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July 15, 2025
Project No. M0785.32.002

Sarah Kingery
Oregon Department of Environmental Quality
165 E 7th Avenue, Suite 100
Eugene, Oregon 97401

Re: Allen Street Study Area–Soil Vapor Monitoring Report

Dear Sarah Kingery:

Maul Foster & Alongi, Inc. (MFA) has prepared this report to present the results of the soil vapor monitoring at the Allen Street Study Area located at 1420 to 1540 SW Allen Street in Corvallis, Oregon (the Site) (Figure 1). The Site was selected for assessment by the Oregon Department of Environmental Quality (DEQ). This report was prepared for the DEQ under Task 3 of Task Order 067-23-20.

Purpose

In October 2024, 17 soil vapor wells were installed at the Site (see Figure 2). The purpose of the wells was to characterize the nature and extent of contamination in soil vapor at the Site, evaluate the potential threat of vapor intrusion into residences at the Site, and determine if further action is required at the Site. Samples from the wells were collected in October 2024 and the results were presented in the Site Investigation Report (MFA 2024a). To assess seasonal variation in soil vapor concentrations, an additional sampling event was conducted approximately six months after the installation and initial sampling event. The second monitoring event was conducted in May 2025.

Chemical data from the monitoring activities were screened against DEQ risk-based concentrations (RBCs) (DEQ 2024) to assess whether the Site poses an unacceptable risk to human health for current and likely future receptors.

Monitoring Event

A representative of MFA collected soil vapor samples for chemical analysis and groundwater elevation measurements. The monitoring activities were performed in general accordance with the Site Investigation Work Plan (MFA 2024b) and DEQ's Brownfield Program Quality Assurance Project Plan (DEQ 2016).

Groundwater Level Measurements

Based on site limitations and the residential supply well data available, DEQ determined a second groundwater sampling event would not be completed as described in the Site Investigation Work Plan (MFA 2024b). Therefore, only water level measurements were collected during this event. Groundwater elevations were measured from two existing groundwater monitoring wells (MW-03 and MW-06; see Figure 2) to understand the water levels at the time of the monitoring event. Groundwater elevations were measured in accordance with MFA Standard Operating Procedure

(SOP) 13 (Attachment A). The static water levels and groundwater level elevations measured on May 20, 2025, are presented in Table 1. In addition, the water levels from the first monitoring event are included in Table 1.

Soil Vapor Sampling

On May 20, 21, and 23, 2025, MFA collected soil vapor samples from 12 of the 17 previously sampled wells (SVW-01S/D, SVW-02S/D, SVW-05S/D, SVW-07S, SVW-08S, SVW-09S/D, and SVW-10S/D). See Figure 2 for the soil vapor sample locations. The following locations were not sampled during this monitoring event based on communication with DEQ:

- **SVW-06S:** During in-field leak detection tests, moisture was observed in the sample train. Purging was completed for approximately five minutes to attempt to clear any perched groundwater that had contacted the sampling screen. No groundwater/moisture was observed during the purging. Sample containers were attached, leak detection protocols conducted, and valves were opened completely to allow for sample collection. However, it was observed that no pressure was able to be drawn from the well as the canister pressure measured for the sample container initially dropped and then did not change. After two attempts, sampling at this well was discontinued.
- **SVW-11S/D and SVW-12S/D:** These wells were not sampled because DEQ indicated that the property owner requested that they be decommissioned in order to complete construction activities in the vicinity.

Soil vapor samples were collected in accordance with SOP 16 (see Attachment A). A helium shroud was deployed around each vapor sampling location to assess leaks in the sample train. MFA used a Dielectric model MGD-2002 helium leak detector to measure helium in and around the sampling location in the field. During the first sampling event, elevated concentrations of helium were detected in the field at several sampling locations, including inside the wells themselves. However, the sample trains passed the in-field leak detection tests and MFA concluded that this was likely caused by methane interference potentially related to the presence of septic systems on the residential properties. Therefore, for this round of sampling, a GEM 5000 landfill gas meter was also used to assess for other gas concentrations in and around each sampling location. Samples were then analyzed for helium to assess leaks in the sample train. Concentrations of helium were well below the threshold of the leak detection tests (10 percent of the concentrations of helium in the shroud) and no elevated concentrations of methane were detected in the field. Field sampling data sheets (FSDS) are included as Attachment B.

Chemical Analyses and Results

The soil vapor samples were submitted to Pace Analytical National Laboratory in Mount Juliet, Tennessee, under their Price Agreement with the State of Oregon. A copy of the analytical laboratory report is included in Attachment C. A data validation memorandum presents the quality assurance/quality control review of the data and is included in Attachment D. The results of the data quality review indicate that the data are of acceptable quality and are suitable for their intended purpose with the qualifiers assigned.[1]

[1] Analytical results for samples SVW-02S and SVW-09D were rejected. Additional discussion of these results is included in the Laboratory Analytical Results section.

Analyses Performed

Soil vapor samples were analyzed for volatile organic compounds (VOCs) by U.S. Environmental Protection Agency Method TO-15 and helium by ASTM International Method D1946. The analytical results are presented in Table 2 (along with the data from the first round of sampling).

Laboratory Analytical Results

Various VOCs were detected above laboratory reporting limits in the soil vapor samples analyzed, with concentrations ranging from 0.63 to 563 micrograms per cubic meter.

Helium was detected at concentrations ranging from 0.832 to 3.16 percent in soil vapor samples SVW-01S/D, SVW-02S/D, SVW-05S/D, SVW-09S/D, and SVW-10S/D. MFA confirmed that the grade of helium applied to the shroud was 99.9 percent and that the shroud concentration for the samples was 45.8 to 49.2 percent. The helium concentration in the samples was well below the action level, which is 5 percent of the shroud concentration, in all samples except for SVW-02S and SVW-09D. MFA concluded that the level of helium in these samples indicates that the results are not representative of soil vapor. As a result, data associated with samples SVW-02S and SVW-09D were rejected (see data validation memorandum in Attachment D). The rejected sample results indicate there were leaks in the sample trains at sample locations SVW-02S and SVW-09D. MFA reassembled the sampling trains until the in-field leak detection tests passed prior to sampling and therefore, there were no field indications of a leak. MFA only experiences rejected data like this when using Pace Analytical National Laboratory.

The level of helium in the remaining samples indicates that the potential impact to data quality is low. Data associated with samples SVW-01S/D, SVW-02D, SVW-05S/D, SVW-09S, and SVW-10S/D were qualified as estimated (see Attachment E).

Data Evaluation

The data collected during this event were compared to the DEQ RBCs for residential exposure via vapor intrusion to indoor air for soil vapor.

1,3-butadiene exceeded the chronic RBC for residential receptors in SVW-05S. Concentrations of 1,3-butadiene in the remaining soil vapor samples analyzed were not detected above the laboratory reporting limit, and no known sources of 1,3-butadiene have been identified in the area. None of the remaining VOCs exceeded the chronic or acute RBCs for residential receptors.

A comparison of the data collected during this event compared to the October 2024 monitoring event is summarized as follows:

- Concentrations of benzene and chloroform were detected above applicable screening levels in SVW-05S during the October 2024 event. Concentrations during this event were not detected above the laboratory reporting limits for benzene and chloroform in SVW-05S.
- Chloroform was detected above applicable screening levels in SVW-09D during the October 2024 event. Analytical results for SVW-09D were rejected during this event.
- During the October 2024 event, 1,3-butadiene was not detected above the laboratory reporting limits in any of the soil vapor samples analyzed.
- Concentrations of chloroform were detected above applicable screening levels in SVW-12S/D during the October 2024 event. These wells were not sampled during this event.

MFA identified that septic systems are located at the residences and chloroform can form through the mixing of bleach with other household products (rubbing alcohol, acetone, etc.) when disposed of

in household drains. Further, chloroform is often found in soil vapor due to irrigation from chlorinated water, leaks from water lines, etc. Although the residences are not connected to the municipal water source (with the exception of 1420 SW Allen Street), a municipal water line is located in nearby SW Hopkins Avenue (City of Corvallis 2025), which is in the inferred up- to cross-gradient location of the residences.

Based on discussions with the DEQ Project Manager, a nearby site located at 1480 SW 3rd Street recently identified elevated concentrations of benzene in soil vapor and they believe additional sources in the area need to be evaluated. As a result, an additional investigation is planned for the area that will provide more information on sources and potential impacts to the Site.

Summary and Conclusions

Soil vapor monitoring wells were installed and initially sampled in October 2024 to assess chemical conditions at the Site. The second monitoring event was completed in May 2025.

Analytical results detected various VOCs in soil vapor at the Site. Chemical data from this investigation was screened against DEQ's vapor intrusion RBCs for residential receptors. Based on the results of the October 2024 and May 2025 monitoring events, there is a potential risk to receptors at the residence located at 1460 (SVW-05), 1520 (SVW-09), and 1540 SW Allen Street (SVW-12). In addition, the soil vapor sample location SVW-06S was not sampled due to the presence of moisture in the well.

The May 2025 monitoring event was the final sampling event authorized by DEQ Task Order 067-23-20. Based on the limited RBC exceedances, likely sources contributing to the exceedances, and DEQ's understanding of future work planned for the area, no additional actions are proposed at the Site. Therefore, MFA recommends that the soil vapor wells installed at the Site be abandoned if no additional sampling of these features are planned.

Sincerely,

Maul Foster & Alongi, Inc.

Dana Domenighini
Project Environmental Scientist

REGISTERED
OREGON
MICHAEL J. PICKERING
No. G1932
GEOLOGIST
EXPIRES: 1/1/2026
This digital seal certifies the signatory and document content.

Michael Pickering, RG
Principal Geologist

Attachments

References

Limitations

Figures

Tables

A—Standard Operating Procedures

B—Field Sampling Data Sheet

C—Laboratory Analytical Report

D—Data Validation Memorandum

cc: Bryn Thoms, Oregon DEQ
Danielle Johnson, Oregon DEQ
Ian Poellet, Oregon DEQ

References

City of Corvallis. 2025. *City of Corvallis Utilities, Public Viewer.* Accessed July 10, 2025. https://corvallisoregon.maps.arcgis.com/apps/webappviewer/index.html?id=d098de302300453eaaf0c506b289c0f5.

DEQ. 2016. *Quality Assurance Project Plan, Brownfield Program.* Oregon Department of Environmental Quality: Portland, OR. November.

DEQ. 2024. *Table 1: Chronic and Acute Vapor Intrusion Risk-Based Concentrations.* Oregon Department of Environmental Quality. March.

MFA. 2024a. *Site Investigation Report, Allen Street Study Area, DEQ Task Order 067-23-11, ECSI No. 3521.* Prepared for the Oregon Department of Environmental Quality. Maul Foster & Alongi, Inc.: Portland, OR. November 26.

MFA. 2024b. *Site Investigation Work Plan, Allen Street Study Area, DEQ Task Order 067-23-11, ECSI No. 3521.* Prepared for the Oregon Department of Environmental Quality. Maul Foster & Alongi, Inc.: Portland, OR. July 19.

Limitations

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

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

Figures

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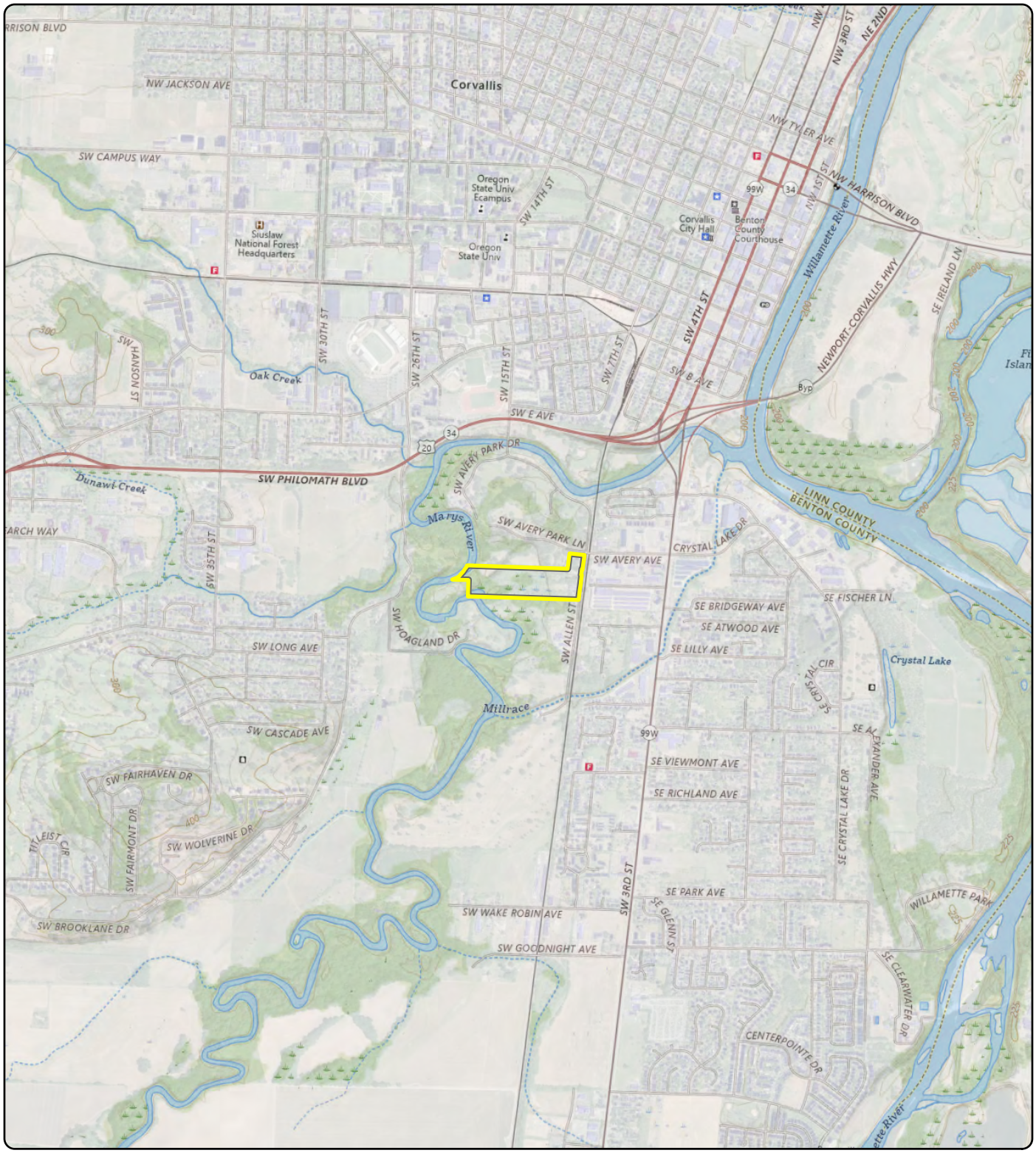

Notes
U.S. Geological Survey 7.5-minute topographic quadrangle (2020): Corvallis.
Township 12 south, range 5 west, sections 2 and 11.

Data Source
Property boundary obtained from Benton County.

Legend

Property Boundary

Figure 1
Site Location

Allen Street Study Area
Oregon Department of Environmental Quality
1420 to 1540 SW Allen Street
Corvallis, OR

0 2,000
Feet

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Reviewed By: ddomenighini
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Project: M0785.32.001

Figure 2
Site Overview and Investigation Locations

Allen Street Study Area
Oregon Department of Environmental Quality
1420 to 1540 SW Allen Street
Corvallis, OR

Legend

- Existing Monitoring Well
- Soil Vapor Well (Shallow and Deep)
- Soil Vapor Well (Shallow Only)
- Soil Vapor Well (Not Sampled May 2025)
- Temporary Soil Vapor Sample (Not Sampled May 2025)
- Previously Proposed Soil Vapor Well (Not Installed)
- Future Residence (Approximate)
- Property Boundary
- Tax Lot

0 50
Feet

Data Sources
Aerial photograph obtained from the Oregon Geospatial Enterprise Office; tax lot data obtained from Benton County.

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Tables

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Table 1
Groundwater Elevations
Allen Street Study Area, Corvallis, Oregon

Location	TOC Reference Elevation (feet)[a][b]	Date	Water Level (feet below TOC)	Water Level Elevation (feet)
MW-03	220.44	10/09/2024	16.67	203.77
		05/20/205	13.78	206.66
MW-06	226.49	10/09/2024	22.99	203.50
		05/20/2025	20.10	206.39

Notes

NAVD29 = North American Vertical Datum of 1929.

TOC = top of casing.

[a]TOC reference elevations obtained from historical surveys conducted by Udell Engineering on August 17, 2005.

[b]Elevation datum is NAVD29.

