



2023 Annual Groundwater Monitoring Report

Milwaukie International Way, Milwaukie, Oregon

ECSI No. 2079

June 10, 2024

Prepared for:



Prepared by:

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2023 Annual Groundwater Monitoring Report

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Abbreviations and Acronyms

µg/L	micrograms per liter
cis-1,2-DCE	cis-1,2-dichloroethene
City	City of Milwaukie
CMT	continuous multichannel tubing
cVOCs	chlorinated volatile organic compounds
DEQ	Oregon Department of Environmental Quality
ECSI	Environmental Cleanup Site Information
EPA	U.S. Environmental Protection Agency
GSI	GSI Water Solutions, Inc.
GTS	groundwater treatment system
IDW	investigation-derived waste
MCL	maximum contaminant level
MIW	Milwaukie International Way
PPE	personnel protective equipment
RBC	risk-based concentration
ROD	Record of Decision
site	Milwaukie International Way site
TCE	trichloroethene
VOCs	volatile organic compounds
VC	vinyl chloride
VI	vapor intrusion

1 Introduction

On behalf of the Oregon Department of Environmental Quality (DEQ), GSI Water Solutions, Inc. (GSI), has prepared this Annual Groundwater Monitoring Report for the Milwaukie International Way (MIW) site (the “site”) located at 4252 and 4288 SE International Way, Milwaukie, Oregon (Figure 1). DEQ has assigned Environmental Cleanup Site Information (ECSI) No. 2079 to the site. This data report presents the results of annual groundwater monitoring activities completed in 2023 at the site. Groundwater monitoring consisted of water level measurements in monitoring wells for the site and water quality sampling from selected wells (Table 1). Monitoring was conducted in accordance with the procedures described in the June 2008 Annual Monitoring Plan (Hart Crowser, 2008). The locations of the off-site and on-site monitoring wells are shown in Figures 2 and 3, respectively. Field procedures are discussed below, and field notes are presented in Appendix A. This report was prepared for DEQ under Task 3 of Task Order No. 065-23-07.

2 Site Background

Historically, machining operations performed within the former Revtek facility on the site (Figure 3) included the use of degreasers containing trichloroethene (TCE). Disposal practices associated with degreasing solvents resulted in TCE and associated chlorinated volatile organic compounds (cVOCs) contaminating soil at the site and resulting in a groundwater contamination plume at and extending downgradient of the site. Of concern is that the City of Milwaukie (City) uses groundwater as a municipal water source and has water wells throughout the City. City Wells 4 and 7 are located approximately two-thirds of a mile and half a mile downgradient (northwest) of the site, respectively. Currently, TCE is the only contaminant in groundwater at City Wells 4 and 7 that has been detected above the U.S. Environmental Protection Agency's (EPA's) maximum contaminant level (MCL). While other TCE contaminant plumes may also be affecting these wells, the presence of a historically significant source of TCE identified at the site in the late 1990s, and a plume extending toward the City wells, necessitated the remediation of TCE at the site. The City operates a treatment system to remove cVOCs prior to distribution.

In 2004, following a series of environmental investigations, cVOC-impacted source soils were excavated at the site, and a groundwater treatment system (GTS) was installed within the source area. The GTS included one extraction well (EXT-1) and an extraction trench. In 2007, DEQ issued a Record of Decision (ROD) for the site requiring additional remedial actions to be implemented (DEQ, 2007). In 2009, as a requirement of the ROD, the GTS was expanded to include two additional extraction wells (EXT-2 and EXT-3) to provide hydraulic control of the source area and downgradient of the cVOC plume. Due to decreasing well efficiency with time, the GTS was modified from 2021 through 2023 to increase the groundwater extraction rates. Modifications were made in accordance with the GTS Modification Work Plan (Hart Crowser, 2021) and included shutting down one extraction well (EXT-1), replacing two extraction wells (EXT-2 and EXT-3 with EXT-2R and EXT-3R, respectively), installing a new extraction well (EXT-4), and connecting the new wells to existing and new conveyances to the treatment system.

Two project objectives of the GTS modifications that are evaluated by annual groundwater monitoring are listed below (Hart Crowser, 2021):

- Achieve hydraulic containment of the plume with concentrations of TCE greater than 100 micrograms per liter ($\mu\text{g/L}$) to maximize mass capture.
- Achieve hydraulic containment of the downgradient cVOC plume with concentrations of TCE above 5 $\mu\text{g/L}$.

To meet these objectives, the cleanup goals for the site are to continue to achieve removal of the 100 $\mu\text{g/L}$ TCE groundwater plume regardless of location and to achieve containment of TCE greater than 5 $\mu\text{g/L}$ in groundwater at the downgradient edge of the plume (i.e., at monitoring wells OSB-9 and OSB-10).

3 Groundwater Elevations

In September 2023, GSI measured groundwater levels in the on- and off-site monitoring wells, including downloading water level data from transducers in seven of the monitoring wells. The modified GTS had been operational for 39 days before measurements were taken to allow time for groundwater levels to adjust and reflect new pumping conditions.

Groundwater Level Measurements. GSI staff opened monitoring wells and allowed groundwater levels to equilibrate before measurements were collected to the nearest 0.01 foot. Due to accessibility issues, water levels in several wells were not measured on the first day of gauging (September 18, 2023) or were deferred until sampling activities (see below). Groundwater elevations were calculated by measuring the depth to water from surveyed top of casing elevations at each well and are presented in Table 1, with wells grouped by aquifer zone. Figures 4 through 8 depict groundwater contours generated from the water level data for each aquifer zone. The September 2023 water levels represented aquifer conditions during GTS operation, including groundwater extraction from extraction wells EXT-2R, EXT-3R, EXT-4, and TRENCH.

Monitoring Well Obstructions. Consistent with the 2021 event, obstructions at approximately 26.5 feet below top of casing were encountered in off-site wells OSB-10-46, OSB-10-98, and OSB-10-119. Each well was dry to this depth, preventing the collection of groundwater level data or water quality samples. The OSB-10 wells are constructed using continuous multichannel tubing (CMT), which allows monitoring from multiple groundwater depth intervals within the same monitoring well location. In 2021, an obstruction was observed at OSB-9-95, but one was not observed in 2023. Field staff were able to gauge the water level and collect water quality samples at this location in 2023.

Off-site well OSB-11 is located within Oregon Highway 224 right-of-way next to a guard rail and at the top of a sloping bank. Previous monitoring events have noted that the well casing was bent at approximately 12 feet below the top of casing, but it was still possible to measure groundwater elevations by working equipment passed the bend. The last water level measurement was obtained from OSB-11-62 in 2021; however, since 2021, the bend in the casing has gotten progressively worse. Water levels and water quality samples were not collected at this location in 2023.

Transducers. On September 22, 2023, groundwater elevation data were downloaded from transducers in seven wells (MW-6D, MW-9D, MW-12D, MW-13D, OSB 3-71, W-2D, and OSB-1). Groundwater elevations from February 2, 2022, through September 22, 2023, for these wells are presented on Figure 9 along with daily precipitation measurements.

4 Groundwater Sampling

A limited groundwater sampling event was completed by Haley & Aldrich from April 19 through 21, 2022. Groundwater samples were collected from EXT-2R, EXT-3R, EXT-4, MW-13D, OSB-5-100, OSB-6-95, OSB-6-125, OSB-6-160, and OSB-9-160 while the GTS was offline for approximately 3 months. No data report was prepared for this event. The results of the April 2022 event are included in this report.

Groundwater sampling was conducted from September 20 through 22, 2023. The 2023 annual groundwater monitoring program was discussed with DEQ prior to sampling. Table 2 presents the 42 monitoring and extraction wells selected for sampling. Obstructions were noted in OSB-10-46, OSB-10-98, and OSB-10-119 as described above, which prevented sampling of these wells.

Generally, monitoring wells were purged and sampled using either a peristaltic pump with disposable tubing or a double-valve pump with decontaminated (washed/rinsed) tubing. The pumps conveyed purged groundwater into a flow-through cell to collect monitoring data on field parameters (i.e., pH, specific conductance, temperature, dissolved oxygen, and oxidation-reduction potential). After field parameters had stabilized, groundwater samples were collected immediately after purging. Samples from the extraction wells were collected at the well head vaults from the sampling ports installed on the extraction lines. Final field parameters measured during the monitoring event are summarized in Table 3.

All water samples were placed directly into laboratory-supplied containers, marked with identifying information, stored on ice, and maintained under chain-of-custody protocols.

5 Sample Analysis and Results

Groundwater samples were submitted to Pace Analytical of Mount Juliet, Tennessee, for analysis under State Price Agreement #8903 for volatile organic compounds (VOCs) by EPA Method 8260D. Annual sampling event results for target cVOCs are presented in Table 4 (mass concentration) for samples collected in the previous 5 years and in Table 5 (molar concentration) for the 2023 annual sampling event. Well construction details are provided in Table 6. VOC concentration profiles for select wells sampled in 2023 (and ordered moving downgradient from the site) are provided on Figures 10 through 16. Profiles include available historical VOC data for each well. Historical water quality data are provided in Appendix B. A Quality Assurance Review report, as well as a copy of the laboratory report for the 2023 monitoring event, are included in Appendix C. All tabled data, as qualified, are acceptable for use.

5.1 Change in Concentration Observations

In general, concentrations near the source area detected in 2023 were similar to those detected in previous sampling events. However, there were some notable exceptions, which are discussed below.

- In extraction well EXT-1, the concentrations of cVOCs decreased in 2023, most notably TCE, *cis*-1,2-dichloroethene (*cis*-1,2-DCE), and vinyl chloride (VC). TCE decreased from 11.2 µg/L in 2021 to 0.377 µg/L in 2023. *Cis*-1,2-DCE decreased from 24.3 µg/L in 2021 to 1.85 µg/L in 2021. VC decreased from 4.86 µg/L in 2021 to 1.34 µg/L in 2023. The reduction in concentration is likely due to the removal of the extraction pump from the well in 2022.
- EXT-2R was sampled during the limited groundwater sampling event in April 2022 and three times in 2023 in June, September, and December. TCE and *cis*-1,2-DCE concentrations increased in all three 2023 sampling events compared to 2022. TCE increased from 7.81 µg/L in April 2022 to 42.8, 74.1, and 65.1 µg/L in June, September, and December 2023, respectively. *Cis*-1,2-DCE increased from 1.68 µg/L in 2022 to 27.7, 48.8, and 44.3 µg/L in June, September, and December 2023, respectively. The increase in concentrations is likely due to the extraction well in EXT-2R becoming fully operational in 2023 and drawing in surrounding groundwater.
- EXT-3R was also sampled in April 2022 and June, September, and December 2023. EXT-3R has shown an increase in TCE in every 2023 event. TCE increased from 0.222 µg/L in April 2022 to 3.98, 26.4, 503 µg/L in June, September, and December 2023, respectively. The increase in TCE is likely due to the extraction well in EXT-3R becoming fully operational in 2023 and drawing in surrounding groundwater.
- EXT-4 was sampled in April 2022 and three times in 2023 in June, September, and December. Since 2022, TCE and *cis*-1,2-DCE have increased in concentration. TCE increased from 46.6 µg/L in April 2022 to 136 µg/L in September 2023. *Cis*-1,2-DCE increased from 0.126 µg/L in April 2022 to 159, 121, and 107 µg/L in June, September, and December 2023, respectively. The increase in concentrations is likely due to the extraction well in EXT-4 becoming fully operational in 2023 and capturing groundwater downgradient of the source area.
- Monitoring well MW-13D has seen a decrease in TCE and *cis*-1,2-DCE between 2020 and 2023 with TCE reducing from 165 µg/L in September 2020 to 11.1 µg/L in September 2023. *Cis*-1,2-DCE decreased from 105 µg/L in September 2020 to 33.0 µg/L in September 2023. MW-13D is located adjacent to EXT-4 but screened above EXT-4. The reduction in cVOC concentrations is likely due to the continuous operation of EXT-4 drawing capturing contaminated groundwater from the area of MW-13D.
- In MW-14D, the concentrations of TCE and *cis*-1,2-DCE decreased between 2021 and 2023 from 3.74 and 1.48 µg/L, respectively, to non-detect levels below laboratory method reporting limit of 1.0 µg/L. MW-14D is upgradient of EXT-4 and screened below EXT-4.

- In OSB-3-71, concentrations of TCE and *cis*-1,2-DCE continued to increase. TCE increased from 2.90 µg/L in 2021 to 5.93 µg/L in 2023, and *cis*-1,2-DCE increased from 12.1 µg/L in 2021 to 18.7 µg/L in 2023.

Changes in other analytical parameters since 2021 at all other wells appear to be insignificant compared to the variability in the data over the period of record.

5.2 Trichloroethene Plume Containment

Containment goals were outlined in the GTS Expansion Work Plan (Hart Crowser, 2021) and are stated in Section 2 above.

100 µg/L TCE Extent. TCE was only detected above 100 µg/L in extraction well EXT-4 in 2023 (125, 136, and 152 µg/L in June, September, and December 2023, respectively). EXT-4 is located on the site property, downgradient of the former source area and screened within the central deep aquifer. It appears that EXT-4 is effectively capturing portions of the TCE plume with a concentration above 100 µg/L. Historically, nearby monitoring wells within the central and lower deep aquifers (MW-6D, MW-9D, MW-12D, MW-13D, MW-14D, and MW-19-100) have detected TCE at over 100 µg/L. In September 2023, TCE was detected in these nearby wells from less than 1.0 µg/L (MW-9D, MW-12D, MW-14D) to 14.1 µg/L in MW-6D.

TCE was detected above 100 µg/L in the former extraction well EXT-2 when it was last sampled 2021 (177 µg/L). TCE was regularly detected above 100 µg/L in EXT-2 since operation began in 2009; however, concentrations were decreasing with TCE concentrations below 100 µg/L detected in 2017, 2018, 2019, and 2020.

5 µg/L TCE Extent. With the exception of EXT-4, TCE was detected above 5 µg/L in onsite monitoring wells MW-6D and MW-13D similar to recent groundwater monitoring events. Historically, TCE was detected above 5 µg/L in nearly all onsite wells in each aquifer zone (Shallow, Upper Deep, Central Deep, Lower Deep, and Sand and Gravel). In 2023, TCE above 5 µg/L is limited to MW-6D and MW-13D in the Upper Deep Zone and EXT-4 in the Central Deep Zone.

In offsite monitoring wells, TCE was detected above 5 µg/L in monitoring wells OSB-3-71, OSB-5-100, and OSB-6-95 in the Upper Deep Zone and OSB-6-125 in the Sand and Gravel Zone in September 2023 similar to previous sampling events. Monitoring wells OSB-10-98 and OSB-10-119 have historically detected TCE above 5 µg/L; however, an obstruction in the OSB well casing prevented sample collection in 2023.

5.3 Comparison to Risk-Based Concentrations

The September 2023 data were screened against DEQ risk-based concentrations (RBCs) for target cVOCs for applicable and potentially complete exposure pathways (DEQ, 2023b). The site and general vicinity are commercial and industrial with residential properties near the downgradient extent of the cVOC plume. Potentially complete exposure pathways include ingestion or inhalation of groundwater and vapor intrusion (VI) into buildings.

City water supply Wells 4 and 7 are located downgradient of the site for supplying municipal water to its residential, commercial, and industrial customers in the vicinity. The City treats the groundwater to remove cVOCs prior to distribution for use. Comparison of the data against RBCs for residential groundwater use (listed in Table 4) indicates that these RBCs are regularly exceeded in groundwater monitoring wells located on- and off-site, including the most downgradient wells in the monitoring well network. TCE concentrations that exceed RBCs off-site are generally present between 90 and 125 feet below ground surface. In 2023, one or more cVOCs of concern (TCE, *cis*-1,2-DCE, and/or VC) were detected above residential ingestion RBCs in:

- Extraction wells EXT-1, EXT-2, EXT-2R, EXT-3R, EXT-4, and the Trench
- Onsite wells MW-5, MW-6D, MW-9D, MW 13D, MW-17S, and MW-19-100
- Cross-gradient off-site wells W-2I, OSB-1, OSB-3-71, and OSB-5-100
- Downgradient wells OSB-4, OSB-6-95, OSB-6-125, OSB-9-95, OSB-9-125, OSB-9-160, OSB-9-185, OSB-9-218, OSB-10-154, and OSB-10-199

There have been no privately-owned drinking water wells identified near the site (Hart Crowser, 2017). The City has identified TCE and other cVOCs in City wells downgradient of the site. The cVOCs detected in the City wells are not necessarily from the MIW site, rather part of a comingled plume in the area. As mentioned in Section 2, the City operates a treatment system to remove cVOCs from groundwater prior to distribution.

VI occurs from migration of cVOCs from the shallow groundwater. Shallow groundwater is only monitored from within the site boundary (commercial properties). Shallow groundwater is screened against chronic and acute VI RBCs for commercial receptors (listed Table 4). At this site, cVOC concentrations in shallow groundwater are nearly undetectable (Table 4) and below commercial VI RBCs (DEQ, 2023a). These indicate that the VI pathway is not a concern.

6 Recommended Monitoring Well Network Repairs

The condition of the monitoring wells and their monuments were noted during the annual groundwater monitoring event in September 2023. Our observations are included in field notes compiled from the event, which are included in Appendix A. Certain conditions of note are discussed below.

6.1 OSB-9 and OSB-10 CMT Multilevel System

Off-site well OSB-9-95 and the OSB-10 CMT wells appear to have obstructions at various depths. These obstructions impact four sample ports and screen intervals: OSB-9-95, OSB-10-46, OSB-10-98, and OSB 10-119. An endoscope may be used to indicate the cause of the obstruction to assess if maintenance can repair the well.

6.2 OSB-11 CMT Multilevel System

Water levels or samples have not been collected from OSB-11 since 2021 due to a bend in the well casing and CMT. Previously, cVOCs have not been detected at any sample interval in OSB-11. Because the bend in OSB-11 casing is likely unfixable without re-drilling the well, it was not recommended for repair in 2021. Water levels and water quality samples were not collected at this location in 2023. We recommend removing OSB-11 from future sampling events.

6.3 Monitoring Well Transducers

A network of eight groundwater elevation transducers are installed in monitoring wells to measure the effects the GTS has on the aquifer. The network of transducers in site monitoring wells is aging and failing.

In February 2022, the transducer cap at MW-14D separated from the body during a data download. The transducer was not replaced at that time. On June 13, 2023, DEQ indicated that the MW-14D transducer should be replaced.

The transducers in OSB-1, MW-9D, and OSB-3-71 are no longer supported by their manufacturers. Data from the MW-9D and OSB-3-71 transducers were recovered by the manufacturer. The data from transducers in MW-14D and OSB-1 were lost due to hardware failure. After approval from DEQ, GSI purchased and installed four replacement transducers that match the models used (In-Situ Rugged Troll) in the remaining network of wells. Transducers were installed in MW-9D, MW-14D, OSB-1, and OSB-3-71 on November 27, 2023.

7 Investigative-Derived Waste

Investigation-derived waste (IDW) generated during annual groundwater monitoring consisted of decontamination water, purge water, disposable equipment (e.g., tubing), and personnel protective equipment (PPE). IDW water generated during field activities was collected in buckets and transported to the treatment system where the water was discharged directly into the treatment system. Disposable equipment and PPE were disposed off-site as solid waste.

8 Limitations

GSI performed this work in accordance with generally accepted professional practices related to the nature of the work accomplished, in the same or similar localities, at the time the services were performed. This report is for the specific application to the referenced project and for the exclusive use of DEQ.

9 References

- DEQ. 2007. Record of Decision, Selected Remedial Action for Milwaukie International Way Site, Milwaukie, Oregon. January 2007.
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- Hart Crowser. 2021. GTS Modification Work Plan, Milwaukie International Way Site, Milwaukie, Oregon, ECSI No. 2079. January 25, 2021.

Table 1. 2023 Annual Groundwater Elevations

Milwaukie International Way
Milwaukie, Oregon

2023 Annual Groundwater Monitoring Report

Well	Date	Time	Top of Casing Elevation (feet NGVD)	Depth to Water (feet btoc)	Groundwater Elevation (feet NGVD)
Groundwater Treatment System					
EXT-2R	18-Sep-23	11:40	—	58.87	—
EXT-3R	18-Sep-23	10:16	—	36.15	—
EXT-4	18-Sep-23	7:51	—	32.43	—
Trench	18-Sep-23	10:37	—	12.94	—
Shallow Zone					
MW-3S	18-Sep-23	9:48	84.61	5.56	79.05
MW-5	18-Sep-23	8:39	85.41	5.69	79.72
MW-6	18-Sep-23	11:31	90.41	8.95	81.46
MW-7	18-Sep-23	12:20	90.25	8.93	81.32
MW-9	18-Sep-23	8:25	87.17	5.99	81.18
MW-11S	19-Sep-23	8:32	87.42	8.54	78.88
MW-12S	18-Sep-23	9:50	89.13	13.28	75.85
MW-15S	18-Sep-23	10:28	88.89	10.50	78.39
MW-16S	18-Sep-23	9:23	83.97	5.25	78.72
MW-17S	18-Sep-23	9:35	89.45	6.94	82.51
OSB-11-30	18-Sep-23	NA	100.16	NA	NA
PZ-2	18-Sep-23	9:12	85.19	8.71	76.48
PZ-3	18-Sep-23	9:06	85.37	8.73	76.64
PZ-4	18-Sep-23	9:49	89.14	14.79	74.35
PZ-5	18-Sep-23	10:16	89.11	12.10	77.01
PZ-6 ¹	18-Sep-23	9:46	88.97	14.51	74.46
PZ-7	18-Sep-23	10:10	89.23	10.74	78.49
W-3S	18-Sep-23	10:57	87.07	6.78	80.29
W-4S	18-Sep-23	8:31	85.96	5.66	80.30
W-5S	18-Sep-23	8:38	85.46	7.98	77.48
W-6S	18-Sep-23	8:25	85.52	5.21	80.31
Upper Deep Zone					
EXT-1	18-Sep-23	10:02	—	12.11	—
MW-12I	18-Sep-23	9:47	89.28	12.46	76.82
OSB-6-35	18-Sep-23	10:00	98.82	27.31	71.51
W-1I	18-Sep-23	9:17	88.79	12.27	76.52
W-2I	18-Sep-23	7:54	88.27	11.71	76.56
W-3I	18-Sep-23	10:49	87.19	9.60	77.59
Central Deep Zone					
MW-3DR	18-Sep-23	9:55	83.56	6.78	76.78
MW-4 (EXT-3)	18-Sep-23	10:06	88.46	12.90	75.56
MW-6D	18-Sep-23	11:05	90.81	14.58	76.23
MW-9D	18-Sep-23	8:09	88.86	12.61	76.25
MW-10D	18-Sep-23	8:53	89.88	12.87	77.01
MW-11D	19-Sep-23	8:35	89.88	9.32	80.56
MW-12D	18-Sep-23	9:51	88.94	13.21	75.73
MW-13D	18-Sep-23	13:15	89.22	13.97	75.25
OSB-12-30	18-Sep-23	11:00	83.61	5.39	78.22
OSB-12-40	18-Sep-23	11:05	83.61	5.30	78.31
Lower Deep Zone					
EXT-2	18-Sep-23	12:04	87.35	16.14	71.21
MW-14D	18-Sep-23	11:39	90.33	14.12	76.21
MW-19-100	20-Sep-23	13:37	89.43	13.63	75.80
OSB-1	21-Sep-23	13:42	89.58	13.74	75.84
OSB-3-71	18-Sep-23	11:45	91.89	20.66	71.23
OSB-3-130	18-Sep-23	11:42	92.88	21.81	71.07
OSB-4	18-Sep-23	11:18	105.43	34.18	71.25
OSB-5-100	18-Sep-23	9:45	130.35	60.89	69.46
OSB-6-95	18-Sep-23	10:05	98.82	31.03	67.79
OSB-7-88	18-Sep-23	11:20	88.68	12.57	76.11
OSB-8-145	18-Sep-23	8:30	148.13	89.60	58.53
OSB-9-45	18-Sep-23	9:00	100.55	33.17	67.38
OSB-9-95	18-Sep-23	9:05	100.55	33.33	67.22
OSB-10-46	20-Sep-23	9:42	93.11	NA	NA

Table 1. 2023 Annual Groundwater Elevations

Milwaukie International Way
Milwaukie, Oregon

2023 Annual Groundwater Monitoring Report

Well	Date	Time	Top of Casing Elevation (feet NGVD)	Depth to Water (feet btoc)	Groundwater Elevation (feet NGVD)
Lower Deep Zone (Continued)					
OSB-10-98	20-Sep-23	9:42	93.11	24.81	68.30
OSB-12-65	18-Sep-23	11:10	83.61	4.98	78.63
OSB-12-82	18-Sep-23	11:15	83.61	5.90	77.71
W-1D	18-Sep-23	9:23	85.49	8.06	77.43
W-2D	18-Sep-23	7:56	84.69	7.61	77.08
W-3D	18-Sep-23	10:53	83.87	5.50	78.37
Sand and Gravel Zone					
MW-19-136	20-Sep-23	13:36	89.36	16.15	73.21
MW-19-173	20-Sep-23	13:34	89.36	16.68	72.68
OSB-5-200	18-Sep-23	9:50	130.34	62.42	67.92
OSB-6-125	18-Sep-23	10:10	98.82	31.26	67.56
OSB-6-160	18-Sep-23	10:15	98.74	31.26	67.48
OSB-6-185	18-Sep-23	10:20	98.74	31.26	67.48
OSB-6-233	18-Sep-23	10:25	98.74	31.25	67.49
OSB-7-88	18-Sep-23	11:20	88.88	12.57	76.31
OSB-7-115	18-Sep-23	11:25	88.88	17.25	71.63
OSB-7-135	18-Sep-23	11:30	88.88	15.64	73.24
OSB-8-178	18-Sep-23	8:25	148.13	NA	NA
OSB-9-125	18-Sep-23	9:10	100.55	33.40	67.15
OSB-9-160	18-Sep-23	9:15	100.57	33.04	67.53
OSB-9-185	18-Sep-23	9:20	100.57	33.04	67.53
OSB-9-218	18-Sep-23	9:25	100.57	33.04	67.53
OSB-10-119	20-Sep-23	9:42	93.11	NA	NA
OSB-10-154	20-Sep-23	10:25	92.92	27.51	65.41
OSB-10-199	20-Sep-23	11:13	92.92	26.41	66.51
OSB-10-227	20-Sep-23	12:07	92.92	26.56	66.36

Notes

¹ Settlement of the PZ-6 well casing and monument were observed during the first quarter of 2011, so the top of casing elevation measurement is no longer accurate.

— = not applicable

btoc = below top of casing

NA = not accessible and no measurement collected

NGVD = National Geodetic Vertical Datum of 1929

Milwaukie International Way
Milwaukie, Oregon

Well	Zone	2023 Water Levels	2023 Sample List	2023 Sampling Rationale
Groundwater Treatment System				
EXT-2R	LD	W	V	Sample will be collected as part of performance monitoring.
EXT-3R	CD	W	V	Sample will be collected as part of performance monitoring.
EXT-4	CD	W	V	Sample will be collected as part of performance monitoring.
Trench	S	W	V	Sample will be collected as part of performance monitoring.
Shallow Zone				
MW-3S	S	W		
MW-5	S	W	V	Confirm hydraulic control
MW-6	S	W	V	Previously ND in 2020; but not sampled in 2021 or since system went down. 2019 rationale was for baseline sample
MW-7	S	W	V	Confirm containment, well was used as baseline for FFS.
MW-9	S	W	V	Confirm containment, well was used as baseline for FFS.
MW-11S	S	W		
MW-12S	S	W		
MW-15S	S	W		
MW-16S	S	W		
MW-17S	S	W	V	Shallow well SE of the trench and downgradient. MW-17S historically had high concentrations. Sample to see if it jumped up due to the system being off
OSB-11-30	S	W		
PZ-2	S	W		
PZ-3	S	W		
PZ-4	S	W		
PZ-5	S	W		
PZ-6	S	W		
PZ-7	S	W		
W-3S	S	W		
W-4S	S	W	V	Confirm containment, well was used as baseline for FFS.
W-5S	S	W		
W-6S	S	W		
Upper Deep Zone				
EXT-1	UD	W	V	Sample from this previous extraction well.
MW-12I	UD	W		
OSB-6-35	UD	W		
W-1I	UD	W		
W-2I	UD	W	V	Confirm containment, well was used as baseline for FFS.
W-3I	UD	W		
Central Deep Zone				
MW-3DR	CD	W		
MW-4 (EXT-3)	CD	W	V	Sample from this previous extraction well.
MW-6D	CD	W	V	Assess EXT-3R effect.
MW-9D	CD	W	V	Confirm hydraulic control.
MW-10D	CD	W	V	Confirm hydraulic control.
MW-11D	CD	W		
MW-12D	CD	W	V	Last sampled in 2019. Low detection of <i>cis</i> -DCE (0.48) detected. Might be good indicator if concentrations increased.
MW-13D	CD	W	V	Assess EXT-3R effect.
OSB-12-30	CD	W		
OSB-12-40	CD	W		
Lower Deep Zone				
EXT-2	LD	W		
MW-14D	LD	W	V	Assess EXT-2R/EXT-3R effect.
MW-19-100	LD	W	V	Assess EXT-2R/EXT-3R effect and vertical migration.
OSB-1	LD	W	V	Confirm hydraulic control; low VOCs, mainly <i>cis</i> -DCE.
OSB-3-71	LD	W	V	Once had higher concentrations, but dropped with EXT-2; check now that EXT-2R is
OSB-3-130	LD	W	V	Confirm hydraulic control; next to old EXT-2; typically ND.
OSB-4	LD	W	V	Low cVOCs.
OSB-5-100	LD	W	V	Assess capture of EXT-2R.
OSB-6-95	LD	W	V	Monitor to confirm overall decreasing trend.
OSB-7-88	LD	W		

Milwaukie International Way
Milwaukie, Oregon

Well	Zone	2023 Water Levels	2023 Sample List	2023 Sampling Rationale
Lower Deep Zone (Continued)				
OSB-8-145	LD	W		
OSB-9-45	LD	W		
OSB-9-95	LD	W	V	Monitor for declines near plume edge.
OSB-10-46	LD	W	V	Will attempt to sample. Low water levels prevented previous sampling. This well was used as baseline sample.
OSB-10-98	LD	W	V	Low water levels in 2020 prevented sampling due to obstructions in CMT well.
OSB-11-62	LD			Removed from GW elevation list. Low water levels in 2020 prevented measurement due to obstructions in CMT well.
OSB-11-97	LD			Removed from GW elevation list. Low water levels in 2020 prevented measurement due to obstructions in CMT well.
OSB-12-65	LD	W		
OSB-12-82	LD	W		
W-1D	LD	W		
W-2D	LD	W	V	Not sampled since 2006. Would confirm containment in NW direction.
W-3D	LD	W		
Sand and Gravel Zone				
MW-19-136	SG	W	V	Confirm stable concentrations.
MW-19-173	SG	W	V	Was ND in 2018 and 2019, not sampled since. Low detections in upper wells. See if cVOCs have dropped to deeper aquifer.
OSB-5-200	SG	W		
OSB-6-125	SG	W	V	Monitor VOCs to see if in range of prior concentrations.
OSB-6-160	SG	W	V	Low concentrations. Check that there is no downward migration.
OSB-6-185	SG	W		
OSB-6-233	SG	W		
OSB-7-115	SG	W		
OSB-7-135	SG	W		
OSB-8-178	SG	W		
OSB-9-125	SG	W	V	Continued assessment of downgradient plume.
OSB-9-160	SG	W	V	Continued assessment of downgradient plume.
OSB-9-185	SG	W	V	Monitor increasing, but still very low, VOC concentrations.
OSB-9-218	SG	W	V	Monitor sporadic detections of VOCs.
OSB-10-119	SG	W	V	Upgradient of City well; above MCL.
OSB-10-154	SG	W	V	Monitor low concentrations of VOCs; zone above is above MCLs.
OSB-10-199	SG	W	V	Verify low conc. Well used for baseline. TCE detected for first time in 2021.
OSB-10-227	SG	W	V	Verify low detection of <i>cis</i> -DCE from 2019. sample used as baseline in 2019.
Count of wells		79	42	

Notes

Pink shading indicates a change from the previous sample list. Rationale for change given.

CD = Central Deep aquifer.

cis-DCE = *cis*-Dichloroethene

cVOC = chlorinated volatile organic compound

LD = Lower Deep aquifer

LS = last sampled

MCL = maximum contaminant level

ND = volatile organic compounds not detected.

S = Shallow aquifer

SG = Sand and Gravel aquifer

TCE = trichloroethene

UD = Upper Deep aquifer

V = volatile organic compounds by U.S. Environmental Protection Agency Method 8260D

VOC = volatile organic compounds

W = water level measurement

Table 3. 2023 Annual Groundwater Field Parameters

Milwaukie International Way
Milwaukie, Oregon

Well	Sample Date	Field Parameters				
		Temperature (°C)	pH	Conductivity (uS/cm)	ORP (mV)	D0 (mg/L)
Groundwater Treatment System						
EXT-2R	21-Sep-23	15.6	7.29	328.0	-8.1	5.25
EXT-3R	21-Sep-23	16.3	7.29	351.4	19.0	7.53
EXT-4	21-Sep-23	18.2	7.07	486.5	35.0	1.95
Trench	21-Sep-23	18.5	6.87	448.2	-17.1	8.31
Shallow Zone						
MW-5	19-Sep-23	20.0	6.92	306.6	-18.8	1.02
MW-6	19-Sep-23	19.3	6.38	215.0	-34.9	4.98
MW-7	19-Sep-23	19.0	6.69	434.3	158.9	0.84
MW-9	19-Sep-23	18.7	6.61	236.3	-39.9	0.63
MW-17S	19-Sep-23	16.0	7.01	250.1	-39.4	0.69
W-4S	20-Sep-23	20.4	6.45	261.7	83.1	0.62
Upper Deep Zone						
EXT-1	22-Sep-23	15.5	7.08	511.0	-105.9	2.75
W-2I	21-Sep-23	16.2	6.91	849.0	-73.2	0.60
Central Deep Zone						
MW-4 (EXT-3)	20-Sep-23	16.8	8.65	91.5	-265.8	0.29
MW-6D	20-Sep-23	16.0	7.00	483.1	-32.0	8.49
MW-9D	20-Sep-23	15.3	7.03	802.0	-90.1	1.91
MW-10D	21-Sep-23	16.5	6.05	158.0	114.4	3.07
MW-12D	20-Sep-23	16.0	7.10	418.1	-92.6	0.70
MW-13D	20-Sep-23	15.1	7.00	673.0	31.7	0.39
Lower Deep Zone						
MW-14D	20-Sep-23	16.9	7.11	275.4	20.6	0.73
MW-19-100	20-Sep-23	16.1	7.37	321.0	-133.1	0.86
OSB-1	21-Sep-23	18.5	7.02	463.0	-52.9	0.40
OSB-3-71	21-Sep-23	15.2	7.29	360.0	-22.0	0.61
OSB-3-130	21-Sep-23	13.7	7.87	252.0	-1.6	2.54
OSB-4	21-Sep-23	14.1	7.21	345.0	-10.4	2.31
OSB-5-100	20-Sep-23	13.1	7.06	399.0	-34.9	9.69
OSB-6-95	19-Sep-23	14.6	7.29	409.0	-277.9	0.50
OSB-9-95	19-Sep-23	15.1	7.38	418.0	-114.3	8.8
OSB-10-46	Obstruction, unable to sample					
OSB-10-98	Obstruction, unable to sample					
W-2D	21-Sep-23	16.0	6.47	589.0	-87.5	1.10
Sand and Gravel Zone						
MW-19-136	20-Sep-23	15.5	7.17	278.0	-182.9	0.56
MW-19-173	20-Sep-23	15.4	7.20	258.0	-179.6	0.32
OSB-6-125	19-Sep-23	14.9	7.61	332.0	-223.7	0.41
OSB-6-160	19-Sep-23	14.7	7.44	360.0	-254.6	0.44
OSB-9-125	19-Sep-23	15.6	7.46	401.0	-177.9	0.88
OSB-9-160	19-Sep-23	15.4	7.41	422.0	-243.9	0.41
OSB-9-185	19-Sep-23	15.1	7.41	391.0	-287.2	0.38
OSB-9-218	19-Sep-23	15.0	7.33	332.0	-277.1	0.32
OSB-10-119	Obstruction, unable to sample					
OSB-10-154	20-Sep-23	14.9	7.25	451.0	-219.9	0.55
OSB-10-199	20-Sep-23	14.9	7.10	379.0	-263.9	1.24
OSB-10-227	20-Sep-23	16.2	7.10	374.0	-287.2	0.54

Notes

°C = degrees Celsius

uS/cm = microsiemens per centimeter

DO = dissolved oxygen

mg/L = milligrams per liter

mS/m = millisiemens per meter

mV = millivolts

ORP = oxidation-reduction potential

Table 4. Groundwater Concentrations for Key Analytes

2023 Annual Groundwater Monitoring Report

Milwaukie International Way
Milwaukie, Oregon

Well	Date	Chlorinated Ethenes								Chlorinated Ethanes			
		PCE		TCE		<i>cis</i> -1,2-DCE		<i>trans</i> -1,2-DCE		1,1-DCE	VC	1,1,1-TCA	1,1-DCA
		µg/L	Q	µg/L	Q	µg/L	Q	µg/L	Q	µg/L	Q	µg/L	Q
Groundwater Treatment System													
EXT-2R	21-Apr-22	1.00 U		7.81		1.68		1.00 U		1.00 U		1.00 U	
EXT-2R	21-Sep-23	0.876 J		74.1		48.8		0.600 J		0.217 J		1.00 U	
EXT-3R	20-Apr-22	1.00 U		0.200 J		0.222 J		2.00 U		2.00 U		2.00 U	
EXT-3R	21-Sep-23	1.00 U		1.00 U		26.4		1.00 U		1.00 U		2.74	
EXT-4	20-Apr-22	0.642 J		46.6		0.126		1.40		0.901 J		1.05	
EXT-4	21-Sep-23	1.95		136		121 J		1.67		0.645 J		1.16	
Trench	19-Sep-18	1.00 U		1.58		22.1		1.00 U		1.00 U		4.24	
Trench	17-Sep-19	1.00 U		0.595 J		49.7		1.00 U		1.00 U		10.3	
Trench	21-Sep-23	1.00 U		0.193 J		27.8		1.00 U		1.00 U		2.80	
Shallow Zone													
MW-5	18-Sep-18	1.00 U		0.306 J		6.78		0.878 J		1.00 U		1.00 U	
MW-5	31-Oct-19	1.00 U		1.00 U		1.10		1.00 U		1.00 U		1.00 U	
MW-5	3-Sep-20	1.00 U		0.218 J		5.10		0.733 J		1.00 U		1.00 U	
MW-5	15-Sep-21	1.00 U		0.310 J		7.03		1.140		1.00 U		1.00 U	
MW-5	19-Sep-23	1.00 U		0.616 J		8.48		1.32		1.00 U		1.00 U	
MW-6	4-Nov-19	1.00 U		1.00 U		1.00 U		1.00 U		1.00 U		1.00 U	
MW-6	3-Sep-20	1.00 U		1.00 U		1.00 U		1.00 U		1.00 U		1.00 U	
MW-6	19-Sep-23	1.00 U		1.00 U		1.00 U		1.00 U		1.00 U		1.00 U	
MW-6-D ⁴	19-Sep-23	1.00 U		1.00 U		1.00 U		1.00 U		1.00 U		1.00 U	
MW-7	16-Sep-19	1.00 U		0.451 J		4.13		1.00 U		1.00 U		1.00 U	
MW-7	3-Sep-20	0.494 J		0.398 J		2.89		1.00 U		1.00 U		1.00 U	
MW-7	15-Sep-21	0.320 J		0.355 J		2.85		1.00 U		1.00 U		1.00 U	
MW-7	19-Sep-23	1.00 U		0.228 J		3.57		1.00 U		1.00 U		1.00 U	
MW-9	3-Sep-20	0.496 J		0.759 J		0.481 J		1.00 U		1.00 U		1.00 U	
MW-9	15-Sep-21	1.00 U		0.469 J		0.220 J		1.00 U		1.00 U		1.00 U	
MW-9	19-Sep-23	1.00 U		0.259 J		0.292 J		1.00 U		1.00 U		1.00 U	
MW-17S	16-Sep-19	1.00 U		1.00 U		8.42		1.00 U		1.00 U		3.99	
MW-17S	19-Sep-23	1.00 U		1.00 U		10.4		1.00 U		1.00 U		2.82	
W-4S	16-Sep-19	1.00 U		1.00 U		0.610 J		1.00 U		1.00 U		1.00 U	
W-4S	20-Sep-23	1.00 U		1.00 U		0.255 J		1.00 U		1.00 U		1.00 U	
Upper Deep Zone													
EXT-1	19-Sep-18	1.00 U		4.20		8.91		1.00 U		1.00 U		1.63	
EXT-1	17-Sep-19	1.00 U		12.2		35.0		1.00 U		1.00 U		6.41	
EXT-1	4-Sep-20	1.00 U		14.4		30.0		0.207 J		0.213 J		4.18 J	
EXT-1	15-Sep-21	1.00 U		11.2		24.3		1.00 U		1.00 U		4.86	
EXT-1	22-Sep-23	1.00 U		0.377 J		1.85		1.00 U		1.00 U		1.34	
W-2I	16-Sep-19	1.00 U		1.00 U		1.00 U		1.00 U		1.00 U		1.00 U	
W-2I	21-Sep-23	1.00 U		1.00 U		0.328 J		1.00 U		1.00 U		0.273 J	
Central Deep Zone													
MW-4 (EXT-3)	19-Sep-18	1.00 U		7.75		48.8		1.00 U		1.00 U		16.1	
MW-4 (EXT-3)	17-Sep-19	1.00 U		1.00 U		37.1		0.921 J		1.00 U		0.482 J	
MW-4 (EXT-3)	3-Sep-20	1.00 U		1.00 U		0.24 J		1.00 U		1.00 U		1.00 U	
MW-4 (EXT-3)	16-Sep-21	1.00 U		1.00 U		1.00 U		1.00 U		1.00 U		1.00 U	
MW-4 (EXT-3)	20-Sep-23	1.00 U		1.00 U		0.127 J		1.00 U		1.00 U		1.00 U	
MW-4 (EXT-3)-D ⁴	20-Sep-23	1.00 U		1.00 U		0.127 J		1.00 U		1.00 U		1.00 U	
MW-6D	18-Sep-18	1.00 U		0.306 J		255		1.40		0.688 J		1.00 U	
MW-6D	4-Nov-19	1.00 U		10.5		40.1		2.05		1.00 U		1.00 U	
MW-6D	3-Sep-20	1.00 U		45.3		135		2.23		0.192 J		2.40 J	
MW-6D-DUP	3-Sep-20	1.00 U		33.8		114		1.85		1.00 U		1.95 J	
MW-6D ²	15-Sep-21	1.00 U		9.74		288		6.63		0.244 J		14.0	
MW-6D	20-Sep-23	1.00 U		14.1 J		134		3.00		0.217 J J		0.641 J	
MW-9D	18-Sep-18	1.00 U		0.793 J		1.61		0.104 J		1.00 U		1.00 U	
MW-9D	31-Oct-19	1.00 U		1.00 U		12.5		1.99		1.00 U		1.00 U	
MW-9D	3-Sep-20	1.00 U		0.586 J		2.58		0.211 J		1.00 U		1.00 U	

Table 4. Groundwater Concentrations for Key Analytes

2023 Annual Groundwater Monitoring Report

Milwaukie International Way
Milwaukie, Oregon

Well	Date	Chlorinated Ethenes						Chlorinated Ethanes									
		PCE		TCE		<i>cis</i> -1,2-DCE	<i>trans</i> -1,2-DCE	1,1-DCE	VC	1,1,1-TCA	1,1-DCA						
		µg/L	Q	µg/L	Q	µg/L	Q	µg/L	Q	µg/L	Q						
Central Deep Zone (Continued)																	
MW-9D	15-Sep-21	1.00	U	1.00	U	78.8		10.9		1.00	U	1.00	U	1.00	U	0.580	J
MW-9D	20-Sep-23	1.00	U	1.00	U	70.5		5.53		1.00	U	2.07		1.00	U	0.437	J
MW-10D	18-Sep-18	1.00	U	0.112	J	9.34		1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
MW-10D	31-Oct-19	1.00	U	1.00	U	2.29		1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
MW-10D	4-Sep-20	1.00	U	1.00	U	4.81		1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
MW-10D	15-Sep-21	1.00	U	1.00	U	0.553	J	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
MW-10D	21-Sep-23	1.00	U	0.260	J	0.805	J	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
MW-12D	4-Nov-19	1.00	U	1.00	U	0.479	J	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
MW-12D	15-Sep-21	1.00	U	1.90		1.54		1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
MW-12D	20-Sep-23	1.00	U	0.427	J	1.20		1.00	U	1.00	U	0.340	J	1.00	U	1.00	U
MW-13D	18-Sep-18	0.163	J	18.7		25.4		0.459	J	1.00	U	1.00	U	1.00	U	1.00	U
MW-13D	4-Nov-19	1.00	U	20.7		32.2		0.737	J	1.00	U	1.00	U	1.00	U	1.00	U
MW-13D	3-Sep-20	0.768	J	165		105		0.524	J	1.00	U	1.00	U	1.00	U	1.00	U
MW-13D	16-Sep-21	1.00	U	39.2		36.0		0.731	J	1.00	U	1.00	U	1.00	U	1.00	U
MW-13D	19-Apr-22	0.526	J	53.6		61.2		0.990	J	0.549	J	0.535	J	1.00	U	1.00	U
MW-13D	20-Sep-23	1.00	U	11.1		33.3		1.96		1.00	U	1.00	U	1.00	U	0.162	J
Lower Deep Zone																	
EXT-2	19-Sep-18	1.48		140		91.5		0.848	J	0.309	J	1.00	U	1.00	U	1.00	U
EXT-2	17-Sep-19	1.27		118		75.8		0.602	J	1.00	U	1.00	U	1.00	U	1.00	U
EXT-2	3-Sep-20	0.923	J	87.4		64.2		0.538	J	0.223	J	1.00	U	1.00	U	1.00	U
EXT-2	17-Sep-21	2.12		177		106		0.645	J	0.314	J	1.00	U	1.00	U	1.00	U
MW-14D	18-Sep-18	1.00	U	1.2		0.74	J	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
MW-14D	4-Nov-19	1.00	U	2.20		1.55		1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
MW-14D	3-Sep-20	1.00	U	2.16		1.69		1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
MW-14D-DUP	3-Sep-20	1.00	U	2.26		1.75		1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
MW-14D	15-Sep-21	1.00	U	3.74		1.48		1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
MW-14D	20-Sep-23	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
MW-19-100	18-Sep-18	1.00	U	0.437	J	0.491	J	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
MW-19-100	4-Nov-19	1.00	U	1.00	U	3.41		1.00	U	1.00	U	0.362	J	1.00	U	1.00	U
MW-19-100	3-Sep-20	1.00	U	0.564	J	0.788	J	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
MW-19-100	16-Sep-21	1.00	U	1.00	U	2.10		1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
MW-19-100	20-Sep-23	1.00	U	1.43		9.93		1.95		0.192	J	1.00	U	1.00	U	1.00	U
OSB-1	18-Sep-18	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
OSB-1	31-Oct-19	1.00	U	1.34		45.2		1.00	U	1.00	U	0.634	J	1.00	U	1.00	U
OSB-1	3-Sep-20	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
OSB-1 ³	16-Sep-21	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
OSB-1	21-Sep-23	1.00	U	0.797	J	26.7		1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
OSB-3-71	31-Oct-19	1.00	U	0.920	J	8.02		1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
OSB-3-71	3-Sep-20	1.00	U	0.949	J	2.18		1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
OSB-3-71 ³	16-Sep-21	1.00	U	2.90		12.1		1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
OSB-3-71	21-Sep-23	1.00	U	5.93		18.7		1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
OSB-3-130	19-Sep-18	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
OSB-3-130	31-Oct-19	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
OSB-3-130-DUP	31-Oct-19	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
OSB-3-130	21-Sep-23	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
OSB-4	19-Sep-18	1.00	U	0.234	J	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
OSB-4	5-Nov-19	1.00	U	1.16		0.275	J	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
OSB-4-DUP	5-Nov-19	1.00	U	1.25		0.323	J	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
OSB-4	2-Sep-20	1.00	U	1.02		0.163	J	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
OSB-4	14-Sep-21	1.00	U	1.16		1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
OSB-4	21-Sep-23	1.00	U	1.17		0.221	J	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
OSB-4-D	21-Sep-23	1.00	U	1.15		0.212	J	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
OSB-5-100	19-Sep-18	1.00	U	4.79		27.7		0.315	J	1.00	U	1.00	U	1.00	U	1.00	U
OSB-5-100	5-Nov-19	1.00	U	6.02		45.3		0.415	J	1.00	U	0.401	J	1.00	U	1.00	U
OSB-5-100	1-Sep-20	1.00	U	5.93		44.1		0.434	J	1.00	U	0.700	J	1.00	U	1.00	U

Table 4. Groundwater Concentrations for Key Analytes

2023 Annual Groundwater Monitoring Report

Milwaukie International Way
Milwaukie, Oregon

Well	Date	Chlorinated Ethenes								Chlorinated Ethanes					
		PCE		TCE		<i>cis</i> -1,2-DCE		<i>trans</i> -1,2-DCE		1,1-DCE	VC	1,1,1-TCA	1,1-DCA		
		µg/L	Q	µg/L	Q	µg/L	Q	µg/L	Q	µg/L	Q	µg/L	Q		
Lower Deep Zone (Continued)															
OSB-5-100 ³	14-Sep-21	1.00 U		5.56		27.1		0.237 J		1.00 U		1.00 U		1.00 U	
OSB-5-100	19-Apr-22	1.00 U		3.81		20.7		0.239 J		0.353 J		0.525 J		1.00 U	
OSB-5-100	20-Sep-23	1.00 U		5.35		37.9		0.393 J		1.00 U		0.381 J		1.00 U	
OSB-6-95	18-Sep-18	0.658 J		67.1		34.7		0.264 J		1.00 U		1.00 U		1.00 U	
OSB-6-95	6-Nov-19	2.78 B		61.6 J		67.7 J		0.494 J		1.00 U		1.00 U		1.00 U	
OSB-6-95-DUP	6-Nov-19	2.41 B		59.7 J		56.6 J		0.407 J		1.00 U		1.00 U		1.00 U	
OSB-6-95	1-Sep-20	0.707 J		50.2		35.7		0.332 J		1.00 U		0.266 J		1.00 U	
OSB-6-95 ³	14-Sep-21	0.460 J		49.9		26.8		1.00 U		1.00 U		1.00 U		1.00 U	
OSB-6-95-DUP ³	14-Sep-21	0.486 J		49.7		27.9		1.00 U		1.00 U		1.00 U		1.00 U	
OSB-6-95	20-Apr-22	1.00 U		19.8		22.7		0.164 J		0.398 J		0.552 J		1.00 U	
OSB-6-95	19-Sep-23	1.00 U		24.9		22.0		1.00 U		1.00 U		1.00 U		1.00 U	
OSB-9-95	19-Sep-18	1.00 U		2.25		2.50		1.00 U		1.00 U		1.00 U		1.00 U	
OSB-9-95	1-Nov-19	1.00 U		2.81		3.11		1.00 U		1.00 U		1.00 U		1.00 U	
OSB-9-95	1-Sep-20	1.00 U		3.55		2.99		1.00 U		1.00 U		1.00 U		1.00 U	
OSB-9-95	19-Sep-23	1.00 U		4.94		3.70		1.00 U		1.00 U		1.00 U		1.00 U	
OSB-10-46	17-Sep-19	1.00 U		1.00 U		1.00 U		1.00 U		1.00 U		1.00 U		1.00 U	
OSB-10-98 ¹	17-Sep-18	0.649 J		66.5		30.1		1.00 U		0.150 J		1.00 U		1.00 U	
OSB-10-98	1-Nov-19	1.00 U		28.5		20.9		1.00 U		1.00 U		1.00 U		1.00 U	
W-2D	20-Sep-23	1.00 U		1.00 U		0.137 J		1.00 U		1.00 U		1.00 U		1.00 U	
Sand and Gravel Zone															
MW-19-136	18-Sep-18	1.00 U		1.00 U		1.00 U		1.00 U		1.00 U		1.00 U		1.00 U	
MW-19-136	4-Nov-19	1.00 U		1.00 U		0.912 J		1.00 U		1.00 U		1.00 U		1.00 U	
MW-19-136	3-Sep-20	1.00 U		1.00 U		2.11		1.00 U		1.00 U		5.96 J		1.00 U	
MW-19-136	16-Sep-21	1.00 U		1.00 U		0.163 J		1.00 U		1.00 U		0.777 J		1.00 U	
MW-19-136-DUP	16-Sep-21	1.00 U		1.00 U		0.155 J		1.00 U		1.00 U		0.740 J		1.00 U	
MW-19-136	20-Sep-23	1.00 U		1.00 U		1.00 U		1.00 U		1.00 U		1.00 U		1.00 U	
MW-19-173	19-Sep-18	1.00 U		1.00 U		1.00 U		1.00 U		1.00 U		1.00 U		1.00 U	
MW-19-173	4-Nov-19	1.00 U		1.00 U		1.00 U		1.00 U		1.00 U		1.00 U		1.00 U	
MW-19-173	20-Sep-23	1.00 U		1.00 U		1.00 U		1.00 U		1.00 U		1.00 U		1.00 U	
MW-19-173-D ⁴	20-Sep-23	1.00 U		1.00 U		1.00 U		1.00 U		1.00 U		1.00 U		1.00 U	
OSB-6-125	18-Sep-18	1.00 U		13.5		3.80		1.00 U		0.139 J		1.00 U		1.00 U	
OSB-6-125	6-Nov-19	1.57 B		13.4 J		21.6 J		1.00 U		1.00 U		2.25		1.00 U	
OSB-6-125	1-Sep-20	1.00 U		14.4		6.16		1.00 U		0.207 J		2.25 J		1.00 U	
OSB-6-125 ³	14-Sep-21	1.00 U		15.1		5.12		1.00 U		1.00 U		2.10		1.00 U	
OSB-6-125	20-Apr-22	1.00 U		22.8		6.79		1.00 U		0.381 J		0.862 J		1.00 U	
OSB-6-125	19-Sep-23	1.00 U		27.0		7.65		1.00 U		1.00 U		1.59		1.00 U	
OSB-6-160	5-Nov-19	1.00 U		1.00 U		0.314 J		1.00 U		1.00 U		1.00 U		1.00 U	
OSB-6-160	1-Sep-20	1.00 U		0.222 J		0.168 J		1.00 U		1.00 U		1.00 U		1.00 U	
OSB-6-160 ³	14-Sep-21	1.00 U		1.00 U		1.00 U		1.00 U		1.00 U		1.00 U		1.00 U	
OSB-6-160	20-Apr-22	1.00 U		0.354 J		1.00 U		1.00 U		1.00 U		1.00 U		1.00 U	
OSB-6-160	19-Sep-23	1.00 U		0.344 J		1.00 U		1.00 U		1.00 U		1.00 U		1.00 U	
OSB-9-125	19-Sep-18	1.00 U		8.33		5.70		1.00 U		0.293 J		1.05		1.00 U	
OSB-9-125	5-Nov-19	1.00 U		6.80		4.91		1.00 U		1.00 U		0.924 J		1.00 U	
OSB-9-125	1-Sep-20	1.00 U		7.00		5.63		1.00 U		0.294 J		1.33 J		1.00 U	
OSB-9-125 ³	14-Sep-21	1.00 U		3.19		3.16		1.00 U		1.00 U		0.789 J		1.00 U	
OSB-9-125	19-Sep-23	1.00 U		4.41		3.29		1.00 U		1.00 U		0.306 J		1.00 U	
OSB-9-160	19-Sep-18	1.00 U		0.160 J		0.290 J		1.00 U		1.00 U		1.00 U		1.00 U	
OSB-9-160	1-Nov-19	1.00 U		0.567 J		0.983 J		1.00 U		1.00 U		1.74		1.00 U	
OSB-9-160	1-Sep-20	1.00 U		0.415 J		0.61 J		1.00 U		1.00 U		0.512 J		1.00 U	
OSB-9-160 ³	14-Sep-21	1.00 U		0.924 J		0.992 J		1.00 U		1.00 U		2.54		1.00 U	
OSB-9-160	20-Apr-22	1.00 U		1.51		1.49		1.00 U		0.435 J		3.16		1.00 U	
OSB-9-160	19-Sep-23	1.00 U		2.06		1.76		1.00 U		0.197 J		2.07		1.00 U	
OSB-9-185	19-Sep-18	1.00 U		1.00 U		0.244 J		1.00 U		1.00 U		1.00 U		1.00 U	
OSB-9-185	5-Nov-19	1.00 U		0.543 J		1.87		1.00 U		1.00 U		0.734 J		1.00 U	
OSB-9-185	1-Sep-20	1.00 U		0.615 J		1.27		1.00 U		1.00 U		0.724 J		1.00 U	

Table 4. Groundwater Concentrations for Key Analytes

Milwaukie International Way
Milwaukie, Oregon

Well	Date	Chlorinated Ethenes								Chlorinated Ethanes							
		PCE		TCE		<i>cis</i> -1,2-DCE		<i>trans</i> -1,2-DCE		1,1-DCE	VC	1,1,1-TCA	1,1-DCA				
		µg/L	Q	µg/L	Q	µg/L	Q	µg/L	Q	µg/L	Q	µg/L	Q				
Sand and Gravel Zone (Continued)																	
OSB-9-185 ³	14-Sep-21	1.00 U		0.958 J		0.935 J		1.00 U		1.00 U		0.791 J		1.00 U		1.00 U	
OSB-9-185	19-Sep-23	1.00 U		0.691 J		0.661 J		1.00 U		1.00 U		0.681 J		1.00 U		1.00 U	
OSB-9-218	19-Sep-18	1.00 U		1.00 U		0.282 J		1.00 U		1.00 U		1.00 U		1.00 U		1.00 U	
OSB-9-218	5-Nov-19	1.00 U		1.00 U		0.917 J		1.00 U		1.00 U		0.358 J		1.00 U		1.00 U	
OSB-9-218	1-Sep-20	1.00 U		0.236 J		1.31 U		1.00 U		1.00 U		0.549 J		1.00 U		1.00 U	
OSB-9-218 ³	14-Sep-21	1.00 U		0.384 J		0.857 J		1.00 U		1.00 U		0.747 J		1.00 U		1.00 U	
OSB-9-218	19-Sep-23	1.00 U		1.00 U		0.351 J		1.00 U		1.00 U		0.491 J		1.00 U		1.00 U	
OSB-9-218-D ⁴	19-Sep-23	1.00 U		1.00 U		0.256 J		1.00 U		1.00 U		0.352 J		1.00 U		1.00 U	
OSB-10-119 ¹	17-Sep-18	0.160 J		11.0		4.24		1.00 U		1.00 U		1.00 U		1.00 U		1.00 U	
OSB-10-119	1-Nov-19	1.00 U		5.60		2.89		1.00 U		1.00 U		1.00 U		1.00 U		1.00 U	
OSB-10-154	17-Sep-18	1.00 U		1.36		0.325 J		1.00 U		1.00 U		1.00 U		1.00 U		1.00 U	
OSB-10-154	17-Sep-19	1.00 U		0.711 J		0.305 J		1.00 U		1.00 U		1.00 U		1.00 U		1.00 U	
OSB-10-154	2-Sep-20	1.00 U		0.997 J		0.393 J		1.00 U		1.00 U		1.00 U		1.00 U		1.00 U	
OSB-10-154-DUP	2-Sep-20	1.00 U		0.988 J		0.453 J		1.00 U		1.00 U		1.00 U		1.00 U		1.00 U	
OSB-10-154 ³	15-Sep-21	1.00 U		0.304 J		0.454 J		1.00 U		1.00 U		1.00 U		1.00 U		1.00 U	
OSB-10-154	20-Sep-23	1.00 U		1.15 J		0.434 J		1.00 U		1.00 U		1.00 U		1.00 U		1.00 U	
OSB-10-199	1-Nov-19	1.00 U		1.00 U		0.721 J		1.00 U		1.00 U		1.00 U		1.00 U		1.00 U	
OSB-10-199	2-Sep-20	1.00 U		1.00 U		0.528 J		1.00 U		1.00 U		1.00 U		1.00 U		1.00 U	
OSB-10-199 ³	15-Sep-21	1.00 U		0.318 J		0.531 J		1.00 U		1.00 U		1.00 U		1.00 U		1.00 U	
OSB-10-199	20-Sep-23	1.00 U		0.274 J		0.491 J		1.00 U		1.00 U		1.00 U		1.00 U		1.00 U	
OSB-10-227	17-Sep-19	1.00 U		1.00 U		0.703 J		1.00 U		1.00 U		1.00 U		1.00 U		1.00 U	
OSB-10-227	20-Sep-23	1.00 U		1.00 U		0.960 J		1.00 U		1.00 U		1.00 U		1.00 U		1.00 U	
DEQ RBCs																	
Ingestion and Inhalation - Res		12		0.49		36		360		280		0.027		8,000		2.8	
VI - Commercial - Chronic ⁵		130		13		1,800		750		1,300		3.3		53,000		55	
VI - Commercial - Acute ⁵		330		27		—		10,000		890		4,600		80,000		—	
Project Containment Goals																	
TCE above 5 µg/L		—		5		—		—		—		—		—		—	
TCE above 100 µg/L		—		100		—		—		—		—		—		—	

Notes

¹ OSB-10-98 and OSB-10-119 samples were likely switched in 2018. Data in this table has been corrected to reflect this sampling error.

² MW-6D incorrectly labeled as "MW-16D" on COC and in laboratory report L1405621 dated October 4, 2021.

³ All "OSB" designated wells incorrectly labeled as "DSB" in laboratory report dated October 4, 2021.

⁴ Duplicate sample collected during the 2023 event.

⁵ Only shallow groundwater is compared to VI RBCs.

Green shading denotes a detected analyte concentration exceeding a DEQ RBC. The exceeded RBC is also shaded.

Light orange shading denotes a detected analyte concentration exceeding project containment goal of 5 µg/L

Dark orange shading denotes a detected analyte concentration exceeding project containment goal of 100 µg/L

Bold text denotes a detected concentration.

DEQ risk-based concentrations (RBCs) are from DEQ (2023b).

— = not applicable

µg/L = micrograms per liter

DCA = dichloroethane

DCE = dichloroethene

J = estimated value

NS = Scheduled for sampling, but samples could not be collected.

PCE = tetrachloroethene

Q = data qualifier

TCA = trichloroethane

TCE = trichloroethene

U = analyte not detected at posted limit

VC = vinyl chloride

VI = vapor intrusion

Table 5. Groundwater Molar Concentrations for Key Analytes

Milwaukie International Way
Milwaukie, Oregon

Well	Date	Chlorinated Ethenes										Chlorinated Ethanes					
		PCE		TCE		<i>cis</i> -1,2-DCE		<i>trans</i> -1,2-DCE		1,1-DCE		VC		1,1,1-TCA		1,1-DCA	
		μM	Q	μM	Q	μM	Q	μM	Q	μM	Q	μM	Q	μM	Q	μM	Q
Groundwater Treatment System																	
EXT-2R	20-Sep-23	0.0053	J	0.564		0.503		0.006	J	0.002	J	—	U	—	U	—	U
EXT-3R	21-Sep-23	—	U	—	U	0.272		—	U	—	U	—	U	—	U	—	U
Trench	21-Sep-23	—	U	0.001		0.287		—	U	—	U	—	U	—	U	—	U
Shallow Zone																	
MW-5	19-Sep-23	—	U	0.005	J	0.087		0.014		—	U	—	U	—	U	—	U
MW-6	19-Sep-23	—	U	—	U	—	U	—	U	—	U	—	U	—	U	—	U
MW-6-D	19-Sep-23	—	U	—	U	—	U	—	U	—	U	—	U	—	U	—	U
MW-7	19-Sep-23	—	U	0.002	J	0.037		—	U	—	U	—	U	—	U	—	U
MW-9	19-Sep-23	—	U	0.002	J	0.003	J	—	U	—	U	—	U	—	U	—	U
MW-17S	19-Sep-23	—	U	—	U	0.107		—	U	—	U	0.045		—	U	—	U
W-4S	20-Sep-23	—	U	—	U	0.003	J	—	U	—	U	—	U	—	U	—	U
Upper Deep Zone																	
EXT-1	22-Sep-23	—	U	0.003	J	0.019		—	U	—	U	0.078		—	U	—	U
W-2I	21-Sep-23	—	U	—	U	—	U	—	U	—	U	—	U	—	U	—	U
Central Deep Zone																	
MW-4 (EXT-3)	20-Sep-23	—	U	—	U	0.001	J	—	U	—	U	—	U	—	U	—	U
MW-4 (EXT-3)-D	20-Sep-23	—	U	—	U	0.001	J	—	U	—	U	—	U	—	U	—	U
MW-6D	20-Sep-23	—	U	0.107	J	1.382		0.031		0.002	J	0.010	J	—	U	—	U
MW-9D	20-Sep-23	—	U	—	U	0.727		0.057		—	U	—	U	—	U	0.004	J
MW-10D	21-Sep-23	—	U	0.002	J	0.008	J	—	U	—	U	—	U	—	U	—	U
MW-12D	20-Sep-23	—	U	0.003	J	0.012		—	U	—	U	—	U	—	U	—	U
MW-13D	20-Sep-23	—	U	0.084		0.343		0.020		—	U	—	U	—	U	0.002	J
Lower Deep Zone																	
EXT-2	21-Sep-23	0.0053		0.5640		0.503		0.007	J	0.003	J	—	U	—	U	—	U
MW-14D	20-Sep-23	—	U	—	U	—	U	—	U	—	U	—	U	—	U	—	U
MW-19-100	20-Sep-23	—	U	0.011		0.102		—	U	0.002	J	—	U	—	U	—	U
OSB-1	21-Sep-23	—	U	0.006	J	0.275		—	U	—	U	—	U	—	U	—	U
OSB-3-71	21-Sep-23	—	U	0.045		0.193		—	U	—	U	—	U	—	U	—	U
OSB-3-130	21-Sep-23	—	U	—	U	—	U	—	U	—	U	—	U	—	U	—	U
OSB-4	21-Sep-23	—	U	0.009		0.002	J	—	U	—	U	—	U	—	U	—	U
OSB-5-100	20-Sep-23	—	U	0.041		0.391		0.004	J	—	U	0.006	J	—	U	—	U
OSB-6-95	19-Sep-23	—	U	0.190		0.227		—	U	—	U	—	U	—	U	—	U
OSB-9-95	19-Sep-23	—	U	0.038		0.038		—	U	—	U	—	U	—	U	—	U
OSB-10-46	17-Sep-23	—	U	—	U	—	U	—	U	—	U	—	U	—	U	—	U
Sand and Gravel Zone																	
MW-19-136	20-Sep-23	—	U	—	U	—	U	—	U	—	U	—	U	—	U	—	U
MW-19-173	20-Sep-23	—	U	—	U	—	U	—	U	—	U	—	U	—	U	—	U
OSB-6-125	20-Sep-23	—	U	0.205		0.079		—	U	—	U	0.025		—	U	—	U
OSB-6-160	19-Sep-23	—	U	0.003	J	—	U	—	U	—	U	—	U	—	U	—	U
OSB-9-125	19-Sep-23	—	U	0.034		0.034		—	U	—	U	0.005	J	—	U	—	U
OSB-9-160	19-Sep-23	—	U	0.016		0.018		—	U	0.0020		0.033		—	U	—	U
OSB-9-185	19-Sep-23	—	U	0.005	J	0.007	J	—	U	—	U	0.011	J	—	U	—	U
OSB-9-218	19-Sep-23	—	U	—	U	0.004	J	—	U	—	U	0.008	J	—	U	—	U
OSB-10-154	20-Sep-23	—	U	0.009	J	0.004	J	—	U	—	U	—	U	—	U	—	U
OSB-10-199	20-Sep-23	—	U	0.002	J	0.005	J	—	U	—	U	—	U	—	U	—	U
OSB-10-227	20-Sep-23	—	U	—	U	0.010	J	—	U	—	U	—	U	—	U	—	U

Notes

Molecular weights: PCE = 165.83 mass in grams per mole (g/mol); TCE = 131.389 g/mol; DCE = 96.944 g/mol; VC = 62.499 g/mol; 1,1,1-TCA = 133.405 g/mol; 1,1-DCA = 98.960 g/mol.

Bold text denotes a detected concentration.

μM = micromoles

DCA = dichloroethane

DCE = dichloroethene

J = estimated value

U = analyte not detected at posted limit

Table 6. Well Construction Details
Milwaukie International Way
Milwaukie, Oregon

Well	Completion Date	Location	Well Material	Well Casing ID (inches)	Well Stickup (feet)	Top of Casing Elevation ¹ (feet NGVD 29)	Measured Well Depth ² (feet)	Screen Length (feet)	Screen Slot Size (inches)	Top of Screen Depth (ft btoc)	Bottom of Screen Depth (ft btoc)	Top of Screen Elevation (ft NGVD 29)	Bottom of Screen Elevation (ft NGVD 29)	Sump Length (feet)	Top of Sand Pack Depth (ft bgs)	Bottom of Sand Pack Depth (ft bgs)
Groundwater Treatment System																
EXT-2R	27-Oct-21	Off Site	Steel	8.0	NA	NA	78.50	20.00	0.02	57.50	77.50	NA	NA	1.00	55.50	78.50
EXT-3R	27-Oct-21	Revtek	Steel	8.0	NA	NA	46.00	10.00	0.02	35.00	45.00	NA	NA	1.00	33.00	46.00
EXT-4	27-Oct-21	Revtek	Steel	8.0	NA	NA	51.00	15.00	0.02	35.00	50.00	NA	NA	1.00	32.00	51.00
Trench	October-02	Revtek/Watumull	HPDE	16	NA	NA	15 - 18	NA	slotted	NA	NA	NA	NA	NA	NA	NA
Shallow Zone																
MW-3S	20-Mar-96	Revtek	PVC	2.0	-0.48	84.61	13.29	9.00	0.01	4.50	13.50	80.60	71.60	0.50	3.50	14.50
MW-5	21-Nov-94	Revtek	PVC	2.0	-0.36	85.41	14.70	10.00	0.02	5.00	15.00	80.80	70.80	NA	NA	NA
MW-6	31-Oct-94	Revtek	PVC	2.0	-0.31	90.41	14.95	10.00	0.02	5.00	15.00	85.70	75.70	0.40	4.00	16.00
MW-7	31-Oct-94	Revtek	PVC	2.0	-0.50	90.25	14.28	10.00	0.02	5.00	15.00	85.80	75.80	0.40	4.00	16.00
MW-9	20-Mar-96	Revtek	PVC	2.0	-0.48	87.17	14.66	10.00	0.01	5.00	15.00	82.70	72.70	0.50	4.00	16.00
MW-11S	13-Mar-97	Revtek	PVC	2.0	-0.20	87.42	12.30	5.00	0.02	7.00	12.00	80.60	75.60	0.50	6.00	14.00
MW-12S	21-Sep-00	Revtek	PVC	2.0	-0.38	89.13	16.30	5.00	0.01	11.50	16.50	77.90	72.90	0.50	10.50	17.00
MW-15S	21-Sep-00	Revtek	PVC	2.0	-0.40	88.89	15.90	5.00	0.01	11.50	16.50	77.80	72.80	0.50	10.50	16.50
MW-16S	12-Jun-00	Revtek	PVC	2.0	-0.39	83.97	12.20	8.00	0.01	4.50	12.50	79.90	71.90	0.50	3.00	12.50
MW-17S	21-Sep-00	Revtek	PVC	2.0	-0.44	89.45	15.40	5.00	0.01	11.00	16.00	78.80	73.80	0.50	9.00	16.00
MW-18S ³	21-Sep-00	Revtek	PVC	2.0	-0.23	88.6	15.10	5.00	0.01	11.50	16.50	77.30	72.30	0.50	9.50	16.50
OSB-11-30	19-May-05	Off Site	HDPE	1.6	-1.15	100.16	NA	2.50	0.006	27.50	30.00	73.80	71.30	NA	25.30	32.50
PZ-2	October-02	Watumull	PVC	2.0	-0.46	85.19	NA	10.00	0.010	4.40	14.40	80.79	70.79	0.50	82.79	70.29
PZ-3	October-02	Watumull	PVC	2.0	-0.40	85.37	NA	10.00	0.010	4.90	14.90	80.47	70.47	0.50	82.57	69.97
PZ-4 ⁴	October-02	Revtek	PVC	2.0	-0.31	89.14	NA	10.00	0.020	4.40	14.40	84.74	74.74	2.00	NA	NA
PZ-5	October-02	Revtek	PVC	2.0	-0.33	89.11	NA	10.00	0.010	6.60	16.60	82.51	72.51	0.50	86.31	72.01
PZ-6 ⁴	October-02	Revtek	PVC	3.0	-0.25	88.97	NA	10.00	0.020	4.40	14.40	84.57	74.57	2.00	NA	NA
PZ-7	October-02	Revtek	PVC	2.0	-0.36	89.23	NA	10.00	0.010	6.30	16.30	82.93	72.93	0.50	86.83	72.43
W-1S ³	19-Dec-97	Watumull	PVC	2.0	2.37	89.24	13.59	4.20	0.02	6.00	10.20	80.60	76.40	0.50	5.00	11.10
W-3S	19-Dec-97	Watumull	PVC	2.0	-0.32	87.07	10.54	4.20	0.02	6.47	10.67	80.90	76.70	0.50	5.50	11.50
W-4S	20-Sep-00	Watumull	PVC	2.0	-0.34	85.96	13.40	5.00	0.01	9.00	14.00	77.30	72.30	0.50	7.00	14.00
W-5S	19-Sep-08	Watumull	PVC	2.0	-0.54	85.46	13.15	5.00	0.01	8.50	13.50	77.50	72.50	0.50	6.50	14.50
W-6S	20-Sep-08	Watumull	PVC	2.0	-0.28	85.52	11.65	5.00	0.01	7.00	12.00	78.80	73.80	0.50	5.00	12.00
Upper Deep Zone																
EXT-1	Jul-03	Revtek	Steel	10	NA	NA	42.00	15.00	0.01	25.00	40.00	NA	NA	NA	NA	NA
MW-12I	17-Mar-97	Revtek	PVC	2.0	-0.34	89.28	26.70	5.00	0.02	21.50	26.50	68.10	63.10	0.50	20.80	28.00
OSB-6-35	13-Apr-03	Off Site	HDPE	1.6	-0.18	98.82	NA	2.50	0.006	32.50	35.00	66.50	64.00	NA	29.00	36.00
W-1I	18-Dec-97	Watumull	PVC	2.0	2.14	88.79	25.17	4.20	0.02	18.50	22.70	68.20	64.00	0.50	17.00	23.50
W-2I	17-Dec-97	Watumull	PVC	2.0	2.05	88.27	27.05	4.20	0.02	20.60	24.80	65.60	61.40	0.50	19.00	25.60
W-3I	18-Dec-97	Watumull	PVC	2.0	-0.26	87.19	28.12	4.20	0.02	24.15	28.35	63.30	59.10	0.50	23.00	29.60
Central Deep Zone																
MW-3DR	13-Mar-97	Revtek	PVC	2.0	-0.48	83.56	40.00	10.00	0.02	29.60	39.60	54.60	44.60	0.50	28.00	40.00
MW-4 (EXT-3)	16-Sep-59	Revtek	Steel	6.0	-2.58	88.46	45.14	NA	NA	NK	NK	NK	NK	NA	NA	NA
MW-6D	27-Nov-96	Revtek	PVC	2.0	-0.34	90.81	40.20	10.00	0.02	30.00	40.00	61.20	51.20	0.50	27.00	40.50
MW-9D	25-Nov-96	Revtek	PVC	2.0	-0.28	88.86	39.70	10.00	0.02	29.00	39.00	60.10	50.10	0.50	27.00	39.50
MW-10D	26-Nov-96	Revtek	PVC	2.0	-0.29	89.88	40.30	10.00	0.02	30.10	40.10	60.10	50.10	0.50	27.00	40.60
MW-11D	12-Mar-97	Revtek	PVC	2.0	-0.34	86.52	39.40	10.00	0.02	29.20	39.20	57.70	47.70	0.50	28.00	39.70
MW-12D	11-Mar-97	Revtek	PVC	2.0	-0.39	88.94	38.60	10.00	0.02	28.50	38.50	60.80	50.80	0.50	27.00	40.00
MW-13D	10-Mar-97	Revtek	PVC	2.0	-0.32	89.22	39.70	10.00	0.02	29.50	39.50	60.00	50.00	0.50	28.00	40.00
OSB-12-30	12-May-05	Off Site	HDPE	2.0	-0.44	83.61	29.65	5.00	0.01	25.00	30.00	59.00	54.00	NA	22.50	31.20
OSB-12-40	12-May-05	Off Site	HDPE	1.6	-0.44	83.61	39.82	2.50	0.006	37.50	40.00	46.50	44.00	NA	36.20	41.20
Lower Deep Zone																
EXT-2	13-Oct-08	Off Site	Steel	8.0	-3.58	87.35	78.00	20.00	0.02	58.00	78.00	30.35	10.35	1.00	55.00	79.00
MW-14D	21-Nov-00	Revtek	PVC	2.0	-0.30	90.33	75.10	10.00	0.01	65.00	75.00	25.60	15.60	0.50	62.00	76.20
MW-19-100	5-Feb-03	Revtek	PVC	2.0	-0.05	89.43	99.82	5.00	0.01	95.00	100.00	-5.30	-10.30	NA	93.00	100.50
OSB-1	8-Dec-00	Off Site	PVC	2.0	2.68	89.58	72.34	10.00	0.01	59.00	69.00	27.90	17.90	0.50	56.20	70.00
OSB-3-71	28-Mar-01	Off Site	PVC	2.0	2.59	91.89	72.50	10.00	0.01	61.50	71.50	27.80	17.80	0.50	57.50	72.20
OSB-3-130	4-Oct-08	Off Site	PVC	2.0	2.69	92.88	130.50	10.00	0.01	120.00	130.00	27.12	17.12	0.50	117.00	130.50
OSB-4	17-Jan-01	Off Site	PVC	2.0	2.43	105.43	84.41	10.00	0.01	71.00	81.00	32.00	22.00	0.50	68.40	81.30
OSB-5-100	25-Mar-03	Off Site	PVC	2.0	-0.44	130.35	99.90	10.00	0.01	90.00	100.00	40.40	30.40	0.50	87.00	102.20
OSB-6-95	13-Apr-03	Off Site	HDPE	1.6	-0.21	98.82	NA	2.50	0.006	92.50	95.00	6.50	4.00	NA	90.20	96.00
OSB-7-88	5-Apr-03	Off Site	PVC	2.0	-0.46	88.68	NA	10.00	0.01	78.00	88.00	11.10	1.10	0.50	76.00	90.00
OSB-8-145	21-Jun-04	Off Site	HDPE	1.6	-0.44	148.13	NA	10.00	0.006	135.00	145.00	13.60	3.60	NA	131.00	147.00
OSB-9-45	6-Jun-04	Off Site	HDPE	1.6	-0.15	100.55	NA	2.50	0.006	42.50	45.00	58.20	55.70	NA	38.30	47.00
OSB-9-95	6-Jun-04	Off Site	HDPE	1.6	-0.15	100.55	NA	2.50	0.006	92.50	95.00	8.20	5.70	NA	88.80	97.10
OSB-10-46	30-Jul-04	Off Site	HDPE	1.6	-0.23	93.11	NA	2.50	0.006	44.00	46.50	49.30	46.80	NA	40.00	48.50
OSB-10-98	30-Jul-04	Off Site	HDPE	1.6	-0.23	93.11	NA	2.50	0.006	96.00	98.50	-2.70	-5.20	NA	92.00	100.50

Table 6. Well Construction Details
Milwaukie International Way
Milwaukie, Oregon

Well	Completion Date	Location	Well Material	Well Casing ID (inches)	Well Stickup (feet)	Top of Casing Elevation ¹ (feet NGVD 29)	Measured Well Depth ² (feet)	Screen Length (feet)	Screen Slot Size (inches)	Top of Screen Depth (ft btoc)	Bottom of Screen Depth (ft btoc)	Top of Screen Elevation (ft NGVD 29)	Bottom of Screen Elevation (ft NGVD 29)	Sump Length (feet)	Top of Sand Pack Depth (ft bgs)	Bottom of Sand Pack Depth (ft bgs)
Lower Deep Zone (Continued)																
OSB-11-62	19-May-05	Off Site	HDPE	1.6	-1.15	100.16	NA	2.50	0.006	60.00	62.50	41.30	38.80	NA	58.00	64.10
OSB-11-97	19-May-05	Off Site	HDPE	1.6	-1.15	100.16	NA	2.50	0.006	95.00	97.50	6.30	3.80	NA	92.50	99.50
OSB-12-65	12-May-05	Off Site	HDPE	1.6	-0.44	83.61	64.65	2.50	0.006	62.50	65.00	21.50	19.00	NA	60.80	66.00
OSB-12-82	12-May-05	Off Site	HDPE	1.6	-0.44	83.61	NA	2.50	0.006	80.00	82.50	4.00	1.50	NA	78.20	83.50
W-1D	6-Mar-01	Watumull	PVC	2.0	-0.31	85.49	70.72	10.00	0.01	60.00	70.00	25.80	15.80	1.00	56.70	71.00
W-2D	8-Feb-01	Watumull	PVC	2.0	-0.09	84.69	69.51	10.00	0.01	59.00	69.00	25.80	15.80	0.30	56.00	70.10
W-3D	22-Mar-01	Watumull	PVC	2.0	-0.33	83.87	69.50	10.00	0.01	58.50	68.50	25.70	15.70	0.50	55.20	69.80
Sand and Gravel Zone																
MW-19-136	5-Feb-03	Revtek	HDPE	1.6	-0.12	89.36	NA	2.50	0.006	134.00	136.50	-43.80	-46.30	NA	132.00	138.30
MW-19-173	5-Feb-03	Revtek	HDPE	1.6	-0.12	89.36	NA	2.50	0.006	171.50	174.00	-80.80	-83.30	NA	168.80	175.00
OSB-5-200	25-Mar-03	Off Site	PVC	2.0	-0.45	130.34	199.2	10.00	0.010	190.00	200.00	-59.70	-69.70	0.50	186.50	201.50
OSB-6-125	13-Apr-03	Off Site	HDPE	1.6	-0.21	98.82	NA	2.50	0.006	122.50	125.00	-23.50	-26.00	NA	120.20	127.00
OSB-6-160	13-Apr-03	Off Site	HDPE	1.6	-0.29	98.74	NA	2.50	0.006	157.50	160.00	-58.50	-61.00	NA	155.50	162.00
OSB-6-185	13-Apr-03	Off Site	HDPE	1.6	-0.29	98.74	NA	2.50	0.006	182.50	185.00	-83.50	-86.00	NA	180.50	187.20
OSB-6-233	13-Apr-03	Off Site	HDPE	1.6	-0.29	98.74	NA	2.50	0.006	230.50	233.00	-131.50	-134.00	NA	228.50	235.00
OSB-7-115	5-Apr-03	Off Site	HDPE	1.6	-0.26	88.88	NA	2.50	0.006	112.50	115.00	-23.40	-25.90	NA	109.50	117.50
OSB-7-135	5-Apr-03	Off Site	HDPE	1.6	-0.26	88.88	NA	2.50	0.006	130.50	133.00	-43.40	-45.90	NA	128.00	135.00
OSB-8-178	21-Jun-04	Off Site	HDPE	1.6	-0.44	148.13	NA	2.50	0.006	173.00	175.50	-24.40	-26.90	NA	169.00	180.00
OSB-9-125	6-Jun-04	Off Site	HDPE	1.6	-0.15	100.55	NA	2.50	0.006	122.50	125.00	-21.80	-24.30	NA	118.50	126.30
OSB-9-160	6-Jun-04	Off Site	HDPE	1.6	-0.13	100.57	NA	2.50	0.006	157.50	160.00	-56.80	-59.30	NA	153.50	162.00
OSB-9-185	6-Jun-04	Off Site	HDPE	1.6	-0.13	100.57	NA	2.50	0.006	182.50	185.00	-81.80	-84.30	NA	178.00	187.50
OSB-9-218	6-Jun-04	Off Site	HDPE	1.6	-0.13	100.57	NA	2.50	0.006	216.00	218.50	-115.30	-117.80	NA	212.00	220.00
OSB-10-119	30-Jul-04	Off Site	HDPE	1.6	-0.23	93.11	NA	2.50	0.006	117.00	119.50	-23.70	-26.20	NA	112.90	121.50
OSB-10-154	13-Jun-04	Off Site	HDPE	1.6	-0.09	92.92	NA	2.50	0.006	151.50	154.00	-58.50	-61.00	NA	147.50	156.30
OSB-10-199	13-Jun-04	Off Site	HDPE	1.6	-0.09	92.92	NA	2.50	0.006	196.50	199.00	-103.50	-106.00	NA	192.50	201.30
OSB-10-227	13-Jun-04	Off Site	HDPE	1.6	-0.09	92.92	NA	2.50	0.006	224.50	227.00	-131.50	-134.00	NA	220.50	229.00

Notes

- ¹ From W&H Pacific Surveys, 1996-2004. The elevations have been updated as the top of casing is altered.
- ² Measured from top of PVC casing during November 1994, December 1996, and groundwater sampling events.
- ³ These wells were decommissioned and removed during the interim remedial measure conducted in 2002.
- ⁴ Discrepancy was noted in original well construction table. Well screen lengths were listed as 5 feet, but screened interval data indicated 10 feet.

In general, well screen elevations have been given the following aquifer zone designation:

- Shallow Zone, 70 to 85 feet, NGVD 29
- Upper Deep Zone, 60 to 70 feet, NGVD 29
- Central Deep Zone, 40 to 60 feet, NGVD 29
- Lower Deep Zone, -10 to 40 feet, NGVD 29
- Sand and Gravel Zone, -23 to -134 feet, NGVD 29

btoc = below top of casing
ft bgs = feet below ground surface
NA = not available
NGVD 29 = National Geodetic Vertical Datum of 1929
NK = not known
nm = not measured

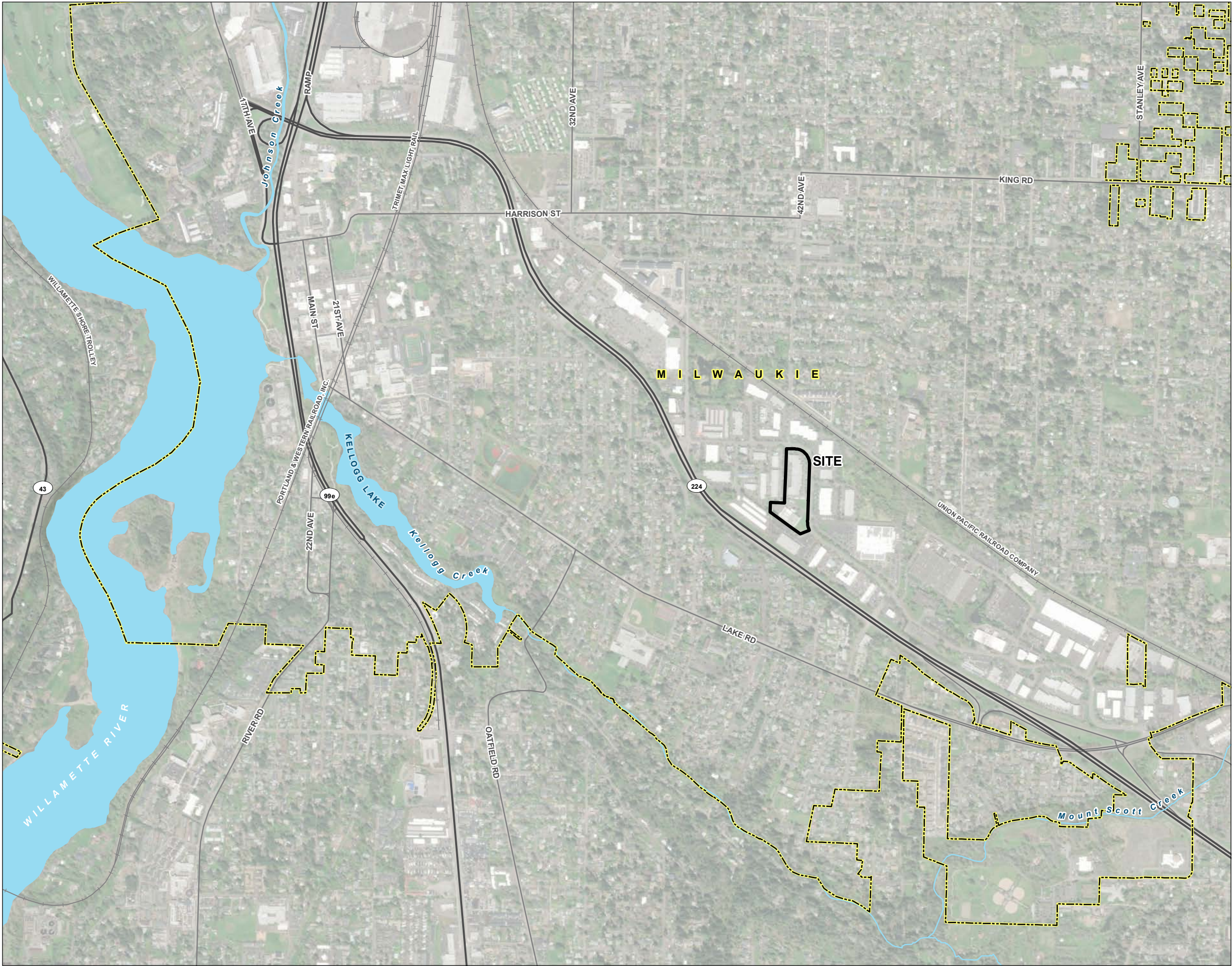


FIGURE 1

Site Vicinity

Milwaukie International Way
Milwaukie, Oregon

LEGEND

- Site Boundary
- City Boundary
- Railroad
- Major Road
- Watercourse
- Waterbody

PROJECT LOCATION

O R E G O N

N

0 550 1,100 1,650

Feet

Date: March 5, 2024
Data Sources: BLM, ESRI, ODOT, USGS,
Aerial Photo 2020

GSI
Water Solutions, Inc.



FIGURE 2
Off-Site Monitoring Well Plan
Milwaukie International Way
Milwaukie, Oregon

- LEGEND**
- Extraction Well
 - Shallow Zone Well
 - Upper Deep Zone Well
 - Central Deep Zone Well
 - Lower Deep Zone Well
 - ⊕ Multiple Completion Well
 - ⊕ Sand and Gravel Zone Well
 - Piezometer
 - Extraction Trench
 - ▢ Groundwater Treatment System
 - ▭ Site Boundary
 - Railroad

NOTE
All features are approximate.

N

0 115 230 345
Feet

Date: March 6, 2024
Data Sources: BLM, ESRI, ODOT, USGS,
Aerial Photo 2020



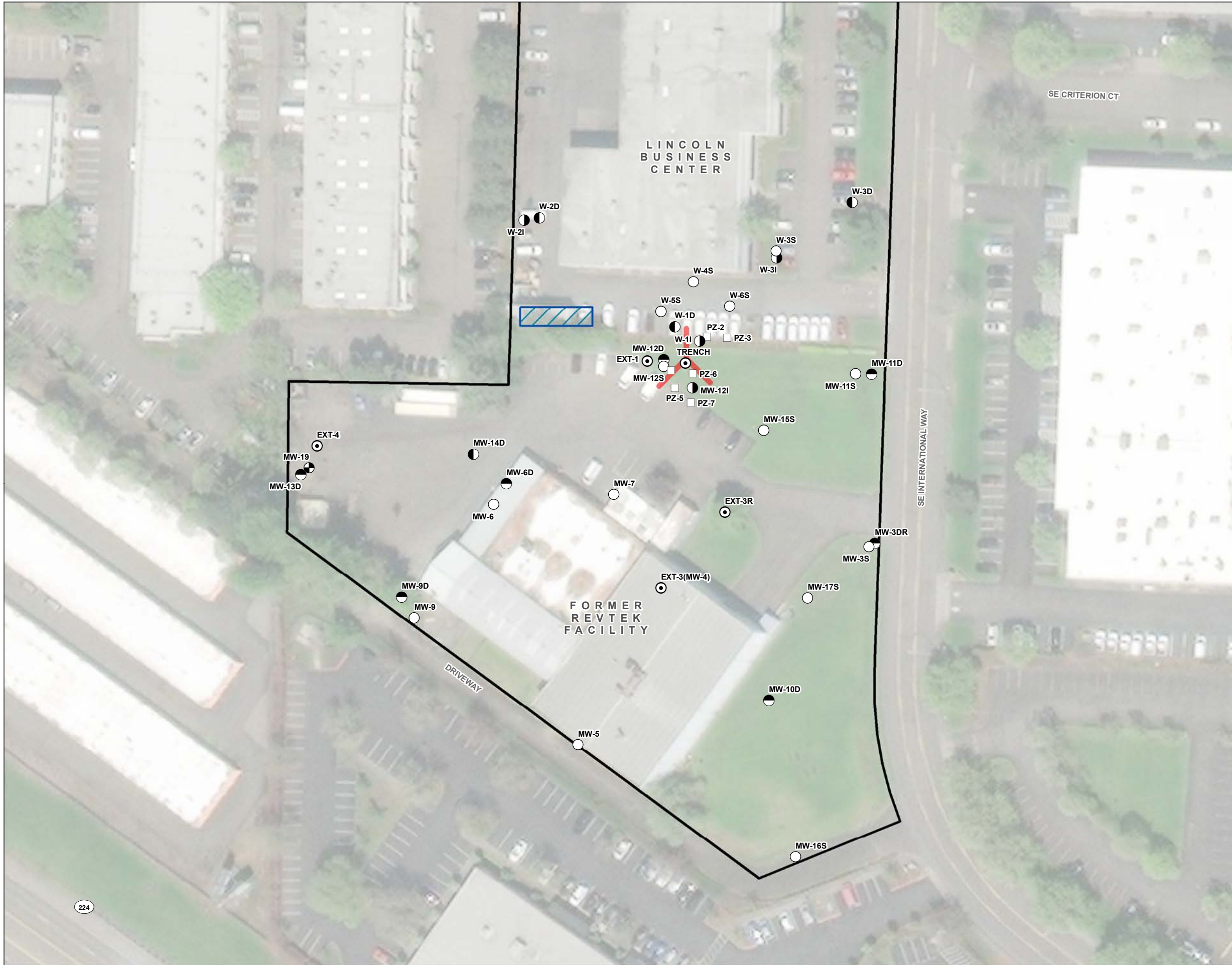


FIGURE 3
On-Site Monitoring Well Plan
Milwaukie International Way
Milwaukie, Oregon

- LEGEND**
- Extraction Well
 - Shallow Zone Well
 - Upper Deep Zone Well
 - Central Deep Zone Well
 - Lower Deep Zone Well
 - Multiple Completion Well
 - Sand and Gravel Zone Well
 - Piezometer
 - Extraction Trench
 - Groundwater Treatment System
 - Site Boundary

NOTE
All features are approximate.

N

0 35 70 105
Feet

Date: March 6, 2024
Data Sources: BLM, ESRI, ODOT, USGS,
Aerial Photo 2020



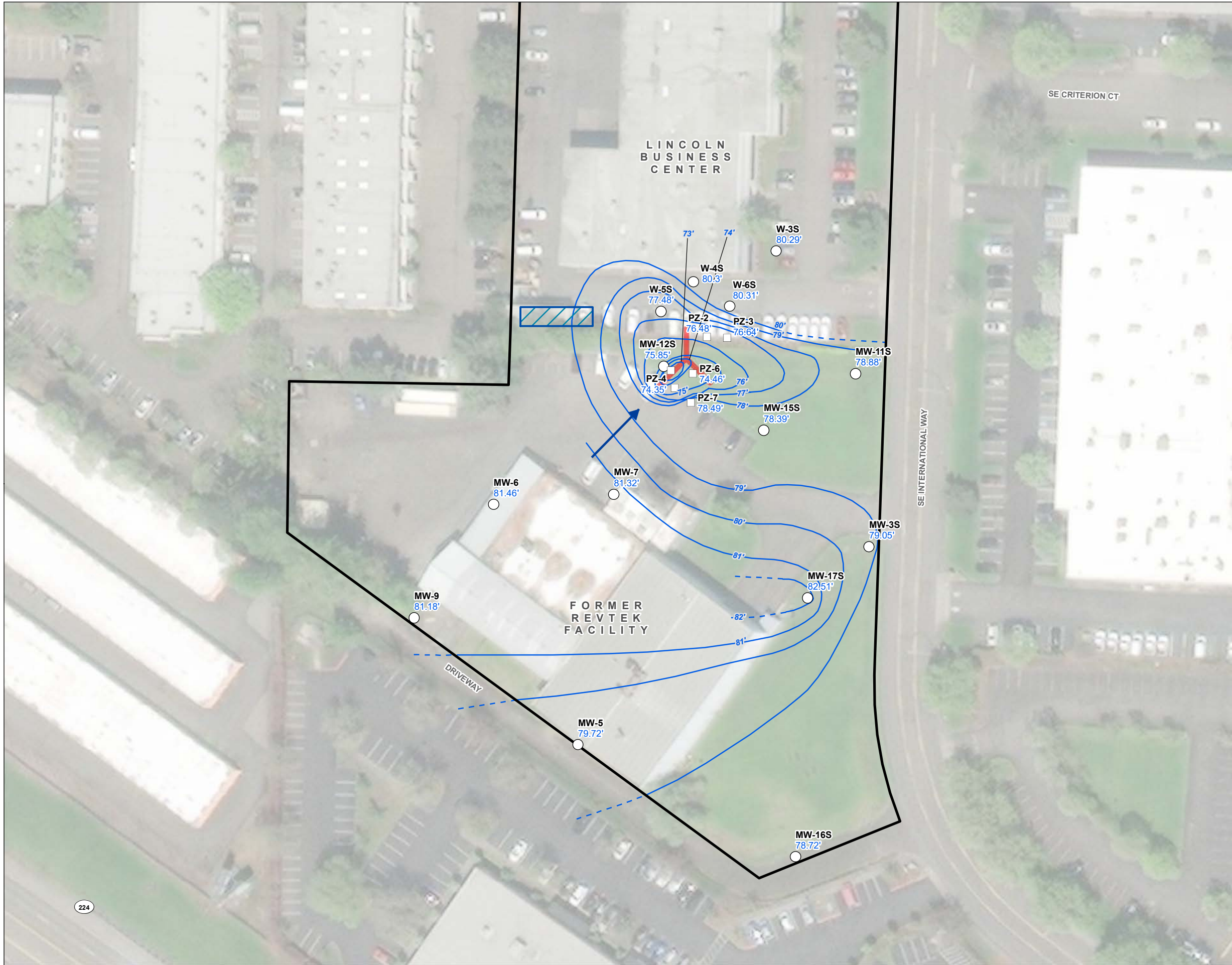
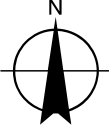


FIGURE 4
Shallow Zone,
Groundwater Elevations
September 2023
Milwaukie International Way
Milwaukie, Oregon

- LEGEND**
- Shallow Zone Well
Groundwater Elevation
 - Piezometer
Groundwater Elevation
 - Extraction Trench
 - ~ Groundwater Elevation Contour, feet
 - ➔ Groundwater Flow Direction
 - ▨ Groundwater Treatment System
 - ▭ Property Boundary

NOTE
All features are approximate.



Date: March 6, 2024
Data Sources: BLM, ESRI, ODOT, USGS,
Aerial Photo 2020

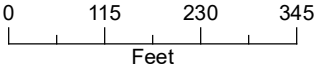
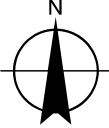




FIGURE 5
Upper Deep Zone,
Groundwater Elevations
September 2023
Milwaukie International Way
Milwaukie, Oregon

- LEGEND**
- Upper Deep Zone Well
Groundwater Elevation
 - ⊗ Multiple Completion Well
Groundwater Elevation
 - Extraction Trench
 - ~ Groundwater Elevation Contour, feet
 - ➔ Groundwater Flow Direction
 - ▨ Groundwater Treatment System
 - ▭ Site Boundary

NOTE
All features are approximate.



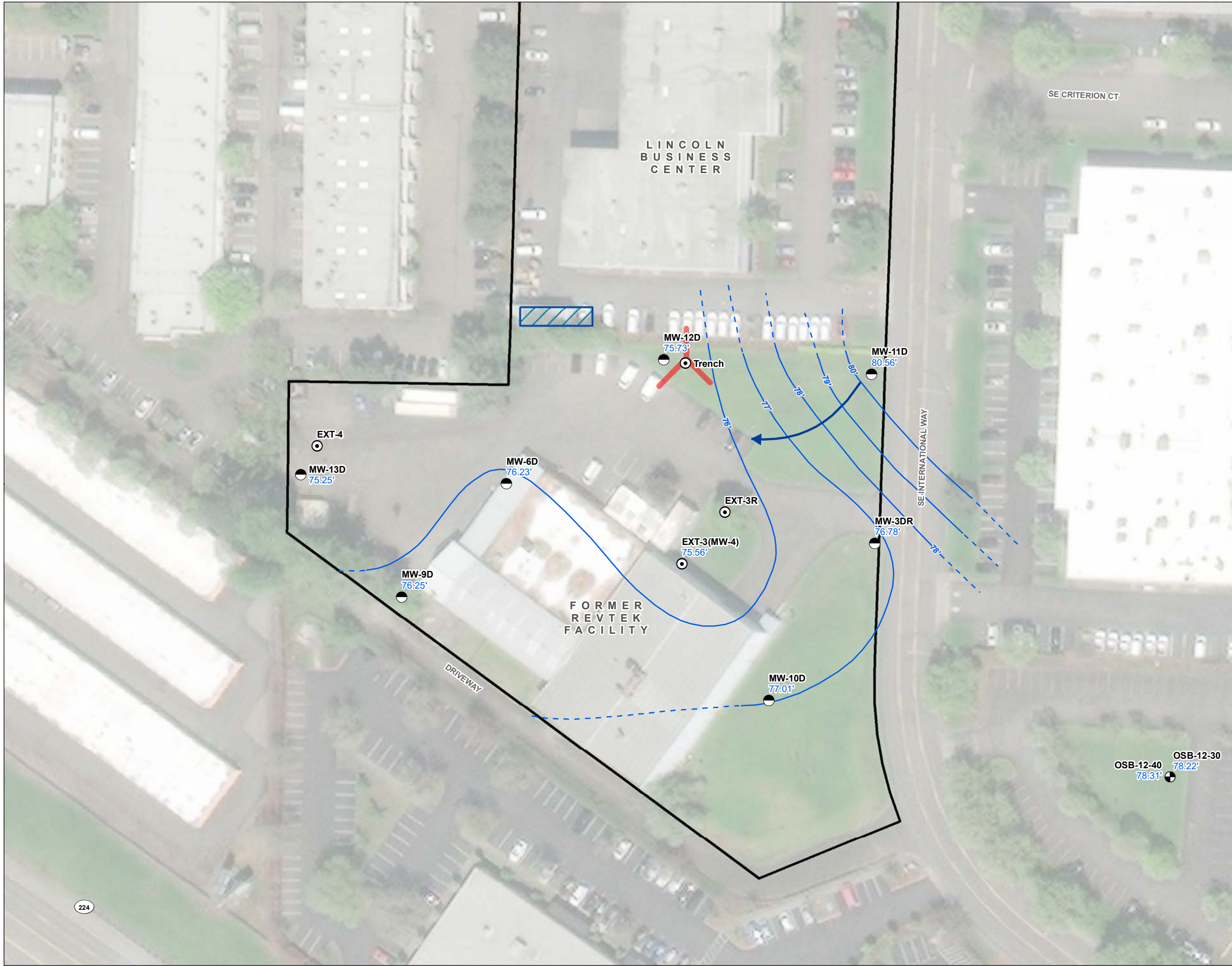


FIGURE 6
Central Deep Zone,
Groundwater Elevations
September 2023
Milwaukie International Way
Milwaukie, Oregon

- LEGEND**
- Extraction Well
Groundwater Elevation
 - Central Deep Zone
Groundwater Elevation
 - ⊕ Multiple Completion Well
Groundwater Elevation
 - Extraction Trench
 - Groundwater Elevation Contour, feet
 - Groundwater Flow Direction
 - ▨ Groundwater Treatment System
 - ▭ Property Boundary

NOTE
All features are approximate.

