

January 30, 2024

Jeff Schatz, R.G.  
Oregon Department of Environmental Quality  
700 NE Multnomah Street No. 600  
Portland, Oregon 97232

Subject: Air Sampling and Prospective Purchaser Agreement Closeout  
The Glass Lab  
350 Southeast Mill Street  
Portland, Oregon  
File No. 5670-006-00

GeoEngineers, Inc. (GeoEngineers) has prepared this letter on behalf of 1805 MLK Owner LLC (the Owner) and ScanlanKemperBard Companies, LLC to present the results of three ambient air sampling events performed at the former Byrum W. Morehouse building at 1805 Southeast Martin Luther King Junior Boulevard in Portland, Oregon (herein referred to as the Site). The former Byrum W. Morehouse building is now known as the Glass Lab building. Consistent with the Prospective Purchaser Agreement Consent Order No. 18-01 (PPA) between the Owner and the Oregon Department of Environmental Quality (DEQ) a sub-slab depressurization system (SSDS) has operated at the Site to mitigate potential intrusion of tetrachloroethene (PCE) and trichloroethene (TCE) in soil vapor into the Glass Lab building. The letter regarding Proposed Scope of Work for Air Sampling and Prospective Purchaser Agreement Closeout, dated June 13, 2023 prepared by Farallon Consulting, LLC (Farallon) and amended by DEQ (work plan) presented an approach for ambient air sampling and, contingent on the sampling results, closeout of the PPA. This letter provides background information regarding conditions at the Site and consistent with the work plan includes the following information relevant for closeout of the PPA:

- A description of the ambient air sampling locations, methods, and results;
- Analytical laboratory reports;
- Tables summarizing the results of sub-slab soil vapor and ambient air sampling at the Site, and comparing the results with DEQ risk-based concentrations (RBCs) for commercial receptors;
- A version of as-built site plan EN1.00 (Attachment A) showing the monitoring locations; and
- An evaluation of potential risk for vapor intrusion performed consistent with the criteria in Section 4.6.6 of DEQ's *Guidance for Assessing and Remediating Vapor Intrusion in Buildings* (VI Guidance), based on the results of indoor air and soil vapor sampling.

The results of the risk evaluation indicate that concentrations of PCE and TCE in soil vapor beneath the Glass Lab building do not pose an unacceptable current and future risk for occupants of the Glass Lab building; therefore, consistent with the DEQ-approved work plan, GeoEngineers on behalf of 1805 MLK Owner LLC requests the following:

- DEQ concurrence for permanent deactivation of the SSDS blower in favor of continued operation of the SSDS in passive mode (without the blower operating); and
- Preparation by DEQ of a Certificate of Completion indicating that the terms of the PPA have been met and requiring operation of the SSDS in only passive mode without further monitoring of SSDS system performance, soil vapor, or ambient air.

## BACKGROUND

The PPA required implementation of a focused remedial action at the Site to address environmental conditions including but not limited to the presence of PCE and TCE in soil vapor beneath the Glass Lab building at concentrations exceeding RBCs for vapor intrusion for occupational (now referred to as commercial) receptors. The objective for the remedial action was to mitigate the potential risk for human health from exposure to this soil vapor via the vapor intrusion into buildings pathway.

The scope of work elements for the focused remedial action described in the PPA have been completed, specifically:

- A Focused Remedial Action Plan (FRAP)<sup>1</sup> was submitted to DEQ in October 2018.
- An Environmental Media Management Plan (EMMP)<sup>2</sup> was submitted to DEQ in July 2018.
- In accordance with the FRAP and EMMP, an SSDS was installed and penetrations and construction joints in the concrete slab building foundation were sealed in 2019. SSDS installation and startup and sealing of construction joints were described in a letter report submitted to DEQ.<sup>3</sup>
- Modeling of emissions was performed and demonstrated that operation of the SSDS does not result in downwash hazards from the discharge stack.
- The SSDS has been operating since June 2019. Performance monitoring events were completed in January 2020, October 2020, July 2021, and April 2022 and the monitoring results were submitted to DEQ.

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<sup>1</sup> Farallon Consulting, L.L.C. 2018. *Focused Remedial Action Work Plan, Byrum W. Morehouse Building, 1805 Southeast Martin Luther King Jr. Boulevard, Portland, Oregon.* October 23. (FRAP)

<sup>2</sup> Farallon Consulting, L.L.C. 2018. *Environmental Media Management Plan, Byrum W. Morehouse Building, 1805 Southeast Martin Luther King Jr. Boulevard, Portland, Oregon.* July 19.

<sup>3</sup> Farallon Consulting, L.L.C. 2020. Letter regarding Remedial Action Operation and Maintenance, The Glass Lab, 1805 Southeast Martin Luther King Jr. Boulevard, Portland, Oregon. From Melissa Roskamp and Mark Havighorst. To Jeff Schatz, Oregon Department of Environmental Quality. April 27.



The performance monitoring activities included but were not limited to collection of soil vapor samples from seven sub-slab monitoring points in the Glass Lab building and analyzing the samples for halogenated volatile organic compounds (HVOCs). The approximate locations of the soil vapor monitoring points are shown on the modified version of as-built site plan EN1.00 (Attachment A). The analytical laboratory reports are included in Attachment B. Table 1 summarizes the results of laboratory analysis and includes the new RBCs for vapor intrusion for commercial receptors that were established by DEQ in June 2023. The analytical results for PCE and TCE are summarized as follows:

- As shown in Table 1 concentrations of PCE and TCE exceed RBCs in some sub-slab soil vapor samples collected from the Glass Lab building, specifically:
  - Concentrations of PCE exceed the RBC of 1,600  $\mu\text{g}/\text{m}^3$  in 8 of the 28 sub-slab soil vapor samples. The maximum concentration of PCE was 6,930  $\mu\text{g}/\text{m}^3$ .
  - Concentrations of TCE exceed the RBC of 100  $\text{mm}$  in 19 of the 28 sub-slab soil vapor samples. The maximum concentration of TCE was 6,160  $\mu\text{g}/\text{m}^3$ .
- Concentrations of PCE and/or TCE exceed RBCs in sub-slab soil vapor samples collected from monitoring points at only the following locations: Tenant Space/Suite 6 (VP-7), Tenant Space/Suite 7 (VP-4 and VP-7), Tenant Space/Suite 8 (VP-3/VP-8), the Loading Dock (VP-2), and the South Stairwell (VP-5/VP-9).
- The highest concentrations of PCE and TCE generally were observed in the samples collected from Tenant Space/Suite 8 (VP-3/VP-8), which is in the southeastern portion of the Glass Lab building. The lowest concentrations of PCE and TCE were observed in the samples collected from Tenant Space/Suite 3 (VP-1), which is in the southwestern portion of the Glass Lab building.
- Concentrations of PCE and TCE at each monitoring point were highest in the sub-slab soil vapor samples collected in July 2021 and generally were lowest in the samples collected in October 2020 and April 2022.
- Concentrations of PCE and TCE at some sampling locations generally are stable but exhibit some variability. The cause for this variability does not appear to be seasonality or operation of the Glass Lab building's HVAC system, and likely is not the result of changes in the depth to shallow groundwater, which the FRAP indicates was not encountered at depths borings at the Site advanced to a depth of 25 feet below ground surface.

The FRAP indicates that the SSDS will operate until it can be demonstrated that operation is not necessary to achieve the remedial objective of “reducing to acceptable levels the human health risks from exposure to soil vapor via the vapor intrusion pathway”. The FRAP indicates that this condition will be demonstrated when concentrations of HVOCs in soil vapor beneath the Glass Lab building are less than the vapor intrusion RBCs for commercial receptors. As described in the work plan, concentrations of only TCE in soil vapor samples collected from some sub-slab monitoring points during more than one of the four performance monitoring events exceeded historical vapor intrusion RBCs for commercial receptors. This condition suggested that continued operation of the SSDS blower may be necessary to mitigate vapor intrusion risk. However, as described in the work plan, continued operation of the SSDS blower is not desirable for the following reasons:



- Operation of the SSDS blower may be exacerbating soil vapor conditions beneath the Glass Lab building by drawing suspected HVOC vapors from the nearby East Side Plating property.
- The approximately 10- to 14-inch-thick sealed concrete slab foundation of the Glass Lab building without operation of the SSDS blower may be sufficient to mitigate the risk from the generally low concentrations of PCE and TCE in soil vapor beneath the Glass Lab building.

The work plan proposed completing three ambient air sampling events using Radiello passive samplers to evaluate whether the sealed concrete slab foundation without operation of the SSDS blower is effective at achieving the remedial objective of reducing human health risks from exposure to soil vapor via the vapor intrusion pathway to acceptable levels.

## SAMPLING LOCATIONS, METHODS, AND RESULTS

Ambient air sampling consistent with the work plan was performed from April 7 through 19 and September 15 through 22, 2023, and from January 5 through 10, 2024. Sampling during these three time periods accounted for potential seasonal variability in ambient air conditions. The approximate sampling locations are depicted on EN1.00. Sampling was performed following the procedure described below.

- The SSDS blower was shut down and switched to passive mode at least 3 days prior to sampling to allow soil vapor and ambient air concentrations to stabilize.
- A materials survey was performed to identify any items in the Glass Lab building likely to contain HVOCs. The survey identified no readily apparent materials containing HVOCs.
- Radiello samplers were deployed at the following primary workspaces for tenants of the Glass Lab building where PCE and/or TCE were detected at concentrations exceeding RBCs in sub-slab soil vapor samples:
  - VP-2A, at the loading dock proximate to vapor monitoring point VP-2;
  - VP-3A, on the Tenant Space/Suite 8 stairway proximate to vapor monitoring point VP-3;
  - VP-4A, in Tenant Space/Suite 7 space proximate to vapor monitoring point VP-4;
  - VP-5A, in the south stairwell proximate to vapor monitoring point VP-5;
  - VP-6A, in Tenant Space/Suite 7 space proximate to vapor monitoring point VP-6; and
  - VP-7A, in Tenant Space/Suite 6 space proximate to vapor monitoring point VP-7.
- Radiello samplers also were deployed at the following locations where tenants may occasionally but do not routinely work and where PCE and/or TCE were not detected at concentrations exceeding RBCs in sub-slab soil vapor samples:
  - Conference RM-A, in the conference room;
  - Second Floor-A, in the second-floor hallway; and
  - Outside-A, outside the Glass Lab building near the south bay door.
- The Radiello samplers were deployed approximately 1 meter above the floor to represent the breathing zone, except the samplers at Outside-A, which were placed approximately 2 meters above the ground to prevent tampering.

Ambient air temperature, humidity, and barometric pressure were measured inside the Glass Lab building during the second and third monitoring events on the days the Radiello samplers were deployed and retrieved. These measurements and temperature, humidity, and barometric pressures<sup>4</sup> for Portland on the days the Radiello Samplers were deployed and retrieved are summarized in the table below. These measurements indicate that temperature, humidity, and barometric pressure inside the Glass Lab building were relatively consistent regardless of seasonal changes in outdoor air conditions.

Date	Ambient Air Conditions					
	Temperature (degrees Fahrenheit)		Relative Humidity (Percent)		Barometric Pressure (inches of mercury)	
	Indoors	Outdoors (Night/Day)	Indoors	Outdoors (Night/Day)	Indoors	Outdoors (Night/Day)
9/15/2023	75	59/81	50	85/27	29.97	29.9
9/22/2023	65	52/70	58	88/32	30.02	30
1/5/2024	64	36/43	46	98/85	30.35	30.4
1/10/2024	62	28/36	52	94/77	31.23	29.7

The Radiello samplers were submitted under chain-of-custody protocols to ALS Environmental in Salt Lake City, Utah, for analysis for HVOCs using modified EPA Method TO-17. The laboratory reports are included in Attachment B. Table 2 presents a summary of the analytical results for PCE and TCE and the RBCs for commercial receptors established by DEQ in June 2023.

The analytical results for PCE and TCE are summarized as follows:

- PCE and TCE were not detected at concentrations exceeding RBCs for commercial receptors in any ambient air samples.
- PCE was detected at concentrations ranging from 0.16 to 2.2 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) in the ambient air samples collected inside the Glass Lab building. These concentrations are more than 1 order of magnitude less than the RBC for Air Inhalation for commercial receptors of 47  $\mu\text{g}/\text{m}^3$ .
- TCE was detected at concentrations ranging from 0.08 to 0.84  $\mu\text{g}/\text{m}^3$  in the ambient air samples collected inside the Glass Lab building. These concentrations are approximately 1 order of magnitude less than the RBC for commercial receptors of 3  $\mu\text{g}/\text{m}^3$  and the acute RBC of 6.3  $\mu\text{g}/\text{m}^3$ .
- PCE was detected at concentrations ranging from 0.12 to 2.1  $\mu\text{g}/\text{m}^3$  in the ambient air samples collected outdoors. TCE was not detected in the ambient air samples collected outdoors.
- The concentrations of PCE and TCE exhibited no apparent seasonality.

<sup>4</sup> Source: <https://www.ncei.noaa.gov/access/past-weather/Portland%20OR>

## EVALUATION OF POTENTIAL RISK FOR VAPOR INTRUSION

Section 4.6.6 of the VI Guidance describes the following two criterion for evaluating based on indoor air and soil vapor sampling data whether an unacceptable risk from vapor intrusion exists:

1. *If the subsurface VOC contribution to indoor air VOC levels exceeds air RBCs, then there is an unacceptable current and future risk to building occupants and corrective action, and removal and/or remediation are necessary.*
2. *If soil gas or sub-slab vapor concentrations exceed RBCs, but the subsurface contribution to indoor VOC levels is below air RBCs, then current VI risks are acceptable.*

Table 3 presents the PCE and TCE concentrations detected in sub-slab soil vapor and ambient air samples by location and includes the current RBCs for vapor intrusion for commercial receptors. As shown in Table 3, PCE and TCE were not detected at concentrations exceeding current RBCs in any of the ambient air samples collected from the Glass Lab building where PCE and/or TCE were detected at concentrations exceeding RBCs in soil vapor samples. These results indicate that consistent with the criteria in the VI Guidance there is no unacceptable risk from vapor intrusion for occupants of the Glass Lab building.

## SUMMARY

Soil vapor and ambient air conditions at the Site have been well-characterized by the collection and analysis of 28 sub-slab soil vapor samples at seven locations during four separate monitoring events and 26 ambient air samples from nine locations consistent with the DEQ-approved FRAP and work plan. The locations include but are not limited to primary and occasional workspaces in the Glass Lab building. The results of soil vapor sampling indicate that soil vapor conditions are stable but concentrations of PCE and TCE in soil vapor beneath the concrete slab foundation exceed RBCs for vapor intrusion into buildings for commercial receptors. Operation of the SSDS blower apparently has not appreciably reduced the concentrations of PCE and TCE beneath the concrete slab foundation and may be exacerbating conditions in soil vapor beneath the Glass Lab building by drawing suspected HVOC vapors from the nearby East Side Plating property.

In contrast, the results of ambient air sampling indicate that PCE and TCE concentrations in ambient air inside the Glass Lab building and proximate to areas where concentrations of PCE and TCE in sub-slab soil vapor exceed RBCs are stable, do not vary with seasonal changes, and are approximately one order of magnitude or more less than RBCs for commercial receptors.


Because soil vapor and ambient air conditions have been well-characterized and soil vapor conditions are stable and concentrations of PCE and TCE in ambient air do not exceed RBCs, consistent with the VI Guidance, there is no unacceptable risk from vapor intrusion for occupants of the Glass Lab building. Accordingly, consistent with the DEQ-approved work plan, GeoEngineers on behalf of 1805 MLK Owner LLC requests the following:



- DEQ concurrence for permanent deactivation of the SSDS blower in favor of continued operation of the SSDS in passive mode (without the blower operating); and
- Preparation by DEQ of a Certificate of Completion indicating that the terms of the PPA have been met and requiring future operation of the SSDS in only passive mode without further monitoring of SSDS system performance, soil vapor, or ambient air.

Please contact us if you have any questions regarding the information presented herein.

Sincerely,  
GeoEngineers, Inc.



Mark Havighorst, P.E.  
Associate Engineer

MH:atk

Attachments:

Table 1, Sub-slab Soil Vapor Analytical Results – Volatile Organic Compounds

Table 2, Ambient Air Analytical Results – Tetrachloroethene and Trichloroethene

Table 3, Sub-slab Soil Vapor Ambient Air Analytical Results – Tetrachloroethene and Trichloroethene

Attachment A, EN1.00

Attachment B, Analytical Laboratory Reports

One electronic copy submitted.

Disclaimer: Any electronic form, facsimile or hard copy of the original document (email, text, table, and/or figure), if provided, and any attachments are only a copy of the original document. The original document is stored by GeoEngineers, Inc. and will serve as the official document of record.



# Table 1

Subslab Soil Vapor Analytical Results - Volatile Organic Compounds

Glass Lab

350 SE Mill Street, Portland, Oregon

Sample Location	Location Description	Sample Identification	Sample Date	Analytical Results (micrograms per cubic meter) <sup>1</sup>														
				1,1,1-Trichloroethane	1,1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethylbenzene	1,3-Butadiene	1,3-Dichlorobenzene	1,4-Dichlorobenzene
VP-1	Tenant Space/Suite 3	VP-01-010920	1/9/2020	1.16	< 1.37	< 1.09	< 0.802	< 0.793	< 4.66	< 0.982	< 1.54	< 1.2	< 0.81	< 0.924	< 0.982	< 4.43	1.73	< 1.2
		VP-1-102920	10/29/2020	< 1.09	< 1.37	< 1.09	< 0.802	< 0.793	< 4.66	< 0.982	< 1.54	< 1.2	< 0.81	< 0.924	< 0.982	< 4.43	< 1.2	< 1.2
		VP-1-072821	7/28/2021	2.01	< 1.37	< 1.09	< 0.802	< 0.793	< 4.66	< 0.982	< 1.54	< 1.20	< 0.81	< 0.924	< 0.982	< 4.43	< 1.20	< 1.20
		VP-1-042522	4/25/2022	< 1.09	< 1.37	< 1.09	< 0.802	< 0.793	< 4.66	< 0.982	< 1.54	< 1.20	< 0.810	< 0.924	< 0.982	< 4.43	< 1.20	< 1.20
VP-2	Loading Dock	VP-02-010920	1/9/2020	1.5	< 1.37	< 1.09	< 0.802	< 0.793	< 4.66	< 0.982	< 1.54	< 1.2	< 0.81	< 0.924	< 0.982	< 4.43	1.28	< 1.2
		VP-2-102920	10/29/2020	< 1.09	< 1.37	< 1.09	< 0.802	< 0.793	< 4.66	< 0.982	< 1.54	< 1.2	< 0.81	< 0.924	< 0.982	< 4.43	< 1.2	< 1.2
		VP-2-072821	7/28/2021	10.1	< 1.37	< 1.09	< 0.802	< 0.793	< 4.66	1.24	< 1.54	< 1.20	< 0.81	< 0.924	< 0.982	< 4.43	< 1.20	< 1.20
		VP-2-042522	4/25/2022	< 1.09	< 1.37	< 1.09	< 0.802	< 0.793	< 4.66	< 0.982	< 1.54	< 1.20	< 0.810	< 0.924	< 0.982	< 4.43	< 1.20	< 1.20
VP-3/ VP-8 <sup>3</sup>	Tenant Space/Suite 8	VP-03-010920	1/9/2020	1.39	< 1.37	< 1.09	< 0.802	< 0.793	< 4.66	< 0.982	< 1.54	< 1.2	< 0.81	< 0.924	< 0.982	< 4.43	< 1.2	< 1.2
		VP-3-102920	10/29/2020	4.90	< 1.37	2.47	4.13	< 0.793	< 4.66	< 0.982	< 1.54	< 1.2	< 0.81	< 0.924	< 0.982	< 4.43	< 1.2	< 1.2
		VP-3-072821	7/28/2021	10.7	< 1.37	< 1.09	1.03	< 0.793	< 4.66	< 0.982	< 1.54	< 1.20	< 0.81	< 0.924	< 0.982	< 4.43	< 1.20	< 1.20
		VP-8-042522	4/25/2022	4.48	< 1.37	< 1.09	< 0.802	< 0.793	< 4.66	< 0.982	< 1.54	< 1.20	< 0.810	< 0.924	< 0.982	< 4.43	< 1.20	< 1.20
VP-4	Tenant Space/Suite 7	VP-04-010920	1/9/2020	4.75	< 1.37	< 1.09	< 0.802	< 0.793	< 4.66	< 0.982	< 1.54	< 1.2	< 0.81	< 0.924	< 0.982	< 4.43	< 1.2	< 1.2
		VP-4-102920	10/29/2020	< 1.09	< 1.37	< 1.09	< 0.802	< 0.793	< 4.66	< 0.982	< 1.54	< 1.2	< 0.81	< 0.924	< 0.982	< 4.43	< 1.2	< 1.2
		VP-4-072821	7/28/2021	17.5	< 1.37	< 1.09	< 0.802	< 0.793	< 4.66	< 0.982	< 1.54	< 1.20	< 0.81	< 0.924	< 0.982	< 4.43	< 1.20	< 1.20
		VP-4-042522	4/25/2022	< 1.09	< 1.37	< 1.09	< 0.802	< 0.793	< 4.66	< 0.982	< 1.54	< 1.20	< 0.810	< 0.924	< 0.982	< 4.43	< 1.20	< 1.20
VP-5/VP-9 <sup>4</sup>	South Stairwell	VP-05-010920	1/9/2020	5.6	< 1.37	< 1.09	< 0.802	< 0.793	< 4.66	< 0.982	< 1.54	< 1.2	< 0.81	< 0.924	< 0.982	< 4.43	< 1.2	< 1.2
		VP-5-102920	10/29/2020	2.89	< 1.37	< 1.09	< 0.802	< 0.793	< 4.66	< 0.982	< 1.54	< 1.2	< 0.81	< 0.924	< 0.982	< 4.43	< 1.2	< 1.2
		VP-5-072821	7/28/2021	11.3	< 1.37	< 1.09	< 0.802	< 0.793	< 4.66	1.01	< 1.54	< 1.20	< 0.81	< 0.924	< 0.982	< 4.43	< 1.20	< 1.20
		VP-9-042522	4/25/2022	2.50	< 1.37	A	< 0.802	< 0.793	< 4.66	< 0.982	< 1.54	< 1.20	< 0.810	< 0.924	< 0.982	< 4.43	< 1.20	< 1.20
VP-6	Tenant Space/Suite 7	VP-06-010920	1/9/2020	4.74	< 1.37	< 1.09	< 0.802	< 0.793	< 4.66	< 0.982	< 1.54	< 1.2	< 0.81	< 0.924	< 0.982	< 4.43	1.52	< 1.2
		VP-6-102920	10/29/2020	< 1.09	< 1.37	< 1.09	< 0.802	< 0.793	< 4.66	< 0.982	< 1.54	< 1.2	< 0.81	< 0.924	< 0.982	< 4.43	< 1.2	< 1.2
		VP-6-072821	7/28/2021	7.40	< 1.37	< 1.09	< 0.802	< 0.793	< 4.66	< 0.982	< 1.54	< 1.20	< 0.81	< 0.924	< 0.982	< 4.43	< 1.20	< 1.20
		VP-6-042522	4/25/2022	< 1.09	< 1.37	< 1.09	< 0.802	< 0.793	< 4.66	< 0.982	< 1.54	< 1.20	< 0.810	< 0.924	< 0.982	< 4.43	< 1.20	< 1.20
VP-7	Tenant Space/Suite 6	VP-07-010920	1/9/2020	< 1.09	< 1.37	< 1.09	< 0.802	< 0.793	< 4.66	1.6	< 1.54	< 1.2	< 0.81	< 0.924	< 0.982	< 4.43	< 1.2	< 1.2
		VP-7-102920	10/29/2020	< 1.09	< 1.37	< 1.09	< 0.802	< 0.793	< 4.66	< 0.982	< 1.54	< 1.2	< 0.81	< 0.924	< 0.982	< 4.43	< 1.2	< 1.2
		VP-7-072821	7/28/2021	< 1.09	< 1.37	< 1.09	< 0.802	< 0.793	< 4.66	1.08	< 1.54	< 1.20	< 0.81	< 0.924	< 0.982	< 4.43	< 1.20	< 1.20
		VP-7-042522	4/25/2022	< 1.09	< 1.37	< 1.09	< 0.802	< 0.793	< 4.66	1.03	< 1.54	< 1.20	< 0.810	< 0.924	< 0.982	< 4.43	< 1.20	< 1.20
DEQ RBC: Soil Gas Vapor Intrusion into Buildings for Commercial Receptors <sup>2</sup>				730,000	7.1	100	260	880	290	8,800	0.68	29,000	16	110	8,800	14	NITI	37

**NOTES:**

Results highlighted in yellow exceed commercial RBCs.

< denotes analyte not detected at or exceeding the reporting limit listed.

>Pv denotes the air concentration reported for the RBC exceeds the vapor pressure of the pure chemical. It can be assumed that this constituent cannot create an unacceptable risk by this pathway.

<sup>1</sup>Analyzed by U.S. Environmental Protection Agency Method TO-15.

<sup>2</sup>State of Oregon Department of Environmental Quality Risk-Based Concentrations Table, revised June 2023

<sup>3</sup>VP-8 was installed to replace VP-3 on April 21, 2022

<sup>4</sup>VP-9 was installed to replace VP-5 on April 21, 2022

DEQ = Oregon Department of Environmental Quality

E = result exceeds calibration range of instrument and is an estimate

J = result is an estimate

NITI = no inhalation toxicity established by DEQ

RBC = Risk-Based Concentration

# Table 1

Subslab Soil Vapor Analytical Results - Volatile Organic Compounds

Glass Lab

350 SE Mill Street, Portland, Oregon

Sample Location	Location Description	Sample Identification	Sample Date	Analytical Results (micrograms per cubic meter) <sup>1</sup>														
				1,4-Dioxane	2,2,4-Trimethylpentane	2-Butanone (Methyl Ethyl Ketone)	2-Chlorotoluene	2-Hexanone	2-Propanol	3-Chloropropene	4-Ethyltoluene	4-Methyl-2-Pentanone (MIBK)	Acetone	Benzene	Benzyl Chloride	Bromodichloromethane	Bromoform	Bromomethane
VP-1	Tenant Space/Suite 3	VP-01-010920	1/9/2020	< 0.721	< 0.934	< 3.69	< 1.03	< 5.11	< 3.07	< 0.626	< 0.982	< 5.12	28.3	< 0.639	< 1.04	< 1.34	< 6.21	< 0.776
		VP-1-102920	10/29/2020	< 0.721	< 0.934	< 3.69	< 1.03	< 5.11	< 3.07	< 0.626	< 0.982	< 5.12	< 2.97	< 0.639	< 1.04	< 1.34	< 6.21	< 0.776
		VP-1-072821	7/28/2021	< 0.721	< 0.934	3.89	< 1.03	< 5.11	6.49	< 0.626	< 0.982	< 5.12	10.0	< 0.639	< 1.04	< 1.34	< 6.21	< 0.776
		VP-1-042522	4/25/2022	< 0.721	11.4	< 3.69	< 1.03	< 5.11	3.12	< 0.626	< 0.982	< 5.12	6.96	< 0.639	< 1.04	< 1.34	< 6.21	< 0.776
VP-2	Loading Dock	VP-02-010920	1/9/2020	< 0.721	< 0.934	< 3.69	< 1.03	< 5.11	6.88	< 0.626	< 0.982	< 5.12	12.2	< 0.639	< 1.04	< 1.34	< 6.21	< 0.776
		VP-2-102920	10/29/2020	< 0.721	< 0.934	< 3.69	< 1.03	< 5.11	< 3.07	< 0.626	< 0.982	< 5.12	8.10	1.02	< 1.04	< 1.34	< 6.21	< 0.776
		VP-2-072821	7/28/2021	< 0.721	< 0.934	< 3.69	< 1.03	< 5.11	< 3.07	< 0.626	< 0.982	< 5.12	6.34	1.15	< 1.04	< 1.34	< 6.21	< 0.776
		VP-2-042522	4/25/2022	< 0.721	< 0.934	< 3.69	< 1.03	< 5.11	< 3.07	< 0.626	< 0.982	< 5.12	6.23	< 0.639	< 1.04	< 1.34	< 6.21	< 0.776
VP-3/ VP-8 <sup>3</sup>	Tenant Space/Suite 8	VP-03-010920	1/9/2020	< 0.721	< 0.934	< 3.69	< 1.03	< 5.11	8.28	< 0.626	< 0.982	< 5.12	73	0.687	< 1.04	< 1.34	< 6.21	< 0.776
		VP-3-102920	10/29/2020	< 0.721	< 0.934	< 3.69	< 1.03	< 5.11	10.5	< 0.626	< 0.982	< 5.12	13.3	1.45	< 1.04	< 1.34	< 6.21	< 0.776
		VP-3-072821	7/28/2021	< 0.721	< 0.934	< 3.69	< 1.03	< 5.11	< 3.07	< 0.626	< 0.982	< 5.12	4.23	1.98	< 1.04	< 1.34	< 6.21	< 0.776
		VP-8-042522	4/25/2022	< 0.721	< 0.934	< 3.69	< 1.03	< 5.11	3.39	< 0.626	< 0.982	< 5.12	11.6	1.37	< 1.04	< 1.34	< 6.21	< 0.776
VP-4	Tenant Space/Suite 7	VP-04-010920	1/9/2020	< 0.721	< 0.934	< 3.69	< 1.03	< 5.11	< 3.07	< 0.626	< 0.982	< 5.12	11.5	0.831	< 1.04	< 1.34	< 6.21	< 0.776
		VP-4-102920	10/29/2020	< 0.721	< 0.934	< 3.69	< 1.03	< 5.11	< 3.07	< 0.626	< 0.982	< 5.12	3.73	1.01	< 1.04	< 1.34	< 6.21	< 0.776
		VP-4-072821	7/28/2021	< 0.721	< 0.934	< 3.69	< 1.03	< 5.11	< 3.07	< 0.626	< 0.982	< 5.12	7.94	1.76	< 1.04	< 1.34	< 6.21	< 0.776
		VP-4-042522	4/25/2022	< 0.721	< 0.934	< 3.69	< 1.03	< 5.11	< 3.07	< 0.626	< 0.982	< 5.12	3.56	< 0.639	< 1.04	< 1.34	< 6.21	< 0.776
VP-5/VP-9 <sup>4</sup>	South Stairwell	VP-05-010920	1/9/2020	< 0.721	< 0.934	< 3.69	< 1.03	< 5.11	< 3.07	< 0.626	< 0.982	< 5.12	4.63	< 0.639	< 1.04	< 1.34	< 6.21	< 0.776
		VP-5-102920	10/29/2020	< 0.721	< 0.934	< 3.69	< 1.03	< 5.11	< 3.07	< 0.626	< 0.982	< 5.12	5.18	< 0.639	< 1.04	< 1.34	< 6.21	< 0.776
		VP-5-072821	7/28/2021	< 0.721	< 0.934	< 3.69	< 1.03	< 5.11	< 3.07	< 0.626	< 0.982	< 5.12	10.8	1.10	< 1.04	< 1.34	< 6.21	< 0.776
		VP-9-042522	4/25/2022	< 0.721	< 0.934	< 3.69	< 1.03	< 5.11	6.34	< 0.626	< 0.982	< 5.12	12.9	< 0.639	< 1.04	< 1.34	< 6.21	< 0.776
VP-6	Tenant Space/Suite 7	VP-06-010920	1/9/2020	< 0.721	< 0.934	< 3.69	< 1.03	< 5.11	< 3.07	< 0.626	< 0.982	< 5.12	10.7	0.754	< 1.04	< 1.34	< 6.21	< 0.776
		VP-6-102920	10/29/2020	< 0.721	< 0.934	< 3.69	< 1.03	< 5.11	< 3.07	< 0.626	< 0.982	< 5.12	4.71	1.62	< 1.04	< 1.34	< 6.21	< 0.776
		VP-6-072821	7/28/2021	< 0.721	< 0.934	< 3.69	< 1.03	< 5.11	< 3.07	< 0.626	< 0.982	< 5.12	6.91	1.61	< 1.04	< 1.34	< 6.21	< 0.776
		VP-6-042522	4/25/2022	< 0.721	< 0.934	< 3.69	< 1.03	< 5.11	4.03	< 0.626	< 0.982	< 5.12	6.51	< 0.639	< 1.04	< 1.34	< 6.21	< 0.776
VP-7	Tenant Space/Suite 6	VP-07-010920	1/9/2020	< 0.721	1.59	< 3.69	< 1.03	< 5.11	3.83	< 0.626	2.28	< 5.12	15.8	3.61	< 1.04	< 1.34	< 6.21	< 0.776
		VP-7-102920	10/29/2020	< 0.721	< 0.934	< 3.69	< 1.03	< 5.11	11.2	< 0.626	< 0.982	< 5.12	12.8	0.965	< 1.04	< 1.34	< 6.21	< 0.776
		VP-7-072821	7/28/2021	< 0.721	< 0.934	< 3.69	< 1.03	< 5.11	< 3.07	< 0.626	< 0.982	< 5.12	8.82	0.904	< 1.04	< 1.34	< 6.21	< 0.776
		VP-7-042522	4/25/2022	< 0.721	< 0.934	6.10	< 1.03	< 5.11	8.70	< 0.626	< 0.982	< 5.12	111	< 0.639	< 1.04	< 1.34	< 6.21	< 0.776
<b>DEQ RBC: Soil Gas Vapor Intrusion into Buildings for Commercial Receptors<sup>2</sup></b>				<b>82</b>	<b>NITI</b>	<b>730,000</b>	<b>NITI</b>	<b>4,400</b>	<b>NITI</b>	<b>NITI</b>	<b>NITI</b>	<b>440,000</b>	<b>NITI</b>	<b>52</b>	<b>8.3</b>	<b>11</b>	<b>370</b>	<b>730</b>

**NOTES:**

Results highlighted in yellow exceed commercial RBCs.