Table 2
Summary of Soil Vapor Analytical Results
Allen Street Study Area
Corvallis, Oregon

Location:	RBC, Soil Vapor, Volatilization to Indoor Air[1]		TSV-01D	TSV-01S	TSV-02D	TSV-02S	SVW-01D		SVW-01S		SVW-02D		SVW-02S		SVW-05D	
Sample Name:	Chronic	Acute	TSV-01D	TSV-01S	TSV-02D	TSV-02S	SVW-01D	SVW-01D	SVW-01S	SVW-01S	SVW-02D	SVW-02D	SVW-02S	SVW-02S	SVW-05D	SVW-05D
Collection Date:	Residential		10/04/2024	10/04/2024	10/04/2024	10/04/2024	10/07/2024	05/20/2025	10/07/2024	05/20/2025	10/07/2024	05/20/2025	10/07/2024	05/20/2025	10/07/2024	05/20/2025
Helium (%)																
Helium[a]	NV	NV	**11.4**	**6.41**	**3.30**	**8.17**	0.100 U	**0.832**	**0.475**	**0.981**	0.100 U	**1.37**	**0.403**	**2.84**	**1.83**	**0.864**
TPH (ug/m^3)																
Gasoline-range hydrocarbons	10,000	NV	-- R	-- R	-- R	-- R	**880**	826 UJ	826 UJ	826 UJ	826 U	826 UJ	826 UJ	-- R	826 UJ	826 UJ
VOCs (ug/m^3)																
1,1,1-Trichloroethane	170,000	370,000	-- R	-- R	-- R	-- R	1.09 U	1.09 UJ	1.09 UJ	1.09 UJ	1.09 U	1.09 UJ	1.09 UJ	-- R	1.09 UJ	1.09 UJ
1,1,2,2-Tetrachloroethane	1.6	NV	-- R	-- R	-- R	-- R	1.37 U	1.37 UJ	1.37 UJ	1.37 UJ	1.37 U	1.37 UJ	1.37 UJ	-- R	1.37 UJ	1.37 UJ
1,1,2-Trichloroethane	5.9	NV	-- R	-- R	-- R	-- R	1.09 U	1.09 UJ	1.09 UJ	1.09 UJ	1.09 U	1.09 UJ	1.09 UJ	-- R	1.09 UJ	1.09 UJ
1,1-Dichloroethane	59	NV	-- R	-- R	-- R	-- R	0.802 U	0.802 UJ	0.802 UJ	0.802 UJ	0.802 U	0.802 UJ	0.802 UJ	-- R	0.802 UJ	0.802 UJ
1,1-Dichloroethene	7,000	6,700	-- R	-- R	-- R	-- R	0.793 U	0.793 UJ	0.793 UJ	0.793 UJ	0.793 U	0.793 UJ	0.793 UJ	-- R	0.793 UJ	0.793 UJ
1,2,4-Trichlorobenzene	70	NV	-- R	-- R	-- R	-- R	4.66 U	4.66 UJ	4.66 UJ	4.66 UJ	4.66 U	4.66 UJ	4.66 UJ	-- R	4.66 UJ	4.66 UJ
1,2,4-Trimethylbenzene	2,100	NV	-- R	-- R	-- R	-- R	**3.47**	0.982 UJ	**1.81 J**	0.982 UJ	**1.21**	0.982 UJ	**2.11 J**	-- R	**1.19 J**	0.982 UJ
1,2-Dibromoethane	0.16	NV	-- R	-- R	-- R	-- R	1.54 U	1.54 UJ	1.54 UJ	1.54 UJ	1.54 U	1.54 UJ	1.54 UJ	-- R	1.54 UJ	1.54 UJ
1,2-Dichlorobenzene	7,000	NV	-- R	-- R	-- R	-- R	1.20 U	1.20 UJ	1.20 UJ	1.20 UJ	1.20 U	1.20 UJ	1.20 UJ	-- R	1.20 UJ	1.20 UJ
1,2-Dichloroethane	3.6	NV	-- R	-- R	-- R	-- R	0.810 U	0.810 UJ	0.810 UJ	0.810 UJ	0.810 U	0.810 UJ	0.810 UJ	-- R	0.810 UJ	0.810 UJ
1,2-Dichloropropane	25	7,700	-- R	-- R	-- R	-- R	0.924 U	0.924 UJ	0.924 UJ	0.924 UJ	0.924 U	0.924 UJ	0.924 UJ	-- R	0.924 UJ	0.924 UJ
1,3,5-Trimethylbenzene	2,100	NV	-- R	-- R	-- R	-- R	0.982 U	0.982 UJ	0.982 UJ	0.982 UJ	0.982 U	0.982 UJ	0.982 UJ	-- R	0.982 UJ	0.982 UJ
1,3-Butadiene	3.1	22,000	-- R	-- R	-- R	-- R	4.43 U	4.43 UJ	4.43 UJ	4.43 UJ	4.43 U	4.43 UJ	4.43 UJ	-- R	4.43 UJ	4.43 UJ
1,3-Dichlorobenzene	NV	NV	-- R	-- R	-- R	-- R	1.20 U	1.20 UJ	1.20 UJ	1.20 UJ	1.20 U	1.20 UJ	1.20 UJ	-- R	1.20 UJ	1.20 UJ
1,4-Dichlorobenzene	8.5	400,000	-- R	-- R	-- R	-- R	1.20 U	1.20 UJ	1.20 UJ	1.20 UJ	1.20 U	1.20 UJ	1.20 UJ	-- R	1.20 UJ	1.20 UJ
1,4-Dioxane	19	240,000	-- R	-- R	-- R	-- R	2.27 U	2.27 UJ	2.27 UJ	2.27 UJ	2.27 U	2.27 UJ	2.27 UJ	-- R	2.27 UJ	2.27 UJ
2,2,4-Trimethylpentane	NV	NV	-- R	-- R	-- R	-- R	0.934 U	0.934 UJ	**1.71 J**	0.934 UJ	0.934 U	0.934 UJ	0.934 UJ	-- R	0.934 UJ	0.934 UJ
2-Butanone	170,000	170,000	-- R	-- R	-- R	-- R	3.69 U	3.69 UJ	3.69 UJ	3.69 UJ	3.69 U	**3.95 J**	3.69 UJ	-- R	3.69 UJ	3.69 UJ
2-Chlorotoluene	NV	NV	-- R	-- R	-- R	-- R	1.03 U	1.03 UJ	1.03 UJ	1.03 UJ	1.03 U	1.03 UJ	1.03 UJ	-- R	1.03 UJ	1.03 UJ
2-Hexanone	1,000	NV	-- R	-- R	-- R	-- R	5.11 U	5.11 UJ	5.11 UJ	5.11 UJ	5.11 U	5.11 UJ	5.11 UJ	-- R	5.11 UJ	5.11 UJ
2-Propanol	7,000	110,000	-- R	-- R	-- R	-- R	**11.4**	**4.10 J**	3.07 UJ	3.07 UJ	**5.68**	3.07 UJ	**3.20 J**	-- R	3.07 UJ	**3.42 J**
4-Ethyltoluene	NV	NV	-- R	-- R	-- R	-- R	0.982 U	0.982 UJ	0.982 UJ	0.982 UJ	0.982 U	0.982 UJ	0.982 UJ	-- R	0.982 UJ	0.982 UJ
4-Methyl-2-pentanone	100,000	NV	-- R	-- R	-- R	-- R	5.12 U	5.12 UJ	5.12 UJ	5.12 UJ	5.12 U	5.12 UJ	5.12 UJ	-- R	5.12 UJ	5.12 UJ
Acetone	NV	2,100,000	-- R	-- R	-- R	-- R	2.97 U	**38.0 J**	**11.2 J**	**10.1 J**	2.97 U	**35.2 J**	**33.3 J**	-- R	2.97 UJ	**21.0 J**
Allyl chloride	16	NV	-- R	-- R	-- R	-- R	0.626 U	0.626 UJ	0.626 UJ	0.626 UJ	0.626 U	0.626 UJ	0.626 UJ	-- R	0.626 UJ	0.626 UJ
Benzene	12	970	-- R	-- R	-- R	-- R	**7.25**	0.639 UJ	**3.02 J**	0.639 UJ	**7.99**	0.639 UJ	**1.86 J**	-- R	**4.73 J**	0.639 UJ
Benzyl chloride	1.9	8,000	-- R	-- R	-- R	-- R	1.04 U	1.04 UJ	1.04 UJ	1.04 UJ	1.04 U	1.04 UJ	1.04 UJ	-- R	1.04 UJ	1.04 UJ
Bromodichloromethane	2.5	NV	-- R	-- R	-- R	-- R	1.34 U	1.34 UJ	1.34 UJ	1.34 UJ	1.34 U	1.34 UJ	1.34 UJ	-- R	1.34 UJ	1.34 UJ
Bromoform	85	NV	-- R	-- R	-- R	-- R	6.21 U	6.52 UJ	6.21 UJ	6.52 UJ	6.21 U	6.52 UJ	6.21 UJ	-- R	6.21 UJ	6.52 UJ
Bromomethane	170	130,000	-- R	-- R	-- R	-- R	0.776 U	0.776 UJ	0.776 UJ	0.776 UJ	0.776 U	0.776 UJ	0.776 UJ	-- R	0.776 UJ	0.776 UJ
Carbon disulfide	24,000	210,000	-- R	-- R	-- R	-- R	**68.5**	**126 J**	**19.3 J**	**7.47 J**	**71.3**	**44.8 J**	**11.2 J**	-- R	**23.1 J**	**5.98 J**
Carbon tetrachloride	16	63,000	-- R	-- R	-- R	-- R	1.26 U	1.26 UJ	1.26 UJ	1.26 UJ	1.26 U	1.26 UJ	1.26 UJ	-- R	1.26 UJ	1.26 UJ
Chlorobenzene	1,700	NV	-- R	-- R	-- R	-- R	0.924 U	0.924 UJ	0.924 UJ	0.924 UJ	0.924 U	0.924 UJ	0.924 UJ	-- R	0.924 UJ	0.924 UJ
Chloroethane	140,000	1,300,000	-- R	-- R	-- R	-- R	0.528 U	**0.765 J**	0.528 UJ	0.528 UJ	0.528 U	0.528 UJ	0.528 UJ	-- R	0.528 UJ	0.528 UJ
Chloroform	4.1	16,000	-- R	-- R	-- R	-- R	**2.83**	0.973 UJ	**1.19 J**	0.973 UJ	0.973 U	0.973 UJ	**2.55 J**	-- R	0.973 UJ	0.973 UJ
Chloromethane	3,100	33,000	-- R	-- R	-- R	-- R	0.413 U	**1.12 J**	0.413 UJ	**1.03 J**	0.413 U	**1.31 J**	0.413 UJ	-- R	0.413 UJ	**0.948 J**
cis-1,2-Dichloroethene	1,400	NV	-- R	-- R	-- R	-- R	0.793 U	0.793 UJ	0.793 UJ	0.793 UJ	0.793 U	0.793 UJ	0.793 UJ	-- R	0.793 UJ	0.793 UJ
cis-1,3-Dichloropropene	NV	NV	-- R	-- R	-- R	-- R	0.908 U	0.908 UJ	0.908 UJ	0.908 UJ	0.908 U	0.908 UJ	0.908 UJ	-- R	0.908 UJ	0.908 UJ
Cyclohexane	210,000	NV	-- R	-- R	-- R	-- R	**11.9**	0.689 UJ	0.689 UJ	0.689 UJ	**7.16**	0.689 UJ	0.689 UJ	-- R	**4.24 J**	0.689 UJ
Dibromochloromethane	NV	NV	-- R	-- R	-- R	-- R	1.70 U	1.70 UJ	1.70 UJ	1.70 UJ	1.70 U	1.70 UJ	1.70 UJ	-- R	1.70 UJ	1.70 UJ

Table 2
Summary of Soil Vapor Analytical Results
Allen Street Study Area
Corvallis, Oregon

Location:	RBC, Soil Vapor, Volatilization to Indoor Air[1]		TSV-01D	TSV-01S	TSV-02D	TSV-02S	SVW-01D		SVW-01S		SVW-02D		SVW-02S		SVW-05D	
Sample Name:	Chronic	Acute	TSV-01D	TSV-01S	TSV-02D	TSV-02S	SVW-01D	SVW-01D	SVW-01S	SVW-01S	SVW-02D	SVW-02D	SVW-02S	SVW-02S	SVW-05D	SVW-05D
Collection Date:	Residential		10/04/2024	10/04/2024	10/04/2024	10/04/2024	10/07/2024	05/20/2025	10/07/2024	05/20/2025	10/07/2024	05/20/2025	10/07/2024	05/20/2025	10/07/2024	05/20/2025
VOCs cont. (ug/m^3)																
Dichlorodifluoromethane (Freon 12)	3,500	NV	-- R	-- R	-- R	-- R	**2.93**	**2.69 J**	**2.45 J**	**2.31 J**	**2.70**	**2.34 J**	**2.43 J**	-- R	**2.40 J**	**2.27 J**
Ethanol	NV	NV	-- R	-- R	-- R	-- R	**20.6**	**5.92 J**	4.71 UJ	4.71 UJ	**10.9**	4.71 UJ	**6.83 J**	-- R	**9.18 J**	**5.39 J**
Ethylbenzene	37	730,000	-- R	-- R	-- R	-- R	**1.86**	0.867 UJ	**0.975 J**	0.867 UJ	**1.24**	**0.980 J**	**1.40 J**	-- R	**1.70 J**	0.867 UJ
Freon 113	170,000	NV	-- R	-- R	-- R	-- R	1.53 U	1.53 UJ	1.53 UJ	1.53 UJ	1.53 U	1.53 UJ	1.53 UJ	-- R	1.53 UJ	1.53 UJ
Freon 114	NV	NV	-- R	-- R	-- R	-- R	1.40 U	1.40 UJ	1.40 UJ	1.40 UJ	1.40 U	1.40 UJ	1.40 UJ	-- R	1.40 UJ	1.40 UJ
Heptane	14,000	NV	-- R	-- R	-- R	-- R	**6.91**	0.818 UJ	0.818 UJ	0.818 UJ	**2.45**	0.818 UJ	0.818 UJ	-- R	**9.00 J**	0.818 UJ
Hexachlorobutadiene	4.3	NV	-- R	-- R	-- R	-- R	6.73 U	6.73 UJ	6.73 UJ	6.73 UJ	6.73 U	6.73 UJ	6.73 UJ	-- R	6.73 UJ	6.73 UJ
Isopropylbenzene	14,000	NV	-- R	-- R	-- R	-- R	0.983 U	0.983 UJ	0.983 UJ	0.983 UJ	0.983 U	0.983 UJ	0.983 UJ	-- R	0.983 UJ	0.983 UJ
m,p-Xylene	NV	NV	-- R	-- R	-- R	-- R	**5.33**	1.73 UJ	**2.82 J**	1.73 UJ	**2.84**	**4.77 J**	**4.42 J**	-- R	**2.67 J**	1.73 UJ
Methyl methacrylate	24,000	NV	-- R	-- R	-- R	-- R	0.819 U	0.819 UJ	0.819 UJ	0.819 UJ	0.819 U	0.819 UJ	0.819 UJ	-- R	0.819 UJ	0.819 UJ
Methyl tert-butyl ether	360	270,000	-- R	-- R	-- R	-- R	0.721 U	0.721 UJ	0.721 UJ	0.721 UJ	0.721 U	0.721 UJ	0.721 UJ	-- R	0.721 UJ	0.721 UJ
Methylene chloride	3,400	70,000	-- R	-- R	-- R	-- R	0.694 U	**1.24 J**	0.694 UJ	**1.03 J**	0.694 U	**0.837 J**	0.694 UJ	-- R	0.694 UJ	**1.38 J**
Naphthalene	2.8	6,700	-- R	-- R	-- R	-- R	3.30 U	3.30 UJ	3.30 UJ	3.30 UJ	3.30 U	3.30 UJ	3.30 UJ	-- R	3.30 UJ	3.30 UJ
n-Hexane	24,000	NV	-- R	-- R	-- R	-- R	**59.2**	2.22 UJ	2.22 UJ	2.22 UJ	**32.2**	**4.27 J**	2.22 UJ	-- R	**93.8 J**	2.22 UJ
n-Propylbenzene	35,000	NV	-- R	-- R	-- R	-- R	0.982 U	0.982 UJ	0.982 UJ	0.982 UJ	0.982 U	0.982 UJ	0.982 UJ	-- R	0.982 UJ	0.982 UJ
o-Xylene	3,500	NV	-- R	-- R	-- R	-- R	**3.41**	0.867 UJ	**1.58 J**	0.867 UJ	**1.97**	**1.57 J**	**2.66 J**	-- R	**1.73 J**	0.867 UJ
Propylene	100,000	NV	-- R	-- R	-- R	-- R	**2,760**	2.15 UJ	2.15 UJ	2.15 UJ	**1,470**	**27.9 J**	2.15 UJ	-- R	**1,390 J**	2.15 UJ
Styrene	35,000	700,000	-- R	-- R	-- R	-- R	1.70 U	1.70 UJ	1.70 UJ	1.70 UJ	1.70 U	1.70 UJ	1.70 UJ	-- R	1.70 UJ	1.70 UJ
Tetrachloroethene	360	1,400	-- R	-- R	-- R	-- R	1.36 U	1.36 UJ	1.36 UJ	1.36 UJ	1.36 U	1.36 UJ	**2.02 J**	-- R	1.36 UJ	1.36 UJ
Tetrahydrofuran	70,000	NV	-- R	-- R	-- R	-- R	0.590 U	0.590 UJ	0.590 UJ	0.590 UJ	0.590 U	0.590 UJ	0.590 UJ	-- R	0.590 UJ	0.590 UJ
Toluene	170,000	250,000	-- R	-- R	-- R	-- R	**14.1**	1.88 UJ	**5.95 J**	1.88 UJ	**7.57**	1.88 UJ	**6.86 J**	-- R	**6.33 J**	1.88 UJ
trans-1,2-Dichloroethene	1,400	26,000	-- R	-- R	-- R	-- R	0.793 U	0.793 UJ	0.793 UJ	0.793 UJ	0.793 U	0.793 UJ	0.793 UJ	-- R	0.793 UJ	0.793 UJ
trans-1,3-Dichloropropene	NV	NV	-- R	-- R	-- R	-- R	0.908 U	0.908 UJ	0.908 UJ	0.908 UJ	0.908 U	0.908 UJ	0.908 UJ	-- R	0.908 UJ	0.908 UJ
Trichloroethene	16	70	-- R	-- R	-- R	-- R	1.07 U	**2.87 J**	1.07 UJ	1.07 UJ	1.07 U	1.07 UJ	1.07 UJ	-- R	1.07 UJ	1.07 UJ
Trichlorofluoromethane (Freon 11)	NV	NV	-- R	-- R	-- R	-- R	**2.00**	**1.24 J**	**1.33 J**	**1.13 J**	**2.06**	**1.15 J**	**1.21 J**	-- R	1.12 UJ	1.12 UJ
Vinyl acetate	7,000	6,700	-- R	-- R	-- R	-- R	2.22 U	2.22 UJ	2.22 UJ	2.22 UJ	2.22 U	2.22 UJ	2.22 UJ	-- R	2.22 UJ	2.22 UJ
Vinyl bromide	6.2	NV	-- R	-- R	-- R	-- R	0.875 U	0.875 UJ	0.875 UJ	0.875 UJ	0.875 U	0.875 UJ	0.875 UJ	-- R	0.875 UJ	0.875 UJ
Vinyl chloride	5.6	43,000	-- R	-- R	-- R	-- R	0.511 U	0.511 UJ	0.511 UJ	0.511 UJ	0.511 U	0.511 UJ	0.511 UJ	-- R	0.511 UJ	0.511 UJ
Xylenes, total[b]	3,500	290,000	-- R	-- R	-- R	-- R	**8.74**	1.73 UJ	**4.40 J**	1.73 UJ	**4.81**	**6.34 J**	**7.08 J**	-- R	**4.40 J**	1.73 UJ