N

0 35 70 105
Feet

Date: March 7, 2024
Data Sources: BLM, ESRI, ODOT, USGS,
Aerial Photo 2020



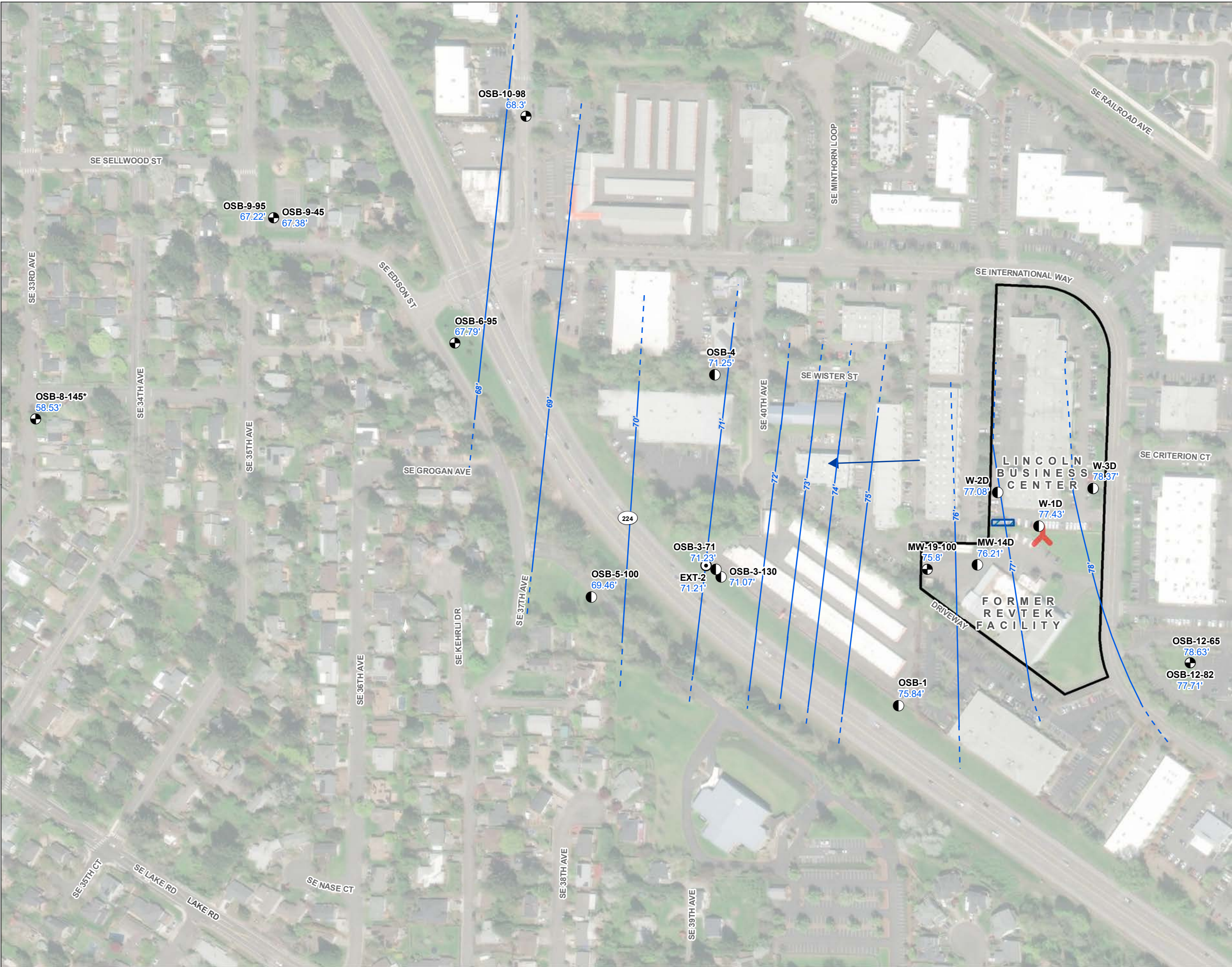
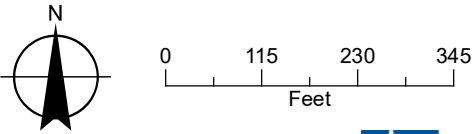


FIGURE 7
Lower Deep Zone,
Groundwater Elevations
September 2023
Milwaukie International Way
Milwaukie, Oregon

- LEGEND**
- Extraction Well Zone
Groundwater Elevation
 - Lower Deep Zone
Groundwater Elevation
 - Multiple Completion Well Zone
Groundwater Elevation
 - Extraction Trench
 - Groundwater Elevation Contour, feet
 - Groundwater Flow Direction
 - Groundwater Treatment System
 - Site Boundary

NOTE
All features are approximate.

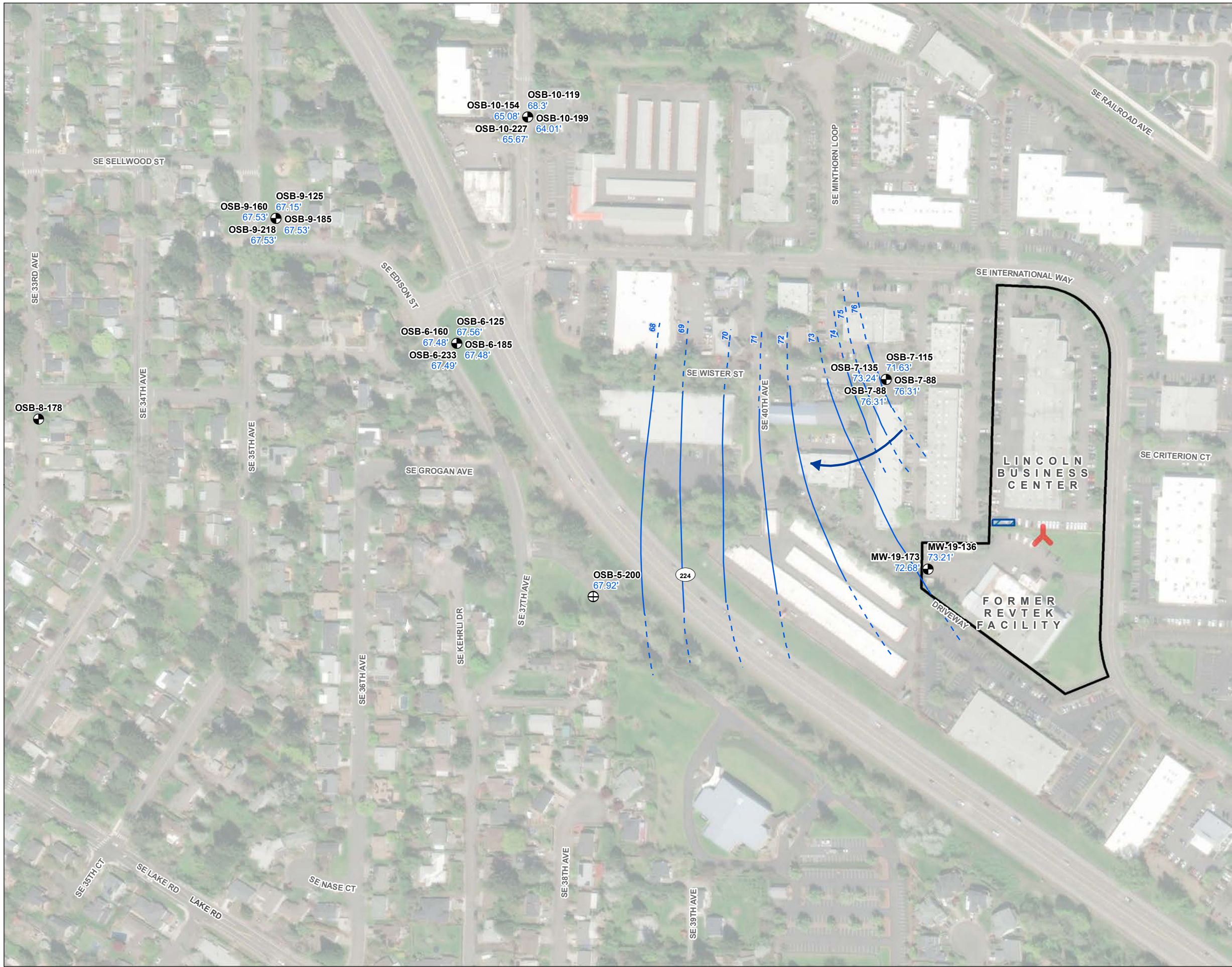
* Water level not included in the groundwater contour



Date: March 7, 2024
Data Sources: BLM, ESRI, ODOT, USGS,
Aerial Photo 2020



FIGURE 8
Sand and Gravel Zone,
Groundwater Elevations
September 2023
 Milwaukie International Way
 Milwaukie, Oregon



- LEGEND**
- Multiple Completion Well
Groundwater Elevation
 - Sand and Gravel Zone
Groundwater Elevation
 - Extraction Trench
 - Groundwater Elevation Contour, feet
 - Groundwater Flow Direction
 - Groundwater Treatment System
 - Site Boundary

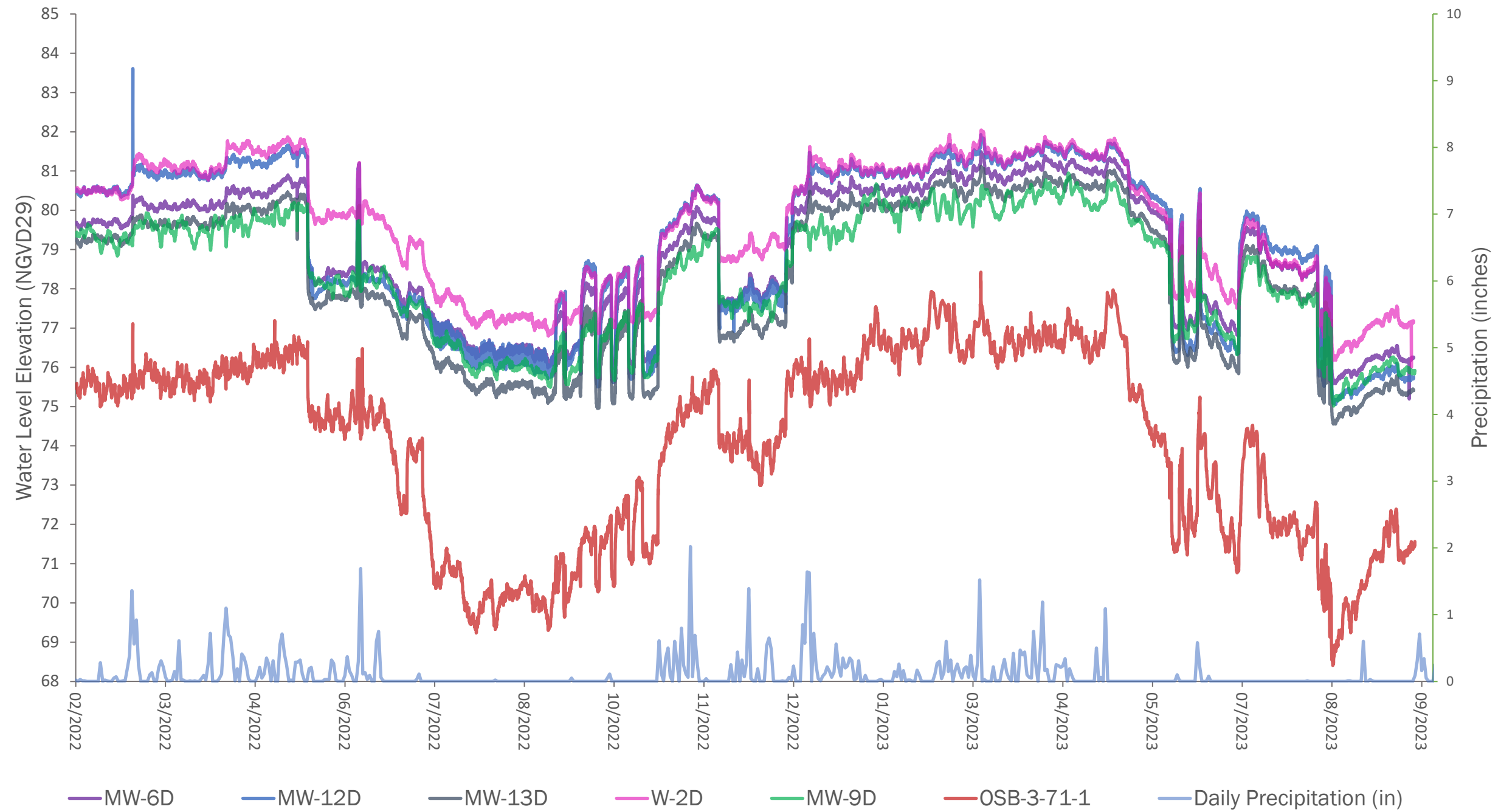
NOTE
 All features are approximate.

N

0 115 230 345
 Feet

Date: March 6, 2024
 Data Sources: BLM, ESRI, ODOT, USGS,
 Aerial Photo 2020

GSI
 Water Solutions, Inc.



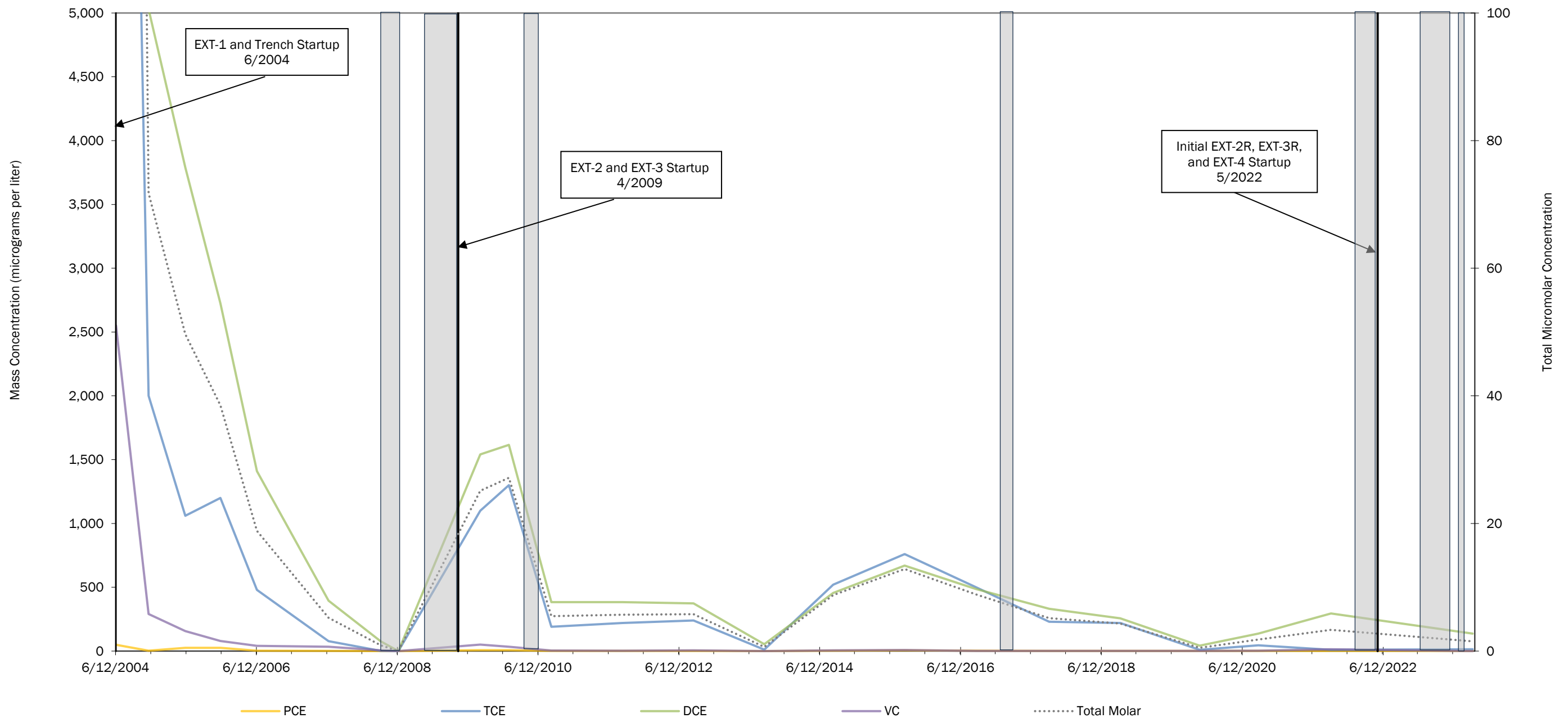
NOTES

FIGURE 9

February 2022 through September 2023 Datalogger Plots

Milwaukie International Way
Milwaukie, Oregon





NOTES

All non-detect mass values plotted at the method reporting limit. DCE values include *cis*-1,2-; *trans*-1,2-; and 1,1- concentrations. Total Molar values reflect the concentration of only detected chlorinated ethenes.

Vertical **black** lines denote system start-up. Shaded areas on chart indicate periods when the GTS was not operational for more than 30 days

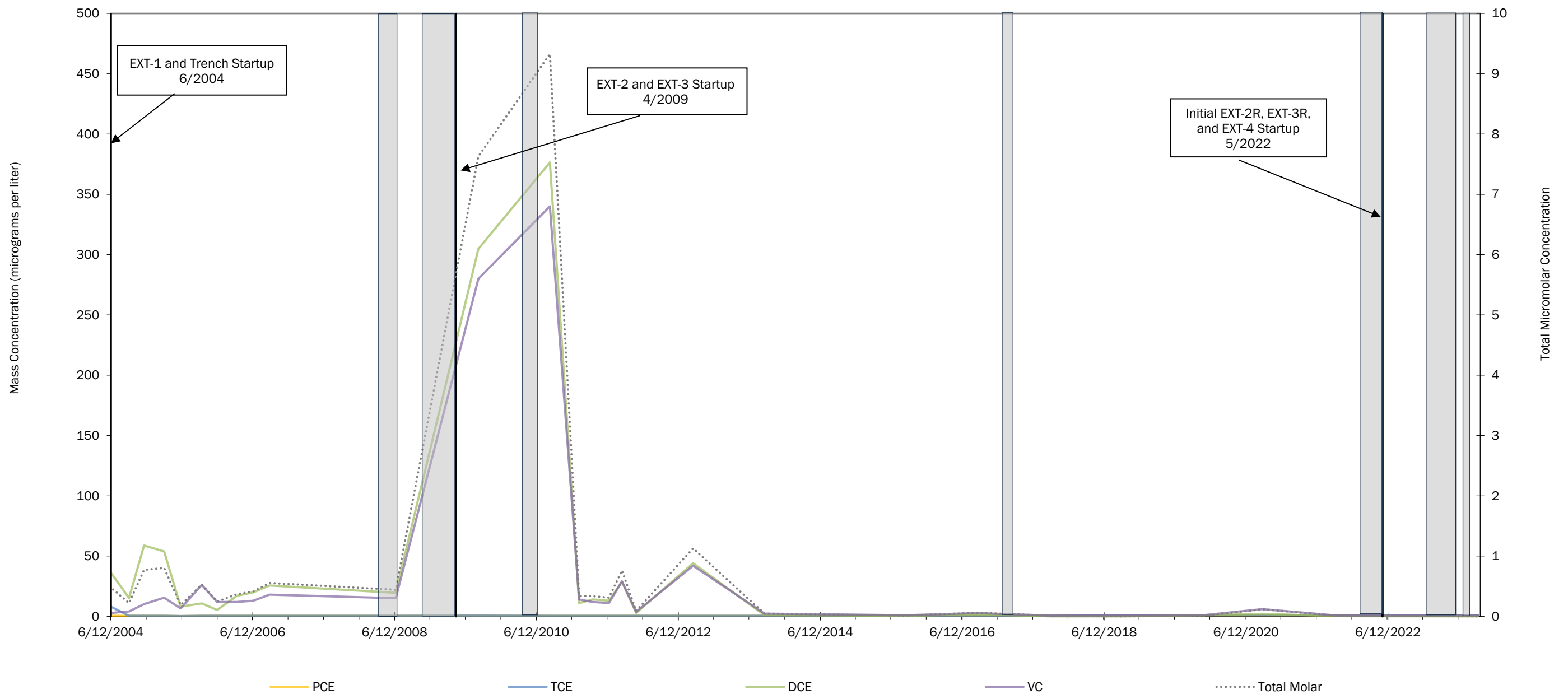
- 1 - GTS was shut down from March 19 through June 23, 2008, to complete the MW-4 (EXT-3) pump test.
- 2 - GTS upgrades occurred from October 2008 through April 2009.
- 3 - GTS was shut down from March 29 through June 27, 2010, to replace the heat exchanger.
- 4 - GTS was shut down from January 5 through March 9, 2017, to replace PLC panel and components.
- 5 - GTS was shut down from January 11 through May 18, 2022 for system expansion.
- 6 - GTS was shut down from December 16, 2022, through June 6, 2023, or system repairs.
- 7 - GTS was shut down from July 6 through August 10, 2023, for system repairs.

ACRONYMS

PCE = tetrachloroethene
TCE = trichloroethene
DCE = dichloroethene
VC = vinyl chloride

FIGURE 10
MW-6D Concentration Profile - Central Deep Zone
Milwaukie International Way
Milwaukie, Oregon





NOTES

All non-detect mass values plotted at the method reporting limit. DCE values include *cis*-1,2-; *trans*-1,2-; and 1,1- concentrations. Total Molar values reflect the concentration of only detected chlorinated ethenes.

Vertical **black** lines denote system start-up. Shaded areas on chart indicate periods when the GTS was not operational for more than 30 days

- 1 - GTS was shut down from March 19 through June 23, 2008, to complete the MW-4 (EXT-3) pump test.
- 2 - GTS upgrades occurred from October 2008 through April 2009.
- 3 - GTS was shut down from March 29 through June 27, 2010, to replace the heat exchanger.
- 4 - GTS was shut down from January 5 through March 9, 2017, to replace PLC panel and components.
- 5 - GTS was shut down from January 11 through May 18, 2022 for system expansion.
- 6 - GTS was shut down from December 16, 2022, through June 6, 2023, for system repairs.
- 7 - GTS was shut down from July 6 through August 10, 2023, for system repairs.

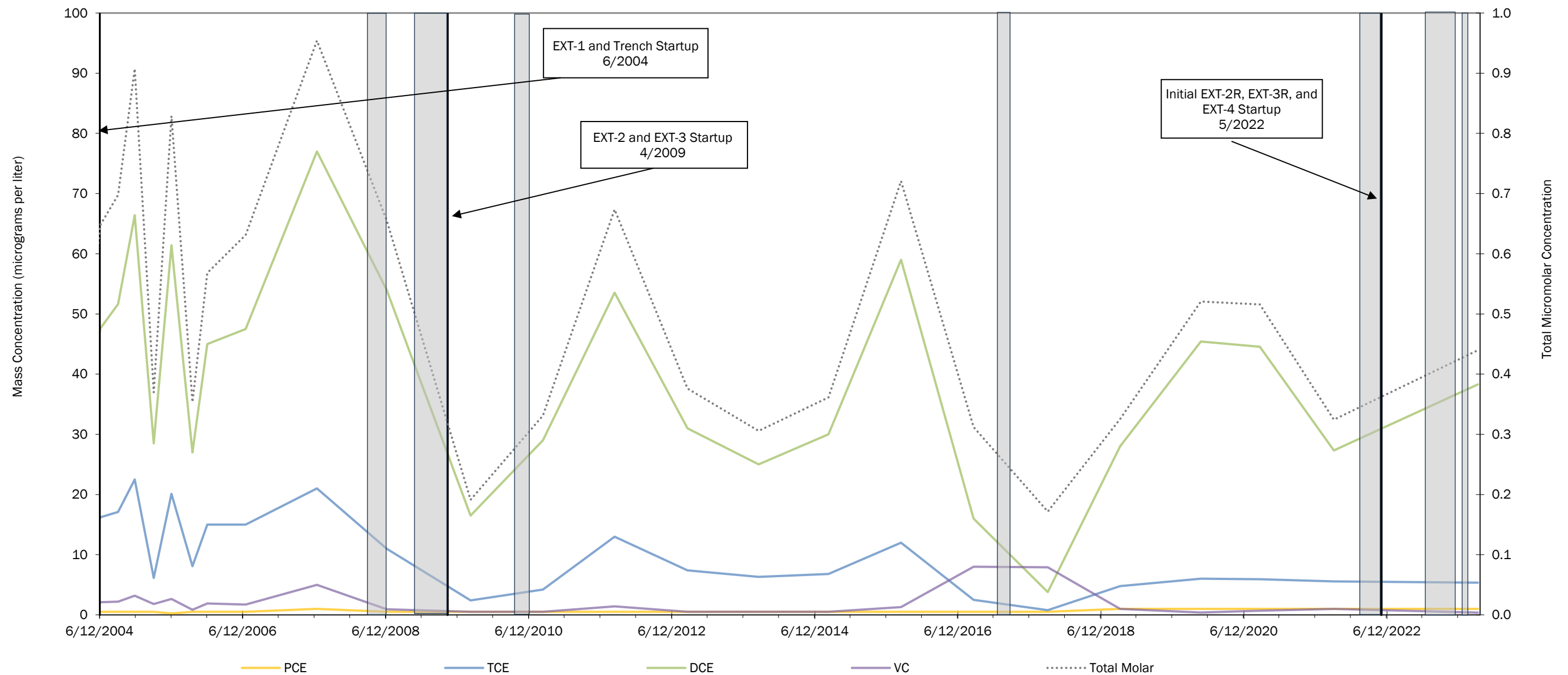
ACRONYMS

PCE = tetrachloroethene
TCE = trichloroethene
DCE = dichloroethene
VC = vinyl chloride

FIGURE 11

MW-19-136 Concentration Profile - Sand and Gravel Zone
Milwaukie International Way
Milwaukie, Oregon





NOTES

All non-detect mass values plotted at the method reporting limit. DCE values include *cis*-1,2-; *trans*-1,2-; and 1,1- concentrations. Total Molar values reflect the concentration of only detected chlorinated ethenes.

Vertical **black** lines denote system start-up. Shaded areas on chart indicate periods when the GTS was not operational for more than 30 days

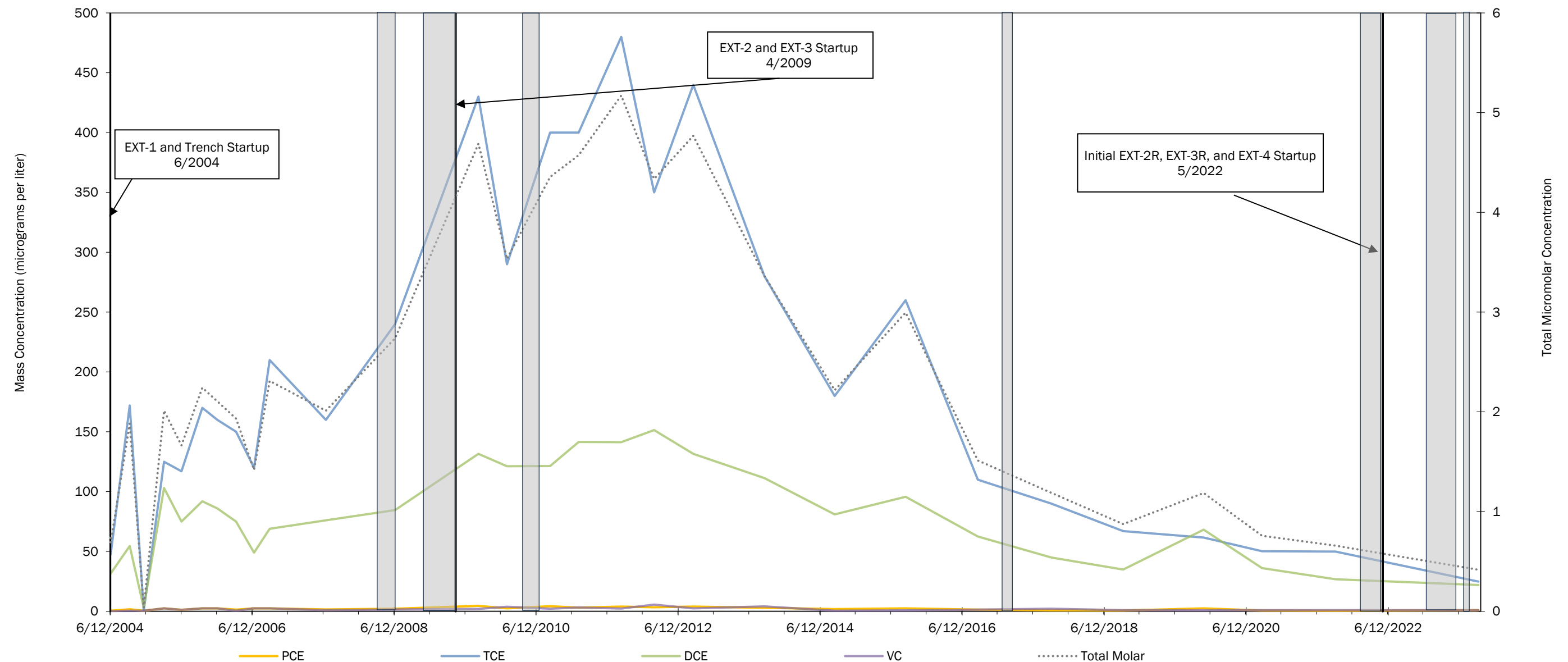
- 1 - GTS was shut down from March 19 through June 23, 2008, to complete the MW-4 (EXT-3) pump test.
- 2 - GTS upgrades occurred from October 2008 through April 2009.
- 3 - GTS was shut down from March 29 through June 27, 2010, to replace the heat exchanger.
- 4 - GTS was shut down from January 5 through March 9, 2017, to replace PLC panel and components.
- 5 - GTS was shut down from January 11 through May 18, 2022 for system expansion.
- 6 - GTS was shut down from December 16, 2022, through June 6, 2023, for system repairs.
- 7 - GTS was shut down from July 6 through August 10, 2023, for system repairs.

ACRONYMS

PCE = tetrachloroethene
TCE = trichloroethene
DCE = dichloroethene
VC = vinyl chloride

FIGURE 12
OSB-5-100 Concentration Profile - Lower Deep Zone
Milwaukie International Way
Milwaukie, Oregon





NOTES

All non-detect mass values plotted at the method reporting limit. DCE values include *cis*-1,2-; *trans*-1,2-; and 1,1- concentrations. Total Molar values reflect the concentration of only detected chlorinated ethenes.

Vertical **black** lines denote system start-up. Shaded areas on chart indicate periods when the GTS was not operational for more than 30 days

1 - GTS was shut down from March 19 through June 23, 2008, to complete the MW-4 (EXT-3) pump test.

2 - GTS upgrades occurred from October 2008 through April 2009.

3 - GTS was shut down from March 29 through June 27, 2010, to replace the heat exchanger.

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7 - GTS was shut down from July 6 through August 10, 2023, for system repairs.

ACRONYMS

PCE = tetrachloroethene

TCE = trichloroethene

DCE = dichloroethene

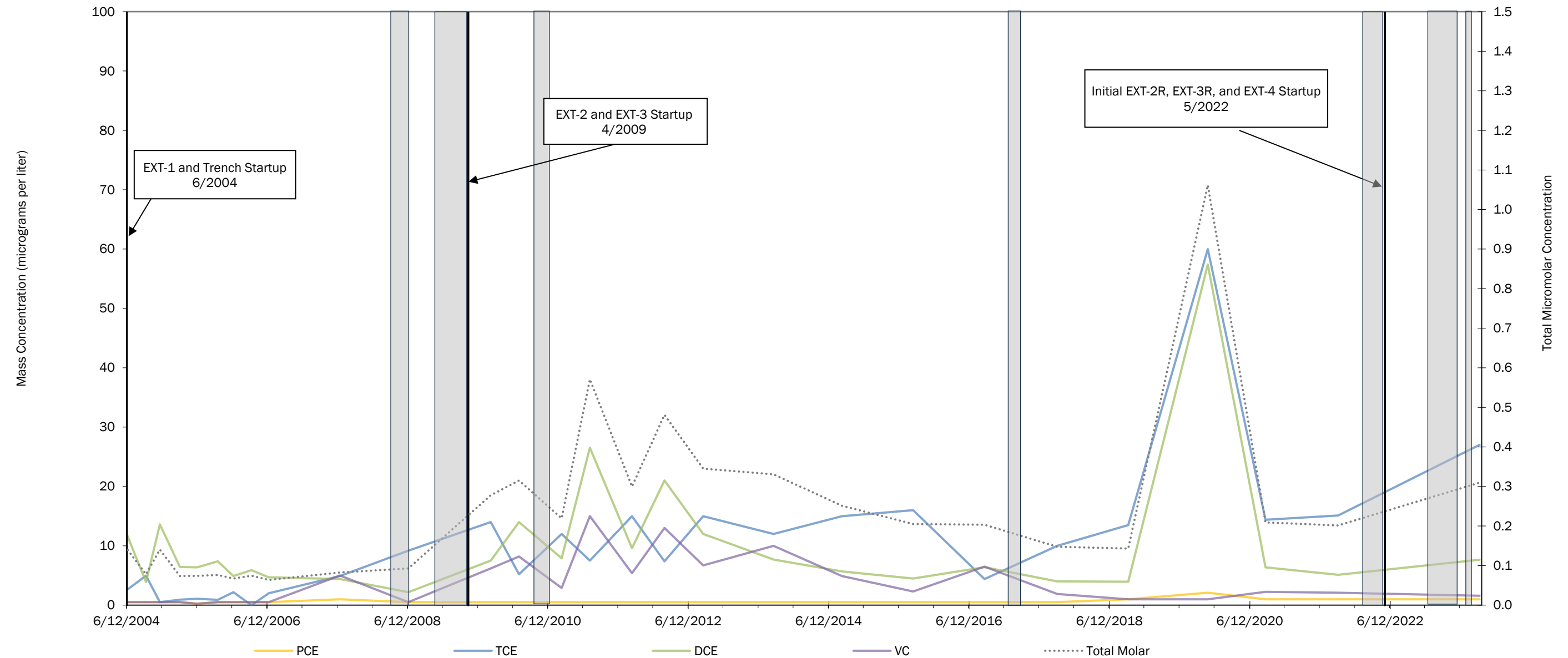
VC = vinyl chloride

FIGURE 13

OSB-6-95 Concentration Profile - Lower Deep Zone

Milwaukie International Way
Milwaukie, Oregon





NOTES

All non-detect mass values plotted at the method reporting limit. DCE values include *cis*-1,2-; *trans*-1,2-; and 1,1- concentrations. Total Molar values reflect the concentration of only detected chlorinated ethenes.

Vertical **black** lines denote system start-up. Shaded areas on chart indicate periods when the GTS was not operational for more than 30 days

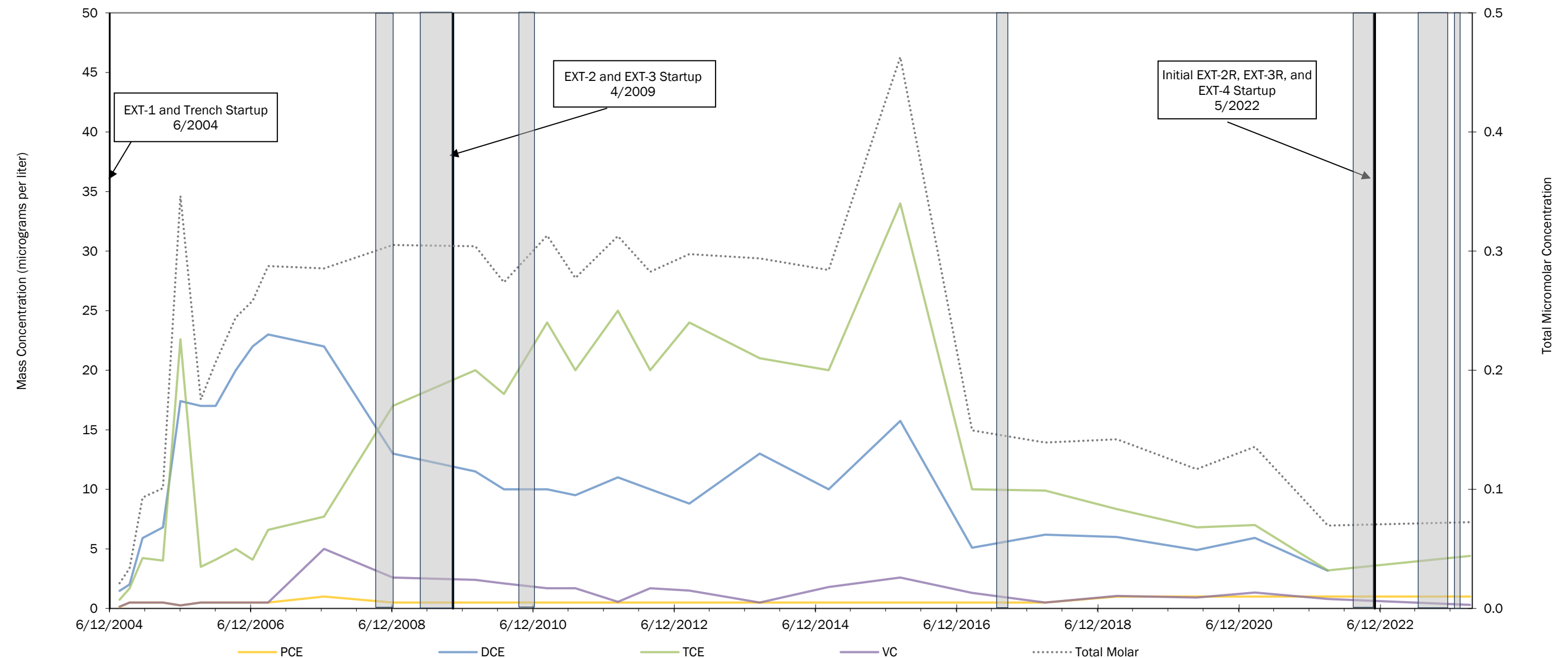
- 1 - GTS was shut down from March 19 through June 23, 2008, to complete the MW-4 (EXT-3) pump test.
- 2 - GTS upgrades occurred from October 2008 through April 2009.
- 3 - GTS was shut down from March 29 through June 27, 2010, to replace the heat exchanger.
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- 6 - GTS was shut down from December 16, 2022, through June 6, 2023, for system repairs.
- 7 - GTS was shut down from July 6 through August 10, 2023, for system repairs.

ACRONYMS

PCE = tetrachloroethene
TCE = trichloroethene
DCE = dichloroethene
VC = vinyl chloride

FIGURE 14
OSB-6-125 Concentration Profile - Sand and Gravel Zone
Milwaukie International Way
Milwaukie, Oregon





NOTES

All non-detect mass values plotted at the method reporting limit. DCE values include *cis*-1,2-; *trans*-1,2-; and 1,1- concentrations. Total Molar values reflect the concentration of only detected chlorinated ethenes.

Vertical **black** lines denote system start-up. Shaded areas on chart indicate periods when the GTS was not operational for more than 30 days

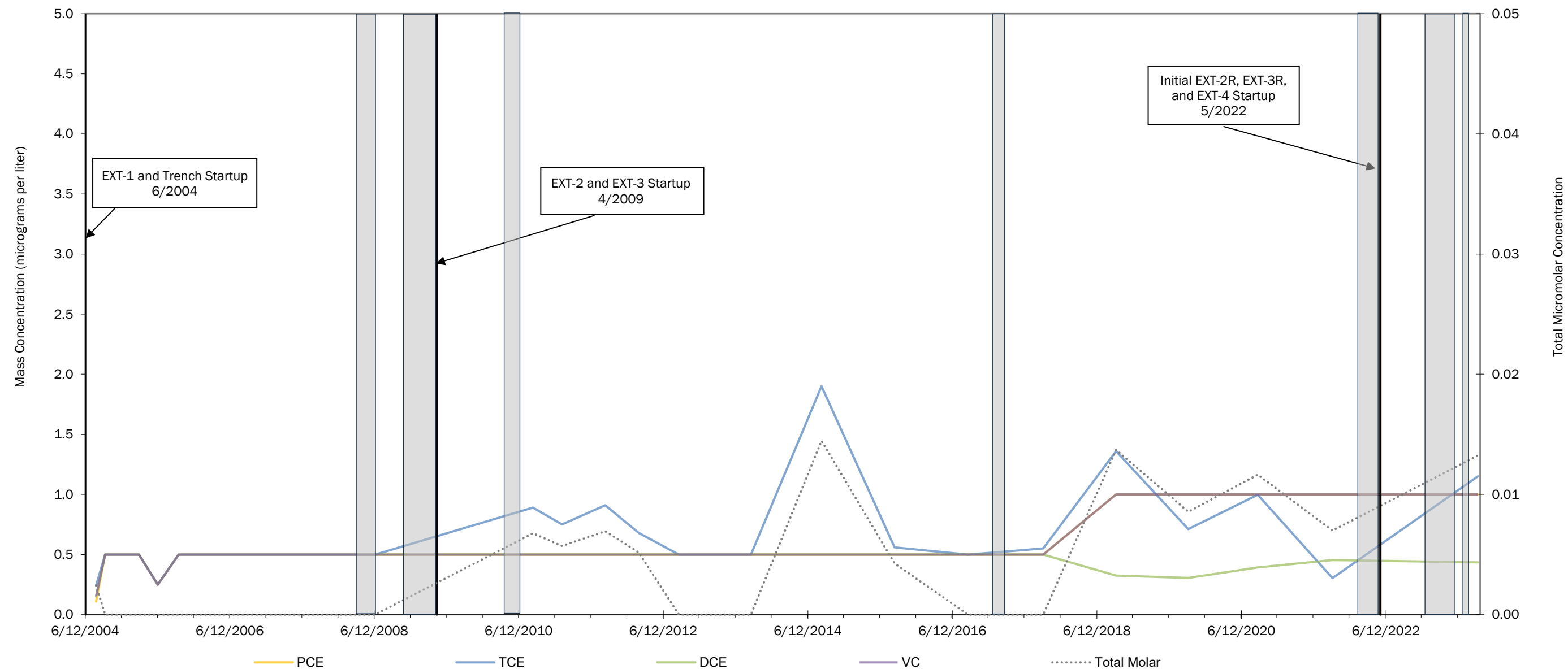
- 1 - GTS was shut down from March 19 through June 23, 2008, to complete the MW-4 (EXT-3) pump test.
- 2 - GTS upgrades occurred from October 2008 through April 2009.
- 3 - GTS was shut down from March 29 through June 27, 2010, to replace the heat exchanger.
- 4 - GTS was shut down from January 5 through March 9, 2017, to replace PLC panel and components.
- 5 - GTS was shut down from January 11 through May 18, 2022 for system expansion.
- 6 - GTS was shut down from December 16, 2022, through June 6, 2023, or system repairs.
- 7 - GTS was shut down from July 6 through August 10, 2023, for system repairs.

ACRONYMS

PCE = tetrachloroethene
TCE = trichloroethene
DCE = dichloroethene
VC = vinyl chloride

FIGURE 15
OSB-9-125 Concentration Profile - Sand and Gravel Zone
Milwaukie International Way
Milwaukie, Oregon





NOTES

All non-detect mass values plotted at the method reporting limit. DCE values include *cis*-1,2-; *trans*-1,2-; and 1,1- concentrations. Total Molar values reflect the concentration of only detected chlorinated ethenes.

Vertical **black** lines denote system start-up. Shaded areas on chart indicate periods when the GTS was not operational for more than 30 days

1 - GTS was shut down from March 19 through June 23, 2008, to complete the MW-4 (EXT-3) pump test.

2 - GTS upgrades occurred from October 2008 through April 2009.

3 - GTS was shut down from March 29 through June 27, 2010, to replace the heat exchanger.

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6 - GTS was shut down from December 16, 2022, through June 6, 2023, for system repairs.

7 - GTS was shut down from July 6 through August 10, 2023, for system repairs.

ACRONYMS

PCE = tetrachloroethene

TCE = trichloroethene

DCE = dichloroethene

VC = vinyl chloride

FIGURE 16

OSB-10-154 Concentration Profile - Sand and Gravel Zone

Milwaukie International Way
Milwaukie, Oregon



APPENDIX A

Field Notes

Well Number	Date	Time	Depth to Water (ft)	Comments
EXT - 4	09/18/23	07:51	32.43'	TOM: 34.76'
MW - 9D	09/18/23	08:09	12.61'	MISSING 1 BOLT
MW - 9	09/18/23	08:25	5.99'	
MW - 5	09/18/23	08:39	5.69'	HIDDEN W/WRAPPER
MW - 55 ^{10D}	09/18/23	08:53	12.07'	SEMI - PURGED
MW - 16S	09/18/23	09:23	5.25'	RUSTED STOPPER / PLUG
MW - 17S	09/18/23	09:35	6.94'	MISSING 2 BOLTS
MW - 3S	09/18/23	09:48	5.56'	BOLT PROTRUDING - BENT
MW - 3DR	09/18/23	09:55	6.70'	
EXT - 3 (MW - 4)	09/18/23	10:06	12.90'	
EXT - 3R	09/18/23	10:16	36.15'	PROBE TOO LARGE TOM: 38.90'
MW - U	09/18/23	11:31	8.95'	PURGED
MW - 6D	09/18/23	11:05	14.58'	
MW - 7				
MW - 14D	09/18/23	11:39	14.12'	NEEDS PURGING
EXT - 1R / Trench	09/18/23	10:37	12.94'	TOM
OSB - 8	09/18/23	12:18	89.91'	

Groundwater Elevation Data

Project: DEQ MIW
Field Rep: Alex McParthyProject No. 2060.007.003

9-18-2023

Well Number	Date	Time	Depth to Water (ft)	Comments
OSB-8-178	9-18-2023	0825		Significant Iron Fouling.
OSB-8-145	9-18-2023	0830	89.6	
OSB-9-45	9-18-2023	0900	33.17 42.7 ^{3m}	Bolt Missing.
OSB-9-95	9-18-2023	0905	33.33	
OSB-9-125	9-18-2023	0910	33.40	
OSB-9-160	9-18-2023	0915	33.64	
OSB-9-185	9-18-2023	0920	33.04	
OSB-9-218	9-18-2023	0925	33.04	
OSB-5-100	9-18-2023	0945	60.89	Bolts Stripped.
OSB-5-200	9-18-2023	0950	62.42	
OSB-6-35	9-18-2023	1000	27.31	Monument lid Broken, Bolts Missing.
OSB-6-95	9-18-2023	1005	31.03	
OSB-6-125	9-18-2023	1010	31.26	
OSB-6-160	9-18-2023	1015	31.26	
OSB-6-185	9-18-2023	1020	31.26	
OSB-6-233	9-18-2023	1025	31.25	
OSB-12-30	9-18-2023	1100	5.39	
OSB-12-40	9-18-2023	1105	5.30	
OSB-12-65	9-18-2023	1110	4.98	
OSB-12-82	9-18-2023	1115	5.90	
OSB-7-88	9-18-2023	1120	12.57	
OSB-7-115	9-18-2023	1125	17.25	
OSB-7-135	9-18-2023	1130	15.04	
EXT-2R	9-18-2023	1140	58.87	
MW-7	9-18-2023	1220	6.93	



650 NE Holladay St, Suite 900
Portland, OR 97232
P: 503.239.8799
www.gsiws.com

Well Number	Date	Time	Depth to Water (ft)	Comments
W-21	9/18/23	7:54	11.71'	(BTOC)
W-2D	9/18/23	7:56	7.61'	"
W-65	9/18/23	8:25	5.21'	" BOLT HEAD SNAPPED, SECURED BY ONE
W-45	9/18/23	8:31	5.66'	" CAP WAS NOT IN PLACE. FEMALE THREADS
W-55	9/18/23	8:38	7.98'	" CAP NOT IN PLACE STRIPPED
PZ-3	9/18/23	9:06	8.73'	" Bailed out.
PZ-2	9/18/23	9:12	8.71'	" Bailed out.
W-11	9/18/23	9:17	12.24'	" STRIPPED
W-1D	9/18/23	9:23	8.06'	" Bailed STRIPPED
PZ-6	9/18/23	9:46	14.51'	" Bailed STRIPPED
MW-121	9/18/23	9:47	12.46'	" Bailed STRIPPED
MW-125	9/18/23	9:50	13.28'	" Bailed
PZ-4	9/18/23	9:49	14.79'	" Bailed STRIPPED
MW-12D	9/18/23	9:51	13.21'	" Bailed STRIPPED
EXT-1	9/18/23	10:02	12.11'	" STRIPPED
PZ-7	9/18/23	10:10	10.74'	" "
PZ-5	9/18/23	10:16	12.10'	" Bailed.
MW-155	9/18/23	10:28	10.50'	" "
MW-35	9/18/23	10:31	6.48'	" STRIPPED
W-31	9/18/23	10:49	9.60'	" Bailed Stripped
W-3D	9/18/23	10:53	5.50'	" Stripped
W-35	9/18/23	10:54	6.78'	" Stripped
OSB-4	9/18/23	11:18	54.18'	" "
EXT-2	9/18/23	12:04	16.14'	" BLACK WIDOWS!
OSB-3-71	9/18/23	11:45	70.66'	" "
OSB-3-130	9/18/23	11:42	21.82'	" "
MW-115	9/19/23	8:32	8.54'	" STRIPPED
MW-11D	9/19/23	8:35	9.32'	" STRIPPED

Groundwater Elevation Data

MIW
Project: GN MONITORING
Field Rep: H. NORCOM

Project No. 002060.00 7

[illegible]

650 NE Holladay St., Suite 900
Portland, OR 97232
P: 503.239.8799
www.qsiws.com

Groundwater Sampling Field Log

Milwaukie International Way

Annual Groundwater Sampling

Well ID: EFFLUENT (EFF)	Well Zone:	Date: 09/21/23
Depth to Water (ft): —	Well Depth (ft): —	Time: 13:20
Field Conditions: 75° SUNNY	Field Personnel: H. NOKLOM	
Decontamination:alconox + tap wash; tap rinse; DI rinse		

PURGE INFORMATION	
-------------------	--

Purge Method: SAMPLE PORT / NOZZLE	Pumping Rate (GPM): —	Equip. Depth (ft): —
YSI Calibrated, refer to calibration log from: 09/21/23	YSI#: 4	

Time	Purge Volume (gallons)	Temp. (°C)	SC (µS/cm)	DO (mg/L)	pH	ORP (mV)	Purge Rate (mL/min)	DTW (ft BTOC)	Pump Speed/*Clarity/ Color/Remarks (NTU)
Stabilization Criteria		± 0.2	±3% (SC>100) ±5% (SC≤100)	± 0.3	± 0.1	± 10	--	--	± 10% (NTU>5) 3 readings < 5 (NTU<5)
:	Pump On, Water Reaches the Purge Bucket							Initial	
19:20	-	17.2	403.1	5.46	6.66	147.8	-	-	0.56
:									
:									
:									
:									
:									
:									
:									
:									
:									
:									
:									
:	Start Sampling								
:	End Sampling								

* VC=Very cloudy CI=Cloudy SC=Slightly Cloudy VSC=Very Slightly Cloudy AC=Almost Clear C=Clear CC=Crystal Clear

Comments:

Sample Information:	
---------------------	--

Sample Type:	Sample ID:	Sample Date:	Sample Time:	Comments (container #, preservative, analyses):
PRIMARY	EFF	09/21/23	13:20	VOAS - 3, HCL
				BY 624

Field Equipment:	
------------------	--

Pump Type/Tubing Type:	—
Water Quality Meter Type:	YSI
Water Level Probe Type:	—

Comments:

Groundwater Sampling Field Log
Milwaukie International Way
Annual Groundwater Sampling

Well ID: EXT-1R/TRENCH	Well Zone: EXTRACTION WELL	Date: 09/21/23
Depth to Water (ft): 12.8'	Well Depth (ft): —	Time: 12:10
Field Conditions: 75° SUNNY	Field Personnel: H. NORCOM	
Decontamination: alconox + tap wash; tap rinse; DI rinse		

PURGE INFORMATION

Purge Method: SAMPLE PORT/NOZZLE	Pumping Rate (GPM): N/A (15 min interval)	Equip. Depth (ft): —
YSI Calibrated, refer to calibration log from: 09/21/23		YSI#: 4

Time	Purge Volume (gallons)	Temp. (°C)	SC (uS/cm)	DO (mg/L)	pH	ORP (mV)	Purge Rate (mL/min)	DTW (ft BTOC)	Pump Speed/*Clarity/ Color/Remarks (NTU)
Stabilization Criteria		± 0.2	±3% (SC>100) ±5% (SC≤100)	± 0.3	± 0.1	± 10	—	—	± 10% (NTU>5) 3 readings < 5 (NTU<5)
:	Pump On, Water Reaches the Purge Bucket							Initial	
12:10	—	18.9	450.8	8.06	6.52	27.0	—	—	11.3
12:30	—	18.8	451.7	9.44	6.65	25.4	—	—	12.9
12:50	—	18.5	448.2	8.31	6.87	-17.1	—	—	11.2
:									
:									
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12:50	Start Sampling						—	—	
12:59	End Sampling						—	—	

* VC=Very cloudy CI=Cloudy SC=Slightly Cloudy VSC=Very Slightly Cloudy AC=Almost Clear C=Clear CC=Crystal Clear

Comments:

Sample Information:

Sample Type:	Sample ID:	Sample Date:	Sample Time:	Comments (container #, preservative, analyses):
PRIMARY	EXT-1R/TRENCH	09/21/23	12:50	VOAS-3, HCL BY 8260D

Field Equipment:

Pump Type/Tubing Type: — SAMPLE PORT / NOZZLE
Water Quality Meter Type: YSI
Water Level Probe Type: HERON
Comments:

Groundwater Sampling Field Log
Milwaukie International Way
Annual Groundwater Sampling

Well ID: <u>EXT-1</u>	Well Zone: <u>UD</u>	Date: <u>9/22/23</u>
Depth to Water (ft): <u>12.00</u>	Well Depth (ft): <u>~42'</u>	Time: <u>8:40</u>
Field Conditions: <u>CCATL</u>	Field Personnel: <u>BSMW</u>	

Decontamination:alconox + tap wash; tap rinse; DI rinse

PURGE INFORMATION

Purge Method: <u>Peri Pump Low flow</u>	Pumping Rate (GPM): <u>300 mL/min</u>	Equip. Depth (ft): <u>35'</u>
YSI Calibrated, refer to calibration log from: <u>9/22/23</u>		YSI#: <u>4</u>

Time	Purge Volume (gallons)	Temp. (°C)	SC (uS/cm)	DO (mg/L)	pH	ORP (mV)	Purge Rate (mL/min)	DTW (ft BTOC)	Pump Speed/*Clarity/ Color/Remarks (NTU)
Stabilization Criteria		± 0.2	±3% (SC>100) ±5% (SC≤100)	± 0.3	± 0.1	± 10	--	--	± 10% (NTU>5) 3 readings < 5 (NTU<5)
<u>8:51</u>	Pump On, Water Reaches the Purge Bucket						<u>300</u>	Initial	
<u>8:54</u>	<u>300 mL</u>	<u>15.4</u>	<u>509</u>	<u>7.63</u>	<u>6.94</u>	<u>-82.2</u>	"	<u>12.08'</u>	<u>18.9 NTU</u>
<u>8:57</u>	<u>1200 mL</u>	<u>15.4</u>	<u>510</u>	<u>7.81</u>	<u>6.99</u>	<u>-90.2</u>	"	<u>12.10'</u>	<u>15.2 NTU</u>
<u>9:00</u>	<u>2100 mL</u>	<u>15.4</u>	<u>508</u>	<u>1.91</u>	<u>7.01</u>	<u>-98.7</u>	"	<u>12.11'</u>	<u>16.1 NTU</u>
<u>9:03</u>	<u>3000 mL</u>	<u>15.4</u>	<u>510</u>	<u>1.34</u>	<u>7.01</u>	<u>-102.5</u>	"	<u>12.13'</u>	<u>11.4 NTU</u>
<u>9:06</u>	<u>3900 mL</u>	<u>15.4</u>	<u>511</u>	<u>0.95</u>	<u>7.03</u>	<u>-104.2</u>	"	<u>12.15'</u>	<u>12.4 NTU</u>
<u>9:09</u>	<u>4800 mL</u>	<u>15.4</u>	<u>511</u>	<u>0.97</u>	<u>7.04</u>	<u>-105.0</u>	"	<u>12.16'</u>	<u>11.3 NTU</u>
<u>9:12</u>	<u>5700 mL</u>	<u>15.5</u>	<u>511</u>	<u>2.75</u>	<u>7.08</u>	<u>-105.9</u>	"	<u>12.18'</u>	<u>12.3 NTU</u>
<u>9:15</u>	Start Sampling								
<u>9:20</u>	End Sampling								

* VC=Very cloudy Cl=Cloudy SC=Slightly Cloudy VSC=Very Slightly Cloudy AC=Almost Clear C=Clear CC=Crystal Clear

Comments: DO MAY BE FLUCTUATING DUE TO TUBING MIS-MATCH. OTHER PARAMETERS STABILIZED

Sample Information:

Sample Type: <u>EXT-1</u>	Sample ID: <u>PRIMARY</u>	Sample Date: <u>9/22/23</u>	Sample Time: <u>9:15</u>	Comments (container #, preservative, analyses): <u>(3) VOA8 E260D</u>

Field Equipment:

Pump Type/Tubing Type: Peri 1/4" LDPE
 Water Quality Meter Type: YSI 556 QUATRO
 Water Level Probe Type: IN-SITU 100

Comments:



GSI Water Solutions, Inc.
 650 NE Holladay St., Suite 900
 Portland, OR 97232

Groundwater Sampling Field Log
Milwaukee International Way
Annual Groundwater Sampling

Well ID: EXT-2R	Well Zone: LD	Date: 9/21/23
Depth to Water (ft): 60.28'	Well Depth (ft): UNKNOWN	Time: 10:26
Field Conditions: CCSATC	Field Personnel: BMW	
Decontamination: alconox + tap wash; tap rinse; DI rinse		

PURGE INFORMATION

Purge Method: (BUILT-IN PUMP)	Pumping Rate (GPM): NA	Equip. Depth (ft): NA
YSI Calibrated, refer to calibration log from: 9/21/23		YSI#: 2

Time	Purge Volume (gallons)	Temp. (°C)	SC (uS/cm)	DO (mg/L)	pH	ORP (mV)	Purge Rate (mL/min)	DTW (ft BTOC)	Pump Speed/*Clarity/ Color/Remarks (NTU)
Stabilization Criteria		± 0.2	±3% (SC>100) ±5% (SC≤100)	± 0.3	± 0.1	± 10	--	--	± 10% (NTU>5) 3 readings < 5 (NTU<5)
:	Pump On, Water Reaches the Purge Bucket							Initial	
10:35	NA	16.00	332	4.75 ↓	7.28	-8.4	NA	60.28'	4.25 NTU
10:40	NA	15.96	326	4.23 ↓	7.32	-9.7	NA	60.28'	38.6 NTU
10:45	NA	15.64	328	5.25 ↓	7.29	-8.1	NA	59.00	3.62 NTU
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10:50	Start Sampling								
10:55	End Sampling								

* VC=Very cloudy CI=Cloudy SC=Slightly Cloudy VSC=Very Slightly Cloudy AC=Almost Clear C=Clear CC=Crystal Clear

Comments: **MEASURED IN CUP, FROM VALVE; PUMP ALWAYS ON. DO FAULTING DUE TO CUP METHOD**

Sample Information:

Sample Type:	Sample ID:	Sample Date:	Sample Time:	Comments (container #, preservative, analyses):
PRIMARY	EXT-2R	9/21/23	1050	871017 (3) UOAs

Field Equipment:

Pump Type/Tubing Type:
Water Quality Meter Type:
Water Level Probe Type:
Comments:

Groundwater Sampling Field Log
Milwaukie International Way
Annual Groundwater Sampling

Well ID: EXT-3R	Well Zone: EXTRACTION Well	Date: 09/21/23
Depth to Water (ft):	Well Depth (ft):	Time: 12:40
Field Conditions: 75° SUNNY	Field Personnel: H. NORKOM	
Decontamination: alconox + tap wash; tap rinse; DI rinse		

PURGE INFORMATION

Purge Method: SAMPLE PORT / NOZZLE	Pumping Rate (GPM): —	Equip. Depth (ft): —
YSI Calibrated, refer to calibration log from: 09/21/23		YSI#: 4

Time	Purge Volume (gallons)	Temp. (°C)	SC (uS/cm)	DO (mg/L)	pH	ORP (mV)	Purge Rate (mL/min)	DTW (ft BTOC)	Pump Speed/*Clarity/ Color/Remarks (NTU)
Stabilization Criteria		± 0.2	±3% (SC>100) ±5% (SC≤100)	± 0.3	± 0.1	± 10	—	—	± 10% (NTU>5) 3 readings < 5 (NTU<5)
:	Pump On, Water Reaches the Purge Bucket							Initial	
12:40	—	16.8	355.4	8.62	7.32	30.5	—		18.8
12:45	—	16.5	354.6	6.54	7.21	25.7	—		2.20
12:50	—	16.3	351.4	7.53	7.29	19.0	—		6.04
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:	Start Sampling								
:	End Sampling								

* VC=Very cloudy CI=Cloudy SC=Slightly Cloudy VSC=Very Slightly Cloudy AC=Almost Clear C=Clear CC=Crystal Clear

Comments:

Sample Information:

Sample Type:	Sample ID:	Sample Date:	Sample Time:	Comments (container #, preservative, analyses):
PRIMARY	EXT-3R	09/21/23	12:55	VOAS - 3, HCL BY 0260D

Field Equipment:

Pump Type/Tubing Type: SAMPLE PORT / NOZZLE
Water Quality Meter Type: YSI
Water Level Probe Type: HERON
Comments:

Groundwater Sampling Field Log
Milwaukee International Way
Annual Groundwater Sampling

Well ID: EXT-3 (MW-4)	Well Zone: Extraction Well	Date: 9-20-2023
Depth to Water (ft): 12.21	Well Depth (ft): 75.19	Time: 1550.
Field Conditions: 70° Partly Cloudy	Field Personnel: Alex McCarthy	
Decontamination: alconox + tap wash; tap rinse; DI rinse ✓		

PURGE INFORMATION

Purge Method: Low Flow	Pumping Rate (GPM): 150 mL/min	Equip. Depth (ft): ~35'
YSI Calibrated, refer to calibration log from: 9-20-2023		YSI#: #4

Time	Purge Volume (gallons)	Temp. (°C)	SC (uS/cm)	DO (mg/L)	pH	ORP (mV)	Purge Rate (mL/min)	DTW (ft BTOC)	Pump Speed/*Clarity/ Color/Remarks (NTU)
Stabilization Criteria		± 0.2	±3% (SC>100) ±5% (SC≤100)	± 0.3	± 0.1	± 10	--	--	± 10% (NTU>5) 3 readings < 5 (NTU<5)
16:00	Pump On, Water Reaches the Purge Bucket						150mL/min	Initial 12.39	VC
16:05	750mL	16.8	93.7	0.55	8.55	-220.0	150mL/min	12.45	Cl. 183 NTU.
16:10	1500mL	16.8	87.9	0.27	8.65	-249.6	150mL/min	12.49	145 NTU.
16:15	2250mL	16.8	89.0	0.27	8.68	-259.7	150mL/min	12.49	88.9 NTU.
16:20	3000mL	16.8	91.1	0.29	8.64	-263.9	150mL/min	12.49	36.6 NTU.
16:25	3750mL	16.8	91.5	0.29	8.65	-265.8	150mL/min	12.56	AC. 15.4 NTU.
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16:30	Start Sampling							12.56	
16:35	End Sampling							12.49	

* VC=Very cloudy Cl=Cloudy SC=Slightly Cloudy VSC=Very Slightly Cloudy AC=Almost Clear C=Clear CC=Crystal Clear

Comments: Very turbid when pump started.

Sample Information:

Sample Type:	Sample ID:	Sample Date:	Sample Time:	Comments (container #, preservative, analyses):
Primary	EXT-3 (MW-4)	9-20-2022	1630	3x 40mL WA, HPL 8260D
Duplicate	EXT-3 (MW-4) -D	9/20-2022	1631	3x 40mL VOA, HPL 8260D

Field Equipment:

Pump Type/Tubing Type: Peristaltic w/ LDPE & Silicon
Water Quality Meter Type: YSI ProQuattro
Water Level Probe Type: Solinst 100PL

Comments:

Groundwater Sampling Field Log
Milwaukie International Way
Annual Groundwater Sampling

Well ID: EXT-4	Well Zone: EXTRACTION Well	Date: 09/21/23
Depth to Water (ft): 32.32	Well Depth (ft):	Time: 13:10
Field Conditions: 75° SUNNY	Field Personnel: H.WORKCOM	
Decontamination:alconox + tap wash; tap rinse; DI rinse		

PURGE INFORMATION

Purge Method: SAMPLE PORT / NOZZLE	Pumping Rate (GPM): —	Equip. Depth (ft): —
YSI Calibrated, refer to calibration log from: 09/21/23		YSI#: 4

Time	Purge Volume (gallons)	Temp. (°C)	SC (uS/cm)	DO (mg/L)	pH	ORP (mV)	Purge Rate (mL/min)	DTW (ft BTOC)	Pump Speed/*Clarity/ Color/Remarks (NTU)
Stabilization Criteria		± 0.2	±3% (SC>100) ±5% (SC≤100)	± 0.3	± 0.1	± 10	—	—	± 10% (NTU>5) 3 readings < 5 (NTU<5)
:	Pump On, Water Reaches the Purge Bucket							Initial	
13:35	—	18.5	463.7	2.94	6.93	57.8	—	32.32	9.51
13:40	—	18.3	485.2	1.56	7.02	41.7	—	—	1.33
13:45	—	18.2	486.5	1.95	7.07	35.0	—	—	3.45
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:	Start Sampling								
:	End Sampling								

* VC=Very cloudy CI=Cloudy SC=Slightly Cloudy VSC=Very Slightly Cloudy AC=Almost Clear C=Clear CC=Crystal Clear

Comments:

Sample Information:

Sample Type:	Sample ID:	Sample Date:	Sample Time:	Comments (container #, preservative, analyses):
PRIMARY	EXT-4	09/21/23	13:45	VOAS-3, HCL BY 82600

Field Equipment:

Pump Type/Tubing Type: SAMPLE PORT / NOZZLE
Water Quality Meter Type: YSI
Water Level Probe Type: HERON
Comments:

Groundwater Sampling Field Log
Milwaukie International Way
Annual Groundwater Sampling

Well ID: W-2D	Well Zone: LOWER DEEP ZONE	Date: 09/21/23
Depth to Water (ft): 7.55'	Well Depth (ft): 26.85'	Time: 08:30
Field Conditions: 50° SUNNY	Field Personnel: H. NORCOM	
Decontamination: alconox + tap wash; tap rinse; DI rinse		

PURGE INFORMATION

Purge Method: PERASTALTIC	Pumping Rate (GPM): (ML/MIN) 200	Equip. Depth (ft): 14'
YSI Calibrated, refer to calibration log from: 09/21/23		YSI#: 4

Time	Purge Volume (gallons)	Temp. (°C)	SC (uS/cm)	DO (mg/L)	pH	ORP (mV)	Purge Rate (mL/min)	DTW (ft BTOC)	Pump Speed/*Clarity/ Color/Remarks (NTU)
Stabilization Criteria									± 0.2 ±3% (SC>100) ±5% (SC≤100)
									± 0.3
									± 0.1
									± 10

									± 10% (NTU>5) 3 readings < 5 (NTU<5)
:	Pump On, Water Reaches the Purge Bucket							Initial	
08:40	0.0	16.6	562	1.05	6.29	-70.9	250	8.44	82.7
08:50	0.11	16.2	551	1.03	6.52	-76.9	200	8.51	451
08:55	0.16	16.0	553	2.3	6.61	-67.3	200	7.91	overrange
09:00	0.21	15.9	582	1.26	6.48	-80.1	200	7.85	472
09:05	0.26	16.0	589	1.10	6.47	-87.5	200	7.90	290
09:10	Start Sampling						200	7.92	
09:15	End Sampling						200	7.97	

* VC=Very cloudy CI=Cloudy SC=Slightly Cloudy VSC=Very Slightly Cloudy AC=Almost Clear C=Clear CC=Crystal Clear

Comments:

Sample Information:

Sample Type:	Sample ID:	Sample Date:	Sample Time:	Comments (container #, preservative, analyses):
PRIMARY	W-2D	09/21/23	09:10	VOAS-3, HCL BY 8260D

Field Equipment:

Pump Type/Tubing Type: PERASTALTIC / LDPE & SILICONE
Water Quality Meter Type: YSI
Water Level Probe Type: SOLINST

Comments:

Groundwater Sampling Field Log
Milwaukie International Way
Annual Groundwater Sampling

Well ID: W-21	Well Zone: UPPER DEEP ZONE	Date: 09/21/23
Depth to Water (ft): 11.86'	Well Depth (ft): 20.90	Time: 09:20
Field Conditions: 60° SUNNY	Field Personnel: H. NORCOM	
Decontamination: alconox + tap wash; tap rinse; DI rinse		

PURGE INFORMATION

Purge Method: PERASTALTIC	Pumping Rate (GPM) (ML/MIN): 100	Equip. Depth (ft): ~15'
YSI Calibrated, refer to calibration log from: 09/21/23		YSI#: 4

Time	Purge Volume (gallons)	Temp. (°C)	SC (uS/cm)	DO (mg/L)	pH	ORP (mV)	Purge Rate (mL/min)	DTW (ft BTOC)	Pump Speed/*Clarity/ Color/Remarks (NTU)
Stabilization Criteria		± 0.2	±3% (SC>100) ±5% (SC≤100)	± 0.3	± 0.1	± 10	--	--	± 10% (NTU>5) 3 readings < 5 (NTU<5)
:	Pump On, Water Reaches the Purge Bucket							Initial	
09:30	0.03	16.3	821	1.08	6.97	-61.5	100	11.98	291
09:40	0.06	16.3	823	0.94	6.94	-64.1	100	12.01	110
09:45	0.09	16.3	834	0.75	6.93	-71.8	100	12.02	61.5
09:50	0.12	16.2	849	0.60	6.91	-73.2	100	12.21	48.3
09:55	Start Sampling						100	12.05	
10:00	End Sampling						100		

* VC=Very cloudy CI=Cloudy SC=Slightly Cloudy VSC=Very Slightly Cloudy AC=Almost Clear C=Clear CC=Crystal Clear

Comments:

Sample Information:

Sample Type:	Sample ID:	Sample Date:	Sample Time:	Comments (container #, preservative, analyses):
PRIMARY	W-21	09/21/23	09:55	VOAS-3, HCL BY 8240D

Field Equipment:

Pump Type/Tubing Type: PERASTALTIC / LDPE, SILICONE
Water Quality Meter Type: YSI
Water Level Probe Type: SOLINST

Comments:

Groundwater Sampling Field Log
Milwaukee International Way
Annual Groundwater Sampling

W-48

Well ID: AW-HD-1 W-48	Well Zone: <u>SHALLOW ZONE</u>	Date: <u>9-20-2023</u>
Depth to Water (ft): <u>5.86</u>	Well Depth (ft): <u>13.4</u>	Time: <u>1725</u>
Field Conditions: <u>66° Mostly Sunny</u>	Field Personnel: <u>Alex McPartly</u>	
Decontamination: alconox + tap wash; tap rinse; DI rinse ☒		

PURGE INFORMATION

Purge Method: <u>LOW FLOW</u>	Pumping Rate (GPM): <u>150 mL/min</u>	Equip. Depth (ft): <u>~11'</u>
YSI Calibrated, refer to calibration log from: <u>9-20-2023</u>		YSI#: <u>#4</u>

Time	Purge Volume (gallons)	Temp. (°C)	SC (uS/cm)	DO (mg/L)	pH	ORP (mV)	Purge Rate (mL/min)	DTW (ft BTOC)	Pump Speed/*Clarity/ Color/Remarks (NTU)
Stabilization Criteria		± 0.2	±3% (SC>100) ±5% (SC≤100)	± 0.3	± 0.1	± 10	--	--	± 10% (NTU>5) 3 readings < 5 (NTU<5)
<u>17:35</u>	Pump On, Water Reaches the Purge Bucket						<u>150 mL/min</u>	<u>Initial 5.98</u>	
<u>17:40</u>	<u>750 mL</u>	<u>20.4</u>	<u>261.5</u>	<u>0.63</u>	<u>6.44</u>	<u>93.2</u>	<u>150 mL/min</u>	<u>5.98</u>	<u>17.0 NTU</u>
<u>17:45</u>	<u>1580 mL</u>	<u>20.3</u>	<u>261.2</u>	<u>0.58</u>	<u>6.42</u>	<u>95.0</u>	<u>150 mL/min</u>	<u>5.97</u>	<u>6.73 NTU C</u>
<u>17:50</u>	<u>2250 mL</u>	<u>20.4</u>	<u>261.6</u>	<u>0.60</u>	<u>6.43</u>	<u>88.7</u>	<u>150 mL/min</u>	<u>5.98</u>	<u>4.26 NTU C</u>
<u>17:55</u>	<u>3000 mL</u>	<u>20.4</u>	<u>261.7</u>	<u>0.62</u>	<u>6.45</u>	<u>83.1</u>	<u>150 mL/min</u>	<u>5.97</u>	<u>3.27 NTU C</u>
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<u>18:00</u>	Start Sampling							<u>5.97</u>	
<u>18:05</u>	End Sampling							<u>5.79</u>	

* VC=Very cloudy CI=Cloudy SC=Slightly Cloudy VSC=Very Slightly Cloudy AC=Almost Clear C=Clear CC=Crystal Clear

Comments:

Sample Information:

Sample Type:	Sample ID:	Sample Date:	Sample Time:	Comments (container #, preservative, analyses):
<u>Primary</u>	<u>AW-HD-1 W-48</u>	<u>9-20-2023</u>	<u>1800</u>	<u>3x4mL VOA, HCL</u> <u>82600</u>

Field Equipment:

Pump Type/Tubing Type: <u>Peristaltic w/ LDPE & S-beam</u>
Water Quality Meter Type: <u>YSI ProQuam</u>
Water Level Probe Type: <u>Solinst 100ft.</u>

Comments:

Groundwater Sampling Field Log
Milwaukie International Way
Annual Groundwater Sampling

Depth to Water (ft):	5.05'	Well Depth (ft):	14.51'	Time:	14:20
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Decontamination:alconox + tap wash; tap rinse; DI rinse

PURGE INFORMATION		
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YSI Calibrated, refer to calibration log from: 09/19/23	YSI#: 4
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* VC=Very cloudy CI=Cloudy SC=Slightly Cloudy VSC=Very Slightly Cloudy AC=Almost Clear C=Clear CC=Crystal Clear

Sample Information:				
				Sample ID/Location/Date

Field Equipment:	
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Pump Type/Tubing Type: PARASTALTIC / LDPE 3 SILICONE

Water Quality Meter Type: YSI

Comments:

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Groundwater Sampling Field Log
Milwaukie International Way
Annual Groundwater Sampling

Well ID: MW-10	Well Zone: SHALLOW ZONE	Date: 09/19/23
Depth to Water (ft): 8.95'	Well Depth (ft): 14.4'	Time: 13:10
Field Conditions: 70° SUNNY	Field Personnel: H. NORLDM	
Decontamination: alconox + tap wash; tap rinse; DI rinse		

PURGE INFORMATION

Purge Method: PARASTATIC	Pumping Rate (GPM): 0.00	Equip. Depth (ft): 10'
YSI Calibrated, refer to calibration log from: 9/19/23		YSI#: 4

Time	Purge Volume (gallons)	Temp. (°C)	SC (uS/cm)	DO (mg/L)	pH	ORP (mV)	Purge Rate (mL/min)	DTW (ft BTOC)	Pump Speed/*Clarity/ Color/Remarks (NTU)
Stabilization Criteria		± 0.2	±3% (SC>100) ±5% (SC≤100)	± 0.3	± 0.1	± 10	--	--	± 10% (NTU>5) 3 readings < 5 (NTU<5)
:	Pump On, Water Reaches the Purge Bucket							Initial 8.95'	
13:15	0.4	18.4	231.2	5.27	6.21	-24.0	225	9.10	26.5
13:20	0.12	18.8	215.8	4.63	6.24	-38.4	225	9.28	53.5
13:25	0.18	19.2	216.5	4.97	6.38	-38.1	225	9.38	24.2
13:30	0.24	19.2	213.8	5.13	6.33	-35.8	225	9.45	14.9
13:35	0.3	19.3	215.0	4.98	6.38	-34.7	225	9.53	
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13:40	Start Sampling						225 ← 13:40	9.58	
13:45	End Sampling						225 ← 13:45		

* VC=Very cloudy CI=Cloudy SC=Slightly Cloudy VSC=Very Slightly Cloudy AC=Almost Clear C=Clear CC=Crystal Clear

Comments:

Sample Information:

Sample Type:	Sample ID:	Sample Date:	Sample Time:	Comments (container #, preservative, analyses):
GW	MW-10	09/19/23	13:40	VOAS - 3
GW	MW-10-D ^{ajm} MW-10-D	09/19/23	13:40 ^{ajm} 13:41	VOAS - 3 dup • All 8260D

Field Equipment:

Pump Type/Tubing Type:	PARASTATIC / LDPE & SILICONE
Water Quality Meter Type:	YSI
Water Level Probe Type:	SOLINST
Comments:	DUPLICATE TAKEN

Groundwater Sampling Field Log
Milwaukie International Way
Annual Groundwater Sampling

Well ID: <u>MW-6D</u>	Well Zone: <u>CENTRAL DEEP ZONE</u>	Date: <u>9-20-2023</u>
Depth to Water (ft): <u>14.69' 14.69'</u>	Well Depth (ft): <u>40.20</u>	Time: <u>0955</u>
Field Conditions: <u>55° Light Rain</u>	Field Personnel: <u>Alex McCordy</u>	
Decontamination: alconox + tap wash; tap rinse; DI rinse ☒		

PURGE INFORMATION

Purge Method: <u>LOW FLOW</u>	Pumping Rate (GPM): <u>150 mL/min</u>	Equip. Depth (ft): <u>~35'</u>
YSI Calibrated, refer to calibration log from: <u>9-20-2023</u>		YSI#: <u>74</u>

Time	Purge Volume (gallons)	Temp. (°C)	SC (uS/cm)	DO (mg/L)	pH	ORP (mV)	Purge Rate (mL/min)	DTW (ft BTOC)	Pump Speed/*Clarity/ Color/Remarks (NTU)
Stabilization Criteria		± 0.2	±3% (SC>100) ±5% (SC≤100)	± 0.3	± 0.1	± 10	--	--	± 10% (NTU>5) 3 readings < 5 (NTU<5)
<u>10:05</u>	<u>Pump On, Water Reaches the Purge Bucket</u>							<u>Initial DTW = 14.69'</u>	<u>SC - DTW = 14.59'</u>
<u>10:10</u>	<u>750mL</u>	<u>15.9</u>	<u>474.1</u>	<u>2.17</u>	<u>7.00</u>	<u>-26.3</u>	<u>150mL/min</u>	<u>14.64</u>	<u>66.6 NTU.</u>
<u>10:20</u>	<u>2250mL</u>	<u>15.9</u>	<u>473.8</u>	<u>9.23</u>	<u>7.04</u>	<u>-35.5</u>	<u>150mL/min</u>	<u>14.64</u>	<u>7.12 NTU.</u>
<u>10:25</u>	<u>3000mL</u>	<u>15.9</u>	<u>477.0</u>	<u>8.84</u>	<u>7.05</u>	<u>-33.2</u>	<u>150mL/min</u>	<u>14.64</u>	<u>3.97 NTU.</u>
<u>10:30</u>	<u>3750mL</u>	<u>15.9</u>	<u>477.8</u>	<u>8.13</u>	<u>7.04</u>	<u>-27.7</u>	<u>150mL/min</u>	<u>14.64</u>	<u>2.05 NTU.</u>
<u>10:35</u>	<u>4500mL</u>	<u>16.0</u>	<u>483.1</u>	<u>8.49</u>	<u>7.00</u>	<u>-32.0</u>	<u>150mL/min</u>	<u>14.65</u>	<u>1.34 NTU.</u>
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<u>10:40</u>	<u>Start Sampling</u>							<u>14.65</u>	
<u>10:45</u>	<u>End Sampling</u>							<u>14.59</u>	

* VC=Very cloudy CI=Cloudy SC=Slightly Cloudy VSC=Very Slightly Cloudy AC=Almost Clear C=Clear CC=Crystal Clear

Comments: Large amount of flocculated reduced product when first starting to pump.

Sample Information:

Sample Type:	Sample ID:	Sample Date:	Sample Time:	Comments (container #, preservative, analyses):
<u>Primary</u>	<u>MW-6D</u>	<u>9-20-2023</u>	<u>1040</u>	<u>3x 40mL VOA's, HCL</u>
				<u>8260D.</u>

Field Equipment:

Pump Type/Tubing Type: <u>Peristaltic w/ LOPE 4 S.I.con.</u>
Water Quality Meter Type: <u>YSI ProQuatro.</u>
Water Level Probe Type: <u>Schmidt 100ft.</u>

Comments:

Groundwater Sampling Field Log
Milwaukie International Way
Annual Groundwater Sampling

Well ID: MW-7	Well Zone: SHALLOW ZONE	Date: 09/19/23
Depth to Water (ft): 8.01'	Well Depth (ft): 14.38'	Time: 09:43
Field Conditions: 50-60°F SUNNY (20.1°C)		Field Personnel: H. NORLOM
Decontamination: alconox + tap wash; tap rinse; DI rinse		

PURGE INFORMATION

Purge Method: parastaltic	Pumping Rate (GPM):	Equip. Depth (ft): 10'
YSI Calibrated, refer to calibration log from: 09/19/23		YSI#: 4

Time	Purge Volume (gallons)	Temp. (°C)	SC (uS/cm)	DO (mg/L)	pH	ORP (mV)	Purge Rate (mL/min)	DTW (ft BTOC)	Pump Speed/*Clarity/ Color/Remarks (NTU)
Stabilization Criteria		± 0.2	±3% (SC>100) ±5% (SC≤100)	± 0.3	± 0.1	± 10	--	--	± 10% (NTU>5) 3 readings < 5 (NTU<5)
09:47	Pump On, Water Reaches the Purge Bucket							^{Initial} 8.01	
09:50	0.09	19.1	419.5	2.29	6.68	158.7	354.88	8.88	4.80
09:55	0.18	19.1	424.3	2.82	6.68	160.0	354.88	8.98	4.20
10:00	0.27	19.2	424.8	8.57	6.65	160.5	354.88	8.95	3.85
10:05	0.36	19.1	424.4	2.21	6.67	161.9	354.88	8.96	3.20
10:10	0.45	19.2	429.8	5.84	6.66	160.9	354.88	8.98	3.09
10:15	0.54	19.1	434.6	1.04	6.67	161.0	354.88	8.98	2.67
10:20	0.6	19.1	434.9	0.98	6.69	159.7	250.00	8.95	1.38
10:25	0.66	18.9	436.0	0.88	6.68	159.3	250.00	8.89	4.16
10:30	0.72	19.0	434.3	0.84	6.69	158.9	250.00	8.89	3.32
10:30	Start Sampling						250.00	8.88	
10:35	End Sampling						250.00	8.89	

* VC=Very cloudy CI=Cloudy SC=Slightly Cloudy VSC=Very Slightly Cloudy AC=Almost Clear C=Clear CC=Crystal Clear

Comments:

Sample Information:

Sample Type:	Sample ID: MW-7	Sample Date: 09/19/23	Sample Time: 10:30	Comments (container #, preservative, analyses):
GW	MW-7	09/19/23	10:30	VOAS - 3 HCL

Field Equipment:

Pump Type/Tubing Type:	PARASTALTIC / LDPE & silicone
Water Quality Meter Type:	solinst 5
Water Level Probe Type:	YSI

Comments:

Groundwater Sampling Field Log
Milwaukie International Way
Annual Groundwater Sampling

Well ID: MW-9	Well Zone: SHALLOW ZONE	Date: 09/19/23
Depth to Water (ft): 14.6 6.2'	Well Depth (ft): 14.6'	Time: 11:45
Field Conditions: 70° SUNNY	Field Personnel: H. NOKCOM	
Decontamination: alconox + tap wash; tap rinse; DI rinse		

PURGE INFORMATION

Purge Method: PARASTATIC	Pumping Rate (GPM): 200 mL/min	Equip. Depth (ft): 10'
YSI Calibrated, refer to calibration log from: 09/19/23		YSI#: 4

Time	Purge Volume (gallons)	Temp. (°C)	SC (uS/cm)	DO (mg/L)	pH	ORP (mV)	Purge Rate (mL/min)	DTW (ft BTOC)	Pump Speed/*Clarity/ Color/Remarks (NTU)
Stabilization Criteria		± 0.2	±3% (SC>100) ±5% (SC≤100)	± 0.3	± 0.1	± 10	--	--	± 10% (NTU>5) 3 readings < 5 (NTU<5)
11:45	Pump On, Water Reaches the Purge Bucket							Initial	
								6.2	
11:50	0.05	18.2	218.8	1.68	6.47	37.7	200	6.23	6.30
11:55	0.1	18.6	227.1	1.18	6.58	18.2	200	6.41	2.46
12:00	0.15	18.7	233.5	1.23	6.61	-8.8	200	6.49	1.75
12:05	0.2	18.7	234.9	1.02	6.61	-26.8	200	6.56	1.11
12:10	0.25	18.7	235.2	0.84	6.60	-35.5	200	6.55	0.91
12:15	0.3	18.7	236.3	0.63	6.61	-39.9	200	6.62	0.82
12:20	Start Sampling								6.74
12:25	End Sampling								6.82

* VC=Very cloudy CI=Cloudy SC=Slightly Cloudy VSC=Very Slightly Cloudy AC=Almost Clear C=Clear CC=Crystal Clear

Comments:

Sample Information:

Sample Type:	Sample ID:	Sample Date:	Sample Time:	Comments (container #, preservative, analyses):
GW	MW-9	09/19/23	12:20	HCL, VOAs - 3

Field Equipment:

Pump Type/Tubing Type: PARASTATIC / LDPE / SILICONE
Water Quality Meter Type: YSI
Water Level Probe Type: SOLINST
Comments:

Groundwater Sampling Field Log
Milwaukee International Way
Annual Groundwater Sampling

Well ID: <u>MW-9D</u>	Well Zone: <u>CENTRAL DEEP ZONE</u>	Date: <u>9-20-2023</u>
Depth to Water (ft): <u>12.46</u>	Well Depth (ft): <u>39.70</u>	Time: <u>1100</u>
Field Conditions: <u>60° Cloudy</u>	Field Personnel: <u>Alex McConthy</u>	
Decontamination: alconox + tap wash; tap rinse; DI rinse ☒		

PURGE INFORMATION

Purge Method: <u>Low Flow</u>	Pumping Rate (GPM): <u>150 mL/min</u>	Equip. Depth (ft): <u>~35'</u>
YSI Calibrated, refer to calibration log from: <u>9-20-2023</u>		YSI#: <u>774</u>

Time	Purge Volume (gallons)	Temp. (°C)	SC (uS/cm)	DO (mg/L)	pH	ORP (mV)	Purge Rate (mL/min)	DTW (ft BTOW)	Pump Speed/*Clarity/ Color/Remarks (NTU)
Stabilization Criteria		± 0.2	±3% (SC>100) ±5% (SC≤100)	± 0.3	± 0.1	± 10	--	--	± 10% (NTU>5) 3 readings < 5 (NTU<5)
<u>11:10</u>	Pump On, Water Reaches the Purge Bucket						<u>150 mL/min</u>	<u>12.55</u> ^{Initial}	
<u>11:15</u>	<u>750 mL</u>	<u>15.3</u>	<u>802</u>	<u>1.99</u>	<u>6.98</u>	<u>-83.6</u>	<u>150 mL/min</u>	<u>12.59</u>	<u>6.02 NTU. C</u>
<u>11:20</u>	<u>1500 mL</u>	<u>15.2</u>	<u>796</u>	<u>1.82</u>	<u>6.99</u>	<u>-88.4</u>	<u>150 mL/min</u>	<u>12.55</u>	<u>3.90 NTU.</u>
<u>11:25</u>	<u>2250 mL</u>	<u>15.2</u>	<u>799</u>	<u>1.76</u>	<u>7.00</u>	<u>-90.0</u>	<u>150 mL/min</u>	<u>12.55</u>	<u>2.04 NTU.</u>
<u>11:30</u>	<u>3000 mL</u>	<u>15.3</u>	<u>802</u>	<u>1.91</u>	<u>7.03</u>	<u>-90.1</u>	<u>150 mL/min</u>	<u>12.55</u>	<u>2.59 NTU.</u>
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<u>11:35</u>	Start Sampling							<u>12.55</u>	
<u>11:40</u>	End Sampling							<u>12.49</u>	

* VC=Very cloudy CI=Cloudy SC=Slightly Cloudy VSC=Very Slightly Cloudy AC=Almost Clear C=Clear CC=Crystal Clear

Comments:

Sample Information:

Sample Type:	Sample ID:	Sample Date:	Sample Time:	Comments (container #, preservative, analyses):
<u>Primary</u>	<u>MW-9D</u>	<u>9-20-2023</u>	<u>1135</u>	<u>3x40mL JCA, HPL</u>
				<u>8260D.</u>

Field Equipment:

Pump Type/Tubing Type: Peristaltic w/ hose & Silicon

Water Quality Meter Type: YSI ProQuatro

Water Level Probe Type: Solinst 100ft.

Comments:

Groundwater Sampling Field Log
Milwaukie International Way
Annual Groundwater Sampling

Well ID: MW-10D	Well Zone: CENTRAL DEER ZONE	Date: 09/21/23
Depth to Water (ft): 12.87'	Well Depth (ft): 39.76'	Time: 10:20
Field Conditions: 70° SUNNY	Field Personnel: H. NORCOM	

Decontamination: alconox + tap wash; tap rinse; DI rinse

PURGE INFORMATION

Purge Method: PERASTALTIC	Pumping Rate (GPM) (ML/MIN) 100	Equip. Depth (ft): 115'
YSI Calibrated, refer to calibration log from: 09/21/23		YSI#: 4

Time	Purge Volume (gallons)	Temp. (°C)	SC (uS/cm)	DO (mg/L)	pH	ORP (mV)	Purge Rate (mL/min)	DTW (ft BTOC)	Pump Speed/*Clarity/ Color/Remarks (NTU)
Stabilization Criteria	± 0.2	± 0.2	± 3% (SC>100) ± 5% (SC≤100)	± 0.3	± 0.1	± 10	--	--	± 10% (NTU>5) 3 readings < 5 (NTU<5)
:	Pump On, Water Reaches the Purge Bucket							Initial	
10:50	0.03	16.4	140.6	3.55	6.12	99.0	100	12.94	19.9
10:55	0.06	16.9	144.3	3.09	6.03	109.3	100	12.93	15.7
11:00	0.09	16.5	158.0	3.07	6.05	114.4	100	12.89	13.4
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11:05	Start Sampling						100	12.91	
11:10	End Sampling						100	12.93	

* VC=Very cloudy CI=Cloudy SC=Slightly Cloudy VSC=Very Slightly Cloudy AC=Almost Clear C=Clear CC=Crystal Clear

Comments:

Sample Information:

Sample Type:	Sample ID:	Sample Date:	Sample Time:	Comments (container #, preservative, analyses):
PRIMARY	MW-10D	09/21/23	11:05	VOAS-3, HCL BY 8260D

Field Equipment:

Pump Type/Tubing Type: PERASTALTIC / LDPE 3 SILICONE
Water Quality Meter Type: YSI
Water Level Probe Type: SOLINST

Comments:

Groundwater Sampling Field Log
Milwaukie International Way
Annual Groundwater Sampling

Well ID: <u>MW-12D</u>	Well Zone: <u>CENTRAL DEEP ZONE</u>	Date: <u>9-20-2023</u>
Depth to Water (ft): <u>13.17</u>	Well Depth (ft): <u>38.6</u>	Time: <u>1335</u>
Field Conditions: <u>66° Mostly Cloudy</u>	Field Personnel: <u>Alex McElrath</u>	
Decontamination: alconox + tap wash; tap rinse; DI rinse ☒		

PURGE INFORMATION

Purge Method: <u>Low Flow</u>	Pumping Rate (GPM): <u>150 mL/min</u>	Equip. Depth (ft): <u>33'</u>
YSI Calibrated, refer to calibration log from: <u>9-20-2023</u>		YSI#: <u>FF4</u>

Time	Purge Volume (gallons)	Temp. (°C)	SC (uS/cm)	DO (mg/L)	pH	ORP (mV)	Purge Rate (mL/min)	DTW (ft BTOC)	Pump Speed/*Clarity/ Color/Remarks (NTU)
Stabilization Criteria		± 0.2	±3% (SC>100) ±5% (SC≤100)	± 0.3	± 0.1	± 10	--	--	± 10% (NTU>5) 3 readings < 5 (NTU<5)
<u>13:45</u>	Pump On, Water Reaches the Purge Bucket							<u>13.23</u> Initial	
<u>13:55</u>	<u>1500 mL</u>	<u>16.0</u>	<u>421.0</u>	<u>0.77</u>	<u>7.11</u>	<u>-90.1</u>	<u>150 mL/min</u>	<u>13.25</u>	<u>32.0 NTU</u>
<u>14:00</u>	<u>2250 mL</u>	<u>16.1</u>	<u>420.2</u>	<u>0.74</u>	<u>7.11</u>	<u>-91.2</u>	<u>150 mL/min</u>	<u>13.25</u>	<u>3.98 NTU</u> <u>C</u>
<u>14:05</u>	<u>3000 mL</u>	<u>15.9</u>	<u>419.6</u>	<u>0.70</u>	<u>7.11</u>	<u>-92.0</u>	<u>150 mL/min</u>	<u>13.26</u>	<u>1.62 NTU</u> <u>C</u>
<u>14:10</u>	<u>3750 mL</u>	<u>16.0</u>	<u>418.1</u>	<u>0.70</u>	<u>7.10</u>	<u>-92.6</u>	<u>150 mL/min</u>	<u>13.27</u>	<u>1.08 NTU</u> <u>C</u>
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<u>14:15</u>	Start Sampling							<u>13.27</u>	
<u>14:20</u>	End Sampling							<u>13.21</u>	

* VC=Very cloudy CI=Cloudy SC=Slightly Cloudy VSC=Very Slightly Cloudy AC=Almost Clear C=Clear CC=Crystal Clear

Comments:

Sample Information:

Sample Type:	Sample ID:	Sample Date:	Sample Time:	Comments (container #, preservative, analyses):
<u>Primary</u>	<u>MW-12D</u>	<u>9-20-2023</u>	<u>1415</u>	<u>3x40mL VOA, HPLC</u> <u>8260D</u>

Field Equipment:

Pump Type/Tubing Type: <u>Pecistatba w/ LDPE & Silicon</u>
Water Quality Meter Type: <u>YSI ProQuatro</u>
Water Level Probe Type: <u>Solinst 100ft</u>

Comments:

Groundwater Sampling Field Log
Milwaukie International Way
Annual Groundwater Sampling

Well ID: MW-13D	Well Zone: CENTRAL DEEP ZONE	Date: 9-20-2023
Depth to Water (ft): 13.87	Well Depth (ft): 39.70	Time: 1:30
Field Conditions: 66° Mostly Cloudy	Field Personnel: Alex McCarthy	
Decontamination: alconox + tap wash; tap rinse; D-rinse ✓		

PURGE INFORMATION

Purge Method: Low Flow	Pumping Rate (GPM): 150 mL/min	Equip. Depth (ft): ~35'
YSI Calibrated, refer to calibration log from: 9-20-2023		YSI#: #4

Time	Purge Volume (gallons)	Temp. (°C)	SC (uS/cm)	DO (mg/L)	pH	ORP (mV)	Purge Rate (mL/min)	DTW (ft BTOC)	Pump Speed/*Clarity/ Color/Remarks (NTU)
Stabilization Criteria		± 0.2	±3% (SC>100) ±5% (SC≤100)	± 0.3	± 0.1	± 10	--	--	± 10% (NTU>5) 3 readings < 5 (NTU<5)
14:45	Pump On, Water Reaches the Purge Bucket						150 mL/min	Initial 13.99	
14:50	750 mL	15.2	674	0.47	6.97	41.8	150 mL/min	14.01	26.7 NTU.
14:55	1500 mL	15.2	674	0.41	7.01	35.7	150 mL/min	14.01	19.9 NTU.
15:00	2250 mL	15.2	673	0.45	7.00	33.2	150 mL/min	14.02	13.9 NTU.
15:05		15.1	673	0.39	7.00	31.7	150 mL/min	14.03	12.3 NTU.
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15:10	Start Sampling							14.03	
15:15	End Sampling							13.89	

* VC=Very cloudy Cl=Cloudy SC=Slightly Cloudy VSC=Very Slightly Cloudy AC=Almost Clear C=Clear CC=Crystal Clear

Comments:

Sample Information:

Sample Type:	Sample ID:	Sample Date:	Sample Time:	Comments (container #, preservative, analyses):
Primary	MW-13D	9-20-2023	1510	3x40mL VOA, HPL 8260D

Field Equipment:

Pump Type/Tubing Type: Peristaltic w/ LDPE & Silicon

Water Quality Meter Type: YSI ProQuatro

Water Level Probe Type: Solinst 104A

Comments:

Groundwater Sampling Field Log
Milwaukie International Way
Annual Groundwater Sampling

Well ID: MW-14D	Well Zone: LOWER DEEP ZONE	Date: 9-20-2023
Depth to Water (ft): 14.05	Well Depth (ft): 75.10	Time: 1150
Field Conditions: 62° Mostly Cloudy	Field Personnel: Alex McCarthy	
Decontamination: alconox + tap wash; tap rinse; DI rinse ✓		

PURGE INFORMATION

Purge Method: Low Flow	Pumping Rate (GPM): 150 mL/min	Equip. Depth (ft): ~70'
YSI Calibrated, refer to calibration log from: 9-20-2023		YSI#: #7

Time	Purge Volume (gallons)	Temp. (°C)	SC (uS/cm)	DO (mg/L)	pH	ORP (mV)	Purge Rate (mL/min)	DTW (ft BTOC)	Pump Speed/*Clarity/ Color/Remarks (NTU)
Stabilization Criteria		± 0.2	±3% (SC>100) ±5% (SC≤100)	± 0.3	± 0.1	± 10	--	--	± 10% (NTU>5) 3 readings < 5 (NTU<5)
12:05	Pump On, Water Reaches the Purge Bucket						150 mL/min	Initial 14.10	
12:10	750 mL	16.8	275.8	0.94	7.09	18.6	150 mL/min	14.11	150 NTU CL
12:15	1500 mL	16.9	275.7	0.81	7.11	18.0	150 mL/min	14.11	139 NTU "
12:20	2250 mL	16.9	275.4	0.73	7.11	18.7	150 mL/min	14.11	135 NTU "
12:25	3000 mL	16.9	275.4	0.73	7.11	20.6	150 mL/min	14.11	135 NTU "
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12:30	Start Sampling							14.11	
12:35	End Sampling							14.08	

* VC=Very cloudy CI=Cloudy SC=Slightly Cloudy VSC=Very Slightly Cloudy AC=Almost Clear C=Clear CC=Crystal Clear

Comments: Removed Cloudy the entire time during purging.

Sample Information:

Sample Type:	Sample ID:	Sample Date:	Sample Time:	Comments (container #, preservative, analyses):
Primary	MW-14D	9-20-2023	1230	3x 40mL VOCs, HPLC 8260D

Field Equipment:

Pump Type/Tubing Type: Peristaltic, w/ LDPE & S. Lion
Water Quality Meter Type: YSI Pro Quattro
Water Level Probe Type: Solinst 100ft

Comments:

Groundwater Sampling Field Log
Milwaukee International Way
Annual Groundwater Sampling

Well ID: MW-17S	Well Zone: SHALLOW ZONE	Date: 09/19/23
Depth to Water (ft): 10.40 10.40'	Well Depth (ft): 15.41'	Time: 15:30
Field Conditions: 75° SUNNY	Field Personnel: H. NORUM	
Decontamination: alconox + tap wash; tap rinse; DI rinse		

PURGE INFORMATION

Purge Method: PARASTATIC	Pumping Rate (GPM): 0.05	Equip. Depth (ft): 12 12'
YSI Calibrated, refer to calibration log from: 09/19/23		YSI#: 4

Time	Purge Volume (gallons)	Temp. (°C)	SC (uS/cm)	DO (mg/L)	pH	ORP (mV)	Purge Rate (mL/min)	DTW (ft BTOW)	Pump Speed/*Clarity/ Color/Remarks (NTU)
Stabilization Criteria		± 0.2	±3% (SC>100) ±5% (SC≤100)	± 0.3	± 0.1	± 10	--	--	± 10% (NTU>5) 3 readings < 5 (NTU<5)
15:30	Pump On, Water Reaches the Purge Bucket							Initial	
15:35	0	16.8	194.9	6.00	6.85	35.0	200	10.48'	146
15:40	0.05	16.4	199.4	1.40	6.84	35.5	200	10.51'	288
15:45	0.1	16.1	242.4	2.12	6.99	-5.5	200	10.46'	660
15:50	0.15	16.9	245.3	0.91	7.01	-21.7	200	10.5'	518
15:55	0.20	17.0	248.9	0.75	7.01	-31.7	200	10.55'	354
16:00	0.25	16.0	250.1	0.69	7.01	-39.4	200	10.57'	320
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16:00	Start Sampling	16:00					200	10.61'	299
16:05	End Sampling	16:05					200	10.7'	

* VC=Very cloudy CI=Cloudy SC=Slightly Cloudy VSC=Very Slightly Cloudy AC=Almost Clear C=Clear CC=Crystal Clear

Comments:

Sample Information:

Sample Type:	Sample ID:	Sample Date:	Sample Time:	Comments (container #, preservative, analyses):
GW	MW-17S	09/19/23	15:55 16:00	3x40mL VOA, HCL 82600

Field Equipment:

Pump Type/Tubing Type: **PARASTATIC / LDPE ? SILICONE**

Water Quality Meter Type: **YSI**

Water Level Probe Type: **SOLINST**

Comments:

Groundwater Sampling Field Log
Milwaukee International Way
Annual Groundwater Sampling

Well ID: MW-19-100	Well Zone: LD	Date: 9/20/22
Depth to Water (ft): 13.03	Well Depth (ft): 100	Time: 1536
Field Conditions: CLOUDY	Field Personnel: BMW HN	
Decontamination: alconox + tap wash; tap rinse; DI rinse YES!		

