),
- composite type (one character -- P = predator species; B = bottom-dwelling species), and
- sample type (one character -- S = standard sample, D = duplicate sample).

The Field Record Form will be produced as a four-page carbonless copy form, with one copy retained by the sampler, and the other three included in the sample shipment to the laboratory (i.e., one for the sample preparation laboratory, one for the sample control center, and one for the Tetra Tech Task Leader). All entries will be made in ink and no erasures will be made. If an incorrect entry is made, the information will be crossed out with a single strike mark, which is initialed and dated by the sampler/recorder.

A Sample Identification Label will be completed (Appendix B) to accompany each sample throughout the chain of custody. The label will document the project name, sampling site location, sampling date and time, the sampler's name, the ten-character tracking code, and the specimen number (e.g., 01 through 05). All entries will be made in indelible ink and will coincide with specimen and sample information on the Field Record Form. Descriptions and definitions of all field data elements required in the Field Record Form and Sample Identification Label are provided in Appendix D.

Proper chain-of-custody procedures are necessary for tracking sample possession from field to laboratory. Chain-of-Custody Forms (Appendix B) will accompany each shipment of samples and will document sample identity (coinciding with information on the field record), sampler relinquishment date and time, and laboratory receipt date and time. Chain-of-Custody Forms will be produced as five-

page carbonless copies, with one copy for the sampler, and four for shipment to the laboratory (i.e., one for the sample preparation laboratory, one for the sample control center, one for the Tetra Tech Task Leader, and one for duplication and distribution to the analytical laboratories). Chain-of-Custody Labels will seal each sample container following packing operations in the field, and will include the signature of the sampler and the date and time sealed. All Chain-of-Custody Label and Form entries will be made in ink. Field sampling teams must notify the sample control center (DynCorp) by telephone (Chris Moore 703/461-2360 or Chris Maynard 703/461-2395) of an incoming shipment.

Samples will be shipped from the field to the sample preparation laboratory via priority, overnight express delivery service. Copies of all shipping airbills will be retained by the sample control center. Specification for retention of field samples by the receiving location are outside the scope of this document. While in storage, it is recommended that samples held for analysis be stored with the original labeling materials.

Annual sampling activities will conclude with the development of a field collection effort summary (i.e., detailed listing of all sampling participants, sampling locations, and specimens collected) by Tetra Tech and review of the summary by the USEPA Project Manager. Following USEPA Project Manager approval, the summaries will be used to document and report back to USEPA Regional/State/Tribal participants the collective sampling progress for each study year. Tetra Tech will maintain a file as a repository for information used in the preparation of the annual field collection summaries throughout the duration of the study. The following information will be included:

- any documents prepared for the study,
- contract and work assignment information,
- project QAPP,
- results of technical reviews, data quality assessments, and audits,
- communications (memoranda; internal notes; telephone conversation records; letters; meeting minutes; and all written correspondence between Tetra Tech, USEPA, and other project team personnel, subcontractors, suppliers, or others),
- maps, photographs, and drawings, and
- studies, reports, and documents pertaining to the project.

If any change(s) in this QAPP is(are) required during the study, a memo will be sent to each person on the distribution list describing the change(s), following approval by the USEPA Project Manager. Any and all memos announcing changes must be attached to the QAPP.

All documents and records prepared for this project will be maintained by USEPA and Tetra Tech during the project, and retained for a period of two years following completion of the project (unless otherwise directed by USEPA).

B. DATA ACQUISITION

7.0 SAMPLING PROCESS DESIGN

The objective of the National Fish Tissue Study is to estimate the national distribution of the mean levels of selected persistent, bioaccumulative, and toxic chemical residues in fish tissue from lakes and reservoirs of the continental United States.

In so doing, the study will provide the following types of information:

- information to meet objectives of the President's Clean Water Action Plan (CWAP),
- information about persistent bioaccumulative toxic chemicals (PBTs) for the Agency's PBT Initiative, and
- data to answer important questions concerning the national occurrence of fish tissue contamination.

For the purposes of this study design, the target population will be all lakes and reservoirs within the coterminous United States excluding the Laurentian Great Lakes and the Great Salt Lake. This study defines a lake as a permanent body of water of at least one hectare (2.47 acres) in surface area with a minimum of 1,000 m^2 of open (unvegetated) water and a minimum depth of one meter. The lakes in this study must also have a permanent fish population. Approximately 500 locations will be sampled over the course of four years based on projections of available resources.

7.1 Sample Type

To meet the study objectives, the National Fish Tissue Study will include composite sampling of fish fillets for predator/gamefish species and whole fish for bottom-dwelling species from each sample lake. Five individuals per composite will be collected, all of which will be large enough to provide sufficient tissue for analysis of the group of target analytes. It has been determined that at least 560 grams of edible tissue for predators, and 560 grams of total body tissue for bottom-dwellers will be required from the composites to allow for analysis of all target analytes. Based on the recommendations of USEPA's *Guidance for Assessing Chemical Contaminant Data for Use in Fish Advisories*,

Volume 1: Fish Sampling and Analysis, Second Edition (USEPA 1995), fish used in a composite sample must meet the following criteria:

- all be of the same species,
- satisfy any legal requirements of harvestable size or weight, or at least be of consumable size if no legal harvest requirements are in effect,
- be of similar size so that the smallest individual in a composite is no less than 75% of the total length of the largest individual,
- be collected at the same time (i.e., collected as close to the same time as possible but no more than 1 week apart) [**Note:** This assumes that a sampling crew was unable to collect all fish needed to prepare the composite sample on the same day. If organisms used in the same composite are collected on different days (no more than 1 week apart), individual fish will be frozen until all the fish to be included in the composite are available for delivery to the laboratory.], and
- be collected in sufficient numbers (five per composite) and of adequate size (five harvestable size adult specimens that collectively will provide greater than 560 grams of edible tissue for predators, and 560 grams of total body tissue for bottom-dwellers) to allow analysis of recommended target analytes.

Individual organisms used in composite samples must be of the same species because of notable differences in the species-specific bioaccumulation potential. Accurate taxonomic identification is essential in preventing the mixing of closely related species with the target species. Under no circumstance should individuals from different species be used in a composite sample.

7.2 Sampling Period

Field sampling will be conducted during the period when water and weather conditions are conducive to safe and efficient field sampling, and when the target species are most frequently harvested by anglers. For most inland freshwaters, the most desirable sampling period is from late summer to early fall, since lipid content is usually highest and water levels are usually lowest at that time. Sampling should not occur during the spawning period of the particular target species being sought. With these recommendations in mind, and considering the geographic extent of the study area (i.e., range of latitudes and longitudes) the field sampling period will begin in August and last through November (and possibly into December in warmer regions).

7.3 Sample Frame

For the purposes of this study, the target population will be all lakes and reservoirs within the coterminous United States excluding the Laurentian Great Lakes and the Great Salt Lake. For this

study, a lake is defined as a permanent body of water of at least one hectare (2.47 acres) in surface area with a minimum of 1,000 m^2 of open (unvegetated) water, and a minimum depth of one meter. The lakes in this study must also have a permanent fish population. Examples of nonpermanent fish populations are lakes that are subject to annual fish winterkill, or are recently stocked with fingerlings. Stocked lakes with adult fish are defined as having a permanent fish population.

The River Reach File Version 3 (RF3) was used to generate the list of lakes in the target population. RF3 constitutes the sample frame, and includes almost all lakes in the target population for this study. Noted exclusions are newly constructed reservoirs. However, RF3 is the best known national GIS coverage for lakes, so it was used in this study.

To ensure the sample frame included all lakes and reservoirs with an area greater than 5,000 ha, a list from multiple sources of such lakes was constructed. The list was sent to USEPA Regional Offices and subsequently to each state to verify that each lake on the list was greater than 5,000 ha and to add any lakes greater than 5,000 ha that were not on the list. The corrected list of lakes was integrated into the RF3 list of lakes before sample selection was initiated. Table 3 summarizes the number of lakes in the sample frame used for sample selection.

Table 3. Numbers of Lakes by Size Category in Sample Frame (Based on RF3).

Lake area (ha)	Number of Lakes	Frequency (%)	Cumulative Number of Lakes	Cumulative Frequency (%)
>1-5	172,747	63.8	172,747	63.8
>5-10	44,996	16.6	217,743	80.4
>10-50	40,016	14.8	257,759	95.2
>50-500	11,228	4.1	268,987	99.3
>500-5000	1,500	0.6	270,387	99.9
>5000	274	0.1	270,761	100.0

7.4 Selection of Lakes for Sampling

The procedures described by Olsen et al. (1998) were used to select an unequal probability sample of lakes. The probability of selection for a lake depends on its area as given by RF3. In Table 4 the expected weight is the reciprocal of the probability of selection (inclusion probability). The inclusion probability was determined by the goal of obtaining approximately an equal number of lakes to sample in each size category. A higher percentage of the lakes in the smaller size categories would include lakes not meeting the target population definition of a lake. The probability of selection was adjusted so that the smaller size categories had a greater sample size. No adjustment was required for size categories 50-500 hectares, 500-5000 hectares, or > 5000 hectares. The adjustments for the remaining size categories were as follows: for 1-5 hectares, increase by 40%; for 5-10 hectares, increase by 30%; and for 10-50 hectares, increase by 20%. These adjustments were based on limited information from the EMAP northeastern lake survey. It is not known yet how well these will apply to

other regions of the country. The impact of an incorrect adjustment will be that the number of lakes actually sampled by size category will not be equal.

Although it was not a requirement for the statistical survey design, study planners decided to select the sample by allocating the lakes to be sampled in each year of the study. It is recommended that the lakes be sampled in the year specified. The advantage of adhering to this approach is that if any year-to-year differences exist in fish tissue contaminants, then the sample will be balanced across years. In the event that the study must be stopped before all lakes can be sampled, sampling all lakes from a subset of the years (e.g., 1999-2001) results in a legitimate unequal probability sample of all lakes. The expected weights must be adjusted to account for the years not sampled.

Table 4. Number of Lakes Selected for Sampling by Size Category and Year.

Lake area (ha)	1999	2000	2001	2002	All Years	Expected Weight
>1-5	39	41	47	47	174	938.84
>5-10	44	40	47	46	177	261.61
>10-50	32	47	46	25	150	256.51
>50-500	34	37	29	34	134	85.06
>500-5000	36	30	31	41	138	11.36
>5000	40	30	25	32	127	2.21
Total	**225**	**225**	**225**	**225**	**900**	

7.5 Nontarget Population, Inaccessible Lakes, and Lakes for which Access is Denied

A critical element of the statistical survey design is the determination of the status of each lake in the sample. This means that each lake is checked to determine if it meets the definition of a lake for the study (Section 7.3). In many cases, a field visit is not necessary to confirm that the lake meets the definition. In other cases, it may be necessary to actually visit the lake to determine if it meets the definition. Regardless, it is essential that a complete record of this information be reported to the USEPA Project Manager, since this information is required to complete the survey estimation procedures. Two other situations can occur that will result in a lake not being sampled. First, the lake may be on private land and require landowner permission to visit the lake. If a landowner refuses access to a lake selected for the study, then this needs to be recorded. Second, a lake may occasionally be physically inaccessible. If there are logistical or safety constraints that make a lake inaccessible, then the reason why the lake is inaccessible needs to be recorded and reported to the USEPA Project Manager and/or the Tetra Tech Task Leader.

Information that must be determined during pre-sampling reconnaissance of each lake includes the following:

- Does the lake meet the definition of the target population (Section 7.3)? If the lake does not meet the definition, what are the reasons? For example:
  - lake < 1 ha in surface area
  - lake < 1 m depth
  - lake < 1000 m^2 of open water (unvegetated)
  - saline lake with no fish population
  - lake has no annual fish population (winterkill lake)
  - other (list specific reasons)

- Has the landowner denied access to lake? (Record landowner information)

- Is the lake physically inaccessible during sampling period of study? If so, state why.

7.6 Reserve Sample of Lakes

As a contingency, a second sample of lakes has been selected as a reserve. Table 5 summarizes the sample sizes for the reserve sample. This sample could be used if the initial sample is determined to have a larger than expected number of nontarget population lakes, resulting in an insufficient sample size. Alternatively, if additional funding is received to allow a larger sample size, the reserve sample of lakes could be used. Decisions regarding use of the reserve sample of lakes (or subsets of the reserve sample) will be made only by the USEPA Project Manager.

Table 5. Number of Lakes (by Size Category and Year) Selected as a Reserve Sample.

Lake area (ha)	1999	2000	2001	2002	All Years	Expected Weight
>1-5	47	48	48	49	192	938.84
>5-10	45	52	40	42	179	261.61
>10-50	36	39	42	41	158	256.51
>50-500	36	26	40	22	124	85.06
>500-5000	38	29	30	37	134	11.36
>5000	23	31	25	34	113	2.21
Total	**225**	**225**	**225**	**225**	**900**	

8.0 SAMPLING METHODS

8.1 Target Species

Field sampling procedures will follow the recommendations of USEPA's *Guidance for Assessing Chemical Contaminant Data for Use in Fish Advisories, Volume I: Fish Sampling and Analysis, Second Edition* (USEPA 1995) [or subsequent updates]. According to the guidance, the primary criteria for selecting target fishes is that the species:

- are commonly consumed in the study area,
- may potentially accumulate high concentrations of chemicals, and
- have a wide geographic distribution.

Secondarily, the target species should be:

- easy to identify,
- abundant,
- easy to capture, and
- large enough to provide adequate tissue for analysis (i.e., harvestable size adult specimens that as a five-fish composite will provide at least 560 grams of edible tissue for analysis).

Two distinct ecological groups of fish, bottom-dwellers and predators, will be included as target fishes for this study. This permits monitoring of a wide variety of habitats, feeding strategies, and physiological factors that might result in differences in bioaccumulation of contaminants. Suggested target species are listed in Table 6 in order of preference (adapted from USEPA 1995). Additional target species may be added to the list of preferred targets on an as-needed basis, following discussion with the USEPA Project Manager and/or the Tetra Tech Task Leader. For example, additional Salmonid species (such as cutthroat trout or kokanee salmon) and Catostomid species (such as longnose sucker, largescale sucker, or bridgelip sucker) may need to be added to the target species for lakes in the northwestern United States. State personnel, with their knowledge of site-specific fisheries and human consumption patterns, will aid in the determination of the availability of target fishes. The criteria listed above must be considered when selecting target species other than those listed in Table 6. Every effort will be made to collect the desired species and number (Section 8.2) of fish; however, the outcome of field sampling efforts will ultimately depend on the natural diversity and abundance of fish in the study lakes.

8.2 Composite Sampling

The National Fish Tissue Study will involve composite sampling of predator/gamefish species and bottom-dwelling species (to be prepared as fillet composites and whole-body composites, respectively, by the sample preparation laboratory). Composite samples are cost-effective for estimating average tissue concentrations of target analytes in target species populations, and compositing ensures adequate sample mass for analysis of all target analytes.

Table 6. Recommended Target Species for Inland Freshwaters (in Order of Preference).

	Family name	Common name	Scientific name
Predator/Gamefish Species *(in order of preference)*	*Centrarchidae*	Largemouth bass	*Micropterus salmoides*
		Smallmouth bass	*Micropterus dolomieu*
		Black crappie	*Pomoxis nigromaculatus*
		White crappie	*Pomoxis annularis*
	Percidae	Walleye	*Stizostedion vitreum*
		Yellow perch	*Perca flavescens*
	Percichthyidae	White bass	*Morone chrysops*
	Esocidae	Northern pike	*Esox lucius*
	Salmonidae	Lake trout	*Salvelinus namaycush*
		Brown trout	*Salmo trutta*
		Rainbow trout	*Oncorhynchus mykiss*
		Brook trout	*Salvelinus fontinalis*
Bottom-dwelling Species *(in order of preference)*	*Cyprinidae*	Common carp	*Cyprinus carpio*
	Ictaluridae	Channel catfish	*Ictalurus punctatus*
		Blue catfish	*Ictalurus furcatus*
		Brown bullhead	*Ameiurus nebulosus*
		Yellow bullhead	*Ameiurus natalis*
	Catostomidae	White sucker	*Catostomus commersoni*

One predator/gamefish composite and one bottom-dwelling species composite will be collected from each target lake (**Note:** The USEPA Project Manager and/or the Tetra Tech Task Leader need to be notified if one of the ecological groups of fish are not present or available from a target lake). Each composite will consist of five fish of adequate size (i.e., adult specimens that collectively will provide at least 560 grams of edible tissue for predators, and 560 grams of total body tissue for bottom-dwellers) to allow analysis of the target analytes. Fish retained for a composite sample must meet the following criteria:

- all be of the same species,
- satisfy any legal requirements of harvestable size (or weight), or at least be of consumable size if no legal harvest requirements are in effect,

- be of similar size so that the smallest individual in a composite is no less than 75% of the total length of the largest individual, and

- be collected at the same time, i.e., collected as close to the same time as possible, but no more than one week apart (**Note:** Individual fish may have to be frozen until all fish to be included in the composite are available for delivery to the sample preparation laboratory).

Accurate taxonomic identification is essential in assuring and defining the organisms that have been composited and submitted for analysis. Under no circumstances should individuals from different species be used in a single composite sample. Ideally, the target species composite should focus on the larger individuals commonly harvested by the local population.

8.3 Sample Collection

Fish collection methods can be divided into two major categories, active and passive. Each has advantages and disadvantages. Active collection methods employ a wide variety of sampling devices including electrofishing units, seines, trawls, and angling equipment (hook and line). Although active collection requires greater fishing effort, it is usually more efficient than passive collection for covering a large number of sites and catching the relatively small number of individuals needed from each site for tissue analysis. The active collection methods generally require more field personnel and more expensive equipment than passive collection methods. Passive collection methods employ a wide array of sampling devices, including gill nets, fyke nets, trammel nets, hoop nets, pound nets, and d-traps. Passive collection methods generally require less fishing effort than active methods, but normally yield a much greater catch than would be required for a contaminant monitoring program. They are also time consuming to deploy. Passive collection devices (e.g., gill nets) must be checked frequently (e.g., at least once every 24 hours) to ensure a limited time lag between fish entrapment and sample preparation/preservation.

Sampling Teams dedicated to the National Fish Tissue Study will be equipped with an array of both active and passive gears to ensure the collection of the desired target numbers and species of fish. Selection of the most appropriate gear type(s) for a particular target lake will be at the discretion of the experienced on-site fisheries biologist. USEPA Regional/State/Tribal Sampling Teams and Contractor-affiliated Sampling Teams will be responsible for providing fisheries sampling gear and sampling vessels. The sample control center will provide sample packaging and shipping supplies. A list of equipment and expendable supplies is provided in Table 7. Sample collection, packaging, and shipment methods are presented as Appendix B, Standard Operating Procedure.

Table 7. Equipment and Supply List for Fish Tissue Sampling.

1. Sampling vessel (including boat, motor, trailer, oars, gas, and all required safety equipment)[a]
2. Electrofishing equipment - OPTIONAL (including variable voltage pulsator unit, generator, electrodes, wiring cables, dip nets, protective gloves, protective boots, and all necessary safety equipment)[a]
3. Nets - OPTIONAL (including trawls, seines, gill nets, fyke nets, trammel nets, hoop nets, pound nets, trap nets)[a]
4. Angling equipment - OPTIONAL (including fishing rods, reels, line, terminal tackle, trot lines)[a]
5. Coast Guard-approved personal floatation devices
6. Maps of target lakes and access routes
7. Global Positioning System (GPS) unit - OPTIONAL [a]
8. pH meter (including associated calibration supplies) [a]
9. Livewell and/or buckets
10. Measuring board (millimeter scale)
11. Ice chests[b]
12. Aluminum foil (solvent-rinsed and baked)[b]
13. Heavy-duty food grade polyethylene tubing[b]
14. Large plastic (composite) bags [b]
15. Knife or scissors
16. Clean nitrile gloves[b]
17. Field Record Forms[b]
18. Sample Identification Labels[b]
19. Chain-of-Custody Forms[b]
20. Chain-of-Custody Labels[b]
21. Scientific collection permit
22. Dry ice[b]
23. Black ballpoint pens and/or waterproof markers
24. Clipboard
25. Packing/strapping tape
26. Overnight courier airbills[b]
27. Plastic cable ties[b]
28. Plastic bubble-wrap[b]
29. First aid kit and emergency telephone numbers

(a) Selection and exact specifications at the discretion of the experienced on-site fisheries biologist.
(b) Provided by the sample control center.

As soon as fish are obtained via active collection methods, or removed from passive collection devices, they should be identified to species. Species identification should be conducted only by experienced personnel knowledgeable of the taxonomy of species in the waterbodies included in the fish contaminant monitoring program. Nontarget species, collected by the field team should be returned to the water. Individuals of the selected target species will be rinsed in ambient water to remove any

foreign material from the external surface, should be handled using clean nitrile gloves (provided by the sample control center), and placed in clean holding containers (livewell, buckets, etc.) to prevent contamination. Each fish of the selected target species should be measured to determine total body length (mm). Maximum body length should be measured, i.e., the length from the anterior-most part of the fish to the tip of the longest caudal finray (when the lobes of the caudal fin are depressed dorsoventrally). When sufficient numbers of the target species have been identified to make up a suitable composite sample (i.e., five individuals meeting the size criteria presented in Section 8.2), the species name, specimen lengths, and all other site and sampling information should be recorded on the Field Record Form (Appendix B).

The field objective is for sampling teams to obtain a representative composite sample for both a predator and a bottom-dwelling species from each lake or reservoir selected for the National Fish Tissue Study. Each composite must consist of all the same species, individual fish must be of similar size (i.e., all within 75% of the length of the largest fish), and the composite must be able to deliver 560 grams of fish tissue (fillets for predators, and whole bodies for bottom-dwellers) for chemical analysis. To obtain a representative sample of the targeted species in lakes and reservoirs (and particularly in large waterbodies), field teams should consider factors such as habitat and presence of contaminant gradients in planning sampling locations for the target lake. Ideally, the habitats suitable for target species would be determined for the lake, and up to three locations of that habitat would be randomly selected for sampling in the lake. If a contamination gradient may be present in the waterbody, then three locations across the gradient should be selected for sampling. For example, in reservoirs, the three locations may be in habitat near the inflow, middle, and outflow of the reservoir. The composite is intended to estimate the mean fish tissue contaminant concentration for the lake or reservoir. Given the diversity of lakes and reservoirs in the study, and given the multiple species that must be used, the study must rely on the local knowledge of the field teams in the selection of the representative composite sample.

9.0 SAMPLE HANDLING AND CUSTODY REQUIREMENTS

9.1 Sample Handling

Clean nitrile gloves (provided by the sample control center) should be worn during the entire sample handling process, beginning with removing the fish from the sampling gear. Individuals of the selected target species should be rinsed in ambient water to remove any foreign material from the external surface. After initial processing to determine species and size, each of the five fish found to be suitable for the composite sample will be individually wrapped in extra heavy-duty aluminum foil (provided by the sample control center as solvent-rinsed, oven-baked sheets). For specimens with sharp fins, spines may be broken (via gloved hands or with the use of a tool covered with the aluminum foil provided by the sample control center) to prevent perforation of the wrapping materials. The broken section of the fins should be included with the fish sample. A Sample Identification Label (Appendix B) will be prepared for each aluminum foil-wrapped specimen. Each foil-wrapped fish will be placed into a waterproof plastic tubing that will be cut to size to fit the specimen (i.e., heavy duty food grade polyethylene tubing provided by the sample control center), and each end of the tubing will be sealed

with a plastic cable tie. The completed Sample Identification Label will be affixed to the cable tie, and the entire specimen package will be "double-bagged" (i.e., placed inside a large plastic bag with all the specimens of the same species from that site and sealed with another cable tie). Once packaged, samples should be immediately placed on dry ice for shipment. If samples will be carried back to a laboratory or other facility to be frozen before shipment, wet ice can be used to transport wrapped and bagged fish samples in the coolers to that laboratory or facility. If possible, all of the specimens in a composite sample should be kept together in the same shipping container (ice chest) for transport. Sampling Teams have the option, depending on site logistics, of:

- shipping the samples packed on dry ice (in sufficient quantities to keep samples frozen for up to 48 hours), via priority overnight delivery service (i.e., Federal Express), so that they arrive at the sample preparation laboratory within less than 24 hours from the time of sample collection, or

- freezing the samples within 24 hours of collection (at $\leq$-20°C), and storing the frozen samples until shipment within 1 week of sample collection (frozen samples will subsequently be packed on dry ice and shipped to the sample preparation laboratory via priority overnight delivery service to arrive within less than 24 hours from time of shipment).

The time of sample collection, relinquishment by the sample team, and time of their arrival at the sample preparation laboratory must be recorded on the Chain-of-Custody Form (Appendix B). Field Sampling Teams should avoid shipping samples for weekend delivery to the sample preparation laboratory unless prior plans for such a delivery have been agreed upon with the sample control center.

9.2 Sample Integrity

A critical requirement of the National Fish Tissue Study is the maintenance of sample integrity from the time of collection to the shipment and arrival at the final destination. Sample integrity is maintained by preventing the loss of contaminants that might be present in the sample and by taking precautions to avoid possible introduction of contaminants during handling. The loss of contaminants can be prevented in the field by ensuring that the sample collected remains intact, i.e., sample collection procedures should be performed with the intention of minimizing the laceration of fish skin. Once a sample is collected, sample integrity is maintained through careful and controlled sample handling, storage, and preservation procedures (Section 9.1).

Preventable sources of extraneous contamination can include the sampling gear, oils and greases on boats, spilled fuel, skin contact, contact with soil or sand, boat motor exhaust, and other potential sources. All potential sources should be identified before the onset and during sample collection, and

appropriate measures should be taken to minimize or eliminate them. Examples of preventative measures include the following:

- Collection nets should be free of any potential contaminants.
- The use of tarred collection nets is prohibited.
- Boats should be positioned so that engine exhaust does not fall on the deck area where samples are being handled.
- Ice chests and other sample storage containers should be scrubbed clean with detergent and rinsed with distilled water prior to use (containers originating from the sample control center will be prewashed and rinsed).
- Samples should not be placed directly on dry ice, but should be stored inside foil, plastic tubing (i.e., heavy-duty food grade polyethylene tubing as per Section 9.1), and plastic garbage bags first.
- Proper gloves (clean nitrile gloves) should be used when handling samples.

9.3 Custody Requirements

As soon as possible following collection, the Sampling Team will begin the process of identifying, labeling, packaging, and storing the sample(s). Each sample will be identified and tracked with a unique numbering scheme as described in Section 6.0. This ten-character composite code followed by a two-digit specimen number will identify each sample on all documentation and records including the following:

- Field Record Form,
- Sample Identification Label, and
- Chain-of-Custody Form.