Table 2
Summary of Soil Vapor Analytical Results
Allen Street Study Area
Corvallis, Oregon

Location:	RBC, Soil Vapor, Volatilization to Indoor Air[1]		SVW-05S		SVW-06S	SVW-07S		SVW-08S		SVW-09D		SVW-09S		SVW-10D	
Sample Name:	Chronic	Acute	SVW-05S	SVW-05S	SVW-06S	SVW-07S	SVW-07S	SVW-08S	SVW-08S	SVW-09D	SVW-09D	SVW-09S	SVW-09S	SVW-10D	SVW-10D
Collection Date:	Residential		10/07/2024	05/20/2025	10/07/2024	10/07/2024	05/21/2025	10/07/2024	05/21/2025	10/08/2024	05/23/2025	10/08/2024	05/23/2025	10/08/2024	05/23/2025
Helium (%)															
Helium[a]	NV	NV	**0.265**	**0.919**	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	**3.16**	**0.416**	**1.15**	**3.12**	**2.17**
TPH (ug/m^3)															
Gasoline-range hydrocarbons	10,000	NV	**1,050** J	826 UJ	826 U	826 U	826 U	826 U	826 U	826 U	-- R	826 UJ	826 UJ	-- R	826 UJ
VOCs (ug/m^3)															
1,1,1-Trichloroethane	170,000	370,000	1.09 UJ	1.09 UJ	1.09 U	1.09 U	1.09 U	1.09 U	1.09 U	1.09 U	-- R	1.09 UJ	1.09 UJ	-- R	1.09 UJ
1,1,2,2-Tetrachloroethane	1.6	NV	1.37 UJ	1.37 UJ	1.37 U	1.37 U	1.37 U	1.37 U	1.37 U	1.37 U	-- R	1.37 UJ	1.37 UJ	-- R	1.37 UJ
1,1,2-Trichloroethane	5.9	NV	1.09 UJ	1.09 UJ	1.09 U	1.09 U	1.09 U	1.09 U	1.09 U	1.09 U	-- R	1.09 UJ	1.09 UJ	-- R	1.09 UJ
1,1-Dichloroethane	59	NV	0.802 UJ	0.802 UJ	0.802 U	0.802 U	0.802 U	0.802 U	0.802 U	0.802 U	-- R	0.802 UJ	0.802 UJ	-- R	0.802 UJ
1,1-Dichloroethene	7,000	6,700	0.793 UJ	0.793 UJ	0.793 U	0.793 U	0.793 U	0.793 U	0.793 U	0.793 U	-- R	0.793 UJ	0.793 UJ	-- R	0.793 UJ
1,2,4-Trichlorobenzene	70	NV	4.66 UJ	4.66 UJ	4.66 U	4.66 U	4.66 U	4.66 U	4.66 U	4.66 U	-- R	4.66 UJ	4.66 UJ	-- R	4.66 UJ
1,2,4-Trimethylbenzene	2,100	NV	**6.72 J**	0.982 UJ	**5.35**	0.982 U	0.982 U	**4.42**	0.982 U	0.982 U	-- R	0.982 UJ	0.982 UJ	-- R	0.982 UJ
1,2-Dibromoethane	0.16	NV	1.54 UJ	1.54 UJ	1.54 U	1.54 U	1.54 U	1.54 U	1.54 U	1.54 U	-- R	1.54 UJ	1.54 UJ	-- R	1.54 UJ
1,2-Dichlorobenzene	7,000	NV	1.20 UJ	1.20 UJ	1.20 U	1.20 U	1.20 U	1.20 U	1.20 U	1.20 U	-- R	1.20 UJ	1.20 UJ	-- R	1.20 UJ
1,2-Dichloroethane	3.6	NV	0.810 UJ	**0.927 J**	0.810 U	0.810 U	0.810 U	0.810 U	0.810 U	0.810 U	-- R	0.810 UJ	0.810 UJ	-- R	0.810 UJ
1,2-Dichloropropane	25	7,700	0.924 UJ	0.924 UJ	0.924 U	0.924 U	0.924 U	0.924 U	0.924 U	0.924 U	-- R	0.924 UJ	0.924 UJ	-- R	0.924 UJ
1,3,5-Trimethylbenzene	2,100	NV	**1.96 J**	0.982 UJ	**2.22**	0.982 U	0.982 U	**1.42**	0.982 U	0.982 U	-- R	0.982 UJ	0.982 UJ	-- R	0.982 UJ
1,3-Butadiene	3.1	22,000	4.43 UJ	**10.2 J**	4.43 U	4.43 U	4.43 U	4.43 U	4.43 U	4.43 U	-- R	4.43 UJ	4.43 UJ	-- R	4.43 UJ
1,3-Dichlorobenzene	NV	NV	1.20 UJ	1.20 UJ	1.20 U	1.20 U	1.20 U	1.20 U	1.20 U	1.20 U	-- R	1.20 UJ	1.20 UJ	-- R	1.20 UJ
1,4-Dichlorobenzene	8.5	400,000	1.20 UJ	1.20 UJ	1.20 U	1.20 U	1.20 U	1.20 U	1.20 U	1.20 U	-- R	1.20 UJ	1.20 UJ	-- R	1.20 UJ
1,4-Dioxane	19	240,000	2.27 UJ	2.27 UJ	2.27 U	2.27 U	2.27 U	2.27 U	2.27 U	2.27 U	-- R	2.27 UJ	2.27 UJ	-- R	2.27 UJ
2,2,4-Trimethylpentane	NV	NV	0.934 UJ	**1.26 J**	0.934 U	0.934 U	0.934 U	0.934 U	0.934 U	0.934 U	-- R	0.934 UJ	0.934 UJ	-- R	0.934 UJ
2-Butanone	170,000	170,000	**17.1 J**	**4.25 J**	3.69 U	3.69 U	3.69 U	3.69 U	3.69 U	3.69 U	-- R	3.69 UJ	**4.39 J**	-- R	3.69 UJ
2-Chlorotoluene	NV	NV	1.03 UJ	1.03 UJ	1.03 U	1.03 U	1.03 U	1.03 U	1.03 U	1.03 U	-- R	1.03 UJ	1.03 UJ	-- R	1.03 UJ
2-Hexanone	1,000	NV	5.11 UJ	5.11 UJ	5.11 U	5.11 U	5.11 U	5.11 U	5.11 U	5.11 U	-- R	5.11 UJ	5.11 UJ	-- R	5.11 UJ
2-Propanol	7,000	110,000	**128 J**	**3.76 J**	**3.07**	3.07 U	**6.54**	**19.8**	**4.79**	3.07 U	-- R	**7.42 J**	**15.7 J**	-- R	**10.9 J**
4-Ethyltoluene	NV	NV	**1.27 J**	0.982 UJ	**3.67**	0.982 U	0.982 U	**1.02**	0.982 U	0.982 U	-- R	0.982 UJ	0.982 UJ	-- R	0.982 UJ
4-Methyl-2-pentanone	100,000	NV	5.12 UJ	5.12 UJ	5.12 U	5.12 U	5.12 U	5.12 U	5.12 U	5.12 U	-- R	5.12 UJ	5.12 UJ	-- R	5.12 UJ
Acetone	NV	2,100,000	**144 J**	**69.6 J**	**22.9**	**11.2**	**25.9**	**66.5**	**29.0**	2.97 U	-- R	**33.7 J**	**93.9 J**	-- R	**13.7 J**
Allyl chloride	16	NV	0.626 UJ	0.626 UJ	0.626 U	0.626 U	0.626 U	0.626 U	0.626 U	0.626 U	-- R	0.626 UJ	0.626 UJ	-- R	0.626 UJ
Benzene	12	970	**21.5 J**	0.639 UJ	**0.984**	0.639 U	0.639 U	**0.789**	0.639 U	**4.09**	-- R	0.639 UJ	0.639 UJ	-- R	0.639 UJ
Benzyl chloride	1.9	8,000	1.04 UJ	1.04 UJ	1.04 U	1.04 U	1.04 U	1.04 U	1.04 U	1.04 U	-- R	1.04 UJ	1.04 UJ	-- R	1.04 UJ
Bromodichloromethane	2.5	NV	1.34 UJ	1.34 UJ	1.34 U	1.34 U	1.34 U	1.34 U	1.34 U	1.34 U	-- R	1.34 UJ	1.34 UJ	-- R	1.34 UJ
Bromoform	85	NV	6.21 UJ	6.52 UJ	6.21 U	6.21 U	6.52 U	6.21 U	6.52 U	6.21 U	-- R	6.21 UJ	6.52 UJ	-- R	6.52 UJ
Bromomethane	170	130,000	0.776 UJ	0.776 UJ	0.776 U	0.776 U	0.776 U	0.776 U	0.776 U	0.776 U	-- R	0.776 UJ	0.776 UJ	-- R	0.776 UJ
Carbon disulfide	24,000	210,000	**33.9 J**	**563 J**	1.24 U	1.24 U	**2.28**	1.24 U	**5.91**	**68.5**	-- R	1.24 UJ	**16.9 J**	-- R	1.24 UJ
Carbon tetrachloride	16	63,000	1.26 UJ	1.26 UJ	1.26 U	1.26 U	1.26 U	1.26 U	1.26 U	1.26 U	-- R	1.26 UJ	1.26 UJ	-- R	1.26 UJ
Chlorobenzene	1,700	NV	0.924 UJ	0.924 UJ	0.924 U	0.924 U	0.924 U	0.924 U	0.924 U	0.924 U	-- R	0.924 UJ	0.924 UJ	-- R	0.924 UJ
Chloroethane	140,000	1,300,000	0.528 UJ	**1.66 J**	0.528 U	0.528 U	0.528 U	0.528 U	0.528 U	0.528 U	-- R	0.528 UJ	0.528 UJ	-- R	0.528 UJ
Chloroform	4.1	16,000	**10.9 J**	0.973 UJ	**1.29**	0.973 U	0.973 U	0.973 U	0.973 U	**4.43**	-- R	**1.08 J**	**1.72 J**	-- R	0.973 UJ
Chloromethane	3,100	33,000	0.413 UJ	**1.85 J**	0.413 U	0.413 U	0.413 U	**0.896**	**0.954**	0.413 U	-- R	0.413 UJ	**0.630 J**	-- R	**1.07 J**
cis-1,2-Dichloroethene	1,400	NV	0.793 UJ	0.793 UJ	0.793 U	0.793 U	0.793 U	0.793 U	0.793 U	0.793 U	-- R	0.793 UJ	0.793 UJ	-- R	0.793 UJ
cis-1,3-Dichloropropene	NV	NV	0.908 UJ	0.908 UJ	0.908 U	0.908 U	0.908 U	0.908 U	0.908 U	0.908 U	-- R	0.908 UJ	0.908 UJ	-- R	0.908 UJ
Cyclohexane	210,000	NV	**1.57 J**	**3.12 J**	0.689 U	0.689 U	0.689 U	0.689 U	0.689 U	**5.51**	-- R	0.689 UJ	0.689 UJ	-- R	0.689 UJ
Dibromochloromethane	NV	NV	1.70 UJ	1.70 UJ	1.70 U	1.70 U	1.70 U	1.70 U	1.70 U	1.70 U	-- R	1.70 UJ	1.70 UJ	-- R	1.70 UJ

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Allen Street Study Area
Corvallis, Oregon