< denotes analyte not detected at or exceeding the reporting limit listed.

>Pv denotes the air concentration reported for the RBC exceeds the vapor pressure of the pure chemical. It can an unacceptable risk by this pathway.

<sup>1</sup>Analyzed by U.S. Environmental Protection Agency Method TO-15.

<sup>2</sup>State of Oregon Department of Environmental Quality Risk-Based Concentrations Table, revised June 2023

<sup>3</sup> VP-8 was installed to replace VP-3 on April 21, 2022

<sup>4</sup> VP-9 was installed to replace VP-5 on April 21, 2022

**Table 1**

Subslab Soil Vapor Analytical Results - Volatile Organic Compounds  
Glass Lab  
350 SE Mill Street, Portland, Oregon

Sample Location	Location Description	Sample Identification	Sample Date	Analytical Results (micrograms per cubic meter) <sup>1</sup>															
				Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Cyclohexane	Dibromochloromethane	Dichlorodifluoromethane	Ethanol	Ethylbenzene	Freon 113	Freon 114	
VP-1	Tenant Space/Suite 3	VP-01-010920	1/9/2020	< 0.622	< 1.26	< 0.924	< 0.528	< 0.973	1.67	< 0.793	< 0.908	< 0.689	< 1.7	2.63	14.8	< 0.867	< 1.53	< 1.4	
		VP-1-102920	10/29/2020	< 0.622	< 1.26	< 0.924	< 0.528	2.71	< 0.413	< 0.793	< 0.908	< 0.689	< 1.7	2.41	20.2 J	< 0.867	< 1.53	< 1.4	
		VP-1-072821	7/28/2021	< 0.622	< 1.26	< 0.924	< 0.528	< 0.973	< 0.413	< 0.793	< 0.908	< 0.689	< 1.70	2.45	61.1	< 0.867	< 1.53	< 1.40	
		VP-1-042522	4/25/2022	< 0.622	< 1.26	< 0.924	< 0.528	< 0.973	< 0.413	< 0.793	< 0.908	< 0.689	< 1.70	2.77	12.2	< 0.867	< 1.53	< 1.40	
VP-2	Loading Dock	VP-02-010920	1/9/2020	< 0.622	< 1.26	< 0.924	< 0.528	< 0.973	0.45	< 0.793	< 0.908	< 0.689	< 1.7	2.7	56.4	< 0.867	< 1.53	< 1.4	
		VP-2-102920	10/29/2020	< 0.622	< 1.26	< 0.924	< 0.528	2.47	< 0.413	< 0.793	< 0.908	< 0.689	< 1.7	2.47	29.4 J	< 0.867	< 1.53	< 1.4	
		VP-2-072821	7/28/2021	0.719	< 1.26	< 0.924	< 0.528	< 0.973	< 0.413	< 0.793	< 0.908	< 0.689	< 1.70	3.03	47.5	< 0.867	< 1.53	< 1.40	
		VP-2-042522	4/25/2022	< 0.622	< 1.26	< 0.924	< 0.528	< 0.973	< 0.413	< 0.793	< 0.908	< 0.689	< 1.70	2.64	8.48	< 0.867	< 1.53	< 1.40	
VP-3/ VP-8 <sup>3</sup>	Tenant Space/Suite 8	VP-03-010920	1/9/2020	< 0.622	< 1.26	< 0.924	< 0.528	4.81	1.29	3.48	< 0.908	< 0.689	< 1.7	2.77	140	< 0.867	< 1.53	< 1.4	
		VP-3-102920	10/29/2020	< 0.622	< 1.26	< 0.924	< 0.528	67.7	< 0.413	149	< 0.908	< 0.689	< 1.7	3.59	116 J	< 0.867	< 1.53	< 1.4	
		VP-3-072821	7/28/2021	0.940	< 1.26	< 0.924	< 0.528	37.3	< 0.413	21.8	< 0.908	< 0.689	< 1.70	2.75	19.0	< 0.867	< 1.53	< 1.40	
		VP-8-042522	4/25/2022	< 0.622	< 1.26	< 0.924	< 0.528	6.96	< 0.413	7.81	< 0.908	< 0.689	< 1.70	2.71	1,030 E	< 0.867	< 1.53	< 1.40	
VP-4	Tenant Space/Suite 7	VP-04-010920	1/9/2020	0.741	< 1.26	< 0.924	< 0.528	11.5	0.467	5.35	< 0.908	< 0.689	< 1.7	2.95	31.1	< 0.867	< 1.53	< 1.4	
		VP-4-102920	10/29/2020	< 0.622	< 1.26	< 0.924	< 0.528	2.18	< 0.413	< 0.793	< 0.908	< 0.689	< 1.7	2.56	96.5 J	< 0.867	< 1.53	< 1.4	
		VP-4-072821	7/28/2021	1.87	< 1.26	< 0.924	< 0.528	48.7	< 0.413	9.71	< 0.908	< 0.689	< 1.70	3.34	22.8	< 0.867	< 1.53	< 1.40	
		VP-4-042522	4/25/2022	< 0.622	< 1.26	< 0.924	< 0.528	3.11	< 0.413	< 0.793	< 0.908	< 0.689	< 1.70	2.65	61.7	< 0.867	< 1.53	< 1.40	
VP-5/VP-9 <sup>4</sup>	South Stairwell	VP-05-010920	1/9/2020	< 0.622	< 1.26	< 0.924	< 0.528	< 0.973	< 0.413	< 0.793	< 0.908	< 0.689	< 1.7	2.94	17.9	< 0.867	< 1.53	< 1.4	
		VP-5-102920	10/29/2020	< 0.622	< 1.26	< 0.924	< 0.528	2.40	< 0.413	< 0.793	< 0.908	< 0.689	< 1.7	2.55	37.0 J	< 0.867	< 1.53	< 1.4	
		VP-5-072821	7/28/2021	< 0.622	< 1.26	< 0.924	< 0.528	< 0.973	< 0.413	< 0.793	< 0.908	< 0.689	< 1.70	3.36	48.5	< 0.867	< 1.53	< 1.40	
		VP-9-042522	4/25/2022	< 0.622	< 1.26	< 0.924	< 0.528	< 0.973	< 0.413	< 0.793	< 0.908	< 0.689	< 1.70	2.68	71.5	< 0.867	< 1.53	< 1.40	
VP-6	Tenant Space/Suite 7	VP-06-010920	1/9/2020	< 0.622	< 1.26	< 0.924	< 0.528	2.7	< 0.413	< 0.793	< 0.908	< 0.689	< 1.7	2.81	10.7	< 0.867	< 1.53	< 1.4	
		VP-6-102920	10/29/2020	< 0.622	< 1.26	< 0.924	< 0.528	3.15	< 0.413	< 0.793	< 0.908	< 0.689	< 1.7	2.42	154 J	< 0.867	< 1.53	< 1.4	
		VP-6-072821	7/28/2021	0.800	< 1.26	< 0.924	< 0.528	5.06	< 0.413	< 0.793	< 0.908	< 0.689	< 1.70	2.85	41.3	< 0.867	< 1.53	< 1.40	
		VP-6-042522	4/25/2022	< 0.622	< 1.26	< 0.924	< 0.528	2.36	< 0.413	1.92	< 0.908	< 0.689	< 1.70	2.71	588 E	< 0.867	< 1.53	< 1.40	
VP-7	Tenant Space/Suite 6	VP-07-010920	1/9/2020	< 0.622	< 1.26	< 0.924	< 0.528	< 0.973	0.96	< 0.793	< 0.908	< 0.689	< 1.7	2.66	53.9	1.17	< 1.53	< 1.4	
		VP-7-102920	10/29/2020	< 0.622	< 1.26	< 0.924	< 0.528	< 0.973	< 0.413	< 0.793	< 0.908	0.692	< 1.7	2.36	85.8 J	0.967	< 1.53	< 1.4	
		VP-7-072821	7/28/2021	< 0.622	< 1.26	< 0.924	< 0.528	< 0.973	< 0.413	< 0.793	< 0.908	< 0.689	< 1.70	2.81	32.8	< 0.867	< 1.53	< 1.40	
		VP-7-042522	4/25/2022	< 0.622	< 1.26	< 0.924	< 0.528	< 0.973	< 0.413	< 0.793	< 0.908	< 0.689	< 1.70	2.66	67.1	1.06	< 1.53	< 1.40	
<b>DEQ RBC: Soil Gas Vapor Intrusion into Buildings for Commercial Receptors<sup>2</sup></b>				<b>100,000</b>	<b>68</b>	<b>7,300</b>	<b>NITI</b>	<b>18</b>	<b>13,000</b>	<b>5,800</b>	<b>NITI</b>	<b>150,000</b>	<b>NITI</b>	<b>15,000</b>	<b>NITI</b>	<b>160</b>	<b>NITI</b>	<b>NITI</b>	

**NOTES:**

Results highlighted in yellow exceed commercial RBCs.

< denotes analyte not detected at or exceeding the reporting limit listed.

>Pv denotes the air concentration reported for the RBC exceeds the vapor pressure of the pure chemical. It can an unacceptable risk by this pathway.

<sup>1</sup>Analyzed by U.S. Environmental Protection Agency Method TO-15.

<sup>2</sup>State of Oregon Department of Environmental Quality Risk-Based Concentrations Table, revised June 2023

<sup>3</sup> VP-8 was installed to replace VP-3 on April 21, 2022

<sup>4</sup> VP-9 was installed to replace VP-5 on April 21, 2022

# Table 1

Subslab Soil Vapor Analytical Results - Volatile Organic Compounds

Glass Lab

350 SE Mill Street, Portland, Oregon

Sample Location	Location Description	Sample Identification	Sample Date	Analytical Results (micrograms per cubic meter) <sup>1</sup>														
				Hexachlorobutadiene	Hexane Extractable Material (Fats, Oils, Greases)	Isopropylbenzene	Methyl Methacrylate	Methyl Tertiary Butyl Ether (MTBE)	Methylene Chloride	Naphthalene	n-Heptane	Propene (Propylene)	Styrene	Tetrachloroethene (PCE)	Tetrahydrofuran	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene
VP-1	Tenant Space/Suite 3	VP-01-010920	1/9/2020	< 6.73	< 0.705	< 0.983	< 0.819	< 0.721	0.896	< 3.3	< 0.818	< 0.689	< 0.851	212	< 0.59	8.89	< 0.793	< 0.908
		VP-1-102920	10/29/2020	< 6.73	< 2.22	< 0.983	< 0.819	< 0.721	< 0.694	< 3.3	< 0.818	< 0.689	< 0.851	21.5	< 0.59	< 1.88	< 0.793	< 0.908
		VP-1-072821	7/28/2021	< 6.73	< 2.22	< 0.983	< 0.819	< 0.721	0.910	< 3.30	< 0.818	< 2.15	< 0.851	308	< 0.59	< 1.88	< 0.793	< 0.908
		VP-1-042522	4/25/2022	< 6.73	< 2.22	< 0.983	< 0.819	< 0.721	1.39	< 3.30	< 0.818	< 2.15	< 0.851	71.3	< 0.590	< 1.88	< 0.793	< 0.908
VP-2	Loading Dock	VP-02-010920	1/9/2020	< 6.73	< 0.705	< 0.983	< 0.819	< 0.721	< 0.694	< 3.3	< 0.818	< 0.689	< 0.851	620	< 0.59	1.66	< 0.793	< 0.908
		VP-2-102920	10/29/2020	< 6.73	< 2.22	< 0.983	< 0.819	< 0.721	1.47	< 3.3	< 0.818	< 0.689	< 0.851	12.2	< 0.59	< 1.88	< 0.793	< 0.908
		VP-2-072821	7/28/2021	< 6.73	< 2.22	< 0.983	< 0.819	< 0.721	< 0.694	< 3.30	< 0.818	< 2.15	< 0.851	4,540	< 0.59	< 1.88	< 0.793	< 0.908
		VP-2-042522	4/25/2022	< 6.73	< 2.22	< 0.983	< 0.819	< 0.721	< 0.694	< 3.30	< 0.818	< 2.15	< 0.851	31.2	< 0.590	< 1.88	< 0.793	< 0.908
VP-3/ VP-8 <sup>3</sup>	Tenant Space/Suite 8	VP-03-010920	1/9/2020	< 6.73	< 0.705	< 0.983	< 0.819	< 0.721	0.875	< 3.3	< 0.818	< 0.689	< 0.851	516	< 0.59	6.59	< 0.793	< 0.908
		VP-3-102920	10/29/2020	< 6.73	< 2.22	< 0.983	< 0.819	< 0.721	3.85	< 3.3	< 0.818	< 0.689	< 0.851	6,260	0.646	4.71	8.88	< 0.908
		VP-3-072821	7/28/2021	< 6.73	< 2.22	< 0.983	< 0.819	< 0.721	< 0.694	< 3.30	< 0.818	< 2.15	< 0.851	6,450	< 0.59	< 1.88	2.63	< 0.908
		VP-8-042522	4/25/2022	< 6.73	< 2.22	< 0.983	< 0.819	< 0.721	< 0.694	< 3.30	< 0.818	< 2.15	< 0.851	1,960	< 0.590	< 1.88	1.03	< 0.908
VP-4	Tenant Space/Suite 7	VP-04-010920	1/9/2020	< 6.73	< 0.705	< 0.983	< 0.819	< 0.721	< 0.694	< 3.3	< 0.818	< 0.689	< 0.851	1,360	< 0.59	2.63	< 0.793	< 0.908
		VP-4-102920	10/29/2020	< 6.73	< 2.22	< 0.983	< 0.819	< 0.721	1.26	< 3.3	< 0.818	< 0.689	< 0.851	27.8	< 0.59	< 1.88	< 0.793	< 0.908
		VP-4-072821	7/28/2021	< 6.73	< 2.22	< 0.983	< 0.819	< 0.721	< 0.694	< 3.30	< 0.818	< 2.15	< 0.851	6,930	< 0.59	< 1.88	1.29	< 0.908
		VP-4-042522	4/25/2022	< 6.73	< 2.22	< 0.983	< 0.819	< 0.721	< 0.694	< 3.30	< 0.818	< 2.15	< 0.851	383	< 0.590	< 1.88	< 0.793	< 0.908
VP-5/VP-9 <sup>4</sup>	South Stairwell	VP-05-010920	1/9/2020	< 6.73	< 0.705	< 0.983	< 0.819	< 0.721	< 0.694	6.6	< 0.818	< 0.689	< 0.851	1,260	0.666	1.75	< 0.793	< 0.908
		VP-5-102920	10/29/2020	< 6.73	< 2.22	< 0.983	< 0.819	< 0.721	< 0.694	< 3.3	< 0.818	< 0.689	< 0.851	1,060	< 0.59	< 1.88	< 0.793	< 0.908
		VP-5-072821	7/28/2021	< 6.73	< 2.22	< 0.983	< 0.819	< 0.721	< 0.694	< 3.30	< 0.818	< 2.15	< 0.851	3,480	< 0.59	2.29	< 0.793	< 0.908
		VP-9-042522	4/25/2022	< 6.73	< 2.22	< 0.983	< 0.819	< 0.721	< 0.694	< 3.30	< 0.818	< 2.15	< 0.851	828	< 0.590	< 1.88	< 0.793	< 0.908
VP-6	Tenant Space/Suite 7	VP-06-010920	1/9/2020	< 6.73	< 0.705	< 0.983	< 0.819	< 0.721	< 0.694	< 3.3	< 0.818	< 0.689	< 0.851	2,170	< 0.59	4.82	< 0.793	< 0.908
		VP-6-102920	10/29/2020	< 6.73	< 2.22	< 0.983	< 0.819	< 0.721	1.94	< 3.3	< 0.818	< 0.689	< 0.851	410	< 0.59	2.63	< 0.793	< 0.908
		VP-6-072821	7/28/2021	< 6.73	< 2.22	< 0.983	< 0.819	< 0.721	< 0.694	< 3.30	< 0.818	< 2.15	< 0.851	3,470	< 0.59	2.09	< 0.793	< 0.908
		VP-6-042522	4/25/2022	< 6.73	< 2.22	< 0.983	< 0.819	< 0.721	< 0.694	< 3.30	< 0.818	< 2.15	< 0.851	286	< 0.590	< 1.88	< 0.793	< 0.908
VP-7	Tenant Space/Suite 6	VP-07-010920	1/9/2020	< 6.73	4.16	< 0.983	< 0.819	< 0.721	2.25	< 3.3	1.64	< 0.689	< 0.851	268	< 0.59	3.56	< 0.793	< 0.908
		VP-7-102920	10/29/2020	< 6.73	10.9	< 0.983	< 0.819	< 0.721	5.10	< 3.3	4.50	< 0.689	< 0.851	9.71	< 0.59	4.93	< 0.793	< 0.908
		VP-7-072821	7/28/2021	< 6.73	< 2.22	< 0.983	< 0.819	< 0.721	< 0.694	< 3.30	< 0.818	< 2.15	< 0.851	1,340	< 0.59	2.96	< 0.793	< 0.908
		VP-7-042522	4/25/2022	< 6.73	< 2.22	< 0.983	< 0.819	< 0.721	< 0.694	< 3.30	< 0.818	< 2.15	< 0.851	3.11	< 0.590	2.26	< 0.793	< 0.908
<b>DEQ RBC: Soil Gas Vapor Intrusion into Buildings for Commercial Receptors<sup>2</sup></b>				<b>19</b>	<b>2,000</b>	<b>NITI</b>	<b>100,000</b>	<b>1,600</b>	<b>41,000</b>	<b>12</b>	<b>58,000</b>	<b>440,000</b>	<b>150,000</b>	<b>1,600</b>	<b>290,000</b>	<b>730,000</b>	<b>5,800</b>	<b>100</b>

**NOTES:**

Results highlighted in yellow exceed commercial RBCs.

< denotes analyte not detected at or exceeding the reporting limit listed.

>Pv denotes the air concentration reported for the RBC exceeds the vapor pressure of the pure chemical. It can an unacceptable risk by this pathway.

<sup>1</sup>Analyzed by U.S. Environmental Protection Agency Method TO-15.

<sup>2</sup>State of Oregon Department of Environmental Quality Risk-Based Concentrations Table, revised June 2023

<sup>3</sup> VP-8 was installed to replace VP-3 on April 21, 2022

<sup>4</sup> VP-9 was installed to replace VP-5 on April 21, 2022

# Table 1

Subslab Soil Vapor Analytical Results - Volatile Organic Compounds  
Glass Lab  
350 SE Mill Street, Portland, Oregon

Sample Location	Location Description	Sample Identification	Sample Date	Analytical Results (micrograms per cubic meter) <sup>1</sup>							
				Trichloroethene (TCE)	Trichlorofluoromethane	Vinyl Acetate	Vinyl Bromide	Vinyl Chloride	m,p-Xylene	o-Xylene	Total Xylenes
VP-1	Tenant Space/Suite 3	VP-01-010920	1/9/2020	1.21	1.42	< 0.704	< 0.875	< 0.511	< 1.73	< 0.867	< 2.597
		VP-1-102920	10/29/2020	< 1.07	1.71	< 0.704	< 0.875	< 0.511	< 1.73	< 0.867	< 2.597
		VP-1-072821	7/28/2021	4.83	1.40	< 0.704	< 0.875	< 0.511	< 1.73	< 0.867	< 2.597
		VP-1-042522	4/25/2022	1.24	1.34	< 0.704	< 0.875	< 0.511	< 1.73	< 0.867	< 2.597
VP-2	Loading Dock	VP-02-010920	1/9/2020	470	1.47	< 0.704	< 0.875	< 0.511	< 1.73	< 0.867	< 2.597
		VP-2-102920	10/29/2020	11.3	1.62	< 0.704	< 0.875	< 0.511	< 1.73	< 0.867	< 2.597
		VP-2-072821	7/28/2021	3,400	1.75	< 0.704	< 0.875	< 0.511	2.31	< 0.867	2.31
		VP-2-042522	4/25/2022	26.5	1.47	< 0.704	< 0.875	< 0.511	< 1.73	< 0.867	< 2.597
VP-3/ VP-8 <sup>3</sup>	Tenant Space/Suite 8	VP-03-010920	1/9/2020	1,020	1.56	< 0.704	< 0.875	< 0.511	< 1.73	< 0.867	< 2.597
		VP-3-102920	10/29/2020	4,140	2.53	< 0.704	< 0.875	< 0.511	1.81	< 0.867	1.81
		VP-3-072821	7/28/2021	5,630	1.55	< 0.704	< 0.875	< 0.511	< 1.73	< 0.867	< 2.597
		VP-8-042522	4/25/2022	2,360	1.43	< 0.704	< 0.875	< 0.511	< 1.73	< 0.867	< 2.597
VP-4	Tenant Space/Suite 7	VP-04-010920	1/9/2020	2,130	1.6	< 0.704	< 0.875	< 0.511	< 1.73	< 0.867	< 2.597
		VP-4-102920	10/29/2020	26.5	1.67	< 0.704	< 0.875	< 0.511	< 1.73	< 0.867	< 2.597
		VP-4-072821	7/28/2021	6,160	1.88	< 0.704	< 0.875	< 0.511	< 1.73	< 0.867	< 2.597
		VP-4-042522	4/25/2022	408	1.42	< 0.704	< 0.875	< 0.511	< 1.73	< 0.867	< 2.597
VP-5/VP-9 <sup>4</sup>	South Stairwell	VP-05-010920	1/9/2020	675	1.52	< 0.704	< 0.875	< 0.511	1.75	< 0.867	1.75
		VP-5-102920	10/29/2020	429	1.50	< 0.704	< 0.875	< 0.511	< 1.73	< 0.867	< 2.597
		VP-5-072821	7/28/2021	1,340	1.80	< 0.704	< 0.875	< 0.511	< 1.73	< 0.867	< 2.597
		VP-9-042522	4/25/2022	354	1.34	< 0.704	< 0.875	< 0.511	< 1.73	< 0.867	< 2.597
VP-6	Tenant Space/Suite 7	VP-06-010920	1/9/2020	4,050	1.45	< 0.704	< 0.875	< 0.511	< 1.73	< 0.867	< 2.597
		VP-6-102920	10/29/2020	595	1.61	< 0.704	< 0.875	< 0.511	< 1.73	< 0.867	< 2.597
		VP-6-072821	7/28/2021	5,570	1.58	< 0.704	< 0.875	< 0.511	< 1.73	< 0.867	< 2.597
		VP-6-042522	4/25/2022	206	1.47	< 0.704	< 0.875	< 0.511	< 1.73	< 0.867	< 2.597
VP-7	Tenant Space/Suite 6	VP-07-010920	1/9/2020	151	1.45	< 0.704	< 0.875	< 0.511	7.85	1.42	9.27
		VP-7-102920	10/29/2020	8.04	1.58	< 0.704	< 0.875	< 0.511	3.35	1.22	4.57
		VP-7-072821	7/28/2021	1,640	1.56	< 0.704	< 0.875	< 0.511	2.02	< 0.867	2.02
		VP-7-042522	4/25/2022	< 1.07	1.39	< 0.704	< 0.875	< 0.511	3.85	1.30	5.15
<b>DEQ RBC: Soil Gas Vapor Intrusion into Buildings for Commercial Receptors<sup>2</sup></b>				<b>100</b>	<b>NITI</b>	<b>29,000</b>	<b>27</b>	<b>93</b>	<b>15,000</b>	<b>15,000</b>	

**NOTES:**

Results highlighted in yellow exceed commercial RBCs.

< denotes analyte not detected at or exceeding the reporting limit listed.

>Pv denotes the air concentration reported for the RBC exceeds the vapor pressure of the pure chemical. It can an unacceptable risk by this pathway.

<sup>1</sup>Analyzed by U.S. Environmental Protection Agency Method TO-15.

<sup>2</sup>State of Oregon Department of Environmental Quality Risk-Based Concentrations Table, revised June 2023

<sup>3</sup> VP-8 was installed to replace VP-3 on April 21, 2022

<sup>4</sup> VP-9 was installed to replace VP-5 on April 21, 2022



**Table 2**

Ambient Air Analytical Results - Tetrachloroethene and Trichloroethene

Glass Lab  
350 SE Mill  
Portland, Oregon

Sample Location	Location Description	Sample ID	Sample Type	Sample Date	Analytical Results <sup>1</sup>	
					Tetrachloroethene	Trichloroethene
					Concentrations in micrograms per cubic meter (µg/m <sup>3</sup> )	
VP-2A	Loading Dock	VP-2A-041923	Indoor Air	4/7/2023-4/19/2023	1.1	0.08
		VP-2A-092223	Indoor Air	9/15/2023-9/22/2023	0.26	0.14
		VP-2A011024	Indoor Air	1/5/2024-1/10/2024	1.2	0.3
VP-3A	Tenant Space/Suite 8	VP-3A-092223	Indoor Air	9/15/2023-9/22/2023	0.16	0.092 U
		VP-3A011024	Indoor Air	1/5/2024-1/10/2024	0.67	0.41
VP-4A	Tenant Space/Suite 7	VP-4A-041923	Indoor Air	4/7/2023-4/19/2023	0.83	0.17
		VP-4A-092223	Indoor Air	9/15/2023-9/22/2023	0.31	0.84
		VP-4A011024	Indoor Air	1/5/2024-1/10/2024	1.1	0.6
VP-5A	South Stairwell	VP-5A-041923	Indoor Air	4/7/2023-4/19/2023	0.91	0.12
		VP-5A-092223	Indoor Air	9/15/2023-9/22/2023	0.3	0.17
		VP-5A011024	Indoor Air	1/5/2024-1/10/2024	0.89	0.24
VP-6A	Tenant Space/Suite 7	VP-6A-041923	Indoor Air	4/7/2023-4/19/2023	0.81	0.29
		VP-6A-092223	Indoor Air	9/15/2023-9/22/2023	0.32	0.82
		VP-6A011024	Indoor Air	1/5/2024-1/10/2024	1.2	0.63
VP-7A	Tenant Space/Suite6	VP-7A-041923	Indoor Air	4/7/2023-4/19/2023	0.93	0.15
		VP-7A-092223	Indoor Air	9/15/2023-9/22/2023	0.61	0.21
		VP-7A011024	Indoor Air	1/5/2024-1/10/2024	2.2	0.47
Conference RM-A (CR-A)	First Floor Conference Room	CR-A-041923	Indoor Air	4/7/2023-4/19/2023	0.69	0.11
		CR-A-092223	Indoor Air	9/15/2023-9/22/2023	0.31	0.16
		CR-A-011024	Indoor Air	1/5/2024-1/10/2024	1.2	0.33
Second Floor-A (SF-A)	Second Floor Hallway	SF-A-041923	Indoor Air	4/7/2023-4/19/2023	0.35	0.11
		SF-A-092223	Indoor Air	9/15/2023-9/22/2023	0.22	0.16
		SF-A-011024	Indoor Air	1/5/2024-1/10/2024	1.1	0.28
Outside-A (O-A)	Outside Near South Bay Door	O-A-041923	Outdoor Air	4/7/2023-4/19/2023	0.21	0.053 U
		O-A-092223	Outdoor Air	9/15/2023-9/22/2023	0.12	0.092 U
		O-A-011024	Outdoor Air	1/5/2024-1/10/2024	0.025 U	0.025 U
<b>DEQ Risk Based Concentration: Air Inhalation for Commercial Receptors<sup>2</sup></b>					<b>47</b>	<b>3</b>
<b>DEQ RBC: Acute Non-cancer<sup>2</sup></b>					<b>-</b>	<b>6.3</b>

**Notes:**

U - not detected at noted method reporting limit

DEQ - Oregon Department of Environmental Quality.

RBC - risk-based concentration

<sup>1</sup>Analyzed by U.S. Environmental Protection Agency Method TO-17. Air samples collected using a radiello diffusive (passive) sampling system.

<sup>2</sup>DEQ RBC Table, revised June 2023.

**Table 3**

Subslab Soil Vapor and Ambient Air Analytical Results - Tetrachlorethene and Trichloroethene  
Glass Lab  
350 SE Mill Street, Portland, Oregon

Sample Location	Location Description	Sample Type	Sample Date	Analytical Results (micrograms per cubic meter)			
				Soil Vapor <sup>1</sup>		Air <sup>2</sup>	
				PCE	TCE	PCE	TCE
VP-1	Tenant Space/Suite 3	Sub-Slab Soil Vapor	1/9/2020	212	1.21	-	-
			10/29/2020	21.5	< 1.07	-	-
			7/28/2021	308	4.83	-	-
			4/25/2022	71.3	1.24	-	-
VP-2	Loading Dock	Sub-Slab Soil Vapor	1/9/2020	620	470	-	-
			10/29/2020	12.2	11.3	-	-
			7/28/2021	4,540	3,400	-	-
			4/25/2022	31.2	26.5	-	-
	Indoor Air	4/7/2023-4/19/2023	-	-	1.1	0.08	
		9/15/2023-9/22/2023	-	-	0.26	0.14	
		1/5/2024-1/10/2024	-	-	1.2	0.3	
VP-3/ VP-8 <sup>3</sup>	Tenant Space/Suite 8	Sub-Slab Soil Vapor	1/9/2020	516	1,020	-	-
			10/29/2020	6,260	4,140	-	-
			7/28/2021	6,450	5,630	-	-
			4/25/2022	1,960	2,360	-	-
	Indoor Air	9/15/2023-9/22/2023	-	-	0.16	0.092 U	
		1/5/2024-1/10/2024	-	-	0.67	0.41	
VP-4	Tenant Space/Suite 7	Sub-Slab Soil Vapor	1/9/2020	1,360	2,130	-	-
			10/29/2020	27.8	26.5	-	-
			7/28/2021	6,930	6,160	-	-
			4/25/2022	383	408	-	-
	Indoor Air	4/7/2023-4/19/2023	-	-	0.83	0.17	
		9/15/2023-9/22/2023	-	-	0.31	0.84	
		1/5/2024-1/10/2024	-	-	1.1	0.6	
VP-5/VP-9 <sup>4</sup>	South Stairwell	Sub-Slab Soil Vapor	1/9/2020	1,260	675	-	-
			10/29/2020	1,060	429	-	-
			7/28/2021	3,480	1,340	-	-
			4/25/2022	828	354	-	-
	Indoor Air	4/7/2023-4/19/2023	-	-	0.91	0.12	
		9/15/2023-9/22/2023	-	-	0.3	0.17	
		1/5/2024-1/10/2024	-	-	0.89	0.24	
VP-6	Tenant Space/Suite 7	Sub-Slab Soil Vapor	1/9/2020	2,170	4,050	-	-
			10/29/2020	410	595	-	-
			7/28/2021	3,470	5,570	-	-
			4/25/2022	286	206	-	-
	Indoor Air	4/7/2023-4/19/2023	-	-	0.81	0.29	
		9/15/2023-9/22/2023	-	-	0.32	0.82	
VP-7	Tenant Space/Suite 6	Sub-Slab Soil Vapor	1/9/2020	268	151	-	-
			10/29/2020	9.71	8.04	-	-
			7/28/2021	1,340	1,640	-	-
			4/25/2022	3.11	< 1.07	-	-
	Indoor Air	4/7/2023-4/19/2023	-	-	0.93	0.15	
		9/15/2023-9/22/2023	-	-	0.61	0.21	
		1/5/2024-1/10/2024	-	-	2.2	0.47	
Conference RM-A	First Floor Conference Room	Indoor Air	4/7/2023-4/19/2023	-	-	0.69	0.11
			9/15/2023-9/22/2023	-	-	0.31	0.16
			1/5/2024-1/10/2024	-	-	1.2	0.33
Second Floor-A	Second Floor Hallway	Indoor Air	4/7/2023-4/19/2023	-	-	0.35	0.11
			9/15/2023-9/22/2023	-	-	0.22	0.16
			1/5/2024-1/10/2024	-	-	1.1	0.28
Outside-A	Outside Near South Bay Door	Outdoor Air	4/7/2023-4/19/2023	-	-	0.21	0.053 U
			9/15/2023-9/22/2023	-	-	0.12	0.092 U
			1/5/2024-1/10/2024	-	-	0.025 U	0.025 U
<b>DEQ RBC: Soil Gas Vapor Intrusion into Buildings for Commercial Receptors<sup>5</sup></b>				<b>1,600</b>	<b>100</b>	-	-
<b>DEQ Risk Based Concentration: Air Inhalation for Commercial Receptors<sup>5</sup></b>				-	-	<b>47</b>	<b>3</b>
<b>DEQ RBC: Acute Non-cancer<sup>5</sup></b>				-	-	-	<b>6.3</b>

**NOTES:**

Results highlighted in yellow exceed commercial RBCs.

<sup>1</sup>Analyzed by U.S. Environmental Protection Agency Method TO-15.

<sup>2</sup>Analyzed by U.S. Environmental Protection Agency Method TO-17. Air samples collected using a radiello diffusive (passive) sampling system.