PURGE INFORMATION

Purge Method: DUAL VALVE LOW FLOW	Pumping Rate (GPM): 150 mL/min	Equip. Depth (ft): 9.3'
YSI Calibrated, refer to calibration log from: 9/20/22		YSI#: 2

Time	Purge Volume (gallons)	Temp. (°C)	SC (uS/cm)	DO (mg/L)	pH	ORP (mV)	Purge Rate (mL/min)	DTW (ft BTOC)	Pump Speed/*Clarity/ Color/Remarks (NTU)
Stabilization Criteria		± 0.2	±3% (SC>100) ±5% (SC≤100)	± 0.3	± 0.1	± 10	--	--	± 10% (NTU>5) 3 readings < 5 (NTU<5)
15:55	Pump On, Water Reaches the Purge Bucket							Initial	
15:59	100 mL	17.3	195	6.24	7.54	-152.6	150 mL/min	13.86'	12.5 NTU
16:00	200 mL	16.8	255	3.95	7.39	-140.6	"	14.08'	3.69 NTU
16:03	300 mL	16.54	284	2.93	7.31	-133.9	"	14.08'	3.11 NTU
16:06	400 mL	16.41	298	2.14	7.31	-132.0	"	14.11'	2.08 NTU
16:09	500 mL	16.29	308	1.52	7.33	-131.7	"	14.13'	2.53 NTU
16:12	600 mL	16.20	314	1.2	7.35	-131.7	"	14.15'	1.42 NTU
16:15	700 mL	16.13	319	0.95	7.36	-132.7	"	14.12'	1.37 NTU
16:18	800 mL	16.09	321	0.86	7.37	-133.1	"	14.14	0.76 NTU
16:20	Start Sampling								
16:25	End Sampling								

* VC=Very cloudy Cl=Cloudy SC=Slightly Cloudy VSC=Very Slightly Cloudy AC=Almost Clear C=Clear CC=Crystal Clear

Comments:

Sample Information:

Sample Type:	Sample ID:	Sample Date:	Sample Time:	Comments (container #, preservative, analyses):
PRIMARY	MW-19-100	9/20/23	16:20	(3) UOAS 8260D
Primary	EQUIP-2	9/20/23	17:25	3x 40 mL UOAS, HCL 8260D

Field Equipment:

Pump Type/Tubing Type: **DUAL VALVE**

Water Quality Meter Type: **YSI 556**

Water Level Probe Type: **HERON**

Comments:

Groundwater Sampling Field Log
Milwaukie International Way
Annual Groundwater Sampling

Well ID: <u>MW-19-136</u>	Well Zone: <u>SG</u>	Date: <u>9/20/23</u>
Depth to Water (ft): <u>15.3'</u>	Well Depth (ft): <u>136</u>	Time: <u>1510</u>
Field Conditions: <u>Cloudy</u>	Field Personnel: <u>BMW HN</u>	
Decontamination: alconox + tap wash; tap rinse; DI rinse <u>YES</u>		

PURGE INFORMATION

Purge Method: <u>DUAL VALVE LOW FLOW</u>	Pumping Rate (GPM): <u>150 mL/min</u>	Equip. Depth (ft): <u>93'</u>
YSI Calibrated, refer to calibration log from: <u>9/20/23</u>		YSI#: <u>2</u>

Time	Purge Volume (gallons)	Temp. (°C)	SC (uS/cm)	DO (mg/L)	pH	ORP (mV)	Purge Rate (mL/min)	DTW (ft BTOC)	Pump Speed/*Clarity/ Color/Remarks (NTU)
Stabilization Criteria		± 0.2	±3% (SC>100) ±5% (SC≤100)	± 0.3	± 0.1	± 10	--	--	± 10% (NTU>5) 3 readings < 5 (NTU<5)
<u>15:11</u>	Pump On, Water Reaches the Purge Bucket							Initial	
<u>15:13</u>	<u>150 mL</u>	<u>16.7</u>	<u>278</u>	<u>3.87</u>	<u>7.08</u>	<u>-219.1</u>	<u>150 mL/min</u>	<u>15.31</u>	<u>29.3 NTU</u>
<u>15:16</u>	<u>400 mL</u>	<u>15.85</u>	<u>274</u>	<u>2.5</u>	<u>6.79</u>	<u>-193.6</u>	<u>"</u>	<u>16.23'</u>	<u>15 NTU</u>
<u>15:19</u>	<u>700 mL</u>	<u>15.75</u>	<u>279</u>	<u>1.79</u>	<u>6.80</u>	<u>-188.6</u>	<u>"</u>	<u>16.32'</u>	<u>7.59 NTU</u>
<u>15:22</u>	<u>1200 mL</u>	<u>15.55</u>	<u>281</u>	<u>0.84</u>	<u>6.98</u>	<u>-186.7</u>	<u>"</u>	<u>16.79'</u>	<u>3.63 NTU</u>
<u>15:25</u>	<u>1500 mL</u>	<u>15.56</u>	<u>280</u>	<u>0.59</u>	<u>7.08</u>	<u>-189.6</u>	<u>"</u>	<u>16.18'</u>	<u>3.77 NTU</u>
<u>15:28</u>	<u>1800 mL</u>	<u>15.46</u>	<u>278</u>	<u>0.56</u>	<u>7.17</u>	<u>-182.9</u>	<u>"</u>	<u>16.21'</u>	<u>4.93 NTU</u>
<u>15:30</u>	Start Sampling								
<u>15:35</u>	End Sampling								

* VC=Very cloudy CI=Cloudy SC=Slightly Cloudy VSC=Very Slightly Cloudy AC=Almost Clear C=Clear CC=Crystal Clear

Comments:

Sample Information:

Sample Type:	Sample ID:	Sample Date:	Sample Time:	Comments (container #, preservative, analyses):
<u>PREMIX</u>	<u>MW-19-136</u>	<u>9/20/23</u>	<u>1530</u>	<u>(5) UOA 8260 D</u>

Field Equipment:

Pump Type/Tubing Type:	<u>DUAL VALVE</u>
Water Quality Meter Type:	<u>YSI 556</u>
Water Level Probe Type:	<u>HERON</u>
Comments:	

Groundwater Sampling Field Log
Milwaukee International Way
Annual Groundwater Sampling

Well ID: MW-19-173	Well Zone: SG	Date: 9/20/23
Depth to Water (ft): 16.24	Well Depth (ft): 174'	Time:
Field Conditions: Cloudy	Field Personnel: BMW HN	
Decontamination: alconox + tap wash; tap rinse; DI rinse		

PURGE INFORMATION

Purge Method: Dual Valve, Low Flow	Pumping Rate (GPM): 150 ml/min	Equip. Depth (ft): 93'
YSI Calibrated, refer to calibration log from: 9/20/23		YSI#: 2

Time	Purge Volume (gallons)	Temp. (°C)	SC (uS/cm)	DO (mg/L)	pH	ORP (mV)	Purge Rate (mL/min)	DTW (ft BTOW)	Pump Speed/*Clarity/ Color/Remarks (NTU)
Stabilization Criteria									± 0.2 ±3% (SC>100) ±5% (SC≤100) ± 0.3 ± 0.1 ± 10 -- -- ± 10% (NTU>5) 3 readings < 5 (NTU<5)
14:16	Pump On, Water Reaches the Purge Bucket							Initial	
14:18	300ml	17.15	287	2.91	6.79	-183.3	150ml/min	16.28'	21.1 NTU 80.8 NTU
14:21	600ml	16.32	282	1.99	6.82	-174.5	"	16.31'	34.0 NTU
14:29	900ml	16.70	270	2.21	6.93	-179.6	"	16.24'	23.6 NTU
14:32	1200ml	16.07	266	0.96	7.06	-181.8	"	16.25'	46.2 NTU
14:35	1600ml	15.70	263	0.76	7.00	-175.7	"	16.29'	46.0 NTU
14:38	1900ml	15.50	260	0.54	7.02	-174.5	"	16.32'	40.3 NTU
14:41	2300ml	15.46	259	0.40	7.11	-176.7	"	16.31	41.8 NTU
14:44	2700ml	15.42	258	0.32	7.2	-177.6	"	16.26	40.8
14:45	Start Sampling								
14:50	End Sampling								

* VC=Very cloudy CI=Cloudy SC=Slightly Cloudy VSC=Very Slightly Cloudy AC=Almost Clear C=Clear CC=Crystal Clear

Comments:

Sample Information:

Sample Type:	Sample ID:	Sample Date:	Sample Time:	Comments (container #, preservative, analyses):
PRIMARY	MW-19-173	9/20/23	14:45	8260 D (3) UOAS
DUPLICATE	MW-19-173-D	9/20/23	14:46	8260 D (3) UOAS

Field Equipment:

Pump Type/Tubing Type: DVP
Water Quality Meter Type: YSI 55C
Water Level Probe Type: HERON

Comments:

Groundwater Sampling Field Log
Milwaukie International Way
Annual Groundwater Sampling

Well ID: OSB-1	Well Zone: LD	Date: 9/21/23
Depth to Water (ft): 13.74'	Well Depth (ft): 77.34	Time: 1342
Field Conditions: CLEAR	Field Personnel: OSMAU	
Decontamination: alconox + tap wash; tap rinse; DI rinse		

PURGE INFORMATION

Purge Method: DUAL VALVE LOW FLOW	Pumping Rate (GPM): 150 mL/min	Equip. Depth (ft): ~68'
YSI Calibrated, refer to calibration log from: 9121123		YSI#: 2

Time	Purge Volume (gallons)	Temp. (°C)	SC (uS/cm)	DO (mg/L)	pH	ORP (mV)	Purge Rate (mL/min)	DTW (ft BTOC)	Pump Speed/*Clarity/ Color/Remarks (NTU)
Stabilization Criteria		± 0.2	±3% (SC>100) ±5% (SC≤100)	± 0.3	± 0.1	± 10	--	--	± 10% (NTU>5) 3 readings < 5 (NTU<5)
13:45	Pump On, Water Reaches the Purge Bucket						150	Initial	
13:48	350 mL	20.12	406	4.24	7.03	-49.7	"	13.76'	9.19 NTU
13:51	200 mL	19.02	451	1.81	6.71	-34.3	"	13.75'	12.2 NTU
13:54	1100 mL	18.68	457	0.94	6.72	-36.6	"	13.75'	9.00 NTU
13:57	1450 mL	18.87	460	0.57	6.9	-45.6	"	13.76'	6.47 NTU
14:00	1800 mL	18.43	463	0.47	6.97	-50.0	"	13.74'	6.74 NTU
14:03	2150 mL	18.51	463	0.40	7.02	-52.9	"	13.75'	5.81 NTU
14:06									
:									
:									
:									
:	Start Sampling								
:	End Sampling								

* VC=Very cloudy CI=Cloudy SC=Slightly Cloudy VSC=Very Slightly Cloudy AC=Almost Clear C=Clear CC=Crystal Clear

Comments:

Sample Information:

Sample Type:	Sample ID:	Sample Date:	Sample Time:	Comments (container #, preservative, analyses):
PRIMARY	OSB-1	9/21/23	14:10	82600 (3) VOA ₅
PRIMARY	EQUIP-3	9/21/23	14:30	3x 40mL VOA ₅ , HCL 82600.

Field Equipment:

Pump Type/Tubing Type: DUP
Water Quality Meter Type: YSI SSC
Water Level Probe Type: H SOLINST 100

Comments:

Groundwater Sampling Field Log
Milwaukie International Way
Annual Groundwater Sampling

Well ID: OSIS-3-71	Well Zone: LD	Date: 9/21/23
Depth to Water (ft): 20.50'	Well Depth (ft): 71	Time: 9:37
Field Conditions: CC=CR	Field Personnel: BMW	
Decontamination:alconox + tap wash; tap rinse; DI rinse		

PURGE INFORMATION

Purge Method: DUAL VALVE LOW FLOW	Pumping Rate (GPM): 150 mL/min	Equip. Depth (ft): ~ 68'
YSI Calibrated, refer to calibration log from: 9/21/23		YSI#: 2

Time	Purge Volume (gallons)	Temp. (°C)	SC (uS/cm)	DO (mg/L)	pH	ORP (mV)	Purge Rate (mL/min)	DTW (ft BTOC)	Pump Speed/*Clarity/ Color/Remarks (NTU)
Stabilization Criteria		± 0.2	±3% (SC>100) ±5% (SC≤100)	± 0.3	± 0.1	± 10	--	--	± 10% (NTU>5) 3 readings < 5 (NTU<5)
9:37	Pump On, Water Reaches the Purge Bucket						150	Initial	
9:37	350 mL	15.12	253	6.05	7.43	3.5	-	20.52'	18.2 NTU
9:40	700 mL	14.98	340	3.65	7.24	3.5	-	20.55'	79.9 NTU
9:43	1100 mL	14.93	353	2.10	7.24	-2.5	-	20.50'	84.4 NTU
9:46	1450 mL	14.95	357	1.24	7.25	-7.8	-	20.30'	88.3 NTU
9:49	1700 mL	14.96	360	0.82	7.27	-14.4	-	20.50'	78.4 NTU
9:52	2100 mL	15.05	361	0.69	7.28	-18.3	-	20.51'	70.3 NTU
9:55	2400 mL	15.23	360	0.61	7.29	-22.0	-	20.50'	61.2 NTU
10:00	Start Sampling								
10:05	End Sampling								

* VC=Very cloudy CI=Cloudy SC=Slightly Cloudy VSC=Very Slightly Cloudy AC=Almost Clear C=Clear CC=Crystal Clear

Comments:

Sample Information:

Sample Type:	Sample ID:	Sample Date:	Sample Time:	Comments (container #, preservative, analyses):
PRIMARY	OSIS-3-71	9/21/23	10:00	8260D (3)VO4S

Field Equipment:

Pump Type/Tubing Type: DUP
Water Quality Meter Type: YSI 556
Water Level Probe Type: HERON 300
Comments:

Groundwater Sampling Field Log
Milwaukee International Way
Annual Groundwater Sampling

Well ID: <u>OSB-4</u>	Well Zone: <u>LD</u>	Date: <u>9/21/23</u>
Depth to Water (ft): <u>34.11'</u>	Well Depth (ft): <u>84.4'</u>	Time: <u>11:10</u>
Field Conditions: <u>CLEAR</u>	Field Personnel: <u>BSM</u>	
Decontamination: alconox + tap wash; tap rinse; DI rinse		

PURGE INFORMATION

Purge Method: <u>DUAL VALVE LOW FLOW</u>	Pumping Rate (GPM): <u>150 mL/min</u>	Equip. Depth (ft): <u>~82'</u>
YSI Calibrated, refer to calibration log from: <u>9/21/23</u>		YSI#: <u>2</u>

Time	Purge Volume (gallons)	Temp. (°C)	SC (uS/cm)	DO (mg/L)	pH	ORP (mV)	Purge Rate (mL/min)	DTW (ft BTOC)	Pump Speed/*Clarity/ Color/Remarks (NTU)
Stabilization Criteria		± 0.2	±3% (SC>100) ±5% (SC≤100)	± 0.3	± 0.1	± 10	--	--	± 10% (NTU>5) 3 readings < 5 (NTU<5)
<u>11:15</u>	Pump On, Water Reaches the Purge Bucket							Initial	
<u>11:19</u>	<u>300 mL</u>	<u>15.05</u>	<u>241</u>	<u>5.54</u>	<u>7.24</u>	<u>-6.5</u>	<u>150</u>	<u>34.14'</u>	<u>11 NTU</u>
<u>11:22</u>	<u>700 mL</u>	<u>14.40</u>	<u>325</u>	<u>3.95</u>	<u>7.14</u>	<u>2.7</u>	<u>" "</u>	<u>34.14'</u>	<u>126 NTU</u>
<u>11:25</u>	<u>1100 mL</u>	<u>14.22</u>	<u>339</u>	<u>2.96</u>	<u>7.16</u>	<u>-1.3</u>	<u>" "</u>	<u>34.14'</u>	<u>7.27 NTU</u>
<u>11:28</u>	<u>1500 mL</u>	<u>14.16</u>	<u>343</u>	<u>2.65</u>	<u>7.18</u>	<u>-5.4</u>	<u>" "</u>	<u>34.14'</u>	<u>5.48 NTU</u>
<u>11:31</u>	<u>1750 mL</u>	<u>14.11</u>	<u>344</u>	<u>2.41</u>	<u>7.20</u>	<u>-8.4</u>	<u>" "</u>	<u>34.14'</u>	<u>3.93 NTU</u>
<u>11:34</u>	<u>2100 mL</u>	<u>14.11</u>	<u>345</u>	<u>2.31</u>	<u>7.21</u>	<u>-10.4</u>	<u>" "</u>	<u>34.16'</u>	<u>2.64 NTU</u>
	Start Sampling								
	End Sampling								

* VC=Very cloudy CI=Cloudy SC=Slightly Cloudy VSC=Very Slightly Cloudy AC=Almost Clear C=Clear CC=Crystal Clear

Comments:

Sample Information:

Sample Type:	Sample ID:	Sample Date:	Sample Time:	Comments (container #, preservative, analyses):
<u>PRIMARY</u>	<u>OSB-4</u>	<u>9/21/23</u>	<u>1135</u>	<u>8260D 3 VOA's</u>
<u>DUPLICATE</u>	<u>OSB-4-D</u>	<u>9/21/23</u>	<u>1136</u>	<u>8260D 3 VOA's</u>

Field Equipment:

Pump Type/Tubing Type: <u>DVP</u>
Water Quality Meter Type: <u>YSI 556</u>
Water Level Probe Type: <u>HSPON 300</u>
Comments:

Groundwater Sampling Field Log
Milwaukie International Way
Annual Groundwater Sampling

Well ID: OSR-5-100	Well Zone: LD	Date: 9/20/23
Depth to Water (ft): 60.71	Well Depth (ft): 99.90'	Time: 8:25
Field Conditions: Cloudy	Field Personnel: BMW HN	
Decontamination:alconox + tap wash; tap rinse; DI rinse YES.		

PURGE INFORMATION	
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Purge Method: <u>DUAL VALVE LOW FLOW</u>	Pumping Rate (GPM): <u>150 ml/min</u>	Equip. Depth (ft): <u>94'</u>
YSI Calibrated, refer to calibration log from: <u>9/20/23</u>		YSI#: <u>2</u>

Time	Purge Volume (gallons)	Temp. (°C)	SC (uS/cm)	DO (mg/L)	pH	ORP (mV)	Purge Rate (mL/min)	DTW (ft BTOC)	Pump Speed/*Clarity/ Color/Remarks (NTU)
Stabilization Criteria		± 0.2	±3% (SC>100) ±5% (SC≤100)	± 0.3	± 0.1	± 10	--	--	± 10% (NTU>5) 3 readings < 5 (NTU<5)
8:32	Pump On, Water Reaches the Purge Bucket						150	Initial	
8:35	300 mL	13.40	349	9.96	6.98	-20.7	" "	60.74	2.9 NTU
8:38	750 mL	13.33	389	9.72	6.93	-22.3	" "	60.81	0.79 NTU
8:41	1000 mL	13.25	395	9.72	6.99	-27.4	" "	60.83	2.07 NTU
8:44	1500 mL	13.18	397	9.40	7.02	-31.5	" "	60.79	0.23 NTU
8:47	1700 mL	13.12	399	9.69	7.06	-34.9	" "	60.79	1.14 NTU
:									
:									
:									
:									
:									
8:50	Start Sampling								
8:55	End Sampling								

VC=Very cloudy CI=Cloudy SC=Slightly Cloudy VSC=Very Slightly Cloudy AC=Almost Clear C=Clear CC=Crystal Clear

Comments:

Sample Information:

Sample Type:	Sample ID:	Sample Date:	Sample Time:	Comments (container #, preservative, analyses):
PRIMARY	OSB-5-100	9/20/23	8:50	3 Vials 8260 D
		9/20/23 Paul		

Field Equipment:

Pump Type/Tubing Type:	DUAL VALVE
Water Quality Meter Type:	YSI
Water Level Probe Type:	WLe-300-1
Comments:	

Groundwater Sampling Field Log
Milwaukee International Way
Annual Groundwater Sampling

Well ID: OSB-3-130	Well Zone: LD	Date: 9/21/23
Depth to Water (ft): 21.75'	Well Depth (ft): 130	Time: 8:36
Field Conditions: CLEAR	Field Personnel: BMU	
Decontamination: alconox + tap wash; tap rinse; DI rinse		

PURGE INFORMATION

Purge Method: DUAL VALVE LOW FLOW	Pumping Rate (GPM): 150 mL/min	Equip. Depth (ft): ~95'
YSI Calibrated, refer to calibration log from: 9/21/23		YSI#: 2

Time	Purge Volume (gallons)	Temp. (°C)	SC (uS/cm)	DO (mg/L)	pH	ORP (mV)	Purge Rate (mL/min)	DTW (ft BTOC)	Pump Speed/*Clarity/ Color/Remarks (NTU)
Stabilization Criteria		± 0.2	±3% (SC>100) ±5% (SC≤100)	± 0.3	± 0.1	± 10	--	--	± 10% (NTU>5) 3 readings < 5 (NTU<5)
8:38	Pump On, Water Reaches the Purge Bucket						150 mL/min	Initial	
8:41	400 mL	13.55	243	5.81	7.62	24.0	" "	21.78'	0.02 NTU
8:44	200 mL	13.54	244	4.45	7.66	20.6	" "	21.82'	0.02 NTU
8:47	1100 mL	13.61	249	3.49	7.75	12.8	" "	21.83'	0.14 NTU
8:50	1500 mL	13.67	251	3.12	7.81	7.0	" "	21.82'	0.12 NTU
8:53	1800 mL	13.73	251	2.87	7.84	3.6	" "	21.82'	0.02 NTU
8:56	2200 mL	13.69	252	2.61	7.86	1.0	" "	21.80'	0.02 NTU
8:59	2600 mL	13.73	252	2.54	7.87	-1.6	" "	21.80'	0.02 NTU
9:00	Start Sampling								
9:05	End Sampling								

* VC=Very cloudy CI=Cloudy SC=Slightly Cloudy VSC=Very Slightly Cloudy AC=Almost Clear C=Clear CC=Crystal Clear

Comments: *All stabilized except DO;*

Sample Information:

Sample Type:	Sample ID:	Sample Date:	Sample Time:	Comments (container #, preservative, analyses):
PRIMARY	OSB-3-130	9/21/23	9:00	8260D (3) UOAS

Field Equipment:

Pump Type/Tubing Type: **DUP**

Water Quality Meter Type: **YSI 556**

Water Level Probe Type: **HELEON 300**

Comments:

Groundwater Sampling Field Log
Milwaukee International Way
Annual Groundwater Sampling

Well ID: <u>OSB-6-95</u>	Well Zone: <u>LOWER DEEP ZONE</u>	Date: <u>9-19-2023</u>
Depth to Water (ft): <u>31.35</u>	Well Depth (ft): <u>95</u>	Time: <u>1535</u>
Field Conditions: <u>70° Sunny</u>	Field Personnel: <u>Alex McCarthy, Braeden Warner</u>	
Decontamination: alconox + tap wash; tap rinse; DI rinse ☒		

PURGE INFORMATION

Purge Method: <u>Low Flow - DVP</u>	Pumping Rate (GPM): <u>150 mL/min</u>	Equip. Depth (ft): <u>~93'</u>
YSI Calibrated, refer to calibration log from: <u>9-19-2023</u>		YSI#: <u>772</u>

Time	Purge Volume (gallons)	Temp. (°C)	SC (uS/cm)	DO (mg/L)	pH	ORP (mV)	Purge Rate (mL/min)	DTW (ft BTOC)	Pump Speed/*Clarity/ Color/Remarks (NTU)
Stabilization Criteria		± 0.2	±3% (SC>100) ±5% (SC≤100)	± 0.3	± 0.1	± 10	--	--	± 10% (NTU>5) 3 readings < 5 (NTU<5)
<u>15:40</u>	Pump On, Water Reaches the Purge Bucket							<u>31.35</u> Initial	
<u>15:45</u>	<u>250mL</u>	<u>15.68</u>	<u>377</u>	<u>3.02</u>	<u>7.49</u>	<u>-296.8</u>	<u>150mL/min</u>	<u>31.38</u>	<u>8.13 NTU</u>
<u>15:50</u>	<u>500mL</u>	<u>14.98</u>	<u>391</u>	<u>1.12</u>	<u>7.39</u>	<u>-287.1</u>	<u>150mL/min</u>	<u>31.24</u>	<u>3.49 NTU</u>
<u>15:55</u>	<u>750mL</u>	<u>14.79</u>	<u>402</u>	<u>0.91</u>	<u>7.31</u>	<u>-284.0</u>	<u>150mL/min</u>	<u>31.38</u>	<u>2.52 NTU</u>
<u>16:00</u>	<u>1000mL</u>	<u>14.59</u>	<u>407</u>	<u>0.57</u>	<u>7.29</u>	<u>-278.7</u>	<u>150mL/min</u>	<u>31.28</u>	<u>2.09 NTU</u>
<u>16:05</u>	<u>1250mL</u>	<u>14.57</u>	<u>407</u>	<u>0.50</u>	<u>7.29</u>	<u>-277.9</u>	<u>150mL/min</u>	<u>31.31</u>	<u>1.62 NTU</u>
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<u>16:10</u>	Start Sampling							<u>31.31</u>	
<u>16:15</u>	End Sampling							<u>31.15</u>	

* VC=Very cloudy CI=Cloudy SC=Slightly Cloudy VSC=Very Slightly Cloudy AC=Almost Clear C=Clear CC=Crystal Clear

Comments: Purging rate of 150mL/min based on 50mL/20 sec pump purge cycle.

Sample Information:

Sample Type:	Sample ID:	Sample Date:	Sample Time:	Comments (container #, preservative, analyses):
<u>Primary</u>	<u>OSB-6-195</u> ^{ajm} <u>OSB-6-95</u>	<u>9-19-2023</u>	<u>1610</u>	<u>3x 40mL VOA, HCL</u> <u>82605</u>

Field Equipment:

Pump Type/Tubing Type: Double Valve Pump w/ LDPE

Water Quality Meter Type: YSI 856

Water Level Probe Type: Herron 300ft.

Comments:

Groundwater Sampling Field Log
Milwaukie International Way
Annual Groundwater Sampling

Well ID: <u>OSB-6-125</u>	Well Zone: <u>SAND & GRAVEL ZONE</u>	Date: <u>9-19-23</u>
Depth to Water (ft): <u>31.38</u>	Well Depth (ft): <u>125'</u>	Time: <u>1615</u>
Field Conditions: <u>71° Sunny</u>	Field Personnel: <u>Alice McElarthy, Bruecen Warner</u>	
Decontamination: alconox + tap wash; tap rinse; DI rinse ☒		

PURGE INFORMATION

Purge Method: <u>LOW FLOW - DUP</u>	Pumping Rate (GPM): <u>150 mL/min</u>	Equip. Depth (ft): <u>~93'</u>
YSI Calibrated, refer to calibration log from: <u>9-19-2023</u>		YSI#: <u>#2</u>

Time	Purge Volume (gallons)	Temp. (°C)	SC (uS/cm)	DO (mg/L)	pH	ORP (mV)	Purge Rate (mL/min)	DTW (ft BTOW)	Pump Speed/*Clarity/ Color/Remarks (NTU)
Stabilization Criteria		± 0.2	±3% (SC>100) ±5% (SC≤100)	± 0.3	± 0.1	± 10	--	--	± 10% (NTU>5) 3 readings < 5 (NTU<5)
<u>16:20</u>	Pump On, Water Reaches the Purge Bucket							<u>Initial</u> <u>31.38</u>	
<u>16:25</u>	<u>250mL</u>	<u>15.77</u>	<u>321</u>	<u>0.96</u>	<u>7.43</u>	<u>-218.2</u>	<u>150mL/min</u>	<u>31.85</u>	<u>2.57 NTU.</u>
<u>16:30</u>	<u>500mL</u>	<u>15.08</u>	<u>330</u>	<u>0.70</u>	<u>7.52</u>	<u>-218.5</u>	<u>150mL/min</u>	<u>31.78</u>	<u>12.7 NTU.</u>
<u>16:35</u>	<u>750mL</u>	<u>14.98</u>	<u>331</u>	<u>0.56</u>	<u>7.55</u>	<u>-220.3</u>	<u>150mL/min</u>	<u>31.80</u>	<u>8.43 NTU.</u>
<u>16:40</u>	<u>1000mL</u>	<u>14.87</u>	<u>332</u>	<u>0.41</u>	<u>7.61</u>	<u>-223.7</u>	<u>150mL/min</u>	<u>31.75</u>	<u>4.86 NTU.</u>
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<u>16:45</u>	Start Sampling							<u>31.75</u>	
<u>16:50</u>	End Sampling							<u>32.21</u>	

* VC=Very cloudy Cl=Cloudy SC=Slightly Cloudy VSC=Very Slightly Cloudy AC=Almost Clear C=Clear CC=Crystal Clear

Comments: Flow rate of 150mL/min based on 50mL/20sec pump purge cycle.

Sample Information:

Sample Type:	Sample ID:	Sample Date:	Sample Time:	Comments (container #, preservative, analyses):
<u>Primary</u>	<u>OSB-6-125</u>	<u>9-19-2023</u>	<u>1645</u>	<u>3x46mL UOAs, HCL.</u> <u>8260D.</u>

Field Equipment:

Pump Type/Tubing Type: <u>Double Valve Pump w/ LDPE</u>
Water Quality Meter Type: <u>YSI 556.</u>
Water Level Probe Type: <u>Hecan 308ft.</u>
Comments:

Groundwater Sampling Field Log
Milwaukie International Way
Annual Groundwater Sampling

Well ID: <u>OSB-6-160</u>	Well Zone: <u>SAND & GRAVEL ZONE</u>	Date: <u>9-19-2023</u>
Depth to Water (ft): <u>31.22</u>	Well Depth (ft): <u>160</u>	Time: <u>1705</u>
Field Conditions: <u>12° Sunny</u>	Field Personnel: <u>A. McCarthy, B. Warner, H. Norcom</u>	
Decontamination: alconox + tap wash; tap rinse; DI rinse ☒		

PURGE INFORMATION

Purge Method: <u>Low Flow - DVP</u>	Pumping Rate (GPM): <u>150 mL/min</u>	Equip. Depth (ft): <u>~93'</u>
YSI Calibrated, refer to calibration log from: <u>9-19-2023</u>		YSI#: <u>#2</u>

Time	Purge Volume (gallons)	Temp. (°C)	SC (uS/cm)	DO (mg/L)	pH	ORP (mV)	Purge Rate (mL/min)	DTW (ft BTOW)	Pump Speed/*Clarity/ Color/Remarks (NTU)
Stabilization Criteria		± 0.2	±3% (SC>100) ±5% (SC≤100)	± 0.3	± 0.1	± 10	--	--	± 10% (NTU>5) 3 readings < 5 (NTU<5)
<u>17:05</u>	Pump On, Water Reaches the Purge Bucket							Initial	
								<u>31.22</u>	
<u>17:10</u>	<u>250 mL</u>	<u>15.21</u>	<u>286</u>	<u>1.61</u>	<u>7.00</u>	<u>-257.1</u>	<u>150 mL/min</u>	<u>31.32</u>	<u>3.31 NTU</u>
<u>17:15</u>	<u>500 mL</u>	<u>14.85</u>	<u>296</u>	<u>0.46</u>	<u>7.02</u>	<u>-254.1</u>	<u>150 mL/min</u>	<u>31.31</u>	<u>2.84 NTU</u>
<u>17:20</u>	<u>750 mL</u>	<u>14.67</u>	<u>322</u>	<u>0.34</u>	<u>7.17</u>	<u>-257.1</u>	<u>150 mL/min</u>	<u>31.21</u>	<u>4.38 NTU</u>
<u>17:25</u>	<u>1000 mL</u>	<u>14.86</u>	<u>343</u>	<u>0.57</u>	<u>7.30</u>	<u>-257.6</u>	<u>150 mL/min</u>	<u>31.25</u>	<u>3.64 NTU</u>
<u>17:30</u>	<u>1250 mL</u>	<u>14.44</u>	<u>360</u>	<u>0.44</u>	<u>7.44</u>	<u>-254.6</u>	<u>150 mL/min</u>	<u>31.18</u>	<u>2.64 NTU</u>
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<u>17:35</u>	Start Sampling							<u>31.18</u>	
:	End Sampling								

* VC=Very cloudy CI=Cloudy SC=Slightly Cloudy VSC=Very Slightly Cloudy AC=Almost Clear C=Clear CC=Crystal Clear

Comments: Purge rate of 150 mL/min based on 50 mL/20 sec purge pump cycle.

Sample Information:

Sample Type:	Sample ID:	Sample Date:	Sample Time:	Comments (container #, preservative, analyses):
<u>Primary</u>	<u>OSB-6-160</u>	<u>9-19-2023</u>	<u>1735</u>	<u>3x 40mL VOA's HCL</u> <u>8260D</u>
<u>Rinseate</u>	<u>EQUIP-1</u>	<u>9-19-2023</u>	<u>1800</u>	<u>3x 40mL VOA's, HCL</u> <u>8260D</u>

Field Equipment:

Pump Type/Tubing Type: Double Valve Pump w/ LDPE
 Water Quality Meter Type: YSI 556
 Water Level Probe Type: Heron 300ft.
 Comments:

Groundwater Sampling Field Log
Milwaukie International Way
Annual Groundwater Sampling

Well ID: <u>OSB-9-95</u>	Well Zone: <u>Lower T. REP Zone</u>	Date: <u>9-19-2023</u>
Depth to Water (ft): <u>33.40</u>	Well Depth (ft): <u>95.00'</u>	Time: <u>10:45</u>
Field Conditions: <u>60° Sunny</u>	Field Personnel: <u>Alex McCarthy, Brandon Warner</u>	
Decontamination: alconox + tap wash; tap rinse; DI rinse ☒		

PURGE INFORMATION

Purge Method: <u>Low-Flow-DWT</u>	Pumping Rate (GPM): <u>150 mL/min</u>	Equip. Depth (ft): <u>93.5</u>
YSI Calibrated, refer to calibration log from: <u>YSI #2 9-19-2023</u>		YSI#: <u>#2</u>

Time	Purge Volume (gallons)	Temp. (°C)	SC (uS/cm)	DO (mg/L)	pH	ORP (mV)	Purge Rate (mL/min)	DTW (ft BTOW)	Pump Speed/*Clarity/ Color/Remarks (NTU)
Stabilization Criteria		± 0.2	±3% (SC>100) ±5% (SC≤100)	± 0.3	± 0.1	± 10	--	--	± 10% (NTU>5) 3 readings < 5 (NTU<5)
<u>11:05</u>	Pump On, Water Reaches the Purge Bucket							Initial <u>33.40</u>	<u>PSE set to 48</u>
<u>11:20</u>	<u>760 mL</u>	<u>15.78</u>	<u>446</u>	<u>29.7</u>	<u>7.04</u>	<u>-121.6</u>	<u>150 mL/min</u>	<u>33.76</u>	<u>5.71 NTU</u>
<u>11:25</u>	<u>950 mL</u>	<u>15.35</u>	<u>416</u>	<u>12.9</u>	<u>7.24</u>	<u>-125.8</u>	<u>150 mL/min</u>	<u>33.81</u>	<u>35.9 NTU</u>
<u>11:30</u>	<u>1200 mL</u>	<u>15.29</u>	<u>418</u>	<u>9.8</u>	<u>7.31</u>	<u>-123.4</u>	<u>150 mL/min</u>	<u>33.82</u>	<u>24.6 NTU</u>
<u>11:35</u>	<u>1450 mL</u>	<u>15.09</u>	<u>418</u>	<u>9.1</u>	<u>7.35</u>	<u>-118.1</u>	<u>150 mL/min</u>	<u>33.85</u>	<u>22.9 NTU</u>
<u>11:40</u>		<u>15.11</u>	<u>418</u>	<u>8.8</u>	<u>7.38</u>	<u>-114.3</u>	<u>150 mL/min</u>	<u>33.87</u>	<u>19.6 NTU</u>
<u>11:45</u>	Start Sampling							<u>33.84</u>	
<u>11:50</u>	End Sampling							<u>33.86</u>	

* VC=Very cloudy Cl=Cloudy SC=Slightly Cloudy VSC=Very Slightly Cloudy AC=Almost Clear C=Clear CC=Crystal Clear

Comments: Purge rate is based on 50 mL/20s when pump is discharging.

Sample Information:

Sample Type:	Sample ID:	Sample Date:	Sample Time:	Comments (container #, preservative, analyses):
<u>Primary</u>	<u>OSB-9-95</u>	<u>9-19-2023</u>	<u>1145</u>	<u>3x40mL VOA, HCL</u> <u>8260D.</u>

Field Equipment:

Pump Type/Tubing Type: <u>Double Valve Pump w/ LPE Tubing</u>
Water Quality Meter Type: <u>YSI 550</u>
Water Level Probe Type: <u>Heron 300ft.</u>
Comments:

Groundwater Sampling Field Log
Milwaukie International Way
Annual Groundwater Sampling

Well ID: <u>OSB-9-125</u>	Well Zone: <u>SAR & GRAVE TONE</u>	Date: <u>9-19-23</u>
Depth to Water (ft): <u>33.83</u>	Well Depth (ft): <u>125</u>	Time: <u>1208</u>
Field Conditions: <u>64° Sunny</u>	Field Personnel: <u>Alex McCarthy, Braeden Warner</u>	
Decontamination: <u>alconox + tap wash; tap rinse; DI rinse</u> ✓		

PURGE INFORMATION

Purge Method: <u>Low Flow - DVP</u>	Pumping Rate (GPM): <u>150 mL/min = 150 mL/min</u>	Equip. Depth (ft): <u>93</u>
YSI Calibrated, refer to calibration log from: <u>9-19-23</u>		YSI#: <u>#2</u>

Time	Purge Volume (gallons)	Temp. (°C)	SC (uS/cm)	DO (mg/L)	pH	ORP (mV)	Purge Rate (mL/min)	DTW (ft BTOW)	Pump Speed/*Clarity/ Color/Remarks (NTU)
Stabilization Criteria		± 0.2	±3% (SC>100) ±5% (SC≤100)	± 0.3	± 0.1	± 10	--	--	± 10% (NTU>5) 3 readings < 5 (NTU<5)
<u>12:10</u>	Pump On, Water Reaches the Purge Bucket							Initial <u>33.83</u>	
<u>12:25</u>	<u>750 mL</u>	<u>16.18</u>	<u>399</u>	<u>2.26</u>	<u>7.18</u>	<u>-165.1</u>	<u>150 mL/min</u>	<u>34.26</u>	<u>7.63 NTU</u>
<u>12:30</u>	<u>1000 mL</u>	<u>15.46</u>	<u>399</u>	<u>1.38</u>	<u>7.32</u>	<u>-172.0</u>	<u>150 mL/min</u>	<u>34.23</u>	<u>5.25 NTU</u>
<u>12:35</u>	<u>1250 mL</u>	<u>15.76</u>	<u>400</u>	<u>1.99</u>	<u>7.43</u>	<u>-177.1</u>	<u>150 mL/min</u>	<u>34.05</u>	<u>3.84 NTU</u>
<u>12:40</u>	<u>1500 mL</u>	<u>15.59</u>	<u>401</u>	<u>1.86</u>	<u>7.46</u>	<u>-177.9</u>	<u>150 mL/min</u>	<u>34.37</u>	<u>3.36 NTU</u>
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<u>12:45</u>	Start Sampling							<u>34.37</u>	
<u>12:50</u>	End Sampling							<u>34.24</u>	

* VC=Very cloudy Cl=Cloudy SC=Slightly Cloudy VSC=Very Slightly Cloudy AC=Almost Clear C=Clear CC=Crystal Clear

Comments: Sample rate based on 50 mL/min during pump purge cycles.

Sample Information:

Sample Type:	Sample ID:	Sample Date:	Sample Time:	Comments (container #, preservative, analyses):
<u>Primary</u>	<u>OSB-9-125</u>	<u>9/19/2023</u>	<u>1245</u>	<u>3x40mL Vials, HCL, 8260D</u>

Field Equipment:

Pump Type/Tubing Type: <u>Double Valve Pump w/ LDPE</u>
Water Quality Meter Type: <u>YSI 556</u>
Water Level Probe Type: <u>Hessan 300ft.</u>
Comments:

Groundwater Sampling Field Log
Milwaukie International Way
Annual Groundwater Sampling

Well ID: <u>OSB-9-160</u>	Well Zone: <u>SAND & GRAVEL ZONE</u>	Date: <u>9-19-2023</u>
Depth to Water (ft): <u>34.05</u>	Well Depth (ft): <u>160</u>	Time: <u>1300</u>
Field Conditions: <u>65° Sunny</u>	Field Personnel: <u>Alex McLaughlin, Braden Warner</u>	
Decontamination: <u>alconox + tap wash; tap rinse; DI rinse</u> ✓		

PURGE INFORMATION

Purge Method: <u>Low Flow - DUP</u>	Pumping Rate (GPM): <u>150 mL/min</u>	Equip. Depth (ft): <u>93</u>
YSI Calibrated, refer to calibration log from: <u>9-19-23</u>		YSI#: <u>#2</u>

Time	Purge Volume (gallons)	Temp. (°C)	SC (uS/cm)	DO (mg/L)	pH	ORP (mV)	Purge Rate (mL/min)	DTW (ft BTOC)	Pump Speed/*Clarity/ Color/Remarks (NTU)
Stabilization Criteria		± 0.2	±3% (SC>100) ±5% (SC≤100)	± 0.3	± 0.1	± 10	--	--	± 10% (NTU>5) 3 readings < 5 (NTU<5)
<u>13:05</u>	Pump On, Water Reaches the Purge Bucket							<u>Initial</u> <u>34.05</u>	<u>Purge Order</u>
<u>13:10</u>	<u>750</u>	<u>16.64</u>	<u>442</u>	<u>0.90</u>	<u>7.17</u>	<u>-216.4</u>	<u>150 mL/min</u>	<u>34.51</u>	<u>2.60 NTU</u>
<u>13:15</u>	<u>520</u>	<u>15.79</u>	<u>444</u>	<u>0.90</u>	<u>7.21</u>	<u>-233.3</u>	<u>150 mL/min</u>	<u>34.55</u>	<u>2.30 NTU</u>
<u>13:20</u>	<u>750</u>	<u>15.38</u>	<u>428</u>	<u>0.56</u>	<u>7.34</u>	<u>-243.8</u>	<u>150 mL/min</u>	<u>34.85</u>	<u>2.03 NTU</u>
<u>13:25</u>	<u>1000</u>	<u>15.37</u>	<u>421</u>	<u>0.43</u>	<u>7.40</u>	<u>-243.9</u>	<u>150 mL/min</u>	<u>34.82</u>	<u>2.61 NTU</u>
<u>13:30</u>	<u>1250</u>	<u>15.35</u>	<u>422</u>	<u>0.41</u>	<u>7.41</u>	<u>-243.8</u>	<u>150 mL/min</u>	<u>34.83</u>	<u>2.58 NTU</u>
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<u>13:35</u>	Start Sampling							<u>34.83</u>	
<u>13:40</u>	End Sampling							<u>33.99</u>	

* VC=Very cloudy CI=Cloudy SC=Slightly Cloudy VSC=Very Slightly Cloudy AC=Almost Clear C=Clear CC=Crystal Clear

Comments: 150 mL/min purge rate based on 50 mL/20 sec pump purge cycle.

Sample Information:

Sample Type:	Sample ID:	Sample Date:	Sample Time:	Comments (container #, preservative, analyses):
<u>Primary</u>	<u>OSB-9-160</u>	<u>9-19-23</u>	<u>1335</u>	<u>3x 40 mL VOA, HCL</u> <u>8260D.</u>

Field Equipment:

Pump Type/Tubing Type: <u>Double Valve Pump w/ LOPE</u>
Water Quality Meter Type: <u>YSI 556</u>
Water Level Probe Type: <u>H/can 300 ft.</u>

Comments:

Groundwater Sampling Field Log
Milwaukie International Way
Annual Groundwater Sampling

OSB-9-185

Well ID: OSB-9-185	Well Zone: SAND & GRAVEL ZONE	Date: 09-19-23
Depth to Water (ft): 33.99	Well Depth (ft): 185	Time: 1345
Field Conditions: 64° Sunny	Field Personnel: Alex McCarthy, Braeden Warner	
Decontamination: alconox + tap wash; tap rinse; DI rinse ✓		

PURGE INFORMATION

Purge Method: Low Flow - DVR	Pumping Rate (GPM): 150 mL/min	Equip. Depth (ft): -93'
YSI Calibrated, refer to calibration log from: 9-19-23		YSI#: #2

Time	Purge Volume (gallons)	Temp. (°C)	SC (uS/cm)	DO (mg/L)	pH	ORP (mV)	Purge Rate (mL/min)	DTW (ft BTOC)	Pump Speed/*Clarity/ Color/Remarks (NTU)
Stabilization Criteria		± 0.2	±3% (SC>100) ±5% (SC≤100)	± 0.3	± 0.1	± 10	--	--	± 10% (NTU>5) 3 readings < 5 (NTU<5)
13:50	Pump On, Water Reaches the Purge Bucket							33.99 Initial	Sulfuric Odor.
13:55	250 mL	16.35	380	3.04	7.13	-266.9	150 mL/min	34.36	7.02 NTU
14:00	500 mL	15.73	386	1.37	7.14	-267.6	150 mL/min	34.23	11.2 NTU
14:05	750 mL	15.36	389	0.59	7.26	-272.9	150 mL/min	34.35	13.31 NTU
14:10	1000 mL	15.22	390	0.39	7.35	-284.6	150 mL/min	34.34	12.4 NTU
14:15	1250 mL	15.09	391	0.38	7.41	-287.2	150 mL/min	34.21	8.85 NTU
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14:20	Start Sampling							34.21	
:	End Sampling							33.85	

* VC=Very cloudy CI=Cloudy SC=Slightly Cloudy VSC=Very Slightly Cloudy AC=Almost Clear C=Clear CC=Crystal Clear

Comments: Purge rate of 150 mL/min is based on 50 mL/20 sec pump purge cycle.

Sample Information:

Sample Type:	Sample ID:	Sample Date:	Sample Time:	Comments (container #, preservative, analyses):
Primary	OSB-9-185	9-19-23	1420	3x 40 mL VOA's, HCL, 8260 D.

Field Equipment:

Pump Type/Tubing Type: Double Valve Pump w/ LDPE
Water Quality Meter Type: YSI 556
Water Level Probe Type: Herron 360ft.

Comments:

Groundwater Sampling Field Log
Milwaukie International Way
Annual Groundwater Sampling

Well ID: <u>OSB-9-218</u>	Well Zone: <u>SAND & GRAVEL ZONE</u>	Date: <u>9-19-2023</u>
Depth to Water (ft): <u>33.78</u>	Well Depth (ft): <u>218</u>	Time: <u>1430</u>
Field Conditions: <u>09° Sunny</u>	Field Personnel: <u>Alex McParthy, Braeden Warner</u>	
Decontamination: <u>all conox + tap wash; tap rinse; DI rinse</u> ✓		

PURGE INFORMATION

Purge Method: <u>Low Flow</u>	Pumping Rate (GPM): <u>150 mL/min</u>	Equip. Depth (ft): <u>~93'</u>
YSI Calibrated, refer to calibration log from: <u>9-19-2023</u>		YSI#: <u>#2</u>

Time	Purge Volume (gallons)	Temp. (°C)	SC (uS/cm)	DO (mg/L)	pH	ORP (mV)	Purge Rate (mL/min)	DTW (ft BTOC)	Pump Speed/*Clarity/ Color/Remarks (NTU)
Stabilization Criteria		± 0.2	±3% (SC>100) ±5% (SC≤100)	± 0.3	± 0.1	± 10	--	--	± 10% (NTU>5) 3 readings < 5 (NTU<5)
<u>14:30</u>	<u>Pump On, Water Reaches the Purge Bucket</u>								<u>Initial</u>
								<u>33.78</u>	
<u>14:35</u>	<u>250 mL</u>	<u>17.44</u>	<u>317</u>	<u>4.03</u>	<u>7.14</u>	<u>-271.4</u>	<u>150 mL/min</u>	<u>34.70</u>	<u>9.67 NTU</u>
<u>14:40</u>	<u>500 mL</u>	<u>16.23</u>	<u>332</u>	<u>1.47</u>	<u>7.06</u>	<u>-267.5</u>	<u>150 mL/min</u>	<u>34.82</u>	<u>8.72 NTU</u>
<u>14:45</u>	<u>750 mL</u>	<u>15.57</u>	<u>332</u>	<u>0.62</u>	<u>7.10</u>	<u>-268.8</u>	<u>150 mL/min</u>	<u>34.36</u>	<u>18.5 NTU</u>
<u>14:50</u>	<u>1000 mL</u>	<u>15.13</u>	<u>332</u>	<u>0.29</u>	<u>7.29</u>	<u>-274.9</u>	<u>150 mL/min</u>	<u>34.75</u>	<u>17.2 NTU</u>
<u>14:55</u>	<u>1250 mL</u>	<u>14.98</u>	<u>332</u>	<u>0.32</u>	<u>7.53</u>	<u>-277.1</u>	<u>150 mL/min</u>	<u>34.38</u>	<u>17.5 NTU</u>
:									
:									
:									
:									
:									
:									
<u>15:00</u>	<u>Start Sampling</u>								<u>34.38</u>
<u>15:05</u>	<u>End Sampling</u>								<u>33.98</u>

* VC=Very cloudy CI=Cloudy SC=Slightly Cloudy VSC=Very Slightly Cloudy AC=Almost Clear C=Clear CC=Crystal Clear

Comments: Purge rate of 150 mL/min based on 50 mL/20 sec pump purge cycle.

Sample Information:

Sample Type:	Sample ID:	Sample Date:	Sample Time:	Comments (container #, preservative, analyses):
<u>Primary</u>	<u>OSB-9-218</u>	<u>9-19-2023</u>	<u>1500</u>	<u>3x 40mL VOA, HCL</u>
<u>Duplicate</u>	<u>OSB-9-218-D</u>	<u>9-19-2023</u>	<u>1501</u>	<u>8260D.</u> <u>3x 40mL VOA, HCL</u> <u>8260D.</u>

Field Equipment:

Pump Type/Tubing Type: Double Valve Pump w/ LDPE
 Water Quality Meter Type: YSI 556
 Water Level Probe Type: Herron 300ft.

Comments:

$$\begin{array}{r} -119 \\ -98 \\ \hline \end{array}$$

PURGE INFORMATION		
Purge Method: <u>DUAL VALVE LOW FLOW</u>	Pumping Rate (GPM):	Equip. Depth (ft):
YSI Calibrated, refer to calibration log from: <u>9/20/23</u>	YSI#: <u>2</u>	

• VC=Very cloudy CI=Cloudy SC=Slightly Cloudy VSC=Very Slightly Cloudy AC=Almost Clear C=Clear CC=Crystal Clear	
Comments:	

Field Equipment:	
Pump Type/Tubing Type:	
Water Quality Meter Type:	
Water Level Probe Type:	

Comments: DTS MEASURED IN CH1 (TALL) OPTION 1 (26.55') AND 2 (26.45') CSB-10-
CH2 " (26.50') " (26.50')
CH3 " (26.48') " (26.53')

Add Poly. Coating must be bent at that depth. Re-coated...
or suggest

Groundwater Sampling Field Log
Milwaukie International Way
Annual Groundwater Sampling

Well ID: OSB-10-154	Well Zone: SC	Date: 9/20/23
Depth to Water (ft): 27.51'	Well Depth (ft): 154	Time:
Field Conditions: Rain	Field Personnel: DMW & JN	
Decontamination: alconox + tap wash; tap rinse; DI rinse YES		

PURGE INFORMATION

Purge Method: DUAL VALVE LOW FLOW	Pumping Rate (GPM): 150 mL/min	Equip. Depth (ft): ~94'
YSI Calibrated, refer to calibration log from: 9/20/23		YSI#: 2

Time	Purge Volume (gallons)	Temp. (°C)	SC (uS/cm)	DO (mg/L)	pH	ORP (mV)	Purge Rate (mL/min)	DTW (ft BTOC)	Pump Speed/*Clarity/ Color/Remarks (NTU)
Stabilization Criteria		± 0.2	±3% (SC>100) ±5% (SC≤100)	± 0.3	± 0.1	± 10	--	--	± 10% (NTU>5) 3 readings < 5 (NTU<5)
10:18	Pump On, Water Reaches the Purge Bucket							Initial	
10:25	450 mL	15.68	444	1.01	7.22	-181.5	150 mL/min	27.84'	27 NTU
10:26	700 mL	15.7	445	0.60	7.09	-183.0	"	27.79'	46.2 NTU
10:29	1100 mL	15.10	445	0.52	7.10	-190.2	"	27.62'	60.4 NTU
10:31	1400 mL	15.01	446	0.42	7.16	-203.7	"	27.52'	75.9 NTU
10:35	1700 mL	15.11	447	0.57	7.18	-210.6	"	27.60'	110 NTU CI GRAY
10:38	2000 mL	14.98	449	0.44	7.23	-218.1	"	27.55'	110 NTU CI GRAY
10:41	2400 mL	14.91	451	0.55	7.25	-219.9	"	27.52'	110 NTU CI GRAY
11:45	Start Sampling								
11:50	End Sampling								

* VC=Very cloudy CI=Cloudy SC=Slightly Cloudy VSC=Very Slightly Cloudy AC=Almost Clear C=Clear CC=Crystal Clear

Comments:

Sample Information:

Sample Type:	Sample ID:	Sample Date:	Sample Time:	Comments (container #, preservative, analyses):
PRIMARY	OSB-10-154	9/20/23	10:45	6260 D VSCS, 3 VCS

Field Equipment:

Pump Type/Tubing Type: DUAL VALVE
Water Quality Meter Type: YSI
Water Level Probe Type: WLC-3001

Comments:

Groundwater Sampling Field Log
Milwaukee International Way
Annual Groundwater Sampling

Well ID: <u>OSB-10-199</u>	Well Zone: <u>SG</u>	Date: <u>9/20/23</u>
Depth to Water (ft): <u>26.41'</u>	Well Depth (ft): <u>199</u>	Time: <u>11:10</u>
Field Conditions: <u>Cloudy</u>	Field Personnel: <u>BW UN</u>	
Decontamination:alconox + tap wash; tap rinse; DI rinse <u>YES</u>		

PURGE INFORMATION

Purge Method: <u>DUAL VALVE LOW FLOW</u>	Pumping Rate (GPM): <u>150 mL/min</u>	Equip. Depth (ft): <u>93'</u>
YSI Calibrated, refer to calibration log from: <u>9/20/23</u>		YSI#: <u>2</u>

Time	Purge Volume (gallons)	Temp. (°C)	SC (uS/cm)	DO (mg/L)	pH	ORP (mV)	Purge Rate (mL/min)	DTW (ft BTOC)	Pump Speed/*Clarity/ Color/Remarks (NTU)
Stabilization Criteria		± 0.2	±3% (SC>100) ±5% (SC≤100)	± 0.3	± 0.1	± 10	--	--	± 10% (NTU>5) 3 readings < 5 (NTU<5)
<u>11:12</u>	Pump On, Water Reaches the Purge Bucket							Initial	
<u>11:13</u>	<u>150 mL</u>	<u>16.20</u>	<u>207</u>	<u>6.48</u>	<u>7.37</u>	<u>-308.3</u>	<u>150</u>	<u>28.91'</u>	<u>32.7 NTU</u>
<u>11:16</u>	<u>500 mL</u>	<u>15.60</u>	<u>341</u>	<u>3.80</u>	<u>7.12</u>	<u>-270.2</u>	"	<u>29.55'</u>	<u>38.7 NTU</u>
<u>11:19</u>	<u>900 mL</u>	<u>15.20</u>	<u>364</u>	<u>2.98</u>	<u>6.99</u>	<u>-257.2</u>	"	<u>30.10'</u>	<u>26.3 NTU</u>
<u>11:22</u>	<u>1250 mL</u>	<u>15.08</u>	<u>371</u>	<u>2.01</u>	<u>6.98</u>	<u>-257.0</u>	"	<u>28.72'</u>	<u>19.0 NTU</u>
<u>11:25</u>	<u>1650 mL</u>	<u>14.97</u>	<u>375</u>	<u>1.32</u>	<u>7.01</u>	<u>-260.3</u>	"	<u>30.08'</u>	<u>16.5 NTU</u>
<u>11:28</u>	<u>2000 mL</u>	<u>14.99</u>	<u>377</u>	<u>1.57</u>	<u>7.06</u>	<u>-262.6</u>	"	<u>29.55'</u>	<u>13.6 NTU</u>
<u>11:31</u>	<u>2350 mL</u>	<u>14.92</u>	<u>379</u>	<u>1.24</u>	<u>7.10</u>	<u>-263.9</u>	"	<u>29.85'</u>	<u>14.7 NTU</u>
<u>11:35</u>	Start Sampling								
<u>11:40</u>	End Sampling								

* VC=Very cloudy CI=Cloudy SC=Slightly Cloudy VSC=Very Slightly Cloudy AC=Almost Clear C=Clear CC=Crystal Clear

Comments:

Sample Information:

Sample Type:	Sample ID:	Sample Date:	Sample Time:	Comments (container #, preservative, analyses):
<u>PRIMARLY</u>	<u>OSB-10-199</u>	<u>9/20/23</u>	<u>11:35</u>	<u>8260 D VAC(3) VOA</u>

Field Equipment:

Pump Type/Tubing Type: <u>DUAL VALVE</u>
Water Quality Meter Type: <u>YSI #2</u>
Water Level Probe Type: <u>HERON</u>

Comments:

Groundwater Sampling Field Log
Milwaukee International Way
Annual Groundwater Sampling

Well ID: <u>OSB-10-227</u>	Well Zone: <u>SG</u>	Date: <u>9/20/23</u>
Depth to Water (ft): <u>26.56'</u>	Well Depth (ft): <u>727</u>	Time: <u>1202</u>
Field Conditions: <u>cloudy</u>	Field Personnel: <u>DMW HN</u>	
Decontamination:alconox + tap wash; tap rinse; DI rinse <u>YES</u>		

PURGE INFORMATION

Purge Method: <u>DUAL VALVE, LOW FLOW</u>	Pumping Rate (GPM): <u>150 mL/min</u>	Equip. Depth (ft): <u>93'</u>
YSI Calibrated, refer to calibration log from: <u>9/20/23</u>		YSI#: <u>2</u>

Time	Purge Volume (gallons)	Temp. (°C)	SC (uS/cm)	DO (mg/L)	pH	ORP (mV)	Purge Rate (mL/min)	DTW (ft BTOC)	Pump Speed/*Clarity/ Color/Remarks (NTU)
Stabilization Criteria		± 0.2	±3% (SC>100) ±5% (SC≤100)	± 0.3	± 0.1	± 10	--	--	± 10% (NTU>5) 3 readings < 5 (NTU<5)
12:05	Pump On, Water Reaches the Purge Bucket							Initial	
12:07	400 mL	17.26	327	4.46	7.05	-308.2	150 mL/min	27.25'	13.3 NTU
12:10	400 mL	16.65	360	3.73	6.81	-290.2	"	28.14'	15.2 NTU
12:13	700 mL	16.50	366	1.42	6.86	-285.4	"	28.07'	16.2 NTU
12:16	1000 mL	16.31	369	0.79	6.97	-277.5	"	27.79'	15.2 NTU 15.2
12:19	1400 mL	16.19	372	0.59	7.03	-284.8	"	27.89'	14.7 NTU
12:22	1700 mL	16.20	374	0.54	7.10	-287.2	"	27.98	21.1 NTU
12:25	Start Sampling								
12:30	End Sampling								

* VC=Very cloudy CI=Cloudy SC=Slightly Cloudy VSC=Very Slightly Cloudy AC=Almost Clear C=Clear CC=Crystal Clear

Comments: DIFFICULT TO PUSH DOWN TUBING

Sample Information:

Sample Type:	Sample ID:	Sample Date:	Sample Time:	Comments (container #, preservative, analyses):
<u>PRIMARY</u>	<u>OSB-10-227</u>	<u>9/20/23</u>	<u>12:25</u>	<u>8760 D VOC VOA (3)</u>

Field Equipment:

Pump Type/Tubing Type:	<u>DUAL VALVE</u>
Water Quality Meter Type:	<u>YSI 556</u>
Water Level Probe Type:	<u>HERON 300</u>

Comments:

APPENDIX B

Historical Water Quality Data

Table B-1. Historical Groundwater Concentrations for Key Analytes

2023 Annual Groundwater Monitoring Report

Milwaukie International Way
Milwaukie, Oregon

Well	Date	Chlorinated Ethenes						Chlorinated Ethanes	
		PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	VC	1,1,1-TCA	1,1-DCA
		µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q
EXT-1	3/17/2008	1.5	200	450	2.3	1.2	38	0.50 U	0.50 U
EXT-1	6/24/2008	1.00 U	110	550	1.9	1.9	100	1.00 U	1.00 U
EXT-1	5/4/2009	0.50 U	4.1	7.4	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
EXT-1	5/20/2009	0.50 U	41	750	6.1	3.3	230	0.50 U	0.50 U
EXT-1	8/17/2009	0.91	110	270	2.5	0.85 J	33 J	0.50 U	0.50 U
EXT-1	8/18/2009	0.99	120	290	1.4	0.91	37 J	0.50 U	0.50 U
EXT-1	8/19/2009	1.2	170	420	1.9	1.5	54 J	0.50 U	0.50 U
EXT-1	8/20/2009	0.50	93	320	1.1	1.6	61	0.50 U	0.50 U
EXT-1	8/21/2009	0.50 U	14	160	0.50 U	0.94	71	0.50 U	0.50 U
EXT-1	8/22/2009	0.89	130	210	1.2	1.2	35	0.50 U	0.50 U
EXT-1	8/23/2009	0.69	130	220	1.1	0.94	33	0.50 U	0.50 U
EXT-1	8/24/2009	0.90	130	190	1.00	0.94	23	0.50 U	0.50 U
EXT-1	8/25/2009	0.54	86	120	0.70	0.71	15	0.50 U	0.50 U
EXT-1	8/26/2009	0.65	100	140	0.74	0.68	16	0.50 U	0.50 U
EXT-1	8/27/2009	0.84	120	160	0.87	0.70	20	0.50 U	0.50 U
EXT-1	8/28/2009	0.61	90	140	0.71	0.59	24	0.50 U	0.50 U
EXT-1	8/29/2009	0.59	91	120	0.67	0.64	19	0.50 U	0.50 U
EXT-1	8/30/2009	0.75	110	150	0.99	0.90	23	0.50 U	0.50 U
EXT-1	8/31/2009	0.75	92	150	0.81	0.73	25	0.50 U	0.50 U
EXT-1	9/1/2009	0.52	71	130	0.65	0.55	20	0.50 U	0.50 U
EXT-1	9/2/2009	0.50 U	47	75	0.50 U	0.50 U	15	0.50 U	0.50 U
EXT-1	9/3/2009	0.50 U	41	58	0.50 U	0.50 U	12	0.50 U	0.50 U
EXT-1	9/4/2009	0.50 U	31	52	0.50 U	0.50 U	13	0.50 U	0.50 U
EXT-1	9/5/2009	0.50 U	32	68	0.50 U	0.50 U	16	0.50 U	0.50 U
EXT-1	9/6/2009	0.50 U	5.0	21	0.50 U	0.50 U	11	0.50 U	0.50 U
EXT-1	9/7/2009	0.50 U	5.6	18	0.50 U	0.50 U	7.2	0.50 U	0.50 U
EXT-1	9/8/2009	0.50 U	17	58	0.50 U	0.50 U	18	0.50 U	0.50 U
EXT-1	9/9/2009	0.50 U	10.0	71	0.50 U	0.50 U	21	0.50 U	0.50 U
EXT-1	9/10/2009	0.50 U	5.5 J	41	0.50 U	0.50 U	12	0.50 U	0.50 U
EXT-1	9/11/2009	0.50 U	1.8	65	0.50 U	0.50 U	26	0.50 U	0.50 U
EXT-1	9/12/2009	0.50 U	1.7	76	0.50 U	0.50 U	22	0.50 U	0.50 U
EXT-1	9/13/2009	0.50 U	1.7	22	0.50 U	0.50 U	9.2	0.50 U	0.50 U
EXT-1	9/14/2009	0.50 U	2.0	11	0.50 U	0.50 U	3.4	0.50 U	0.50 U
EXT-1	9/15/2009	0.50 U	1.7	36	0.50 U	0.50 U	25	0.50 U	0.50 U
EXT-1	9/16/2009	0.50 U	1.9	12	0.50 U	0.50 U	3.3	0.50 U	0.50 U
EXT-1	9/17/2009	0.50 U	3.2	16	0.50 U	0.50 U	4.7	0.50 U	0.50 U
EXT-1	9/18/2009	0.50 U	7.1	23	0.50 U	0.50 U	3.6	0.50 U	0.50 U
EXT-1	9/20/2009	1.00 U	1.9	7.4	1.00 U	1.00 U	2.1	1.00 U	1.00 U
EXT-1	9/21/2009	1.00 U	2.1	6.3	1.00 U	1.00 U	1.7	1.00 U	1.00 U
EXT-1	9/22/2009	1.00 U	4.2	8.9	1.00 U	1.00 U	1.6	1.00 U	1.00 U
EXT-1	9/23/2009	1.00 U	7.8	25	1.00 U	1.00 U	6.0	1.00 U	1.00 U
EXT-1	9/24/2009	1.00 U	14	38	1.00 U	1.00 U	8.4	1.00 U	1.00 U
EXT-1	9/25/2009	1.00 U	12	35	1.00 U	1.00 U	6.4	1.00 U	1.00 U
EXT-1	9/26/2009	1.00 U	14	30	0.20 J	0.21 J	4.1 J	1.00 U	1.00 U
EXT-1	9/27/2009	1.00 U	11	24	1.00 U	1.00 U	4.8	1.00 U	1.00 U
EXT-1	9/28/2009	1.00 U	0.37 J	1.8	1.00 U	1.00 U	1.3	1.00 U	1.00 U
EXT-1	9/22/2023	0.30 U	0.37 J	1.8	0.14 U	0.18 U	1.3	0.14 U	0.100 U
EXT-2	9/29/2009	4.8	510	120	1.2	0.50 U	3.1	0.50 U	0.50 U
EXT-2	9/30/2009	6.1	550	140	1.4	0.50 U	3.3	0.50 U	0.50 U
EXT-2	10/1/2009	4.6	370	100	1.5	0.50 U	2.2	0.50 U	0.50 U
EXT-2	10/2/2009	4.1	470	120	1.00	1.00 U	2.1	1.00 U	1.00 U
EXT-2	10/3/2009	3.6	370	110	1.1	0.50 U	2.4	0.50 U	0.50 U
EXT-2	10/4/2009	4.7	360	93	1.5	0.50 UJ	2.5 J	0.50 U	0.50 U
EXT-2	10/5/2009	3.5	300	81	0.77	0.50 U	1.8 J	0.50 U	0.50 U

Table B-1. Historical Groundwater Concentrations for Key Analytes

2023 Annual Groundwater Monitoring Report

Milwaukie International Way
Milwaukie, Oregon

Well	Date	Chlorinated Ethenes						Chlorinated Ethanes	
		PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	VC	1,1,1-TCA	1,1-DCA
		µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q
EXT-2	10/6/2009	3.4	290	88	0.81	0.50 U	1.6 J	0.50 U	0.50 U
EXT-2	10/7/2009	3.3	360	110	0.94	0.50 U	1.7	0.50 U	0.50 U
EXT-2	10/8/2009	3.4	350	110	0.95	0.50 U	1.8	0.50 U	0.50 U
EXT-2	10/9/2009	2.8	260	86	0.85	0.50 U	1.5	0.50 U	0.50 U
EXT-2	10/10/2009	3.1	330	130	1.1	1.00 U	1.5	0.50 U	0.50 U
EXT-2	10/11/2009	4.6	390	130	1.2	0.50 U	1.7	0.50 U	0.50 U
EXT-2	10/12/2009	4.0	340	120	1.1	0.50 U	2.1	0.50 U	0.50 U
EXT-2	10/13/2009	3.5	310	110	1.2	0.50 U	1.4	0.50 U	0.50 U
EXT-2	10/14/2009	3.2	260	110	1.1	0.50 U	1.2	0.50 U	0.50 U
EXT-2	10/15/2009	3.1	290	120	0.97	0.50 U	1.1	0.50 U	0.50 U
EXT-2	10/16/2009	3.0	290	110	0.97	0.50 U	0.99	0.50 U	0.50 U
EXT-2	10/17/2009	3.1	330	130	1.3	0.58	1.1	0.50 U	0.50 U
EXT-2	10/18/2009	2.6	230	100	1.00	0.50 U	0.64	0.50 U	0.50 U
EXT-2	10/19/2009	2.3	220	110	1.1	0.50 U	0.65	0.50 U	0.50 U
EXT-2	8/14/2013	2.1	210	95	0.83	0.50 U	0.59	0.50 U	0.50 U
EXT-2	11/20/2013	2.6	240	110	0.84	0.50 U	0.59	0.50 U	0.50 U
EXT-2	2/27/2014	1.9	210	110	0.67	0.50 U	0.50 U	0.50 U	0.50 U
EXT-2	5/5/2014	2.3	200	99	0.85	0.50 U	0.56	0.50 U	0.50 U
EXT-2	8/21/2014	2.0	200	89	0.80	0.50 U	0.62	0.50 U	0.50 U
EXT-2	11/7/2014	2.6	240	120	0.99	0.50 U	0.84	0.50 U	0.50 U
EXT-2	2/25/2015	2.9	220	120	1.1	0.52	0.74	0.50 U	0.50 U
EXT-2	5/27/2015	2.1	200	99	0.98	1.00 U	0.62	0.50 U	0.50 U
EXT-2	8/25/2015	2.8	270 J	150	0.80	0.50 U	0.50 U	0.50 U	0.50 U
EXT-2	11/20/2015	2.0	190	110	0.87	0.50 U	0.79	0.50 U	0.50 U
EXT-2	3/3/2016	2.1	210	120	0.76	0.50 U	0.50 U	0.50 U	0.50 U
EXT-2	5/27/2016	2.5	210	110	0.95	0.50 U	0.64	0.50 U	0.50 U
EXT-2	8/31/2016	2.8	230	120	1.1	0.50 U	0.86	0.50 U	0.50 U
EXT-2	11/16/2016	2.0	170	94	0.91	0.50 U	0.50	0.50 U	0.50 U
EXT-2	3/15/2017	2.5	240	130	1.00	0.50 U	1.2	0.50 U	0.50 U
EXT-2	6/14/2017	0.96	87	71	0.55	0.50 U	0.50 U	0.50 U	0.50 U
EXT-2	9/14/2017	1.4	140	86	0.73	0.50 U	0.50 U	0.50 U	0.50 U
EXT-2	12/18/2017	1.2	100	71	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
EXT-2	3/29/2018	1.00	84	60	0.48 J	1.00 U	1.00 U	1.00 U	1.00 U
EXT-2	6/7/2018	1.00	110	66	0.46 J	1.00 U	1.00 U	1.00 U	1.00 U
EXT-2	9/19/2018	1.4	140	92	0.84 J	0.30 J	1.00 U	1.00 U	1.00 U
EXT-2	3/13/2019	2.1	200	120	0.88 J	1.00 U	0.33 J	1.00 U	1.00 U
EXT-2	6/14/2019	1.2	89	84	0.55	1.00 U	1.00 U	1.00 U	1.00 U
EXT-2	9/17/2019	1.2	120	76	0.60 J	1.00 U	1.00 U	1.00 U	1.00 U
EXT-2	9/3/2020	0.92 J	87	64	0.53 J	0.22 J	1.00 U	1.00 U	1.00 U
EXT-2	9/17/2021	2.1	180	110	0.64 J	0.31 J	1.00 U	1.00 U	1.00 U
EXT-2R	6/6/2023	0.70 J	43 J-	28	0.19 J	0.18 U	0.23 U	0.14 U	0.100 U
EXT-2R	9/21/2023	0.87 J	74	49	0.60 J	0.21 J	0.23 U	0.14 U	0.100 U
EXT-3 (MW-4)	5/4/2009	1.3 U	15	1100	8.9	1.3	150	1.3 U	1.3 U
EXT-3 (MW-4)	5/11/2009	0.50 U	6.4	650	4.8	0.88	170	0.50 U	0.50 U
EXT-3 (MW-4)	5/20/2009	0.50 U	4.0	310	3.8	0.50 U	72	0.50 U	0.50 U
EXT-3 (MW-4)	6/16/2009	1.00 U	9.1	440	3.0	1.00 U	110	1.00 U	1.00 U
EXT-3 (MW-4)	7/13/2009	0.50 U	22	340	2.5	0.50 U	81	0.50 U	0.50 U
EXT-3 (MW-4)	8/19/2009	0.50 U	31	260	3.1	0.50 UJ	56 J	0.50 U	0.50 U
EXT-3 (MW-4)	9/15/2009	0.50 U	35	240	1.8	0.50 U	45 J	0.50 U	0.50 U
EXT-3 (MW-4)	12/29/2009	0.50 U	24	210	1.7	0.50 U	33 J	0.50 U	0.50 U
EXT-3 (MW-4)	7/27/2010	1.00 U	16	450	2.8	1.00 U	76	1.00 U	1.00 U
EXT-3 (MW-4)	8/20/2010	0.50 U	9.5	450	2.2	0.52	86	0.50 U	0.50 U
EXT-3 (MW-4)	11/22/2010	0.50 U	7.6	240	2.5	0.50 U	58	0.50 U	0.50 U
EXT-3 (MW-4)	2/22/2011	0.50 U	4.4	210	2.1	0.50 U	47	0.50 U	0.50 U

Table B-1. Historical Groundwater Concentrations for Key Analytes

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Milwaukie International Way
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Well	Date	Chlorinated Ethenes						Chlorinated Ethanes	
		PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	VC	1,1,1-TCA	1,1-DCA
		µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q
EXT-3 (MW-4)	5/23/2011	0.50 U	3.0	200	2.0	0.50 U	41	0.50 U	0.50 U
EXT-3 (MW-4)	8/23/2011	0.50 U	2.3	260	1.9	0.50 U	58	0.50 U	0.50 U
EXT-3 (MW-4)	11/7/2011	0.50 U	2.0	170	1.6	0.50 U	33	0.50 U	0.50 U
EXT-3 (MW-4)	2/10/2012	0.50 U	1.7	210	1.6	0.50 U	59	0.50 U	0.50 U
EXT-3 (MW-4)	5/2/2012	0.50 U	3.6	140	1.3	0.50 U	34	0.50 U	0.50 U
EXT-3 (MW-4)	8/27/2012	0.50 U	1.1	130	1.2	0.50 U	33	0.50 U	0.50 U
EXT-3 (MW-4)	11/5/2012	0.50 U	0.96	210	2.3	0.50 U	57	0.50 U	0.50 U
EXT-3 (MW-4)	2/27/2013	0.50 U	0.50 U	230	3.0	0.50 U	50	0.50 U	0.50 U
EXT-3 (MW-4)	5/7/2013	0.50 U	0.50 U	250	2.7	0.50 U	58	0.50 U	0.50 U
EXT-3 (MW-4)	11/20/2013	0.50 U	0.98	250	2.3	0.50 U	97	0.50 U	0.50 U
EXT-3 (MW-4)	2/27/2014	0.50 U	2.3	150	1.6	0.50 U	44	0.50 U	0.50 U
EXT-3 (MW-4)	5/5/2014	0.50 U	2.1	160	1.7	0.50 U	47	0.50 U	0.50 U
EXT-3 (MW-4)	8/21/2014	0.50 U	11	130	1.5	0.50 U	46	0.50 U	0.50 U
EXT-3 (MW-4)	2/25/2015	0.50 U	15	170	1.7	0.50 U	60	0.50 U	0.50 U
EXT-3 (MW-4)	5/27/2015	1.00 U	6.3	140	1.7	1.00 U	47	0.50 U	0.50 U
EXT-3 (MW-4)	8/25/2015	0.50 U	25 J	84	1.2	0.50 U	22	0.50 U	0.50 U
EXT-3 (MW-4)	11/20/2015	0.50 U	32	100	1.00	0.50 U	31	0.50 U	0.50 U
EXT-3 (MW-4)	3/3/2016	0.50 U	30	110	1.2	0.50 U	29	0.50 U	0.50 U
EXT-3 (MW-4)	5/27/2016	0.50 U	19	140	1.6	0.50 U	45	0.50 U	0.50 U
EXT-3 (MW-4)	8/31/2016	0.96	91	110	1.00	0.50 U	25	0.50 U	0.50 U
EXT-3 (MW-4)	11/16/2016	0.50 U	13	100	1.7	0.50 U	43	0.50 U	0.50 U
EXT-3 (MW-4)	3/15/2017	0.50 U	6.9	150	1.6	0.50 U	85	0.50 U	0.50 U
EXT-3 (MW-4)	6/14/2017	0.50 U	4.4	150	2.3	0.50 U	69	0.50 U	0.50 U
EXT-3 (MW-4)	9/14/2017	0.50 U	2.0	180	3.4	0.50 U	55	0.50 U	0.50 U
EXT-3 (MW-4)	12/18/2017	—	—	—	—	—	—	—	—
EXT-3 (MW-4)	3/29/2018	1.00 U	17	65	0.82 J	1.00 U	20	1.00 U	1.00 U
EXT-3 (MW-4)	6/7/2018	1.00 U	15	48	0.63 J	1.00 U	14	1.00 U	1.00 U
EXT-3 (MW-4)	9/19/2018	1.00 U	7.7	49	1.00 U	1.00 U	16	1.00 U	1.00 U
EXT-3 (MW-4)	3/13/2019	1.00 U	1.8	75	1.1	1.00 U	30	1.00 U	1.00 U
EXT-3 (MW-4)	6/14/2019	—	—	—	—	—	—	—	—
EXT-3 (MW-4)	9/17/2019	1.00 U	1.00 U	37	0.92 J	1.00 U	0.48 J	1.00 U	1.00 U
EXT-3 (MW-4)	9/3/2020	1.00 U	1.00 U	0.23 J	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
EXT-3 (MW-4)	9/16/2021	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
EXT-3 (MW-4)	9/20/2023	0.30 U	0.19 U	0.12 J	0.14 U	0.18 U	0.23 U	0.14 U	0.100 U
EXT-3 (MW-4)	9/20/2023	0.30 U	0.19 U	0.15 J	0.14 U	0.18 U	0.23 U	0.14 U	0.100 U
EXT-3R	6/6/2023	0.30 U	0.19 UJ-	3.9	0.14 U	0.18 U	1.1	0.14 U	0.100 U
EXT-3R	9/21/2023	0.30 U	0.19 U	26	0.14 U	0.18 U	2.7	0.14 U	0.100 U
EXT-4	6/6/2023	1.6	130	160	1.9	0.69 J	1.1	0.14 U	0.100 U
EXT-4	9/21/2023	1.9	140	120	1.6	0.64 J	1.1	0.14 U	0.100 U
Trench	3/17/2008	0.50 U	64	270	0.53	0.51	13	0.50 U	0.50 U
Trench	6/27/2008	0.50 U	16	56	0.50 U	0.50 U	5.4	0.50 U	0.50 U
Trench	5/4/2009	1.3 U	51	690	2.1	2.8	150	1.3 U	1.3 U
Trench	5/11/2009	0.50 U	3.7	4.2	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Trench	5/20/2009	0.50 U	2.9	4.6	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Trench	8/17/2009	0.50 U	7.7	290	1.8	0.50 UJ	74 J	0.50 U	0.50 U
Trench	9/15/2009	0.50 U	6.6	90	0.50 U	0.50 U	7.7 J	0.50 U	0.50 U
Trench	12/29/2009	0.50 U	1.00	1.00	0.50 U	0.50 U	0.50 J	0.50 U	0.50 U
Trench	7/27/2010	2.5 U	120	1500	3.2	3.2	140	2.5 U	2.5 U
Trench	8/20/2010	5.0 U	83	2600	8.2	7.5	310	5.0 U	5.0 U
Trench	11/22/2010	0.50 U	0.50 U	4.9	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Trench	2/22/2011	0.50 U	21	320	0.57	0.62	41	0.50 U	0.50 U
Trench	5/23/2011	2.5 U	280	1300	3.9	3.0	96	2.5 U	2.5 U
Trench	8/23/2011	1.00 U	150	740	2.1	2.1	85	1.00 U	1.00 U
Trench	11/7/2011	0.50 U	11	180	1.6	0.50 U	6.4	0.50 U	0.50 U

Table B-1. Historical Groundwater Concentrations for Key Analytes

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Milwaukie, Oregon

Well	Date	Chlorinated Ethenes						Chlorinated Ethanes	
		PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	VC	1,1,1-TCA	1,1-DCA
		µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q
Trench	2/10/2012	0.50 U	14	270	0.50 U	0.62	77	0.50 U	0.50 U
Trench	5/2/2012	0.50 U	1.1	8.4	0.50 U	0.50 U	0.62	0.50 U	0.50 U
Trench	8/27/2012	2.5 U	230	810	3.0	2.5 U	120	2.5 U	2.5 U
Trench	11/5/2012	0.50 U	3.1	7.3	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Trench	2/27/2013	0.50 U	9.3	11	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Trench	5/7/2013	—	—	—	—	—	—	—	—
Trench	8/14/2013	1.00 U	150	550	2.1	1.6	65	1.00 U	1.00 U
Trench	11/20/2013	0.50 U	15	45	0.50 U	0.50 U	0.88	0.50 U	0.50 U
Trench	2/27/2014	0.50 U	6.5	9.0	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Trench	5/5/2014	0.50 U	0.80	2.2	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Trench	8/21/2014	0.50 U	25	140	0.70	0.53	67	0.50 U	0.50 U
Trench	11/7/2014	0.50 U	4.5	5.8	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Trench	2/25/2015	0.50 U	0.55	0.57	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Trench	5/27/2015	0.50 U	1.7	3.3	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Trench	8/25/2015	0.50 U	1.9 J	17	0.50 U	0.50 U	12	0.50 U	0.50 U
Trench	3/3/2016	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Trench	5/27/2016	0.50 U	26	320	0.60	0.72	65	0.50 U	0.50 U
Trench	3/15/2017	0.50 U	1.1	3.5	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Trench	6/14/2017	0.50 U	14	62	0.50 U	0.50 U	29	0.50 U	0.50 U
Trench	9/14/2017	0.50 U	7.2	72	0.50 U	0.50 U	41	0.50 U	0.50 U
Trench	11/16/2017	0.50 U	5.1	8.3	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Trench	3/29/2018	1.00 U	0.47 J	1.5	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Trench	6/7/2018	1.00 U	3.7	78	1.00 U	1.00 U	21	1.00 U	1.00 U
Trench	9/19/2018	1.00 U	1.5	22	1.00 U	1.00 U	4.2	1.00 U	1.00 U
Trench	3/13/2019	1.00 U	1.00 U	0.56 J	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Trench	6/14/2019	1.00 U	1.00 U	4.5	1.00 U	1.00 U	0.50	1.00 U	1.00 U
Trench	9/17/2019	1.00 U	0.59 J	50	1.00 U	1.00 U	10	1.00 U	1.00 U
Trench	6/6/2023	0.30 U	0.19 UJ-	0.12 U	0.14 U	0.18 U	0.23 U	0.14 U	0.100 U
Trench	9/21/2023	0.30 U	0.19 J	28	0.14 U	0.18 U	2.8	0.14 U	0.100 U
MW-1	8/31/1992	15	70	—	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U
MW-1	10/21/1992	0.50 U	0.50 U	140	0.50 U	0.50 U	21	0.50 U	0.50 U
MW-1	7/8/1993	1.7	8.9	—	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-1	7/28/1994	1.3	12	4.7	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-1	11/7/1994	2.0	20	5.0	0.60	0.50 U	0.50 U	0.50 U	0.50 U
MW-1	2/20/1995	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-1	5/12/1995	0.50 U	7.1	3.7	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-1	4/2/1996	0.50 U	1.4	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-1	6/5/1996	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-1	12/4/1996	0.50 U	1.5	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-1	3/18/1997	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-1	4/11/2000	0.080	0.14	0.080	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
MW-2	10/21/1992	4.8	68	28	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U
MW-2	7/8/1993	0.50 U	34	—	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-2	7/28/1994	0.50 U	83	39	0.50 U	0.50 U	0.70	0.50 U	0.50 U
MW-2	11/7/1994	0.50 U	2.0	6.0	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-2	2/20/1995	1.3	1.00	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-2	5/12/1995	0.50 U	1.8	8.9	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-2	4/2/1996	0.50 U	2.7	8.5	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-2	6/5/1996	0.50 U	1.5	6.1	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-2	12/4/1996	1.5	1.00	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-2	3/18/1997	1.4	1.4	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-2	4/11/2000	0.36	0.91	5.8	0.14	0.40 U	0.40 U	0.40 U	0.40 U
MW-3S	4/1/1996	0.50 U	0.50 U	1.3	0.50 U	0.50 U	2.0	0.50 U	0.50 U
MW-3S	6/5/1996	0.50 U	0.50 U	1.00	0.50 U	0.50 U	3.0	0.50 U	0.50 U

Table B-1. Historical Groundwater Concentrations for Key Analytes

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Milwaukie, Oregon

Well	Date	Chlorinated Ethenes						Chlorinated Ethanes	
		PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	VC	1,1,1-TCA	1,1-DCA
		µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q
MW-3S	12/4/1996	0.50 U	0.50 U	1700	0.70	3.1	830	0.50 U	0.50 U
MW-3S	3/18/1997	0.50 U	0.50 U	59	0.50 U	0.50 U	200	0.50 U	0.50 U
MW-3S	4/14/2000	0.40 U	0.40 U	0.14	0.40 U	0.40 U	2.1 U	0.40 U	0.40 U
MW-3S	10/10/2000	0.070	5.8	38	0.40 U	0.090	260	0.40 U	0.050
MW-3S	12/12/2000	0.40 U	0.40 U	0.40	0.40 U	0.40 U	37	0.40 U	0.40 U
MW-3S	3/13/2001	0.40 U	0.042	0.12	0.40 U	0.40 U	1.5	0.40 U	0.40 U
MW-3S	9/19/2001	0.40 U	0.12	0.25	0.40 U	0.40 U	1.1	0.40 U	0.40 U
MW-3S	1/3/2002	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	0.51	1.00 U	1.00 U
MW-3S	5/9/2002	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-3S	6/21/2002	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-3S	10/3/2002	0.50 U	0.50 U	9.5	0.50 U	0.50 U	62	0.50 U	0.50 U
MW-3S	12/19/2002	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	1.4	0.50 U	0.50 U
MW-3	10/21/1992	3.4	15	1.4	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U
MW-3	7/8/1993	0.50 U	0.60	—	0.50 U	0.50 U	130	0.70	0.50 U
MW-3	7/28/1994	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-3	11/7/1994	0.50 U	0.60	2000	3.0	0.50 U	1000	0.50 U	0.50 U
MW-3	2/20/1995	0.50 U	0.50 U	1600	2.1	2.2	470	0.50 U	0.50 U
MW-3	5/12/1995	0.50 U	0.50 U	440	0.50 U	1.00	350	0.50 U	0.50 U
MW-3	4/2/1996	0.50 U	0.50 U	44	0.50 U	0.50 U	130	0.50 U	0.50 U
MW-3S	3/26/2003	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-3S	6/24/2003	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-3S	9/24/2003	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-3S	12/15/2003	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-3S	3/18/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-3S	6/14/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-3S	9/14/2004	0.50 U	0.50 U	0.53 J	0.50 U	0.50 U	1.9	0.50 U	0.50 U
MW-3S	11/30/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	1.3	0.50 U	0.50 U
MW-3S	3/9/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-3S	6/9/2005	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
MW-3S	9/20/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-3S	12/7/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-3S	6/19/2006	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-3D	6/5/1996	0.50 U	0.50 U	13	0.50 U	0.50 U	78	0.50 U	0.50 U
MW-3D	12/4/1996	0.50 U	0.50 U	970	0.50 U	2.0	650	0.50 U	0.50 U
MW-3DR	3/20/1997	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-3DR	4/11/2000	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
MW-3DR	10/10/2000	0.40 U	0.30	0.20	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
MW-3DR	3/13/2001	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
MW-3DR	1/3/2002	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
MW-3DR	6/20/2002	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-3DR	12/18/2002	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-3DR	6/24/2003	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-3DR	12/15/2003	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-3DR	6/14/2004	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-3DR	11/30/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-3DR	6/7/2005	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
MW-3DR	12/7/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-3DR	6/19/2006	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-4	8/17/1992	0.50 U	56	—	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U
MW-4	10/21/1992	0.50 U	77	460	3.0	0.50 U	4.5	0.50 U	0.50 U
MW-4	4/20/1993	0.50 U	250	560	5.0	1.00 U	16	0.50 U	1.00 U
MW-4	7/8/1993	0.50 U	18	—	7.2	2.6	17	0.70	0.50 U
MW-4	7/28/1994	5.0 U	5.0 U	940	5.0 U	5.0 U	1100	5.0 U	5.0 U
MW-4	11/7/1994	0.60	5.0	30	0.50 U	0.50 U	1.00	0.50 U	0.50 U

Table B-1. Historical Groundwater Concentrations for Key Analytes

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Milwaukie International Way
Milwaukie, Oregon

Well	Date	Chlorinated Ethenes						Chlorinated Ethanes	
		PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	VC	1,1,1-TCA	1,1-DCA
		µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q
MW-4	2/20/1995	0.50 U	300	2600	18	2.4	51	0.50 U	0.50 U
MW-4	5/12/1995	0.50 U	210	2000	17	2.0	40	0.50 U	0.50 U
MW-4	4/2/1996	0.50 U	170	2300	20	2.8	83	0.50 U	0.50 U
MW-4	6/5/1996	0.50 U	180	3500	33	4.4	140	0.50 U	0.60
MW-4	12/5/1996	0.50 UJ	97 J	3900 J	25 J	3.7 J	150 J	0.50 UJ	0.50 UJ
MW-4	3/19/1997	25 U	100	3100	25 U	25 U	180	25 U	25 U
MW-4	1/5/1998	1.00 U	1.00 U	36	1.00 U	1.00 U	10.0 U	1.00 U	1.00 U
MW-4	4/12/2000	0.40 U	24	2300	12	2.4	190	0.40 U	0.21
MW-4	10/12/2000	8.0 U	24	4200	29	4.9	390	8.0 U	8.0 U
MW-4	3/14/2001	10.0 U	25	1600	11	10.0 U	150	10.0 U	10.0 U
MW-4	1/3/2002	10.0 U	20	1100	10.0 U	10.0 U	110	10.0 U	10.0 U
MW-4	6/24/2002	50 U	50 U	3300	50 U	50 U	330	50 U	50 U
MW-4	12/23/2002	0.50 U	24	1700	7.8	1.3	270	0.50 U	0.50 U
MW-4	6/27/2003	50 U	50 U	1200	50 U	50 U	180	50 U	50 U
MW-4	12/12/2003	0.50 U	5.7	1000	14	1.2	230	0.50 U	0.50 U
MW-4	6/15/2004	0.50 U	6.0	240	1.8	0.50 U	84	0.50 U	0.50 U
MW-4	12/8/2004	5.0 U	220	3900	25	5.0 U	350	5.0 U	5.0 U
MW-4	6/14/2005	5.0 U	89	1200	16	5.0 U	250	5.0 U	5.0 U
MW-4	12/14/2005	10.0 UJ	10.0 UJ	1000 J	10.0 UJ	10.0 UJ	330 J	10.0 UJ	10.0 UJ
MW-4	6/27/2006	10.0 U	64	630	10.0 U	10.0 U	19	10.0 U	10.0 U
MW-4	9/6/2006	5.0 U	30	350	5.0	5.0 U	8.9	5.0 U	5.0 U
MW-4	6/21/2007	38	38	450	14	1.3	49	1.00 U	1.00 U
MW-4	3/18/2008	0.50 U	0.50 U	6.2	0.50 U	0.50 U	3.0	0.50 U	0.50 U
MW-4	4/21/2008	1.00 U	1.00 U	660	6.0	1.1	120	1.00 U	1.00 U
MW-4	5/22/2008	1.00 U	1.00 U	670	5.5	1.1	180	1.00 U	1.00 U
MW-4	6/19/2008	1.3 U	2.8	480	4.8	1.3 U	140	1.3 U	1.3 U
MW-5	11/7/1994	0.50 U	90	100	4.0	3.0	7.0	0.50 U	4.0
MW-5	2/20/1995	0.50 U	81	92	2.3	2.6	1.9	0.50 U	3.4
MW-5	5/12/1995	0.50 U	59	54	1.5	2.0	3.0	0.50 U	3.0
MW-5	6/6/1996	0.50 U	180	150	5.4	4.3	8.2	0.50 U	5.1
MW-5	12/4/1996	0.50 U	61	71	2.6	1.1	1.2	0.50 U	1.5
MW-5	3/18/1997	0.50 U	92	280	8.9	3.0	60	0.50 U	4.3
MW-5	4/13/2000	0.090	46	75	5.1	0.85	1.8	0.40 U	1.5
MW-5	10/11/2000	0.40 U	0.53	14	1.4	0.16	4.8	0.40 U	0.31
MW-5	3/13/2001	10.0 U	14	44	2.8	10.0 U	2.4	10.0 U	10.0 U
MW-5	1/7/2002	1.00 U	1.00 U	2.8	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
MW-5	6/20/2002	0.50 U	9.3	40	3.0	0.50 U	1.2	0.50 U	0.58
MW-5	12/18/2002	0.50 U	0.50 U	2.5	0.50 U	0.50 U	0.87 J	0.50 U	0.50 U
MW-5	6/24/2003	0.50 U	3.6	29	2.5	0.50 U	1.7	0.50 U	0.50 U
MW-5	12/18/2003	0.50 U	0.50 U	1.0	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-5	6/15/2004	0.50 U	3.6	37	2.9	0.50 U	3.1	0.50 U	0.50 U
MW-5	12/2/2004	0.50 U	0.54 J	34	4.4	0.50 U	7.7	0.50 U	0.50 U
MW-5	6/9/2005	0.25 U	0.25 U	19	1.7	0.25 U	4.9	0.25 U	0.25 U
MW-5	12/14/2005	0.50 U	0.50 U	8.6	0.50 U	0.50 U	1.6	0.50 U	0.50 U
MW-5	6/20/2006	0.50 U	0.50 U	9.7	0.50 U	0.50 U	0.71	0.50 U	0.50 U
MW-5	6/26/2007	1.00 U	1.00 U	5.7	1.00 U	1.00 U	2.0 U	1.00 U	1.00 U
MW-5	6/19/2008	0.50 U	0.50 U	16	0.50 U	1.00 U	1.00 U	1.00 U	1.00 U
MW-5	9/18/2018	1.00 U	0.30 J	6.7	0.87 J	1.00 U	1.00 U	1.00 U	1.00 U
MW-5	10/31/2019	1.00 U	1.00 U	1.1	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
MW-5	9/3/2020	1.00 U	0.21 J	5.1	0.73 J	1.00 U	1.00 U	1.00 U	1.00 U
MW-5	9/15/2021	1.00 U	0.31 J	7.0	1.1	1.00 U	1.00 U	1.00 U	1.00 U
MW-5	9/19/2023	0.30 U	0.61 J	8.4	1.3	0.18 U	0.23 U	0.14 U	0.100 U
MW-6	11/7/1994	3.0	3.0	0.60	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-6	2/20/1995	4.0	3.1	0.50 U	0.50 U	0.50 U	0.50 U	0.60	0.50 U

Table B-1. Historical Groundwater Concentrations for Key Analytes

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Milwaukie, Oregon

Well	Date	Chlorinated Ethenes						Chlorinated Ethanes	
		PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	VC	1,1,1-TCA	1,1-DCA
		µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q
MW-6	5/12/1995	9.8	2.6	0.50 U	0.50 U	0.50 U	0.50 U	0.60	0.50 U
MW-6	4/2/1996	6.0	3.9	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-6	6/6/1996	5.7	2.1	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-6	12/4/1996	7.2	7.4	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-6	3/18/1997	3.1	1.4	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-6	4/13/2000	2.6	0.75	0.15	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
MW-6	10/11/2000	1.8	0.31	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
MW-6	3/13/2001	27	6400	9300	89	19	290	0.40 U	1.2
MW-6	4/24/2001	1.2	0.41	0.16	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
MW-6	1/7/2002	1.3	0.73	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
MW-6	6/20/2002	1.5	0.54	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-6	12/19/2002	0.98 J	2.2	3.9	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-6	6/24/2003	1.9	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-6	12/15/2003	1.4	1.9	1.2	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-6	6/14/2004	1.2	1.1	0.73 J	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-6	11/30/2004	1.4	2.6	2.0	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-6	6/9/2005	1.0	6.0	5.3	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
MW-6	12/9/2005	0.50 U	3.1	5.0	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-6	6/15/2006	1.1	1.3	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-6	6/26/2007	1.00 U	1.8	1.00 U	1.00 U	1.00 U	2.0 U	1.00 U	1.00 U
MW-6	6/18/2008	0.95	1.7	0.83	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-6	9/14/2017	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-6	11/4/2019	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
MW-6	9/3/2020	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
MW-6	9/19/2023	0.30 U	0.19 U	0.12 U	0.14 U	0.18 U	0.23 U	0.14 U	0.100 U
MW-6	9/19/2023	0.30 U	0.19 U	0.12 U	0.14 U	0.18 U	0.23 U	0.14 U	0.100 U
MW-6D	12/5/1996	0.50 UJ	21000 J	12000 J	87 J	25 J	180 J	0.50 UJ	3.8 J
MW-6D	3/19/1997	240	34000	13000	100	25 U	150	25 U	25 U
MW-6D	1/7/1998	100 U	18000	13000	100 U	100 U	510	100 U	100 U
MW-6D	10/28/1998	77	3200	2100	55	16	19	12 U	12 U
MW-6D	4/14/2000	110	30000	20000	210	38	500 U	0.40 U	3.4
MW-6D	10/11/2000	70	17000	15000	95	39	45	0.40 U	1.6
MW-6D	3/13/2001	100	25000	23000	180	49	1100	4.0 U	2.2
MW-6D	1/7/2002	200 U	14000	17000	200 U	200 U	200 U	200 U	200 U
MW-6D	6/21/2002	1000 U	24000	38000	1000 U	1000 U	1500	1000 U	1000 U
MW-6D	12/19/2002	500 U	23000	45000	500 U	500 U	2600	500 U	500 U
MW-6D	6/24/2003	500 U	23000	44000	500 U	500 U	2300	500 U	500 U
MW-6D	12/15/2003	500 U	18000	38000	500 U	500 U	2500	500 U	500 U
MW-6D	6/14/2004	50 U	15000	40000	190	78 J	2600	50 U	50 U
MW-6D	11/30/2004	2.5 U	2000	5000	30	2.5 U	290	2.5 U	2.5 U
MW-6D	6/9/2005	25 U	1100	3800	25 U	25 U	160	25 U	25 U
MW-6D	12/8/2005	25 U	1200	2700	25	25 U	79	25 U	25 U
MW-6D	6/15/2006	2.5 U	480	1400	9.5	2.5 U	41	2.5 U	2.5 U
MW-6D	6/22/2007	1.00 U	78	390	5.4	1.00 U	34	1.00 U	1.00 U
MW-6D	3/18/2008	0.50 U	50	430	2.9	0.60	9.0	0.50 U	0.50 U
MW-6D	6/18/2008	2.5 U	440	1200	5.5	2.5 U	2.5 U	2.5 U	2.5 U
MW-6D	8/17/2009	6.8	1100	1500	36	4.6 J	51 J	2.5 U	2.5 U
MW-6D	1/12/2010	7.6	1300 J	1600	10.0	5.5	34	2.5 U	2.5 U
MW-6D	8/20/2010	0.92	190	380	2.4	0.81	4.2	0.50 U	0.50 U
MW-6D	8/23/2011	1.5	220	380	2.3	0.95	3.4	0.50 U	0.50 U
MW-6D	8/27/2012	1.6	240	370	2.5	1.3	5.2	0.50 U	0.50 U
MW-6D	8/29/2013	0.50 U	12	52	1.2	0.50 U	0.50 U	0.50 U	0.50 U
MW-6D	8/21/2014	2.8	520	450	3.5	1.9	5.9	1.00 U	1.00 U
MW-6D	8/27/2015	5.1	760 J	660	6.5	2.9	7.9	1.00 U	1.00 U