Location:	RBC, Soil Vapor, Volatilization to Indoor Air[1]		SVW-05S		SVW-06S	SVW-07S		SVW-08S		SVW-09D		SVW-09S		SVW-10D	
Sample Name:	Chronic	Acute	SVW-05S	SVW-05S	SVW-06S	SVW-07S	SVW-07S	SVW-08S	SVW-08S	SVW-09D	SVW-09D	SVW-09S	SVW-09S	SVW-10D	SVW-10D
Collection Date:	Residential		10/07/2024	05/20/2025	10/07/2024	10/07/2024	05/21/2025	10/07/2024	05/21/2025	10/08/2024	05/23/2025	10/08/2024	05/23/2025	10/08/2024	05/23/2025
VOCs cont. (ug/m^3)															
Dichlorodifluoromethane (Freon 12)	3,500	NV	**2.17 J**	**1.93 J**	**2.15**	**2.52**	**1.93**	**2.46**	**2.06**	**2.67**	-- R	**2.46 J**	**2.38 J**	-- R	**2.21 J**
Ethanol	NV	NV	**2,300**	**7.26 J**	**7.90**	4.71 U	**12.6**	**43.9**	**8.92**	4.71 U	-- R	**10.1 J**	**5.37 J**	-- R	**19.0 J**
Ethylbenzene	37	730,000	**2.94 J**	**5.33 J**	**7.02**	0.867 U	0.867 U	**1.49**	0.867 U	0.867 U	-- R	0.867 UJ	0.867 UJ	-- R	0.867 UJ
Freon 113	170,000	NV	1.53 UJ	1.53 UJ	1.53 U	1.53 U	1.53 U	1.53 U	1.53 U	1.53 U	-- R	1.53 UJ	1.53 UJ	-- R	1.53 UJ
Freon 114	NV	NV	1.40 UJ	1.40 UJ	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	-- R	1.40 UJ	1.40 UJ	-- R	1.40 UJ
Heptane	14,000	NV	**11.7 J**	**9.08 J**	0.818 U	0.818 U	0.818 U	0.818 U	0.818 U	**3.02**	-- R	0.818 UJ	0.818 UJ	-- R	0.818 UJ
Hexachlorobutadiene	4.3	NV	6.73 UJ	6.73 UJ	6.73 U	6.73 U	6.73 U	6.73 U	6.73 U	6.73 U	-- R	6.73 UJ	6.73 UJ	-- R	6.73 UJ
Isopropylbenzene	14,000	NV	0.983 UJ	0.983 UJ	0.983 U	0.983 U	0.983 U	0.983 U	0.983 U	0.983 U	-- R	0.983 UJ	0.983 UJ	-- R	0.983 UJ
m,p-Xylene	NV	NV	**13.1 J**	**2.01 J**	**33.8**	1.73 U	1.73 U	**6.20**	1.73 U	**1.94**	-- R	1.73 UJ	1.73 UJ	-- R	1.73 UJ
Methyl methacrylate	24,000	NV	0.819 UJ	0.819 UJ	0.819 U	0.819 U	0.819 U	0.819 U	0.819 U	0.819 U	-- R	0.819 UJ	0.819 UJ	-- R	0.819 UJ
Methyl tert-butyl ether	360	270,000	0.721 UJ	0.721 UJ	0.721 U	0.721 U	0.721 U	0.721 U	0.721 U	0.721 U	-- R	0.721 UJ	0.721 UJ	-- R	0.721 UJ
Methylene chloride	3,400	70,000	0.694 UJ	**2.25 J**	0.694 U	0.694 U	0.694 U	**29.6**	0.694 U	0.694 U	-- R	0.694 UJ	**1.17 J**	-- R	**3.96 J**
Naphthalene	2.8	6,700	3.30 UJ	3.30 UJ	3.30 U	3.30 U	3.30 U	3.30 U	3.30 U	3.30 U	-- R	3.30 UJ	3.30 UJ	-- R	3.30 UJ
n-Hexane	24,000	NV	**7.62 J**	**108 J**	2.22 U	2.22 U	2.22 U	**31.2**	2.22 U	**36.7**	-- R	2.22 UJ	2.22 UJ	-- R	2.22 UJ
n-Propylbenzene	35,000	NV	**1.32 J**	0.982 UJ	0.982 U	0.982 U	0.982 U	0.982 U	0.982 U	0.982 U	-- R	0.982 UJ	0.982 UJ	-- R	0.982 UJ
o-Xylene	3,500	NV	**3.84 J**	**0.915 J**	**14.7**	0.867 U	0.867 U	**2.95**	0.867 U	0.867 U	-- R	0.867 UJ	0.867 UJ	-- R	0.867 UJ
Propylene	100,000	NV	**32.7 J**	**282 J**	2.15 U	2.15 U	2.15 U	**158**	2.15 U	2.15 U	-- R	2.15 UJ	2.15 UJ	-- R	2.15 UJ
Styrene	35,000	700,000	1.70 UJ	**13.4 J**	1.70 U	1.70 U	1.70 U	1.70 U	1.70 U	1.70 U	-- R	1.70 UJ	1.70 UJ	-- R	1.70 UJ
Tetrachloroethene	360	1,400	1.36 UJ	1.36 UJ	**2.38**	1.36 U	1.36 U	1.36 U	1.36 U	**2.55**	-- R	1.36 UJ	1.36 UJ	-- R	1.36 UJ
Tetrahydrofuran	70,000	NV	**5.51 J**	0.590 UJ	**2.65**	0.590 U	0.590 U	0.590 U	0.590 U	0.590 U	-- R	0.590 UJ	0.590 UJ	-- R	0.590 UJ
Toluene	170,000	250,000	**17.2 J**	1.88 UJ	**35.3**	1.88 U	1.88 U	**7.12**	1.88 U	**5.05**	-- R	**2.15 J**	1.88 UJ	-- R	1.88 UJ
trans-1,2-Dichloroethene	1,400	26,000	0.793 UJ	0.793 UJ	0.793 U	0.793 U	0.793 U	0.793 U	0.793 U	0.793 U	-- R	0.793 UJ	0.793 UJ	-- R	0.793 UJ
trans-1,3-Dichloropropene	NV	NV	0.908 UJ	0.908 UJ	0.908 U	0.908 U	0.908 U	0.908 U	0.908 U	0.908 U	-- R	0.908 UJ	0.908 UJ	-- R	0.908 UJ
Trichloroethene	16	70	1.07 UJ	1.07 UJ	1.07 U	1.07 U	1.07 U	1.07 U	1.07 U	1.07 U	-- R	1.07 UJ	1.07 UJ	-- R	1.07 UJ
Trichlorofluoromethane (Freon 11)	NV	NV	1.12 UJ	1.12 UJ	1.12 U	1.12 U	**1.13**	1.12 U	**1.16**	1.12 U	-- R	1.12 UJ	1.12 UJ	-- R	**1.19 J**
Vinyl acetate	7,000	6,700	2.22 UJ	2.22 UJ	2.22 U	2.22 U	**2.74**	2.22 U	**2.74**	2.22 U	-- R	2.22 UJ	**4.37 J**	-- R	2.22 UJ
Vinyl bromide	6.2	NV	0.875 UJ	0.875 UJ	0.875 U	0.875 U	0.875 U	0.875 U	0.875 U	0.875 U	-- R	0.875 UJ	0.875 UJ	-- R	0.875 UJ
Vinyl chloride	5.6	43,000	0.511 UJ	0.511 UJ	0.511 U	0.511 U	0.511 U	0.511 U	0.511 U	0.511 U	-- R	0.511 UJ	0.511 UJ	-- R	0.511 UJ
Xylenes, total[b]	3,500	290,000	**16.9 J**	**2.93 J**	**48.5**	1.73 U	1.73 UJ	**9.15**	1.73 UJ	**2.37 J**	-- R	1.73 UJ	1.73 UJ	-- R	1.73 UJ

Table 2
Summary of Soil Vapor Analytical Results
Allen Street Study Area
Corvallis, Oregon

Location:	RBC, Soil Vapor, Volatilization to Indoor Air[1]		SVW-10S		SVW-11D	SVW-11S	SVW-12D	SVW-12S
Sample Name:	Chronic	Acute	SVW-10S	SVW-10S	SVW-11D	SVW-11S	SVW-12D	SVW-12S
Collection Date:	Residential		10/08/2024	05/23/2025	10/08/2024	10/08/2024	10/08/2024	10/08/2024
Helium (%)								
Helium[a]	NV	NV	**0.172**	**2.39**	**0.672**	**0.154**	**0.371**	**0.126**
TPH (ug/m^3)								
Gasoline-range hydrocarbons	10,000	NV	826 UJ	826 UJ	826 UJ	826 UJ	826 UJ	826 UJ
VOCs (ug/m^3)								
1,1,1-Trichloroethane	170,000	370,000	1.09 UJ	1.09 UJ	1.09 UJ	1.09 UJ	1.09 UJ	1.09 UJ
1,1,2,2-Tetrachloroethane	1.6	NV	1.37 UJ	1.37 UJ	1.37 UJ	1.37 UJ	1.37 UJ	1.37 UJ
1,1,2-Trichloroethane	5.9	NV	1.09 UJ	1.09 UJ	1.09 UJ	1.09 UJ	1.09 UJ	1.09 UJ
1,1-Dichloroethane	59	NV	0.802 UJ	0.802 UJ	0.802 UJ	0.802 UJ	0.802 UJ	0.802 UJ
1,1-Dichloroethene	7,000	6,700	0.793 UJ	0.793 UJ	0.793 UJ	0.793 UJ	0.793 UJ	0.793 UJ
1,2,4-Trichlorobenzene	70	NV	4.66 UJ	4.66 UJ	4.66 UJ	4.66 UJ	4.66 UJ	4.66 UJ
1,2,4-Trimethylbenzene	2,100	NV	**1.43 J**	0.982 UJ	0.982 UJ	**1.50 J**	0.982 UJ	0.982 UJ
1,2-Dibromoethane	0.16	NV	1.54 UJ	1.54 UJ	1.54 UJ	1.54 UJ	1.54 UJ	1.54 UJ
1,2-Dichlorobenzene	7,000	NV	1.20 UJ	1.20 UJ	1.20 UJ	1.20 UJ	1.20 UJ	1.20 UJ
1,2-Dichloroethane	3.6	NV	0.810 UJ	0.810 UJ	0.810 UJ	0.810 UJ	0.810 UJ	0.810 UJ
1,2-Dichloropropane	25	7,700	0.924 UJ	0.924 UJ	0.924 UJ	0.924 UJ	0.924 UJ	0.924 UJ
1,3,5-Trimethylbenzene	2,100	NV	0.982 UJ	0.982 UJ	0.982 UJ	0.982 UJ	0.982 UJ	0.982 UJ
1,3-Butadiene	3.1	22,000	4.43 UJ	4.43 UJ	4.43 UJ	4.43 UJ	4.43 UJ	4.43 UJ
1,3-Dichlorobenzene	NV	NV	1.20 UJ	1.20 UJ	1.20 UJ	1.20 UJ	1.20 UJ	1.20 UJ
1,4-Dichlorobenzene	8.5	400,000	1.20 UJ	1.20 UJ	1.20 UJ	1.20 UJ	1.20 UJ	1.20 UJ
1,4-Dioxane	19	240,000	2.27 UJ	2.27 UJ	2.27 UJ	2.27 UJ	2.27 UJ	2.27 UJ
2,2,4-Trimethylpentane	NV	NV	0.934 UJ	0.934 UJ	0.934 UJ	0.934 UJ	0.934 UJ	0.934 UJ
2-Butanone	170,000	170,000	3.69 UJ	3.69 UJ	3.69 UJ	3.69 UJ	3.69 UJ	3.69 UJ
2-Chlorotoluene	NV	NV	1.03 UJ	1.03 UJ	1.03 UJ	1.03 UJ	1.03 UJ	1.03 UJ
2-Hexanone	1,000	NV	5.11 UJ	5.11 UJ	5.11 UJ	5.11 UJ	5.11 UJ	5.11 UJ
2-Propanol	7,000	110,000	**4.52 J**	**3.96 J**	3.07 UJ	**6.10 J**	**3.49 J**	**7.08 J**
4-Ethyltoluene	NV	NV	0.982 UJ	0.982 UJ	0.982 UJ	0.982 UJ	0.982 UJ	0.982 UJ
4-Methyl-2-pentanone	100,000	NV	5.12 UJ	5.12 UJ	5.12 UJ	5.12 UJ	5.12 UJ	5.12 UJ
Acetone	NV	2,100,000	**34.7 J**	**11.5 J**	**24.2 J**	**21.5 J**	**19.6 J**	**14.3 J**
Allyl chloride	16	NV	0.626 UJ	0.626 UJ	0.626 UJ	0.626 UJ	0.626 UJ	0.626 UJ
Benzene	12	970	0.639 UJ	0.639 UJ	**0.885 J**	0.639 UJ	**7.41 J**	**0.815 J**
Benzyl chloride	1.9	8,000	1.04 UJ	1.04 UJ	1.04 UJ	1.04 UJ	1.04 UJ	1.04 UJ
Bromodichloromethane	2.5	NV	1.34 UJ	1.34 UJ	1.34 UJ	1.34 UJ	1.34 UJ	1.34 UJ
Bromoform	85	NV	6.21 UJ	6.52 UJ	6.21 UJ	6.21 UJ	6.21 UJ	6.21 UJ
Bromomethane	170	130,000	0.776 UJ	0.776 UJ	0.776 UJ	0.776 UJ	0.776 UJ	0.776 UJ
Carbon disulfide	24,000	210,000	**19.8 J**	**10.5 J**	**6.94 J**	1.24 UJ	**58.5 J**	**18.4 J**
Carbon tetrachloride	16	63,000	1.26 UJ	1.26 UJ	1.26 UJ	1.26 UJ	1.26 UJ	1.26 UJ
Chlorobenzene	1,700	NV	0.924 UJ	0.924 UJ	0.924 UJ	0.924 UJ	0.924 UJ	0.924 UJ
Chloroethane	140,000	1,300,000	0.528 UJ	0.528 UJ	0.528 UJ	0.528 UJ	0.528 UJ	0.528 UJ
Chloroform	4.1	16,000	**2.28 J**	0.973 UJ	0.973 UJ	**3.91 J**	**26.3 J**	**7.11 J**
Chloromethane	3,100	33,000	0.413 UJ	**1.03 J**	**1.46 J**	0.413 UJ	0.413 UJ	0.413 UJ
cis-1,2-Dichloroethene	1,400	NV	0.793 UJ	0.793 UJ	0.793 UJ	0.793 UJ	0.793 UJ	0.793 UJ
cis-1,3-Dichloropropene	NV	NV	0.908 UJ	0.908 UJ	0.908 UJ	0.908 UJ	0.908 UJ	0.908 UJ
Cyclohexane	210,000	NV	0.689 UJ	0.689 UJ	**0.878 J**	0.689 UJ	**2.38 J**	0.689 UJ
Dibromochloromethane	NV	NV	1.70 UJ	1.70 UJ	1.70 UJ	1.70 UJ	1.70 UJ	1.70 UJ

Table 2
Summary of Soil Vapor Analytical Results
Allen Street Study Area
Corvallis, Oregon

Location:	RBC, Soil Vapor, Volatilization to Indoor Air[1]		SVW-10S		SVW-11D	SVW-11S	SVW-12D	SVW-12S
Sample Name:	Chronic	Acute	SVW-10S	SVW-10S	SVW-11D	SVW-11S	SVW-12D	SVW-12S
Collection Date:	Residential		10/08/2024	05/23/2025	10/08/2024	10/08/2024	10/08/2024	10/08/2024
VOCs cont. (ug/m^3)								
Dichlorodifluoromethane (Freon 12)	3,500	NV	**2.36 J**	**2.40 J**	**2.54 J**	**2.41 J**	**2.51 J**	**2.68 J**
Ethanol	NV	NV	**6.41 J**	4.71 UJ	**6.20 J**	**20.0 J**	**6.11 J**	**7.56 J**
Ethylbenzene	37	730,000	**0.880 J**	0.867 UJ	0.867 UJ	0.867 UJ	**1.20 J**	**1.45 J**
Freon 113	170,000	NV	1.53 UJ	1.53 UJ	1.53 UJ	1.53 UJ	1.53 UJ	1.53 UJ
Freon 114	NV	NV	1.40 UJ	1.40 UJ	1.40 UJ	1.40 UJ	1.40 UJ	1.40 UJ
Heptane	14,000	NV	0.818 UJ	0.818 UJ	0.818 UJ	0.818 UJ	**0.953 J**	0.818 UJ
Hexachlorobutadiene	4.3	NV	6.73 UJ	6.73 UJ	6.73 UJ	6.73 UJ	6.73 UJ	6.73 UJ
Isopropylbenzene	14,000	NV	0.983 UJ	0.983 UJ	0.983 UJ	0.983 UJ	0.983 UJ	0.983 UJ
m,p-Xylene	NV	NV	**2.22 J**	**2.16 J**	1.73 UJ	1.73 UJ	1.73 UJ	**2.16 J**
Methyl methacrylate	24,000	NV	0.819 UJ	0.819 UJ	0.819 UJ	0.819 UJ	0.819 UJ	0.819 UJ
Methyl tert-butyl ether	360	270,000	0.721 UJ	0.721 UJ	0.721 UJ	0.721 UJ	0.721 UJ	0.721 UJ
Methylene chloride	3,400	70,000	0.694 UJ	**1.11 J**	0.694 UJ	0.694 UJ	0.694 UJ	0.694 UJ
Naphthalene	2.8	6,700	3.30 UJ	3.30 UJ	3.30 UJ	3.30 UJ	3.30 UJ	3.30 UJ
n-Hexane	24,000	NV	2.22 UJ	2.22 UJ	**5.82 J**	2.22 UJ	**8.88 J**	2.22 UJ
n-Propylbenzene	35,000	NV	0.982 UJ	0.982 UJ	0.982 UJ	0.982 UJ	0.982 UJ	0.982 UJ
o-Xylene	3,500	NV	**1.37 J**	0.867 UJ	0.867 UJ	0.867 UJ	**1.41 J**	**1.40 J**
Propylene	100,000	NV	**24.3 J**	2.15 UJ	**394 J**	2.15 UJ	**80.9 J**	2.15 UJ
Styrene	35,000	700,000	1.70 UJ	1.70 UJ	1.70 UJ	1.70 UJ	1.70 UJ	1.70 UJ
Tetrachloroethene	360	1,400	1.36 UJ	1.36 UJ	1.36 UJ	1.36 UJ	1.36 UJ	1.36 UJ
Tetrahydrofuran	70,000	NV	0.590 UJ	0.590 UJ	0.590 UJ	0.590 UJ	0.590 UJ	0.590 UJ
Toluene	170,000	250,000	**3.09 J**	1.88 UJ	1.88 UJ	1.88 UJ	**4.41 J**	1.88 UJ
trans-1,2-Dichloroethene	1,400	26,000	0.793 UJ	0.793 UJ	0.793 UJ	0.793 UJ	0.793 UJ	0.793 UJ
trans-1,3-Dichloropropene	NV	NV	0.908 UJ	0.908 UJ	0.908 UJ	0.908 UJ	0.908 UJ	0.908 UJ
Trichloroethene	16	70	1.07 UJ	1.07 UJ	1.07 UJ	1.07 UJ	1.07 UJ	1.07 UJ
Trichlorofluoromethane (Freon 11)	NV	NV	1.12 UJ	**1.21 J**	**1.33 J**	1.12 UJ	**1.44 J**	1.12 UJ
Vinyl acetate	7,000	6,700	2.22 UJ	2.22 UJ	2.22 UJ	2.22 UJ	2.22 UJ	2.22 UJ
Vinyl bromide	6.2	NV	0.875 UJ	0.875 UJ	0.875 UJ	0.875 UJ	0.875 UJ	0.875 UJ
Vinyl chloride	5.6	43,000	0.511 UJ	0.511 UJ	0.511 UJ	0.511 UJ	0.511 UJ	0.511 UJ
Xylenes, total[b]	3,500	290,000	**3.59 J**	**2.59 J**	1.73 UJ	1.73 UJ	**2.28 J**	**3.56 J**

Table 2
Summary of Soil Vapor Analytical Results
Allen Street Study Area
Corvallis, Oregon

Notes

Bold indicates a detection above the reporting limit.

Shading (color key below) indicates values that exceed RBCs; non-detects (U, UJ) and rejected results (R) were not compared with screening criteria.

Data summation rules are as follows: non-detect results are multiplied by one-half when used for sums. When all results are non-detect, the highest reporting limit is provided as the sum.

RBC, Soil Vapor, Volatilization to Indoor Air, Chronic, Residential

-- = result value is not shown because it has been qualified as rejected.

