



COLD WEATHER SAMPLING EVENT REPORT

Former Harbour Point Cleaners
Suite B6, Mukilteo Speedway Center
13619 Mukilteo Speedway
Lynnwood, Washington 98087

PREPARED FOR:

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COLD WEATHER SAMPLING EVENT REPORT

March 2022

**Former Harbour Point Cleaners
Suite B6, Mukilteo Speedway Center
13619 Mukilteo Speedway
Lynnwood, Washington 98087
Washington State Department of Ecology Facility ID: 41352598
Washington State Department of Ecology Voluntary Cleanup Program No. NW2902
Atlas PROJECT NO. 282 EM 0017 / NPWRI 18001**

1.0 INTRODUCTION AND REMEDIATION HISTORY

Atlas Technical Consultants (Atlas) has prepared this report on behalf of WRI-URS Mukilteo Speedway, LLC. to document the results of cold weather ambient air and sub-slab vapor sampling at the former Harbour Point Dry Cleaners tenant space within the Mukilteo Speedway Center at 13619 Mukilteo Speedway, Lynnwood, Washington (**Figure 1**). The sampling was conducted in accordance with the reporting requirements of the Operations and Maintenance (O&M) Plan in the Environmental Covenant with No Further Action determination for the Mukilteo Speedway Center - Harbour Point Cleaners. The O&M Plan states that a full set of sub-slab, indoor air and outdoor air sampling shall be conducted the first winter and reported (year 1) and conducted and reported year 5. The O&M Plan states that if the results are significantly greater than the 2018 and 2019 samples, then a second round of sampling will be conducted at year 3.

The 2022 Cold Weather sampling event was conducted to further evaluate the effectiveness of the former sub-slab depressurization (SSD) system which operated from January 2017 through June of 2018, and the remediation of the interior of the space which took place in June 2018. The SSD system was installed in order to reduce risk to human health and the environment, and to further comply with the Model Toxics Control Act (MTCA) and its implementing regulations, Chapter 70.105D of the Revised Code of Washington (RCW) and Chapter 173- 340 of the Washington Administrative Code (WAC). The SSD system mitigated vapor intrusion from underlying soil previously identified as impacted with volatile organic compounds (VOCs), including tetrachloroethene (PCE [tetrachloroethylene, perchloroethylene]), which was formally used at the tenant space as a dry-cleaning solvent, through the concrete floor slab into the building.

A cold weather sampling event was conducted on March 25, 2022. The event included the collection of an 8-hour indoor ambient air sample from within the former Harbour Point dry cleaning facility (ambient air sample IA1-032522), and an 8-hour indoor ambient air sample from within the west-adjacent tenant space (ambient air sample IA2-032522), the collection of four sub-slab soil-vapor samples (SV1-0325222 through SV4-032522), and three outdoor air samples (OA1-032522, OA2-032522, and OA3-032522). A sample could not be collected from soil vapor point SV-5 due to Summa canister malfunction. The recorded temperature in Mukilteo, Washington on March 25, 2022, ranged from 43 to 55 degrees Fahrenheit.

Laboratory analysis was performed by PACE Analytical, an Ecology accredited analytical laboratory; each sample was analyzed for select volatile organic compounds (VOCs) by United States Environmental Protection Agency (EPA) Method TO-15. The air sample analysis included those VOCs associated with PCE, which includes degradation compounds, produced through the



de-chlorination of PCE: trichloroethene (trichloroethylene [TCE]), cis-1,2-dichloroethene (cis-1,2-dichloroethylene [cis-DCE]), trans-1,2-dichloroethene (trans-1,2-dichloroethylene [trans-DCE]), 1,1-dichloroethene (1,1-dichloroethylene [1,1-DCE]), and vinyl chloride.

Results from the cold weather sampling event indicated that the ambient air sample collected from inside the former Harbour Point Cleaners tenant space (air sample IA1-032522) and from the adjacent west tenant space (air sample IA2-032522) indicates ambient concentrations of TCE below the MTCA Method B Indoor Air Screening Level for TCE of $0.37 \mu\text{g}/\text{m}^3$ and concentrations of PCE below laboratory reporting limits.

Results of the sampling of sub-slab soil vapor probes SV-1 through SV-5 indicated that PCE was detected in SV-1 at a concentration in excess of the MTCA Method C Sub-slab Soil Gas Screening Level ($1,333 \mu\text{g}/\text{m}^3$). Results of the sampling also indicated that TCE was detected in SV-1 at a concentration in excess of the MTCA Method B Sub-slab Soil Gas Screening Level ($12.3 \mu\text{g}/\text{m}^3$), but below the MTCA Method C Sub-slab Soil Gas Screening Level ($66.7 \mu\text{g}/\text{m}^3$). No other PCE-related compounds were detected in any sub-slab vapor samples at a concentration in excess of the MTCA Method B or C Sub-slab Soil Gas Screening Level.

Historical system pilot testing, installation, and performance data, as well as indoor air cleanup and post system sampling data collected prior to April 2019 is summarized in the following reports:

- ATC, *Sub-Slab Depressurization Pilot Test Report Harbour Point Cleaners at Mukilteo Speedway Center 13619 Mukilteo Speedway Lynnwood, Washington 98037*, December 7, 2016.
- ATC, *Initial Operations and Maintenance Report Harbour Point Cleaners at Mukilteo Speedway Center 13619 Mukilteo Speedway Lynnwood, Washington 98037*, May 2, 2017.
- ATC, *Cleanup Action Report, Former Harbour Point Cleaners, Suite B6, Mukilteo Speedway Center 13619 Mukilteo Speedway, Lynnwood, Washington 98037*, October 15, 2018.
- ATC, *Cold Weather Sampling Event Report, January 2019, Former Harbour Point Cleaners, Suite B6, Mukilteo Speedway Center 13619 Mukilteo Speedway, Lynnwood, Washington 98037*, March 4, 2019.



2.0 COLD WEATHER VISIT SUMMARY

In order to comply with the Operations and Maintenance Plan in the Environmental Covenant for the Mukilteo Speedway Center - Harbour Point Cleaners, Atlas performed a cold weather sampling event on March 25, 2022. Weather conditions in Mukilteo, Washington included recorded temperatures of 43 to 55 degrees Fahrenheit, and barometric pressure of 29.6 inches. The sampling event included the following activities:

- Collected 8-hour indoor ambient air samples from within the former Harbour Point tenant space (location IA-1) and the adjacent-west tenant space (location IA-2). The two air samples were collected within 6-liter (L) laboratory certified Summa canisters equipped with flow regulators that allowed the canisters to remain open for sample collection over an approximate 8-hour period. Each sample was analyzed by PACE for VOCs by EPA Method TO-15.
- Collected three outdoor ambient air samples (locations OA-1, OA-2, and OA-3) in order to assess exterior sources of VOCs in ambient air within the dry-cleaning tenant space. The three air samples were collected within 6-L laboratory certified Summa canisters equipped with flow regulators that allowed the canisters to remain open for sample collection over an approximate 8-hour period. Each sample was analyzed by PACE for VOCs by EPA Method TO-15.
- Collected samples from sub-slab vapor points SV-1 through SV-4 within 6-L laboratory certified Summa canisters equipped with flow regulators that allowed the canisters to remain open for sample collection over an approximate 20-minute period. A sample could not be collected from soil vapor point SV-5 due to Summa canister malfunction. Prior to collection of each sample, sampling trains were purged using a dedicated purge summa canister connected via a manifold. The purge summa valve was opened and allowed to draw vacuum from the sampling train for approximately two minutes to ensure that all stagnant or ambient air from the sample train was evacuated. Following purging, the purge summa valve was closed prior to sample collection. Each sub-slab vapor point sample was analyzed by PACE for VOCs by EPA Method TO-15SIM.

Field notes from the cold weather sampling event are included with this report in **Appendix A**.



3.0 DATA SUMMARY AND EVALUATION

INDOOR AIR EVALUATION: Atlas assessed indoor ambient air quality by collecting 8-hour ambient air samples from within the former Harbour Point tenant space (location IA-1) and the adjacent-west tenant space (location IA-2). This was the third sampling event to take place since the SSD system operations ceased in June 2018, and the first since the Environmental Covenant with No Further Action determination was finalized. Indoor air sample locations are shown on **Figure 2**.

The MTCA regulations at WAC 173-340-750 provide Method B (unrestricted or residential) indoor air cleanup levels and Method C (industrial) air cleanup levels. Method B levels are typically utilized as default values for determining acceptable indoor air concentrations in an unrestricted land-use scenario (e.g., residential). The methodology utilized to derive Method B cleanup levels assumes typical residential exposure parameters and includes both child and adult exposures. Conversely, the methodology utilized to determine Method C cleanup levels utilizes typical commercial/industrial exposure parameters, only considers adult exposures, and uses a less conservative lifetime cancer risk threshold. In consideration of these differences and the commercial nature of the current and anticipated future land use associated with the site, the Method C cleanup levels are considered to be more appropriate than the Method B cleanup levels. Method B and C indoor air cleanup levels for select VOCs provide a relevant basis for comparing the indoor air sampling results to applicable health-based screening levels. Provided below are additional details regarding the measured concentrations of PCE and TCE in indoor and ambient air and comparison to Method B and Method C screening levels.

Indoor Air Samples

Atlas collected indoor air samples from Former Harbour Point Cleaners Tenant Space (IA-1) and from the adjacent Tenant Space B5 (IA-2). Indoor air sample results are summarized on **Table 1**, and the laboratory report is included in **Appendix B**.

With the exception of carbon tetrachloride, chloroform, and 1,4-dichlorobenzene in both indoor air samples, no VOCs were detected in indoor air at concentrations in excess of MTCA Method B Indoor Air Screening Levels. chloroform, and 1,4-dichlorobenzene in both indoor air samples, no VOCs were detected in indoor air at concentrations in excess of MTCA Method B Indoor Air Screening Levels. These compounds were not detected in any sub-slab vapor samples. Therefore, the presence of these constituents in indoor air do not appear to be related to a vapor intrusion source.

Former Harbour Point Cleaners Tenant Space (IA-1)

PCE was detected in the indoor air sample below the Method B Screening Level ($9.62 \mu\text{g}/\text{m}^3$) at a concentration of $0.229 \mu\text{g}/\text{m}^3$. TCE was not detected in the indoor air sample below the Method B Screening Level ($0.334 \mu\text{g}/\text{m}^3$).



Adjacent Tenant Space B5 (IA-2)

PCE was detected in the indoor air sample below the Method B Screening Level ($9.62 \mu\text{g}/\text{m}^3$) at a concentration of $0.348 \mu\text{g}/\text{m}^3$. TCE was not detected in the indoor air sample below the Method B Screening Level ($0.334 \mu\text{g}/\text{m}^3$).

Sub-Slab Vapor SV-1 through SV-5)

Atlas collected samples from sub-slab vapor points SV-1 through SV-4. A sample could not be collected from soil vapor point SV-5 due to a Summa canister malfunction. Sub-slab vapor point locations are shown on **Figure 2**.