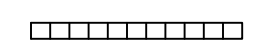
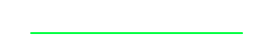
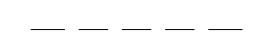





<sup>3</sup>VP-8 was installed to replace VP-3 on April 21, 2022

<sup>4</sup>VP-9 was installed to replace VP-5 on April 21, 2022

<sup>5</sup>State of Oregon Department of Environmental Quality Risk-Based Concentrations Table, revised June 2023

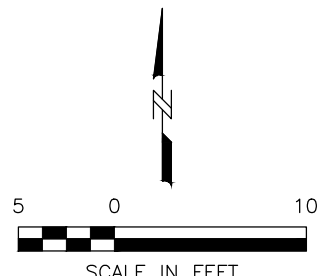
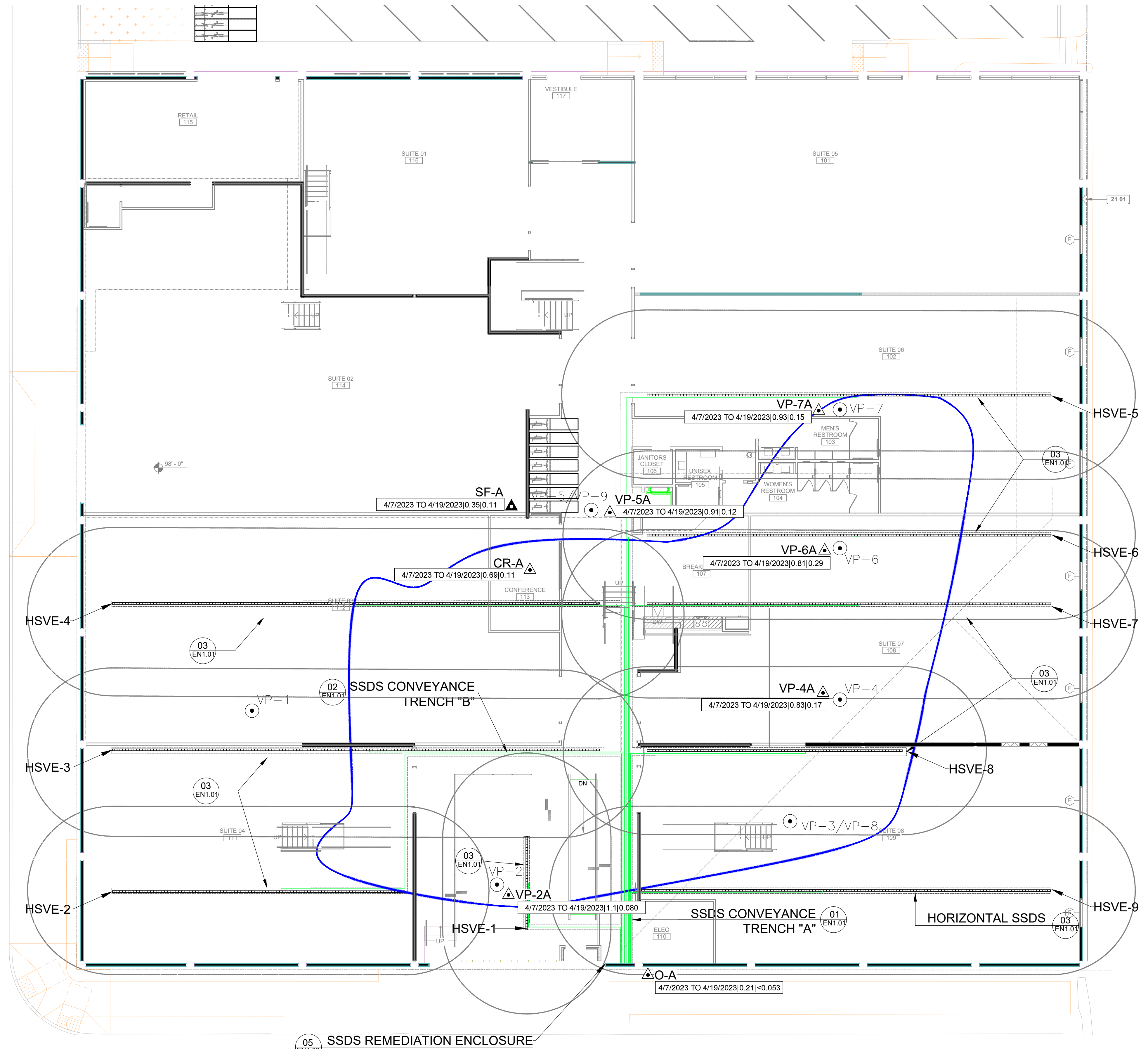


**LEGEND**

-  SLOTTED 4 INCH DIAMETER SCHEDULE 40 PVC
-  SOLID 2 INCH DIAMETER SCHEDULE 40 PVC
-  TRENCH LAYOUT
-  ACTIVE SUBSLAB DEPRESSURIZATION SYSTEM (SSDS) ESTIMATED AREA OF INFLUENCE
-  APPROXIMATE EXTENT OF TRICHLOROETHENE CONCENTRATIONS IN SOIL GAS EXCEEDING OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY RISK BASED CONCENTRATIONS FOR OCCUPATIONAL RECEPTORS BASED ON 2019 DATA AND DEQ RBCS
-  VP-1 PERMANENT SUBSLAB VAPOR MONITORING POINT
-  VP-2A AMBIENT AIR MONITORING LOCATION (FARALLON 2023)
-  SF-A AMBIENT AIR MONITORING LOCATION SECOND FLOOR (FARALLON 2023)

**AIR SAMPLING NOTES:**

DATE SAMPLED AND ANALYTICAL RESULTS AS:  
 SAMPLE DATE | PCE | TCE  
 AIR ANALYTICAL RESULTS IN MICROGRAMS PER CUBIC METER.  
 < = DENOTES ANALYTE NOT DETECTED AT OR EXCEEDING THE LISTED REPORTING LIMIT  
 PCE = TETRACHLOROETHENE  
 TCE = TRICHLOROETHENE



**DRAFT**

NO.	DATE	BY	CHK.	MR.	APP.	REVISION/DESCRIPTION
1	4/10/2020	AS-BUILT SET				

**PRELIMINARY PLANS**  
 NOT FOR CONSTRUCTION

**PREPARED BY:**  
**FARALLON CONSULTING**  
 4380 SW Macadam Avenue  
 Portland, OR 97239  
 (503) 280-4635  
 farallonconsulting.com

**PREPARED FOR:**  
 WILLIS TOWERS WATSON  
 SCANNING COMPANIES LLC  
 810 NORTHWEST MARSHALL ST.  
 PORTLAND, OR 97209  
 T: (503) 252-3331

**SITE PLAN**  
 BYRUM W. MOREHOUSE BUILDING  
 MARTIN LUTHER KING JR. BOULEVARD  
 PORTLAND, OREGON  
 1805 SOUTHEAST

**811**  
 Know what's below.  
 Call before you dig.

PROJECT LOCATION (S,T,R):  
 PORTIONS OF THE \_14 OF \_14  
 OF  
 SEC. 003, TWP. 001S, RING. 001E, W.M.

JURISDICTION FILE NO.:

FARALLON PROJECT NO.:  
 1451-018

SHEET  
 03 OF 07

**EN1.00**

R:\Projects\1451-018\CAD\Engineering\Drawings\1451-018-EN1.00 SITE PLAN AMBIENT AIR SAMPLING.dwg 5/30/2023 5:16 PM (Vincent Bachmann)



# ANALYTICAL REPORT

Report Date: April 28, 2023

Melissa Roskamp  
Farallon Consulting  
4380 SW Macadam Suite 500  
Portland, OR 97239

Phone: 503-966-6162

E-mail: mroskamp@farallonconsulting.com

Workorder: **34-2311514**

Project ID: Glass Lab

Purchase Order: 1451-018-004

Project Manager Jessica Cofrancesco

Client Sample ID	Lab ID	Collect Date	Receive Date	Sampling Site
VP-2A-041923	2311514001	04/19/23	04/21/23	Glass Lab
VP-5A-041923	2311514002	04/19/23	04/21/23	Glass Lab
VP-4A-041923	2311514003	04/19/23	04/21/23	Glass Lab
CR-A-041923	2311514004	04/19/23	04/21/23	Glass Lab
VP-6A-041923	2311514005	04/19/23	04/21/23	Glass Lab
VP-7A-041923	2311514006	04/19/23	04/21/23	Glass Lab
SF-A-041923	2311514007	04/19/23	04/21/23	Glass Lab
O-A-041923	2311514008	04/19/23	04/21/23	Glass Lab

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# ANALYTICAL REPORT

Workorder: **34-2311514**

Client: Farallon Consulting, L.L.C.

Project Manager: Jessica Cofrancesco

## Analytical Results

Sample ID: <b>VP-2A-041923</b>	Sampling Site: Glass Lab	Collected: 04/19/2023				
Lab ID: 2311514001	Media: Radiello, Code 145	Received: 04/21/2023				
Matrix: Air	Sampling Parameter: Exposure 17410 Minutes					
<b>Analysis Method - Radiello, Volatile Organics</b>						
Preparation: Not Applicable	Analysis: Radiello, Volatile Organics Air Batch: IVOA/6177 (HBN: 306252) Analyzed: 04/26/2023 17:41	Instrument ID: 5975-X				
<b>Analyte</b>	<b>Result (ng/sample)</b>	<b>Result (ug/m<sup>3</sup>)</b>	<b>Result (ppb)</b>	<b>RL (ng/sample)</b>	<b>Dilution</b>	<b>Qual</b>
Trichloroethene	38	0.080	0.015	25	1	
Tetrachloroethene	480	1.1	0.16	25	1	

Sample ID: <b>VP-5A-041923</b>	Sampling Site: Glass Lab	Collected: 04/19/2023				
Lab ID: 2311514002	Media: Radiello, Code 145	Received: 04/21/2023				
Matrix: Air	Sampling Parameter: Exposure 17399 Minutes					
<b>Analysis Method - Radiello, Volatile Organics</b>						
Preparation: Not Applicable	Analysis: Radiello, Volatile Organics Air Batch: IVOA/6177 (HBN: 306252) Analyzed: 04/26/2023 18:04	Instrument ID: 5975-X				
<b>Analyte</b>	<b>Result (ng/sample)</b>	<b>Result (ug/m<sup>3</sup>)</b>	<b>Result (ppb)</b>	<b>RL (ng/sample)</b>	<b>Dilution</b>	<b>Qual</b>
Trichloroethene	56	0.12	0.022	25	1	
Tetrachloroethene	400	0.91	0.13	25	1	

Sample ID: <b>VP-4A-041923</b>	Sampling Site: Glass Lab	Collected: 04/19/2023				
Lab ID: 2311514003	Media: Radiello, Code 145	Received: 04/21/2023				
Matrix: Air	Sampling Parameter: Exposure 17338 Minutes					
<b>Analysis Method - Radiello, Volatile Organics</b>						
Preparation: Not Applicable	Analysis: Radiello, Volatile Organics Air Batch: IVOA/6177 (HBN: 306252) Analyzed: 04/26/2023 18:25	Instrument ID: 5975-X				
<b>Analyte</b>	<b>Result (ng/sample)</b>	<b>Result (ug/m<sup>3</sup>)</b>	<b>Result (ppb)</b>	<b>RL (ng/sample)</b>	<b>Dilution</b>	<b>Qual</b>
Trichloroethene	81	0.17	0.032	25	1	
Tetrachloroethene	360	0.83	0.12	25	1	



# ANALYTICAL REPORT

Workorder: **34-2311514**

Client: Farallon Consulting, L.L.C.

Project Manager: Jessica Cofrancesco

## Analytical Results

Sample ID: <b>CR-A-041923</b>	Sampling Site: Glass Lab	Collected: 04/19/2023				
Lab ID: 2311514004	Media: Radiello, Code 145	Received: 04/21/2023				
Matrix: Air	Sampling Parameter: Exposure 17391 Minutes					
<b>Analysis Method - Radiello, Volatile Organics</b>						
Preparation: Not Applicable	Analysis: Radiello, Volatile Organics Air Batch: IVOA/6177 (HBN: 306252) Analyzed: 04/26/2023 18:47	Instrument ID: 5975-X				
<b>Analyte</b>	<b>Result (ng/sample)</b>	<b>Result (ug/m<sup>3</sup>)</b>	<b>Result (ppb)</b>	<b>RL (ng/sample)</b>	<b>Dilution</b>	<b>Qual</b>
Trichloroethene	53	0.11	0.021	25	1	
Tetrachloroethene	310	0.69	0.10	25	1	

Sample ID: <b>VP-6A-041923</b>	Sampling Site: Glass Lab	Collected: 04/19/2023				
Lab ID: 2311514005	Media: Radiello, Code 145	Received: 04/21/2023				
Matrix: Air	Sampling Parameter: Exposure 17327 Minutes					
<b>Analysis Method - Radiello, Volatile Organics</b>						
Preparation: Not Applicable	Analysis: Radiello, Volatile Organics Air Batch: IVOA/6177 (HBN: 306252) Analyzed: 04/26/2023 19:08	Instrument ID: 5975-X				
<b>Analyte</b>	<b>Result (ng/sample)</b>	<b>Result (ug/m<sup>3</sup>)</b>	<b>Result (ppb)</b>	<b>RL (ng/sample)</b>	<b>Dilution</b>	<b>Qual</b>
Trichloroethene	140	0.29	0.054	25	1	
Tetrachloroethene	360	0.81	0.12	25	1	

Sample ID: <b>VP-7A-041923</b>	Sampling Site: Glass Lab	Collected: 04/19/2023				
Lab ID: 2311514006	Media: Radiello, Code 145	Received: 04/21/2023				
Matrix: Air	Sampling Parameter: Exposure 17332 Minutes					
<b>Analysis Method - Radiello, Volatile Organics</b>						
Preparation: Not Applicable	Analysis: Radiello, Volatile Organics Air Batch: IVOA/6177 (HBN: 306252) Analyzed: 04/26/2023 19:30	Instrument ID: 5975-X				
<b>Analyte</b>	<b>Result (ng/sample)</b>	<b>Result (ug/m<sup>3</sup>)</b>	<b>Result (ppb)</b>	<b>RL (ng/sample)</b>	<b>Dilution</b>	<b>Qual</b>
Trichloroethene	72	0.15	0.028	25	1	
Tetrachloroethene	410	0.93	0.14	25	1	



# ANALYTICAL REPORT

Workorder: **34-2311514**

Client: Farallon Consulting, L.L.C.

Project Manager: Jessica Cofrancesco

## Analytical Results

Sample ID: <b>SF-A-041923</b>	Sampling Site: Glass Lab	Collected: 04/19/2023				
Lab ID: 2311514007	Media: Radiello, Code 145	Received: 04/21/2023				
Matrix: Air	Sampling Parameter: Exposure 14700 Minutes					
<b>Analysis Method - Radiello, Volatile Organics</b>						
Preparation: Not Applicable	Analysis: Radiello, Volatile Organics Air Batch: IVOA/6177 (HBN: 306252) Analyzed: 04/27/2023 09:34	Instrument ID: 5975-X				
<b>Analyte</b>	<b>Result (ng/sample)</b>	<b>Result (ug/m<sup>3</sup>)</b>	<b>Result (ppb)</b>	<b>RL (ng/sample)</b>	<b>Dilution</b>	<b>Qual</b>
Trichloroethene	45	0.11	0.021	25	1	
Tetrachloroethene	130	0.35	0.052	25	1	

Sample ID: <b>O-A-041923</b>	Sampling Site: Glass Lab	Collected: 04/19/2023				
Lab ID: 2311514008	Media: Radiello, Code 145	Received: 04/21/2023				
Matrix: Air	Sampling Parameter: Exposure 17362 Minutes					
<b>Analysis Method - Radiello, Volatile Organics</b>						
Preparation: Not Applicable	Analysis: Radiello, Volatile Organics Air Batch: IVOA/6177 (HBN: 306252) Analyzed: 04/26/2023 20:12	Instrument ID: 5975-X				
<b>Analyte</b>	<b>Result (ng/sample)</b>	<b>Result (ug/m<sup>3</sup>)</b>	<b>Result (ppb)</b>	<b>RL (ng/sample)</b>	<b>Dilution</b>	<b>Qual</b>
Trichloroethene	ND	<0.053	<0.0099	25	1	
Tetrachloroethene	93	0.21	0.031	25	1	

## Comments

### Quality Control: Radiello, Volatile Organics - (Batch: 306252)

TO-17 Modification: All results are semi-quantitative based on Daily CCV Standard.

QC limits for this method are advisory.

## Report Authorization (/S/ is an electronic signature that complies with 21 CFR Part 11)

Method	Analyst	Peer Review
Radiello, Volatile Organics (306252)	/S/ Robert Copenhafer 04/27/2023 12:25	/S/ Paul Kelly 04/28/2023 14:54

## Laboratory Contact Information

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# ANALYTICAL REPORT

Workorder: **34-2311514**

Client: Farallon Consulting, L.L.C.

Project Manager: Jessica Cofrancesco

## General Lab Comments

The results provided in this report relate only to the items tested.  
 Samples were received in acceptable condition unless otherwise noted.  
 The following was provided by the client: Sample ID, Collection Date, Sampling Location, Media Type, Sampling Parameter.  
 Collection Date, Media Type, and Sampling Parameter can potentially affect the validity of the results.  
 Samples have not been blank corrected unless otherwise noted.  
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Testing Sector	Accreditation Body (Standard)	Certificate Number	Website
Industrial Hygiene	AIHA (ISO 17025 & AIHA IHLAP)	101574	<a href="http://www.aihaaccreditedlabs.org">http://www.aihaaccreditedlabs.org</a>
	DOECAP-AP Washington	L22-62 C596	<a href="http://www.pjlabs.com">http://www.pjlabs.com</a> <a href="https://ecology.wa.gov/Regulations-Permits/Permits-certifications/Laboratory-Accreditation">https://ecology.wa.gov/Regulations-Permits/Permits-certifications/Laboratory-Accreditation</a>
Dietary Supplements	PJLA (ISO 17025)	L22-61	<a href="http://www.pjlabs.com">http://www.pjlabs.com</a>

## Result Symbol Definitions

MDL = Method Detection Limit, a statistical estimate of method/media/instrument sensitivity.  
 RL = Reporting Limit, a verified value of method/media/instrument sensitivity.  
 CRDL = Contract Required Detection Limit  
 Reg. Limit = Regulatory Limit.  
 ND = Not Detected, testing result not detected above the MDL or RL.  
 < Means this testing result is less than the numerical value.  
 \*\* No result could be reported, see sample comments for details.

## Qualifier Symbol Definitions

U = Qualifier indicates that the analyte was not detected above the MDL.  
 J = Qualifier Indicates that the analyte value is between the MDL and the RL. It is also used to indicate an estimated value for tentatively identified compounds in mass spectrometry where a 1:1 response is assumed.  
 B = Qualifier indicates that the analyte was detected in the blank.  
 E = Qualifier indicates that the analyte result exceeds calibration range.  
 P = Qualifier indicates that the RPD between the two columns is greater than 40%.  
 Q = Qualifier indicates that the analyte was outside the limits in a lab QC sample.



# ANALYTICAL REPORT

Report Date: January 22, 2024

Melissa Roskamp  
GeoEngineers, Inc  
523 East Second Avenue  
Spokane, WA 99202

E-mail: mroskamp@geoengineers.com

Workorder: **34-2401704**

Client Project ID: The Glass Lab, Portland OR  
Purchase Order: NA  
Project Manager: Jessica Cofrancesco

## Analytical Results

Sample ID: <b>VP-2A-011024</b> Lab ID: 2401704001	Sampling Location: Loading Dock	Collected: 01/10/2024 Received: 01/12/2024		
Method: Radiello, Volatile Organics Dilution: 1	Media: Radiello, Code 145 Sampling Parameter: Exposure 7400 Minutes	Instrument: 5975-X Analyzed: 01/18/2024 (314208)		
Analyte	Result (ng/sample)	Result (ug/m <sup>3</sup> )	Result (ppb)	RL (ng/sample)
Trichloroethene	61	0.30	0.056	25
Tetrachloroethene	230	1.2	0.18	25

Sample ID: <b>VP-3A-011024</b> Lab ID: 2401704002	Sampling Location: Suite 8	Collected: 01/10/2024 Received: 01/12/2024		
Method: Radiello, Volatile Organics Dilution: 1	Media: Radiello, Code 145 Sampling Parameter: Exposure 7456 Minutes	Instrument: 5975-X Analyzed: 01/18/2024 (314208)		
Analyte	Result (ng/sample)	Result (ug/m <sup>3</sup> )	Result (ppb)	RL (ng/sample)
Trichloroethene	82	0.41	0.076	25
Tetrachloroethene	130	0.67	0.099	25

Sample ID: <b>VP-4A-011024</b> Lab ID: 2401704003	Sampling Location: Suite 7	Collected: 01/10/2024 Received: 01/12/2024		
Method: Radiello, Volatile Organics Dilution: 1	Media: Radiello, Code 145 Sampling Parameter: Exposure 7420 Minutes	Instrument: 5975-X Analyzed: 01/18/2024 (314208)		
Analyte	Result (ng/sample)	Result (ug/m <sup>3</sup> )	Result (ppb)	RL (ng/sample)
Trichloroethene	130	0.66	0.12	25
Tetrachloroethene	210	1.1	0.16	25



# ANALYTICAL REPORT

Workorder: **34-2401704**

Client Project ID: The Glass Lab, Portland OR

Purchase Order: NA

Project Manager: Jessica Cofrancesco

## Analytical Results

Sample ID: <b>VP-5A-011024</b>		Collected: 01/10/2024	
Lab ID: 2401704004		Received: 01/12/2024	
Method: Radiello, Volatile Organics		Media: Radiello, Code 145	
Dilution: 1		Instrument: 5975-X	
Sampling Parameter: Exposure 7388 Minutes		Analyzed: 01/18/2024 (314208)	
<b>Analyte</b>	<b>Result (ng/sample)</b>	<b>Result (ug/m<sup>3</sup>)</b>	<b>Result (ppb)</b>
Trichloroethene	48	0.24	0.045
Tetrachloroethene	170	0.89	0.13

Sample ID: <b>VP-6A-011024</b>		Collected: 01/10/2024	
Lab ID: 2401704005		Received: 01/12/2024	
Method: Radiello, Volatile Organics		Media: Radiello, Code 145	
Dilution: 1		Instrument: 5975-X	
Sampling Parameter: Exposure 7426 Minutes		Analyzed: 01/18/2024 (314208)	
<b>Analyte</b>	<b>Result (ng/sample)</b>	<b>Result (ug/m<sup>3</sup>)</b>	<b>Result (ppb)</b>
Trichloroethene	130	0.63	0.12
Tetrachloroethene	220	1.2	0.17

Sample ID: <b>VP-7A-011024</b>		Collected: 01/10/2024	
Lab ID: 2401704006		Received: 01/12/2024	
Method: Radiello, Volatile Organics		Media: Radiello, Code 145	
Dilution: 1		Instrument: 5975-X	
Sampling Parameter: Exposure 7452 Minutes		Analyzed: 01/18/2024 (314208)	
<b>Analyte</b>	<b>Result (ng/sample)</b>	<b>Result (ug/m<sup>3</sup>)</b>	<b>Result (ppb)</b>
Trichloroethene	96	0.47	0.088
Tetrachloroethene	410	2.2	0.32

Sample ID: <b>CR-A-011024</b>		Collected: 01/10/2024	
Lab ID: 2401704007		Received: 01/12/2024	
Method: Radiello, Volatile Organics		Media: Radiello, Code 145	
Dilution: 1		Instrument: 5975-X	
Sampling Parameter: Exposure 7373 Minutes		Analyzed: 01/18/2024 (314208)	
<b>Analyte</b>	<b>Result (ng/sample)</b>	<b>Result (ug/m<sup>3</sup>)</b>	<b>Result (ppb)</b>
Trichloroethene	66	0.33	0.061
Tetrachloroethene	220	1.2	0.17

Sample ID: <b>SF-A-011024</b>		Collected: 01/10/2024	
Lab ID: 2401704008		Received: 01/12/2024	
Method: Radiello, Volatile Organics		Media: Radiello, Code 145	
Dilution: 1		Instrument: 5975-X	
Sampling Parameter: Exposure 7390 Minutes		Analyzed: 01/18/2024 (314208)	
<b>Analyte</b>	<b>Result (ng/sample)</b>	<b>Result (ug/m<sup>3</sup>)</b>	<b>Result (ppb)</b>
Trichloroethene	56	0.28	0.052
Tetrachloroethene	210	1.1	0.17



# ANALYTICAL REPORT

Workorder: **34-2401704**

Client Project ID: The Glass Lab, Portland OR

Purchase Order: NA

Project Manager: Jessica Cofrancesco

## Analytical Results

Sample ID: <b>O-A-011024</b> Lab ID: 2401704009	Sampling Location: Second Floor	Collected: 01/10/2024 Received: 01/12/2024		
Method: Radiello, Volatile Organics Dilution: 1	Media: Radiello, Code 145 Sampling Parameter: Exposure 7387 Minutes	Instrument: 5975-X Analyzed: 01/18/2024 (314208)		
Analyte	Result (ng/sample)	Result (ug/m <sup>3</sup> )	Result (ppb)	RL (ng/sample)
Trichloroethene	ND	ND	ND	25
Tetrachloroethene	ND	ND	ND	25

## Comments

**Quality Control: Radiello, Volatile Organics - (Batch: 314208)**

TO-17 Modification: All results are semi-quantitative based on Daily CCV Standard.

QC limits for this method are advisory.

## Report Authorization (/S/ is an electronic signature that complies with 21 CFR Part 11)

Method (Analysis Batch)	Analyst	Peer Review
Radiello, Volatile Organics (314208)	/S/ Preston Akagi 01/19/2024 15:04	/S/ Robert Copenhafer 01/22/2024 08:14

## Laboratory Contact Information

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# ANALYTICAL REPORT

Workorder: **34-2401704**

Client Project ID: The Glass Lab, Portland OR

Purchase Order: NA

Project Manager: Jessica Cofrancesco

## General Lab Comments

The results provided in this report relate only to the items tested.

Samples were received in acceptable condition unless otherwise noted.

The following was provided by the client: Sample ID, Collection Date, Sampling Location, Media Type, Sampling Parameter.

Collection Date, Media Type, and Sampling Parameter can potentially affect the validity of the results.

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	DOECAP-AP	L22-62	<a href="http://www.pjlabs.com">http://www.pjlabs.com</a>
	Washington	C596	<a href="https://ecology.wa.gov/Regulations-Permits/Permits-certifications/Laboratory-Accreditation">https://ecology.wa.gov/Regulations-Permits/Permits-certifications/Laboratory-Accreditation</a>
Dietary Supplements	PJLA (ISO 17025)	L22-61	<a href="http://www.pjlabs.com">http://www.pjlabs.com</a>

## Definitions

LOD = Limit of Detection = MDL = Method Detection Limit, A statistical estimate of method/media/instrument sensitivity.

LOQ = Limit of Quantitation = RL = Reporting Limit, A verified value of method/media/instrument sensitivity.

ND = Not Detected, Testing result not detected above the LOD or LOQ.

NA = Not Applicable.

\*\* No result could be reported, see sample comments for details.

< Means this testing result is less than the numerical value.

( ) This testing result is between the LOD and LOQ and has higher analytical uncertainty than values at or above the LOQ.



# ANALYTICAL REPORT

Report Date: October 02, 2023

T Battye  
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4380 S Macadam Ave #500  
Portland, OR 97239

E-mail: [tbattye@farallonconsulting.com](mailto:tbattye@farallonconsulting.com)

Workorder: **34-2326955**

Project ID: Glass Lab

Purchase Order: 1451-018-004

Project Manager Jessica Cofrancesco

Client Sample ID	Lab ID	Collect Date	Receive Date	Sampling Site
VP-2A-092223	2326955001	09/22/23	09/26/23	Glass Lab
VP-3A-092223	2326955002	09/22/23	09/26/23	Glass Lab
VP-5A-092223	2326955003	09/22/23	09/26/23	Glass Lab
VP-4A-092223	2326955004	09/22/23	09/26/23	Glass Lab
VP-6A-092223	2326955005	09/22/23	09/26/23	Glass Lab
CR-A-092223	2326955006	09/22/23	09/26/23	Glass Lab
VP-7A-092223	2326955007	09/22/23	09/26/23	Glass Lab
SF-A-092223	2326955008	09/22/23	09/26/23	Glass Lab
O-A-092223	2326955009	09/22/23	09/26/23	Glass Lab



# ANALYTICAL REPORT

Workorder: **34-2326955**

Client: Farallon Consulting, L.L.C.

Project Manager: Jessica Cofrancesco

## Analytical Results

Sample ID: <b>VP-2A-092223</b>	Sampling Site: Glass Lab	Collected: 09/22/2023				
Lab ID: 2326955001	Media: Radiello, Code 145	Received: 09/26/2023				
Matrix: Air	Sampling Parameter: Exposure 10080 Minutes					
<b>Analysis Method - Radiello, Volatile Organics</b>						
Preparation: Not Applicable	Analysis: Radiello, Volatile Organics Air Batch: IVOA/6312 (HBN: 310993) Analyzed: 09/28/2023 15:42	Instrument ID: 5975-X				
<b>Analyte</b>	<b>Result (ng/sample)</b>	<b>Result (ug/m<sup>3</sup>)</b>	<b>Result (ppb)</b>	<b>RL (ng/sample)</b>	<b>Dilution</b>	<b>Qual</b>
Trichloroethene	38	0.14	0.026	25	1	
Tetrachloroethene	66	0.26	0.038	25	1	

Sample ID: <b>VP-3A-092223</b>	Sampling Site: Glass Lab	Collected: 09/22/2023				
Lab ID: 2326955002	Media: Radiello, Code 145	Received: 09/26/2023				
Matrix: Air	Sampling Parameter: Exposure 10071 Minutes					
<b>Analysis Method - Radiello, Volatile Organics</b>						
Preparation: Not Applicable	Analysis: Radiello, Volatile Organics Air Batch: IVOA/6312 (HBN: 310993) Analyzed: 09/28/2023 16:03	Instrument ID: 5975-X				
<b>Analyte</b>	<b>Result (ng/sample)</b>	<b>Result (ug/m<sup>3</sup>)</b>	<b>Result (ppb)</b>	<b>RL (ng/sample)</b>	<b>Dilution</b>	<b>Qual</b>
Trichloroethene	ND	<0.092	<0.017	25	1	
Tetrachloroethene	42	0.16	0.024	25	1	

Sample ID: <b>VP-5A-092223</b>	Sampling Site: Glass Lab	Collected: 09/22/2023				
Lab ID: 2326955003	Media: Radiello, Code 145	Received: 09/26/2023				
Matrix: Air	Sampling Parameter: Exposure 10071 Minutes					
<b>Analysis Method - Radiello, Volatile Organics</b>						
Preparation: Not Applicable	Analysis: Radiello, Volatile Organics Air Batch: IVOA/6312 (HBN: 310993) Analyzed: 09/28/2023 16:24	Instrument ID: 5975-X				
<b>Analyte</b>	<b>Result (ng/sample)</b>	<b>Result (ug/m<sup>3</sup>)</b>	<b>Result (ppb)</b>	<b>RL (ng/sample)</b>	<b>Dilution</b>	<b>Qual</b>
Trichloroethene	47	0.17	0.032	25	1	
Tetrachloroethene	77	0.30	0.044	25	1	



# ANALYTICAL REPORT

Workorder: **34-2326955**

Client: Farallon Consulting, L.L.C.

Project Manager: Jessica Cofrancesco

## Analytical Results

Sample ID: <b>VP-4A-092223</b>	Sampling Site: Glass Lab	Collected: 09/22/2023				
Lab ID: 2326955004	Media: Radiello, Code 145	Received: 09/26/2023				
Matrix: Air	Sampling Parameter: Exposure 10083 Minutes					
<b>Analysis Method - Radiello, Volatile Organics</b>						
Preparation: Not Applicable	Analysis: Radiello, Volatile Organics Air Batch: IVOA/6312 (HBN: 310993) Analyzed: 09/28/2023 16:46	Instrument ID: 5975-X				
<b>Analyte</b>	<b>Result (ng/sample)</b>	<b>Result (ug/m<sup>3</sup>)</b>	<b>Result (ppb)</b>	<b>RL (ng/sample)</b>	<b>Dilution</b>	<b>Qual</b>
Trichloroethene	230	0.84	0.16	25	1	
Tetrachloroethene	80	0.31	0.046	25	1	

Sample ID: <b>VP-6A-092223</b>	Sampling Site: Glass Lab	Collected: 09/22/2023				
Lab ID: 2326955005	Media: Radiello, Code 145	Received: 09/26/2023				
Matrix: Air	Sampling Parameter: Exposure 10079 Minutes					
<b>Analysis Method - Radiello, Volatile Organics</b>						
Preparation: Not Applicable	Analysis: Radiello, Volatile Organics Air Batch: IVOA/6312 (HBN: 310993) Analyzed: 09/28/2023 17:07	Instrument ID: 5975-X				
<b>Analyte</b>	<b>Result (ng/sample)</b>	<b>Result (ug/m<sup>3</sup>)</b>	<b>Result (ppb)</b>	<b>RL (ng/sample)</b>	<b>Dilution</b>	<b>Qual</b>
Trichloroethene	230	0.82	0.15	25	1	
Tetrachloroethene	82	0.32	0.047	25	1	

Sample ID: <b>CR-A-092223</b>	Sampling Site: Glass Lab	Collected: 09/22/2023				
Lab ID: 2326955006	Media: Radiello, Code 145	Received: 09/26/2023				
Matrix: Air	Sampling Parameter: Exposure 10078 Minutes					
<b>Analysis Method - Radiello, Volatile Organics</b>						
Preparation: Not Applicable	Analysis: Radiello, Volatile Organics Air Batch: IVOA/6312 (HBN: 310993) Analyzed: 09/28/2023 17:28	Instrument ID: 5975-X				
<b>Analyte</b>	<b>Result (ng/sample)</b>	<b>Result (ug/m<sup>3</sup>)</b>	<b>Result (ppb)</b>	<b>RL (ng/sample)</b>	<b>Dilution</b>	<b>Qual</b>
Trichloroethene	44	0.16	0.030	25	1	
Tetrachloroethene	80	0.31	0.046	25	1	



# ANALYTICAL REPORT

Workorder: **34-2326955**

Client: Farallon Consulting, L.L.C.