J = result is estimated.

NV = no value.

R = result is rejected. The analyte may or may not be present in the sample. The results are not shown.

RBC = risk-based concentration.

TPH = total petroleum hydrocarbons.

U = result is non-detect at the method reporting limit.

UJ = result is non-detect with an estimated method reporting limit.

ug/m^3 = micrograms per cubic meter.

VOC = volatile organic compound.

[a]Helium was applied to the shrouded sampling train during sample collecttion to identify leaks. A detection of helium indiates a leak in the sampling train.

[b]Total xylenes is the sum of m,p-xylene and o-xylene.

Reference

[1]DEQ. 2024. Table 1: *Chronic and Acute Vapor Intrusion Risk-Based Concentrations*. Oregon Department of Environmental Quality. March.

Attachment A

Standard Operating Procedures

MAUL
FOSTER
ALONGI

Standard Operating Procedure

Monitoring Well—Water Elevation

SOP Number: 13
Date: 03/09/2021
Revision Number: 0.1

Scope and Application

This standard operating procedure (SOP) describes the methods for obtaining groundwater level measurements and light nonaqueous-phase liquid (LNAPL) measurements from monitoring wells. Measurement may be collected as an independent event or in conjunction with groundwater sampling or sampling of removed LNAPL.

Equipment and Materials Required

The following materials are necessary for this procedure:

- Personal protective equipment (as specified in the health and safety plan)
- Equipment decontamination supplies if equipment will be reused between well locations (see SOP 1 for equipment decontamination procedures)
- Field notebook
- Water-level meter or oil/water interface probe if water levels and LNAPL levels will be measured
- Bailers or tape/paste to confirm LNAPL detections if required; see SOP 10 for procedures for managing LNAPL when removing LNAPL from a well

Methodology

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

General Sampling Procedure:

Review well construction details and historical groundwater and LNAPL levels and thicknesses if available.

During groundwater sampling events, measurements should be collected before, during, and after purging and sampling. During purging and low-flow sampling, water-level measurements are conducted to ensure that drawdown is not occurring. Low-flow sampling methods are described in SOP 9. The following procedures should be followed when collecting groundwater-level and LNAPL measurements from wells.

Water Level Measurement

1. Test the water-level meter to ensure proper instrument response. This can be accomplished by immersing the probe tip in a small container of water.
2. Open the well cover and cap and allow the water level to equilibrate with atmospheric pressure for several minutes so that a static water level is attained. Audible air movement into or out of

the well upon loosening of the well cap is an indication that the water level is not in equilibrium with atmospheric pressure.

3. Locate the measurement reference point at the top of the well casing. Typically, this is a small notch in the casing or a point marked with a pen. If no measure point is present, measure the water level from the north side of the casing and note the result in the field notebook.
4. Lower the water-level meter probe into the well casing until the probe signal indicates that water has been contacted.
5. Observe the depth-to-water (DTW) reading from the measurement reference point at the top of the well casing to the nearest 0.01 foot. Over the course of about a minute, raise and re-lower the probe and observe the resulting DTW reading. If the reading remains unchanged to within 0.01 foot, this is an indication that the water level has equilibrated with atmospheric pressure; the reading can then be recorded in the field notebook as the static water level reading. If the reading changes, allow more time for the water level to become static.
6. If the work scope or SAP requires measurement of the depth-to-bottom (DTB), lower the probe to the bottom of the well and record the DTB reading from the reference point to the nearest 0.01 foot.
7. Remove the probe and decontaminate the probe and the portion of the probe tape inserted into the well casing.

Water Level and LNAPL Measurement

1. Repeat above steps 1 through 7.
2. Lower the interface probe into the well casing until the probe signal indicates that LNAPL has been contacted. Typically, the interface probe will signal by a repeating beep when LNAPL is present. A steady signal indicates that LNAPL is absent and that the probe is recording the DTW.
3. Observe the LNAPL reading as described in step 5 above until a static reading to the nearest 0.01 foot is achieved, and record the reading in the field notebook.
4. Lower the probe until a steady signal indicates that water has been contacted. Observe the water-level reading as described in step 5 above to confirm a static water level, and record the reading in the field notebook.
5. If LNAPL is detected in a well with no prior history of LNAPL presence, or the LNAPL thickness is greater than in prior observations, verify the presence and thickness using an alternative technique (e.g., bailer, tape, and water/petroleum colorimetric paste). See SOP 10 for procedures for managing LNAPL when removing LNAPL from a well.
6. Remove the interface probe and decontaminate the probe and the portion of the probe tape inserted into the well casing.

Standard Operating Procedure

Soil Vapor Sampling

SOP Number: 16
Date: 03/09/2021
Revision Number: 0.1

Scope and Application

This standard operating procedure (SOP) describes the methods for collecting soil vapor samples from temporary or permanent equipment installed in unsaturated subsurface soil. Sample collection may require drilling through concrete or asphalt to gain access to subsurface soils.

Equipment and Materials Required

- The following materials are necessary for this procedure:
- Personal protective equipment (as specified in the health and safety plan)
- Measuring tape, Teflon™ tape, wrenches
- Laboratory-supplied sample canister (e.g., Summa), manifolds, and flow controllers
- Leak-detection equipment (helium tank, two-stage regulator, and gas-flow-control valve; and helium leak detector)
- Vacuum (purge) pump
- Laboratory chain-of-custody form
- Equipment decontamination supplies if vapor-sampling equipment[instruments?] will be reused between sample locations (see SOP 1 for equipment decontamination procedures)
- Soil vapor field sampling datasheet and notebook

Methodology

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

Complete the attached questionnaire before beginning vapor-sampling activities. The intent of this questionnaire is to document potential sources of vapors that could require the collection of vapor samples that are not representative of vapors present in subsurface soil.

General Sampling Procedure:

Sample collection from a temporary or permanent boring

- Installation of the sample point may be completed manually or by a drilling subcontractor. See SOPs 7 and 8 for drilling procedures.
- Vapor point construction details, including screen length and depth placement, annular material, and seal specifications, may be project-specific and should be described in the project SAP.
- Clear the ground surface of brush, root mat, grass, leaves, and other debris.

- Remove soil to the target depth, verify that the sample depth is correct, and record the depth in the field notebook and the boring log (see SOP 2).
- Assemble and attach the sampling equipment as described below. Before sampling, temporary sampling points must equilibrate for at least 30 minutes. Permanent points should equilibrate for at least 48 hours.

Sample collection from a subslab sample point

Subslab soil-gas sampling points consist of a Cox-Colvin & Associates, Inc. (Cox-Colvin) Vapor PinTM system. The procedures developed by Cox-Colvin for installing and removing the Vapor Pin system, including the secure cover, are attached.

Assembly and attachment of sampling equipment

- Connect the sampling equipment as shown in the attached figure such that the equipment can be purged, leak tested, shut-in tested, and sampled in the field.
- The vapor pin installed in an asphalt or cement slab will be connected to the ¼ turn Swagelok® ball valve (Valve #1—sampling valve), using appurtenant stainless steel or Tygon® tubing. The sampling valve is connected to a vacuum gauge, which is attached to the flow controller.
- At the flow controller, a Swagelok tee connection will be fitted to the canister and to a second ¼ turn Swagelok ball valve (Valve #2—purge valve) used to isolate the purging equipment during actual sampling.
- The canister has a built-in valve that allows isolation of the canister during purging and leak-checking activities. On the other side of the purge valve (#2), a vacuum pump will be connected in order to induce vacuum for purging and shut-in testing.

Leak detection

- Helium will be contained around the sampling apparatus and sampling pin to serve as a leak-check compound. Helium will be released into a small structure (shroud) that is placed over the sampling pin and sampling train.
- With the canister valve closed, a sample of the soil gas collected during purging (described below) will be contained in a Tedlar® bag.
- A field helium detector will be used to sample the air purged through the sampling train to verify the presence or absence of helium. A helium concentration greater than 10 percent of the concentration in the containment structure indicates that a leak is occurring.
- If a leak is detected, the sampling and purging train fittings will be tightened and the leak check will be repeated.
- The absence of helium during the purging process verifies the integrity of the sampling system before the sample is collected.
- The canister will also be analyzed for helium by the analytical laboratory as a quality assurance measure.

Sampling

- After the sampling train is purged and no leaks are detected in the sampling train, close the valve leading to the vacuum pump (Valve #2—purge valve), open the valve leading to the

sampling pin (Valve #1—sample valve), and then open the valve on the canister to collect the sample over a 30-minute period or the duration of time required for the specific test.

- Record field data during the sampling on the soil vapor field sampling datasheet, including the sampling start and stop times, the initial and final canister vacuum readings, and weather conditions.
- The sample will be rejected if the initial canister pressure is not at least -25 inch of mercury or if the final canister pressure is greater than -0.1 inch of mercury. The final canister pressure is recommended at or near -5 inch of mercury.

Data Recording

In a field log notebook and soil vapor field sampling datasheet, record the following:

- Project name, sample date, sampling location, canister serial number, initial vacuum reading, final pressure reading, and sampling time.
- Weather conditions during sampling (temperature, barometric pressure, humidity, sunny/cloud cover, wind).
- Date and amount of most recent prior rainfall.

Abandonment of Sampling Points

- Temporary Borings: Abandon each borehole in accordance with local and state regulations/procedures. See SOPs 7 and 8 for borehole abandonment procedures. The abandonment procedure typically consists of filling the boring with granular bentonite and hydrating the bentonite with water. Match the surface completion to the surrounding materials.
- Subslab Vapor Pin: The subslab vapor pin will be properly decommissioned consistent with the attached Cox-Colvin procedure. The slab borehole will be filled with grout and/or concrete. Surface restoration may include a follow-up visit for final sanding and finish work to restore the floor slab, and associated coverings, to their original condition as required.

Attachment B

Field Sampling Data Sheet

MAUL FOSTER ALONGI

Soil Vapor Field Sampling Data Sheet
Project: M0785.32.002
Client: Oregon Department of Environmental Quality
Location: 1420-1540 SW Allen Street, Corvallis, Oregon

Sample ID	Sample Date	Initial Vaccum ("Hg)	Shut-in Test	SUMMA Canister No.	Manifold No.	Sample Size/Rate	Purge Time		Helium Concentration		Purge		Sample Time		Sample Vaccum	
							Begin	End	Outdoor Ambient Air (ppm)	Under Shroud (%)	Purge Volume (L)	Helium Concentration in Tedlar Bag	Begin	End	Intial ("Hg)	Final ("Hg)
SVW-01S	5/20/2025	-29	✔	021881	022613	1L	12:47	12:50	0	45.8	1	1,850 ppm	12:52	12:57	-29	-5
SVW-01D	5/20/2025	-29	✔	023915	029074	1L	12:14	12:17	0	46.8	1	0	12:18	12:27	-29	-5
SVW-02S	5/20/2025	-29	✔	022837	023112	1L	11:58	12:00	0	48.2	1	2.0%	12:02	12:06	-29	-5
SVW-02D	5/20/2025	-29	✔	012705	011927	1L	11:27	11:30	0	47.6	1	7,400 ppm	11:31	11:35	-29	-5
SVW-05S	5/20/2025	-29	✔	015128	007136	1L	15:28	15:31	0	46.3	1	0	15:33	15:38	-29	-5
SVW-05D	5/20/2025	-29	✔	021895	024980	1L	16:15	16:18	0	45.8	1	0	16:20	16:25	-29	-5
SVW-07S	5/21/2025	-29	✔	015192	022415	1L	9:58	10:01	0	44.5	1	0	10:03	10:08	-29	-5
SVW-08S	5/21/2025	-29	✔	012085	011546	1L	9:11	9:13	0	48.1	1	0	9:16	9:21	-29	-5
SVW-09S	5/23/2025	-29	✔	022547	022493	1L	13:16	13:19	0	48.0	1	100 ppm	13:22	13:27	-29	-5
SVW-09D	5/23/2025	-29	✔	015901	010950	1L	12:23	12:26	0	47.2	1	300 ppm	12:28	12:33	-29	-5
SVW-10S	5/23/2025	-29	✔	021532	012063	1L	10:17	10:20	0	49.2	1	0	10:22	10:27	-29	-5
SVW-10D	5/23/2025	-29	✔	020612	022625	1L	11:15	11:18	0	48.8	1	0	11:20	11:24	-29	-5

Notes

"Hg= Inches of mercury

ID= identification

L= liter

No.= number

ppm= parts per million

%= percent

Attachment C

Laboratory Analytical Report

MAUL FOSTER ALONGI

ANALYTICAL REPORT

June 02, 2025

Oregon Dept. of Env. Quality - ODEQ

Sample Delivery Group:	L1863398
Samples Received:	05/27/2025
Project Number:	
Description:	Allen Street Study Area

Report To:

Sarah KINGERY
165 E 7th Ave.
Suite 100
Eugene, OR 97401

Entire Report Reviewed By:

Shane Gambill
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 mydata.pacelabs.com

TABLE OF CONTENTS

SVW-01D L1863398-01

Collected by: Connor Anderson | Collected date/time: 05/20/25 12:18 | Received date/time: 05/27/25 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2526128	1	05/29/25 12:18	05/29/25 12:18	CAM	Mt. Juliet, TN
Organic Compounds (GC) by Method ASTM 1946	WG2527716	1	05/31/25 09:17	05/31/25 09:17	LKH	Mt. Juliet, TN

SVW-01S L1863398-02

Collected by: Connor Anderson | Collected date/time: 05/20/25 12:52 | Received date/time: 05/27/25 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2526128	1	05/29/25 12:48	05/29/25 12:48	CAM	Mt. Juliet, TN
Organic Compounds (GC) by Method ASTM 1946	WG2527716	1	05/31/25 09:22	05/31/25 09:22	LKH	Mt. Juliet, TN

SVW-02D L1863398-03

Collected by: Connor Anderson | Collected date/time: 05/20/25 11:31 | Received date/time: 05/27/25 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2526128	1	05/29/25 13:20	05/29/25 13:20	CAM	Mt. Juliet, TN
Organic Compounds (GC) by Method ASTM 1946	WG2527716	1	05/31/25 09:31	05/31/25 09:31	LKH	Mt. Juliet, TN

SVW-02S L1863398-04

Collected by: Connor Anderson | Collected date/time: 05/20/25 12:02 | Received date/time: 05/27/25 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2526128	1	05/29/25 13:51	05/29/25 13:51	CAM	Mt. Juliet, TN
Organic Compounds (GC) by Method ASTM 1946	WG2527716	1	05/31/25 09:35	05/31/25 09:35	LKH	Mt. Juliet, TN

SVW-05D L1863398-05

Collected by: Connor Anderson | Collected date/time: 05/20/25 16:20 | Received date/time: 05/27/25 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2526128	1	05/29/25 14:21	05/29/25 14:21	CAM	Mt. Juliet, TN
Organic Compounds (GC) by Method ASTM 1946	WG2527716	1	05/31/25 09:39	05/31/25 09:39	LKH	Mt. Juliet, TN

SVW-05S L1863398-06

Collected by: Connor Anderson | Collected date/time: 05/20/25 15:33 | Received date/time: 05/27/25 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2526128	1	05/29/25 14:51	05/29/25 14:51	CAM	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG2528694	10	06/02/25 13:01	06/02/25 13:01	CAM	Mt. Juliet, TN
Organic Compounds (GC) by Method ASTM 1946	WG2527716	1	05/31/25 09:42	05/31/25 09:42	LKH	Mt. Juliet, TN

SVW-07S L1863398-07

Collected by: Connor Anderson | Collected date/time: 05/21/25 10:03 | Received date/time: 05/27/25 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2526128	1	05/29/25 15:22	05/29/25 15:22	CAM	Mt. Juliet, TN
Organic Compounds (GC) by Method ASTM 1946	WG2527800	1	05/31/25 12:19	05/31/25 12:19	LKH	Mt. Juliet, TN

SVW-08S L1863398-08

Collected by: Connor Anderson | Collected date/time: 05/21/25 09:16 | Received date/time: 05/27/25 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2526128	1	05/29/25 15:53	05/29/25 15:53	CAM	Mt. Juliet, TN
Organic Compounds (GC) by Method ASTM 1946	WG2527800	1	05/31/25 12:31	05/31/25 12:31	LKH	Mt. Juliet, TN

SVW-09D L1863398-09

Collected by: Connor Anderson | Collected date/time: 05/23/25 12:28 | Received date/time: 05/27/25 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2526128	1	05/29/25 16:24	05/29/25 16:24	CAM	Mt. Juliet, TN
Organic Compounds (GC) by Method ASTM 1946	WG2527800	1	05/31/25 12:35	05/31/25 12:35	LKH	Mt. Juliet, TN

SVW-09S L1863398-10

Collected by: Connor Anderson | Collected date/time: 05/23/25 13:22 | Received date/time: 05/27/25 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2526128	1	05/29/25 16:55	05/29/25 16:55	CAM	Mt. Juliet, TN
Organic Compounds (GC) by Method ASTM 1946	WG2527800	1	05/31/25 12:41	05/31/25 12:41	LKH	Mt. Juliet, TN

SVW-10D L1863398-11

Collected by: Connor Anderson | Collected date/time: 05/23/25 11:20 | Received date/time: 05/27/25 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2526128	1	05/29/25 17:24	05/29/25 17:24	CAM	Mt. Juliet, TN
Organic Compounds (GC) by Method ASTM 1946	WG2527800	1	05/31/25 12:51	05/31/25 12:51	LKH	Mt. Juliet, TN

SVW-10S L1863398-12

Collected by: Connor Anderson | Collected date/time: 05/23/25 10:22 | Received date/time: 05/27/25 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2526128	1	05/29/25 17:54	05/29/25 17:54	CAM	Mt. Juliet, TN
Organic Compounds (GC) by Method ASTM 1946	WG2527800	1	05/31/25 13:28	05/31/25 13:28	LKH	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.