PCE was detected in one of the four sub-slab vapor probes (SV-1 at $1,710 \mu\text{g}/\text{m}^3$) at a concentration in excess of the MTCA Method C Sub-slab Soil Gas Screening Level ($1,330 \mu\text{g}/\text{m}^3$). The PCE concentrations detected in sub-slab vapor probe SV-1 samples collected in 2018 and 2019 ranged from 718 to $1,160 \mu\text{g}/\text{m}^3$, in excess of the MTCA Method B Sub-slab Soil Gas Screening Level ($321 \mu\text{g}/\text{m}^3$).

TCE was also detected in the sample from sub-slab vapor probe SV-1 at a concentration of $20.20 \mu\text{g}/\text{m}^3$, in excess of the MTCA Method B Sub-slab Soil Gas Screening Level ($12.3 \mu\text{g}/\text{m}^3$). The samples collected in 2018 and 2019 ranged from 8.48 to $9.01 \mu\text{g}/\text{m}^3$ at concentrations below the MTCA Method B Sub-slab Soil Gas Screening Level.

No other PCE-related compounds were detected in the four sampled sub-slab vapor probes (SV-1 through SV-5) at concentrations in excess of the MTCA Method B Sub-slab Soil Gas Screening Levels. Sub-slab soil gas sample results are summarized on **Table 2**, and the laboratory report is included in **Appendix B**.

OUTDOOR AIR EVALUATION:

Atlas assessed outdoor ambient air quality by collecting 8-hour ambient air samples from outside of the former Harbour Point tenant space (locations OA-1, OA-2, and OA-3). Sample locations are shown on **Figure 2**. With the exception of carbon tetrachloride, no VOCs were detected in outdoor air at concentrations in excess of MTCA Method B Indoor Air Screening Levels. Outdoor air sample locations are shown on **Figure 3**, and the laboratory analytical results are summarized on **Table 1**. The laboratory report is included in **Appendix B**.



4.0 RECOMMENDATIONS

Atlas conducted cold weather ambient air and sub-slab vapor sampling at the former Harbour Point Dry Cleaners tenant space within the Mukilteo Speedway Center on March 25, 2022. The sampling was conducted in accordance with the reporting requirements of the O&M Plan in the Environmental Covenant for the Mukilteo Speedway Center - Harbour Point Cleaners. The O&M Plan states that a full set of sub-slab, indoor air and outdoor air sampling shall be conducted the first winter and reported (year 1). The results of the winter 2022 ambient air and sub-slab vapor sampling are not significantly greater than the 2018 and 2019 sample results. Therefore, Atlas recommends that the second round of sampling be conducted and reported in year 5.

TABLES

Table 1
Former Harbour Point Cleaners
13619 Mukilteo Speedway
Indoor and Outdoor Air and SSDS Effluent Sampling Results
Samples obtained on July 6, 2018 and January 10, 2019
Concentrations in micrograms per cubic meter (ug/m³)

Analyte	CAS #	MTCA Method B Cleanup Level ¹	MTCA Method C Cleanup Level ²	Outdoor Results								
				OA-1 07/06/18	OA-1 01/10/19	OA-1 03/25/22	OA-2 07/06/18	OA-2 01/10/19	OA-2 03/25/22	OA-3 07/06/18	OA-3 01/10/19	OA-3 03/25/22
				76	49	49	76	49	49	76	49	49
Average Temperature (°F)				76	49	49	76	49	49	76	49	49
Acetone	67-64-1	14,171	31,000	5.21	--	--	6.36	--	--	4.66	--	--
Allyl Chloride	107-05-1			<0.626	--	--	<0.626	--	--	<0.626	--	--
Benzene	71-43-2	13.7	3.21	<0.639	0.577	0.99	<0.639	0.869	0.904	<0.639	0.462	1.05
Benzyl Chloride	100-44-7			<1.04	--	--	<1.04	--	--	<1.04	--	--
Bromodichloromethane	75-27-4			<1.34	--	--	<1.34	--	--	<1.34	--	--
Bromoform	75-25-2			<6.21	--	--	<6.21	--	--	<6.21	--	--
Bromomethane	74-83-9			<0.776	--	--	<0.776	--	--	<0.776	--	--
1,3-Butadiene	106-99-0			<4.43	--	--	<4.43	--	--	<4.43	--	--
Carbon Disulfide	75-15-0			<0.622	--	--	<0.622	--	--	<0.622	--	--
Carbon Tetrachloride	56-23-5	0.417	4.17	<1.26	0.461	0.60	<1.26	0.438	0.577	<1.26	0.469	0.59
Chlorobenzene	108-90-7			<0.924	--	--	<0.924	--	--	<0.924	--	--
Chloroethane	75-00-3			<0.528	<0.106	<0.106	<0.528	<0.106	<0.106	<0.528	<0.106	<0.106
Chloroform	67-66-3	0.109	1.09	<0.973	<0.0973	<0.0973	<0.973	<0.0973	<0.0973	<0.973	<0.0973	<0.0973
Chloromethane	74-87-3	41.1	90	0.946	1.01	1.51	0.89	0.962	1.43	0.883	1.04	1.51
2-Chlorotoluene	95-49-8			<1.03	--	--	<1.03	--	--	<1.03	--	--
Cyclohexane	110-82-7			<0.689	--	--	<0.689	--	--	<0.689	--	--
Dibromochloromethane	124-48-1			<1.70	--	--	<1.70	--	--	<1.70	--	--
1,2-Dibromoethane	106-93-4			<1.54	<0.154	<0.154	<1.54	<0.154	<0.154	<1.54	<0.154	<0.154
1,2-Dichlorobenzene	95-50-1			<1.20	--	--	<1.20	--	--	<1.20	--	--
1,3-Dichlorobenzene	541-73-1			<1.20	--	--	<1.20	--	--	<1.20	--	--
1,4-Dichlorobenzene	106-46-7	0.227	2.27	<1.20	<0.120	<0.120	<1.20	<0.120	0.31	<1.20	<0.120	<0.120
1,2-Dichloroethane	107-06-2	0.0962	0.962	<0.810	0.0882	<0.0810	<0.810	0.0902	<0.0810	<0.810	0.0859	<0.0810
1,1-Dichloroethane	75-34-3			<0.802	<0.0802	<0.0802	<0.802	<0.0802	<0.0802	<0.802	<0.0802	<0.0802
1,1-Dichloroethene	75-35-4			<0.793	<0.0793	<0.0793	<0.793	<0.0793	<0.0793	<0.793	<0.0793	<0.0793
cis-1,2-Dichloroethene	156-59-2			<0.793	<0.0793	<0.0793	<0.793	<0.0793	<0.0793	<0.793	<0.0793	<0.0793
trans-1,2-Dichloroethene	156-60-5			<0.793	0.117	<0.0793	<0.793	<0.0793	<0.0793	<0.793	<0.0793	<0.0793
1,2-Dichloropropane	78-87-5			<0.924	<0.139	<0.0139	<0.924	<0.139	<0.0139	<0.924	<0.139	<0.0139
cis-1,3-Dichloropropene	10061-01-5			<0.908	<0.0908	<0.0908	<0.908	<0.0908	<0.0908	<0.908	<0.0908	<0.0908
trans-1,3-Dichloropropene	10061-02-6			<0.908	<0.136	<0.136	<0.908	<0.136	<0.136	<0.908	<0.136	<0.136
1,4-Dioxane	123-91-1			<0.721	--	--	<0.721	--	--	<0.721	--	--
Ethanol	64-17-5			4.83	--	--	11.5	--	--	7.77	--	--
Ethylbenzene	100-41-4	457	1,000	<0.867	0.297	0.585	<0.867	0.385	0.668	<0.867	0.208	0.559
4-Ethyltoluene	622-96-8			<0.982	--	--	<0.982	--	--	<0.982	--	--
Trichlorofluoromethane	75-69-4	320	700	1.31	--	--	1.25	--	--	1.32	--	--
Dichlorodifluoromethane	75-71-8	45.7	100	1.83	--	--	1.59	--	--	1.75	--	--
1,1,2-Trichlorotrifluoroethane	76-13-1			<1.53	--	--	<1.53	--	--	<1.53	--	--
1,2-Dichlorotetrafluoroethane	76-14-2			<1.40	--	--	<1.40	--	--	<1.40	--	--
Heptane	142-82-5			<0.818	--	--	<0.818	--	--	<0.818	--	--
Hexachloro-1,3-butadiene	87-68-3			<6.73	--	--	<6.73	--	--	<6.73	--	--
n-Hexane	110-54-3	320	700	<0.705	--	--	<0.705	--	--	0.832	--	--
Isopropylbenzene	98-82-8			<0.983	--	--	<0.983	--	--	<0.983	--	--
Methylene Chloride	75-09-2	250	600	0.948	--	--	0.948	--	--	1.49	--	--
Methyl Butyl Ketone	591-78-6			<5.11	--	--	<5.11	--	--	<5.11	--	--
2-Butanone (MEK)	78-93-3			<3.69	--	--	9.05	--	--	<3.69	--	--
4-Methyl-2-pentanone (MIBK)	108-10-1			<512	--	--	<512	--	--	<512	--	--
Methyl Methacrylate	80-62-6			<0.819	--	--	<0.819	--	--	<0.819	--	--
MTBE	1634-04-4			<0.721	--	--	<0.721	--	--	<0.721	--	--
Naphthalene	91-20-3			<3.30	--	--	<3.30	--	--	<3.30	--	--
2-Propanol	67-63-0			<3.07	--	--	11.8	--	--	<3.07	--	--
Propene	115-07-1			<0.689	--	--	<0.689	--	--	<0.689	--	--
Styrene	100-42-5			<0.851	--	--	<0.851	--	--	<0.851	--	--
1,1,2,2-Tetrachloroethane	79-34-5	0.0431	0.431	<1.37	<0.137	<0.137	<1.37	<0.137	<0.137	<1.37	<0.137	<0.137
Tetrachloroethylene	127-18-4	9.62	40.1	<1.36	<0.136	0.146	<1.36	<0.136	0.196	<1.36	<0.136	0.136
Tetrahydrofuran	109-99-9			<0.590	--	--	<0.590	--	--	<0.590	--	--
Toluene	108-88-3	2,289	5,000	3.36	--	--	1.35	--	--	2.53	--	--
1,2,4-Trichlorobenzene	120-82-1			<4.66	--	--	<4.66	--	--	<4.66	--	--
1,1,1-Trichloroethane	71-55-6	2,290	5,000	<1.09	<0.109	<0.109	<1.09	<0.109	<0.109	<1.09	<0.109	<0.109
1,1,2-Trichloroethane	79-00-5			<1.09	<0.163	<0.163	<1.09	<0.163	<0.163	<1.09	<0.163	<0.163
Trichloroethylene	79-01-6	0.0334	2.0	<1.07	<0.107	<0.107	<1.07	<0.107	<0.107	<1.07	1.59	<0.107
1,2,4-Trimethylbenzene	95-63-6	3.2	7.0	<0.982	--	--	<0.982	--	--	<0.982	--	--
1,3,5-Trimethylbenzene	108-67-8			<0.982	--	--	<0.982	--	--	<0.982	--	--
2,2,4-Trimethylpentane	540-84-1			<0.934	--	--	<0.934	--	--	<0.934	--	--
Vinyl Chloride	75-01-4	0.28	2.84	<0.511	<0.0511	<0.0511	<0.511	<0.0511	<0.0511	<0.511	<0.0511	<0.0511
Vinyl Bromide	593-60-2			<0.875	--	--	<0.875	--	--	<0.875	--	--
Vinyl Acetate	108-05-4	91.4	200	<0.704	<0.0704	<0.0704	<0.704	<0.0704	<0.0704	<0.704	0.0830	<0.0704
m&p-Xylene	1330-20-7			<1.73	--	--	<1.73	--	--	<1.73	--	--
o-Xylene	95-47-6			<0.867	--	--	<0.867	--	--	<0.867	--	--