Project Manager: Jessica Cofrancesco

## Analytical Results

Sample ID: <b>VP-7A-092223</b>	Sampling Site: Glass Lab	Collected: 09/22/2023				
Lab ID: 2326955007	Media: Radiello, Code 145	Received: 09/26/2023				
Matrix: Air	Sampling Parameter: Exposure 10073 Minutes					
<b>Analysis Method - Radiello, Volatile Organics</b>						
Preparation: Not Applicable	Analysis: Radiello, Volatile Organics Air Batch: IVOA/6312 (HBN: 310993) Analyzed: 09/28/2023 17:49	Instrument ID: 5975-X				
<b>Analyte</b>	<b>Result (ng/sample)</b>	<b>Result (ug/m<sup>3</sup>)</b>	<b>Result (ppb)</b>	<b>RL (ng/sample)</b>	<b>Dilution</b>	<b>Qual</b>
Trichloroethene	56	0.21	0.038	25	1	
Tetrachloroethene	160	0.61	0.090	25	1	

Sample ID: <b>SF-A-092223</b>	Sampling Site: Glass Lab	Collected: 09/22/2023				
Lab ID: 2326955008	Media: Radiello, Code 145	Received: 09/26/2023				
Matrix: Air	Sampling Parameter: Exposure 10070 Minutes					
<b>Analysis Method - Radiello, Volatile Organics</b>						
Preparation: Not Applicable	Analysis: Radiello, Volatile Organics Air Batch: IVOA/6312 (HBN: 310993) Analyzed: 09/28/2023 18:11	Instrument ID: 5975-X				
<b>Analyte</b>	<b>Result (ng/sample)</b>	<b>Result (ug/m<sup>3</sup>)</b>	<b>Result (ppb)</b>	<b>RL (ng/sample)</b>	<b>Dilution</b>	<b>Qual</b>
Trichloroethene	44	0.16	0.030	25	1	
Tetrachloroethene	57	0.22	0.033	25	1	

Sample ID: <b>O-A-092223</b>	Sampling Site: Glass Lab	Collected: 09/22/2023				
Lab ID: 2326955009	Media: Radiello, Code 145	Received: 09/26/2023				
Matrix: Air	Sampling Parameter: Exposure 10038 Minutes					
<b>Analysis Method - Radiello, Volatile Organics</b>						
Preparation: Not Applicable	Analysis: Radiello, Volatile Organics Air Batch: IVOA/6312 (HBN: 310993) Analyzed: 09/28/2023 18:32	Instrument ID: 5975-X				
<b>Analyte</b>	<b>Result (ng/sample)</b>	<b>Result (ug/m<sup>3</sup>)</b>	<b>Result (ppb)</b>	<b>RL (ng/sample)</b>	<b>Dilution</b>	<b>Qual</b>
Trichloroethene	ND	<0.092	<0.017	25	1	
Tetrachloroethene	31	0.12	0.018	25	1	

## Comments

### Quality Control: Radiello, Volatile Organics - (Batch: 310993)

TO-17 Modification: All results are semi-quantitative based on Daily CCV Standard.

Not all compounds in the LCS/LCSD were within performance limits. This is not a method requirement.



# ANALYTICAL REPORT

Workorder: **34-2326955**

Client: Farallon Consulting, L.L.C.

Project Manager: Jessica Cofrancesco

Report Authorization (/S/ is an electronic signature that complies with 21 CFR Part 11)

Method	Analyst	Peer Review
Radiello, Volatile Organics (310993)	/S/ Robert Copenhafer 09/29/2023 10:01	/S/ Paul Kelly 10/02/2023 12:50

## Laboratory Contact Information

ALS Environmental  
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Phone: (801) 266-7700  
Email: [alslt.lab@ALSGlobal.com](mailto:alslt.lab@ALSGlobal.com)  
Web: [www.alsglobal.com/slt](http://www.alsglobal.com/slt)

## General Lab Comments

The results provided in this report relate only to the items tested.  
Samples were received in acceptable condition unless otherwise noted.  
The following was provided by the client: Sample ID, Collection Date, Sampling Location, Media Type, Sampling Parameter.  
Collection Date, Media Type, and Sampling Parameter can potentially affect the validity of the results.  
Samples have not been blank corrected unless otherwise noted.  
This test report shall not be reproduced, except in full, without written approval of ALS.

ALS provides professional analytical services for all samples submitted. ALS is not in a position to interpret the data and assumes no responsibility for the quality of the samples submitted.

All quality control samples processed with the samples in this report yielded acceptable results unless otherwise noted.

ALS is accredited for specific fields of testing (scopes) in the following testing sectors. The quality system implemented at ALS conforms to accreditation requirements and is applied to all analytical testing performed by ALS. The following table lists testing sector, accreditation body, accreditation number and website. Please contact these accrediting bodies or your ALS project manager for the current scope of accreditation that applies to your analytical testing.

Testing Sector	Accreditation Body (Standard)	Certificate Number	Website
Industrial Hygiene	AIHA (ISO 17025 & AIHA IHLAP)	101574	<a href="http://www.aihaaccreditedlabs.org">http://www.aihaaccreditedlabs.org</a>
	DOECAP-AP	L22-62	<a href="http://www.pjllabs.com">http://www.pjllabs.com</a>
	Washington	C596	<a href="https://ecology.wa.gov/Regulations-Permits/Permits-certifications/Laboratory-Accreditation">https://ecology.wa.gov/Regulations-Permits/Permits-certifications/Laboratory-Accreditation</a>
Dietary Supplements	PJLA (ISO 17025)	L22-61	<a href="http://www.pjllabs.com">http://www.pjllabs.com</a>



## ANALYTICAL REPORT

**Workorder:** 34-2326955

**Client:** Farallon Consulting, L.L.C.

**Project Manager:** Jessica Cofrancesco

### Result Symbol Definitions

MDL = Method Detection Limit, a statistical estimate of method/media/instrument sensitivity.

RL = Reporting Limit, a verified value of method/media/instrument sensitivity.

CRDL = Contract Required Detection Limit

Reg. Limit = Regulatory Limit.

ND = Not Detected, testing result not detected above the MDL or RL.

< Means this testing result is less than the numerical value.

\*\* No result could be reported, see sample comments for details.

### Qualifier Symbol Definitions

U = Qualifier indicates that the analyte was not detected above the MDL.

J = Qualifier Indicates that the analyte value is between the MDL and the RL. It is also used to indicate an estimated value for tentatively identified compounds in mass spectrometry where a 1:1 response is assumed.

B = Qualifier indicates that the analyte was detected in the blank.

E = Qualifier indicates that the analyte result exceeds calibration range.

P = Qualifier indicates that the RPD between the two columns is greater than 40%.

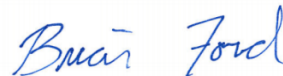
Q = Qualifier indicates that the analyte was outside the limits in a lab QC sample.

**Farallon Consulting - Portland, OR**

Sample Delivery Group: L1486802  
Samples Received: 04/27/2022  
Project Number: 1451-018  
Description: The Glasslab

Report To: Melissa Roskamp  
4380 S MacAdam Ave.  
Ste. 500  
Portland, OR 97239

Entire Report Reviewed By:



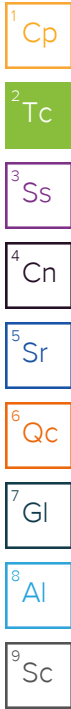
Brian Ford  
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

**Pace Analytical National**12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 [www.pacenational.com](http://www.pacenational.com)

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# SAMPLE SUMMARY

## VP-2-042522 L1486802-01 Air

Collected by George Cannon    Collected date/time 04/25/22 10:00    Received date/time 04/27/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1856037	1	04/28/22 22:38	04/28/22 22:38	DAH	Mt. Juliet, TN

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

## VP-6-042522 L1486802-02 Air

Collected by George Cannon    Collected date/time 04/25/22 11:33    Received date/time 04/27/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1856037	1	04/28/22 23:09	04/28/22 23:09	DAH	Mt. Juliet, TN

<sup>4</sup> Cn

<sup>5</sup> Sr

## VP-9-042522 L1486802-03 Air

Collected by George Cannon    Collected date/time 04/25/22 10:43    Received date/time 04/27/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1856037	1	04/28/22 23:39	04/28/22 23:39	DAH	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1856341	10	04/29/22 20:07	04/29/22 20:07	DAH	Mt. Juliet, TN

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

## VP-7-042522 L1486802-04 Air

Collected by George Cannon    Collected date/time 04/25/22 11:10    Received date/time 04/27/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1856037	1	04/29/22 00:10	04/29/22 00:10	DAH	Mt. Juliet, TN

<sup>9</sup> Sc

## VP-4-042522 L1486802-05 Air

Collected by George Cannon    Collected date/time 04/25/22 11:51    Received date/time 04/27/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1856037	1	04/29/22 00:42	04/29/22 00:42	DAH	Mt. Juliet, TN

## VP-8-042522 L1486802-06 Air

Collected by George Cannon    Collected date/time 04/25/22 12:14    Received date/time 04/27/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1856037	1	04/29/22 01:13	04/29/22 01:13	DAH	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1856341	10	04/29/22 20:48	04/29/22 20:48	DAH	Mt. Juliet, TN

## VP-1-042522 L1486802-07 Air

Collected by George Cannon    Collected date/time 04/25/22 10:20    Received date/time 04/27/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1856037	1	04/29/22 01:44	04/29/22 01:44	DAH	Mt. Juliet, TN

## EFF-042522 L1486802-08 Air

Collected by George Cannon    Collected date/time 04/25/22 09:25    Received date/time 04/27/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1856037	1	04/29/22 02:15	04/29/22 02:15	DAH	Mt. Juliet, TN

# CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Brian Ford  
Project Manager

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	2.62	6.23		1	<a href="#">WG1856037</a>
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	<a href="#">WG1856037</a>
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	<a href="#">WG1856037</a>
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	<a href="#">WG1856037</a>
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	<a href="#">WG1856037</a>
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	<a href="#">WG1856037</a>
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	<a href="#">WG1856037</a>
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	<a href="#">WG1856037</a>
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	<a href="#">WG1856037</a>
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	<a href="#">WG1856037</a>
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	<a href="#">WG1856037</a>
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	<a href="#">WG1856037</a>
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	<a href="#">WG1856037</a>
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	<a href="#">WG1856037</a>
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	<a href="#">WG1856037</a>
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	<a href="#">WG1856037</a>
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	<a href="#">WG1856037</a>
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	<a href="#">WG1856037</a>
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	<a href="#">WG1856037</a>
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	<a href="#">WG1856037</a>
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	<a href="#">WG1856037</a>
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	<a href="#">WG1856037</a>
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	<a href="#">WG1856037</a>
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	<a href="#">WG1856037</a>
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	<a href="#">WG1856037</a>
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	<a href="#">WG1856037</a>
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	<a href="#">WG1856037</a>
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	<a href="#">WG1856037</a>
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	<a href="#">WG1856037</a>
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	<a href="#">WG1856037</a>
Ethanol	64-17-5	46.10	1.25	2.36	4.50	8.48		1	<a href="#">WG1856037</a>
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	<a href="#">WG1856037</a>
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	<a href="#">WG1856037</a>
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.261	1.47		1	<a href="#">WG1856037</a>
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.533	2.64		1	<a href="#">WG1856037</a>
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	<a href="#">WG1856037</a>
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	<a href="#">WG1856037</a>
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	<a href="#">WG1856037</a>
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	<a href="#">WG1856037</a>
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	<a href="#">WG1856037</a>
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	<a href="#">WG1856037</a>
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	<a href="#">WG1856037</a>
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	<a href="#">WG1856037</a>
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	<a href="#">WG1856037</a>
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	<a href="#">WG1856037</a>
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	<a href="#">WG1856037</a>
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	<a href="#">WG1856037</a>
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	<a href="#">WG1856037</a>
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	<a href="#">WG1856037</a>
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	<a href="#">WG1856037</a>
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	<a href="#">WG1856037</a>
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	<a href="#">WG1856037</a>
Tetrachloroethylene	127-18-4	166	0.200	1.36	4.59	31.2		1	<a href="#">WG1856037</a>
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	<a href="#">WG1856037</a>
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	<a href="#">WG1856037</a>
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	<a href="#">WG1856037</a>

1 Cp  
2 Tc  
3 Ss  
4 Cn  
5 Sr  
6 Qc  
7 Gl  
8 Al  
9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	<a href="#">WG1856037</a>
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	<a href="#">WG1856037</a>
Trichloroethylene	79-01-6	131	0.200	1.07	4.94	26.5		1	<a href="#">WG1856037</a>
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	<a href="#">WG1856037</a>
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	<a href="#">WG1856037</a>
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	<a href="#">WG1856037</a>
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	<a href="#">WG1856037</a>
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	<a href="#">WG1856037</a>
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	<a href="#">WG1856037</a>
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	<a href="#">WG1856037</a>
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	<a href="#">WG1856037</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		94.4				<a href="#">WG1856037</a>

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	2.74	6.51		1	<a href="#">WG1856037</a>
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	<a href="#">WG1856037</a>
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	<a href="#">WG1856037</a>
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	<a href="#">WG1856037</a>
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	<a href="#">WG1856037</a>
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	<a href="#">WG1856037</a>
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	<a href="#">WG1856037</a>
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	<a href="#">WG1856037</a>
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	<a href="#">WG1856037</a>
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	<a href="#">WG1856037</a>
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	<a href="#">WG1856037</a>
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	<a href="#">WG1856037</a>
Chloroform	67-66-3	119	0.200	0.973	0.484	2.36		1	<a href="#">WG1856037</a>
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	<a href="#">WG1856037</a>
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	<a href="#">WG1856037</a>
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	<a href="#">WG1856037</a>
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	<a href="#">WG1856037</a>
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	<a href="#">WG1856037</a>
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	<a href="#">WG1856037</a>
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	<a href="#">WG1856037</a>
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	<a href="#">WG1856037</a>
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	<a href="#">WG1856037</a>
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	<a href="#">WG1856037</a>
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	<a href="#">WG1856037</a>
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	0.485	1.92		1	<a href="#">WG1856037</a>
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	<a href="#">WG1856037</a>
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	<a href="#">WG1856037</a>
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	<a href="#">WG1856037</a>
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	<a href="#">WG1856037</a>
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	<a href="#">WG1856037</a>
Ethanol	64-17-5	46.10	1.25	2.36	312	588	E	1	<a href="#">WG1856037</a>
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	<a href="#">WG1856037</a>
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	<a href="#">WG1856037</a>
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.261	1.47		1	<a href="#">WG1856037</a>
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.548	2.71		1	<a href="#">WG1856037</a>
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	<a href="#">WG1856037</a>
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	<a href="#">WG1856037</a>
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	<a href="#">WG1856037</a>
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	<a href="#">WG1856037</a>
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	<a href="#">WG1856037</a>
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	<a href="#">WG1856037</a>
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	<a href="#">WG1856037</a>
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	<a href="#">WG1856037</a>
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	<a href="#">WG1856037</a>
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	<a href="#">WG1856037</a>
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	<a href="#">WG1856037</a>
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	<a href="#">WG1856037</a>
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	<a href="#">WG1856037</a>
2-Propanol	67-63-0	60.10	1.25	3.07	1.64	4.03		1	<a href="#">WG1856037</a>
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	<a href="#">WG1856037</a>
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	<a href="#">WG1856037</a>
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	<a href="#">WG1856037</a>
Tetrachloroethylene	127-18-4	166	0.200	1.36	42.1	286		1	<a href="#">WG1856037</a>
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	<a href="#">WG1856037</a>
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	<a href="#">WG1856037</a>
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	<a href="#">WG1856037</a>

1 Cp  
2 Tc  
3 Ss  
4 Cn  
5 Sr  
6 Qc  
7 Gl  
8 Al  
9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	<a href="#">WG1856037</a>
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	<a href="#">WG1856037</a>
Trichloroethylene	79-01-6	131	0.200	1.07	38.4	206		1	<a href="#">WG1856037</a>
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	<a href="#">WG1856037</a>
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	<a href="#">WG1856037</a>
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	<a href="#">WG1856037</a>
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	<a href="#">WG1856037</a>
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	<a href="#">WG1856037</a>
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	<a href="#">WG1856037</a>
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	<a href="#">WG1856037</a>
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	<a href="#">WG1856037</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		96.1				<a href="#">WG1856037</a>

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	5.41	12.9		1	WG1856037
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1856037
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1856037
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1856037
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1856037
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1856037
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1856037
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1856037
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1856037
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1856037
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1856037
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1856037
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1856037
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG1856037
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1856037
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1856037
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1856037
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1856037
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1856037
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1856037
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1856037
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1856037
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1856037
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1856037
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1856037
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1856037
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1856037
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1856037
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1856037
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1856037
Ethanol	64-17-5	46.10	1.25	2.36	37.9	71.5		1	WG1856037
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1856037
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1856037
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.239	1.34		1	WG1856037
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.542	2.68		1	WG1856037
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1856037
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1856037
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1856037
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1856037
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1856037
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1856037
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1856037
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1856037
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1856037
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1856037
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1856037
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1856037
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1856037
2-Propanol	67-63-0	60.10	1.25	3.07	2.58	6.34		1	WG1856037
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1856037
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1856037
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1856037
Tetrachloroethylene	127-18-4	166	2.00	13.6	122	828		10	WG1856341
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1856037
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG1856037
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1856037

1 Cp  
2 Tc  
3 Ss  
4 Cn  
5 Sr  
6 Qc  
7 Gl  
8 Al  
9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	0.460	2.50		1	<a href="#">WG1856037</a>
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	<a href="#">WG1856037</a>
Trichloroethylene	79-01-6	131	0.200	1.07	66.1	354		1	<a href="#">WG1856037</a>
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	<a href="#">WG1856037</a>
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	<a href="#">WG1856037</a>
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	<a href="#">WG1856037</a>
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	<a href="#">WG1856037</a>
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	<a href="#">WG1856037</a>
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	<a href="#">WG1856037</a>
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	<a href="#">WG1856037</a>
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	<a href="#">WG1856037</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		96.2				<a href="#">WG1856037</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		98.3				<a href="#">WG1856341</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

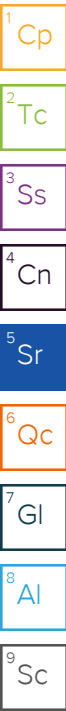
7 Gl

8 Al

9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	46.7	111		1	<a href="#">WG1856037</a>
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	<a href="#">WG1856037</a>
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	<a href="#">WG1856037</a>
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	<a href="#">WG1856037</a>
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	<a href="#">WG1856037</a>
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	<a href="#">WG1856037</a>
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	<a href="#">WG1856037</a>
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	<a href="#">WG1856037</a>
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	<a href="#">WG1856037</a>
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	<a href="#">WG1856037</a>
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	<a href="#">WG1856037</a>
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	<a href="#">WG1856037</a>
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	<a href="#">WG1856037</a>
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	<a href="#">WG1856037</a>
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	<a href="#">WG1856037</a>
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	<a href="#">WG1856037</a>
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	<a href="#">WG1856037</a>
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	<a href="#">WG1856037</a>
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	<a href="#">WG1856037</a>
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	<a href="#">WG1856037</a>
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	<a href="#">WG1856037</a>
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	<a href="#">WG1856037</a>
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	<a href="#">WG1856037</a>
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	<a href="#">WG1856037</a>
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	<a href="#">WG1856037</a>
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	<a href="#">WG1856037</a>
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	<a href="#">WG1856037</a>
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	<a href="#">WG1856037</a>
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	<a href="#">WG1856037</a>
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	<a href="#">WG1856037</a>
Ethanol	64-17-5	46.10	1.25	2.36	35.6	67.1		1	<a href="#">WG1856037</a>
Ethylbenzene	100-41-4	106	0.200	0.867	0.244	1.06		1	<a href="#">WG1856037</a>
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	<a href="#">WG1856037</a>
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.248	1.39		1	<a href="#">WG1856037</a>
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.538	2.66		1	<a href="#">WG1856037</a>
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	<a href="#">WG1856037</a>
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	<a href="#">WG1856037</a>
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	<a href="#">WG1856037</a>
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	<a href="#">WG1856037</a>
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	<a href="#">WG1856037</a>
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	<a href="#">WG1856037</a>
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	<a href="#">WG1856037</a>
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	<a href="#">WG1856037</a>
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	2.07	6.10		1	<a href="#">WG1856037</a>
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	<a href="#">WG1856037</a>
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	<a href="#">WG1856037</a>
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	<a href="#">WG1856037</a>
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	<a href="#">WG1856037</a>
2-Propanol	67-63-0	60.10	1.25	3.07	3.54	8.70		1	<a href="#">WG1856037</a>
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	<a href="#">WG1856037</a>
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	<a href="#">WG1856037</a>
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	<a href="#">WG1856037</a>
Tetrachloroethylene	127-18-4	166	0.200	1.36	0.458	3.11		1	<a href="#">WG1856037</a>
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	<a href="#">WG1856037</a>
Toluene	108-88-3	92.10	0.500	1.88	0.600	2.26		1	<a href="#">WG1856037</a>
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	<a href="#">WG1856037</a>



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	<a href="#">WG1856037</a>
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	<a href="#">WG1856037</a>
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	<a href="#">WG1856037</a>
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.210	1.03		1	<a href="#">WG1856037</a>
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	<a href="#">WG1856037</a>
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	<a href="#">WG1856037</a>
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	<a href="#">WG1856037</a>
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	<a href="#">WG1856037</a>
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	<a href="#">WG1856037</a>
m&p-Xylene	1330-20-7	106	0.400	1.73	0.887	3.85		1	<a href="#">WG1856037</a>
o-Xylene	95-47-6	106	0.200	0.867	0.300	1.30		1	<a href="#">WG1856037</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		96.0				<a href="#">WG1856037</a>

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	1.50	3.56		1	WG1856037
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1856037
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1856037
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1856037
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1856037
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1856037
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1856037
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1856037
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1856037
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1856037
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1856037
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1856037
Chloroform	67-66-3	119	0.200	0.973	0.640	3.11		1	WG1856037
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG1856037
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1856037
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1856037
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1856037
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1856037
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1856037
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1856037
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1856037
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1856037
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1856037
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1856037
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1856037
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1856037
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1856037
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1856037
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1856037
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1856037
Ethanol	64-17-5	46.10	1.25	2.36	32.7	61.7		1	WG1856037
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1856037
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1856037
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.253	1.42		1	WG1856037
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.536	2.65		1	WG1856037
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1856037
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1856037
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1856037
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1856037
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1856037
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1856037
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1856037
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1856037
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1856037
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1856037
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1856037
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1856037
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1856037
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1856037
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1856037
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1856037
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1856037
Tetrachloroethylene	127-18-4	166	0.200	1.36	56.4	383		1	WG1856037
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1856037
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG1856037
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1856037

1 Cp  
2 Tc  
3 Ss  
4 Cn  
5 Sr  
6 Qc  
7 Gl  
8 Al  
9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	<a href="#">WG1856037</a>
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	<a href="#">WG1856037</a>
Trichloroethylene	79-01-6	131	0.200	1.07	76.1	408		1	<a href="#">WG1856037</a>
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	<a href="#">WG1856037</a>
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	<a href="#">WG1856037</a>
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	<a href="#">WG1856037</a>
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	<a href="#">WG1856037</a>
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	<a href="#">WG1856037</a>
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	<a href="#">WG1856037</a>
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	<a href="#">WG1856037</a>
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	<a href="#">WG1856037</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		92.9				<a href="#">WG1856037</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	4.87	11.6		1	WG1856037
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1856037
Benzene	71-43-2	78.10	0.200	0.639	0.430	1.37		1	WG1856037
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1856037
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1856037
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1856037
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1856037
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1856037
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1856037
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1856037
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1856037
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1856037
Chloroform	67-66-3	119	0.200	0.973	1.43	6.96		1	WG1856037
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG1856037
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1856037
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1856037
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1856037
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1856037
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1856037
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1856037
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1856037
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1856037
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1856037
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1856037
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	1.97	7.81		1	WG1856037
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	0.261	1.03		1	WG1856037
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1856037
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1856037
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1856037
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1856037
Ethanol	64-17-5	46.10	1.25	2.36	548	1030	E	1	WG1856037
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1856037
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1856037
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.254	1.43		1	WG1856037
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.548	2.71		1	WG1856037
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1856037
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1856037
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1856037
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1856037
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1856037
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1856037
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1856037
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1856037
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1856037
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1856037
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1856037
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1856037
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1856037
2-Propanol	67-63-0	60.10	1.25	3.07	1.38	3.39		1	WG1856037
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1856037
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1856037
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1856037
Tetrachloroethylene	127-18-4	166	2.00	13.6	289	1960		10	WG1856341
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1856037
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG1856037
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1856037

1 Cp  
2 Tc  
3 Ss  
4 Cn  
5 Sr  
6 Qc  
7 Gl  
8 Al  
9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	0.823	4.48		1	<a href="#">WG1856037</a>
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	<a href="#">WG1856037</a>
Trichloroethylene	79-01-6	131	2.00	10.7	440	2360		10	<a href="#">WG1856341</a>
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	<a href="#">WG1856037</a>
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	<a href="#">WG1856037</a>
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	<a href="#">WG1856037</a>
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	<a href="#">WG1856037</a>
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	<a href="#">WG1856037</a>
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	<a href="#">WG1856037</a>
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	<a href="#">WG1856037</a>
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	<a href="#">WG1856037</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		97.9				<a href="#">WG1856037</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		98.3				<a href="#">WG1856341</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

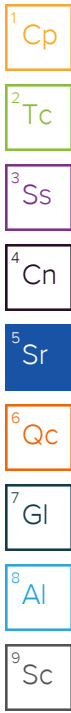
7 Gl

8 Al

9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	2.93	6.96		1	<a href="#">WG1856037</a>
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	<a href="#">WG1856037</a>
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	<a href="#">WG1856037</a>
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	<a href="#">WG1856037</a>
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	<a href="#">WG1856037</a>
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	<a href="#">WG1856037</a>
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	<a href="#">WG1856037</a>
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	<a href="#">WG1856037</a>
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	<a href="#">WG1856037</a>
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	<a href="#">WG1856037</a>
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	<a href="#">WG1856037</a>
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	<a href="#">WG1856037</a>
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	<a href="#">WG1856037</a>
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	<a href="#">WG1856037</a>
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	<a href="#">WG1856037</a>
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	<a href="#">WG1856037</a>
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	<a href="#">WG1856037</a>
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	<a href="#">WG1856037</a>
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	<a href="#">WG1856037</a>
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	<a href="#">WG1856037</a>
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	<a href="#">WG1856037</a>
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	<a href="#">WG1856037</a>
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	<a href="#">WG1856037</a>
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	<a href="#">WG1856037</a>
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	<a href="#">WG1856037</a>
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	<a href="#">WG1856037</a>
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	<a href="#">WG1856037</a>
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	<a href="#">WG1856037</a>
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	<a href="#">WG1856037</a>
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	<a href="#">WG1856037</a>
Ethanol	64-17-5	46.10	1.25	2.36	6.45	12.2		1	<a href="#">WG1856037</a>
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	<a href="#">WG1856037</a>
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	<a href="#">WG1856037</a>
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.239	1.34		1	<a href="#">WG1856037</a>
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.560	2.77		1	<a href="#">WG1856037</a>
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	<a href="#">WG1856037</a>
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	<a href="#">WG1856037</a>
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	<a href="#">WG1856037</a>
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	<a href="#">WG1856037</a>
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	<a href="#">WG1856037</a>
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	<a href="#">WG1856037</a>
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.401	1.39		1	<a href="#">WG1856037</a>
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	<a href="#">WG1856037</a>
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	<a href="#">WG1856037</a>
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	<a href="#">WG1856037</a>
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	<a href="#">WG1856037</a>
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	<a href="#">WG1856037</a>
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	<a href="#">WG1856037</a>
2-Propanol	67-63-0	60.10	1.25	3.07	1.27	3.12		1	<a href="#">WG1856037</a>
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	<a href="#">WG1856037</a>
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	<a href="#">WG1856037</a>
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	<a href="#">WG1856037</a>
Tetrachloroethylene	127-18-4	166	0.200	1.36	10.5	71.3		1	<a href="#">WG1856037</a>
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	<a href="#">WG1856037</a>
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	<a href="#">WG1856037</a>
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	<a href="#">WG1856037</a>



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	<a href="#">WG1856037</a>
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	<a href="#">WG1856037</a>
Trichloroethylene	79-01-6	131	0.200	1.07	0.232	1.24		1	<a href="#">WG1856037</a>
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	<a href="#">WG1856037</a>
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	<a href="#">WG1856037</a>
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	2.45	11.4		1	<a href="#">WG1856037</a>
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	<a href="#">WG1856037</a>
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	<a href="#">WG1856037</a>
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	<a href="#">WG1856037</a>
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	<a href="#">WG1856037</a>
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	<a href="#">WG1856037</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		95.2				<a href="#">WG1856037</a>

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	11.3	26.9		1	WG1856037
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1856037
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1856037
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1856037
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1856037
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1856037
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1856037
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1856037
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1856037
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1856037
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1856037
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1856037
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1856037
Chloromethane	74-87-3	50.50	0.200	0.413	0.573	1.18		1	WG1856037
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1856037
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1856037
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1856037
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1856037
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1856037
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1856037
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1856037
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1856037
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1856037
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1856037
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1856037
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1856037
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1856037
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1856037
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1856037
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1856037
Ethanol	64-17-5	46.10	1.25	2.36	56.5	107		1	WG1856037
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1856037
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1856037
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.261	1.47		1	WG1856037
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.564	2.79		1	WG1856037
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1856037
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1856037
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1856037
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1856037
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1856037
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1856037
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1856037
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1856037
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1856037
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1856037
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1856037
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1856037
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1856037
2-Propanol	67-63-0	60.10	1.25	3.07	8.58	21.1		1	WG1856037
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1856037
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1856037
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1856037
Tetrachloroethylene	127-18-4	166	0.200	1.36	34.5	234		1	WG1856037
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1856037
Toluene	108-88-3	92.10	0.500	1.88	0.655	2.47		1	WG1856037
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1856037

1 Cp  
2 Tc  
3 Ss  
4 Cn  
5 Sr  
6 Qc  
7 Gl  
8 Al  
9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	<a href="#">WG1856037</a>
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	<a href="#">WG1856037</a>
Trichloroethylene	79-01-6	131	0.200	1.07	7.29	39.1		1	<a href="#">WG1856037</a>
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	<a href="#">WG1856037</a>
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	<a href="#">WG1856037</a>
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	<a href="#">WG1856037</a>
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	<a href="#">WG1856037</a>
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	<a href="#">WG1856037</a>
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	<a href="#">WG1856037</a>
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	<a href="#">WG1856037</a>
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	<a href="#">WG1856037</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		95.4				<a href="#">WG1856037</a>

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Method Blank (MB)

(MB) R3786453-3 04/28/22 11:49

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Acetone	U		0.584	1.25
Allyl Chloride	U		0.114	0.200
Benzene	U		0.0715	0.200
Benzyl Chloride	U		0.0598	0.200
Bromodichloromethane	U		0.0702	0.200
Bromoform	U		0.0732	0.600
Bromomethane	U		0.0982	0.200
1,3-Butadiene	U		0.104	2.00
Carbon disulfide	U		0.102	0.200
Carbon tetrachloride	U		0.0732	0.200
Chlorobenzene	U		0.0832	0.200
Chloroethane	U		0.0996	0.200
Chloroform	U		0.0717	0.200
Chloromethane	U		0.103	0.200
2-Chlorotoluene	U		0.0828	0.200
Cyclohexane	U		0.0753	0.200
Dibromochloromethane	U		0.0727	0.200
1,2-Dibromoethane	U		0.0721	0.200
1,2-Dichlorobenzene	U		0.128	0.200
1,3-Dichlorobenzene	U		0.182	0.200
1,4-Dichlorobenzene	U		0.0557	0.200
1,2-Dichloroethane	U		0.0700	0.200
1,1-Dichloroethane	U		0.0723	0.200
1,1-Dichloroethene	U		0.0762	0.200
cis-1,2-Dichloroethene	U		0.0784	0.200
trans-1,2-Dichloroethene	U		0.0673	0.200
1,2-Dichloropropane	U		0.0760	0.200
cis-1,3-Dichloropropene	U		0.0689	0.200
trans-1,3-Dichloropropene	U		0.0728	0.200
1,4-Dioxane	U		0.0833	0.200
Ethanol	U		0.265	1.25
Ethylbenzene	U		0.0835	0.200
4-Ethyltoluene	U		0.0783	0.200
Trichlorofluoromethane	U		0.0819	0.200
Dichlorodifluoromethane	U		0.137	0.200
1,1,2-Trichlorotrifluoroethane	U		0.0793	0.200
1,2-Dichlorotetrafluoroethane	U		0.0890	0.200
Heptane	U		0.104	0.200
Hexachloro-1,3-butadiene	U		0.105	0.630
n-Hexane	U		0.206	0.630

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Method Blank (MB)

(MB) R3786453-3 04/28/22 11:49

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
Isopropylbenzene	U		0.0777	0.200
Methylene Chloride	U		0.0979	0.200
Methyl Butyl Ketone	U		0.133	1.25
2-Butanone (MEK)	U		0.0814	1.25
4-Methyl-2-pentanone (MIBK)	U		0.0765	1.25
Methyl Methacrylate	U		0.0876	0.200
MTBE	U		0.0647	0.200
Naphthalene	U		0.350	0.630
2-Propanol	U		0.264	1.25
Propene	U		0.0932	1.25
Styrene	U		0.0788	0.200
1,1,2,2-Tetrachloroethane	U		0.0743	0.200
Tetrachloroethylene	U		0.0814	0.200
Tetrahydrofuran	U		0.0734	0.200
Toluene	U		0.0870	0.500
1,2,4-Trichlorobenzene	U		0.148	0.630
1,1,1-Trichloroethane	U		0.0736	0.200
1,1,2-Trichloroethane	U		0.0775	0.200
Trichloroethylene	U		0.0680	0.200
1,2,4-Trimethylbenzene	U		0.0764	0.200
1,3,5-Trimethylbenzene	U		0.0779	0.200
2,2,4-Trimethylpentane	U		0.133	0.200
Vinyl chloride	U		0.0949	0.200
Vinyl Bromide	U		0.0852	0.200
Vinyl acetate	U		0.116	0.200
m&p-Xylene	U		0.135	0.400
o-Xylene	U		0.0828	0.200
(S) 1,4-Bromofluorobenzene	94.2			60.0-140