Each sample (i.e., individual fish) will be labeled by affixing a Sample Identification Label (Appendix B) as per the instructions in Section 9.1. All sample label entries will be made with black indelible ink. The sample label will accompany each sample throughout the chain-of-custody. Each sample label will include the following information:

- project name (USEPA National Fish Tissue Study),
- site identification (lake name),

- sample number (01 through 05),
- composite code (ten-digit code as in Section 6.0),
- date of sample (month/day/year),
- time of collection (military time),
- preservative used (dry ice or frozen), and
- collector's name (field team leader).

Detailed documentation of the samples collected in the field (for shipment to the sample preparation laboratory) and information about the collection location will be recorded on a Field Record Form (Appendix B). One form must be completed for each sample composite. One page of the four-page carbonless copy form (Section 6.0) will be retained by the sampler, and the other copies will be included with sample shipment to the sample preparation laboratory. (The sample preparation laboratory will retain one copy, and be responsible for forwarding one copy to the sample control center and one copy to the Tetra Tech Task Leader.) All entries will be made in black ink and no erasures will be made. Each form will have the proper entry requirements, which includes the following information:

- composite code (ten digits as per Section 6.0),
- sampling date (month/day/year),
- time of collection (military time),
- collection method (e.g., gill net),
- collector's name (printed and signed),
- collector's affiliation, address, and telephone number,
- site name (lake name),
- site description (location of lake and area of lake sampled),
- lake type (e.g., natural lake),
- estimated maximum depth (meters),

- fish species (common name),
- length (mm) of each specimen,
- location, date and time of collection for each specimen, and
- a simple sketch of the sampling site and sample collection points.

All samples and composites will be transferred to the receiving laboratory (i.e., sample preparation laboratory) under chain of custody. The Chain-of-Custody Form (Appendix B) acts as a record of sample shipment and a catalog of the contents of each shipment (coinciding with information on the field record). The forms will be produced as five-page carbonless copies with one copy retained by the sampler and four for shipment to the laboratory (i.e., one for the sample preparation laboratory, one for the sample control center, one for the Tetra Tech Task Leader, and one for duplication and distribution to the analytical laboratories). The latter four copies will be placed in a waterproof plastic bag (provided by the sample control center) and sealed inside the shipping container. All Chain-of-Custody Form entries will be made in black ink and will include:

- the USEPA Project Manager's name, address and telephone number (refer to the QAPP cover page),
- sampler's name and telephone number,
- project name (USEPA National Fish Tissue Study),
- page number (e.g., 1 of 1),
- sample location (lake name),
- collection date and time,
- composite code (ten-digit) and sample number (two-digit),
- preservative (dry ice or frozen),
- number of containers,
- type of analysis required (USEPA 274 PBT target analytes [including breakdown products and PCB congeners]),
- sampler's signature, sample date, and time,
- sampler relinquishment date and time,

- laboratory recipient signature, and
- laboratory receipt date and time.

Immediately following the packing of each shipping container (Section 9.1), each container (ice chest) will be secured with packaging tape and sealed with a Chain-of-Custody Label (provided by the laboratory). The Chain-of-Custody Label must contain the signature of the sampler and the date and time written in ink. The seal must be affixed such that the shipping container cannot be opened without breaking the seal (e.g., label adhered across the ice chest latch), so as to protect and document the integrity of the contents from field to laboratory.

10.0 ANALYTICAL METHODS REQUIREMENTS

Samples will be shipped (Section 9.1) under chain of custody to locations designated by the USEPA Project Manager for processing and analytical testing. Sample processing and analytical testing and methods are outside the scope of this QAPP and therefore are not addressed herein, but will be discussed in the Analytical Activities QAPP.

11.0 QUALITY CONTROL REQUIREMENTS

Data quality is addressed, in part, by consistent performance of valid procedures documented in the standard operating procedures (Appendix B). It is enhanced by the training and experience of project staff (Section 5.0) and documentation of project activities (Section 6.0). This QAPP, a field sampling plan, and training materials will be distributed to all USEPA/Regional/State/ Tribal Fish Sampling Coordinators, and, in turn, to sampling personnel. Orientation sessions will be set up by EPA Regions to distribute and discuss project materials (Section 5.0). USEPA Regional/State/Tribal Fish Sampling Coordinators and Field Team Leaders will be required to view the training materials, read the QAPP, and verify in writing that they read or viewed the materials and understood the procedures and requirements.

12.0 INSTRUMENT/EQUIPMENT TESTING, INSPECTION, AND MAINTENANCE REQUIREMENTS

All field equipment will be inspected prior to sampling activities to ensure that proper use requirements are met (e.g., boats or electrofishers are operating correctly, nets are without defects, pH meter properly calibrated). Inspection of field equipment will occur well in advance of the field operation to allow time for replacement or repair of defective equipment, and the field team will be equipped with proper backup equipment to prevent lost time on site. One member of each field team should gather and inspect all equipment on the equipment and supply list (Table 7) prior to each sampling event.

13.0 INSTRUMENT CALIBRATION AND FREQUENCY

All pH meters used by field teams will be calibrated according to the manufacturer's operating instructions, on a daily basis, while in use (Appendix C).

14.0 INSPECTION/ACCEPTANCE REQUIREMENTS FOR SUPPLIES AND CONSUMABLES

Careful and thorough planning is necessary to ensure the efficient and effective completion of the field sample collection task. A general checklist of field equipment and supplies is provided in Table 7. Sampling gear will be provided by each field team, and most sample preparation and shipment supplies will be provided by the sample control center. It will be the responsibility of each field team to gather and inspect the necessary sampling gear prior to the sampling event and to inspect the sample packaging and shipping supplies received from the laboratory. Defective packaging and shipping supplies (e.g., torn or damaged polyethylene sample tubing) will be discarded, and, if necessary, the field team will contact the sample control center to obtain replacement supplies.

15.0 DATA ACQUISITION REQUIREMENTS (NONDIRECT MEASUREMENTS)

Nondirect measurements will include identification and/or verification of each sample lake location (i.e., latitude and longitude). Coordinates of the target lakes are provided in Appendix A as decimal degrees and conventional degrees, minutes, and seconds. USEPA Regional/State/ Tribal Fish Sampling Coordinators or Field Sampling Teams having corrections to the Appendix A coordinates for a particular target lake (based on USGS quadrangle, or equivalent, map verification), need to report those corrections to the USEPA Project Manager (telephone 202/260-7055) or Tetra Tech Task Leader (telephone 410/356-8993).

16.0 DATA MANAGEMENT

Samples will be documented and tracked via Sample Identification Labels, Field Record Forms, and Chain-of-Custody Forms (Section 6.0). Since the sampling effort is a cooperative one involving many different partner agencies and groups, the diligence of the Field Sampling Teams in completion of the proper records is essential. Field team leaders will be responsible for reviewing all completed field forms. Any corrections should be noted, initialed, and dated by the reviewer (Section 6.0). As mentioned in Section 6.0, Field Record Forms and Chain-of-Custody Forms will each be prepared and replicated in the field, via multiple page "carbonless copy" forms. The sampler will retain one copy each of the Field Record and Chain-of-Custody Forms, and the remaining copies will be delivered to the sample preparation laboratory with the samples. Shipment of samples to the sample preparation laboratory (Section 9.1) must be conducted by a delivery service that provides constant tracking of shipments (e.g., Federal Express). Laboratory sample log-in and data management procedures are beyond the scope of this QAPP.

The sample preparation laboratory will retain one copy of each Field Record Form and Chain-of-Custody Form, and will forward a copy of each to the Tetra Tech Task Leader. All form copies obtained by Tetra Tech will be maintained in a project file during the active phase of the project, and for a period of 2 years following completion of the project (unless otherwise directed by USEPA).

Upon completion of annual sampling activities, Tetra Tech will develop a field collection effort summary (i.e., a detailed listing of all sampling participants, sampling locations, and specimens collected) based on information recorded by all Sampling Teams on the Field Record Forms. The Field Record Form data will be entered into an Excel® spreadsheet to create the annual summary. All data entries will be checked for errors in transcription and computer input by a minimum of two persons. If there is any indication that requirements for sample integrity or data quality have not been met, the Tetra Tech QA Officer will be notified immediately (with an accompanying explanation of the problems encountered). All computer files associated with the project will be stored in a project subdirectory by Tetra Tech, and will be copied to disk for archive for the two years subsequent to project completion (unless otherwise directed by the USEPA Project Manager).

C. ASSESSMENT/OVERSIGHT

17.0 ASSESSMENT AND RESPONSE ACTIONS

Assessment activities and corrective response actions have been identified to ensure that sample collection activities are conducted as prescribed and that the measurement quality objectives and data quality objectives established by USEPA are met. The QA program under which this project will operate includes performance and system audits with independent checks of the data obtained from sampling activities. Either type of audit could indicate the need for corrective action. The essential steps in the program are as follows:

- identify and define the problem,
- assign responsibility for investigating the problem,
- investigate and determine the cause of the problem,
- assign and accept responsibility for implementing appropriate corrective action,
- establish effectiveness of and implement the corrective action, and
- verify that the corrective action has eliminated the problem.

Immediate corrective actions form part of normal operating procedures and are noted on project Field Record Forms. Problems not solved this way require more formalized, long-term

corrective action. In the event that quality problems requiring attention are identified, the Tetra Tech Task Leader and/or Tetra Tech QA Officer will determine whether attainment of acceptable data quality requires either short- or long-term actions. Failure in an analytical system (e.g., performance requirements are not met) and corrective actions for those failures are beyond the scope of this QAPP.

Communication and oversight will proceed from Field Sampling Team Leaders (e.g., senior fisheries biologist) to the Tetra Tech Task Leader and the USEPA Regional/State/Tribal Fish Sampling Coordinators. The Tetra Tech Task Leader will be on-call throughout the entire sampling period (Section 7.2) to address questions and receive communications of sampling status from the Field Sampling Teams. The Tetra Tech Task Leader will communicate the status of the sampling activities to the USEPA Project Manager on a weekly basis (at a minimum). The USEPA Regional/State/Tribal Fish Sampling Coordinators and Tetra Tech Task Leader will immediately consult with the Tetra Tech QA Officer and USEPA Project Manager regarding any difficulties encountered during sample collection activities. The Tetra Tech QA Officer will initiate the corrective action system described above, documenting the nature of the problem and ensuring that the recommended corrective action is carried out.

The USEPA Project Manager and/or the Tetra Tech QA Officer will work with the USEPA Regional/ State/Tribal Fish Sampling Coordinators and Tetra Tech Task Leader to determine the best way to rectify the problem and obtain accurate and useable data. When corrective actions have been taken and a sufficient time period has elapsed that allows a response, the response will be compared with project goals by the USEPA Project Manager. The Tetra Tech QA Officer will verify that the corrective action has been appropriately addressed to eliminate the problem. The USEPA QA Manager has the authority to stop work on the project if problems affecting data quality are identified that will require extensive effort to resolve. The USEPA Project Manager will consult with the USEPA QA Manager regarding any and all corrective actions and stop work orders.

Performance audits are qualitative checks on different segments of project activities, and are most appropriate for sampling, analysis, and data processing activities. Field audits will be conducted periodically in accordance with Agency requirements and availability of resources. Performance audit techniques include checks on sampling equipment, measurements, and the analysis of data quality using QC and spiked samples. Analytical performance audits are beyond the scope of this QAPP. The USEPA Regional/State/Tribal Fish Sampling Coordinators and/or the Tetra Tech Task Leader will be responsible for overseeing work as it is performed, and periodically conducting QC checks during the sample collection phase of this project.

System audits are qualitative reviews of project activity to check that the overall quality program is functioning and that the appropriate QC measures identified in the QAPP are being implemented. The Tetra Tech QA Officer will conduct one internal system audit during the project and report the results to the USEPA Project Manager on Tetra Tech's standard Audit Report Form.

18.0 REPORTS TO MANAGEMENT

Following completion of the system audit, the Tetra Tech QA Officer will prepare an Audit Report Form and submit copies to both the USEPA Project Manager and the USEPA QA Officer.

Upon completion of weekly sampling activities, the Tetra Tech Task Leader will contact the USEPA Project Manager to summarize Field Sampling Team progress for the preceding week and submit a weekly progress report detailing the sampling activities. Following completion of annual field sampling activities, Tetra Tech will prepare an annual field collection effort summary (i.e., detailed listing of all sampling participants, sampling locations, and specimens collected) for review by the USEPA Project Manager. Following incorporation of USEPA Project Manager comments and final approval, the summary will be used to report back to USEPA Regional/State/Tribal participants to document collective sampling progress for each study year.

D. DATA VALIDATION AND USABILITY

19.0 DATA REVIEW, VALIDATION, AND VERIFICATION REQUIREMENTS

Data validation and review services provide a method for determining the usability and limitations of data, and provide a standardized data quality assessment. All Field Record Forms and Chain-of-Custody records will be reviewed by the Tetra Tech Task Leader (assisted by the QA Officer, as needed) for completeness and correctness. Tetra Tech will be responsible for reviewing data entries and transmittals for completeness and adherence to QA requirements. Data quality will be assessed by comparing entered data to original data or by comparing results with the measurement performance criteria summarized in Section 4.2 to determine whether to accept, reject, or qualify the data. Results of the review and validation processes will be reported to the USEPA Project Manager.

20.0 VALIDATION AND VERIFICATION METHODS

All Field Record Forms and Chain-of-Custody records will be reviewed by the Tetra Tech Task Leader. The Tetra Tech QA Officer will review a minimum of five percent of the Field Record Forms and Chain-of-Custody records. Any discrepancies in the records will be reconciled with the appropriate associated field personnel and will be reported to the USEPA Project Manager.

Analytical validation and verification methods are outside of the scope of this QAPP. The submission of samples to the sample preparation laboratory will include Field Record Forms and Chain-of-Custody Forms documenting sampling time and date. This information will be checked by the receiving laboratory to ensure that holding times (Section 9.1) have not been exceeded. Violations of holding times will be reported (by the laboratory) to the USEPA Project Manager and the Tetra Tech Task Leader via the USEPA Sample Analysis Manager, and the

USEPA Project Manager will discuss with the USEPA Sample Analysis Manager whether or not to issue a stop work order for analysis of that particular sample.

21.0 RECONCILIATION WITH DATA QUALITY OBJECTIVES

As soon as possible following completion of the sample collection task, precision, accuracy, and completeness measures will be assessed by Tetra Tech and compared with the criteria discussed in Section 4.0. This will represent the final determination of whether the data collected are of the correct type, quantity, and quality to support their intended use for this project. Any problems encountered in meeting the performance criteria (or uncertainties and limitations in the use of the data) will be discussed with the USEPA Project Manager, and will be reconciled, if possible.

LITERATURE CITED

NOAA. 1993. *Sampling and Analytical Methods of the National Status and Trends Program National Benthic Surveillance and Mussel Watch Projects 1984-1992, Volumes I-IV*. National Oceanic and Atmospheric Administration, Coastal Monitoring and Bioeffects Assessment Division, Office of Ocean Resources Conservation and Assessment, National Ocean Service, Silver Spring, MD. NOAA Technical Memorandum NOS ORCA 71. Reference No. 024.

Olsen, A.R., D.L. Stevens, Jr., and D. White. 1998. Application of global grids in environmental sampling. *Computing Science and Statistics*. 30:279-284.

U.S. Environmental Protection Agency (USEPA). 1992. National Study of Chemical Residues in Fish. U.S. Environmental Protection Agency, Office of Science and Technology, Washington, D.C. EPA 823-R-92-008.

U.S. Environmental Protection Agency (USEPA). 1995. Guidance for Assessing Chemical Contaminant Data for Use in Fish Advisories, Volume 1: Fish Sampling and Analysis, Second Edition. U.S. Environmental Protection Agency, Office of Water, Washington, D.C. EPA 823-R-95-007.

U.S. Environmental Protection Agency (USEPA). 1999a. EPA Requirements for Quality Assurance Project Plans. U.S. Environmental Protection Agency, Quality Assurance Division, Washington, D.C. Interim Final. EPA/QA/R-5.

U.S. Environmental Protection Agency (USEPA). 1999b. National Study of Chemical Residues in Lake Fish Tissue: Study Design. U.S. Environmental Protection Agency, Office of Science and Technology, Washington, D.C.

U.S. Environmental Protection Agency (USEPA). 1999c. Update: Listing of Fish and Wildlife Advisories. Fact Sheet. U.S. Environmental Protection Agency, Office of Water, Washington, D.C. EPA 823-F-99-005.

Appendix A

Randomly Selected List of Target Lakes

OWOW99 Site-ID	Long. DD	Lat. DD	Lake Name	St.	County	Lake Area (ha)	Yr.	Longitude			Latitude		
								Deg	Min	Sec	Deg	Min	Sec
OWOW99-0022	-87.3315	33.9487		AL	WALKER	4	1	87	19	53.40	33	56	55.32
OWOW99-0072	-85.0969	31.9344	WALTER F GEORGE RES	AL	BARBOUR	15282	1	85	5	48.84	31	56	3.84
OWOW99-0136	-87.1320	34.0809	Lewis Smith Lake	AL	WINSTON	8793	1	87	7	55.20	34	4	51.24
OWOW99-0147	-86.0285	31.1530		AL	GENEVA	6	1	86	1	42.60	31	9	10.80
OWOW99-0161	-87.0398	34.6639	Wheeler Lake	AL		27143	1	87	2	23.21	34	39	49.93
OWOW99-0197	-87.3823	32.0983		AL	WILCOX	4738	1	87	22	56.28	32	5	53.88
OWOW99-0486	-86.3385	33.3199		AL	TALLADEGA	16	2	86	20	18.60	33	19	11.64
OWOW99-0511	-85.5705	34.0993		AL	CHEROKEE	48	2	85	34	13.80	34	5	57.48
OWOW99-0547	-87.1202	33.3243		AL	JEFFERSON	7	2	87	7	12.72	33	19	27.48
OWOW99-0560	-85.1396	32.4487	Clark's lake	AL	RUSSELL	3	2	85	8	22.56	32	26	55.32
OWOW99-0622	-85.3245	31.1539	Pine Lake	AL	HOUSTON	3	2	85	19	28.20	31	9	14.04
OWOW99-0647	-85.7285	32.4403		AL	MACON	3	2	85	43	42.60	32	26	25.08
OWOW99-0923	-87.2961	31.4475	Kelley Lake	AL	MONROE	2	3	87	17	45.96	31	26	51.00
OWOW99-0947	-87.4428	32.8863	Payne Lake	AL	HALE	46	3	87	26	34.08	32	53	10.68
OWOW99-0961	-86.2978	34.1229		AL	MARSHALL	3	3	86	17	52.08	34	7	22.44
OWOW99-1072	-86.7524	32.3890	Jones Bluff Lake	AL	LOWNDES	5063	3	86	45	8.64	32	23	20.40
OWOW99-1436	-85.9938	33.6132		AL	CALHOUN	7	4	85	59	37.68	33	36	47.52
OWOW99-1472	-86.0533	32.3590		AL	MONTGOMERY	1	4	86	3	11.88	32	21	32.40
OWOW99-1497	-86.3959	33.1694	Candles Lake	AL	TALLADEGA	26	4	86	23	45.24	33	10	9.84
OWOW99-0047	-93.9120	35.2279		AR	LOGAN	6	1	93	54	43.20	35	13	40.44
OWOW99-0097	-91.9745	34.9647		AR	LONOKE	3	1	91	58	28.20	34	57	52.92
OWOW99-0122	-91.3425	35.7756		AR	INDEPENDENCE	2	1	91	20	33.00	35	46	32.16
OWOW99-0143	-92.2420	36.4063	NORFOLK L	AR	BAXTER	7546	1	92	14	31.20	36	24	22.68
OWOW99-0171	-91.7495	34.1479		AR	JEFFERSON	5	1	91	44	58.20	34	8	52.44
OWOW99-0222	-90.3498	34.8895		AR	CRITTENDEN	2	1	90	20	59.28	34	53	22.20
OWOW99-0497	-93.8325	35.5319		AR	FRANKLIN	166	2	93	49	57.00	35	31	54.84

OWOW99 Site-ID	Long. DD	Lat. DD	Lake Name	St.	County	Lake Area (ha)	Yr.	Longitude			Latitude		
								Deg	Min	Sec	Deg	Min	Sec
OWOW99-0523	-93.7021	33.2410		AR	LAFAYETTE	21	2	93	42	7.56	33	14	27.60
OWOW99-0571	-92.1631	35.5610		AR	CLEBURNE	4803	2	92	9	47.16	35	33	39.60
OWOW99-0623	-93.1037	34.1847		AR	CLARK	152	2	93	6	13.32	34	11	4.92
OWOW99-0922	-91.7543	34.7737		AR	LONOKE	7	3	91	45	15.48	34	46	25.32
OWOW99-0971	-91.0572	34.2542		AR	PHILLIPS	2	3	91	3	25.92	34	15	15.12
OWOW99-1022	-90.7207	34.7570		AR	LEE	1	3	90	43	14.52	34	45	25.20
OWOW99-1046	-92.5217	34.5720		AR	SALINE	4	3	92	31	18.12	34	34	19.20
OWOW99-1371	-93.3895	34.6169	L OUCHITA	AR	GARLAND	15816	4	93	23	22.20	34	37	0.84
OWOW99-1396	-91.3933	34.4663		AR	ARKANSAS	24	4	91	23	35.88	34	27	58.68
OWOW99-1398	-94.0040	33.7506	Millwood Lake	AR	LITTLE RIVER	9668	4	94	0	14.40	33	45	2.16
OWOW99-1447	-91.6630	34.9565		AR	PRAIRIE	6	4	91	39	46.80	34	57	23.40
OWOW99-1449	-93.2374	34.2571	Degray Lake	AR	CLARK	4576	4	93	14	14.64	34	15	25.56
OWOW99-1493	-93.9496	36.3670	BEAVER RES	AR	BENTON	8311	4	93	56	58.56	36	22	1.20
OWOW99-1522	-90.3370	34.9306		AR	CRITTENDEN	872	4	90	20	13.20	34	55	50.16
OWOW99-0045	-111.2923	33.5876	Apache Lake	AZ	MARICOPA	888	1	111	17	32.28	33	35	15.36
OWOW99-0569	-109.5274	34.1152	Carnero Lake	AZ	APACHE	27	2	109	31	38.64	34	6	54.72
OWOW99-0595	-110.0558	34.3240	White Lake	AZ	NAVAJO	10	2	110	3	20.88	34	19	26.40
OWOW99-1020	-114.6362	35.4539	L MOJAVE	AZ	MOHAVE	10446	3	114	38	10.32	35	27	14.04
OWOW99-1044	-109.4212	33.9097	Crescent Lake	AZ	APACHE	64	3	109	25	16.32	33	54	34.92
OWOW99-1520	-114.3657	34.5009	L HAVASU	AZ	MOHAVE	7223	4	114	21	56.52	34	30	3.24
OWOW99-0001	-120.4193	41.9579	Goose Lake	CA		0	1	120	25	9.59	41	57	28.58
OWOW99-0002	-119.2349	36.8747		CA	FRESNO	2337	1	119	14	5.64	36	52	28.92
OWOW99-0018	-114.5414	33.5724		CA	RIVERSIDE	7	1	114	32	29.04	33	34	20.64
OWOW99-0026	-123.7864	40.0640		CA	HUMBOLDT	25	1	123	47	11.04	40	3	50.40
OWOW99-0027	-119.7812	38.1627		CA	TUOLUMNE	3	1	119	46	52.32	38	9	45.72
OWOW99-0051	-122.1163	37.7861		CA	ALAMEDA	309	1	122	6	58.68	37	47	9.96

OWOW99 Site-ID	Long. DD	Lat. DD	Lake Name	St.	County	Lake Area (ha)	Yr.	Longitude			Latitude		
								Deg	Min	Sec	Deg	Min	Sec
OWOW99-0077	-120.4489	40.5446		CA	LASSEN	11	1	120	26	56.04	40	32	40.56
OWOW99-0118	-116.8157	34.0550		CA	SAN BERNARDINO	74	1	116	48	56.52	34	3	18.00
OWOW99-0126	-122.7705	39.0266	Clear Lake	CA	LAKE	15956	1	122	46	13.80	39	1	35.76
OWOW99-0128	-118.1459	35.0290		CA	KERN	1	1	118	8	45.24	35	1	44.40
OWOW99-0151	-121.3599	39.5799	Lake Oroville	CA	BUTTE	1730	1	121	21	35.64	39	34	47.64
OWOW99-0201	-122.1881	41.4196		CA	SISKIYOU	294	1	122	11	17.16	41	25	10.56
OWOW99-0452	-118.6846	37.1583		CA	FRESNO	2	2	118	41	4.56	37	9	29.88
OWOW99-0468	-116.7810	32.9124		CA	SAN DIEGO	590	2	116	46	51.60	32	54	44.64
OWOW99-0476	-122.3975	40.8253	SHASTA L	CA	SHASTA	5468	2	122	23	51.00	40	49	31.08
OWOW99-0477	-119.0280	38.0050	Mono Lake	CA	MONO	16302	2	119	1	40.80	38	0	18.00
OWOW99-0503	-121.1275	37.0439	San Luis Res	CA	MERCED	5214	2	121	7	39.00	37	2	38.04
OWOW99-0551	-120.5188	40.2272		CA	PLUMAS	2	2	120	31	7.68	40	13	37.92
OWOW99-0577	-120.8588	37.1225		CA	MERCED	6	2	120	51	31.68	37	7	21.00
OWOW99-0601	-121.1105	38.4797		CA	SACRAMENTO	2	2	121	6	37.80	38	28	46.92
OWOW99-0603	-118.1823	34.2971		CA	LOS ANGELES	33	2	118	10	56.28	34	17	49.56
OWOW99-0651	-121.1289	41.5180		CA	MODOC	55	2	121	7	44.04	41	31	4.80
OWOW99-0953	-119.4818	36.0562		CA	TULARE	44	3	119	28	54.48	36	3	22.32
OWOW99-0977	-118.9776	37.3797		CA	FRESNO	755	3	118	58	39.36	37	22	46.92
OWOW99-1002	-120.8496	37.8529		CA	STANISLAUS	719	3	120	50	58.56	37	51	10.44
OWOW99-1026	-120.1551	38.9911		CA	EL DORADO	8	3	120	9	18.36	38	59	27.96
OWOW99-1076	-121.8182	38.0663		CA	SOLANO	476	3	121	49	5.52	38	3	58.68
OWOW99-1118	-115.8314	33.3079	Salton Sea	CA	IMPERIAL	94543	3	115	49	53.04	33	18	28.44
OWOW99-1351	-120.4928	39.4114		CA	NEVADA	89	4	120	29	34.08	39	24	41.04
OWOW99-1378	-120.8460	35.3417		CA	SAN LUIS OBISPO	858	4	120	50	45.60	35	20	30.12
OWOW99-1402	-117.9516	36.1876		CA	INYO	687	4	117	57	5.76	36	11	15.36
OWOW99-1418	-118.0490	33.6996		CA	ORANGE	6	4	118	2	56.40	33	41	58.56