Notes:
Samples analyzed for VOCs via EPA Method TO-15
ug/m³ = micrograms per cubic meter
MTCA - Washington State Department of Ecology Model Toxics Control Act
¹ = MTCA Method B Indoor Air Screening Level
² = MTCA Method C Indoor Air Screening Level
Bold denotes non-detect concentration at or above either MTCA Method B Indoor Air Cleanup Levels
Bold and shaded denotes concentration at or above either MTCA Method B Indoor Air Cleanup Levels
ND = Not detected at or above laboratory reporting limit
-- = Not Analyzed

Table 2

Summary of Soil Vapor Sample Analytical Results - Chlorinated Volatile Organic Compounds

Former Harbour Point Cleaners

13619 Mukilteo Speedway

Lynnwood, Washington

Sample ID	Sample Depth Interval (feet below ground surface)	Sample Date	Select Chlorinated Volatile Organic Compounds (cVOCs) ¹ in ug/m ³						Leak Detection Compounds	
			PCE	TCE	cis-DCE	trans-DCE	1,1-DCE	Vinyl Chloride	Helium in ppmv ²	% Oxygen ³
VE-1	0.5 (sub-slab)	1/29/2015	10,000	66.10	<0.793	<0.793	<0.793	<0.511	<254	7.41
VE-2	0.5 (sub-slab)	1/29/2015	4,740	8.42	<0.793	<0.793	<0.793	<0.511	57,600	8.00
VE-3	0.5 (sub-slab)	1/29/2015	3,230	5.12	<0.793	<0.793	<0.793	<0.511	<246	7.68
Slab-1	0.5 (sub-slab)	7/3/2015	1,950	7.73	<0.0793	<0.0238	<0.0357	<0.217	ND	--
Slab-2	0.5 (sub-slab)	7/3/2015	632	1.21	<0.0793	<0.0238	<0.0357	<0.217	ND	--
Slab-3	0.5 (sub-slab)	7/3/2015	523	0.907	<0.0793	<0.0238	<0.0357	<0.217	ND	--
Slab-4	0.5 (sub-slab)	7/3/2015	60.2	0.288	<0.0793	<0.0238	<0.0357	<0.217	ND	--
Slab-5	0.5 (sub-slab)	7/3/2015	48.1	<0.0914	<0.0793	<0.0238	<0.0357	<0.217	ND	--
SV-1	2" below slab	7/6/2018	1,160	8.48	<0.793	<0.793	<0.802	<0.511	ND	--
		1/10/2019	769	8.96	<0.793	<0.793	<0.793	<0.511	<0.100	--
	Dup-011019	1/10/2019	1,100	9.01	<0.793	<0.793	<0.793	<0.511	<0.100	--
		3/25/2022	1,710	20.20	0.951	<0.793	<0.793	<0.511	<0.100	--
SV-2	2" below slab	7/6/2018	108	<1.07	<0.793	<0.793	<0.802	<0.511	ND	--
		1/10/2019	99.5	<1.07	<0.793	<0.793	<0.793	<0.511	<0.100	--
		3/25/2022	232	<1.07	<0.793	<0.793	<0.793	<0.511	<0.100	--
SV-3	2" below slab	7/6/2018	100	16.1	<0.793	<0.793	<0.802	<0.511	ND	--
		1/10/2019	190	6.02	<0.793	<0.793	<0.793	<0.511	<0.100	--
		3/25/2022	290	1.96	<0.793	<0.793	<0.793	<0.511	<0.100	--
SV-4	2" below slab	7/6/2018	17.1	1.65	<0.793	<0.793	<0.802	<0.511	ND	--
		1/10/2019	14.3	<1.07	<0.793	<0.793	<0.793	<0.511	<0.100	--
		3/25/2022	29.8	<1.07	<0.793	<0.793	<0.793	<0.511	<0.100	--
SV-5	2" below slab	7/6/2018	4.04	<1.07	<0.793	<0.793	<0.802	<0.511	ND	--
		1/10/2019	5.32	<1.07	<0.793	<0.793	<0.793	<0.511	<0.100	--
		3/25/2022	Not Collected - Summa Canister Malfunction						--	--
2015 MTCA Method B Subslab Screening Level			321	12.3	NA	NA	3,050	9.3	NA	NA
2015 MTCA Method C Subslab Screening Level			1,330	66.7	NA	NA	6,670	93.3	NA	NA

Notes:

ug/m³ = micrograms per cubic meter

ppmv = parts per million by volume

PCE = Tetrachloroethene (Tetrachloroethylene, perchloroethylene)

TCE = Trichloroethene (Trichloroethylene)

cis-DCE = cis-1,2-Dichloroethene (cis-1,2-Dichloroethylene)

trans-DCE = trans-1,2-Dichloroethene (trans-1,2-Dichloroethylene)

1,1-DCE = 1,1-Dichloroethene (1,1-Dichloroethylene)

MTCA - Washington State Department of Ecology Model Toxics Control Act

Bold denotes concentration at or above MTCA Method B Subslab Soil Gas Screening Level

1 = Analytical results by EPA Method TO-15

2 = Analytical results by EPA Method 3C

3 = Analytical results by gas chromatography/thermal conductivity detector

All analytical results reported in micrograms per cubic meter (ug/m³)

A complete list of VOC data is provided in Appendix B.

NA = No applicable data

SSDS was shutdown on June 28, 2018, and sampling performed on July 6, 2018 and January 10, 2019 was while the SSDS was NOT operating

FIGURES

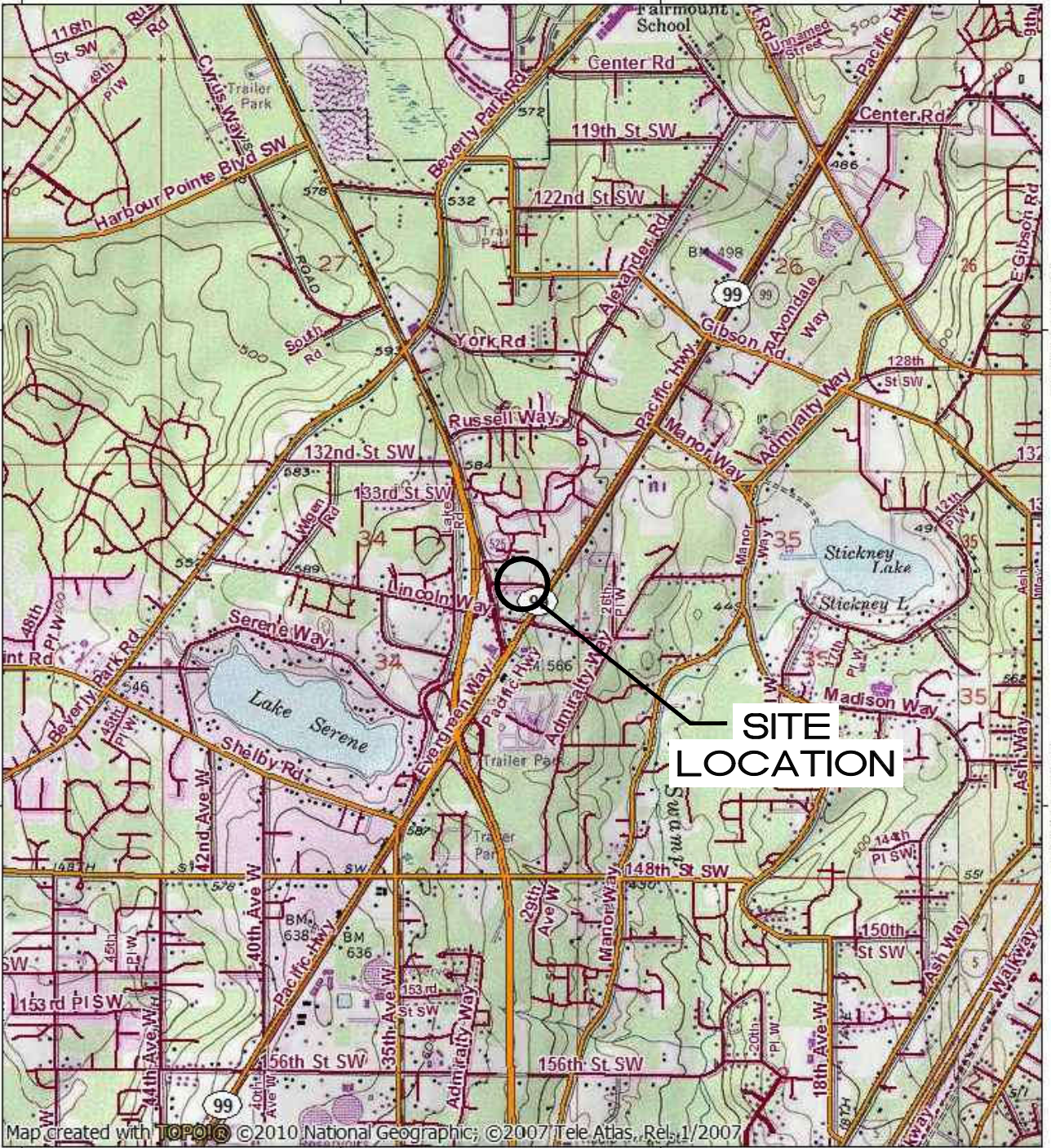
122.30000° W 122.28333° W 122.26667° W WGS84 122.25000° W

47.883333° N

47.883333° N

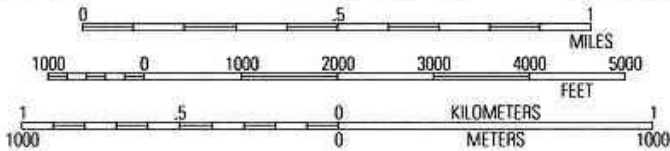
47.86667° N

47.86667° N



Map created with **TOPO!** ©2010 National Geographic; ©2007 Tele Atlas, Rel. 1/2007