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3786453-1 04/28/22 10:46 • (LCSD) R3786453-2 04/28/22 11:18

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ppbv	ppbv	ppbv	%	%	%			%	%
Acetone	3.75	4.23	4.21	113	112	70.0-130			0.474	25
Allyl Chloride	3.75	4.12	4.10	110	109	70.0-130			0.487	25
Benzene	3.75	4.20	4.14	112	110	70.0-130			1.44	25
Benzyl Chloride	3.75	4.42	4.46	118	119	70.0-152			0.901	25
Bromodichloromethane	3.75	4.26	4.26	114	114	70.0-130			0.000	25

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3786453-1 04/28/22 10:46 • (LCSD) R3786453-2 04/28/22 11:18

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromoform	3.75	4.19	4.03	112	107	70.0-130			3.89	25
Bromomethane	3.75	4.16	4.04	111	108	70.0-130			2.93	25
1,3-Butadiene	3.75	3.90	3.85	104	103	70.0-130			1.29	25
Carbon disulfide	3.75	4.11	4.02	110	107	70.0-130			2.21	25
Carbon tetrachloride	3.75	4.18	4.12	111	110	70.0-130			1.45	25
Chlorobenzene	3.75	4.11	4.05	110	108	70.0-130			1.47	25
Chloroethane	3.75	4.59	4.24	122	113	70.0-130			7.93	25
Chloroform	3.75	4.17	4.10	111	109	70.0-130			1.69	25
Chloromethane	3.75	4.08	4.02	109	107	70.0-130			1.48	25
2-Chlorotoluene	3.75	4.29	4.24	114	113	70.0-130			1.17	25
Cyclohexane	3.75	4.11	4.18	110	111	70.0-130			1.69	25
Dibromochloromethane	3.75	4.23	4.28	113	114	70.0-130			1.18	25
1,2-Dibromoethane	3.75	4.26	4.23	114	113	70.0-130			0.707	25
1,2-Dichlorobenzene	3.75	4.31	4.35	115	116	70.0-130			0.924	25
1,3-Dichlorobenzene	3.75	4.19	4.11	112	110	70.0-130			1.93	25
1,4-Dichlorobenzene	3.75	4.26	4.13	114	110	70.0-130			3.10	25
1,2-Dichloroethane	3.75	4.40	4.32	117	115	70.0-130			1.83	25
1,1-Dichloroethane	3.75	4.15	4.14	111	110	70.0-130			0.241	25
1,1-Dichloroethene	3.75	4.17	4.06	111	108	70.0-130			2.67	25
cis-1,2-Dichloroethene	3.75	4.25	4.10	113	109	70.0-130			3.59	25
trans-1,2-Dichloroethene	3.75	4.16	4.09	111	109	70.0-130			1.70	25
1,2-Dichloropropane	3.75	4.26	4.24	114	113	70.0-130			0.471	25
cis-1,3-Dichloropropene	3.75	4.37	4.22	117	113	70.0-130			3.49	25
trans-1,3-Dichloropropene	3.75	4.38	4.14	117	110	70.0-130			5.63	25
1,4-Dioxane	3.75	4.26	4.26	114	114	70.0-140			0.000	25
Ethanol	3.75	4.26	4.21	114	112	55.0-148			1.18	25
Ethylbenzene	3.75	4.25	4.15	113	111	70.0-130			2.38	25
4-Ethyltoluene	3.75	4.34	4.28	116	114	70.0-130			1.39	25
Trichlorofluoromethane	3.75	4.15	4.10	111	109	70.0-130			1.21	25
Dichlorodifluoromethane	3.75	4.16	4.14	111	110	64.0-139			0.482	25
1,1,2-Trichlorotrifluoroethane	3.75	4.13	3.97	110	106	70.0-130			3.95	25
1,2-Dichlorotetrafluoroethane	3.75	4.15	4.04	111	108	70.0-130			2.69	25
Heptane	3.75	4.12	4.02	110	107	70.0-130			2.46	25
Hexachloro-1,3-butadiene	3.75	3.96	4.13	106	110	70.0-151			4.20	25
n-Hexane	3.75	4.14	3.95	110	105	70.0-130			4.70	25
Isopropylbenzene	3.75	4.29	4.29	114	114	70.0-130			0.000	25
Methylene Chloride	3.75	3.96	3.90	106	104	70.0-130			1.53	25
Methyl Butyl Ketone	3.75	4.37	4.35	117	116	70.0-149			0.459	25
Methyl Ethyl Ketone	3.75	4.12	3.98	110	106	70.0-130			3.46	25
4-Methyl-2-pentanone (MIBK)	3.75	4.21	4.20	112	112	70.0-139			0.238	25

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3786453-1 04/28/22 10:46 • (LCSD) R3786453-2 04/28/22 11:18

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Methyl Methacrylate	3.75	4.27	4.04	114	108	70.0-130			5.54	25
MTBE	3.75	4.29	4.22	114	113	70.0-130			1.65	25
Naphthalene	3.75	4.96	5.02	132	134	70.0-159			1.20	25
2-Propanol	3.75	4.00	3.94	107	105	70.0-139			1.51	25
Propene	3.75	4.00	3.97	107	106	64.0-144			0.753	25
Styrene	3.75	4.47	4.33	119	115	70.0-130			3.18	25
1,1,2,2-Tetrachloroethane	3.75	4.12	4.11	110	110	70.0-130			0.243	25
Tetrachloroethylene	3.75	4.22	4.10	113	109	70.0-130			2.88	25
Tetrahydrofuran	3.75	4.02	3.96	107	106	70.0-137			1.50	25
Toluene	3.75	4.16	4.27	111	114	70.0-130			2.61	25
1,2,4-Trichlorobenzene	3.75	5.38	5.15	143	137	70.0-160			4.37	25
1,1,1-Trichloroethane	3.75	4.20	4.06	112	108	70.0-130			3.39	25
1,1,2-Trichloroethane	3.75	4.32	4.21	115	112	70.0-130			2.58	25
Trichloroethylene	3.75	4.15	4.21	111	112	70.0-130			1.44	25
1,2,4-Trimethylbenzene	3.75	4.22	4.22	113	113	70.0-130			0.000	25
1,3,5-Trimethylbenzene	3.75	4.34	4.24	116	113	70.0-130			2.33	25
2,2,4-Trimethylpentane	3.75	3.98	4.02	106	107	70.0-130			1.00	25
Vinyl chloride	3.75	4.19	4.24	112	113	70.0-130			1.19	25
Vinyl Bromide	3.75	4.09	4.09	109	109	70.0-130			0.000	25
Vinyl acetate	3.75	4.37	4.23	117	113	70.0-130			3.26	25
m&p-Xylene	7.50	8.48	8.28	113	110	70.0-130			2.39	25
o-Xylene	3.75	4.25	4.26	113	114	70.0-130			0.235	25
<i>(S) 1,4-Bromofluorobenzene</i>				100	99.7	60.0-140				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3786471-3 04/29/22 10:53

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
Tetrachloroethylene	U		0.0814	0.200
Trichloroethylene	U		0.0680	0.200
<i>(S) 1,4-Bromofluorobenzene</i>	96.5			60.0-140

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3786471-1 04/29/22 09:28 • (LCSD) R3786471-2 04/29/22 10:11

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ppbv	ppbv	ppbv	%	%	%			%	%
Tetrachloroethylene	3.75	4.62	4.72	123	126	70.0-130			2.14	25
Trichloroethylene	3.75	4.69	4.79	125	128	70.0-130			2.11	25
<i>(S) 1,4-Bromofluorobenzene</i>				98.3	98.6	60.0-140				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

# GLOSSARY OF TERMS

## Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

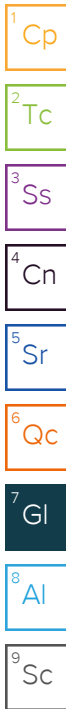
Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

### Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

### Qualifier Description

E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
---	---



# ACCREDITATIONS & LOCATIONS

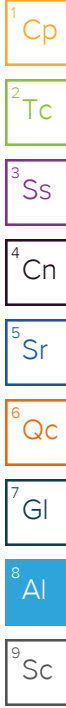
## Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico <sup>1</sup>	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina <sup>1</sup>	DW21704
Georgia	NELAP	North Carolina <sup>3</sup>	41
Georgia <sup>1</sup>	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky <sup>1,6</sup>	KY90010	South Carolina	84004002
Kentucky <sup>2</sup>	16	South Dakota	n/a
Louisiana	AI30792	Tennessee <sup>1,4</sup>	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas <sup>5</sup>	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 <sup>5</sup>	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

<sup>1</sup> Drinking Water <sup>2</sup> Underground Storage Tanks <sup>3</sup> Aquatic Toxicity <sup>4</sup> Chemical/Microbiological <sup>5</sup> Mold <sup>6</sup> Wastewater n/a Accreditation not applicable

\* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

\* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.



Company Name/Address:  
**Farallon Consulting - Portland, OR**  
 4380 S MacAdam Ave.  
 Ste. 500

Billing Information:  
 Accounts Payable  
 4380 S MacAdam Ave.  
 Ste. 500  
 Portland, OR 97239

Analysis

Chain of Custody Page 1 of 1



12065 Lebanon Road Mt Juliet, TN 37122  
 Phone: 615-758-5858 Alt: 800-767-5859  
 Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: <https://info.pacelabs.com/hubs/pas-standard-terms.pdf>

Report To:  
**Melissa Roskamp**

Email To:  
 mroskamp@farallonconsulting.com

Project Description:  
**The Glasslab**

City/State Collected:  
**Portland OR**

Please Circle:  
 PT  MT  CT  ET

Phone:  
**503-280-4635**

Client Project #  
**1451-018**

Lab Project #  
**FARCONPOR-1451018**

Collected by (print):  
*George Cannon*

Site/Facility ID #

P.O. #

Collected by (signature):  
*George Cannon*

**Rush?** (Lab MUST Be Notified)  
 Same Day  Three Day  
 Next Day  Five Day  
 Two Day

Date Results Needed

Sample ID

Can #

Flow Cont. #

Date

Time

Initial

Final

VOCs TO-15 Summa

Sample ID	Can #	Flow Cont. #	Date	Time	Initial	Final								
VP-2-042522	012550	009437	4/25/22	1000	-28	-2.5	X							u
VP-6-042522	010629	005940	4/25/22	1133	-29	-2	X							u
VP-9-042522	007185	011552	4/25/22	1043	-29	-3	X							u
VP-7-042522	008531	012578	4/25/22	1110	-29	-2	X							u
VP-4-042522	006968	007466	4/25/22	1151	-30	-4	X							u
VP-8-042522	012471	006679	4/25/22	1214	-30	-4	X							u
VP-1-042522	010595	011935	4/25/22	1020	-30	-4	X							u
EFF-042522	005719	010345	4/25/22	0925	-28	-3	X							u

SDG: **1486802**  
**D143**

Acctnum: **FARCONPOR**  
 Template: **T190728**  
 Prelogin: **P918558**  
 PM: 110 - Brian Ford  
 PB: *DL 4/26/22*

Shipped Via: **FedEX Ground**

Rem./Contaminant Sample # (lab only)

**Sample Receipt Checklist**  
 COC Seal Present/Intact:  Y  N If Applicable  
 COC Signed/Accurate:  Y  N VOA Zero Headspace:  Y  N  
 Bottles arrive intact:  Y  N Pres. Correct/Check:  Y  N  
 Correct bottles used:  Y  N  
 Sufficient volume sent:  Y  N  
 P&H Screen < 0.5 mD/hr:  Y  N

5349 7824 5277/

Relinquished by: (Signature) <i>George Cannon</i>			Date: 4-25-22	Time: 1708	Samples returned via: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Courier		Tracking # 5288	Hold #
Relinquished by: (Signature)			Date:	Time:	Received by: (Signature)		Date:	Time:
Relinquished by: (Signature)			Date:	Time:	Received for lab by: (Signature) <i>D. Hanvick</i>		Date: 4-27-22	Time: 900

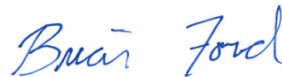
Condition: (lab use only)  
*Any*  
 COC Seal Intact:  Y  N  NA  
 NCF:

## Farallon Consulting - Portland, OR

Sample Delivery Group: L1179154  
Samples Received: 01/14/2020  
Project Number: 1451-018  
Description: Glasslab

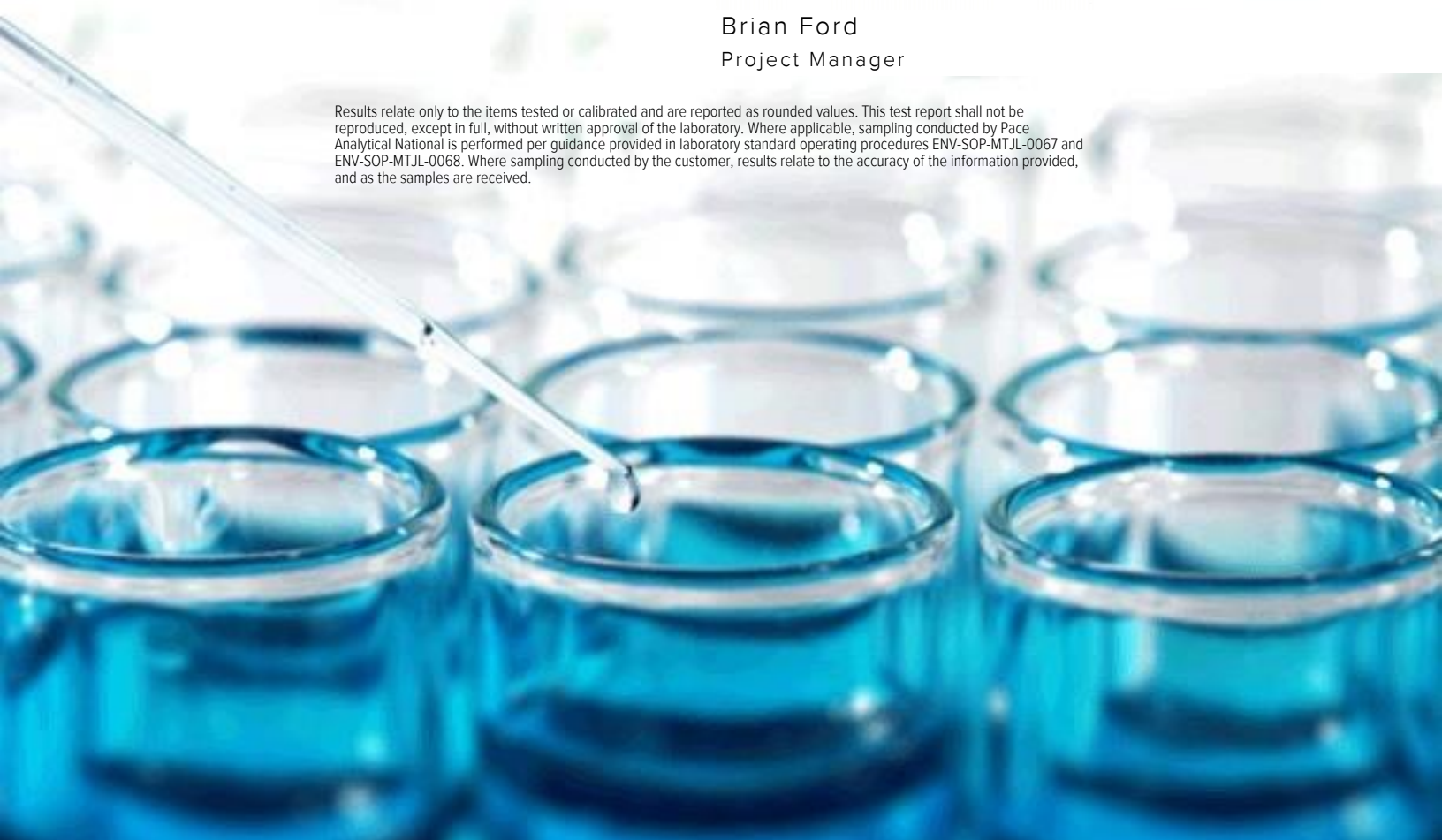
Report To: Melissa Roskamp  
4380 SW MacAdam Ave.  
Ste. 500  
Portland, OR 97239

Entire Report Reviewed By:



Brian Ford  
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.





<b>Cp: Cover Page</b>	<b>1</b>	<b>1</b> Cp
<b>Tc: Table of Contents</b>	<b>2</b>	
<b>Ss: Sample Summary</b>	<b>3</b>	<b>2</b> Tc
<b>Cn: Case Narrative</b>	<b>5</b>	
<b>Sr: Sample Results</b>	<b>6</b>	<b>3</b> Ss
VP-01-010920 L1179154-01	<b>6</b>	
VP-02-010920 L1179154-02	<b>8</b>	<b>4</b> Cn
VP-03-010920 L1179154-03	<b>10</b>	<b>5</b> Sr
VP-04-010920 L1179154-04	<b>12</b>	
VP-05-010920 L1179154-05	<b>14</b>	<b>6</b> Qc
VP-06-010920 L1179154-06	<b>16</b>	
VP-07-010920 L1179154-07	<b>18</b>	<b>7</b> Gl
EFF-01132020 L1179154-08	<b>20</b>	<b>8</b> Al
<b>Qc: Quality Control Summary</b>	<b>22</b>	
Volatile Organic Compounds (MS) by Method TO-15	<b>22</b>	<b>9</b> Sc
<b>Gl: Glossary of Terms</b>	<b>27</b>	
<b>Al: Accreditations &amp; Locations</b>	<b>28</b>	
<b>Sc: Sample Chain of Custody</b>	<b>29</b>	

# SAMPLE SUMMARY



## VP-01-010920 L1179154-01 Air

Collected by  
Brittany Train      Collected date/time  
01/09/20 13:19      Received date/time  
01/14/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1411525	1	01/15/20 15:05	01/15/20 15:05	MBF	Mt. Juliet, TN

1  
Cp

2  
Tc

3  
Ss

4  
Cn

5  
Sr

6  
Qc

7  
Gl

8  
Al

9  
Sc

## VP-02-010920 L1179154-02 Air

Collected by  
Brittany Train      Collected date/time  
01/09/20 12:30      Received date/time  
01/14/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1411525	1	01/15/20 15:50	01/15/20 15:50	MBF	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1412388	10	01/16/20 15:30	01/16/20 15:30	DAH	Mt. Juliet, TN

## VP-03-010920 L1179154-03 Air

Collected by  
Brittany Train      Collected date/time  
01/09/20 08:57      Received date/time  
01/14/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1411525	1	01/15/20 16:33	01/15/20 16:33	AMH	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1412388	10	01/16/20 16:18	01/16/20 16:18	DAH	Mt. Juliet, TN

## VP-04-010920 L1179154-04 Air

Collected by  
Brittany Train      Collected date/time  
01/09/20 10:05      Received date/time  
01/14/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1411525	1	01/15/20 17:17	01/15/20 17:17	AMH	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1412388	20	01/16/20 17:04	01/16/20 17:04	DAH	Mt. Juliet, TN

## VP-05-010920 L1179154-05 Air

Collected by  
Brittany Train      Collected date/time  
01/09/20 11:46      Received date/time  
01/14/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1411525	1	01/15/20 18:02	01/15/20 18:02	AMH	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1412388	10	01/16/20 17:51	01/16/20 17:51	DAH	Mt. Juliet, TN

## VP-06-010920 L1179154-06 Air

Collected by  
Brittany Train      Collected date/time  
01/09/20 11:15      Received date/time  
01/14/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1411525	1	01/15/20 18:47	01/15/20 18:47	AMH	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1412388	20	01/16/20 18:38	01/16/20 18:38	DAH	Mt. Juliet, TN

## VP-07-010920 L1179154-07 Air

Collected by  
Brittany Train      Collected date/time  
01/09/20 14:38      Received date/time  
01/14/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1411525	1	01/15/20 19:31	01/15/20 19:31	AMH	Mt. Juliet, TN

# SAMPLE SUMMARY



EFF-01132020 L1179154-08 Air

Collected by: Brittany Train  
Collected date/time: 01/13/20 10:00  
Received date/time: 01/14/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1411525	1	01/15/20 20:14	01/15/20 20:14	AMH	Mt. Juliet, TN

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford  
Project Manager

- <sup>1</sup> Cp
- <sup>2</sup> Tc
- <sup>3</sup> Ss
- <sup>4</sup> Cn
- <sup>5</sup> Sr
- <sup>6</sup> Qc
- <sup>7</sup> Gl
- <sup>8</sup> Al
- <sup>9</sup> Sc



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	11.9	28.3		1	WG1411525
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1411525
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1411525
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1411525
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1411525
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1411525
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1411525
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1411525
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1411525
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1411525
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1411525
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1411525
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1411525
Chloromethane	74-87-3	50.50	0.200	0.413	0.810	1.67		1	WG1411525
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1411525
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1411525
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1411525
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1411525
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1411525
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	0.287	1.73		1	WG1411525
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1411525
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1411525
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1411525
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1411525
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1411525
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1411525
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1411525
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1411525
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1411525
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1411525
Ethanol	64-17-5	46.10	0.630	1.19	7.83	14.8		1	WG1411525
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1411525
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1411525
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.253	1.42		1	WG1411525
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.532	2.63		1	WG1411525
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1411525
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1411525
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1411525
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1411525
n-Hexane	110-54-3	86.20	0.200	0.705	ND	ND		1	WG1411525
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1411525
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.258	0.896		1	WG1411525
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1411525
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1411525
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1411525
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1411525
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1411525
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1411525
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1411525
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1411525
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1411525
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1411525
Tetrachloroethylene	127-18-4	166	0.200	1.36	31.2	212		1	WG1411525
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1411525
Toluene	108-88-3	92.10	0.200	0.753	2.36	8.89		1	WG1411525
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1411525

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	0.214	1.16		1	<a href="#">WG1411525</a>
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	<a href="#">WG1411525</a>
Trichloroethylene	79-01-6	131	0.200	1.07	0.226	1.21		1	<a href="#">WG1411525</a>
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	<a href="#">WG1411525</a>
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	<a href="#">WG1411525</a>
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	<a href="#">WG1411525</a>
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	<a href="#">WG1411525</a>
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	<a href="#">WG1411525</a>
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	<a href="#">WG1411525</a>
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	<a href="#">WG1411525</a>
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	<a href="#">WG1411525</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		98.7				<a href="#">WG1411525</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	5.12	12.2		1	WG1411525
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1411525
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1411525
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1411525
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1411525
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1411525
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1411525
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1411525
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1411525
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1411525
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1411525
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1411525
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1411525
Chloromethane	74-87-3	50.50	0.200	0.413	0.218	0.450		1	WG1411525
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1411525
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1411525
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1411525
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1411525
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1411525
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	0.213	1.28		1	WG1411525
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1411525
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1411525
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1411525
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1411525
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1411525
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1411525
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1411525
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1411525
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1411525
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1411525
Ethanol	64-17-5	46.10	0.630	1.19	29.9	56.4		1	WG1411525
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1411525
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1411525
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.261	1.47		1	WG1411525
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.546	2.70		1	WG1411525
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1411525
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1411525
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1411525
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1411525
n-Hexane	110-54-3	86.20	0.200	0.705	ND	ND		1	WG1411525
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1411525
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1411525
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1411525
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1411525
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1411525
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1411525
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1411525
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1411525
2-Propanol	67-63-0	60.10	1.25	3.07	2.80	6.88		1	WG1411525
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1411525
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1411525
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1411525
Tetrachloroethylene	127-18-4	166	0.200	1.36	91.3	620		1	WG1411525
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1411525
Toluene	108-88-3	92.10	0.200	0.753	0.440	1.66		1	WG1411525
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1411525

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	0.275	1.50		1	<a href="#">WG1411525</a>
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	<a href="#">WG1411525</a>
Trichloroethylene	79-01-6	131	2.00	10.7	87.8	470		10	<a href="#">WG1412388</a>
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	<a href="#">WG1411525</a>
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	<a href="#">WG1411525</a>
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	<a href="#">WG1411525</a>
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	<a href="#">WG1411525</a>
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	<a href="#">WG1411525</a>
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	<a href="#">WG1411525</a>
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	<a href="#">WG1411525</a>
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	<a href="#">WG1411525</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		99.7				<a href="#">WG1411525</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		86.1				<a href="#">WG1412388</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	30.7	73.0		1	WG1411525
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1411525
Benzene	71-43-2	78.10	0.200	0.639	0.215	0.687		1	WG1411525
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1411525
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1411525
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1411525
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1411525
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1411525
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1411525
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1411525
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1411525
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1411525
Chloroform	67-66-3	119	0.200	0.973	0.988	4.81		1	WG1411525
Chloromethane	74-87-3	50.50	0.200	0.413	0.624	1.29		1	WG1411525
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1411525
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1411525
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1411525
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1411525
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1411525
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1411525
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1411525
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1411525
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1411525
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1411525
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	0.879	3.48		1	WG1411525
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1411525
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1411525
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1411525
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1411525
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1411525
Ethanol	64-17-5	46.10	0.630	1.19	74.1	140		1	WG1411525
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1411525
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1411525
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.278	1.56		1	WG1411525
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.561	2.77		1	WG1411525
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1411525
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1411525
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1411525
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1411525
n-Hexane	110-54-3	86.20	0.200	0.705	ND	ND		1	WG1411525
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1411525
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.252	0.875		1	WG1411525
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1411525
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1411525
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1411525
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1411525
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1411525
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1411525
2-Propanol	67-63-0	60.10	1.25	3.07	3.37	8.28		1	WG1411525
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1411525
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1411525
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1411525
Tetrachloroethylene	127-18-4	166	0.200	1.36	76.0	516		1	WG1411525
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1411525
Toluene	108-88-3	92.10	0.200	0.753	1.75	6.59		1	WG1411525
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1411525

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	0.255	1.39		1	<a href="#">WG1411525</a>
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	<a href="#">WG1411525</a>
Trichloroethylene	79-01-6	131	2.00	10.7	190	1020		10	<a href="#">WG1412388</a>
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	<a href="#">WG1411525</a>
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	<a href="#">WG1411525</a>
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	<a href="#">WG1411525</a>
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	<a href="#">WG1411525</a>
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	<a href="#">WG1411525</a>
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	<a href="#">WG1411525</a>
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	<a href="#">WG1411525</a>
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	<a href="#">WG1411525</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		98.8				<a href="#">WG1411525</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		86.8				<a href="#">WG1412388</a>

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	4.83	11.5		1	WG1411525
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1411525
Benzene	71-43-2	78.10	0.200	0.639	0.260	0.831		1	WG1411525
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1411525
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1411525
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1411525
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1411525
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1411525
Carbon disulfide	75-15-0	76.10	0.200	0.622	0.238	0.741		1	WG1411525
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1411525
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1411525
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1411525
Chloroform	67-66-3	119	0.200	0.973	2.37	11.5		1	WG1411525
Chloromethane	74-87-3	50.50	0.200	0.413	0.226	0.467		1	WG1411525
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1411525
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1411525
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1411525
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1411525
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1411525
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1411525
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1411525
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1411525
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1411525
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1411525
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	1.35	5.35		1	WG1411525
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1411525
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1411525
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1411525
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1411525
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1411525
Ethanol	64-17-5	46.10	0.630	1.19	16.5	31.1		1	WG1411525
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1411525
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1411525
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.285	1.60		1	WG1411525
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.596	2.95		1	WG1411525
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1411525
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1411525
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1411525
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1411525
n-Hexane	110-54-3	86.20	0.200	0.705	ND	ND		1	WG1411525
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1411525
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1411525
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1411525
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1411525
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1411525
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1411525
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1411525
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1411525
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1411525
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1411525
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1411525
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1411525
Tetrachloroethylene	127-18-4	166	4.00	27.2	201	1360		20	WG1412388
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1411525
Toluene	108-88-3	92.10	0.200	0.753	0.698	2.63		1	WG1411525
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1411525

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	0.873	4.75		1	<a href="#">WG1411525</a>
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	<a href="#">WG1411525</a>
Trichloroethylene	79-01-6	131	4.00	21.4	397	2130		20	<a href="#">WG1412388</a>
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	<a href="#">WG1411525</a>
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	<a href="#">WG1411525</a>
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	<a href="#">WG1411525</a>
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	<a href="#">WG1411525</a>
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	<a href="#">WG1411525</a>
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	<a href="#">WG1411525</a>
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	<a href="#">WG1411525</a>
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	<a href="#">WG1411525</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		99.4				<a href="#">WG1411525</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		84.5				<a href="#">WG1412388</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	1.95	4.63		1	WG1411525
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1411525
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1411525
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1411525
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1411525
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1411525
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1411525
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1411525
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1411525
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1411525
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1411525
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1411525
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1411525
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG1411525
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1411525
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1411525
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1411525
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1411525
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1411525
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1411525
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1411525
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1411525
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1411525
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1411525
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1411525
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1411525
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1411525
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1411525
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1411525
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1411525
Ethanol	64-17-5	46.10	0.630	1.19	9.50	17.9		1	WG1411525
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1411525
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1411525
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.270	1.52		1	WG1411525
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.595	2.94		1	WG1411525
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1411525
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1411525
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1411525
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1411525
n-Hexane	110-54-3	86.20	0.200	0.705	ND	ND		1	WG1411525
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1411525
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1411525
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1411525
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1411525
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1411525
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1411525
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1411525
Naphthalene	91-20-3	128	0.630	3.30	1.26	6.60		1	WG1411525
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1411525
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1411525
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1411525
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1411525
Tetrachloroethylene	127-18-4	166	2.00	13.6	186	1260		10	WG1412388
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	0.226	0.666		1	WG1411525
Toluene	108-88-3	92.10	0.200	0.753	0.465	1.75		1	WG1411525
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1411525

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	1.03	5.60		1	<a href="#">WG1411525</a>
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	<a href="#">WG1411525</a>
Trichloroethylene	79-01-6	131	2.00	10.7	126	675		10	<a href="#">WG1412388</a>
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	<a href="#">WG1411525</a>
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	<a href="#">WG1411525</a>
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	<a href="#">WG1411525</a>
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	<a href="#">WG1411525</a>
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	<a href="#">WG1411525</a>
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	<a href="#">WG1411525</a>
m&p-Xylene	1330-20-7	106	0.400	1.73	0.404	1.75		1	<a href="#">WG1411525</a>
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	<a href="#">WG1411525</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		98.9				<a href="#">WG1411525</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		89.6				<a href="#">WG1412388</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	4.51	10.7		1	WG1411525
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1411525
Benzene	71-43-2	78.10	0.200	0.639	0.236	0.754		1	WG1411525
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1411525
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1411525
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1411525
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1411525
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1411525
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1411525
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1411525
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1411525
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1411525
Chloroform	67-66-3	119	0.200	0.973	0.555	2.70		1	WG1411525
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG1411525
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1411525
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1411525
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1411525
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1411525
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1411525
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	0.252	1.52		1	WG1411525
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1411525
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1411525
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1411525
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1411525
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1411525
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1411525
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1411525
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1411525
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1411525
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1411525
Ethanol	64-17-5	46.10	0.630	1.19	5.68	10.7		1	WG1411525
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1411525
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1411525
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.258	1.45		1	WG1411525
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.569	2.81		1	WG1411525
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1411525
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1411525
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1411525
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1411525
n-Hexane	110-54-3	86.20	0.200	0.705	ND	ND		1	WG1411525
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1411525
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1411525
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1411525
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1411525
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1411525
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1411525
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1411525
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1411525
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1411525
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1411525
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1411525
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1411525
Tetrachloroethylene	127-18-4	166	4.00	27.2	320	2170		20	WG1412388
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1411525
Toluene	108-88-3	92.10	0.200	0.753	1.28	4.82		1	WG1411525
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1411525

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	0.871	4.74		1	<a href="#">WG1411525</a>
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	<a href="#">WG1411525</a>
Trichloroethylene	79-01-6	131	4.00	21.4	755	4050		20	<a href="#">WG1412388</a>
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	<a href="#">WG1411525</a>
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	<a href="#">WG1411525</a>
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	<a href="#">WG1411525</a>
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	<a href="#">WG1411525</a>
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	<a href="#">WG1411525</a>
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	<a href="#">WG1411525</a>
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	<a href="#">WG1411525</a>
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	<a href="#">WG1411525</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		97.9				<a href="#">WG1411525</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		86.8				<a href="#">WG1412388</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	6.63	15.8		1	WG1411525
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1411525
Benzene	71-43-2	78.10	0.200	0.639	1.13	3.61		1	WG1411525
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1411525
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1411525
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1411525
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1411525
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1411525
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1411525
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1411525
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1411525
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1411525
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1411525
Chloromethane	74-87-3	50.50	0.200	0.413	0.465	0.960		1	WG1411525
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1411525
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1411525
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1411525
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1411525
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1411525
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1411525
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1411525
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1411525
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1411525
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1411525
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1411525
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1411525
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1411525
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1411525
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1411525
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1411525
Ethanol	64-17-5	46.10	0.630	1.19	28.6	53.9		1	WG1411525
Ethylbenzene	100-41-4	106	0.200	0.867	0.270	1.17		1	WG1411525
4-Ethyltoluene	622-96-8	120	0.200	0.982	0.465	2.28		1	WG1411525
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.258	1.45		1	WG1411525
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.538	2.66		1	WG1411525
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1411525
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1411525
Heptane	142-82-5	100	0.200	0.818	0.400	1.64		1	WG1411525
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1411525
n-Hexane	110-54-3	86.20	0.200	0.705	1.18	4.16		1	WG1411525
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1411525
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.648	2.25		1	WG1411525
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1411525
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1411525
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1411525
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1411525
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1411525
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1411525
2-Propanol	67-63-0	60.10	1.25	3.07	1.56	3.83		1	WG1411525
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1411525
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1411525
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1411525
Tetrachloroethylene	127-18-4	166	0.200	1.36	39.5	268		1	WG1411525
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1411525
Toluene	108-88-3	92.10	0.200	0.753	0.945	3.56		1	WG1411525
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1411525