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Milwaukie, Oregon

Well	Date	Chlorinated Ethenes						Chlorinated Ethanes	
		PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	VC	1,1,1-TCA	1,1-DCA
		µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q
MW-6D	8/30/2016	3.5	500	480	4.7	2.0	2.1	1.00 U	1.00 U
MW-6D	9/14/2017	1.00 U	230	330	1.2	1.00 U	1.00 U	1.00 U	1.00 U
MW-6D	9/18/2018	1.00 U	220 J	260	1.4	0.68 J	1.00 U	1.00 U	1.00 U
MW-6D	11/4/2019	1.00 U	11	40	2.0	1.00 U	1.00 U	1.00 U	1.00 U
MW-6D	9/3/2020	1.00 U	34	110	1.8	1.00 U	1.9 J	1.00 U	1.00 U
MW-6D	9/15/2021	1.00 U	9.7	290	6.6	0.24 J	14	1.00 U	1.00 U
MW-6D	9/20/2023	0.30 U	14 J+	130	3.0	0.21 J+	0.64 J	0.14 U	0.100 U
MW-7	11/7/1994	0.50 U	8.0	800	6.0	1.00	50	0.50 U	0.50 U
MW-7	2/20/1995	1.4	5.3	670	3.5	0.70	84	0.50 U	0.50 U
MW-7	5/12/1995	1.2	6.1	160	2.5	0.50 U	22	0.50 U	0.50 U
MW-7	4/2/1996	1.00	4.0	270	2.2	0.50 U	46	0.50 U	0.50 U
MW-7	6/6/1996	0.70	3.7	190	2.5	0.50 U	58	0.50 U	0.50 U
MW-7	12/4/1996	0.60 J	2.6 J	250 J	2.5 J	0.50 UJ	47 J	0.50 UJ	0.50 UJ
MW-7	3/18/1997	0.50 U	2.2	280	1.6	0.50 U	52	0.50 U	0.50 U
MW-7	10/28/1998	0.50 U	4.3	340	3.5	0.50 U	53	0.50 U	0.50 U
MW-7	4/13/2000	0.45	1.2	37	0.17	0.40 U	5.8	0.40 U	0.030
MW-7	10/11/2000	0.40	1.8	71	0.91	4.0 U	6.1	4.0 U	4.0 U
MW-7	3/14/2001	10.0 U	10.0 U	190	10.0 U	10.0 U	20	10.0 U	10.0 U
MW-7	1/7/2002	1.00 U	1.00 U	130	1.00 U	1.00 U	29	1.00 U	1.00 U
MW-7	6/21/2002	5.0 U	5.0 U	93	5.0 U	5.0 U	19	5.0 U	5.0 U
MW-7	12/19/2002	5.0 U	5.0 U	160	5.0 U	5.0 U	52	5.0 U	5.0 U
MW-7	6/24/2003	50 U	50 U	3200	50 U	50 U	990	50 U	50 U
MW-7	12/15/2003	50 U	50 U	3000	50 U	50 U	1100	50 U	50 U
MW-7	6/15/2004	2.5 U	2.5 U	340	2.5 U	2.5 U	140	2.5 U	2.5 U
MW-7	11/30/2004	0.63 J	2.3	360	1.2	0.50 U	38	0.50 U	0.50 U
MW-7	6/7/2005	1.2 U	1.2 U	98	1.2 U	1.2 U	6.0	1.2 U	1.2 U
MW-7	9/20/2005	0.50 U	1.1	96	0.70	0.50 U	9.5	0.50 U	0.50 U
MW-7	12/8/2005	0.50 U	1.2	58	0.84	0.50 U	4.7	0.50 U	0.50 U
MW-7	6/15/2006	2.5 U	2.5 U	100	2.5 U	2.5 U	5.5	2.5 U	2.5 U
MW-7	6/21/2007	1.00 U	1.7	51	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
MW-7	3/18/2008	0.61	2.3	68	0.50 U	0.50 U	2.5	0.50 U	0.50 U
MW-7	6/18/2008	0.96	2.3	13	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-7	9/14/2017	0.50 U	0.80	4.0	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-7	9/16/2019	1.00 U	0.45 J	4.1	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
MW-7	9/3/2020	0.49 J	0.39 J	2.8	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
MW-7	9/15/2021	0.32 J	0.35 J	2.8	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
MW-7	9/19/2023	0.30 U	0.22 J	3.5	0.14 U	0.18 U	0.23 U	0.14 U	0.100 U
MW-8	6/5/1996	4.7	18	190	1.6	0.50 U	6.0	0.50 U	0.50 U
MW-8	12/3/1996	2.3	12	1200	7.0	1.4	37	0.50 U	0.50 U
MW-8	3/18/1997	6.5	15	45	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-8	4/12/2000	0.55	3.0	71	0.57	0.090	1.4	0.40 U	0.40 U
MW-9	4/1/1996	7.6	180	280	5.6	7.3	75	270	160
MW-9	6/5/1996	5.3	76	180	5.0	3.4	65	100	110
MW-9	12/3/1996	4.9	43	93	3.1	2.1	0.50 U	37	71
MW-9	3/18/1997	5.2	94	110	2.9	5.8	46	150	110
MW-9	4/13/2000	1.9	24	16	0.17	1.00	10.0	31	28
MW-9	10/11/2000	2.1	12	1.4	0.40 U	0.22	2.2	5.6	3.9
MW-9	3/13/2001	1.9	14	4.7	0.083	0.27	5.4	7.5	14
MW-9	1/7/2002	1.1	5.1	4.5	0.70	1.00 U	44	2.2	29
MW-9	6/20/2002	1.5	17	52	0.53	2.9	9.3	110	54
MW-9	12/18/2002	2.0	16	20	0.50 U	1.9	7.3	32	54
MW-9	6/24/2003	1.8	13	16	0.50 U	1.3	12	23	39
MW-9	12/15/2003	1.7	7.8	5.1	0.50 U	0.61 J	2.8	4.9	18
MW-9	6/14/2004	1.3	7.3	13	0.50 U	1.2	5.3	26	29

Table B-1. Historical Groundwater Concentrations for Key Analytes

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Well	Date	Chlorinated Ethenes						Chlorinated Ethanes	
		PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	VC	1,1,1-TCA	1,1-DCA
		µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q
MW-9	12/2/2004	2.1	6.2	3.9	0.50 U	0.54 J	1.3	5.9	11
MW-9	6/9/2005	1.5	3.9	1.6	0.25 U	0.25 U	1.8	0.96	0.25 U
MW-9	12/9/2005	1.1	3.7	4.0	0.50 U	3.9	0.72	0.50 U	0.50 U
MW-9	6/16/2006	1.00	3.1	3.5	0.50 U	0.50 U	2.0	0.56	6.8
MW-9	6/25/2007	1.00 U	1.4	3.3	1.00 U	1.00 U	2.6	1.2	5.3
MW-9	6/19/2008	0.94	1.00	1.8	0.50 U	0.50 U	0.79	0.50 U	1.4
MW-9	9/3/2020	0.49 J	0.75 J	0.48 J	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
MW-9	9/15/2021	1.00 U	0.46 J	0.22 J	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
MW-9	9/19/2023	0.30 U	0.25 J	0.29 J	0.14 U	0.18 U	0.23 U	0.14 U	0.100 U
MW-9D	12/5/1996	19	2700 J	1300	7.7	1.5	13	0.50 U	0.60
MW-9D	3/19/1997	5.0 U	310	570	5.0	5.0 U	5.0 U	5.0 U	5.0 U
MW-9D	1/6/1998	2.0 U	150	500	10	2.0 U	99	2.0 U	2.0 U
MW-9D	10/28/1998	0.50 U	140	350	3.4	1.1	8.1	0.50 U	1.6
MW-9D	4/13/2000	0.23	150	470	4.2	1.1	17	0.40 U	0.62
MW-9D	10/11/2000	8.0 U	100	350	8.0 U	8.0 U	13	8.0 U	8.0 U
MW-9D	3/13/2001	4.0 U	110	280	3.8	0.69	7.2	4.0 U	0.47
MW-9D	1/7/2002	10.0 U	130	400	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
MW-9D	6/25/2002	5.0 U	150	400	5.3	5.0 U	8.3	5.0 U	5.0 U
MW-9D	12/20/2002	5.0 U	360	780 J	15	5.0 U	35	5.0 U	5.0 U
MW-9D	6/24/2003	5.0 U	210	1100 J	12	5.0 U	28	5.0 U	5.0 U
MW-9D	6/15/2004	5.0 U	100	1200	11	5.0 U	47	5.0 U	5.0 U
MW-9D	12/6/2004	5.0 U	110	1400	12	5.0 U	77	5.0 U	5.0 U
MW-9D	6/9/2005	2.5 U	33	450	2.5 U	2.5 U	46	2.5 U	2.5 U
MW-9D	12/9/2005	2.5 U	19	220	4.1	2.5 U	14	2.5 U	2.5 U
MW-9D	6/16/2006	2.5 U	9.3	130	2.5 U	2.5 U	5.1	2.5 U	2.5 U
MW-9D	6/25/2007	1.00 U	5.9	110	1.9	1.00 U	7.3	1.00 U	1.00 U
MW-9D	6/19/2008	0.50 U	3.4	23	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-9D	8/17/2009	0.50 U	0.50 U	42	2.7	0.50 UJ	2.1 J	0.50 U	0.50 U
MW-9D	8/20/2010	0.50 U	0.50 U	22	1.4	0.50 U	0.50 U	0.50 U	0.50 U
MW-9D	8/23/2011	0.50 U	0.50 U	17	1.4	0.50 U	0.50 U	0.50 U	0.50 U
MW-9D	8/27/2012	0.50 U	0.50 U	12	1.4	0.50 U	0.50 U	0.50 U	0.50 U
MW-9D	9/18/2018	1.00 U	0.79 J	1.6	0.10 J	1.00 U	1.00 U	1.00 U	1.00 U
MW-9D	10/31/2019	1.00 U	1.00 U	13	1.9	1.00 U	1.00 U	1.00 U	0.27 J
MW-9D	9/3/2020	1.00 U	0.58 J	2.5	0.21 J	1.00 U	1.00 U	1.00 U	1.00 U
MW-9D	9/15/2021	1.00 U	1.00 U	79	11	1.00 U	1.00 U	1.00 U	0.58 J
MW-9D	9/20/2023	0.30 U	0.19 U	71	5.5	0.18 U	2.0	0.14 U	0.43 J
MW-10S	4/1/1996	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-10S	6/5/1996	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-10S	12/3/1996	4.9	50	170 J	0.70	0.50 U	0.50 U	0.50 U	0.50 U
MW-10S	3/17/1997	1.4	9.7	36	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-10D	12/5/1996	0.50 U	39	78	0.50 U	0.50 U	2.4	0.50 U	0.50 U
MW-10D	3/19/1997	0.50 U	5.2	210	0.80	0.50 U	6.2	0.50 U	0.50 U
MW-10D	4/12/2000	0.40 U	8.4	650	3.8	0.46	23	0.40 U	0.40 U
MW-10D	10/11/2000	4.0 U	19	480	2.7	4.0 U	5.5	4.0 U	4.0 U
MW-10D	3/13/2001	4.0 U	95	1800	11	1.3	44	4.0 U	4.0 U
MW-10D	1/3/2002	10.0 U	110	1100	5.0	10.0 U	13	10.0 U	10.0 U
MW-10D	6/21/2002	50 U	180	2400	50 U	50 U	50 U	50 U	50 U
MW-10D	12/19/2002	50 U	100	1200	50 U	50 U	50 U	50 U	50 U
MW-10D	6/24/2003	5.0 U	54	910	5.0 U	5.0 U	22	5.0 U	5.0 U
MW-10D	12/18/2003	5.0 U	90	840	6.4 J	5.0 U	18	5.0 U	5.0 U
MW-10D	6/15/2004	5.0 U	80	1500	25	5.0 U	99	5.0 U	5.0 U
MW-10D	12/6/2004	0.50 U	3.7	97	0.83 J	0.50 U	3.5	0.50 U	0.50 U
MW-10D	6/7/2005	1.2 U	5.4	140	2.7	1.2 U	4.1	1.2 U	1.2 U
MW-10D	9/20/2005	0.50 U	3.0	130 J	1.4	0.50 U	3.8	0.50 U	0.50 U

Table B-1. Historical Groundwater Concentrations for Key Analytes

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Well	Date	Chlorinated Ethenes						Chlorinated Ethanes	
		PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	VC	1,1,1-TCA	1,1-DCA
		µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q
MW-10D	12/8/2005	2.5 U	2.5 U	110	2.5 U	2.5 U	3.8	2.5 U	2.5 U
MW-10D	6/19/2006	2.5 U	2.5 U	88	2.5 U	2.5 U	2.6	2.5 U	2.5 U
MW-10D	6/25/2007	1.00 U	1.00 U	76	1.00 U	1.00 U	3.4	1.00 U	1.00 U
MW-10D	6/19/2008	0.50 U	0.50 U	40	0.50 U	0.50 U	1.1	0.50 U	0.50 U
MW-10D	8/17/2009	0.50 U	0.75	17	0.50 U	0.50 UJ	0.50 UJ	0.50 U	0.50 U
MW-10D	9/18/2018	1.00 U	0.11 J	9.3	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
MW-10D	10/31/2019	1.00 U	1.00 U	2.2	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
MW-10D	9/4/2020	1.00 U	1.00 U	4.8	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
MW-10D	9/15/2021	1.00 U	1.00 U	0.55 J	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
MW-10D	9/21/2023	0.30 U	0.26 J	0.80 J	0.14 U	0.18 U	0.23 U	0.14 U	0.100 U
MW-11S	3/19/1997	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-11S	1/6/1998	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
MW-11S	10/10/2000	0.40 U	0.40 U	0.11	0.065	0.40 U	0.100	0.40 U	0.40 U
MW-11S	3/13/2001	0.40 U	0.40 U	0.14	0.042	0.40 U	0.092	0.40 U	0.40 U
MW-11S	1/3/2002	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
MW-11S	6/20/2002	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-11S	12/18/2002	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-11S	6/24/2003	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-11S	12/15/2003	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-11S	6/14/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-11S	11/30/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-11S	6/9/2005	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
MW-11S	12/8/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-11S	6/16/2006	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-11S	3/17/2008	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-11S	6/18/2008	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-11D	3/19/1997	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-11D	1/6/1998	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
MW-11D	10/10/2000	0.40 U	0.40 U	0.44	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
MW-11D	3/13/2001	0.40 U	0.40 U	0.083	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
MW-11D	1/3/2002	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
MW-11D	6/20/2002	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-11D	12/18/2002	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-11D	6/24/2003	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-11D	12/15/2003	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-11D	6/14/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-11D	12/6/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-11D	6/7/2005	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
MW-11D	12/8/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-11D	6/16/2006	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-12S	10/12/2000	3600	120000	400000	4800	750	27000	40 U	8.0
MW-12S	12/12/2000	3700	170000	570000	4800	780	41000	40 U	28
MW-12S	3/14/2001	3000	150000	390000	2200	480	24000	10.0 U	10.0 U
MW-12S	9/19/2001	3200	180000	450000	3000	650	26000	8000 U	8000 U
MW-12S	1/7/2002	3100	190000	360000	1700	430	24000	2000 U	2000 U
MW-12S	5/10/2002	5000 U	160000	720000	5000 U	5000 U	32000	5000 U	5000 U
MW-12S	6/25/2002	2900	140000	560000	3400	530	25000	500 U	500 U
MW-12S	10/3/2002	8000 J	120000	460000	5600 J	1400 J	26000	5.0 U	30
MW-12S	12/20/2002	5000 U	150000	230000 J	5000 U	5000 U	10000	5000 U	5000 U
MW-12S	3/26/2003	2400	150000	210000	1400	610 J	11000	500 U	500 U
MW-12S	6/27/2003	3300	110000 J	140000 J	2000	560	9700	50 U	50 U
MW-12S	9/23/2003	2700	71000	370000	2200	540 J	18000	500 U	500 U
MW-12S	12/17/2003	5000 U	80000	140000	5000 U	5000 U	9300 J	5000 U	5000 U
MW-12S	3/18/2004	3300	99000	70000	500 U	500 U	4700	500 U	500 U

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		PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	VC	1,1,1-TCA	1,1-DCA
		µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q
MW-12S	6/15/2004	2600	78000	68000	500 U	500 U	5300	500 U	500 U
MW-12S	9/14/2004	2600	73000	77000	360	350	3200	47 U	47 U
MW-12S	12/6/2004	2600	43000	50000	290	320	2300	50 U	50 U
MW-12S	3/9/2005	1900	28000	30000	300	220	760	50 U	50 U
MW-12S	6/7/2005	250	1300	51000	330	310	2100	25 U	25 U
MW-12S	9/19/2005	100 U	100 U	16000	100 U	110	1400	100 U	100 U
MW-12S	12/8/2005	100 U	100 U	9400	100 U	100 U	2400	100 U	100 U
MW-12S	3/21/2006	50 U	50 U	3500	50 U	50 U	760	50 U	50 U
MW-12S	6/15/2006	500 U	500 U	31000	500 U	500 U	2700	500 U	500 U
MW-12S	9/7/2006	250 U	250 U	14000	250 U	250 U	2500	250 U	250 U
MW-12S	3/17/2008	2.5 U	3.0	1300	2.5 U	3.8	1000	250 U	250 U
MW-12S	4/21/2008	2.5 U	3.1	1300	2.5 U	5.8	1000	2.5 U	2.5 U
MW-12S	5/22/2008	1.3 U	3.0	1000	1.3 U	7.5	1000	1.3 U	1.3 U
MW-12S	6/18/2008	2.5 U	2.5 U	780	2.5 U	5.5	1100	2.5 U	2.5 U
MW-12S	8/20/2010	2.5 U	2.5 U	630	2.5 U	2.5 U	810	2.5 U	2.5 U
MW-12S	8/23/2011	0.50 U	0.92	57	0.50 U	0.50 U	43	0.50 U	0.50 U
MW-12S	8/28/2012	0.50 U	0.53	110	0.50 U	0.50 U	170	0.50 U	0.50 U
MW-12I	1/7/1998	170	28000	37000	310	100 U	1900	100 U	100 U
MW-12I	10/28/1998	130	25000	44000	250	92	1800	50 U	50 U
MW-12I	10/12/2000	170	20000	72000	500	180	4200	40 U	40 U
MW-12I	3/14/2001	110	17000	40000	200	86	2700	10.0 U	10.0 U
MW-12I	1/7/2002	200 U	1800	12000	200 U	200 U	1100	200 U	200 U
MW-12I	6/26/2002	31	4900 J	17000 J	120 J	33	1300 J	0.50 U	0.62
MW-12I	12/20/2002	50 U	4400	23000	120	50 U	1400	50 U	50 U
MW-12I	6/27/2003	500 U	500 U	10000	500 U	500 U	1000	500 U	500 U
MW-12I	12/18/2003	500 U	4000	29000	500 U	500 U	4000	500 U	500 U
MW-12I	6/15/2004	50 U	5900	22000	91 J	140	1900	50 U	50 U
MW-12I	12/6/2004	5.0 U	93	2800	6.3 J	13	390	5.0 U	5.0 U
MW-12I	6/7/2005	5.0 U	12	920	5.0 U	5.0 U	150	5.0 U	5.0 U
MW-12I	12/7/2005	25 U	25 U	1500	25 U	25 U	170	25 U	25 U
MW-12I	6/15/2006	25 U	25 U	1200	25 U	25 U	210	25 U	25 U
MW-12I	3/17/2008	1.00 U	22	560	1.9	1.3	110	1.00 U	1.00 U
MW-12I	4/21/2008	5.0 U	44	4000	10.0	10.0	450	5.0 U	5.0 U
MW-12I	5/22/2008	5.0 U	170	4500	16	12	630	5.0 U	5.0 U
MW-12I	6/18/2008	13 U	160	4200	21	13 U	590	13 U	13 U
MW-12I	8/17/2009	5.0 U	330	2700	13	5.0 UJ	360 J	5.0 U	5.0 U
MW-12I	1/12/2010	2.5 U	360	1700	6.3	3.3	160	2.5 U	2.5 U
MW-12I	8/20/2010	0.50 U	0.50 U	52	0.50 U	0.50 U	38	0.50 U	0.50 U
MW-12I	8/23/2011	0.50 U	1.1	14	0.50 U	0.50 U	8.8	0.50 U	0.50 U
MW-12I	8/28/2012	0.50 U	0.50 U	0.87	0.50 U	0.50 U	1.8	0.50 U	0.50 U
MW-12D	3/20/1997	85	1200 U	760 U	13 U	13 U	13 U	13 U	13 U
MW-12D	1/7/1998	470	65000	52000	370	200 U	3900	200 U	200 U
MW-12D	4/14/2000	37	12000 U	16000	73	31	450 U	0.40 U	2.9 J
MW-12D	10/11/2000	200 U	20000	45000	290	120	2700	200 U	200 U
MW-12D	3/14/2001	110	24000	30000	200	66	1700	10.0 U	10.0 U
MW-12D	1/7/2002	200 U	26000	39000	170	200 U	2500	200 U	200 U
MW-12D	6/25/2002	97	25000	46000	200	95	2900	50 U	50 U
MW-12D	12/20/2002	500 U	29000	48000	500 U	500 U	3000	500 U	500 U
MW-12D	6/27/2003	500 U	25000 J	25000 J	500 U	500 U	1200	500 U	500 U
MW-12D	12/17/2003	500 U	22000	28000	500 U	500 U	1800	500 U	500 U
MW-12D	6/15/2004	21 J	4000 J	10000 J	33 J	33 J	510 J	10.0 UJ	10.0 UJ
MW-12D	12/6/2004	5.1 J	380	400	5.0 U	5.0 U	5.5 J	5.0 U	5.0 U
MW-12D	6/7/2005	6.2	390	360	2.5 U	2.5 U	12	2.5 U	2.5 U
MW-12D	9/19/2005	2.5 U	280	390	2.5 U	2.5 U	19	2.5 U	2.5 U

Table B-1. Historical Groundwater Concentrations for Key Analytes

2023 Annual Groundwater Monitoring Report

Milwaukie International Way
Milwaukie, Oregon

Well	Date	Chlorinated Ethenes						Chlorinated Ethanes	
		PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	VC	1,1,1-TCA	1,1-DCA
		µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q
MW-12D	12/8/2005	2.5 U	160	240	2.5 U	2.5 U	9.0	2.5 U	2.5 U
MW-12D	6/15/2006	0.50 U	0.50 U	2.3	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-12D	6/25/2007	1.00 U	7.0	11	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
MW-12D	3/17/2008	0.50 U	32	190	0.75	0.50 U	14	0.50 U	0.50 U
MW-12D	6/18/2008	2.5 U	180	1200	4.1	7.3	200	2.5 U	2.5 U
MW-12D	8/17/2009	0.50 U	49	100	0.68	0.50 UJ	11 J	0.50 U	0.50 U
MW-12D	8/20/2010	0.50 U	12	51	0.50 U	0.50 U	5.2	0.50 U	0.50 U
MW-12D	8/23/2011	0.50 U	2.2	3.2	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-12D	8/28/2012	0.50 U	0.64	4.8	0.50 U	0.50 U	1.1	0.50 U	0.50 U
MW-12D	11/4/2019	1.00 U	1.00 U	0.47 J	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
MW-12D	9/15/2021	1.00 U	1.9	1.5	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
MW-12D	9/20/2023	0.30 U	0.42 J	1.2	0.14 U	0.18 U	0.34 J	0.14 U	0.100 U
MW-13D	3/20/1997	340 U	30000	7000 U	130 U	130 U	130 U	130 U	130 U
MW-13D	1/6/1998	190	28000	8400	100 U	100 U	140	100 U	100 U
MW-13D	4/14/2000	120	22000	8500 U	47	19	160 U	0.40 U	0.40 U
MW-13D	10/11/2000	140	22000	8000	60	200 U	65	200 U	200 U
MW-13D	3/14/2001	220	27000	9600	110	27	310	10.0 U	10.0 U
MW-13D	1/7/2002	180	24000	12000	200 U	200 U	430	200 U	200 U
MW-13D	6/24/2002	990	22000	22000	500 U	500 U	3600	500 U	500 U
MW-13D	12/19/2002	150	22000	13000	88 J	50 U	500	50 U	50 U
MW-13D	6/27/2003	130	16000 J	12000 J	160	45	490	5.0 U	5.0 U
MW-13D	12/17/2003	500 U	23000	15000	500 U	500 U	690 J	500 U	500 U
MW-13D	6/15/2004	91 J	17000	13000	84 J	50 U	580	50 U	50 U
MW-13D	11/30/2004	70	11000	9000	67	29	440	10.0 U	10.0 U
MW-13D	6/14/2005	31	7500	5400	67	15	130	2.5 U	2.5 U
MW-13D	9/19/2005	50 U	3500	3400	50 U	50 U	88	50 U	50 U
MW-13D	12/8/2005	50 U	4400	3900	50 U	50 U	50 U	50 U	50 U
MW-13D	6/19/2006	32	4000	2900	25 U	25 U	82	25 U	25 U
MW-13D	6/21/2007	3.7	390	580	10.0	2.8	40	1.00 U	1.00 U
MW-13D	6/18/2008	5.6	930	970	6.9	3.2	14	2.5 U	2.5 U
MW-13D	8/17/2009	2.6	380	420	9.5	1.5 J	13 J	0.50 U	0.50 U
MW-13D	1/12/2010	3.5	450	410	4.4	1.9	8.2	0.50 U	0.50 U
MW-13D	8/20/2010	8.5	1200	660	4.8	2.5	11	2.5 U	2.5 U
MW-13D	8/23/2011	1.2	170	220	1.9	0.64	1.2	0.50 U	0.50 U
MW-13D	8/27/2012	0.74	130	130	1.5	0.50 U	0.64	0.50 U	0.50 U
MW-13D	8/29/2013	0.80	87	76	0.85	0.50 U	0.50 U	0.50 U	0.50 U
MW-13D	8/19/2014	0.72	99	80	2.1	0.50 U	0.50 U	0.50 U	0.50 U
MW-13D	8/27/2015	1.00	130 J	80	1.8	0.50 U	0.50 U	0.50 U	0.50 U
MW-13D	8/29/2016	1.4	140	83	1.3	0.50 U	0.50 U	0.50 U	0.50 U
MW-13D	9/13/2017	0.50 U	10.0	16	0.59	0.50 U	0.50 U	0.50 U	0.50 U
MW-13D	9/18/2018	0.16 J	19	25	0.45 J	1.00 U	1.00 U	1.00 U	1.00 U
MW-13D	11/4/2019	1.00 U	21	32	0.73 J	1.00 U	1.00 U	1.00 U	1.00 U
MW-13D	9/3/2020	0.76 J	170	110	0.52 J	1.00 U	1.00 U	1.00 U	1.00 U
MW-13D	9/16/2021	1.00 U	39	36	0.73 J	1.00 U	1.00 U	1.00 U	1.00 U
MW-13D	9/20/2023	0.30 U	11	33	1.9	0.18 U	0.23 U	0.14 U	0.16 J
MW-14D	12/13/2000	3.6	220	110	1.1	0.36	2.8	0.40 U	0.40 U
MW-14D	3/14/2001	3.6	280	130	10.0 U	10.0 U	3.8	10.0 U	10.0 U
MW-14D	6/6/2001	5.7	510	280	1.6	10.0 U	9.1	10.0 U	10.0 U
MW-14D	9/19/2001	5.2	700	520	2.9	8.0 U	13	8.0 U	8.0 U
MW-14D	1/7/2002	20 U	900	650	20 U	20 U	19	20 U	20 U
MW-14D	6/24/2002	50 U	1300	1000	50 U	50 U	50 U	50 U	50 U
MW-14D	10/3/2002	9.2	1600	1200	6.5	5.0 U	37	5.0 U	5.0 U
MW-14D	12/19/2002	50 U	1600	1300	50 U	50 U	52 J	50 U	50 U
MW-14D	3/26/2003	7.4 J	1400	1200	7.7 J	5.0 U	46	5.0 U	5.0 U

Table B-1. Historical Groundwater Concentrations for Key Analytes

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Milwaukie International Way
Milwaukie, Oregon

Well	Date	Chlorinated Ethenes						Chlorinated Ethanes	
		PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	VC	1,1,1-TCA	1,1-DCA
		µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q
MW-14D	6/27/2003	6.5	930	820	12	2.4	30	0.50 U	0.50 U
MW-14D	9/24/2003	500 U	1500	1400	500 U	500 U	500 U	500 U	500 U
MW-14D	12/17/2003	50 U	1600	1600	50 U	50 U	66 J	50 U	50 U
MW-14D	3/15/2004	10	1500	1800	11	5.0 J	75	5.0 U	5.0 U
MW-14D	6/15/2004	8.2 J	1300	1600	9.2 J	5.0 U	62	5.0 U	5.0 U
MW-14D	9/14/2004	2.5 U	180	200	2.5 U	2.5 U	3.8 J	2.5 U	2.5 U
MW-14D	12/6/2004	5.0 U	150	170	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
MW-14D	3/9/2005	0.50 U	76	72	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-14D	6/7/2005	0.52	79	82	0.82	0.25 U	0.25 U	0.25 U	0.25 U
MW-14D	9/19/2005	0.50 UJ	16 J	19 J	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
MW-14D	12/12/2005	0.50 U	34	36	0.78	0.50 U	0.50 U	0.50 U	0.50 U
MW-14D	3/21/2006	0.50 U	45	49	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-14D	6/15/2006	0.50 U	17	20	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-14D	9/8/2006	0.50 U	2.4	2.8	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-14D	6/22/2007	1.00 U	3.6	4.2	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
MW-14D	6/18/2008	0.50 U	12	5.8	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-14D	8/17/2009	0.50 U	2.9	3.5	0.50 U	0.50 UJ	0.50 UJ	0.50 U	0.50 U
MW-14D	8/20/2010	0.50 U	6.9	15	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-14D	8/23/2011	0.50 U	8.3	51	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-14D	8/27/2012	0.50 U	1.5	0.93	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-14D	8/21/2014	0.50 U	1.00	0.65	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-14D	8/27/2015	0.50 U	1.6 J	0.65	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-14D	8/30/2016	0.50 U	2.3	0.82	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-14D	9/14/2017	0.50 U	2.7	8.1	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-14D	9/18/2018	1.00 U	1.2	0.74 J	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
MW-14D	11/4/2019	1.00 U	2.2	1.5	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
MW-14D	9/3/2020	1.00 U	2.1	1.6	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
MW-14D	9/15/2021	1.00 U	3.7	1.4	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
MW-14D	9/20/2023	0.30 U	0.19 U	0.12 U	0.14 U	0.18 U	0.23 U	0.14 U	0.100 U
MW-15S	10/12/2000	0.40 U	1.7	1.5	0.40 U	0.40 U	0.11	0.40 U	0.40 U
MW-15S	12/12/2000	0.40 U	0.28	0.33	0.40 U	0.40 U	0.12	0.40 U	0.40 U
MW-15S	3/14/2001	0.40 U	0.091	0.18	0.40 U	0.40 U	0.100	0.40 U	0.40 U
MW-15S	6/6/2001	0.40 U	0.40 U	0.099	0.40 U	0.40 U	0.100	0.40 U	0.40 U
MW-15S	9/19/2001	0.40 U	0.10	0.23	0.40 U	0.40 U	0.10	0.40 U	0.40 U
MW-15S	1/3/2002	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
MW-15S	5/9/2002	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-15S	6/20/2002	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-15S	10/2/2002	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-15S	12/18/2002	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-15S	3/26/2003	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-15S	6/24/2003	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-15S	9/23/2003	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-15S	6/14/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-15S	9/14/2004	0.50 U	0.50 U	11	0.50 U	0.50 U	22	0.50 U	0.50 U
MW-15S	11/30/2004	0.50 U	0.50 U	97	0.50 U	0.50 U	180	0.50 U	0.50 U
MW-15S	6/7/2005	0.25 U	0.25 U	0.70	0.25 U	0.25 U	2.6	0.25 U	0.25 U
MW-15S	12/7/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	1.7	0.50 U	0.50 U
MW-15S	6/16/2006	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-16S	10/10/2000	0.40 U	8.5	24	0.63	0.40 U	0.15	0.40 U	0.40 U
MW-16S	12/12/2000	0.40 U	7.1	42	1.00	0.083	0.19	0.40 U	0.40 U
MW-16S	3/13/2001	0.40 U	4.3	28	0.72	0.40 U	0.11	0.40 U	0.40 U
MW-16S	6/5/2001	0.40 U	6.4	49	1.4	0.12	0.32	0.40 U	0.40 U
MW-16S	9/19/2001	8.0 U	11	68	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U
MW-16S	1/3/2002	1.00 U	1.00 U	2.9	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U

Table B-1. Historical Groundwater Concentrations for Key Analytes

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Milwaukie International Way
Milwaukie, Oregon

Well	Date	Chlorinated Ethenes						Chlorinated Ethanes	
		PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	VC	1,1,1-TCA	1,1-DCA
		µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q
MW-16S	5/10/2002	0.50 U	1.7	32	0.73	0.50 U	0.50 U	0.50 U	0.50 U
MW-16S	6/21/2002	5.0 U	5.0 U	77	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
MW-16S	10/3/2002	0.50 U	1.2	52	1.0	0.50 U	0.55	0.50 U	0.50 U
MW-16S	12/19/2002	0.50 U	0.50 U	5.9	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-16S	3/26/2003	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-16S	6/24/2003	0.50 U	1.2	36	1.1	0.50 U	0.50 U	0.50 U	0.50 U
MW-16S	9/24/2003	0.50 U	0.50 U	0.77 J	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-16S	12/17/2003	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-16S	3/18/2004	0.50 U	0.50 U	2.9	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-16S	9/14/2004	0.50 U	0.50 U	4.7	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-16S	12/2/2004	0.50 U	0.50 U	1.6	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-16S	3/9/2005	0.50 U	0.50 U	7.7	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-16S	6/9/2005	0.25 U	0.25 U	0.76	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
MW-16S	9/23/2005	0.50 U	0.50 U	13	0.78	0.50 U	0.50 U	0.50 U	0.50 U
MW-16S	12/14/2005	0.50 U	0.50 U	4.7	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-16S	6/20/2006	0.50 U	0.50 U	5.5	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-16S	6/25/2007	1.00 U	1.00 U	23	1.4	1.00 U	1.00 U	1.00 U	1.00 U
MW-16S	6/19/2008	0.50 U	0.50 U	4.5	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-16S	8/17/2009	0.50 U	0.50 U	6.0	0.90	0.50 UJ	0.50 UJ	0.50 U	0.50 U
MW-17S	10/10/2000	0.40 U	14	7900	37	3.0	560	0.40 U	0.060
MW-17S	12/12/2000	16	580	7200	23	4.3	680	40 U	40 U
MW-17S	3/13/2001	4.0 U	29	4900	14	1.5	550	4.0 U	4.0 U
MW-17S	6/5/2001	100 U	100 U	5200	100 U	100 U	510	100 U	100 U
MW-17S	9/19/2001	80 U	57	6000	80 U	80 U	430	80 U	80 U
MW-17S	1/3/2002	200 U	200 U	4000	200 U	200 U	750	200 U	200 U
MW-17S	5/10/2002	50 U	50 U	4700	50 U	50 U	440	50 U	50 U
MW-17S	6/25/2002	5.0 U	5.0 U	3800	6.8	5.0 U	310	5.0 U	5.0 U
MW-17S	10/3/2002	50 U	50 U	2100 J	50 U	50 U	160	50 U	50 U
MW-17S	12/20/2002	0.50 U	2.8	2200 J	4.4	0.89 J	300 J	0.50 U	0.50 U
MW-17S	3/26/2003	2.5 U	2.5 U	2400	2.5 U	2.5 U	690	2.5 U	2.5 U
MW-17S	6/24/2003	50 U	50 U	2100	50 U	50 U	290	50 U	50 U
MW-17S	9/24/2003	5.0 U	5.0 U	580	5.0 U	5.0 U	110	5.0 U	5.0 U
MW-17S	12/18/2003	5.0 U	5.0 U	230	5.0 U	5.0 U	140	5.0 U	5.0 U
MW-17S	3/18/2004	5.0 U	5.0 U	360	5.0 U	5.0 U	140	5.0 U	5.0 U
MW-17S	6/15/2004	0.50 U	0.50 U	180	0.50 U	0.50 U	130	0.50 U	0.50 U
MW-17S	9/14/2004	2.5 U	2.5 U	230	2.5 U	2.5 U	48	2.5 U	2.5 U
MW-17S	11/30/2004	0.50 U	0.50 U	290	0.50 U	0.50 U	48	0.50 U	0.50 U
MW-17S	3/9/2005	2.5 U	2.5 U	160	2.5 U	2.5 U	21	2.5 U	2.5 U
MW-17S	6/7/2005	1.2 U	1.2 U	95	1.2 U	1.2 U	21	1.2 U	1.2 U
MW-17S	9/20/2005	2.5 U	2.5 U	320	2.5 U	2.5 U	57	2.5 U	2.5 U
MW-17S	12/7/2005	0.50 U	0.50 U	46	0.50 U	0.50 U	19	0.50 U	0.50 U
MW-17S	6/15/2006	2.5 U	2.5 U	89	2.5 U	2.5 U	11	2.5 U	2.5 U
MW-17S	8/17/2009	0.50 U	0.50 U	48	0.50 U	0.50 UJ	11 J	0.50 U	0.50 U
MW-17S	9/16/2019	1.00 U	1.00 U	8.4	1.00 U	1.00 U	3.9	1.00 U	1.00 U
MW-17S	9/19/2023	0.30 U	0.19 U	10	0.14 U	0.18 U	2.8	0.14 U	0.100 U
MW-18S	10/12/2000	5000	620000	140000	1900	170	1600	40 U	6.0
MW-18S	12/13/2000	3400	740000	160000	2000	170	1400	40 U	14
MW-18S	3/15/2001	3800	580000	120000	720	170	1400	500 U	500 U
MW-18S	6/6/2001	3500	330000	110000	670	260	1500	10.0 U	10.0 U
MW-18S	9/19/2001	2900	440000	150000	910	200	1500	800 U	800 U
MW-18S	1/7/2002	3300	460000	130000	990	220	1800	200 U	200 U
MW-18S	5/10/2002	5000 U	350000	110000	5000 U	5000 U	5000 U	5000 U	5000 U
MW-18S	6/25/2002	3600	660000	140000	940	500 U	2000	500 U	500 U
MW-18S	10/3/2002	3400	960000	140000	930	240 J	2000	0.50 U	3.3

Table B-1. Historical Groundwater Concentrations for Key Analytes

Milwaukie International Way
Milwaukie, Oregon

Well	Date	Chlorinated Ethenes						Chlorinated Ethanes	
		PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	VC	1,1,1-TCA	1,1-DCA
		µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q
MW-19-100	6/27/2003	0.50 U	48	240 J	2.1	0.50 U	3.8	0.50 U	0.50 U
MW-19-100	9/24/2003	0.50 U	11	54	0.75 J	0.50 U	3.1	0.50 U	0.50 U
MW-19-100	12/12/2003	0.50 U	4.3	24	0.51 J	0.50 U	1.0	0.50 U	0.50 U
MW-19-100	3/18/2004	5.0 U	5.0 U	19	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
MW-19-100	9/16/2004	0.50 U	1.1	3.0	0.50 U	0.50 U	0.71 J	0.50 U	0.50 U
MW-19-100	12/8/2004	0.50 U	0.53 J	1.5 J	0.50 U	0.50 U	0.50 J	0.50 U	0.50 U
MW-19-100	3/9/2005	0.50 U	0.50 U	1.1	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-19-100	6/7/2005	0.25 U	0.25 U	0.53 J	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
MW-19-100	9/19/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-19-100	12/9/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-19-100	6/19/2006	0.50 U	0.50 U	3.3	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-19-100	6/18/2008	0.50 U	2.1	19	0.50 U	0.50 U	10.0	0.50 U	0.50 U
MW-19-100	8/17/2009	0.50 U	2.3	15	0.50 U	0.50 U	8.0 J	0.50 U	0.50 U
MW-19-100	8/20/2010	0.50 U	0.50 U	0.87	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-19-100	8/26/2011	0.50 U	0.97	0.81	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-19-100	8/27/2012	0.50 U	0.94	0.70	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-19-100	8/29/2013	0.50 U	0.50 U	2.3	0.50 U	0.50 U	1.6	0.50 U	0.50 U
MW-19-100	8/27/2015	0.50 U	0.61 J	3.3	0.50 U	0.50 U	0.61	0.50 U	0.50 U
MW-19-100	8/29/2016	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-19-100	9/13/2017	0.50 U	0.50 U	1.2	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-19-100	9/18/2018	1.00 U	0.43 J	0.49 J	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
MW-19-100	11/4/2019	1.00 U	1.00 U	3.4	1.00 U	1.00 U	0.36 J	1.00 U	1.00 U
MW-19-100	9/3/2020	1.00 U	0.56 J	0.78 J	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
MW-19-100	9/16/2021	1.00 U	1.00 U	2.1	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
MW-19-100	9/20/2023	0.30 U	1.4	9.9	1.9	0.19 J	0.23 U	0.14 U	0.100 U
MW-19-136	6/27/2003	3.0	46	15 J	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-19-136	9/23/2003	2.5 U	2.5 U	14	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
MW-19-136	12/17/2003	0.50 U	0.88 J	21	0.50 J	0.50 U	0.92 J	0.50 U	0.50 U
MW-19-136	3/18/2004	5.0 U	5.0 U	38	5.0 U	5.0 U	9.8 J	5.0 U	5.0 U
MW-19-136	6/15/2004	0.50 U	7.7	35	0.79 J	0.50 U	2.8	0.50 U	0.50 U
MW-19-136	9/14/2004	0.50 U	0.50 U	15	0.54 J	0.50 U	4.0	0.50 U	0.50 U
MW-19-136	11/30/2004	0.50 U	0.50 U	57	1.6	0.50 U	10	0.50 U	0.50 U
MW-19-136	3/14/2005	0.50 U	0.50 U	52	1.6	0.50 U	16	0.50 U	0.50 U
MW-19-136	6/7/2005	0.25 U	0.25 U	8.1	0.25 U	0.25 U	6.6	0.25 U	0.25 U
MW-19-136	9/23/2005	0.50 U	0.50 U	10.0	0.73	0.50 U	26	0.50 U	0.50 U
MW-19-136	12/12/2005	0.50 U	0.50 U	5.2	0.50 U	0.50 U	12	0.50 U	0.50 U
MW-19-136	3/22/2006	0.50 U	0.50 U	—	0.50 U	0.50 U	—	0.50 U	0.50 U
MW-19-136	6/16/2006	0.50 U	0.50 U	20	0.50 U	0.50 U	13	0.50 U	0.50 U
MW-19-136	9/7/2006	0.50 U	0.50 U	25	0.65	0.50 U	18	0.50 U	0.50 U
MW-19-136	6/18/2008	0.50 U	0.50 U	19	0.50 U	0.55	15	0.50 U	0.50 U
MW-19-136	8/17/2009	0.50 U	0.64	300	1.1	3.6 J	280 J	0.50 U	0.50 U
MW-19-136	8/20/2010	0.50 U	0.50	370	0.56	5.9	340	0.50 U	0.50 U
MW-19-136	1/18/2011	0.50 U	0.50 U	11	0.50 U	0.50 U	14	0.50 U	0.50 U
MW-19-136	3/28/2011	0.50 U	0.50 U	14	0.50 U	0.50 U	12	0.50 U	0.50 U
MW-19-136	6/20/2011	0.50 U	0.50 U	13	0.50 U	0.52	11	0.50 U	0.50 U
MW-19-136	8/26/2011	0.50 U	0.50 U	28	0.50 U	0.77	29	0.50 U	0.50 U
MW-19-136	11/7/2011	0.50 U	0.50 U	2.9	0.50 U	0.50 U	3.8	0.50 U	0.50 U
MW-19-136	8/27/2012	0.50 U	0.50 U	43	0.50 U	1.1	42	0.50 U	0.50 U
MW-19-136	8/29/2013	0.50 U	0.50 U	1.1	0.50 U	0.50 U	2.2	0.50 U	0.50 U
MW-19-136	8/27/2015	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.87	0.50 U	0.50 U
MW-19-136	8/29/2016	0.50 U	0.50 U	1.7	0.50 U	0.50 U	2.7	0.50 U	0.50 U
MW-19-136	9/13/2017	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.68	0.50 U	0.50 U
MW-19-136	9/18/2018	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
MW-19-136	11/4/2019	1.00 U	1.00 U	0.91 J	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U

Table B-1. Historical Groundwater Concentrations for Key Analytes

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Milwaukie International Way
Milwaukie, Oregon

Well	Date	Chlorinated Ethenes						Chlorinated Ethanes	
		PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	VC	1,1,1-TCA	1,1-DCA
		µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q
MW-19-136	9/3/2020	1.00 U	1.00 U	2.1	1.00 U	1.00 U	5.9 J	1.00 U	0.15 J
MW-19-136	9/16/2021	1.00 U	1.00 U	0.15 J	1.00 U	1.00 U	0.74 J	1.00 U	1.00 U
MW-19-136	9/20/2023	0.30 U	0.19 U	0.12 U	0.14 U	0.18 U	0.23 U	0.14 U	0.100 U
MW-19-173	6/27/2003	0.50 U	2.2	5.7	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-19-173	9/23/2003	0.50 U	2.7	12	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-19-173	12/17/2003	0.50 U	0.64 J	14	0.50 U	0.50 U	0.65 J	0.50 U	0.50 U
MW-19-173	3/18/2004	0.50 U	0.50 U	32	0.65 J	0.50 U	2.3	0.50 U	0.50 U
MW-19-173	6/15/2004	0.50 U	0.50 U	26	0.53 J	0.50 U	2.9	0.50 U	0.50 U
MW-19-173	9/14/2004	0.50 U	0.50 U	16	0.50 U	0.50 U	2.0	0.50 U	0.50 U
MW-19-173	11/30/2004	0.50 U	0.50 U	27	0.53 J	0.50 U	3.6	0.50 U	0.50 U
MW-19-173	3/14/2005	0.50 U	0.50 U	44	0.74	0.50 U	5.4	0.50 U	0.50 U
MW-19-173	6/7/2005	0.25 U	0.25 U	19	0.25 U	0.25 U	4.6	0.25 U	0.25 U
MW-19-173	9/23/2005	0.50 U	0.50 U	12	0.50 U	0.50 U	7.0	0.50 U	0.50 U
MW-19-173	12/12/2005	0.50 U	0.50 U	9.3	0.56	0.50 U	12	0.50 U	0.50 U
MW-19-173	3/22/2006	0.50 U	0.50 U	5.8	0.50 U	0.50 U	10.0	0.50 U	0.50 U
MW-19-173	6/16/2006	0.50 U	0.50 U	7.2	0.50 U	0.50 U	14	0.50 U	0.50 U
MW-19-173	9/8/2006	0.50 U	0.50 U	8.0	0.50 U	0.50 U	14	0.50 U	0.50 U
MW-19-173	6/28/2007	1.00 U	1.00 U	16	1.2	1.00 U	12	1.00 U	1.00 U
MW-19-173	6/18/2008	0.50 U	0.50 U	24	0.50 U	0.50 U	18	0.50 U	0.50 U
MW-19-173	8/20/2010	0.50 U	0.50 U	78	0.50 U	1.7	130	0.50 U	0.50 U
MW-19-173	1/18/2011	0.50 U	0.50 U	77	0.50 U	1.5	99	0.50 U	0.50 U
MW-19-173	3/28/2011	0.50 U	0.50 U	5.8	0.50 U	0.50 U	9.0	0.50 U	0.50 U
MW-19-173	6/20/2011	0.50 U	0.50 U	2.9	0.50 U	0.50 U	4.9	0.50 U	0.50 U
MW-19-173	8/26/2011	0.50 U	0.50 U	7.6	0.50 U	0.50 U	24	0.50 U	0.50 U
MW-19-173	11/7/2011	0.50 U	0.50 U	1.3	0.50 U	0.50 U	4.2	0.50 U	0.50 U
MW-19-173	8/27/2012	0.50 U	0.50 U	7.8	0.50 U	0.50 U	18	0.50 U	0.50 U
MW-19-173	8/29/2013	0.50 U	0.50 U	0.87	0.50 U	0.50 U	2.9	0.50 U	0.50 U
MW-19-173	8/27/2015	0.50 U	0.50 U	0.70	0.50 U	0.50 U	6.4	0.50 U	0.50 U
MW-19-173	8/29/2016	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	1.9	0.50 U	0.50 U
MW-19-173	9/13/2017	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-19-173	9/19/2018	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
MW-19-173	11/4/2019	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
MW-19-173	9/20/2023	0.30 U	0.19 U	0.12 U	0.14 U	0.18 U	0.23 U	0.14 U	0.100 U
MW-19-173	9/20/2023	0.30 U	0.19 U	0.12 U	0.14 U	0.18 U	0.23 U	0.14 U	0.100 U
OSB-1	12/13/2000	0.40 U	4.3	27	0.14	0.40 U	0.50	0.40 U	0.40 U
OSB-1	3/15/2001	0.40 U	5.1	28	0.100	0.40 U	0.44	0.40 U	0.40 U
OSB-1	6/6/2001	0.40 U	5.1	27	0.20	0.40 U	0.68	0.40 U	0.40 U
OSB-1	9/20/2001	0.40 U	4.9	36	0.15	0.40 U	0.85	0.40 U	0.40 U
OSB-1	1/4/2002	1.00 U	4.7	31	1.00 U	1.00 U	0.54	1.00 U	1.00 U
OSB-1	5/11/2002	0.50 U	4.2	33	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-1	6/26/2002	0.50 U	6.1	38	0.50 U	0.50 U	0.74	0.50 U	0.50 U
OSB-1	10/4/2002	1.00 U	4.1	36	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
OSB-1	12/20/2002	0.50 U	6.4	47	0.50 U	0.50 U	0.96 J	0.50 U	0.50 U
OSB-1	6/27/2003	0.50 U	6.2	48	0.50 U	0.50 U	0.96 J	0.50 U	0.50 U
OSB-1	9/26/2003	0.50 U	6.1	53	0.50 U	0.50 U	1.4	0.50 U	0.50 U
OSB-1	12/19/2003	0.50 U	6.5	54	0.50 U	0.50 U	1.3	0.50 U	0.50 U
OSB-1	3/17/2004	0.50 U	7.0	71	0.50 U	0.50 U	1.5	0.50 U	0.50 U
OSB-1	6/15/2004	0.50 U	2.3	22	0.50 U	0.50 U	0.20 U	0.50 U	0.50 U
OSB-1	9/14/2004	0.50 U	7.3	84	0.50 U	0.50 U	2.3	0.50 U	0.50 U
OSB-1	12/2/2004	0.50 U	6.9	76	0.50 U	0.50 U	2.2	0.50 U	0.50 U
OSB-1	3/10/2005	0.50 U	6.6	88	0.62	0.50 U	2.0	0.50 U	0.50 U
OSB-1	6/9/2005	0.25 U	7.2	90	0.52	0.25 U	2.9	0.25 U	0.25 U
OSB-1	9/21/2005	0.50 U	7.4	130 J	0.59	0.50 U	4.6	0.50 U	0.50 U
OSB-1	12/15/2005	2.5 U	7.3	95	2.5 U	2.5 U	3.0	2.5 U	2.5 U

Table B-1. Historical Groundwater Concentrations for Key Analytes

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Milwaukie International Way
Milwaukie, Oregon

Well	Date	Chlorinated Ethenes						Chlorinated Ethanes	
		PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	VC	1,1,1-TCA	1,1-DCA
		µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q
OSB-1	3/23/2006	0.50 U	6.8	90	0.50 U	0.50 U	2.8	0.50 U	0.50 U
OSB-1	6/20/2006	0.50 U	6.8	96	0.50 U	0.50 U	2.6	0.50 U	0.50 U
OSB-1	9/7/2006	2.5 U	7.8	110	2.5 U	2.5 U	3.9	2.5 U	2.5 U
OSB-1	6/28/2007	0.75	7.5	99	1.00 U	1.00 U	2.0 U	1.00 U	1.00 U
OSB-1	6/19/2008	0.50 U	7.8	110	0.60	0.50 U	3.9	0.50 U	0.50 U
OSB-1	8/19/2009	0.50 U	0.50 U	0.92	0.50 U	0.50 UJ	0.50 UJ	0.50 U	0.50 U
OSB-1	8/25/2010	0.50 U	1.6	19	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-1	8/26/2011	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-1	9/18/2018	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
OSB-1	10/31/2019	1.00 U	1.3	45	1.00 U	1.00 U	0.63 J	1.00 U	1.00 U
OSB-1	9/3/2020	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
OSB-1	9/16/2021	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
OSB-1	9/21/2023	0.30 U	0.79 J	27	0.14 U	0.18 U	0.23 U	0.14 U	0.100 U
OSB-3-71	10/26/2000	0.80 U	3.0	1.3	0.80 U	0.80 U	0.80 U	0.80 U	0.80 U
OSB-3-71	1/4/2001	5.0	570	240	10.0 U	10.0 U	7.5	10.0 U	10.0 U
OSB-3-71	6/6/2001	2.3	270	160	1.7	10.0 U	4.9	10.0 U	10.0 U
OSB-3-71	9/20/2001	1.4	290	180	2.5	0.24	4.2	0.40 U	0.40 U
OSB-3-71	5/11/2002	5.0 U	400	220	5.0 U	5.0 U	6.6	5.0 U	5.0 U
OSB-3-71	6/26/2002	1.9	390	250	2.8	0.50 U	6.6	0.50 U	0.50 U
OSB-3-71	10/4/2002	5.0 U	410 J	230	5.0 U	5.0 U	7.0	5.0 U	5.0 U
OSB-3-71	12/20/2002	5.0 UJ	280 J	130 J	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ
OSB-3-71	3/26/2003	5.5 J	730	280	5.0 U	5.0 U	12	5.0 U	5.0 U
OSB-3-71	6/27/2003	1.7	220	90	1.7	0.50 U	3.3	0.50 U	0.50 U
OSB-3-71	9/26/2003	2.9	390	190	2.5	0.50 U	7.0	0.50 U	0.50 U
OSB-3-71	12/19/2003	7.7 J	780	210	5.0 U	5.0 U	9.1 J	5.0 U	5.0 U
OSB-3-71	3/17/2004	11 J	1100	290	10.0 U	10.0 U	12 J	10.0 U	10.0 U
OSB-3-71	6/15/2004	5.0	510	210	2.6 J	2.5 U	9.6	2.5 U	2.5 U
OSB-3-71	9/14/2004	4.0 J	500	210	2.5 J	2.5 U	8.2	2.5 U	2.5 U
OSB-3-71	12/2/2004	7.7 J	810	240	5.0 U	5.0 U	11	5.0 U	5.0 U
OSB-3-71	3/10/2005	5.0 U	340	140	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
OSB-3-71	6/14/2005	2.5 U	640	210	2.5 U	2.5 U	8.9	2.5 U	2.5 U
OSB-3-71	9/20/2005	5.0 U	490	200	5.0 U	5.0 U	9.3	5.0 U	5.0 U
OSB-3-71	12/16/2005	10.0 U	750	220	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
OSB-3-71	3/22/2006	—	—	—	5.0 U	5.0 U	—	5.0 U	5.0 U
OSB-3-71	6/20/2006	5.9	750	210	5.0 U	5.0 U	8.6	5.0 U	5.0 U
OSB-3-71	9/7/2006	5.0 U	460	180	5.0 U	5.0 U	7.4	5.0 U	5.0 U
OSB-3-71	6/28/2007	5.0 U	380	130	5.0 U	5.0 U	10.0 U	5.0 U	5.0 U
OSB-3-71	6/19/2008	2.7	330	87	1.1	0.50 U	2.2	0.50 U	0.50 U
OSB-3-71	8/19/2009	0.50 U	14	8.7	0.50 U	0.50 UJ	0.50 UJ	0.50 U	0.50 U
OSB-3-71	1/12/2010	0.50 U	1.4	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-3-71	8/25/2010	0.50 U	31	11	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-3-71	8/25/2011	0.50 U	4.3	0.81	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-3-71	8/28/2012	0.50 U	3.0	0.54	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-3-71	8/29/2013	0.50 U	2.6	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-3-71	10/31/2019	1.00 U	0.92 J	8.0	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
OSB-3-71	9/3/2020	1.00 U	0.94 J	2.1	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
OSB-3-71	9/16/2021	1.00 U	2.9	12	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
OSB-3-71	9/21/2023	0.30 U	5.9	19	0.14 U	0.18 U	0.23 U	0.14 U	0.100 U
OSB-3-130	10/27/2008	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-3-130	8/19/2009	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 UJ	0.50 U	0.50 U
OSB-3-130	8/25/2010	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-3-130	8/23/2011	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-3-130	8/28/2012	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-3-130	8/29/2013	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U

Table B-1. Historical Groundwater Concentrations for Key Analytes

Milwaukie International Way
Milwaukie, Oregon

Well	Date	Chlorinated Ethenes						Chlorinated Ethanes	
		PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	VC	1,1,1-TCA	1,1-DCA
		µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q
OSB-3-130	9/19/2018	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
OSB-3-130	10/31/2019	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
OSB-3-130	9/21/2023	0.30 U	0.19 U	0.12 U	0.14 U	0.18 U	0.23 U	0.14 U	0.100 U
OSB-4	3/15/2001	0.40 U	0.61	0.25	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
OSB-4	6/6/2001	0.40 U	0.52	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
OSB-4	9/20/2001	0.40 U	0.61	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
OSB-4	1/4/2002	1.00 U	0.69	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
OSB-4	5/10/2002	0.50 U	0.59	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-4	6/24/2002	0.50 U	0.57	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-4	10/4/2002	0.50 U	0.60	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-4	12/23/2002	0.50 U	0.79 J	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-4	3/28/2003	0.50 U	0.72 J	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-4	6/27/2003	0.50 U	0.96 J	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-4	9/24/2003	0.50 U	0.72 J	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-4	12/12/2003	0.50 U	0.75 J	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-4	3/18/2004	0.50 U	0.79 J	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-4	6/21/2004	0.50 U	0.65 J	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-4	9/16/2004	0.50 U	0.80 J	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-4	12/8/2004	0.50 U	0.77 J	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-4	3/16/2005	0.50 U	0.73	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-4	6/14/2005	0.25 U	0.84	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
OSB-4	9/29/2005	0.50 U	0.81	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-4	12/14/2005	0.50 U	0.77	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-4	6/27/2006	0.50 U	0.79	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-4	6/28/2007	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	2.0 U	1.00 U	1.00 U
OSB-4	6/17/2008	0.50 U	0.83	0.57	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-4	8/25/2011	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-4	8/28/2013	0.50 U	1.3	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-4	8/26/2015	0.50 U	1.4 J	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-4	8/31/2016	0.50 U	0.97	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-4	9/13/2017	0.50 U	1.2	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-4	9/19/2018	1.00 U	0.23 J	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
OSB-4	11/5/2019	1.00 U	1.1	0.27 J	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
OSB-4	9/2/2020	1.00 U	1.0	0.16 J	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
OSB-4	9/14/2021	1.00 U	1.1	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
OSB-4	9/21/2023	0.30 U	1.1	0.22 J	0.14 U	0.18 U	0.23 U	0.14 U	0.100 U
OSB-4	9/21/2023	0.30 U	1.1	0.21 J	0.14 U	0.18 U	0.23 U	0.14 U	0.100 U
OSB-5-100	4/18/2003	0.10 U	12	36	0.53 J	0.19 U	1.8	0.085 U	0.15 U
OSB-5-100	6/30/2003	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-5-100	9/24/2003	0.50 U	15	37	0.50 U	0.50 U	1.6	0.50 U	0.50 U
OSB-5-100	12/12/2003	0.50 U	20	54	0.92 J	0.50 U	2.1	0.50 U	0.50 U
OSB-5-100	3/16/2004	0.50 U	7.8	27	0.50 U	0.50 U	0.76 J	0.50 U	0.50 U
OSB-5-100	6/15/2004	0.50 U	16	47	0.56 J	0.50 U	2.1	0.50 U	0.50 U
OSB-5-100	9/14/2004	0.50 U	17	51	0.53 J	0.50 U	2.1	0.50 U	0.50 U
OSB-5-100	12/8/2004	0.50 U	23	66	0.69 J	0.50 U	3.2	0.50 U	0.50 U
OSB-5-100	3/15/2005	0.50 U	6.1	29	0.50 U	0.50 U	1.8	0.50 U	0.50 U
OSB-5-100	6/14/2005	0.25 U	20	60	1.1	0.25 U	2.6	0.25 U	0.25 U
OSB-5-100	9/29/2005	0.50 U	8.1	27	0.50 U	0.50 U	0.83	0.50 U	0.50 U
OSB-5-100	12/14/2005	0.50 UJ	15 J	44 J	0.50 UJ	0.50 UJ	1.9 J	0.50 UJ	0.50 UJ
OSB-5-100	6/28/2006	0.50 U	15	47	0.50	0.50 U	1.7	0.50 U	0.50 U
OSB-5-100	6/27/2007	1.00 U	21	77	1.00 U	1.00 U	5.0 U	1.00 U	1.00 U
OSB-5-100	6/17/2008	0.50 U	11	54	0.50 U	0.50 U	0.94	0.50 U	0.50 U
OSB-5-100	8/19/2009	0.50 U	2.4	16	0.50 U	0.50 UJ	0.50 UJ	0.50 U	0.50 U
OSB-5-100	8/24/2010	0.50 U	4.2	29	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U

Table B-1. Historical Groundwater Concentrations for Key Analytes

Milwaukie International Way
Milwaukie, Oregon

Well	Date	Chlorinated Ethenes						Chlorinated Ethanes	
		PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	VC	1,1,1-TCA	1,1-DCA
		µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q
OSB-5-100	8/25/2011	0.50 U	13	53	0.53	0.50 U	1.4	0.50 U	0.50 U
OSB-5-100	8/31/2012	0.50 U	7.4	31	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-5-100	8/30/2013	0.50 U	6.3	25	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-5-100	8/21/2014	0.50 U	6.8	30	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-5-100	8/27/2015	0.50 U	12 J	59	0.50 U	0.50 U	1.3	0.50 U	0.50 U
OSB-5-100	8/31/2016	0.50 U	2.5	16	0.50 U	0.50 U	8.0	0.50 U	0.50 U
OSB-5-100	9/14/2017	0.50 U	0.78	3.8	0.50 U	0.50 U	7.9	0.50 U	0.50 U
OSB-5-100	9/19/2018	1.00 U	4.7	28	0.31 J	1.00 U	1.00 U	1.00 U	1.00 U
OSB-5-100	11/5/2019	1.00 U	6.0	45	0.41 J	1.00 U	0.40 J	1.00 U	1.00 U
OSB-5-100	9/1/2020	1.00 U	5.9	44	0.43 J	1.00 U	0.70 J	1.00 U	1.00 U
OSB-5-100	9/14/2021	1.00 U	5.5	27	0.23 J	1.00 U	1.00 U	1.00 U	1.00 U
OSB-5-100	9/20/2023	0.30 U	5.3	38	0.39 J	0.18 U	0.38 J	0.14 U	0.100 U
OSB-5-200	4/18/2003	0.10 U	0.24 U	0.45 J	0.17 U	0.19 U	0.15 U	0.085 U	0.15 U
OSB-5-200	6/30/2003	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-5-200	9/24/2003	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-5-200	12/12/2003	1.3	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-5-200	3/16/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-5-200	6/15/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-5-200	9/14/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-5-200	12/8/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-5-200	3/15/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-5-200	6/14/2005	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
OSB-5-200	9/27/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-5-200	12/13/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-5-200	6/28/2006	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-5-200	8/25/2011	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-5-200	8/31/2012	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-5-200	8/30/2013	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-5-200	8/31/2016	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-5-200	9/13/2017	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-5-200	9/19/2018	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
OSB-6-35	4/18/2003	0.10 U	0.48 J	0.17	0.17 U	0.19 U	0.15 U	0.085 U	0.15 U
OSB-6-35	12/18/2003	0.50 U	2.5	1.1	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-35	3/17/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-35	6/15/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-35	9/21/2004	0.50 U	0.64 J	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-35	12/2/2004	0.50 U	0.84 J	0.59 J	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-35	3/10/2005	0.50 U	0.81	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-35	6/14/2005	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
OSB-6-35	9/29/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-35	12/19/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-35	3/22/2006	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-35	6/21/2006	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-35	8/24/2011	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-35	8/28/2012	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-35	8/29/2013	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-95	4/18/2003	0.46 J	41	5.4	0.17 U	0.19 U	0.15 U	0.085 U	0.15 U
OSB-6-95	6/30/2003	0.72 J	87	13	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-95	9/24/2003	5.0 U	70	17	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
OSB-6-95	12/18/2003	5.0 U	140	23	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
OSB-6-95	3/17/2004	2.5 U	110	59	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
OSB-6-95	6/15/2004	0.50 U	48	32	0.50 U	0.50 U	0.20 U	0.50 U	0.50 U
OSB-6-95	9/21/2004	1.7	170 J	55	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-95	12/2/2004	0.50 U	0.63 J	3.0	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U

Table B-1. Historical Groundwater Concentrations for Key Analytes

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Milwaukie International Way
Milwaukie, Oregon

Well	Date	Chlorinated Ethenes						Chlorinated Ethanes	
		PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	VC	1,1,1-TCA	1,1-DCA
		µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q
OSB-6-95	3/16/2005	2.5 U	130	100	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
OSB-6-95	6/14/2005	1.2 U	120	75	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
OSB-6-95	9/29/2005	2.5 U	170	92	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
OSB-6-95	12/16/2005	2.5 U	160	86	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
OSB-6-95	3/22/2006	1.4	150	75	0.50 U	0.50 U	0.52	0.50 U	0.50 U
OSB-6-95	6/22/2006	2.5 U	120	49	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
OSB-6-95	9/11/2006	2.5 U	210	69	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
OSB-6-95	6/27/2007	1.5	160	76	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
OSB-6-95	6/17/2008	2.1	240	84	0.54	0.50 U	1.6	0.50 U	0.50 U
OSB-6-95	8/19/2009	4.5	430	130	0.96	0.62 J	2.0 J	0.50 U	0.50 U
OSB-6-95	1/13/2010	2.5	290	120	0.63	0.54	3.8	0.50 U	0.50 U
OSB-6-95	8/23/2010	4.3	400	120	0.76	0.56	2.1	0.50 U	0.50 U
OSB-6-95	1/17/2011	3.0	400	140	0.82	0.61	3.2	0.50 U	0.50 U
OSB-6-95	8/24/2011	4.0	480	140	0.75	0.57	2.3	0.50 U	0.50 U
OSB-6-95	2/9/2012	3.4	350	150	0.87	0.56	5.6	0.50 U	0.50 U
OSB-6-95	8/29/2012	4.0	440	130	0.89	0.69	2.4	0.50 U	0.50 U
OSB-6-95	8/30/2013	2.9	280	110	0.75	0.60	4.1	0.50 U	0.50 U
OSB-6-95	8/21/2014	2.5	260	95	0.75	0.50 U	0.87	0.50 U	0.50 U
OSB-6-95	8/26/2015	1.8	180 J	81	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-95	8/31/2016	1.4	110	62	0.50	0.50 U	1.4	0.50 U	0.50 U
OSB-6-95	9/13/2017	0.82	90	45	0.50 U	0.50 U	2.1	0.50 U	0.50 U
OSB-6-95	9/18/2018	0.65 J	67	35	0.26 J	0.50 U	1.00 U	1.00 U	1.00 U
OSB-6-95	11/6/2019	2.7	62 J	68 J	0.49 J	1.00 U	1.00 U	1.00 U	1.00 U
OSB-6-95	9/1/2020	0.70 J	50	36	0.33 J	1.00 U	0.26 J	1.00 U	1.00 U
OSB-6-95	9/14/2021	0.48 J	50	28	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
OSB-6-95	9/19/2023	0.30 U	25	22	0.14 U	0.18 U	0.23 U	0.14 U	0.100 U
OSB-6-125	4/18/2003	0.10 U	1.5	0.27 J	0.17 U	0.19 U	0.15 U	0.085 U	0.15 U
OSB-6-125	6/30/2003	0.50 U	2.0	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-125	9/24/2003	0.50 U	3.5	0.59 J	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-125	12/18/2003	0.50 U	4.7	1.3	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-125	3/17/2004	0.50 U	5.5	4.2	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-125	6/15/2004	0.50 U	2.6	12	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-125	9/21/2004	0.50 U	4.9	3.8	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-125	12/2/2004	0.50 U	0.50 U	14	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-125	3/16/2005	0.50 U	0.94	6.4	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-125	6/14/2005	0.25 U	1.0	6.3	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
OSB-6-125	9/29/2005	0.50 U	0.90 U	7.4	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-125	12/19/2005	0.50 U	2.2	4.9	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-125	3/24/2006	0.50 U	1.8	5.9	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-125	6/21/2006	0.50 U	2.0	4.7	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-125	6/27/2007	1.00 U	4.9	4.4	1.00 U	1.00 U	5.0 U	1.00 U	1.00 U
OSB-6-125	6/17/2008	0.50 U	9.2	2.2	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-125	8/19/2009	0.50 U	14	7.0	0.50 U	0.50 UJ	6.2 J	0.50 U	0.50 U
OSB-6-125	1/13/2010	0.50 U	5.2	14	0.50 U	0.50 U	8.2	0.50 U	0.50 U
OSB-6-125	8/23/2010	0.50 U	12	7.9	0.50 U	0.50 U	2.9	0.50 U	0.50 U
OSB-6-125	1/17/2011	0.50 U	7.5	26	0.50 U	0.54	15	0.50 U	0.50 U
OSB-6-125	8/24/2011	0.50 U	15	9.6	0.50 U	0.50 U	5.4	0.50 U	0.50 U
OSB-6-125	2/9/2012	0.50 U	7.4	21	0.50 U	0.50 U	13	0.50 U	0.50 U
OSB-6-125	8/29/2012	0.50 U	15	12	0.50 U	0.50 U	6.7	0.50 U	0.50 U
OSB-6-125	8/30/2013	0.50 U	12	7.1	0.50 U	0.60	10.0	0.50 U	0.50 U
OSB-6-125	8/20/2014	0.50 U	15	5.7	0.50 U	0.50 U	4.9	0.50 U	0.50 U
OSB-6-125	8/26/2015	0.50 U	16 J	4.5	0.50 U	0.50 U	2.3	0.50 U	0.50 U
OSB-6-125	8/31/2016	0.50 U	4.4	6.4	0.50 U	0.50 U	6.5	0.50 U	0.50 U
OSB-6-125	9/13/2017	0.50 U	10.0	4.0	0.50 U	0.50 U	1.9	0.50 U	0.50 U

Table B-1. Historical Groundwater Concentrations for Key Analytes

Milwaukie International Way
Milwaukie, Oregon

Well	Date	Chlorinated Ethenes						Chlorinated Ethanes	
		PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	VC	1,1,1-TCA	1,1-DCA
		µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q
OSB-6-125	9/18/2018	1.00 U	14	3.8	1.00 U	0.13 J	1.00 U	1.00 U	1.00 U
OSB-6-125	11/6/2019	1.5	13 J	22 J	1.00 U	1.00 U	2.2	1.00 U	1.00 U
OSB-6-125	9/1/2020	1.00 U	14	6.1	1.00 U	0.20 J	2.2 J	1.00 U	1.00 U
OSB-6-125	9/14/2021	1.00 U	15	5.1	1.00 U	1.00 U	2.1	1.00 U	1.00 U
OSB-6-125	9/19/2023	0.30 U	27	7.6	0.14 U	0.18 U	1.5	0.14 U	0.100 U
OSB-6-160	4/18/2003	0.93 J	0.31 J	0.25 J	0.17 U	0.19 U	0.15 U	0.085 U	0.15 U
OSB-6-160	6/30/2003	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-160	9/24/2003	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-160	12/18/2003	0.50 U	0.52 J	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-160	3/17/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-160	6/15/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-160	9/21/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-160	12/2/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-160	3/10/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-160	6/14/2005	0.25 U	0.25 U	0.86	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
OSB-6-160	9/29/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-160	12/19/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-160	3/24/2006	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-160	6/22/2006	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-160	6/17/2008	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-160	8/23/2010	0.50 U	0.89	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-160	1/17/2011	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-160	8/25/2011	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-160	8/30/2012	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-160	8/30/2013	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-160	8/21/2014	0.50 U	2.6	0.58	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-160	8/26/2015	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-160	8/31/2016	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-160	9/13/2017	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-160	11/5/2019	1.00 U	1.00 U	0.31 J	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
OSB-6-160	9/1/2020	1.00 U	0.22 J	0.16 J	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
OSB-6-160	9/14/2021	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
OSB-6-160	9/19/2023	0.30 U	0.34 J	0.12 U	0.14 U	0.18 U	0.23 U	0.14 U	0.100 U
OSB-6-185	4/18/2003	0.24 J	0.24 U	0.17 U	0.17 U	0.19 U	0.15 U	0.085 U	0.15 U
OSB-6-185	6/30/2003	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-185	9/24/2003	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-185	12/18/2003	0.50 U	0.52 J	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-185	3/17/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-185	6/15/2004	0.50 U	0.50 U	0.54 J	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-185	9/21/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-185	11/30/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-185	3/16/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-185	6/14/2005	0.25 U	0.25 U	1.1	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
OSB-6-185	9/30/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-185	12/19/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-185	3/24/2006	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-185	6/23/2006	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-185	8/23/2010	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-185	8/30/2012	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-185	8/27/2015	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-233	4/18/2003	0.13 J	0.28 J	0.17 U	0.17 U	0.19 U	0.15 U	0.085 U	0.15 U
OSB-6-233	6/30/2003	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-233	9/24/2003	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-233	12/18/2003	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U

Table B-1. Historical Groundwater Concentrations for Key Analytes

Milwaukie International Way
Milwaukie, Oregon

Well	Date	Chlorinated Ethenes						Chlorinated Ethanes	
		PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	VC	1,1,1-TCA	1,1-DCA
		µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q
OSB-6-233	3/17/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-233	6/15/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-233	9/21/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-233	11/30/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-233	3/15/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-233	6/14/2005	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
OSB-6-233	9/30/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-233	12/19/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-233	3/24/2006	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-6-233	6/23/2006	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-7-88	4/18/2003	0.10 U	0.24 U	0.17 U	0.17 U	0.19 U	0.15 U	0.085 U	0.15 U
OSB-7-88	6/30/2003	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-7-88	9/24/2003	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-7-88	12/17/2003	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-7-88	3/16/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-7-88	6/21/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-7-88	9/14/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-7-88	12/8/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-7-88	3/17/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-7-88	6/14/2005	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
OSB-7-88	9/29/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-7-88	12/14/2005	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
OSB-7-88	6/27/2006	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-7-115	4/18/2003	0.10 U	0.24 U	0.17 U	0.17 U	0.19 U	0.15 U	0.085 U	0.15 U
OSB-7-115	6/30/2003	0.50 U	1.2	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-7-115	9/24/2003	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
OSB-7-115	12/18/2003	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-7-115	3/16/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-7-115	6/21/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.20 U	0.50 U	0.50 U
OSB-7-115	9/14/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-7-115	12/2/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-7-115	3/11/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-7-115	6/14/2005	0.25 U	3.1	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
OSB-7-115	9/26/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-7-115	12/14/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-7-115	6/21/2006	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-7-115	8/25/2010	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-7-115	8/29/2013	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-7-135	4/18/2003	0.10 U	0.24 U	0.17 U	0.17 U	0.19 U	0.15 U	0.085 U	0.15 U
OSB-7-135	6/30/2003	0.50 U	2.8	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-7-135	9/24/2003	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-7-135	12/18/2003	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-7-135	3/16/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-7-135	6/21/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.20 U	0.50 U	0.50 U
OSB-7-135	9/14/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-7-135	12/2/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-7-135	3/11/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-7-135	6/14/2005	0.25 U	1.8	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
OSB-7-135	9/26/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-7-135	12/14/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-7-135	6/21/2006	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-7-135	8/27/2015	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-8-145	7/27/2004	0.10 UJ	0.49 J	0.30 J	0.17 UJ	0.19 UJ	0.15 UJ	0.085 UJ	0.15 UJ
OSB-8-145	9/24/2004	0.50 U	0.56 J	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U

Table B-1. Historical Groundwater Concentrations for Key Analytes

Milwaukie International Way
Milwaukie, Oregon

Well	Date	Chlorinated Ethenes						Chlorinated Ethanes	
		PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	VC	1,1,1-TCA	1,1-DCA
		µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q
OSB-8-145	12/15/2004	0.50 U	0.72 J	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-8-145	3/16/2005	0.50 U	0.63	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-8-145	6/14/2005	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
OSB-8-145	9/26/2005	0.50 U	0.63	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-8-145	12/12/2005	0.50 U	0.58 J	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-8-145	6/23/2006	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-8-145	1/13/2010	0.50 U	2.0	1.6	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-8-145	8/24/2010	0.50 U	0.70	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-8-145	9/3/2013	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-8-145	9/19/2018	1.00 U	0.13 J	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
OSB-8-178	7/27/2004	0.10 UJ	0.24 UJ	0.17 UJ	0.17 UJ	0.19 UJ	0.15 UJ	0.085 UJ	0.15 UJ
OSB-8-178	9/24/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-8-178	12/15/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-8-178	3/16/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-8-178	6/14/2005	0.25 U	0.65	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
OSB-8-178	9/26/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-8-178	12/12/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-8-178	6/23/2006	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-8-178	8/24/2010	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-8-178	9/3/2013	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-45	9/24/2004	0.50 UJ	0.79 J	0.62 J	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
OSB-9-45	11/30/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-45	3/15/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-45	6/14/2005	0.25 U	0.61	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
OSB-9-45	12/13/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-45	3/27/2006	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-45	6/22/2006	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-45	6/17/2008	0.50 U	0.50 U	0.82	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-45	8/28/2013	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-45	9/12/2017	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-45	9/19/2018	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
OSB-9-95	7/30/2004	0.11	18	16	0.17 U	0.19 UJ	0.15 R	0.085 U	0.15 UJ
OSB-9-95	9/24/2004	0.50 U	18	15	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-95	11/30/2004	0.50 U	17	16	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-95	3/14/2005	0.50 U	20	15	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-95	6/14/2005	0.25 U	23	18	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
OSB-9-95	9/27/2005	0.50 U	24	17	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-95	12/13/2005	0.50 U	19	17	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-95	3/27/2006	0.50 U	29	21	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-95	6/22/2006	0.50 U	25	18	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-95	9/8/2006	0.50 U	29	20	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-95	6/17/2008	0.50 U	30	19	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-95	8/18/2009	0.50 U	19	14	0.50 U	0.50 UJ	0.50 UJ	0.50 U	0.50 U
OSB-9-95	8/24/2010	0.50 U	14	11	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-95	1/17/2011	0.50 U	14	12	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-95	8/25/2011	0.50 U	24	15	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-95	8/29/2012	0.50 U	25	15	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-95	8/28/2013	0.50 U	20	13	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-95	8/19/2014	0.50 U	14	10.0	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-95	8/24/2015	0.50 U	8.8 J	6.9	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-95	8/30/2016	0.50 U	4.7	4.1	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-95	9/12/2017	0.50 U	2.8	3.0	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-95	9/19/2018	1.00 U	2.2	2.5	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
OSB-9-95	11/1/2019	1.00 U	2.8	3.1	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U

Table B-1. Historical Groundwater Concentrations for Key Analytes

2023 Annual Groundwater Monitoring Report

Milwaukie International Way
Milwaukie, Oregon

Well	Date	Chlorinated Ethenes						Chlorinated Ethanes	
		PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	VC	1,1,1-TCA	1,1-DCA
		µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q
OSB-9-95	9/1/2020	1.00 U	3.5	2.9	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
OSB-9-95	9/19/2023	0.30 U	4.9	3.7	0.14 U	0.18 U	0.23 U	0.14 U	0.100 U
OSB-9-125	8/3/2004	0.10 UJ	0.73	1.2	0.17 U	0.19 UJ	0.15 R	0.085 U	0.15 UJ
OSB-9-125	9/24/2004	0.50 U	1.6	2.0	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-125	11/30/2004	0.50 U	4.2	5.9	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-125	3/15/2005	0.50 U	4.0	6.8	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-125	6/14/2005	0.25 UJ	23 J	17 J	0.25 UJ	0.25 UJ	0.25 UJ	0.25 UJ	0.25 UJ
OSB-9-125	9/27/2005	0.50 U	3.5 U	17	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-125	12/13/2005	0.50 U	4.1	17	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-125	3/27/2006	0.50 U	5.0	20	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-125	6/22/2006	0.50 U	4.1	22	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-125	9/11/2006	0.50 U	6.6	23	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-125	6/27/2007	1.00 U	7.7	22	1.00 U	1.00 U	5.0 U	1.00 U	1.00 U
OSB-9-125	6/17/2008	0.50 U	17	13	0.50 U	0.50 U	2.6	0.50 U	0.50 U
OSB-9-125	8/18/2009	0.50 U	20	11	0.50 U	0.50 UJ	2.4 J	0.50 U	0.50 U
OSB-9-125	1/12/2010	0.50 U	18	10.0	0.50 U	0.50 U	2.1	0.50 U	0.50 U
OSB-9-125	8/24/2010	0.50 U	24	10.0	0.50 U	0.50 U	1.7	0.50 U	0.50 U
OSB-9-125	1/17/2011	0.50 U	20	9.5	0.50 U	0.50 U	1.7	0.50 U	0.50 U
OSB-9-125	8/25/2011	0.50 U	25	11	0.50 U	0.50 U	0.55	0.50 U	0.50 U
OSB-9-125	2/8/2012	0.50 U	20	10.0	0.50 U	0.50 U	1.7	0.50 U	0.50 U
OSB-9-125	8/29/2012	0.50 U	24	8.8	0.50 U	0.50 U	1.5	0.50 U	0.50 U
OSB-9-125	8/28/2013	0.50 U	21	13	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-125	8/19/2014	0.50 U	20	10.0	0.50 U	0.50 U	1.8	0.50 U	0.50 U
OSB-9-125	8/25/2015	0.50 U	34 J	15	0.50 U	0.75	2.6	0.50 U	0.50 U
OSB-9-125	9/12/2015	0.50 U	9.9	6.2	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-125	8/30/2016	0.50 U	10.0	5.1	0.50 U	0.50 U	1.3	0.50 U	0.50 U
OSB-9-125	9/19/2018	1.00 U	8.3	5.7	1.00 U	0.29 J	1.0	1.00 U	1.00 U
OSB-9-125	11/5/2019	1.00 U	6.8	4.9	1.00 U	1.00 U	0.92 J	1.00 U	1.00 U
OSB-9-125	9/1/2020	1.00 U	7.0	5.6	1.00 U	0.29 J	1.3 J	1.00 U	1.00 U
OSB-9-125	9/14/2021	1.00 U	3.1	3.1	1.00 U	1.00 U	0.78 J	1.00 U	1.00 U
OSB-9-125	9/19/2023	0.30 U	4.4	3.2	0.14 U	0.18 U	0.30 J	0.14 U	0.100 U
OSB-9-160	7/30/2004	0.10 U	0.24 U	0.38	0.17 U	0.19 U	0.15 U	0.085 U	0.15 U
OSB-9-160	9/24/2004	0.50 U	1.6	2.0	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-160	11/30/2004	0.50 U	1.0	1.9	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-160	3/15/2005	0.50 UJ	2.3 J	2.7 J	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
OSB-9-160	6/14/2005	0.25 U	2.8	3.3	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
OSB-9-160	9/28/2005	0.50 U	4.2 U	4.0	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-160	12/13/2005	0.50 U	2.4	3.5	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-160	3/24/2006	0.50 U	—	—	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-160	6/22/2006	0.50 U	2.3	3.5	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-160	9/8/2006	0.50 U	7.1	6.3	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-160	6/26/2007	1.00 U	9.5	10.0	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
OSB-9-160	6/17/2008	0.50 U	4.7	16	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-160	8/18/2009	0.50 U	11	14	0.50 U	0.50 UJ	0.50 UJ	0.50 U	0.50 U
OSB-9-160	1/12/2010	0.50 U	13	14	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-160	8/24/2010	0.50 U	13	16	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-160	1/17/2011	0.50 U	6.4	15	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-160	8/25/2011	0.50 U	18	18	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-160	2/8/2012	0.50 U	4.4	8.4	0.50 U	0.50 U	1.6	0.50 U	0.50 U
OSB-9-160	8/29/2012	0.50 U	15	13	0.50 U	0.50 U	1.2	0.50 U	0.50 U
OSB-9-160	8/28/2013	0.50 U	3.2	3.8	0.50 U	0.50 U	2.9	0.50 U	0.50 U
OSB-9-160	8/19/2014	0.50 U	13	9.5	0.50 U	0.50 U	4.0	0.50 U	0.50 U
OSB-9-160	8/25/2015	0.50 U	9.5 J	7.9	0.50 U	0.59	4.5	0.50 U	0.50 U
OSB-9-160	8/30/2016	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U

Table B-1. Historical Groundwater Concentrations for Key Analytes

Milwaukie International Way
Milwaukie, Oregon

Well	Date	Chlorinated Ethenes						Chlorinated Ethanes	
		PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	VC	1,1,1-TCA	1,1-DCA
		µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q
OSB-9-160	9/12/2017	0.50 U	1.8	2.0	0.50 U	0.50 U	2.2	0.50 U	0.50 U
OSB-9-160	9/19/2018	1.00 U	0.16 J	0.29 J	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
OSB-9-160	11/1/2019	1.00 U	0.56 J	0.98 J	1.00 U	1.00 U	1.7	1.00 U	1.00 U
OSB-9-160	9/1/2020	1.00 U	0.41 J	0.61 J	1.00 U	1.00 U	0.51 J	1.00 U	1.00 U
OSB-9-160	9/14/2021	1.00 U	0.92 J	0.99 J	1.00 U	1.00 U	2.5	1.00 U	1.00 U
OSB-9-160	9/19/2023	0.30 U	2.0	1.7	0.14 U	0.19 J	2.0	0.14 U	0.100 U
OSB-9-185	7/30/2004	0.10 U	0.24 U	0.17 U	0.17 U	0.19 U	0.15 U	0.085 U	0.15 U
OSB-9-185	9/24/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-185	11/30/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-185	3/14/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-185	6/14/2005	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
OSB-9-185	9/28/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-185	12/15/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-185	3/24/2006	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-185	6/29/2006	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-185	6/17/2008	0.50 U	0.81	12	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-185	8/18/2009	0.50 U	0.77	11	0.50 U	0.50 UJ	0.50 UJ	0.50 U	0.50 U
OSB-9-185	8/24/2010	0.50 U	1.1	4.2	0.50 U	0.50 U	0.53	0.50 U	0.50 U
OSB-9-185	1/17/2011	0.50 U	1.5	14	0.50 U	0.50 U	0.55	0.50 U	0.50 U
OSB-9-185	8/25/2011	0.50 U	1.1	6.7	0.50 U	0.50 U	0.50	0.50 U	0.50 U
OSB-9-185	2/8/2012	0.50 U	1.1	16	0.50 U	0.50 U	2.0	0.50 U	0.50 U
OSB-9-185	8/29/2012	0.50 U	1.2	8.0	0.50 U	0.50 U	1.1	0.50 U	0.50 U
OSB-9-185	8/28/2013	0.50 U	0.60	1.4	0.50 U	0.50 U	0.73	0.50 U	0.50 U
OSB-9-185	8/19/2014	0.50 U	0.98	1.9	0.50 U	0.50 U	0.91	0.50 U	0.50 U
OSB-9-185	8/25/2015	0.50 U	1.2 J	3.0	0.50 U	0.50 U	1.3	0.50 U	0.50 U
OSB-9-185	8/30/2016	0.50 U	0.50 U	0.65	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-185	9/13/2017	0.50 U	0.50 U	0.52	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-185	9/19/2018	1.00 U	1.00 U	0.24 J	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
OSB-9-185	11/5/2019	1.00 U	0.54 J	1.8	1.00 U	1.00 U	0.73 J	1.00 U	1.00 U
OSB-9-185	9/1/2020	1.00 U	0.61 J	1.2	1.00 U	1.00 U	0.72 J	1.00 U	1.00 U
OSB-9-185	9/14/2021	1.00 U	0.95 J	0.93 J	1.00 U	1.00 U	0.79 J	1.00 U	1.00 U
OSB-9-185	9/19/2023	0.30 U	0.69 J	0.66 J	0.14 U	0.18 U	0.68 J	0.14 U	0.100 U
OSB-9-218	7/26/2004	0.10 UJ	0.24 UJ	0.17 UJ	0.17 UJ	0.19 UJ	0.15 UJ	0.085 UJ	0.15 UJ
OSB-9-218	9/24/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-218	11/30/2004	0.50 U	0.83 J	0.53 J	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-218	3/14/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-218	6/14/2005	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
OSB-9-218	9/22/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-218	12/15/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-218	3/24/2006	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-218	6/22/2006	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-218	8/25/2011	0.50 U	0.50 U	5.3	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-218	8/29/2012	0.50 U	0.50 U	9.2	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-218	8/28/2013	0.50 U	0.50 U	5.5	0.50 U	0.50 U	1.5	0.50 U	0.50 U
OSB-9-218	8/19/2014	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-218	8/30/2016	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-218	9/13/2017	0.50 U	0.50 U	0.94	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-9-218	9/19/2018	1.00 U	1.00 U	0.28 J	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
OSB-9-218	11/5/2019	1.00 U	1.00 U	0.91 J	1.00 U	1.00 U	0.35 J	1.00 U	1.00 U
OSB-9-218	9/1/2020	1.00 U	0.23 J	1.3 U	1.00 U	1.00 U	0.54 J	1.00 U	1.00 U
OSB-9-218	9/14/2021	1.00 U	0.38 J	0.85 J	1.00 U	1.00 U	0.74 J	1.00 U	1.00 U
OSB-9-218	9/19/2023	0.30 U	0.19 U	0.35 J	0.14 U	0.18 U	0.49 J	0.14 U	0.100 U
OSB-9-218	9/19/2023	0.30 U	0.19 U	0.25 J	0.14 U	0.18 U	0.35 J	0.14 U	0.100 U
OSB-10-46	9/21/2004	0.50 U	0.56 J	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U

Table B-1. Historical Groundwater Concentrations for Key Analytes

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Milwaukie International Way
Milwaukie, Oregon

Well	Date	Chlorinated Ethenes						Chlorinated Ethanes	
		PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	VC	1,1,1-TCA	1,1-DCA
		µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q
OSB-10-46	12/2/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-46	3/11/2005	0.50 U	0.58	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-46	6/14/2005	0.25 U	0.92	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
OSB-10-46	9/22/2005	0.50 U	0.51	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-46	12/20/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-46	3/23/2006	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-46	6/21/2006	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-46	9/8/2006	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-46	6/16/2008	0.50 U	0.55	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-46	8/29/2013	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-46	9/17/2019	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
OSB-10-98	8/11/2004	0.10 U	3.0	1.3	0.17 U	0.19 U	0.15 U	0.085 U	0.15 U
OSB-10-98	9/16/2004	0.50 U	27	3.8	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-98	12/2/2004	0.50 U	26	4.1	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-98	3/11/2005	0.50 U	29	4.6	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-98	6/14/2005	0.25 U	35	6.1	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
OSB-10-98	9/22/2005	0.50 U	29	5.3	0.50 U	0.50 U	0.50 U	0.25 U	0.50 U
OSB-10-98	12/20/2005	0.50 U	34	5.7	0.50 U	0.50 U	0.50 U	0.25 U	0.50 U
OSB-10-98	3/23/2006	0.50 U	34	6.3	0.50 U	0.50 U	0.50 U	0.25 U	0.50 U
OSB-10-98	6/21/2006	0.50 U	25	8.1	0.50 U	0.50 U	0.50 U	0.25 U	0.50 U
OSB-10-98	9/8/2006	0.50 U	27	6.1	0.50 U	0.50 U	0.50 U	0.25 U	0.50 U
OSB-10-98	6/27/2007	1.00 U	46	11	1.00 U	1.00 U	1.00 U	0.25 U	1.00 U
OSB-10-98	6/16/2008	0.50 U	58	9.9	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-98	8/19/2009	0.77	70	16	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-98	1/12/2010	0.50	64	14	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-98	8/23/2010	0.50 U	46	13	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-98	1/17/2011	0.59	81	20	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-98	8/24/2011	0.89	93	25	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-98	2/9/2012	0.74	70	26	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-98	8/30/2012	0.73	67	32	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-98	8/29/2013	0.69	82	32	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-98	8/20/2014	1.1	99	44	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-98	8/25/2015	0.50 U	62 J	30	0.50 U	0.50 U	0.88	0.50 U	0.50 U
OSB-10-98	8/30/2016	0.64	76	33	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-98	9/14/2017	0.72	88	35	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-98	9/17/2018	0.16 J	11	4.2	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
OSB-10-98	11/1/2019	1.00 U	29	21	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
OSB-10-119	8/11/2004	0.10 U	0.99	0.54	0.17 U	0.19 U	0.15 U	0.085 U	0.15 U
OSB-10-119	9/16/2004	0.50 U	4.6	0.64 J	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-119	12/2/2004	0.50 U	5.4	0.71 J	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-119	3/11/2005	0.50 U	4.4	0.70	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-119	6/14/2005	0.25 U	6.4	2.4	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
OSB-10-119	9/27/2005	0.50 U	6.8	0.98	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-119	12/20/2005	0.50 U	6.2	0.90	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-119	3/23/2006	0.50 U	7.5	1.3	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-119	6/21/2006	0.50 U	7.2	1.5	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-119	6/27/2007	1.00 U	7.3	2.0	1.00 U	1.00 U	5.0 U	1.00 U	1.00 U
OSB-10-119	6/16/2008	0.50 U	5.9	1.8	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-119	8/19/2009	0.50 U	9.3	2.0	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-119	8/23/2010	0.50 U	12	3.0	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-119	1/17/2011	0.50 U	12	21	0.50 U	0.50 U	1.8	0.50 U	0.50 U
OSB-10-119	8/24/2011	0.50 U	14	18	0.50 U	0.50 U	1.9	0.50 U	0.50 U
OSB-10-119	2/9/2012	0.50 U	16	5.2	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-119	8/30/2012	0.50 U	15	7.2	0.50 U	0.50 U	1.00	0.50 U	0.50 U

Table B-1. Historical Groundwater Concentrations for Key Analytes

Milwaukie International Way
Milwaukie, Oregon

Well	Date	Chlorinated Ethenes						Chlorinated Ethanes	
		PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	VC	1,1,1-TCA	1,1-DCA
		µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q
OSB-10-119	8/29/2013	0.50 U	16	5.3	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-119	8/20/2014	0.50 U	17	11	0.50 U	0.50 U	1.9	0.50 U	0.50 U
OSB-10-119	8/25/2015	0.50 U	12 J	10.0	0.50 U	0.50 U	2.2	0.50 U	0.50 U
OSB-10-119	8/30/2016	0.50 U	7.2	7.6	0.50 U	0.50 U	1.6	0.50 U	0.50 U
OSB-10-119	9/14/2017	0.50 U	13	6.5	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-119	9/17/2018	0.64 J	67	30	1.00 U	0.15 J	1.00 U	1.00 U	1.00 U
OSB-10-119	11/1/2019	1.00 U	5.6	2.8	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
OSB-10-154	8/6/2004	0.10 U	0.24 U	0.17 U	0.17 U	0.19 U	0.15 R	0.085 U	0.15 U
OSB-10-154	9/21/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-154	12/2/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-154	3/11/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-154	6/14/2005	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
OSB-10-154	9/27/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-154	12/20/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-154	3/23/2006	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-154	6/21/2006	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-154	6/16/2008	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-154	8/23/2010	0.50 U	0.89	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-154	1/17/2011	0.50 U	0.75	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-154	8/24/2011	0.50 U	0.91	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-154	2/9/2012	0.50 U	0.68	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-154	8/30/2012	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-154	8/29/2013	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-154	8/20/2014	0.50 U	1.9	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-154	8/25/2015	0.50 U	0.56 J	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-154	8/30/2016	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-154	9/14/2017	0.50 U	0.55	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-154	9/17/2018	1.00 U	1.3	0.32 J	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
OSB-10-154	9/17/2019	1.00 U	0.71 J	0.30 J	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
OSB-10-154	9/2/2020	1.00 U	0.98 J	0.45 J	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
OSB-10-154	9/15/2021	1.00 U	0.30 J	0.45 J	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
OSB-10-154	9/20/2023	0.30 U	1.1 J+	0.43 J	0.14 U	0.18 U	0.23 U	0.14 U	0.100 U
OSB-10-199	8/5/2004	0.10 U	0.24 U	0.17 U	0.17 U	0.19 U	0.15 R	0.085 U	0.15 U
OSB-10-199	9/16/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-199	12/2/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-199	3/11/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-199	6/14/2005	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
OSB-10-199	9/27/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-199	12/20/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-199	3/23/2006	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-199	6/21/2006	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-199	8/26/2015	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-199	8/30/2016	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-199	11/1/2019	1.00 U	1.00 U	0.72 J	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
OSB-10-199	9/2/2020	1.00 U	1.00 U	0.52 J	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
OSB-10-199	9/15/2021	1.00 U	0.31 J	0.53 J	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
OSB-10-199	9/20/2023	0.30 U	0.27 J+	0.49 J	0.14 U	0.18 U	0.23 U	0.14 U	0.100 U
OSB-10-227	8/4/2004	0.10 U	0.24 U	0.17 U	0.17 U	0.19 U	0.15 R	0.085 U	0.15 U
OSB-10-227	9/21/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-227	12/2/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-227	3/11/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-227	6/14/2005	0.25 U	0.25 U	0.50 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
OSB-10-227	9/27/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-227	12/20/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U

Table B-1. Historical Groundwater Concentrations for Key Analytes

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Milwaukie International Way
Milwaukie, Oregon

Well	Date	Chlorinated Ethenes						Chlorinated Ethanes	
		PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	VC	1,1,1-TCA	1,1-DCA
		µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q
OSB-10-227	3/23/2006	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-227	6/21/2006	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-10-227	9/17/2019	1.00 U	1.00 U	0.70 J	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
OSB-10-227	9/20/2023	0.30 U	0.19 U	0.96 J	0.14 U	0.18 U	0.23 U	0.14 U	0.100 U
OSB-11-30	6/14/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-11-30	9/23/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-11-30	12/19/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-11-30	6/22/2006	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-11-62	6/14/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-11-62	9/20/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-11-62	12/16/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-11-62	6/22/2006	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-11-62	6/27/2007	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
OSB-11-62	6/16/2008	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-11-97	6/14/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-11-97	9/23/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-11-97	12/19/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-11-97	6/22/2006	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-12-30	6/7/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-12-30	9/22/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-12-30	12/19/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-12-30	6/20/2006	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-12-40	6/7/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-12-40	9/20/2005	0.50 U	0.57	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-12-40	12/12/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-12-40	6/20/2006	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-12-40	6/16/2008	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-12-65	6/9/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-12-65	9/22/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-12-65	12/13/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-12-65	6/20/2006	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-12-65	8/25/2010	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-12-82	6/7/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-12-82	9/22/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-12-82	12/19/2005	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
OSB-12-82	6/20/2006	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
OSB-12-82	6/16/2008	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
PZ-2	3/17/2008	0.50 U	0.71	31	0.50 U	0.50 U	22	0.50 U	0.50 U
PZ-2	5/22/2008	0.50 U	0.50 U	1.3	0.50 U	0.50 U	9.6	0.50 U	0.50 U
PZ-2	6/17/2008	0.50 U	0.50 U	0.83	0.50 U	0.50	4.9	0.50 U	0.50 U
PZ-4	3/17/2008	0.50 U	23	300	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
PZ-4	4/21/2008	0.50 U	5.7	40	0.50 U	0.50 U	0.56	0.50 U	0.50 U
PZ-4	5/22/2008	0.50 U	4.5	35	0.50 U	0.50 U	3.0	0.50 U	0.50 U
PZ-4	6/18/2008	0.50 U	2.9	9.0	0.50 U	0.50 U	0.97	0.50 U	0.50 U
PZ-4	6/23/2008	0.50 U	2.6	6.2	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
PZ-5	3/17/2008	0.50 U	1.8	12	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
PZ-5	4/21/2008	0.50 U	2.3	13	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
PZ-5	5/22/2008	0.50 U	2.2	36	0.50 U	0.50 U	57	0.50 U	0.50 U
PZ-5	6/18/2008	0.50 U	2.7	26	0.50 U	0.50 U	41	0.50 U	0.50 U
PZ-6	3/17/2008	0.50 U	5.4	31	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
PZ-6	4/21/2008	0.50 U	12	31	0.50 U	0.50 U	0.70	0.50 U	0.50 U
PZ-6	5/22/2008	0.50 U	14	27	0.50 U	0.50 U	1.8	0.50 U	0.50 U
PZ-6	6/18/2008	0.50 U	4.5	9.8	0.50 U	0.50 U	0.72	0.50 U	0.50 U
W-1S	12/19/1997	1.00 U	61	44	1.00 U	1.00 U	10.0 U	1.00 U	1.00 U

Table B-1. Historical Groundwater Concentrations for Key Analytes

2023 Annual Groundwater Monitoring Report

Milwaukie International Way
Milwaukie, Oregon

Well	Date	Chlorinated Ethenes						Chlorinated Ethanes	
		PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	VC	1,1,1-TCA	1,1-DCA
		µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q
W-1S	1/8/1998	25 U	2900	6900	25 U	25 U	140	25 U	25 U
W-1S	10/27/1998	0.50 U	4.1	200	0.50 U	1.8	110	0.50 U	0.50 U
W-1S	4/14/2000	3.6	480 U	3000 U	13	19	280 U	0.40 U	0.40 U
W-1S	10/9/2000	0.40 U	0.77	92	0.24	1.7	40	0.40 U	0.024
W-1S	3/13/2001	0.50	230	1300	10.0	7.5	100	0.40 U	0.040
W-1S	1/3/2002	1.00 U	1.00 U	1.1	1.00 U	1.00 U	1.7	1.00 U	1.00 U
W-1S	6/19/2002	0.50 U	0.50 U	1.1	0.50 U	0.50 U	1.1	0.50 U	0.50 U
W-1I	1/8/1998	200 U	12000	13000	200 U	200 U	2800	200 U	200 U
W-1I	10/27/1998	97	18000	18000	99	82	1100	50 U	50 U
W-1I	4/14/2000	150	64000	46000	190	88	1300 U	0.40 U	5.3 J
W-1I	10/9/2000	180	41000	31000	170	100	1700	0.40 U	1.9
W-1I	3/12/2001	200	50000	41000	190	70	1800	4.0 U	2.0
W-1I	1/3/2002	130	37000	23000	83	100 U	860	100 U	100 U
W-1I	6/19/2002	5000 U	23000	19000	5000 U	5000 U	5000 U	5000 U	5000 U
W-1I	12/18/2002	100	4700	13000	120	58	86	5.0 U	5.0 U
W-1I	6/24/2003	500 U	1900	16000	500 U	500 U	1000	500 U	500 U
W-1I	12/15/2003	500 U	12000	20000	500 U	500 U	1600	500 U	500 U
W-1I	6/14/2004	50 U	1600	4200	50 U	50 U	870	50 U	50 U
W-1I	12/6/2004	5.0 U	42	1300	5.0 U	12	350	5.0 U	5.0 U
W-1I	6/7/2005	0.25 U	0.25 U	31	0.25 U	0.64	72	0.25 U	0.25 U
W-1I	12/6/2005	5.0 U	5.9	390	5.0 U	5.0 U	180	5.0 U	5.0 U
W-1I	6/14/2006	2.5 U	2.5 U	110	2.5 U	2.5 U	150	2.5 U	2.5 U
W-1I	6/25/2007	1.00 U	1.00 U	3.1	1.00 U	1.00 U	8.6	1.00 U	1.00 U
W-1I	6/17/2008	0.50 U	0.50 U	44	0.50 U	0.50 U	81	0.50 U	0.50 U
W-1I	8/17/2009	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ	2.1 J	0.50 U	0.50 U
W-1I	8/25/2010	0.50 U	0.50 U	3.3	0.50 U	0.50 U	33	0.50 U	0.50 U
W-1I	8/23/2011	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-1I	8/28/2012	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-1D	2/27/2001	0.80 U	0.80 U	0.80 U	0.80 U	0.80 U	0.80 U	0.80 U	0.80 U
W-1D	3/12/2001	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
W-1D	6/5/2001	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
W-1D	9/18/2001	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
W-1D	1/3/2002	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
W-1D	5/9/2002	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-1D	6/19/2002	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-1D	10/2/2002	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-1D	12/18/2002	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-1D	3/25/2003	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-1D	6/24/2003	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-1D	9/23/2003	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-1D	12/15/2003	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-1D	3/15/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-1D	6/14/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.20 U	0.50 U	0.50 U
W-1D	9/14/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-1D	12/6/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-1D	3/8/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-1D	6/7/2005	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
W-1D	9/16/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-1D	12/6/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-1D	6/14/2006	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-2I	1/7/1998	0.70	110	37	0.50 U	0.50 U	2.6	0.50 U	0.50 U
W-2I	1/9/1998	1.3	200	110	1.0	1.00 U	10.0 U	1.00 U	1.00 U
W-2I	10/28/1998	5.0 U	5.0 U	450	5.0 U	5.0 U	810	5.0 U	5.0 U
W-2I	4/14/2000	0.50	84	960	2.9	25	860	0.40 U	0.16