122.30000° W 122.28333° W 122.26667° W WGS84 122.25000° W



SOURCE: USGS TOPO MAP, EDMONDS EAST, WA, 1981

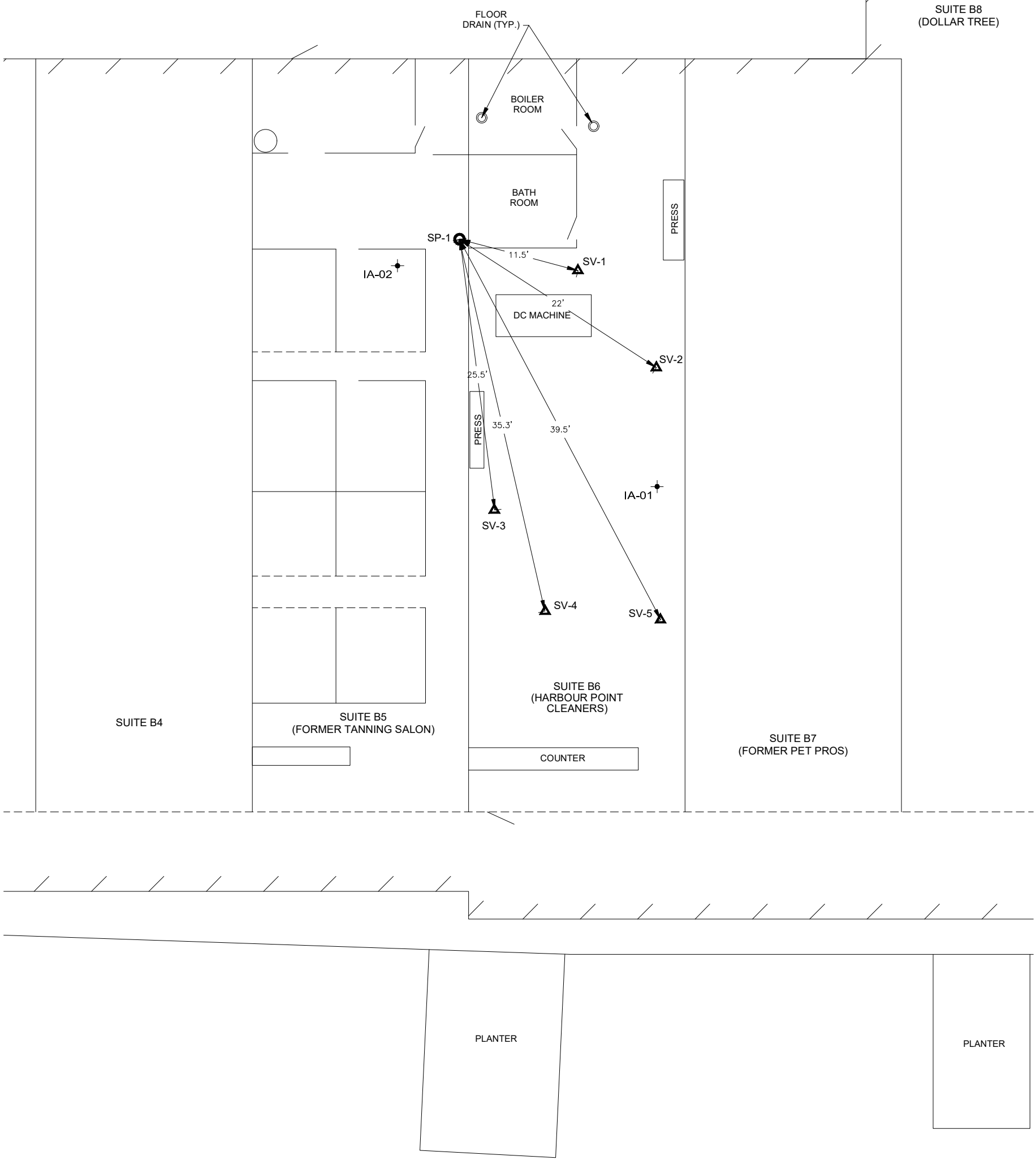
SITE LOCATION MAP

SPEEDWAY SHOPPING CENTER
 13632 HIGHWAY 99
 LYNWOOD, WA

PROJECT NUMBER: 282EM00166	DATE: 11/10/16	FIGURE
APPROVED BY: SP	DRAWN BY: BK	1

ATLAS 6347 Seaview Avenue NW
 Seattle, Washington 98107
 Ph: (206) 781-1449 *** Fax: (206) 781-1543

SUITE B8
(DOLLAR TREE)



LEGEND

- IA-01 + INDOOR AIR QUALITY SAMPLE
- SV-1 ▲ SUB-SLAB MONITORING POINT
- SP-1 ○ SUB-SLAB DEPRESSURIZATION SYSTEM RISER PIPE

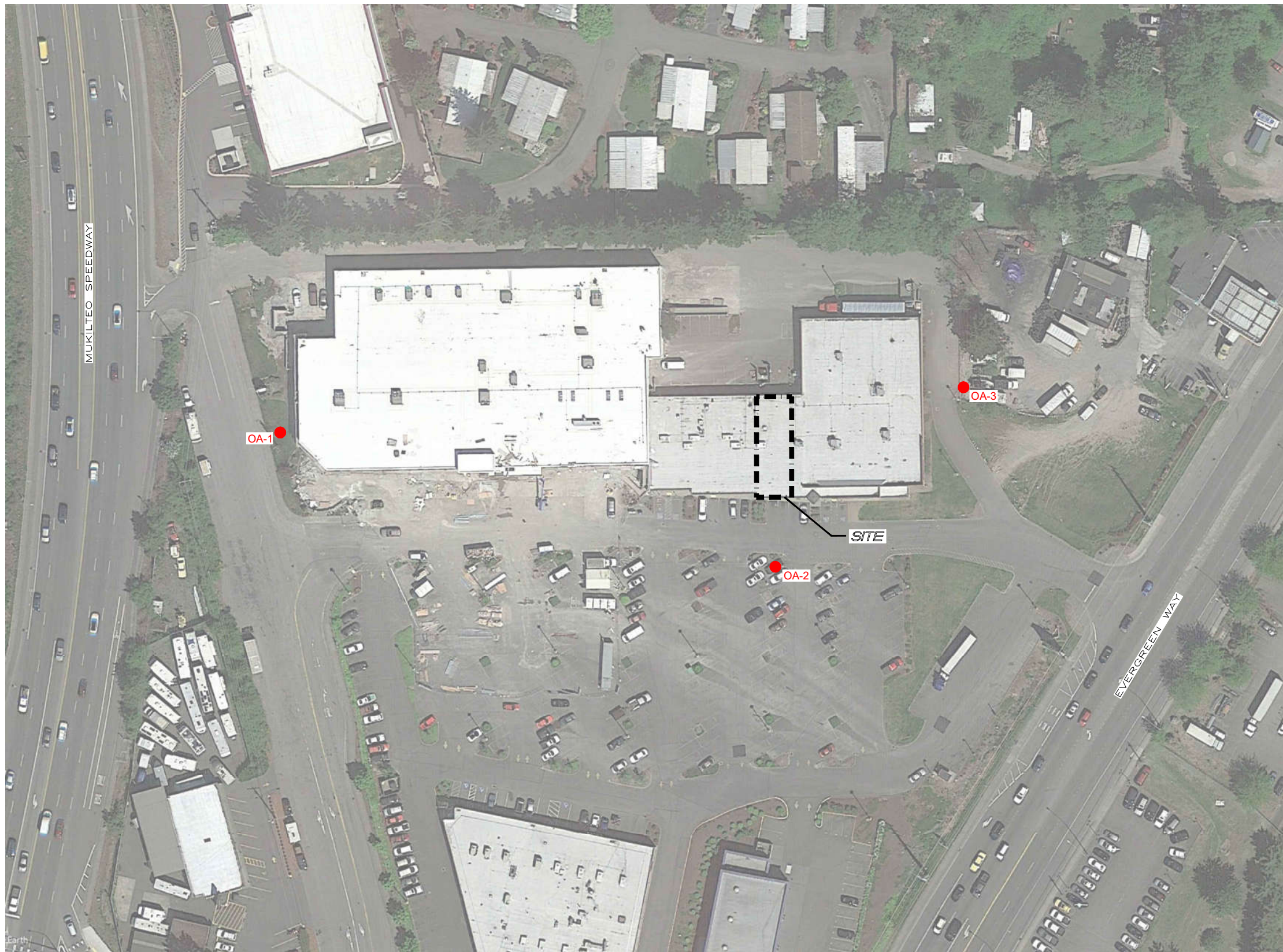


NOTE: SCALE AND LOCATIONS ARE APPROXIMATE

INDOOR AIR AND SUB-SLAB SAMPLE LOCATIONS

FORMER HARBOUR POINT CLEANERS
13619 MUKILTEO SPEEDWAY
LYNNWOOD, WA

PROJECT NUMBER: NPWR18001	DATE: 3/1/19	FIGURE
APPROVED BY: ES	DRAWN BY: BK	2
6347 Seaview Avenue NW Seattle, Washington 98107 Ph: (206) 781-1449 *** Fax: (206) 781-1543		



LEGEND

OA-1 ● OUTDOOR AIR SAMPLE



SOURCE: GOOGLE EARTH PRO, 5/13/18
 NOTE: SCALE AND LOCATIONS ARE APPROXIMATE

OUTDOOR AIR SAMPLE LOCATIONS

FORMER HARBOUR POINT CLEANERS
 13619 MUKILTEO SPEEDWAY
 LYNNWOOD, WA

PROJECT NUMBER: NPWR18001
 APPROVED BY: ES

DATE: 3/1/19
 DRAWN BY: BK

FIGURE
3

ATLAS
 6347 Seaview Avenue NW
 Seattle, Washington 98107
 Ph: (206) 781-1449 *** Fax: (206) 781-1543

APPENDIX I
FIELD NOTES FROM MARCH 2022 COLD WEATHER SAMPLING
EVENT



Field Report

FLD-100
Revision 1.0
6/1/2016

ATC Branch: Seattle - 10282		Date: 03-25-2022	Page 1 of
ATC Representative(s): B. Gonlet		Project: - Winter Sampling Event	
Role: Project Geologist		Location:	
Contact Information: (206) 781-1449		Project No:	Task No: --
Scope of Work:		Weather: Overcast	Temperature:
<input checked="" type="checkbox"/> Monitoring <input type="checkbox"/> Assessment <input type="checkbox"/> Remediation <input type="checkbox"/> Closure		Contractor: N/A	

Time:	Comments:
07:50	Arrive on-site, don level D PPE.
	Begin prepping outdoor Air canisters (8-hr samples)

Initial Hg	Canister SN	Regulator SN	Location	Time		Final Hg
				on	off	
-29	10415	11880/011300	1A1 (inside drycleaner)	08:24		-4
1064 -30	012215 9970	10883/010047	1A2 (inside milk tea)	09:53		
1664 -28	33612	11324/010217	0A1	08:24		-4
4346 -28.5	11044	11896/011303	0A2	08:24		-4
4164 -28.5	35935	102011	0A3	08:21		-5.30

- Mob ~~to~~ equip to drycleaner tenant space
- Soft demo activities have taken place in the tenant space (drywall removal, flooring (ceramic) removal, and bathroom finishes (toilet/sink/wall coverings))
- property manager indicates that former drycleaner tenant + adj (east) tenant will be occupied by restaurant in ~
- west adjacent property is operated by "Mustache Milk Tea"
- call E. Silver to notify of info provided by property manager

Equipment Used:		
Contractor Hours (per Person):	Staff / Technician Hours:	Mileage:
Copies To:	Project Manager:	
	Reviewed By:	