OWOW99 Site-ID	Long. DD	Lat. DD	Lake Name	St.	County	Lake Area (ha)	Yr.	Longitude			Latitude		
								Deg	Min	Sec	Deg	Min	Sec
OWOW99-1426	-122.7696	40.8951	Claire Engle	CA	TRINITY	6757	4	122	46	10.56	40	53	42.36
OWOW99-1427	-119.4148	37.6232		CA	MADERA	4	4	119	24	53.28	37	37	23.52
OWOW99-1502	-121.9981	37.4396		CA	SANTA CLARA	61	4	121	59	53.16	37	26	22.56
OWOW99-1526	-120.7485	38.7982		CA	EL DORADO	9	4	120	44	54.60	38	47	53.52
OWOW99-1528	-120.4040	34.9692		CA	SANTA BARBARA	941	4	120	24	14.40	34	58	9.12
OWOW99-1551	-120.1479	41.7342	Upper Alkali Lake (dry)	CA	MODOC	11196	4	120	8	52.44	41	44	3.12
OWOW99-0019	-102.3823	37.4862		CO	BACA	22	1	102	22	56.28	37	29	10.32
OWOW99-0028	-104.7065	40.0127		CO	WELD	6	1	104	42	23.40	40	0	45.72
OWOW99-0078	-107.3337	39.7020		CO	GARFIELD	9	1	107	20	1.32	39	42	7.20
OWOW99-0176	-108.0405	39.0011		CO	DELTA	6	1	108	2	25.80	39	0	3.96
OWOW99-0469	-102.2763	40.0854		CO	YUMA	7	2	102	16	34.68	40	5	7.44
OWOW99-0478	-105.0226	40.5558		CO	LARIMER	3	2	105	1	21.36	40	33	20.88
OWOW99-0552	-106.2063	40.0177		CO	GRAND	546	2	106	12	22.68	40	1	3.72
OWOW99-0903	-104.4631	40.8024		CO	WELD	1	3	104	27	47.16	40	48	8.64
OWOW99-0969	-106.5172	37.4731		CO	RIO GRANDE	6	3	106	31	1.92	37	28	23.16
OWOW99-0994	-103.7030	38.1887		CO	CROWLEY	2239	3	103	42	10.80	38	11	19.32
OWOW99-1003	-105.0564	40.7888		CO	LARIMER	10	3	105	3	23.04	40	47	19.68
OWOW99-1394	-107.8886	37.8946		CO	SAN MIGUEL	2	4	107	53	18.96	37	53	40.56
OWOW99-1428	-105.3511	40.8820		CO	LARIMER	108	4	105	21	3.96	40	52	55.20
OWOW99-1569	-104.8543	39.6397		CO	ARAPAHOE	347	4	104	51	15.48	39	38	22.92
OWOW99-0117	-71.9430	42.0115	Quinebaug River	CT	WINDHAM	11	1	71	56	34.80	42	0	41.40
OWOW99-0938	-73.4959	41.3409	Rainbow Lake	CT	FAIRFIELD	15	3	73	29	45.24	41	20	27.24
OWOW99-1117	-72.9549	41.9704	Barkhamsted Reservoir	CT	LITCHFIELD	891	3	72	57	17.64	41	58	13.44
OWOW99-1538	-72.7665	41.5074	Foster Lake	CT	NEW HAVEN	4	4	72	45	59.40	41	30	26.64
OWOW99-0025	-81.8469	28.4754		FL	LAKE	78	1	81	50	48.84	28	28	31.44
OWOW99-0050	-81.9264	28.6951		FL	LAKE	10	1	81	55	35.04	28	41	42.36

OWOW99 Site-ID	Long. DD	Lat. DD	Lake Name	St.	County	Lake Area (ha)	Yr.	Longitude			Latitude		
								Deg	Min	Sec	Deg	Min	Sec
OWOW99-0060	-82.3394	30.0367		FL	UNION	363	1	82	20	21.84	30	2	12.12
OWOW99-0075	-81.5695	24.7544		FL	MONROE	24	1	81	34	10.20	24	45	15.84
OWOW99-0100	-82.3507	28.9242	Tsala Apopka Lake	FL		0	1	82	21	2.52	28	55	27.23
OWOW99-0125	-80.9404	27.9389		FL	OSCEOLA	2	1	80	56	25.44	27	56	20.04
OWOW99-0135	-81.8437	29.1804		FL	MARION	140	1	81	50	37.32	29	10	49.44
OWOW99-0150	-80.7960	27.1752	Lake Okeechobee	FL	OKEECHOBEE	4830	1	80	47	45.60	27	10	30.72
OWOW99-0160	-80.5882	27.7803		FL	INDIAN RIVER	3	1	80	35	17.52	27	46	49.08
OWOW99-0175	-82.2463	27.5928		FL	MANATEE	2	1	82	14	46.68	27	35	34.08
OWOW99-0200	-84.9271	30.6812		FL	JACKSON	3	1	84	55	37.56	30	40	52.32
OWOW99-0225	-82.2637	28.3406		FL	PASCO	62	1	82	15	49.32	28	20	26.16
OWOW99-0475	-81.6036	28.5265		FL	ORANGE	76	2	81	36	12.96	28	31	35.40
OWOW99-0498	-86.3279	30.4826		FL	WALTON	2	2	86	19	40.44	30	28	57.36
OWOW99-0500	-81.6221	28.6191	Lake Apopka	FL	ORANGE	12439	2	81	37	19.56	28	37	8.76
OWOW99-0510	-80.9802	28.2704		FL	OSCEOLA	5	2	80	58	48.72	28	16	13.44
OWOW99-0525	-81.1501	26.4247		FL	HENDRY	24	2	81	9	0.36	26	25	28.92
OWOW99-0535	-81.2028	29.5902		FL	FLAGLER	111	2	81	12	10.08	29	35	24.72
OWOW99-0550	-80.6610	24.9913		FL	MONROE	53	2	80	39	39.60	24	59	28.68
OWOW99-0574	-81.9198	29.0737		FL	MARION	7	2	81	55	11.28	29	4	25.32
OWOW99-0600	-82.2659	27.9661		FL	HILLSBOROUGH	22	2	82	15	57.24	27	57	57.96
OWOW99-0610	-81.6416	29.4031		FL	PUTNAM	3	2	81	38	29.76	29	24	11.16
OWOW99-0625	-80.2610	26.0262		FL	BROWARD	5	2	80	15	39.60	26	1	34.32
OWOW99-0650	-82.5276	29.4948		FL	ALACHUA	7	2	82	31	39.36	29	29	41.28
OWOW99-0675	-81.8420	27.8500		FL	POLK	130	2	81	50	31.20	27	51	0.00
OWOW99-0925	-81.8724	28.9253		FL	LAKE	9	3	81	52	20.64	28	55	31.08
OWOW99-0960	-81.4955	28.6981		FL	ORANGE	23	3	81	29	43.80	28	41	53.16
OWOW99-0972	-85.4548	30.7352		FL	WASHINGTON	5	3	85	27	17.28	30	44	6.72

OWOW99 Site-ID	Long. DD	Lat. DD	Lake Name	St.	County	Lake Area (ha)	Yr.	Longitude			Latitude		
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OWOW99-0975	-81.4995	27.7380		FL	POLK	1400	3	81	29	58.20	27	44	16.80
OWOW99-1000	-81.3723	28.2325	L TOHOPEKALIGA	FL	OSCEOLA	7643	3	81	22	20.28	28	13	57.00
OWOW99-1025	-82.6637	28.2997		FL	PASCO	8	3	82	39	49.32	28	17	58.92
OWOW99-1050	-82.3075	27.4795		FL	MANATEE	593	3	82	18	27.00	27	28	46.20
OWOW99-1060	-81.8922	29.6284		FL	PUTNAM	18	3	81	53	31.92	29	37	42.24
OWOW99-1075	-85.7628	30.4994		FL	WASHINGTON	20	3	85	45	46.08	30	29	57.84
OWOW99-1100	-82.3138	26.8617		FL	CHARLOTTE	16	3	82	18	49.68	26	51	42.12
OWOW99-1125	-81.0849	28.1410		FL	OSCEOLA	7	3	81	5	5.64	28	8	27.60
OWOW99-1385	-81.4253	28.9124		FL	LAKE	3	4	81	25	31.08	28	54	44.64
OWOW99-1400	-81.8260	26.8045		FL	CHARLOTTE	6	4	81	49	33.60	26	48	16.20
OWOW99-1425	-81.4320	28.1606		FL	OSCEOLA	57	4	81	25	55.20	28	9	38.16
OWOW99-1450	-81.7713	28.8391		FL	LAKE	2	4	81	46	16.68	28	50	20.76
OWOW99-1475	-83.5613	30.0024		FL	TAYLOR	6	4	83	33	40.68	30	0	8.64
OWOW99-1485	-82.1732	29.4535	Orange Lake	FL		5142	4	82	10	23.66	29	27	12.46
OWOW99-1500	-80.9613	25.3195		FL	MONROE	50	4	80	57	40.68	25	19	10.20
OWOW99-1525	-81.9134	27.7037		FL	POLK	113	4	81	54	48.24	27	42	13.32
OWOW99-1535	-80.8242	28.9187		FL	VOLUSIA	4	4	80	49	27.12	28	55	7.32
OWOW99-1550	-81.8328	26.3086		FL	COLLIER	13	4	81	49	58.08	26	18	30.96
OWOW99-1575	-81.7677	27.9878		FL	POLK	259	4	81	46	3.72	27	59	16.08
OWOW99-0011	-82.0992	32.5078		GA	CANDLER	8	1	82	5	57.12	32	30	28.08
OWOW99-0036	-84.6784	31.9560		GA	STEWART	1	1	84	40	42.24	31	57	21.60
OWOW99-0061	-83.8010	34.6489		GA	WHITE	16	1	83	48	3.60	34	38	56.04
OWOW99-0086	-85.1335	33.0623	West Point Lake	GA	TROUP	9215	1	85	8	0.60	33	3	44.28
OWOW99-0111	-83.2689	31.5345		GA	IRWIN	3	1	83	16	8.04	31	32	4.20
OWOW99-0185	-82.4576	31.0359		GA	WARE	4	1	82	27	27.36	31	2	9.24
OWOW99-0186	-82.7802	34.0842		GA	ELBERT	2	1	82	46	48.72	34	5	3.12

OWOW99 Site-ID	Long. DD	Lat. DD	Lake Name	St.	County	Lake Area (ha)	Yr.	Longitude			Latitude		
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OWOW99-0461	-82.2751	32.5185		GA	EMANUEL	6	2	82	16	30.36	32	31	6.60
OWOW99-0586	-83.1705	31.6930		GA	BEN HILL	3	2	83	10	13.80	31	41	34.80
OWOW99-0636	-83.2274	34.0646		GA	MADISON	33	2	83	13	38.64	34	3	52.56
OWOW99-0661	-82.7082	32.8112		GA	WASHINGTON	13	2	82	42	29.52	32	48	40.32
OWOW99-0911	-83.4105	33.0359		GA	JONES	1	3	83	24	37.80	33	2	9.24
OWOW99-0950	-84.3761	30.6983		GA	GRADY	13	3	84	22	33.96	30	41	53.88
OWOW99-0986	-81.6357	32.9502		GA	SCREVEN	2	3	81	38	8.52	32	57	0.72
OWOW99-1011	-84.6197	32.3871		GA	MARION	10	3	84	37	10.92	32	23	13.56
OWOW99-1035	-84.6319	34.1368		GA	CHEROKEE	4661	3	84	37	54.84	34	8	12.48
OWOW99-1085	-82.5690	31.0989		GA	WARE	3	3	82	34	8.40	31	5	56.04
OWOW99-1097	-83.8326	30.8728		GA	THOMAS	5	3	83	49	57.36	30	52	22.08
OWOW99-1111	-82.7243	31.2453		GA	ATKINSON	3	3	82	43	27.48	31	14	43.08
OWOW99-1360	-84.9227	33.6541		GA	CARROLL	6	4	84	55	21.72	33	39	14.76
OWOW99-1386	-85.2008	34.2992		GA	FLOYD	12	4	85	12	2.88	34	17	57.12
OWOW99-1411	-83.8231	31.1853		GA	COLQUITT	4	4	83	49	23.16	31	11	7.08
OWOW99-1461	-82.3983	33.6589	J Strom Thurmond Res	GA	COLUMBIA	10307	4	82	23	53.88	33	39	32.04
OWOW99-1511	-83.2477	31.8803		GA	WILCOX	40	4	83	14	51.72	31	52	49.08
OWOW99-1547	-84.9136	30.7852	L SEMINOLE	GA	SEMINOLE	5138	4	84	54	48.96	30	47	6.72
OWOW99-1561	-83.2858	33.2307	Lake Sinclair	GA	PUTNAM	2071	4	83	17	8.88	33	13	50.52
OWOW99-0082	-95.7467	43.3695		IA	OSCEOLA	6	1	95	44	48.12	43	22	10.20
OWOW99-0165	-93.6948	42.8389	Morse Lake	IA	WRIGHT	41	1	93	41	41.28	42	50	20.04
OWOW99-0540	-93.7902	40.8780	Unnamed lake	IA	DECATUR	3	2	93	47	24.72	40	52	40.80
OWOW99-0615	-95.8102	40.7771	Percival Lake	IA	FREMONT	6	2	95	48	36.72	40	46	37.56
OWOW99-0907	-94.8276	43.4883	Eagle Lake	IA	EMMET	82	3	94	49	39.36	43	29	17.88
OWOW99-0965	-92.3738	40.9740	Sand pit	IA	WAPELLO	13	3	92	22	25.68	40	58	26.40
OWOW99-1040	-93.7316	41.7532	Saylorville Lake	IA	POLK	2041	3	93	43	53.76	41	45	11.52

OWOW99 Site-ID	Long. DD	Lat. DD	Lake Name	St.	County	Lake Area (ha)	Yr.	Longitude			Latitude		
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OWOW99-1090	-94.2594	41.5498	Diamondhead Lake	IA	GUTHRIE	40	3	94	15	33.84	41	32	59.28
OWOW99-1432	-94.8721	42.9460	Rush Lake	IA	PALO ALTO	178	4	94	52	19.56	42	56	45.60
OWOW99-0079	-117.0784	44.6758	Brownlee Reservoir	ID	WASHINGTON	6071	1	117	4	42.35	44	40	32.74
OWOW99-0127	-111.1113	43.2436	PALISADES RES	ID	BONNEVILLE	6062	1	111	6	40.68	43	14	36.96
OWOW99-0177	-112.9475	42.7355		ID	POWER	6	1	112	56	50.86	42	44	7.94
OWOW99-0553	-114.6393	43.7787		ID	BLAINE	8	2	114	38	21.44	43	46	43.39
OWOW99-0554	-116.8576	48.5679	Priest Lake	ID	BONNER	9454	2	116	51	27.50	48	34	4.37
OWOW99-0627	-111.3329	42.0037	Bear Lake	ID		28329	2	111	19	58.48	42	0	13.32
OWOW99-0904	-115.9208	45.0938		ID	VALLEY	3	3	115	55	14.81	45	5	37.50
OWOW99-1028	-115.8469	45.0996		ID	VALLEY	3	3	115	50	48.88	45	5	58.45
OWOW99-1452	-111.5860	42.9042	Blackfoot Reservoir	ID	CARIBOU	6475	4	111	35	9.67	42	54	15.01
OWOW99-0015	-88.7835	37.7733	Unnamed lake	IL	WILLIAMSON	6	1	88	47	0.60	37	46	23.88
OWOW99-0041	-88.6600	41.6475	Buck Lake	IL	DE KALB	4	1	88	39	36.00	41	38	51.00
OWOW99-0091	-89.2082	41.0500	Unnamed lake	IL	MARSHALL	2	1	89	12	29.52	41	2	60.00
OWOW99-0115	-89.8931	39.4512	Otter Lake	IL	MACOUPIN	126	1	89	53	35.16	39	27	4.32
OWOW99-0140	-90.6031	41.4549	Unnamed lake	IL	ROCK ISLAND	2	1	90	36	11.16	41	27	17.64
OWOW99-0190	-89.3736	38.5090	Unnamed lake	IL	CLINTON	7	1	89	22	24.96	38	30	32.40
OWOW99-0491	-87.5327	41.6645	Wolf Lake	IL	COOK	323	2	87	31	57.72	41	39	52.20
OWOW99-0515	-89.5855	40.5838	Unnamed lake	IL	TAZEWELL	17	2	89	35	7.80	40	35	1.68
OWOW99-0916	-89.3615	41.2039	Unnamed lake	IL	PUTNAM	31	3	89	21	41.40	41	12	14.04
OWOW99-0990	-89.8377	38.2833	Unnamed lake	IL	ST CLAIR	4	3	89	50	15.72	38	16	59.88
OWOW99-1065	-88.9741	38.0812	Rend Lake	IL	FRANKLIN	833	3	88	58	26.76	38	4	52.32
OWOW99-1115	-90.2936	40.1154	Crane Lake	IL	MASON	73	3	90	17	36.96	40	6	55.44
OWOW99-1390	-89.9905	40.3401	McHarry Pond	IL	MASON	6	4	89	59	25.80	40	20	24.36
OWOW99-1415	-90.0621	38.9224	Unnamed lake	IL	MADISON	5	4	90	3	43.56	38	55	20.64
OWOW99-1441	-88.2174	41.2945	Unnamed lake	IL	WILL	25	4	88	13	2.64	41	17	40.20

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OWOW99-1465	-88.5078	37.7370	Unnamed lake	IL	SALINE	8	4	88	30	28.08	37	44	13.20
OWOW99-1565	-89.4784	37.8187	Kinkaid Lake	IL	JACKSON	972	4	89	28	42.24	37	49	7.32
OWOW99-0141	-86.7549	39.7330	Baire Lake	IN	PUTNAM	3	1	86	45	17.64	39	43	58.80
OWOW99-0191	-85.5530	40.7298		IN	HUNTINGTON	102	1	85	33	10.80	40	43	47.28
OWOW99-0216	-86.3262	39.0996		IN	BROWN	59	1	86	19	34.32	39	5	58.56
OWOW99-0466	-85.8336	41.2229	Winona Lake	IN	KOSCIUSKO	216	2	85	50	0.96	41	13	22.44
OWOW99-0590	-87.5286	39.0672	Turtle Creek Reservoir	IN	SULLIVAN	606	2	87	31	42.96	39	4	1.92
OWOW99-0616	-85.9425	39.9282	Geist Reservoir	IN	HAMILTON	683	2	85	56	33.00	39	55	41.52
OWOW99-0940	-87.2352	39.0350	Round Lake	IN	GREENE	8	3	87	14	6.72	39	2	6.00
OWOW99-0941	-85.6889	38.7726	Hardy Lake	IN	SCOTT	316	3	85	41	20.04	38	46	21.36
OWOW99-1416	-86.3382	41.6112	(gravel pit)	IN	ST JOSEPH	18	4	86	20	17.52	41	36	40.32
OWOW99-1516	-85.0236	41.6268	Fox Lake	IN	STEUBEN	53	4	85	1	24.96	41	37	36.48
OWOW99-1541	-86.9530	40.0349	Unnamed lake	IN	MONTGOMERY	5	4	86	57	10.80	40	2	5.64
OWOW99-0044	-97.7495	38.4030		KS	MCPHERSON	12	1	97	44	58.20	38	24	10.80
OWOW99-0119	-96.7013	39.4570	Tuttle Creek Lake	KS	POTTAWATOMIE	2153	1	96	42	4.68	39	27	25.20
OWOW99-0168	-94.7718	38.0787		KS	LINN	2	1	94	46	18.48	38	4	43.32
OWOW99-0218	-95.8411	38.2688		KS	COFFEY	3	1	95	50	27.96	38	16	7.68
OWOW99-0568	-95.9745	38.5312		KS	LYON	2	2	95	58	28.20	38	31	52.32
OWOW99-0619	-98.4462	37.9214		KS	RENO	6	2	98	26	46.32	37	55	17.04
OWOW99-0668	-96.2702	38.4313		KS	LYON	1	2	96	16	12.72	38	25	52.68
OWOW99-0943	-96.5009	37.3790		KS	ELK	2	3	96	30	3.24	37	22	44.40
OWOW99-0993	-98.0562	37.9161		KS	RENO	2	3	98	3	22.32	37	54	57.96
OWOW99-1019	-99.2180	39.5027		KS	ROOKS	2	3	99	13	4.80	39	30	9.72
OWOW99-1119	-95.6010	39.5024		KS	JACKSON	5	3	95	36	3.60	39	30	8.64
OWOW99-1368	-95.1619	38.5113		KS	FRANKLIN	10	4	95	9	42.84	38	30	40.68
OWOW99-1519	-98.2340	39.1122		KS	LINCOLN	3	4	98	14	2.40	39	6	43.92

OWOW99 Site-ID	Long. DD	Lat. DD	Lake Name	St.	County	Lake Area (ha)	Yr.	Longitude			Latitude		
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OWOW99-1568	-95.6120	37.8871		KS	WOODSON	2	4	95	36	43.20	37	53	13.56
OWOW99-0037	-86.1933	37.3077		KY	EDMONSON	808	1	86	11	35.88	37	18	27.72
OWOW99-0465	-88.4942	37.2822		KY	LIVINGSTON	13	2	88	29	39.12	37	16	55.92
OWOW99-0640	-85.6473	37.7978		KY	NELSON	3	2	85	38	50.28	37	47	52.08
OWOW99-0641	-84.7146	37.6850		KY	BOYLE	1084	2	84	42	52.56	37	41	6.00
OWOW99-1012	-85.2710	37.2335		KY	ADAIR	3191	3	85	16	15.60	37	14	0.60
OWOW99-1062	-84.7791	36.9740		KY	PULASKI	231	3	84	46	44.76	36	58	26.40
OWOW99-1361	-88.1218	37.0234		KY	LYON	8	4	88	7	18.48	37	1	24.24
OWOW99-0024	-89.8980	29.6683	Unknown	LA	PLAQUEMINES	4	1	89	53	52.80	29	40	5.88
OWOW99-0074	-92.3439	31.5566	Unknown	LA	GRANT	11	1	92	20	38.04	31	33	23.76
OWOW99-0124	-90.1274	30.1925	Lake Ponchartrain	LA		#####	1	90	7	38.46	30	11	33.14
OWOW99-0149	-93.4958	32.1731	Unknown	LA	RED RIVER	8	1	93	29	44.88	32	10	23.16
OWOW99-0173	-93.3868	32.4381	Lake Bisteneau	LA	WEBSTER	6283	1	93	23	12.48	32	26	17.16
OWOW99-0174	-93.4135	30.8376	Unknown	LA	BEAUREGARD	5	1	93	24	48.60	30	50	15.36
OWOW99-0199	-93.0480	29.9418	Unknown	LA	CAMERON	602	1	93	2	52.80	29	56	30.48
OWOW99-0224	-89.8645	30.6719	Unknown	LA	WASHINGTON	34	1	89	51	52.20	30	40	18.84
OWOW99-0474	-89.7188	30.1291	Lake St. Catherine?	LA	ORLEANS	3109	2	89	43	7.68	30	7	44.76
OWOW99-0549	-91.9919	31.6677	Unknown	LA	CATAHOULA	19	2	91	59	30.84	31	40	3.72
OWOW99-0575	-89.5451	29.4416	Allen Bay	LA	PLAQUEMINES	16	2	89	32	42.36	29	26	29.76
OWOW99-0599	-91.6058	30.7783	Unknown	LA	POINTE COUPEE	55	2	91	36	20.88	30	46	41.88
OWOW99-0649	-91.5507	29.9396	Unknown	LA	ST MARY	10	2	91	33	2.52	29	56	22.56
OWOW99-0674	-89.2912	29.9980	Indian Mound Bay?	LA	ST BERNARD	82	2	89	17	28.32	29	59	52.80
OWOW99-0999	-90.5717	29.9208	Lac des Allemands	LA		5957	3	90	34	18.05	29	55	14.95
OWOW99-1048	-93.7341	32.3496	Unknown	LA	CADDO	8	3	93	44	2.76	32	20	58.56
OWOW99-1074	-93.4158	30.2565	Unknown	LA	CALCASIEU	64	3	93	24	56.88	30	15	23.40
OWOW99-1099	-92.0605	32.5879	Unknown	LA	OUACHITA	6	3	92	3	37.80	32	35	16.44

OWOW99 Site-ID	Long. DD	Lat. DD	Lake Name	St.	County	Lake Area (ha)	Yr.	Longitude			Latitude		
								Deg	Min	Sec	Deg	Min	Sec
OWOW99-1124	-89.3347	29.8557	Christmas Camp Lake?	LA	ST BERNARD	21	3	89	20	4.92	29	51	20.52
OWOW99-1374	-92.3550	30.7519	Miller's Lake	LA	EVANGELINE	1246	4	92	21	18.00	30	45	6.84
OWOW99-1375	-89.6034	29.5372	California Bay?	LA	PLAQUEMINES	1302	4	89	36	12.24	29	32	13.92
OWOW99-1424	-89.8663	29.6994	Unknown	LA	PLAQUEMINES	6	4	89	51	58.68	29	41	57.84
OWOW99-1474	-91.7324	30.7120	Unknown	LA	POINTE COUPEE	16	4	91	43	56.64	30	42	43.20
OWOW99-1499	-91.5497	31.4483	Old River	LA	CONCORDIA	3	4	91	32	58.92	31	26	53.88
OWOW99-1548	-91.9289	32.8645	Lake Bussy Brake	LA	MOREHOUSE	848	4	91	55	44.04	32	51	52.20
OWOW99-1549	-91.2212	32.0874	Lake Bruin	LA	TENSAS	7	4	91	13	16.32	32	5	14.64
OWOW99-0017	-71.1075	41.7031	North Watuppa Pond	MA	BRISTOL	674	1	71	6	27.00	41	42	11.16
OWOW99-0043	-71.0101	42.6178	Prichards Pond	MA	ESSEX	5	1	71	0	36.36	42	37	4.08
OWOW99-0467	-70.0928	41.7239	Seymour Pond	MA	BARNSTABLE	69	2	70	5	34.08	41	43	26.04
OWOW99-0493	-71.9988	42.5272	Bents Pond	MA	WORCESTER	9	2	71	59	55.68	42	31	37.92
OWOW99-0567	-72.3087	42.4015	QUABBIN RES	MA	WORCESTER	9536	2	72	18	31.32	42	24	5.40
OWOW99-0592	-71.8687	42.1353	Carbuncle Pond	MA	WORCESTER	4	2	71	52	7.32	42	8	7.08
OWOW99-0992	-71.6047	42.2435	Westboro Reservoir	MA	WORCESTER	1	3	71	36	16.92	42	14	36.60
OWOW99-1017	-70.6276	41.3523	Big Homer Pond	MA	DUKES	13	3	70	37	39.36	41	21	8.28
OWOW99-1443	-71.7692	42.5272	Rockwell Pond	MA	WORCESTER	4	4	71	46	9.12	42	31	37.92
OWOW99-0563	-76.3694	38.8416	Holligans Snooze Inlet	MD	QUEEN ANNES	10	2	76	22	9.84	38	50	29.76
OWOW99-0564	-75.8240	38.0482	Annemessex River	MD	SOMERSET	1710	2	75	49	26.40	38	2	53.52
OWOW99-1439	-79.3215	39.5043	Deep Creek Lake	MD	GARRETT	1449	4	79	19	17.40	39	30	15.48
OWOW99-0042	-69.8635	45.1845	Heald Ponds	ME	SOMERSET	9	1	69	51	48.60	45	11	4.20
OWOW99-0092	-68.2270	44.8762	Lower Middle Branch Pond	ME	HANCOCK	104	1	68	13	37.20	44	52	34.32
OWOW99-0166	-68.0095	44.9731	Stiles Lake	ME	HANCOCK	17	1	68	0	34.20	44	58	23.16
OWOW99-0192	-70.5879	44.1533	Little Pond	ME	OXFORD	11	1	70	35	16.44	44	9	11.88
OWOW99-0210	-69.3678	45.8203	Ragged Lake	ME	PISCATAQUIS	1047	1	69	22	4.08	45	49	13.08
OWOW99-0217	-70.8049	44.0539	Moose Pond	ME	CUMBERLAND	679	1	70	48	17.64	44	3	14.04