Table B-1. Historical Groundwater Concentrations for Key Analytes

Milwaukie International Way
Milwaukie, Oregon

Well	Date	Chlorinated Ethenes						Chlorinated Ethanes	
		PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	VC	1,1,1-TCA	1,1-DCA
		µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q
W-2I	10/10/2000	40 U	40 U	860	40 U	19	700	40 U	40 U
W-2I	3/12/2001	4.0 U	7.3	580	0.39	7.6	750	4.0 U	4.0 U
W-2I	1/3/2002	1.00 U	1.00 U	79	1.00 U	0.85	230	1.00 U	1.00 U
W-2I	6/18/2002	10.0 U	10.0 U	110 J	10.0 U	10.0 U	300 J	10.0 U	10.0 U
W-2I	12/17/2002	0.50 U	0.87 J	150	0.50 U	6.6	200	0.50 U	0.50 U
W-2I	6/24/2003	50 U	50 U	4900	50 U	50 U	1700	50 U	50 U
W-2I	12/15/2003	50 U	50 U	3000	50 U	50 U	1400	50 U	50 U
W-2I	6/14/2004	5.0 U	5.0 U	680	5.0 U	5.0 U	480	5.0 U	5.0 U
W-2I	11/30/2004	0.50 U	0.50 U	170	0.50 U	1.3	99	0.50 U	0.50 U
W-2I	6/7/2005	0.25 U	0.25 U	30	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
W-2I	9/19/2005	0.50 U	0.50 U	43	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-2I	12/8/2005	0.50 U	0.50 U	0.60	0.50 U	0.50 U	1.1	0.50 U	0.50 U
W-2I	6/14/2006	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.52	0.50 U	0.50 U
W-2I	6/25/2007	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
W-2I	6/17/2008	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-2I	8/25/2010	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-2I	9/16/2019	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
W-2I	9/21/2023	0.30 U	0.19 U	0.32 J	0.14 U	0.18 U	0.27 J	0.14 U	0.100 U
W-2D	1/31/2001	0.80 U	0.80 U	0.80 U	0.80 U	0.80 U	0.80 U	0.80 U	0.80 U
W-2D	3/12/2001	0.40 U	0.40 U	0.28	0.40 U	0.40 U	0.100	0.40 U	0.40 U
W-2D	6/5/2001	0.40 U	0.40 U	0.069	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
W-2D	9/19/2001	0.40 U	0.40 U	0.10	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
W-2D	1/3/2002	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
W-2D	5/9/2002	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-2D	6/18/2002	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-2D	10/2/2002	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-2D	12/17/2002	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.20 U	0.50 U	0.50 U
W-2D	3/25/2003	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-2D	6/24/2003	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-2D	9/23/2003	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-2D	12/15/2003	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-2D	3/15/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-2D	6/14/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.20 U	0.50 U	0.50 U
W-2D	9/14/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-2D	11/30/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-2D	3/8/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-2D	6/7/2005	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
W-2D	9/16/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-2D	12/6/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-2D	6/14/2006	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-2D	9/21/2023	0.30 U	0.19 U	0.13 J	0.14 U	0.18 U	0.23 U	0.14 U	0.100 U
W-3S	1/8/1998	0.50 U	7.0	4.3	0.50 U	0.50 U	1.6	0.50 U	0.50 U
W-3S	10/28/1998	0.50 U	0.60	8.2	0.50 U	0.50 U	1.9	0.50 U	0.50 U
W-3S	4/12/2000	0.050	3.5	62	0.26	0.62	49	0.40 U	0.40 U
W-3S	10/9/2000	4.0 U	0.53	29	0.58	4.0 U	8.1	4.0 U	4.0 U
W-3S	3/12/2001	0.40 U	0.26	7.8	0.100	0.045	1.7	0.40 U	0.40 U
W-3S	1/2/2002	1.00 U	1.00 U	4.7	1.00 U	1.00 U	1.2	1.00 U	1.00 U
W-3S	6/18/2002	0.50 U	0.50 U	6.9	0.50 U	0.50 U	1.4	0.50 U	0.50 U
W-3S	12/17/2002	0.50 U	0.50 U	11	0.50 U	0.50 U	1.8	0.50 U	0.50 U
W-3S	6/24/2003	0.50 U	0.50 U	11	0.50 U	0.50 U	2.5	0.50 U	0.50 U
W-3S	12/15/2003	0.50 U	4.8	85	0.50 U	0.54 J	5.9	0.50 U	0.50 U
W-3S	6/14/2004	0.50 U	1.7	20	0.50 U	0.50 U	2.4	0.50 U	0.50 U
W-3S	11/30/2004	0.50 U	0.62 J	13	0.50 U	0.50 U	2.8	0.50 U	0.50 U
W-3S	6/7/2005	0.25 U	0.25 U	2.0	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U

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2023 Annual Groundwater Monitoring Report

Milwaukie International Way
Milwaukie, Oregon

Well	Date	Chlorinated Ethenes						Chlorinated Ethanes	
		PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	VC	1,1,1-TCA	1,1-DCA
		µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q
W-3S	12/6/2005	0.50 U	0.50 U	1.9	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-3S	6/13/2006	0.50 U	0.65	7.7	0.50 U	0.50 U	0.89	0.50 U	0.50 U
W-3S	3/17/2008	0.50 U	1.6	7.4	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-3S	6/17/2008	0.50 U	7.6	23	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-3S	8/25/2010	0.50 U	0.50 U	4.6	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-3S	8/23/2011	0.50 U	0.50 U	4.5	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-3I	1/8/1998	0.50 U	7.7	6.2	0.50 U	0.50 U	0.80	0.50 U	0.50 U
W-3I	10/28/1998	0.50 U	0.50 U	4.6	0.50 U	0.50 U	1.2	0.50 U	0.50 U
W-3I	4/12/2000	0.40 U	0.100	3.1	0.40 U	0.40 U	0.47	0.40 U	0.40 U
W-3I	10/9/2000	0.40 U	0.40 U	3.5	0.058	0.40 U	0.47	0.40 U	0.40 U
W-3I	3/12/2001	0.40 U	0.40 U	2.8	0.40 U	0.40 U	0.26	0.40 U	0.40 U
W-3I	1/2/2002	1.00 U	1.00 U	2.1	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
W-3I	6/18/2002	0.50 U	0.50 U	1.9	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-3I	12/17/2002	0.50 U	0.50 U	2.0	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-3I	6/24/2003	0.50 U	0.50 U	2.5	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-3I	12/15/2003	0.50 U	0.50 U	1.9	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-3I	6/14/2004	0.50 U	0.50 U	1.8	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-3I	11/30/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-3I	6/7/2005	0.25 U	0.25 U	2.1	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
W-3I	12/6/2005	0.50 U	0.50 U	2.8	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-3I	6/13/2006	0.50 U	0.50 U	2.6	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-3D	3/15/2001	0.80 U	0.80 U	0.80 U	0.80 U	0.80 U	0.80 U	0.80 U	0.80 U
W-3D	6/5/2001	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
W-3D	9/19/2001	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
W-3D	1/2/2002	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
W-3D	5/8/2002	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-3D	6/18/2002	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-3D	10/2/2002	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-3D	12/17/2002	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.20 U	0.50 U	0.50 U
W-3D	3/25/2003	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-3D	6/24/2003	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-3D	9/23/2003	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-3D	12/15/2003	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-3D	3/15/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-3D	6/14/2004	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
W-3D	9/14/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-3D	12/6/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-3D	3/8/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-3D	6/7/2005	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
W-3D	9/16/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-3D	12/6/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-3D	6/13/2006	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-4S	10/9/2000	8.0 U	8.0 U	55	8.0 U	8.0 U	14	8.0 U	8.0 U
W-4S	12/12/2000	0.40 U	0.31	60	0.35	0.15	44	0.40 U	0.40 U
W-4S	3/12/2001	0.40 U	0.23	62	0.20	0.13	19	0.40 U	0.40 U
W-4S	6/5/2001	0.40 U	0.34	57	0.24	0.29	17	0.40 U	0.40 U
W-4S	9/18/2001	8.0 U	2.2	180	8.0 U	8.0 U	46	8.0 U	8.0 U
W-4S	1/3/2002	1.00 U	1.00 U	26	1.00 U	1.00 U	11	1.00 U	1.00 U
W-4S	5/9/2002	0.50 U	0.50 U	44	0.50 U	0.50 U	9.4	0.50 U	0.50 U
W-4S	6/19/2002	25 U	25 U	650	25 U	25 U	470	25 U	25 U
W-4S	10/2/2002	0.50 U	0.81	200	0.59	0.59	53	0.50 U	0.50 U
W-4S	12/17/2002	0.50 U	1.0	280 J	0.55 J	0.80 J	210 J	0.50 U	0.50 U
W-4S	3/25/2003	0.50 U	0.50 J	860	1.4	5.1	1100	0.50 U	0.50 U
W-4S	6/24/2003	5.0 U	5.0 U	250	5.0 U	5.0 U	350	5.0 U	5.0 U

Table B-1. Historical Groundwater Concentrations for Key Analytes

2023 Annual Groundwater Monitoring Report

Milwaukie International Way
Milwaukie, Oregon

Well	Date	Chlorinated Ethenes						Chlorinated Ethanes	
		PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	VC	1,1,1-TCA	1,1-DCA
		µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q
W-4S	9/23/2003	2.5 U	2.5 U	110	2.5 U	2.5 U	16	2.5 U	2.5 U
W-4S	12/15/2003	5.0 U	13	140	5.0 U	5.0 U	15	5.0 U	5.0 U
W-4S	3/15/2004	5.0 U	10	450	5.0 U	5.1 J	500	5.0 U	5.0 U
W-4S	6/14/2004	2.5 U	2.8 J	350	2.5 U	2.8 J	240	2.5 U	2.5 U
W-4S	9/14/2004	0.50 U	0.50 U	1.2	0.50 U	0.50 U	140	0.50 U	0.50 U
W-4S	11/30/2004	0.50 U	0.50 U	0.50 J	0.50 U	0.50 U	10 J	0.50 U	0.50 U
W-4S	3/8/2005	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	1.2	0.50 U	0.50 U
W-4S	6/7/2005	0.25 U	0.25 U	5.3	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
W-4S	9/16/2005	0.50 U	0.50 U	0.54	0.50 U	0.50 U	0.83	0.50 U	0.50 U
W-4S	12/6/2005	0.50 U	0.50 U	5.5 J	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-4S	3/21/2006	0.50 U	—	—	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-4S	6/14/2006	0.50 U	3.9	21	0.50 U	0.50 U	0.65	0.50 U	0.50 U
W-4S	9/7/2006	0.50 U	1.9	25	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-4S	6/25/2007	1.00 U	6.4	24	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
W-4S	3/17/2008	0.50 U	5.5	26	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-4S	6/17/2008	0.50 U	2.0	14	0.50 U	0.84	0.50 U	0.50 U	0.50 U
W-4S	8/25/2010	0.50 U	0.50 U	5.5	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-4S	9/16/2019	1.00 U	1.00 U	0.61 J	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
W-4S	9/20/2023	0.30 U	0.19 U	0.25 J	0.14 U	0.18 U	0.23 U	0.14 U	0.100 U
W-5S	10/10/2000	0.40 U	0.40	13	0.076	0.086	0.93	0.40 U	0.022
W-5S	12/12/2000	0.40 U	0.51	3.9	0.40 U	0.40 U	1.2	0.40 U	0.40 U
W-5S	3/12/2001	0.40 U	0.060	2.9	0.40 U	0.40 U	0.89	0.40 U	0.40 U
W-5S	6/5/2001	0.40 U	0.100	2.8	0.40 U	0.40 U	1.00	0.40 U	0.40 U
W-5S	9/18/2001	0.40 U	0.40 U	5.1	0.40 U	0.40 U	1.6	0.40 U	0.40 U
W-5S	1/3/2002	1.00 U	1.00 U	2.3	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
W-5S	5/9/2002	0.50 U	0.50 U	2.4	0.50 U	0.50 U	0.60	0.50 U	0.50 U
W-5S	6/19/2002	0.50 U	0.50 U	2.6	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-5S	10/2/2002	0.50 U	0.50 U	2.4	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-5S	12/17/2002	0.50 U	0.50 U	2.6	0.50 U	0.50 U	0.81	0.50 U	0.50 U
W-5S	3/25/2003	0.50 U	0.50 U	32	0.50 U	0.50 U	15	0.50 U	0.50 U
W-5S	6/24/2003	0.50 U	0.50 U	5.3	0.50 U	0.50 U	1.5	0.50 U	0.50 U
W-5S	9/23/2003	0.50 U	0.50 U	3.5	0.50 U	0.50 U	0.75 J	0.50 U	0.50 U
W-5S	12/15/2003	0.50 U	4.0	130	0.56	2.1	38	0.50 U	0.50 U
W-5S	3/15/2004	2.5 U	2.5 U	220	2.5 U	3.2 J	76	2.5 U	2.5 U
W-5S	6/14/2004	0.50 U	0.50 U	250	0.50 U	3.5	120	0.50 U	0.50 U
W-5S	9/14/2004	0.50 U	0.50 U	1.6	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-5S	11/30/2004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-5S	3/8/2005	0.50 U	0.50 U	1.2	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-5S	6/7/2005	0.25 UJ	0.25 UJ	2.2 J	0.25 UJ	0.25 UJ	0.25 UJ	0.25 UJ	0.25 UJ
W-5S	9/16/2005	0.50 UJ	0.50 UJ	1.1 J	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
W-5S	12/8/2005	0.50 U	0.50 U	0.79	0.50 U	0.50 U	0.65	0.50 U	0.50 U
W-5S	6/14/2006	0.50 U	0.50 U	0.57	0.50 U	0.50 U	0.55	0.50 U	0.50 U
W-5S	3/17/2008	0.50 U	0.50 U	1.1	0.50 U	0.50 U	0.85	0.50 U	0.50 U
W-5S	4/21/2008	0.50 U	0.50 U	1.4	0.50 U	0.50 U	1.1	0.50 U	0.50 U
W-5S	5/22/2008	0.50 U	0.50 U	1.3	0.50 U	0.50 U	1.2	0.50 U	0.50 U
W-5S	6/17/2008	0.50 U	0.50 U	0.60	0.50 U	0.50 U	0.69	0.50 U	0.50 U
W-6S	10/9/2000	0.40 U	3.5	430	2.4	3.0	170	0.40 U	0.12
W-6S	12/12/2000	0.40 U	0.66	130	0.59	0.80	62	0.40 U	0.11
W-6S	3/12/2001	4.0 U	6.4	120	4.0 U	1.4	54	4.0 U	4.0 U
W-6S	6/5/2001	10.0 U	4.1	470	10.0 U	3.4	300	10.0 U	10.0 U
W-6S	9/18/2001	8.0 U	8.0 U	200	8.0 U	8.0 U	79	8.0 U	8.0 U
W-6S	1/3/2002	1.00 U	1.00 U	130	1.00 U	0.76	39	1.00 U	1.00 U
W-6S	5/9/2002	0.50 U	0.50 U	16	0.50 U	0.50 U	6.8	0.50 U	0.50 U
W-6S	6/19/2002	0.50 U	0.50 U	12	0.50 U	0.50 U	8.9	0.50 U	0.50 U

Table B-1. Historical Groundwater Concentrations for Key Analytes

Milwaukie International Way
Milwaukie, Oregon

Well	Date	Chlorinated Ethenes						Chlorinated Ethanes	
		PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	VC	1,1,1-TCA	1,1-DCA
		µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q	µg/L Q
W-6S	10/2/2002	0.50 U	0.50 U	22	0.50 U	0.50 U	13	0.50 U	0.50 U
W-6S	12/18/2002	0.50 U	0.50 U	38	0.50 U	0.50 U	2.5	0.50 U	0.50 U
W-6S	3/25/2003	0.50 U	0.50 U	13 J	0.50 U	0.50 U	9.3	0.50 U	0.50 U
W-6S	6/24/2003	0.50 U	0.50 U	13	0.50 U	0.50 U	6.7	0.50 U	0.50 U
W-6S	9/23/2003	0.50 U	0.50 U	85	0.50 J	0.50 U	23	0.50 U	0.50 U
W-6S	12/15/2003	0.50 U	1.8	36	0.50 U	0.50 U	10	0.50 U	0.50 U
W-6S	3/18/2004	0.50 U	3.2	32	0.50 U	0.50 U	4.1	0.50 U	0.50 U
W-6S	6/13/2004	0.50 UJ	0.50 UJ	2.5 J	0.50 UJ	0.50 UJ	2.5 J	0.50 UJ	0.50 UJ
W-6S	9/14/2004	0.50 U	0.50 U	48	0.50 U	0.50 U	1.4	0.50 U	0.50 U
W-6S	12/2/2004	0.50 U	0.50 U	0.89 J	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-6S	6/7/2005	0.25 U	0.25 U	7.7	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
W-6S	9/16/2005	0.50 U	0.50 U	10.0	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-6S	12/7/2005	0.50 U	0.50 U	1.5	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
W-6S	6/14/2006	0.50 U	3.6	21	0.50 U	0.50 U	0.67	0.50 U	0.50 U
W-6S	8/28/2012	0.50 U	0.50 U	3.0	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U

APPENDIX C

Data Quality Assurance Review
and Analytical Laboratory Reports

Data Validation Report

Milwaukie International Way

GSI 2023 Data

April 9, 2024

Prepared by: Mitchell Fargher



GSI Water Solutions, Inc.

650 NE Holladay Street, Suite 900, Portland, OR 97232

Report Narrative

The data in this abbreviated validation and usability report (EPA Stage 2A) were reviewed using the guidance presented in the following:

- Project QAPP (where required)
- Method Specific Control Limits
- Laboratory Standard Operation Procedures (SOPs) & Control Limits
- *National Functional Guidelines for Organic Data Review (USEPA 2020)*
- *National Functional Guidelines for Inorganic Data Review (USEPA 2020)*
- *National Functional Guidelines for High Resolution Superfund Methods Data Review (USEPA 2020)*

Data that is not qualified meets the data quality objectives specified in the referenced documents and can be used for decision-making purposes. Data qualified as estimated (J/UJ) may be used for decision-making purposes but should be used in conjunction with the reason codes assigned to the qualifier for further context. Data that is rejected (R) should not be used for any decision-making purposes due to significant deviations in quality control requirements.

Sample Delivery Group (SDG) Summary

SDG	Analytical Laboratory	Sample Receipt Date	Lab Report Date
L1624168	Pace Analytical	06/08/2023	06/19/2023
L1686038	Pace Analytical	12/08/2023	12/15/2023
L1711035	Pace Analytical	03/01/2024	03/15/2024
L1659125	Pace Analytical	09/23/2023	10/04/2023

Analytical Methods & Technical Holding Times

Analytical Method	Sample Matrix	Technical Holding Time (4 °C)
EPA 8260D	Aqueous	14 Days
EPA 624.1	Aqueous	14 Days

Sample Delivery Group: L1659125

Sample Delivery Group L1659125 was comprised of a single Pace Analytical laboratory report. The section below contains qualifications related to the entirety of the package.

Sample Identification

The following 45 field samples and 3 rinse blanks were included in this sample delivery group:

Field Sample ID	Lab Sample ID	Sample Date	Matrix	Sample Type
W-4S	L1659125-01	09/20/2023 18:00	Groundwater	Normal
OSB-3-130	L1659125-02	09/21/2023 09:00	Groundwater	Normal
W-2D	L1659125-03	09/21/2023 09:10	Groundwater	Normal
W-2I	L1659125-04	09/21/2023 09:55	Groundwater	Normal
OSB-3-71	L1659125-05	09/21/2023 10:00	Groundwater	Normal
EXT-2R	L1659125-06	09/21/2023 10:50	Groundwater	Normal
MW-10D	L1659125-07	09/21/2023 11:05	Groundwater	Normal
OSB-4	L1659125-08	09/21/2023 11:35	Groundwater	Normal
OSB-4-D	L1659125-09	09/21/2023 11:36	Groundwater	Field Duplicate
EXT-1R/TRENCH	L1659125-10	09/21/2023 12:50	Groundwater	Normal
EXT-3R	L1659125-11	09/21/2023 12:55	Groundwater	Normal
EXT-4	L1659125-12	09/21/2023 13:45	Groundwater	Normal
OSB-1	L1659125-13	09/21/2023 14:10	Groundwater	Normal
EXT-1	L1659125-14	09/22/2023 09:15	Groundwater	Normal
MW-7	L1659125-15	09/19/2023 10:30	Groundwater	Normal
OSB-9-95	L1659125-16	09/19/2023 11:45	Groundwater	Normal
MW-9	L1659125-17	09/19/2023 12:20	Groundwater	Normal
OSB-9-125	L1659125-18	09/19/2023 12:45	Groundwater	Normal
OSB-9-160	L1659125-19	09/19/2023 13:35	Groundwater	Normal
MW-6	L1659125-20	09/19/2023 13:40	Groundwater	Normal
MW-6-D	L1659125-21	09/19/2023 13:41	Groundwater	Field Duplicate
OSB-9-185	L1659125-22	09/19/2023 14:20	Groundwater	Normal
MW-5	L1659125-23	09/19/2023 14:45	Groundwater	Normal
OSB-9-218	L1659125-24	09/19/2023 15:00	Groundwater	Normal
OSB-9-218-D	L1659125-25	09/19/2023 15:01	Groundwater	Field Duplicate
MW-17S	L1659125-26	09/19/2023 16:00	Groundwater	Normal
OSB-6-95	L1659125-27	09/19/2023 16:10	Groundwater	Normal
OSB-6-125	L1659125-28	09/19/2023 16:45	Groundwater	Normal
OSB-6-160	L1659125-29	09/19/2023 17:35	Groundwater	Normal
OSB-5-100	L1659125-30	09/20/2023 08:50	Groundwater	Normal
MW-6D	L1659125-31	09/20/2023 10:40	Groundwater	Normal
OSB-10-154	L1659125-32	09/20/2023 10:45	Groundwater	Normal
OSB-10-199	L1659125-33	09/20/2023 11:35	Groundwater	Normal

MW-9D	L1659125-34	09/20/2023 11:35	Groundwater	Normal
OSB-10-227	L1659125-35	09/20/2023 12:25	Groundwater	Normal
MW-14D	L1659125-36	09/20/2023 12:30	Groundwater	Normal
MW-12D	L1659125-37	09/20/2023 14:15	Groundwater	Normal
MW-19-173	L1659125-38	09/20/2023 14:45	Groundwater	Normal
MW-19-173-D	L1659125-39	09/20/2023 14:46	Groundwater	Field Duplicate
MW-13D	L1659125-40	09/20/2023 15:10	Groundwater	Normal
MW-19-136	L1659125-41	09/20/2023 15:30	Groundwater	Normal
MW-19-100	L1659125-42	09/20/2023 16:20	Groundwater	Normal
EXT-3 (MW-4)	L1659125-43	09/20/2023 16:30	Groundwater	Normal
EXT-3(MW-4)-D	L1659125-44	09/20/2023 16:31	Groundwater	Field Duplicate
EQUIP-1	L1659125-45	09/19/2023 18:00	Groundwater	Rinse Blank
EQUIP-2	L1659125-46	09/20/2023 17:25	Groundwater	Rinse Blank
EQUIP-3	L1659125-47	09/21/2023 14:30	Groundwater	Rinse Blank
EFF	L1659125-48	09/21/2023 15:00	Groundwater	Normal

Sample Management

Sample Receipt

All sample receipt documentation was complete and correct. Samples were shipped to the laboratory by the client. Samples were received intact, and the bottle labels agreed with the COC. No anomalies were noted.

Holding Time/Preservation

The samples were analyzed within the technical holding times and were properly preserved.

Laboratory QA/QC

Initial & Continuing Calibration (ICV/CCV)

Not independently verified during abbreviated Stage 2A/B validation with access to only the Level 2 lab report. Lab did not flag any sample results having an associated ICV/CCV outside of specified control limits except for:

Batch	Method	Analyte	Reason	Qualifier
WG2142369	EPA 8260D	Acrolein	CCV < LCL	J-
WG2142369	EPA 8260D	Bromoform	CCV < LCL	J-
WG2142369	EPA 8260D	Methyl ethyl ketone	CCV < LCL	J-
WG2142370	EPA 8260D	1,1-Dichloroethene	CCV > UCL	J+
WG2142370	EPA 8260D	Acrolein	CCV < LCL	J-
WG2142370	EPA 8260D	Bromoform	CCV < LCL	J-

WG2142370	EPA 8260D	cis-1,3-Dichloropropene	CCV < LCL	J-
WG2142370	EPA 8260D	Dibromochloromethane	CCV < LCL	J-
WG2142370	EPA 8260D	trans-1,3-Dichloropropene	CCV < LCL	J-
WG2142370	EPA 8260D	Trichloroethene	CCV > UCL	J+
WG2142928	EPA 8260D	Acetone	CCV > UCL	J+
WG2142931	EPA 8260D	1,1,2-Trichlorotrifluoroethane	CCV < LCL	J-
WG2142931	EPA 8260D	Acetone	CCV < LCL	J-
WG2142931	EPA 8260D	Acrolein	CCV < LCL	J-
WG2142931	EPA 8260D	Acrylonitrile	CCV < LCL	J-
WG2142931	EPA 8260D	Methyl ethyl ketone	CCV < LCL	J-

Method Blanks

Method blanks were performed per lab bath and no analytes were detected or did not affect qualification of samples except for:

Batch	Field Sample ID	Method	Analyte	Reason	Qualifier
WG2142928	EQUIP-1	E8260D	Chloroform	Result < RL	U
WG2142928	EQUIP-2	E8260D	Chloroform	Result < RL	U
WG2142931	EQUIP-3	E8260D	Carbon disulfide	Result < RL	U

Reporting Limits

Reporting limits were not verified against project specific requirements.

Sample Dilutions

Reported sample dilutions were reviewed and detected analytes were reported from a sample analysis with the lowest dilution.

Surrogate Spikes / Labeled Standards

Surrogates or labeled standards were added to field and QC samples as required per the method where applicable. Sample surrogate percent recoveries for were within QC acceptance limits.

Matrix Spike (MS)/Matrix Spike Duplicates (MSD)

The MS and MSD analyses performed on SDG samples met all QC acceptance criteria for percent recovery and relative percent difference (RPD) where required per the method.

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

An LCS was analyzed for each batch and all recoveries were within QC acceptance criteria or did not affect qualification of samples except for:

Batch	Method	Analyte	Reason	Qualifier
WG2142369	EPA 8260D	1,2,3-Trichlorobenzene	LCSD RPD > Limit	J
WG2142369	EPA 8260D	Acetone	LCSD RPD > Limit	J
WG2142369	EPA 8260D	Naphthalene	LCSD RPD > Limit	J
WG2142370	EPA 8260D	1,1-Dichloroethene	LCS > UCL	J+
WG2142370	EPA 8260D	Acetone	LCSD RPD > Limit	J
WG2142370	EPA 8260D	Acrylonitrile	LCSD RPD > Limit	J
WG2142370	EPA 8260D	Bromoform	LCS < LCL, LCSD RPD > Limit	J-
WG2142370	EPA 8260D	cis-1,3-Dichloropropene	LCS < LCL	J-
WG2142370	EPA 8260D	Dibromochloromethane	LCS < LCL	J-
WG2142370	EPA 8260D	trans-1,3-Dichloropropene	LCS < LCL, LCSD RPD > Limit	J-
WG2142370	EPA 8260D	Trichloroethene	LCS > UCL	J+
WG2142928	EPA 8260D	1,2,3-Trichlorobenzene	LCSD RPD > Limit	J
WG2142928	EPA 8260D	1,2,4-Trichlorobenzene	LCSD RPD > Limit	J
WG2142928	EPA 8260D	Hexachlorobutadiene	LCSD RPD > Limit	J
WG2142928	EPA 8260D	Naphthalene	LCSD RPD > Limit	J
WG2142928	EPA 8260D	Acetone	LCS > UCL	J+

Laboratory Duplicates

Laboratory duplicate analyses were analyzed where required and all recoveries were within QC acceptance criteria.

Target Compound Identification

All target compound identifications were within validation criteria for relative retention times, characteristic ions, and relative ion abundances where applicable.

Tentatively Identified Compounds (TIC)

No results were reported as TICs as a part of this SDG.

Field QA/QC

Field Duplicates

Field duplicates collected and analyzed as part of this SDG were within control limits.

Equipment Blanks

Equipment blanks collected as part of this SDG had no detections except for:

Field Sample ID	Method	Analyte	Result	Qualifier
EQUIP-1	E8260D	Acetone	31.5	J+
EQUIP-2	E8260D	Acetone	55.6	J+
EQUIP-3	E8260D	Acetone	29.6	J-
EQUIP-3	E8260D	Chloroform	1.69	J
EQUIP-3	E8260D	Toluene	0.321	J

No sample results were qualified due to these equipment blank detections.

Trip Blanks

Trip blanks were not collected or analyzed as part of this SDG.

SDG Overall Assessment

The data found in this report complied with the data quality objectives as specified. The data, as qualified, are acceptable to use for decision-making purposes. No results were rejected. Data qualifiers are summarized in the following table (results qualified as U due to being non-detect were not included in the table below):

Field Sample ID	Analyte	Result	Qualifier	Validation Code
EFF	Tetrachloroethene	0.711	J	BRL
EFF	trans-1,2-Dichloroethene	0.527	J	BRL
EXT-1	1,2,3-Trichlorobenzene	0.23	UJ	LCS
EXT-1	Acetone	11.3	UJ	LCS
EXT-1	Acrolein	2.54	UJ-	CCV
EXT-1	Bromoform	0.129	UJ-	CCV
EXT-1	Methyl ethyl ketone	1.19	UJ-	CCV
EXT-1	Naphthalene	1	UJ	LCS
EXT-1	Trichloroethene	0.377	J	BRL
EXT-1R/TRENCH	Trichloroethene	0.193	J	BRL
EXT-2R	1,1-Dichloroethene	0.217	J	BRL
EXT-2R	Tetrachloroethene	0.876	J	BRL
EXT-2R	trans-1,2-Dichloroethene	0.6	J	BRL
EXT-3 (MW-4)	1,2,3-Trichlorobenzene	0.23	UJ	LCS
EXT-3 (MW-4)	1,2,4-Trichlorobenzene	0.481	UJ	LCS
EXT-3 (MW-4)	cis-1,2-Dichloroethene	0.127	J	BRL
EXT-3 (MW-4)	Hexachlorobutadiene	0.337	UJ	LCS
EXT-3 (MW-4)	Naphthalene	1	UJ	LCS
EXT-3(MW-4)-D	1,2,3-Trichlorobenzene	0.23	UJ	LCS

EXT-3(MW-4)-D	1,2,4-Trichlorobenzene	0.481	UJ	LCS
EXT-3(MW-4)-D	cis-1,2-Dichloroethene	0.155	J	BRL
EXT-3(MW-4)-D	Hexachlorobutadiene	0.337	UJ	LCS
EXT-3(MW-4)-D	Naphthalene	1	UJ	LCS
EXT-4	1,1-Dichloroethene	0.645	J	BRL
EXT-4	1,2,3-Trichlorobenzene	0.23	UJ	LCS
EXT-4	Acetone	11.3	UJ	LCS
EXT-4	Acrolein	2.54	UJ-	CCV
EXT-4	Bromoform	0.129	UJ-	CCV
EXT-4	Methyl ethyl ketone	1.19	UJ-	CCV
EXT-4	Naphthalene	1	UJ	LCS
MW-10D	cis-1,2-Dichloroethene	0.805	J	BRL
MW-10D	Trichloroethene	0.26	J	BRL
MW-12D	1,2,3-Trichlorobenzene	0.23	UJ	LCS
MW-12D	1,2,4-Trichlorobenzene	0.481	UJ	LCS
MW-12D	Hexachlorobutadiene	0.337	UJ	LCS
MW-12D	Naphthalene	1	UJ	LCS
MW-12D	Trichloroethene	0.427	J	BRL
MW-12D	Vinyl chloride	0.34	J	BRL
MW-13D	1,1-Dichloroethane	0.162	J	BRL
MW-13D	1,2,3-Trichlorobenzene	0.23	UJ	LCS
MW-13D	1,2,4-Trichlorobenzene	0.481	UJ	LCS
MW-13D	Hexachlorobutadiene	0.337	UJ	LCS
MW-13D	Naphthalene	1	UJ	LCS
MW-14D	1,2,3-Trichlorobenzene	0.23	UJ	LCS
MW-14D	1,2,4-Trichlorobenzene	0.481	UJ	LCS
MW-14D	Hexachlorobutadiene	0.337	UJ	LCS
MW-14D	Naphthalene	1	UJ	LCS
MW-17S	1,2,3-Trichlorobenzene	0.23	UJ	LCS
MW-17S	Acetone	11.3	UJ	LCS
MW-17S	Acrolein	2.54	UJ-	CCV
MW-17S	Bromoform	0.129	UJ-	CCV
MW-17S	Methyl ethyl ketone	1.19	UJ-	CCV
MW-17S	Naphthalene	1	UJ	LCS
MW-19-100	1,1-Dichloroethene	0.192	J	BRL
MW-19-100	1,2,3-Trichlorobenzene	0.23	UJ	LCS
MW-19-100	1,2,4-Trichlorobenzene	0.481	UJ	LCS
MW-19-100	Hexachlorobutadiene	0.337	UJ	LCS
MW-19-100	Naphthalene	1	UJ	LCS
MW-19-100	Total Xylenes	0.334	J	BRL
MW-19-136	1,2,3-Trichlorobenzene	0.23	UJ	LCS

MW-19-136	1,2,4-Trichlorobenzene	0.481	UJ	LCS
MW-19-136	Ethylbenzene	0.207	J	BRL
MW-19-136	Hexachlorobutadiene	0.337	UJ	LCS
MW-19-136	Naphthalene	1	UJ	LCS
MW-19-136	Total Xylenes	0.748	J	BRL
MW-19-173	1,2,3-Trichlorobenzene	0.23	UJ	LCS
MW-19-173	1,2,4-Trichlorobenzene	0.481	UJ	LCS
MW-19-173	Ethylbenzene	0.168	J	BRL
MW-19-173	Hexachlorobutadiene	0.337	UJ	LCS
MW-19-173	Naphthalene	1	UJ	LCS
MW-19-173	Total Xylenes	0.562	J	BRL
MW-19-173-D	1,2,3-Trichlorobenzene	0.23	UJ	LCS
MW-19-173-D	1,2,4-Trichlorobenzene	0.481	UJ	LCS
MW-19-173-D	Hexachlorobutadiene	0.337	UJ	LCS
MW-19-173-D	Naphthalene	1	UJ	LCS
MW-19-173-D	Total Xylenes	0.513	J	BRL
MW-5	1,2,3-Trichlorobenzene	0.23	UJ	LCS
MW-5	Acetone	11.3	UJ	LCS
MW-5	Acrolein	2.54	UJ-	CCV
MW-5	Bromoform	0.129	UJ-	CCV
MW-5	Methyl ethyl ketone	1.19	UJ-	CCV
MW-5	Naphthalene	1	UJ	LCS
MW-5	Trichloroethene	0.616	J	BRL
MW-6	1,2,3-Trichlorobenzene	0.23	UJ	LCS
MW-6	Acetone	11.3	UJ	LCS
MW-6	Acrolein	2.54	UJ-	CCV
MW-6	Bromoform	0.129	UJ-	CCV
MW-6	Methyl ethyl ketone	1.19	UJ-	CCV
MW-6	Naphthalene	1	UJ	LCS
MW-6-D	1,2,3-Trichlorobenzene	0.23	UJ	LCS
MW-6-D	Acetone	11.3	UJ	LCS
MW-6-D	Acrolein	2.54	UJ-	CCV
MW-6-D	Bromoform	0.129	UJ-	CCV
MW-6-D	Methyl ethyl ketone	1.19	UJ-	CCV
MW-6-D	Naphthalene	1	UJ	LCS
MW-6D	1,1-Dichloroethene	0.217	J+	LCS, CCV
MW-6D	Acetone	11.3	UJ	LCS
MW-6D	Acrolein	2.54	UJ-	CCV
MW-6D	Acrylonitrile	0.671	UJ	LCS
MW-6D	Bromoform	0.129	UJ-	LCS, CCV
MW-6D	cis-1,3-Dichloropropene	0.111	UJ-	LCS, CCV

MW-6D	Dibromochloromethane	0.14	UJ-	LCS, CCV
MW-6D	trans-1,3-Dichloropropene	0.118	UJ-	LCS, CCV
MW-6D	Trichloroethene	14.1	J+	LCS, CCV
MW-6D	Vinyl chloride	0.641	J	BRL
MW-7	1,2,3-Trichlorobenzene	0.23	UJ	LCS
MW-7	Acetone	11.3	UJ	LCS
MW-7	Acrolein	2.54	UJ-	CCV
MW-7	Bromoform	0.129	UJ-	CCV
MW-7	Methyl ethyl ketone	1.19	UJ-	CCV
MW-7	Naphthalene	1	UJ	LCS
MW-7	Trichloroethene	0.228	J	BRL
MW-9	1,2,3-Trichlorobenzene	0.23	UJ	LCS
MW-9	Acetone	11.3	UJ	LCS
MW-9	Acrolein	2.54	UJ-	CCV
MW-9	Bromoform	0.129	UJ-	CCV
MW-9	cis-1,2-Dichloroethene	0.292	J	BRL
MW-9	Methyl ethyl ketone	1.19	UJ-	CCV
MW-9	Naphthalene	1	UJ	LCS
MW-9	Trichloroethene	0.259	J	BRL
MW-9D	1,1-Dichloroethane	0.437	J	BRL
MW-9D	Acetone	11.3	UJ	LCS
MW-9D	Acrolein	2.54	UJ-	CCV
MW-9D	Acrylonitrile	0.671	UJ	LCS
MW-9D	Benzene	0.142	J	BRL
MW-9D	Bromoform	0.129	UJ-	LCS, CCV
MW-9D	cis-1,3-Dichloropropene	0.111	UJ-	LCS, CCV
MW-9D	Dibromochloromethane	0.14	UJ-	LCS, CCV
MW-9D	trans-1,3-Dichloropropene	0.118	UJ-	LCS, CCV
OSB-1	1,2,3-Trichlorobenzene	0.23	UJ	LCS
OSB-1	Acetone	11.3	UJ	LCS
OSB-1	Acrolein	2.54	UJ-	CCV
OSB-1	Bromoform	0.129	UJ-	CCV
OSB-1	Methyl ethyl ketone	1.19	UJ-	CCV
OSB-1	Naphthalene	1	UJ	LCS
OSB-1	Trichloroethene	0.797	J	BRL
OSB-10-154	Acetone	11.3	UJ	LCS
OSB-10-154	Acrolein	2.54	UJ-	CCV
OSB-10-154	Acrylonitrile	0.671	UJ	LCS
OSB-10-154	Bromoform	0.129	UJ-	LCS, CCV
OSB-10-154	Carbon disulfide	0.231	J	BRL
OSB-10-154	cis-1,2-Dichloroethene	0.434	J	BRL

OSB-10-154	cis-1,3-Dichloropropene	0.111	UJ-	LCS, CCV
OSB-10-154	Dibromochloromethane	0.14	UJ-	LCS, CCV
OSB-10-154	Toluene	0.638	J	BRL
OSB-10-154	trans-1,3-Dichloropropene	0.118	UJ-	LCS, CCV
OSB-10-154	Trichloroethene	1.15	J+	LCS, CCV
OSB-10-199	Acetone	11.3	UJ	LCS
OSB-10-199	Acrolein	2.54	UJ-	CCV
OSB-10-199	Acrylonitrile	0.671	UJ	LCS
OSB-10-199	Bromoform	0.129	UJ-	LCS, CCV
OSB-10-199	cis-1,2-Dichloroethene	0.491	J	BRL
OSB-10-199	cis-1,3-Dichloropropene	0.111	UJ-	LCS, CCV
OSB-10-199	Dibromochloromethane	0.14	UJ-	LCS, CCV
OSB-10-199	Total Xylenes	0.292	J	BRL
OSB-10-199	trans-1,3-Dichloropropene	0.118	UJ-	LCS, CCV
OSB-10-199	Trichloroethene	0.274	J+	LCS, CCV
OSB-10-227	1,2,3-Trichlorobenzene	0.23	UJ	LCS
OSB-10-227	1,2,4-Trichlorobenzene	0.481	UJ	LCS
OSB-10-227	cis-1,2-Dichloroethene	0.96	J	BRL
OSB-10-227	Hexachlorobutadiene	0.337	UJ	LCS
OSB-10-227	Naphthalene	1	UJ	LCS
OSB-4	cis-1,2-Dichloroethene	0.221	J	BRL
OSB-4-D	cis-1,2-Dichloroethene	0.212	J	BRL
OSB-5-100	1,2,3-Trichlorobenzene	0.23	UJ	LCS
OSB-5-100	Acetone	11.3	UJ	LCS
OSB-5-100	Acrolein	2.54	UJ-	CCV
OSB-5-100	Bromoform	0.129	UJ-	CCV
OSB-5-100	Methyl ethyl ketone	1.19	UJ-	CCV
OSB-5-100	Naphthalene	1	UJ	LCS
OSB-5-100	trans-1,2-Dichloroethene	0.393	J	BRL
OSB-5-100	Vinyl chloride	0.381	J	BRL
OSB-6-125	1,2,3-Trichlorobenzene	0.23	UJ	LCS
OSB-6-125	Acetone	11.3	UJ	LCS
OSB-6-125	Acrolein	2.54	UJ-	CCV
OSB-6-125	Bromoform	0.129	UJ-	CCV
OSB-6-125	Methyl ethyl ketone	1.19	UJ-	CCV
OSB-6-125	Naphthalene	1	UJ	LCS
OSB-6-160	1,2,3-Trichlorobenzene	0.23	UJ	LCS
OSB-6-160	Acetone	11.3	UJ	LCS
OSB-6-160	Acrolein	2.54	UJ-	CCV
OSB-6-160	Bromoform	0.129	UJ-	CCV
OSB-6-160	Methyl ethyl ketone	1.19	UJ-	CCV

OSB-6-160	Naphthalene	1	UJ	LCS
OSB-6-160	Trichloroethene	0.344	J	BRL
OSB-6-95	1,2,3-Trichlorobenzene	0.23	UJ	LCS
OSB-6-95	Acetone	11.3	UJ	LCS
OSB-6-95	Acrolein	2.54	UJ-	CCV
OSB-6-95	Bromoform	0.129	UJ-	CCV
OSB-6-95	Methyl ethyl ketone	1.19	UJ-	CCV
OSB-6-95	Naphthalene	1	UJ	LCS
OSB-9-125	1,2,3-Trichlorobenzene	0.23	UJ	LCS
OSB-9-125	Acetone	11.3	UJ	LCS
OSB-9-125	Acrolein	2.54	UJ-	CCV
OSB-9-125	Bromoform	0.129	UJ-	CCV
OSB-9-125	Methyl ethyl ketone	1.19	UJ-	CCV
OSB-9-125	Naphthalene	1	UJ	LCS
OSB-9-125	Vinyl chloride	0.306	J	BRL
OSB-9-160	1,1-Dichloroethene	0.197	J	BRL
OSB-9-160	1,2,3-Trichlorobenzene	0.23	UJ	LCS
OSB-9-160	Acetone	11.3	UJ	LCS
OSB-9-160	Acrolein	2.54	UJ-	CCV
OSB-9-160	Bromoform	0.129	UJ-	CCV
OSB-9-160	Methyl ethyl ketone	1.19	UJ-	CCV
OSB-9-160	Naphthalene	1	UJ	LCS
OSB-9-185	1,2,3-Trichlorobenzene	0.23	UJ	LCS
OSB-9-185	Acetone	11.3	UJ	LCS
OSB-9-185	Acrolein	2.54	UJ-	CCV
OSB-9-185	Bromoform	0.129	UJ-	CCV
OSB-9-185	cis-1,2-Dichloroethene	0.661	J	BRL
OSB-9-185	Methyl ethyl ketone	1.19	UJ-	CCV
OSB-9-185	Naphthalene	1	UJ	LCS
OSB-9-185	Trichloroethene	0.691	J	BRL
OSB-9-185	Vinyl chloride	0.681	J	BRL
OSB-9-218	1,2,3-Trichlorobenzene	0.23	UJ	LCS
OSB-9-218	Acetone	11.3	UJ	LCS
OSB-9-218	Acrolein	2.54	UJ-	CCV
OSB-9-218	Benzene	0.096	J	BRL
OSB-9-218	Bromoform	0.129	UJ-	CCV
OSB-9-218	cis-1,2-Dichloroethene	0.351	J	BRL
OSB-9-218	Methyl ethyl ketone	1.19	UJ-	CCV
OSB-9-218	Naphthalene	1	UJ	LCS
OSB-9-218	Vinyl chloride	0.491	J	BRL
OSB-9-218-D	1,2,3-Trichlorobenzene	0.23	UJ	LCS

OSB-9-218-D	Acetone	11.3	UJ	LCS
OSB-9-218-D	Acrolein	2.54	UJ-	CCV
OSB-9-218-D	Bromoform	0.129	UJ-	CCV
OSB-9-218-D	cis-1,2-Dichloroethene	0.256	J	BRL
OSB-9-218-D	Methyl ethyl ketone	1.19	UJ-	CCV
OSB-9-218-D	Naphthalene	1	UJ	LCS
OSB-9-218-D	Vinyl chloride	0.352	J	BRL
OSB-9-95	1,2,3-Trichlorobenzene	0.23	UJ	LCS
OSB-9-95	Acetone	11.3	UJ	LCS
OSB-9-95	Acrolein	2.54	UJ-	CCV
OSB-9-95	Bromoform	0.129	UJ-	CCV
OSB-9-95	Methyl ethyl ketone	1.19	UJ-	CCV
OSB-9-95	Naphthalene	1	UJ	LCS
EQUIP-1	1,2,3-Trichlorobenzene	0.23	UJ	LCS
EQUIP-1	1,2,4-Trichlorobenzene	0.481	UJ	LCS
EQUIP-1	Acetone	31.5	J+	LCS, CCV
EQUIP-1	Chloroform	5	U	MBK
EQUIP-1	Hexachlorobutadiene	0.337	UJ	LCS
EQUIP-1	Naphthalene	1	UJ	LCS
EQUIP-2	1,2,3-Trichlorobenzene	0.23	UJ	LCS
EQUIP-2	1,2,4-Trichlorobenzene	0.481	UJ	LCS
EQUIP-2	Acetone	55.6	J+	LCS, CCV
EQUIP-2	Chloroform	5	U	MBK
EQUIP-2	Hexachlorobutadiene	0.337	UJ	LCS
EQUIP-2	Naphthalene	1	UJ	LCS
EQUIP-3	1,1,2-Trichlorotrifluoroethane	0.18	UJ-	CCV
EQUIP-3	Acetone	29.6	J-	CCV, BRL
EQUIP-3	Acrolein	2.54	UJ-	CCV
EQUIP-3	Acrylonitrile	0.671	UJ-	CCV
EQUIP-3	Carbon disulfide	1	U	MBK
EQUIP-3	Chloroform	1.69	J	BRL
EQUIP-3	Methyl ethyl ketone	1.19	UJ-	CCV
EQUIP-3	Toluene	0.321	J	BRL
W-2D	cis-1,2-Dichloroethene	0.137	J	BRL
W-2I	cis-1,2-Dichloroethene	0.328	J	BRL
W-2I	Methyl tert-butyl ether	0.198	J	BRL
W-2I	Vinyl chloride	0.273	J	BRL
W-4S	Chloroform	0.986	J	BRL
W-4S	cis-1,2-Dichloroethene	0.255	J	BRL

Overall Assessment

The data found in this report complied with the data quality objectives as specified. The data, as qualified, are acceptable to use for decision-making purposes. In total, 4,022 results were reviewed from four sample delivery groups. The overall completeness for this event was 100%.

Definitions of Qualifiers

The following table lists each potential validation qualifier and associated definition.

Qualifier	Definition
U	The analyte was not detected and is reported as less than the LOD or as defined by the client. The LOD has been adjusted for any dilution or concentration of the sample.
J	The reported result is an estimated value.
J+	The reported result is an estimated value, but the result may be biased high.
J-	The reported result is an estimated value, but the result may be biased low.
UJ	The analyte was not detected and is reported as less than the LOD or as defined by the client. However, the associated numerical value is approximate.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a “tentative identification”.
NJ	The analyte has been “tentatively identified” or “presumptively” as present, and the associated numerical value is the estimated concentration in the sample.
R	The sample results (including non-detects) were affected by serious deficiencies in the ability to analyze the sample and to meet published method and project quality control criteria. The presence or absence of the analyte cannot be substantiated by the data provided. Exclusion of the data is recommended.

Definitions of Validation Codes

The following table lists possible validation codes and their associated definition.

Code	Definition
BRL	Below reporting limit
HTE	Holding time exceeded
INT	Interference
ERL	Elevated reporting limit
LCS	Laboratory control sample/Laboratory control sample duplicate outside of quality control limits
LDP	Laboratory duplicate sample analysis outside of quality control limits
MSD	Matrix spike/Matrix spike duplicate outside of quality control limits
PRF	Professional judgment
SUR	Surrogate/labeled standard outside of quality control limits
MBK	Method blank contamination
TIC	Tentatively identified compound
CCV	Continuing calibration verification analysis outside of quality control limits

Blank Contamination Actions

The following table lists the standard guidelines (high-resolution in parenthesis) for applying qualifiers due to blank contamination.

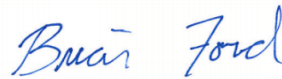
Blank Result	Sample Result	Action
< RL	< RL	Report at RL & qualify U
	> RL, < 5X (2X) Blank Result	Report at sample result & qualify U
	> RL, < 10X (5X) Blank Result	Report at sample result & qualify J+
	> RL, > 10X (5X) Blank Result	No qualification
> RL	< RL	Report at RL & qualify U
	> RL, < 5X (2X) Blank Result	Report at sample result & qualify U
	> RL, < 10X (5X) Blank Result	Report at sample result & qualify J+
	> RL, > 10X (5X) Blank Result	No qualification

Oregon Dept. of Env. Quality - ODEQ

Sample Delivery Group: L1659125
Samples Received: 09/23/2023
Project Number: 2060.007
Description: Milwaukie International Way

Report To: Mark Pugh
3150 NW 229th St., Suite 150
Hillsboro, OR 97124

Entire Report Reviewed By:



Brian Ford
Project Manager

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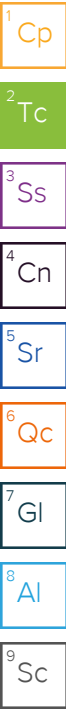
Pace Analytical National12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

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

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SAMPLE SUMMARY

W-4S L1659125-01 GW

				Collected by Alex McCarthy	Collected date/time 09/20/23 18:00	Received date/time 09/23/23 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2142217	1	09/30/23 07:52	09/30/23 07:52	KSD	Mt. Juliet, TN

¹ Cp

² Tc

³ Ss

OSB-3-130 L1659125-02 GW

				Collected by Alex McCarthy	Collected date/time 09/21/23 09:00	Received date/time 09/23/23 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2142217	1	09/30/23 08:12	09/30/23 08:12	KSD	Mt. Juliet, TN

⁴ Cn

⁵ Sr

W-2D L1659125-03 GW

				Collected by Alex McCarthy	Collected date/time 09/21/23 09:10	Received date/time 09/23/23 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2142217	1	09/30/23 08:31	09/30/23 08:31	KSD	Mt. Juliet, TN

⁶ Qc

⁷ Gl

W-2I L1659125-04 GW

				Collected by Alex McCarthy	Collected date/time 09/21/23 09:55	Received date/time 09/23/23 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2142217	1	09/30/23 08:50	09/30/23 08:50	KSD	Mt. Juliet, TN

⁸ Al

⁹ Sc

OSB-3-71 L1659125-05 GW

				Collected by Alex McCarthy	Collected date/time 09/21/23 10:00	Received date/time 09/23/23 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2142217	1	09/30/23 09:10	09/30/23 09:10	KSD	Mt. Juliet, TN

EXT-2R L1659125-06 GW

				Collected by Alex McCarthy	Collected date/time 09/21/23 10:50	Received date/time 09/23/23 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2142217	1	09/30/23 09:29	09/30/23 09:29	KSD	Mt. Juliet, TN

MW-10D L1659125-07 GW

				Collected by Alex McCarthy	Collected date/time 09/21/23 11:05	Received date/time 09/23/23 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2142217	1	09/30/23 09:48	09/30/23 09:48	KSD	Mt. Juliet, TN

OSB-4 L1659125-08 GW

				Collected by Alex McCarthy	Collected date/time 09/21/23 11:35	Received date/time 09/23/23 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2142217	1	09/30/23 10:07	09/30/23 10:07	KSD	Mt. Juliet, TN

SAMPLE SUMMARY

OSB-4-D L1659125-09 GW

				Collected by Alex McCarthy	Collected date/time 09/21/23 11:36	Received date/time 09/23/23 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2142217	1	09/30/23 10:27	09/30/23 10:27	KSD	Mt. Juliet, TN

EXT-1R/TRENCH L1659125-10 GW

				Collected by Alex McCarthy	Collected date/time 09/21/23 12:50	Received date/time 09/23/23 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2142217	1	09/30/23 10:46	09/30/23 10:46	KSD	Mt. Juliet, TN

EXT-3R L1659125-11 GW

				Collected by Alex McCarthy	Collected date/time 09/21/23 12:55	Received date/time 09/23/23 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2142217	1	09/30/23 11:05	09/30/23 11:05	KSD	Mt. Juliet, TN

EXT-4 L1659125-12 GW

				Collected by Alex McCarthy	Collected date/time 09/21/23 13:45	Received date/time 09/23/23 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2142369	1	09/30/23 14:28	09/30/23 14:28	KSD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2143977	10	10/04/23 00:47	10/04/23 00:47	ADM	Mt. Juliet, TN

OSB-1 L1659125-13 GW

				Collected by Alex McCarthy	Collected date/time 09/21/23 14:10	Received date/time 09/23/23 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2142369	1	09/30/23 14:58	09/30/23 14:58	KSD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2143977	1	10/03/23 22:53	10/03/23 22:53	ADM	Mt. Juliet, TN

EXT-1 L1659125-14 GW

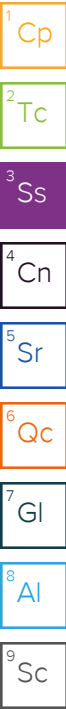
				Collected by Alex McCarthy	Collected date/time 09/22/23 09:15	Received date/time 09/23/23 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2142369	1	09/30/23 15:17	09/30/23 15:17	KSD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2143977	1	10/03/23 23:12	10/03/23 23:12	ADM	Mt. Juliet, TN

MW-7 L1659125-15 GW

				Collected by Alex McCarthy	Collected date/time 09/19/23 10:30	Received date/time 09/23/23 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2142369	1	09/30/23 15:36	09/30/23 15:36	KSD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2143977	1	10/03/23 19:22	10/03/23 19:22	ADM	Mt. Juliet, TN

OSB-9-95 L1659125-16 GW

				Collected by Alex McCarthy	Collected date/time 09/19/23 11:45	Received date/time 09/23/23 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2142369	1	09/30/23 15:55	09/30/23 15:55	KSD	Mt. Juliet, TN



SAMPLE SUMMARY

MW-9 L1659125-17 GW

				Collected by Alex McCarthy	Collected date/time 09/19/23 12:20	Received date/time 09/23/23 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2142369	1	09/30/23 16:14	09/30/23 16:14	KSD	Mt. Juliet, TN

OSB-9-125 L1659125-18 GW

				Collected by Alex McCarthy	Collected date/time 09/19/23 12:45	Received date/time 09/23/23 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2142369	1	09/30/23 16:33	09/30/23 16:33	KSD	Mt. Juliet, TN

OSB-9-160 L1659125-19 GW

				Collected by Alex McCarthy	Collected date/time 09/19/23 13:35	Received date/time 09/23/23 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2142369	1	09/30/23 16:53	09/30/23 16:53	KSD	Mt. Juliet, TN

MW-6 L1659125-20 GW

				Collected by Alex McCarthy	Collected date/time 09/19/23 13:40	Received date/time 09/23/23 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2142369	1	09/30/23 17:12	09/30/23 17:12	KSD	Mt. Juliet, TN

MW-6-D L1659125-21 GW

				Collected by Alex McCarthy	Collected date/time 09/19/23 13:41	Received date/time 09/23/23 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2142369	1	09/30/23 17:31	09/30/23 17:31	KSD	Mt. Juliet, TN

OSB-9-185 L1659125-22 GW

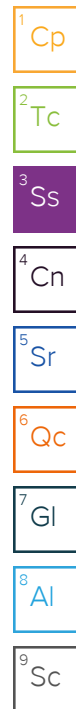
				Collected by Alex McCarthy	Collected date/time 09/19/23 14:20	Received date/time 09/23/23 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2142369	1	09/30/23 17:50	09/30/23 17:50	KSD	Mt. Juliet, TN

MW-5 L1659125-23 GW

				Collected by Alex McCarthy	Collected date/time 09/19/23 14:45	Received date/time 09/23/23 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2142369	1	09/30/23 18:10	09/30/23 18:10	KSD	Mt. Juliet, TN

OSB-9-218 L1659125-24 GW

				Collected by Alex McCarthy	Collected date/time 09/19/23 15:00	Received date/time 09/23/23 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2142369	1	09/30/23 18:29	09/30/23 18:29	KSD	Mt. Juliet, TN



SAMPLE SUMMARY

OSB-9-218-D L1659125-25 GW

				Collected by Alex McCarthy	Collected date/time 09/19/23 15:01	Received date/time 09/23/23 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2142369	1	09/30/23 18:48	09/30/23 18:48	KSD	Mt. Juliet, TN

MW-17S L1659125-26 GW

				Collected by Alex McCarthy	Collected date/time 09/19/23 16:00	Received date/time 09/23/23 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2142369	1	09/30/23 19:08	09/30/23 19:08	KSD	Mt. Juliet, TN

OSB-6-95 L1659125-27 GW

				Collected by Alex McCarthy	Collected date/time 09/19/23 16:10	Received date/time 09/23/23 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2142369	1	09/30/23 19:27	09/30/23 19:27	KSD	Mt. Juliet, TN

OSB-6-125 L1659125-28 GW

				Collected by Alex McCarthy	Collected date/time 09/19/23 16:45	Received date/time 09/23/23 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2142369	1	09/30/23 19:46	09/30/23 19:46	KSD	Mt. Juliet, TN

OSB-6-160 L1659125-29 GW

				Collected by Alex McCarthy	Collected date/time 09/19/23 17:35	Received date/time 09/23/23 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2142369	1	09/30/23 20:06	09/30/23 20:06	KSD	Mt. Juliet, TN

OSB-5-100 L1659125-30 GW

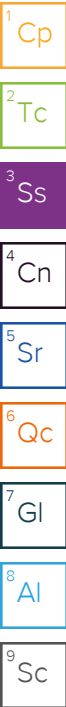
				Collected by Alex McCarthy	Collected date/time 09/20/23 08:50	Received date/time 09/23/23 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2142369	1	09/30/23 20:25	09/30/23 20:25	KSD	Mt. Juliet, TN

MW-6D L1659125-31 GW

				Collected by Alex McCarthy	Collected date/time 09/20/23 10:40	Received date/time 09/23/23 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2142370	1	09/30/23 22:36	09/30/23 22:36	KSD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2143977	10	10/04/23 01:07	10/04/23 01:07	ADM	Mt. Juliet, TN

OSB-10-154 L1659125-32 GW

				Collected by Alex McCarthy	Collected date/time 09/20/23 10:45	Received date/time 09/23/23 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2142370	1	10/01/23 07:35	10/01/23 07:35	KSD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2143977	1	10/04/23 00:09	10/04/23 00:09	ADM	Mt. Juliet, TN



SAMPLE SUMMARY

OSB-10-199 L1659125-33 GW

				Collected by Alex McCarthy	Collected date/time 09/20/23 11:35	Received date/time 09/23/23 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2142370	1	10/01/23 07:54	10/01/23 07:54	KSD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2143977	1	10/04/23 00:28	10/04/23 00:28	ADM	Mt. Juliet, TN

MW-9D L1659125-34 GW

				Collected by Alex McCarthy	Collected date/time 09/20/23 11:35	Received date/time 09/23/23 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2142370	1	10/01/23 08:14	10/01/23 08:14	KSD	Mt. Juliet, TN

OSB-10-227 L1659125-35 GW

				Collected by Alex McCarthy	Collected date/time 09/20/23 12:25	Received date/time 09/23/23 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2142928	1	10/02/23 01:50	10/02/23 01:50	JCP	Mt. Juliet, TN

MW-14D L1659125-36 GW

				Collected by Alex McCarthy	Collected date/time 09/20/23 12:30	Received date/time 09/23/23 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2142928	1	10/02/23 02:09	10/02/23 02:09	JCP	Mt. Juliet, TN

MW-12D L1659125-37 GW

				Collected by Alex McCarthy	Collected date/time 09/20/23 14:15	Received date/time 09/23/23 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2142928	1	10/02/23 02:30	10/02/23 02:30	JCP	Mt. Juliet, TN

MW-19-173 L1659125-38 GW

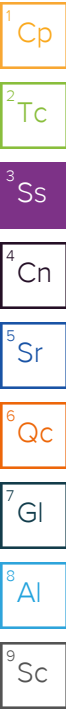
				Collected by Alex McCarthy	Collected date/time 09/20/23 14:45	Received date/time 09/23/23 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2142928	1	10/02/23 02:47	10/02/23 02:47	JCP	Mt. Juliet, TN

MW-19-173-D L1659125-39 GW

				Collected by Alex McCarthy	Collected date/time 09/20/23 14:46	Received date/time 09/23/23 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2142928	1	10/02/23 03:06	10/02/23 03:06	JCP	Mt. Juliet, TN

MW-13D L1659125-40 GW

				Collected by Alex McCarthy	Collected date/time 09/20/23 15:10	Received date/time 09/23/23 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2142928	1	10/02/23 03:25	10/02/23 03:25	JCP	Mt. Juliet, TN



SAMPLE SUMMARY

MW-19-136 L1659125-41 GW

				Collected by Alex McCarthy	Collected date/time 09/20/23 15:30	Received date/time 09/23/23 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2142928	1	10/02/23 03:44	10/02/23 03:44	JCP	Mt. Juliet, TN

MW-19-100 L1659125-42 GW

				Collected by Alex McCarthy	Collected date/time 09/20/23 16:20	Received date/time 09/23/23 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2142928	1	10/02/23 04:03	10/02/23 04:03	JCP	Mt. Juliet, TN

EXT-3 (MW-4) L1659125-43 GW

				Collected by Alex McCarthy	Collected date/time 09/20/23 16:30	Received date/time 09/23/23 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2142928	1	10/02/23 04:23	10/02/23 04:23	JCP	Mt. Juliet, TN

EXT-3(MW-4)-D L1659125-44 GW

				Collected by Alex McCarthy	Collected date/time 09/20/23 16:31	Received date/time 09/23/23 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2142928	1	10/02/23 04:41	10/02/23 04:41	JCP	Mt. Juliet, TN

EQUIP-1 L1659125-45 GW

				Collected by Alex McCarthy	Collected date/time 09/19/23 18:00	Received date/time 09/23/23 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2142928	1	10/02/23 05:00	10/02/23 05:00	JCP	Mt. Juliet, TN

EQUIP-2 L1659125-46 GW

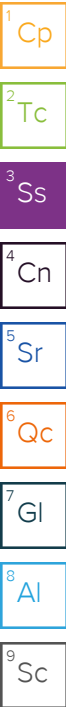
				Collected by Alex McCarthy	Collected date/time 09/20/23 17:25	Received date/time 09/23/23 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2142928	1	10/02/23 05:20	10/02/23 05:20	JCP	Mt. Juliet, TN

EQUIP-3 L1659125-47 GW

				Collected by Alex McCarthy	Collected date/time 09/21/23 14:30	Received date/time 09/23/23 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2142931	1	10/01/23 23:15	10/01/23 23:15	JCP	Mt. Juliet, TN

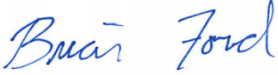
EFF L1659125-48 WW

				Collected by Alex McCarthy	Collected date/time 09/21/23 15:00	Received date/time 09/23/23 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 624.1	WG2142334	1	09/30/23 13:33	09/30/23 13:33	JCP	Mt. Juliet, TN

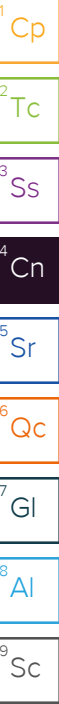


CASE NARRATIVE

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



Brian Ford
Project Manager



Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	50.0	1	09/30/2023 07:52	WG2142217
Acrolein	U		2.54	50.0	1	09/30/2023 07:52	WG2142217
Acrylonitrile	U		0.671	10.0	1	09/30/2023 07:52	WG2142217
Benzene	U		0.0941	1.00	1	09/30/2023 07:52	WG2142217
Bromobenzene	U		0.118	1.00	1	09/30/2023 07:52	WG2142217
Bromodichloromethane	U		0.136	1.00	1	09/30/2023 07:52	WG2142217
Bromoform	U		0.129	1.00	1	09/30/2023 07:52	WG2142217
Bromomethane	U		0.605	5.00	1	09/30/2023 07:52	WG2142217
n-Butylbenzene	U		0.157	1.00	1	09/30/2023 07:52	WG2142217
sec-Butylbenzene	U		0.125	1.00	1	09/30/2023 07:52	WG2142217
tert-Butylbenzene	U		0.127	1.00	1	09/30/2023 07:52	WG2142217
Carbon disulfide	U		0.0962	1.00	1	09/30/2023 07:52	WG2142217
Carbon tetrachloride	U		0.128	1.00	1	09/30/2023 07:52	WG2142217
Chlorobenzene	U		0.116	1.00	1	09/30/2023 07:52	WG2142217
Chlorodibromomethane	U		0.140	1.00	1	09/30/2023 07:52	WG2142217
Chloroethane	U		0.192	5.00	1	09/30/2023 07:52	WG2142217
Chloroform	0.986	J	0.111	5.00	1	09/30/2023 07:52	WG2142217
Chloromethane	U		0.960	2.50	1	09/30/2023 07:52	WG2142217
2-Chlorotoluene	U		0.106	1.00	1	09/30/2023 07:52	WG2142217
4-Chlorotoluene	U		0.114	1.00	1	09/30/2023 07:52	WG2142217
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	09/30/2023 07:52	WG2142217
1,2-Dibromoethane	U		0.126	1.00	1	09/30/2023 07:52	WG2142217
Dibromomethane	U		0.122	1.00	1	09/30/2023 07:52	WG2142217
1,2-Dichlorobenzene	U		0.107	1.00	1	09/30/2023 07:52	WG2142217
1,3-Dichlorobenzene	U		0.110	1.00	1	09/30/2023 07:52	WG2142217
1,4-Dichlorobenzene	U		0.120	1.00	1	09/30/2023 07:52	WG2142217
Dichlorodifluoromethane	U		0.374	5.00	1	09/30/2023 07:52	WG2142217
1,1-Dichloroethane	U		0.100	1.00	1	09/30/2023 07:52	WG2142217
1,2-Dichloroethane	U		0.0819	1.00	1	09/30/2023 07:52	WG2142217
1,1-Dichloroethene	U		0.188	1.00	1	09/30/2023 07:52	WG2142217
cis-1,2-Dichloroethene	0.255	J	0.126	1.00	1	09/30/2023 07:52	WG2142217
trans-1,2-Dichloroethene	U		0.149	1.00	1	09/30/2023 07:52	WG2142217
1,2-Dichloropropane	U		0.149	1.00	1	09/30/2023 07:52	WG2142217
1,1-Dichloropropene	U		0.142	1.00	1	09/30/2023 07:52	WG2142217
1,3-Dichloropropane	U		0.110	1.00	1	09/30/2023 07:52	WG2142217
cis-1,3-Dichloropropene	U		0.111	1.00	1	09/30/2023 07:52	WG2142217
trans-1,3-Dichloropropene	U		0.118	1.00	1	09/30/2023 07:52	WG2142217
2,2-Dichloropropane	U		0.161	1.00	1	09/30/2023 07:52	WG2142217
Di-isopropyl ether	U		0.105	1.00	1	09/30/2023 07:52	WG2142217
Ethylbenzene	U		0.137	1.00	1	09/30/2023 07:52	WG2142217
Hexachloro-1,3-butadiene	U		0.337	1.00	1	09/30/2023 07:52	WG2142217
Isopropylbenzene	U		0.105	1.00	1	09/30/2023 07:52	WG2142217
p-Isopropyltoluene	U		0.120	1.00	1	09/30/2023 07:52	WG2142217
2-Butanone (MEK)	U		1.19	10.0	1	09/30/2023 07:52	WG2142217
Methylene Chloride	U		0.430	5.00	1	09/30/2023 07:52	WG2142217
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	09/30/2023 07:52	WG2142217
Methyl tert-butyl ether	U		0.101	1.00	1	09/30/2023 07:52	WG2142217
Naphthalene	U		1.00	5.00	1	09/30/2023 07:52	WG2142217
n-Propylbenzene	U		0.0993	1.00	1	09/30/2023 07:52	WG2142217
Styrene	U		0.118	1.00	1	09/30/2023 07:52	WG2142217
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	09/30/2023 07:52	WG2142217
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	09/30/2023 07:52	WG2142217
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	09/30/2023 07:52	WG2142217
Tetrachloroethene	U		0.300	1.00	1	09/30/2023 07:52	WG2142217
Toluene	U		0.278	1.00	1	09/30/2023 07:52	WG2142217
1,2,3-Trichlorobenzene	U		0.230	1.00	1	09/30/2023 07:52	WG2142217

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

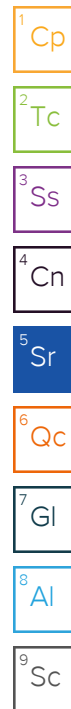
Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	U		0.481	1.00	1	09/30/2023 07:52	WG2142217
1,1,1-Trichloroethane	U		0.149	1.00	1	09/30/2023 07:52	WG2142217
1,1,2-Trichloroethane	U		0.158	1.00	1	09/30/2023 07:52	WG2142217
Trichloroethene	U		0.190	1.00	1	09/30/2023 07:52	WG2142217
Trichlorofluoromethane	U		0.160	5.00	1	09/30/2023 07:52	WG2142217
1,2,3-Trichloropropane	U		0.237	2.50	1	09/30/2023 07:52	WG2142217
1,2,4-Trimethylbenzene	U		0.322	1.00	1	09/30/2023 07:52	WG2142217
1,2,3-Trimethylbenzene	U		0.104	1.00	1	09/30/2023 07:52	WG2142217
1,3,5-Trimethylbenzene	U		0.104	1.00	1	09/30/2023 07:52	WG2142217
Vinyl chloride	U		0.234	1.00	1	09/30/2023 07:52	WG2142217
Xylenes, Total	U		0.174	3.00	1	09/30/2023 07:52	WG2142217
(S) Toluene-d8	104			80.0-120		09/30/2023 07:52	WG2142217
(S) 4-Bromofluorobenzene	99.2			77.0-126		09/30/2023 07:52	WG2142217
(S) 1,2-Dichloroethane-d4	107			70.0-130		09/30/2023 07:52	WG2142217

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	50.0	1	09/30/2023 08:12	WG2142217
Acrolein	U		2.54	50.0	1	09/30/2023 08:12	WG2142217
Acrylonitrile	U		0.671	10.0	1	09/30/2023 08:12	WG2142217
Benzene	U		0.0941	1.00	1	09/30/2023 08:12	WG2142217
Bromobenzene	U		0.118	1.00	1	09/30/2023 08:12	WG2142217
Bromodichloromethane	U		0.136	1.00	1	09/30/2023 08:12	WG2142217
Bromoform	U		0.129	1.00	1	09/30/2023 08:12	WG2142217
Bromomethane	U		0.605	5.00	1	09/30/2023 08:12	WG2142217
n-Butylbenzene	U		0.157	1.00	1	09/30/2023 08:12	WG2142217
sec-Butylbenzene	U		0.125	1.00	1	09/30/2023 08:12	WG2142217
tert-Butylbenzene	U		0.127	1.00	1	09/30/2023 08:12	WG2142217
Carbon disulfide	U		0.0962	1.00	1	09/30/2023 08:12	WG2142217
Carbon tetrachloride	U		0.128	1.00	1	09/30/2023 08:12	WG2142217
Chlorobenzene	U		0.116	1.00	1	09/30/2023 08:12	WG2142217
Chlorodibromomethane	U		0.140	1.00	1	09/30/2023 08:12	WG2142217
Chloroethane	U		0.192	5.00	1	09/30/2023 08:12	WG2142217
Chloroform	U		0.111	5.00	1	09/30/2023 08:12	WG2142217
Chloromethane	U		0.960	2.50	1	09/30/2023 08:12	WG2142217
2-Chlorotoluene	U		0.106	1.00	1	09/30/2023 08:12	WG2142217
4-Chlorotoluene	U		0.114	1.00	1	09/30/2023 08:12	WG2142217
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	09/30/2023 08:12	WG2142217
1,2-Dibromoethane	U		0.126	1.00	1	09/30/2023 08:12	WG2142217
Dibromomethane	U		0.122	1.00	1	09/30/2023 08:12	WG2142217
1,2-Dichlorobenzene	U		0.107	1.00	1	09/30/2023 08:12	WG2142217
1,3-Dichlorobenzene	U		0.110	1.00	1	09/30/2023 08:12	WG2142217
1,4-Dichlorobenzene	U		0.120	1.00	1	09/30/2023 08:12	WG2142217
Dichlorodifluoromethane	U		0.374	5.00	1	09/30/2023 08:12	WG2142217
1,1-Dichloroethane	U		0.100	1.00	1	09/30/2023 08:12	WG2142217
1,2-Dichloroethane	U		0.0819	1.00	1	09/30/2023 08:12	WG2142217
1,1-Dichloroethene	U		0.188	1.00	1	09/30/2023 08:12	WG2142217
cis-1,2-Dichloroethene	U		0.126	1.00	1	09/30/2023 08:12	WG2142217
trans-1,2-Dichloroethene	U		0.149	1.00	1	09/30/2023 08:12	WG2142217
1,2-Dichloropropane	U		0.149	1.00	1	09/30/2023 08:12	WG2142217
1,1-Dichloropropene	U		0.142	1.00	1	09/30/2023 08:12	WG2142217
1,3-Dichloropropane	U		0.110	1.00	1	09/30/2023 08:12	WG2142217
cis-1,3-Dichloropropene	U		0.111	1.00	1	09/30/2023 08:12	WG2142217
trans-1,3-Dichloropropene	U		0.118	1.00	1	09/30/2023 08:12	WG2142217
2,2-Dichloropropane	U		0.161	1.00	1	09/30/2023 08:12	WG2142217
Di-isopropyl ether	U		0.105	1.00	1	09/30/2023 08:12	WG2142217
Ethylbenzene	U		0.137	1.00	1	09/30/2023 08:12	WG2142217
Hexachloro-1,3-butadiene	U		0.337	1.00	1	09/30/2023 08:12	WG2142217
Isopropylbenzene	U		0.105	1.00	1	09/30/2023 08:12	WG2142217
p-Isopropyltoluene	U		0.120	1.00	1	09/30/2023 08:12	WG2142217
2-Butanone (MEK)	U		1.19	10.0	1	09/30/2023 08:12	WG2142217
Methylene Chloride	U		0.430	5.00	1	09/30/2023 08:12	WG2142217
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	09/30/2023 08:12	WG2142217
Methyl tert-butyl ether	U		0.101	1.00	1	09/30/2023 08:12	WG2142217
Naphthalene	U		1.00	5.00	1	09/30/2023 08:12	WG2142217
n-Propylbenzene	U		0.0993	1.00	1	09/30/2023 08:12	WG2142217
Styrene	U		0.118	1.00	1	09/30/2023 08:12	WG2142217
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	09/30/2023 08:12	WG2142217
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	09/30/2023 08:12	WG2142217
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	09/30/2023 08:12	WG2142217
Tetrachloroethene	U		0.300	1.00	1	09/30/2023 08:12	WG2142217
Toluene	U		0.278	1.00	1	09/30/2023 08:12	WG2142217
1,2,3-Trichlorobenzene	U		0.230	1.00	1	09/30/2023 08:12	WG2142217



Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	U		0.481	1.00	1	09/30/2023 08:12	WG2142217
1,1,1-Trichloroethane	U		0.149	1.00	1	09/30/2023 08:12	WG2142217
1,1,2-Trichloroethane	U		0.158	1.00	1	09/30/2023 08:12	WG2142217
Trichloroethene	U		0.190	1.00	1	09/30/2023 08:12	WG2142217
Trichlorofluoromethane	U		0.160	5.00	1	09/30/2023 08:12	WG2142217
1,2,3-Trichloropropane	U		0.237	2.50	1	09/30/2023 08:12	WG2142217
1,2,4-Trimethylbenzene	U		0.322	1.00	1	09/30/2023 08:12	WG2142217
1,2,3-Trimethylbenzene	U		0.104	1.00	1	09/30/2023 08:12	WG2142217
1,3,5-Trimethylbenzene	U		0.104	1.00	1	09/30/2023 08:12	WG2142217
Vinyl chloride	U		0.234	1.00	1	09/30/2023 08:12	WG2142217
Xylenes, Total	U		0.174	3.00	1	09/30/2023 08:12	WG2142217
(S) Toluene-d8	104			80.0-120		09/30/2023 08:12	WG2142217
(S) 4-Bromofluorobenzene	103			77.0-126		09/30/2023 08:12	WG2142217
(S) 1,2-Dichloroethane-d4	109			70.0-130		09/30/2023 08:12	WG2142217

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	50.0	1	09/30/2023 08:31	WG2142217
Acrolein	U		2.54	50.0	1	09/30/2023 08:31	WG2142217
Acrylonitrile	U		0.671	10.0	1	09/30/2023 08:31	WG2142217
Benzene	U		0.0941	1.00	1	09/30/2023 08:31	WG2142217
Bromobenzene	U		0.118	1.00	1	09/30/2023 08:31	WG2142217
Bromodichloromethane	U		0.136	1.00	1	09/30/2023 08:31	WG2142217
Bromoform	U		0.129	1.00	1	09/30/2023 08:31	WG2142217
Bromomethane	U		0.605	5.00	1	09/30/2023 08:31	WG2142217
n-Butylbenzene	U		0.157	1.00	1	09/30/2023 08:31	WG2142217
sec-Butylbenzene	U		0.125	1.00	1	09/30/2023 08:31	WG2142217
tert-Butylbenzene	U		0.127	1.00	1	09/30/2023 08:31	WG2142217
Carbon disulfide	U		0.0962	1.00	1	09/30/2023 08:31	WG2142217
Carbon tetrachloride	U		0.128	1.00	1	09/30/2023 08:31	WG2142217
Chlorobenzene	U		0.116	1.00	1	09/30/2023 08:31	WG2142217
Chlorodibromomethane	U		0.140	1.00	1	09/30/2023 08:31	WG2142217
Chloroethane	U		0.192	5.00	1	09/30/2023 08:31	WG2142217
Chloroform	U		0.111	5.00	1	09/30/2023 08:31	WG2142217
Chloromethane	U		0.960	2.50	1	09/30/2023 08:31	WG2142217
2-Chlorotoluene	U		0.106	1.00	1	09/30/2023 08:31	WG2142217
4-Chlorotoluene	U		0.114	1.00	1	09/30/2023 08:31	WG2142217
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	09/30/2023 08:31	WG2142217
1,2-Dibromoethane	U		0.126	1.00	1	09/30/2023 08:31	WG2142217
Dibromomethane	U		0.122	1.00	1	09/30/2023 08:31	WG2142217
1,2-Dichlorobenzene	U		0.107	1.00	1	09/30/2023 08:31	WG2142217
1,3-Dichlorobenzene	U		0.110	1.00	1	09/30/2023 08:31	WG2142217
1,4-Dichlorobenzene	U		0.120	1.00	1	09/30/2023 08:31	WG2142217
Dichlorodifluoromethane	U		0.374	5.00	1	09/30/2023 08:31	WG2142217
1,1-Dichloroethane	U		0.100	1.00	1	09/30/2023 08:31	WG2142217
1,2-Dichloroethane	U		0.0819	1.00	1	09/30/2023 08:31	WG2142217
1,1-Dichloroethene	U		0.188	1.00	1	09/30/2023 08:31	WG2142217
cis-1,2-Dichloroethene	0.137	J	0.126	1.00	1	09/30/2023 08:31	WG2142217
trans-1,2-Dichloroethene	U		0.149	1.00	1	09/30/2023 08:31	WG2142217
1,2-Dichloropropane	U		0.149	1.00	1	09/30/2023 08:31	WG2142217
1,1-Dichloropropene	U		0.142	1.00	1	09/30/2023 08:31	WG2142217
1,3-Dichloropropane	U		0.110	1.00	1	09/30/2023 08:31	WG2142217
cis-1,3-Dichloropropene	U		0.111	1.00	1	09/30/2023 08:31	WG2142217
trans-1,3-Dichloropropene	U		0.118	1.00	1	09/30/2023 08:31	WG2142217
2,2-Dichloropropane	U		0.161	1.00	1	09/30/2023 08:31	WG2142217
Di-isopropyl ether	U		0.105	1.00	1	09/30/2023 08:31	WG2142217
Ethylbenzene	U		0.137	1.00	1	09/30/2023 08:31	WG2142217
Hexachloro-1,3-butadiene	U		0.337	1.00	1	09/30/2023 08:31	WG2142217
Isopropylbenzene	U		0.105	1.00	1	09/30/2023 08:31	WG2142217
p-Isopropyltoluene	U		0.120	1.00	1	09/30/2023 08:31	WG2142217
2-Butanone (MEK)	U		1.19	10.0	1	09/30/2023 08:31	WG2142217
Methylene Chloride	U		0.430	5.00	1	09/30/2023 08:31	WG2142217
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	09/30/2023 08:31	WG2142217
Methyl tert-butyl ether	U		0.101	1.00	1	09/30/2023 08:31	WG2142217
Naphthalene	U		1.00	5.00	1	09/30/2023 08:31	WG2142217
n-Propylbenzene	U		0.0993	1.00	1	09/30/2023 08:31	WG2142217
Styrene	U		0.118	1.00	1	09/30/2023 08:31	WG2142217
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	09/30/2023 08:31	WG2142217
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	09/30/2023 08:31	WG2142217
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	09/30/2023 08:31	WG2142217
Tetrachloroethene	U		0.300	1.00	1	09/30/2023 08:31	WG2142217
Toluene	U		0.278	1.00	1	09/30/2023 08:31	WG2142217
1,2,3-Trichlorobenzene	U		0.230	1.00	1	09/30/2023 08:31	WG2142217

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	U		0.481	1.00	1	09/30/2023 08:31	WG2142217
1,1,1-Trichloroethane	U		0.149	1.00	1	09/30/2023 08:31	WG2142217
1,1,2-Trichloroethane	U		0.158	1.00	1	09/30/2023 08:31	WG2142217
Trichloroethene	U		0.190	1.00	1	09/30/2023 08:31	WG2142217
Trichlorofluoromethane	U		0.160	5.00	1	09/30/2023 08:31	WG2142217
1,2,3-Trichloropropane	U		0.237	2.50	1	09/30/2023 08:31	WG2142217
1,2,4-Trimethylbenzene	U		0.322	1.00	1	09/30/2023 08:31	WG2142217
1,2,3-Trimethylbenzene	U		0.104	1.00	1	09/30/2023 08:31	WG2142217
1,3,5-Trimethylbenzene	U		0.104	1.00	1	09/30/2023 08:31	WG2142217
Vinyl chloride	U		0.234	1.00	1	09/30/2023 08:31	WG2142217
Xylenes, Total	U		0.174	3.00	1	09/30/2023 08:31	WG2142217
(S) Toluene-d8	107			80.0-120		09/30/2023 08:31	WG2142217
(S) 4-Bromofluorobenzene	101			77.0-126		09/30/2023 08:31	WG2142217
(S) 1,2-Dichloroethane-d4	98.1			70.0-130		09/30/2023 08:31	WG2142217

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	50.0	1	09/30/2023 08:50	WG2142217
Acrolein	U		2.54	50.0	1	09/30/2023 08:50	WG2142217
Acrylonitrile	U		0.671	10.0	1	09/30/2023 08:50	WG2142217
Benzene	U		0.0941	1.00	1	09/30/2023 08:50	WG2142217
Bromobenzene	U		0.118	1.00	1	09/30/2023 08:50	WG2142217
Bromodichloromethane	U		0.136	1.00	1	09/30/2023 08:50	WG2142217
Bromoform	U		0.129	1.00	1	09/30/2023 08:50	WG2142217
Bromomethane	U		0.605	5.00	1	09/30/2023 08:50	WG2142217
n-Butylbenzene	U		0.157	1.00	1	09/30/2023 08:50	WG2142217
sec-Butylbenzene	U		0.125	1.00	1	09/30/2023 08:50	WG2142217
tert-Butylbenzene	U		0.127	1.00	1	09/30/2023 08:50	WG2142217
Carbon disulfide	U		0.0962	1.00	1	09/30/2023 08:50	WG2142217
Carbon tetrachloride	U		0.128	1.00	1	09/30/2023 08:50	WG2142217
Chlorobenzene	U		0.116	1.00	1	09/30/2023 08:50	WG2142217
Chlorodibromomethane	U		0.140	1.00	1	09/30/2023 08:50	WG2142217
Chloroethane	U		0.192	5.00	1	09/30/2023 08:50	WG2142217
Chloroform	U		0.111	5.00	1	09/30/2023 08:50	WG2142217
Chloromethane	U		0.960	2.50	1	09/30/2023 08:50	WG2142217
2-Chlorotoluene	U		0.106	1.00	1	09/30/2023 08:50	WG2142217
4-Chlorotoluene	U		0.114	1.00	1	09/30/2023 08:50	WG2142217
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	09/30/2023 08:50	WG2142217
1,2-Dibromoethane	U		0.126	1.00	1	09/30/2023 08:50	WG2142217
Dibromomethane	U		0.122	1.00	1	09/30/2023 08:50	WG2142217
1,2-Dichlorobenzene	U		0.107	1.00	1	09/30/2023 08:50	WG2142217
1,3-Dichlorobenzene	U		0.110	1.00	1	09/30/2023 08:50	WG2142217
1,4-Dichlorobenzene	U		0.120	1.00	1	09/30/2023 08:50	WG2142217
Dichlorodifluoromethane	U		0.374	5.00	1	09/30/2023 08:50	WG2142217
1,1-Dichloroethane	U		0.100	1.00	1	09/30/2023 08:50	WG2142217
1,2-Dichloroethane	U		0.0819	1.00	1	09/30/2023 08:50	WG2142217
1,1-Dichloroethene	U		0.188	1.00	1	09/30/2023 08:50	WG2142217
cis-1,2-Dichloroethene	0.328	J	0.126	1.00	1	09/30/2023 08:50	WG2142217
trans-1,2-Dichloroethene	U		0.149	1.00	1	09/30/2023 08:50	WG2142217
1,2-Dichloropropane	U		0.149	1.00	1	09/30/2023 08:50	WG2142217
1,1-Dichloropropene	U		0.142	1.00	1	09/30/2023 08:50	WG2142217
1,3-Dichloropropane	U		0.110	1.00	1	09/30/2023 08:50	WG2142217
cis-1,3-Dichloropropene	U		0.111	1.00	1	09/30/2023 08:50	WG2142217
trans-1,3-Dichloropropene	U		0.118	1.00	1	09/30/2023 08:50	WG2142217
2,2-Dichloropropane	U		0.161	1.00	1	09/30/2023 08:50	WG2142217
Di-isopropyl ether	U		0.105	1.00	1	09/30/2023 08:50	WG2142217
Ethylbenzene	U		0.137	1.00	1	09/30/2023 08:50	WG2142217
Hexachloro-1,3-butadiene	U		0.337	1.00	1	09/30/2023 08:50	WG2142217
Isopropylbenzene	U		0.105	1.00	1	09/30/2023 08:50	WG2142217
p-Isopropyltoluene	U		0.120	1.00	1	09/30/2023 08:50	WG2142217
2-Butanone (MEK)	U		1.19	10.0	1	09/30/2023 08:50	WG2142217
Methylene Chloride	U		0.430	5.00	1	09/30/2023 08:50	WG2142217
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	09/30/2023 08:50	WG2142217
Methyl tert-butyl ether	0.198	J	0.101	1.00	1	09/30/2023 08:50	WG2142217
Naphthalene	U		1.00	5.00	1	09/30/2023 08:50	WG2142217
n-Propylbenzene	U		0.0993	1.00	1	09/30/2023 08:50	WG2142217
Styrene	U		0.118	1.00	1	09/30/2023 08:50	WG2142217
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	09/30/2023 08:50	WG2142217
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	09/30/2023 08:50	WG2142217
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	09/30/2023 08:50	WG2142217
Tetrachloroethene	U		0.300	1.00	1	09/30/2023 08:50	WG2142217
Toluene	U		0.278	1.00	1	09/30/2023 08:50	WG2142217
1,2,3-Trichlorobenzene	U		0.230	1.00	1	09/30/2023 08:50	WG2142217

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	U		0.481	1.00	1	09/30/2023 08:50	WG2142217
1,1,1-Trichloroethane	U		0.149	1.00	1	09/30/2023 08:50	WG2142217
1,1,2-Trichloroethane	U		0.158	1.00	1	09/30/2023 08:50	WG2142217
Trichloroethene	U		0.190	1.00	1	09/30/2023 08:50	WG2142217
Trichlorofluoromethane	U		0.160	5.00	1	09/30/2023 08:50	WG2142217
1,2,3-Trichloropropane	U		0.237	2.50	1	09/30/2023 08:50	WG2142217
1,2,4-Trimethylbenzene	U		0.322	1.00	1	09/30/2023 08:50	WG2142217
1,2,3-Trimethylbenzene	U		0.104	1.00	1	09/30/2023 08:50	WG2142217
1,3,5-Trimethylbenzene	U		0.104	1.00	1	09/30/2023 08:50	WG2142217
Vinyl chloride	0.273	<u>J</u>	0.234	1.00	1	09/30/2023 08:50	WG2142217
Xylenes, Total	U		0.174	3.00	1	09/30/2023 08:50	WG2142217
(S) Toluene-d8	106			80.0-120		09/30/2023 08:50	WG2142217
(S) 4-Bromofluorobenzene	99.8			77.0-126		09/30/2023 08:50	WG2142217
(S) 1,2-Dichloroethane-d4	104			70.0-130		09/30/2023 08:50	WG2142217

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	50.0	1	09/30/2023 09:10	WG2142217
Acrolein	U		2.54	50.0	1	09/30/2023 09:10	WG2142217
Acrylonitrile	U		0.671	10.0	1	09/30/2023 09:10	WG2142217
Benzene	U		0.0941	1.00	1	09/30/2023 09:10	WG2142217
Bromobenzene	U		0.118	1.00	1	09/30/2023 09:10	WG2142217
Bromodichloromethane	U		0.136	1.00	1	09/30/2023 09:10	WG2142217
Bromoform	U		0.129	1.00	1	09/30/2023 09:10	WG2142217
Bromomethane	U		0.605	5.00	1	09/30/2023 09:10	WG2142217
n-Butylbenzene	U		0.157	1.00	1	09/30/2023 09:10	WG2142217
sec-Butylbenzene	U		0.125	1.00	1	09/30/2023 09:10	WG2142217
tert-Butylbenzene	U		0.127	1.00	1	09/30/2023 09:10	WG2142217
Carbon disulfide	U		0.0962	1.00	1	09/30/2023 09:10	WG2142217
Carbon tetrachloride	U		0.128	1.00	1	09/30/2023 09:10	WG2142217
Chlorobenzene	U		0.116	1.00	1	09/30/2023 09:10	WG2142217
Chlorodibromomethane	U		0.140	1.00	1	09/30/2023 09:10	WG2142217
Chloroethane	U		0.192	5.00	1	09/30/2023 09:10	WG2142217
Chloroform	U		0.111	5.00	1	09/30/2023 09:10	WG2142217
Chloromethane	U		0.960	2.50	1	09/30/2023 09:10	WG2142217
2-Chlorotoluene	U		0.106	1.00	1	09/30/2023 09:10	WG2142217
4-Chlorotoluene	U		0.114	1.00	1	09/30/2023 09:10	WG2142217
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	09/30/2023 09:10	WG2142217
1,2-Dibromoethane	U		0.126	1.00	1	09/30/2023 09:10	WG2142217
Dibromomethane	U		0.122	1.00	1	09/30/2023 09:10	WG2142217
1,2-Dichlorobenzene	U		0.107	1.00	1	09/30/2023 09:10	WG2142217
1,3-Dichlorobenzene	U		0.110	1.00	1	09/30/2023 09:10	WG2142217
1,4-Dichlorobenzene	U		0.120	1.00	1	09/30/2023 09:10	WG2142217
Dichlorodifluoromethane	U		0.374	5.00	1	09/30/2023 09:10	WG2142217
1,1-Dichloroethane	U		0.100	1.00	1	09/30/2023 09:10	WG2142217
1,2-Dichloroethane	U		0.0819	1.00	1	09/30/2023 09:10	WG2142217
1,1-Dichloroethene	U		0.188	1.00	1	09/30/2023 09:10	WG2142217
cis-1,2-Dichloroethene	18.7		0.126	1.00	1	09/30/2023 09:10	WG2142217
trans-1,2-Dichloroethene	U		0.149	1.00	1	09/30/2023 09:10	WG2142217
1,2-Dichloropropane	U		0.149	1.00	1	09/30/2023 09:10	WG2142217
1,1-Dichloropropene	U		0.142	1.00	1	09/30/2023 09:10	WG2142217
1,3-Dichloropropane	U		0.110	1.00	1	09/30/2023 09:10	WG2142217
cis-1,3-Dichloropropene	U		0.111	1.00	1	09/30/2023 09:10	WG2142217
trans-1,3-Dichloropropene	U		0.118	1.00	1	09/30/2023 09:10	WG2142217
2,2-Dichloropropane	U		0.161	1.00	1	09/30/2023 09:10	WG2142217
Di-isopropyl ether	U		0.105	1.00	1	09/30/2023 09:10	WG2142217
Ethylbenzene	U		0.137	1.00	1	09/30/2023 09:10	WG2142217
Hexachloro-1,3-butadiene	U		0.337	1.00	1	09/30/2023 09:10	WG2142217
Isopropylbenzene	U		0.105	1.00	1	09/30/2023 09:10	WG2142217
p-Isopropyltoluene	U		0.120	1.00	1	09/30/2023 09:10	WG2142217
2-Butanone (MEK)	U		1.19	10.0	1	09/30/2023 09:10	WG2142217
Methylene Chloride	U		0.430	5.00	1	09/30/2023 09:10	WG2142217
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	09/30/2023 09:10	WG2142217
Methyl tert-butyl ether	U		0.101	1.00	1	09/30/2023 09:10	WG2142217
Naphthalene	U		1.00	5.00	1	09/30/2023 09:10	WG2142217
n-Propylbenzene	U		0.0993	1.00	1	09/30/2023 09:10	WG2142217
Styrene	U		0.118	1.00	1	09/30/2023 09:10	WG2142217
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	09/30/2023 09:10	WG2142217
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	09/30/2023 09:10	WG2142217
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	09/30/2023 09:10	WG2142217
Tetrachloroethene	U		0.300	1.00	1	09/30/2023 09:10	WG2142217
Toluene	U		0.278	1.00	1	09/30/2023 09:10	WG2142217
1,2,3-Trichlorobenzene	U		0.230	1.00	1	09/30/2023 09:10	WG2142217

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

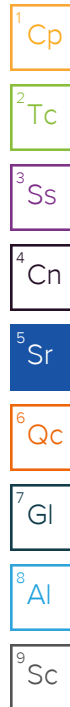
Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	U		0.481	1.00	1	09/30/2023 09:10	WG2142217
1,1,1-Trichloroethane	U		0.149	1.00	1	09/30/2023 09:10	WG2142217
1,1,2-Trichloroethane	U		0.158	1.00	1	09/30/2023 09:10	WG2142217
Trichloroethene	5.93		0.190	1.00	1	09/30/2023 09:10	WG2142217
Trichlorofluoromethane	U		0.160	5.00	1	09/30/2023 09:10	WG2142217
1,2,3-Trichloropropane	U		0.237	2.50	1	09/30/2023 09:10	WG2142217
1,2,4-Trimethylbenzene	U		0.322	1.00	1	09/30/2023 09:10	WG2142217
1,2,3-Trimethylbenzene	U		0.104	1.00	1	09/30/2023 09:10	WG2142217
1,3,5-Trimethylbenzene	U		0.104	1.00	1	09/30/2023 09:10	WG2142217
Vinyl chloride	U		0.234	1.00	1	09/30/2023 09:10	WG2142217
Xylenes, Total	U		0.174	3.00	1	09/30/2023 09:10	WG2142217
(S) Toluene-d8	107			80.0-120		09/30/2023 09:10	WG2142217
(S) 4-Bromofluorobenzene	102			77.0-126		09/30/2023 09:10	WG2142217
(S) 1,2-Dichloroethane-d4	104			70.0-130		09/30/2023 09:10	WG2142217

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	50.0	1	09/30/2023 09:29	WG2142217
Acrolein	U		2.54	50.0	1	09/30/2023 09:29	WG2142217
Acrylonitrile	U		0.671	10.0	1	09/30/2023 09:29	WG2142217
Benzene	U		0.0941	1.00	1	09/30/2023 09:29	WG2142217
Bromobenzene	U		0.118	1.00	1	09/30/2023 09:29	WG2142217
Bromodichloromethane	U		0.136	1.00	1	09/30/2023 09:29	WG2142217
Bromoform	U		0.129	1.00	1	09/30/2023 09:29	WG2142217
Bromomethane	U		0.605	5.00	1	09/30/2023 09:29	WG2142217
n-Butylbenzene	U		0.157	1.00	1	09/30/2023 09:29	WG2142217
sec-Butylbenzene	U		0.125	1.00	1	09/30/2023 09:29	WG2142217
tert-Butylbenzene	U		0.127	1.00	1	09/30/2023 09:29	WG2142217
Carbon disulfide	U		0.0962	1.00	1	09/30/2023 09:29	WG2142217
Carbon tetrachloride	U		0.128	1.00	1	09/30/2023 09:29	WG2142217
Chlorobenzene	U		0.116	1.00	1	09/30/2023 09:29	WG2142217
Chlorodibromomethane	U		0.140	1.00	1	09/30/2023 09:29	WG2142217
Chloroethane	U		0.192	5.00	1	09/30/2023 09:29	WG2142217
Chloroform	U		0.111	5.00	1	09/30/2023 09:29	WG2142217
Chloromethane	U		0.960	2.50	1	09/30/2023 09:29	WG2142217
2-Chlorotoluene	U		0.106	1.00	1	09/30/2023 09:29	WG2142217
4-Chlorotoluene	U		0.114	1.00	1	09/30/2023 09:29	WG2142217
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	09/30/2023 09:29	WG2142217
1,2-Dibromoethane	U		0.126	1.00	1	09/30/2023 09:29	WG2142217
Dibromomethane	U		0.122	1.00	1	09/30/2023 09:29	WG2142217
1,2-Dichlorobenzene	U		0.107	1.00	1	09/30/2023 09:29	WG2142217
1,3-Dichlorobenzene	U		0.110	1.00	1	09/30/2023 09:29	WG2142217
1,4-Dichlorobenzene	U		0.120	1.00	1	09/30/2023 09:29	WG2142217
Dichlorodifluoromethane	U		0.374	5.00	1	09/30/2023 09:29	WG2142217
1,1-Dichloroethane	U		0.100	1.00	1	09/30/2023 09:29	WG2142217
1,2-Dichloroethane	U		0.0819	1.00	1	09/30/2023 09:29	WG2142217
1,1-Dichloroethene	0.217	U	0.188	1.00	1	09/30/2023 09:29	WG2142217
cis-1,2-Dichloroethene	48.8		0.126	1.00	1	09/30/2023 09:29	WG2142217
trans-1,2-Dichloroethene	0.600	U	0.149	1.00	1	09/30/2023 09:29	WG2142217
1,2-Dichloropropane	U		0.149	1.00	1	09/30/2023 09:29	WG2142217
1,1-Dichloropropene	U		0.142	1.00	1	09/30/2023 09:29	WG2142217
1,3-Dichloropropane	U		0.110	1.00	1	09/30/2023 09:29	WG2142217
cis-1,3-Dichloropropene	U		0.111	1.00	1	09/30/2023 09:29	WG2142217
trans-1,3-Dichloropropene	U		0.118	1.00	1	09/30/2023 09:29	WG2142217
2,2-Dichloropropane	U		0.161	1.00	1	09/30/2023 09:29	WG2142217
Di-isopropyl ether	U		0.105	1.00	1	09/30/2023 09:29	WG2142217
Ethylbenzene	U		0.137	1.00	1	09/30/2023 09:29	WG2142217
Hexachloro-1,3-butadiene	U		0.337	1.00	1	09/30/2023 09:29	WG2142217
Isopropylbenzene	U		0.105	1.00	1	09/30/2023 09:29	WG2142217
p-Isopropyltoluene	U		0.120	1.00	1	09/30/2023 09:29	WG2142217
2-Butanone (MEK)	U		1.19	10.0	1	09/30/2023 09:29	WG2142217
Methylene Chloride	U		0.430	5.00	1	09/30/2023 09:29	WG2142217
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	09/30/2023 09:29	WG2142217
Methyl tert-butyl ether	U		0.101	1.00	1	09/30/2023 09:29	WG2142217
Naphthalene	U		1.00	5.00	1	09/30/2023 09:29	WG2142217
n-Propylbenzene	U		0.0993	1.00	1	09/30/2023 09:29	WG2142217
Styrene	U		0.118	1.00	1	09/30/2023 09:29	WG2142217
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	09/30/2023 09:29	WG2142217
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	09/30/2023 09:29	WG2142217
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	09/30/2023 09:29	WG2142217
Tetrachloroethene	0.876	U	0.300	1.00	1	09/30/2023 09:29	WG2142217
Toluene	U		0.278	1.00	1	09/30/2023 09:29	WG2142217
1,2,3-Trichlorobenzene	U		0.230	1.00	1	09/30/2023 09:29	WG2142217