Field Report

FLD-100

Revision 1.0

6/1/2016

ATC Branch: Seattle - 10282		Date: 03-25-2022	Page 2 of
ATC Representative(s): B. Goulet		Project:	
Role: Geologist		Location:	
Contact Information: (206) 781-1449		Project No:	Task No: --
Scope of Work:		Weather: Overcast	Temperature: 51°
<input checked="" type="checkbox"/> Monitoring <input type="checkbox"/> Assessment <input type="checkbox"/> Remediation <input type="checkbox"/> Closure		Contractor: N/A	

Time:	Comments:
	Mob to SV-1 - prepare to begin SV sampling
	Perform shut-in test, pass!
	on 3/25/2022 He to shroud
	Purge lines w/ purge canister (~2" Hg)
	Introduce He to shroud, leak test, pass!
10:16	Begin sampling SV-1 (SV1-032522)
10:28	End sample SV-1
	Mob to SV-2 - perform shut-in test, pass!
	Purge lines w/ purge canister (~2" Hg)
	Introduce He to shroud, leak test, pass!
10:56	Begin sampling SV-2 (SV2-032522)
11:02	End sample SV-2
	Repeat sampling procedures for remaining SV points (shut-in, leak test, purge)
11:37	Begin sampling SV-3 (SV3-032522)
11:41	End sample SV-3
12:07	Begin sampling SV-4 (SV4-032522)
12:11	End sampling SV-4

Equipment Used:		
Contractor Hours (per Person):	Staff / Technician Hours:	Mileage:
Copies To:	Project Manager:	
	Reviewed By:	

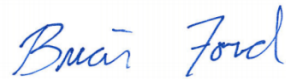
**APPENDIX II
LABORATORY REPORT**

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

ATC Group Services LLC - Seattle, WA

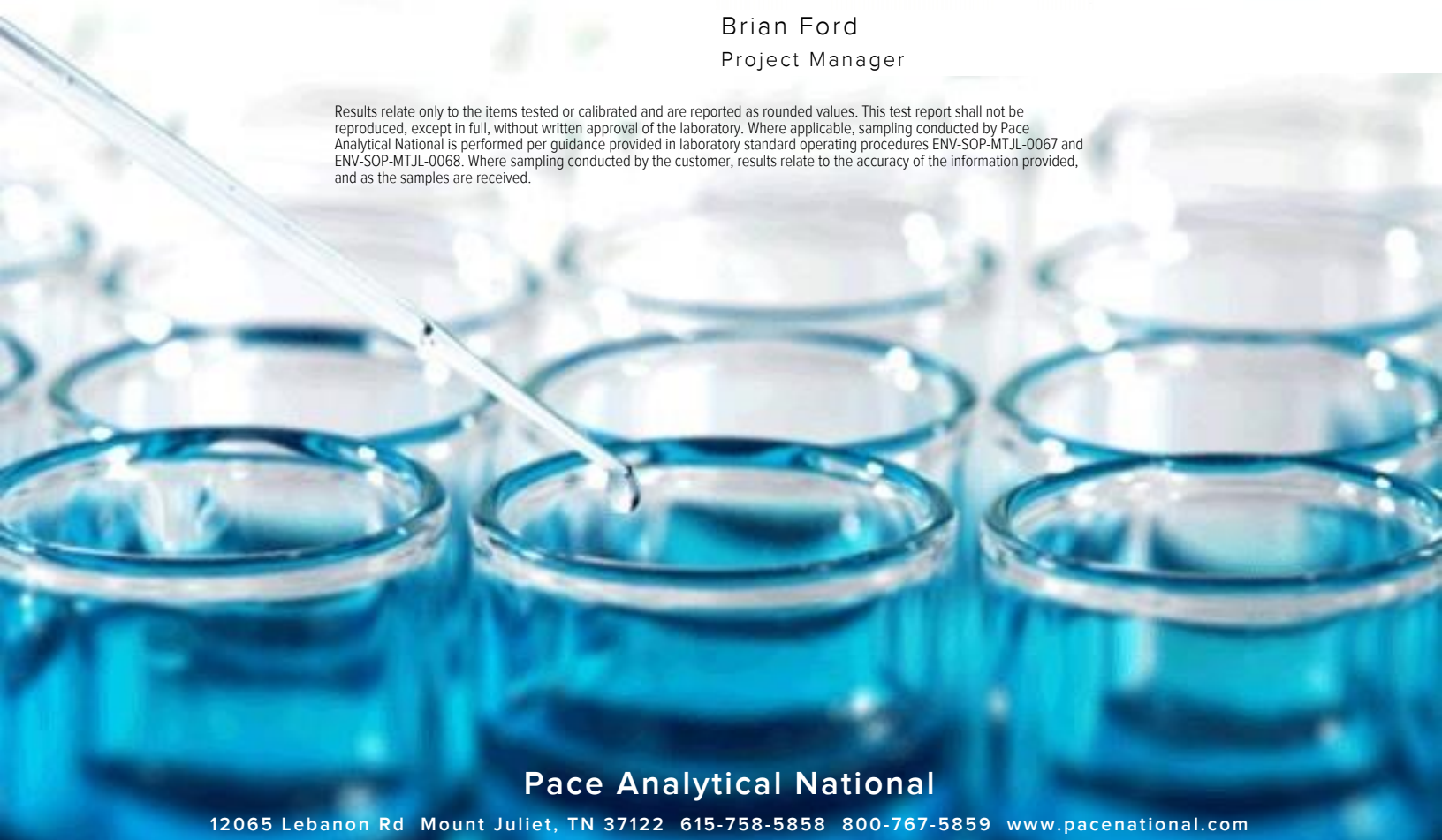
Sample Delivery Group: L1475870
Samples Received: 03/28/2022
Project Number:
Description: Harbour Pointe Cleaners Cold Weather Sampling Event
Report To: Brianne Goulet
6347 Seaview Avenue NW
Seattle, WA 98107

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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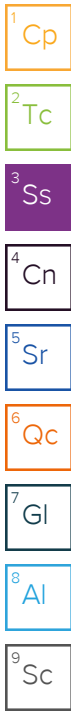
Cp: Cover Page	1	1 Cp
Tc: Table of Contents	2	2 Tc
Ss: Sample Summary	3	3 Ss
Cn: Case Narrative	5	4 Cn
Sr: Sample Results	6	5 Sr
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Al: Accreditations & Locations	29	
Sc: Sample Chain of Custody	30	

SAMPLE SUMMARY

IA2-032522 L1475870-01 Air

Collected by B. Goulet Collected date/time 03/25/22 09:53 Received date/time 03/28/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15-SIM	WG1839906	1	03/29/22 17:10	03/29/22 17:10	DAH	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15-SIM	WG1840847	1	03/30/22 16:36	03/30/22 16:36	DAH	Mt. Juliet, TN



SV1-032522 L1475870-02 Air

Collected by B. Goulet Collected date/time 03/25/22 10:16 Received date/time 03/28/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1841217	1	03/31/22 20:40	03/31/22 20:40	DAH	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1841846	10	04/01/22 14:32	04/01/22 14:32	DAH	Mt. Juliet, TN
Organic Compounds (GC) by Method ASTM 1946	WG1839885	1	03/29/22 11:38	03/29/22 11:38	DBB	Mt. Juliet, TN

SV2-032522 L1475870-03 Air

Collected by B. Goulet Collected date/time 03/25/22 10:56 Received date/time 03/28/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1841217	1	03/31/22 21:22	03/31/22 21:22	DAH	Mt. Juliet, TN
Organic Compounds (GC) by Method ASTM 1946	WG1839885	1	03/29/22 11:44	03/29/22 11:44	DBB	Mt. Juliet, TN

SV3-032522 L1475870-04 Air

Collected by B. Goulet Collected date/time 03/25/22 11:37 Received date/time 03/28/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1841217	1	03/31/22 22:04	03/31/22 22:04	DAH	Mt. Juliet, TN
Organic Compounds (GC) by Method ASTM 1946	WG1839885	1	03/29/22 11:47	03/29/22 11:47	DBB	Mt. Juliet, TN

SV4-032522 L1475870-05 Air

Collected by B. Goulet Collected date/time 03/25/22 12:07 Received date/time 03/28/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1841217	1	03/31/22 22:46	03/31/22 22:46	DAH	Mt. Juliet, TN
Organic Compounds (GC) by Method ASTM 1946	WG1839885	1	03/29/22 11:50	03/29/22 11:50	DBB	Mt. Juliet, TN

IA1-032522 L1475870-06 Air

Collected by B. Goulet Collected date/time 03/25/22 08:24 Received date/time 03/28/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15-SIM	WG1839906	1	03/29/22 17:48	03/29/22 17:48	DAH	Mt. Juliet, TN

OA1-032522 L1475870-07 Air

Collected by B. Goulet Collected date/time 03/25/22 08:24 Received date/time 03/28/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15-SIM	WG1839906	1	03/29/22 18:25	03/29/22 18:25	DAH	Mt. Juliet, TN

SAMPLE SUMMARY

OA2-032522 L1475870-08 Air

Collected by: B. Goulet
 Collected date/time: 03/25/22 08:24
 Received date/time: 03/28/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15-SIM	WG1839906	1	03/29/22 19:02	03/29/22 19:02	DAH	Mt. Juliet, TN

¹ Cp

² Tc

³ Ss

OA3-032522 L1475870-09 Air

Collected by: B. Goulet
 Collected date/time: 03/25/22 08:21
 Received date/time: 03/28/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15-SIM	WG1839906	1	03/29/22 19:40	03/29/22 19:40	DAH	Mt. Juliet, TN

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ 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

- 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-SIM

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Benzene	71-43-2	78.10	0.0200	0.0639	0.334	1.07		1	WG1839906
Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.114	0.718		1	WG1839906
Chloroethane	75-00-3	64.50	0.0400	0.106	ND	ND		1	WG1839906
Chloroform	67-66-3	119	0.0200	0.0973	1.95	9.49		1	WG1839906
Chloromethane	74-87-3	50.50	0.0300	0.0620	0.825	1.70		1	WG1839906
1,2-Dibromoethane	106-93-4	188	0.0200	0.154	ND	ND		1	WG1839906
1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	0.0641	0.385	C5 J4 V3	1	WG1840847
1,1-Dichloroethane	75-34-3	98	0.0200	0.0802	ND	ND		1	WG1839906
1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	ND	ND		1	WG1839906
1,1-Dichloroethene	75-35-4	96.90	0.0200	0.0793	ND	ND		1	WG1839906
cis-1,2-Dichloroethene	156-59-2	96.90	0.0200	0.0793	ND	ND		1	WG1839906
trans-1,2-Dichloroethene	156-60-5	96.90	0.0200	0.0793	ND	ND		1	WG1839906
1,2-Dichloropropane	78-87-5	113	0.0300	0.139	ND	ND		1	WG1839906
cis-1,3-Dichloropropene	10061-01-5	111	0.0200	0.0908	ND	ND		1	WG1839906
trans-1,3-Dichloropropene	10061-02-6	111	0.0300	0.136	ND	ND		1	WG1839906
Ethylbenzene	100-41-4	106	0.0300	0.130	0.207	0.897	V3	1	WG1840847
1,1,2,2-Tetrachloroethane	79-34-5	168	0.0200	0.137	ND	ND		1	WG1840847
Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.0513	0.348		1	WG1839906
1,1,1-Trichloroethane	71-55-6	133	0.0200	0.109	ND	ND		1	WG1839906
1,1,2-Trichloroethane	79-00-5	133	0.0300	0.163	ND	ND		1	WG1839906
Trichloroethylene	79-01-6	131	0.0200	0.107	ND	ND		1	WG1839906
Vinyl chloride	75-01-4	62.50	0.0200	0.0511	ND	ND		1	WG1839906
Vinyl acetate	108-05-4	86.10	0.0200	0.0704	ND	ND		1	WG1839906
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		119				WG1839906
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		111				WG1840847

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Sample Narrative:

L1475870-01 WG1840847: Previous run also had low IS/SURR recovery. Matrix effect.