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	<a href="#">WG1411525</a>
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	<a href="#">WG1411525</a>
Trichloroethylene	79-01-6	131	0.200	1.07	28.1	151		1	<a href="#">WG1411525</a>
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.326	1.60		1	<a href="#">WG1411525</a>
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	<a href="#">WG1411525</a>
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	0.340	1.59		1	<a href="#">WG1411525</a>
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	<a href="#">WG1411525</a>
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	<a href="#">WG1411525</a>
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	<a href="#">WG1411525</a>
m&p-Xylene	1330-20-7	106	0.400	1.73	1.81	7.85		1	<a href="#">WG1411525</a>
o-Xylene	95-47-6	106	0.200	0.867	0.327	1.42		1	<a href="#">WG1411525</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		97.9				<a href="#">WG1411525</a>

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	11.1	26.4		1	WG1411525
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1411525
Benzene	71-43-2	78.10	0.200	0.639	0.477	1.52		1	WG1411525
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1411525
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1411525
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1411525
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1411525
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1411525
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1411525
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1411525
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1411525
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1411525
Chloroform	67-66-3	119	0.200	0.973	0.607	2.95		1	WG1411525
Chloromethane	74-87-3	50.50	0.200	0.413	0.522	1.08		1	WG1411525
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1411525
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1411525
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1411525
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1411525
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1411525
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1411525
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1411525
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1411525
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1411525
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1411525
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	1.11	4.40		1	WG1411525
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1411525
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1411525
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1411525
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1411525
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1411525
Ethanol	64-17-5	46.10	0.630	1.19	6.40	12.1		1	WG1411525
Ethylbenzene	100-41-4	106	0.200	0.867	3.27	14.2		1	WG1411525
4-Ethyltoluene	622-96-8	120	0.200	0.982	6.31	31.0		1	WG1411525
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.259	1.46		1	WG1411525
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.565	2.79		1	WG1411525
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1411525
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1411525
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1411525
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1411525
n-Hexane	110-54-3	86.20	0.200	0.705	0.222	0.783		1	WG1411525
Isopropylbenzene	98-82-8	120.20	0.200	0.983	0.631	3.10		1	WG1411525
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.446	1.55		1	WG1411525
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	1.70	6.95		1	WG1411525
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	5.69	16.8		1	WG1411525
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1411525
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1411525
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1411525
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1411525
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1411525
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1411525
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1411525
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1411525
Tetrachloroethylene	127-18-4	166	0.200	1.36	63.0	428		1	WG1411525
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	0.646	1.90		1	WG1411525
Toluene	108-88-3	92.10	0.200	0.753	1.15	4.33		1	WG1411525
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1411525

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	<a href="#">WG1411525</a>
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	<a href="#">WG1411525</a>
Trichloroethylene	79-01-6	131	0.200	1.07	48.0	257		1	<a href="#">WG1411525</a>
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	13.4	65.8		1	<a href="#">WG1411525</a>
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	3.41	16.7		1	<a href="#">WG1411525</a>
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	<a href="#">WG1411525</a>
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	<a href="#">WG1411525</a>
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	<a href="#">WG1411525</a>
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	<a href="#">WG1411525</a>
m&p-Xylene	1330-20-7	106	0.400	1.73	5.54	24.0		1	<a href="#">WG1411525</a>
o-Xylene	95-47-6	106	0.200	0.867	3.39	14.7		1	<a href="#">WG1411525</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		99.2				<a href="#">WG1411525</a>

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Method Blank (MB)

(MB) R3491181-3 01/15/20 13:20

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Acetone	U		0.0569	1.25
Allyl Chloride	U		0.0546	0.200
Benzene	U		0.0460	0.200
Benzyl Chloride	U		0.0598	0.200
Bromodichloromethane	U		0.0436	0.200
Bromoform	U		0.0786	0.600
Bromomethane	U		0.0609	0.200
1,3-Butadiene	U		0.0563	2.00
Carbon disulfide	U		0.0544	0.200
Carbon tetrachloride	U		0.0585	0.200
Chlorobenzene	U		0.0601	0.200
Chloroethane	U		0.0489	0.200
Chloroform	U		0.0574	0.200
Chloromethane	U		0.0544	0.200
2-Chlorotoluene	U		0.0605	0.200
Cyclohexane	U		0.0534	0.200
Dibromochloromethane	U		0.0494	0.200
1,2-Dibromoethane	U		0.0185	0.200
1,2-Dichlorobenzene	U		0.0603	0.200
1,3-Dichlorobenzene	U		0.0597	0.200
1,4-Dichlorobenzene	U		0.0557	0.200
1,2-Dichloroethane	U		0.0616	0.200
1,1-Dichloroethane	U		0.0514	0.200
1,1-Dichloroethene	U		0.0490	0.200
cis-1,2-Dichloroethene	U		0.0389	0.200
trans-1,2-Dichloroethene	U		0.0464	0.200
1,2-Dichloropropane	U		0.0599	0.200
cis-1,3-Dichloropropene	U		0.0588	0.200
trans-1,3-Dichloropropene	U		0.0435	0.200
1,4-Dioxane	U		0.0554	0.200
Ethylbenzene	U		0.0506	0.200
4-Ethyltoluene	U		0.0666	0.200
Trichlorofluoromethane	U		0.0673	0.200
Dichlorodifluoromethane	U		0.0601	0.200
1,1,2-Trichlorotrifluoroethane	U		0.0687	0.200
1,2-Dichlorotetrafluoroethane	U		0.0458	0.200
Heptane	U		0.0626	0.200
Hexachloro-1,3-butadiene	U		0.0656	0.630
n-Hexane	U		0.0457	0.200
Isopropylbenzene	U		0.0563	0.200

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc



Method Blank (MB)

(MB) R3491181-3 01/15/20 13:20

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
Methylene Chloride	U		0.0465	0.200
Methyl Butyl Ketone	U		0.0682	1.25
2-Butanone (MEK)	U		0.0493	1.25
4-Methyl-2-pentanone (MIBK)	U		0.0650	1.25
Methyl Methacrylate	U		0.0773	0.200
MTBE	U		0.0505	0.200
Naphthalene	U		0.154	0.630
2-Propanol	U		0.0882	1.25
Propene	0.0976	U	0.0932	0.400
Styrene	U		0.0465	0.200
1,1,2,2-Tetrachloroethane	U		0.0576	0.200
Tetrachloroethylene	U		0.0497	0.200
Tetrahydrofuran	U		0.0508	0.200
Toluene	U		0.0499	0.200
1,2,4-Trichlorobenzene	U		0.148	0.630
1,1,1-Trichloroethane	U		0.0665	0.200
1,1,2-Trichloroethane	U		0.0287	0.200
Trichloroethylene	U		0.0545	0.200
1,2,4-Trimethylbenzene	U		0.0483	0.200
1,3,5-Trimethylbenzene	U		0.0631	0.200
2,2,4-Trimethylpentane	U		0.0456	0.200
Vinyl chloride	U		0.0457	0.200
Vinyl Bromide	U		0.0727	0.200
Vinyl acetate	U		0.0639	0.200
m&p-Xylene	U		0.0946	0.400
o-Xylene	U		0.0633	0.200
Ethanol	U		0.0832	0.630
(S) 1,4-Bromofluorobenzene	81.9			60.0-140

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3491181-1 01/15/20 11:51 • (LCSD) R3491181-2 01/15/20 12:38

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ppbv	ppbv	ppbv	%	%	%			%	%
Ethanol	3.75	3.78	3.77	101	101	55.0-148			0.265	25
Propene	3.75	3.84	3.81	102	102	64.0-144			0.784	25
Dichlorodifluoromethane	3.75	4.45	4.40	119	117	64.0-139			1.13	25
1,2-Dichlorotetrafluoroethane	3.75	4.20	4.20	112	112	70.0-130			0.000	25
Chloromethane	3.75	4.13	4.18	110	111	70.0-130			1.20	25



Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3491181-1 01/15/20 11:51 • (LCSD) R3491181-2 01/15/20 12:38

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Vinyl chloride	3.75	4.22	4.11	113	110	70.0-130			2.64	25
1,3-Butadiene	3.75	4.14	3.96	110	106	70.0-130			4.44	25
Bromomethane	3.75	4.24	3.81	113	102	70.0-130			10.7	25
Chloroethane	3.75	4.23	4.19	113	112	70.0-130			0.950	25
Trichlorofluoromethane	3.75	4.19	4.15	112	111	70.0-130			0.959	25
1,1,2-Trichlorotrifluoroethane	3.75	4.16	4.13	111	110	70.0-130			0.724	25
1,1-Dichloroethene	3.75	4.11	4.12	110	110	70.0-130			0.243	25
1,1-Dichloroethane	3.75	4.09	4.10	109	109	70.0-130			0.244	25
Acetone	3.75	4.16	4.19	111	112	70.0-130			0.719	25
2-Propanol	3.75	3.94	3.99	105	106	70.0-139			1.26	25
Carbon disulfide	3.75	4.02	3.99	107	106	70.0-130			0.749	25
Methylene Chloride	3.75	4.11	4.11	110	110	70.0-130			0.000	25
MTBE	3.75	4.04	4.04	108	108	70.0-130			0.000	25
trans-1,2-Dichloroethene	3.75	4.00	4.00	107	107	70.0-130			0.000	25
n-Hexane	3.75	4.02	4.00	107	107	70.0-130			0.499	25
Vinyl acetate	3.75	4.29	4.39	114	117	70.0-130			2.30	25
Methyl Ethyl Ketone	3.75	4.27	4.19	114	112	70.0-130			1.89	25
cis-1,2-Dichloroethene	3.75	4.06	4.01	108	107	70.0-130			1.24	25
Chloroform	3.75	4.06	4.04	108	108	70.0-130			0.494	25
Cyclohexane	3.75	4.13	4.09	110	109	70.0-130			0.973	25
1,1,1-Trichloroethane	3.75	4.10	4.09	109	109	70.0-130			0.244	25
Carbon tetrachloride	3.75	4.12	4.07	110	109	70.0-130			1.22	25
Benzene	3.75	3.98	3.95	106	105	70.0-130			0.757	25
1,2-Dichloroethane	3.75	3.97	3.98	106	106	70.0-130			0.252	25
Heptane	3.75	4.67	4.67	125	125	70.0-130			0.000	25
Trichloroethylene	3.75	3.90	3.89	104	104	70.0-130			0.257	25
1,2-Dichloropropane	3.75	3.91	3.93	104	105	70.0-130			0.510	25
1,4-Dioxane	3.75	3.96	3.94	106	105	70.0-140			0.506	25
Bromodichloromethane	3.75	3.94	3.95	105	105	70.0-130			0.253	25
cis-1,3-Dichloropropene	3.75	4.00	3.98	107	106	70.0-130			0.501	25
4-Methyl-2-pentanone (MIBK)	3.75	4.24	4.25	113	113	70.0-139			0.236	25
Toluene	3.75	3.98	3.98	106	106	70.0-130			0.000	25
trans-1,3-Dichloropropene	3.75	4.07	4.11	109	110	70.0-130			0.978	25
1,1,2-Trichloroethane	3.75	3.92	3.91	105	104	70.0-130			0.255	25
Tetrachloroethylene	3.75	3.99	3.99	106	106	70.0-130			0.000	25
Methyl Butyl Ketone	3.75	3.80	3.81	101	102	70.0-149			0.263	25
Dibromochloromethane	3.75	4.05	4.05	108	108	70.0-130			0.000	25
1,2-Dibromoethane	3.75	4.13	4.15	110	111	70.0-130			0.483	25
Chlorobenzene	3.75	4.08	4.10	109	109	70.0-130			0.489	25
Ethylbenzene	3.75	4.04	4.03	108	107	70.0-130			0.248	25

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc



Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3491181-1 01/15/20 11:51 • (LCSD) R3491181-2 01/15/20 12:38

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
m&p-Xylene	7.50	8.03	8.01	107	107	70.0-130			0.249	25
o-Xylene	3.75	3.97	3.96	106	106	70.0-130			0.252	25
Styrene	3.75	4.28	4.26	114	114	70.0-130			0.468	25
Bromoform	3.75	4.24	4.25	113	113	70.0-130			0.236	25
1,1,2,2-Tetrachloroethane	3.75	4.09	4.07	109	109	70.0-130			0.490	25
4-Ethyltoluene	3.75	4.24	4.25	113	113	70.0-130			0.236	25
1,3,5-Trimethylbenzene	3.75	4.16	4.16	111	111	70.0-130			0.000	25
1,2,4-Trimethylbenzene	3.75	4.21	4.18	112	111	70.0-130			0.715	25
1,3-Dichlorobenzene	3.75	3.57	3.57	95.2	95.2	70.0-130			0.000	25
1,4-Dichlorobenzene	3.75	3.43	3.45	91.5	92.0	70.0-130			0.581	25
Benzyl Chloride	3.75	3.56	3.56	94.9	94.9	70.0-152			0.000	25
1,2-Dichlorobenzene	3.75	4.50	4.54	120	121	70.0-130			0.885	25
1,2,4-Trichlorobenzene	3.75	3.51	3.56	93.6	94.9	70.0-160			1.41	25
Hexachloro-1,3-butadiene	3.75	4.00	4.01	107	107	70.0-151			0.250	25
Naphthalene	3.75	3.57	3.59	95.2	95.7	70.0-159			0.559	25
Allyl Chloride	3.75	4.05	4.02	108	107	70.0-130			0.743	25
2-Chlorotoluene	3.75	4.13	4.15	110	111	70.0-130			0.483	25
Methyl Methacrylate	3.75	4.15	4.14	111	110	70.0-130			0.241	25
Tetrahydrofuran	3.75	4.07	4.06	109	108	70.0-137			0.246	25
2,2,4-Trimethylpentane	3.75	4.01	3.98	107	106	70.0-130			0.751	25
Vinyl Bromide	3.75	4.15	4.12	111	110	70.0-130			0.726	25
Isopropylbenzene	3.75	4.06	4.03	108	107	70.0-130			0.742	25
<i>(S) 1,4-Bromofluorobenzene</i>				99.5	99.8	60.0-140				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Method Blank (MB)

(MB) R3491602-3 01/16/20 11:34

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
Tetrachloroethylene	U		0.0497	0.200
Trichloroethylene	U		0.0545	0.200
<i>(S) 1,4-Bromofluorobenzene</i>	91.3			60.0-140

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3491602-1 01/16/20 09:58 • (LCSD) R3491602-2 01/16/20 10:47

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ppbv	ppbv	ppbv	%	%	%			%	%
Trichloroethylene	3.75	4.30	4.32	115	115	70.0-130			0.464	25
Tetrachloroethylene	3.75	4.22	4.19	113	112	70.0-130			0.713	25
<i>(S) 1,4-Bromofluorobenzene</i>				99.4	99.9	60.0-140				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Qualifier Description

J	The identification of the analyte is acceptable; the reported value is an estimate.
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Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

\* Not all certifications held by the laboratory are applicable to the results reported in the attached report.  
 \* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

## State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico <sup>1</sup>	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina <sup>1</sup>	DW21704
Georgia	NELAP	North Carolina <sup>3</sup>	41
Georgia <sup>1</sup>	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky <sup>1,6</sup>	90010	South Carolina	84004
Kentucky <sup>2</sup>	16	South Dakota	n/a
Louisiana	AI30792	Tennessee <sup>1,4</sup>	2006
Louisiana <sup>1</sup>	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas <sup>5</sup>	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

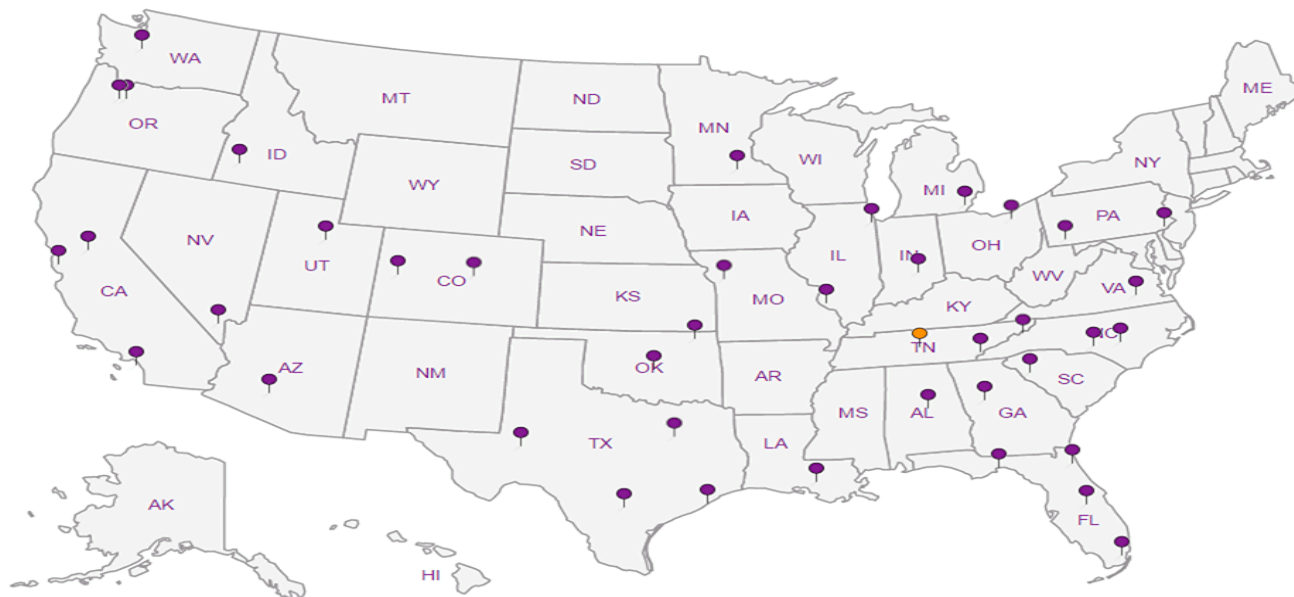
## Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 <sup>5</sup>	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

<sup>1</sup> Drinking Water <sup>2</sup> Underground Storage Tanks <sup>3</sup> Aquatic Toxicity <sup>4</sup> Chemical/Microbiological <sup>5</sup> Mold <sup>6</sup> Wastewater n/a Accreditation not applicable

## Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



1 Cp

2 Tc

3 Ss

4 Cn


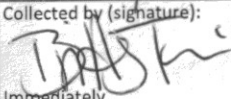
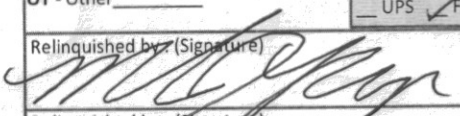
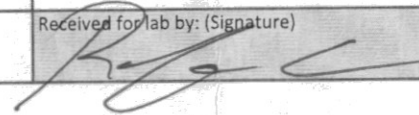
5 Sr

6 Qc

7 Gl

8 Al

9 Sc

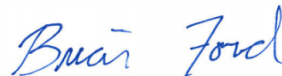
<b>Farallon Consulting - Portland, OR</b> 4380 SW MacAdam Ave. Ste. 500 Portland OR 97239		Billing Information:		Accounts Payable 4380 SW MacAdam Ave. Ste. 500 Portland, OR 97239		Pres Chk		Analysis / Container / Preservative					Chain of Custody Page <u>1</u> of <u>1</u>				
		Report to: <b>Melissa Roskamp</b>		Email To: mroskamp@farallonconsulting.com										 12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859			
Project Description: <b>Glasslab</b>		City/State Collected: <b>Portland, OR</b>		Please Circle: PT MT CT ET													
Phone: <b>503-280-4635</b>		Client Project # <b>1451-018</b>		Lab Project # <b>FARCONPOR-1451018</b>										SDG # <b>U179154</b>			
Fax:		Site/Facility ID #		P.O. #										Ta <b>H019</b>			
Collected by (print): <b>Brittany Train</b>		Rush? (Lab MUST Be Notified)		Quote #										Acctnum: <b>FARCONPOR</b>			
Collected by (signature): 		<input type="checkbox"/> Same Day <input type="checkbox"/> Five Day <input type="checkbox"/> Next Day <input type="checkbox"/> 5 Day (Rad Only) <input type="checkbox"/> Two Day <input type="checkbox"/> 10 Day (Rad Only) <input type="checkbox"/> Three Day		Date Results Needed										Template: <b>T160712</b>			
Immediately Packed on Ice N ___ Y ___														Prelogin: <b>P747497</b>			
Sample ID		Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs							PM: <b>110 - Brian Ford</b>			
VP-01-010920		grab	Air	15"	1/9/20	13:19	1	X							PB: <b>CSG 12/27/19</b>		
VP-02-010920		↓	Air	↓	↓	12:30	↓	↓							Shipped Via: <b>FedEX Ground</b>		
VP-03-010920		↓	Air	↓	↓	08:57	↓	↓							Remarks		
VP-04-010920		↓	Air	↓	↓	10:05	↓	↓							Sample # (lab only)		
VP-05-010920		↓	Air	↓	↓	11:46	↓	↓							- 01		
VP-06-010920		↓	Air	↓	↓	11:15	↓	↓							- 02		
VP-07-010920		↓	Air	↓	↓	14:38	↓	↓							- 03		
CAF-01132020		"	Air	NA	1/13/2020	10:00	1	X							- 04		
			Air												- 05		
			Air												- 06		
			Air												- 07		
			Air												- 08		
* Matrix: SS - Soil    AIR - Air    F - Filter GW - Groundwater    B - Bioassay WW - WasteWater DW - Drinking Water OT - Other		Remarks:		pH _____ Temp _____		Flow _____ Other _____										Sample Receipt Checklist COC Seal Present/Intact: <input checked="" type="checkbox"/> NP <input type="checkbox"/> Y <input type="checkbox"/> N COC Signed/Accurate: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Bottles arrive intact: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Correct bottles used: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Sufficient volume sent: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N If Applicable VOA Zero Headspace: <input type="checkbox"/> Y <input type="checkbox"/> N Preservation Correct/Checked: <input type="checkbox"/> Y <input type="checkbox"/> N RAD Screen <0.5 mR/hr: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
Samples returned via: <input type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> Courier		Tracking #		1461 1749 8950													
Relinquished by: (Signature) 		Date:	Time:	Received by: (Signature)		Trip Blank Received: Yes / No HCL / MeOH TBR											
Relinquished by: (Signature)		Date:	Time:	Received by: (Signature)		Temp: °C    Bottles Received: 8										If preservation required by Login: Date/Time	
Relinquished by: (Signature)		Date:	Time:	Received for lab by: (Signature) 		Date: 1/14    Time: 0830										Hold:    Condition: NCF / OK	

## Farallon Consulting - Portland, OR

Sample Delivery Group: L1384691  
Samples Received: 07/30/2021  
Project Number: 1451-018  
Description: The Glasslab

Report To: Melissa Roskamp  
4380 S MacAdam Ave.  
Ste. 500  
Portland, OR 97239

Entire Report Reviewed By:



Brian Ford  
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

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# SAMPLE SUMMARY

## VP-1-072821 L1384691-01 Air

Collected by  
MG/GC

Collected date/time  
07/28/21 13:43

Received date/time  
07/30/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1715185	1	07/31/21 13:02	07/31/21 13:02	MBF	Mt. Juliet, TN

## VP-2-072821 L1384691-02 Air

Collected by  
MG/GC

Collected date/time  
07/28/21 12:01

Received date/time  
07/30/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1715185	1	07/31/21 13:44	07/31/21 13:44	MBF	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1715768	10	08/02/21 12:33	08/02/21 12:33	FKG	Mt. Juliet, TN

## VP-3-072821 L1384691-03 Air

Collected by  
MG/GC

Collected date/time  
07/28/21 12:32

Received date/time  
07/30/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1715185	1	07/31/21 14:25	07/31/21 14:25	MBF	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1715768	20	08/02/21 13:10	08/02/21 13:10	FKG	Mt. Juliet, TN

## VP-4-072821 L1384691-04 Air

Collected by  
MG/GC

Collected date/time  
07/28/21 13:17

Received date/time  
07/30/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1715185	1	07/31/21 15:07	07/31/21 15:07	MBF	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1715768	20	08/02/21 13:47	08/02/21 13:47	FKG	Mt. Juliet, TN

## VP-5-072821 L1384691-05 Air

Collected by  
MG/GC

Collected date/time  
07/28/21 14:07

Received date/time  
07/30/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1715185	1	07/31/21 15:49	07/31/21 15:49	MBF	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1715768	10	08/02/21 14:24	08/02/21 14:24	FKG	Mt. Juliet, TN

## VP-6-072821 L1384691-06 Air

Collected by  
MG/GC

Collected date/time  
07/28/21 12:55

Received date/time  
07/30/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1715185	1	07/31/21 16:30	07/31/21 16:30	MBF	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1715768	20	08/02/21 15:01	08/02/21 15:01	FKG	Mt. Juliet, TN

## VP-7-072821 L1384691-07 Air

Collected by  
MG/GC

Collected date/time  
07/28/21 14:48

Received date/time  
07/30/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1715185	1	07/31/21 17:13	07/31/21 17:13	MBF	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1715768	10	08/02/21 15:39	08/02/21 15:39	FKG	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

# SAMPLE SUMMARY

EFF-072821 L1384691-08 Air


Collected by: MG/GC  
 Collected date/time: 07/28/21 15:42  
 Received date/time: 07/30/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1715185	1	07/31/21 17:55	07/31/21 17:55	MBF	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1715768	10	08/02/21 16:16	08/02/21 16:16	FKG	Mt. Juliet, TN

- <sup>1</sup>Cp
- <sup>2</sup>Tc
- <sup>3</sup>Ss
- <sup>4</sup>Cn
- <sup>5</sup>Sr
- <sup>6</sup>Qc
- <sup>7</sup>Gl
- <sup>8</sup>Al
- <sup>9</sup>Sc

# CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Brian Ford  
Project Manager

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	4.22	10.0		1	WG1715185
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1715185
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1715185
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1715185
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1715185
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1715185
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1715185
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1715185
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1715185
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1715185
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1715185
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1715185
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1715185
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG1715185
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1715185
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1715185
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1715185
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1715185
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1715185
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1715185
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1715185
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1715185
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1715185
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1715185
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1715185
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1715185
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1715185
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1715185
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1715185
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1715185
Ethanol	64-17-5	46.10	1.25	2.36	32.4	61.1		1	WG1715185
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1715185
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1715185
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.250	1.40		1	WG1715185
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.495	2.45		1	WG1715185
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1715185
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1715185
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1715185
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1715185
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1715185
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1715185
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.262	0.910		1	WG1715185
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1715185
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	1.32	3.89		1	WG1715185
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1715185
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1715185
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1715185
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1715185
2-Propanol	67-63-0	60.10	1.25	3.07	2.64	6.49		1	WG1715185
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1715185
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1715185
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1715185
Tetrachloroethylene	127-18-4	166	0.200	1.36	45.4	308		1	WG1715185
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1715185
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG1715185
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1715185

1 Cp  
2 Tc  
3 Ss  
4 Cn  
5 Sr  
6 Qc  
7 Gl  
8 Al  
9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	0.369	2.01		1	<a href="#">WG1715185</a>
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	<a href="#">WG1715185</a>
Trichloroethylene	79-01-6	131	0.200	1.07	0.901	4.83		1	<a href="#">WG1715185</a>
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	<a href="#">WG1715185</a>
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	<a href="#">WG1715185</a>
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	<a href="#">WG1715185</a>
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	<a href="#">WG1715185</a>
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	<a href="#">WG1715185</a>
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	<a href="#">WG1715185</a>
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	<a href="#">WG1715185</a>
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	<a href="#">WG1715185</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		96.5				<a href="#">WG1715185</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	2.67	6.34		1	WG1715185
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1715185
Benzene	71-43-2	78.10	0.200	0.639	0.359	1.15		1	WG1715185
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1715185
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1715185
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1715185
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1715185
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1715185
Carbon disulfide	75-15-0	76.10	0.200	0.622	0.231	0.719		1	WG1715185
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1715185
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1715185
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1715185
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1715185
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG1715185
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1715185
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1715185
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1715185
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1715185
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1715185
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1715185
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1715185
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1715185
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1715185
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1715185
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1715185
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1715185
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1715185
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1715185
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1715185
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1715185
Ethanol	64-17-5	46.10	1.25	2.36	25.2	47.5		1	WG1715185
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1715185
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1715185
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.312	1.75		1	WG1715185
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.612	3.03		1	WG1715185
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1715185
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1715185
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1715185
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1715185
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1715185
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1715185
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1715185
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1715185
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1715185
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1715185
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1715185
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1715185
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1715185
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1715185
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1715185
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1715185
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1715185
Tetrachloroethylene	127-18-4	166	2.00	13.6	669	4540		10	WG1715768
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1715185
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG1715185
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1715185

1 Cp  
2 Tc  
3 Ss  
4 Cn  
5 Sr  
6 Qc  
7 Gl  
8 Al  
9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	1.85	10.1		1	<a href="#">WG1715185</a>
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	<a href="#">WG1715185</a>
Trichloroethylene	79-01-6	131	2.00	10.7	635	3400		10	<a href="#">WG1715768</a>
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.253	1.24		1	<a href="#">WG1715185</a>
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	<a href="#">WG1715185</a>
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	<a href="#">WG1715185</a>
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	<a href="#">WG1715185</a>
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	<a href="#">WG1715185</a>
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	<a href="#">WG1715185</a>
m&p-Xylene	1330-20-7	106	0.400	1.73	0.533	2.31		1	<a href="#">WG1715185</a>
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	<a href="#">WG1715185</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		95.8				<a href="#">WG1715185</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		99.5				<a href="#">WG1715768</a>

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	1.78	4.23		1	WG1715185
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1715185
Benzene	71-43-2	78.10	0.200	0.639	0.619	1.98		1	WG1715185
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1715185
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1715185
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1715185
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1715185
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1715185
Carbon disulfide	75-15-0	76.10	0.200	0.622	0.302	0.940		1	WG1715185
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1715185
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1715185
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1715185
Chloroform	67-66-3	119	0.200	0.973	7.67	37.3		1	WG1715185
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG1715185
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1715185
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1715185
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1715185
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1715185
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1715185
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1715185
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1715185
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1715185
1,1-Dichloroethane	75-34-3	98	0.200	0.802	0.256	1.03		1	WG1715185
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1715185
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	5.49	21.8		1	WG1715185
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	0.664	2.63		1	WG1715185
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1715185
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1715185
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1715185
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1715185
Ethanol	64-17-5	46.10	1.25	2.36	10.1	19.0		1	WG1715185
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1715185
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1715185
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.275	1.55		1	WG1715185
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.556	2.75		1	WG1715185
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1715185
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1715185
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1715185
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1715185
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1715185
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1715185
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1715185
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1715185
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1715185
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1715185
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1715185
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1715185
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1715185
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1715185
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1715185
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1715185
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1715185
Tetrachloroethylene	127-18-4	166	4.00	27.2	950	6450		20	WG1715768
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1715185
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG1715185
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1715185

1 Cp  
2 Tc  
3 Ss  
4 Cn  
5 Sr  
6 Qc  
7 Gl  
8 Al  
9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	1.97	10.7		1	<a href="#">WG1715185</a>
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	<a href="#">WG1715185</a>
Trichloroethylene	79-01-6	131	4.00	21.4	1050	5630		20	<a href="#">WG1715768</a>
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	<a href="#">WG1715185</a>
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	<a href="#">WG1715185</a>
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	<a href="#">WG1715185</a>
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	<a href="#">WG1715185</a>
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	<a href="#">WG1715185</a>
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	<a href="#">WG1715185</a>
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	<a href="#">WG1715185</a>
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	<a href="#">WG1715185</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		96.0				<a href="#">WG1715185</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		98.8				<a href="#">WG1715768</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	3.34	7.94		1	WG1715185
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1715185
Benzene	71-43-2	78.10	0.200	0.639	0.551	1.76		1	WG1715185
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1715185
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1715185
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1715185
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1715185
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1715185
Carbon disulfide	75-15-0	76.10	0.200	0.622	0.600	1.87		1	WG1715185
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1715185
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1715185
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1715185
Chloroform	67-66-3	119	0.200	0.973	10.0	48.7		1	WG1715185
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG1715185
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1715185
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1715185
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1715185
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1715185
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1715185
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1715185
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1715185
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1715185
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1715185
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1715185
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	2.45	9.71		1	WG1715185
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	0.325	1.29		1	WG1715185
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1715185
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1715185
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1715185
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1715185
Ethanol	64-17-5	46.10	1.25	2.36	12.1	22.8		1	WG1715185
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1715185
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1715185
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.335	1.88		1	WG1715185
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.676	3.34		1	WG1715185
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1715185
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1715185
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1715185
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1715185
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1715185
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1715185
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1715185
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1715185
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1715185
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1715185
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1715185
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1715185
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1715185
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1715185
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1715185
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1715185
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1715185
Tetrachloroethylene	127-18-4	166	4.00	27.2	1020	6930		20	WG1715768
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1715185
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG1715185
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1715185

1 Cp  
2 Tc  
3 Ss  
4 Cn  
5 Sr  
6 Qc  
7 Gl  
8 Al  
9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	3.21	17.5		1	<a href="#">WG1715185</a>
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	<a href="#">WG1715185</a>
Trichloroethylene	79-01-6	131	4.00	21.4	1150	6160		20	<a href="#">WG1715768</a>
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	<a href="#">WG1715185</a>
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	<a href="#">WG1715185</a>
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	<a href="#">WG1715185</a>
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	<a href="#">WG1715185</a>
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	<a href="#">WG1715185</a>
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	<a href="#">WG1715185</a>
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	<a href="#">WG1715185</a>
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	<a href="#">WG1715185</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		95.0				<a href="#">WG1715185</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		98.4				<a href="#">WG1715768</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	4.53	10.8		1	WG1715185
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1715185
Benzene	71-43-2	78.10	0.200	0.639	0.344	1.10		1	WG1715185
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1715185
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1715185
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1715185
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1715185
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1715185
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1715185
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1715185
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1715185
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1715185
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1715185
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG1715185
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1715185
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1715185
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1715185
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1715185
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1715185
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1715185
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1715185
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1715185
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1715185
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1715185
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1715185
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1715185
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1715185
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1715185
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1715185
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1715185
Ethanol	64-17-5	46.10	1.25	2.36	25.7	48.5		1	WG1715185
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1715185
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1715185
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.320	1.80		1	WG1715185
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.679	3.36		1	WG1715185
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1715185
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1715185
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1715185
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1715185
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1715185
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1715185
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1715185
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1715185
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1715185
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1715185
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1715185
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1715185
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1715185
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1715185
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1715185
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1715185
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1715185
Tetrachloroethylene	127-18-4	166	2.00	13.6	512	3480		10	WG1715768
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1715185
Toluene	108-88-3	92.10	0.500	1.88	0.607	2.29		1	WG1715185
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1715185