Shane Gambill
Project Manager

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	16.0	38.0		1	WG2526128
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2526128
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG2526128
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2526128
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2526128
Bromoform	75-25-2	253	0.630	6.52	ND	ND		1	WG2526128
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG2526128
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG2526128
Carbon disulfide	75-15-0	76.10	0.400	1.24	40.6	126		1	WG2526128
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2526128
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2526128
Chloroethane	75-00-3	64.50	0.200	0.528	0.290	0.765		1	WG2526128
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG2526128
Chloromethane	74-87-3	50.50	0.200	0.413	0.540	1.12		1	WG2526128
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2526128
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG2526128
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2526128
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2526128
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2526128
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG2526128
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2526128
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2526128
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG2526128
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2526128
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG2526128
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2526128
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG2526128
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2526128
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2526128
1,4-Dioxane	123-91-1	88.10	0.630	2.27	ND	ND		1	WG2526128
Ethanol	64-17-5	46.10	2.50	4.71	3.14	5.92		1	WG2526128
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG2526128
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG2526128
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.221	1.24		1	WG2526128
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.543	2.69		1	WG2526128
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG2526128
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2526128
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG2526128
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2526128
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG2526128
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG2526128
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.357	1.24		1	WG2526128
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2526128
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG2526128
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2526128
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG2526128
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2526128
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2526128
2-Propanol	67-63-0	60.10	1.25	3.07	1.67	4.10		1	WG2526128
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG2526128
n-Propylbenzene	103-65-1	120	0.200	0.982	ND	ND		1	WG2526128
Styrene	100-42-5	104	0.400	1.70	ND	ND	J4	1	WG2526128
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2526128
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG2526128
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG2526128
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG2526128

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
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2526128
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG2526128
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2526128
Trichloroethylene	79-01-6	131	0.200	1.07	0.536	2.87		1	WG2526128
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND	J4	1	WG2526128
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG2526128
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG2526128
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG2526128
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2526128
Vinyl acetate	108-05-4	86.10	0.630	2.22	ND	ND		1	WG2526128
m&p-Xylene		106	0.400	1.73	ND	ND		1	WG2526128
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG2526128
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG2526128
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*89.6*				WG2526128

Organic Compounds (GC) by Method ASTM 1946

Analyte	CAS #	Mol. Wt.	RDL %	Result %	Qualifier	Dilution	Batch
Helium	7440-59-7		0.100	0.832		1	WG2527716

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	4.23	10.1		1	WG2526128
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2526128
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG2526128
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2526128
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2526128
Bromoform	75-25-2	253	0.630	6.52	ND	ND		1	WG2526128
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG2526128
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG2526128
Carbon disulfide	75-15-0	76.10	0.400	1.24	2.40	7.47		1	WG2526128
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2526128
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2526128
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG2526128
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG2526128
Chloromethane	74-87-3	50.50	0.200	0.413	0.498	1.03		1	WG2526128
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2526128
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG2526128
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2526128
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2526128
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2526128
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG2526128
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2526128
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2526128
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG2526128
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2526128
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG2526128
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2526128
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG2526128
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2526128
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2526128
1,4-Dioxane	123-91-1	88.10	0.630	2.27	ND	ND		1	WG2526128
Ethanol	64-17-5	46.10	2.50	4.71	ND	ND		1	WG2526128
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG2526128
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG2526128
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.201	1.13		1	WG2526128
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.467	2.31		1	WG2526128
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG2526128
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2526128
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG2526128
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2526128
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG2526128
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG2526128
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.298	1.03		1	WG2526128
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2526128
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG2526128
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2526128
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG2526128
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2526128
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2526128
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG2526128
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG2526128
n-Propylbenzene	103-65-1	120	0.200	0.982	ND	ND		1	WG2526128
Styrene	100-42-5	104	0.400	1.70	ND	ND	J4	1	WG2526128
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2526128
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG2526128
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG2526128
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG2526128

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
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2526128
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG2526128
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2526128
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG2526128
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND	J4	1	WG2526128
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG2526128
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG2526128
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG2526128
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2526128
Vinyl acetate	108-05-4	86.10	0.630	2.22	ND	ND		1	WG2526128
m&p-Xylene		106	0.400	1.73	ND	ND		1	WG2526128
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG2526128
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG2526128
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*92.3*				WG2526128

Organic Compounds (GC) by Method ASTM 1946

Analyte	CAS #	Mol. Wt.	RDL %	Result %	Qualifier	Dilution	Batch
Helium	7440-59-7		0.100	0.981		1	WG2527716

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	14.8	35.2		1	WG2526128
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2526128
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG2526128
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2526128
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2526128
Bromoform	75-25-2	253	0.630	6.52	ND	ND		1	WG2526128
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG2526128
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG2526128
Carbon disulfide	75-15-0	76.10	0.400	1.24	14.4	44.8		1	WG2526128
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2526128
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2526128
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG2526128
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG2526128
Chloromethane	74-87-3	50.50	0.200	0.413	0.634	1.31		1	WG2526128
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2526128
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG2526128
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2526128
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2526128
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2526128
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG2526128
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2526128
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2526128
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG2526128
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2526128
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG2526128
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2526128
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG2526128
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2526128
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2526128
1,4-Dioxane	123-91-1	88.10	0.630	2.27	ND	ND		1	WG2526128
Ethanol	64-17-5	46.10	2.50	4.71	ND	ND		1	WG2526128
Ethylbenzene	100-41-4	106	0.200	0.867	0.226	0.980		1	WG2526128
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG2526128
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.204	1.15		1	WG2526128
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.473	2.34		1	WG2526128
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG2526128
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2526128
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG2526128
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2526128
n-Hexane	110-54-3	86.20	0.630	2.22	1.21	4.27		1	WG2526128
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG2526128
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.241	0.837		1	WG2526128
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2526128
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	1.34	3.95		1	WG2526128
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2526128
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG2526128
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2526128
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2526128
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG2526128
Propene	115-07-1	42.10	1.25	2.15	16.2	27.9		1	WG2526128
n-Propylbenzene	103-65-1	120	0.200	0.982	ND	ND		1	WG2526128
Styrene	100-42-5	104	0.400	1.70	ND	ND	J4	1	WG2526128
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2526128
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG2526128
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG2526128
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG2526128

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
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2526128
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG2526128
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2526128
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG2526128
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND	J4	1	WG2526128
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG2526128
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG2526128
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG2526128
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2526128
Vinyl acetate	108-05-4	86.10	0.630	2.22	ND	ND		1	WG2526128
m&p-Xylene		106	0.400	1.73	1.10	4.77		1	WG2526128
o-Xylene	95-47-6	106	0.200	0.867	0.362	1.57		1	WG2526128
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG2526128
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*93.0*				WG2526128

Organic Compounds (GC) by Method ASTM 1946

Analyte	CAS #	Mol. Wt.	RDL %	Result %	Qualifier	Dilution	Batch
Helium	7440-59-7		0.100	1.37		1	WG2527716

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	10.0	23.8		1	WG2526128
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2526128
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG2526128
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2526128
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2526128
Bromoform	75-25-2	253	0.630	6.52	ND	ND		1	WG2526128
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG2526128
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG2526128
Carbon disulfide	75-15-0	76.10	0.400	1.24	15.7	48.9		1	WG2526128
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2526128
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2526128
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG2526128
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG2526128
Chloromethane	74-87-3	50.50	0.200	0.413	0.527	1.09		1	WG2526128
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2526128
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG2526128
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2526128
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2526128
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2526128
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG2526128
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2526128
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2526128
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG2526128
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2526128
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG2526128
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2526128
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG2526128
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2526128
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2526128
1,4-Dioxane	123-91-1	88.10	0.630	2.27	ND	ND		1	WG2526128
Ethanol	64-17-5	46.10	2.50	4.71	2.73	5.15		1	WG2526128
Ethylbenzene	100-41-4	106	0.200	0.867	0.356	1.54		1	WG2526128
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG2526128
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND	ND		1	WG2526128
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.453	2.24		1	WG2526128
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG2526128
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2526128
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG2526128
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2526128
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG2526128
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG2526128
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.307	1.07		1	WG2526128
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2526128
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG2526128
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2526128
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG2526128
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2526128
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2526128
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG2526128
Propene	115-07-1	42.10	1.25	2.15	52.9	91.1		1	WG2526128
n-Propylbenzene	103-65-1	120	0.200	0.982	ND	ND		1	WG2526128
Styrene	100-42-5	104	0.400	1.70	ND	ND	J4	1	WG2526128
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2526128
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG2526128
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG2526128
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG2526128

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
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2526128
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG2526128
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2526128
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG2526128
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND	J4	1	WG2526128
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG2526128
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG2526128
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG2526128
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2526128
Vinyl acetate	108-05-4	86.10	0.630	2.22	ND	ND		1	WG2526128
m&p-Xylene		106	0.400	1.73	1.74	7.54		1	WG2526128
o-Xylene	95-47-6	106	0.200	0.867	0.652	2.83		1	WG2526128
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG2526128
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*93.7*				WG2526128

Organic Compounds (GC) by Method ASTM 1946

Analyte	CAS #	Mol. Wt.	RDL %	Result %	Qualifier	Dilution	Batch
Helium	7440-59-7		0.100	2.84		1	WG2527716

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	8.84	21.0		1	WG2526128
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2526128
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG2526128
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2526128
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2526128
Bromoform	75-25-2	253	0.630	6.52	ND	ND		1	WG2526128
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG2526128
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG2526128
Carbon disulfide	75-15-0	76.10	0.400	1.24	1.92	5.98		1	WG2526128
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2526128
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2526128
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG2526128
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG2526128
Chloromethane	74-87-3	50.50	0.200	0.413	0.459	0.948		1	WG2526128
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2526128
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG2526128
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2526128
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2526128
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2526128
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG2526128
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2526128
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2526128
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG2526128
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2526128
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG2526128
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2526128
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG2526128
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2526128
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2526128
1,4-Dioxane	123-91-1	88.10	0.630	2.27	ND	ND		1	WG2526128
Ethanol	64-17-5	46.10	2.50	4.71	2.86	5.39		1	WG2526128
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG2526128
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG2526128
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND	ND		1	WG2526128
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.460	2.27		1	WG2526128
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG2526128
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2526128
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG2526128
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2526128
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG2526128
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG2526128
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.397	1.38		1	WG2526128
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2526128
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG2526128
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2526128
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG2526128
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2526128
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2526128
2-Propanol	67-63-0	60.10	1.25	3.07	1.39	3.42		1	WG2526128
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG2526128
n-Propylbenzene	103-65-1	120	0.200	0.982	ND	ND		1	WG2526128
Styrene	100-42-5	104	0.400	1.70	ND	ND	J4	1	WG2526128
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2526128
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG2526128
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG2526128
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG2526128

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
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2526128
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG2526128
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2526128
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG2526128
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND	J4	1	WG2526128
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG2526128
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG2526128
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG2526128
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2526128
Vinyl acetate	108-05-4	86.10	0.630	2.22	ND	ND		1	WG2526128
m&p-Xylene		106	0.400	1.73	ND	ND		1	WG2526128
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG2526128
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG2526128
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*92.4*				WG2526128

Organic Compounds (GC) by Method ASTM 1946

Analyte	CAS #	Mol. Wt.	RDL %	Result %	Qualifier	Dilution	Batch
Helium	7440-59-7		0.100	0.864		1	WG2527716

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	29.3	69.6		1	WG2526128
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2526128
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG2526128
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2526128
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2526128
Bromoform	75-25-2	253	0.630	6.52	ND	ND		1	WG2526128
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG2526128
1,3-Butadiene	106-99-0	54.10	2.00	4.43	4.59	10.2		1	WG2526128
Carbon disulfide	75-15-0	76.10	0.400	1.24	181	563		1	WG2526128
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2526128
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2526128
Chloroethane	75-00-3	64.50	0.200	0.528	0.631	1.66		1	WG2526128
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG2526128
Chloromethane	74-87-3	50.50	0.200	0.413	0.895	1.85		1	WG2526128
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2526128
Cyclohexane	110-82-7	84.20	0.200	0.689	0.907	3.12		1	WG2526128
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2526128
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2526128
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2526128
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG2526128
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2526128
1,2-Dichloroethane	107-06-2	99	0.200	0.810	0.229	0.927		1	WG2526128
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG2526128
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2526128
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG2526128
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2526128
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG2526128
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2526128
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2526128
1,4-Dioxane	123-91-1	88.10	0.630	2.27	ND	ND		1	WG2526128
Ethanol	64-17-5	46.10	2.50	4.71	3.85	7.26		1	WG2526128
Ethylbenzene	100-41-4	106	0.200	0.867	1.23	5.33		1	WG2526128
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG2526128
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND	ND		1	WG2526128
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.390	1.93		1	WG2526128
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG2526128
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2526128
Heptane	142-82-5	100	0.200	0.818	2.22	9.08		1	WG2526128
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2526128
n-Hexane	110-54-3	86.20	0.630	2.22	30.7	108		1	WG2526128
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG2526128
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.648	2.25		1	WG2526128
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2526128
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	1.44	4.25		1	WG2526128
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2526128
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG2526128
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2526128
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2526128
2-Propanol	67-63-0	60.10	1.25	3.07	1.53	3.76		1	WG2526128
Propene	115-07-1	42.10	12.5	21.5	164	282		10	WG2528694
n-Propylbenzene	103-65-1	120	0.200	0.982	ND	ND		1	WG2526128
Styrene	100-42-5	104	0.400	1.70	3.15	13.4	J4	1	WG2526128
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2526128
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG2526128
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG2526128
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG2526128

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
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2526128
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG2526128
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2526128
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG2526128
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND	J4	1	WG2526128
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG2526128
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	0.269	1.26		1	WG2526128
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG2526128
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2526128
Vinyl acetate	108-05-4	86.10	0.630	2.22	ND	ND		1	WG2526128
m&p-Xylene		106	0.400	1.73	0.464	2.01		1	WG2526128
o-Xylene	95-47-6	106	0.200	0.867	0.211	0.915		1	WG2526128
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG2526128
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*94.5*				WG2526128
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*89.5*				WG2528694

Organic Compounds (GC) by Method ASTM 1946

Analyte	CAS #	Mol. Wt.	RDL %	Result %	Qualifier	Dilution	Batch
Helium	7440-59-7		0.100	0.919		1	WG2527716

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	10.9	25.9		1	WG2526128
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2526128
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG2526128
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2526128
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2526128
Bromoform	75-25-2	253	0.630	6.52	ND	ND		1	WG2526128
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG2526128
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG2526128
Carbon disulfide	75-15-0	76.10	0.400	1.24	0.731	2.28		1	WG2526128
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2526128
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2526128
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG2526128
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG2526128
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG2526128
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2526128
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG2526128
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2526128
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2526128
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2526128
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG2526128
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2526128
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2526128
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG2526128
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2526128
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG2526128
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2526128
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG2526128
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2526128
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2526128
1,4-Dioxane	123-91-1	88.10	0.630	2.27	ND	ND		1	WG2526128
Ethanol	64-17-5	46.10	2.50	4.71	6.69	12.6		1	WG2526128
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG2526128
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG2526128
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.201	1.13		1	WG2526128
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.390	1.93		1	WG2526128
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG2526128
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2526128
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG2526128
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2526128
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG2526128
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG2526128
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG2526128
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2526128
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG2526128
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2526128
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG2526128
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2526128
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2526128
2-Propanol	67-63-0	60.10	1.25	3.07	2.66	6.54		1	WG2526128
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG2526128
n-Propylbenzene	103-65-1	120	0.200	0.982	ND	ND		1	WG2526128
Styrene	100-42-5	104	0.400	1.70	ND	ND	J4	1	WG2526128
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2526128
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG2526128
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG2526128
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG2526128

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
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2526128
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG2526128
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2526128
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG2526128
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND	J4	1	WG2526128
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG2526128
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG2526128
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG2526128
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2526128
Vinyl acetate	108-05-4	86.10	0.630	2.22	0.777	2.74		1	WG2526128
m&p-Xylene		106	0.400	1.73	ND	ND		1	WG2526128
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG2526128
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG2526128
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*91.0*				WG2526128

Organic Compounds (GC) by Method ASTM 1946

Analyte	CAS #	Mol. Wt.	RDL %	Result %	Qualifier	Dilution	Batch
Helium	7440-59-7		0.100	ND		1	WG2527800