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	3.63	8.63		1	WG1841217
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1841217
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1841217
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1841217
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1841217
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1841217
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1841217
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1841217
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1841217
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1841217
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1841217
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1841217
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1841217
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG1841217
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1841217
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1841217
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1841217
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1841217
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1841217
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1841217
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1841217
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1841217
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1841217
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1841217
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	0.240	0.951		1	WG1841217
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1841217
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1841217
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1841217
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1841217
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1841217
Ethanol	64-17-5	46.10	1.25	2.36	9.31	17.6		1	WG1841217
Ethylbenzene	100-41-4	106	0.200	0.867	0.331	1.44		1	WG1841217
4-Ethyltoluene	622-96-8	120	0.200	0.982	0.507	2.49		1	WG1841217
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.740	4.16		1	WG1841217
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	3.16	15.6		1	WG1841217
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1841217
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1841217
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1841217
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1841217
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1841217
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1841217
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1841217
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	62.8	257		1	WG1841217
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	2.72	8.02		1	WG1841217
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1841217
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1841217
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1841217
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1841217
2-Propanol	67-63-0	60.10	1.25	3.07	6.37	15.7		1	WG1841217
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1841217
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1841217
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1841217
Tetrachloroethylene	127-18-4	166	2.00	13.6	252	1710		10	WG1841846
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1841217
Toluene	108-88-3	92.10	0.500	1.88	1.76	6.63		1	WG1841217
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1841217

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	WG1841217
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1841217
Trichloroethylene	79-01-6	131	0.200	1.07	3.77	20.2		1	WG1841217
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.522	2.56		1	WG1841217
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1841217
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1841217
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1841217
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1841217
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1841217
m&p-Xylene	1330-20-7	106	0.400	1.73	1.44	6.24		1	WG1841217
o-Xylene	95-47-6	106	0.200	0.867	0.476	2.06		1	WG1841217
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		98.3				WG1841217
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		101				WG1841846

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Organic Compounds (GC) by Method ASTM 1946

Analyte	CAS #	Mol. Wt.	RDL %	Result %	Qualifier	Dilution	Batch
Helium	7440-59-7		0.100	ND		1	WG1839885

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	1.70	4.04		1	WG1841217
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1841217
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1841217
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1841217
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1841217
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1841217
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1841217
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1841217
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1841217
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1841217
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1841217
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1841217
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1841217
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG1841217
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1841217
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1841217
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1841217
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1841217
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1841217
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1841217
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1841217
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1841217
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1841217
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1841217
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1841217
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1841217
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1841217
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1841217
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1841217
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1841217
Ethanol	64-17-5	46.10	1.25	2.36	5.77	10.9		1	WG1841217
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1841217
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1841217
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.962	5.41		1	WG1841217
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	4.63	22.9		1	WG1841217
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1841217
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1841217
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1841217
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1841217
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1841217
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1841217
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1841217
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1841217
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1841217
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1841217
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1841217
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1841217
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1841217
2-Propanol	67-63-0	60.10	1.25	3.07	2.49	6.12		1	WG1841217
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1841217
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1841217
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1841217
Tetrachloroethylene	127-18-4	166	0.200	1.36	34.1	232		1	WG1841217
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1841217
Toluene	108-88-3	92.10	0.500	1.88	0.751	2.83		1	WG1841217
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1841217

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	0.846	4.60		1	WG1841217
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1841217
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1841217
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1841217
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1841217
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1841217
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1841217
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1841217
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1841217
m&p-Xylene	1330-20-7	106	0.400	1.73	0.447	1.94		1	WG1841217
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1841217
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		97.5				WG1841217

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

Organic Compounds (GC) by Method ASTM 1946

Analyte	CAS #	Mol. Wt.	RDL %	Result %	Qualifier	Dilution	Batch
Helium	7440-59-7		0.100	ND		1	WG1839885

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	3.02	7.18		1	WG1841217
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1841217
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1841217
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1841217
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1841217
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1841217
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1841217
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1841217
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1841217
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1841217
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1841217
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1841217
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1841217
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG1841217
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1841217
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1841217
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1841217
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1841217
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1841217
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1841217
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1841217
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1841217
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1841217
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1841217
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1841217
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1841217
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1841217
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1841217
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1841217
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1841217
Ethanol	64-17-5	46.10	1.25	2.36	11.6	21.9		1	WG1841217
Ethylbenzene	100-41-4	106	0.200	0.867	0.249	1.08		1	WG1841217
4-Ethyltoluene	622-96-8	120	0.200	0.982	0.350	1.72		1	WG1841217
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.537	3.02		1	WG1841217
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	1.62	8.01		1	WG1841217
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1841217
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1841217
Heptane	142-82-5	100	0.200	0.818	0.268	1.10		1	WG1841217
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1841217
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1841217
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1841217
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.236	0.819		1	WG1841217
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1841217
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1841217
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1841217
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1841217
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1841217
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1841217
2-Propanol	67-63-0	60.10	1.25	3.07	4.58	11.3		1	WG1841217
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1841217
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1841217
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1841217
Tetrachloroethylene	127-18-4	166	0.200	1.36	42.7	290		1	WG1841217
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1841217
Toluene	108-88-3	92.10	0.500	1.88	1.21	4.56		1	WG1841217
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1841217

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	WG1841217
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1841217
Trichloroethylene	79-01-6	131	0.200	1.07	0.365	1.96		1	WG1841217
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.437	2.14		1	WG1841217
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1841217
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1841217
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1841217
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1841217
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1841217
m&p-Xylene	1330-20-7	106	0.400	1.73	1.06	4.60		1	WG1841217
o-Xylene	95-47-6	106	0.200	0.867	0.365	1.58		1	WG1841217
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		99.3				WG1841217

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

Organic Compounds (GC) by Method ASTM 1946

Analyte	CAS #	Mol. Wt.	RDL %	Result %	Qualifier	Dilution	Batch
Helium	7440-59-7		0.100	ND		1	WG1839885

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	2.41	5.73		1	WG1841217
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1841217
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1841217
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1841217
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1841217
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1841217
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1841217
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1841217
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1841217
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1841217
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1841217
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1841217
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1841217
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG1841217
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1841217
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1841217
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1841217
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1841217
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1841217
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1841217
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1841217
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1841217
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1841217
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1841217
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1841217
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1841217
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1841217
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1841217
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1841217
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1841217
Ethanol	64-17-5	46.10	1.25	2.36	7.18	13.5		1	WG1841217
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1841217
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1841217
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.537	3.02		1	WG1841217
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	2.00	9.89		1	WG1841217
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1841217
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1841217
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1841217
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1841217
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1841217
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1841217
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1841217
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1841217
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1841217
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1841217
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1841217
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1841217
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1841217
2-Propanol	67-63-0	60.10	1.25	3.07	1.70	4.18		1	WG1841217
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1841217
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1841217
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1841217
Tetrachloroethylene	127-18-4	166	0.200	1.36	4.39	29.8		1	WG1841217
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1841217
Toluene	108-88-3	92.10	0.500	1.88	0.616	2.32		1	WG1841217
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1841217

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	WG1841217
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1841217
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1841217
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.212	1.04		1	WG1841217
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1841217
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1841217
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1841217
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1841217
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1841217
m&p-Xylene	1330-20-7	106	0.400	1.73	0.562	2.44		1	WG1841217
o-Xylene	95-47-6	106	0.200	0.867	0.201	0.871		1	WG1841217
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		96.9				WG1841217

Organic Compounds (GC) by Method ASTM 1946

Analyte	CAS #	Mol. Wt.	RDL %	Result %	Qualifier	Dilution	Batch
Helium	7440-59-7		0.100	ND		1	WG1839885

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-SIM

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Benzene	71-43-2	78.10	0.0200	0.0639	0.364	1.16		1	WG1839906
Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0984	0.620		1	WG1839906
Chloroethane	75-00-3	64.50	0.0400	0.106	ND	ND		1	WG1839906
Chloroform	67-66-3	119	0.0200	0.0973	0.192	0.934		1	WG1839906
Chloromethane	74-87-3	50.50	0.0300	0.0620	0.781	1.61		1	WG1839906
1,2-Dibromoethane	106-93-4	188	0.0200	0.154	ND	ND		1	WG1839906
1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	0.352	2.12		1	WG1839906
1,1-Dichloroethane	75-34-3	98	0.0200	0.0802	ND	ND		1	WG1839906
1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	ND	ND		1	WG1839906
1,1-Dichloroethene	75-35-4	96.90	0.0200	0.0793	ND	ND		1	WG1839906
cis-1,2-Dichloroethene	156-59-2	96.90	0.0200	0.0793	ND	ND		1	WG1839906
trans-1,2-Dichloroethene	156-60-5	96.90	0.0200	0.0793	ND	ND		1	WG1839906
1,2-Dichloropropane	78-87-5	113	0.0300	0.139	ND	ND		1	WG1839906
cis-1,3-Dichloropropene	10061-01-5	111	0.0200	0.0908	ND	ND		1	WG1839906
trans-1,3-Dichloropropene	10061-02-6	111	0.0300	0.136	ND	ND		1	WG1839906
Ethylbenzene	100-41-4	106	0.0300	0.130	0.411	1.78		1	WG1839906
1,1,2,2-Tetrachloroethane	79-34-5	168	0.0200	0.137	ND	ND		1	WG1839906
Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.0338	0.229		1	WG1839906
1,1,1-Trichloroethane	71-55-6	133	0.0200	0.109	ND	ND		1	WG1839906
1,1,2-Trichloroethane	79-00-5	133	0.0300	0.163	ND	ND		1	WG1839906
Trichloroethylene	79-01-6	131	0.0200	0.107	ND	ND		1	WG1839906
Vinyl chloride	75-01-4	62.50	0.0200	0.0511	ND	ND		1	WG1839906
Vinyl acetate	108-05-4	86.10	0.0200	0.0704	ND	ND		1	WG1839906
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		113				WG1839906