1 Cp  
2 Tc  
3 Ss  
4 Cn  
5 Sr  
6 Qc  
7 Gl  
8 Al  
9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	2.08	11.3		1	<a href="#">WG1715185</a>
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	<a href="#">WG1715185</a>
Trichloroethylene	79-01-6	131	2.00	10.7	250	1340		10	<a href="#">WG1715768</a>
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.205	1.01		1	<a href="#">WG1715185</a>
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	<a href="#">WG1715185</a>
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	<a href="#">WG1715185</a>
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	<a href="#">WG1715185</a>
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	<a href="#">WG1715185</a>
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	<a href="#">WG1715185</a>
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	<a href="#">WG1715185</a>
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	<a href="#">WG1715185</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		95.3				<a href="#">WG1715185</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		99.8				<a href="#">WG1715768</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	2.91	6.91		1	WG1715185
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1715185
Benzene	71-43-2	78.10	0.200	0.639	0.505	1.61		1	WG1715185
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1715185
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1715185
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1715185
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1715185
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1715185
Carbon disulfide	75-15-0	76.10	0.200	0.622	0.257	0.800		1	WG1715185
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1715185
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1715185
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1715185
Chloroform	67-66-3	119	0.200	0.973	1.04	5.06		1	WG1715185
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG1715185
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1715185
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1715185
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1715185
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1715185
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1715185
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1715185
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1715185
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1715185
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1715185
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1715185
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1715185
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1715185
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1715185
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1715185
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1715185
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1715185
Ethanol	64-17-5	46.10	1.25	2.36	21.9	41.3		1	WG1715185
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1715185
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1715185
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.282	1.58		1	WG1715185
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.577	2.85		1	WG1715185
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1715185
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1715185
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1715185
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1715185
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1715185
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1715185
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1715185
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1715185
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1715185
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1715185
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1715185
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1715185
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1715185
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1715185
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1715185
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1715185
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1715185
Tetrachloroethylene	127-18-4	166	4.00	27.2	511	3470		20	WG1715768
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1715185
Toluene	108-88-3	92.10	0.500	1.88	0.556	2.09		1	WG1715185
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1715185

1 Cp  
2 Tc  
3 Ss  
4 Cn  
5 Sr  
6 Qc  
7 Gl  
8 Al  
9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	1.36	7.40		1	<a href="#">WG1715185</a>
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	<a href="#">WG1715185</a>
Trichloroethylene	79-01-6	131	4.00	21.4	1040	5570		20	<a href="#">WG1715768</a>
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	<a href="#">WG1715185</a>
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	<a href="#">WG1715185</a>
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	<a href="#">WG1715185</a>
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	<a href="#">WG1715185</a>
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	<a href="#">WG1715185</a>
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	<a href="#">WG1715185</a>
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	<a href="#">WG1715185</a>
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	<a href="#">WG1715185</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		95.3				<a href="#">WG1715185</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		99.1				<a href="#">WG1715768</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	3.71	8.82		1	WG1715185
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1715185
Benzene	71-43-2	78.10	0.200	0.639	0.283	0.904		1	WG1715185
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1715185
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1715185
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1715185
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1715185
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1715185
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1715185
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1715185
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1715185
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1715185
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1715185
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG1715185
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1715185
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1715185
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1715185
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1715185
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1715185
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1715185
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1715185
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1715185
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1715185
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1715185
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1715185
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1715185
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1715185
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1715185
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1715185
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1715185
Ethanol	64-17-5	46.10	1.25	2.36	17.4	32.8		1	WG1715185
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1715185
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1715185
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.278	1.56		1	WG1715185
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.569	2.81		1	WG1715185
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1715185
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1715185
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1715185
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1715185
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1715185
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1715185
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1715185
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1715185
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1715185
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1715185
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1715185
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1715185
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1715185
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1715185
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1715185
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1715185
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1715185
Tetrachloroethylene	127-18-4	166	2.00	13.6	198	1340		10	WG1715768
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1715185
Toluene	108-88-3	92.10	0.500	1.88	0.786	2.96		1	WG1715185
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1715185

1 Cp  
2 Tc  
3 Ss  
4 Cn  
5 Sr  
6 Qc  
7 Gl  
8 Al  
9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	<a href="#">WG1715185</a>
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	<a href="#">WG1715185</a>
Trichloroethylene	79-01-6	131	2.00	10.7	306	1640		10	<a href="#">WG1715768</a>
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.221	1.08		1	<a href="#">WG1715185</a>
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	<a href="#">WG1715185</a>
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	<a href="#">WG1715185</a>
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	<a href="#">WG1715185</a>
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	<a href="#">WG1715185</a>
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	<a href="#">WG1715185</a>
m&p-Xylene	1330-20-7	106	0.400	1.73	0.466	2.02		1	<a href="#">WG1715185</a>
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	<a href="#">WG1715185</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		94.6				<a href="#">WG1715185</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		99.9				<a href="#">WG1715768</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	11.7	27.8		1	WG1715185
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1715185
Benzene	71-43-2	78.10	0.200	0.639	0.201	0.642		1	WG1715185
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1715185
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1715185
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1715185
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1715185
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1715185
Carbon disulfide	75-15-0	76.10	0.200	0.622	0.296	0.921		1	WG1715185
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1715185
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1715185
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1715185
Chloroform	67-66-3	119	0.200	0.973	0.546	2.66		1	WG1715185
Chloromethane	74-87-3	50.50	0.200	0.413	0.384	0.793		1	WG1715185
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1715185
Cyclohexane	110-82-7	84.20	0.200	0.689	0.309	1.06		1	WG1715185
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1715185
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1715185
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1715185
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1715185
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1715185
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1715185
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1715185
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1715185
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1715185
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1715185
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1715185
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1715185
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1715185
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1715185
Ethanol	64-17-5	46.10	1.25	2.36	13.9	26.2		1	WG1715185
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1715185
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1715185
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.291	1.64		1	WG1715185
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.570	2.82		1	WG1715185
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1715185
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1715185
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1715185
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1715185
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1715185
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1715185
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.282	0.979		1	WG1715185
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1715185
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1715185
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1715185
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1715185
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1715185
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1715185
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1715185
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1715185
Styrene	100-42-5	104	0.200	0.851	0.363	1.54		1	WG1715185
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1715185
Tetrachloroethylene	127-18-4	166	2.00	13.6	106	720		10	WG1715768
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1715185
Toluene	108-88-3	92.10	0.500	1.88	2.63	9.91		1	WG1715185
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1715185

1 Cp  
2 Tc  
3 Ss  
4 Cn  
5 Sr  
6 Qc  
7 Gl  
8 Al  
9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	<a href="#">WG1715185</a>
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	<a href="#">WG1715185</a>
Trichloroethylene	79-01-6	131	0.200	1.07	68.9	369		1	<a href="#">WG1715185</a>
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	<a href="#">WG1715185</a>
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	<a href="#">WG1715185</a>
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	<a href="#">WG1715185</a>
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	<a href="#">WG1715185</a>
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	<a href="#">WG1715185</a>
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	<a href="#">WG1715185</a>
m&p-Xylene	1330-20-7	106	0.400	1.73	0.525	2.28		1	<a href="#">WG1715185</a>
o-Xylene	95-47-6	106	0.200	0.867	0.232	1.01		1	<a href="#">WG1715185</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		95.3				<a href="#">WG1715185</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		99.5				<a href="#">WG1715768</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3686527-3 07/31/21 09:12

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Acetone	U		0.584	1.25
Allyl Chloride	U		0.114	0.200
Benzene	U		0.0715	0.200
Benzyl Chloride	U		0.0598	0.200
Bromodichloromethane	U		0.0702	0.200
Bromoform	U		0.0732	0.600
Bromomethane	U		0.0982	0.200
1,3-Butadiene	U		0.104	2.00
Carbon disulfide	U		0.102	0.200
Carbon tetrachloride	U		0.0732	0.200
Chlorobenzene	U		0.0832	0.200
Chloroethane	U		0.0996	0.200
Chloroform	U		0.0717	0.200
Chloromethane	U		0.103	0.200
2-Chlorotoluene	U		0.0828	0.200
Cyclohexane	U		0.0753	0.200
Dibromochloromethane	U		0.0727	0.200
1,2-Dibromoethane	U		0.0721	0.200
1,2-Dichlorobenzene	U		0.128	0.200
1,3-Dichlorobenzene	U		0.182	0.200
1,4-Dichlorobenzene	U		0.0557	0.200
1,2-Dichloroethane	U		0.0700	0.200
1,1-Dichloroethane	U		0.0723	0.200
1,1-Dichloroethene	U		0.0762	0.200
cis-1,2-Dichloroethene	U		0.0784	0.200
trans-1,2-Dichloroethene	U		0.0673	0.200
1,2-Dichloropropane	U		0.0760	0.200
cis-1,3-Dichloropropene	U		0.0689	0.200
trans-1,3-Dichloropropene	U		0.0728	0.200
1,4-Dioxane	U		0.0833	0.200
Ethylbenzene	U		0.0835	0.200
4-Ethyltoluene	U		0.0783	0.200
Trichlorofluoromethane	U		0.0819	0.200
Dichlorodifluoromethane	U		0.137	0.200
1,1,2-Trichlorotrifluoroethane	U		0.0793	0.200
1,2-Dichlorotetrafluoroethane	U		0.0890	0.200
Heptane	U		0.104	0.200
Hexachloro-1,3-butadiene	U		0.105	0.630
n-Hexane	U		0.206	0.630
Isopropylbenzene	U		0.0777	0.200

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Method Blank (MB)

(MB) R3686527-3 07/31/21 09:12

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
Methylene Chloride	U		0.0979	0.200
Methyl Butyl Ketone	U		0.133	1.25
2-Butanone (MEK)	U		0.0814	1.25
4-Methyl-2-pentanone (MIBK)	U		0.0765	1.25
Methyl Methacrylate	U		0.0876	0.200
MTBE	U		0.0647	0.200
Naphthalene	U		0.350	0.630
2-Propanol	U		0.264	1.25
Propene	0.110	U	0.0932	1.25
Styrene	U		0.0788	0.200
1,1,2,2-Tetrachloroethane	U		0.0743	0.200
Tetrachloroethylene	U		0.0814	0.200
Tetrahydrofuran	U		0.0734	0.200
Toluene	U		0.0870	0.500
1,2,4-Trichlorobenzene	U		0.148	0.630
1,1,1-Trichloroethane	U		0.0736	0.200
1,1,2-Trichloroethane	U		0.0775	0.200
Trichloroethylene	U		0.0680	0.200
1,2,4-Trimethylbenzene	U		0.0764	0.200
1,3,5-Trimethylbenzene	U		0.0779	0.200
2,2,4-Trimethylpentane	U		0.133	0.200
Vinyl chloride	U		0.0949	0.200
Vinyl Bromide	U		0.0852	0.200
Vinyl acetate	U		0.116	0.200
m&p-Xylene	U		0.135	0.400
o-Xylene	U		0.0828	0.200
Ethanol	U		0.265	1.25
(S) 1,4-Bromofluorobenzene	93.9			60.0-140

1 Cp  
2 Tc  
3 Ss  
4 Cn  
5 Sr  
6 Qc  
7 Gl  
8 Al  
9 Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3686527-1 07/31/21 07:48 • (LCSD) R3686527-2 07/31/21 08:31

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ppbv	ppbv	ppbv	%	%	%			%	%
Ethanol	3.75	3.38	3.39	90.1	90.4	55.0-148			0.295	25
Propene	3.75	4.11	4.10	110	109	64.0-144			0.244	25
Dichlorodifluoromethane	3.75	4.02	4.12	107	110	64.0-139			2.46	25
1,2-Dichlorotetrafluoroethane	3.75	4.11	4.09	110	109	70.0-130			0.488	25
Chloromethane	3.75	4.46	4.56	119	122	70.0-130			2.22	25

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3686527-1 07/31/21 07:48 • (LCSD) R3686527-2 07/31/21 08:31

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Vinyl chloride	3.75	4.36	4.35	116	116	70.0-130			0.230	25
1,3-Butadiene	3.75	4.34	4.32	116	115	70.0-130			0.462	25
Bromomethane	3.75	4.18	4.23	111	113	70.0-130			1.19	25
Chloroethane	3.75	4.38	4.32	117	115	70.0-130			1.38	25
Trichlorofluoromethane	3.75	3.87	3.92	103	105	70.0-130			1.28	25
1,1,2-Trichlorotrifluoroethane	3.75	4.05	4.13	108	110	70.0-130			1.96	25
1,1-Dichloroethene	3.75	4.14	4.20	110	112	70.0-130			1.44	25
1,1-Dichloroethane	3.75	4.24	4.29	113	114	70.0-130			1.17	25
Acetone	3.75	4.19	4.13	112	110	70.0-130			1.44	25
2-Propanol	3.75	4.43	4.41	118	118	70.0-139			0.452	25
Carbon disulfide	3.75	4.24	4.22	113	113	70.0-130			0.473	25
Methylene Chloride	3.75	4.19	4.40	112	117	70.0-130			4.89	25
MTBE	3.75	4.14	4.19	110	112	70.0-130			1.20	25
trans-1,2-Dichloroethene	3.75	4.24	4.29	113	114	70.0-130			1.17	25
n-Hexane	3.75	4.41	4.44	118	118	70.0-130			0.678	25
Vinyl acetate	3.75	4.41	4.34	118	116	70.0-130			1.60	25
Methyl Ethyl Ketone	3.75	4.52	4.56	121	122	70.0-130			0.881	25
cis-1,2-Dichloroethene	3.75	4.21	4.31	112	115	70.0-130			2.35	25
Chloroform	3.75	4.01	4.08	107	109	70.0-130			1.73	25
Cyclohexane	3.75	4.22	4.20	113	112	70.0-130			0.475	25
1,1,1-Trichloroethane	3.75	3.85	3.93	103	105	70.0-130			2.06	25
Carbon tetrachloride	3.75	3.81	3.89	102	104	70.0-130			2.08	25
Benzene	3.75	4.24	4.30	113	115	70.0-130			1.41	25
1,2-Dichloroethane	3.75	3.95	4.04	105	108	70.0-130			2.25	25
Heptane	3.75	4.49	4.44	120	118	70.0-130			1.12	25
Trichloroethylene	3.75	4.00	4.09	107	109	70.0-130			2.22	25
1,2-Dichloropropane	3.75	4.36	4.45	116	119	70.0-130			2.04	25
1,4-Dioxane	3.75	4.12	4.18	110	111	70.0-140			1.45	25
Bromodichloromethane	3.75	3.94	4.02	105	107	70.0-130			2.01	25
cis-1,3-Dichloropropene	3.75	4.08	4.18	109	111	70.0-130			2.42	25
4-Methyl-2-pentanone (MIBK)	3.75	4.09	4.16	109	111	70.0-139			1.70	25
Toluene	3.75	4.09	4.12	109	110	70.0-130			0.731	25
trans-1,3-Dichloropropene	3.75	4.01	4.04	107	108	70.0-130			0.745	25
1,1,2-Trichloroethane	3.75	4.02	4.09	107	109	70.0-130			1.73	25
Tetrachloroethylene	3.75	3.91	3.95	104	105	70.0-130			1.02	25
Methyl Butyl Ketone	3.75	4.56	4.57	122	122	70.0-149			0.219	25
Dibromochloromethane	3.75	3.91	4.01	104	107	70.0-130			2.53	25
1,2-Dibromoethane	3.75	4.03	4.08	107	109	70.0-130			1.23	25
Chlorobenzene	3.75	4.00	4.08	107	109	70.0-130			1.98	25
Ethylbenzene	3.75	4.15	4.23	111	113	70.0-130			1.91	25

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3686527-1 07/31/21 07:48 • (LCSD) R3686527-2 07/31/21 08:31

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
m&p-Xylene	7.50	8.21	8.34	109	111	70.0-130			1.57	25
o-Xylene	3.75	4.07	4.15	109	111	70.0-130			1.95	25
Styrene	3.75	4.11	4.16	110	111	70.0-130			1.21	25
Bromoform	3.75	3.95	4.05	105	108	70.0-130			2.50	25
1,1,2,2-Tetrachloroethane	3.75	4.20	4.27	112	114	70.0-130			1.65	25
4-Ethyltoluene	3.75	4.16	4.25	111	113	70.0-130			2.14	25
1,3,5-Trimethylbenzene	3.75	3.96	4.03	106	107	70.0-130			1.75	25
1,2,4-Trimethylbenzene	3.75	4.01	4.11	107	110	70.0-130			2.46	25
1,3-Dichlorobenzene	3.75	4.05	4.12	108	110	70.0-130			1.71	25
1,4-Dichlorobenzene	3.75	4.05	4.16	108	111	70.0-130			2.68	25
Benzyl Chloride	3.75	3.98	4.04	106	108	70.0-152			1.50	25
1,2-Dichlorobenzene	3.75	4.02	4.10	107	109	70.0-130			1.97	25
1,2,4-Trichlorobenzene	3.75	3.57	3.66	95.2	97.6	70.0-160			2.49	25
Hexachloro-1,3-butadiene	3.75	3.84	3.95	102	105	70.0-151			2.82	25
Naphthalene	3.75	3.53	3.58	94.1	95.5	70.0-159			1.41	25
Allyl Chloride	3.75	4.41	4.31	118	115	70.0-130			2.29	25
2-Chlorotoluene	3.75	4.04	4.09	108	109	70.0-130			1.23	25
Methyl Methacrylate	3.75	4.50	4.54	120	121	70.0-130			0.885	25
Tetrahydrofuran	3.75	4.58	4.63	122	123	70.0-137			1.09	25
2,2,4-Trimethylpentane	3.75	4.43	4.40	118	117	70.0-130			0.679	25
Vinyl Bromide	3.75	4.14	4.19	110	112	70.0-130			1.20	25
Isopropylbenzene	3.75	4.10	4.18	109	111	70.0-130			1.93	25
<i>(S) 1,4-Bromofluorobenzene</i>				96.8	96.2	60.0-140				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3686764-3 08/02/21 10:30

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
Tetrachloroethylene	U		0.0814	0.200
Trichloroethylene	U		0.0680	0.200
(S) 1,4-Bromofluorobenzene	100			60.0-140

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3686764-1 08/02/21 09:12 • (LCSD) R3686764-2 08/02/21 09:52

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ppbv	ppbv	ppbv	%	%	%			%	%
Trichloroethylene	3.75	4.48	4.47	119	119	70.0-130			0.223	25
Tetrachloroethylene	3.75	4.26	4.23	114	113	70.0-130			0.707	25
(S) 1,4-Bromofluorobenzene				101	99.7	60.0-140				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

# GLOSSARY OF TERMS

## Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

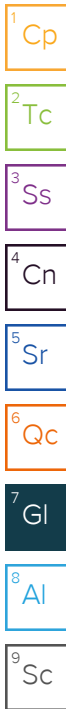
Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

### Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

### Qualifier Description

J	The identification of the analyte is acceptable; the reported value is an estimate.
---	---



# ACCREDITATIONS & LOCATIONS

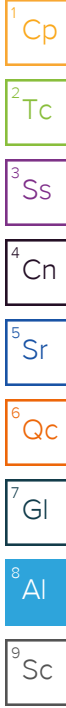
## Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

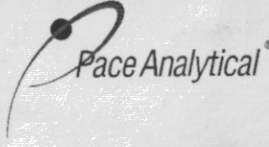
Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico <sup>1</sup>	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina <sup>1</sup>	DW21704
Georgia	NELAP	North Carolina <sup>3</sup>	41
Georgia <sup>1</sup>	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky <sup>1,6</sup>	KY90010	South Carolina	84004002
Kentucky <sup>2</sup>	16	South Dakota	n/a
Louisiana	AI30792	Tennessee <sup>1,4</sup>	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas <sup>5</sup>	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 <sup>5</sup>	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

<sup>1</sup> Drinking Water <sup>2</sup> Underground Storage Tanks <sup>3</sup> Aquatic Toxicity <sup>4</sup> Chemical/Microbiological <sup>5</sup> Mold <sup>6</sup> Wastewater n/a Accreditation not applicable

\* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

\* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.



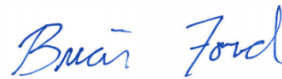
Company Name/Address: <b>Farallon Consulting - Portland, OR</b> 4380 S MacAdam Ave. Ste. 500 Portland, OR 97239		Billing Information: Accounts Payable 4380 S MacAdam Ave. Ste. 500 Portland, OR 97239		Analysis / Container / Preservative		Chain of Custody Page ___ of ___	
Report to: <b>Melissa Roskamp</b>		Email To: mroskamp@farallonconsulting.com		Pres Chk		 12065 Lebanon Rd Mount Juliet, TN 37122 Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: <a href="https://info.pacelabs.com/hubs/pas-standard-terms.pdf">https://info.pacelabs.com/hubs/pas-standard-terms.pdf</a>	
Project Description: <b>The Glasslab</b>		City/State Collected: <b>Portland, OR</b>		Please Circle: <input checked="" type="radio"/> PT <input type="radio"/> MT <input type="radio"/> CT <input type="radio"/> ET			
Phone: <b>503-280-4635</b>		Client Project # <b>1451-018</b>		Lab Project # <b>FARCONPOR-1451018</b>		SDG # <b>L1384691</b>	
Collected by (print): <b>MG/GC</b>		Site/Facility ID #		P.O. #		Table # <b>M015</b>	
Collected by (signature): <i>Megan Gni</i>		<b>Rush?</b> (Lab MUST Be Notified) <input type="checkbox"/> Same Day <input type="checkbox"/> Five Day <input type="checkbox"/> Next Day <input type="checkbox"/> 5 Day (Rad Only) <input type="checkbox"/> Two Day <input type="checkbox"/> 10 Day (Rad Only) <input type="checkbox"/> Three Day		Quote #		Acctnum: <b>FARCONPOR</b>	
Immediately Packed on Ice N <input checked="" type="checkbox"/> Y <input type="checkbox"/>		Date Results Needed		No. of Cntrs		Template: <b>T190728</b>	
Sample ID		Comp/Grab		Matrix *		Depth	
Date		Time		Date		Time	
VP-1-072821		G		Air		15" 7/28/21 1843 1 X	
VP-2-072821		↓		Air		1201 1 X	
VP-3-072821		↓		Air		1232 1 X	
VP-4-072821		↓		Air		1317 1 X	
VP-5-072821		↓		Air		1407 1 X	
VP-6-072821		↓		Air		1255 1 X	
VP-7-072821		↓		Air		1448 1 X	
EFF-072821		↓		Air		1542 1 X	
* Matrix: SS - Soil <input checked="" type="radio"/> AIR - Air <input type="radio"/> F - Filter GW - Groundwater <input type="radio"/> B - Bioassay WW - WasteWater DW - Drinking Water OT - Other _____		Remarks:		pH _____ Temp _____ Flow _____ Other _____		<b>Sample Receipt Checklist</b> COC Seal Present/Intact: <input checked="" type="checkbox"/> NP <input type="checkbox"/> Y <input type="checkbox"/> N COC Signed/Accurate: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Bottles arrive intact: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Correct bottles used: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Sufficient volume sent: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N If Applicable VOA Zero Headspace: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Preservation Correct/Checked: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N RAD Screen <0.5 mR/hr: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
Samples returned via: UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Courier _____		Tracking # <b>936249548695, 8700</b>		Relinquished by: (Signature) <i>Megan Gni</i>		Date: <b>7-28-21</b>	
Relinquished by: (Signature)		Date:		Time: <b>1643</b>		Received by: (Signature)	
Relinquished by: (Signature)		Date:		Time:		Received by: (Signature)	
Relinquished by: (Signature)		Date:		Time:		Received for lab by: (Signature) <i>B. Barnes</i>	
Temp: <b>Amb</b> °C		Bottles Received: <b>8+ empty</b>		Date: <b>7-30-21</b>		Time: <b>0900</b>	
Trip Blank Received: Yes/No <input type="checkbox"/> HCL/MeOH <input type="checkbox"/> TBR		If preservation required by Login: Date/Time		Hold:		Condition: NCF / <input checked="" type="radio"/> OK	

## Farallon Consulting - Portland, OR

Sample Delivery Group: L1280296  
Samples Received: 10/31/2020  
Project Number: 1451-018  
Description: Glass Lab

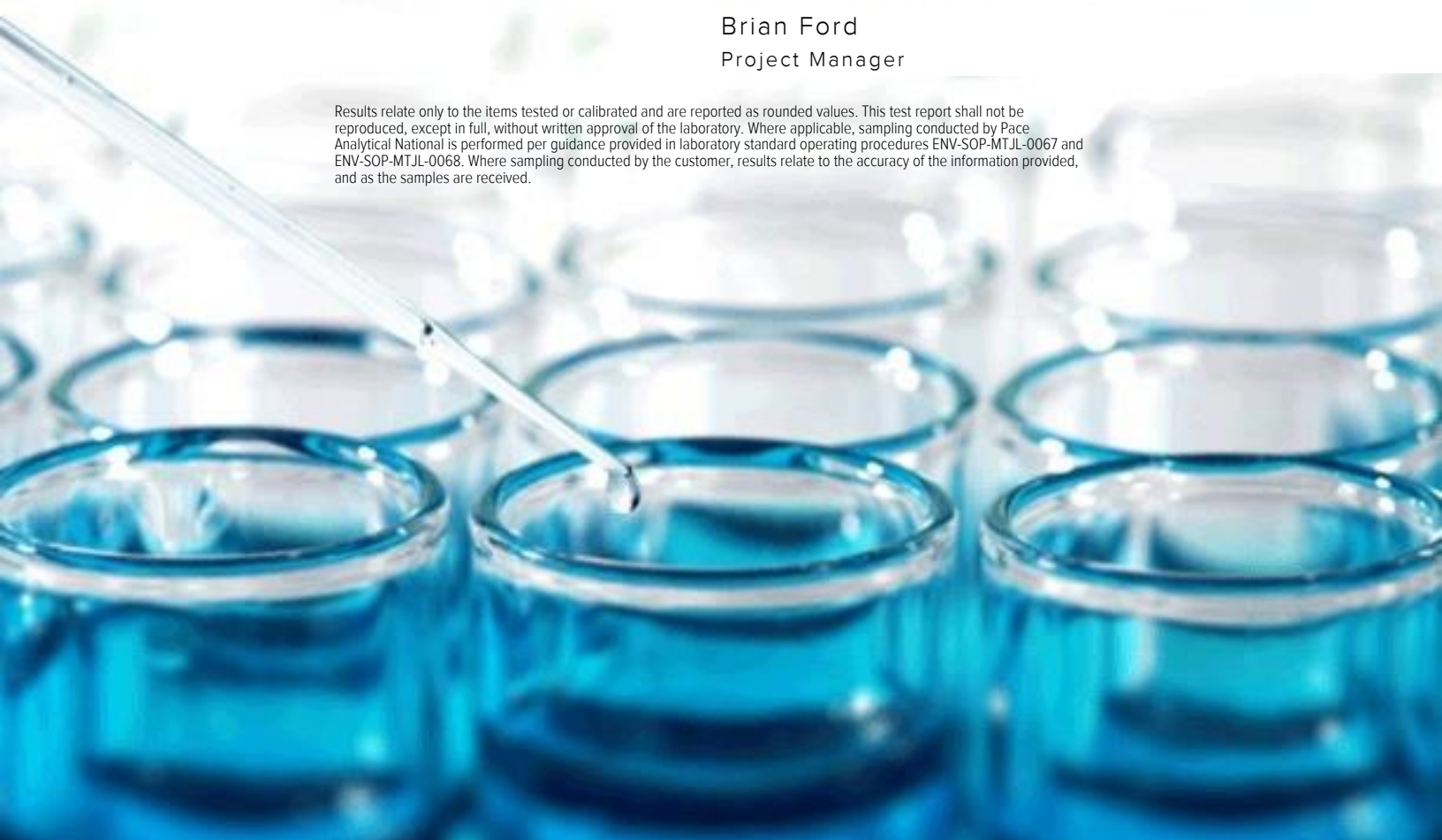
Report To: Melissa Roskamp  
4380 S MacAdam Ave.  
Ste. 500  
Portland, OR 97239

Entire Report Reviewed By:



Brian Ford  
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.