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OWOW99-0492	-69.7220	45.6786	Moosehead Lake	ME		30308	2	69	43	19.09	45	40	43.10
OWOW99-0516	-67.8207	45.1594	Little River Lake	ME	WASHINGTON	29	2	67	49	14.52	45	9	33.84
OWOW99-0566	-68.4982	44.6483	Green Lake	ME	HANCOCK	1267	2	68	29	53.52	44	38	53.88
OWOW99-0617	-70.3992	44.0212	Middle Range Pond	ME	ANDROSCOGGIN	15	2	70	23	57.12	44	1	16.32
OWOW99-0635	-68.7143	47.1056	Wallagrass Lakes	ME	AROOSTOOK	100	2	68	42	51.48	47	6	20.16
OWOW99-0642	-69.4533	44.0098	McCurdy Pond	ME	LINCOLN	80	2	69	27	11.88	44	0	35.28
OWOW99-0660	-69.2984	46.1063	Cuxabexis Lake	ME	PISCATAQUIS	247	2	69	17	54.24	46	6	22.68
OWOW99-0667	-70.8288	44.8868	Mooselookmeguntic Lake	ME	OXFORD	6597	2	70	49	43.68	44	53	12.48
OWOW99-0917	-67.4489	44.7863	Hadley Lake	ME	WASHINGTON	680	3	67	26	56.04	44	47	10.68
OWOW99-0935	-69.0874	46.5076	Peaked Mountain Pond	ME	PISCATAQUIS	5	3	69	5	14.64	46	30	27.36
OWOW99-0966	-67.6423	45.6216	Spednik Lake	ME	WASHINGTON	5571	3	67	38	32.28	45	37	17.76
OWOW99-0967	-70.8544	43.9330	Unnamed	ME	OXFORD	7	3	70	51	15.84	43	55	58.80
OWOW99-1041	-68.9015	45.6875	Pemadumcook Lake	ME	PISCATAQUIS	7453	3	68	54	5.40	45	41	15.00
OWOW99-1067	-70.0304	44.4858	Parker Pond	ME	KENNEBEC	611	3	70	1	49.44	44	29	8.88
OWOW99-1366	-69.1132	44.2628	Megunticook Lake	ME	WALDO	574	4	69	6	47.52	44	15	46.08
OWOW99-1391	-68.3404	45.6371	Unnamed	ME	AROOSTOOK	5	4	68	20	25.44	45	38	13.56
OWOW99-1392	-70.8790	43.6124	Mud Pond	ME	YORK	8	4	70	52	44.40	43	36	44.64
OWOW99-1442	-70.2829	45.6192	Wood Pond	ME	SOMERSET	819	4	70	16	58.44	45	37	9.12
OWOW99-1460	-69.0628	46.3064	Chandler Pond	ME	PISCATAQUIS	52	4	69	3	46.08	46	18	23.04
OWOW99-1560	-69.8704	45.9150	Seboomook Lake	ME	SOMERSET	2571	4	69	52	13.44	45	54	54.00
OWOW99-0009	-85.0115	45.3005	Walloon Lake	MI	EMMET	1832	1	85	0	41.40	45	18	1.80
OWOW99-0014	-83.4149	43.0991	West Lake #1	MI	LAPEER	1	1	83	24	53.64	43	5	56.76
OWOW99-0016	-86.3480	41.9271	Lake Chapin	MI	BERRIEN	220	1	86	20	52.80	41	55	37.56
OWOW99-0116	-85.3849	42.3976	Torch Lake	MI	KALAMAZOO	13	1	85	23	5.64	42	23	51.36
OWOW99-0159	-87.0669	46.3338	Dorsey Lake	MI	ALGER	16	1	87	4	0.84	46	20	1.68

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OWOW99-0184	-85.5683	44.5887	Hackman Lake	MI	GRAND TRAVERSE	7	1	85	34	5.88	44	35	19.32
OWOW99-0189	-85.3889	44.0069	Boot Lake	MI	OSCEOLA	3	1	85	23	20.04	44	0	24.84
OWOW99-0209	-85.9940	46.2242	T Pool	MI	SCHOOLCRAFT	95	1	85	59	38.40	46	13	27.12
OWOW99-0214	-84.7831	42.5946	Unnamed	MI	EATON	6	1	84	46	59.16	42	35	40.56
OWOW99-0459	-84.6654	45.4599	Burt Lake	MI	CHEBOYGAN	0	2	84	39	55.58	45	27	35.78
OWOW99-0464	-83.5643	42.6691	White Lake	MI	OAKLAND	198	2	83	33	51.48	42	40	8.76
OWOW99-0509	-88.0520	46.5487	Mud Lake	MI	MARQUETTE	2	2	88	3	7.20	46	32	55.32
OWOW99-0534	-88.8515	46.8884	Lake Roland	MI	HOUGHTON	107	2	88	51	5.40	46	53	18.24
OWOW99-0539	-85.2538	43.3313	Spring Lake	MI	MONTCALM	22	2	85	15	13.68	43	19	52.68
OWOW99-0589	-84.2805	44.4161	Horseshoe Lake	MI	OGEMAW	14	2	84	16	49.80	44	24	57.96
OWOW99-0591	-86.1248	42.2524	Dyer Lake	MI	VAN BUREN	12	2	86	7	29.28	42	15	8.64
OWOW99-0609	-89.1549	46.1527	Birch Lake	MI	GOGEBIC	84	2	89	9	17.64	46	9	9.72
OWOW99-0634	-85.3152	44.9782	Torch Lake	MI	ANTRIM	7503	2	85	18	54.72	44	58	41.52
OWOW99-0639	-84.7165	44.3499	Houghton Lake	MI	ROSCOMMON	8068	2	84	42	59.40	44	20	59.64
OWOW99-0659	-84.7507	45.6852	Lake Paradise	MI	EMMET	767	2	84	45	2.52	45	41	6.72
OWOW99-0664	-84.2082	42.1467	Norvell Lake	MI	JACKSON	12	2	84	12	29.52	42	8	48.12
OWOW99-0934	-86.0872	46.5590	Cloverleaf Lake	MI	ALGER	5	3	86	5	13.92	46	33	32.40
OWOW99-0939	-86.1309	44.0559	Mud Lake	MI	MASON	2	3	86	7	51.24	44	3	21.24
OWOW99-0984	-83.5097	45.0968	Seven Mile Pond	MI	ALPENA	556	3	83	30	34.92	45	5	48.48
OWOW99-0989	-83.5418	42.6689	Grass Lake	MI	OAKLAND	15	3	83	32	30.48	42	40	8.04
OWOW99-1016	-85.5184	41.8123	Tamarack Lake	MI	ST JOSEPH	52	3	85	31	6.24	41	48	44.28
OWOW99-1064	-85.3592	43.1538	Little Wabasis Lake	MI	KENT	14	3	85	21	33.12	43	9	13.68
OWOW99-1116	-85.5206	42.1948	Long Lake	MI	KALAMAZOO	198	3	85	31	14.16	42	11	41.28
OWOW99-1384	-87.9626	46.6857	Lake Margaret	MI	MARQUETTE	52	4	87	57	45.36	46	41	8.52
OWOW99-1414	-84.2279	41.7327		MI	LENAWEE	6	4	84	13	40.44	41	43	57.72
OWOW99-1459	-86.0181	44.8708	Glen Lake	MI	LEELANAU	560	4	86	1	5.16	44	52	14.88

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OWOW99-1464	-83.5503	43.1634	Unnamed	MI	GENESEE	2	4	83	33	1.08	43	9	48.24
OWOW99-1489	-84.5111	43.1184		MI	GRATIOT	1375	4	84	30	39.96	43	7	6.24
OWOW99-1534	-89.5863	46.5082	Gogebic Lake	MI		5170	4	89	35	10.50	46	30	29.56
OWOW99-1559	-83.6934	46.0584		MI	CHIPPEWA	29	4	83	41	36.24	46	3	30.24
OWOW99-1564	-83.8948	42.5038	Chenango Lake (Lime Lake)	MI	LIVINGSTON	12	4	83	53	41.28	42	30	13.68
OWOW99-0005	-95.1647	47.3415	LaSalle	MN	HUBBARD	90	1	95	9	52.92	47	20	29.40
OWOW99-0010	-90.9426	48.0215	Mora	MN	COOK	94	1	90	56	33.36	48	1	17.40
OWOW99-0031	-94.9994	46.8863	Long	MN	HUBBARD	784	1	94	59	57.84	46	53	10.68
OWOW99-0032	-96.3941	45.5205	Unnamed	MN	BIG STONE	6	1	96	23	38.76	45	31	13.80
OWOW99-0033	-93.5870	45.4859	Cantlin	MN	SHERBURNE	41	1	93	35	13.20	45	29	9.24
OWOW99-0035	-91.1740	48.0688	Kekekabic	MN	LAKE	691	1	91	10	26.40	48	4	7.68
OWOW99-0055	-93.5770	47.1810	Pokegama Lake	MN	ITASCA	6313	1	93	34	37.20	47	10	51.60
OWOW99-0057	-95.6236	45.7808	Unnamed	MN	DOUGLAS	8	1	95	37	24.96	45	46	50.88
OWOW99-0081	-95.9084	46.7805	Fox	MN	BECKER	56	1	95	54	30.24	46	46	49.80
OWOW99-0083	-94.2868	46.3518	White Sand	MN	CROW WING	159	1	94	17	12.48	46	21	6.48
OWOW99-0085	-90.4943	47.8652	Dick	MN	COOK	53	1	90	29	39.48	47	51	54.72
OWOW99-0106	-95.4026	47.1965	Glanders	MN	CLEARWATER	20	1	95	24	9.36	47	11	47.40
OWOW99-0110	-92.8239	48.5579	Namakan Lake	MN		5686	1	92	49	25.93	48	33	28.51
OWOW99-0130	-92.1057	47.3197	Linwood Lake??	MN	ST LOUIS	3	1	92	6	20.52	47	19	10.92
OWOW99-0132	-95.8216	45.6412	Unnamed	MN	STEVENS	8	1	95	49	17.76	45	38	28.32
OWOW99-0155	-94.2687	46.4872	Hubert	MN	CROW WING	511	1	94	16	7.32	46	29	13.92
OWOW99-0157	-94.6157	45.3749	Rice	MN	STEARNS	618	1	94	36	56.52	45	22	29.64
OWOW99-0180	-94.2727	46.9586	Woman	MN	CASS	2396	1	94	16	21.72	46	57	30.96
OWOW99-0182	-93.5168	44.7412	O'Dowd	MN	SCOTT	118	1	93	31	0.48	44	44	28.32
OWOW99-0183	-92.7562	46.3802	Sturgeon	MN	PINE	666	1	92	45	22.32	46	22	48.72
OWOW99-0205	-94.5317	47.4232	Cass Lake	MN		12050	1	94	31	53.94	47	25	23.48

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OWOW99-0207	-93.2741	43.7920	Geneva	MN	FREEBORN	694	1	93	16	26.76	43	47	31.20
OWOW99-0455	-93.5638	47.5288	Pickerel	MN	ITASCA	16	2	93	33	49.68	47	31	43.68
OWOW99-0460	-91.5581	47.6143	South McDougal	MN	LAKE	113	2	91	33	29.16	47	36	51.48
OWOW99-0481	-95.5381	47.0775	Many Point	MN	BECKER	677	2	95	32	17.16	47	4	39.00
OWOW99-0482	-96.0942	45.3626	Unnamed	MN	SWIFT	11	2	96	5	39.12	45	21	45.36
OWOW99-0483	-94.0019	45.5746	Unnamed	MN	BENTON	2	2	94	0	6.84	45	34	28.56
OWOW99-0485	-92.0778	48.2927	LAC LA CROIX	MN	ST LOUIS	5769	2	92	4	40.08	48	17	33.72
OWOW99-0505	-96.0091	46.3972	Wolf	MN	OTTER TAIL	16	2	96	0	32.76	46	23	49.92
OWOW99-0507	-94.1022	45.3217	Bass	MN	WRIGHT	86	2	94	6	7.92	45	19	18.12
OWOW99-0530	-92.9112	46.8136	Moberg	MN	ST LOUIS	14	2	92	54	40.32	46	48	48.96
OWOW99-0532	-94.5663	45.5608	Lauer	MN	STEARNS	5	2	94	33	58.68	45	33	38.88
OWOW99-0555	-95.8735	46.6991	Unnamed	MN	OTTER TAIL	5	2	95	52	24.60	46	41	56.76
OWOW99-0556	-94.4671	43.6875	Buffalo	MN	MARTIN	103	2	94	28	1.56	43	41	15.00
OWOW99-0557	-95.3693	46.0890	Unnamed	MN	DOUGLAS	7	2	95	22	9.48	46	5	20.40
OWOW99-0559	-90.6578	47.9947	Trump	MN	COOK	14	2	90	39	28.08	47	59	40.92
OWOW99-0581	-95.7940	47.4786	Unnamed	MN	MAHNOMEN	8	2	95	47	38.40	47	28	42.96
OWOW99-0583	-92.8785	45.2609	Unnamed	MN	WASHINGTON	21	2	92	52	42.60	45	15	39.24
OWOW99-0585	-93.1006	48.2787	Unnamed	MN	KOOCHICHING	1	2	93	6	2.16	48	16	43.32
OWOW99-0605	-92.2737	46.9391	Fish Lake Reservoir	MN	ST LOUIS	1214	2	92	16	25.32	46	56	20.76
OWOW99-0607	-95.3151	45.5396	Swenoda	MN	POPE	117	2	95	18	54.36	45	32	22.56
OWOW99-0630	-93.9130	46.4961	Agate	MN	CROW WING	66	2	93	54	46.80	46	29	45.96
OWOW99-0632	-93.1093	44.8687	Unnamed	MN	DAKOTA	2	2	93	6	33.48	44	52	7.32
OWOW99-0633	-92.8199	46.3146	First	MN	PINE	31	2	92	49	11.64	46	18	52.56
OWOW99-0655	-94.8418	47.6093	Fox	MN	BELTRAMI	64	2	94	50	30.48	47	36	33.48
OWOW99-0905	-95.9718	48.3293	Mud Lake	MN		9591	3	95	58	18.48	48	19	45.55
OWOW99-0906	-95.4222	46.3986	East Leaf	MN	OTTER TAIL	170	3	95	25	19.92	46	23	54.96

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OWOW99-0908	-94.6005	46.2537	Shamineau	MN	MORRISON	548	3	94	36	1.80	46	15	13.32
OWOW99-0910	-90.9841	48.0774	Howard Lake	MN	COOK	69	3	90	59	2.76	48	4	38.64
OWOW99-0930	-95.5579	47.6234	Unnamed	MN	POLK	13	3	95	33	28.44	47	37	24.24
OWOW99-0932	-91.6562	44.0415	Winona	MN	WINONA	32	3	91	39	22.32	44	2	29.40
OWOW99-0933	-93.6431	46.2381	Miles Lacs	MN	MILLE LACS	51700	3	93	38	35.16	46	14	17.16
OWOW99-0955	-95.9853	46.0809	Four Mile	MN	GRANT	79	3	95	59	7.08	46	4	51.24
OWOW99-0957	-95.0638	45.2362	Florida	MN	KANDIYOHI	211	3	95	3	49.68	45	14	10.32
OWOW99-0980	-95.0251	47.9620	Lower Red Lake	MN		0	3	95	1	30.29	47	57	43.02
OWOW99-0985	-91.2914	47.8110	Isabella	MN	LAKE	667	3	91	17	29.04	47	48	39.60
OWOW99-1006	-96.1832	47.6754	Unnamed	MN	POLK	7	3	96	10	59.52	47	40	31.44
OWOW99-1008	-93.0521	45.1318	Amelia	MN	ANOKA	50	3	93	3	7.56	45	7	54.48
OWOW99-1010	-91.7537	47.8983	White Iron	MN	LAKE	2404	3	91	45	13.32	47	53	53.88
OWOW99-1030	-96.2475	46.8293	Unnamed	MN	CLAY	12	3	96	14	51.00	46	49	45.48
OWOW99-1032	-93.6363	44.9095	Minnetonka	MN	HENNEPIN	1700	3	93	38	10.68	44	54	34.20
OWOW99-1034	-93.0806	48.5981		MN	ST LOUIS	1	3	93	4	50.16	48	35	53.16
OWOW99-1055	-94.3916	47.1557	Leech Lake	MN		44280	3	94	23	29.69	47	9	20.48
OWOW99-1057	-93.8774	44.2542	Washington	MN	LE SUEUR	582	3	93	52	38.64	44	15	15.12
OWOW99-1080	-93.4365	47.2130	Unnamed	MN	ITASCA	7	3	93	26	11.40	47	12	46.80
OWOW99-1082	-95.6831	45.8481	Unnamed	MN	DOUGLAS	14	3	95	40	59.16	45	50	53.16
OWOW99-1110	-92.3073	47.8681	Vermilion Lake	MN		19875	3	92	18	26.17	47	52	5.20
OWOW99-1355	-95.8561	46.5908	McCollume	MN	OTTER TAIL	6	4	95	51	21.96	46	35	26.88
OWOW99-1357	-94.4259	44.9814	Belle	MN	MEEKER	362	4	94	25	33.24	44	58	53.04
OWOW99-1359	-94.9752	49.3608		MN	LAKE OF THE WOODS	114	4	94	58	30.72	49	21	38.88
OWOW99-1380	-95.7993	46.3063	North Turtle	MN	OTTER TAIL	601	4	95	47	57.48	46	18	22.68
OWOW99-1382	-94.8427	45.1832	Diamond	MN	KANDIYOHI	626	4	94	50	33.72	45	10	59.52
OWOW99-1410	-91.9695	48.0107	Slim	MN	ST LOUIS	131	4	91	58	10.20	48	0	38.52

OWOW99 Site-ID	Long. DD	Lat. DD	Lake Name	St.	County	Lake Area (ha)	Yr.	Longitude			Latitude		
								Deg	Min	Sec	Deg	Min	Sec
OWOW99-1430	-95.2037	48.9700	Lake of the Woods	MN		#####	4	95	12	13.25	48	58	12.07
OWOW99-1431	-95.7495	46.4793	Dead	MN	OTTER TAIL	2988	4	95	44	58.20	46	28	45.48
OWOW99-1435	-91.0591	48.1618	Unnamed	MN	LAKE	2	4	91	3	32.76	48	9	42.48
OWOW99-1455	-93.7461	46.6502	Blind	MN	AITKIN	120	4	93	44	45.96	46	39	0.72
OWOW99-1457	-92.3071	44.5155	Lake Pepin	MN	GOODHUE	5075	4	92	18	25.56	44	30	55.80
OWOW99-1458	-92.5169	46.2546	Unnamed	MN	PINE	10	4	92	31	0.84	46	15	16.56
OWOW99-1480	-94.7573	47.1668	Kabekona	MN	HUBBARD	975	4	94	45	26.28	47	10	0.48
OWOW99-1482	-93.7620	44.4942	Thomas	MN	LE SUEUR	48	4	93	45	43.20	44	29	39.12
OWOW99-1506	-95.6548	46.9790	Flat	MN	BECKER	741	4	95	39	17.28	46	58	44.40
OWOW99-1508	-93.7467	45.1509	Charlotte	MN	WRIGHT	94	4	93	44	48.12	45	9	3.24
OWOW99-1510	-91.4933	47.9748	Ennis	MN	LAKE	9	4	91	29	35.88	47	58	29.28
OWOW99-1530	-93.5769	47.4910	Spider	MN	ITASCA	546	4	93	34	36.84	47	29	27.60
OWOW99-1532	-95.3562	45.9641	Carlos	MN	DOUGLAS	1040	4	95	21	22.32	45	57	50.76
OWOW99-1555	-95.1158	47.7441	Unnamed	MN	BELTRAMI	6	4	95	6	56.88	47	44	38.76
OWOW99-0040	-91.0894	38.8129		MO	WARREN	10	1	91	5	21.84	38	48	46.44
OWOW99-0215	-89.6157	37.2404		MO	CAPE GIRARDEAU	128	1	89	36	56.52	37	14	25.44
OWOW99-0490	-92.1693	38.9230		MO	BOONE	9	2	92	10	9.48	38	55	22.80
OWOW99-0518	-92.9303	38.5295		MO	MORGAN	4	2	92	55	49.08	38	31	46.20
OWOW99-0543	-93.3961	36.5590	TABLE ROCK L	MO	STONE	12410	2	93	23	45.96	36	33	32.40
OWOW99-0618	-93.6900	37.3760		MO	DADE	3	2	93	41	24.00	37	22	33.60
OWOW99-0665	-91.3675	38.0854		MO	CRAWFORD	2	2	91	22	3.00	38	5	7.44
OWOW99-0912	-89.1714	36.7866		MO	MISSISSIPPI	8	3	89	10	17.04	36	47	11.76
OWOW99-0915	-91.6021	39.2285		MO	AUDRAIN	8	3	91	36	7.56	39	13	42.60
OWOW99-0968	-91.5418	37.7095		MO	DENT	2	3	91	32	30.48	37	42	34.20
OWOW99-1015	-90.4555	38.7693		MO	ST LOUIS	2	3	90	27	19.80	38	46	9.48
OWOW99-1043	-94.3974	38.7750		MO	CASS	12	3	94	23	50.64	38	46	30.00

OWOW99 Site-ID	Long. DD	Lat. DD	Lake Name	St.	County	Lake Area (ha)	Yr.	Longitude			Latitude		
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OWOW99-1068	-94.5328	37.2897		MO	JASPER	14	3	94	31	58.08	37	17	22.92
OWOW99-1393	-93.5719	38.1700	TRUMAN RES	MO	ST CLAIR	9246	4	93	34	18.84	38	10	12.00
OWOW99-1437	-89.4497	36.5535		MO	NEW MADRID	10	4	89	26	58.92	36	33	12.60
OWOW99-1440	-91.7100	39.5129	Mark Twain Lake	MO	RALLS	3551	4	91	42	36.00	39	30	46.44
OWOW99-1490	-92.0686	40.0317		MO	KNOX	4	4	92	4	6.96	40	1	54.12
OWOW99-1515	-91.9827	38.9651		MO	CALLAWAY	9	4	91	58	57.72	38	57	54.36
OWOW99-0071	-91.1601	33.5082		MS	WASHINGTON	47	1	91	9	36.36	33	30	29.52
OWOW99-0098	-88.5441	32.5750		MS	LAUDERDALE	12	1	88	32	38.76	32	34	30.00
OWOW99-0146	-89.8375	33.4770		MS	CARROLL	50	1	89	50	15.00	33	28	37.20
OWOW99-0172	-90.8814	32.7220		MS	SHARKEY	10	1	90	52	53.04	32	43	19.20
OWOW99-0472	-88.1104	34.8551		MS	TISHOMINGO	636	2	88	6	37.44	34	51	18.36
OWOW99-0521	-90.4070	34.0076		MS	TALLAHATCHIE	75	2	90	24	25.20	34	0	27.36
OWOW99-0522	-90.1623	32.2687		MS	RANKIN	4	2	90	9	44.28	32	16	7.32
OWOW99-0546	-90.9335	33.2578		MS	WASHINGTON	6	2	90	56	0.60	33	15	28.08
OWOW99-0572	-89.5842	31.6186		MS	COVINGTON	3	2	89	35	3.12	31	37	6.96
OWOW99-0621	-90.2024	33.5276		MS	LEFLORE	1016	2	90	12	8.64	33	31	39.36
OWOW99-0624	-90.7826	32.0304		MS	CLAIBORNE	37	2	90	46	57.36	32	1	49.44
OWOW99-0672	-89.7129	34.4486	Sardis Lake	MS		23684	2	89	42	46.48	34	26	55.03
OWOW99-0949	-89.0588	30.8977		MS	STONE	1	3	89	3	31.68	30	53	51.72
OWOW99-0997	-89.8621	34.1474	Enid Lake	MS		11230	3	89	51	43.45	34	8	50.68
OWOW99-1047	-88.9294	32.8226		MS	NESHOBA	4	3	88	55	45.84	32	49	21.36
OWOW99-1096	-89.7340	33.8319	Grenada Lake	MS		26154	3	89	44	2.36	33	49	54.80
OWOW99-1122	-88.7112	33.7215		MS	MONROE	5	3	88	42	40.32	33	43	17.40
OWOW99-1372	-90.3281	32.2211		MS	HINDS	2	4	90	19	41.16	32	13	15.96
OWOW99-1397	-90.1054	32.5856		MS	MADISON	19	4	90	6	19.44	32	35	8.16
OWOW99-1422	-89.7740	34.0039		MS	YALOBUSHA	6	4	89	46	26.40	34	0	14.04