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-SIM

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Benzene	71-43-2	78.10	0.0200	0.0639	0.310	0.990		1	WG1839906
Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0952	0.600		1	WG1839906
Chloroethane	75-00-3	64.50	0.0400	0.106	ND	ND		1	WG1839906
Chloroform	67-66-3	119	0.0200	0.0973	ND	ND		1	WG1839906
Chloromethane	74-87-3	50.50	0.0300	0.0620	0.729	1.51		1	WG1839906
1,2-Dibromoethane	106-93-4	188	0.0200	0.154	ND	ND		1	WG1839906
1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	ND	ND		1	WG1839906
1,1-Dichloroethane	75-34-3	98	0.0200	0.0802	ND	ND		1	WG1839906
1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	ND	ND		1	WG1839906
1,1-Dichloroethene	75-35-4	96.90	0.0200	0.0793	ND	ND		1	WG1839906
cis-1,2-Dichloroethene	156-59-2	96.90	0.0200	0.0793	ND	ND		1	WG1839906
trans-1,2-Dichloroethene	156-60-5	96.90	0.0200	0.0793	ND	ND		1	WG1839906
1,2-Dichloropropane	78-87-5	113	0.0300	0.139	ND	ND		1	WG1839906
cis-1,3-Dichloropropene	10061-01-5	111	0.0200	0.0908	ND	ND		1	WG1839906
trans-1,3-Dichloropropene	10061-02-6	111	0.0300	0.136	ND	ND		1	WG1839906
Ethylbenzene	100-41-4	106	0.0300	0.130	0.135	0.585		1	WG1839906
1,1,2,2-Tetrachloroethane	79-34-5	168	0.0200	0.137	ND	ND		1	WG1839906
Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.0215	0.146		1	WG1839906
1,1,1-Trichloroethane	71-55-6	133	0.0200	0.109	ND	ND		1	WG1839906
1,1,2-Trichloroethane	79-00-5	133	0.0300	0.163	ND	ND		1	WG1839906
Trichloroethylene	79-01-6	131	0.0200	0.107	ND	ND		1	WG1839906
Vinyl chloride	75-01-4	62.50	0.0200	0.0511	ND	ND		1	WG1839906
Vinyl acetate	108-05-4	86.10	0.0200	0.0704	ND	ND		1	WG1839906
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		109				WG1839906

- 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-SIM

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Benzene	71-43-2	78.10	0.0200	0.0639	0.283	0.904		1	WG1839906
Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0916	0.577		1	WG1839906
Chloroethane	75-00-3	64.50	0.0400	0.106	ND	ND		1	WG1839906
Chloroform	67-66-3	119	0.0200	0.0973	ND	ND		1	WG1839906
Chloromethane	74-87-3	50.50	0.0300	0.0620	0.691	1.43		1	WG1839906
1,2-Dibromoethane	106-93-4	188	0.0200	0.154	ND	ND		1	WG1839906
1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	0.0515	0.310		1	WG1839906
1,1-Dichloroethane	75-34-3	98	0.0200	0.0802	ND	ND		1	WG1839906
1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	ND	ND		1	WG1839906
1,1-Dichloroethene	75-35-4	96.90	0.0200	0.0793	ND	ND		1	WG1839906
cis-1,2-Dichloroethene	156-59-2	96.90	0.0200	0.0793	ND	ND		1	WG1839906
trans-1,2-Dichloroethene	156-60-5	96.90	0.0200	0.0793	ND	ND		1	WG1839906
1,2-Dichloropropane	78-87-5	113	0.0300	0.139	ND	ND		1	WG1839906
cis-1,3-Dichloropropene	10061-01-5	111	0.0200	0.0908	ND	ND		1	WG1839906
trans-1,3-Dichloropropene	10061-02-6	111	0.0300	0.136	ND	ND		1	WG1839906
Ethylbenzene	100-41-4	106	0.0300	0.130	0.154	0.668		1	WG1839906
1,1,2,2-Tetrachloroethane	79-34-5	168	0.0200	0.137	ND	ND		1	WG1839906
Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.0289	0.196		1	WG1839906
1,1,1-Trichloroethane	71-55-6	133	0.0200	0.109	ND	ND		1	WG1839906
1,1,2-Trichloroethane	79-00-5	133	0.0300	0.163	ND	ND		1	WG1839906
Trichloroethylene	79-01-6	131	0.0200	0.107	ND	ND		1	WG1839906
Vinyl chloride	75-01-4	62.50	0.0200	0.0511	ND	ND		1	WG1839906
Vinyl acetate	108-05-4	86.10	0.0200	0.0704	ND	ND		1	WG1839906
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		106				WG1839906

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-SIM

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Benzene	71-43-2	78.10	0.0200	0.0639	0.329	1.05		1	WG1839906
Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0937	0.590		1	WG1839906
Chloroethane	75-00-3	64.50	0.0400	0.106	ND	ND		1	WG1839906
Chloroform	67-66-3	119	0.0200	0.0973	ND	ND		1	WG1839906
Chloromethane	74-87-3	50.50	0.0300	0.0620	0.730	1.51		1	WG1839906
1,2-Dibromoethane	106-93-4	188	0.0200	0.154	ND	ND		1	WG1839906
1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	ND	ND		1	WG1839906
1,1-Dichloroethane	75-34-3	98	0.0200	0.0802	ND	ND		1	WG1839906
1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	ND	ND		1	WG1839906
1,1-Dichloroethene	75-35-4	96.90	0.0200	0.0793	ND	ND		1	WG1839906
cis-1,2-Dichloroethene	156-59-2	96.90	0.0200	0.0793	ND	ND		1	WG1839906
trans-1,2-Dichloroethene	156-60-5	96.90	0.0200	0.0793	ND	ND		1	WG1839906
1,2-Dichloropropane	78-87-5	113	0.0300	0.139	ND	ND		1	WG1839906
cis-1,3-Dichloropropene	10061-01-5	111	0.0200	0.0908	ND	ND		1	WG1839906
trans-1,3-Dichloropropene	10061-02-6	111	0.0300	0.136	ND	ND		1	WG1839906
Ethylbenzene	100-41-4	106	0.0300	0.130	0.129	0.559		1	WG1839906
1,1,2,2-Tetrachloroethane	79-34-5	168	0.0200	0.137	ND	ND		1	WG1839906
Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.0200	0.136		1	WG1839906
1,1,1-Trichloroethane	71-55-6	133	0.0200	0.109	ND	ND		1	WG1839906
1,1,2-Trichloroethane	79-00-5	133	0.0300	0.163	ND	ND		1	WG1839906
Trichloroethylene	79-01-6	131	0.0200	0.107	ND	ND		1	WG1839906
Vinyl chloride	75-01-4	62.50	0.0200	0.0511	ND	ND		1	WG1839906
Vinyl acetate	108-05-4	86.10	0.0200	0.0704	ND	ND		1	WG1839906
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		108				WG1839906

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3776472-3 03/31/22 10:11

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	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

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3776472-3 03/31/22 10:11

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	0.274	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	97.3			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) R3776472-1 03/31/22 08:46 • (LCSD) R3776472-2 03/31/22 09:29

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	4.30	4.18	115	111	70.0-130			2.83	25
Allyl Chloride	3.75	4.42	3.73	118	99.5	70.0-130			16.9	25
Benzene	3.75	4.13	4.06	110	108	70.0-130			1.71	25
Benzyl Chloride	3.75	4.34	4.16	116	111	70.0-152			4.24	25
Bromodichloromethane	3.75	4.24	4.15	113	111	70.0-130			2.15	25

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

(LCS) R3776472-1 03/31/22 08:46 • (LCSD) R3776472-2 03/31/22 09:29

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	4.22	4.12	113	110	70.0-130			2.40	25
Bromomethane	3.75	4.41	4.18	118	111	70.0-130			5.36	25
1,3-Butadiene	3.75	4.49	4.35	120	116	70.0-130			3.17	25
Carbon disulfide	3.75	4.42	3.85	118	103	70.0-130			13.8	25
Carbon tetrachloride	3.75	4.07	4.03	109	107	70.0-130			0.988	25
Chlorobenzene	3.75	4.12	4.01	110	107	70.0-130			2.71	25
Chloroethane	3.75	4.32	4.48	115	119	70.0-130			3.64	25
Chloroform	3.75	4.22	4.09	113	109	70.0-130			3.13	25
Chloromethane	3.75	4.28	4.12	114	110	70.0-130			3.81	25
2-Chlorotoluene	3.75	4.22	4.10	113	109	70.0-130			2.88	25
Cyclohexane	3.75	4.14	4.11	110	110	70.0-130			0.727	25
Dibromochloromethane	3.75	4.24	4.08	113	109	70.0-130			3.85	25
1,2-Dibromoethane	3.75	4.20	4.13	112	110	70.0-130			1.68	25
1,2-Dichlorobenzene	3.75	4.07	4.03	109	107	70.0-130			0.988	25
1,3-Dichlorobenzene	3.75	4.22	3.97	113	106	70.0-130			6.11	25
1,4-Dichlorobenzene	3.75	4.11	3.98	110	106	70.0-130			3.21	25
1,2-Dichloroethane	3.75	4.19	4.18	112	111	70.0-130			0.239	25
1,1-Dichloroethane	3.75	4.27	4.18	114	111	70.0-130			2.13	25
1,1-Dichloroethene	3.75	4.28	4.15	114	111	70.0-130			3.08	25
cis-1,2-Dichloroethene	3.75	4.36	4.17	116	111	70.0-130			4.45	25
trans-1,2-Dichloroethene	3.75	4.30	4.16	115	111	70.0-130			3.31	25
1,2-Dichloropropane	3.75	4.25	4.14	113	110	70.0-130			2.62	25
cis-1,3-Dichloropropene	3.75	4.20	4.18	112	111	70.0-130			0.477	25
trans-1,3-Dichloropropene	3.75	4.25	4.19	113	112	70.0-130			1.42	25
1,4-Dioxane	3.75	4.27	3.90	114	104	70.0-140			9.06	25
Ethanol	3.75	4.18	3.95	111	105	55.0-148			5.66	25
Ethylbenzene	3.75	4.16	4.09	111	109	70.0-130			1.70	25
4-Ethyltoluene	3.75	4.17	4.08	111	109	70.0-130			2.18	25
Trichlorofluoromethane	3.75	4.08	4.04	109	108	70.0-130			0.985	25
Dichlorodifluoromethane	3.75	4.09	3.95	109	105	64.0-139			3.48	25
1,1,2-Trichlorotrifluoroethane	3.75	4.14	4.01	110	107	70.0-130			3.19	25
1,2-Dichlorotetrafluoroethane	3.75	4.36	4.29	116	114	70.0-130			1.62	25
Heptane	3.75	3.95	3.88	105	103	70.0-130			1.79	25
Hexachloro-1,3-butadiene	3.75	4.07	4.06	109	108	70.0-151			0.246	25
n-Hexane	3.75	4.25	4.25	113	113	70.0-130			0.000	25
Isopropylbenzene	3.75	4.15	4.05	111	108	70.0-130			2.44	25
Methylene Chloride	3.75	4.28	4.20	114	112	70.0-130			1.89	25
Methyl Butyl Ketone	3.75	4.43	4.42	118	118	70.0-149			0.226	25
Methyl Ethyl Ketone	3.75	4.43	4.16	118	111	70.0-130			6.29	25
4-Methyl-2-pentanone (MIBK)	3.75	4.33	4.27	115	114	70.0-139			1.40	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) R3776472-1 03/31/22 08:46 • (LCSD) R3776472-2 03/31/22 09:29