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	12.2	29.0		1	WG2526128
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2526128
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG2526128
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2526128
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2526128
Bromoform	75-25-2	253	0.630	6.52	ND	ND		1	WG2526128
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG2526128
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG2526128
Carbon disulfide	75-15-0	76.10	0.400	1.24	1.90	5.91		1	WG2526128
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2526128
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2526128
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG2526128
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG2526128
Chloromethane	74-87-3	50.50	0.200	0.413	0.462	0.954		1	WG2526128
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2526128
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG2526128
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2526128
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2526128
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2526128
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG2526128
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2526128
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2526128
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG2526128
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2526128
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG2526128
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2526128
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG2526128
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2526128
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2526128
1,4-Dioxane	123-91-1	88.10	0.630	2.27	ND	ND		1	WG2526128
Ethanol	64-17-5	46.10	2.50	4.71	4.73	8.92		1	WG2526128
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG2526128
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG2526128
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.207	1.16		1	WG2526128
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.417	2.06		1	WG2526128
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG2526128
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2526128
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG2526128
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2526128
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG2526128
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG2526128
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG2526128
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2526128
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG2526128
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2526128
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG2526128
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2526128
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2526128
2-Propanol	67-63-0	60.10	1.25	3.07	1.95	4.79		1	WG2526128
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG2526128
n-Propylbenzene	103-65-1	120	0.200	0.982	ND	ND		1	WG2526128
Styrene	100-42-5	104	0.400	1.70	ND	ND	J4	1	WG2526128
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2526128
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG2526128
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG2526128
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG2526128

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
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2526128
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG2526128
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2526128
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG2526128
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND	J4	1	WG2526128
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG2526128
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG2526128
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG2526128
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2526128
Vinyl acetate	108-05-4	86.10	0.630	2.22	0.777	2.74		1	WG2526128
m&p-Xylene		106	0.400	1.73	ND	ND		1	WG2526128
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG2526128
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG2526128
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*88.2*				WG2526128

Organic Compounds (GC) by Method ASTM 1946

Analyte	CAS #	Mol. Wt.	RDL %	Result %	Qualifier	Dilution	Batch
Helium	7440-59-7		0.100	ND		1	WG2527800

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	10.2	24.2		1	WG2526128
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2526128
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG2526128
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2526128
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2526128
Bromoform	75-25-2	253	0.630	6.52	ND	ND		1	WG2526128
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG2526128
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG2526128
Carbon disulfide	75-15-0	76.10	0.400	1.24	2.56	7.97		1	WG2526128
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2526128
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2526128
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG2526128
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG2526128
Chloromethane	74-87-3	50.50	0.200	0.413	0.611	1.26		1	WG2526128
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2526128
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG2526128
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2526128
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2526128
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2526128
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG2526128
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2526128
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2526128
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG2526128
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2526128
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG2526128
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2526128
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG2526128
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2526128
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2526128
1,4-Dioxane	123-91-1	88.10	0.630	2.27	ND	ND		1	WG2526128
Ethanol	64-17-5	46.10	2.50	4.71	5.35	10.1		1	WG2526128
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG2526128
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG2526128
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.205	1.15		1	WG2526128
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.479	2.37		1	WG2526128
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG2526128
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2526128
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG2526128
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2526128
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG2526128
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG2526128
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.650	2.26		1	WG2526128
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2526128
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG2526128
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2526128
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG2526128
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2526128
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2526128
2-Propanol	67-63-0	60.10	1.25	3.07	3.61	8.87		1	WG2526128
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG2526128
n-Propylbenzene	103-65-1	120	0.200	0.982	ND	ND		1	WG2526128
Styrene	100-42-5	104	0.400	1.70	ND	ND	J4	1	WG2526128
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2526128
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG2526128
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG2526128
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG2526128

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
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2526128
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG2526128
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2526128
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG2526128
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND	J4	1	WG2526128
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG2526128
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG2526128
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG2526128
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2526128
Vinyl acetate	108-05-4	86.10	0.630	2.22	ND	ND		1	WG2526128
m&p-Xylene		106	0.400	1.73	ND	ND		1	WG2526128
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG2526128
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG2526128
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*91.8*				WG2526128

Organic Compounds (GC) by Method ASTM 1946

Analyte	CAS #	Mol. Wt.	RDL %	Result %	Qualifier	Dilution	Batch
Helium	7440-59-7		0.100	3.16		1	WG2527800

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	39.5	93.9		1	WG2526128
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2526128
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG2526128
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2526128
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2526128
Bromoform	75-25-2	253	0.630	6.52	ND	ND		1	WG2526128
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG2526128
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG2526128
Carbon disulfide	75-15-0	76.10	0.400	1.24	5.44	16.9		1	WG2526128
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2526128
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2526128
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG2526128
Chloroform	67-66-3	119	0.200	0.973	0.353	1.72		1	WG2526128
Chloromethane	74-87-3	50.50	0.200	0.413	0.305	0.630		1	WG2526128
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2526128
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG2526128
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2526128
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2526128
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2526128
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG2526128
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2526128
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2526128
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG2526128
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2526128
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG2526128
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2526128
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG2526128
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2526128
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2526128
1,4-Dioxane	123-91-1	88.10	0.630	2.27	ND	ND		1	WG2526128
Ethanol	64-17-5	46.10	2.50	4.71	2.85	5.37		1	WG2526128
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG2526128
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG2526128
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND	ND		1	WG2526128
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.481	2.38		1	WG2526128
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG2526128
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2526128
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG2526128
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2526128
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG2526128
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG2526128
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.337	1.17		1	WG2526128
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2526128
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	1.49	4.39		1	WG2526128
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2526128
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG2526128
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2526128
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2526128
2-Propanol	67-63-0	60.10	1.25	3.07	6.38	15.7		1	WG2526128
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG2526128
n-Propylbenzene	103-65-1	120	0.200	0.982	ND	ND		1	WG2526128
Styrene	100-42-5	104	0.400	1.70	ND	ND	J4	1	WG2526128
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2526128
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG2526128
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG2526128
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG2526128

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
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2526128
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG2526128
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2526128
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG2526128
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND	J4	1	WG2526128
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG2526128
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG2526128
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG2526128
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2526128
Vinyl acetate	108-05-4	86.10	0.630	2.22	1.24	4.37		1	WG2526128
m&p-Xylene		106	0.400	1.73	ND	ND		1	WG2526128
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG2526128
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG2526128
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*90.6*				WG2526128

Organic Compounds (GC) by Method ASTM 1946

Analyte	CAS #	Mol. Wt.	RDL %	Result %	Qualifier	Dilution	Batch
Helium	7440-59-7		0.100	1.15		1	WG2527800

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	5.77	13.7		1	WG2526128
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2526128
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG2526128
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2526128
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2526128
Bromoform	75-25-2	253	0.630	6.52	ND	ND		1	WG2526128
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG2526128
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG2526128
Carbon disulfide	75-15-0	76.10	0.400	1.24	ND	ND		1	WG2526128
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2526128
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2526128
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG2526128
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG2526128
Chloromethane	74-87-3	50.50	0.200	0.413	0.520	1.07		1	WG2526128
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2526128
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG2526128
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2526128
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2526128
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2526128
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG2526128
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2526128
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2526128
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG2526128
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2526128
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG2526128
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2526128
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG2526128
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2526128
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2526128
1,4-Dioxane	123-91-1	88.10	0.630	2.27	ND	ND		1	WG2526128
Ethanol	64-17-5	46.10	2.50	4.71	10.1	19.0		1	WG2526128
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG2526128
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG2526128
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.212	1.19		1	WG2526128
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.447	2.21		1	WG2526128
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG2526128
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2526128
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG2526128
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2526128
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG2526128
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG2526128
Methylene Chloride	75-09-2	84.90	0.200	0.694	1.14	3.96		1	WG2526128
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2526128
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG2526128
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2526128
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG2526128
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2526128
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2526128
2-Propanol	67-63-0	60.10	1.25	3.07	4.43	10.9		1	WG2526128
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG2526128
n-Propylbenzene	103-65-1	120	0.200	0.982	ND	ND		1	WG2526128
Styrene	100-42-5	104	0.400	1.70	ND	ND	J4	1	WG2526128
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2526128
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG2526128
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG2526128
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG2526128

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
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2526128
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG2526128
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2526128
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG2526128
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND	J4	1	WG2526128
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG2526128
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG2526128
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG2526128
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2526128
Vinyl acetate	108-05-4	86.10	0.630	2.22	ND	ND		1	WG2526128
m&p-Xylene		106	0.400	1.73	ND	ND		1	WG2526128
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG2526128
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG2526128
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*91.8*				WG2526128

Organic Compounds (GC) by Method ASTM 1946

Analyte	CAS #	Mol. Wt.	RDL %	Result %	Qualifier	Dilution	Batch
Helium	7440-59-7		0.100	2.17		1	WG2527800

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	4.82	11.5		1	WG2526128
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2526128
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG2526128
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2526128
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2526128
Bromoform	75-25-2	253	0.630	6.52	ND	ND		1	WG2526128
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG2526128
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG2526128
Carbon disulfide	75-15-0	76.10	0.400	1.24	3.38	10.5		1	WG2526128
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2526128
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2526128
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG2526128
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG2526128
Chloromethane	74-87-3	50.50	0.200	0.413	0.499	1.03		1	WG2526128
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2526128
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG2526128
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2526128
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2526128
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2526128
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG2526128
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2526128
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2526128
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG2526128
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2526128
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG2526128
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2526128
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG2526128
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2526128
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2526128
1,4-Dioxane	123-91-1	88.10	0.630	2.27	ND	ND		1	WG2526128
Ethanol	64-17-5	46.10	2.50	4.71	ND	ND		1	WG2526128
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG2526128
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG2526128
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.215	1.21		1	WG2526128
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.485	2.40		1	WG2526128
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG2526128
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2526128
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG2526128
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2526128
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG2526128
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG2526128
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.319	1.11		1	WG2526128
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2526128
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG2526128
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2526128
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG2526128
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2526128
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2526128
2-Propanol	67-63-0	60.10	1.25	3.07	1.61	3.96		1	WG2526128
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG2526128
n-Propylbenzene	103-65-1	120	0.200	0.982	ND	ND		1	WG2526128
Styrene	100-42-5	104	0.400	1.70	ND	ND	J4	1	WG2526128
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2526128
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG2526128
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG2526128
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG2526128

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
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2526128
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG2526128
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2526128
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG2526128
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND	J4	1	WG2526128
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG2526128
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG2526128
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG2526128
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2526128
Vinyl acetate	108-05-4	86.10	0.630	2.22	ND	ND		1	WG2526128
m&p-Xylene		106	0.400	1.73	0.498	2.16		1	WG2526128
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG2526128
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG2526128
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*90.6*				WG2526128

Organic Compounds (GC) by Method ASTM 1946

Analyte	CAS #	Mol. Wt.	RDL %	Result %	Qualifier	Dilution	Batch
Helium	7440-59-7		0.100	2.39		1	WG2527800

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

Method Blank (MB)

(MB) R4223054-2 05/29/25 09:58

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Acetone	U		0.520	1.25
Allyl chloride	U		0.186	0.200
Benzene	U		0.110	0.200
Benzyl Chloride	U		0.0888	0.200
Bromodichloromethane	U		0.0695	0.200
Bromoform	U		0.0755	0.630
Bromomethane	U		0.0938	0.200
1,3-Butadiene	U		0.158	2.00
Carbon disulfide	U		0.160	0.400
Carbon tetrachloride	U		0.0746	0.200
Chlorobenzene	U		0.118	0.200
Chloroethane	U		0.110	0.200
Chloroform	U		0.104	0.200
Chloromethane	U		0.110	0.200
2-Chlorotoluene	U		0.0787	0.200
Cyclohexane	U		0.170	0.200
Dibromochloromethane	U		0.0696	0.200
1,2-Dibromoethane	U		0.0690	0.200
1,2-Dichlorobenzene	U		0.0734	0.200
1,3-Dichlorobenzene	U		0.0753	0.200
1,4-Dichlorobenzene	U		0.0768	0.200
1,2-Dichloroethane	U		0.0730	0.200
1,1-Dichloroethane	U		0.0710	0.200
1,1-Dichloroethene	U		0.0747	0.200
cis-1,2-Dichloroethene	U		0.0796	0.200
trans-1,2-Dichloroethene	U		0.0735	0.200
1,2-Dichloropropane	U		0.0752	0.200
cis-1,3-Dichloropropene	U		0.0743	0.200
trans-1,3-Dichloropropene	U		0.0795	0.200
1,4-Dioxane	U		0.164	0.630
Ethanol	U		2.37	2.50
Ethylbenzene	U		0.0778	0.200
4-Ethyltoluene	U		0.0887	0.200
Trichlorofluoromethane	U		0.0771	0.200
Dichlorodifluoromethane	U		0.0806	0.200
1,1,2-Trichlorotrifluoroethane	U		0.0751	0.200
1,2-Dichlorotetrafluoroethane	U		0.0756	0.200
Heptane	U		0.114	0.200
Hexachloro-1,3-butadiene	U		0.0800	0.630
n-Hexane	U		0.143	0.630

Method Blank (MB)

(MB) R4223054-2 05/29/25 09:58

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Isopropylbenzene	U		0.0722	0.200
Methylene Chloride	U		0.169	0.200
Methyl Butyl Ketone	U		0.133	1.25
2-Butanone (MEK)	U		0.116	1.25
4-Methyl-2-pentanone (MIBK)	U		0.106	1.25
Methyl methacrylate	U		0.169	0.200
MTBE	U		0.0813	0.200
Naphthalene	U		0.617	0.630
2-Propanol	U		0.680	1.25
Propene	U		0.214	1.25
n-Propylbenzene	U		0.0807	0.200
Styrene	U		0.0802	0.400
1,1,2,2-Tetrachloroethane	U		0.0695	0.200
Tetrachloroethylene	U		0.111	0.200
Tetrahydrofuran	U		0.164	0.200
Toluene	U		0.130	0.500
1,2,4-Trichlorobenzene	U		0.462	0.630
1,1,1-Trichloroethane	U		0.0718	0.200
1,1,2-Trichloroethane	U		0.0683	0.200
Trichloroethylene	U		0.0680	0.200
1,2,4-Trimethylbenzene	U		0.0927	0.200
1,3,5-Trimethylbenzene	U		0.0853	0.200
2,2,4-Trimethylpentane	U		0.0898	0.200
Vinyl chloride	U		0.0826	0.200
Vinyl Bromide	U		0.0749	0.200
Vinyl acetate	U		0.0968	0.630
m&p-Xylene	U		0.174	0.400
o-Xylene	U		0.0887	0.200
TPH (GC/MS) Low Fraction	U		68.3	200
(S) 1,4-Bromofluorobenzene	*92.4*			*60.0-140*

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

(LCS) R4223054-1 05/29/25 09:32 • (LCSD) R4223054-3 05/29/25 11:03

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	3.75	3.99	4.01	106	107	70.0-130			0.500	25
Allyl chloride	3.75	4.20	4.26	112	114	70.0-130			1.42	25
Benzene	3.75	4.13	4.29	110	114	70.0-130			3.80	25

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

(LCS) R4223054-1 05/29/25 09:32 • (LCSD) R4223054-3 05/29/25 11:03

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzyl Chloride	3.75	4.48	4.82	119	129	70.0-152			7.31	25
Bromodichloromethane	3.75	4.04	4.20	108	112	70.0-130			3.88	25
Bromoform	3.75	3.93	4.09	105	109	70.0-130			3.99	25
Bromomethane	3.75	4.01	4.10	107	109	70.0-130			2.22	25
1,3-Butadiene	3.75	4.15	4.18	111	111	70.0-130			0.720	25
Carbon disulfide	7.50	8.38	8.56	112	114	70.0-130			2.13	25
Carbon tetrachloride	3.75	4.08	4.15	109	111	70.0-130			1.70	25
Chlorobenzene	3.75	4.05	4.24	108	113	70.0-130			4.58	25
Chloroethane	3.75	4.01	4.05	107	108	70.0-130			0.993	25
Chloroform	3.75	4.17	4.23	111	113	70.0-130			1.43	25
Chloromethane	3.75	4.00	4.14	107	110	70.0-130			3.44	25
2-Chlorotoluene	3.75	4.35	4.51	116	120	70.0-130			3.61	25
Cyclohexane	3.75	4.16	4.17	111	111	70.0-130			0.240	25
Dibromochloromethane	3.75	3.94	4.18	105	111	70.0-130			5.91	25
1,2-Dibromoethane	3.75	4.18	4.40	111	117	70.0-130			5.13	25
1,2-Dichlorobenzene	3.75	4.32	4.63	115	123	70.0-130			6.93	25
1,3-Dichlorobenzene	3.75	4.59	4.85	122	129	70.0-130			5.51	25
1,4-Dichlorobenzene	3.75	4.61	4.81	123	128	70.0-130			4.25	25
1,2-Dichloroethane	3.75	4.03	4.13	107	110	70.0-130			2.45	25
1,1-Dichloroethane	3.75	4.28	4.40	114	117	70.0-130			2.76	25
1,1-Dichloroethene	3.75	4.10	4.14	109	110	70.0-130			0.971	25
cis-1,2-Dichloroethene	3.75	4.27	4.24	114	113	70.0-130			0.705	25
trans-1,2-Dichloroethene	3.75	4.36	4.03	116	107	70.0-130			7.87	25
1,2-Dichloropropane	3.75	4.23	4.32	113	115	70.0-130			2.11	25
cis-1,3-Dichloropropene	3.75	4.18	4.38	111	117	70.0-130			4.67	25
trans-1,3-Dichloropropene	3.75	4.26	4.44	114	118	70.0-130			4.14	25
1,4-Dioxane	3.75	4.13	4.26	110	114	70.0-140			3.10	25
Ethanol	3.75	3.75	3.66	100	97.6	55.0-148			2.43	25
Ethylbenzene	3.75	4.33	4.40	115	117	70.0-130			1.60	25
4-Ethyltoluene	3.75	4.53	4.77	121	127	70.0-130			5.16	25
Trichlorofluoromethane	3.75	3.97	4.02	106	107	70.0-130			1.25	25
Dichlorodifluoromethane	3.75	3.96	4.01	106	107	64.0-139			1.25	25
1,1,2-Trichlorotrifluoroethane	3.75	4.03	4.12	107	110	70.0-130			2.21	25
1,2-Dichlorotetrafluoroethane	3.75	4.02	4.12	107	110	70.0-130			2.46	25
Heptane	3.75	4.40	4.46	117	119	70.0-130			1.35	25
Hexachloro-1,3-butadiene	3.75	4.24	4.48	113	119	70.0-151			5.50	25
n-Hexane	3.75	4.37	4.39	117	117	70.0-130			0.457	25
Isopropylbenzene	3.75	4.26	4.52	114	121	70.0-130			5.92	25
Methylene Chloride	3.75	4.03	4.12	107	110	70.0-130			2.21	25
Methyl Butyl Ketone	3.75	4.68	4.70	125	125	70.0-149			0.426	25