OWOW99 Site-ID	Long. DD	Lat. DD	Lake Name	St.	County	Lake Area (ha)	Yr.	Longitude			Latitude		
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OWOW99-1448	-89.3108	31.3542		MS	FORREST	30	4	89	18	38.88	31	21	15.12
OWOW99-1546	-90.0304	33.5995		MS	CARROLL	8	4	90	1	49.44	33	35	58.20
OWOW99-1572	-90.0714	34.7557		MS	DE SOTO	3249	4	90	4	17.04	34	45	20.52
OWOW99-1574	-89.5315	30.3291		MS	HANCOCK	2	4	89	31	53.40	30	19	44.76
OWOW99-0029	-111.2044	48.3775		MT	LIBERTY	1076	1	111	12	15.84	48	22	39.00
OWOW99-0053	-108.1039	45.1706	BIGHORN L	MT	BIG HORN	6943	1	108	6	14.04	45	10	14.16
OWOW99-0054	-113.7489	48.6154		MT	GLACIER	1	1	113	44	56.04	48	36	55.44
OWOW99-0084	-106.7435	47.7335	FORT PECK RES	MT	VALLEY	98766	1	106	44	36.60	47	44	0.60
OWOW99-0104	-107.4776	47.1298		MT	GARFIELD	6	1	107	28	39.36	47	7	47.28
OWOW99-0129	-113.3498	48.8880		MT	GLACIER	6	1	113	20	59.28	48	53	16.80
OWOW99-0153	-113.1950	44.9973		MT	BEAVERHEAD	10	1	113	11	42.00	44	59	50.28
OWOW99-0178	-104.6747	45.6234		MT	CARTER	8	1	104	40	28.92	45	37	24.24
OWOW99-0181	-104.5234	47.2791		MT	DAWSON	2055	1	104	31	24.24	47	16	44.76
OWOW99-0454	-113.9012	47.5570		MT	MISSOULA	23	2	113	54	4.32	47	33	25.20
OWOW99-0479	-111.5479	47.4160		MT	CASCADE	20	2	111	32	52.44	47	24	57.60
OWOW99-0558	-106.4908	47.6953		MT	GARFIELD	2	2	106	29	26.88	47	41	43.08
OWOW99-0579	-111.5445	46.3699		MT	BROADWATER	196	2	111	32	40.20	46	22	11.64
OWOW99-0604	-115.2348	48.5864	L KOOCANUSA	MT	LINCOLN	11463	2	115	14	5.28	48	35	11.04
OWOW99-0909	-108.5948	48.3476		MT	BLAINE	59	3	108	35	41.28	48	20	51.36
OWOW99-0952	-111.2497	44.7870	Hebgen Lake	MT		0	3	111	14	58.74	44	47	13.02
OWOW99-1004	-111.9909	48.0219		MT	TETON	9	3	111	59	27.24	48	1	18.84
OWOW99-1029	-115.6653	48.2210		MT	LINCOLN	52	3	115	39	55.08	48	13	15.60
OWOW99-1079	-113.8897	48.1628		MT	FLATHEAD	9	3	113	53	22.92	48	9	46.08
OWOW99-1104	-115.4069	47.2692		MT	MINERAL	3	3	115	24	24.84	47	16	9.12
OWOW99-1358	-106.0834	47.8205		MT	MCCONE	5	4	106	5	0.24	47	49	13.80
OWOW99-1404	-113.2146	47.0855		MT	POWELL	2	4	113	12	52.56	47	5	7.80

OWOW99 Site-ID	Long. DD	Lat. DD	Lake Name	St.	County	Lake Area (ha)	Yr.	Longitude			Latitude		
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OWOW99-1429	-112.4335	47.9460		MT	TETON	1296	4	112	26	0.60	47	56	45.60
OWOW99-1434	-107.2259	48.7055		MT	PHILLIPS	231	4	107	13	33.24	48	42	19.80
OWOW99-1504	-111.6821	45.4309		MT	MADISON	1491	4	111	40	55.56	45	25	51.24
OWOW99-1529	-114.0767	48.8717		MT	FLATHEAD	1	4	114	4	36.12	48	52	18.12
OWOW99-0062	-81.4559	35.3010	Kings Mt. Reservoir	NC	CLEVELAND	552	1	81	27	21.24	35	18	3.60
OWOW99-0137	-80.4275	35.7108	Impoundment/Grants Creek	NC	ROWAN	6	1	80	25	39.00	35	42	38.88
OWOW99-0139	-76.4601	35.7687	Phelps Lake	NC		6718	1	76	27	36.18	35	46	7.36
OWOW99-0162	-79.0165	35.7732	B Everett Jordan Lake	NC	CHATHAM	5787	1	79	0	59.40	35	46	23.52
OWOW99-0164	-78.0190	36.5410	Lake Gaston	NC	WARREN	7951	1	78	1	8.40	36	32	27.60
OWOW99-0537	-80.9698	35.3508	Mt. Island Lake	NC	MECKLENBURG	1404	2	80	58	11.28	35	21	2.88
OWOW99-0611	-83.3703	35.4456	Impoundment/Oconoluftee River	NC	SWAIN	7	2	83	22	13.08	35	26	44.16
OWOW99-0612	-78.9274	35.1360	Smith Lake	NC	CUMBERLAND	34	2	78	55	38.64	35	8	9.60
OWOW99-0962	-79.8803	35.7551	Unnamed	NC	RANDOLPH	1	3	79	52	49.08	35	45	18.36
OWOW99-1037	-78.4574	35.2586	Unnamed	NC	SAMPSON	24	3	78	27	26.64	35	15	30.96
OWOW99-1112	-77.2761	34.7116	Unnamed	NC	ONSLOW	6	3	77	16	33.96	34	42	41.76
OWOW99-1387	-78.6858	36.0778	Unnamed	NC	GRANVILLE	1	4	78	41	8.88	36	4	40.08
OWOW99-1389	-77.2762	36.1907	Unnamed	NC	BERTIE	6	4	77	16	34.32	36	11	26.52
OWOW99-0006	-100.0630	46.7390	Long Lake	ND	KIDDER	1300	1	100	3	46.80	46	44	20.40
OWOW99-0030	-98.8053	48.2210	Devils Lake	ND	RAMSEY	7120	1	98	48	19.08	48	13	15.60
OWOW99-0034	-103.9666	48.6934		ND	DIVIDE	9	1	103	57	59.76	48	41	36.24
OWOW99-0105	-98.9742	48.2524		ND	RAMSEY	2196	1	98	58	27.12	48	15	8.64
OWOW99-0109	-100.2730	48.8584		ND	BOTTINEAU	5	1	100	16	22.80	48	51	30.24
OWOW99-0131	-100.9038	46.9226		ND	BURLEIGH	20	1	100	54	13.68	46	55	21.36
OWOW99-0156	-99.9637	47.4209		ND	WELLS	37	1	99	57	49.32	47	25	15.24
OWOW99-0456	-99.0408	47.1242		ND	STUTSMAN	3	2	99	2	26.88	47	7	27.12

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OWOW99-0480	-98.1807	47.8124		ND	NELSON	13	2	98	10	50.52	47	48	44.64
OWOW99-0484	-103.4168	48.2622		ND	WILLIAMS	60	2	103	25	0.48	48	15	43.92
OWOW99-0506	-99.1740	47.1297		ND	STUTSMAN	11	2	99	10	26.40	47	7	46.92
OWOW99-0580	-100.2759	47.8418		ND	SHERIDAN	24	2	100	16	33.24	47	50	30.48
OWOW99-0584	-102.3091	48.5432		ND	MOUNTRAIL	6	2	102	18	32.76	48	32	35.52
OWOW99-0606	-100.3287	47.7739		ND	SHERIDAN	8	2	100	19	43.32	47	46	26.04
OWOW99-0656	-98.9907	46.0214		ND	DICKEY	12	2	98	59	26.52	46	1	17.04
OWOW99-0956	-99.7841	47.0430		ND	KIDDER	1356	3	99	47	2.76	47	2	34.80
OWOW99-0981	-99.2248	46.6055		ND	LOGAN	4	3	99	13	29.28	46	36	19.80
OWOW99-1005	-99.8568	48.5667		ND	ROLETTE	49	3	99	51	24.48	48	34	0.12
OWOW99-1009	-102.0806	48.3434		ND	MOUNTRAIL	4	3	102	4	50.16	48	20	36.24
OWOW99-1081	-101.4909	47.9278		ND	WARD	52	3	101	29	27.24	47	55	40.08
OWOW99-1105	-97.8659	47.5268		ND	STEELE	5	3	97	51	57.24	47	31	36.48
OWOW99-1106	-97.8346	46.7275		ND	BARNES	13	3	97	50	4.56	46	43	39.00
OWOW99-1109	-100.2276	48.9943		ND	BOTTINEAU	20	3	100	13	39.36	48	59	39.48
OWOW99-1381	-99.5410	47.2677		ND	KIDDER	64	4	99	32	27.60	47	16	3.72
OWOW99-1405	-99.0504	47.6458		ND	EDDY	16	4	99	3	1.44	47	38	44.88
OWOW99-1406	-99.1631	46.9102		ND	STUTSMAN	12	4	99	9	47.16	46	54	36.72
OWOW99-1409	-99.9233	48.8529		ND	ROLETTE	5	4	99	55	23.88	48	51	10.44
OWOW99-1456	-99.4723	46.1183		ND	MCINTOSH	204	4	99	28	20.28	46	7	5.88
OWOW99-1505	-100.1783	48.1937		ND	PIERCE	10	4	100	10	41.88	48	11	37.32
OWOW99-1509	-101.9556	48.2697		ND	MOUNTRAIL	55	4	101	57	20.16	48	16	10.92
OWOW99-1531	-102.4403	47.9289		ND	MOUNTRAIL	2	4	102	26	25.08	47	55	44.04
OWOW99-0003	-99.1880	42.2988		NE	HOLT	37	1	99	11	16.80	42	17	55.68
OWOW99-0065	-96.3294	42.2335		NE	THURSTON	6	1	96	19	45.84	42	14	0.60
OWOW99-0094	-96.7822	41.2891		NE	SAUNDERS	3	1	96	46	55.92	41	17	20.76

OWOW99 Site-ID	Long. DD	Lat. DD	Lake Name	St.	County	Lake Area (ha)	Yr.	Longitude			Latitude		
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OWOW99-0103	-102.7355	42.0064		NE	BOX BUTTE	8	1	102	44	7.80	42	0	23.04
OWOW99-0453	-103.4950	41.9337		NE	SCOTTS BLUFF	784	2	103	29	42.00	41	56	1.32
OWOW99-0494	-100.4095	40.9410		NE	LINCOLN	226	2	100	24	34.20	40	56	27.60
OWOW99-0578	-102.3409	42.0069		NE	GARDEN	10	2	102	20	27.24	42	0	24.84
OWOW99-0594	-98.1846	40.0087		NE	NUCKOLLS	7	2	98	11	4.56	40	0	31.32
OWOW99-0919	-96.9633	41.4518		NE	COLFAX	5	3	96	57	47.88	41	27	6.48
OWOW99-0978	-101.7811	42.4001		NE	CHERRY	10	3	101	46	51.96	42	24	0.36
OWOW99-1103	-102.5531	42.2118		NE	SHERIDAN	7	3	102	33	11.16	42	12	42.48
OWOW99-1356	-98.1129	42.7988		NE	KNOX	28	4	98	6	46.44	42	47	55.68
OWOW99-1403	-101.8481	41.2503	L MCCONAUGHY	NE	KEITH	11464	4	101	50	53.16	41	15	1.08
OWOW99-1419	-95.6776	40.3263		NE	NEMAHA	2	4	95	40	39.36	40	19	34.68
OWOW99-1444	-101.5539	40.4322		NE	CHASE	652	4	101	33	14.04	40	25	55.92
OWOW99-1540	-96.3740	41.3094		NE	DOUGLAS	9	4	96	22	26.40	41	18	33.84
OWOW99-0142	-71.1640	43.0991	Unnamed	NH	ROCKINGHAM	5	1	71	9	50.40	43	5	56.76
OWOW99-0167	-71.3410	43.6026	Lake Winnepesaukee	NH	BELKNAP	18545	1	71	20	27.60	43	36	9.36
OWOW99-0517	-71.7674	43.6595	Newfound Lake	NH	GRAFTON	1718	2	71	46	2.64	43	39	34.20
OWOW99-0918	-71.7401	43.0228	Unnamed	NH	HILLSBOROUGH	8	3	71	44	24.36	43	1	22.08
OWOW99-1367	-71.9652	43.3070	Loch Lyndon Reservoir	NH	MERRIMACK	47	4	71	57	54.72	43	18	25.20
OWOW99-0013	-74.8627	39.7848		NJ	CAMDEN	4	1	74	51	45.72	39	47	5.28
OWOW99-0463	-74.2645	39.7364		NJ	OCEAN	18	2	74	15	52.20	39	44	11.04
OWOW99-0638	-74.2684	41.1211		NJ	PASSAIC	23	2	74	16	6.24	41	7	15.96
OWOW99-1063	-74.2473	40.8269		NJ	ESSEX	5	3	74	14	50.28	40	49	36.84
OWOW99-1413	-75.2780	39.3922		NJ	CUMBERLAND	3	4	75	16	40.80	39	23	31.92
OWOW99-1563	-74.9980	40.9226		NJ	WARREN	6	4	74	59	52.80	40	55	21.36
OWOW99-0095	-103.6595	35.0939	Arch Hurly Conservency Lake	NM	QUAY	39	1	103	39	34.20	35	5	38.04
OWOW99-0169	-107.6105	36.5178	Mavajo Reservoir	NM	RIO ARRIBA	1892	1	107	36	37.80	36	31	4.08

OWOW99 Site-ID	Long. DD	Lat. DD	Lake Name	St.	County	Lake Area (ha)	Yr.	Longitude			Latitude		
								Deg	Min	Sec	Deg	Min	Sec
OWOW99-0519	-105.0750	36.8757	No name playa lake	NM	COLFAX	6	2	105	4	30.00	36	52	32.52
OWOW99-1369	-104.3510	32.6128	Brantley Reservoir	NM		8498	4	104	21	3.46	32	36	46.19
OWOW99-1445	-103.9262	33.0108	No name playa lake	NM	CHAVES	1	4	103	55	34.32	33	0	38.88
OWOW99-0501	-118.3701	38.5316		NV	MINERAL	82	2	118	22	12.36	38	31	53.76
OWOW99-0652	-114.3731	36.2826	LAKE MEAD	NV	CLARK	39373	2	114	22	23.16	36	16	57.36
OWOW99-0902	-119.5533	40.0220	Pyramid Lake	NV	WASHOE	44233	3	119	33	11.88	40	1	19.20
OWOW99-0926	-115.4695	40.1724	Ruby Lake	NV	ELKO	38	3	115	28	10.20	40	10	20.64
OWOW99-0951	-118.3443	38.9805		NV	MINERAL	84	3	118	20	39.48	38	58	49.80
OWOW99-1102	-116.0292	38.9549		NV	NYE	269	3	116	1	45.12	38	57	17.64
OWOW99-1376	-118.3889	38.8915		NV	MINERAL	277	4	118	23	20.04	38	53	29.40
OWOW99-1451	-117.1533	41.4146	Chimney Reservoir	NV	HUMBOLDT	881	4	117	9	11.88	41	24	52.56
OWOW99-1552	-116.2257	36.3573		NV	NYE	138	4	116	13	32.52	36	21	26.28
OWOW99-0038	-75.5268	42.5710	Mead Pond	NY	CHENANGO	5	1	75	31	36.48	42	34	15.60
OWOW99-0063	-74.7667	41.7675	Lake Barnabee	NY	SULLIVAN	2	1	74	46	0.12	41	46	3.00
OWOW99-0067	-74.5002	44.1914	Tupper Lake	NY	FRANKLIN	2584	1	74	30	0.72	44	11	29.04
OWOW99-0088	-76.9186	42.6277	Seneca Lake	NY	YATES	17413	1	76	55	6.96	42	37	39.72
OWOW99-0113	-75.4139	44.2527	Sylvia Lake	NY	ST LAWRENCE	125	1	75	24	50.04	44	15	9.72
OWOW99-0114	-79.3778	42.1331	Chatauqua Lake	NY		5438	1	79	22	40.12	42	7	59.20
OWOW99-0138	-73.5965	42.1441	Copake Lake	NY	COLUMBIA	158	1	73	35	47.40	42	8	38.76
OWOW99-0488	-74.1190	42.2356	Colgate Lake	NY	GREENE	11	2	74	7	8.40	42	14	8.16
OWOW99-0538	-74.5199	41.6999	Unnamed	NY	SULLIVAN	7	2	74	31	11.64	41	41	59.64
OWOW99-0542	-74.4799	44.2537	Little Wolf Pond	NY	FRANKLIN	65	2	74	28	47.64	44	15	13.32
OWOW99-0562	-78.8773	42.6172	Unnamed	NY	ERIE	2	2	78	52	38.28	42	37	1.92
OWOW99-0588	-75.2920	44.1313	Unnamed	NY	LEWIS	1	2	75	17	31.20	44	7	52.68
OWOW99-0593	-73.7070	43.7154	Brant Lake	NY	WARREN	572	2	73	42	25.20	43	42	55.44
OWOW99-0613	-73.7041	41.5026	Southern South Lake	NY	PUTNAM	4	2	73	42	14.76	41	30	9.36

OWOW99 Site-ID	Long. DD	Lat. DD	Lake Name	St.	County	Lake Area (ha)	Yr.	Longitude			Latitude		
								Deg	Min	Sec	Deg	Min	Sec
OWOW99-0913	-75.9898	43.4336	Whitney Pond	NY	OSWEGO	32	3	75	59	23.28	43	26	0.96
OWOW99-1013	-74.1704	43.2291	Northville Lake	NY	FULTON	8	3	74	10	13.44	43	13	44.76
OWOW99-1018	-73.6822	43.3046	Unnamed	NY	WARREN	7	3	73	40	55.92	43	18	16.56
OWOW99-1362	-77.1845	43.2367	Unnamed	NY	WAYNE	1	4	77	11	4.20	43	14	12.12
OWOW99-1438	-76.2675	43.2846	Pennellville Pond	NY	OSWEGO	7	4	76	16	3.00	43	17	4.56
OWOW99-1463	-72.3292	40.9420	Goldfish Pond	NY	SUFFOLK	1	4	72	19	45.12	40	56	31.20
OWOW99-1488	-73.9587	41.1617	DeForest Lake	NY	ROCKLAND	94	4	73	57	31.32	41	9	42.12
OWOW99-1492	-74.5445	44.3974	Little Rock Pond	NY	FRANKLIN	7	4	74	32	40.20	44	23	50.64
OWOW99-1513	-74.8449	43.8336	Moose Lake	NY	HERKIMER	507	4	74	50	41.64	43	50	0.96
OWOW99-1518	-73.5952	43.8205	Grizzle Ocean	NY	ESSEX	8	4	73	35	42.72	43	49	13.80
OWOW99-1542	-73.9226	44.5617	Mud Pond	NY	CLINTON	45	4	73	55	21.36	44	33	42.12
OWOW99-0066	-82.5221	39.1898	Lake Rupert	OH	VINTON	133	1	82	31	19.56	39	11	23.28
OWOW99-0163	-81.7622	40.1524		OH	MUSKINGUM	1542	1	81	45	43.92	40	9	8.64
OWOW99-0513	-82.2338	39.9526	Unnamed	OH	LICKING	2	2	82	14	1.68	39	57	9.36
OWOW99-0541	-83.1276	40.6223	Unnamed	OH	MARION	2	2	83	7	39.36	40	37	20.28
OWOW99-0963	-83.5746	41.0512	Unnamed	OH	HANCOCK	1	3	83	34	28.56	41	3	4.32
OWOW99-1038	-81.6191	41.0094	Branch Lake #1	OH	SUMMIT	3	3	81	37	8.76	41	0	33.84
OWOW99-1066	-84.0402	39.8466	Unnamed	OH	GREENE	9	3	84	2	24.72	39	50	47.76
OWOW99-1091	-84.1174	39.5665	Unnamed	OH	WARREN	4	3	84	7	2.64	39	33	59.40
OWOW99-1114	-83.6802	41.6072	Unnamed	OH	LUCAS	5	3	83	40	48.72	41	36	25.92
OWOW99-1363	-81.2526	41.3496	Unnamed Lake	OH	GEAUGA	2	4	81	15	9.36	41	20	58.56
OWOW99-1388	-81.1403	40.7884	Hidden Valley Lake	OH	STARK	2	4	81	8	25.08	40	47	18.24
OWOW99-1466	-84.7258	39.2000	Unnamed Lake	OH	HAMILTON	5	4	84	43	32.88	39	12	0.00
OWOW99-1491	-82.2990	39.7671	Clouse Lake	OH	PERRY	13	4	82	17	56.40	39	46	1.56
OWOW99-1514	-80.5713	41.3069	Unnamed Lake	OH	TRUMBULL	2	4	80	34	16.68	41	18	24.84
OWOW99-0023	-96.3983	33.9319		OK	BRYAN	5	1	96	23	53.88	33	55	54.84

OWOW99 Site-ID	Long. DD	Lat. DD	Lake Name	St.	County	Lake Area (ha)	Yr.	Longitude			Latitude		
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OWOW99-0049	-94.8975	34.9442		OK	LE FLORE	1	1	94	53	51.00	34	56	39.12
OWOW99-0068	-95.5922	36.5821	OOLOGAH L	OK	ROGERS	6100	1	95	35	31.92	36	34	55.56
OWOW99-0069	-98.4909	35.1982		OK	CADDO	1654	1	98	29	27.24	35	11	53.52
OWOW99-0099	-95.4239	34.0857	Hugo Lake	OK	CHOCTAW	4950	1	95	25	26.04	34	5	8.52
OWOW99-0193	-95.3515	35.9778		OK	WAGONER	634	1	95	21	5.40	35	58	40.08
OWOW99-0194	-95.8195	35.3984		OK	MCINTOSH	590	1	95	49	10.20	35	23	54.24
OWOW99-0219	-96.3680	36.2481	KEYSTONE L	OK	PAWNEE	5455	1	96	22	4.80	36	14	53.16
OWOW99-0499	-94.6797	34.2803	BROKEN BOW L	OK	MCCURTAIN	5342	2	94	40	46.92	34	16	49.08
OWOW99-0544	-97.5291	34.9868		OK	MCCLAIN	12	2	97	31	44.76	34	59	12.48
OWOW99-0643	-95.3119	36.0564		OK	WAGONER	799	2	95	18	42.84	36	3	23.04
OWOW99-0644	-95.2973	35.4847		OK	MUSKOGEE	1	2	95	17	50.28	35	29	4.92
OWOW99-0669	-96.7935	36.6135		OK	OSAGE	2	2	96	47	36.60	36	36	48.60
OWOW99-0924	-96.2380	34.5780		OK	COAL	159	3	96	14	16.80	34	34	40.80
OWOW99-0944	-97.9921	35.5221		OK	CANADIAN	63	3	97	59	31.56	35	31	19.56
OWOW99-1023	-98.0545	34.3044		OK	STEPHENS	2076	3	98	3	16.20	34	18	15.84
OWOW99-1024	-95.1480	35.2651		OK	HASKELL	6	3	95	8	52.80	35	15	54.36
OWOW99-1069	-98.6438	35.4976		OK	CUSTER	4	3	98	38	37.68	35	29	51.36
OWOW99-1093	-95.1917	36.4339		OK	MAYES	8	3	95	11	30.12	36	26	2.04
OWOW99-1123	-96.5470	34.4187		OK	JOHNSTON	41	3	96	32	49.20	34	25	7.32
OWOW99-1423	-97.6357	34.5867		OK	STEPHENS	15	4	97	38	8.52	34	35	12.12
OWOW99-1468	-94.9559	35.7116	TENKILLER FERRY L	OK	CHEROKEE	5350	4	94	57	21.24	35	42	41.76
OWOW99-1469	-96.5172	35.1970		OK	SEMINOLE	145	4	96	31	1.92	35	11	49.20
OWOW99-1494	-99.3117	34.9257		OK	KIOWA	1810	4	99	18	42.12	34	55	32.52
OWOW99-1524	-94.8057	35.2691		OK	LE FLORE	1	4	94	48	20.52	35	16	8.76
OWOW99-1543	-95.6455	36.5462		OK	ROGERS	99	4	95	38	43.80	36	32	46.32
OWOW99-1544	-98.1776	36.7337		OK	ALFALFA	4041	4	98	10	39.36	36	44	1.32

OWOW99 Site-ID	Long. DD	Lat. DD	Lake Name	St.	County	Lake Area (ha)	Yr.	Longitude			Latitude		
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OWOW99-0076	-123.2389	44.5527		OR	LINN	7	1	123	14	20.11	44	33	9.54
OWOW99-0101	-119.2216	43.4362		OR	HARNEY	57	1	119	13	17.87	43	26	10.28
OWOW99-0451	-122.0948	42.9494	Crater Lake	OR	KLAMATH	5318	2	122	5	41.10	42	56	57.84
OWOW99-0576	-119.1225	43.2360	Harney Lake	OR		9844	2	119	7	21.14	43	14	9.67
OWOW99-0629	-120.5315	45.7258	Lake Umatilla	OR	KLICKITAT	11698	2	120	31	53.54	45	43	32.92
OWOW99-0901	-122.1189	44.8230		OR	MARION	26	3	122	7	7.97	44	49	22.87
OWOW99-0929	-123.8054	46.1084		OR	CLATSOP	10	3	123	48	19.33	46	6	30.06
OWOW99-0976	-120.0245	42.1399		OR	LAKE	767	3	120	1	28.20	42	8	23.64
OWOW99-1001	-123.2441	43.3729		OR	DOUGLAS	6	3	123	14	38.72	43	22	22.48
OWOW99-1101	-120.2574	42.6017	Lake Abert	OR	LAKE	16397	3	120	15	26.60	42	36	6.08
OWOW99-1353	-117.3510	43.4992		OR	MALHEUR	4577	4	117	21	3.67	43	29	57.08
OWOW99-1401	-122.0095	42.2938		OR	KLAMATH	1498	4	122	0	34.13	42	17	37.82
OWOW99-1454	-123.3889	45.4452		OR	WASHINGTON	81	4	123	23	19.97	45	26	42.61
OWOW99-1501	-121.7221	43.6916		OR	DESCHUTES	4110	4	121	43	19.67	43	41	29.87
OWOW99-0039	-78.6659	41.1581	Lake Sabula	PA	CLEARFIELD	13	1	78	39	57.24	41	9	29.16
OWOW99-0089	-77.8121	39.9451	unnamed pond	PA	FRANKLIN	2	1	77	48	43.56	39	56	42.36
OWOW99-0188	-74.9514	41.2504	Pike Lake #3	PA	PIKE	6	1	74	57	5.04	41	15	1.44
OWOW99-0213	-76.3888	41.9443	unnamed pond	PA	BRADFORD	10	1	76	23	19.68	41	56	39.48
OWOW99-0489	-79.4857	40.6822	Crooked Creek Lake	PA	ARMSTRONG	151	2	79	29	8.52	40	40	55.92
OWOW99-0663	-76.2884	41.2899	Luzerne Lake #6	PA	LUZERNE	18	2	76	17	18.24	41	17	23.64
OWOW99-0988	-75.6005	40.5611	Lehigh Lake #7	PA	LEHIGH	2	3	75	36	1.80	40	33	39.96
OWOW99-1014	-80.4247	41.2928	Shenango River Reservoir	PA	MERCER	1491	3	80	25	28.92	41	17	34.08
OWOW99-1088	-75.2502	41.4692	Wayne-Whitney Lake	PA	WAYNE	46	3	75	15	0.72	41	28	9.12
OWOW99-1113	-76.7346	40.1593	York Haven Dam	PA	DAUPHIN	1596	3	76	44	4.56	40	9	33.48
OWOW99-1417	-71.5789	41.1687	Fresh Pond	RI	WASHINGTON	2526	4	71	34	44.04	41	10	7.32
OWOW99-1517	-71.4594	41.7052	Gorton Pond?	RI	KENT	22	4	71	27	33.84	41	42	18.72