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	4.24	4.25	113	113	70.0-130			0.236	25
MTBE	3.75	4.23	4.09	113	109	70.0-130			3.37	25
Naphthalene	3.75	4.29	4.17	114	111	70.0-159			2.84	25
2-Propanol	3.75	4.31	4.07	115	109	70.0-139			5.73	25
Propene	3.75	4.31	4.29	115	114	64.0-144			0.465	25
Styrene	3.75	4.29	4.12	114	110	70.0-130			4.04	25
1,1,2,2-Tetrachloroethane	3.75	4.22	4.10	113	109	70.0-130			2.88	25
Tetrachloroethylene	3.75	4.08	3.94	109	105	70.0-130			3.49	25
Tetrahydrofuran	3.75	4.51	4.35	120	116	70.0-137			3.61	25
Toluene	3.75	4.19	4.14	112	110	70.0-130			1.20	25
1,2,4-Trichlorobenzene	3.75	4.17	4.22	111	113	70.0-160			1.19	25
1,1,1-Trichloroethane	3.75	4.20	4.02	112	107	70.0-130			4.38	25
1,1,2-Trichloroethane	3.75	4.06	4.03	108	107	70.0-130			0.742	25
Trichloroethylene	3.75	4.09	4.10	109	109	70.0-130			0.244	25
1,2,4-Trimethylbenzene	3.75	4.28	4.27	114	114	70.0-130			0.234	25
1,3,5-Trimethylbenzene	3.75	4.25	4.21	113	112	70.0-130			0.946	25
2,2,4-Trimethylpentane	3.75	4.32	4.21	115	112	70.0-130			2.58	25
Vinyl chloride	3.75	4.42	4.18	118	111	70.0-130			5.58	25
Vinyl Bromide	3.75	3.94	3.86	105	103	70.0-130			2.05	25
Vinyl acetate	3.75	4.33	3.98	115	106	70.0-130			8.42	25
m&p-Xylene	7.50	8.33	8.29	111	111	70.0-130			0.481	25
o-Xylene	3.75	4.15	4.14	111	110	70.0-130			0.241	25
<i>(S) 1,4-Bromofluorobenzene</i>				99.1	98.9	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) R3776591-2 04/01/22 10:18

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
Tetrachloroethylene	U		0.0814	0.200
(S) 1,4-Bromofluorobenzene	95.8			60.0-140

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

(LCS) R3776591-1 04/01/22 09:36 • (LCSD) R3776591-3 04/01/22 11:17

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	4.20	4.20	112	112	70.0-130			0.000	25
(S) 1,4-Bromofluorobenzene				97.7	96.8	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) R3775777-3 03/29/22 10:47

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Benzene	0.0138	U	0.0112	0.0200
Carbon tetrachloride	U		0.00995	0.0200
Chloroethane	U		0.00944	0.0400
Chloroform	U		0.00729	0.0200
Chloromethane	U		0.0162	0.0300
1,2-Dibromoethane	U		0.00779	0.0200
1,4-Dichlorobenzene	U		0.00691	0.0200
1,1-Dichloroethane	U		0.00893	0.0200
1,2-Dichloroethane	U		0.000471	0.0200
1,1-Dichloroethene	U		0.00921	0.0200
cis-1,2-Dichloroethene	U		0.0142	0.0200
trans-1,2-Dichloroethene	U		0.00499	0.0200
1,2-Dichloropropane	U		0.00885	0.0300
cis-1,3-Dichloropropene	U		0.00735	0.0200
trans-1,3-Dichloropropene	U		0.00711	0.0300
Ethylbenzene	U		0.0126	0.0300
1,1,2,2-Tetrachloroethane	U		0.00874	0.0200
Tetrachloroethylene	U		0.0127	0.0200
1,1,1-Trichloroethane	U		0.00649	0.0200
1,1,2-Trichloroethane	U		0.00583	0.0300
Trichloroethylene	U		0.00746	0.0200
Vinyl chloride	U		0.00765	0.0200
Vinyl acetate	U		0.0111	0.0200
(S) 1,4-Bromofluorobenzene	97.8			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) R3775777-1 03/29/22 09:31 • (LCSD) R3775777-2 03/29/22 10:10

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.500	0.517	0.515	103	103	70.0-130			0.388	25
Carbon tetrachloride	0.500	0.542	0.544	108	109	70.0-130			0.368	25
Chloroethane	0.500	0.517	0.509	103	102	70.0-130			1.56	25
Chloroform	0.500	0.546	0.542	109	108	70.0-130			0.735	25
Chloromethane	0.500	0.570	0.564	114	113	70.0-130			1.06	25
1,2-Dibromoethane	0.500	0.533	0.530	107	106	70.0-130			0.564	25
1,4-Dichlorobenzene	0.500	0.651	0.647	130	129	70.0-130			0.616	25
1,1-Dichloroethane	0.500	0.564	0.560	113	112	70.0-130			0.712	25
1,2-Dichloroethane	0.500	0.537	0.535	107	107	70.0-130			0.373	25

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

(LCS) R3775777-1 03/29/22 09:31 • (LCSD) R3775777-2 03/29/22 10:10

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 %
1,1-Dichloroethene	0.500	0.575	0.572	115	114	70.0-130			0.523	25
cis-1,2-Dichloroethene	0.500	0.544	0.539	109	108	70.0-130			0.923	25
trans-1,2-Dichloroethene	0.500	0.557	0.556	111	111	70.0-130			0.180	25
1,2-Dichloropropane	0.500	0.537	0.533	107	107	70.0-130			0.748	25
cis-1,3-Dichloropropene	0.500	0.544	0.542	109	108	70.0-130			0.368	25
trans-1,3-Dichloropropene	0.500	0.529	0.522	106	104	70.0-130			1.33	25
Ethylbenzene	0.500	0.556	0.576	111	115	70.0-130			3.53	25
1,1,2-Tetrachloroethane	0.500	0.525	0.524	105	105	70.0-130			0.191	25
Tetrachloroethylene	0.500	0.540	0.542	108	108	70.0-130			0.370	25
1,1,1-Trichloroethane	0.500	0.555	0.553	111	111	70.0-130			0.361	25
1,1,2-Trichloroethane	0.500	0.521	0.521	104	104	70.0-130			0.000	25
Trichloroethylene	0.500	0.552	0.548	110	110	70.0-130			0.727	25
Vinyl chloride	0.500	0.569	0.572	114	114	70.0-130			0.526	25
Vinyl acetate	0.500	0.566	0.561	113	112	70.0-130			0.887	25
(S) 1,4-Bromofluorobenzene				104	104	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) R3775912-3 03/30/22 10:37

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
1,4-Dichlorobenzene	U		0.00691	0.0200
Ethylbenzene	U		0.0126	0.0300
1,1,2,2-Tetrachloroethane	U		0.00874	0.0200
(S) 1,4-Bromofluorobenzene	99.6			60.0-140

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

(LCS) R3775912-1 03/30/22 09:20 • (LCSD) R3775912-2 03/30/22 09:59

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ppbv	ppbv	ppbv	%	%	%			%	%
1,4-Dichlorobenzene	0.500	0.702	0.711	140	142	70.0-130	<u>J4</u>	<u>J4</u>	1.27	25
Ethylbenzene	0.500	0.634	0.646	127	129	70.0-130			1.88	25
1,1,2,2-Tetrachloroethane	0.500	0.567	0.571	113	114	70.0-130			0.703	25
(S) 1,4-Bromofluorobenzene				105	105	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) R3775125-3 03/29/22 10:34

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Helium	U		0.0259	0.100

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

(LCS) R3775125-1 03/29/22 10:01 • (LCSD) R3775125-2 03/29/22 10:21

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Helium	2.50	2.28	2.32	91.2	92.8	70.0-130			1.74	25

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

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
C5	The reported concentration is an estimate. The continuing calibration standard associated with this data responded high. Data is likely to show a high bias concerning the result.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J4	The associated batch QC was outside the established quality control range for accuracy.
V3	The internal standard exhibited poor recovery due to sample matrix interference. The analytical results will be biased high. BDL results will be unaffected.

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

ACCREDITATIONS & LOCATIONS

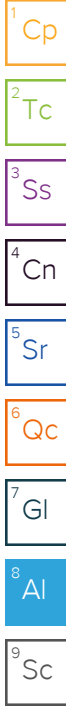
Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122


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 ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	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 ^{1,6}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	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 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ 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.



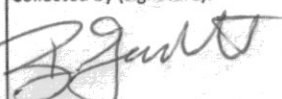
Company Name/Address: ATC Group Services LLC - Seattle, WA		Billing Information: Accounts Payable 6347 Seaview Ave. NW Seattle, WA 98107		Analysis		Chain of Custody Page ___ of ___	
6347 Seaview Avenue NW Seattle, WA 98107						 Pace PEOPLE ADVANCING SCIENCE MT JULIET, TN 12065 Lebanon Road Mt Juliet, 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/hubfs/pas-standard-terms.pdf	

Report To: Brianne Goulet	Email To: Brianne.Goulet@oneatlas.com + Elisabeth.Silver@oneatlas.com
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Project Description: Harbour Pointe Cleaners Cold Weather Sampling Event	City/State Collected: Lynwood, WA	Please Circle: PT MT CT ET
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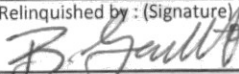
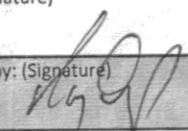
Phone: 206-781-1449	Client Project #	Lab Project # ATCSWA-HPCLEANERS
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Collected by (print): B. Goulet	Site/Facility ID #	P.O. # NPWR118001
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Collected by (signature): 	Rush? (Lab MUST Be Notified) <input type="checkbox"/> Same Day <input type="checkbox"/> Three Day <input type="checkbox"/> Next Day <input type="checkbox"/> Five Day <input type="checkbox"/> Two Day	Date Results Needed
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Sample ID	Can #	Flow Cont. #	Date	Time	Canister Pressure/Vacuum		Helium Summa	TO-15 VOCs Summa	TO-15SIM VOCs Summa	Rem./Contaminant	Sample # (lab only)
					Initial	Final					
IA1-032522	8496	1188011300	03-25-2022	08:24	-29.0	-4.0		X			
IA2-032522	12215	10047		09:53	-30.0	-8.0		X			-01
OA1-032522	11158	10217		08:24	-28.0	-4.0		X			
OA2-032522	8788	11303		08:24	-28.5	-4.0		X			
OA3-032522	11972	120119		08:21	-28.5	-5.5		X			
SV1-032522	20301	5958		10:16	-27.0	-4.0	X	X			-02
SV2-032522	20652	10160		10:56	-29.0	-5.0	X	X			-03
SV3-032522	20211	10988		11:37	-29.5	-7.0	X	X			-04
SV4-032522	20250	20350		12:07	-28.5	-6.0	X	X			-05
SV5-032522											

Remarks:	Samples returned via: <input type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> Courier	Tracking #	Hold #
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Relinquished by: (Signature) 	Date: 03-25-2022	Time: 16:36	Received by: (Signature)	Date:	Time:	Condition: (lab use only)
			Received by: (Signature)	Date:	Time:	COC Seal Intact: <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA
			Received for lab by: (Signature) 	Date: 3-29-22	Time: 0900	NCF: <input checked="" type="checkbox"/>

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
 RAD Screen <0.5 mR/hr: Y N