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

(LCS) R4223054-1 05/29/25 09:32 • (LCSD) R4223054-3 05/29/25 11:03

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
2-Butanone (MEK)	3.75	4.39	4.45	117	119	70.0-130			1.36	25
4-Methyl-2-pentanone (MIBK)	3.75	3.89	3.80	104	101	70.0-139			2.34	25
Methyl methacrylate	3.75	4.47	4.40	119	117	70.0-130			1.58	25
MTBE	3.75	4.23	4.27	113	114	70.0-130			0.941	25
Naphthalene	3.75	4.78	5.28	127	141	70.0-159			9.94	25
2-Propanol	3.75	3.97	3.93	106	105	70.0-139			1.01	25
Propene	3.75	4.39	4.37	117	117	64.0-144			0.457	25
n-Propylbenzene	3.75	4.48	4.79	119	128	70.0-130			6.69	25
Styrene	7.50	9.53	9.99	127	133	70.0-130		J4	4.71	25
1,1,2,2-Tetrachloroethane	3.75	4.41	4.61	118	123	70.0-130			4.43	25
Tetrachloroethylene	3.75	4.08	4.24	109	113	70.0-130			3.85	25
Tetrahydrofuran	3.75	4.36	4.34	116	116	70.0-137			0.460	25
Toluene	3.75	4.28	4.30	114	115	70.0-130			0.466	25
1,2,4-Trichlorobenzene	3.75	4.70	5.08	125	135	70.0-160			7.77	25
1,1,1-Trichloroethane	3.75	4.07	4.15	109	111	70.0-130			1.95	25
1,1,2-Trichloroethane	3.75	4.08	4.22	109	113	70.0-130			3.37	25
Trichloroethylene	3.75	4.13	4.22	110	113	70.0-130			2.16	25
1,2,4-Trimethylbenzene	3.75	4.66	4.94	124	132	70.0-130		J4	5.83	25
1,3,5-Trimethylbenzene	3.75	4.59	4.72	122	126	70.0-130			2.79	25
2,2,4-Trimethylpentane	3.75	4.40	4.46	117	119	70.0-130			1.35	25
Vinyl chloride	3.75	4.07	4.14	109	110	70.0-130			1.71	25
Vinyl Bromide	3.75	4.02	4.13	107	110	70.0-130			2.70	25
Vinyl acetate	3.75	4.41	4.45	118	119	70.0-130			0.903	25
m&p-Xylene	7.50	8.96	9.37	119	125	70.0-130			4.47	25
o-Xylene	3.75	4.49	4.69	120	125	70.0-130			4.36	25
TPH (GC/MS) Low Fraction	188	206	205	110	109	70.0-130			0.487	25
(S) 1,4-Bromofluorobenzene				*97.9*	*97.9*	*60.0-140*				

Method Blank (MB)

(MB) R4224124-3 06/02/25 10:06

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Propene	U		0.214	1.25
(S) 1,4-Bromofluorobenzene	*88.4*			*60.0-140*

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

(LCS) R4224124-1 06/02/25 09:10 • (LCSD) R4224124-2 06/02/25 09:39

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Propene	3.75	3.99	3.84	106	102	64.0-144			3.83	25
(S) 1,4-Bromofluorobenzene				*96.2*	*96.8*	*60.0-140*				

Method Blank (MB)

(MB) R4223439-3 05/31/25 09:12

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Helium	U		0.0551	0.100

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

(LCS) R4223439-1 05/31/25 08:54 • (LCSD) R4223439-2 05/31/25 09:08

Analyte	Spike Amount %	LCS Result %	LCSD Result %	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Helium	2.50	2.63	2.73	105	109	70.0-130			3.73	25

Method Blank (MB)

(MB) R4223501-3 05/31/25 12:12

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	%		%	%
Helium	U		0.0551	0.100

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

(LCS) R4223501-1 05/31/25 12:05 • (LCSD) R4223501-2 05/31/25 12:09

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	%	%	%	%	%	%			%	%
Helium	2.50	2.70	2.60	108	104	70.0-130			3.77	25

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
J4	The associated batch QC was outside the established quality control range for accuracy.

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	LAO000356
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.

M078

State of Oregon Chain of Custody

Agency, Authorized Purchaser or Agent: Oregon DEQ	Contract Laboratory Name: ESC	Lab Selection Criteria:	Turn Around Time:
Send Lab Report To: Sarah Kingery Address: 165 E 7th Avenue, Suite 100, Eugene, OR 97401 Tel. #: 541-321-3687 E-mail: sarah.kingery@deq.oregon.gov	Lab Batch #: Invoice To: ODEQ/Business Office Address: 700 NE Multnomah St, Suite 600, Portland, OR 97232 Tel. #: 503-229-5696	☐ Proximity (if TAT < 48 hrs) ☐ Prior work on same project ☒ Cost (for anticipated analyses)	☒ 10 days (std.) ☐ 5 days ☐ 72 hours

Sample Receipt Checklist
COC Seal Present/Intact: Y N NP
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Unused: 8
Size: 12 AirL 6L 1.4L
Tage Color: G 12 P B
Condition: OK NCF

Project Name: Allen Street Study Area

Sampler Name: Connor Anderson

Sample ID#	Canister #	Flow Cont. #	Collection		Canister Pressure/Vacuum		VOCs by TO-15	Helium by ASTM 1946		Comments
			Date	Time	Initial	Final				L5163398
SVW-01D	023915	029074	5/20/25	1218	-29	-5	X	X		-01
SVW-01S	021881	022613	5/20/25	1252	-29	-5	X	X		-02
SVW-02D	012705	011927	5/20/25	1131	-29	-5	X	X		-03
SVW-02S	022837	023112	5/20/25	1202	-29	-5	X	X		-04
SVW-05D	021895	024980	5/20/25	1620	-29	-5	X	X		-05
SVW-05S	015128	007136	5/20/25	1533	-29	-5	X	X		-06
SVW-07S	015192	022415	5/21/25	1003	-29	-5	X	X		-07
SVW-08S	012085	011546	5/21/25	0916	-29	-5	X	X		-08
SVW-09D	015901	010950	5/23/25	1228	-29	-5	X	X		-09
SVW-09S	022547	022493	5/23/25	1322	-29	-5	X	X		-10
SVW-10D	020612	022625	5/23/25	1120	-29	-5	X	X		-11
SVW-10S	021532	012063	5/23/25	1022	-29	-5	X	X		-12

Please email results to: ddomenighini@maulfoster.com and sarah.kingery@deq.oregon.gov

Relinquished By: Connor Anderson	Agency/Agent: MFA	Received By:	Agency/Agent:
Signature:	Time & Date: 5/23/25, 1700	Signature:	Time & Date:
Relinquished By:	Agency/Agent:	Received By: Elijah Wilson	Agency/Agent: Pace
Signature:	Time & Date:	Signature: Elijah Wilson	Time & Date: 05/28/25 0930 EW

THIS PURCHASE IS SUBMITTED PURSUANT TO STATE OF OREGON SOLICITATION #**102-1098-07** AND PRICE AGREEMENT # **8903**. THE PRICE AGREEMENT INCLUDING CONTRACT TERMS AND CONDITIONS AND SPECIAL CONTRACT TERMS AND CONDITIONS (T'S &C'S) CONTAINED IN THE PRICE AGREEMENT ARE HEREBY INCORPORATED BY REFERENCE AND SHALL APPLY TO THIS PURCHASE AND SHALL TAKE PRECEDENCE OVER ALL OTHER, CONFLICTING T'S AND C'S, EXPRESS OR IMPLIED.

Multiple Parcel Form

L# L1863398

Parcel Tracking Number	Infrared Thermometer ID	Temperature Reading (°C)	Correction Factor (°C)	Corrected Temperature (°C)	Custody Seal Intact
4416 7185 4804	N/A	AMB	+0.0	AMB	Yes / No / Not Present (circled: Not Present)
4416 7185 4790	↓	↓	↓	↓	Yes / No / Not Present (circled: Not Present)
4416 7185 4789	↓	↓	↓	↓	Yes / No / Not Present (circled: Not Present)
4416 7185 4778	↓	↓	↓	↓	Yes / No / Not Present (circled: Not Present)
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present

Elijah Wilson
Name

05/28
Date

Attachment D

Data Validation Memorandum

MAUL
FOSTER
ALONGI

Data Validation Memorandum

Project No. M0785.32.001 | June 9, 2025 | Oregon Department of Environmental Quality

Maul Foster & Alongi, Inc. (MFA), conducted an independent Stage 2A review of the quality of analytical results for soil vapor samples collected in May 2025 at the Allen Street Study Area located at 1420 to 1540 SW Allen Street in Corvallis, Oregon.

Pace Analytical National Center for Testing and Innovation (Pace-N) performed the analyses. MFA reviewed Pace-N report number L1863398. The analyses performed and the samples analyzed are listed in the following tables.

Analysis	Reference
Helium	ASTM D1946
Volatile organic compounds	EPA TO-15

Notes
ASTM = ASTM International.
EPA = U.S. Environmental Protection Agency.
TO = toxic organics.

Samples Analyzed	
Report L1863398	
SVW-01D	SVW-07S
SVW-01S	SVW-08S
SVW-02D	SVW-09D
SVW-02S	SVW-09S
SVW-05D	SVW-10D
SVW-05S	SVW-10S

Data Validation Procedures

Analytical results were evaluated according to applicable sections of U.S. Environmental Protection Agency (EPA) guidelines for data review (EPA 2020) and appropriate laboratory- and method-specific guidelines (EPA 1986, Pace-N 2024).

Data validation procedures were modified, as appropriate, to accommodate quality control requirements for methods that EPA data review guidelines do not specifically address (e.g., ASTM International [ASTM] Method D1946).

Based on the data quality assurance/quality control review described herein, the data, with the appropriate final data qualifiers assigned, are considered acceptable for their intended use. Final data qualifiers represent qualifiers originating from the laboratory and accepted by the reviewer, and data qualifiers assigned by the reviewer during validation.

Final data qualifiers:

- J = result is estimated.
- R = result is rejected. The analyte may or may not be present in the sample.
- U = result is non-detect at the method reporting limit (MRL).

- UJ = result is non-detect with an estimated MRL.

General Qualifications

Helium Results

The reviewer confirmed that soil vapor samples were collected under a helium shroud to detect leaks in the collection system. According to report L1863398, most soil vapor samples had ASTM Method D1946 helium detections. Helium results are shown in the following table, along with the associated helium shroud concentrations obtained from field sampling data sheets.

Report	Sample	ASTM D1946 Helium Result (%)	Helium Shroud Concentration (%)
L1863398	SVW-01D	0.832	46.8
	SVW-01S	0.981	45.8
	SVW-02D	1.37	47.6
	SVW-02S	2.84	48.2
	SVW-05D	0.864	45.8
	SVW-05S	0.919	46.3
	SVW-07S	ND	44.5
	SVW-08S	ND	48.1
	SVW-09D	3.16	47.2
	SVW-09S	1.15	48.0
	SVW-10D	2.17	48.8
	SVW-10S	2.39	49.2

Note
ASTM = ASTM International.
ND = non-detect.

The concentrations of ASTM Method D1946 helium were compared with the measured shroud concentrations. The reviewer considered ASTM Method D1946 helium results greater than 5 percent of the shroud concentration significant; the associated sample results were not representative of soil vapor and therefore the reviewer qualified these results with R as rejected. ASTM Method D1946 helium results that were detected but less than 5 percent of the shroud concentration were correlated to a low impact to sample quality. The reviewer qualified detected results associated with these lower helium detections with J and qualified non-detect results with UJ. Samples that were non-detect for helium by ASTM Method D1946 did not require qualification.

Report	Samples	Analysis	Original Results	Qualification
L1863398	SVW-02S SVW-09D	EPA TO-15	Detected	R
			Non-detect	R
	SVW-01D SVW-01S SVW-02D SVW-05D SVW-05S SVW-09S SVW-10D SVW-10S		Detected	J
			Non-detect	UJ

Notes
EPA = U.S. Environmental Protection Agency.
J = result is estimated.
R = result is rejected. The analyte may or may not be present in the sample.
TO = toxic organics.
UJ = result is non-detect with an estimated method reporting limit.

Sample Conditions

Sample Custody

Sample custody was appropriately documented on the chain-of-custody form accompanying the report.

The reviewer confirmed that the gap in custody on the chain-of-custody form accompanying report L1863398 is due to shipment via a third-party service.

Holding Times

Extractions and analyses were performed within the recommended holding times.

Preservation and Sample Storage

The samples were preserved and stored appropriately.

Reporting Limits

The laboratory evaluated results to MRLs. Pace-N reports MRLs as “reported detection limits.”

Blank Results

Method Blanks

Laboratory method blanks are used to evaluate whether laboratory contamination was introduced during sample preparation and analysis. Laboratory method blank analyses were performed at the required frequencies, in accordance with laboratory- and method-specific requirements.

All laboratory method blank results were non-detect to MRLs.

Laboratory Control Sample and Laboratory Control Sample Duplicate Results

Laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) results are used to evaluate laboratory precision and accuracy. All LCS and LCSD were prepared and analyzed at the required frequency, in accordance with laboratory- and method-specific requirements.

According to report L1863398, the EPA Method TO-15 batch WG2526128 LCSD results for styrene and 1,2,4-trimethylbenzene were above the upper percent recovery acceptance limit of 130 percent, at 133 percent and 132 percent, respectively. The reviewer qualified associated detected sample results with J, as shown in the following table. Directional bias was not applied since results were additionally qualified due to helium detections, as shown in the General Qualification section. Associated non-detect results did not require qualification.

Report	Sample	Analyte	Original Result (ug/m^3)	Qualified Result (ug/m^3)
L1863398	SVW-05S	Styrene	13.4	13.4 J

Notes
J = result is estimated.
ug/m^3 = micrograms per cubic meter.

All remaining LCS and LCSD results were within acceptance limits for percent recovery and relative percent difference.

Laboratory Duplicate Results

Laboratory duplicate results are used to evaluate laboratory precision and sample homogeneity. Laboratory duplicate results were not reported; batch precision was evaluated using LCS and LCSD results.

Matrix Spike and Matrix Spike Duplicate Results

Matrix spike and matrix spike duplicate results are used to evaluate laboratory precision, accuracy, and the effect of the sample matrix on sample preparation and target analyte recovery. No matrix spike or matrix spike duplicate results were reported, in accordance with the method.

Surrogate Results

Surrogate results are used to evaluate laboratory performance of target organic compounds for individual samples.

All surrogate results were within percent recovery acceptance limits.

Field Duplicate Results

Field duplicate results are used to evaluate field precision and sample homogeneity. No field duplicate samples were submitted for analysis.

Data Package

The data package was reviewed for transcription errors, omissions, and anomalies.

None were found.

References

EPA. 1986. *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods.* EPA publication SW-846. 3rd ed. U.S. Environmental Protection Agency. Final updates I (1993), II (1995), IIA (1994), IIB (1995), III (1997), IIIA (1999), IIIB (2005), IV (2008), V (2015), VI phase I (2017), VI phase II (2018), VI phase III (2019), VII phase I (2019), and VII phase II (2020).

EPA. 2020. *National Functional Guidelines for Organic Superfund Methods Data Review.* EPA 540-R-20-005. U.S. Environmental Protection Agency, Office of Superfund Remediation and Technology Innovation: Washington, DC. November.

Pace-N. 2024. *Quality Manual.* Version 04. Pace Analytical Services, LLC: Mt. Juliet, TN. March 7.