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OWOW99-1567	-71.4065	41.9839	Arnolds Mills Reservoir	RI	PROVIDENCE	6	4	71	24	23.40	41	59	2.04
OWOW99-0012	-80.1384	34.5133		SC	CHESTERFIELD	3	1	80	8	18.24	34	30	47.88
OWOW99-0112	-79.1741	34.3024		SC	DILLON	159	1	79	10	26.76	34	18	8.64
OWOW99-0211	-80.9912	33.2641		SC	BAMBERG	37	1	80	59	28.32	33	15	50.76
OWOW99-0212	-80.9015	33.6414		SC	CALHOUN	18	1	80	54	5.40	33	38	29.04
OWOW99-0462	-80.1292	34.3049		SC	DARLINGTON	36	2	80	7	45.12	34	18	17.64
OWOW99-0536	-82.5805	34.6606		SC	ANDERSON	3	2	82	34	49.80	34	39	38.16
OWOW99-0662	-80.7032	34.3094		SC	KERSHAW	2	2	80	42	11.52	34	18	33.84
OWOW99-0936	-81.3848	33.6076		SC	AIKEN	18	3	81	23	5.28	33	36	27.36
OWOW99-0937	-80.2755	33.5042		SC	CLARENDON	3	3	80	16	31.80	33	30	15.12
OWOW99-0987	-81.4667	34.0877	L MURRAY	SC	NEWBERRY	19602	3	81	28	0.12	34	5	15.72
OWOW99-1061	-81.6083	33.8239		SC	AIKEN	6	3	81	36	29.88	33	49	26.04
OWOW99-1087	-81.6246	34.8750		SC	CHEROKEE	6	3	81	37	28.56	34	52	30.00
OWOW99-1412	-79.2482	33.3649		SC	GEORGETOWN	4	4	79	14	53.52	33	21	53.64
OWOW99-1486	-83.1017	34.5784	HARTWELL RES	SC	OCONEE	6881	4	83	6	6.12	34	34	42.24
OWOW99-1537	-81.9264	34.8039		SC	SPARTANBURG	3	4	81	55	35.04	34	48	14.04
OWOW99-1562	-80.8089	34.4193	Lake Wateree	SC	KERSHAW	5548	4	80	48	32.04	34	25	9.48
OWOW99-0007	-98.0560	43.7564		SD	DAVISON	284	1	98	3	21.60	43	45	23.04
OWOW99-0056	-102.2547	45.7699		SD	PERKINS	959	1	102	15	16.92	45	46	11.64
OWOW99-0107	-97.1801	44.8678		SD	CODINGTON	1124	1	97	10	48.36	44	52	4.08
OWOW99-0203	-101.3716	44.1562		SD	HAAKON	5	1	101	22	17.76	44	9	22.32
OWOW99-0206	-99.8458	45.7071		SD	CAMPBELL	6	1	99	50	44.88	45	42	25.56
OWOW99-0457	-96.4624	44.4955		SD	BROOKINGS	616	2	96	27	44.64	44	29	43.80
OWOW99-0531	-103.2273	45.1155		SD	BUTTE	4	2	103	13	38.28	45	6	55.80
OWOW99-0582	-97.5077	45.6993		SD	MARSHALL	83	2	97	30	27.72	45	41	57.48
OWOW99-0628	-103.8945	44.2735		SD	LAWRENCE	681	2	103	53	40.20	44	16	24.60

OWOW99 Site-ID	Long. DD	Lat. DD	Lake Name	St.	County	Lake Area (ha)	Yr.	Longitude			Latitude		
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OWOW99-0631	-103.4072	45.8542		SD	HARDING	9	2	103	24	25.92	45	51	15.12
OWOW99-0653	-100.0315	43.3437		SD	TRIPP	3	2	100	1	53.40	43	20	37.32
OWOW99-0657	-99.3955	44.6185		SD	HYDE	3	2	99	23	43.80	44	37	6.60
OWOW99-0928	-103.4528	44.8720		SD	BUTTE	5	3	103	27	10.08	44	52	19.20
OWOW99-0931	-99.1439	45.9093		SD	MCPHERSON	129	3	99	8	38.04	45	54	33.48
OWOW99-0982	-101.0124	44.3660		SD	STANLEY	25	3	101	0	44.64	44	21	57.60
OWOW99-1007	-97.2311	45.1795		SD	DAY	83	3	97	13	51.96	45	10	46.20
OWOW99-1031	-98.2920	43.4149		SD	DOUGLAS	38	3	98	17	31.20	43	24	53.64
OWOW99-1056	-100.5331	44.8741	OAHE RES	SD	DEWEY	61520	3	100	31	59.16	44	52	26.76
OWOW99-1107	-97.5925	44.4791		SD	KINGSBURY	119	3	97	35	33.00	44	28	44.76
OWOW99-1407	-97.1505	44.1469		SD	LAKE	95	4	97	9	1.80	44	8	48.84
OWOW99-1453	-103.7237	45.0254		SD	BUTTE	7	4	103	43	25.32	45	1	31.44
OWOW99-1481	-102.1920	45.2425		SD	PERKINS	43	4	102	11	31.20	45	14	33.00
OWOW99-1507	-97.4514	45.3803		SD	DAY	940	4	97	27	5.04	45	22	49.08
OWOW99-1553	-103.4179	43.3078		SD	FALL RIVER	1742	4	103	25	4.44	43	18	28.08
OWOW99-1556	-97.2857	45.7157		SD	MARSHALL	54	4	97	17	8.52	45	42	56.52
OWOW99-1557	-99.7300	43.9121		SD	LYMAN	3	4	99	43	48.00	43	54	43.56
OWOW99-0087	-86.5603	36.0991	J PERCY PRIEST L	TN	DAVIDSON	5370	1	86	33	37.08	36	5	56.76
OWOW99-0187	-83.8330	36.3113	Norris Lake	TN	UNION	3749	1	83	49	58.80	36	18	40.68
OWOW99-0487	-85.2748	36.5651	Dale Hollow Lake	TN	CLAY	10726	2	85	16	29.28	36	33	54.36
OWOW99-0561	-88.4150	35.5581		TN	HENDERSON	184	2	88	24	54.00	35	33	29.16
OWOW99-0587	-86.7644	36.4128		TN	ROBERTSON	5	2	86	45	51.84	36	24	46.08
OWOW99-0597	-89.3677	35.2595		TN	FAYETTE	5	2	89	22	3.72	35	15	34.20
OWOW99-1036	-88.0792	36.4316	KENTUCKY L	TN	HENRY	46342	3	88	4	45.12	36	25	53.76
OWOW99-1086	-84.7785	35.6188		TN	MEIGS	2	3	84	46	42.60	35	37	7.68
OWOW99-1487	-83.3651	35.9973	DOUGLAS L	TN	JEFFERSON	11139	4	83	21	54.36	35	59	50.28

OWOW99 Site-ID	Long. DD	Lat. DD	Lake Name	St.	County	Lake Area (ha)	Yr.	Longitude			Latitude		
								Deg	Min	Sec	Deg	Min	Sec
OWOW99-1512	-86.4277	36.0389		TN	RUTHERFORD	714	4	86	25	39.72	36	2	20.04
OWOW99-1536	-84.2180	35.6086	Tellico Lake	TN	MONROE	6639	4	84	13	4.80	35	36	30.96
OWOW99-0020	-95.3874	30.1851	Rogers Lake	TX	MONTGOMERY	9	1	95	23	14.64	30	11	6.36
OWOW99-0021	-100.5777	31.9371	E V Spence Reservoir	TX	COKE	6055	1	100	34	39.72	31	56	13.56
OWOW99-0046	-97.4428	31.9740		TX	BOSQUE	2208	1	97	26	34.08	31	58	26.40
OWOW99-0048	-98.3790	33.7103	Lake Arrowhead	TX	CLAY	6561	1	98	22	44.40	33	42	37.08
OWOW99-0070	-98.0258	30.4154	Lake Travis	TX	TRAVIS	7240	1	98	1	32.88	30	24	55.44
OWOW99-0073	-94.6013	32.8300		TX	MARION	557	1	94	36	4.68	32	49	48.00
OWOW99-0096	-97.8593	32.0622	Flag Branch Lake	TX	BOSQUE	11	1	97	51	33.48	32	3	43.92
OWOW99-0120	-97.3485	26.2842	Unnamed lake	TX	CAMERON	35	1	97	20	54.60	26	17	3.12
OWOW99-0121	-99.2766	33.9259	Santa Rosa Lake	TX	WILBARGER	660	1	99	16	35.76	33	55	33.24
OWOW99-0123	-97.1985	33.0425		TX	DENTON	380	1	97	11	54.60	33	2	33.00
OWOW99-0145	-96.2522	29.4629		TX	WHARTON	2	1	96	15	7.92	29	27	46.44
OWOW99-0148	-94.7224	33.2888		TX	MORRIS	1239	1	94	43	20.64	33	17	19.68
OWOW99-0170	-100.9665	32.4319	Bullock Lake	TX	MITCHELL	2	1	100	57	59.40	32	25	54.84
OWOW99-0195	-94.9041	29.8449		TX	CHAMBERS	4	1	94	54	14.76	29	50	41.64
OWOW99-0196	-99.6494	28.9065		TX	ZAVALA	5	1	99	38	57.84	28	54	23.40
OWOW99-0198	-95.6121	33.4843		TX	LAMAR	6	1	95	36	43.56	33	29	3.48
OWOW99-0220	-95.6834	31.1694		TX	HOUSTON	23	1	95	41	0.24	31	10	9.84
OWOW99-0221	-97.9284	28.2013	Lake Corpus Christi	TX	LIVE OAK	7831	1	97	55	42.24	28	12	4.68
OWOW99-0223	-96.0107	32.9492	Lake Tawakoni	TX	HUNT	15333	1	96	0	38.52	32	56	57.12
OWOW99-0470	-98.1155	26.1452		TX	HIDALGO	8	2	98	6	55.80	26	8	42.72
OWOW99-0471	-99.5140	32.0370	Lake Coleman	TX	COLEMAN	705	2	99	30	50.40	32	2	13.20
OWOW99-0473	-96.7899	33.8561	L TEXOMA	TX	GRAYSON	23549	2	96	47	23.64	33	51	21.96
OWOW99-0495	-100.3492	34.4613	Lake Childress	TX	CHILDRESS	121	2	100	20	57.12	34	27	40.68
OWOW99-0496	-96.8272	32.0145	Unnamed lake	TX	NAVARRO	12	2	96	49	37.92	32	0	52.20

OWOW99 Site-ID	Long. DD	Lat. DD	Lake Name	St.	County	Lake Area (ha)	Yr.	Longitude			Latitude		
								Deg	Min	Sec	Deg	Min	Sec
OWOW99-0520	-96.0261	28.7684		TX	MATAGORDA	18	2	96	1	33.96	28	46	6.24
OWOW99-0524	-94.1918	30.8490	B A Steinhagen Lake	TX		5549	2	94	11	30.59	30	50	56.29
OWOW99-0545	-95.0674	29.5604	Clear Lake	TX	HARRIS	812	2	95	4	2.64	29	33	37.44
OWOW99-0548	-94.3946	32.2129	Shelby Lake	TX	PANOLA	5	2	94	23	40.56	32	12	46.44
OWOW99-0570	-98.2822	32.6120		TX	PALO PINTO	7	2	98	16	55.92	32	36	43.20
OWOW99-0573	-95.5984	33.8270	Lake Pat Mayse	TX	LAMAR	2390	2	95	35	54.24	33	49	37.20
OWOW99-0596	-99.0068	32.7753	HUBBARD CR RES	TX	STEPHENS	5960	2	99	0	24.48	32	46	31.08
OWOW99-0598	-96.6693	33.3078	ASCS Lake Riser 638	TX	COLLIN	7	2	96	40	9.48	33	18	28.08
OWOW99-0620	-98.3474	29.8943		TX	COMAL	19	2	98	20	50.64	29	53	39.48
OWOW99-0645	-97.6087	31.0062	Stillhouse Hollow Lake	TX	BELL	2664	2	97	36	31.32	31	0	22.32
OWOW99-0646	-98.4200	28.3815		TX	MCMULLEN	6	2	98	25	12.00	28	22	53.40
OWOW99-0648	-96.6480	32.6450		TX	DALLAS	6	2	96	38	52.80	32	38	42.00
OWOW99-0670	-94.8510	30.4974		TX	POLK	6	2	94	51	3.60	30	29	50.64
OWOW99-0671	-97.8103	28.1089		TX	SAN PATRICIO	7	2	97	48	37.08	28	6	32.04
OWOW99-0673	-95.4881	32.1860	L PALESTINE	TX	HENDERSON	9533	2	95	29	17.16	32	11	9.60
OWOW99-0920	-101.8108	35.4638		TX	POTTER	655	3	101	48	38.88	35	27	49.68
OWOW99-0921	-97.5738	31.1665	Lake Belton	TX	BELL	1052	3	97	34	25.68	31	9	59.40
OWOW99-0945	-95.9137	31.2285	Unnamed lake	TX	LEON	2	3	95	54	49.32	31	13	42.60
OWOW99-0946	-99.1748	27.9740		TX	WEBB	20	3	99	10	29.28	27	58	26.40
OWOW99-0948	-96.5444	33.1304	Lake Lavon	TX	COLLIN	81	3	96	32	39.84	33	7	49.44
OWOW99-0970	-96.6798	28.3294		TX	CALHOUN	2	3	96	40	47.28	28	19	45.84
OWOW99-0973	-94.3321	33.2844	Wright Patman Lake	TX	BOWIE	11360	3	94	19	55.56	33	17	3.84
OWOW99-0974	-94.1659	32.0277	Sabine River overflow	TX	PANOLA	5	3	94	9	57.24	32	1	39.72
OWOW99-0995	-96.2954	30.1495		TX	WASHINGTON	2	3	96	17	43.44	30	8	58.20
OWOW99-0996	-101.1158	30.1436		TX	VAL VERDE	51	3	101	6	56.88	30	8	36.96
OWOW99-0998	-96.0390	32.0818		TX	HENDERSON	10	3	96	2	20.40	32	4	54.48

OWOW99 Site-ID	Long. DD	Lat. DD	Lake Name	St.	County	Lake Area (ha)	Yr.	Longitude			Latitude		
								Deg	Min	Sec	Deg	Min	Sec
OWOW99-1021	-98.6771	33.3955		TX	YOUNG	9	3	98	40	37.56	33	23	43.80
OWOW99-1045	-98.5051	32.0189	Lake Proctor	TX	COMANCHE	1913	3	98	30	18.36	32	1	8.04
OWOW99-1049	-94.5522	31.5542		TX	NACOGDOCHES	3	3	94	33	7.92	31	33	15.12
OWOW99-1070	-95.3163	28.9617		TX	BRAZORIA	2	3	95	18	58.68	28	57	42.12
OWOW99-1071	-100.9560	29.6535		TX	VAL VERDE	588	3	100	57	21.60	29	39	12.60
OWOW99-1073	-95.5320	33.1012		TX	HOPKINS	5	3	95	31	55.20	33	6	4.32
OWOW99-1094	-101.6812	35.6553		TX	MOORE	593	3	101	40	52.32	35	39	19.08
OWOW99-1095	-98.0244	30.3621		TX	TRAVIS	225	3	98	1	27.84	30	21	43.56
OWOW99-1098	-95.5161	32.5682		TX	SMITH	6	3	95	30	57.96	32	34	5.52
OWOW99-1120	-97.8470	27.1988		TX	KENEDY	5	3	97	50	49.20	27	11	55.68
OWOW99-1121	-98.9015	33.7473		TX	ARCHER	3	3	98	54	5.40	33	44	50.28
OWOW99-1370	-96.8215	32.2412		TX	ELLIS	9	4	96	49	17.40	32	14	28.32
OWOW99-1373	-94.1256	32.7491	CADDO L	TX	MARION	10794	4	94	7	32.16	32	44	56.76
OWOW99-1395	-98.0162	28.9365		TX	KARNES	8	4	98	0	58.32	28	56	11.40
OWOW99-1399	-93.7712	31.5230	Toledo Bend Reservoir	TX	SABINE	67141	4	93	46	16.32	31	31	22.80
OWOW99-1420	-99.2401	26.8182		TX	ZAPATA	116	4	99	14	24.36	26	49	5.52
OWOW99-1421	-99.2335	31.3159		TX	MCCULLOCH	6	4	99	14	0.60	31	18	57.24
OWOW99-1446	-96.2172	31.9798	Richland Reservoir	TX		18124	4	96	13	1.92	31	58	47.14
OWOW99-1470	-96.5598	30.7472		TX	ROBERTSON	2	4	96	33	35.28	30	44	49.92
OWOW99-1471	-98.6921	28.6395		TX	ATASCOSA	1	4	98	41	31.56	28	38	22.20
OWOW99-1473	-96.9868	33.1494	Lake Lewisville	TX	DENTON	8590	4	96	59	12.48	33	8	57.84
OWOW99-1495	-95.5053	29.6160	What Is It Pond	TX	FORT BEND	1	4	95	30	19.08	29	36	57.60
OWOW99-1496	-100.1961	28.5733		TX	MAVERICK	3	4	100	11	45.96	28	34	23.88
OWOW99-1498	-96.3628	33.1896		TX	COLLIN	9	4	96	21	46.08	33	11	22.56
OWOW99-1521	-100.3713	33.0911		TX	STONEWALL	7	4	100	22	16.68	33	5	27.96
OWOW99-1523	-97.6110	33.4887		TX	MONTAGUE	5	4	97	36	39.60	33	29	19.32

OWOW99 Site-ID	Long. DD	Lat. DD	Lake Name	St.	County	Lake Area (ha)	Yr.	Longitude			Latitude		
								Deg	Min	Sec	Deg	Min	Sec
OWOW99-1545	-97.3344	30.0141		TX	BASTROP	4	4	97	20	3.84	30	0	50.76
OWOW99-1570	-95.5857	30.4678	Lake Conroe	TX	MONTGOMERY	8030	4	95	35	8.52	30	28	4.08
OWOW99-1571	-99.3188	26.9216	I N T E R N A T I O N A L FALCON RES	TX	ZAPATA	15802	4	99	19	7.68	26	55	17.76
OWOW99-1573	-95.5930	32.6230		TX	SMITH	3	4	95	35	34.80	32	37	22.80
OWOW99-0102	-113.7755	37.2618		UT	WASHINGTON	101	1	113	46	31.80	37	15	42.48
OWOW99-0144	-110.8572	37.3143		UT	KANE	912	1	110	51	25.92	37	18	51.48
OWOW99-0152	-110.2791	40.6966		UT	DUCHESNE	4	1	110	16	44.76	40	41	47.76
OWOW99-0526	-111.8377	39.0707		UT	SANPETE	15	2	111	50	15.72	39	4	14.52
OWOW99-0626	-112.6432	40.8812		UT	TOOELE	921	2	112	38	35.52	40	52	52.32
OWOW99-0927	-111.8883	41.8315		UT	CACHE	7	3	111	53	17.88	41	49	53.40
OWOW99-1027	-110.1109	40.7634		UT	DUCHESNE	10	3	110	6	39.24	40	45	48.24
OWOW99-1051	-111.1449	40.1871	Strawberry Reservoir	UT	WASATCH	3172	3	111	8	41.64	40	11	13.56
OWOW99-1352	-110.1033	40.3998		UT	DUCHESNE	2	4	110	6	11.88	40	23	59.28
OWOW99-1476	-111.8073	40.2025	Utah Lake	UT		0	4	111	48	26.21	40	12	8.86
OWOW99-0064	-77.8438	38.0644	Lake Anna	VA	LOUISA	5254	1	77	50	37.68	38	3	51.84
OWOW99-0090	-77.3122	37.9672	unnamed	VA	CAROLINE	11	1	77	18	43.92	37	58	1.92
OWOW99-0512	-79.0903	36.6820	Big Lake	VA	HALIFAX	10	2	79	5	25.08	36	40	55.20
OWOW99-0514	-78.5318	36.5703		VA	MECKLENBURG	10	2	78	31	54.48	36	34	13.08
OWOW99-0614	-77.3104	37.4233	Griggs Pond	VA	HENRICO	6	2	77	18	37.44	37	25	23.88
OWOW99-0914	-77.7039	38.8207	unnamed	VA	PRINCE WILLIAM	3	3	77	42	14.04	38	49	14.52
OWOW99-0964	-76.5704	36.8671	Lone Star Lake	VA	SUFFOLK	13	3	76	34	13.44	36	52	1.56
OWOW99-1039	-75.9664	37.4214		VA	NORTHAMPTON	628	3	75	57	59.04	37	25	17.04
OWOW99-1089	-78.9541	36.7873	Banister Lake	VA	HALIFAX	154	3	78	57	14.76	36	47	14.28
OWOW99-1364	-76.3460	37.0230		VA	HAMPTON	170	4	76	20	45.60	37	1	22.80
OWOW99-1462	-79.4531	36.7772	unnamed pond	VA	PITTSYLVANIA	1	4	79	27	11.16	36	46	37.92
OWOW99-1539	-77.6024	37.2620	Lake Chesdin	VA	CHESTERFIELD	1316	4	77	36	8.64	37	15	43.20

OWOW99 Site-ID	Long. DD	Lat. DD	Lake Name	St.	County	Lake Area (ha)	Yr.	Longitude			Latitude		
								Deg	Min	Sec	Deg	Min	Sec
OWOW99-0093	-72.8915	42.8282	Lake Whitingham	VT	WINDHAM	1565	1	72	53	29.40	42	49	41.52
OWOW99-0942	-72.0592	44.7480	Lake Willoughby	VT	ORLEANS	670	3	72	3	33.12	44	44	52.80
OWOW99-1042	-72.4259	43.6486	Lake Pinneo	VT	WINDSOR	7	3	72	25	33.24	43	38	54.96
OWOW99-1092	-73.2782	44.8277		VT	GRAND ISLE	3406	3	73	16	41.52	44	49	39.72
OWOW99-1467	-72.3081	44.8707	Kidder Pond	VT	ORLEANS	6	4	72	18	29.16	44	52	14.52
OWOW99-0004	-121.3595	47.3342	Keechelus Lake	WA	KITTITAS	955	1	121	21	34.06	47	20	2.94
OWOW99-0080	-117.5813	47.7677	Dry Lake	WA	SPOKANE	5	1	117	34	52.61	47	46	3.58
OWOW99-0154	-120.9586	48.5632	Unnamed/Vulcan	WA	SKAGIT	3	1	120	57	30.82	48	33	47.63
OWOW99-0179	-119.5883	46.9819	Frenchman Hills Lake	WA	GRANT	138	1	119	35	17.77	46	58	54.88
OWOW99-0202	-123.7674	48.0848	Cresent Lake	WA	CLALLAM	1995	1	123	46	2.71	48	5	5.32
OWOW99-0204	-122.8397	46.9928	unnamed	WA	THURSTON	6	1	122	50	22.88	46	59	34.19
OWOW99-0504	-120.3321	48.0261	Lake Chelan	WA	CHELAN	13091	2	120	19	55.38	48	1	33.96
OWOW99-0529	-121.1618	46.6403	Rimrock Lake	WA	YAKIMA	952	2	121	9	42.44	46	38	25.08
OWOW99-0654	-121.3833	47.5843	Lake Dorothy	WA	KING	102	2	121	22	59.88	47	35	3.41
OWOW99-0954	-119.4764	48.9145	Mud Lake	WA	OKANOGAN	4	3	119	28	34.97	48	54	52.24
OWOW99-0979	-122.4597	48.0215	Lone Lake	WA	ISLAND	34	3	122	27	34.81	48	1	17.47
OWOW99-1054	-119.3222	46.9868	Potholes Reservoir	WA	GRANT	11333	3	119	19	19.99	46	59	12.48
OWOW99-1354	-117.2925	48.4300		WA	PEND_OREILLE	936	4	117	17	33.07	48	25	48.00
OWOW99-1379	-118.8874	48.0631	Buffalo Lake	WA	OKANOGAN	226	4	118	53	14.50	48	3	47.02
OWOW99-1479	-118.9817	46.0048	Lake Wallula	WA	BENTON	12961	4	118	58	54.16	46	0	17.21
OWOW99-1554	-121.6659	47.6052	Calligan Lake	WA	KING	117	4	121	39	57.17	47	36	18.54
OWOW99-0008	-89.2323	44.0659	Irogami (Fish) Lake	WI	WAUSHARA	116	1	89	13	56.28	44	3	57.24
OWOW99-0058	-92.2221	45.7970	Warner Lake	WI	BURNETT	71	1	92	13	19.56	45	47	49.20
OWOW99-0059	-89.0859	46.0610	Noseeum Lake	WI	VILAS	5	1	89	5	9.24	46	3	39.60
OWOW99-0108	-92.6510	45.2943	Osceola Lake	WI	POLK	17	1	92	39	3.60	45	17	39.48
OWOW99-0133	-90.9843	45.8117	Lake Winter	WI	SAWYER	110	1	90	59	3.48	45	48	42.12