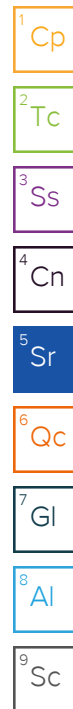
Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	U		0.481	1.00	1	09/30/2023 09:29	WG2142217
1,1,1-Trichloroethane	U		0.149	1.00	1	09/30/2023 09:29	WG2142217
1,1,2-Trichloroethane	U		0.158	1.00	1	09/30/2023 09:29	WG2142217
Trichloroethene	74.1		0.190	1.00	1	09/30/2023 09:29	WG2142217
Trichlorofluoromethane	U		0.160	5.00	1	09/30/2023 09:29	WG2142217
1,2,3-Trichloropropane	U		0.237	2.50	1	09/30/2023 09:29	WG2142217
1,2,4-Trimethylbenzene	U		0.322	1.00	1	09/30/2023 09:29	WG2142217
1,2,3-Trimethylbenzene	U		0.104	1.00	1	09/30/2023 09:29	WG2142217
1,3,5-Trimethylbenzene	U		0.104	1.00	1	09/30/2023 09:29	WG2142217
Vinyl chloride	U		0.234	1.00	1	09/30/2023 09:29	WG2142217
Xylenes, Total	U		0.174	3.00	1	09/30/2023 09:29	WG2142217
(S) Toluene-d8	103			80.0-120		09/30/2023 09:29	WG2142217
(S) 4-Bromofluorobenzene	102			77.0-126		09/30/2023 09:29	WG2142217
(S) 1,2-Dichloroethane-d4	107			70.0-130		09/30/2023 09:29	WG2142217

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	50.0	1	09/30/2023 09:48	WG2142217
Acrolein	U		2.54	50.0	1	09/30/2023 09:48	WG2142217
Acrylonitrile	U		0.671	10.0	1	09/30/2023 09:48	WG2142217
Benzene	U		0.0941	1.00	1	09/30/2023 09:48	WG2142217
Bromobenzene	U		0.118	1.00	1	09/30/2023 09:48	WG2142217
Bromodichloromethane	U		0.136	1.00	1	09/30/2023 09:48	WG2142217
Bromoform	U		0.129	1.00	1	09/30/2023 09:48	WG2142217
Bromomethane	U		0.605	5.00	1	09/30/2023 09:48	WG2142217
n-Butylbenzene	U		0.157	1.00	1	09/30/2023 09:48	WG2142217
sec-Butylbenzene	U		0.125	1.00	1	09/30/2023 09:48	WG2142217
tert-Butylbenzene	U		0.127	1.00	1	09/30/2023 09:48	WG2142217
Carbon disulfide	U		0.0962	1.00	1	09/30/2023 09:48	WG2142217
Carbon tetrachloride	U		0.128	1.00	1	09/30/2023 09:48	WG2142217
Chlorobenzene	U		0.116	1.00	1	09/30/2023 09:48	WG2142217
Chlorodibromomethane	U		0.140	1.00	1	09/30/2023 09:48	WG2142217
Chloroethane	U		0.192	5.00	1	09/30/2023 09:48	WG2142217
Chloroform	U		0.111	5.00	1	09/30/2023 09:48	WG2142217
Chloromethane	U		0.960	2.50	1	09/30/2023 09:48	WG2142217
2-Chlorotoluene	U		0.106	1.00	1	09/30/2023 09:48	WG2142217
4-Chlorotoluene	U		0.114	1.00	1	09/30/2023 09:48	WG2142217
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	09/30/2023 09:48	WG2142217
1,2-Dibromoethane	U		0.126	1.00	1	09/30/2023 09:48	WG2142217
Dibromomethane	U		0.122	1.00	1	09/30/2023 09:48	WG2142217
1,2-Dichlorobenzene	U		0.107	1.00	1	09/30/2023 09:48	WG2142217
1,3-Dichlorobenzene	U		0.110	1.00	1	09/30/2023 09:48	WG2142217
1,4-Dichlorobenzene	U		0.120	1.00	1	09/30/2023 09:48	WG2142217
Dichlorodifluoromethane	U		0.374	5.00	1	09/30/2023 09:48	WG2142217
1,1-Dichloroethane	U		0.100	1.00	1	09/30/2023 09:48	WG2142217
1,2-Dichloroethane	U		0.0819	1.00	1	09/30/2023 09:48	WG2142217
1,1-Dichloroethene	U		0.188	1.00	1	09/30/2023 09:48	WG2142217
cis-1,2-Dichloroethene	0.805	J	0.126	1.00	1	09/30/2023 09:48	WG2142217
trans-1,2-Dichloroethene	U		0.149	1.00	1	09/30/2023 09:48	WG2142217
1,2-Dichloropropane	U		0.149	1.00	1	09/30/2023 09:48	WG2142217
1,1-Dichloropropene	U		0.142	1.00	1	09/30/2023 09:48	WG2142217
1,3-Dichloropropane	U		0.110	1.00	1	09/30/2023 09:48	WG2142217
cis-1,3-Dichloropropene	U		0.111	1.00	1	09/30/2023 09:48	WG2142217
trans-1,3-Dichloropropene	U		0.118	1.00	1	09/30/2023 09:48	WG2142217
2,2-Dichloropropane	U		0.161	1.00	1	09/30/2023 09:48	WG2142217
Di-isopropyl ether	U		0.105	1.00	1	09/30/2023 09:48	WG2142217
Ethylbenzene	U		0.137	1.00	1	09/30/2023 09:48	WG2142217
Hexachloro-1,3-butadiene	U		0.337	1.00	1	09/30/2023 09:48	WG2142217
Isopropylbenzene	U		0.105	1.00	1	09/30/2023 09:48	WG2142217
p-Isopropyltoluene	U		0.120	1.00	1	09/30/2023 09:48	WG2142217
2-Butanone (MEK)	U		1.19	10.0	1	09/30/2023 09:48	WG2142217
Methylene Chloride	U		0.430	5.00	1	09/30/2023 09:48	WG2142217
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	09/30/2023 09:48	WG2142217
Methyl tert-butyl ether	U		0.101	1.00	1	09/30/2023 09:48	WG2142217
Naphthalene	U		1.00	5.00	1	09/30/2023 09:48	WG2142217
n-Propylbenzene	U		0.0993	1.00	1	09/30/2023 09:48	WG2142217
Styrene	U		0.118	1.00	1	09/30/2023 09:48	WG2142217
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	09/30/2023 09:48	WG2142217
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	09/30/2023 09:48	WG2142217
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	09/30/2023 09:48	WG2142217
Tetrachloroethene	U		0.300	1.00	1	09/30/2023 09:48	WG2142217
Toluene	U		0.278	1.00	1	09/30/2023 09:48	WG2142217
1,2,3-Trichlorobenzene	U		0.230	1.00	1	09/30/2023 09:48	WG2142217



Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	U		0.481	1.00	1	09/30/2023 09:48	WG2142217
1,1,1-Trichloroethane	U		0.149	1.00	1	09/30/2023 09:48	WG2142217
1,1,2-Trichloroethane	U		0.158	1.00	1	09/30/2023 09:48	WG2142217
Trichloroethene	0.260	J	0.190	1.00	1	09/30/2023 09:48	WG2142217
Trichlorofluoromethane	U		0.160	5.00	1	09/30/2023 09:48	WG2142217
1,2,3-Trichloropropane	U		0.237	2.50	1	09/30/2023 09:48	WG2142217
1,2,4-Trimethylbenzene	U		0.322	1.00	1	09/30/2023 09:48	WG2142217
1,2,3-Trimethylbenzene	U		0.104	1.00	1	09/30/2023 09:48	WG2142217
1,3,5-Trimethylbenzene	U		0.104	1.00	1	09/30/2023 09:48	WG2142217
Vinyl chloride	U		0.234	1.00	1	09/30/2023 09:48	WG2142217
Xylenes, Total	U		0.174	3.00	1	09/30/2023 09:48	WG2142217
(S) Toluene-d8	107			80.0-120		09/30/2023 09:48	WG2142217
(S) 4-Bromofluorobenzene	98.1			77.0-126		09/30/2023 09:48	WG2142217
(S) 1,2-Dichloroethane-d4	104			70.0-130		09/30/2023 09:48	WG2142217

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

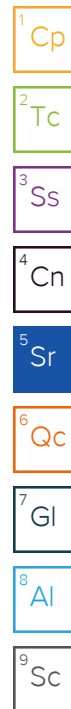
7Gl

8Al

9Sc

Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	50.0	1	09/30/2023 10:07	WG2142217
Acrolein	U		2.54	50.0	1	09/30/2023 10:07	WG2142217
Acrylonitrile	U		0.671	10.0	1	09/30/2023 10:07	WG2142217
Benzene	U		0.0941	1.00	1	09/30/2023 10:07	WG2142217
Bromobenzene	U		0.118	1.00	1	09/30/2023 10:07	WG2142217
Bromodichloromethane	U		0.136	1.00	1	09/30/2023 10:07	WG2142217
Bromoform	U		0.129	1.00	1	09/30/2023 10:07	WG2142217
Bromomethane	U		0.605	5.00	1	09/30/2023 10:07	WG2142217
n-Butylbenzene	U		0.157	1.00	1	09/30/2023 10:07	WG2142217
sec-Butylbenzene	U		0.125	1.00	1	09/30/2023 10:07	WG2142217
tert-Butylbenzene	U		0.127	1.00	1	09/30/2023 10:07	WG2142217
Carbon disulfide	U		0.0962	1.00	1	09/30/2023 10:07	WG2142217
Carbon tetrachloride	U		0.128	1.00	1	09/30/2023 10:07	WG2142217
Chlorobenzene	U		0.116	1.00	1	09/30/2023 10:07	WG2142217
Chlorodibromomethane	U		0.140	1.00	1	09/30/2023 10:07	WG2142217
Chloroethane	U		0.192	5.00	1	09/30/2023 10:07	WG2142217
Chloroform	U		0.111	5.00	1	09/30/2023 10:07	WG2142217
Chloromethane	U		0.960	2.50	1	09/30/2023 10:07	WG2142217
2-Chlorotoluene	U		0.106	1.00	1	09/30/2023 10:07	WG2142217
4-Chlorotoluene	U		0.114	1.00	1	09/30/2023 10:07	WG2142217
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	09/30/2023 10:07	WG2142217
1,2-Dibromoethane	U		0.126	1.00	1	09/30/2023 10:07	WG2142217
Dibromomethane	U		0.122	1.00	1	09/30/2023 10:07	WG2142217
1,2-Dichlorobenzene	U		0.107	1.00	1	09/30/2023 10:07	WG2142217
1,3-Dichlorobenzene	U		0.110	1.00	1	09/30/2023 10:07	WG2142217
1,4-Dichlorobenzene	U		0.120	1.00	1	09/30/2023 10:07	WG2142217
Dichlorodifluoromethane	U		0.374	5.00	1	09/30/2023 10:07	WG2142217
1,1-Dichloroethane	U		0.100	1.00	1	09/30/2023 10:07	WG2142217
1,2-Dichloroethane	U		0.0819	1.00	1	09/30/2023 10:07	WG2142217
1,1-Dichloroethene	U		0.188	1.00	1	09/30/2023 10:07	WG2142217
cis-1,2-Dichloroethene	0.221	J	0.126	1.00	1	09/30/2023 10:07	WG2142217
trans-1,2-Dichloroethene	U		0.149	1.00	1	09/30/2023 10:07	WG2142217
1,2-Dichloropropane	U		0.149	1.00	1	09/30/2023 10:07	WG2142217
1,1-Dichloropropene	U		0.142	1.00	1	09/30/2023 10:07	WG2142217
1,3-Dichloropropane	U		0.110	1.00	1	09/30/2023 10:07	WG2142217
cis-1,3-Dichloropropene	U		0.111	1.00	1	09/30/2023 10:07	WG2142217
trans-1,3-Dichloropropene	U		0.118	1.00	1	09/30/2023 10:07	WG2142217
2,2-Dichloropropane	U		0.161	1.00	1	09/30/2023 10:07	WG2142217
Di-isopropyl ether	U		0.105	1.00	1	09/30/2023 10:07	WG2142217
Ethylbenzene	U		0.137	1.00	1	09/30/2023 10:07	WG2142217
Hexachloro-1,3-butadiene	U		0.337	1.00	1	09/30/2023 10:07	WG2142217
Isopropylbenzene	U		0.105	1.00	1	09/30/2023 10:07	WG2142217
p-Isopropyltoluene	U		0.120	1.00	1	09/30/2023 10:07	WG2142217
2-Butanone (MEK)	U		1.19	10.0	1	09/30/2023 10:07	WG2142217
Methylene Chloride	U		0.430	5.00	1	09/30/2023 10:07	WG2142217
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	09/30/2023 10:07	WG2142217
Methyl tert-butyl ether	U		0.101	1.00	1	09/30/2023 10:07	WG2142217
Naphthalene	U		1.00	5.00	1	09/30/2023 10:07	WG2142217
n-Propylbenzene	U		0.0993	1.00	1	09/30/2023 10:07	WG2142217
Styrene	U		0.118	1.00	1	09/30/2023 10:07	WG2142217
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	09/30/2023 10:07	WG2142217
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	09/30/2023 10:07	WG2142217
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	09/30/2023 10:07	WG2142217
Tetrachloroethene	U		0.300	1.00	1	09/30/2023 10:07	WG2142217
Toluene	U		0.278	1.00	1	09/30/2023 10:07	WG2142217
1,2,3-Trichlorobenzene	U		0.230	1.00	1	09/30/2023 10:07	WG2142217



Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	U		0.481	1.00	1	09/30/2023 10:07	WG2142217
1,1,1-Trichloroethane	U		0.149	1.00	1	09/30/2023 10:07	WG2142217
1,1,2-Trichloroethane	U		0.158	1.00	1	09/30/2023 10:07	WG2142217
Trichloroethene	1.17		0.190	1.00	1	09/30/2023 10:07	WG2142217
Trichlorofluoromethane	U		0.160	5.00	1	09/30/2023 10:07	WG2142217
1,2,3-Trichloropropane	U		0.237	2.50	1	09/30/2023 10:07	WG2142217
1,2,4-Trimethylbenzene	U		0.322	1.00	1	09/30/2023 10:07	WG2142217
1,2,3-Trimethylbenzene	U		0.104	1.00	1	09/30/2023 10:07	WG2142217
1,3,5-Trimethylbenzene	U		0.104	1.00	1	09/30/2023 10:07	WG2142217
Vinyl chloride	U		0.234	1.00	1	09/30/2023 10:07	WG2142217
Xylenes, Total	U		0.174	3.00	1	09/30/2023 10:07	WG2142217
(S) Toluene-d8	103			80.0-120		09/30/2023 10:07	WG2142217
(S) 4-Bromofluorobenzene	101			77.0-126		09/30/2023 10:07	WG2142217
(S) 1,2-Dichloroethane-d4	110			70.0-130		09/30/2023 10:07	WG2142217

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	50.0	1	09/30/2023 10:27	WG2142217
Acrolein	U		2.54	50.0	1	09/30/2023 10:27	WG2142217
Acrylonitrile	U		0.671	10.0	1	09/30/2023 10:27	WG2142217
Benzene	U		0.0941	1.00	1	09/30/2023 10:27	WG2142217
Bromobenzene	U		0.118	1.00	1	09/30/2023 10:27	WG2142217
Bromodichloromethane	U		0.136	1.00	1	09/30/2023 10:27	WG2142217
Bromoform	U		0.129	1.00	1	09/30/2023 10:27	WG2142217
Bromomethane	U		0.605	5.00	1	09/30/2023 10:27	WG2142217
n-Butylbenzene	U		0.157	1.00	1	09/30/2023 10:27	WG2142217
sec-Butylbenzene	U		0.125	1.00	1	09/30/2023 10:27	WG2142217
tert-Butylbenzene	U		0.127	1.00	1	09/30/2023 10:27	WG2142217
Carbon disulfide	U		0.0962	1.00	1	09/30/2023 10:27	WG2142217
Carbon tetrachloride	U		0.128	1.00	1	09/30/2023 10:27	WG2142217
Chlorobenzene	U		0.116	1.00	1	09/30/2023 10:27	WG2142217
Chlorodibromomethane	U		0.140	1.00	1	09/30/2023 10:27	WG2142217
Chloroethane	U		0.192	5.00	1	09/30/2023 10:27	WG2142217
Chloroform	U		0.111	5.00	1	09/30/2023 10:27	WG2142217
Chloromethane	U		0.960	2.50	1	09/30/2023 10:27	WG2142217
2-Chlorotoluene	U		0.106	1.00	1	09/30/2023 10:27	WG2142217
4-Chlorotoluene	U		0.114	1.00	1	09/30/2023 10:27	WG2142217
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	09/30/2023 10:27	WG2142217
1,2-Dibromoethane	U		0.126	1.00	1	09/30/2023 10:27	WG2142217
Dibromomethane	U		0.122	1.00	1	09/30/2023 10:27	WG2142217
1,2-Dichlorobenzene	U		0.107	1.00	1	09/30/2023 10:27	WG2142217
1,3-Dichlorobenzene	U		0.110	1.00	1	09/30/2023 10:27	WG2142217
1,4-Dichlorobenzene	U		0.120	1.00	1	09/30/2023 10:27	WG2142217
Dichlorodifluoromethane	U		0.374	5.00	1	09/30/2023 10:27	WG2142217
1,1-Dichloroethane	U		0.100	1.00	1	09/30/2023 10:27	WG2142217
1,2-Dichloroethane	U		0.0819	1.00	1	09/30/2023 10:27	WG2142217
1,1-Dichloroethene	U		0.188	1.00	1	09/30/2023 10:27	WG2142217
cis-1,2-Dichloroethene	0.212	J	0.126	1.00	1	09/30/2023 10:27	WG2142217
trans-1,2-Dichloroethene	U		0.149	1.00	1	09/30/2023 10:27	WG2142217
1,2-Dichloropropane	U		0.149	1.00	1	09/30/2023 10:27	WG2142217
1,1-Dichloropropene	U		0.142	1.00	1	09/30/2023 10:27	WG2142217
1,3-Dichloropropane	U		0.110	1.00	1	09/30/2023 10:27	WG2142217
cis-1,3-Dichloropropene	U		0.111	1.00	1	09/30/2023 10:27	WG2142217
trans-1,3-Dichloropropene	U		0.118	1.00	1	09/30/2023 10:27	WG2142217
2,2-Dichloropropane	U		0.161	1.00	1	09/30/2023 10:27	WG2142217
Di-isopropyl ether	U		0.105	1.00	1	09/30/2023 10:27	WG2142217
Ethylbenzene	U		0.137	1.00	1	09/30/2023 10:27	WG2142217
Hexachloro-1,3-butadiene	U		0.337	1.00	1	09/30/2023 10:27	WG2142217
Isopropylbenzene	U		0.105	1.00	1	09/30/2023 10:27	WG2142217
p-Isopropyltoluene	U		0.120	1.00	1	09/30/2023 10:27	WG2142217
2-Butanone (MEK)	U		1.19	10.0	1	09/30/2023 10:27	WG2142217
Methylene Chloride	U		0.430	5.00	1	09/30/2023 10:27	WG2142217
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	09/30/2023 10:27	WG2142217
Methyl tert-butyl ether	U		0.101	1.00	1	09/30/2023 10:27	WG2142217
Naphthalene	U		1.00	5.00	1	09/30/2023 10:27	WG2142217
n-Propylbenzene	U		0.0993	1.00	1	09/30/2023 10:27	WG2142217
Styrene	U		0.118	1.00	1	09/30/2023 10:27	WG2142217
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	09/30/2023 10:27	WG2142217
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	09/30/2023 10:27	WG2142217
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	09/30/2023 10:27	WG2142217
Tetrachloroethene	U		0.300	1.00	1	09/30/2023 10:27	WG2142217
Toluene	U		0.278	1.00	1	09/30/2023 10:27	WG2142217
1,2,3-Trichlorobenzene	U		0.230	1.00	1	09/30/2023 10:27	WG2142217

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	U		0.481	1.00	1	09/30/2023 10:27	WG2142217
1,1,1-Trichloroethane	U		0.149	1.00	1	09/30/2023 10:27	WG2142217
1,1,2-Trichloroethane	U		0.158	1.00	1	09/30/2023 10:27	WG2142217
Trichloroethene	1.15		0.190	1.00	1	09/30/2023 10:27	WG2142217
Trichlorofluoromethane	U		0.160	5.00	1	09/30/2023 10:27	WG2142217
1,2,3-Trichloropropane	U		0.237	2.50	1	09/30/2023 10:27	WG2142217
1,2,4-Trimethylbenzene	U		0.322	1.00	1	09/30/2023 10:27	WG2142217
1,2,3-Trimethylbenzene	U		0.104	1.00	1	09/30/2023 10:27	WG2142217
1,3,5-Trimethylbenzene	U		0.104	1.00	1	09/30/2023 10:27	WG2142217
Vinyl chloride	U		0.234	1.00	1	09/30/2023 10:27	WG2142217
Xylenes, Total	U		0.174	3.00	1	09/30/2023 10:27	WG2142217
(S) Toluene-d8	103			80.0-120		09/30/2023 10:27	WG2142217
(S) 4-Bromofluorobenzene	104			77.0-126		09/30/2023 10:27	WG2142217
(S) 1,2-Dichloroethane-d4	105			70.0-130		09/30/2023 10:27	WG2142217

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

EXT-1R/TRENCH

Collected date/time: 09/21/23 12:50

SAMPLE RESULTS - 10

L1659125

Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	50.0	1	09/30/2023 10:46	WG2142217
Acrolein	U		2.54	50.0	1	09/30/2023 10:46	WG2142217
Acrylonitrile	U		0.671	10.0	1	09/30/2023 10:46	WG2142217
Benzene	U		0.0941	1.00	1	09/30/2023 10:46	WG2142217
Bromobenzene	U		0.118	1.00	1	09/30/2023 10:46	WG2142217
Bromodichloromethane	U		0.136	1.00	1	09/30/2023 10:46	WG2142217
Bromoform	U		0.129	1.00	1	09/30/2023 10:46	WG2142217
Bromomethane	U		0.605	5.00	1	09/30/2023 10:46	WG2142217
n-Butylbenzene	U		0.157	1.00	1	09/30/2023 10:46	WG2142217
sec-Butylbenzene	U		0.125	1.00	1	09/30/2023 10:46	WG2142217
tert-Butylbenzene	U		0.127	1.00	1	09/30/2023 10:46	WG2142217
Carbon disulfide	U		0.0962	1.00	1	09/30/2023 10:46	WG2142217
Carbon tetrachloride	U		0.128	1.00	1	09/30/2023 10:46	WG2142217
Chlorobenzene	U		0.116	1.00	1	09/30/2023 10:46	WG2142217
Chlorodibromomethane	U		0.140	1.00	1	09/30/2023 10:46	WG2142217
Chloroethane	U		0.192	5.00	1	09/30/2023 10:46	WG2142217
Chloroform	U		0.111	5.00	1	09/30/2023 10:46	WG2142217
Chloromethane	U		0.960	2.50	1	09/30/2023 10:46	WG2142217
2-Chlorotoluene	U		0.106	1.00	1	09/30/2023 10:46	WG2142217
4-Chlorotoluene	U		0.114	1.00	1	09/30/2023 10:46	WG2142217
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	09/30/2023 10:46	WG2142217
1,2-Dibromoethane	U		0.126	1.00	1	09/30/2023 10:46	WG2142217
Dibromomethane	U		0.122	1.00	1	09/30/2023 10:46	WG2142217
1,2-Dichlorobenzene	U		0.107	1.00	1	09/30/2023 10:46	WG2142217
1,3-Dichlorobenzene	U		0.110	1.00	1	09/30/2023 10:46	WG2142217
1,4-Dichlorobenzene	U		0.120	1.00	1	09/30/2023 10:46	WG2142217
Dichlorodifluoromethane	U		0.374	5.00	1	09/30/2023 10:46	WG2142217
1,1-Dichloroethane	U		0.100	1.00	1	09/30/2023 10:46	WG2142217
1,2-Dichloroethane	U		0.0819	1.00	1	09/30/2023 10:46	WG2142217
1,1-Dichloroethene	U		0.188	1.00	1	09/30/2023 10:46	WG2142217
cis-1,2-Dichloroethene	27.8		0.126	1.00	1	09/30/2023 10:46	WG2142217
trans-1,2-Dichloroethene	U		0.149	1.00	1	09/30/2023 10:46	WG2142217
1,2-Dichloropropane	U		0.149	1.00	1	09/30/2023 10:46	WG2142217
1,1-Dichloropropene	U		0.142	1.00	1	09/30/2023 10:46	WG2142217
1,3-Dichloropropane	U		0.110	1.00	1	09/30/2023 10:46	WG2142217
cis-1,3-Dichloropropene	U		0.111	1.00	1	09/30/2023 10:46	WG2142217
trans-1,3-Dichloropropene	U		0.118	1.00	1	09/30/2023 10:46	WG2142217
2,2-Dichloropropane	U		0.161	1.00	1	09/30/2023 10:46	WG2142217
Di-isopropyl ether	U		0.105	1.00	1	09/30/2023 10:46	WG2142217
Ethylbenzene	U		0.137	1.00	1	09/30/2023 10:46	WG2142217
Hexachloro-1,3-butadiene	U		0.337	1.00	1	09/30/2023 10:46	WG2142217
Isopropylbenzene	U		0.105	1.00	1	09/30/2023 10:46	WG2142217
p-Isopropyltoluene	U		0.120	1.00	1	09/30/2023 10:46	WG2142217
2-Butanone (MEK)	U		1.19	10.0	1	09/30/2023 10:46	WG2142217
Methylene Chloride	U		0.430	5.00	1	09/30/2023 10:46	WG2142217
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	09/30/2023 10:46	WG2142217
Methyl tert-butyl ether	U		0.101	1.00	1	09/30/2023 10:46	WG2142217
Naphthalene	U		1.00	5.00	1	09/30/2023 10:46	WG2142217
n-Propylbenzene	U		0.0993	1.00	1	09/30/2023 10:46	WG2142217
Styrene	U		0.118	1.00	1	09/30/2023 10:46	WG2142217
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	09/30/2023 10:46	WG2142217
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	09/30/2023 10:46	WG2142217
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	09/30/2023 10:46	WG2142217
Tetrachloroethene	U		0.300	1.00	1	09/30/2023 10:46	WG2142217
Toluene	U		0.278	1.00	1	09/30/2023 10:46	WG2142217
1,2,3-Trichlorobenzene	U		0.230	1.00	1	09/30/2023 10:46	WG2142217

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

ACCOUNT:

Oregon Dept. of Env. Quality - ODEQ

PROJECT:

2060.007

SDG:

L1659125

DATE/TIME:

10/04/23 15:12

PAGE:

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EXT-1R/TRENCH

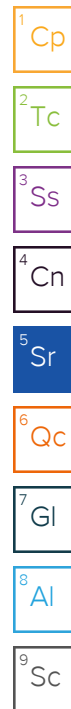
Collected date/time: 09/21/23 12:50

SAMPLE RESULTS - 10

L1659125

Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	U		0.481	1.00	1	09/30/2023 10:46	WG2142217
1,1,1-Trichloroethane	U		0.149	1.00	1	09/30/2023 10:46	WG2142217
1,1,2-Trichloroethane	U		0.158	1.00	1	09/30/2023 10:46	WG2142217
Trichloroethene	0.193	J	0.190	1.00	1	09/30/2023 10:46	WG2142217
Trichlorofluoromethane	U		0.160	5.00	1	09/30/2023 10:46	WG2142217
1,2,3-Trichloropropane	U		0.237	2.50	1	09/30/2023 10:46	WG2142217
1,2,4-Trimethylbenzene	U		0.322	1.00	1	09/30/2023 10:46	WG2142217
1,2,3-Trimethylbenzene	U		0.104	1.00	1	09/30/2023 10:46	WG2142217
1,3,5-Trimethylbenzene	U		0.104	1.00	1	09/30/2023 10:46	WG2142217
Vinyl chloride	2.80		0.234	1.00	1	09/30/2023 10:46	WG2142217
Xylenes, Total	U		0.174	3.00	1	09/30/2023 10:46	WG2142217
(S) Toluene-d8	102			80.0-120		09/30/2023 10:46	WG2142217
(S) 4-Bromofluorobenzene	103			77.0-126		09/30/2023 10:46	WG2142217
(S) 1,2-Dichloroethane-d4	112			70.0-130		09/30/2023 10:46	WG2142217



Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	50.0	1	09/30/2023 11:05	WG2142217
Acrolein	U		2.54	50.0	1	09/30/2023 11:05	WG2142217
Acrylonitrile	U		0.671	10.0	1	09/30/2023 11:05	WG2142217
Benzene	U		0.0941	1.00	1	09/30/2023 11:05	WG2142217
Bromobenzene	U		0.118	1.00	1	09/30/2023 11:05	WG2142217
Bromodichloromethane	U		0.136	1.00	1	09/30/2023 11:05	WG2142217
Bromoform	U		0.129	1.00	1	09/30/2023 11:05	WG2142217
Bromomethane	U		0.605	5.00	1	09/30/2023 11:05	WG2142217
n-Butylbenzene	U		0.157	1.00	1	09/30/2023 11:05	WG2142217
sec-Butylbenzene	U		0.125	1.00	1	09/30/2023 11:05	WG2142217
tert-Butylbenzene	U		0.127	1.00	1	09/30/2023 11:05	WG2142217
Carbon disulfide	U		0.0962	1.00	1	09/30/2023 11:05	WG2142217
Carbon tetrachloride	U		0.128	1.00	1	09/30/2023 11:05	WG2142217
Chlorobenzene	U		0.116	1.00	1	09/30/2023 11:05	WG2142217
Chlorodibromomethane	U		0.140	1.00	1	09/30/2023 11:05	WG2142217
Chloroethane	U		0.192	5.00	1	09/30/2023 11:05	WG2142217
Chloroform	U		0.111	5.00	1	09/30/2023 11:05	WG2142217
Chloromethane	U		0.960	2.50	1	09/30/2023 11:05	WG2142217
2-Chlorotoluene	U		0.106	1.00	1	09/30/2023 11:05	WG2142217
4-Chlorotoluene	U		0.114	1.00	1	09/30/2023 11:05	WG2142217
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	09/30/2023 11:05	WG2142217
1,2-Dibromoethane	U		0.126	1.00	1	09/30/2023 11:05	WG2142217
Dibromomethane	U		0.122	1.00	1	09/30/2023 11:05	WG2142217
1,2-Dichlorobenzene	U		0.107	1.00	1	09/30/2023 11:05	WG2142217
1,3-Dichlorobenzene	U		0.110	1.00	1	09/30/2023 11:05	WG2142217
1,4-Dichlorobenzene	U		0.120	1.00	1	09/30/2023 11:05	WG2142217
Dichlorodifluoromethane	U		0.374	5.00	1	09/30/2023 11:05	WG2142217
1,1-Dichloroethane	U		0.100	1.00	1	09/30/2023 11:05	WG2142217
1,2-Dichloroethane	U		0.0819	1.00	1	09/30/2023 11:05	WG2142217
1,1-Dichloroethene	U		0.188	1.00	1	09/30/2023 11:05	WG2142217
cis-1,2-Dichloroethene	26.4		0.126	1.00	1	09/30/2023 11:05	WG2142217
trans-1,2-Dichloroethene	U		0.149	1.00	1	09/30/2023 11:05	WG2142217
1,2-Dichloropropane	U		0.149	1.00	1	09/30/2023 11:05	WG2142217
1,1-Dichloropropene	U		0.142	1.00	1	09/30/2023 11:05	WG2142217
1,3-Dichloropropane	U		0.110	1.00	1	09/30/2023 11:05	WG2142217
cis-1,3-Dichloropropene	U		0.111	1.00	1	09/30/2023 11:05	WG2142217
trans-1,3-Dichloropropene	U		0.118	1.00	1	09/30/2023 11:05	WG2142217
2,2-Dichloropropane	U		0.161	1.00	1	09/30/2023 11:05	WG2142217
Di-isopropyl ether	U		0.105	1.00	1	09/30/2023 11:05	WG2142217
Ethylbenzene	U		0.137	1.00	1	09/30/2023 11:05	WG2142217
Hexachloro-1,3-butadiene	U		0.337	1.00	1	09/30/2023 11:05	WG2142217
Isopropylbenzene	U		0.105	1.00	1	09/30/2023 11:05	WG2142217
p-Isopropyltoluene	U		0.120	1.00	1	09/30/2023 11:05	WG2142217
2-Butanone (MEK)	U		1.19	10.0	1	09/30/2023 11:05	WG2142217
Methylene Chloride	U		0.430	5.00	1	09/30/2023 11:05	WG2142217
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	09/30/2023 11:05	WG2142217
Methyl tert-butyl ether	U		0.101	1.00	1	09/30/2023 11:05	WG2142217
Naphthalene	U		1.00	5.00	1	09/30/2023 11:05	WG2142217
n-Propylbenzene	U		0.0993	1.00	1	09/30/2023 11:05	WG2142217
Styrene	U		0.118	1.00	1	09/30/2023 11:05	WG2142217
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	09/30/2023 11:05	WG2142217
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	09/30/2023 11:05	WG2142217
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	09/30/2023 11:05	WG2142217
Tetrachloroethene	U		0.300	1.00	1	09/30/2023 11:05	WG2142217
Toluene	U		0.278	1.00	1	09/30/2023 11:05	WG2142217
1,2,3-Trichlorobenzene	U		0.230	1.00	1	09/30/2023 11:05	WG2142217

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	U		0.481	1.00	1	09/30/2023 11:05	WG2142217
1,1,1-Trichloroethane	U		0.149	1.00	1	09/30/2023 11:05	WG2142217
1,1,2-Trichloroethane	U		0.158	1.00	1	09/30/2023 11:05	WG2142217
Trichloroethene	U		0.190	1.00	1	09/30/2023 11:05	WG2142217
Trichlorofluoromethane	U		0.160	5.00	1	09/30/2023 11:05	WG2142217
1,2,3-Trichloropropane	U		0.237	2.50	1	09/30/2023 11:05	WG2142217
1,2,4-Trimethylbenzene	U		0.322	1.00	1	09/30/2023 11:05	WG2142217
1,2,3-Trimethylbenzene	U		0.104	1.00	1	09/30/2023 11:05	WG2142217
1,3,5-Trimethylbenzene	U		0.104	1.00	1	09/30/2023 11:05	WG2142217
Vinyl chloride	2.74		0.234	1.00	1	09/30/2023 11:05	WG2142217
Xylenes, Total	U		0.174	3.00	1	09/30/2023 11:05	WG2142217
(S) Toluene-d8	107			80.0-120		09/30/2023 11:05	WG2142217
(S) 4-Bromofluorobenzene	99.5			77.0-126		09/30/2023 11:05	WG2142217
(S) 1,2-Dichloroethane-d4	106			70.0-130		09/30/2023 11:05	WG2142217

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	J3 J4	11.3	50.0	1	09/30/2023 14:28	WG2142369
Acrolein	U	C3	2.54	50.0	1	09/30/2023 14:28	WG2142369
Acrylonitrile	U		0.671	10.0	1	09/30/2023 14:28	WG2142369
Benzene	U		0.0941	1.00	1	09/30/2023 14:28	WG2142369
Bromobenzene	U		0.118	1.00	1	09/30/2023 14:28	WG2142369
Bromodichloromethane	U		0.136	1.00	1	09/30/2023 14:28	WG2142369
Bromoform	U	C3	0.129	1.00	1	09/30/2023 14:28	WG2142369
Bromomethane	U		0.605	5.00	1	09/30/2023 14:28	WG2142369
n-Butylbenzene	U		0.157	1.00	1	09/30/2023 14:28	WG2142369
sec-Butylbenzene	U		0.125	1.00	1	09/30/2023 14:28	WG2142369
tert-Butylbenzene	U		0.127	1.00	1	09/30/2023 14:28	WG2142369
Carbon disulfide	U		0.0962	1.00	1	09/30/2023 14:28	WG2142369
Carbon tetrachloride	U		0.128	1.00	1	09/30/2023 14:28	WG2142369
Chlorobenzene	U		0.116	1.00	1	09/30/2023 14:28	WG2142369
Chlorodibromomethane	U		0.140	1.00	1	09/30/2023 14:28	WG2142369
Chloroethane	U		0.192	5.00	1	09/30/2023 14:28	WG2142369
Chloroform	U		0.111	5.00	1	09/30/2023 14:28	WG2142369
Chloromethane	U		0.960	2.50	1	09/30/2023 14:28	WG2142369
2-Chlorotoluene	U		0.106	1.00	1	09/30/2023 14:28	WG2142369
4-Chlorotoluene	U		0.114	1.00	1	09/30/2023 14:28	WG2142369
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	09/30/2023 14:28	WG2142369
1,2-Dibromoethane	U		0.126	1.00	1	09/30/2023 14:28	WG2142369
Dibromomethane	U		0.122	1.00	1	09/30/2023 14:28	WG2142369
1,2-Dichlorobenzene	U		0.107	1.00	1	09/30/2023 14:28	WG2142369
1,3-Dichlorobenzene	U		0.110	1.00	1	09/30/2023 14:28	WG2142369
1,4-Dichlorobenzene	U		0.120	1.00	1	09/30/2023 14:28	WG2142369
Dichlorodifluoromethane	U		0.374	5.00	1	09/30/2023 14:28	WG2142369
1,1-Dichloroethane	U		0.100	1.00	1	09/30/2023 14:28	WG2142369
1,2-Dichloroethane	U		0.0819	1.00	1	09/30/2023 14:28	WG2142369
1,1-Dichloroethene	0.645	J	0.188	1.00	1	09/30/2023 14:28	WG2142369
cis-1,2-Dichloroethene	121		1.26	10.0	10	10/04/2023 00:47	WG2143977
trans-1,2-Dichloroethene	1.67		0.149	1.00	1	09/30/2023 14:28	WG2142369
1,2-Dichloropropane	U		0.149	1.00	1	09/30/2023 14:28	WG2142369
1,1-Dichloropropene	U		0.142	1.00	1	09/30/2023 14:28	WG2142369
1,3-Dichloropropane	U		0.110	1.00	1	09/30/2023 14:28	WG2142369
cis-1,3-Dichloropropene	U		0.111	1.00	1	09/30/2023 14:28	WG2142369
trans-1,3-Dichloropropene	U		0.118	1.00	1	09/30/2023 14:28	WG2142369
2,2-Dichloropropane	U		0.161	1.00	1	09/30/2023 14:28	WG2142369
Di-isopropyl ether	U		0.105	1.00	1	09/30/2023 14:28	WG2142369
Ethylbenzene	U		0.137	1.00	1	09/30/2023 14:28	WG2142369
Hexachloro-1,3-butadiene	U		0.337	1.00	1	09/30/2023 14:28	WG2142369
Isopropylbenzene	U		0.105	1.00	1	09/30/2023 14:28	WG2142369
p-Isopropyltoluene	U		0.120	1.00	1	09/30/2023 14:28	WG2142369
2-Butanone (MEK)	U	C3	1.19	10.0	1	09/30/2023 14:28	WG2142369
Methylene Chloride	U		0.430	5.00	1	09/30/2023 14:28	WG2142369
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	09/30/2023 14:28	WG2142369
Methyl tert-butyl ether	U		0.101	1.00	1	09/30/2023 14:28	WG2142369
Naphthalene	U	J3	1.00	5.00	1	09/30/2023 14:28	WG2142369
n-Propylbenzene	U		0.0993	1.00	1	09/30/2023 14:28	WG2142369
Styrene	U		0.118	1.00	1	09/30/2023 14:28	WG2142369
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	09/30/2023 14:28	WG2142369
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	09/30/2023 14:28	WG2142369
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	09/30/2023 14:28	WG2142369
Tetrachloroethene	1.95		0.300	1.00	1	09/30/2023 14:28	WG2142369
Toluene	U		0.278	1.00	1	09/30/2023 14:28	WG2142369
1,2,3-Trichlorobenzene	U	J3	0.230	1.00	1	09/30/2023 14:28	WG2142369

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

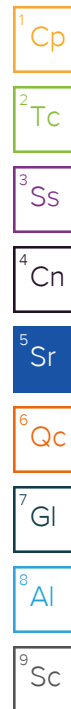
7 Gl

8 Al

9 Sc

Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	U		0.481	1.00	1	09/30/2023 14:28	WG2142369
1,1,1-Trichloroethane	U		0.149	1.00	1	09/30/2023 14:28	WG2142369
1,1,2-Trichloroethane	U		0.158	1.00	1	09/30/2023 14:28	WG2142369
Trichloroethene	136		1.90	10.0	10	10/04/2023 00:47	WG2143977
Trichlorofluoromethane	U		0.160	5.00	1	09/30/2023 14:28	WG2142369
1,2,3-Trichloropropane	U		0.237	2.50	1	09/30/2023 14:28	WG2142369
1,2,4-Trimethylbenzene	U		0.322	1.00	1	09/30/2023 14:28	WG2142369
1,2,3-Trimethylbenzene	U		0.104	1.00	1	09/30/2023 14:28	WG2142369
1,3,5-Trimethylbenzene	U		0.104	1.00	1	09/30/2023 14:28	WG2142369
Vinyl chloride	1.16		0.234	1.00	1	09/30/2023 14:28	WG2142369
Xylenes, Total	U		0.174	3.00	1	09/30/2023 14:28	WG2142369
(S) Toluene-d8	103			80.0-120		09/30/2023 14:28	WG2142369
(S) Toluene-d8	115			80.0-120		10/04/2023 00:47	WG2143977
(S) 4-Bromofluorobenzene	103			77.0-126		09/30/2023 14:28	WG2142369
(S) 4-Bromofluorobenzene	86.2			77.0-126		10/04/2023 00:47	WG2143977
(S) 1,2-Dichloroethane-d4	107			70.0-130		09/30/2023 14:28	WG2142369
(S) 1,2-Dichloroethane-d4	91.9			70.0-130		10/04/2023 00:47	WG2143977



Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	J3 J4	11.3	50.0	1	09/30/2023 14:58	WG2142369
Acrolein	U	C3	2.54	50.0	1	09/30/2023 14:58	WG2142369
Acrylonitrile	U		0.671	10.0	1	09/30/2023 14:58	WG2142369
Benzene	U		0.0941	1.00	1	09/30/2023 14:58	WG2142369
Bromobenzene	U		0.118	1.00	1	09/30/2023 14:58	WG2142369
Bromodichloromethane	U		0.136	1.00	1	09/30/2023 14:58	WG2142369
Bromoform	U	C3	0.129	1.00	1	09/30/2023 14:58	WG2142369
Bromomethane	U		0.605	5.00	1	09/30/2023 14:58	WG2142369
n-Butylbenzene	U		0.157	1.00	1	09/30/2023 14:58	WG2142369
sec-Butylbenzene	U		0.125	1.00	1	09/30/2023 14:58	WG2142369
tert-Butylbenzene	U		0.127	1.00	1	09/30/2023 14:58	WG2142369
Carbon disulfide	U		0.0962	1.00	1	09/30/2023 14:58	WG2142369
Carbon tetrachloride	U		0.128	1.00	1	09/30/2023 14:58	WG2142369
Chlorobenzene	U		0.116	1.00	1	09/30/2023 14:58	WG2142369
Chlorodibromomethane	U		0.140	1.00	1	09/30/2023 14:58	WG2142369
Chloroethane	U		0.192	5.00	1	09/30/2023 14:58	WG2142369
Chloroform	U		0.111	5.00	1	09/30/2023 14:58	WG2142369
Chloromethane	U		0.960	2.50	1	09/30/2023 14:58	WG2142369
2-Chlorotoluene	U		0.106	1.00	1	09/30/2023 14:58	WG2142369
4-Chlorotoluene	U		0.114	1.00	1	09/30/2023 14:58	WG2142369
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	09/30/2023 14:58	WG2142369
1,2-Dibromoethane	U		0.126	1.00	1	09/30/2023 14:58	WG2142369
Dibromomethane	U		0.122	1.00	1	09/30/2023 14:58	WG2142369
1,2-Dichlorobenzene	U		0.107	1.00	1	09/30/2023 14:58	WG2142369
1,3-Dichlorobenzene	U		0.110	1.00	1	09/30/2023 14:58	WG2142369
1,4-Dichlorobenzene	U		0.120	1.00	1	09/30/2023 14:58	WG2142369
Dichlorodifluoromethane	U		0.374	5.00	1	09/30/2023 14:58	WG2142369
1,1-Dichloroethane	U		0.100	1.00	1	09/30/2023 14:58	WG2142369
1,2-Dichloroethane	U		0.0819	1.00	1	09/30/2023 14:58	WG2142369
1,1-Dichloroethene	U		0.188	1.00	1	09/30/2023 14:58	WG2142369
cis-1,2-Dichloroethene	26.7		0.126	1.00	1	09/30/2023 14:58	WG2142369
trans-1,2-Dichloroethene	U		0.149	1.00	1	09/30/2023 14:58	WG2142369
1,2-Dichloropropane	U		0.149	1.00	1	09/30/2023 14:58	WG2142369
1,1-Dichloropropene	U		0.142	1.00	1	09/30/2023 14:58	WG2142369
1,3-Dichloropropane	U		0.110	1.00	1	09/30/2023 14:58	WG2142369
cis-1,3-Dichloropropene	U		0.111	1.00	1	09/30/2023 14:58	WG2142369
trans-1,3-Dichloropropene	U		0.118	1.00	1	09/30/2023 14:58	WG2142369
2,2-Dichloropropane	U		0.161	1.00	1	09/30/2023 14:58	WG2142369
Di-isopropyl ether	U		0.105	1.00	1	09/30/2023 14:58	WG2142369
Ethylbenzene	U		0.137	1.00	1	09/30/2023 14:58	WG2142369
Hexachloro-1,3-butadiene	U		0.337	1.00	1	09/30/2023 14:58	WG2142369
Isopropylbenzene	U		0.105	1.00	1	09/30/2023 14:58	WG2142369
p-Isopropyltoluene	U		0.120	1.00	1	09/30/2023 14:58	WG2142369
2-Butanone (MEK)	U	C3	1.19	10.0	1	09/30/2023 14:58	WG2142369
Methylene Chloride	U		0.430	5.00	1	09/30/2023 14:58	WG2142369
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	09/30/2023 14:58	WG2142369
Methyl tert-butyl ether	U		0.101	1.00	1	09/30/2023 14:58	WG2142369
Naphthalene	U	J3	1.00	5.00	1	09/30/2023 14:58	WG2142369
n-Propylbenzene	U		0.0993	1.00	1	09/30/2023 14:58	WG2142369
Styrene	U		0.118	1.00	1	09/30/2023 14:58	WG2142369
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	09/30/2023 14:58	WG2142369
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	09/30/2023 14:58	WG2142369
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	09/30/2023 14:58	WG2142369
Tetrachloroethene	U		0.300	1.00	1	09/30/2023 14:58	WG2142369
Toluene	U		0.278	1.00	1	09/30/2023 14:58	WG2142369
1,2,3-Trichlorobenzene	U	J3	0.230	1.00	1	09/30/2023 14:58	WG2142369

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	U		0.481	1.00	1	09/30/2023 14:58	WG2142369
1,1,1-Trichloroethane	U		0.149	1.00	1	09/30/2023 14:58	WG2142369
1,1,2-Trichloroethane	U		0.158	1.00	1	09/30/2023 14:58	WG2142369
Trichloroethene	0.797	J	0.190	1.00	1	10/03/2023 22:53	WG2143977
Trichlorofluoromethane	U		0.160	5.00	1	09/30/2023 14:58	WG2142369
1,2,3-Trichloropropane	U		0.237	2.50	1	09/30/2023 14:58	WG2142369
1,2,4-Trimethylbenzene	U		0.322	1.00	1	09/30/2023 14:58	WG2142369
1,2,3-Trimethylbenzene	U		0.104	1.00	1	09/30/2023 14:58	WG2142369
1,3,5-Trimethylbenzene	U		0.104	1.00	1	09/30/2023 14:58	WG2142369
Vinyl chloride	U		0.234	1.00	1	09/30/2023 14:58	WG2142369
Xylenes, Total	U		0.174	3.00	1	09/30/2023 14:58	WG2142369
(S) Toluene-d8	106			80.0-120		09/30/2023 14:58	WG2142369
(S) Toluene-d8	118			80.0-120		10/03/2023 22:53	WG2143977
(S) 4-Bromofluorobenzene	98.4			77.0-126		09/30/2023 14:58	WG2142369
(S) 4-Bromofluorobenzene	90.9			77.0-126		10/03/2023 22:53	WG2143977
(S) 1,2-Dichloroethane-d4	109			70.0-130		09/30/2023 14:58	WG2142369
(S) 1,2-Dichloroethane-d4	89.9			70.0-130		10/03/2023 22:53	WG2143977

1
Cp2
Tc3
Ss4
Cn5
Sr6
Qc7
Gl8
Al9
Sc

Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	J3 J4	11.3	50.0	1	09/30/2023 15:17	WG2142369
Acrolein	U	C3	2.54	50.0	1	09/30/2023 15:17	WG2142369
Acrylonitrile	U		0.671	10.0	1	09/30/2023 15:17	WG2142369
Benzene	U		0.0941	1.00	1	09/30/2023 15:17	WG2142369
Bromobenzene	U		0.118	1.00	1	09/30/2023 15:17	WG2142369
Bromodichloromethane	U		0.136	1.00	1	09/30/2023 15:17	WG2142369
Bromoform	U	C3	0.129	1.00	1	09/30/2023 15:17	WG2142369
Bromomethane	U		0.605	5.00	1	09/30/2023 15:17	WG2142369
n-Butylbenzene	U		0.157	1.00	1	09/30/2023 15:17	WG2142369
sec-Butylbenzene	U		0.125	1.00	1	09/30/2023 15:17	WG2142369
tert-Butylbenzene	U		0.127	1.00	1	09/30/2023 15:17	WG2142369
Carbon disulfide	U		0.0962	1.00	1	09/30/2023 15:17	WG2142369
Carbon tetrachloride	U		0.128	1.00	1	09/30/2023 15:17	WG2142369
Chlorobenzene	U		0.116	1.00	1	09/30/2023 15:17	WG2142369
Chlorodibromomethane	U		0.140	1.00	1	09/30/2023 15:17	WG2142369
Chloroethane	U		0.192	5.00	1	09/30/2023 15:17	WG2142369
Chloroform	U		0.111	5.00	1	09/30/2023 15:17	WG2142369
Chloromethane	U		0.960	2.50	1	09/30/2023 15:17	WG2142369
2-Chlorotoluene	U		0.106	1.00	1	09/30/2023 15:17	WG2142369
4-Chlorotoluene	U		0.114	1.00	1	09/30/2023 15:17	WG2142369
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	09/30/2023 15:17	WG2142369
1,2-Dibromoethane	U		0.126	1.00	1	09/30/2023 15:17	WG2142369
Dibromomethane	U		0.122	1.00	1	09/30/2023 15:17	WG2142369
1,2-Dichlorobenzene	U		0.107	1.00	1	09/30/2023 15:17	WG2142369
1,3-Dichlorobenzene	U		0.110	1.00	1	09/30/2023 15:17	WG2142369
1,4-Dichlorobenzene	U		0.120	1.00	1	09/30/2023 15:17	WG2142369
Dichlorodifluoromethane	U		0.374	5.00	1	09/30/2023 15:17	WG2142369
1,1-Dichloroethane	U		0.100	1.00	1	09/30/2023 15:17	WG2142369
1,2-Dichloroethane	U		0.0819	1.00	1	09/30/2023 15:17	WG2142369
1,1-Dichloroethene	U		0.188	1.00	1	09/30/2023 15:17	WG2142369
cis-1,2-Dichloroethene	1.85		0.126	1.00	1	09/30/2023 15:17	WG2142369
trans-1,2-Dichloroethene	U		0.149	1.00	1	09/30/2023 15:17	WG2142369
1,2-Dichloropropane	U		0.149	1.00	1	09/30/2023 15:17	WG2142369
1,1-Dichloropropene	U		0.142	1.00	1	09/30/2023 15:17	WG2142369
1,3-Dichloropropane	U		0.110	1.00	1	09/30/2023 15:17	WG2142369
cis-1,3-Dichloropropene	U		0.111	1.00	1	09/30/2023 15:17	WG2142369
trans-1,3-Dichloropropene	U		0.118	1.00	1	09/30/2023 15:17	WG2142369
2,2-Dichloropropane	U		0.161	1.00	1	09/30/2023 15:17	WG2142369
Di-isopropyl ether	U		0.105	1.00	1	09/30/2023 15:17	WG2142369
Ethylbenzene	U		0.137	1.00	1	09/30/2023 15:17	WG2142369
Hexachloro-1,3-butadiene	U		0.337	1.00	1	09/30/2023 15:17	WG2142369
Isopropylbenzene	U		0.105	1.00	1	09/30/2023 15:17	WG2142369
p-Isopropyltoluene	U		0.120	1.00	1	09/30/2023 15:17	WG2142369
2-Butanone (MEK)	U	C3	1.19	10.0	1	09/30/2023 15:17	WG2142369
Methylene Chloride	U		0.430	5.00	1	09/30/2023 15:17	WG2142369
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	09/30/2023 15:17	WG2142369
Methyl tert-butyl ether	U		0.101	1.00	1	09/30/2023 15:17	WG2142369
Naphthalene	U	J3	1.00	5.00	1	09/30/2023 15:17	WG2142369
n-Propylbenzene	U		0.0993	1.00	1	09/30/2023 15:17	WG2142369
Styrene	U		0.118	1.00	1	09/30/2023 15:17	WG2142369
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	09/30/2023 15:17	WG2142369
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	09/30/2023 15:17	WG2142369
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	09/30/2023 15:17	WG2142369
Tetrachloroethene	U		0.300	1.00	1	09/30/2023 15:17	WG2142369
Toluene	U		0.278	1.00	1	09/30/2023 15:17	WG2142369
1,2,3-Trichlorobenzene	U	J3	0.230	1.00	1	09/30/2023 15:17	WG2142369

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

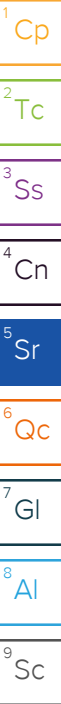
7 Gl

8 Al

9 Sc

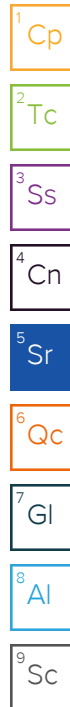
Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	U		0.481	1.00	1	09/30/2023 15:17	WG2142369
1,1,1-Trichloroethane	U		0.149	1.00	1	09/30/2023 15:17	WG2142369
1,1,2-Trichloroethane	U		0.158	1.00	1	09/30/2023 15:17	WG2142369
Trichloroethene	0.377	J	0.190	1.00	1	10/03/2023 23:12	WG2143977
Trichlorofluoromethane	U		0.160	5.00	1	09/30/2023 15:17	WG2142369
1,2,3-Trichloropropane	U		0.237	2.50	1	09/30/2023 15:17	WG2142369
1,2,4-Trimethylbenzene	U		0.322	1.00	1	09/30/2023 15:17	WG2142369
1,2,3-Trimethylbenzene	U		0.104	1.00	1	09/30/2023 15:17	WG2142369
1,3,5-Trimethylbenzene	U		0.104	1.00	1	09/30/2023 15:17	WG2142369
Vinyl chloride	1.34		0.234	1.00	1	09/30/2023 15:17	WG2142369
Xylenes, Total	U		0.174	3.00	1	09/30/2023 15:17	WG2142369
(S) Toluene-d8	104			80.0-120		09/30/2023 15:17	WG2142369
(S) Toluene-d8	116			80.0-120		10/03/2023 23:12	WG2143977
(S) 4-Bromofluorobenzene	102			77.0-126		09/30/2023 15:17	WG2142369
(S) 4-Bromofluorobenzene	86.9			77.0-126		10/03/2023 23:12	WG2143977
(S) 1,2-Dichloroethane-d4	110			70.0-130		09/30/2023 15:17	WG2142369
(S) 1,2-Dichloroethane-d4	94.2			70.0-130		10/03/2023 23:12	WG2143977



Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	J3 J4	11.3	50.0	1	09/30/2023 15:36	WG2142369
Acrolein	U	C3	2.54	50.0	1	09/30/2023 15:36	WG2142369
Acrylonitrile	U		0.671	10.0	1	09/30/2023 15:36	WG2142369
Benzene	U		0.0941	1.00	1	09/30/2023 15:36	WG2142369
Bromobenzene	U		0.118	1.00	1	09/30/2023 15:36	WG2142369
Bromodichloromethane	U		0.136	1.00	1	09/30/2023 15:36	WG2142369
Bromoform	U	C3	0.129	1.00	1	09/30/2023 15:36	WG2142369
Bromomethane	U		0.605	5.00	1	09/30/2023 15:36	WG2142369
n-Butylbenzene	U		0.157	1.00	1	09/30/2023 15:36	WG2142369
sec-Butylbenzene	U		0.125	1.00	1	09/30/2023 15:36	WG2142369
tert-Butylbenzene	U		0.127	1.00	1	09/30/2023 15:36	WG2142369
Carbon disulfide	U		0.0962	1.00	1	09/30/2023 15:36	WG2142369
Carbon tetrachloride	U		0.128	1.00	1	09/30/2023 15:36	WG2142369
Chlorobenzene	U		0.116	1.00	1	09/30/2023 15:36	WG2142369
Chlorodibromomethane	U		0.140	1.00	1	09/30/2023 15:36	WG2142369
Chloroethane	U		0.192	5.00	1	09/30/2023 15:36	WG2142369
Chloroform	U		0.111	5.00	1	09/30/2023 15:36	WG2142369
Chloromethane	U		0.960	2.50	1	09/30/2023 15:36	WG2142369
2-Chlorotoluene	U		0.106	1.00	1	09/30/2023 15:36	WG2142369
4-Chlorotoluene	U		0.114	1.00	1	09/30/2023 15:36	WG2142369
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	09/30/2023 15:36	WG2142369
1,2-Dibromoethane	U		0.126	1.00	1	09/30/2023 15:36	WG2142369
Dibromomethane	U		0.122	1.00	1	09/30/2023 15:36	WG2142369
1,2-Dichlorobenzene	U		0.107	1.00	1	09/30/2023 15:36	WG2142369
1,3-Dichlorobenzene	U		0.110	1.00	1	09/30/2023 15:36	WG2142369
1,4-Dichlorobenzene	U		0.120	1.00	1	09/30/2023 15:36	WG2142369
Dichlorodifluoromethane	U		0.374	5.00	1	09/30/2023 15:36	WG2142369
1,1-Dichloroethane	U		0.100	1.00	1	09/30/2023 15:36	WG2142369
1,2-Dichloroethane	U		0.0819	1.00	1	09/30/2023 15:36	WG2142369
1,1-Dichloroethene	U		0.188	1.00	1	09/30/2023 15:36	WG2142369
cis-1,2-Dichloroethene	3.57		0.126	1.00	1	09/30/2023 15:36	WG2142369
trans-1,2-Dichloroethene	U		0.149	1.00	1	09/30/2023 15:36	WG2142369
1,2-Dichloropropane	U		0.149	1.00	1	09/30/2023 15:36	WG2142369
1,1-Dichloropropene	U		0.142	1.00	1	09/30/2023 15:36	WG2142369
1,3-Dichloropropane	U		0.110	1.00	1	09/30/2023 15:36	WG2142369
cis-1,3-Dichloropropene	U		0.111	1.00	1	09/30/2023 15:36	WG2142369
trans-1,3-Dichloropropene	U		0.118	1.00	1	09/30/2023 15:36	WG2142369
2,2-Dichloropropane	U		0.161	1.00	1	09/30/2023 15:36	WG2142369
Di-isopropyl ether	U		0.105	1.00	1	09/30/2023 15:36	WG2142369
Ethylbenzene	U		0.137	1.00	1	09/30/2023 15:36	WG2142369
Hexachloro-1,3-butadiene	U		0.337	1.00	1	09/30/2023 15:36	WG2142369
Isopropylbenzene	U		0.105	1.00	1	09/30/2023 15:36	WG2142369
p-Isopropyltoluene	U		0.120	1.00	1	09/30/2023 15:36	WG2142369
2-Butanone (MEK)	U	C3	1.19	10.0	1	09/30/2023 15:36	WG2142369
Methylene Chloride	U		0.430	5.00	1	09/30/2023 15:36	WG2142369
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	09/30/2023 15:36	WG2142369
Methyl tert-butyl ether	U		0.101	1.00	1	09/30/2023 15:36	WG2142369
Naphthalene	U	J3	1.00	5.00	1	09/30/2023 15:36	WG2142369
n-Propylbenzene	U		0.0993	1.00	1	09/30/2023 15:36	WG2142369
Styrene	U		0.118	1.00	1	09/30/2023 15:36	WG2142369
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	09/30/2023 15:36	WG2142369
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	09/30/2023 15:36	WG2142369
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	09/30/2023 15:36	WG2142369
Tetrachloroethene	U		0.300	1.00	1	09/30/2023 15:36	WG2142369
Toluene	U		0.278	1.00	1	09/30/2023 15:36	WG2142369
1,2,3-Trichlorobenzene	U	J3	0.230	1.00	1	09/30/2023 15:36	WG2142369



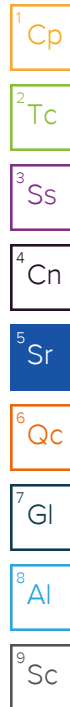
Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	U		0.481	1.00	1	09/30/2023 15:36	WG2142369
1,1,1-Trichloroethane	U		0.149	1.00	1	09/30/2023 15:36	WG2142369
1,1,2-Trichloroethane	U		0.158	1.00	1	09/30/2023 15:36	WG2142369
Trichloroethene	0.228	J	0.190	1.00	1	10/03/2023 19:22	WG2143977
Trichlorofluoromethane	U		0.160	5.00	1	09/30/2023 15:36	WG2142369
1,2,3-Trichloropropane	U		0.237	2.50	1	09/30/2023 15:36	WG2142369
1,2,4-Trimethylbenzene	U		0.322	1.00	1	09/30/2023 15:36	WG2142369
1,2,3-Trimethylbenzene	U		0.104	1.00	1	09/30/2023 15:36	WG2142369
1,3,5-Trimethylbenzene	U		0.104	1.00	1	09/30/2023 15:36	WG2142369
Vinyl chloride	U		0.234	1.00	1	09/30/2023 15:36	WG2142369
Xylenes, Total	U		0.174	3.00	1	09/30/2023 15:36	WG2142369
(S) Toluene-d8	107			80.0-120		09/30/2023 15:36	WG2142369
(S) Toluene-d8	115			80.0-120		10/03/2023 19:22	WG2143977
(S) 4-Bromofluorobenzene	103			77.0-126		09/30/2023 15:36	WG2142369
(S) 4-Bromofluorobenzene	87.9			77.0-126		10/03/2023 19:22	WG2143977
(S) 1,2-Dichloroethane-d4	107			70.0-130		09/30/2023 15:36	WG2142369
(S) 1,2-Dichloroethane-d4	83.8			70.0-130		10/03/2023 19:22	WG2143977

1
Cp2
Tc3
Ss4
Cn5
Sr6
Qc7
Gl8
Al9
Sc

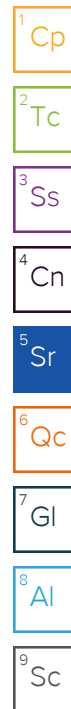
Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	J3 J4	11.3	50.0	1	09/30/2023 15:55	WG2142369
Acrolein	U	C3	2.54	50.0	1	09/30/2023 15:55	WG2142369
Acrylonitrile	U		0.671	10.0	1	09/30/2023 15:55	WG2142369
Benzene	U		0.0941	1.00	1	09/30/2023 15:55	WG2142369
Bromobenzene	U		0.118	1.00	1	09/30/2023 15:55	WG2142369
Bromodichloromethane	U		0.136	1.00	1	09/30/2023 15:55	WG2142369
Bromoform	U	C3	0.129	1.00	1	09/30/2023 15:55	WG2142369
Bromomethane	U		0.605	5.00	1	09/30/2023 15:55	WG2142369
n-Butylbenzene	U		0.157	1.00	1	09/30/2023 15:55	WG2142369
sec-Butylbenzene	U		0.125	1.00	1	09/30/2023 15:55	WG2142369
tert-Butylbenzene	U		0.127	1.00	1	09/30/2023 15:55	WG2142369
Carbon disulfide	U		0.0962	1.00	1	09/30/2023 15:55	WG2142369
Carbon tetrachloride	U		0.128	1.00	1	09/30/2023 15:55	WG2142369
Chlorobenzene	U		0.116	1.00	1	09/30/2023 15:55	WG2142369
Chlorodibromomethane	U		0.140	1.00	1	09/30/2023 15:55	WG2142369
Chloroethane	U		0.192	5.00	1	09/30/2023 15:55	WG2142369
Chloroform	U		0.111	5.00	1	09/30/2023 15:55	WG2142369
Chloromethane	U		0.960	2.50	1	09/30/2023 15:55	WG2142369
2-Chlorotoluene	U		0.106	1.00	1	09/30/2023 15:55	WG2142369
4-Chlorotoluene	U		0.114	1.00	1	09/30/2023 15:55	WG2142369
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	09/30/2023 15:55	WG2142369
1,2-Dibromoethane	U		0.126	1.00	1	09/30/2023 15:55	WG2142369
Dibromomethane	U		0.122	1.00	1	09/30/2023 15:55	WG2142369
1,2-Dichlorobenzene	U		0.107	1.00	1	09/30/2023 15:55	WG2142369
1,3-Dichlorobenzene	U		0.110	1.00	1	09/30/2023 15:55	WG2142369
1,4-Dichlorobenzene	U		0.120	1.00	1	09/30/2023 15:55	WG2142369
Dichlorodifluoromethane	U		0.374	5.00	1	09/30/2023 15:55	WG2142369
1,1-Dichloroethane	U		0.100	1.00	1	09/30/2023 15:55	WG2142369
1,2-Dichloroethane	U		0.0819	1.00	1	09/30/2023 15:55	WG2142369
1,1-Dichloroethene	U		0.188	1.00	1	09/30/2023 15:55	WG2142369
cis-1,2-Dichloroethene	3.70		0.126	1.00	1	09/30/2023 15:55	WG2142369
trans-1,2-Dichloroethene	U		0.149	1.00	1	09/30/2023 15:55	WG2142369
1,2-Dichloropropane	U		0.149	1.00	1	09/30/2023 15:55	WG2142369
1,1-Dichloropropene	U		0.142	1.00	1	09/30/2023 15:55	WG2142369
1,3-Dichloropropane	U		0.110	1.00	1	09/30/2023 15:55	WG2142369
cis-1,3-Dichloropropene	U		0.111	1.00	1	09/30/2023 15:55	WG2142369
trans-1,3-Dichloropropene	U		0.118	1.00	1	09/30/2023 15:55	WG2142369
2,2-Dichloropropane	U		0.161	1.00	1	09/30/2023 15:55	WG2142369
Di-isopropyl ether	U		0.105	1.00	1	09/30/2023 15:55	WG2142369
Ethylbenzene	U		0.137	1.00	1	09/30/2023 15:55	WG2142369
Hexachloro-1,3-butadiene	U		0.337	1.00	1	09/30/2023 15:55	WG2142369
Isopropylbenzene	U		0.105	1.00	1	09/30/2023 15:55	WG2142369
p-Isopropyltoluene	U		0.120	1.00	1	09/30/2023 15:55	WG2142369
2-Butanone (MEK)	U	C3	1.19	10.0	1	09/30/2023 15:55	WG2142369
Methylene Chloride	U		0.430	5.00	1	09/30/2023 15:55	WG2142369
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	09/30/2023 15:55	WG2142369
Methyl tert-butyl ether	U		0.101	1.00	1	09/30/2023 15:55	WG2142369
Naphthalene	U	J3	1.00	5.00	1	09/30/2023 15:55	WG2142369
n-Propylbenzene	U		0.0993	1.00	1	09/30/2023 15:55	WG2142369
Styrene	U		0.118	1.00	1	09/30/2023 15:55	WG2142369
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	09/30/2023 15:55	WG2142369
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	09/30/2023 15:55	WG2142369
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	09/30/2023 15:55	WG2142369
Tetrachloroethene	U		0.300	1.00	1	09/30/2023 15:55	WG2142369
Toluene	U		0.278	1.00	1	09/30/2023 15:55	WG2142369
1,2,3-Trichlorobenzene	U	J3	0.230	1.00	1	09/30/2023 15:55	WG2142369



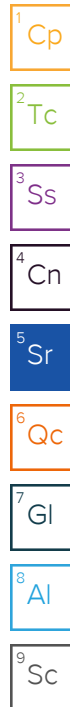
Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	U		0.481	1.00	1	09/30/2023 15:55	WG2142369
1,1,1-Trichloroethane	U		0.149	1.00	1	09/30/2023 15:55	WG2142369
1,1,2-Trichloroethane	U		0.158	1.00	1	09/30/2023 15:55	WG2142369
Trichloroethene	4.94		0.190	1.00	1	09/30/2023 15:55	WG2142369
Trichlorofluoromethane	U		0.160	5.00	1	09/30/2023 15:55	WG2142369
1,2,3-Trichloropropane	U		0.237	2.50	1	09/30/2023 15:55	WG2142369
1,2,4-Trimethylbenzene	U		0.322	1.00	1	09/30/2023 15:55	WG2142369
1,2,3-Trimethylbenzene	U		0.104	1.00	1	09/30/2023 15:55	WG2142369
1,3,5-Trimethylbenzene	U		0.104	1.00	1	09/30/2023 15:55	WG2142369
Vinyl chloride	U		0.234	1.00	1	09/30/2023 15:55	WG2142369
Xylenes, Total	U		0.174	3.00	1	09/30/2023 15:55	WG2142369
(S) Toluene-d8	101			80.0-120		09/30/2023 15:55	WG2142369
(S) 4-Bromofluorobenzene	103			77.0-126		09/30/2023 15:55	WG2142369
(S) 1,2-Dichloroethane-d4	107			70.0-130		09/30/2023 15:55	WG2142369



Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	J3 J4	11.3	50.0	1	09/30/2023 16:14	WG2142369
Acrolein	U	C3	2.54	50.0	1	09/30/2023 16:14	WG2142369
Acrylonitrile	U		0.671	10.0	1	09/30/2023 16:14	WG2142369
Benzene	U		0.0941	1.00	1	09/30/2023 16:14	WG2142369
Bromobenzene	U		0.118	1.00	1	09/30/2023 16:14	WG2142369
Bromodichloromethane	U		0.136	1.00	1	09/30/2023 16:14	WG2142369
Bromoform	U	C3	0.129	1.00	1	09/30/2023 16:14	WG2142369
Bromomethane	U		0.605	5.00	1	09/30/2023 16:14	WG2142369
n-Butylbenzene	U		0.157	1.00	1	09/30/2023 16:14	WG2142369
sec-Butylbenzene	U		0.125	1.00	1	09/30/2023 16:14	WG2142369
tert-Butylbenzene	U		0.127	1.00	1	09/30/2023 16:14	WG2142369
Carbon disulfide	U		0.0962	1.00	1	09/30/2023 16:14	WG2142369
Carbon tetrachloride	U		0.128	1.00	1	09/30/2023 16:14	WG2142369
Chlorobenzene	U		0.116	1.00	1	09/30/2023 16:14	WG2142369
Chlorodibromomethane	U		0.140	1.00	1	09/30/2023 16:14	WG2142369
Chloroethane	U		0.192	5.00	1	09/30/2023 16:14	WG2142369
Chloroform	U		0.111	5.00	1	09/30/2023 16:14	WG2142369
Chloromethane	U		0.960	2.50	1	09/30/2023 16:14	WG2142369
2-Chlorotoluene	U		0.106	1.00	1	09/30/2023 16:14	WG2142369
4-Chlorotoluene	U		0.114	1.00	1	09/30/2023 16:14	WG2142369
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	09/30/2023 16:14	WG2142369
1,2-Dibromoethane	U		0.126	1.00	1	09/30/2023 16:14	WG2142369
Dibromomethane	U		0.122	1.00	1	09/30/2023 16:14	WG2142369
1,2-Dichlorobenzene	U		0.107	1.00	1	09/30/2023 16:14	WG2142369
1,3-Dichlorobenzene	U		0.110	1.00	1	09/30/2023 16:14	WG2142369
1,4-Dichlorobenzene	U		0.120	1.00	1	09/30/2023 16:14	WG2142369
Dichlorodifluoromethane	U		0.374	5.00	1	09/30/2023 16:14	WG2142369
1,1-Dichloroethane	U		0.100	1.00	1	09/30/2023 16:14	WG2142369
1,2-Dichloroethane	U		0.0819	1.00	1	09/30/2023 16:14	WG2142369
1,1-Dichloroethene	U		0.188	1.00	1	09/30/2023 16:14	WG2142369
cis-1,2-Dichloroethene	0.292	J	0.126	1.00	1	09/30/2023 16:14	WG2142369
trans-1,2-Dichloroethene	U		0.149	1.00	1	09/30/2023 16:14	WG2142369
1,2-Dichloropropane	U		0.149	1.00	1	09/30/2023 16:14	WG2142369
1,1-Dichloropropene	U		0.142	1.00	1	09/30/2023 16:14	WG2142369
1,3-Dichloropropane	U		0.110	1.00	1	09/30/2023 16:14	WG2142369
cis-1,3-Dichloropropene	U		0.111	1.00	1	09/30/2023 16:14	WG2142369
trans-1,3-Dichloropropene	U		0.118	1.00	1	09/30/2023 16:14	WG2142369
2,2-Dichloropropane	U		0.161	1.00	1	09/30/2023 16:14	WG2142369
Di-isopropyl ether	U		0.105	1.00	1	09/30/2023 16:14	WG2142369
Ethylbenzene	U		0.137	1.00	1	09/30/2023 16:14	WG2142369
Hexachloro-1,3-butadiene	U		0.337	1.00	1	09/30/2023 16:14	WG2142369
Isopropylbenzene	U		0.105	1.00	1	09/30/2023 16:14	WG2142369
p-Isopropyltoluene	U		0.120	1.00	1	09/30/2023 16:14	WG2142369
2-Butanone (MEK)	U	C3	1.19	10.0	1	09/30/2023 16:14	WG2142369
Methylene Chloride	U		0.430	5.00	1	09/30/2023 16:14	WG2142369
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	09/30/2023 16:14	WG2142369
Methyl tert-butyl ether	U		0.101	1.00	1	09/30/2023 16:14	WG2142369
Naphthalene	U	J3	1.00	5.00	1	09/30/2023 16:14	WG2142369
n-Propylbenzene	U		0.0993	1.00	1	09/30/2023 16:14	WG2142369
Styrene	U		0.118	1.00	1	09/30/2023 16:14	WG2142369
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	09/30/2023 16:14	WG2142369
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	09/30/2023 16:14	WG2142369
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	09/30/2023 16:14	WG2142369
Tetrachloroethene	U		0.300	1.00	1	09/30/2023 16:14	WG2142369
Toluene	U		0.278	1.00	1	09/30/2023 16:14	WG2142369
1,2,3-Trichlorobenzene	U	J3	0.230	1.00	1	09/30/2023 16:14	WG2142369



Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	U		0.481	1.00	1	09/30/2023 16:14	WG2142369
1,1,1-Trichloroethane	U		0.149	1.00	1	09/30/2023 16:14	WG2142369
1,1,2-Trichloroethane	U		0.158	1.00	1	09/30/2023 16:14	WG2142369
Trichloroethene	0.259	J	0.190	1.00	1	09/30/2023 16:14	WG2142369
Trichlorofluoromethane	U		0.160	5.00	1	09/30/2023 16:14	WG2142369
1,2,3-Trichloropropane	U		0.237	2.50	1	09/30/2023 16:14	WG2142369
1,2,4-Trimethylbenzene	U		0.322	1.00	1	09/30/2023 16:14	WG2142369
1,2,3-Trimethylbenzene	U		0.104	1.00	1	09/30/2023 16:14	WG2142369
1,3,5-Trimethylbenzene	U		0.104	1.00	1	09/30/2023 16:14	WG2142369
Vinyl chloride	U		0.234	1.00	1	09/30/2023 16:14	WG2142369
Xylenes, Total	U		0.174	3.00	1	09/30/2023 16:14	WG2142369
(S) Toluene-d8	103			80.0-120		09/30/2023 16:14	WG2142369
(S) 4-Bromofluorobenzene	101			77.0-126		09/30/2023 16:14	WG2142369
(S) 1,2-Dichloroethane-d4	107			70.0-130		09/30/2023 16:14	WG2142369

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	J3 J4	11.3	50.0	1	09/30/2023 16:33	WG2142369
Acrolein	U	C3	2.54	50.0	1	09/30/2023 16:33	WG2142369
Acrylonitrile	U		0.671	10.0	1	09/30/2023 16:33	WG2142369
Benzene	U		0.0941	1.00	1	09/30/2023 16:33	WG2142369
Bromobenzene	U		0.118	1.00	1	09/30/2023 16:33	WG2142369
Bromodichloromethane	U		0.136	1.00	1	09/30/2023 16:33	WG2142369
Bromoform	U	C3	0.129	1.00	1	09/30/2023 16:33	WG2142369
Bromomethane	U		0.605	5.00	1	09/30/2023 16:33	WG2142369
n-Butylbenzene	U		0.157	1.00	1	09/30/2023 16:33	WG2142369
sec-Butylbenzene	U		0.125	1.00	1	09/30/2023 16:33	WG2142369
tert-Butylbenzene	U		0.127	1.00	1	09/30/2023 16:33	WG2142369
Carbon disulfide	U		0.0962	1.00	1	09/30/2023 16:33	WG2142369
Carbon tetrachloride	U		0.128	1.00	1	09/30/2023 16:33	WG2142369
Chlorobenzene	U		0.116	1.00	1	09/30/2023 16:33	WG2142369
Chlorodibromomethane	U		0.140	1.00	1	09/30/2023 16:33	WG2142369
Chloroethane	U		0.192	5.00	1	09/30/2023 16:33	WG2142369
Chloroform	U		0.111	5.00	1	09/30/2023 16:33	WG2142369
Chloromethane	U		0.960	2.50	1	09/30/2023 16:33	WG2142369
2-Chlorotoluene	U		0.106	1.00	1	09/30/2023 16:33	WG2142369
4-Chlorotoluene	U		0.114	1.00	1	09/30/2023 16:33	WG2142369
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	09/30/2023 16:33	WG2142369
1,2-Dibromoethane	U		0.126	1.00	1	09/30/2023 16:33	WG2142369
Dibromomethane	U		0.122	1.00	1	09/30/2023 16:33	WG2142369
1,2-Dichlorobenzene	U		0.107	1.00	1	09/30/2023 16:33	WG2142369
1,3-Dichlorobenzene	U		0.110	1.00	1	09/30/2023 16:33	WG2142369
1,4-Dichlorobenzene	U		0.120	1.00	1	09/30/2023 16:33	WG2142369
Dichlorodifluoromethane	U		0.374	5.00	1	09/30/2023 16:33	WG2142369
1,1-Dichloroethane	U		0.100	1.00	1	09/30/2023 16:33	WG2142369
1,2-Dichloroethane	U		0.0819	1.00	1	09/30/2023 16:33	WG2142369
1,1-Dichloroethene	U		0.188	1.00	1	09/30/2023 16:33	WG2142369
cis-1,2-Dichloroethene	3.29		0.126	1.00	1	09/30/2023 16:33	WG2142369
trans-1,2-Dichloroethene	U		0.149	1.00	1	09/30/2023 16:33	WG2142369
1,2-Dichloropropane	U		0.149	1.00	1	09/30/2023 16:33	WG2142369
1,1-Dichloropropene	U		0.142	1.00	1	09/30/2023 16:33	WG2142369
1,3-Dichloropropane	U		0.110	1.00	1	09/30/2023 16:33	WG2142369
cis-1,3-Dichloropropene	U		0.111	1.00	1	09/30/2023 16:33	WG2142369
trans-1,3-Dichloropropene	U		0.118	1.00	1	09/30/2023 16:33	WG2142369
2,2-Dichloropropane	U		0.161	1.00	1	09/30/2023 16:33	WG2142369
Di-isopropyl ether	U		0.105	1.00	1	09/30/2023 16:33	WG2142369
Ethylbenzene	U		0.137	1.00	1	09/30/2023 16:33	WG2142369
Hexachloro-1,3-butadiene	U		0.337	1.00	1	09/30/2023 16:33	WG2142369
Isopropylbenzene	U		0.105	1.00	1	09/30/2023 16:33	WG2142369
p-Isopropyltoluene	U		0.120	1.00	1	09/30/2023 16:33	WG2142369
2-Butanone (MEK)	U	C3	1.19	10.0	1	09/30/2023 16:33	WG2142369
Methylene Chloride	U		0.430	5.00	1	09/30/2023 16:33	WG2142369
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	09/30/2023 16:33	WG2142369
Methyl tert-butyl ether	U		0.101	1.00	1	09/30/2023 16:33	WG2142369
Naphthalene	U	J3	1.00	5.00	1	09/30/2023 16:33	WG2142369
n-Propylbenzene	U		0.0993	1.00	1	09/30/2023 16:33	WG2142369
Styrene	U		0.118	1.00	1	09/30/2023 16:33	WG2142369
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	09/30/2023 16:33	WG2142369
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	09/30/2023 16:33	WG2142369
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	09/30/2023 16:33	WG2142369
Tetrachloroethene	U		0.300	1.00	1	09/30/2023 16:33	WG2142369
Toluene	U		0.278	1.00	1	09/30/2023 16:33	WG2142369
1,2,3-Trichlorobenzene	U	J3	0.230	1.00	1	09/30/2023 16:33	WG2142369

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	U		0.481	1.00	1	09/30/2023 16:33	WG2142369
1,1,1-Trichloroethane	U		0.149	1.00	1	09/30/2023 16:33	WG2142369
1,1,2-Trichloroethane	U		0.158	1.00	1	09/30/2023 16:33	WG2142369
Trichloroethene	4.41		0.190	1.00	1	09/30/2023 16:33	WG2142369
Trichlorofluoromethane	U		0.160	5.00	1	09/30/2023 16:33	WG2142369
1,2,3-Trichloropropane	U		0.237	2.50	1	09/30/2023 16:33	WG2142369
1,2,4-Trimethylbenzene	U		0.322	1.00	1	09/30/2023 16:33	WG2142369
1,2,3-Trimethylbenzene	U		0.104	1.00	1	09/30/2023 16:33	WG2142369
1,3,5-Trimethylbenzene	U		0.104	1.00	1	09/30/2023 16:33	WG2142369
Vinyl chloride	0.306	<u>J</u>	0.234	1.00	1	09/30/2023 16:33	WG2142369
Xylenes, Total	U		0.174	3.00	1	09/30/2023 16:33	WG2142369
(S) Toluene-d8	107			80.0-120		09/30/2023 16:33	WG2142369
(S) 4-Bromofluorobenzene	101			77.0-126		09/30/2023 16:33	WG2142369
(S) 1,2-Dichloroethane-d4	110			70.0-130		09/30/2023 16:33	WG2142369

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	J3 J4	11.3	50.0	1	09/30/2023 16:53	WG2142369
Acrolein	U	C3	2.54	50.0	1	09/30/2023 16:53	WG2142369
Acrylonitrile	U		0.671	10.0	1	09/30/2023 16:53	WG2142369
Benzene	U		0.0941	1.00	1	09/30/2023 16:53	WG2142369
Bromobenzene	U		0.118	1.00	1	09/30/2023 16:53	WG2142369
Bromodichloromethane	U		0.136	1.00	1	09/30/2023 16:53	WG2142369
Bromoform	U	C3	0.129	1.00	1	09/30/2023 16:53	WG2142369
Bromomethane	U		0.605	5.00	1	09/30/2023 16:53	WG2142369
n-Butylbenzene	U		0.157	1.00	1	09/30/2023 16:53	WG2142369
sec-Butylbenzene	U		0.125	1.00	1	09/30/2023 16:53	WG2142369
tert-Butylbenzene	U		0.127	1.00	1	09/30/2023 16:53	WG2142369
Carbon disulfide	U		0.0962	1.00	1	09/30/2023 16:53	WG2142369
Carbon tetrachloride	U		0.128	1.00	1	09/30/2023 16:53	WG2142369
Chlorobenzene	U		0.116	1.00	1	09/30/2023 16:53	WG2142369
Chlorodibromomethane	U		0.140	1.00	1	09/30/2023 16:53	WG2142369
Chloroethane	U		0.192	5.00	1	09/30/2023 16:53	WG2142369
Chloroform	U		0.111	5.00	1	09/30/2023 16:53	WG2142369
Chloromethane	U		0.960	2.50	1	09/30/2023 16:53	WG2142369
2-Chlorotoluene	U		0.106	1.00	1	09/30/2023 16:53	WG2142369
4-Chlorotoluene	U		0.114	1.00	1	09/30/2023 16:53	WG2142369
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	09/30/2023 16:53	WG2142369
1,2-Dibromoethane	U		0.126	1.00	1	09/30/2023 16:53	WG2142369
Dibromomethane	U		0.122	1.00	1	09/30/2023 16:53	WG2142369
1,2-Dichlorobenzene	U		0.107	1.00	1	09/30/2023 16:53	WG2142369
1,3-Dichlorobenzene	U		0.110	1.00	1	09/30/2023 16:53	WG2142369
1,4-Dichlorobenzene	U		0.120	1.00	1	09/30/2023 16:53	WG2142369
Dichlorodifluoromethane	U		0.374	5.00	1	09/30/2023 16:53	WG2142369
1,1-Dichloroethane	U		0.100	1.00	1	09/30/2023 16:53	WG2142369
1,2-Dichloroethane	U		0.0819	1.00	1	09/30/2023 16:53	WG2142369
1,1-Dichloroethene	0.197	J	0.188	1.00	1	09/30/2023 16:53	WG2142369
cis-1,2-Dichloroethene	1.76		0.126	1.00	1	09/30/2023 16:53	WG2142369
trans-1,2-Dichloroethene	U		0.149	1.00	1	09/30/2023 16:53	WG2142369
1,2-Dichloropropane	U		0.149	1.00	1	09/30/2023 16:53	WG2142369
1,1-Dichloropropene	U		0.142	1.00	1	09/30/2023 16:53	WG2142369
1,3-Dichloropropane	U		0.110	1.00	1	09/30/2023 16:53	WG2142369
cis-1,3-Dichloropropene	U		0.111	1.00	1	09/30/2023 16:53	WG2142369
trans-1,3-Dichloropropene	U		0.118	1.00	1	09/30/2023 16:53	WG2142369
2,2-Dichloropropane	U		0.161	1.00	1	09/30/2023 16:53	WG2142369
Di-isopropyl ether	U		0.105	1.00	1	09/30/2023 16:53	WG2142369
Ethylbenzene	U		0.137	1.00	1	09/30/2023 16:53	WG2142369
Hexachloro-1,3-butadiene	U		0.337	1.00	1	09/30/2023 16:53	WG2142369
Isopropylbenzene	U		0.105	1.00	1	09/30/2023 16:53	WG2142369
p-Isopropyltoluene	U		0.120	1.00	1	09/30/2023 16:53	WG2142369
2-Butanone (MEK)	U	C3	1.19	10.0	1	09/30/2023 16:53	WG2142369
Methylene Chloride	U		0.430	5.00	1	09/30/2023 16:53	WG2142369
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	09/30/2023 16:53	WG2142369
Methyl tert-butyl ether	U		0.101	1.00	1	09/30/2023 16:53	WG2142369
Naphthalene	U	J3	1.00	5.00	1	09/30/2023 16:53	WG2142369
n-Propylbenzene	U		0.0993	1.00	1	09/30/2023 16:53	WG2142369
Styrene	U		0.118	1.00	1	09/30/2023 16:53	WG2142369
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	09/30/2023 16:53	WG2142369
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	09/30/2023 16:53	WG2142369
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	09/30/2023 16:53	WG2142369
Tetrachloroethene	U		0.300	1.00	1	09/30/2023 16:53	WG2142369
Toluene	U		0.278	1.00	1	09/30/2023 16:53	WG2142369
1,2,3-Trichlorobenzene	U	J3	0.230	1.00	1	09/30/2023 16:53	WG2142369

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	U		0.481	1.00	1	09/30/2023 16:53	WG2142369
1,1,1-Trichloroethane	U		0.149	1.00	1	09/30/2023 16:53	WG2142369
1,1,2-Trichloroethane	U		0.158	1.00	1	09/30/2023 16:53	WG2142369
Trichloroethene	2.06		0.190	1.00	1	09/30/2023 16:53	WG2142369
Trichlorofluoromethane	U		0.160	5.00	1	09/30/2023 16:53	WG2142369
1,2,3-Trichloropropane	U		0.237	2.50	1	09/30/2023 16:53	WG2142369
1,2,4-Trimethylbenzene	U		0.322	1.00	1	09/30/2023 16:53	WG2142369
1,2,3-Trimethylbenzene	U		0.104	1.00	1	09/30/2023 16:53	WG2142369
1,3,5-Trimethylbenzene	U		0.104	1.00	1	09/30/2023 16:53	WG2142369
Vinyl chloride	2.07		0.234	1.00	1	09/30/2023 16:53	WG2142369
Xylenes, Total	U		0.174	3.00	1	09/30/2023 16:53	WG2142369
(S) Toluene-d8	108			80.0-120		09/30/2023 16:53	WG2142369
(S) 4-Bromofluorobenzene	98.8			77.0-126		09/30/2023 16:53	WG2142369
(S) 1,2-Dichloroethane-d4	106			70.0-130		09/30/2023 16:53	WG2142369

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	J3 J4	11.3	50.0	1	09/30/2023 17:12	WG2142369
Acrolein	U	C3	2.54	50.0	1	09/30/2023 17:12	WG2142369
Acrylonitrile	U		0.671	10.0	1	09/30/2023 17:12	WG2142369
Benzene	U		0.0941	1.00	1	09/30/2023 17:12	WG2142369
Bromobenzene	U		0.118	1.00	1	09/30/2023 17:12	WG2142369
Bromodichloromethane	U		0.136	1.00	1	09/30/2023 17:12	WG2142369
Bromoform	U	C3	0.129	1.00	1	09/30/2023 17:12	WG2142369
Bromomethane	U		0.605	5.00	1	09/30/2023 17:12	WG2142369
n-Butylbenzene	U		0.157	1.00	1	09/30/2023 17:12	WG2142369
sec-Butylbenzene	U		0.125	1.00	1	09/30/2023 17:12	WG2142369
tert-Butylbenzene	U		0.127	1.00	1	09/30/2023 17:12	WG2142369
Carbon disulfide	U		0.0962	1.00	1	09/30/2023 17:12	WG2142369
Carbon tetrachloride	U		0.128	1.00	1	09/30/2023 17:12	WG2142369
Chlorobenzene	U		0.116	1.00	1	09/30/2023 17:12	WG2142369
Chlorodibromomethane	U		0.140	1.00	1	09/30/2023 17:12	WG2142369
Chloroethane	U		0.192	5.00	1	09/30/2023 17:12	WG2142369
Chloroform	U		0.111	5.00	1	09/30/2023 17:12	WG2142369
Chloromethane	U		0.960	2.50	1	09/30/2023 17:12	WG2142369
2-Chlorotoluene	U		0.106	1.00	1	09/30/2023 17:12	WG2142369
4-Chlorotoluene	U		0.114	1.00	1	09/30/2023 17:12	WG2142369
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	09/30/2023 17:12	WG2142369
1,2-Dibromoethane	U		0.126	1.00	1	09/30/2023 17:12	WG2142369
Dibromomethane	U		0.122	1.00	1	09/30/2023 17:12	WG2142369
1,2-Dichlorobenzene	U		0.107	1.00	1	09/30/2023 17:12	WG2142369
1,3-Dichlorobenzene	U		0.110	1.00	1	09/30/2023 17:12	WG2142369
1,4-Dichlorobenzene	U		0.120	1.00	1	09/30/2023 17:12	WG2142369
Dichlorodifluoromethane	U		0.374	5.00	1	09/30/2023 17:12	WG2142369
1,1-Dichloroethane	U		0.100	1.00	1	09/30/2023 17:12	WG2142369
1,2-Dichloroethane	U		0.0819	1.00	1	09/30/2023 17:12	WG2142369
1,1-Dichloroethene	U		0.188	1.00	1	09/30/2023 17:12	WG2142369
cis-1,2-Dichloroethene	U		0.126	1.00	1	09/30/2023 17:12	WG2142369
trans-1,2-Dichloroethene	U		0.149	1.00	1	09/30/2023 17:12	WG2142369
1,2-Dichloropropane	U		0.149	1.00	1	09/30/2023 17:12	WG2142369
1,1-Dichloropropene	U		0.142	1.00	1	09/30/2023 17:12	WG2142369
1,3-Dichloropropane	U		0.110	1.00	1	09/30/2023 17:12	WG2142369
cis-1,3-Dichloropropene	U		0.111	1.00	1	09/30/2023 17:12	WG2142369
trans-1,3-Dichloropropene	U		0.118	1.00	1	09/30/2023 17:12	WG2142369
2,2-Dichloropropane	U		0.161	1.00	1	09/30/2023 17:12	WG2142369
Di-isopropyl ether	U		0.105	1.00	1	09/30/2023 17:12	WG2142369
Ethylbenzene	U		0.137	1.00	1	09/30/2023 17:12	WG2142369
Hexachloro-1,3-butadiene	U		0.337	1.00	1	09/30/2023 17:12	WG2142369
Isopropylbenzene	U		0.105	1.00	1	09/30/2023 17:12	WG2142369
p-Isopropyltoluene	U		0.120	1.00	1	09/30/2023 17:12	WG2142369
2-Butanone (MEK)	U	C3	1.19	10.0	1	09/30/2023 17:12	WG2142369
Methylene Chloride	U		0.430	5.00	1	09/30/2023 17:12	WG2142369
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	09/30/2023 17:12	WG2142369
Methyl tert-butyl ether	U		0.101	1.00	1	09/30/2023 17:12	WG2142369
Naphthalene	U	J3	1.00	5.00	1	09/30/2023 17:12	WG2142369
n-Propylbenzene	U		0.0993	1.00	1	09/30/2023 17:12	WG2142369
Styrene	U		0.118	1.00	1	09/30/2023 17:12	WG2142369
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	09/30/2023 17:12	WG2142369
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	09/30/2023 17:12	WG2142369
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	09/30/2023 17:12	WG2142369
Tetrachloroethene	U		0.300	1.00	1	09/30/2023 17:12	WG2142369
Toluene	U		0.278	1.00	1	09/30/2023 17:12	WG2142369
1,2,3-Trichlorobenzene	U	J3	0.230	1.00	1	09/30/2023 17:12	WG2142369

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	U		0.481	1.00	1	09/30/2023 17:12	WG2142369
1,1,1-Trichloroethane	U		0.149	1.00	1	09/30/2023 17:12	WG2142369
1,1,2-Trichloroethane	U		0.158	1.00	1	09/30/2023 17:12	WG2142369
Trichloroethene	U		0.190	1.00	1	09/30/2023 17:12	WG2142369
Trichlorofluoromethane	U		0.160	5.00	1	09/30/2023 17:12	WG2142369
1,2,3-Trichloropropane	U		0.237	2.50	1	09/30/2023 17:12	WG2142369
1,2,4-Trimethylbenzene	U		0.322	1.00	1	09/30/2023 17:12	WG2142369
1,2,3-Trimethylbenzene	U		0.104	1.00	1	09/30/2023 17:12	WG2142369
1,3,5-Trimethylbenzene	U		0.104	1.00	1	09/30/2023 17:12	WG2142369
Vinyl chloride	U		0.234	1.00	1	09/30/2023 17:12	WG2142369
Xylenes, Total	U		0.174	3.00	1	09/30/2023 17:12	WG2142369
(S) Toluene-d8	101			80.0-120		09/30/2023 17:12	WG2142369
(S) 4-Bromofluorobenzene	107			77.0-126		09/30/2023 17:12	WG2142369
(S) 1,2-Dichloroethane-d4	124			70.0-130		09/30/2023 17:12	WG2142369

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	J3 J4	11.3	50.0	1	09/30/2023 17:31	WG2142369
Acrolein	U	C3	2.54	50.0	1	09/30/2023 17:31	WG2142369
Acrylonitrile	U		0.671	10.0	1	09/30/2023 17:31	WG2142369
Benzene	U		0.0941	1.00	1	09/30/2023 17:31	WG2142369
Bromobenzene	U		0.118	1.00	1	09/30/2023 17:31	WG2142369
Bromodichloromethane	U		0.136	1.00	1	09/30/2023 17:31	WG2142369
Bromoform	U	C3	0.129	1.00	1	09/30/2023 17:31	WG2142369
Bromomethane	U		0.605	5.00	1	09/30/2023 17:31	WG2142369
n-Butylbenzene	U		0.157	1.00	1	09/30/2023 17:31	WG2142369
sec-Butylbenzene	U		0.125	1.00	1	09/30/2023 17:31	WG2142369
tert-Butylbenzene	U		0.127	1.00	1	09/30/2023 17:31	WG2142369
Carbon disulfide	U		0.0962	1.00	1	09/30/2023 17:31	WG2142369
Carbon tetrachloride	U		0.128	1.00	1	09/30/2023 17:31	WG2142369
Chlorobenzene	U		0.116	1.00	1	09/30/2023 17:31	WG2142369
Chlorodibromomethane	U		0.140	1.00	1	09/30/2023 17:31	WG2142369
Chloroethane	U		0.192	5.00	1	09/30/2023 17:31	WG2142369
Chloroform	U		0.111	5.00	1	09/30/2023 17:31	WG2142369
Chloromethane	U		0.960	2.50	1	09/30/2023 17:31	WG2142369
2-Chlorotoluene	U		0.106	1.00	1	09/30/2023 17:31	WG2142369
4-Chlorotoluene	U		0.114	1.00	1	09/30/2023 17:31	WG2142369
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	09/30/2023 17:31	WG2142369
1,2-Dibromoethane	U		0.126	1.00	1	09/30/2023 17:31	WG2142369
Dibromomethane	U		0.122	1.00	1	09/30/2023 17:31	WG2142369
1,2-Dichlorobenzene	U		0.107	1.00	1	09/30/2023 17:31	WG2142369
1,3-Dichlorobenzene	U		0.110	1.00	1	09/30/2023 17:31	WG2142369
1,4-Dichlorobenzene	U		0.120	1.00	1	09/30/2023 17:31	WG2142369
Dichlorodifluoromethane	U		0.374	5.00	1	09/30/2023 17:31	WG2142369
1,1-Dichloroethane	U		0.100	1.00	1	09/30/2023 17:31	WG2142369
1,2-Dichloroethane	U		0.0819	1.00	1	09/30/2023 17:31	WG2142369
1,1-Dichloroethene	U		0.188	1.00	1	09/30/2023 17:31	WG2142369
cis-1,2-Dichloroethene	U		0.126	1.00	1	09/30/2023 17:31	WG2142369
trans-1,2-Dichloroethene	U		0.149	1.00	1	09/30/2023 17:31	WG2142369
1,2-Dichloropropane	U		0.149	1.00	1	09/30/2023 17:31	WG2142369
1,1-Dichloropropene	U		0.142	1.00	1	09/30/2023 17:31	WG2142369
1,3-Dichloropropane	U		0.110	1.00	1	09/30/2023 17:31	WG2142369
cis-1,3-Dichloropropene	U		0.111	1.00	1	09/30/2023 17:31	WG2142369
trans-1,3-Dichloropropene	U		0.118	1.00	1	09/30/2023 17:31	WG2142369
2,2-Dichloropropane	U		0.161	1.00	1	09/30/2023 17:31	WG2142369
Di-isopropyl ether	U		0.105	1.00	1	09/30/2023 17:31	WG2142369
Ethylbenzene	U		0.137	1.00	1	09/30/2023 17:31	WG2142369
Hexachloro-1,3-butadiene	U		0.337	1.00	1	09/30/2023 17:31	WG2142369
Isopropylbenzene	U		0.105	1.00	1	09/30/2023 17:31	WG2142369
p-Isopropyltoluene	U		0.120	1.00	1	09/30/2023 17:31	WG2142369
2-Butanone (MEK)	U	C3	1.19	10.0	1	09/30/2023 17:31	WG2142369
Methylene Chloride	U		0.430	5.00	1	09/30/2023 17:31	WG2142369
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	09/30/2023 17:31	WG2142369
Methyl tert-butyl ether	U		0.101	1.00	1	09/30/2023 17:31	WG2142369
Naphthalene	U	J3	1.00	5.00	1	09/30/2023 17:31	WG2142369
n-Propylbenzene	U		0.0993	1.00	1	09/30/2023 17:31	WG2142369
Styrene	U		0.118	1.00	1	09/30/2023 17:31	WG2142369
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	09/30/2023 17:31	WG2142369
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	09/30/2023 17:31	WG2142369
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	09/30/2023 17:31	WG2142369
Tetrachloroethene	U		0.300	1.00	1	09/30/2023 17:31	WG2142369
Toluene	U		0.278	1.00	1	09/30/2023 17:31	WG2142369
1,2,3-Trichlorobenzene	U	J3	0.230	1.00	1	09/30/2023 17:31	WG2142369

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	U		0.481	1.00	1	09/30/2023 17:31	WG2142369
1,1,1-Trichloroethane	U		0.149	1.00	1	09/30/2023 17:31	WG2142369
1,1,2-Trichloroethane	U		0.158	1.00	1	09/30/2023 17:31	WG2142369
Trichloroethene	U		0.190	1.00	1	09/30/2023 17:31	WG2142369
Trichlorofluoromethane	U		0.160	5.00	1	09/30/2023 17:31	WG2142369
1,2,3-Trichloropropane	U		0.237	2.50	1	09/30/2023 17:31	WG2142369
1,2,4-Trimethylbenzene	U		0.322	1.00	1	09/30/2023 17:31	WG2142369
1,2,3-Trimethylbenzene	U		0.104	1.00	1	09/30/2023 17:31	WG2142369
1,3,5-Trimethylbenzene	U		0.104	1.00	1	09/30/2023 17:31	WG2142369
Vinyl chloride	U		0.234	1.00	1	09/30/2023 17:31	WG2142369
Xylenes, Total	U		0.174	3.00	1	09/30/2023 17:31	WG2142369
(S) Toluene-d8	103			80.0-120		09/30/2023 17:31	WG2142369
(S) 4-Bromofluorobenzene	103			77.0-126		09/30/2023 17:31	WG2142369
(S) 1,2-Dichloroethane-d4	118			70.0-130		09/30/2023 17:31	WG2142369