<b>Cp: Cover Page</b>	<b>1</b>	<b>1</b> Cp
<b>Tc: Table of Contents</b>	<b>2</b>	
<b>Ss: Sample Summary</b>	<b>3</b>	<b>2</b> Tc
<b>Cn: Case Narrative</b>	<b>4</b>	
<b>Sr: Sample Results</b>	<b>5</b>	<b>3</b> Ss
EFF-10292020 L1280296-01	<b>5</b>	
VP-2-102920 L1280296-02	<b>7</b>	<b>4</b> Cn
VP-1-102920 L1280296-03	<b>9</b>	<b>5</b> Sr
VP-3-102920 L1280296-04	<b>11</b>	
VP-5-102920 L1280296-05	<b>13</b>	<b>6</b> Qc
VP-6-102920 L1280296-06	<b>15</b>	
VP-7-102920 L1280296-07	<b>17</b>	<b>7</b> Gl
VP-4-102920 L1280296-09	<b>19</b>	<b>8</b> Al
<b>Qc: Quality Control Summary</b>	<b>21</b>	<b>9</b> Sc
Volatile Organic Compounds (MS) by Method TO-15	<b>21</b>	
<b>Gl: Glossary of Terms</b>	<b>26</b>	
<b>Al: Accreditations &amp; Locations</b>	<b>27</b>	
<b>Sc: Sample Chain of Custody</b>	<b>28</b>	

# SAMPLE SUMMARY



## EFF-10292020 L1280296-01 Air

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1570101	1	11/03/20 18:35	11/03/20 18:35	CAW	Mt. Juliet, TN

Collected by MR/MG  
 Collected date/time 10/29/20 10:00  
 Received date/time 10/31/20 09:00

1 Cp

## VP-2-102920 L1280296-02 Air

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1570101	1	11/03/20 19:16	11/03/20 19:16	CAW	Mt. Juliet, TN

Collected by MR/MG  
 Collected date/time 10/29/20 10:14  
 Received date/time 10/31/20 09:00

2 Tc

3 Ss

4 Cn

## VP-1-102920 L1280296-03 Air

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1570101	1	11/03/20 19:57	11/03/20 19:57	CAW	Mt. Juliet, TN

Collected by MR/MG  
 Collected date/time 10/29/20 10:59  
 Received date/time 10/31/20 09:00

5 Sr

6 Qc

7 Gl

## VP-3-102920 L1280296-04 Air

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1570101	1	11/03/20 23:38	11/03/20 23:38	CAW	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1571606	20	11/05/20 19:38	11/05/20 19:38	MBF	Mt. Juliet, TN

Collected by MR/MG  
 Collected date/time 10/29/20 10:39  
 Received date/time 10/31/20 09:00

8 Al

9 Sc

## VP-5-102920 L1280296-05 Air

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1570101	1	11/03/20 20:39	11/03/20 20:39	CAW	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1571606	10	11/05/20 20:19	11/05/20 20:19	MBF	Mt. Juliet, TN

Collected by MR/MG  
 Collected date/time 10/29/20 12:00  
 Received date/time 10/31/20 09:00

## VP-6-102920 L1280296-06 Air

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1570101	1	11/03/20 21:20	11/03/20 21:20	CAW	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1571606	10	11/05/20 20:59	11/05/20 20:59	MBF	Mt. Juliet, TN

Collected by MR/MG  
 Collected date/time 10/29/20 11:42  
 Received date/time 10/31/20 09:00

## VP-7-102920 L1280296-07 Air

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1570101	1	11/03/20 21:59	11/03/20 21:59	CAW	Mt. Juliet, TN

Collected by MR/MG  
 Collected date/time 10/29/20 13:29  
 Received date/time 10/31/20 09:00

## VP-4-102920 L1280296-09 Air

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1570101	1	11/03/20 22:40	11/03/20 22:40	CAW	Mt. Juliet, TN

Collected by MR/MG  
 Collected date/time 10/29/20 10:23  
 Received date/time 10/31/20 09:00



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford  
Project Manager

- <sup>1</sup> Cp
- <sup>2</sup> Tc
- <sup>3</sup> Ss
- <sup>4</sup> Cn
- <sup>5</sup> Sr
- <sup>6</sup> Qc
- <sup>7</sup> Gl
- <sup>8</sup> Al
- <sup>9</sup> Sc



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	7.92	18.8		1	WG1570101
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1570101
Benzene	71-43-2	78.10	0.200	0.639	0.538	1.72		1	WG1570101
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1570101
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1570101
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1570101
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1570101
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1570101
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1570101
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1570101
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1570101
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1570101
Chloroform	67-66-3	119	0.200	0.973	1.15	5.60		1	WG1570101
Chloromethane	74-87-3	50.50	0.200	0.413	0.302	0.624		1	WG1570101
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1570101
Cyclohexane	110-82-7	84.20	0.200	0.689	0.312	1.07		1	WG1570101
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1570101
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1570101
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1570101
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1570101
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1570101
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1570101
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1570101
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1570101
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	1.07	4.24		1	WG1570101
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1570101
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1570101
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1570101
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1570101
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1570101
Ethanol	64-17-5	46.10	0.630	1.19	78.2	147	J3	1	WG1570101
Ethylbenzene	100-41-4	106	0.200	0.867	0.237	1.03		1	WG1570101
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1570101
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.298	1.67		1	WG1570101
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.506	2.50		1	WG1570101
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND	J3	1	WG1570101
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1570101
Heptane	142-82-5	100	0.200	0.818	0.500	2.04		1	WG1570101
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1570101
n-Hexane	110-54-3	86.20	0.630	2.22	2.21	7.79		1	WG1570101
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1570101
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.630	2.19		1	WG1570101
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1570101
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	1.74	5.13		1	WG1570101
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1570101
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1570101
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1570101
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1570101
2-Propanol	67-63-0	60.10	1.25	3.07	1.71	4.20		1	WG1570101
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1570101
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1570101
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1570101
Tetrachloroethylene	127-18-4	166	0.200	1.36	47.6	323		1	WG1570101
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1570101
Toluene	108-88-3	92.10	0.500	1.88	2.13	8.02		1	WG1570101
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1570101

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	<a href="#">WG1570101</a>
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	<a href="#">WG1570101</a>
Trichloroethylene	79-01-6	131	0.200	1.07	24.0	129		1	<a href="#">WG1570101</a>
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	<a href="#">WG1570101</a>
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	<a href="#">WG1570101</a>
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	<a href="#">WG1570101</a>
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	<a href="#">WG1570101</a>
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	<a href="#">WG1570101</a>
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	<a href="#">WG1570101</a>
m&p-Xylene	1330-20-7	106	0.400	1.73	0.782	3.39		1	<a href="#">WG1570101</a>
o-Xylene	95-47-6	106	0.200	0.867	0.318	1.38		1	<a href="#">WG1570101</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		89.7				<a href="#">WG1570101</a>

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	3.41	8.10		1	WG1570101
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1570101
Benzene	71-43-2	78.10	0.200	0.639	0.318	1.02		1	WG1570101
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1570101
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1570101
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1570101
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1570101
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1570101
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1570101
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1570101
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1570101
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1570101
Chloroform	67-66-3	119	0.200	0.973	0.507	2.47		1	WG1570101
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG1570101
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1570101
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1570101
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1570101
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1570101
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1570101
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1570101
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1570101
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1570101
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1570101
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1570101
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1570101
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1570101
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1570101
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1570101
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1570101
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1570101
Ethanol	64-17-5	46.10	0.630	1.19	15.6	29.4	J3	1	WG1570101
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1570101
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1570101
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.288	1.62		1	WG1570101
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.499	2.47		1	WG1570101
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND	J3	1	WG1570101
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1570101
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1570101
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1570101
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1570101
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1570101
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.423	1.47		1	WG1570101
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1570101
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1570101
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1570101
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1570101
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1570101
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1570101
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1570101
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1570101
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1570101
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1570101
Tetrachloroethylene	127-18-4	166	0.200	1.36	1.80	12.2		1	WG1570101
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1570101
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG1570101
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1570101

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	<a href="#">WG1570101</a>
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	<a href="#">WG1570101</a>
Trichloroethylene	79-01-6	131	0.200	1.07	2.10	11.3		1	<a href="#">WG1570101</a>
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	<a href="#">WG1570101</a>
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	<a href="#">WG1570101</a>
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	<a href="#">WG1570101</a>
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	<a href="#">WG1570101</a>
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	<a href="#">WG1570101</a>
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	<a href="#">WG1570101</a>
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	<a href="#">WG1570101</a>
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	<a href="#">WG1570101</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		88.3				<a href="#">WG1570101</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	ND	ND		1	WG1570101
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1570101
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1570101
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1570101
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1570101
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1570101
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1570101
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1570101
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1570101
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1570101
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1570101
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1570101
Chloroform	67-66-3	119	0.200	0.973	0.556	2.71		1	WG1570101
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG1570101
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1570101
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1570101
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1570101
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1570101
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1570101
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1570101
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1570101
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1570101
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1570101
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1570101
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1570101
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1570101
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1570101
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1570101
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1570101
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1570101
Ethanol	64-17-5	46.10	0.630	1.19	10.7	20.2	J3	1	WG1570101
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1570101
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1570101
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.304	1.71		1	WG1570101
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.488	2.41		1	WG1570101
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND	J3	1	WG1570101
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1570101
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1570101
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1570101
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1570101
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1570101
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1570101
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1570101
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1570101
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1570101
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1570101
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1570101
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1570101
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1570101
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1570101
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1570101
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1570101
Tetrachloroethylene	127-18-4	166	0.200	1.36	3.17	21.5		1	WG1570101
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1570101
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG1570101
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1570101

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	<a href="#">WG1570101</a>
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	<a href="#">WG1570101</a>
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	<a href="#">WG1570101</a>
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	<a href="#">WG1570101</a>
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	<a href="#">WG1570101</a>
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	<a href="#">WG1570101</a>
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	<a href="#">WG1570101</a>
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	<a href="#">WG1570101</a>
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	<a href="#">WG1570101</a>
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	<a href="#">WG1570101</a>
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	<a href="#">WG1570101</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		88.5				<a href="#">WG1570101</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	5.61	13.3		1	WG1570101
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1570101
Benzene	71-43-2	78.10	0.200	0.639	0.455	1.45		1	WG1570101
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1570101
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1570101
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1570101
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1570101
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1570101
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1570101
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1570101
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1570101
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1570101
Chloroform	67-66-3	119	0.200	0.973	13.9	67.7		1	WG1570101
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG1570101
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1570101
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1570101
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1570101
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1570101
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1570101
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1570101
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1570101
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1570101
1,1-Dichloroethane	75-34-3	98	0.200	0.802	1.03	4.13		1	WG1570101
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1570101
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	37.6	149		1	WG1570101
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	2.24	8.88		1	WG1570101
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1570101
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1570101
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1570101
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1570101
Ethanol	64-17-5	46.10	0.630	1.19	61.6	116	J3	1	WG1570101
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1570101
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1570101
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.450	2.53		1	WG1570101
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.725	3.59		1	WG1570101
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND	J3	1	WG1570101
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1570101
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1570101
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1570101
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1570101
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1570101
Methylene Chloride	75-09-2	84.90	0.200	0.694	1.11	3.85		1	WG1570101
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1570101
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1570101
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1570101
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1570101
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1570101
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1570101
2-Propanol	67-63-0	60.10	1.25	3.07	4.29	10.5		1	WG1570101
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1570101
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1570101
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1570101
Tetrachloroethylene	127-18-4	166	4.00	27.2	922	6260		20	WG1571606
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	0.219	0.646		1	WG1570101
Toluene	108-88-3	92.10	0.500	1.88	1.25	4.71		1	WG1570101
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1570101

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	0.900	4.90		1	<a href="#">WG1570101</a>
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	0.454	2.47		1	<a href="#">WG1570101</a>
Trichloroethylene	79-01-6	131	4.00	21.4	772	4140		20	<a href="#">WG1571606</a>
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	<a href="#">WG1570101</a>
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	<a href="#">WG1570101</a>
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	<a href="#">WG1570101</a>
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	<a href="#">WG1570101</a>
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	<a href="#">WG1570101</a>
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	<a href="#">WG1570101</a>
m&p-Xylene	1330-20-7	106	0.400	1.73	0.417	1.81		1	<a href="#">WG1570101</a>
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	<a href="#">WG1570101</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		96.5				<a href="#">WG1570101</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		96.8				<a href="#">WG1571606</a>

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	2.18	5.18		1	WG1570101
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1570101
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1570101
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1570101
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1570101
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1570101
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1570101
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1570101
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1570101
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1570101
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1570101
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1570101
Chloroform	67-66-3	119	0.200	0.973	0.494	2.40		1	WG1570101
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG1570101
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1570101
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1570101
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1570101
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1570101
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1570101
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1570101
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1570101
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1570101
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1570101
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1570101
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1570101
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1570101
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1570101
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1570101
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1570101
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1570101
Ethanol	64-17-5	46.10	0.630	1.19	19.6	37.0	J3	1	WG1570101
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1570101
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1570101
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.267	1.50		1	WG1570101
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.516	2.55		1	WG1570101
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND	J3	1	WG1570101
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1570101
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1570101
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1570101
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1570101
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1570101
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1570101
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1570101
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1570101
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1570101
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1570101
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1570101
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1570101
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1570101
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1570101
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1570101
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1570101
Tetrachloroethylene	127-18-4	166	2.00	13.6	156	1060		10	WG1571606
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1570101
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG1570101
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1570101

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	0.531	2.89		1	<a href="#">WG1570101</a>
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	<a href="#">WG1570101</a>
Trichloroethylene	79-01-6	131	0.200	1.07	80.0	429		1	<a href="#">WG1570101</a>
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	<a href="#">WG1570101</a>
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	<a href="#">WG1570101</a>
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	<a href="#">WG1570101</a>
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	<a href="#">WG1570101</a>
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	<a href="#">WG1570101</a>
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	<a href="#">WG1570101</a>
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	<a href="#">WG1570101</a>
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	<a href="#">WG1570101</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		98.8				<a href="#">WG1570101</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		98.2				<a href="#">WG1571606</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	1.98	4.71		1	WG1570101
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1570101
Benzene	71-43-2	78.10	0.200	0.639	0.508	1.62		1	WG1570101
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1570101
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1570101
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1570101
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1570101
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1570101
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1570101
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1570101
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1570101
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1570101
Chloroform	67-66-3	119	0.200	0.973	0.648	3.15		1	WG1570101
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG1570101
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1570101
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1570101
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1570101
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1570101
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1570101
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1570101
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1570101
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1570101
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1570101
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1570101
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1570101
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1570101
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1570101
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1570101
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1570101
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1570101
Ethanol	64-17-5	46.10	0.630	1.19	81.6	154	J3	1	WG1570101
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1570101
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1570101
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.286	1.61		1	WG1570101
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.489	2.42		1	WG1570101
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND	J3	1	WG1570101
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1570101
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1570101
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1570101
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1570101
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1570101
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.558	1.94		1	WG1570101
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1570101
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1570101
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1570101
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1570101
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1570101
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1570101
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1570101
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1570101
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1570101
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1570101
Tetrachloroethylene	127-18-4	166	0.200	1.36	60.4	410		1	WG1570101
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1570101
Toluene	108-88-3	92.10	0.500	1.88	0.698	2.63		1	WG1570101
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1570101

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	<a href="#">WG1570101</a>
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	<a href="#">WG1570101</a>
Trichloroethylene	79-01-6	131	2.00	10.7	111	595		10	<a href="#">WG1571606</a>
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	<a href="#">WG1570101</a>
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	<a href="#">WG1570101</a>
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	<a href="#">WG1570101</a>
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	<a href="#">WG1570101</a>
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	<a href="#">WG1570101</a>
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	<a href="#">WG1570101</a>
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	<a href="#">WG1570101</a>
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	<a href="#">WG1570101</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		87.8				<a href="#">WG1570101</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		97.8				<a href="#">WG1571606</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	5.40	12.8		1	WG1570101
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1570101
Benzene	71-43-2	78.10	0.200	0.639	0.302	0.965		1	WG1570101
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1570101
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1570101
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1570101
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1570101
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1570101
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1570101
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1570101
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1570101
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1570101
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1570101
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG1570101
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1570101
Cyclohexane	110-82-7	84.20	0.200	0.689	0.201	0.692		1	WG1570101
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1570101
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1570101
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1570101
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1570101
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1570101
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1570101
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1570101
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1570101
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1570101
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1570101
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1570101
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1570101
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1570101
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1570101
Ethanol	64-17-5	46.10	0.630	1.19	45.5	85.8	J3	1	WG1570101
Ethylbenzene	100-41-4	106	0.200	0.867	0.223	0.967		1	WG1570101
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1570101
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.281	1.58		1	WG1570101
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.478	2.36		1	WG1570101
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND	J3	1	WG1570101
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1570101
Heptane	142-82-5	100	0.200	0.818	1.10	4.50		1	WG1570101
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1570101
n-Hexane	110-54-3	86.20	0.630	2.22	3.08	10.9		1	WG1570101
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1570101
Methylene Chloride	75-09-2	84.90	0.200	0.694	1.47	5.10		1	WG1570101
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1570101
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1570101
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1570101
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1570101
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1570101
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1570101
2-Propanol	67-63-0	60.10	1.25	3.07	4.54	11.2		1	WG1570101
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1570101
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1570101
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1570101
Tetrachloroethylene	127-18-4	166	0.200	1.36	1.43	9.71		1	WG1570101
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1570101
Toluene	108-88-3	92.10	0.500	1.88	1.31	4.93		1	WG1570101
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1570101

1  
Cp

2  
Tc

3  
Ss

4  
Cn

5  
Sr

6  
Qc

7  
Gl

8  
Al

9  
Sc



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	<a href="#">WG1570101</a>
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	<a href="#">WG1570101</a>
Trichloroethylene	79-01-6	131	0.200	1.07	1.50	8.04		1	<a href="#">WG1570101</a>
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	<a href="#">WG1570101</a>
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	<a href="#">WG1570101</a>
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	<a href="#">WG1570101</a>
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	<a href="#">WG1570101</a>
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	<a href="#">WG1570101</a>
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	<a href="#">WG1570101</a>
m&p-Xylene	1330-20-7	106	0.400	1.73	0.772	3.35		1	<a href="#">WG1570101</a>
o-Xylene	95-47-6	106	0.200	0.867	0.281	1.22		1	<a href="#">WG1570101</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		89.8				<a href="#">WG1570101</a>

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	1.57	3.73		1	WG1570101
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1570101
Benzene	71-43-2	78.10	0.200	0.639	0.315	1.01		1	WG1570101
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1570101
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1570101
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1570101
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1570101
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1570101
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1570101
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1570101
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1570101
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1570101
Chloroform	67-66-3	119	0.200	0.973	0.448	2.18		1	WG1570101
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG1570101
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1570101
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1570101
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1570101
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1570101
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1570101
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1570101
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1570101
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1570101
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1570101
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1570101
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1570101
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1570101
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1570101
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1570101
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1570101
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1570101
Ethanol	64-17-5	46.10	0.630	1.19	51.2	96.5	J3	1	WG1570101
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1570101
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1570101
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.297	1.67		1	WG1570101
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.517	2.56		1	WG1570101
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND	J3	1	WG1570101
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1570101
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1570101
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1570101
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1570101
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1570101
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.364	1.26		1	WG1570101
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1570101
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1570101
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1570101
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1570101
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1570101
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1570101
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1570101
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1570101
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1570101
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1570101
Tetrachloroethylene	127-18-4	166	0.200	1.36	4.09	27.8		1	WG1570101
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1570101
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG1570101
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1570101

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	<a href="#">WG1570101</a>
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	<a href="#">WG1570101</a>
Trichloroethylene	79-01-6	131	0.200	1.07	4.95	26.5		1	<a href="#">WG1570101</a>
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	<a href="#">WG1570101</a>
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	<a href="#">WG1570101</a>
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	<a href="#">WG1570101</a>
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	<a href="#">WG1570101</a>
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	<a href="#">WG1570101</a>
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	<a href="#">WG1570101</a>
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	<a href="#">WG1570101</a>
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	<a href="#">WG1570101</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		86.4				<a href="#">WG1570101</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Method Blank (MB)

(MB) R3588912-3 11/03/20 10:02

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
Acetone	U		0.584	1.25
Allyl Chloride	U		0.114	0.200
Benzene	U		0.0715	0.200
Benzyl Chloride	U		0.0598	0.200
Bromodichloromethane	U		0.0702	0.200
Bromoform	U		0.0732	0.600
Bromomethane	U		0.0982	0.200
1,3-Butadiene	U		0.104	2.00
Carbon disulfide	U		0.102	0.200
Carbon tetrachloride	U		0.0732	0.200
Chlorobenzene	U		0.0832	0.200
Chloroethane	U		0.0996	0.200
Chloroform	U		0.0717	0.200
Chloromethane	U		0.103	0.200
2-Chlorotoluene	U		0.0828	0.200
Cyclohexane	U		0.0753	0.200
Dibromochloromethane	U		0.0727	0.200
1,2-Dibromoethane	U		0.0721	0.200
1,2-Dichlorobenzene	U		0.128	0.200
1,3-Dichlorobenzene	U		0.182	0.200
1,4-Dichlorobenzene	0.0632	U	0.0557	0.200
1,2-Dichloroethane	U		0.0700	0.200
1,1-Dichloroethane	U		0.0723	0.200
1,1-Dichloroethene	U		0.0762	0.200
cis-1,2-Dichloroethene	U		0.0784	0.200
trans-1,2-Dichloroethene	U		0.0673	0.200
1,2-Dichloropropane	U		0.0760	0.200
cis-1,3-Dichloropropene	U		0.0689	0.200
trans-1,3-Dichloropropene	U		0.0728	0.200
1,4-Dioxane	U		0.0833	0.200
Ethylbenzene	U		0.0835	0.200
4-Ethyltoluene	U		0.0783	0.200
Trichlorofluoromethane	U		0.0819	0.200
Dichlorodifluoromethane	U		0.137	0.200
1,1,2-Trichlorotrifluoroethane	U		0.0793	0.200
1,2-Dichlorotetrafluoroethane	U		0.0890	0.200
Heptane	U		0.104	0.200
Hexachloro-1,3-butadiene	U		0.105	0.630
n-Hexane	U		0.206	0.630
Isopropylbenzene	U		0.0777	0.200

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc



Method Blank (MB)

(MB) R3588912-3 11/03/20 10:02

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
Methylene Chloride	U		0.0979	0.200
Methyl Butyl Ketone	U		0.133	1.25
2-Butanone (MEK)	U		0.0814	1.25
4-Methyl-2-pentanone (MIBK)	U		0.0765	1.25
Methyl Methacrylate	U		0.0876	0.200
MTBE	U		0.0647	0.200
Naphthalene	U		0.350	0.630
2-Propanol	U		0.264	1.25
Propene	0.152	J	0.0932	0.400
Styrene	U		0.0788	0.200
1,1,2,2-Tetrachloroethane	U		0.0743	0.200
Tetrachloroethylene	U		0.0814	0.200
Tetrahydrofuran	U		0.0734	0.200
Toluene	U		0.0870	0.500
1,2,4-Trichlorobenzene	U		0.148	0.630
1,1,1-Trichloroethane	U		0.0736	0.200
1,1,2-Trichloroethane	U		0.0775	0.200
Trichloroethylene	U		0.0680	0.200
1,2,4-Trimethylbenzene	U		0.0764	0.200
1,3,5-Trimethylbenzene	U		0.0779	0.200
2,2,4-Trimethylpentane	U		0.133	0.200
Vinyl chloride	U		0.0949	0.200
Vinyl Bromide	U		0.0852	0.200
Vinyl acetate	U		0.116	0.200
m&p-Xylene	U		0.135	0.400
o-Xylene	U		0.0828	0.200
Ethanol	U		0.265	0.630
(S) 1,4-Bromofluorobenzene	84.4			60.0-140

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3588912-1 11/03/20 08:46 • (LCSD) R3588912-2 11/03/20 09:25

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ppbv	ppbv	ppbv	%	%	%			%	%
Ethanol	3.75	3.18	4.30	84.8	115	55.0-148		J3	29.9	25
Propene	3.75	3.45	3.30	92.0	88.0	64.0-144			4.44	25
Dichlorodifluoromethane	3.75	3.57	3.40	95.2	90.7	64.0-139			4.88	25
1,2-Dichlorotetrafluoroethane	3.75	3.57	3.54	95.2	94.4	70.0-130			0.844	25
Chloromethane	3.75	3.62	3.54	96.5	94.4	70.0-130			2.23	25



Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3588912-1 11/03/20 08:46 • (LCSD) R3588912-2 11/03/20 09:25

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Vinyl chloride	3.75	3.68	3.64	98.1	97.1	70.0-130			1.09	25
1,3-Butadiene	3.75	3.57	3.43	95.2	91.5	70.0-130			4.00	25
Bromomethane	3.75	3.30	3.83	88.0	102	70.0-130			14.9	25
Chloroethane	3.75	3.38	4.18	90.1	111	70.0-130			21.2	25
Trichlorofluoromethane	3.75	3.61	4.08	96.3	109	70.0-130			12.2	25
1,1,2-Trichlorotrifluoroethane	3.75	2.92	4.05	77.9	108	70.0-130		J3	32.4	25
1,1-Dichloroethene	3.75	3.95	3.97	105	106	70.0-130			0.505	25
1,1-Dichloroethane	3.75	3.72	3.62	99.2	96.5	70.0-130			2.72	25
Acetone	3.75	3.28	3.25	87.5	86.7	70.0-130			0.919	25
2-Propanol	3.75	3.42	3.34	91.2	89.1	70.0-139			2.37	25
Carbon disulfide	3.75	3.61	3.52	96.3	93.9	70.0-130			2.52	25
Methylene Chloride	3.75	3.61	3.47	96.3	92.5	70.0-130			3.95	25
MTBE	3.75	3.54	3.51	94.4	93.6	70.0-130			0.851	25
trans-1,2-Dichloroethene	3.75	3.70	3.56	98.7	94.9	70.0-130			3.86	25
n-Hexane	3.75	3.68	3.71	98.1	98.9	70.0-130			0.812	25
Vinyl acetate	3.75	3.45	3.38	92.0	90.1	70.0-130			2.05	25
Methyl Ethyl Ketone	3.75	3.38	3.38	90.1	90.1	70.0-130			0.000	25
cis-1,2-Dichloroethene	3.75	3.21	3.23	85.6	86.1	70.0-130			0.621	25
Chloroform	3.75	3.62	3.61	96.5	96.3	70.0-130			0.277	25
Cyclohexane	3.75	3.66	3.71	97.6	98.9	70.0-130			1.36	25
1,1,1-Trichloroethane	3.75	3.55	3.57	94.7	95.2	70.0-130			0.562	25
Carbon tetrachloride	3.75	3.57	3.55	95.2	94.7	70.0-130			0.562	25
Benzene	3.75	3.62	3.60	96.5	96.0	70.0-130			0.554	25
1,2-Dichloroethane	3.75	3.64	3.59	97.1	95.7	70.0-130			1.38	25
Heptane	3.75	3.83	3.85	102	103	70.0-130			0.521	25
Trichloroethylene	3.75	3.61	3.61	96.3	96.3	70.0-130			0.000	25
1,2-Dichloropropane	3.75	3.59	3.55	95.7	94.7	70.0-130			1.12	25
1,4-Dioxane	3.75	3.14	3.16	83.7	84.3	70.0-140			0.635	25
Bromodichloromethane	3.75	3.63	3.61	96.8	96.3	70.0-130			0.552	25
cis-1,3-Dichloropropene	3.75	3.58	3.60	95.5	96.0	70.0-130			0.557	25
4-Methyl-2-pentanone (MIBK)	3.75	3.80	3.75	101	100	70.0-139			1.32	25
Toluene	3.75	3.68	3.76	98.1	100	70.0-130			2.15	25
trans-1,3-Dichloropropene	3.75	3.51	3.60	93.6	96.0	70.0-130			2.53	25
1,1,2-Trichloroethane	3.75	3.50	3.53	93.3	94.1	70.0-130			0.853	25
Tetrachloroethylene	3.75	3.60	3.61	96.0	96.3	70.0-130			0.277	25
Methyl Butyl Ketone	3.75	3.67	3.54	97.9	94.4	70.0-149			3.61	25
Dibromochloromethane	3.75	3.52	3.57	93.9	95.2	70.0-130			1.41	25
1,2-Dibromoethane	3.75	3.64	3.67	97.1	97.9	70.0-130			0.821	25
Chlorobenzene	3.75	3.63	3.67	96.8	97.9	70.0-130			1.10	25
Ethylbenzene	3.75	3.77	3.80	101	101	70.0-130			0.793	25

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3588912-1 11/03/20 08:46 • (LCSD) R3588912-2 11/03/20 09:25

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
m&p-Xylene	7.50	7.65	7.76	102	103	70.0-130			1.43	25
o-Xylene	3.75	3.69	3.81	98.4	102	70.0-130			3.20	25
Styrene	3.75	3.89	3.94	104	105	70.0-130			1.28	25
Bromoform	3.75	3.52	3.55	93.9	94.7	70.0-130			0.849	25
1,1,2,2-Tetrachloroethane	3.75	3.62	3.62	96.5	96.5	70.0-130			0.000	25
4-Ethyltoluene	3.75	3.87	4.04	103	108	70.0-130			4.30	25
1,3,5-Trimethylbenzene	3.75	3.85	3.90	103	104	70.0-130			1.29	25
1,2,4-Trimethylbenzene	3.75	3.89	4.01	104	107	70.0-130			3.04	25
1,3-Dichlorobenzene	3.75	3.92	3.95	105	105	70.0-130			0.762	25
1,4-Dichlorobenzene	3.75	3.96	3.93	106	105	70.0-130			0.760	25
Benzyl Chloride	3.75	3.47	3.55	92.5	94.7	70.0-152			2.28	25
1,2-Dichlorobenzene	3.75	4.00	4.03	107	107	70.0-130			0.747	25
1,2,4-Trichlorobenzene	3.75	3.90	3.86	104	103	70.0-160			1.03	25
Hexachloro-1,3-butadiene	3.75	3.70	3.68	98.7	98.1	70.0-151			0.542	25
Naphthalene	3.75	3.91	4.02	104	107	70.0-159			2.77	25
Allyl Chloride	3.75	3.52	3.42	93.9	91.2	70.0-130			2.88	25
2-Chlorotoluene	3.75	3.67	3.71	97.9	98.9	70.0-130			1.08	25
Methyl Methacrylate	3.75	3.66	3.68	97.6	98.1	70.0-130			0.545	25
Tetrahydrofuran	3.75	3.59	3.58	95.7	95.5	70.0-137			0.279	25
2,2,4-Trimethylpentane	3.75	3.66	3.72	97.6	99.2	70.0-130			1.63	25
Vinyl Bromide	3.75	3.51	4.09	93.6	109	70.0-130			15.3	25
Isopropylbenzene	3.75	3.80	3.87	101	103	70.0-130			1.83	25
(S) 1,4-Bromofluorobenzene				98.8	99.6	60.0-140				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Method Blank (MB)

(MB) R3590053-3 11/05/20 10:26

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
Tetrachloroethylene	U		0.0814	0.200
Trichloroethylene	U		0.0680	0.200
(S) 1,4-Bromofluorobenzene	97.9			60.0-140

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3590053-1 11/05/20 09:02 • (LCSD) R3590053-2 11/05/20 09:45

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ppbv	ppbv	ppbv	%	%	%			%	%
Trichloroethylene	3.75	4.04	4.08	108	109	70.0-130			0.985	25
Tetrachloroethylene	3.75	4.07	4.18	109	111	70.0-130			2.67	25
(S) 1,4-Bromofluorobenzene				101	100	60.0-140				

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc



Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.



Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

\* Not all certifications held by the laboratory are applicable to the results reported in the attached report.  
 \* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

## State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico <sup>1</sup>	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina <sup>1</sup>	DW21704
Georgia	NELAP	North Carolina <sup>3</sup>	41
Georgia <sup>1</sup>	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky <sup>1,6</sup>	90010	South Carolina	84004
Kentucky <sup>2</sup>	16	South Dakota	n/a
Louisiana	AI30792	Tennessee <sup>1,4</sup>	2006
Louisiana <sup>1</sup>	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas <sup>5</sup>	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

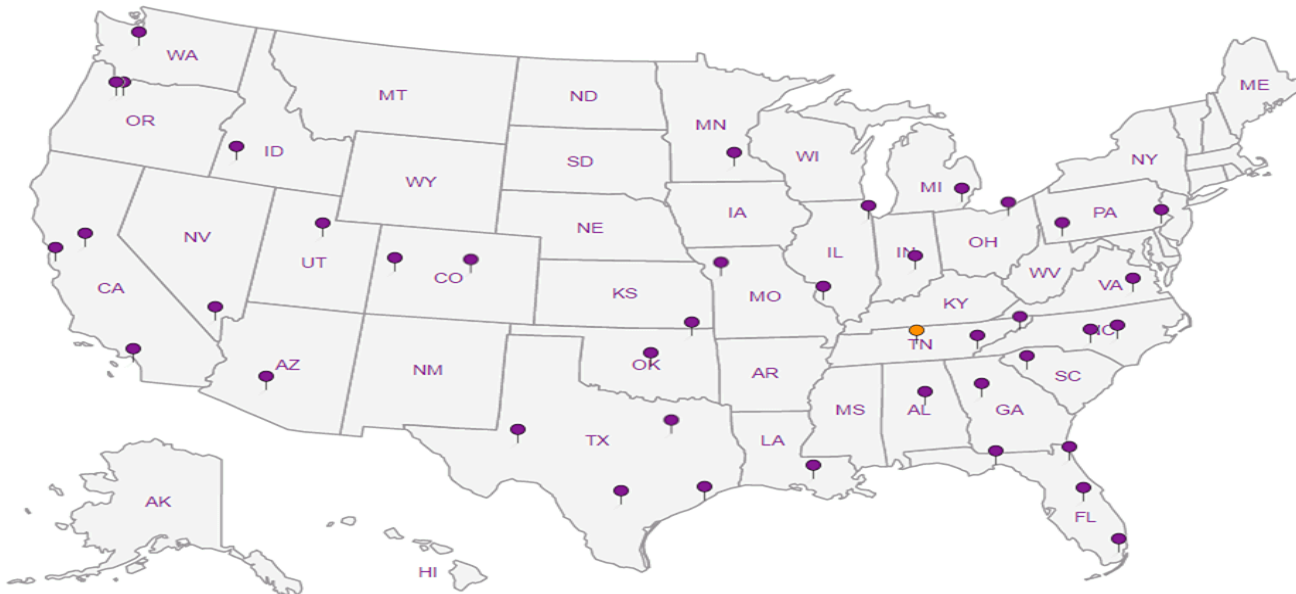
## Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 <sup>5</sup>	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

<sup>1</sup> Drinking Water <sup>2</sup> Underground Storage Tanks <sup>3</sup> Aquatic Toxicity <sup>4</sup> Chemical/Microbiological <sup>5</sup> Mold <sup>6</sup> Wastewater n/a Accreditation not applicable

## Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

# Farallon Consulting - Portland, OR

4380 S MacAdam Ave.  
Ste. 500  
Portland OR 97239

### Billing Information:

Accounts Payable  
4380 S MacAdam Ave.  
Ste. 500  
Portland, OR 97239

Pres  
Chk

Email To: mroskamp@farallonconsulting.com

Report to:  
Melissa Roskamp

Project Description:

*Glass Lab*

City/State  
Collected:

*OR*

Please Circle:  
PT MT CT ET

P  M  C  T  E

Phone: 503-280-4635

Client Project #  
1451-018

Lab Project #  
FARCONPOR-1451018

Collected by (print):

*MR/IMG*

Site/Facility ID #

P.O. #

Collected by (signature):

Rush? (Lab MUST Be Notified)

Same Day  Five Day  
 Next Day  5 Day (Rad Only)  
 Two Day  10 Day (Rad Only)  
 Three Day

Quote #

Date Results Needed

Immediately  
Packed on Ice N  Y

No.  
of  
Cnts

TO-15 Summa

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cnts
<i>EFF-10292020</i>	<i>G</i>	<i>Air</i>	<i>15"</i>	<i>10/29/20</i>	<i>10:00</i>	<i>1</i>
<i>VP2-10292020</i>		<i>Air</i>			<i>1014</i>	
<i>VP-1-102920</i>		<i>Air</i>			<i>1059</i>	
<i>VP-3-102920</i>		<i>Air</i>			<i>1039</i>	
<i>VP-4-102920</i>		<i>Air</i>			<i>1123</i>	
<i>VP-5-102920</i>		<i>Air</i>			<i>1200</i>	
<i>VP-6-102920</i>		<i>Air</i>			<i>1142</i>	
<i>VP-7-102920</i>		<i>Air</i>			<i>1329</i>	
<i>N/A</i>						

Chain of Custody Page \_\_\_ of \_\_\_



12065 Lebanon Rd  
Mount Juliet, TN 37122  
Phone: 615-758-5858  
Phone: 800-767-5859  
Fax: 615-758-5859



SDG # *L1780296*  
**J178**

Acctnum: FARCONPOR

Template: T176276

Prelogin: P804701

PM: 110 - Brian Ford

PB: *CSG 10/23/20*

Shipped Via: FedEX Ground

Remarks | Sample # (lab only)

*-01*  
*-02*  
*-03*  
*-04*  
*-05*  
*-06*  
*-07*  
*-08*

\* Matrix:  
SS - Soil  AIR - Air  F - Filter  
GW - Groundwater  B - Bioassay  
WW - WasteWater  
DW - Drinking Water  
OT - Other \_\_\_\_\_

Remarks:

pH \_\_\_\_\_ Temp \_\_\_\_\_

Flow \_\_\_\_\_ Other \_\_\_\_\_

### Sample Receipt Checklist

COC Seal Present/Intact:  Y  N  
COC Signed/Accurate:  Y  N  
Bottles arrive intact:  Y  N  
Correct bottles used:  Y  N  
Sufficient volume sent:  Y  N  
If Applicable  
VOA Zero Headspace:  Y  N  
Preservation Correct/Checked:  Y  N  
RAD Screen <0.5 mR/hr:  Y  N

Samples returned via:  
 UPS  FedEx  Courier \_\_\_\_\_

Tracking # *1411 1768 1218-1229*

Relinquished by: (Signature)

*Megan Gehris*

Date:

*10/29/20*

Time:

Received by: (Signature)

Trip Blank Received: Yes/No

*Yes*  
HCl/MeOH  
TBR

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Temp: °C Bottles Received:

*AMB 2 + 2 empty*

If preservation required by Login: Date/Time

Relinquished by: (Signature)

Date:

Time:

Received for lab by: (Signature)

*A. Feldman*

Date:

*10/31/20 9:00*

Hold:

Condition:  
NCF /  OK