OWOW99 Site-ID	Long. DD	Lat. DD	Lake Name	St.	County	Lake Area (ha)	Yr.	Longitude			Latitude		
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OWOW99-0134	-89.5894	45.8619	Sweeney Lake	WI	ONEIDA	78	1	89	35	21.84	45	51	42.84
OWOW99-0158	-90.5273	46.2912	Maki Lake	WI	IRON	17	1	90	31	38.28	46	17	28.32
OWOW99-0208	-89.6991	44.8103	L DUBAY/Big Eau Pleine Res	WI	MARATHON	5356	1	89	41	56.76	44	48	37.08
OWOW99-0458	-89.9860	43.9352	Castle Lake	WI	JUNEAU	5010	2	89	59	9.60	43	56	6.72
OWOW99-0508	-89.5351	45.6967	Bob's Lake	WI	ONEIDA	8	2	89	32	6.36	45	41	48.12
OWOW99-0533	-91.5771	45.7591	unnamed	WI	WASHBURN	4	2	91	34	37.56	45	45	32.76
OWOW99-0565	-91.1565	43.3500		WI	CRAWFORD	59	2	91	9	23.40	43	21	0.00
OWOW99-0608	-90.1691	46.0857	Turtle Flambeau Flowage	WI		0	2	90	10	8.72	46	5	8.52
OWOW99-0658	-89.6562	45.2854	Black Alder Lake	WI	LINCOLN	5	2	89	39	22.32	45	17	7.44
OWOW99-0666	-88.4157	44.0020	Lake Winnebago	WI	WINNEBAGO	53757	2	88	24	56.52	44	0	7.20
OWOW99-0958	-91.3394	46.1505	Pacwawong Lake	WI	SAWYER	76	3	91	20	21.84	46	9	1.80
OWOW99-0959	-89.3112	45.8418	Bog Lake	WI	ONEIDA	20	3	89	18	40.32	45	50	30.48
OWOW99-0983	-89.1146	44.5307	Hatch Lake	WI	WAUPACA	46	3	89	6	52.56	44	31	50.52
OWOW99-0991	-89.0375	43.9647	unnamed	WI	GREEN LAKE	7	3	89	2	15.00	43	57	52.92
OWOW99-1033	-91.2826	46.3544	Flynn Lake	WI	BAYFIELD	27	3	91	16	57.36	46	21	15.84
OWOW99-1058	-91.8659	45.4135	Yellow River Reservoir	WI	BARRON	21	3	91	51	57.24	45	24	48.60
OWOW99-1059	-89.1653	45.5817	Mars (Sequilla) Lake	WI	ONEIDA	16	3	89	9	55.08	45	34	54.12
OWOW99-1083	-92.3092	45.6438	Crooked Lake	WI	POLK	8	3	92	18	33.12	45	38	37.68
OWOW99-1084	-89.5527	46.1376	Big Gibson Lake	WI	VILAS	48	3	89	33	9.72	46	8	15.36
OWOW99-1108	-91.3828	45.2325	Calkins North Lake	WI	CHIPPEWA	5	3	91	22	58.08	45	13	57.00
OWOW99-1365	-90.8791	43.1321	unnamed	WI	CRAWFORD	5	4	90	52	44.76	43	7	55.56
OWOW99-1383	-89.8021	45.9586	Bolton Lake	WI	VILAS	57	4	89	48	7.56	45	57	30.96
OWOW99-1408	-90.4251	44.1284	Unnamed l	WI	MONROE	6	4	90	25	30.36	44	7	42.24
OWOW99-1433	-92.6653	45.4906	Beede Lake	WI	POLK	2	4	92	39	55.08	45	29	26.16

OWOW99 Site-ID	Long. DD	Lat. DD	Lake Name	St.	County	Lake Area (ha)	Yr.	Longitude			Latitude		
								Deg	Min	Sec	Deg	Min	Sec
OWOW99-1483	-92.2409	45.9427	Upper Loon Lake (Phernetton)	WI	BURNETT	24	4	92	14	27.24	45	56	33.72
OWOW99-1484	-88.2877	45.2655	Mirror Lake	WI	MARINETTE	4	4	88	17	15.72	45	15	55.80
OWOW99-1533	-91.2291	45.5345		WI	RUSK	1617	4	91	13	44.76	45	32	4.20
OWOW99-1558	-88.8840	45.1419	McGee Lake	WI	LANGLADE	8	4	88	53	2.40	45	8	30.84
OWOW99-1566	-88.3072	43.0729	Pewaukee Lake	WI	WAUKESHA	985	4	88	18	25.92	43	4	22.44
OWOW99-0637	-80.8542	38.2409	Summersville Lake	WV	NICHOLAS	844	2	80	51	15.12	38	14	27.24
OWOW99-0052	-109.3330	43.0084		WY	FREMONT	4	1	109	19	58.80	43	0	30.24
OWOW99-0502	-106.9291	42.6746		WY	NATRONA	1	2	106	55	44.76	42	40	28.56
OWOW99-0527	-109.3050	42.8726		WY	FREMONT	73	2	109	18	18.00	42	52	21.36
OWOW99-0528	-109.2586	44.4925		WY	PARK	1385	2	109	15	30.96	44	29	33.00
OWOW99-0602	-110.6277	44.2998		WY	TETON	1116	2	110	37	39.72	44	17	59.28
OWOW99-1052	-110.3633	43.4642		WY	TETON	35	3	110	21	47.88	43	27	51.12
OWOW99-1053	-106.2468	43.1947		WY	NATRONA	24	3	106	14	48.48	43	11	40.92
OWOW99-1077	-109.6685	43.3312		WY	FREMONT	40	3	109	40	6.60	43	19	52.32
OWOW99-1078	-110.3662	44.4549	Yellowstone Lake	WY		0	3	110	21	58.43	44	27	17.53
OWOW99-1377	-106.2790	41.3601		WY	ALBANY	5	4	106	16	44.40	41	21	36.36
OWOW99-1477	-109.3615	42.8049		WY	SUBLETTE	3	4	109	21	41.40	42	48	17.64
OWOW99-1478	-106.7534	44.4843		WY	JOHNSON	821	4	106	45	12.24	44	29	3.48
OWOW99-1503	-106.1244	42.7497		WY	NATRONA	8	4	106	7	27.84	42	44	58.92
OWOW99-1527	-110.8467	43.8054		WY	TETON	4	4	110	50	48.12	43	48	19.44

Appendix B

Standard Operating Procedure: Fish Tissue Sample Collection Procedures for a National Study of Chemical Residues in Lake Fish Tissue

Standard Operating Procedure

Fish Tissue Sample Collection Procedures for a National Study of Chemical Residues in Lake Fish Tissue

Scope and Applicability: This Standard Operating Procedure (SOP) must be followed by all Field Sample Collection Teams involved with the USEPA Office of Water's National Study of Chemical Residues in Lake Fish Tissue. Adherence to the SOP will ensure that field sampling activities will be performed the same way every time, i.e., are standardized, for all sampling participants.

Fish tissue sample collection procedures are presented below as sequential steps, and include specific equipment, materials, and methods required to perform field sampling activities only.

Responsibility and Personnel Qualifications: This procedure may be used by any Field Sampling Teams that have been authorized by the USEPA Project Manager or the USEPA Regional/State/ Tribal Fish Sampling Coordinators to collect fish for the National Study of Chemical Residues in Lake Fish Tissue.

References:

U.S. Environmental Protection Agency (USEPA). 1995. Guidance for Assessing Chemical Contaminant Data for Use in Fish Advisories. Volume 1: Fish Sampling and Analysis. Second Edition. U.S. Environmental Protection Agency, Office of Water, Washington, D.C. EPA 823-R-95-007.

U.S. Environmental Protection Agency (USEPA). 1997. Quality Assurance Project Plan for the Cook Inlet Contaminant Study Sampling. U.S. Environmental Protection Agency, Office of Water, Office of Science and Technology, Washington, D.C.

U.S. Environmental Protection Agency (USEPA). 1997. Sampling Plan for Conducting Field Sampling and Chemical Analysis for the Cook Inlet Contaminant Study. U.S. Environmental Protection Agency, Office of Water, Office of Science and Technology, Washington, D.C.

U.S. Environmental Protection Agency (USEPA). 1999a. EPA Requirements for Quality Assurance Project Plans. U.S. Environmental Protection Agency, Quality Assurance Division, Washington, D.C. Interim Final. EPA QA/R-5.

U.S. Environmental Protection Agency (USEPA). 1999b. National Study of Chemical Residues in Lake Fish Tissue: Study Design. U.S. Environmental Protection Agency, Office of Water, Office of Science and Technology, Washington, D.C.

Precautions: Follow usual safety precautions for working in the field. Boats and/or electrofishing equipment should only be operated by qualified, experienced operators trained in their proper use. Each vessel must be equipped with the appropriate Coast Guard-required safety equipment (including personal floatation devices for each field team member). If electrofishing equipment is used for sample collection, each team member must be insulated from the water, boat, and electrodes via rubber boots and gloves.

Equipment/Materials:

Sampling vessel (including boat, motor, trailer, oars, gas, and all required safety equipment)[(a)]

Electrofishing equipment - OPTIONAL (including variable voltage pulsator unit, generator, electrodes, wiring cables, dip nets, protective gloves, protective boots, and all necessary safety equipment)[(a)]

Nets - OPTIONAL (including trawls, seines, gill nets, fyke nets, trammel nets, hoop nets, pound nets, trap nets)[(a)]

Angling equipment - OPTIONAL (including fishing rods, reels, line, terminal tackle, trot lines)[(a)]

Coast Guard-approved personal floatation devices

Maps of target lakes and access routes

Global Positioning System (GPS) unit - OPTIONAL [(a)]

pH meter (including associated calibration supplies) [(a)]

Livewell and/or buckets

Measuring board (millimeter scale)

Ice chests[(b)]

Aluminum foil (solvent-rinsed and baked)[(b)]

Heavy-duty food grade polyethylene tubing[(b)]

Large plastic (composite) bags[(b)]

Knife or scissors

Clean nitrile gloves[(b)]

Field Record Forms[(b)]

Sample Identification Labels[(b)]

Chain-of-Custody Forms[(b)]

Chain-of-Custody Labels[(b)]

Scientific collection permit

Dry Ice[(b)]

Black ballpoint pens and/or waterproof markers

Clipboard

Packing/strapping tape

Overnight courier airbills[(b)]

Plastic cable ties[(b)]

Plastic bubble-wrap[(b)]

First aid kit and emergency telephone numbers

[(a)] Selection and exact specifications at the discretion of the experienced on-site fisheries biologist.

[(b)] Provided by the sample control center.

Procedures:

1. Identify the target lake to be sampled using the USEPA Office of Water's Target Lake List. Locate the target lake via the coordinates provided in the Target Lake List and USGS topographic maps (or equivalent maps).

2. Based on site reconnaissance, determine whether the target lake meets the definition of a suitable lake for sampling for the purposes of this study, i.e., each lake must:

   - be a permanent body of water of at least one hectare in surface area,
   - have a minimum of 1,000 m^2 of open (unvegetated) water,
   - be greater than 1 meter deep, and
   - have a permanent fish population (e.g., no annual winterkill, not recently stocked with young fish).

   If the target lake meets all of the above criteria, and if in the case of private property, the landowner allows access/permission to sample the lake, proceed with Step 3. If the lake does not meet the definition of a lake and/or if a private landowner denies access, record the problem and contact the USEPA Project Manager and/or the Tetra Tech Task Leader.

3. Assemble an array of both active and passive gear types, to ensure the collection of the desired target numbers and species of fish. Selection of the most appropriate gear type(s) for a particular target lake will be at the discretion of the experienced on-site fisheries biologist. Detailed procedures for use or deployment of all possible gear types are not included here. However, if passive collection devices (e.g., gill nets) are used, they must be checked frequently (e.g., several times daily if possible, but at least every 24 hours) to ensure a limited time lag between fish entrapment and sample preparation. Sampling Teams must be qualified, experienced, and/or trained on the safe and effective use of each gear type selected.

4. Sampling gear will be selected and deployed to obtain samples of both predator species and bottom-dwelling species. Suggested target species, listed in order of preference, are as follows:

	Family name	Common name	Scientific name
Predator/Gamefish Species *(in order of preference)*	*Centrarchidae*	Largemouth bass	*Micropterus salmoides*
		Smallmouth bass	*Micropterus dolomieu*
		Black crappie	*Pomoxis nigromaculatus*
		White crappie	*Pomoxis annularis*
	Percidae	Walleye	*Stizostedion vitreum*
		Yellow perch	*Perca flavescens*
	Percichthyidae	White bass	*Morone chrysops*
	Esocidae	Northern pike	*Esox lucius*
	Salmonidae	Lake trout	*Salvelinus namaycush*
		Brown trout	*Salmo trutta*
		Rainbow trout	*Oncorhynchus mykiss*
		Brook trout	*Salvelinus fontinalis*
Bottom-dwelling Species *(in order of preference)*	*Cyprinidae*	Common carp	*Cyprinus carpio*
	Ictaluridae	Channel catfish	*Ictalurus punctatus*
		Blue catfish	*Ictalurus furcatus*
		Brown bullhead	*Ameiurus nebulosus*
		Yellow bullhead	*Ameiurus natalis*
	Catostomidae	White sucker	*Catostomus commersoni*

5. As soon as fish have been obtained via active collection methods (or removed from passive collection devices) they must be identified to species. Clean nitrile gloves must be worn during the sample handling process. Potential target species/individuals will be rinsed in ambient water to remove any foreign material from the external surface and placed in clean holding containers (e.g., livewells, buckets). Nontarget fishes or small specimens are returned to the lake.

6. One predator and one bottom-dwelling species composite will be retained from each target lake. Each composite must consist of five fish of adequate size (i.e., adult specimens that collectively will provide greater than 560 grams of edible tissue for predators and 560 grams of total body tissue for bottom dwellers) for analysis. Select fish for each composite based on the following criteria:

   - all are of the same species,
   - all satisfy legal requirements of harvestable size (or weight), or at least be of consumable size if no legal harvest requirements are in effect,
   - all are of similar size, so that the smallest individual in a composite is no less than 75% of the total length of the largest individual, and

- all are collected at the same time, i.e., collected as close to the same time as possible, but no more than one week apart (Note: Individual fish may have to be frozen until all fish to be included in the composite are available for delivery to the sample preparation laboratory).

Accurate taxonomic identification is essential in assuring and defining the organisms that have been composited and submitted for analysis. Under no circumstances should individuals from different species be used in a single composite sample.

7. Following selection of five fish for each of the two composites that meet the above-listed criteria for compositing, measure each to determine total body length. Measure total length of each specimen in millimeters, from the anterior-most part of the fish to the tip of the longest caudal finray (when the lobes of the caudal fin are depressed dorsoventrally).

8. Record species retained, specimen length, location collected and sampling date and time on the Field Record Form (Figure 1) in black ink. Complete site location description portions of the form, and draw a simple sketch of the sampling area in the space provided. One Field Record Form will be completed for each composite collected from the target lake.

9. Assign the unique ten-character composite sample ID number to each composite as directed on the Field Record Form (Figure 1):

   - state of collection (two-character abbreviation),
   - year of collection (two-number abbreviation),
   - lake identification number (four-digit code from Appendix A),
   - composite type (one character -- P = predator species; B = bottom-dwelling species), and
   - sample type (one character -- S = standard sample; D = duplicate sample).

10. Sign and date the Field Record Form.

11. Remove each fish retained for analysis from the clean holding container(s) (e.g., livewell) using clean nitrile gloves. Dispatch each fish using a clean wooden bat (or equivalent wooden device).

12. Wrap each fish in extra heavy-duty aluminum foil (provided by the sample control center as solvent-rinsed, oven-baked sheets).

13. Prepare a Sample Identification Label (Figure 2) (in black ink) for each sample, ensuring that the label information matches the information recorded on the Field Record Form.

14. Cut a length of food grade tubing (provided by sample control center) that is long enough to

contain each individual fish and to allow extra length on each end to secure with cable ties. Place each foil-wrapped specimen into the appropriate length of tubing. Seal each end of the tubing with a plastic cable tie, and attach the appropriate Sample Identification Label.

15. Double-bag each entire specimen package, that is, place inside a large plastic bag with all specimens of the same species from that site and seal with another cable tie.

16. As soon as each sample is packaged, place it immediately on dry ice for shipment. If samples will be carried back to a laboratory or other facility to be frozen before shipment, wet ice can be used to transport wrapped and bagged fish samples in the coolers to a laboratory or other interim facility.

17. If possible, keep all (five) specimens designated for a particular composite in the same shipping container (ice chest) for transport.

18. Samples may be stored on dry ice for a maximum of 24 hours. Sampling teams have the option, depending on site logistics, of:

- shipping the samples packed on dry ice in sufficient quantities to keep samples frozen for up to 48 hours, via priority overnight delivery service (e.g., Federal Express), so that they arrive at the sample preparation laboratory within less than 24 hours from the time of sample collection, or

- freezing the samples within 24 hours of collection at $\leq$-20°C, and storing the frozen samples until shipment within 1 week of sample collection (frozen samples will subsequently be packed on dry ice and shipped to the sample preparation laboratory via priority overnight delivery service).

19. Complete a Chain-of-Custody Form (Figure 3). All entries must be in black ink and coincide with specimen/sample information on the Sample Identification Labels and Field Record Forms.

20. Retain one copy of the Chain-of-Custody Form and Field Record Form, place and seal all other copies in a waterproof bag, and enclose the sealed forms in the shipping container (ice chest).

21. Pack each shipping container (completely) with dry ice, secure each container with packaging tape, and seal it (e.g., across the latch of the ice chest) with a Chain-of-Custody Label (provided by the sample control center). Include the signature of the sampler and the date/time sealed (in black ink) on each Chain-of-Custody Label.

22. Ship each container to the laboratory via priority overnight express delivery service, as directed by the USEPA Project Manager or Tetra Tech Task Leader. Monitor sample holding time, and factor time required for shipment/delivery to ensure that the preservation and holding criteria described in Step 18 have been met.

Figure 1. Field record for fish samples

Field Record for National Study of Chemical Residues in Lake Fish Tissue

Composite Sample ID: ___ ___ ___ ___ ___ ___ ___ ___ ___ ___
(State) (Year) (Lake ID Number) (Composite type P=predator or B=bottom-dweller) (Sample type S=standard or D=duplicate)

Sampling Date : _____

Collection Method(s): _____

Collector Name (print and sign): _____

Affiliation: _____ Phone: _____

Address: _____

Site Location County: _____

Latitude: _____ Longitude: _____

Site Name: _____

Site Description: _____

Circle one: natural lake, modified natural lake, human-made reservoir, other _____

Estimated maximum lake depth _____ meters

pH surface _____ mid (optional) _____ bottom (optional) _____

Sample Description

Fish Species: _____ Total Number of Individuals: _____

Specimen #	Length (mm)*	Location	Date/Time	Notes
01				
02				
03				
04				
05				

Additional Comments:

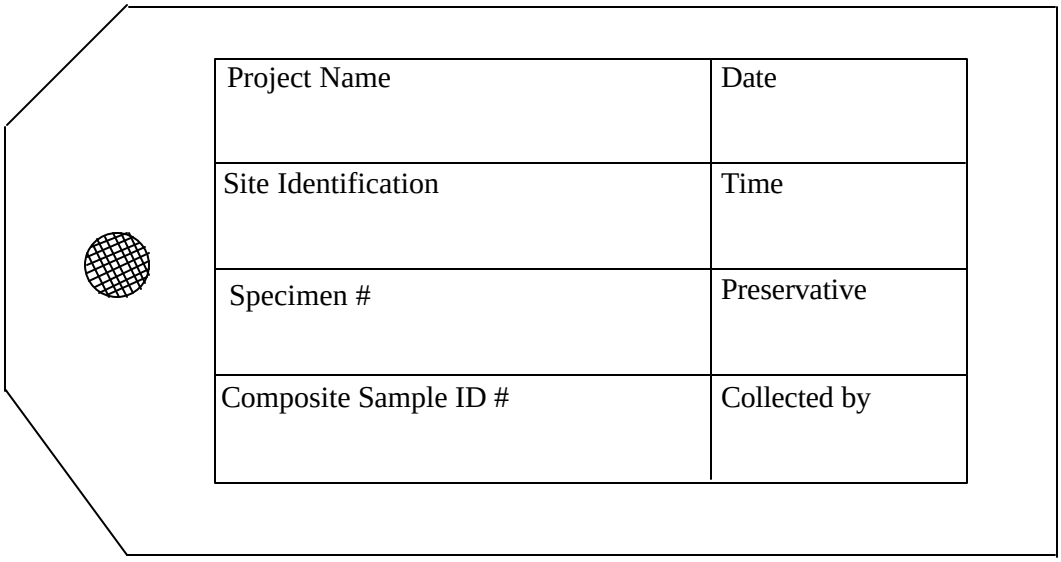
*minimum individual size should be no less than 75% maximum individual size

Sampling Site Diagram

FORM DISTRIBUTION: White -- Tetra Tech Task Leader Yellow & Pink -- Sample Prep Lab Gold -- Sampler

EPA Sample Number (*to be assigned by Prep Lab*): ___ ___ ___ ___ ___

Figure 2. Sample identification label[a].



Project Name	Date
Site Identification	Time
Specimen #	Preservative
Composite Sample ID #	Collected by

[a] See Appendix D for key to complete Sample Identification Label.

Figure 3. Chain-of-Custody Form.

Tetra Tech, Inc. | Biological Research Facility

CHAIN-OF-CUSTODY RECORD

Project Manager or Client Contact:

Address/Phone:

Contact Name/Phone:

Project Number: Project Name:

Page of Sample Location:

Date	Time	Sample Identification/Station	Preservative (Y/N)	Number of Containers	Type of Analyses Requested	***Shaded area for Tt use only:*** Collection Method	Log Number

Sample check-in:
DO ____
T ____
pH ____
Cond/Salinity ____
Chlorine ____
Appearance ____
_____
_____

Sampled by: *(signature)*	Date/Time:	Relinquished by: *(signature)*	Date/Time:	Received by: *(signature)* Date/Time:
Received by: *(signature)*	Date/Time:	Received by: *(signature)*	Date/Time:	Received by: *(signature)* Date/Time:

FORM DISTRIBUTION: White - Tt BRF Yellow - Report Pink - Sampler

reproduced electronically

Appendix C

Standard Operating Procedure: pH Measurements

Standard Operating Procedure

pH Measurement Procedures for a National Study of Chemical Residues in Lake Fish Tissue

Scope and Applicability: This Standard Operating Procedure (SOP) must be followed by all Field Sample Collection Teams involved with the USEPA Office of Water's National Study of Chemical Residues in Lake Fish Tissue. Adherence to the SOP will ensure that field pH measurements will be performed the same way every time, i.e., are standardized, for all sampling participants.

Procedures for field pH measurement are presented as sequential steps in the SOP to follow, and include equipment, materials, and methods required to perform field measurements only.

Responsibility and Personnel Qualifications: This procedure may be used by any Field Sampling Teams that have been authorized by the USEPA Project Manager or the USEPA Regional/State/ Tribal Fish Sampling Coordinators to collect fish for the National Study of Chemical Residues in Lake Fish Tissue.

References: American Public Health Association (APHA). 1995. Part 4500 — H^+: pH Value. Pages 4-65 - 4-69 in APHA. Standard Methods for the Examination of Water and Wastewater. APHA, Washington, D.C.

Precautions: Follow usual safety precautions for working in the field. Boats should only be operated by qualified, experienced operators trained in their proper use. Each vessel must be equipped with the appropriate Coast Guard-required safety equipment (including personal floatation devices for each field team member). Caution must be used when deploying pH probes overboard, and deployment should only occur when vessels are stable and not under power.

Equipment/Materials:

Sampling vessel (including boat, motor, trailer, oars, gas, and all required safety equipment)[(a)]

Coast Guard-approved personal floatation devices

Maps of target lakes and access routes

Field Record Forms[(b)]

Clipboard

pH meter with pH electrode/probe[(a)]

Standard buffer solutions (pH 4, 7, and 10)

Calibration cup or beaker

Distilled water

Calibration log book[(a)]

(a) Selection and exact specifications at the discretion of the experienced on-site fisheries biologist.

(b) Provided by the sample control center.

Procedures:

GENERAL

Procedures provided herein focus on pH probe deployment and pH measurement, not specific component assembly or operation since selection of a particular meter for use is at the discretion of the individual field teams. Field teams are urged to read, understand, and follow the manufacturer's instructions for their pH meter of choice for this study.

CALIBRATION

1. Prior to deployment (i.e., at a minimum once daily during field use), the pH meter must be calibrated as per manufacturer's specifications. Calibration procedures presented here are generalized and are not water-specific.

2. Rinse the calibration cup (or beaker) and pH sensor with distilled, deionized water.

3. Pour off the deionized water and fill the calibration cup with pH 4.0 buffer solution, making sure that the pH sensor is completely immersed in buffer solution.

4. Turn the meter display on and monitor pH. When the pH reading has stabilized to a consistent value, note the reading in a calibration log book or field notebook.

5. If the displayed value is different from the buffer/standard, adjust the meter (e.g., via a calibration setting) to match the buffer value. Record the final calibrated pH reading (which must match the buffer value) in the calibration log book.

6. Decant the 4.0 buffer solution from the calibration cup, and rinse the pH sensor and calibration cup with distilled water.

7. Fill the calibration cup with 7.0 buffer solution and repeat Steps 4 through 5.

8. Decant the pH 7.0 buffer solution and rinse the pH sensor and calibration cup with distilled water. Fill the calibration cup with pH 10.0 buffer solution and repeat Steps 4 through 5.

9. Decant the buffer solution and rinse the pH sensor with distilled water.

10. Once the meter is successfully calibrated, lake pH can be measured. Water sample temperature must be similar in temperature to that of the calibration standards (or use and adjust the temperature compensation feature of the meter).

DEPLOYMENT AND SAMPLE MEASUREMENT

11. Deploy the pH sensor by gently lowering the probe into the water. Be sure that the sensor is completely immersed.

    Specific deployment and measurement instructions for the National Fish Tissue Study requires only one measurement location (with an optional vertical profile) per target lake, and are as follows:

    a. In waters < 2 meters deep, measure pH at approximately 30 cm (approximately 1 ft) below the surface.

    b. In waters ≥ 2 meters deep, measure pH at approximately 30 cm below the surface, at mid-depth, and at 30 cm above lake bottom substrates; ***however*** if multiple measurements or vertical profiles are not feasible (e.g., due to lake depth, meter probe cord length, etc.), record a single measurement at 30 cm below the surface.

12. When the pH reading has stabilized to a consistent value, record the reading on the Field Record Form (provided by the sample control center) to the nearest 0.1 unit.

13. Repeat Step 12 for mid-depth and near bottom measurements, as appropriate and if feasible (refer to Step 11).

14. Follow manufacturer's instructions for pH meter and electrode storage and maintenance.

Appendix D

Field Data Element Dictionary

Field Data Element Definitions and Instructions
Associated with Field Sample Collection Activities for the
National Study of Chemical Residues in Lake Fish Tissue

Element	
Affiliation:	The **Affiliation** field (on the Field Record Form) contains the agency, group, or company name of those persons conducting the field effort.
Collected by:	The **Collected by** field on the Sample Identification Label is synonymous with the **Collector Name** field on the Field Record Form, and contains the name of the Field Team Leader.
Collection Method:	The **Collection Method** field on the Field Record Form contains the listing of sampling gear types used to collect samples.
Collector Name:	The **Collector Name** field on the Field Record Form is synonymous with the **Collected by** field on the Sample Identification Label, and contains the name of the Field Team Leader.
Composite Sample ID:	The **Composite Sample ID** field on the Field Record Form and the Sample Identification Label is composed of a ten-character code including state of collection (two-character abbreviation), year of collection (two-number abbreviation), lake identification number (four-digit USEPA code), composite type (one character -- P = predator species, B = bottom-dwelling species), and qualifier for standard or duplicate composite samples (one character -- S = standard sample, D = duplicate sample).
EPA Sample Number:	Please leave this space blank on the Field Record Form. The **EPA Sample Number** is an analytical tracking number that will be assigned by the sample preparation laboratory to each individual aliquot of fish tissue prepared for analysis.
Estimated Maximum Lake Depth:	The **Estimated Maximum Lake Depth** field on the Field Record Form stores a depth estimate in meters for the deepest portion of the target lake. Estimates will be made by the Field Team and may be based on sources such as lake maps, depth sounder readings, anchor line lengths, etc.
Fish Species:	The **Fish Species** field on the Field Record Form stores the common name of the fish retained for analysis. Scientific name entries are optional.