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U	J3 J4	11.3	50.0	1	09/30/2023 17:50	WG2142369
Acrolein	U	C3	2.54	50.0	1	09/30/2023 17:50	WG2142369
Acrylonitrile	U		0.671	10.0	1	09/30/2023 17:50	WG2142369
Benzene	U		0.0941	1.00	1	09/30/2023 17:50	WG2142369
Bromobenzene	U		0.118	1.00	1	09/30/2023 17:50	WG2142369
Bromodichloromethane	U		0.136	1.00	1	09/30/2023 17:50	WG2142369
Bromoform	U	C3	0.129	1.00	1	09/30/2023 17:50	WG2142369
Bromomethane	U		0.605	5.00	1	09/30/2023 17:50	WG2142369
n-Butylbenzene	U		0.157	1.00	1	09/30/2023 17:50	WG2142369
sec-Butylbenzene	U		0.125	1.00	1	09/30/2023 17:50	WG2142369
tert-Butylbenzene	U		0.127	1.00	1	09/30/2023 17:50	WG2142369
Carbon disulfide	U		0.0962	1.00	1	09/30/2023 17:50	WG2142369
Carbon tetrachloride	U		0.128	1.00	1	09/30/2023 17:50	WG2142369
Chlorobenzene	U		0.116	1.00	1	09/30/2023 17:50	WG2142369
Chlorodibromomethane	U		0.140	1.00	1	09/30/2023 17:50	WG2142369
Chloroethane	U		0.192	5.00	1	09/30/2023 17:50	WG2142369
Chloroform	U		0.111	5.00	1	09/30/2023 17:50	WG2142369
Chloromethane	U		0.960	2.50	1	09/30/2023 17:50	WG2142369
2-Chlorotoluene	U		0.106	1.00	1	09/30/2023 17:50	WG2142369
4-Chlorotoluene	U		0.114	1.00	1	09/30/2023 17:50	WG2142369
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	09/30/2023 17:50	WG2142369
1,2-Dibromoethane	U		0.126	1.00	1	09/30/2023 17:50	WG2142369
Dibromomethane	U		0.122	1.00	1	09/30/2023 17:50	WG2142369
1,2-Dichlorobenzene	U		0.107	1.00	1	09/30/2023 17:50	WG2142369
1,3-Dichlorobenzene	U		0.110	1.00	1	09/30/2023 17:50	WG2142369
1,4-Dichlorobenzene	U		0.120	1.00	1	09/30/2023 17:50	WG2142369
Dichlorodifluoromethane	U		0.374	5.00	1	09/30/2023 17:50	WG2142369
1,1-Dichloroethane	U		0.100	1.00	1	09/30/2023 17:50	WG2142369
1,2-Dichloroethane	U		0.0819	1.00	1	09/30/2023 17:50	WG2142369
1,1-Dichloroethene	U		0.188	1.00	1	09/30/2023 17:50	WG2142369
cis-1,2-Dichloroethene	0.661	J	0.126	1.00	1	09/30/2023 17:50	WG2142369
trans-1,2-Dichloroethene	U		0.149	1.00	1	09/30/2023 17:50	WG2142369
1,2-Dichloropropane	U		0.149	1.00	1	09/30/2023 17:50	WG2142369
1,1-Dichloropropene	U		0.142	1.00	1	09/30/2023 17:50	WG2142369
1,3-Dichloropropane	U		0.110	1.00	1	09/30/2023 17:50	WG2142369
cis-1,3-Dichloropropene	U		0.111	1.00	1	09/30/2023 17:50	WG2142369
trans-1,3-Dichloropropene	U		0.118	1.00	1	09/30/2023 17:50	WG2142369
2,2-Dichloropropane	U		0.161	1.00	1	09/30/2023 17:50	WG2142369
Di-isopropyl ether	U		0.105	1.00	1	09/30/2023 17:50	WG2142369
Ethylbenzene	U		0.137	1.00	1	09/30/2023 17:50	WG2142369
Hexachloro-1,3-butadiene	U		0.337	1.00	1	09/30/2023 17:50	WG2142369
Isopropylbenzene	U		0.105	1.00	1	09/30/2023 17:50	WG2142369
p-Isopropyltoluene	U		0.120	1.00	1	09/30/2023 17:50	WG2142369
2-Butanone (MEK)	U	C3	1.19	10.0	1	09/30/2023 17:50	WG2142369
Methylene Chloride	U		0.430	5.00	1	09/30/2023 17:50	WG2142369
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	09/30/2023 17:50	WG2142369
Methyl tert-butyl ether	U		0.101	1.00	1	09/30/2023 17:50	WG2142369
Naphthalene	U	J3	1.00	5.00	1	09/30/2023 17:50	WG2142369
n-Propylbenzene	U		0.0993	1.00	1	09/30/2023 17:50	WG2142369
Styrene	U		0.118	1.00	1	09/30/2023 17:50	WG2142369
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	09/30/2023 17:50	WG2142369
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	09/30/2023 17:50	WG2142369
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	09/30/2023 17:50	WG2142369
Tetrachloroethene	U		0.300	1.00	1	09/30/2023 17:50	WG2142369
Toluene	U		0.278	1.00	1	09/30/2023 17:50	WG2142369
1,2,3-Trichlorobenzene	U	J3	0.230	1.00	1	09/30/2023 17:50	WG2142369

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	U		0.481	1.00	1	09/30/2023 17:50	WG2142369
1,1,1-Trichloroethane	U		0.149	1.00	1	09/30/2023 17:50	WG2142369
1,1,2-Trichloroethane	U		0.158	1.00	1	09/30/2023 17:50	WG2142369
Trichloroethene	0.691	J	0.190	1.00	1	09/30/2023 17:50	WG2142369
Trichlorofluoromethane	U		0.160	5.00	1	09/30/2023 17:50	WG2142369
1,2,3-Trichloropropane	U		0.237	2.50	1	09/30/2023 17:50	WG2142369
1,2,4-Trimethylbenzene	U		0.322	1.00	1	09/30/2023 17:50	WG2142369
1,2,3-Trimethylbenzene	U		0.104	1.00	1	09/30/2023 17:50	WG2142369
1,3,5-Trimethylbenzene	U		0.104	1.00	1	09/30/2023 17:50	WG2142369
Vinyl chloride	0.681	J	0.234	1.00	1	09/30/2023 17:50	WG2142369
Xylenes, Total	U		0.174	3.00	1	09/30/2023 17:50	WG2142369
(S) Toluene-d8	103			80.0-120		09/30/2023 17:50	WG2142369
(S) 4-Bromofluorobenzene	101			77.0-126		09/30/2023 17:50	WG2142369
(S) 1,2-Dichloroethane-d4	116			70.0-130		09/30/2023 17:50	WG2142369

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	J3 J4	11.3	50.0	1	09/30/2023 18:10	WG2142369
Acrolein	U	C3	2.54	50.0	1	09/30/2023 18:10	WG2142369
Acrylonitrile	U		0.671	10.0	1	09/30/2023 18:10	WG2142369
Benzene	U		0.0941	1.00	1	09/30/2023 18:10	WG2142369
Bromobenzene	U		0.118	1.00	1	09/30/2023 18:10	WG2142369
Bromodichloromethane	U		0.136	1.00	1	09/30/2023 18:10	WG2142369
Bromoform	U	C3	0.129	1.00	1	09/30/2023 18:10	WG2142369
Bromomethane	U		0.605	5.00	1	09/30/2023 18:10	WG2142369
n-Butylbenzene	U		0.157	1.00	1	09/30/2023 18:10	WG2142369
sec-Butylbenzene	U		0.125	1.00	1	09/30/2023 18:10	WG2142369
tert-Butylbenzene	U		0.127	1.00	1	09/30/2023 18:10	WG2142369
Carbon disulfide	U		0.0962	1.00	1	09/30/2023 18:10	WG2142369
Carbon tetrachloride	U		0.128	1.00	1	09/30/2023 18:10	WG2142369
Chlorobenzene	U		0.116	1.00	1	09/30/2023 18:10	WG2142369
Chlorodibromomethane	U		0.140	1.00	1	09/30/2023 18:10	WG2142369
Chloroethane	U		0.192	5.00	1	09/30/2023 18:10	WG2142369
Chloroform	U		0.111	5.00	1	09/30/2023 18:10	WG2142369
Chloromethane	U		0.960	2.50	1	09/30/2023 18:10	WG2142369
2-Chlorotoluene	U		0.106	1.00	1	09/30/2023 18:10	WG2142369
4-Chlorotoluene	U		0.114	1.00	1	09/30/2023 18:10	WG2142369
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	09/30/2023 18:10	WG2142369
1,2-Dibromoethane	U		0.126	1.00	1	09/30/2023 18:10	WG2142369
Dibromomethane	U		0.122	1.00	1	09/30/2023 18:10	WG2142369
1,2-Dichlorobenzene	U		0.107	1.00	1	09/30/2023 18:10	WG2142369
1,3-Dichlorobenzene	U		0.110	1.00	1	09/30/2023 18:10	WG2142369
1,4-Dichlorobenzene	U		0.120	1.00	1	09/30/2023 18:10	WG2142369
Dichlorodifluoromethane	U		0.374	5.00	1	09/30/2023 18:10	WG2142369
1,1-Dichloroethane	U		0.100	1.00	1	09/30/2023 18:10	WG2142369
1,2-Dichloroethane	U		0.0819	1.00	1	09/30/2023 18:10	WG2142369
1,1-Dichloroethene	U		0.188	1.00	1	09/30/2023 18:10	WG2142369
cis-1,2-Dichloroethene	8.48		0.126	1.00	1	09/30/2023 18:10	WG2142369
trans-1,2-Dichloroethene	1.32		0.149	1.00	1	09/30/2023 18:10	WG2142369
1,2-Dichloropropane	U		0.149	1.00	1	09/30/2023 18:10	WG2142369
1,1-Dichloropropene	U		0.142	1.00	1	09/30/2023 18:10	WG2142369
1,3-Dichloropropane	U		0.110	1.00	1	09/30/2023 18:10	WG2142369
cis-1,3-Dichloropropene	U		0.111	1.00	1	09/30/2023 18:10	WG2142369
trans-1,3-Dichloropropene	U		0.118	1.00	1	09/30/2023 18:10	WG2142369
2,2-Dichloropropane	U		0.161	1.00	1	09/30/2023 18:10	WG2142369
Di-isopropyl ether	U		0.105	1.00	1	09/30/2023 18:10	WG2142369
Ethylbenzene	U		0.137	1.00	1	09/30/2023 18:10	WG2142369
Hexachloro-1,3-butadiene	U		0.337	1.00	1	09/30/2023 18:10	WG2142369
Isopropylbenzene	U		0.105	1.00	1	09/30/2023 18:10	WG2142369
p-Isopropyltoluene	U		0.120	1.00	1	09/30/2023 18:10	WG2142369
2-Butanone (MEK)	U	C3	1.19	10.0	1	09/30/2023 18:10	WG2142369
Methylene Chloride	U		0.430	5.00	1	09/30/2023 18:10	WG2142369
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	09/30/2023 18:10	WG2142369
Methyl tert-butyl ether	U		0.101	1.00	1	09/30/2023 18:10	WG2142369
Naphthalene	U	J3	1.00	5.00	1	09/30/2023 18:10	WG2142369
n-Propylbenzene	U		0.0993	1.00	1	09/30/2023 18:10	WG2142369
Styrene	U		0.118	1.00	1	09/30/2023 18:10	WG2142369
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	09/30/2023 18:10	WG2142369
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	09/30/2023 18:10	WG2142369
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	09/30/2023 18:10	WG2142369
Tetrachloroethene	U		0.300	1.00	1	09/30/2023 18:10	WG2142369
Toluene	U		0.278	1.00	1	09/30/2023 18:10	WG2142369
1,2,3-Trichlorobenzene	U	J3	0.230	1.00	1	09/30/2023 18:10	WG2142369

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

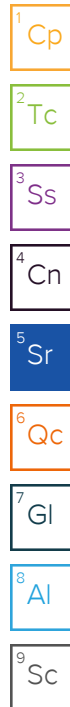
Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	U		0.481	1.00	1	09/30/2023 18:10	WG2142369
1,1,1-Trichloroethane	U		0.149	1.00	1	09/30/2023 18:10	WG2142369
1,1,2-Trichloroethane	U		0.158	1.00	1	09/30/2023 18:10	WG2142369
Trichloroethene	0.616	J	0.190	1.00	1	09/30/2023 18:10	WG2142369
Trichlorofluoromethane	U		0.160	5.00	1	09/30/2023 18:10	WG2142369
1,2,3-Trichloropropane	U		0.237	2.50	1	09/30/2023 18:10	WG2142369
1,2,4-Trimethylbenzene	U		0.322	1.00	1	09/30/2023 18:10	WG2142369
1,2,3-Trimethylbenzene	U		0.104	1.00	1	09/30/2023 18:10	WG2142369
1,3,5-Trimethylbenzene	U		0.104	1.00	1	09/30/2023 18:10	WG2142369
Vinyl chloride	U		0.234	1.00	1	09/30/2023 18:10	WG2142369
Xylenes, Total	U		0.174	3.00	1	09/30/2023 18:10	WG2142369
(S) Toluene-d8	104			80.0-120		09/30/2023 18:10	WG2142369
(S) 4-Bromofluorobenzene	104			77.0-126		09/30/2023 18:10	WG2142369
(S) 1,2-Dichloroethane-d4	120			70.0-130		09/30/2023 18:10	WG2142369

1
Cp2
Tc3
Ss4
Cn5
Sr6
Qc7
Gl8
Al9
Sc

Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	J3 J4	11.3	50.0	1	09/30/2023 18:29	WG2142369
Acrolein	U	C3	2.54	50.0	1	09/30/2023 18:29	WG2142369
Acrylonitrile	U		0.671	10.0	1	09/30/2023 18:29	WG2142369
Benzene	0.0960	J	0.0941	1.00	1	09/30/2023 18:29	WG2142369
Bromobenzene	U		0.118	1.00	1	09/30/2023 18:29	WG2142369
Bromodichloromethane	U		0.136	1.00	1	09/30/2023 18:29	WG2142369
Bromoform	U	C3	0.129	1.00	1	09/30/2023 18:29	WG2142369
Bromomethane	U		0.605	5.00	1	09/30/2023 18:29	WG2142369
n-Butylbenzene	U		0.157	1.00	1	09/30/2023 18:29	WG2142369
sec-Butylbenzene	U		0.125	1.00	1	09/30/2023 18:29	WG2142369
tert-Butylbenzene	U		0.127	1.00	1	09/30/2023 18:29	WG2142369
Carbon disulfide	U		0.0962	1.00	1	09/30/2023 18:29	WG2142369
Carbon tetrachloride	U		0.128	1.00	1	09/30/2023 18:29	WG2142369
Chlorobenzene	U		0.116	1.00	1	09/30/2023 18:29	WG2142369
Chlorodibromomethane	U		0.140	1.00	1	09/30/2023 18:29	WG2142369
Chloroethane	U		0.192	5.00	1	09/30/2023 18:29	WG2142369
Chloroform	U		0.111	5.00	1	09/30/2023 18:29	WG2142369
Chloromethane	U		0.960	2.50	1	09/30/2023 18:29	WG2142369
2-Chlorotoluene	U		0.106	1.00	1	09/30/2023 18:29	WG2142369
4-Chlorotoluene	U		0.114	1.00	1	09/30/2023 18:29	WG2142369
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	09/30/2023 18:29	WG2142369
1,2-Dibromoethane	U		0.126	1.00	1	09/30/2023 18:29	WG2142369
Dibromomethane	U		0.122	1.00	1	09/30/2023 18:29	WG2142369
1,2-Dichlorobenzene	U		0.107	1.00	1	09/30/2023 18:29	WG2142369
1,3-Dichlorobenzene	U		0.110	1.00	1	09/30/2023 18:29	WG2142369
1,4-Dichlorobenzene	U		0.120	1.00	1	09/30/2023 18:29	WG2142369
Dichlorodifluoromethane	U		0.374	5.00	1	09/30/2023 18:29	WG2142369
1,1-Dichloroethane	U		0.100	1.00	1	09/30/2023 18:29	WG2142369
1,2-Dichloroethane	U		0.0819	1.00	1	09/30/2023 18:29	WG2142369
1,1-Dichloroethene	U		0.188	1.00	1	09/30/2023 18:29	WG2142369
cis-1,2-Dichloroethene	0.351	J	0.126	1.00	1	09/30/2023 18:29	WG2142369
trans-1,2-Dichloroethene	U		0.149	1.00	1	09/30/2023 18:29	WG2142369
1,2-Dichloropropane	U		0.149	1.00	1	09/30/2023 18:29	WG2142369
1,1-Dichloropropene	U		0.142	1.00	1	09/30/2023 18:29	WG2142369
1,3-Dichloropropane	U		0.110	1.00	1	09/30/2023 18:29	WG2142369
cis-1,3-Dichloropropene	U		0.111	1.00	1	09/30/2023 18:29	WG2142369
trans-1,3-Dichloropropene	U		0.118	1.00	1	09/30/2023 18:29	WG2142369
2,2-Dichloropropane	U		0.161	1.00	1	09/30/2023 18:29	WG2142369
Di-isopropyl ether	U		0.105	1.00	1	09/30/2023 18:29	WG2142369
Ethylbenzene	U		0.137	1.00	1	09/30/2023 18:29	WG2142369
Hexachloro-1,3-butadiene	U		0.337	1.00	1	09/30/2023 18:29	WG2142369
Isopropylbenzene	U		0.105	1.00	1	09/30/2023 18:29	WG2142369
p-Isopropyltoluene	U		0.120	1.00	1	09/30/2023 18:29	WG2142369
2-Butanone (MEK)	U	C3	1.19	10.0	1	09/30/2023 18:29	WG2142369
Methylene Chloride	U		0.430	5.00	1	09/30/2023 18:29	WG2142369
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	09/30/2023 18:29	WG2142369
Methyl tert-butyl ether	U		0.101	1.00	1	09/30/2023 18:29	WG2142369
Naphthalene	U	J3	1.00	5.00	1	09/30/2023 18:29	WG2142369
n-Propylbenzene	U		0.0993	1.00	1	09/30/2023 18:29	WG2142369
Styrene	U		0.118	1.00	1	09/30/2023 18:29	WG2142369
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	09/30/2023 18:29	WG2142369
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	09/30/2023 18:29	WG2142369
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	09/30/2023 18:29	WG2142369
Tetrachloroethene	U		0.300	1.00	1	09/30/2023 18:29	WG2142369
Toluene	U		0.278	1.00	1	09/30/2023 18:29	WG2142369
1,2,3-Trichlorobenzene	U	J3	0.230	1.00	1	09/30/2023 18:29	WG2142369



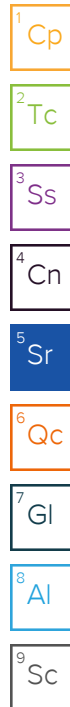
Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	U		0.481	1.00	1	09/30/2023 18:29	WG2142369
1,1,1-Trichloroethane	U		0.149	1.00	1	09/30/2023 18:29	WG2142369
1,1,2-Trichloroethane	U		0.158	1.00	1	09/30/2023 18:29	WG2142369
Trichloroethene	U		0.190	1.00	1	09/30/2023 18:29	WG2142369
Trichlorofluoromethane	U		0.160	5.00	1	09/30/2023 18:29	WG2142369
1,2,3-Trichloropropane	U		0.237	2.50	1	09/30/2023 18:29	WG2142369
1,2,4-Trimethylbenzene	U		0.322	1.00	1	09/30/2023 18:29	WG2142369
1,2,3-Trimethylbenzene	U		0.104	1.00	1	09/30/2023 18:29	WG2142369
1,3,5-Trimethylbenzene	U		0.104	1.00	1	09/30/2023 18:29	WG2142369
Vinyl chloride	0.491	<u>J</u>	0.234	1.00	1	09/30/2023 18:29	WG2142369
Xylenes, Total	U		0.174	3.00	1	09/30/2023 18:29	WG2142369
(S) Toluene-d8	105			80.0-120		09/30/2023 18:29	WG2142369
(S) 4-Bromofluorobenzene	104			77.0-126		09/30/2023 18:29	WG2142369
(S) 1,2-Dichloroethane-d4	119			70.0-130		09/30/2023 18:29	WG2142369

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	J3 J4	11.3	50.0	1	09/30/2023 18:48	WG2142369
Acrolein	U	C3	2.54	50.0	1	09/30/2023 18:48	WG2142369
Acrylonitrile	U		0.671	10.0	1	09/30/2023 18:48	WG2142369
Benzene	U		0.0941	1.00	1	09/30/2023 18:48	WG2142369
Bromobenzene	U		0.118	1.00	1	09/30/2023 18:48	WG2142369
Bromodichloromethane	U		0.136	1.00	1	09/30/2023 18:48	WG2142369
Bromoform	U	C3	0.129	1.00	1	09/30/2023 18:48	WG2142369
Bromomethane	U		0.605	5.00	1	09/30/2023 18:48	WG2142369
n-Butylbenzene	U		0.157	1.00	1	09/30/2023 18:48	WG2142369
sec-Butylbenzene	U		0.125	1.00	1	09/30/2023 18:48	WG2142369
tert-Butylbenzene	U		0.127	1.00	1	09/30/2023 18:48	WG2142369
Carbon disulfide	U		0.0962	1.00	1	09/30/2023 18:48	WG2142369
Carbon tetrachloride	U		0.128	1.00	1	09/30/2023 18:48	WG2142369
Chlorobenzene	U		0.116	1.00	1	09/30/2023 18:48	WG2142369
Chlorodibromomethane	U		0.140	1.00	1	09/30/2023 18:48	WG2142369
Chloroethane	U		0.192	5.00	1	09/30/2023 18:48	WG2142369
Chloroform	U		0.111	5.00	1	09/30/2023 18:48	WG2142369
Chloromethane	U		0.960	2.50	1	09/30/2023 18:48	WG2142369
2-Chlorotoluene	U		0.106	1.00	1	09/30/2023 18:48	WG2142369
4-Chlorotoluene	U		0.114	1.00	1	09/30/2023 18:48	WG2142369
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	09/30/2023 18:48	WG2142369
1,2-Dibromoethane	U		0.126	1.00	1	09/30/2023 18:48	WG2142369
Dibromomethane	U		0.122	1.00	1	09/30/2023 18:48	WG2142369
1,2-Dichlorobenzene	U		0.107	1.00	1	09/30/2023 18:48	WG2142369
1,3-Dichlorobenzene	U		0.110	1.00	1	09/30/2023 18:48	WG2142369
1,4-Dichlorobenzene	U		0.120	1.00	1	09/30/2023 18:48	WG2142369
Dichlorodifluoromethane	U		0.374	5.00	1	09/30/2023 18:48	WG2142369
1,1-Dichloroethane	U		0.100	1.00	1	09/30/2023 18:48	WG2142369
1,2-Dichloroethane	U		0.0819	1.00	1	09/30/2023 18:48	WG2142369
1,1-Dichloroethene	U		0.188	1.00	1	09/30/2023 18:48	WG2142369
cis-1,2-Dichloroethene	0.256	J	0.126	1.00	1	09/30/2023 18:48	WG2142369
trans-1,2-Dichloroethene	U		0.149	1.00	1	09/30/2023 18:48	WG2142369
1,2-Dichloropropane	U		0.149	1.00	1	09/30/2023 18:48	WG2142369
1,1-Dichloropropene	U		0.142	1.00	1	09/30/2023 18:48	WG2142369
1,3-Dichloropropane	U		0.110	1.00	1	09/30/2023 18:48	WG2142369
cis-1,3-Dichloropropene	U		0.111	1.00	1	09/30/2023 18:48	WG2142369
trans-1,3-Dichloropropene	U		0.118	1.00	1	09/30/2023 18:48	WG2142369
2,2-Dichloropropane	U		0.161	1.00	1	09/30/2023 18:48	WG2142369
Di-isopropyl ether	U		0.105	1.00	1	09/30/2023 18:48	WG2142369
Ethylbenzene	U		0.137	1.00	1	09/30/2023 18:48	WG2142369
Hexachloro-1,3-butadiene	U		0.337	1.00	1	09/30/2023 18:48	WG2142369
Isopropylbenzene	U		0.105	1.00	1	09/30/2023 18:48	WG2142369
p-Isopropyltoluene	U		0.120	1.00	1	09/30/2023 18:48	WG2142369
2-Butanone (MEK)	U	C3	1.19	10.0	1	09/30/2023 18:48	WG2142369
Methylene Chloride	U		0.430	5.00	1	09/30/2023 18:48	WG2142369
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	09/30/2023 18:48	WG2142369
Methyl tert-butyl ether	U		0.101	1.00	1	09/30/2023 18:48	WG2142369
Naphthalene	U	J3	1.00	5.00	1	09/30/2023 18:48	WG2142369
n-Propylbenzene	U		0.0993	1.00	1	09/30/2023 18:48	WG2142369
Styrene	U		0.118	1.00	1	09/30/2023 18:48	WG2142369
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	09/30/2023 18:48	WG2142369
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	09/30/2023 18:48	WG2142369
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	09/30/2023 18:48	WG2142369
Tetrachloroethene	U		0.300	1.00	1	09/30/2023 18:48	WG2142369
Toluene	U		0.278	1.00	1	09/30/2023 18:48	WG2142369
1,2,3-Trichlorobenzene	U	J3	0.230	1.00	1	09/30/2023 18:48	WG2142369



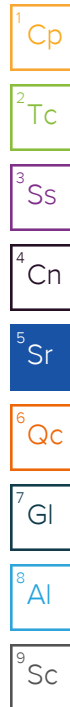
Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	U		0.481	1.00	1	09/30/2023 18:48	WG2142369
1,1,1-Trichloroethane	U		0.149	1.00	1	09/30/2023 18:48	WG2142369
1,1,2-Trichloroethane	U		0.158	1.00	1	09/30/2023 18:48	WG2142369
Trichloroethene	U		0.190	1.00	1	09/30/2023 18:48	WG2142369
Trichlorofluoromethane	U		0.160	5.00	1	09/30/2023 18:48	WG2142369
1,2,3-Trichloropropane	U		0.237	2.50	1	09/30/2023 18:48	WG2142369
1,2,4-Trimethylbenzene	U		0.322	1.00	1	09/30/2023 18:48	WG2142369
1,2,3-Trimethylbenzene	U		0.104	1.00	1	09/30/2023 18:48	WG2142369
1,3,5-Trimethylbenzene	U		0.104	1.00	1	09/30/2023 18:48	WG2142369
Vinyl chloride	0.352	<u>J</u>	0.234	1.00	1	09/30/2023 18:48	WG2142369
Xylenes, Total	U		0.174	3.00	1	09/30/2023 18:48	WG2142369
(S) Toluene-d8	102			80.0-120		09/30/2023 18:48	WG2142369
(S) 4-Bromofluorobenzene	103			77.0-126		09/30/2023 18:48	WG2142369
(S) 1,2-Dichloroethane-d4	119			70.0-130		09/30/2023 18:48	WG2142369

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	J3 J4	11.3	50.0	1	09/30/2023 19:08	WG2142369
Acrolein	U	C3	2.54	50.0	1	09/30/2023 19:08	WG2142369
Acrylonitrile	U		0.671	10.0	1	09/30/2023 19:08	WG2142369
Benzene	U		0.0941	1.00	1	09/30/2023 19:08	WG2142369
Bromobenzene	U		0.118	1.00	1	09/30/2023 19:08	WG2142369
Bromodichloromethane	U		0.136	1.00	1	09/30/2023 19:08	WG2142369
Bromoform	U	C3	0.129	1.00	1	09/30/2023 19:08	WG2142369
Bromomethane	U		0.605	5.00	1	09/30/2023 19:08	WG2142369
n-Butylbenzene	U		0.157	1.00	1	09/30/2023 19:08	WG2142369
sec-Butylbenzene	U		0.125	1.00	1	09/30/2023 19:08	WG2142369
tert-Butylbenzene	U		0.127	1.00	1	09/30/2023 19:08	WG2142369
Carbon disulfide	U		0.0962	1.00	1	09/30/2023 19:08	WG2142369
Carbon tetrachloride	U		0.128	1.00	1	09/30/2023 19:08	WG2142369
Chlorobenzene	U		0.116	1.00	1	09/30/2023 19:08	WG2142369
Chlorodibromomethane	U		0.140	1.00	1	09/30/2023 19:08	WG2142369
Chloroethane	U		0.192	5.00	1	09/30/2023 19:08	WG2142369
Chloroform	U		0.111	5.00	1	09/30/2023 19:08	WG2142369
Chloromethane	U		0.960	2.50	1	09/30/2023 19:08	WG2142369
2-Chlorotoluene	U		0.106	1.00	1	09/30/2023 19:08	WG2142369
4-Chlorotoluene	U		0.114	1.00	1	09/30/2023 19:08	WG2142369
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	09/30/2023 19:08	WG2142369
1,2-Dibromoethane	U		0.126	1.00	1	09/30/2023 19:08	WG2142369
Dibromomethane	U		0.122	1.00	1	09/30/2023 19:08	WG2142369
1,2-Dichlorobenzene	U		0.107	1.00	1	09/30/2023 19:08	WG2142369
1,3-Dichlorobenzene	U		0.110	1.00	1	09/30/2023 19:08	WG2142369
1,4-Dichlorobenzene	U		0.120	1.00	1	09/30/2023 19:08	WG2142369
Dichlorodifluoromethane	U		0.374	5.00	1	09/30/2023 19:08	WG2142369
1,1-Dichloroethane	U		0.100	1.00	1	09/30/2023 19:08	WG2142369
1,2-Dichloroethane	U		0.0819	1.00	1	09/30/2023 19:08	WG2142369
1,1-Dichloroethene	U		0.188	1.00	1	09/30/2023 19:08	WG2142369
cis-1,2-Dichloroethene	10.4		0.126	1.00	1	09/30/2023 19:08	WG2142369
trans-1,2-Dichloroethene	U		0.149	1.00	1	09/30/2023 19:08	WG2142369
1,2-Dichloropropane	U		0.149	1.00	1	09/30/2023 19:08	WG2142369
1,1-Dichloropropene	U		0.142	1.00	1	09/30/2023 19:08	WG2142369
1,3-Dichloropropane	U		0.110	1.00	1	09/30/2023 19:08	WG2142369
cis-1,3-Dichloropropene	U		0.111	1.00	1	09/30/2023 19:08	WG2142369
trans-1,3-Dichloropropene	U		0.118	1.00	1	09/30/2023 19:08	WG2142369
2,2-Dichloropropane	U		0.161	1.00	1	09/30/2023 19:08	WG2142369
Di-isopropyl ether	U		0.105	1.00	1	09/30/2023 19:08	WG2142369
Ethylbenzene	U		0.137	1.00	1	09/30/2023 19:08	WG2142369
Hexachloro-1,3-butadiene	U		0.337	1.00	1	09/30/2023 19:08	WG2142369
Isopropylbenzene	U		0.105	1.00	1	09/30/2023 19:08	WG2142369
p-Isopropyltoluene	U		0.120	1.00	1	09/30/2023 19:08	WG2142369
2-Butanone (MEK)	U	C3	1.19	10.0	1	09/30/2023 19:08	WG2142369
Methylene Chloride	U		0.430	5.00	1	09/30/2023 19:08	WG2142369
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	09/30/2023 19:08	WG2142369
Methyl tert-butyl ether	U		0.101	1.00	1	09/30/2023 19:08	WG2142369
Naphthalene	U	J3	1.00	5.00	1	09/30/2023 19:08	WG2142369
n-Propylbenzene	U		0.0993	1.00	1	09/30/2023 19:08	WG2142369
Styrene	U		0.118	1.00	1	09/30/2023 19:08	WG2142369
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	09/30/2023 19:08	WG2142369
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	09/30/2023 19:08	WG2142369
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	09/30/2023 19:08	WG2142369
Tetrachloroethene	U		0.300	1.00	1	09/30/2023 19:08	WG2142369
Toluene	U		0.278	1.00	1	09/30/2023 19:08	WG2142369
1,2,3-Trichlorobenzene	U	J3	0.230	1.00	1	09/30/2023 19:08	WG2142369



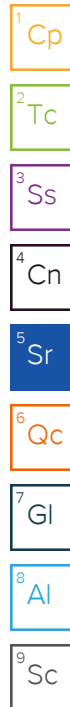
Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	U		0.481	1.00	1	09/30/2023 19:08	WG2142369
1,1,1-Trichloroethane	U		0.149	1.00	1	09/30/2023 19:08	WG2142369
1,1,2-Trichloroethane	U		0.158	1.00	1	09/30/2023 19:08	WG2142369
Trichloroethene	U		0.190	1.00	1	09/30/2023 19:08	WG2142369
Trichlorofluoromethane	U		0.160	5.00	1	09/30/2023 19:08	WG2142369
1,2,3-Trichloropropane	U		0.237	2.50	1	09/30/2023 19:08	WG2142369
1,2,4-Trimethylbenzene	U		0.322	1.00	1	09/30/2023 19:08	WG2142369
1,2,3-Trimethylbenzene	U		0.104	1.00	1	09/30/2023 19:08	WG2142369
1,3,5-Trimethylbenzene	U		0.104	1.00	1	09/30/2023 19:08	WG2142369
Vinyl chloride	2.82		0.234	1.00	1	09/30/2023 19:08	WG2142369
Xylenes, Total	U		0.174	3.00	1	09/30/2023 19:08	WG2142369
(S) Toluene-d8	104			80.0-120		09/30/2023 19:08	WG2142369
(S) 4-Bromofluorobenzene	103			77.0-126		09/30/2023 19:08	WG2142369
(S) 1,2-Dichloroethane-d4	118			70.0-130		09/30/2023 19:08	WG2142369

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	J3 J4	11.3	50.0	1	09/30/2023 19:27	WG2142369
Acrolein	U	C3	2.54	50.0	1	09/30/2023 19:27	WG2142369
Acrylonitrile	U		0.671	10.0	1	09/30/2023 19:27	WG2142369
Benzene	U		0.0941	1.00	1	09/30/2023 19:27	WG2142369
Bromobenzene	U		0.118	1.00	1	09/30/2023 19:27	WG2142369
Bromodichloromethane	U		0.136	1.00	1	09/30/2023 19:27	WG2142369
Bromoform	U	C3	0.129	1.00	1	09/30/2023 19:27	WG2142369
Bromomethane	U		0.605	5.00	1	09/30/2023 19:27	WG2142369
n-Butylbenzene	U		0.157	1.00	1	09/30/2023 19:27	WG2142369
sec-Butylbenzene	U		0.125	1.00	1	09/30/2023 19:27	WG2142369
tert-Butylbenzene	U		0.127	1.00	1	09/30/2023 19:27	WG2142369
Carbon disulfide	U		0.0962	1.00	1	09/30/2023 19:27	WG2142369
Carbon tetrachloride	U		0.128	1.00	1	09/30/2023 19:27	WG2142369
Chlorobenzene	U		0.116	1.00	1	09/30/2023 19:27	WG2142369
Chlorodibromomethane	U		0.140	1.00	1	09/30/2023 19:27	WG2142369
Chloroethane	U		0.192	5.00	1	09/30/2023 19:27	WG2142369
Chloroform	U		0.111	5.00	1	09/30/2023 19:27	WG2142369
Chloromethane	U		0.960	2.50	1	09/30/2023 19:27	WG2142369
2-Chlorotoluene	U		0.106	1.00	1	09/30/2023 19:27	WG2142369
4-Chlorotoluene	U		0.114	1.00	1	09/30/2023 19:27	WG2142369
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	09/30/2023 19:27	WG2142369
1,2-Dibromoethane	U		0.126	1.00	1	09/30/2023 19:27	WG2142369
Dibromomethane	U		0.122	1.00	1	09/30/2023 19:27	WG2142369
1,2-Dichlorobenzene	U		0.107	1.00	1	09/30/2023 19:27	WG2142369
1,3-Dichlorobenzene	U		0.110	1.00	1	09/30/2023 19:27	WG2142369
1,4-Dichlorobenzene	U		0.120	1.00	1	09/30/2023 19:27	WG2142369
Dichlorodifluoromethane	U		0.374	5.00	1	09/30/2023 19:27	WG2142369
1,1-Dichloroethane	U		0.100	1.00	1	09/30/2023 19:27	WG2142369
1,2-Dichloroethane	U		0.0819	1.00	1	09/30/2023 19:27	WG2142369
1,1-Dichloroethene	U		0.188	1.00	1	09/30/2023 19:27	WG2142369
cis-1,2-Dichloroethene	22.0		0.126	1.00	1	09/30/2023 19:27	WG2142369
trans-1,2-Dichloroethene	U		0.149	1.00	1	09/30/2023 19:27	WG2142369
1,2-Dichloropropane	U		0.149	1.00	1	09/30/2023 19:27	WG2142369
1,1-Dichloropropene	U		0.142	1.00	1	09/30/2023 19:27	WG2142369
1,3-Dichloropropane	U		0.110	1.00	1	09/30/2023 19:27	WG2142369
cis-1,3-Dichloropropene	U		0.111	1.00	1	09/30/2023 19:27	WG2142369
trans-1,3-Dichloropropene	U		0.118	1.00	1	09/30/2023 19:27	WG2142369
2,2-Dichloropropane	U		0.161	1.00	1	09/30/2023 19:27	WG2142369
Di-isopropyl ether	U		0.105	1.00	1	09/30/2023 19:27	WG2142369
Ethylbenzene	U		0.137	1.00	1	09/30/2023 19:27	WG2142369
Hexachloro-1,3-butadiene	U		0.337	1.00	1	09/30/2023 19:27	WG2142369
Isopropylbenzene	U		0.105	1.00	1	09/30/2023 19:27	WG2142369
p-Isopropyltoluene	U		0.120	1.00	1	09/30/2023 19:27	WG2142369
2-Butanone (MEK)	U	C3	1.19	10.0	1	09/30/2023 19:27	WG2142369
Methylene Chloride	U		0.430	5.00	1	09/30/2023 19:27	WG2142369
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	09/30/2023 19:27	WG2142369
Methyl tert-butyl ether	U		0.101	1.00	1	09/30/2023 19:27	WG2142369
Naphthalene	U	J3	1.00	5.00	1	09/30/2023 19:27	WG2142369
n-Propylbenzene	U		0.0993	1.00	1	09/30/2023 19:27	WG2142369
Styrene	U		0.118	1.00	1	09/30/2023 19:27	WG2142369
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	09/30/2023 19:27	WG2142369
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	09/30/2023 19:27	WG2142369
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	09/30/2023 19:27	WG2142369
Tetrachloroethene	U		0.300	1.00	1	09/30/2023 19:27	WG2142369
Toluene	U		0.278	1.00	1	09/30/2023 19:27	WG2142369
1,2,3-Trichlorobenzene	U	J3	0.230	1.00	1	09/30/2023 19:27	WG2142369



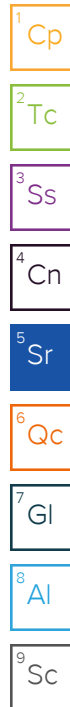
Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	U		0.481	1.00	1	09/30/2023 19:27	WG2142369
1,1,1-Trichloroethane	U		0.149	1.00	1	09/30/2023 19:27	WG2142369
1,1,2-Trichloroethane	U		0.158	1.00	1	09/30/2023 19:27	WG2142369
Trichloroethene	24.9		0.190	1.00	1	09/30/2023 19:27	WG2142369
Trichlorofluoromethane	U		0.160	5.00	1	09/30/2023 19:27	WG2142369
1,2,3-Trichloropropane	U		0.237	2.50	1	09/30/2023 19:27	WG2142369
1,2,4-Trimethylbenzene	U		0.322	1.00	1	09/30/2023 19:27	WG2142369
1,2,3-Trimethylbenzene	U		0.104	1.00	1	09/30/2023 19:27	WG2142369
1,3,5-Trimethylbenzene	U		0.104	1.00	1	09/30/2023 19:27	WG2142369
Vinyl chloride	U		0.234	1.00	1	09/30/2023 19:27	WG2142369
Xylenes, Total	U		0.174	3.00	1	09/30/2023 19:27	WG2142369
(S) Toluene-d8	103			80.0-120		09/30/2023 19:27	WG2142369
(S) 4-Bromofluorobenzene	103			77.0-126		09/30/2023 19:27	WG2142369
(S) 1,2-Dichloroethane-d4	120			70.0-130		09/30/2023 19:27	WG2142369

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	J3 J4	11.3	50.0	1	09/30/2023 19:46	WG2142369
Acrolein	U	C3	2.54	50.0	1	09/30/2023 19:46	WG2142369
Acrylonitrile	U		0.671	10.0	1	09/30/2023 19:46	WG2142369
Benzene	U		0.0941	1.00	1	09/30/2023 19:46	WG2142369
Bromobenzene	U		0.118	1.00	1	09/30/2023 19:46	WG2142369
Bromodichloromethane	U		0.136	1.00	1	09/30/2023 19:46	WG2142369
Bromoform	U	C3	0.129	1.00	1	09/30/2023 19:46	WG2142369
Bromomethane	U		0.605	5.00	1	09/30/2023 19:46	WG2142369
n-Butylbenzene	U		0.157	1.00	1	09/30/2023 19:46	WG2142369
sec-Butylbenzene	U		0.125	1.00	1	09/30/2023 19:46	WG2142369
tert-Butylbenzene	U		0.127	1.00	1	09/30/2023 19:46	WG2142369
Carbon disulfide	U		0.0962	1.00	1	09/30/2023 19:46	WG2142369
Carbon tetrachloride	U		0.128	1.00	1	09/30/2023 19:46	WG2142369
Chlorobenzene	U		0.116	1.00	1	09/30/2023 19:46	WG2142369
Chlorodibromomethane	U		0.140	1.00	1	09/30/2023 19:46	WG2142369
Chloroethane	U		0.192	5.00	1	09/30/2023 19:46	WG2142369
Chloroform	U		0.111	5.00	1	09/30/2023 19:46	WG2142369
Chloromethane	U		0.960	2.50	1	09/30/2023 19:46	WG2142369
2-Chlorotoluene	U		0.106	1.00	1	09/30/2023 19:46	WG2142369
4-Chlorotoluene	U		0.114	1.00	1	09/30/2023 19:46	WG2142369
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	09/30/2023 19:46	WG2142369
1,2-Dibromoethane	U		0.126	1.00	1	09/30/2023 19:46	WG2142369
Dibromomethane	U		0.122	1.00	1	09/30/2023 19:46	WG2142369
1,2-Dichlorobenzene	U		0.107	1.00	1	09/30/2023 19:46	WG2142369
1,3-Dichlorobenzene	U		0.110	1.00	1	09/30/2023 19:46	WG2142369
1,4-Dichlorobenzene	U		0.120	1.00	1	09/30/2023 19:46	WG2142369
Dichlorodifluoromethane	U		0.374	5.00	1	09/30/2023 19:46	WG2142369
1,1-Dichloroethane	U		0.100	1.00	1	09/30/2023 19:46	WG2142369
1,2-Dichloroethane	U		0.0819	1.00	1	09/30/2023 19:46	WG2142369
1,1-Dichloroethene	U		0.188	1.00	1	09/30/2023 19:46	WG2142369
cis-1,2-Dichloroethene	7.65		0.126	1.00	1	09/30/2023 19:46	WG2142369
trans-1,2-Dichloroethene	U		0.149	1.00	1	09/30/2023 19:46	WG2142369
1,2-Dichloropropane	U		0.149	1.00	1	09/30/2023 19:46	WG2142369
1,1-Dichloropropene	U		0.142	1.00	1	09/30/2023 19:46	WG2142369
1,3-Dichloropropane	U		0.110	1.00	1	09/30/2023 19:46	WG2142369
cis-1,3-Dichloropropene	U		0.111	1.00	1	09/30/2023 19:46	WG2142369
trans-1,3-Dichloropropene	U		0.118	1.00	1	09/30/2023 19:46	WG2142369
2,2-Dichloropropane	U		0.161	1.00	1	09/30/2023 19:46	WG2142369
Di-isopropyl ether	U		0.105	1.00	1	09/30/2023 19:46	WG2142369
Ethylbenzene	U		0.137	1.00	1	09/30/2023 19:46	WG2142369
Hexachloro-1,3-butadiene	U		0.337	1.00	1	09/30/2023 19:46	WG2142369
Isopropylbenzene	U		0.105	1.00	1	09/30/2023 19:46	WG2142369
p-Isopropyltoluene	U		0.120	1.00	1	09/30/2023 19:46	WG2142369
2-Butanone (MEK)	U	C3	1.19	10.0	1	09/30/2023 19:46	WG2142369
Methylene Chloride	U		0.430	5.00	1	09/30/2023 19:46	WG2142369
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	09/30/2023 19:46	WG2142369
Methyl tert-butyl ether	U		0.101	1.00	1	09/30/2023 19:46	WG2142369
Naphthalene	U	J3	1.00	5.00	1	09/30/2023 19:46	WG2142369
n-Propylbenzene	U		0.0993	1.00	1	09/30/2023 19:46	WG2142369
Styrene	U		0.118	1.00	1	09/30/2023 19:46	WG2142369
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	09/30/2023 19:46	WG2142369
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	09/30/2023 19:46	WG2142369
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	09/30/2023 19:46	WG2142369
Tetrachloroethene	U		0.300	1.00	1	09/30/2023 19:46	WG2142369
Toluene	U		0.278	1.00	1	09/30/2023 19:46	WG2142369
1,2,3-Trichlorobenzene	U	J3	0.230	1.00	1	09/30/2023 19:46	WG2142369



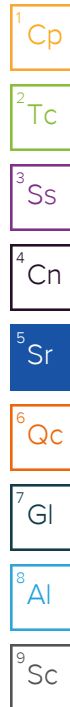
Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	U		0.481	1.00	1	09/30/2023 19:46	WG2142369
1,1,1-Trichloroethane	U		0.149	1.00	1	09/30/2023 19:46	WG2142369
1,1,2-Trichloroethane	U		0.158	1.00	1	09/30/2023 19:46	WG2142369
Trichloroethene	27.0		0.190	1.00	1	09/30/2023 19:46	WG2142369
Trichlorofluoromethane	U		0.160	5.00	1	09/30/2023 19:46	WG2142369
1,2,3-Trichloropropane	U		0.237	2.50	1	09/30/2023 19:46	WG2142369
1,2,4-Trimethylbenzene	U		0.322	1.00	1	09/30/2023 19:46	WG2142369
1,2,3-Trimethylbenzene	U		0.104	1.00	1	09/30/2023 19:46	WG2142369
1,3,5-Trimethylbenzene	U		0.104	1.00	1	09/30/2023 19:46	WG2142369
Vinyl chloride	1.59		0.234	1.00	1	09/30/2023 19:46	WG2142369
Xylenes, Total	U		0.174	3.00	1	09/30/2023 19:46	WG2142369
(S) Toluene-d8	100			80.0-120		09/30/2023 19:46	WG2142369
(S) 4-Bromofluorobenzene	103			77.0-126		09/30/2023 19:46	WG2142369
(S) 1,2-Dichloroethane-d4	116			70.0-130		09/30/2023 19:46	WG2142369

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	J3 J4	11.3	50.0	1	09/30/2023 20:06	WG2142369
Acrolein	U	C3	2.54	50.0	1	09/30/2023 20:06	WG2142369
Acrylonitrile	U		0.671	10.0	1	09/30/2023 20:06	WG2142369
Benzene	U		0.0941	1.00	1	09/30/2023 20:06	WG2142369
Bromobenzene	U		0.118	1.00	1	09/30/2023 20:06	WG2142369
Bromodichloromethane	U		0.136	1.00	1	09/30/2023 20:06	WG2142369
Bromoform	U	C3	0.129	1.00	1	09/30/2023 20:06	WG2142369
Bromomethane	U		0.605	5.00	1	09/30/2023 20:06	WG2142369
n-Butylbenzene	U		0.157	1.00	1	09/30/2023 20:06	WG2142369
sec-Butylbenzene	U		0.125	1.00	1	09/30/2023 20:06	WG2142369
tert-Butylbenzene	U		0.127	1.00	1	09/30/2023 20:06	WG2142369
Carbon disulfide	U		0.0962	1.00	1	09/30/2023 20:06	WG2142369
Carbon tetrachloride	U		0.128	1.00	1	09/30/2023 20:06	WG2142369
Chlorobenzene	U		0.116	1.00	1	09/30/2023 20:06	WG2142369
Chlorodibromomethane	U		0.140	1.00	1	09/30/2023 20:06	WG2142369
Chloroethane	U		0.192	5.00	1	09/30/2023 20:06	WG2142369
Chloroform	U		0.111	5.00	1	09/30/2023 20:06	WG2142369
Chloromethane	U		0.960	2.50	1	09/30/2023 20:06	WG2142369
2-Chlorotoluene	U		0.106	1.00	1	09/30/2023 20:06	WG2142369
4-Chlorotoluene	U		0.114	1.00	1	09/30/2023 20:06	WG2142369
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	09/30/2023 20:06	WG2142369
1,2-Dibromoethane	U		0.126	1.00	1	09/30/2023 20:06	WG2142369
Dibromomethane	U		0.122	1.00	1	09/30/2023 20:06	WG2142369
1,2-Dichlorobenzene	U		0.107	1.00	1	09/30/2023 20:06	WG2142369
1,3-Dichlorobenzene	U		0.110	1.00	1	09/30/2023 20:06	WG2142369
1,4-Dichlorobenzene	U		0.120	1.00	1	09/30/2023 20:06	WG2142369
Dichlorodifluoromethane	U		0.374	5.00	1	09/30/2023 20:06	WG2142369
1,1-Dichloroethane	U		0.100	1.00	1	09/30/2023 20:06	WG2142369
1,2-Dichloroethane	U		0.0819	1.00	1	09/30/2023 20:06	WG2142369
1,1-Dichloroethene	U		0.188	1.00	1	09/30/2023 20:06	WG2142369
cis-1,2-Dichloroethene	U		0.126	1.00	1	09/30/2023 20:06	WG2142369
trans-1,2-Dichloroethene	U		0.149	1.00	1	09/30/2023 20:06	WG2142369
1,2-Dichloropropane	U		0.149	1.00	1	09/30/2023 20:06	WG2142369
1,1-Dichloropropene	U		0.142	1.00	1	09/30/2023 20:06	WG2142369
1,3-Dichloropropane	U		0.110	1.00	1	09/30/2023 20:06	WG2142369
cis-1,3-Dichloropropene	U		0.111	1.00	1	09/30/2023 20:06	WG2142369
trans-1,3-Dichloropropene	U		0.118	1.00	1	09/30/2023 20:06	WG2142369
2,2-Dichloropropane	U		0.161	1.00	1	09/30/2023 20:06	WG2142369
Di-isopropyl ether	U		0.105	1.00	1	09/30/2023 20:06	WG2142369
Ethylbenzene	U		0.137	1.00	1	09/30/2023 20:06	WG2142369
Hexachloro-1,3-butadiene	U		0.337	1.00	1	09/30/2023 20:06	WG2142369
Isopropylbenzene	U		0.105	1.00	1	09/30/2023 20:06	WG2142369
p-Isopropyltoluene	U		0.120	1.00	1	09/30/2023 20:06	WG2142369
2-Butanone (MEK)	U	C3	1.19	10.0	1	09/30/2023 20:06	WG2142369
Methylene Chloride	U		0.430	5.00	1	09/30/2023 20:06	WG2142369
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	09/30/2023 20:06	WG2142369
Methyl tert-butyl ether	U		0.101	1.00	1	09/30/2023 20:06	WG2142369
Naphthalene	U	J3	1.00	5.00	1	09/30/2023 20:06	WG2142369
n-Propylbenzene	U		0.0993	1.00	1	09/30/2023 20:06	WG2142369
Styrene	U		0.118	1.00	1	09/30/2023 20:06	WG2142369
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	09/30/2023 20:06	WG2142369
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	09/30/2023 20:06	WG2142369
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	09/30/2023 20:06	WG2142369
Tetrachloroethene	U		0.300	1.00	1	09/30/2023 20:06	WG2142369
Toluene	U		0.278	1.00	1	09/30/2023 20:06	WG2142369
1,2,3-Trichlorobenzene	U	J3	0.230	1.00	1	09/30/2023 20:06	WG2142369



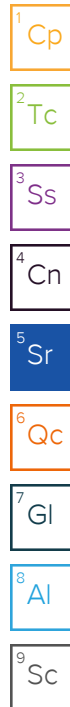
Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	U		0.481	1.00	1	09/30/2023 20:06	WG2142369
1,1,1-Trichloroethane	U		0.149	1.00	1	09/30/2023 20:06	WG2142369
1,1,2-Trichloroethane	U		0.158	1.00	1	09/30/2023 20:06	WG2142369
Trichloroethene	0.344	J	0.190	1.00	1	09/30/2023 20:06	WG2142369
Trichlorofluoromethane	U		0.160	5.00	1	09/30/2023 20:06	WG2142369
1,2,3-Trichloropropane	U		0.237	2.50	1	09/30/2023 20:06	WG2142369
1,2,4-Trimethylbenzene	U		0.322	1.00	1	09/30/2023 20:06	WG2142369
1,2,3-Trimethylbenzene	U		0.104	1.00	1	09/30/2023 20:06	WG2142369
1,3,5-Trimethylbenzene	U		0.104	1.00	1	09/30/2023 20:06	WG2142369
Vinyl chloride	U		0.234	1.00	1	09/30/2023 20:06	WG2142369
Xylenes, Total	U		0.174	3.00	1	09/30/2023 20:06	WG2142369
(S) Toluene-d8	101			80.0-120		09/30/2023 20:06	WG2142369
(S) 4-Bromofluorobenzene	102			77.0-126		09/30/2023 20:06	WG2142369
(S) 1,2-Dichloroethane-d4	111			70.0-130		09/30/2023 20:06	WG2142369

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	J3 J4	11.3	50.0	1	09/30/2023 20:25	WG2142369
Acrolein	U	C3	2.54	50.0	1	09/30/2023 20:25	WG2142369
Acrylonitrile	U		0.671	10.0	1	09/30/2023 20:25	WG2142369
Benzene	U		0.0941	1.00	1	09/30/2023 20:25	WG2142369
Bromobenzene	U		0.118	1.00	1	09/30/2023 20:25	WG2142369
Bromodichloromethane	U		0.136	1.00	1	09/30/2023 20:25	WG2142369
Bromoform	U	C3	0.129	1.00	1	09/30/2023 20:25	WG2142369
Bromomethane	U		0.605	5.00	1	09/30/2023 20:25	WG2142369
n-Butylbenzene	U		0.157	1.00	1	09/30/2023 20:25	WG2142369
sec-Butylbenzene	U		0.125	1.00	1	09/30/2023 20:25	WG2142369
tert-Butylbenzene	U		0.127	1.00	1	09/30/2023 20:25	WG2142369
Carbon disulfide	U		0.0962	1.00	1	09/30/2023 20:25	WG2142369
Carbon tetrachloride	U		0.128	1.00	1	09/30/2023 20:25	WG2142369
Chlorobenzene	U		0.116	1.00	1	09/30/2023 20:25	WG2142369
Chlorodibromomethane	U		0.140	1.00	1	09/30/2023 20:25	WG2142369
Chloroethane	U		0.192	5.00	1	09/30/2023 20:25	WG2142369
Chloroform	U		0.111	5.00	1	09/30/2023 20:25	WG2142369
Chloromethane	U		0.960	2.50	1	09/30/2023 20:25	WG2142369
2-Chlorotoluene	U		0.106	1.00	1	09/30/2023 20:25	WG2142369
4-Chlorotoluene	U		0.114	1.00	1	09/30/2023 20:25	WG2142369
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	09/30/2023 20:25	WG2142369
1,2-Dibromoethane	U		0.126	1.00	1	09/30/2023 20:25	WG2142369
Dibromomethane	U		0.122	1.00	1	09/30/2023 20:25	WG2142369
1,2-Dichlorobenzene	U		0.107	1.00	1	09/30/2023 20:25	WG2142369
1,3-Dichlorobenzene	U		0.110	1.00	1	09/30/2023 20:25	WG2142369
1,4-Dichlorobenzene	U		0.120	1.00	1	09/30/2023 20:25	WG2142369
Dichlorodifluoromethane	U		0.374	5.00	1	09/30/2023 20:25	WG2142369
1,1-Dichloroethane	U		0.100	1.00	1	09/30/2023 20:25	WG2142369
1,2-Dichloroethane	U		0.0819	1.00	1	09/30/2023 20:25	WG2142369
1,1-Dichloroethene	U		0.188	1.00	1	09/30/2023 20:25	WG2142369
cis-1,2-Dichloroethene	37.9		0.126	1.00	1	09/30/2023 20:25	WG2142369
trans-1,2-Dichloroethene	0.393	J	0.149	1.00	1	09/30/2023 20:25	WG2142369
1,2-Dichloropropane	U		0.149	1.00	1	09/30/2023 20:25	WG2142369
1,1-Dichloropropene	U		0.142	1.00	1	09/30/2023 20:25	WG2142369
1,3-Dichloropropane	U		0.110	1.00	1	09/30/2023 20:25	WG2142369
cis-1,3-Dichloropropene	U		0.111	1.00	1	09/30/2023 20:25	WG2142369
trans-1,3-Dichloropropene	U		0.118	1.00	1	09/30/2023 20:25	WG2142369
2,2-Dichloropropane	U		0.161	1.00	1	09/30/2023 20:25	WG2142369
Di-isopropyl ether	U		0.105	1.00	1	09/30/2023 20:25	WG2142369
Ethylbenzene	U		0.137	1.00	1	09/30/2023 20:25	WG2142369
Hexachloro-1,3-butadiene	U		0.337	1.00	1	09/30/2023 20:25	WG2142369
Isopropylbenzene	U		0.105	1.00	1	09/30/2023 20:25	WG2142369
p-Isopropyltoluene	U		0.120	1.00	1	09/30/2023 20:25	WG2142369
2-Butanone (MEK)	U	C3	1.19	10.0	1	09/30/2023 20:25	WG2142369
Methylene Chloride	U		0.430	5.00	1	09/30/2023 20:25	WG2142369
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	09/30/2023 20:25	WG2142369
Methyl tert-butyl ether	U		0.101	1.00	1	09/30/2023 20:25	WG2142369
Naphthalene	U	J3	1.00	5.00	1	09/30/2023 20:25	WG2142369
n-Propylbenzene	U		0.0993	1.00	1	09/30/2023 20:25	WG2142369
Styrene	U		0.118	1.00	1	09/30/2023 20:25	WG2142369
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	09/30/2023 20:25	WG2142369
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	09/30/2023 20:25	WG2142369
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	09/30/2023 20:25	WG2142369
Tetrachloroethene	U		0.300	1.00	1	09/30/2023 20:25	WG2142369
Toluene	U		0.278	1.00	1	09/30/2023 20:25	WG2142369
1,2,3-Trichlorobenzene	U	J3	0.230	1.00	1	09/30/2023 20:25	WG2142369



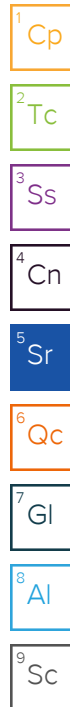
Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	U		0.481	1.00	1	09/30/2023 20:25	WG2142369
1,1,1-Trichloroethane	U		0.149	1.00	1	09/30/2023 20:25	WG2142369
1,1,2-Trichloroethane	U		0.158	1.00	1	09/30/2023 20:25	WG2142369
Trichloroethene	5.35		0.190	1.00	1	09/30/2023 20:25	WG2142369
Trichlorofluoromethane	U		0.160	5.00	1	09/30/2023 20:25	WG2142369
1,2,3-Trichloropropane	U		0.237	2.50	1	09/30/2023 20:25	WG2142369
1,2,4-Trimethylbenzene	U		0.322	1.00	1	09/30/2023 20:25	WG2142369
1,2,3-Trimethylbenzene	U		0.104	1.00	1	09/30/2023 20:25	WG2142369
1,3,5-Trimethylbenzene	U		0.104	1.00	1	09/30/2023 20:25	WG2142369
Vinyl chloride	0.381	<u>J</u>	0.234	1.00	1	09/30/2023 20:25	WG2142369
Xylenes, Total	U		0.174	3.00	1	09/30/2023 20:25	WG2142369
(S) Toluene-d8	105			80.0-120		09/30/2023 20:25	WG2142369
(S) 4-Bromofluorobenzene	102			77.0-126		09/30/2023 20:25	WG2142369
(S) 1,2-Dichloroethane-d4	105			70.0-130		09/30/2023 20:25	WG2142369

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

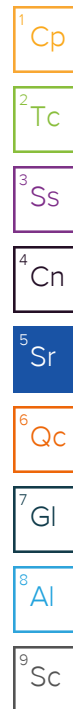
Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	J3	11.3	50.0	1	09/30/2023 22:36	WG2142370
Acrolein	U	C3	2.54	50.0	1	09/30/2023 22:36	WG2142370
Acrylonitrile	U	J3	0.671	10.0	1	09/30/2023 22:36	WG2142370
Benzene	U		0.0941	1.00	1	09/30/2023 22:36	WG2142370
Bromobenzene	U		0.118	1.00	1	09/30/2023 22:36	WG2142370
Bromodichloromethane	U		0.136	1.00	1	09/30/2023 22:36	WG2142370
Bromoform	U	C3 J3 J4	0.129	1.00	1	09/30/2023 22:36	WG2142370
Bromomethane	U		0.605	5.00	1	09/30/2023 22:36	WG2142370
n-Butylbenzene	U		0.157	1.00	1	09/30/2023 22:36	WG2142370
sec-Butylbenzene	U		0.125	1.00	1	09/30/2023 22:36	WG2142370
tert-Butylbenzene	U		0.127	1.00	1	09/30/2023 22:36	WG2142370
Carbon disulfide	U		0.0962	1.00	1	09/30/2023 22:36	WG2142370
Carbon tetrachloride	U		0.128	1.00	1	09/30/2023 22:36	WG2142370
Chlorobenzene	U		0.116	1.00	1	09/30/2023 22:36	WG2142370
Chlorodibromomethane	U	C3 J4	0.140	1.00	1	09/30/2023 22:36	WG2142370
Chloroethane	U		0.192	5.00	1	09/30/2023 22:36	WG2142370
Chloroform	U		0.111	5.00	1	09/30/2023 22:36	WG2142370
Chloromethane	U		0.960	2.50	1	09/30/2023 22:36	WG2142370
2-Chlorotoluene	U		0.106	1.00	1	09/30/2023 22:36	WG2142370
4-Chlorotoluene	U		0.114	1.00	1	09/30/2023 22:36	WG2142370
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	09/30/2023 22:36	WG2142370
1,2-Dibromoethane	U		0.126	1.00	1	09/30/2023 22:36	WG2142370
Dibromomethane	U	J4	0.122	1.00	1	09/30/2023 22:36	WG2142370
1,2-Dichlorobenzene	U		0.107	1.00	1	09/30/2023 22:36	WG2142370
1,3-Dichlorobenzene	U		0.110	1.00	1	09/30/2023 22:36	WG2142370
1,4-Dichlorobenzene	U		0.120	1.00	1	09/30/2023 22:36	WG2142370
Dichlorodifluoromethane	U		0.374	5.00	1	09/30/2023 22:36	WG2142370
1,1-Dichloroethane	U		0.100	1.00	1	09/30/2023 22:36	WG2142370
1,2-Dichloroethane	U		0.0819	1.00	1	09/30/2023 22:36	WG2142370
1,1-Dichloroethene	0.217	J J4	0.188	1.00	1	09/30/2023 22:36	WG2142370
cis-1,2-Dichloroethene	134		1.26	10.0	10	10/04/2023 01:07	WG2143977
trans-1,2-Dichloroethene	3.00		0.149	1.00	1	09/30/2023 22:36	WG2142370
1,2-Dichloropropane	U		0.149	1.00	1	09/30/2023 22:36	WG2142370
1,1-Dichloropropene	U		0.142	1.00	1	09/30/2023 22:36	WG2142370
1,3-Dichloropropane	U		0.110	1.00	1	09/30/2023 22:36	WG2142370
cis-1,3-Dichloropropene	U	C3 J4	0.111	1.00	1	09/30/2023 22:36	WG2142370
trans-1,3-Dichloropropene	U	C3 J3 J4	0.118	1.00	1	09/30/2023 22:36	WG2142370
2,2-Dichloropropane	U		0.161	1.00	1	09/30/2023 22:36	WG2142370
Di-isopropyl ether	U		0.105	1.00	1	09/30/2023 22:36	WG2142370
Ethylbenzene	U		0.137	1.00	1	09/30/2023 22:36	WG2142370
Hexachloro-1,3-butadiene	U		0.337	1.00	1	09/30/2023 22:36	WG2142370
Isopropylbenzene	U		0.105	1.00	1	09/30/2023 22:36	WG2142370
p-Isopropyltoluene	U		0.120	1.00	1	09/30/2023 22:36	WG2142370
2-Butanone (MEK)	U		1.19	10.0	1	09/30/2023 22:36	WG2142370
Methylene Chloride	U		0.430	5.00	1	09/30/2023 22:36	WG2142370
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	09/30/2023 22:36	WG2142370
Methyl tert-butyl ether	U		0.101	1.00	1	09/30/2023 22:36	WG2142370
Naphthalene	U	J4	1.00	5.00	1	09/30/2023 22:36	WG2142370
n-Propylbenzene	U		0.0993	1.00	1	09/30/2023 22:36	WG2142370
Styrene	U		0.118	1.00	1	09/30/2023 22:36	WG2142370
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	09/30/2023 22:36	WG2142370
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	09/30/2023 22:36	WG2142370
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	09/30/2023 22:36	WG2142370
Tetrachloroethene	U		0.300	1.00	1	09/30/2023 22:36	WG2142370
Toluene	U		0.278	1.00	1	09/30/2023 22:36	WG2142370
1,2,3-Trichlorobenzene	U	J4	0.230	1.00	1	09/30/2023 22:36	WG2142370



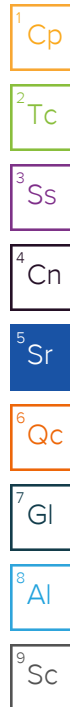
Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	U		0.481	1.00	1	09/30/2023 22:36	WG2142370
1,1,1-Trichloroethane	U		0.149	1.00	1	09/30/2023 22:36	WG2142370
1,1,2-Trichloroethane	U		0.158	1.00	1	09/30/2023 22:36	WG2142370
Trichloroethene	14.1	C5 J4	0.190	1.00	1	09/30/2023 22:36	WG2142370
Trichlorofluoromethane	U		0.160	5.00	1	09/30/2023 22:36	WG2142370
1,2,3-Trichloropropane	U		0.237	2.50	1	09/30/2023 22:36	WG2142370
1,2,4-Trimethylbenzene	U		0.322	1.00	1	09/30/2023 22:36	WG2142370
1,2,3-Trimethylbenzene	U		0.104	1.00	1	09/30/2023 22:36	WG2142370
1,3,5-Trimethylbenzene	U		0.104	1.00	1	09/30/2023 22:36	WG2142370
Vinyl chloride	0.641	J	0.234	1.00	1	09/30/2023 22:36	WG2142370
Xylenes, Total	U		0.174	3.00	1	09/30/2023 22:36	WG2142370
(S) Toluene-d8	104			80.0-120		09/30/2023 22:36	WG2142370
(S) Toluene-d8	117			80.0-120		10/04/2023 01:07	WG2143977
(S) 4-Bromofluorobenzene	97.9			77.0-126		09/30/2023 22:36	WG2142370
(S) 4-Bromofluorobenzene	87.6			77.0-126		10/04/2023 01:07	WG2143977
(S) 1,2-Dichloroethane-d4	114			70.0-130		09/30/2023 22:36	WG2142370
(S) 1,2-Dichloroethane-d4	88.3			70.0-130		10/04/2023 01:07	WG2143977



Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	J3	11.3	50.0	1	10/01/2023 07:35	WG2142370
Acrolein	U	C3	2.54	50.0	1	10/01/2023 07:35	WG2142370
Acrylonitrile	U	J3	0.671	10.0	1	10/01/2023 07:35	WG2142370
Benzene	1.24		0.0941	1.00	1	10/01/2023 07:35	WG2142370
Bromobenzene	U		0.118	1.00	1	10/01/2023 07:35	WG2142370
Bromodichloromethane	U		0.136	1.00	1	10/01/2023 07:35	WG2142370
Bromoform	U	C3 J3 J4	0.129	1.00	1	10/01/2023 07:35	WG2142370
Bromomethane	U		0.605	5.00	1	10/01/2023 07:35	WG2142370
n-Butylbenzene	U		0.157	1.00	1	10/01/2023 07:35	WG2142370
sec-Butylbenzene	U		0.125	1.00	1	10/01/2023 07:35	WG2142370
tert-Butylbenzene	U		0.127	1.00	1	10/01/2023 07:35	WG2142370
Carbon disulfide	0.231	J	0.0962	1.00	1	10/01/2023 07:35	WG2142370
Carbon tetrachloride	U		0.128	1.00	1	10/01/2023 07:35	WG2142370
Chlorobenzene	U		0.116	1.00	1	10/01/2023 07:35	WG2142370
Chlorodibromomethane	U	C3 J4	0.140	1.00	1	10/01/2023 07:35	WG2142370
Chloroethane	U		0.192	5.00	1	10/01/2023 07:35	WG2142370
Chloroform	U		0.111	5.00	1	10/01/2023 07:35	WG2142370
Chloromethane	U		0.960	2.50	1	10/01/2023 07:35	WG2142370
2-Chlorotoluene	U		0.106	1.00	1	10/01/2023 07:35	WG2142370
4-Chlorotoluene	U		0.114	1.00	1	10/01/2023 07:35	WG2142370
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	10/01/2023 07:35	WG2142370
1,2-Dibromoethane	U		0.126	1.00	1	10/01/2023 07:35	WG2142370
Dibromomethane	U	J4	0.122	1.00	1	10/01/2023 07:35	WG2142370
1,2-Dichlorobenzene	U		0.107	1.00	1	10/01/2023 07:35	WG2142370
1,3-Dichlorobenzene	U		0.110	1.00	1	10/01/2023 07:35	WG2142370
1,4-Dichlorobenzene	U		0.120	1.00	1	10/01/2023 07:35	WG2142370
Dichlorodifluoromethane	U		0.374	5.00	1	10/01/2023 07:35	WG2142370
1,1-Dichloroethane	U		0.100	1.00	1	10/01/2023 07:35	WG2142370
1,2-Dichloroethane	U		0.0819	1.00	1	10/01/2023 07:35	WG2142370
1,1-Dichloroethene	U	J4	0.188	1.00	1	10/01/2023 07:35	WG2142370
cis-1,2-Dichloroethene	0.434	J	0.126	1.00	1	10/04/2023 00:09	WG2143977
trans-1,2-Dichloroethene	U		0.149	1.00	1	10/01/2023 07:35	WG2142370
1,2-Dichloropropane	U		0.149	1.00	1	10/01/2023 07:35	WG2142370
1,1-Dichloropropene	U		0.142	1.00	1	10/01/2023 07:35	WG2142370
1,3-Dichloropropane	U		0.110	1.00	1	10/01/2023 07:35	WG2142370
cis-1,3-Dichloropropene	U	C3 J4	0.111	1.00	1	10/01/2023 07:35	WG2142370
trans-1,3-Dichloropropene	U	C3 J3 J4	0.118	1.00	1	10/01/2023 07:35	WG2142370
2,2-Dichloropropane	U		0.161	1.00	1	10/01/2023 07:35	WG2142370
Di-isopropyl ether	U		0.105	1.00	1	10/01/2023 07:35	WG2142370
Ethylbenzene	U		0.137	1.00	1	10/01/2023 07:35	WG2142370
Hexachloro-1,3-butadiene	U		0.337	1.00	1	10/01/2023 07:35	WG2142370
Isopropylbenzene	U		0.105	1.00	1	10/01/2023 07:35	WG2142370
p-Isopropyltoluene	U		0.120	1.00	1	10/01/2023 07:35	WG2142370
2-Butanone (MEK)	U		1.19	10.0	1	10/01/2023 07:35	WG2142370
Methylene Chloride	U		0.430	5.00	1	10/01/2023 07:35	WG2142370
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	10/01/2023 07:35	WG2142370
Methyl tert-butyl ether	U		0.101	1.00	1	10/01/2023 07:35	WG2142370
Naphthalene	U	J4	1.00	5.00	1	10/01/2023 07:35	WG2142370
n-Propylbenzene	U		0.0993	1.00	1	10/01/2023 07:35	WG2142370
Styrene	U		0.118	1.00	1	10/01/2023 07:35	WG2142370
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	10/01/2023 07:35	WG2142370
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	10/01/2023 07:35	WG2142370
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	10/01/2023 07:35	WG2142370
Tetrachloroethene	U		0.300	1.00	1	10/01/2023 07:35	WG2142370
Toluene	0.638	J	0.278	1.00	1	10/01/2023 07:35	WG2142370
1,2,3-Trichlorobenzene	U	J4	0.230	1.00	1	10/01/2023 07:35	WG2142370



Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	U		0.481	1.00	1	10/01/2023 07:35	WG2142370
1,1,1-Trichloroethane	U		0.149	1.00	1	10/01/2023 07:35	WG2142370
1,1,2-Trichloroethane	U		0.158	1.00	1	10/01/2023 07:35	WG2142370
Trichloroethene	1.15	C5 J4	0.190	1.00	1	10/01/2023 07:35	WG2142370
Trichlorofluoromethane	U		0.160	5.00	1	10/01/2023 07:35	WG2142370
1,2,3-Trichloropropane	U		0.237	2.50	1	10/01/2023 07:35	WG2142370
1,2,4-Trimethylbenzene	U		0.322	1.00	1	10/01/2023 07:35	WG2142370
1,2,3-Trimethylbenzene	U		0.104	1.00	1	10/01/2023 07:35	WG2142370
1,3,5-Trimethylbenzene	U		0.104	1.00	1	10/01/2023 07:35	WG2142370
Vinyl chloride	U		0.234	1.00	1	10/01/2023 07:35	WG2142370
Xylenes, Total	U		0.174	3.00	1	10/01/2023 07:35	WG2142370
(S) Toluene-d8	102			80.0-120		10/01/2023 07:35	WG2142370
(S) Toluene-d8	118			80.0-120		10/04/2023 00:09	WG2143977
(S) 4-Bromofluorobenzene	109			77.0-126		10/01/2023 07:35	WG2142370
(S) 4-Bromofluorobenzene	89.9			77.0-126		10/04/2023 00:09	WG2143977
(S) 1,2-Dichloroethane-d4	118			70.0-130		10/01/2023 07:35	WG2142370
(S) 1,2-Dichloroethane-d4	94.4			70.0-130		10/04/2023 00:09	WG2143977

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	J3	11.3	50.0	1	10/01/2023 07:54	WG2142370
Acrolein	U	C3	2.54	50.0	1	10/01/2023 07:54	WG2142370
Acrylonitrile	U	J3	0.671	10.0	1	10/01/2023 07:54	WG2142370
Benzene	U		0.0941	1.00	1	10/01/2023 07:54	WG2142370
Bromobenzene	U		0.118	1.00	1	10/01/2023 07:54	WG2142370
Bromodichloromethane	U		0.136	1.00	1	10/01/2023 07:54	WG2142370
Bromoform	U	C3 J3 J4	0.129	1.00	1	10/01/2023 07:54	WG2142370
Bromomethane	U		0.605	5.00	1	10/01/2023 07:54	WG2142370
n-Butylbenzene	U		0.157	1.00	1	10/01/2023 07:54	WG2142370
sec-Butylbenzene	U		0.125	1.00	1	10/01/2023 07:54	WG2142370
tert-Butylbenzene	U		0.127	1.00	1	10/01/2023 07:54	WG2142370
Carbon disulfide	U		0.0962	1.00	1	10/01/2023 07:54	WG2142370
Carbon tetrachloride	U		0.128	1.00	1	10/01/2023 07:54	WG2142370
Chlorobenzene	U		0.116	1.00	1	10/01/2023 07:54	WG2142370
Chlorodibromomethane	U	C3 J4	0.140	1.00	1	10/01/2023 07:54	WG2142370
Chloroethane	U		0.192	5.00	1	10/01/2023 07:54	WG2142370
Chloroform	U		0.111	5.00	1	10/01/2023 07:54	WG2142370
Chloromethane	U		0.960	2.50	1	10/01/2023 07:54	WG2142370
2-Chlorotoluene	U		0.106	1.00	1	10/01/2023 07:54	WG2142370
4-Chlorotoluene	U		0.114	1.00	1	10/01/2023 07:54	WG2142370
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	10/01/2023 07:54	WG2142370
1,2-Dibromoethane	U		0.126	1.00	1	10/01/2023 07:54	WG2142370
Dibromomethane	U	J4	0.122	1.00	1	10/01/2023 07:54	WG2142370
1,2-Dichlorobenzene	U		0.107	1.00	1	10/01/2023 07:54	WG2142370
1,3-Dichlorobenzene	U		0.110	1.00	1	10/01/2023 07:54	WG2142370
1,4-Dichlorobenzene	U		0.120	1.00	1	10/01/2023 07:54	WG2142370
Dichlorodifluoromethane	U		0.374	5.00	1	10/01/2023 07:54	WG2142370
1,1-Dichloroethane	U		0.100	1.00	1	10/01/2023 07:54	WG2142370
1,2-Dichloroethane	U		0.0819	1.00	1	10/01/2023 07:54	WG2142370
1,1-Dichloroethene	U	J4	0.188	1.00	1	10/01/2023 07:54	WG2142370
cis-1,2-Dichloroethene	0.491	J	0.126	1.00	1	10/04/2023 00:28	WG2143977
trans-1,2-Dichloroethene	U		0.149	1.00	1	10/01/2023 07:54	WG2142370
1,2-Dichloropropane	U		0.149	1.00	1	10/01/2023 07:54	WG2142370
1,1-Dichloropropene	U		0.142	1.00	1	10/01/2023 07:54	WG2142370
1,3-Dichloropropane	U		0.110	1.00	1	10/01/2023 07:54	WG2142370
cis-1,3-Dichloropropene	U	C3 J4	0.111	1.00	1	10/01/2023 07:54	WG2142370
trans-1,3-Dichloropropene	U	C3 J3 J4	0.118	1.00	1	10/01/2023 07:54	WG2142370
2,2-Dichloropropane	U		0.161	1.00	1	10/01/2023 07:54	WG2142370
Di-isopropyl ether	U		0.105	1.00	1	10/01/2023 07:54	WG2142370
Ethylbenzene	U		0.137	1.00	1	10/01/2023 07:54	WG2142370
Hexachloro-1,3-butadiene	U		0.337	1.00	1	10/01/2023 07:54	WG2142370
Isopropylbenzene	U		0.105	1.00	1	10/01/2023 07:54	WG2142370
p-Isopropyltoluene	U		0.120	1.00	1	10/01/2023 07:54	WG2142370
2-Butanone (MEK)	U		1.19	10.0	1	10/01/2023 07:54	WG2142370
Methylene Chloride	U		0.430	5.00	1	10/01/2023 07:54	WG2142370
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	10/01/2023 07:54	WG2142370
Methyl tert-butyl ether	U		0.101	1.00	1	10/01/2023 07:54	WG2142370
Naphthalene	U	J4	1.00	5.00	1	10/01/2023 07:54	WG2142370
n-Propylbenzene	U		0.0993	1.00	1	10/01/2023 07:54	WG2142370
Styrene	U		0.118	1.00	1	10/01/2023 07:54	WG2142370
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	10/01/2023 07:54	WG2142370
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	10/01/2023 07:54	WG2142370
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	10/01/2023 07:54	WG2142370
Tetrachloroethene	U		0.300	1.00	1	10/01/2023 07:54	WG2142370
Toluene	U		0.278	1.00	1	10/01/2023 07:54	WG2142370
1,2,3-Trichlorobenzene	U	J4	0.230	1.00	1	10/01/2023 07:54	WG2142370

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	U		0.481	1.00	1	10/01/2023 07:54	WG2142370
1,1,1-Trichloroethane	U		0.149	1.00	1	10/01/2023 07:54	WG2142370
1,1,2-Trichloroethane	U		0.158	1.00	1	10/01/2023 07:54	WG2142370
Trichloroethene	0.274	J J4	0.190	1.00	1	10/01/2023 07:54	WG2142370
Trichlorofluoromethane	U		0.160	5.00	1	10/01/2023 07:54	WG2142370
1,2,3-Trichloropropane	U		0.237	2.50	1	10/01/2023 07:54	WG2142370
1,2,4-Trimethylbenzene	U		0.322	1.00	1	10/01/2023 07:54	WG2142370
1,2,3-Trimethylbenzene	U		0.104	1.00	1	10/01/2023 07:54	WG2142370
1,3,5-Trimethylbenzene	U		0.104	1.00	1	10/01/2023 07:54	WG2142370
Vinyl chloride	U		0.234	1.00	1	10/01/2023 07:54	WG2142370
Xylenes, Total	0.292	J	0.174	3.00	1	10/01/2023 07:54	WG2142370
(S) Toluene-d8	106			80.0-120		10/01/2023 07:54	WG2142370
(S) Toluene-d8	116			80.0-120		10/04/2023 00:28	WG2143977
(S) 4-Bromofluorobenzene	101			77.0-126		10/01/2023 07:54	WG2142370
(S) 4-Bromofluorobenzene	89.4			77.0-126		10/04/2023 00:28	WG2143977
(S) 1,2-Dichloroethane-d4	107			70.0-130		10/01/2023 07:54	WG2142370
(S) 1,2-Dichloroethane-d4	92.4			70.0-130		10/04/2023 00:28	WG2143977

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	J3	11.3	50.0	1	10/01/2023 08:14	WG2142370
Acrolein	U	C3	2.54	50.0	1	10/01/2023 08:14	WG2142370
Acrylonitrile	U	J3	0.671	10.0	1	10/01/2023 08:14	WG2142370
Benzene	0.142	J	0.0941	1.00	1	10/01/2023 08:14	WG2142370
Bromobenzene	U		0.118	1.00	1	10/01/2023 08:14	WG2142370
Bromodichloromethane	U		0.136	1.00	1	10/01/2023 08:14	WG2142370
Bromoform	U	C3 J3 J4	0.129	1.00	1	10/01/2023 08:14	WG2142370
Bromomethane	U		0.605	5.00	1	10/01/2023 08:14	WG2142370
n-Butylbenzene	U		0.157	1.00	1	10/01/2023 08:14	WG2142370
sec-Butylbenzene	U		0.125	1.00	1	10/01/2023 08:14	WG2142370
tert-Butylbenzene	U		0.127	1.00	1	10/01/2023 08:14	WG2142370
Carbon disulfide	U		0.0962	1.00	1	10/01/2023 08:14	WG2142370
Carbon tetrachloride	U		0.128	1.00	1	10/01/2023 08:14	WG2142370
Chlorobenzene	U		0.116	1.00	1	10/01/2023 08:14	WG2142370
Chlorodibromomethane	U	C3 J4	0.140	1.00	1	10/01/2023 08:14	WG2142370
Chloroethane	U		0.192	5.00	1	10/01/2023 08:14	WG2142370
Chloroform	U		0.111	5.00	1	10/01/2023 08:14	WG2142370
Chloromethane	U		0.960	2.50	1	10/01/2023 08:14	WG2142370
2-Chlorotoluene	U		0.106	1.00	1	10/01/2023 08:14	WG2142370
4-Chlorotoluene	U		0.114	1.00	1	10/01/2023 08:14	WG2142370
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	10/01/2023 08:14	WG2142370
1,2-Dibromoethane	U		0.126	1.00	1	10/01/2023 08:14	WG2142370
Dibromomethane	U	J4	0.122	1.00	1	10/01/2023 08:14	WG2142370
1,2-Dichlorobenzene	U		0.107	1.00	1	10/01/2023 08:14	WG2142370
1,3-Dichlorobenzene	U		0.110	1.00	1	10/01/2023 08:14	WG2142370
1,4-Dichlorobenzene	U		0.120	1.00	1	10/01/2023 08:14	WG2142370
Dichlorodifluoromethane	U		0.374	5.00	1	10/01/2023 08:14	WG2142370
1,1-Dichloroethane	0.437	J	0.100	1.00	1	10/01/2023 08:14	WG2142370
1,2-Dichloroethane	U		0.0819	1.00	1	10/01/2023 08:14	WG2142370
1,1-Dichloroethene	U	J4	0.188	1.00	1	10/01/2023 08:14	WG2142370
cis-1,2-Dichloroethene	70.5		0.126	1.00	1	10/01/2023 08:14	WG2142370
trans-1,2-Dichloroethene	5.53		0.149	1.00	1	10/01/2023 08:14	WG2142370
1,2-Dichloropropane	U		0.149	1.00	1	10/01/2023 08:14	WG2142370
1,1-Dichloropropene	U		0.142	1.00	1	10/01/2023 08:14	WG2142370
1,3-Dichloropropane	U		0.110	1.00	1	10/01/2023 08:14	WG2142370
cis-1,3-Dichloropropene	U	C3 J4	0.111	1.00	1	10/01/2023 08:14	WG2142370
trans-1,3-Dichloropropene	U	C3 J3 J4	0.118	1.00	1	10/01/2023 08:14	WG2142370
2,2-Dichloropropane	U		0.161	1.00	1	10/01/2023 08:14	WG2142370
Di-isopropyl ether	U		0.105	1.00	1	10/01/2023 08:14	WG2142370
Ethylbenzene	U		0.137	1.00	1	10/01/2023 08:14	WG2142370
Hexachloro-1,3-butadiene	U		0.337	1.00	1	10/01/2023 08:14	WG2142370
Isopropylbenzene	U		0.105	1.00	1	10/01/2023 08:14	WG2142370
p-Isopropyltoluene	U		0.120	1.00	1	10/01/2023 08:14	WG2142370
2-Butanone (MEK)	U		1.19	10.0	1	10/01/2023 08:14	WG2142370
Methylene Chloride	U		0.430	5.00	1	10/01/2023 08:14	WG2142370
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	10/01/2023 08:14	WG2142370
Methyl tert-butyl ether	U		0.101	1.00	1	10/01/2023 08:14	WG2142370
Naphthalene	U	J4	1.00	5.00	1	10/01/2023 08:14	WG2142370
n-Propylbenzene	U		0.0993	1.00	1	10/01/2023 08:14	WG2142370
Styrene	U		0.118	1.00	1	10/01/2023 08:14	WG2142370
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	10/01/2023 08:14	WG2142370
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	10/01/2023 08:14	WG2142370
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	10/01/2023 08:14	WG2142370
Tetrachloroethene	U		0.300	1.00	1	10/01/2023 08:14	WG2142370
Toluene	U		0.278	1.00	1	10/01/2023 08:14	WG2142370
1,2,3-Trichlorobenzene	U	J4	0.230	1.00	1	10/01/2023 08:14	WG2142370

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	U		0.481	1.00	1	10/01/2023 08:14	WG2142370
1,1,1-Trichloroethane	U		0.149	1.00	1	10/01/2023 08:14	WG2142370
1,1,2-Trichloroethane	U		0.158	1.00	1	10/01/2023 08:14	WG2142370
Trichloroethene	U	J4	0.190	1.00	1	10/01/2023 08:14	WG2142370
Trichlorofluoromethane	U		0.160	5.00	1	10/01/2023 08:14	WG2142370
1,2,3-Trichloropropane	U		0.237	2.50	1	10/01/2023 08:14	WG2142370
1,2,4-Trimethylbenzene	U		0.322	1.00	1	10/01/2023 08:14	WG2142370
1,2,3-Trimethylbenzene	U		0.104	1.00	1	10/01/2023 08:14	WG2142370
1,3,5-Trimethylbenzene	U		0.104	1.00	1	10/01/2023 08:14	WG2142370
Vinyl chloride	2.07		0.234	1.00	1	10/01/2023 08:14	WG2142370
Xylenes, Total	U		0.174	3.00	1	10/01/2023 08:14	WG2142370
(S) Toluene-d8	99.1			80.0-120		10/01/2023 08:14	WG2142370
(S) 4-Bromofluorobenzene	104			77.0-126		10/01/2023 08:14	WG2142370
(S) 1,2-Dichloroethane-d4	121			70.0-130		10/01/2023 08:14	WG2142370

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	J4	11.3	50.0	1	10/02/2023 01:50	WG2142928
Acrolein	U		2.54	50.0	1	10/02/2023 01:50	WG2142928
Acrylonitrile	U		0.671	10.0	1	10/02/2023 01:50	WG2142928
Benzene	U		0.0941	1.00	1	10/02/2023 01:50	WG2142928
Bromobenzene	U		0.118	1.00	1	10/02/2023 01:50	WG2142928
Bromodichloromethane	U		0.136	1.00	1	10/02/2023 01:50	WG2142928
Bromoform	U		0.129	1.00	1	10/02/2023 01:50	WG2142928
Bromomethane	U		0.605	5.00	1	10/02/2023 01:50	WG2142928
n-Butylbenzene	U		0.157	1.00	1	10/02/2023 01:50	WG2142928
sec-Butylbenzene	U		0.125	1.00	1	10/02/2023 01:50	WG2142928
tert-Butylbenzene	U		0.127	1.00	1	10/02/2023 01:50	WG2142928
Carbon disulfide	U		0.0962	1.00	1	10/02/2023 01:50	WG2142928
Carbon tetrachloride	U		0.128	1.00	1	10/02/2023 01:50	WG2142928
Chlorobenzene	U		0.116	1.00	1	10/02/2023 01:50	WG2142928
Chlorodibromomethane	U		0.140	1.00	1	10/02/2023 01:50	WG2142928
Chloroethane	U		0.192	5.00	1	10/02/2023 01:50	WG2142928
Chloroform	U		0.111	5.00	1	10/02/2023 01:50	WG2142928
Chloromethane	U		0.960	2.50	1	10/02/2023 01:50	WG2142928
2-Chlorotoluene	U		0.106	1.00	1	10/02/2023 01:50	WG2142928
4-Chlorotoluene	U		0.114	1.00	1	10/02/2023 01:50	WG2142928
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	10/02/2023 01:50	WG2142928
1,2-Dibromoethane	U		0.126	1.00	1	10/02/2023 01:50	WG2142928
Dibromomethane	U		0.122	1.00	1	10/02/2023 01:50	WG2142928
1,2-Dichlorobenzene	U		0.107	1.00	1	10/02/2023 01:50	WG2142928
1,3-Dichlorobenzene	U		0.110	1.00	1	10/02/2023 01:50	WG2142928
1,4-Dichlorobenzene	U		0.120	1.00	1	10/02/2023 01:50	WG2142928
Dichlorodifluoromethane	U		0.374	5.00	1	10/02/2023 01:50	WG2142928
1,1-Dichloroethane	U		0.100	1.00	1	10/02/2023 01:50	WG2142928
1,2-Dichloroethane	U		0.0819	1.00	1	10/02/2023 01:50	WG2142928
1,1-Dichloroethene	U		0.188	1.00	1	10/02/2023 01:50	WG2142928
cis-1,2-Dichloroethene	0.960	J	0.126	1.00	1	10/02/2023 01:50	WG2142928
trans-1,2-Dichloroethene	U		0.149	1.00	1	10/02/2023 01:50	WG2142928
1,2-Dichloropropane	U		0.149	1.00	1	10/02/2023 01:50	WG2142928
1,1-Dichloropropene	U		0.142	1.00	1	10/02/2023 01:50	WG2142928
1,3-Dichloropropane	U		0.110	1.00	1	10/02/2023 01:50	WG2142928
cis-1,3-Dichloropropene	U		0.111	1.00	1	10/02/2023 01:50	WG2142928
trans-1,3-Dichloropropene	U		0.118	1.00	1	10/02/2023 01:50	WG2142928
2,2-Dichloropropane	U	J4	0.161	1.00	1	10/02/2023 01:50	WG2142928
Di-isopropyl ether	U		0.105	1.00	1	10/02/2023 01:50	WG2142928
Ethylbenzene	U		0.137	1.00	1	10/02/2023 01:50	WG2142928
Hexachloro-1,3-butadiene	U	J3	0.337	1.00	1	10/02/2023 01:50	WG2142928
Isopropylbenzene	U		0.105	1.00	1	10/02/2023 01:50	WG2142928
p-Isopropyltoluene	U		0.120	1.00	1	10/02/2023 01:50	WG2142928
2-Butanone (MEK)	U		1.19	10.0	1	10/02/2023 01:50	WG2142928
Methylene Chloride	U		0.430	5.00	1	10/02/2023 01:50	WG2142928
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	10/02/2023 01:50	WG2142928
Methyl tert-butyl ether	U		0.101	1.00	1	10/02/2023 01:50	WG2142928
Naphthalene	U	J3	1.00	5.00	1	10/02/2023 01:50	WG2142928
n-Propylbenzene	U		0.0993	1.00	1	10/02/2023 01:50	WG2142928
Styrene	U		0.118	1.00	1	10/02/2023 01:50	WG2142928
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	10/02/2023 01:50	WG2142928
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	10/02/2023 01:50	WG2142928
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	10/02/2023 01:50	WG2142928
Tetrachloroethene	U		0.300	1.00	1	10/02/2023 01:50	WG2142928
Toluene	U		0.278	1.00	1	10/02/2023 01:50	WG2142928
1,2,3-Trichlorobenzene	U	J3	0.230	1.00	1	10/02/2023 01:50	WG2142928

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	U	J3	0.481	1.00	1	10/02/2023 01:50	WG2142928
1,1,1-Trichloroethane	U		0.149	1.00	1	10/02/2023 01:50	WG2142928
1,1,2-Trichloroethane	U		0.158	1.00	1	10/02/2023 01:50	WG2142928
Trichloroethene	U		0.190	1.00	1	10/02/2023 01:50	WG2142928
Trichlorofluoromethane	U		0.160	5.00	1	10/02/2023 01:50	WG2142928
1,2,3-Trichloropropane	U		0.237	2.50	1	10/02/2023 01:50	WG2142928
1,2,4-Trimethylbenzene	U		0.322	1.00	1	10/02/2023 01:50	WG2142928
1,2,3-Trimethylbenzene	U		0.104	1.00	1	10/02/2023 01:50	WG2142928
1,3,5-Trimethylbenzene	U		0.104	1.00	1	10/02/2023 01:50	WG2142928
Vinyl chloride	U		0.234	1.00	1	10/02/2023 01:50	WG2142928
Xylenes, Total	U		0.174	3.00	1	10/02/2023 01:50	WG2142928
(S) Toluene-d8	90.6			80.0-120		10/02/2023 01:50	WG2142928
(S) 4-Bromofluorobenzene	92.1			77.0-126		10/02/2023 01:50	WG2142928
(S) 1,2-Dichloroethane-d4	90.0			70.0-130		10/02/2023 01:50	WG2142928

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	J4	11.3	50.0	1	10/02/2023 02:09	WG2142928
Acrolein	U		2.54	50.0	1	10/02/2023 02:09	WG2142928
Acrylonitrile	U		0.671	10.0	1	10/02/2023 02:09	WG2142928
Benzene	U		0.0941	1.00	1	10/02/2023 02:09	WG2142928
Bromobenzene	U		0.118	1.00	1	10/02/2023 02:09	WG2142928
Bromodichloromethane	U		0.136	1.00	1	10/02/2023 02:09	WG2142928
Bromoform	U		0.129	1.00	1	10/02/2023 02:09	WG2142928
Bromomethane	U		0.605	5.00	1	10/02/2023 02:09	WG2142928
n-Butylbenzene	U		0.157	1.00	1	10/02/2023 02:09	WG2142928
sec-Butylbenzene	U		0.125	1.00	1	10/02/2023 02:09	WG2142928
tert-Butylbenzene	U		0.127	1.00	1	10/02/2023 02:09	WG2142928
Carbon disulfide	U		0.0962	1.00	1	10/02/2023 02:09	WG2142928
Carbon tetrachloride	U		0.128	1.00	1	10/02/2023 02:09	WG2142928
Chlorobenzene	U		0.116	1.00	1	10/02/2023 02:09	WG2142928
Chlorodibromomethane	U		0.140	1.00	1	10/02/2023 02:09	WG2142928
Chloroethane	U		0.192	5.00	1	10/02/2023 02:09	WG2142928
Chloroform	U		0.111	5.00	1	10/02/2023 02:09	WG2142928
Chloromethane	U		0.960	2.50	1	10/02/2023 02:09	WG2142928
2-Chlorotoluene	U		0.106	1.00	1	10/02/2023 02:09	WG2142928
4-Chlorotoluene	U		0.114	1.00	1	10/02/2023 02:09	WG2142928
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	10/02/2023 02:09	WG2142928
1,2-Dibromoethane	U		0.126	1.00	1	10/02/2023 02:09	WG2142928
Dibromomethane	U		0.122	1.00	1	10/02/2023 02:09	WG2142928
1,2-Dichlorobenzene	U		0.107	1.00	1	10/02/2023 02:09	WG2142928
1,3-Dichlorobenzene	U		0.110	1.00	1	10/02/2023 02:09	WG2142928
1,4-Dichlorobenzene	U		0.120	1.00	1	10/02/2023 02:09	WG2142928
Dichlorodifluoromethane	U		0.374	5.00	1	10/02/2023 02:09	WG2142928
1,1-Dichloroethane	U		0.100	1.00	1	10/02/2023 02:09	WG2142928
1,2-Dichloroethane	U		0.0819	1.00	1	10/02/2023 02:09	WG2142928
1,1-Dichloroethene	U		0.188	1.00	1	10/02/2023 02:09	WG2142928
cis-1,2-Dichloroethene	U		0.126	1.00	1	10/02/2023 02:09	WG2142928
trans-1,2-Dichloroethene	U		0.149	1.00	1	10/02/2023 02:09	WG2142928
1,2-Dichloropropane	U		0.149	1.00	1	10/02/2023 02:09	WG2142928
1,1-Dichloropropene	U		0.142	1.00	1	10/02/2023 02:09	WG2142928
1,3-Dichloropropane	U		0.110	1.00	1	10/02/2023 02:09	WG2142928
cis-1,3-Dichloropropene	U		0.111	1.00	1	10/02/2023 02:09	WG2142928
trans-1,3-Dichloropropene	U		0.118	1.00	1	10/02/2023 02:09	WG2142928
2,2-Dichloropropane	U	J4	0.161	1.00	1	10/02/2023 02:09	WG2142928
Di-isopropyl ether	U		0.105	1.00	1	10/02/2023 02:09	WG2142928
Ethylbenzene	U		0.137	1.00	1	10/02/2023 02:09	WG2142928
Hexachloro-1,3-butadiene	U	J3	0.337	1.00	1	10/02/2023 02:09	WG2142928
Isopropylbenzene	U		0.105	1.00	1	10/02/2023 02:09	WG2142928
p-Isopropyltoluene	U		0.120	1.00	1	10/02/2023 02:09	WG2142928
2-Butanone (MEK)	U		1.19	10.0	1	10/02/2023 02:09	WG2142928
Methylene Chloride	U		0.430	5.00	1	10/02/2023 02:09	WG2142928
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	10/02/2023 02:09	WG2142928
Methyl tert-butyl ether	U		0.101	1.00	1	10/02/2023 02:09	WG2142928
Naphthalene	U	J3	1.00	5.00	1	10/02/2023 02:09	WG2142928
n-Propylbenzene	U		0.0993	1.00	1	10/02/2023 02:09	WG2142928
Styrene	U		0.118	1.00	1	10/02/2023 02:09	WG2142928
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	10/02/2023 02:09	WG2142928
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	10/02/2023 02:09	WG2142928
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	10/02/2023 02:09	WG2142928
Tetrachloroethene	U		0.300	1.00	1	10/02/2023 02:09	WG2142928
Toluene	U		0.278	1.00	1	10/02/2023 02:09	WG2142928
1,2,3-Trichlorobenzene	U	J3	0.230	1.00	1	10/02/2023 02:09	WG2142928

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	U	J3	0.481	1.00	1	10/02/2023 02:09	WG2142928
1,1,1-Trichloroethane	U		0.149	1.00	1	10/02/2023 02:09	WG2142928
1,1,2-Trichloroethane	U		0.158	1.00	1	10/02/2023 02:09	WG2142928
Trichloroethene	U		0.190	1.00	1	10/02/2023 02:09	WG2142928
Trichlorofluoromethane	U		0.160	5.00	1	10/02/2023 02:09	WG2142928
1,2,3-Trichloropropane	U		0.237	2.50	1	10/02/2023 02:09	WG2142928
1,2,4-Trimethylbenzene	U		0.322	1.00	1	10/02/2023 02:09	WG2142928
1,2,3-Trimethylbenzene	U		0.104	1.00	1	10/02/2023 02:09	WG2142928
1,3,5-Trimethylbenzene	U		0.104	1.00	1	10/02/2023 02:09	WG2142928
Vinyl chloride	U		0.234	1.00	1	10/02/2023 02:09	WG2142928
Xylenes, Total	U		0.174	3.00	1	10/02/2023 02:09	WG2142928
(S) Toluene-d8	90.9			80.0-120		10/02/2023 02:09	WG2142928
(S) 4-Bromofluorobenzene	91.3			77.0-126		10/02/2023 02:09	WG2142928
(S) 1,2-Dichloroethane-d4	88.2			70.0-130		10/02/2023 02:09	WG2142928