Length:	The **Length** field on the Field Record Form contains the individual Total Length (in millimeters) of each fish retained for analysis. Total length of each specimen is measured from the anterior-most part of the fish to the tip of the longest caudal finray (when the lobes of the caudal fin are depressed dorsoventrally) and recorded to the nearest mm.
Location:	The **Location** field on the Field Record Form stores a brief description of the area in the lake where each fish was collected.
Preservative:	The **Preservative** field on the Sample Identification Label stores information on how the samples were preserved for shipment, i.e., either on dry ice or frozen.
Project Name:	The **Project Name** field on the Sample Identification Label contains the designation "USEPA National Fish Tissue Study".
Sampling Date:	The **Sampling Date** field on the Field Record Form and Sample Identification Label stores the numerical month/date/year (e.g., 10/02/99) of sample collection.
Site Description:	The **Site Description** field on the Field Record Form contains a brief written description of the location of the lake (e.g., road or town landmarks) and area of lake sampled (e.g., east portion of the lake).
Site Identification:	The **Site Identification** field on the Sample Identification Label is synonymous with the **Site Name** field on the Field Record Form, and contains the lake name.
Site Name:	The **Site Name** field on the Field Record Form is synonymous with the **Site Identification** field on the Sample Identification Label and contains the lake name.
Specimen #:	The **Specimen #** field on the Field Record Form and the Sample Identification Label consists of a two-digit number from 01 through 05.
Time:	The **Time** field on the Sample Identification Label and Field Record Form stores time of sample collection recorded in military time (i.e., four digits). Time fields on the Field Record Form include collection times for each individual specimen.

JOHNSON LAKE FISH TISSUE MONITORING

APPENDIX M: OUTFALL SWALES AND WARNING SIGNS INSPECTION REPORTS AND PHOTOGRAPHS

DOF DALTON OLMSTED FUGLEVAND

MEMORANDUM

TO:	Todd De Bow; Owens-Brockway Glass Container, Inc
FROM:	Connor Lamb; Dalton, Olmsted, & Fuglevand, Inc. (DOF)
DATE:	July 12, 2022
SUBJECT:	Spring 2022 Inspection Summary

The purpose of this memorandum is to document the observations and maintenance performed during the Spring 2022 inspection of the Sediment Remediation Action Area and the Swales at the Owens-Brockway Portland facility, which was performed on June 8, 2022, by Dalton, Olmsted & Fuglevand (DOF) engineer Dan Pickering and geologist Amber Lutey.

Necessary Actions:

The following is a summary of the recommended actions due to findings during the Spring 2022 swale inspection:

- Remove sediment build up in sedimentation vault for Outfall 2 (see Photo 1).
- Clean out accumulated sediment in discharge pipe to Outfall 2.
- Clear loose sediment that has accumulated in Outfall 6 swale, specifically near the concrete weir.
- It appears that the butterfly valve at Outfall 2 was repaired with a rubber insert since the last inspection (see Photo 2). There does appear to some wear on the repaired portion of the valve. There was no flow at time of inspection to test the repair.
- Buildup of fine sediment in areas of the Outfall 2 swale should be removed and revegetated to provide greater infiltration and nutrient uptake capabilities (see Photo 3). These areas will also likely need to have the tree canopy above thinned to promote revegetation.
- Rutting has occurred in several locations throughout the swale (see Photo 4). Maintenance in these areas should be performed to restore the flow path to spread the width of the swale, removal of some of the accumulated sediment/bare soil, and revegetation of these areas would provide greater infiltration and nutrient uptake capabilities.
- Remove the accumulation of sediment and debris collected in the PRF sedimentation vaults.
- Buildup of fine sediment in PRF swale should be removed. Revegetation of the PRF swales would provide greater infiltration and nutrient uptake capabilities (see Photo 5). These areas will also likely need to have the tree canopy above thinned to promote revegetation.

Other Recommendations:

The following is a list of other recommendations that would improve the function and effectiveness of the swales and other stormwater outfalls:

- Mowing of the grassy area above the StormGate™ SGS 816 vault should be maintained so that vault lids are not covered with vegetation.

- Outfall 5 has a rock apron that is overtop geotextile material that leads to Johnson Lake. Stormwater has undermined the apron starting approximately 30-feet back from the end of the apron and is causing rutting underneath the apron where the stormwater discharges on the east side of the apron (see Photo 6). Rutting and undermining of the apron will likely continue without repair. To repair the rip rap in this location would need to be removed in order to determine the steps necessary to repair the apron. Likely the geotextile material would need to be repaired and then the rip rap replaced.

Objective:

The purpose of the swale inspection is to verify that the valves are working properly, the swales are in good condition, and to measure the depth of the sediment collected in the sediment vaults. Fish warning signs that were installed during the 2013 calendar year were also inspected to verify that they were not being obstructed or had been vandalized.

Methods:

DOF representatives walked the length of each swale looking for debris, erosion, ponding water and noxious weeds. Prior to inspecting each vault, the manhole cover was removed, and the vault was allowed to acclimatize for a minimum of 10 minutes. To measure depth of sediment accumulation within each sediment vault, a PVC sounding rod was used to determine the bottom elevation of each sediment vault in relation to the lip of the manhole. A sounding tape was then used to measure distance from the lip of the manhole to the top of the sediment collected in the vault. A 5-foot steel T-handle valve wrench was used to open and close the valves at both the PRF and OF2 Swale. The valves were closed for a minimum of 5 minutes if flow was present to determine if flow had ceased. Concrete sample port was added to the discharge end of Outfall 5 in order to improve sampling.

Background:

The Owens-Brockway facility located in Portland, Oregon has two swales that were installed on the property in order to manage stormwater runoff prior to entering Johnson Lake. These swales are located at Outfall 2 and Outfall 6.

Outfall 2

The Outfall 2 swale (OF2 Swale), located south of Johnson Lake and east of the ball field area, was constructed to collect and convey stormwater runoff from the existing Outfall 2 drainage area. The OF2 Swale slows stormwater from Outfall 2, which carries stormwater from Outfall 2 and former outfalls 1 and 3, allowing water to infiltrate into the ground before entering Johnson Lake.

The OF2 Swale has several components to manage stormwater runoff including:

a. A StormGate™ SGS 816 vault that provides containment in the event of a spill, separates oil and grease from the stormwater, and allows heavy metals and other large size particles settle out before the runoff flows into the swale.
b. The butterfly valve located at Outfall 2 to control inflow into the swale in the event of a hazardous spill.
c. The semi-abandoned Outfall 1, which serves as an overflow structure for Outfall 2 for high flow storm events. Overflow water exits Outfall 1 and then flows into OF2 Swale over a rip rapped route.

d. A grassy swale with check dams and flow spreaders to slow the flow and promote infiltration and with vegetation to increase uptake. The swale is approximately 540 feet long and terminates at Johnson Lake with a swale apron.

Outfall 6

The NE 92nd Dr. Pollution Reduction Facility (PRF) is located between Johnson Lake and NE 92nd Dr. The PRF consists of to two pollution reduction facilities (swales), one for the City of Portland's street runoff (west swale) and the other for the facility's private runoff (east swale).

Each side of the PRF facility has several components to manage stormwater runoff prior to entering Columbia South Shore area including:

a. A diversion manhole to divert the stormwater to the PRF
b. A sedimentation manhole to let heavy metals and other large size particles settle out before the runoff flows into the swale
c. A resilient wedge gate valve, located inside of a standard manhole between the sedimentation manhole and the swale, which is installed to control inflow into the swale in case of hazardous spills
d. A sedimentation box at the outlet of the pipe to prevent erosion and as a second settling point for heavy materials
e. A grass swale to convey the runoff
f. A discharge point to Johnson Lake is located at the end of the swale

Observations:

OF2 Swale:
The swale generally appeared to be in good condition. Though there is some channeling at a couple locations of the swale. Bare soil and sediment accumulations were found near the center of the swale and before one of the check dams. Standing water was also observed near the center of the swale with no recorded precipitation events occurring within 48-hours prior to the inspection. Noxious weeds did not appear to be present in the swale. The butterfly valve for the stormwater shutoff opened and closed easily and did not need to be greased. There was no flow of water through the stormwater outfall at the time of the inspection, but there was accumulated sediment present in the bottom of the actual discharge pipe. Approximately 24-inches of sediment had accumulated in the vault upstream of the StormGate weir. No accumulation of sediment was observed on downstream side of the weir leading to the outfall in the sediment vault.

PRF Swales:
The O-I and City sedimentation manholes had ~2-inches and ~20-inches of sediment respectively. Minor amounts debris was observed floating in each vault. The gate valves for both the City and O-I swales opened and closed easily and did not require any maintenance. There was no flow to the swales at the time of the inspection to determine if the gate valves sealed properly. Less than 3-inches of sediment detected in sediment vaults. The swales were generally in good condition, with no signs of scouring but lacked any vegetation likely due to the lack of sun light getting through the tree canopy and accumulation of fine sediment in each swale. The berm that separates the two swales appeared to be good condition and had no signs of erosion. No noxious weeds observed in the swale.

Attachments: Inspection Checklist, Maintenance Log & Photos

DOF DALTON OLMSTED FUGLEVAND

Inspection Checklist

Owens-Brockway Glass Container Inc. - Portland, Oregon - Inspection Checklist for Outfall 2 (OF2) Swale, Pollution Reduction Facility (PRF) Swales, and Remedial Action (RA) Soil Area

Instructions:
1. See attached map for location of inspection areas: OF2 Swale; PRF Swales; and RA Soil Area
2. Check the box if an issue exists for an area and provide an explanation of the issue
3. After the issue has been corrected pursuant to the O&M Plans*, complete the attached Maintenance Log

OF2
NW – 14"
NE – trace
SW – 14"
SE – 3"

Issue	RA Soil Area	OF2 Swale	PRF Swales		Explanation of Issue
			City	O-I	
Trash/debris is present		No	No	No	
Soil Erosion or ruts are present		X	No	No	
Dead or Stressed Plants or present		No	No	No	
Bare Soil is present		X	X	X	
Noxious Weedy Vegetation is present		No	No	No	
Ponding Water exists (greater than 48 hours)		X			Ponding water near entrance to OF2
Flow is present in Outfall #1		No	---	---	
Flow is restricted in Swale	---				No flow to evaluate
Floating materials are not captured by Sedimentation Manhole/Box/Vault	---	No	No	No	
Damaged Sedimentation Manhole/Box/Vault or Covers	---	No	No	No	
Sediment is greater than 2 feet in PRF Sedimentation Manhole	---	---	N20"	<2"	
Sediment fills more than 60% of volume in PRF Sedimentation Box	---	---	No	No	
Sediment is greater than 9 inches in OF2 Vault (SGS)	---	X	---	---	see sediment thickness above.
Leaking gate valve or butterfly valve	---	X			No flow to assess if valve seals; sediment buildup to be cleaned
Valve does not open/close properly	---	Good	Good	Good	

* As necessary, refer to the O&M Plans for specific details on inspection and maintenance requirements

Inspection Performed by:

Print Name: Daniel Pickering Signature: [signature] Date: 6/8/2022

Maintenance Log

Maintenance Log

Owens-Brockway Glass Container Inc. - Portland, Oregon
Outfall 2 (OF2) Swale, Pollution Reduction Facility (PRF) Swales, and Remedial Action (RA) Soil Area

Facility Element: *(circle all that apply)*

PRF Swales		OF2 Swale	RA Soil Area
City (Western Swale)	O-B (Eastern Swale)		
Sedimentation Manhole	Sedimentation Manhole	StormGate™ SGS 816	Vegetation
Resilient Wedge Gate Valve	Resilient Wedge Gate Valve	Butterfly Valve	Erosion
Sedimentation Box	Sedimentation Box	Swale	Slope
Swale	Swale	Vegetation	Ponding
Vegetation	Vegetation		

Work Performed by: D Pickering

Description of Work Performed: Swale 2 stormgate vault lids were completely covered w/ vegitation. Vegitation was Cleared to expose lids.

(Attach additional sheets as necessary)

Print Name: Daniel Pickering Signature: [signature] Date: 6/8/2022

Inspection Photos



P-1: Sediment accumulation upstream of the StormGate weir.



P-2: Butterfly valve discharge to Outfall 2 swale. Note sediment accumulation below discharge.

Inspection Photos



P-3: Bare soil, sediment, and ponding water present in Outfall 2 swale.



P-4: Check dam failure (circled in yellow) and scouring downstream of this location.

Inspection Photos



P-5: PRF swale: note the lack of vegetation in swales and darker sediment accumulations in both swales that is likely hindering vegetation growth.



P-6: Rutting underneath Outfall 5 apron near entrance to Johnson Lake.

DOF DALTON OLMSTED FUGLEVAND

MEMORANDUM

TO: Todd De Bow; Owens-Brockway Glass Container, Inc
FROM: Dan Pickering; Dalton, Olmsted, & Fuglevand, Inc. (DOF)
DATE: December 14, 2022
SUBJECT: Fall 2022 Swale Inspection Summary

The purpose of this memorandum is to document the observations and maintenance performed during the Fall 2022 inspection of the Sediment Remediation Action Area and the Swales at the Owens-Brockway Portland facility, which was performed on November 8, 2022, by Dalton, Olmsted & Fuglevand (DOF) engineer Dan Pickering and geologist Amber Lutey.

Necessary Actions:

The following is a summary of the recommended actions due to findings during the Fall 2022 swale inspection:

- Repair Outfall 2 butterfly valve so that it does not leak (see Photo 1).
- Maintenance and replanting of recently planted vegetation in Swale 2 and PRF swales. Some plants were displaced (see Photos 2 and 3), and others had root wads exposed by heavy precipitation in the area during the previous 4 days.
- Check dams in Swale 2 were repaired since last inspection but were repaired with smaller rock. During high flows the smaller rock was displaced (see Photo 4). Portions of the check dams that have displaced rock will need to be repaired with larger rock similar to what was used initially during construction of the swale.

Other Recommendations:

The following is a list of other recommendations that would improve the function and effectiveness of the swales and other stormwater outfalls:

- The PRF swale and Swale 2 will need to have leaves cleared once most if not all leaves have fallen from surrounding trees. There were still a lot of leaves on surrounding trees at time of inspection.
- Outfall 5 has a rock apron that is overtop geotextile material that leads to Johnson Lake. Stormwater continues undermined the apron starting approximately 30-feet back from the end of the apron and is causing rutting underneath the apron and continues to discharge on the east side of the apron as previously documented (see Photo 5). This will continue to be monitored but will likely need to be repaired in the future.

Objective:

The purpose of the swale inspection is to verify that the valves are working properly, the swales are in good condition, and to measure the depth of the sediment collected in the sediment vaults. Fish warning signs that were installed during the 2013 calendar year were also inspected to verify that they were not being obstructed or had been vandalized.

Methods:

DOF representatives walked the length of each swale looking for debris, erosion, ponding water and noxious weeds. Prior to inspecting each vault, the manhole cover was removed, and the vault was allowed to acclimatize for a minimum of 10 minutes. To measure depth of sediment accumulation within each sediment vault, a PVC sounding rod was used to determine the bottom elevation of each sediment vault in relation to the lip of the manhole. A sounding tape was then used to measure distance from the lip of the manhole to the top of the sediment collected in the vault. A 5-foot steel T-handle valve wrench was used to open and close the valves at both the PRF and OF2 Swales. The valves were closed for a minimum of 5 minutes if flow was present to determine if flow had ceased.

Background:

The Owens-Brockway facility located in Portland, Oregon has two swales that were installed on the property in order to manage stormwater runoff prior to entering Johnson Lake. These swales are located at Outfall 2 and Outfall 6.

Outfall 2

The Outfall 2 swale (OF2 Swale), located south of Johnson Lake and east of the ball field area, was constructed to collect and convey stormwater runoff from the existing Outfall 2 drainage area. The OF2 Swale slows stormwater from Outfall 2, which carries stormwater from Outfall 2 and former outfalls 1 and 3, allowing water to infiltrate into the ground before entering Johnson Lake.

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c. The semi-abandoned Outfall 1, which serves as an overflow structure for Outfall 2 for high flow storm events. Overflow water exits Outfall 1 and then flows into OF2 Swale over a rip rapped route.
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Outfall 6

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Each side of the PRF facility has several components to manage stormwater runoff prior to entering Columbia Slough South Shore area including:

a. A diversion manhole to divert the stormwater to the PRF
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d. A sedimentation box at the outlet of the pipe to prevent erosion and as a second settling point for heavy materials

e. A grass swale to convey the runoff
f. A discharge point to Johnson Lake is located at the end of the swale

Observations:

OF2 Swale:
The swale had significant maintenance performed since the last inspection. Maintenance included the thinning of the overhead tree foliage, removal of fine grain sediment that had accumulated in various spots throughout the swale, and new wetland vegetation that is shade tolerant was planted in areas where bare soil was exposed. The warm dry weather extended into early fall and the newly planted vegetation did not have a chance to take root. During the recent rain (Nov 4th to 7th) event the produced almost 3-inches of rain uprooted some plants and exposed the root wads of many more. The bare soil areas are still mostly bare but should fill in as the new plants take hold over the winter and spring. Only trace amounts of sediment was detected in the sediment vault and downstream of the StormGate weir.

PRF Swales:
The O-I and City sedimentation manholes had trace amounts of detectible sediment. Minor amounts debris was observed floating in each vault. The gate valves for both the City and O-I swales opened and closed easily and did not require any maintenance. There was no flow to the swales at the time of the inspection to determine if the gate valves sealed properly. More than 3-inches of sediment was observed in the City's PRF sedimentation box. Only trace amounts of sediment observed in the O-I PRF sedimentation box. The O-I swale is generally in good condition, with no signs of scouring. The City swale has significant accumulation of fine sediment. The recently planted vegetation in the O-I swale has not had the opportunity to take hold and spread yet. There was some standing water in both swales due to heavy precipitation that fell over the last several days. The berm that separates the two swales appeared to be good condition and had no signs of erosion. No noxious weeds observed in the swale. Leaves had started to fall on swale and will need to be removed but can be done once most of the leaves have fallen.

Attachments: Inspection Checklist, Maintenance Log & Photos

11/8/22
A. Lutey, D. Pickering

Owens-Brockway Glass Container Inc. - Portland, Oregon - Inspection Checklist for Outfall 2 (OF2) Swale, Pollution Reduction Facility (PRF) Swales, and Remedial Action (RA) Soil Area

Instructions:
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2. Check the box if an issue exists for an area and provide an explanation of the issue
3. After the issue has been corrected pursuant to the O&M Plans*, complete the attached Maintenance Log

Issue	RA Soil Area	OF2 Swale	PRF Swales		Explanation of Issue
			City	O-I	
Trash/debris is present	no	no	some leaves	some leaves	
Soil Erosion or ruts are present	no	yes but minimal	no	no	
Dead or Stressed Plants or present	no	no	no	no	
Bare Soil is present	yes	yes	yes	yes	
Noxious Weedy Vegetation is present	no	no	no	no	
Ponding Water exists (greater than 48 hours)	no	no	yes	yes	
Flow is present in Outfall #1	no	no	---	---	
Flow is restricted in Swale	---	no	no	no	
Floating materials are not captured by Sedimentation Manhole/Box/Vault	---	no	no	no	
Damaged Sedimentation Manhole/Box/Vault or Covers	---	no	no	no	
Sediment is greater than 2 feet in PRF Sedimentation Manhole	---	---	no	no	~1ft on city side Trace amts on O-I
Sediment fills more than 60% of volume in PRF Sedimentation Box	---	---	yes	no	
Sediment is greater than 9 inches in OF2 Vault (SGS)	---	no	---	---	SW- >9in. NW- >9in. SE- >9 in. NE- >9 in.
Leaking gate valve or butterfly valve	---	yes			OF2 ↑
Valve does not open/close properly	---	opens/ closes	opens/ closes	opens/ closes	opens + closes but does not seat fully (flow still present) - OF2

* As necessary, refer to the O&M Plans for specific details on inspection and maintenance requirements

Inspection Performed by:

Print Name: Amber Lutey, Dan Pickering Signature: Amber Lutey, DPickering Date: 11/8/22

Maintenance Log

Owens-Brockway Glass Container Inc. - Portland, Oregon
Outfall 2 (OF2) Swale, Pollution Reduction Facility (PRF) Swales, and Remedial Action (RA) Soil Area

Facility Element: *(circle all that apply)*

PRF Swales		OF2 Swale	RA Soil Area
City (Western Swale)	O-B (Eastern Swale)		
Sedimentation Manhole	Sedimentation Manhole	StormGate™ SGS 816	Vegetation
Resilient Wedge Gate Valve	Resilient Wedge Gate Valve	Butterfly Valve	Erosion
Sedimentation Box	Sedimentation Box	Swale	Slope
Swale	Swale	Vegetation	Ponding
Vegetation	Vegetation		

Work Performed by: Pulled moss

Description of Work Performed: Pulled moss out of OF2 valve - did not help stop flow when valve was closed.

(Attach additional sheets as necessary)

Print Name: Amber Lutey, DAP Pickering Signature: Amber Lutey Date: 11/8/22

Inspection Photos



P-1: Moss and algae growth at bottom of valve. The material was removed and flow under valve increased.



P-2: Recently planted swale vegetation. Rainfall has been minimal since planting but it expected that these place will spread quickly with more rain and sunlight. Note the tree canopy has been cut back.

Inspection Photos



P-3: Smaller rock placed to repair check dams has started to wash away. Recommend larger rock to reduce potential for washout.



P-4: Deer scat observed in the swale circled in red.

Inspection Photos



P-5: PRF swale facing discharge pipes and sedimentation boxes. Not new vegetation in O-I swale.



P-6: O-I swale on the left and City swale on the right.


Natural Area
RULES OF USE
WARNING
FISH CONTAMINATED
DO NOT EAT




WARNING
FISH CONTAMINATED
DO NOT EAT
2013/10/29

JOHNSON LAKE FISH TISSUE MONITORING

APPENDIX N: SUMMARY DATA FROM 2004 AND 2017

Summary of 2004 Fish Tissue Analyses (ARCADIS 2004).

Composite/Sample Name	Date Collected	Species	Length (mm)	Mass (g)	# Fish in Sample	Lipid (%)	Total PCB (µg/kg)	Lipid - Normal Total PCB (µg/kg)	PCB Congener 126 (µg/kg)
GF-1-FWB	3/25/2004	Largemouth Bass	316	620	1	5.3	403	7531	--
GF-1-Carcass						9.2	733	7962	0.36
GF-1-Fillet						1.3	92.6	7123	0.0382
RF-1-FWB	3/23/2004	Common Carp	640[1]	5627[1]	3	9.2	1208	13131	--
RF-1-Carcass						11	1369	12445	--
RF-1-Fillet						3.9	389	10205	0.293
RF-1-Skin						8.1	1595	19691	--
RF-2-FWB	3/23/2004	Largescale Sucker	520[1]	1095[1]	3	5.6	520	9293	--
RF-2-Carcass						7.4	781	10547	--
RF-2-Fillet						2.7	148	5481	0.62
RF-3-FWB	3/23/2004	Largescale Sucker	457[1]	1164[1]	5	8.7	279	3201	--
RF-3-Carcass						11	388	3527	--
RF-3-Fillet						5	148	2950	0.101
MF-1[2]	3/25/2004	Largescale Sucker	321	392	1	9.6	136	1411	0.0487
MF-2[2]	3/25/2004	Sculpin	181	276[3]	2	2.7	266	9852	0.0561
MF-3[2]	3/24/2004	Common Carp	342	750	1	5.4	82.8	1533	0.0226
SF-1[2]	3/24/2004	Sculpin	90	17.4[1]	2	4.2	ND	--	--
SF-2[2]		Three-spine stickleback	35	19.6[3]	32	3.5	ND	--	--
SF-3[2]		Three-spine stickleback	32	17.5[3]	31	2.7	ND	--	--
SF-6[2]		Mixed[4]	57	21[3]	4	4.7	ND	--	--
SF-7[2]		Three-spine stickleback	50	15.5[3]	6	2.4	ND	--	--
SF-8[2]		Sculpin	107	75.9	3	3.4	ND	--	--

[1] Measurement is an average for individuals in sample group
[2] Composite samples are whole-body
[3] Measurement is the sum of the individuals in the sample group
[4] Non-detect

Summary of 2017 fish sample and composite results (Grette 2018).

Date Collected	Sample ID	Composite ID	Species	Fork Length (mm)	Percent Lipid	Total PCB (µg/kg)	Lipid-Normal Total PCB	PCB Congener 126 (µg/kg)
6/21/2017	RF1-ES-1	RF1,6 Composite (fillet)	Largescale Sucker	508	3.9	484	12410	0.135
6/21/2017	RF1-ES-7		Largescale Sucker	526				
6/21/2017	RF1-ES-8		Largescale Sucker	467				
6/21/2017	RF1-ES-9		Largescale Sucker	524				
6/23/2017	RF6-ES-15		Largescale Sucker	549				
6/23/2017	RF1-ES-16		Largescale Sucker	584				
6/21/2017	SF6-ES-2	SF2,6 Composite (whole body)	Three Spined Stickleback	47	2.1	122	5810	0.034
6/21/2017	SF6-ES-3		Three Spined Stickleback	48				
6/21/2017	SF6-ES-4		Three Spined Stickleback	48				
6/21/2017	SF6-ES-5		Three Spined Stickleback	46				
6/21/2017	SF6-ES-6		Three Spined Stickleback	46				
6/23/2017	SF2-ES-11		Sculpin	101				
6/23/2017	PF2-ES-12	PF2-ES-12 (fillet)	Pumpkin-seed	98	0.3	12.1	4033	0.009
6/23/2017	LF2-ES-10	LF2 Composite (whole body)	Largescale Sucker	165	3.9	90.8	2328	0.035
6/23/2017	LF2-ES-13		Sculpin	125				
6/23/2017	LF2-ES-17		Largescale Sucker	143				
6/23/2017	RF1-ES-14	RF1-ES-14 (fillet)	Largescale Sucker	511	4.7	102	2170	ND