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	J4	11.3	50.0	1	10/02/2023 02:30	WG2142928
Acrolein	U		2.54	50.0	1	10/02/2023 02:30	WG2142928
Acrylonitrile	U		0.671	10.0	1	10/02/2023 02:30	WG2142928
Benzene	U		0.0941	1.00	1	10/02/2023 02:30	WG2142928
Bromobenzene	U		0.118	1.00	1	10/02/2023 02:30	WG2142928
Bromodichloromethane	U		0.136	1.00	1	10/02/2023 02:30	WG2142928
Bromoform	U		0.129	1.00	1	10/02/2023 02:30	WG2142928
Bromomethane	U		0.605	5.00	1	10/02/2023 02:30	WG2142928
n-Butylbenzene	U		0.157	1.00	1	10/02/2023 02:30	WG2142928
sec-Butylbenzene	U		0.125	1.00	1	10/02/2023 02:30	WG2142928
tert-Butylbenzene	U		0.127	1.00	1	10/02/2023 02:30	WG2142928
Carbon disulfide	U		0.0962	1.00	1	10/02/2023 02:30	WG2142928
Carbon tetrachloride	U		0.128	1.00	1	10/02/2023 02:30	WG2142928
Chlorobenzene	U		0.116	1.00	1	10/02/2023 02:30	WG2142928
Chlorodibromomethane	U		0.140	1.00	1	10/02/2023 02:30	WG2142928
Chloroethane	U		0.192	5.00	1	10/02/2023 02:30	WG2142928
Chloroform	U		0.111	5.00	1	10/02/2023 02:30	WG2142928
Chloromethane	U		0.960	2.50	1	10/02/2023 02:30	WG2142928
2-Chlorotoluene	U		0.106	1.00	1	10/02/2023 02:30	WG2142928
4-Chlorotoluene	U		0.114	1.00	1	10/02/2023 02:30	WG2142928
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	10/02/2023 02:30	WG2142928
1,2-Dibromoethane	U		0.126	1.00	1	10/02/2023 02:30	WG2142928
Dibromomethane	U		0.122	1.00	1	10/02/2023 02:30	WG2142928
1,2-Dichlorobenzene	U		0.107	1.00	1	10/02/2023 02:30	WG2142928
1,3-Dichlorobenzene	U		0.110	1.00	1	10/02/2023 02:30	WG2142928
1,4-Dichlorobenzene	U		0.120	1.00	1	10/02/2023 02:30	WG2142928
Dichlorodifluoromethane	U		0.374	5.00	1	10/02/2023 02:30	WG2142928
1,1-Dichloroethane	U		0.100	1.00	1	10/02/2023 02:30	WG2142928
1,2-Dichloroethane	U		0.0819	1.00	1	10/02/2023 02:30	WG2142928
1,1-Dichloroethene	U		0.188	1.00	1	10/02/2023 02:30	WG2142928
cis-1,2-Dichloroethene	1.20		0.126	1.00	1	10/02/2023 02:30	WG2142928
trans-1,2-Dichloroethene	U		0.149	1.00	1	10/02/2023 02:30	WG2142928
1,2-Dichloropropane	U		0.149	1.00	1	10/02/2023 02:30	WG2142928
1,1-Dichloropropene	U		0.142	1.00	1	10/02/2023 02:30	WG2142928
1,3-Dichloropropane	U		0.110	1.00	1	10/02/2023 02:30	WG2142928
cis-1,3-Dichloropropene	U		0.111	1.00	1	10/02/2023 02:30	WG2142928
trans-1,3-Dichloropropene	U		0.118	1.00	1	10/02/2023 02:30	WG2142928
2,2-Dichloropropane	U	J4	0.161	1.00	1	10/02/2023 02:30	WG2142928
Di-isopropyl ether	U		0.105	1.00	1	10/02/2023 02:30	WG2142928
Ethylbenzene	U		0.137	1.00	1	10/02/2023 02:30	WG2142928
Hexachloro-1,3-butadiene	U	J3	0.337	1.00	1	10/02/2023 02:30	WG2142928
Isopropylbenzene	U		0.105	1.00	1	10/02/2023 02:30	WG2142928
p-Isopropyltoluene	U		0.120	1.00	1	10/02/2023 02:30	WG2142928
2-Butanone (MEK)	U		1.19	10.0	1	10/02/2023 02:30	WG2142928
Methylene Chloride	U		0.430	5.00	1	10/02/2023 02:30	WG2142928
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	10/02/2023 02:30	WG2142928
Methyl tert-butyl ether	U		0.101	1.00	1	10/02/2023 02:30	WG2142928
Naphthalene	U	J3	1.00	5.00	1	10/02/2023 02:30	WG2142928
n-Propylbenzene	U		0.0993	1.00	1	10/02/2023 02:30	WG2142928
Styrene	U		0.118	1.00	1	10/02/2023 02:30	WG2142928
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	10/02/2023 02:30	WG2142928
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	10/02/2023 02:30	WG2142928
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	10/02/2023 02:30	WG2142928
Tetrachloroethene	U		0.300	1.00	1	10/02/2023 02:30	WG2142928
Toluene	U		0.278	1.00	1	10/02/2023 02:30	WG2142928
1,2,3-Trichlorobenzene	U	J3	0.230	1.00	1	10/02/2023 02:30	WG2142928

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

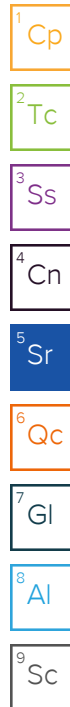
Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	U	<u>J3</u>	0.481	1.00	1	10/02/2023 02:30	WG2142928
1,1,1-Trichloroethane	U		0.149	1.00	1	10/02/2023 02:30	WG2142928
1,1,2-Trichloroethane	U		0.158	1.00	1	10/02/2023 02:30	WG2142928
Trichloroethene	0.427	<u>J</u>	0.190	1.00	1	10/02/2023 02:30	WG2142928
Trichlorofluoromethane	U		0.160	5.00	1	10/02/2023 02:30	WG2142928
1,2,3-Trichloropropane	U		0.237	2.50	1	10/02/2023 02:30	WG2142928
1,2,4-Trimethylbenzene	U		0.322	1.00	1	10/02/2023 02:30	WG2142928
1,2,3-Trimethylbenzene	U		0.104	1.00	1	10/02/2023 02:30	WG2142928
1,3,5-Trimethylbenzene	U		0.104	1.00	1	10/02/2023 02:30	WG2142928
Vinyl chloride	0.340	<u>J</u>	0.234	1.00	1	10/02/2023 02:30	WG2142928
Xylenes, Total	U		0.174	3.00	1	10/02/2023 02:30	WG2142928
(S) Toluene-d8	92.4			80.0-120		10/02/2023 02:30	WG2142928
(S) 4-Bromofluorobenzene	91.2			77.0-126		10/02/2023 02:30	WG2142928
(S) 1,2-Dichloroethane-d4	90.1			70.0-130		10/02/2023 02:30	WG2142928

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	J4	11.3	50.0	1	10/02/2023 02:47	WG2142928
Acrolein	U		2.54	50.0	1	10/02/2023 02:47	WG2142928
Acrylonitrile	U		0.671	10.0	1	10/02/2023 02:47	WG2142928
Benzene	U		0.0941	1.00	1	10/02/2023 02:47	WG2142928
Bromobenzene	U		0.118	1.00	1	10/02/2023 02:47	WG2142928
Bromodichloromethane	U		0.136	1.00	1	10/02/2023 02:47	WG2142928
Bromoform	U		0.129	1.00	1	10/02/2023 02:47	WG2142928
Bromomethane	U		0.605	5.00	1	10/02/2023 02:47	WG2142928
n-Butylbenzene	U		0.157	1.00	1	10/02/2023 02:47	WG2142928
sec-Butylbenzene	U		0.125	1.00	1	10/02/2023 02:47	WG2142928
tert-Butylbenzene	U		0.127	1.00	1	10/02/2023 02:47	WG2142928
Carbon disulfide	U		0.0962	1.00	1	10/02/2023 02:47	WG2142928
Carbon tetrachloride	U		0.128	1.00	1	10/02/2023 02:47	WG2142928
Chlorobenzene	U		0.116	1.00	1	10/02/2023 02:47	WG2142928
Chlorodibromomethane	U		0.140	1.00	1	10/02/2023 02:47	WG2142928
Chloroethane	U		0.192	5.00	1	10/02/2023 02:47	WG2142928
Chloroform	U		0.111	5.00	1	10/02/2023 02:47	WG2142928
Chloromethane	U		0.960	2.50	1	10/02/2023 02:47	WG2142928
2-Chlorotoluene	U		0.106	1.00	1	10/02/2023 02:47	WG2142928
4-Chlorotoluene	U		0.114	1.00	1	10/02/2023 02:47	WG2142928
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	10/02/2023 02:47	WG2142928
1,2-Dibromoethane	U		0.126	1.00	1	10/02/2023 02:47	WG2142928
Dibromomethane	U		0.122	1.00	1	10/02/2023 02:47	WG2142928
1,2-Dichlorobenzene	U		0.107	1.00	1	10/02/2023 02:47	WG2142928
1,3-Dichlorobenzene	U		0.110	1.00	1	10/02/2023 02:47	WG2142928
1,4-Dichlorobenzene	U		0.120	1.00	1	10/02/2023 02:47	WG2142928
Dichlorodifluoromethane	U		0.374	5.00	1	10/02/2023 02:47	WG2142928
1,1-Dichloroethane	U		0.100	1.00	1	10/02/2023 02:47	WG2142928
1,2-Dichloroethane	U		0.0819	1.00	1	10/02/2023 02:47	WG2142928
1,1-Dichloroethene	U		0.188	1.00	1	10/02/2023 02:47	WG2142928
cis-1,2-Dichloroethene	U		0.126	1.00	1	10/02/2023 02:47	WG2142928
trans-1,2-Dichloroethene	U		0.149	1.00	1	10/02/2023 02:47	WG2142928
1,2-Dichloropropane	U		0.149	1.00	1	10/02/2023 02:47	WG2142928
1,1-Dichloropropene	U		0.142	1.00	1	10/02/2023 02:47	WG2142928
1,3-Dichloropropane	U		0.110	1.00	1	10/02/2023 02:47	WG2142928
cis-1,3-Dichloropropene	U		0.111	1.00	1	10/02/2023 02:47	WG2142928
trans-1,3-Dichloropropene	U		0.118	1.00	1	10/02/2023 02:47	WG2142928
2,2-Dichloropropane	U	J4	0.161	1.00	1	10/02/2023 02:47	WG2142928
Di-isopropyl ether	U		0.105	1.00	1	10/02/2023 02:47	WG2142928
Ethylbenzene	0.168	J	0.137	1.00	1	10/02/2023 02:47	WG2142928
Hexachloro-1,3-butadiene	U	J3	0.337	1.00	1	10/02/2023 02:47	WG2142928
Isopropylbenzene	U		0.105	1.00	1	10/02/2023 02:47	WG2142928
p-Isopropyltoluene	U		0.120	1.00	1	10/02/2023 02:47	WG2142928
2-Butanone (MEK)	U		1.19	10.0	1	10/02/2023 02:47	WG2142928
Methylene Chloride	U		0.430	5.00	1	10/02/2023 02:47	WG2142928
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	10/02/2023 02:47	WG2142928
Methyl tert-butyl ether	U		0.101	1.00	1	10/02/2023 02:47	WG2142928
Naphthalene	U	J3	1.00	5.00	1	10/02/2023 02:47	WG2142928
n-Propylbenzene	U		0.0993	1.00	1	10/02/2023 02:47	WG2142928
Styrene	U		0.118	1.00	1	10/02/2023 02:47	WG2142928
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	10/02/2023 02:47	WG2142928
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	10/02/2023 02:47	WG2142928
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	10/02/2023 02:47	WG2142928
Tetrachloroethene	U		0.300	1.00	1	10/02/2023 02:47	WG2142928
Toluene	U		0.278	1.00	1	10/02/2023 02:47	WG2142928
1,2,3-Trichlorobenzene	U	J3	0.230	1.00	1	10/02/2023 02:47	WG2142928



Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	U	<u>J3</u>	0.481	1.00	1	10/02/2023 02:47	WG2142928
1,1,1-Trichloroethane	U		0.149	1.00	1	10/02/2023 02:47	WG2142928
1,1,2-Trichloroethane	U		0.158	1.00	1	10/02/2023 02:47	WG2142928
Trichloroethene	U		0.190	1.00	1	10/02/2023 02:47	WG2142928
Trichlorofluoromethane	U		0.160	5.00	1	10/02/2023 02:47	WG2142928
1,2,3-Trichloropropane	U		0.237	2.50	1	10/02/2023 02:47	WG2142928
1,2,4-Trimethylbenzene	U		0.322	1.00	1	10/02/2023 02:47	WG2142928
1,2,3-Trimethylbenzene	U		0.104	1.00	1	10/02/2023 02:47	WG2142928
1,3,5-Trimethylbenzene	U		0.104	1.00	1	10/02/2023 02:47	WG2142928
Vinyl chloride	U		0.234	1.00	1	10/02/2023 02:47	WG2142928
Xylenes, Total	0.562	<u>J</u>	0.174	3.00	1	10/02/2023 02:47	WG2142928
(S) Toluene-d8	90.1			80.0-120		10/02/2023 02:47	WG2142928
(S) 4-Bromofluorobenzene	91.9			77.0-126		10/02/2023 02:47	WG2142928
(S) 1,2-Dichloroethane-d4	89.3			70.0-130		10/02/2023 02:47	WG2142928

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	J4	11.3	50.0	1	10/02/2023 03:06	WG2142928
Acrolein	U		2.54	50.0	1	10/02/2023 03:06	WG2142928
Acrylonitrile	U		0.671	10.0	1	10/02/2023 03:06	WG2142928
Benzene	U		0.0941	1.00	1	10/02/2023 03:06	WG2142928
Bromobenzene	U		0.118	1.00	1	10/02/2023 03:06	WG2142928
Bromodichloromethane	U		0.136	1.00	1	10/02/2023 03:06	WG2142928
Bromoform	U		0.129	1.00	1	10/02/2023 03:06	WG2142928
Bromomethane	U		0.605	5.00	1	10/02/2023 03:06	WG2142928
n-Butylbenzene	U		0.157	1.00	1	10/02/2023 03:06	WG2142928
sec-Butylbenzene	U		0.125	1.00	1	10/02/2023 03:06	WG2142928
tert-Butylbenzene	U		0.127	1.00	1	10/02/2023 03:06	WG2142928
Carbon disulfide	U		0.0962	1.00	1	10/02/2023 03:06	WG2142928
Carbon tetrachloride	U		0.128	1.00	1	10/02/2023 03:06	WG2142928
Chlorobenzene	U		0.116	1.00	1	10/02/2023 03:06	WG2142928
Chlorodibromomethane	U		0.140	1.00	1	10/02/2023 03:06	WG2142928
Chloroethane	U		0.192	5.00	1	10/02/2023 03:06	WG2142928
Chloroform	U		0.111	5.00	1	10/02/2023 03:06	WG2142928
Chloromethane	U		0.960	2.50	1	10/02/2023 03:06	WG2142928
2-Chlorotoluene	U		0.106	1.00	1	10/02/2023 03:06	WG2142928
4-Chlorotoluene	U		0.114	1.00	1	10/02/2023 03:06	WG2142928
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	10/02/2023 03:06	WG2142928
1,2-Dibromoethane	U		0.126	1.00	1	10/02/2023 03:06	WG2142928
Dibromomethane	U		0.122	1.00	1	10/02/2023 03:06	WG2142928
1,2-Dichlorobenzene	U		0.107	1.00	1	10/02/2023 03:06	WG2142928
1,3-Dichlorobenzene	U		0.110	1.00	1	10/02/2023 03:06	WG2142928
1,4-Dichlorobenzene	U		0.120	1.00	1	10/02/2023 03:06	WG2142928
Dichlorodifluoromethane	U		0.374	5.00	1	10/02/2023 03:06	WG2142928
1,1-Dichloroethane	U		0.100	1.00	1	10/02/2023 03:06	WG2142928
1,2-Dichloroethane	U		0.0819	1.00	1	10/02/2023 03:06	WG2142928
1,1-Dichloroethene	U		0.188	1.00	1	10/02/2023 03:06	WG2142928
cis-1,2-Dichloroethene	U		0.126	1.00	1	10/02/2023 03:06	WG2142928
trans-1,2-Dichloroethene	U		0.149	1.00	1	10/02/2023 03:06	WG2142928
1,2-Dichloropropane	U		0.149	1.00	1	10/02/2023 03:06	WG2142928
1,1-Dichloropropene	U		0.142	1.00	1	10/02/2023 03:06	WG2142928
1,3-Dichloropropane	U		0.110	1.00	1	10/02/2023 03:06	WG2142928
cis-1,3-Dichloropropene	U		0.111	1.00	1	10/02/2023 03:06	WG2142928
trans-1,3-Dichloropropene	U		0.118	1.00	1	10/02/2023 03:06	WG2142928
2,2-Dichloropropane	U	J4	0.161	1.00	1	10/02/2023 03:06	WG2142928
Di-isopropyl ether	U		0.105	1.00	1	10/02/2023 03:06	WG2142928
Ethylbenzene	U		0.137	1.00	1	10/02/2023 03:06	WG2142928
Hexachloro-1,3-butadiene	U	J3	0.337	1.00	1	10/02/2023 03:06	WG2142928
Isopropylbenzene	U		0.105	1.00	1	10/02/2023 03:06	WG2142928
p-Isopropyltoluene	U		0.120	1.00	1	10/02/2023 03:06	WG2142928
2-Butanone (MEK)	U		1.19	10.0	1	10/02/2023 03:06	WG2142928
Methylene Chloride	U		0.430	5.00	1	10/02/2023 03:06	WG2142928
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	10/02/2023 03:06	WG2142928
Methyl tert-butyl ether	U		0.101	1.00	1	10/02/2023 03:06	WG2142928
Naphthalene	U	J3	1.00	5.00	1	10/02/2023 03:06	WG2142928
n-Propylbenzene	U		0.0993	1.00	1	10/02/2023 03:06	WG2142928
Styrene	U		0.118	1.00	1	10/02/2023 03:06	WG2142928
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	10/02/2023 03:06	WG2142928
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	10/02/2023 03:06	WG2142928
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	10/02/2023 03:06	WG2142928
Tetrachloroethene	U		0.300	1.00	1	10/02/2023 03:06	WG2142928
Toluene	U		0.278	1.00	1	10/02/2023 03:06	WG2142928
1,2,3-Trichlorobenzene	U	J3	0.230	1.00	1	10/02/2023 03:06	WG2142928

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	U	<u>J3</u>	0.481	1.00	1	10/02/2023 03:06	WG2142928
1,1,1-Trichloroethane	U		0.149	1.00	1	10/02/2023 03:06	WG2142928
1,1,2-Trichloroethane	U		0.158	1.00	1	10/02/2023 03:06	WG2142928
Trichloroethene	U		0.190	1.00	1	10/02/2023 03:06	WG2142928
Trichlorofluoromethane	U		0.160	5.00	1	10/02/2023 03:06	WG2142928
1,2,3-Trichloropropane	U		0.237	2.50	1	10/02/2023 03:06	WG2142928
1,2,4-Trimethylbenzene	U		0.322	1.00	1	10/02/2023 03:06	WG2142928
1,2,3-Trimethylbenzene	U		0.104	1.00	1	10/02/2023 03:06	WG2142928
1,3,5-Trimethylbenzene	U		0.104	1.00	1	10/02/2023 03:06	WG2142928
Vinyl chloride	U		0.234	1.00	1	10/02/2023 03:06	WG2142928
Xylenes, Total	0.513	<u>J</u>	0.174	3.00	1	10/02/2023 03:06	WG2142928
(S) Toluene-d8	92.6			80.0-120		10/02/2023 03:06	WG2142928
(S) 4-Bromofluorobenzene	90.6			77.0-126		10/02/2023 03:06	WG2142928
(S) 1,2-Dichloroethane-d4	86.8			70.0-130		10/02/2023 03:06	WG2142928

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	J4	11.3	50.0	1	10/02/2023 03:25	WG2142928
Acrolein	U		2.54	50.0	1	10/02/2023 03:25	WG2142928
Acrylonitrile	U		0.671	10.0	1	10/02/2023 03:25	WG2142928
Benzene	U		0.0941	1.00	1	10/02/2023 03:25	WG2142928
Bromobenzene	U		0.118	1.00	1	10/02/2023 03:25	WG2142928
Bromodichloromethane	U		0.136	1.00	1	10/02/2023 03:25	WG2142928
Bromoform	U		0.129	1.00	1	10/02/2023 03:25	WG2142928
Bromomethane	U		0.605	5.00	1	10/02/2023 03:25	WG2142928
n-Butylbenzene	U		0.157	1.00	1	10/02/2023 03:25	WG2142928
sec-Butylbenzene	U		0.125	1.00	1	10/02/2023 03:25	WG2142928
tert-Butylbenzene	U		0.127	1.00	1	10/02/2023 03:25	WG2142928
Carbon disulfide	U		0.0962	1.00	1	10/02/2023 03:25	WG2142928
Carbon tetrachloride	U		0.128	1.00	1	10/02/2023 03:25	WG2142928
Chlorobenzene	U		0.116	1.00	1	10/02/2023 03:25	WG2142928
Chlorodibromomethane	U		0.140	1.00	1	10/02/2023 03:25	WG2142928
Chloroethane	U		0.192	5.00	1	10/02/2023 03:25	WG2142928
Chloroform	U		0.111	5.00	1	10/02/2023 03:25	WG2142928
Chloromethane	U		0.960	2.50	1	10/02/2023 03:25	WG2142928
2-Chlorotoluene	U		0.106	1.00	1	10/02/2023 03:25	WG2142928
4-Chlorotoluene	U		0.114	1.00	1	10/02/2023 03:25	WG2142928
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	10/02/2023 03:25	WG2142928
1,2-Dibromoethane	U		0.126	1.00	1	10/02/2023 03:25	WG2142928
Dibromomethane	U		0.122	1.00	1	10/02/2023 03:25	WG2142928
1,2-Dichlorobenzene	U		0.107	1.00	1	10/02/2023 03:25	WG2142928
1,3-Dichlorobenzene	U		0.110	1.00	1	10/02/2023 03:25	WG2142928
1,4-Dichlorobenzene	U		0.120	1.00	1	10/02/2023 03:25	WG2142928
Dichlorodifluoromethane	U		0.374	5.00	1	10/02/2023 03:25	WG2142928
1,1-Dichloroethane	0.162	J	0.100	1.00	1	10/02/2023 03:25	WG2142928
1,2-Dichloroethane	U		0.0819	1.00	1	10/02/2023 03:25	WG2142928
1,1-Dichloroethene	U		0.188	1.00	1	10/02/2023 03:25	WG2142928
cis-1,2-Dichloroethene	33.3		0.126	1.00	1	10/02/2023 03:25	WG2142928
trans-1,2-Dichloroethene	1.96		0.149	1.00	1	10/02/2023 03:25	WG2142928
1,2-Dichloropropane	U		0.149	1.00	1	10/02/2023 03:25	WG2142928
1,1-Dichloropropene	U		0.142	1.00	1	10/02/2023 03:25	WG2142928
1,3-Dichloropropane	U		0.110	1.00	1	10/02/2023 03:25	WG2142928
cis-1,3-Dichloropropene	U		0.111	1.00	1	10/02/2023 03:25	WG2142928
trans-1,3-Dichloropropene	U		0.118	1.00	1	10/02/2023 03:25	WG2142928
2,2-Dichloropropane	U	J4	0.161	1.00	1	10/02/2023 03:25	WG2142928
Di-isopropyl ether	U		0.105	1.00	1	10/02/2023 03:25	WG2142928
Ethylbenzene	U		0.137	1.00	1	10/02/2023 03:25	WG2142928
Hexachloro-1,3-butadiene	U	J3	0.337	1.00	1	10/02/2023 03:25	WG2142928
Isopropylbenzene	U		0.105	1.00	1	10/02/2023 03:25	WG2142928
p-Isopropyltoluene	U		0.120	1.00	1	10/02/2023 03:25	WG2142928
2-Butanone (MEK)	U		1.19	10.0	1	10/02/2023 03:25	WG2142928
Methylene Chloride	U		0.430	5.00	1	10/02/2023 03:25	WG2142928
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	10/02/2023 03:25	WG2142928
Methyl tert-butyl ether	U		0.101	1.00	1	10/02/2023 03:25	WG2142928
Naphthalene	U	J3	1.00	5.00	1	10/02/2023 03:25	WG2142928
n-Propylbenzene	U		0.0993	1.00	1	10/02/2023 03:25	WG2142928
Styrene	U		0.118	1.00	1	10/02/2023 03:25	WG2142928
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	10/02/2023 03:25	WG2142928
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	10/02/2023 03:25	WG2142928
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	10/02/2023 03:25	WG2142928
Tetrachloroethene	U		0.300	1.00	1	10/02/2023 03:25	WG2142928
Toluene	U		0.278	1.00	1	10/02/2023 03:25	WG2142928
1,2,3-Trichlorobenzene	U	J3	0.230	1.00	1	10/02/2023 03:25	WG2142928

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	U	J3	0.481	1.00	1	10/02/2023 03:25	WG2142928
1,1,1-Trichloroethane	U		0.149	1.00	1	10/02/2023 03:25	WG2142928
1,1,2-Trichloroethane	U		0.158	1.00	1	10/02/2023 03:25	WG2142928
Trichloroethene	11.1		0.190	1.00	1	10/02/2023 03:25	WG2142928
Trichlorofluoromethane	U		0.160	5.00	1	10/02/2023 03:25	WG2142928
1,2,3-Trichloropropane	U		0.237	2.50	1	10/02/2023 03:25	WG2142928
1,2,4-Trimethylbenzene	U		0.322	1.00	1	10/02/2023 03:25	WG2142928
1,2,3-Trimethylbenzene	U		0.104	1.00	1	10/02/2023 03:25	WG2142928
1,3,5-Trimethylbenzene	U		0.104	1.00	1	10/02/2023 03:25	WG2142928
Vinyl chloride	U		0.234	1.00	1	10/02/2023 03:25	WG2142928
Xylenes, Total	U		0.174	3.00	1	10/02/2023 03:25	WG2142928
(S) Toluene-d8	92.0			80.0-120		10/02/2023 03:25	WG2142928
(S) 4-Bromofluorobenzene	90.1			77.0-126		10/02/2023 03:25	WG2142928
(S) 1,2-Dichloroethane-d4	90.1			70.0-130		10/02/2023 03:25	WG2142928

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	J4	11.3	50.0	1	10/02/2023 03:44	WG2142928
Acrolein	U		2.54	50.0	1	10/02/2023 03:44	WG2142928
Acrylonitrile	U		0.671	10.0	1	10/02/2023 03:44	WG2142928
Benzene	U		0.0941	1.00	1	10/02/2023 03:44	WG2142928
Bromobenzene	U		0.118	1.00	1	10/02/2023 03:44	WG2142928
Bromodichloromethane	U		0.136	1.00	1	10/02/2023 03:44	WG2142928
Bromoform	U		0.129	1.00	1	10/02/2023 03:44	WG2142928
Bromomethane	U		0.605	5.00	1	10/02/2023 03:44	WG2142928
n-Butylbenzene	U		0.157	1.00	1	10/02/2023 03:44	WG2142928
sec-Butylbenzene	U		0.125	1.00	1	10/02/2023 03:44	WG2142928
tert-Butylbenzene	U		0.127	1.00	1	10/02/2023 03:44	WG2142928
Carbon disulfide	U		0.0962	1.00	1	10/02/2023 03:44	WG2142928
Carbon tetrachloride	U		0.128	1.00	1	10/02/2023 03:44	WG2142928
Chlorobenzene	U		0.116	1.00	1	10/02/2023 03:44	WG2142928
Chlorodibromomethane	U		0.140	1.00	1	10/02/2023 03:44	WG2142928
Chloroethane	U		0.192	5.00	1	10/02/2023 03:44	WG2142928
Chloroform	U		0.111	5.00	1	10/02/2023 03:44	WG2142928
Chloromethane	U		0.960	2.50	1	10/02/2023 03:44	WG2142928
2-Chlorotoluene	U		0.106	1.00	1	10/02/2023 03:44	WG2142928
4-Chlorotoluene	U		0.114	1.00	1	10/02/2023 03:44	WG2142928
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	10/02/2023 03:44	WG2142928
1,2-Dibromoethane	U		0.126	1.00	1	10/02/2023 03:44	WG2142928
Dibromomethane	U		0.122	1.00	1	10/02/2023 03:44	WG2142928
1,2-Dichlorobenzene	U		0.107	1.00	1	10/02/2023 03:44	WG2142928
1,3-Dichlorobenzene	U		0.110	1.00	1	10/02/2023 03:44	WG2142928
1,4-Dichlorobenzene	U		0.120	1.00	1	10/02/2023 03:44	WG2142928
Dichlorodifluoromethane	U		0.374	5.00	1	10/02/2023 03:44	WG2142928
1,1-Dichloroethane	U		0.100	1.00	1	10/02/2023 03:44	WG2142928
1,2-Dichloroethane	U		0.0819	1.00	1	10/02/2023 03:44	WG2142928
1,1-Dichloroethene	U		0.188	1.00	1	10/02/2023 03:44	WG2142928
cis-1,2-Dichloroethene	U		0.126	1.00	1	10/02/2023 03:44	WG2142928
trans-1,2-Dichloroethene	U		0.149	1.00	1	10/02/2023 03:44	WG2142928
1,2-Dichloropropane	U		0.149	1.00	1	10/02/2023 03:44	WG2142928
1,1-Dichloropropene	U		0.142	1.00	1	10/02/2023 03:44	WG2142928
1,3-Dichloropropane	U		0.110	1.00	1	10/02/2023 03:44	WG2142928
cis-1,3-Dichloropropene	U		0.111	1.00	1	10/02/2023 03:44	WG2142928
trans-1,3-Dichloropropene	U		0.118	1.00	1	10/02/2023 03:44	WG2142928
2,2-Dichloropropane	U	J4	0.161	1.00	1	10/02/2023 03:44	WG2142928
Di-isopropyl ether	U		0.105	1.00	1	10/02/2023 03:44	WG2142928
Ethylbenzene	0.207	J	0.137	1.00	1	10/02/2023 03:44	WG2142928
Hexachloro-1,3-butadiene	U	J3	0.337	1.00	1	10/02/2023 03:44	WG2142928
Isopropylbenzene	U		0.105	1.00	1	10/02/2023 03:44	WG2142928
p-Isopropyltoluene	U		0.120	1.00	1	10/02/2023 03:44	WG2142928
2-Butanone (MEK)	U		1.19	10.0	1	10/02/2023 03:44	WG2142928
Methylene Chloride	U		0.430	5.00	1	10/02/2023 03:44	WG2142928
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	10/02/2023 03:44	WG2142928
Methyl tert-butyl ether	U		0.101	1.00	1	10/02/2023 03:44	WG2142928
Naphthalene	U	J3	1.00	5.00	1	10/02/2023 03:44	WG2142928
n-Propylbenzene	U		0.0993	1.00	1	10/02/2023 03:44	WG2142928
Styrene	U		0.118	1.00	1	10/02/2023 03:44	WG2142928
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	10/02/2023 03:44	WG2142928
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	10/02/2023 03:44	WG2142928
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	10/02/2023 03:44	WG2142928
Tetrachloroethene	U		0.300	1.00	1	10/02/2023 03:44	WG2142928
Toluene	U		0.278	1.00	1	10/02/2023 03:44	WG2142928
1,2,3-Trichlorobenzene	U	J3	0.230	1.00	1	10/02/2023 03:44	WG2142928

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

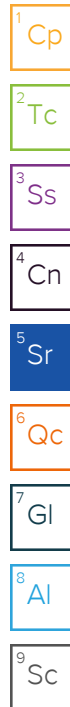
Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	U	J3	0.481	1.00	1	10/02/2023 03:44	WG2142928
1,1,1-Trichloroethane	U		0.149	1.00	1	10/02/2023 03:44	WG2142928
1,1,2-Trichloroethane	U		0.158	1.00	1	10/02/2023 03:44	WG2142928
Trichloroethene	U		0.190	1.00	1	10/02/2023 03:44	WG2142928
Trichlorofluoromethane	U		0.160	5.00	1	10/02/2023 03:44	WG2142928
1,2,3-Trichloropropane	U		0.237	2.50	1	10/02/2023 03:44	WG2142928
1,2,4-Trimethylbenzene	U		0.322	1.00	1	10/02/2023 03:44	WG2142928
1,2,3-Trimethylbenzene	U		0.104	1.00	1	10/02/2023 03:44	WG2142928
1,3,5-Trimethylbenzene	U		0.104	1.00	1	10/02/2023 03:44	WG2142928
Vinyl chloride	U		0.234	1.00	1	10/02/2023 03:44	WG2142928
Xylenes, Total	0.748	J	0.174	3.00	1	10/02/2023 03:44	WG2142928
(S) Toluene-d8	91.9			80.0-120		10/02/2023 03:44	WG2142928
(S) 4-Bromofluorobenzene	90.9			77.0-126		10/02/2023 03:44	WG2142928
(S) 1,2-Dichloroethane-d4	90.4			70.0-130		10/02/2023 03:44	WG2142928

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	J4	11.3	50.0	1	10/02/2023 04:03	WG2142928
Acrolein	U		2.54	50.0	1	10/02/2023 04:03	WG2142928
Acrylonitrile	U		0.671	10.0	1	10/02/2023 04:03	WG2142928
Benzene	U		0.0941	1.00	1	10/02/2023 04:03	WG2142928
Bromobenzene	U		0.118	1.00	1	10/02/2023 04:03	WG2142928
Bromodichloromethane	U		0.136	1.00	1	10/02/2023 04:03	WG2142928
Bromoform	U		0.129	1.00	1	10/02/2023 04:03	WG2142928
Bromomethane	U		0.605	5.00	1	10/02/2023 04:03	WG2142928
n-Butylbenzene	U		0.157	1.00	1	10/02/2023 04:03	WG2142928
sec-Butylbenzene	U		0.125	1.00	1	10/02/2023 04:03	WG2142928
tert-Butylbenzene	U		0.127	1.00	1	10/02/2023 04:03	WG2142928
Carbon disulfide	U		0.0962	1.00	1	10/02/2023 04:03	WG2142928
Carbon tetrachloride	U		0.128	1.00	1	10/02/2023 04:03	WG2142928
Chlorobenzene	U		0.116	1.00	1	10/02/2023 04:03	WG2142928
Chlorodibromomethane	U		0.140	1.00	1	10/02/2023 04:03	WG2142928
Chloroethane	U		0.192	5.00	1	10/02/2023 04:03	WG2142928
Chloroform	U		0.111	5.00	1	10/02/2023 04:03	WG2142928
Chloromethane	U		0.960	2.50	1	10/02/2023 04:03	WG2142928
2-Chlorotoluene	U		0.106	1.00	1	10/02/2023 04:03	WG2142928
4-Chlorotoluene	U		0.114	1.00	1	10/02/2023 04:03	WG2142928
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	10/02/2023 04:03	WG2142928
1,2-Dibromoethane	U		0.126	1.00	1	10/02/2023 04:03	WG2142928
Dibromomethane	U		0.122	1.00	1	10/02/2023 04:03	WG2142928
1,2-Dichlorobenzene	U		0.107	1.00	1	10/02/2023 04:03	WG2142928
1,3-Dichlorobenzene	U		0.110	1.00	1	10/02/2023 04:03	WG2142928
1,4-Dichlorobenzene	U		0.120	1.00	1	10/02/2023 04:03	WG2142928
Dichlorodifluoromethane	U		0.374	5.00	1	10/02/2023 04:03	WG2142928
1,1-Dichloroethane	U		0.100	1.00	1	10/02/2023 04:03	WG2142928
1,2-Dichloroethane	U		0.0819	1.00	1	10/02/2023 04:03	WG2142928
1,1-Dichloroethene	0.192	J	0.188	1.00	1	10/02/2023 04:03	WG2142928
cis-1,2-Dichloroethene	9.93		0.126	1.00	1	10/02/2023 04:03	WG2142928
trans-1,2-Dichloroethene	1.95		0.149	1.00	1	10/02/2023 04:03	WG2142928
1,2-Dichloropropane	U		0.149	1.00	1	10/02/2023 04:03	WG2142928
1,1-Dichloropropene	U		0.142	1.00	1	10/02/2023 04:03	WG2142928
1,3-Dichloropropane	U		0.110	1.00	1	10/02/2023 04:03	WG2142928
cis-1,3-Dichloropropene	U		0.111	1.00	1	10/02/2023 04:03	WG2142928
trans-1,3-Dichloropropene	U		0.118	1.00	1	10/02/2023 04:03	WG2142928
2,2-Dichloropropane	U	J4	0.161	1.00	1	10/02/2023 04:03	WG2142928
Di-isopropyl ether	U		0.105	1.00	1	10/02/2023 04:03	WG2142928
Ethylbenzene	U		0.137	1.00	1	10/02/2023 04:03	WG2142928
Hexachloro-1,3-butadiene	U	J3	0.337	1.00	1	10/02/2023 04:03	WG2142928
Isopropylbenzene	U		0.105	1.00	1	10/02/2023 04:03	WG2142928
p-Isopropyltoluene	U		0.120	1.00	1	10/02/2023 04:03	WG2142928
2-Butanone (MEK)	U		1.19	10.0	1	10/02/2023 04:03	WG2142928
Methylene Chloride	U		0.430	5.00	1	10/02/2023 04:03	WG2142928
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	10/02/2023 04:03	WG2142928
Methyl tert-butyl ether	U		0.101	1.00	1	10/02/2023 04:03	WG2142928
Naphthalene	U	J3	1.00	5.00	1	10/02/2023 04:03	WG2142928
n-Propylbenzene	U		0.0993	1.00	1	10/02/2023 04:03	WG2142928
Styrene	U		0.118	1.00	1	10/02/2023 04:03	WG2142928
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	10/02/2023 04:03	WG2142928
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	10/02/2023 04:03	WG2142928
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	10/02/2023 04:03	WG2142928
Tetrachloroethene	U		0.300	1.00	1	10/02/2023 04:03	WG2142928
Toluene	U		0.278	1.00	1	10/02/2023 04:03	WG2142928
1,2,3-Trichlorobenzene	U	J3	0.230	1.00	1	10/02/2023 04:03	WG2142928



Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	U	J3	0.481	1.00	1	10/02/2023 04:03	WG2142928
1,1,1-Trichloroethane	U		0.149	1.00	1	10/02/2023 04:03	WG2142928
1,1,2-Trichloroethane	U		0.158	1.00	1	10/02/2023 04:03	WG2142928
Trichloroethene	1.43		0.190	1.00	1	10/02/2023 04:03	WG2142928
Trichlorofluoromethane	U		0.160	5.00	1	10/02/2023 04:03	WG2142928
1,2,3-Trichloropropane	U		0.237	2.50	1	10/02/2023 04:03	WG2142928
1,2,4-Trimethylbenzene	U		0.322	1.00	1	10/02/2023 04:03	WG2142928
1,2,3-Trimethylbenzene	U		0.104	1.00	1	10/02/2023 04:03	WG2142928
1,3,5-Trimethylbenzene	U		0.104	1.00	1	10/02/2023 04:03	WG2142928
Vinyl chloride	U		0.234	1.00	1	10/02/2023 04:03	WG2142928
Xylenes, Total	0.334	J	0.174	3.00	1	10/02/2023 04:03	WG2142928
(S) Toluene-d8	92.7			80.0-120		10/02/2023 04:03	WG2142928
(S) 4-Bromofluorobenzene	91.5			77.0-126		10/02/2023 04:03	WG2142928
(S) 1,2-Dichloroethane-d4	89.1			70.0-130		10/02/2023 04:03	WG2142928

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	J4	11.3	50.0	1	10/02/2023 04:23	WG2142928
Acrolein	U		2.54	50.0	1	10/02/2023 04:23	WG2142928
Acrylonitrile	U		0.671	10.0	1	10/02/2023 04:23	WG2142928
Benzene	U		0.0941	1.00	1	10/02/2023 04:23	WG2142928
Bromobenzene	U		0.118	1.00	1	10/02/2023 04:23	WG2142928
Bromodichloromethane	U		0.136	1.00	1	10/02/2023 04:23	WG2142928
Bromoform	U		0.129	1.00	1	10/02/2023 04:23	WG2142928
Bromomethane	U		0.605	5.00	1	10/02/2023 04:23	WG2142928
n-Butylbenzene	U		0.157	1.00	1	10/02/2023 04:23	WG2142928
sec-Butylbenzene	U		0.125	1.00	1	10/02/2023 04:23	WG2142928
tert-Butylbenzene	U		0.127	1.00	1	10/02/2023 04:23	WG2142928
Carbon disulfide	U		0.0962	1.00	1	10/02/2023 04:23	WG2142928
Carbon tetrachloride	U		0.128	1.00	1	10/02/2023 04:23	WG2142928
Chlorobenzene	U		0.116	1.00	1	10/02/2023 04:23	WG2142928
Chlorodibromomethane	U		0.140	1.00	1	10/02/2023 04:23	WG2142928
Chloroethane	U		0.192	5.00	1	10/02/2023 04:23	WG2142928
Chloroform	U		0.111	5.00	1	10/02/2023 04:23	WG2142928
Chloromethane	U		0.960	2.50	1	10/02/2023 04:23	WG2142928
2-Chlorotoluene	U		0.106	1.00	1	10/02/2023 04:23	WG2142928
4-Chlorotoluene	U		0.114	1.00	1	10/02/2023 04:23	WG2142928
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	10/02/2023 04:23	WG2142928
1,2-Dibromoethane	U		0.126	1.00	1	10/02/2023 04:23	WG2142928
Dibromomethane	U		0.122	1.00	1	10/02/2023 04:23	WG2142928
1,2-Dichlorobenzene	U		0.107	1.00	1	10/02/2023 04:23	WG2142928
1,3-Dichlorobenzene	U		0.110	1.00	1	10/02/2023 04:23	WG2142928
1,4-Dichlorobenzene	U		0.120	1.00	1	10/02/2023 04:23	WG2142928
Dichlorodifluoromethane	U		0.374	5.00	1	10/02/2023 04:23	WG2142928
1,1-Dichloroethane	U		0.100	1.00	1	10/02/2023 04:23	WG2142928
1,2-Dichloroethane	U		0.0819	1.00	1	10/02/2023 04:23	WG2142928
1,1-Dichloroethene	U		0.188	1.00	1	10/02/2023 04:23	WG2142928
cis-1,2-Dichloroethene	0.127	J	0.126	1.00	1	10/02/2023 04:23	WG2142928
trans-1,2-Dichloroethene	U		0.149	1.00	1	10/02/2023 04:23	WG2142928
1,2-Dichloropropane	U		0.149	1.00	1	10/02/2023 04:23	WG2142928
1,1-Dichloropropene	U		0.142	1.00	1	10/02/2023 04:23	WG2142928
1,3-Dichloropropane	U		0.110	1.00	1	10/02/2023 04:23	WG2142928
cis-1,3-Dichloropropene	U		0.111	1.00	1	10/02/2023 04:23	WG2142928
trans-1,3-Dichloropropene	U		0.118	1.00	1	10/02/2023 04:23	WG2142928
2,2-Dichloropropane	U	J4	0.161	1.00	1	10/02/2023 04:23	WG2142928
Di-isopropyl ether	U		0.105	1.00	1	10/02/2023 04:23	WG2142928
Ethylbenzene	U		0.137	1.00	1	10/02/2023 04:23	WG2142928
Hexachloro-1,3-butadiene	U	J3	0.337	1.00	1	10/02/2023 04:23	WG2142928
Isopropylbenzene	U		0.105	1.00	1	10/02/2023 04:23	WG2142928
p-Isopropyltoluene	U		0.120	1.00	1	10/02/2023 04:23	WG2142928
2-Butanone (MEK)	U		1.19	10.0	1	10/02/2023 04:23	WG2142928
Methylene Chloride	U		0.430	5.00	1	10/02/2023 04:23	WG2142928
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	10/02/2023 04:23	WG2142928
Methyl tert-butyl ether	U		0.101	1.00	1	10/02/2023 04:23	WG2142928
Naphthalene	U	J3	1.00	5.00	1	10/02/2023 04:23	WG2142928
n-Propylbenzene	U		0.0993	1.00	1	10/02/2023 04:23	WG2142928
Styrene	U		0.118	1.00	1	10/02/2023 04:23	WG2142928
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	10/02/2023 04:23	WG2142928
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	10/02/2023 04:23	WG2142928
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	10/02/2023 04:23	WG2142928
Tetrachloroethene	U		0.300	1.00	1	10/02/2023 04:23	WG2142928
Toluene	U		0.278	1.00	1	10/02/2023 04:23	WG2142928
1,2,3-Trichlorobenzene	U	J3	0.230	1.00	1	10/02/2023 04:23	WG2142928

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	U	J3	0.481	1.00	1	10/02/2023 04:23	WG2142928
1,1,1-Trichloroethane	U		0.149	1.00	1	10/02/2023 04:23	WG2142928
1,1,2-Trichloroethane	U		0.158	1.00	1	10/02/2023 04:23	WG2142928
Trichloroethene	U		0.190	1.00	1	10/02/2023 04:23	WG2142928
Trichlorofluoromethane	U		0.160	5.00	1	10/02/2023 04:23	WG2142928
1,2,3-Trichloropropane	U		0.237	2.50	1	10/02/2023 04:23	WG2142928
1,2,4-Trimethylbenzene	U		0.322	1.00	1	10/02/2023 04:23	WG2142928
1,2,3-Trimethylbenzene	U		0.104	1.00	1	10/02/2023 04:23	WG2142928
1,3,5-Trimethylbenzene	U		0.104	1.00	1	10/02/2023 04:23	WG2142928
Vinyl chloride	U		0.234	1.00	1	10/02/2023 04:23	WG2142928
Xylenes, Total	U		0.174	3.00	1	10/02/2023 04:23	WG2142928
(S) Toluene-d8	92.3			80.0-120		10/02/2023 04:23	WG2142928
(S) 4-Bromofluorobenzene	88.6			77.0-126		10/02/2023 04:23	WG2142928
(S) 1,2-Dichloroethane-d4	87.1			70.0-130		10/02/2023 04:23	WG2142928

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	J4	11.3	50.0	1	10/02/2023 04:41	WG2142928
Acrolein	U		2.54	50.0	1	10/02/2023 04:41	WG2142928
Acrylonitrile	U		0.671	10.0	1	10/02/2023 04:41	WG2142928
Benzene	U		0.0941	1.00	1	10/02/2023 04:41	WG2142928
Bromobenzene	U		0.118	1.00	1	10/02/2023 04:41	WG2142928
Bromodichloromethane	U		0.136	1.00	1	10/02/2023 04:41	WG2142928
Bromoform	U		0.129	1.00	1	10/02/2023 04:41	WG2142928
Bromomethane	U		0.605	5.00	1	10/02/2023 04:41	WG2142928
n-Butylbenzene	U		0.157	1.00	1	10/02/2023 04:41	WG2142928
sec-Butylbenzene	U		0.125	1.00	1	10/02/2023 04:41	WG2142928
tert-Butylbenzene	U		0.127	1.00	1	10/02/2023 04:41	WG2142928
Carbon disulfide	U		0.0962	1.00	1	10/02/2023 04:41	WG2142928
Carbon tetrachloride	U		0.128	1.00	1	10/02/2023 04:41	WG2142928
Chlorobenzene	U		0.116	1.00	1	10/02/2023 04:41	WG2142928
Chlorodibromomethane	U		0.140	1.00	1	10/02/2023 04:41	WG2142928
Chloroethane	U		0.192	5.00	1	10/02/2023 04:41	WG2142928
Chloroform	U		0.111	5.00	1	10/02/2023 04:41	WG2142928
Chloromethane	U		0.960	2.50	1	10/02/2023 04:41	WG2142928
2-Chlorotoluene	U		0.106	1.00	1	10/02/2023 04:41	WG2142928
4-Chlorotoluene	U		0.114	1.00	1	10/02/2023 04:41	WG2142928
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	10/02/2023 04:41	WG2142928
1,2-Dibromoethane	U		0.126	1.00	1	10/02/2023 04:41	WG2142928
Dibromomethane	U		0.122	1.00	1	10/02/2023 04:41	WG2142928
1,2-Dichlorobenzene	U		0.107	1.00	1	10/02/2023 04:41	WG2142928
1,3-Dichlorobenzene	U		0.110	1.00	1	10/02/2023 04:41	WG2142928
1,4-Dichlorobenzene	U		0.120	1.00	1	10/02/2023 04:41	WG2142928
Dichlorodifluoromethane	U		0.374	5.00	1	10/02/2023 04:41	WG2142928
1,1-Dichloroethane	U		0.100	1.00	1	10/02/2023 04:41	WG2142928
1,2-Dichloroethane	U		0.0819	1.00	1	10/02/2023 04:41	WG2142928
1,1-Dichloroethene	U		0.188	1.00	1	10/02/2023 04:41	WG2142928
cis-1,2-Dichloroethene	0.155	J	0.126	1.00	1	10/02/2023 04:41	WG2142928
trans-1,2-Dichloroethene	U		0.149	1.00	1	10/02/2023 04:41	WG2142928
1,2-Dichloropropane	U		0.149	1.00	1	10/02/2023 04:41	WG2142928
1,1-Dichloropropene	U		0.142	1.00	1	10/02/2023 04:41	WG2142928
1,3-Dichloropropane	U		0.110	1.00	1	10/02/2023 04:41	WG2142928
cis-1,3-Dichloropropene	U		0.111	1.00	1	10/02/2023 04:41	WG2142928
trans-1,3-Dichloropropene	U		0.118	1.00	1	10/02/2023 04:41	WG2142928
2,2-Dichloropropane	U	J4	0.161	1.00	1	10/02/2023 04:41	WG2142928
Di-isopropyl ether	U		0.105	1.00	1	10/02/2023 04:41	WG2142928
Ethylbenzene	U		0.137	1.00	1	10/02/2023 04:41	WG2142928
Hexachloro-1,3-butadiene	U	J3	0.337	1.00	1	10/02/2023 04:41	WG2142928
Isopropylbenzene	U		0.105	1.00	1	10/02/2023 04:41	WG2142928
p-Isopropyltoluene	U		0.120	1.00	1	10/02/2023 04:41	WG2142928
2-Butanone (MEK)	U		1.19	10.0	1	10/02/2023 04:41	WG2142928
Methylene Chloride	U		0.430	5.00	1	10/02/2023 04:41	WG2142928
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	10/02/2023 04:41	WG2142928
Methyl tert-butyl ether	U		0.101	1.00	1	10/02/2023 04:41	WG2142928
Naphthalene	U	J3	1.00	5.00	1	10/02/2023 04:41	WG2142928
n-Propylbenzene	U		0.0993	1.00	1	10/02/2023 04:41	WG2142928
Styrene	U		0.118	1.00	1	10/02/2023 04:41	WG2142928
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	10/02/2023 04:41	WG2142928
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	10/02/2023 04:41	WG2142928
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	10/02/2023 04:41	WG2142928
Tetrachloroethene	U		0.300	1.00	1	10/02/2023 04:41	WG2142928
Toluene	U		0.278	1.00	1	10/02/2023 04:41	WG2142928
1,2,3-Trichlorobenzene	U	J3	0.230	1.00	1	10/02/2023 04:41	WG2142928

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	U	J3	0.481	1.00	1	10/02/2023 04:41	WG2142928
1,1,1-Trichloroethane	U		0.149	1.00	1	10/02/2023 04:41	WG2142928
1,1,2-Trichloroethane	U		0.158	1.00	1	10/02/2023 04:41	WG2142928
Trichloroethene	U		0.190	1.00	1	10/02/2023 04:41	WG2142928
Trichlorofluoromethane	U		0.160	5.00	1	10/02/2023 04:41	WG2142928
1,2,3-Trichloropropane	U		0.237	2.50	1	10/02/2023 04:41	WG2142928
1,2,4-Trimethylbenzene	U		0.322	1.00	1	10/02/2023 04:41	WG2142928
1,2,3-Trimethylbenzene	U		0.104	1.00	1	10/02/2023 04:41	WG2142928
1,3,5-Trimethylbenzene	U		0.104	1.00	1	10/02/2023 04:41	WG2142928
Vinyl chloride	U		0.234	1.00	1	10/02/2023 04:41	WG2142928
Xylenes, Total	U		0.174	3.00	1	10/02/2023 04:41	WG2142928
(S) Toluene-d8	90.3			80.0-120		10/02/2023 04:41	WG2142928
(S) 4-Bromofluorobenzene	88.4			77.0-126		10/02/2023 04:41	WG2142928
(S) 1,2-Dichloroethane-d4	87.2			70.0-130		10/02/2023 04:41	WG2142928

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	31.5	J J4	11.3	50.0	1	10/02/2023 05:00	WG2142928
Acrolein	U		2.54	50.0	1	10/02/2023 05:00	WG2142928
Acrylonitrile	U		0.671	10.0	1	10/02/2023 05:00	WG2142928
Benzene	U		0.0941	1.00	1	10/02/2023 05:00	WG2142928
Bromobenzene	U		0.118	1.00	1	10/02/2023 05:00	WG2142928
Bromodichloromethane	U		0.136	1.00	1	10/02/2023 05:00	WG2142928
Bromoform	U		0.129	1.00	1	10/02/2023 05:00	WG2142928
Bromomethane	U		0.605	5.00	1	10/02/2023 05:00	WG2142928
n-Butylbenzene	U		0.157	1.00	1	10/02/2023 05:00	WG2142928
sec-Butylbenzene	U		0.125	1.00	1	10/02/2023 05:00	WG2142928
tert-Butylbenzene	U		0.127	1.00	1	10/02/2023 05:00	WG2142928
Carbon disulfide	U		0.0962	1.00	1	10/02/2023 05:00	WG2142928
Carbon tetrachloride	U		0.128	1.00	1	10/02/2023 05:00	WG2142928
Chlorobenzene	U		0.116	1.00	1	10/02/2023 05:00	WG2142928
Chlorodibromomethane	U		0.140	1.00	1	10/02/2023 05:00	WG2142928
Chloroethane	U		0.192	5.00	1	10/02/2023 05:00	WG2142928
Chloroform	1.96	J	0.111	5.00	1	10/02/2023 05:00	WG2142928
Chloromethane	U		0.960	2.50	1	10/02/2023 05:00	WG2142928
2-Chlorotoluene	U		0.106	1.00	1	10/02/2023 05:00	WG2142928
4-Chlorotoluene	U		0.114	1.00	1	10/02/2023 05:00	WG2142928
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	10/02/2023 05:00	WG2142928
1,2-Dibromoethane	U		0.126	1.00	1	10/02/2023 05:00	WG2142928
Dibromomethane	U		0.122	1.00	1	10/02/2023 05:00	WG2142928
1,2-Dichlorobenzene	U		0.107	1.00	1	10/02/2023 05:00	WG2142928
1,3-Dichlorobenzene	U		0.110	1.00	1	10/02/2023 05:00	WG2142928
1,4-Dichlorobenzene	U		0.120	1.00	1	10/02/2023 05:00	WG2142928
Dichlorodifluoromethane	U		0.374	5.00	1	10/02/2023 05:00	WG2142928
1,1-Dichloroethane	U		0.100	1.00	1	10/02/2023 05:00	WG2142928
1,2-Dichloroethane	U		0.0819	1.00	1	10/02/2023 05:00	WG2142928
1,1-Dichloroethene	U		0.188	1.00	1	10/02/2023 05:00	WG2142928
cis-1,2-Dichloroethene	U		0.126	1.00	1	10/02/2023 05:00	WG2142928
trans-1,2-Dichloroethene	U		0.149	1.00	1	10/02/2023 05:00	WG2142928
1,2-Dichloropropane	U		0.149	1.00	1	10/02/2023 05:00	WG2142928
1,1-Dichloropropene	U		0.142	1.00	1	10/02/2023 05:00	WG2142928
1,3-Dichloropropane	U		0.110	1.00	1	10/02/2023 05:00	WG2142928
cis-1,3-Dichloropropene	U		0.111	1.00	1	10/02/2023 05:00	WG2142928
trans-1,3-Dichloropropene	U		0.118	1.00	1	10/02/2023 05:00	WG2142928
2,2-Dichloropropane	U	J4	0.161	1.00	1	10/02/2023 05:00	WG2142928
Di-isopropyl ether	U		0.105	1.00	1	10/02/2023 05:00	WG2142928
Ethylbenzene	U		0.137	1.00	1	10/02/2023 05:00	WG2142928
Hexachloro-1,3-butadiene	U	J3	0.337	1.00	1	10/02/2023 05:00	WG2142928
Isopropylbenzene	U		0.105	1.00	1	10/02/2023 05:00	WG2142928
p-Isopropyltoluene	U		0.120	1.00	1	10/02/2023 05:00	WG2142928
2-Butanone (MEK)	U		1.19	10.0	1	10/02/2023 05:00	WG2142928
Methylene Chloride	U		0.430	5.00	1	10/02/2023 05:00	WG2142928
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	10/02/2023 05:00	WG2142928
Methyl tert-butyl ether	U		0.101	1.00	1	10/02/2023 05:00	WG2142928
Naphthalene	U	J3	1.00	5.00	1	10/02/2023 05:00	WG2142928
n-Propylbenzene	U		0.0993	1.00	1	10/02/2023 05:00	WG2142928
Styrene	U		0.118	1.00	1	10/02/2023 05:00	WG2142928
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	10/02/2023 05:00	WG2142928
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	10/02/2023 05:00	WG2142928
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	10/02/2023 05:00	WG2142928
Tetrachloroethene	U		0.300	1.00	1	10/02/2023 05:00	WG2142928
Toluene	U		0.278	1.00	1	10/02/2023 05:00	WG2142928
1,2,3-Trichlorobenzene	U	J3	0.230	1.00	1	10/02/2023 05:00	WG2142928

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

EQUIP-1

SAMPLE RESULTS - 45

Collected date/time: 09/19/23 18:00

L1659125

Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	U	J3	0.481	1.00	1	10/02/2023 05:00	WG2142928
1,1,1-Trichloroethane	U		0.149	1.00	1	10/02/2023 05:00	WG2142928
1,1,2-Trichloroethane	U		0.158	1.00	1	10/02/2023 05:00	WG2142928
Trichloroethene	U		0.190	1.00	1	10/02/2023 05:00	WG2142928
Trichlorofluoromethane	U		0.160	5.00	1	10/02/2023 05:00	WG2142928
1,2,3-Trichloropropane	U		0.237	2.50	1	10/02/2023 05:00	WG2142928
1,2,4-Trimethylbenzene	U		0.322	1.00	1	10/02/2023 05:00	WG2142928
1,2,3-Trimethylbenzene	U		0.104	1.00	1	10/02/2023 05:00	WG2142928
1,3,5-Trimethylbenzene	U		0.104	1.00	1	10/02/2023 05:00	WG2142928
Vinyl chloride	U		0.234	1.00	1	10/02/2023 05:00	WG2142928
Xylenes, Total	U		0.174	3.00	1	10/02/2023 05:00	WG2142928
(S) Toluene-d8	91.5			80.0-120		10/02/2023 05:00	WG2142928
(S) 4-Bromofluorobenzene	91.7			77.0-126		10/02/2023 05:00	WG2142928
(S) 1,2-Dichloroethane-d4	90.9			70.0-130		10/02/2023 05:00	WG2142928

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

ACCOUNT:

Oregon Dept. of Env. Quality - ODEQ

PROJECT:

2060.007

SDG:

L1659125

DATE/TIME:

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EQUIP-2

Collected date/time: 09/20/23 17:25

SAMPLE RESULTS - 46

L1659125

Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	55.6	C5 J4	11.3	50.0	1	10/02/2023 05:20	WG2142928
Acrolein	U		2.54	50.0	1	10/02/2023 05:20	WG2142928
Acrylonitrile	U		0.671	10.0	1	10/02/2023 05:20	WG2142928
Benzene	U		0.0941	1.00	1	10/02/2023 05:20	WG2142928
Bromobenzene	U		0.118	1.00	1	10/02/2023 05:20	WG2142928
Bromodichloromethane	U		0.136	1.00	1	10/02/2023 05:20	WG2142928
Bromoform	U		0.129	1.00	1	10/02/2023 05:20	WG2142928
Bromomethane	U		0.605	5.00	1	10/02/2023 05:20	WG2142928
n-Butylbenzene	U		0.157	1.00	1	10/02/2023 05:20	WG2142928
sec-Butylbenzene	U		0.125	1.00	1	10/02/2023 05:20	WG2142928
tert-Butylbenzene	U		0.127	1.00	1	10/02/2023 05:20	WG2142928
Carbon disulfide	U		0.0962	1.00	1	10/02/2023 05:20	WG2142928
Carbon tetrachloride	U		0.128	1.00	1	10/02/2023 05:20	WG2142928
Chlorobenzene	U		0.116	1.00	1	10/02/2023 05:20	WG2142928
Chlorodibromomethane	U		0.140	1.00	1	10/02/2023 05:20	WG2142928
Chloroethane	U		0.192	5.00	1	10/02/2023 05:20	WG2142928
Chloroform	2.06	J	0.111	5.00	1	10/02/2023 05:20	WG2142928
Chloromethane	U		0.960	2.50	1	10/02/2023 05:20	WG2142928
2-Chlorotoluene	U		0.106	1.00	1	10/02/2023 05:20	WG2142928
4-Chlorotoluene	U		0.114	1.00	1	10/02/2023 05:20	WG2142928
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	10/02/2023 05:20	WG2142928
1,2-Dibromoethane	U		0.126	1.00	1	10/02/2023 05:20	WG2142928
Dibromomethane	U		0.122	1.00	1	10/02/2023 05:20	WG2142928
1,2-Dichlorobenzene	U		0.107	1.00	1	10/02/2023 05:20	WG2142928
1,3-Dichlorobenzene	U		0.110	1.00	1	10/02/2023 05:20	WG2142928
1,4-Dichlorobenzene	U		0.120	1.00	1	10/02/2023 05:20	WG2142928
Dichlorodifluoromethane	U		0.374	5.00	1	10/02/2023 05:20	WG2142928
1,1-Dichloroethane	U		0.100	1.00	1	10/02/2023 05:20	WG2142928
1,2-Dichloroethane	U		0.0819	1.00	1	10/02/2023 05:20	WG2142928
1,1-Dichloroethene	U		0.188	1.00	1	10/02/2023 05:20	WG2142928
cis-1,2-Dichloroethene	U		0.126	1.00	1	10/02/2023 05:20	WG2142928
trans-1,2-Dichloroethene	U		0.149	1.00	1	10/02/2023 05:20	WG2142928
1,2-Dichloropropane	U		0.149	1.00	1	10/02/2023 05:20	WG2142928
1,1-Dichloropropene	U		0.142	1.00	1	10/02/2023 05:20	WG2142928
1,3-Dichloropropane	U		0.110	1.00	1	10/02/2023 05:20	WG2142928
cis-1,3-Dichloropropene	U		0.111	1.00	1	10/02/2023 05:20	WG2142928
trans-1,3-Dichloropropene	U		0.118	1.00	1	10/02/2023 05:20	WG2142928
2,2-Dichloropropane	U	J4	0.161	1.00	1	10/02/2023 05:20	WG2142928
Di-isopropyl ether	U		0.105	1.00	1	10/02/2023 05:20	WG2142928
Ethylbenzene	U		0.137	1.00	1	10/02/2023 05:20	WG2142928
Hexachloro-1,3-butadiene	U	J3	0.337	1.00	1	10/02/2023 05:20	WG2142928
Isopropylbenzene	U		0.105	1.00	1	10/02/2023 05:20	WG2142928
p-Isopropyltoluene	U		0.120	1.00	1	10/02/2023 05:20	WG2142928
2-Butanone (MEK)	U		1.19	10.0	1	10/02/2023 05:20	WG2142928
Methylene Chloride	U		0.430	5.00	1	10/02/2023 05:20	WG2142928
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	10/02/2023 05:20	WG2142928
Methyl tert-butyl ether	U		0.101	1.00	1	10/02/2023 05:20	WG2142928
Naphthalene	U	J3	1.00	5.00	1	10/02/2023 05:20	WG2142928
n-Propylbenzene	U		0.0993	1.00	1	10/02/2023 05:20	WG2142928
Styrene	U		0.118	1.00	1	10/02/2023 05:20	WG2142928
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	10/02/2023 05:20	WG2142928
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	10/02/2023 05:20	WG2142928
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	10/02/2023 05:20	WG2142928
Tetrachloroethene	U		0.300	1.00	1	10/02/2023 05:20	WG2142928
Toluene	U		0.278	1.00	1	10/02/2023 05:20	WG2142928
1,2,3-Trichlorobenzene	U	J3	0.230	1.00	1	10/02/2023 05:20	WG2142928

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

ACCOUNT:

Oregon Dept. of Env. Quality - ODEQ

PROJECT:

2060.007

SDG:

L1659125

DATE/TIME:

10/04/23 15:12

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Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	U	J3	0.481	1.00	1	10/02/2023 05:20	WG2142928
1,1,1-Trichloroethane	U		0.149	1.00	1	10/02/2023 05:20	WG2142928
1,1,2-Trichloroethane	U		0.158	1.00	1	10/02/2023 05:20	WG2142928
Trichloroethene	U		0.190	1.00	1	10/02/2023 05:20	WG2142928
Trichlorofluoromethane	U		0.160	5.00	1	10/02/2023 05:20	WG2142928
1,2,3-Trichloropropane	U		0.237	2.50	1	10/02/2023 05:20	WG2142928
1,2,4-Trimethylbenzene	U		0.322	1.00	1	10/02/2023 05:20	WG2142928
1,2,3-Trimethylbenzene	U		0.104	1.00	1	10/02/2023 05:20	WG2142928
1,3,5-Trimethylbenzene	U		0.104	1.00	1	10/02/2023 05:20	WG2142928
Vinyl chloride	U		0.234	1.00	1	10/02/2023 05:20	WG2142928
Xylenes, Total	U		0.174	3.00	1	10/02/2023 05:20	WG2142928
(S) Toluene-d8	91.6			80.0-120		10/02/2023 05:20	WG2142928
(S) 4-Bromofluorobenzene	89.8			77.0-126		10/02/2023 05:20	WG2142928
(S) 1,2-Dichloroethane-d4	89.7			70.0-130		10/02/2023 05:20	WG2142928

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

EQUIP-3

Collected date/time: 09/21/23 14:30

SAMPLE RESULTS - 47

L1659125

Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	29.6	C3 J	11.3	50.0	1	10/01/2023 23:15	WG2142931
Acrolein	U	C3	2.54	50.0	1	10/01/2023 23:15	WG2142931
Acrylonitrile	U	C3	0.671	10.0	1	10/01/2023 23:15	WG2142931
Benzene	U		0.0941	1.00	1	10/01/2023 23:15	WG2142931
Bromobenzene	U		0.118	1.00	1	10/01/2023 23:15	WG2142931
Bromodichloromethane	U		0.136	1.00	1	10/01/2023 23:15	WG2142931
Bromoform	U		0.129	1.00	1	10/01/2023 23:15	WG2142931
Bromomethane	U		0.605	5.00	1	10/01/2023 23:15	WG2142931
n-Butylbenzene	U		0.157	1.00	1	10/01/2023 23:15	WG2142931
sec-Butylbenzene	U		0.125	1.00	1	10/01/2023 23:15	WG2142931
tert-Butylbenzene	U		0.127	1.00	1	10/01/2023 23:15	WG2142931
Carbon disulfide	0.388	B J	0.0962	1.00	1	10/01/2023 23:15	WG2142931
Carbon tetrachloride	U		0.128	1.00	1	10/01/2023 23:15	WG2142931
Chlorobenzene	U		0.116	1.00	1	10/01/2023 23:15	WG2142931
Chlorodibromomethane	U		0.140	1.00	1	10/01/2023 23:15	WG2142931
Chloroethane	U		0.192	5.00	1	10/01/2023 23:15	WG2142931
Chloroform	1.69	J	0.111	5.00	1	10/01/2023 23:15	WG2142931
Chloromethane	U		0.960	2.50	1	10/01/2023 23:15	WG2142931
2-Chlorotoluene	U		0.106	1.00	1	10/01/2023 23:15	WG2142931
4-Chlorotoluene	U		0.114	1.00	1	10/01/2023 23:15	WG2142931
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	10/01/2023 23:15	WG2142931
1,2-Dibromoethane	U		0.126	1.00	1	10/01/2023 23:15	WG2142931
Dibromomethane	U		0.122	1.00	1	10/01/2023 23:15	WG2142931
1,2-Dichlorobenzene	U		0.107	1.00	1	10/01/2023 23:15	WG2142931
1,3-Dichlorobenzene	U		0.110	1.00	1	10/01/2023 23:15	WG2142931
1,4-Dichlorobenzene	U		0.120	1.00	1	10/01/2023 23:15	WG2142931
Dichlorodifluoromethane	U		0.374	5.00	1	10/01/2023 23:15	WG2142931
1,1-Dichloroethane	U		0.100	1.00	1	10/01/2023 23:15	WG2142931
1,2-Dichloroethane	U		0.0819	1.00	1	10/01/2023 23:15	WG2142931
1,1-Dichloroethene	U		0.188	1.00	1	10/01/2023 23:15	WG2142931
cis-1,2-Dichloroethene	U		0.126	1.00	1	10/01/2023 23:15	WG2142931
trans-1,2-Dichloroethene	U		0.149	1.00	1	10/01/2023 23:15	WG2142931
1,2-Dichloropropane	U		0.149	1.00	1	10/01/2023 23:15	WG2142931
1,1-Dichloropropene	U		0.142	1.00	1	10/01/2023 23:15	WG2142931
1,3-Dichloropropane	U		0.110	1.00	1	10/01/2023 23:15	WG2142931
cis-1,3-Dichloropropene	U		0.111	1.00	1	10/01/2023 23:15	WG2142931
trans-1,3-Dichloropropene	U		0.118	1.00	1	10/01/2023 23:15	WG2142931
2,2-Dichloropropane	U		0.161	1.00	1	10/01/2023 23:15	WG2142931
Di-isopropyl ether	U		0.105	1.00	1	10/01/2023 23:15	WG2142931
Ethylbenzene	U		0.137	1.00	1	10/01/2023 23:15	WG2142931
Hexachloro-1,3-butadiene	U		0.337	1.00	1	10/01/2023 23:15	WG2142931
Isopropylbenzene	U		0.105	1.00	1	10/01/2023 23:15	WG2142931
p-Isopropyltoluene	U		0.120	1.00	1	10/01/2023 23:15	WG2142931
2-Butanone (MEK)	U	C3	1.19	10.0	1	10/01/2023 23:15	WG2142931
Methylene Chloride	U		0.430	5.00	1	10/01/2023 23:15	WG2142931
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	10/01/2023 23:15	WG2142931
Methyl tert-butyl ether	U		0.101	1.00	1	10/01/2023 23:15	WG2142931
Naphthalene	U		1.00	5.00	1	10/01/2023 23:15	WG2142931
n-Propylbenzene	U		0.0993	1.00	1	10/01/2023 23:15	WG2142931
Styrene	U		0.118	1.00	1	10/01/2023 23:15	WG2142931
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	10/01/2023 23:15	WG2142931
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	10/01/2023 23:15	WG2142931
1,1,2-Trichlorotrifluoroethane	U	C3	0.180	1.00	1	10/01/2023 23:15	WG2142931
Tetrachloroethene	U		0.300	1.00	1	10/01/2023 23:15	WG2142931
Toluene	0.321	J	0.278	1.00	1	10/01/2023 23:15	WG2142931
1,2,3-Trichlorobenzene	U		0.230	1.00	1	10/01/2023 23:15	WG2142931

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

ACCOUNT:

Oregon Dept. of Env. Quality - ODEQ

PROJECT:

2060.007

SDG:

L1659125

DATE/TIME:

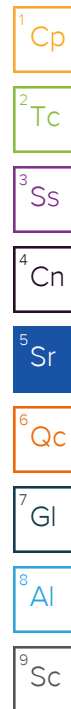
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Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	U		0.481	1.00	1	10/01/2023 23:15	WG2142931
1,1,1-Trichloroethane	U		0.149	1.00	1	10/01/2023 23:15	WG2142931
1,1,2-Trichloroethane	U		0.158	1.00	1	10/01/2023 23:15	WG2142931
Trichloroethene	U		0.190	1.00	1	10/01/2023 23:15	WG2142931
Trichlorofluoromethane	U		0.160	5.00	1	10/01/2023 23:15	WG2142931
1,2,3-Trichloropropane	U		0.237	2.50	1	10/01/2023 23:15	WG2142931
1,2,4-Trimethylbenzene	U		0.322	1.00	1	10/01/2023 23:15	WG2142931
1,2,3-Trimethylbenzene	U		0.104	1.00	1	10/01/2023 23:15	WG2142931
1,3,5-Trimethylbenzene	U		0.104	1.00	1	10/01/2023 23:15	WG2142931
Vinyl chloride	U		0.234	1.00	1	10/01/2023 23:15	WG2142931
Xylenes, Total	U		0.174	3.00	1	10/01/2023 23:15	WG2142931
(S) Toluene-d8	114			80.0-120		10/01/2023 23:15	WG2142931
(S) 4-Bromofluorobenzene	93.9			77.0-126		10/01/2023 23:15	WG2142931
(S) 1,2-Dichloroethane-d4	95.2			70.0-130		10/01/2023 23:15	WG2142931



Volatile Organic Compounds (GC/MS) by Method 624.1/8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	U		0.0941	1.00	1	09/30/2023 13:33	WG2142334
Bromodichloromethane	U		0.136	1.00	1	09/30/2023 13:33	WG2142334
Bromoform	U		0.129	1.00	1	09/30/2023 13:33	WG2142334
Bromomethane	U		0.605	5.00	1	09/30/2023 13:33	WG2142334
Carbon tetrachloride	U		0.128	1.00	1	09/30/2023 13:33	WG2142334
Chlorobenzene	U		0.116	1.00	1	09/30/2023 13:33	WG2142334
Chlorodibromomethane	U		0.140	1.00	1	09/30/2023 13:33	WG2142334
Chloroethane	U		0.192	5.00	1	09/30/2023 13:33	WG2142334
Chloroform	U		0.111	5.00	1	09/30/2023 13:33	WG2142334
Chloromethane	U		0.960	2.50	1	09/30/2023 13:33	WG2142334
1,2-Dichlorobenzene	U		0.107	1.00	1	09/30/2023 13:33	WG2142334
1,3-Dichlorobenzene	U		0.110	1.00	1	09/30/2023 13:33	WG2142334
1,4-Dichlorobenzene	U		0.120	1.00	1	09/30/2023 13:33	WG2142334
Dichlorodifluoromethane	U		0.374	5.00	1	09/30/2023 13:33	WG2142334
1,1-Dichloroethane	U		0.100	1.00	1	09/30/2023 13:33	WG2142334
1,2-Dichloroethane	U		0.0819	1.00	1	09/30/2023 13:33	WG2142334
1,1-Dichloroethene	U		0.188	1.00	1	09/30/2023 13:33	WG2142334
cis-1,2-Dichloroethene	65.7		0.126	1.00	1	09/30/2023 13:33	WG2142334
trans-1,2-Dichloroethene	0.527	J	0.149	1.00	1	09/30/2023 13:33	WG2142334
1,2-Dichloropropane	U		0.149	1.00	1	09/30/2023 13:33	WG2142334
cis-1,3-Dichloropropene	U		0.111	1.00	1	09/30/2023 13:33	WG2142334
trans-1,3-Dichloropropene	U		0.118	1.00	1	09/30/2023 13:33	WG2142334
Ethylbenzene	U		0.137	1.00	1	09/30/2023 13:33	WG2142334
Methylene Chloride	U		0.430	5.00	1	09/30/2023 13:33	WG2142334
Methyl tert-butyl ether	U		0.101	1.00	1	09/30/2023 13:33	WG2142334
Naphthalene	U		1.00	5.00	1	09/30/2023 13:33	WG2142334
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	09/30/2023 13:33	WG2142334
Tetrachloroethene	0.711	J	0.300	1.00	1	09/30/2023 13:33	WG2142334
Toluene	U		0.278	1.00	1	09/30/2023 13:33	WG2142334
1,1,1-Trichloroethane	U		0.149	1.00	1	09/30/2023 13:33	WG2142334
1,1,2-Trichloroethane	U		0.158	1.00	1	09/30/2023 13:33	WG2142334
Trichloroethene	66.1		0.190	1.00	1	09/30/2023 13:33	WG2142334
Trichlorofluoromethane	U		0.160	5.00	1	09/30/2023 13:33	WG2142334
Vinyl chloride	5.67		0.234	1.00	1	09/30/2023 13:33	WG2142334
(S) Toluene-d8	104			80.0-120		09/30/2023 13:33	WG2142334
(S) 4-Bromofluorobenzene	93.1			80.0-120		09/30/2023 13:33	WG2142334
(S) 1,2-Dichloroethane-d4	102			70.0-130		09/30/2023 13:33	WG2142334

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3980416-3 09/30/23 07:52

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.0941	1.00
Bromodichloromethane	U		0.136	1.00
Bromoform	U		0.129	1.00
Bromomethane	U		0.605	5.00
Carbon tetrachloride	U		0.128	1.00
Chlorobenzene	U		0.116	1.00
Chlorodibromomethane	U		0.140	1.00
Chloroethane	U		0.192	5.00
Chloroform	U		0.111	5.00
Chloromethane	U		0.960	2.50
1,2-Dichlorobenzene	U		0.107	1.00
1,3-Dichlorobenzene	U		0.110	1.00
1,4-Dichlorobenzene	U		0.120	1.00
Dichlorodifluoromethane	U		0.374	5.00
1,1-Dichloroethane	U		0.100	1.00
1,2-Dichloroethane	U		0.0819	1.00
1,1-Dichloroethene	U		0.188	1.00
cis-1,2-Dichloroethene	U		0.126	1.00
trans-1,2-Dichloroethene	U		0.149	1.00
1,2-Dichloropropane	U		0.149	1.00
cis-1,3-Dichloropropene	U		0.111	1.00
trans-1,3-Dichloropropene	U		0.118	1.00
Ethylbenzene	U		0.137	1.00
Methylene Chloride	U		0.430	5.00
Methyl tert-butyl ether	U		0.101	1.00
Naphthalene	U		1.00	5.00
1,1,2,2-Tetrachloroethane	U		0.133	1.00
Tetrachloroethene	U		0.300	1.00
Toluene	U		0.278	1.00
1,1,1-Trichloroethane	U		0.149	1.00
1,1,2-Trichloroethane	U		0.158	1.00
Trichloroethene	U		0.190	1.00
Trichlorofluoromethane	U		0.160	5.00
Vinyl chloride	U		0.234	1.00
(S) Toluene-d8	106			80.0-120
(S) 4-Bromofluorobenzene	94.1			80.0-120
(S) 1,2-Dichloroethane-d4	106			70.0-130

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

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

(LCS) R3980416-1 09/30/23 06:54 • (LCSD) R3980416-2 09/30/23 07:13

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Benzene	5.00	4.97	4.85	99.4	97.0	65.0-135			2.44	20
Bromodichloromethane	5.00	4.94	4.92	98.8	98.4	65.0-135			0.406	20
Bromoform	5.00	4.99	5.01	99.8	100	70.0-130			0.400	20
Bromomethane	5.00	5.64	5.91	113	118	15.0-185			4.68	20
Carbon tetrachloride	5.00	5.14	5.09	103	102	70.0-130			0.978	20
Chlorobenzene	5.00	4.78	4.75	95.6	95.0	65.0-135			0.630	20
Chlorodibromomethane	5.00	4.80	4.98	96.0	99.6	70.0-135			3.68	20
Chloroethane	5.00	5.96	6.53	119	131	40.0-160			9.13	20
Chloroform	5.00	5.14	4.92	103	98.4	70.0-135			4.37	20
Chloromethane	5.00	6.34	6.12	127	122	0.100-205			3.53	20
1,2-Dichlorobenzene	5.00	4.50	4.57	90.0	91.4	65.0-135			1.54	20
1,3-Dichlorobenzene	5.00	4.57	4.43	91.4	88.6	70.0-130			3.11	20
1,4-Dichlorobenzene	5.00	4.58	4.52	91.6	90.4	65.0-135			1.32	20
Dichlorodifluoromethane	5.00	5.38	5.18	108	104	49.0-155			3.79	20
1,1-Dichloroethane	5.00	5.19	5.32	104	106	70.0-130			2.47	20
1,2-Dichloroethane	5.00	5.10	4.97	102	99.4	70.0-130			2.58	20
1,1-Dichloroethene	5.00	5.21	5.32	104	106	50.0-150			2.09	20
cis-1,2-Dichloroethene	5.00	4.94	5.07	98.8	101	73.0-120			2.60	20
trans-1,2-Dichloroethene	5.00	5.11	4.73	102	94.6	70.0-130			7.72	20
1,2-Dichloropropane	5.00	4.94	5.14	98.8	103	35.0-165			3.97	20
cis-1,3-Dichloropropene	5.00	4.67	4.48	93.4	89.6	25.0-175			4.15	20
trans-1,3-Dichloropropene	5.00	4.41	4.35	88.2	87.0	50.0-150			1.37	20
Ethylbenzene	5.00	4.53	4.54	90.6	90.8	60.0-140			0.221	20
Methylene Chloride	5.00	5.29	5.36	106	107	60.0-140			1.31	20
Methyl tert-butyl ether	5.00	4.52	4.53	90.4	90.6	64.0-123			0.221	20
Naphthalene	5.00	3.23	3.46	64.6	69.2	62.0-128			6.88	20
1,1,2,2-Tetrachloroethane	5.00	4.92	4.90	98.4	98.0	60.0-140			0.407	20
Tetrachloroethene	5.00	4.83	4.75	96.6	95.0	70.0-130			1.67	20
Toluene	5.00	4.67	4.72	93.4	94.4	70.0-130			1.06	20
1,1,1-Trichloroethane	5.00	5.01	5.01	100	100	70.0-130			0.000	20
1,1,2-Trichloroethane	5.00	4.94	4.90	98.8	98.0	70.0-130			0.813	20
Trichloroethene	5.00	5.02	5.05	100	101	65.0-135			0.596	20
Trichlorofluoromethane	5.00	5.88	5.98	118	120	50.0-150			1.69	20
Vinyl chloride	5.00	6.44	6.33	129	127	5.00-195			1.72	20
(S) Toluene-d8				102	103	80.0-120				
(S) 4-Bromofluorobenzene				97.1	97.6	80.0-120				
(S) 1,2-Dichloroethane-d4				105	106	70.0-130				

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L1659433-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1659433-02 09/30/23 15:27 • (MS) R3980416-4 09/30/23 15:46 • (MSD) R3980416-5 09/30/23 16:05

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	125	U	127	145	102	116	25	37.0-151			13.2	61
Bromodichloromethane	125	U	122	144	97.6	115	25	35.0-155			16.5	56
Bromoform	125	U	111	125	88.8	100	25	45.0-169			11.9	42
Bromomethane	125	U	149	163	119	130	25	0.100-206			8.97	61
Carbon tetrachloride	125	U	134	146	107	117	25	70.0-140			8.57	41
Chlorobenzene	125	U	123	135	98.4	108	25	37.0-160			9.30	53
Chlorodibromomethane	125	U	119	138	95.2	110	25	53.0-149			14.8	50
Chloroethane	125	U	171	182	137	146	25	14.0-230			6.23	78
Chloroform	125	4.06	124	152	96.0	118	25	51.0-138			20.3	54
Chloromethane	125	U	178	185	142	148	25	0.100-273			3.86	60
1,2-Dichlorobenzene	125	U	124	131	99.2	105	25	18.0-190			5.49	57
1,3-Dichlorobenzene	125	U	123	132	98.4	106	25	59.0-156			7.06	43
1,4-Dichlorobenzene	125	U	127	134	102	107	25	18.0-190			5.36	57
Dichlorodifluoromethane	125	U	172	205	138	164	25	20.0-160		J5	17.5	20
1,1-Dichloroethane	125	U	127	152	102	122	25	59.0-155			17.9	40
1,2-Dichloroethane	125	U	109	140	87.2	112	25	49.0-155			24.9	49
1,1-Dichloroethene	125	U	138	166	110	133	25	0.100-234			18.4	32
cis-1,2-Dichloroethene	125	U	124	135	99.2	108	25	43.0-142			8.49	20
trans-1,2-Dichloroethene	125	U	122	144	97.6	115	25	54.0-156			16.5	45
1,2-Dichloropropane	125	U	129	147	103	118	25	0.100-210			13.0	55
cis-1,3-Dichloropropene	125	U	111	130	88.8	104	25	0.100-227			15.8	58
trans-1,3-Dichloropropene	125	U	108	122	86.4	97.6	25	17.0-183			12.2	86
Ethylbenzene	125	U	119	131	95.2	105	25	37.0-162			9.60	63
Methylene Chloride	125	U	129	144	103	115	25	0.100-221			11.0	28
Methyl tert-butyl ether	125	U	101	125	80.8	100	25	42.0-142		J3	21.2	20
Naphthalene	125	U	108	90.6	86.4	72.5	25	42.0-146			17.5	20
1,1,2,2-Tetrachloroethane	125	U	134	143	107	114	25	46.0-157			6.50	61
Tetrachloroethene	125	U	126	143	101	114	25	64.0-148			12.6	39
Toluene	125	U	126	139	101	111	25	47.0-150			9.81	41
1,1,1-Trichloroethane	125	U	141	148	113	118	25	56.0-162			4.84	36
1,1,2-Trichloroethane	125	U	122	136	97.6	109	25	52.0-150			10.9	45
Trichloroethene	125	U	120	137	96.0	110	25	70.0-157			13.2	48
Trichlorofluoromethane	125	U	175	206	140	165	25	17.0-181			16.3	84
Vinyl chloride	125	U	189	203	151	162	25	0.100-251			7.14	66
(S) Toluene-d8					102	97.6		80.0-120				
(S) 4-Bromofluorobenzene					95.5	95.8		80.0-120				
(S) 1,2-Dichloroethane-d4					95.1	105		70.0-130				

Sample Narrative:

OS: Lowest possible dilution due to sample foaming.

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3981027-3 09/30/23 04:56

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		11.3	50.0
Acrolein	U		2.54	50.0
Acrylonitrile	U		0.671	10.0
Benzene	U		0.0941	1.00
Bromobenzene	U		0.118	1.00
Bromodichloromethane	U		0.136	1.00
Bromoform	U		0.129	1.00
Bromomethane	U		0.605	5.00
n-Butylbenzene	U		0.157	1.00
sec-Butylbenzene	U		0.125	1.00
tert-Butylbenzene	U		0.127	1.00
Carbon disulfide	U		0.0962	1.00
Carbon tetrachloride	U		0.128	1.00
Chlorobenzene	U		0.116	1.00
Chlorodibromomethane	U		0.140	1.00
Chloroethane	U		0.192	5.00
Chloroform	U		0.111	5.00
Chloromethane	U		0.960	2.50
2-Chlorotoluene	U		0.106	1.00
4-Chlorotoluene	U		0.114	1.00
1,2-Dibromo-3-Chloropropane	U		0.276	5.00
1,2-Dibromoethane	U		0.126	1.00
Dibromomethane	U		0.122	1.00
1,2-Dichlorobenzene	U		0.107	1.00
1,3-Dichlorobenzene	U		0.110	1.00
1,4-Dichlorobenzene	U		0.120	1.00
Dichlorodifluoromethane	U		0.374	5.00
1,1-Dichloroethane	U		0.100	1.00
1,2-Dichloroethane	U		0.0819	1.00
1,1-Dichloroethene	U		0.188	1.00
cis-1,2-Dichloroethene	U		0.126	1.00
trans-1,2-Dichloroethene	U		0.149	1.00
1,2-Dichloropropane	U		0.149	1.00
1,1-Dichloropropene	U		0.142	1.00
1,3-Dichloropropane	U		0.110	1.00
cis-1,3-Dichloropropene	U		0.111	1.00
trans-1,3-Dichloropropene	U		0.118	1.00
2,2-Dichloropropane	U		0.161	1.00
Di-isopropyl ether	U		0.105	1.00
Ethylbenzene	U		0.137	1.00

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3981027-3 09/30/23 04:56

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Hexachloro-1,3-butadiene	U		0.337	1.00
Isopropylbenzene	U		0.105	1.00
p-Isopropyltoluene	U		0.120	1.00
2-Butanone (MEK)	U		1.19	10.0
Methylene Chloride	U		0.430	5.00
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0
Methyl tert-butyl ether	U		0.101	1.00
Naphthalene	U		1.00	5.00
n-Propylbenzene	U		0.0993	1.00
Styrene	U		0.118	1.00
1,1,1,2-Tetrachloroethane	U		0.147	1.00
1,1,2,2-Tetrachloroethane	U		0.133	1.00
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00
Tetrachloroethene	U		0.300	1.00
Toluene	U		0.278	1.00
1,2,3-Trichlorobenzene	U		0.230	1.00
1,2,4-Trichlorobenzene	U		0.481	1.00
1,1,1-Trichloroethane	U		0.149	1.00
1,1,2-Trichloroethane	U		0.158	1.00
Trichloroethene	U		0.190	1.00
Trichlorofluoromethane	U		0.160	5.00
1,2,3-Trichloropropane	U		0.237	2.50
1,2,4-Trimethylbenzene	U		0.322	1.00
1,2,3-Trimethylbenzene	U		0.104	1.00
1,3,5-Trimethylbenzene	U		0.104	1.00
Vinyl chloride	U		0.234	1.00
Xylenes, Total	U		0.174	3.00
(S) Toluene-d8	103			80.0-120
(S) 4-Bromofluorobenzene	101			77.0-126
(S) 1,2-Dichloroethane-d4	104			70.0-130

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

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

(LCS) R3981027-1 09/30/23 03:58 • (LCSD) R3981027-2 09/30/23 04:17

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	25.0	24.8	24.8	99.2	99.2	19.0-160			0.000	27
Acrolein	25.0	24.5	23.8	98.0	95.2	10.0-160			2.90	26
Acrylonitrile	25.0	26.4	25.1	106	100	55.0-149			5.05	20

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

(LCS) R3981027-1 09/30/23 03:58 • (LCSD) R3981027-2 09/30/23 04:17

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	5.00	4.69	4.59	93.8	91.8	70.0-123			2.16	20
Bromobenzene	5.00	4.90	4.57	98.0	91.4	73.0-121			6.97	20
Bromodichloromethane	5.00	5.06	5.05	101	101	75.0-120			0.198	20
Bromoform	5.00	4.92	4.71	98.4	94.2	68.0-132			4.36	20
Bromomethane	5.00	4.59	4.52	91.8	90.4	10.0-160			1.54	25
n-Butylbenzene	5.00	4.86	4.60	97.2	92.0	73.0-125			5.50	20
sec-Butylbenzene	5.00	5.10	4.69	102	93.8	75.0-125			8.38	20
tert-Butylbenzene	5.00	4.83	4.47	96.6	89.4	76.0-124			7.74	20
Carbon disulfide	5.00	4.92	4.92	98.4	98.4	61.0-128			0.000	20
Carbon tetrachloride	5.00	5.55	5.46	111	109	68.0-126			1.63	20
Chlorobenzene	5.00	5.30	4.83	106	96.6	80.0-121			9.28	20
Chlorodibromomethane	5.00	5.19	4.94	104	98.8	77.0-125			4.94	20
Chloroethane	5.00	4.84	4.76	96.8	95.2	47.0-150			1.67	20
Chloroform	5.00	5.20	5.17	104	103	73.0-120			0.579	20
Chloromethane	5.00	4.87	4.55	97.4	91.0	41.0-142			6.79	20
2-Chlorotoluene	5.00	4.70	4.50	94.0	90.0	76.0-123			4.35	20
4-Chlorotoluene	5.00	4.76	4.37	95.2	87.4	75.0-122			8.54	20
1,2-Dibromo-3-Chloropropane	5.00	5.52	5.14	110	103	58.0-134			7.13	20
1,2-Dibromoethane	5.00	5.42	5.06	108	101	80.0-122			6.87	20
Dibromomethane	5.00	5.11	5.01	102	100	80.0-120			1.98	20
1,2-Dichlorobenzene	5.00	4.81	4.52	96.2	90.4	79.0-121			6.22	20
1,3-Dichlorobenzene	5.00	5.16	4.80	103	96.0	79.0-120			7.23	20
1,4-Dichlorobenzene	5.00	4.57	4.71	91.4	94.2	79.0-120			3.02	20
Dichlorodifluoromethane	5.00	4.45	4.34	89.0	86.8	51.0-149			2.50	20
1,1-Dichloroethane	5.00	5.50	5.42	110	108	70.0-126			1.47	20
1,2-Dichloroethane	5.00	5.10	5.07	102	101	70.0-128			0.590	20
1,1-Dichloroethene	5.00	5.54	5.37	111	107	71.0-124			3.12	20
cis-1,2-Dichloroethene	5.00	5.23	5.15	105	103	73.0-120			1.54	20
trans-1,2-Dichloroethene	5.00	5.32	5.20	106	104	73.0-120			2.28	20
1,2-Dichloropropane	5.00	5.32	5.21	106	104	77.0-125			2.09	20
1,1-Dichloropropene	5.00	5.40	5.15	108	103	74.0-126			4.74	20
1,3-Dichloropropane	5.00	5.15	4.78	103	95.6	80.0-120			7.45	20
cis-1,3-Dichloropropene	5.00	4.69	4.73	93.8	94.6	80.0-123			0.849	20
trans-1,3-Dichloropropene	5.00	4.80	4.85	96.0	97.0	78.0-124			1.04	20
2,2-Dichloropropane	5.00	5.12	4.96	102	99.2	58.0-130			3.17	20
Di-isopropyl ether	5.00	5.19	5.07	104	101	58.0-138			2.34	20
Ethylbenzene	5.00	5.46	5.00	109	100	79.0-123			8.80	20
Hexachloro-1,3-butadiene	5.00	5.12	4.66	102	93.2	54.0-138			9.41	20
Isopropylbenzene	5.00	5.47	4.97	109	99.4	76.0-127			9.58	20
p-Isopropyltoluene	5.00	5.15	4.67	103	93.4	76.0-125			9.78	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

(LCS) R3981027-1 09/30/23 03:58 • (LCSD) R3981027-2 09/30/23 04:17

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
2-Butanone (MEK)	25.0	23.9	23.0	95.6	92.0	44.0-160			3.84	20
Methylene Chloride	5.00	5.02	4.97	100	99.4	67.0-120			1.00	20
4-Methyl-2-pentanone (MIBK)	25.0	29.3	27.2	117	109	68.0-142			7.43	20
Methyl tert-butyl ether	5.00	5.10	4.97	102	99.4	68.0-125			2.58	20
Naphthalene	5.00	6.42	6.01	128	120	54.0-135			6.60	20
n-Propylbenzene	5.00	4.79	4.42	95.8	88.4	77.0-124			8.03	20
Styrene	5.00	5.00	4.65	100	93.0	73.0-130			7.25	20
1,1,1,2-Tetrachloroethane	5.00	5.36	4.97	107	99.4	75.0-125			7.55	20
1,1,2,2-Tetrachloroethane	5.00	4.86	4.65	97.2	93.0	65.0-130			4.42	20
1,1,2-Trichlorotrifluoroethane	5.00	5.06	4.87	101	97.4	69.0-132			3.83	20
Tetrachloroethene	5.00	5.77	5.27	115	105	72.0-132			9.06	20
Toluene	5.00	5.01	4.56	100	91.2	79.0-120			9.40	20
1,2,3-Trichlorobenzene	5.00	6.70	6.01	134	120	50.0-138			10.9	20
1,2,4-Trichlorobenzene	5.00	5.84	5.39	117	108	57.0-137			8.01	20
1,1,1-Trichloroethane	5.00	5.41	5.28	108	106	73.0-124			2.43	20
1,1,2-Trichloroethane	5.00	5.26	4.93	105	98.6	80.0-120			6.48	20
Trichloroethene	5.00	5.55	5.33	111	107	78.0-124			4.04	20
Trichlorofluoromethane	5.00	4.89	4.79	97.8	95.8	59.0-147			2.07	20
1,2,3-Trichloropropane	5.00	5.03	4.60	101	92.0	73.0-130			8.93	20
1,2,4-Trimethylbenzene	5.00	4.55	4.26	91.0	85.2	76.0-121			6.58	20
1,2,3-Trimethylbenzene	5.00	4.76	4.47	95.2	89.4	77.0-120			6.28	20
1,3,5-Trimethylbenzene	5.00	4.80	4.48	96.0	89.6	76.0-122			6.90	20
Vinyl chloride	5.00	5.21	5.01	104	100	67.0-131			3.91	20
Xylenes, Total	15.0	15.7	14.5	105	96.7	79.0-123			7.95	20
(S) Toluene-d8				104	101	80.0-120				
(S) 4-Bromofluorobenzene				105	104	77.0-126				
(S) 1,2-Dichloroethane-d4				114	117	70.0-130				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3981028-3 09/30/23 13:50

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		11.3	50.0
Acrolein	U		2.54	50.0
Acrylonitrile	U		0.671	10.0
Benzene	U		0.0941	1.00
Bromobenzene	U		0.118	1.00
Bromodichloromethane	U		0.136	1.00
Bromoform	U		0.129	1.00
Bromomethane	U		0.605	5.00
n-Butylbenzene	U		0.157	1.00
sec-Butylbenzene	U		0.125	1.00
tert-Butylbenzene	U		0.127	1.00
Carbon disulfide	U		0.0962	1.00
Carbon tetrachloride	U		0.128	1.00
Chlorobenzene	U		0.116	1.00
Chlorodibromomethane	U		0.140	1.00
Chloroethane	U		0.192	5.00
Chloroform	U		0.111	5.00
Chloromethane	U		0.960	2.50
2-Chlorotoluene	U		0.106	1.00
4-Chlorotoluene	U		0.114	1.00
1,2-Dibromo-3-Chloropropane	U		0.276	5.00
1,2-Dibromoethane	U		0.126	1.00
Dibromomethane	U		0.122	1.00
1,2-Dichlorobenzene	U		0.107	1.00
1,3-Dichlorobenzene	U		0.110	1.00
1,4-Dichlorobenzene	U		0.120	1.00
Dichlorodifluoromethane	U		0.374	5.00
1,1-Dichloroethane	U		0.100	1.00
1,2-Dichloroethane	U		0.0819	1.00
1,1-Dichloroethene	U		0.188	1.00
cis-1,2-Dichloroethene	U		0.126	1.00
trans-1,2-Dichloroethene	U		0.149	1.00
1,2-Dichloropropane	U		0.149	1.00
1,1-Dichloropropene	U		0.142	1.00
1,3-Dichloropropane	U		0.110	1.00
cis-1,3-Dichloropropene	U		0.111	1.00
trans-1,3-Dichloropropene	U		0.118	1.00
2,2-Dichloropropane	U		0.161	1.00
Di-isopropyl ether	U		0.105	1.00
Ethylbenzene	U		0.137	1.00

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Cp

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Al

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Sc

Method Blank (MB)

(MB) R3981028-3 09/30/23 13:50

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Hexachloro-1,3-butadiene	U		0.337	1.00
Isopropylbenzene	U		0.105	1.00
p-Isopropyltoluene	U		0.120	1.00
2-Butanone (MEK)	U		1.19	10.0
Methylene Chloride	U		0.430	5.00
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0
Methyl tert-butyl ether	U		0.101	1.00
Naphthalene	U		1.00	5.00
n-Propylbenzene	U		0.0993	1.00
Styrene	U		0.118	1.00
1,1,1,2-Tetrachloroethane	U		0.147	1.00
1,1,2,2-Tetrachloroethane	U		0.133	1.00
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00
Tetrachloroethene	U		0.300	1.00
Toluene	U		0.278	1.00
1,2,3-Trichlorobenzene	U		0.230	1.00
1,2,4-Trichlorobenzene	U		0.481	1.00
1,1,1-Trichloroethane	U		0.149	1.00
1,1,2-Trichloroethane	U		0.158	1.00
Trichloroethene	U		0.190	1.00
Trichlorofluoromethane	U		0.160	5.00
1,2,3-Trichloropropane	U		0.237	2.50
1,2,4-Trimethylbenzene	U		0.322	1.00
1,2,3-Trimethylbenzene	U		0.104	1.00
1,3,5-Trimethylbenzene	U		0.104	1.00
Vinyl chloride	U		0.234	1.00
Xylenes, Total	U		0.174	3.00
(S) Toluene-d8	102			80.0-120
(S) 4-Bromofluorobenzene	98.6			77.0-126
(S) 1,2-Dichloroethane-d4	107			70.0-130

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

(LCS) R3981028-1 09/30/23 12:52 • (LCSD) R3981028-2 09/30/23 13:11

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	25.0	110	23.2	440	92.8	19.0-160	J4	J3	130	27
Acrolein	25.0	17.3	19.0	69.2	76.0	10.0-160			9.37	26
Acrylonitrile	25.0	21.7	22.7	86.8	90.8	55.0-149			4.50	20

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Cp

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Tc

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Sc

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

(LCS) R3981028-1 09/30/23 12:52 • (LCSD) R3981028-2 09/30/23 13:11

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Benzene	5.00	4.75	4.77	95.0	95.4	70.0-123			0.420	20
Bromobenzene	5.00	4.46	4.74	89.2	94.8	73.0-121			6.09	20
Bromodichloromethane	5.00	4.99	4.75	99.8	95.0	75.0-120			4.93	20
Bromoform	5.00	3.77	3.62	75.4	72.4	68.0-132			4.06	20
Bromomethane	5.00	5.03	4.85	101	97.0	10.0-160			3.64	25
n-Butylbenzene	5.00	4.84	4.85	96.8	97.0	73.0-125			0.206	20
sec-Butylbenzene	5.00	4.77	4.87	95.4	97.4	75.0-125			2.07	20
tert-Butylbenzene	5.00	4.52	4.61	90.4	92.2	76.0-124			1.97	20
Carbon disulfide	5.00	5.31	4.89	106	97.8	61.0-128			8.24	20
Carbon tetrachloride	5.00	6.00	5.68	120	114	68.0-126			5.48	20
Chlorobenzene	5.00	5.11	5.16	102	103	80.0-121			0.974	20
Chlorodibromomethane	5.00	4.62	4.44	92.4	88.8	77.0-125			3.97	20
Chloroethane	5.00	5.25	4.95	105	99.0	47.0-150			5.88	20
Chloroform	5.00	5.25	5.07	105	101	73.0-120			3.49	20
Chloromethane	5.00	5.36	5.12	107	102	41.0-142			4.58	20
2-Chlorotoluene	5.00	4.51	4.56	90.2	91.2	76.0-123			1.10	20
4-Chlorotoluene	5.00	4.34	4.59	86.8	91.8	75.0-122			5.60	20
1,2-Dibromo-3-Chloropropane	5.00	4.51	5.08	90.2	102	58.0-134			11.9	20
1,2-Dibromoethane	5.00	5.13	5.41	103	108	80.0-122			5.31	20
Dibromomethane	5.00	5.70	5.08	114	102	80.0-120			11.5	20
1,2-Dichlorobenzene	5.00	4.42	4.68	88.4	93.6	79.0-121			5.71	20
1,3-Dichlorobenzene	5.00	4.76	4.98	95.2	99.6	79.0-120			4.52	20
1,4-Dichlorobenzene	5.00	4.65	4.74	93.0	94.8	79.0-120			1.92	20
Dichlorodifluoromethane	5.00	5.11	4.72	102	94.4	51.0-149			7.93	20
1,1-Dichloroethane	5.00	5.37	5.31	107	106	70.0-126			1.12	20
1,2-Dichloroethane	5.00	4.97	5.12	99.4	102	70.0-128			2.97	20
1,1-Dichloroethene	5.00	5.74	5.66	115	113	71.0-124			1.40	20
cis-1,2-Dichloroethene	5.00	5.10	5.18	102	104	73.0-120			1.56	20
trans-1,2-Dichloroethene	5.00	5.38	5.18	108	104	73.0-120			3.79	20
1,2-Dichloropropane	5.00	5.36	5.28	107	106	77.0-125			1.50	20
1,1-Dichloropropene	5.00	5.71	5.55	114	111	74.0-126			2.84	20
1,3-Dichloropropane	5.00	4.83	4.89	96.6	97.8	80.0-120			1.23	20
cis-1,3-Dichloropropene	5.00	4.81	4.65	96.2	93.0	80.0-123			3.38	20
trans-1,3-Dichloropropene	5.00	4.78	4.70	95.6	94.0	78.0-124			1.69	20
2,2-Dichloropropane	5.00	5.43	5.16	109	103	58.0-130			5.10	20
Di-isopropyl ether	5.00	5.29	5.35	106	107	58.0-138			1.13	20
Ethylbenzene	5.00	5.32	5.33	106	107	79.0-123			0.188	20
Hexachloro-1,3-butadiene	5.00	4.90	5.08	98.0	102	54.0-138			3.61	20
Isopropylbenzene	5.00	5.44	5.38	109	108	76.0-127			1.11	20
p-Isopropyltoluene	5.00	4.83	4.94	96.6	98.8	76.0-125			2.25	20

¹Cp

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

(LCS) R3981028-1 09/30/23 12:52 • (LCSD) R3981028-2 09/30/23 13:11

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
2-Butanone (MEK)	25.0	20.0	22.2	80.0	88.8	44.0-160			10.4	20
Methylene Chloride	5.00	4.60	4.85	92.0	97.0	67.0-120			5.29	20
4-Methyl-2-pentanone (MIBK)	25.0	26.7	28.3	107	113	68.0-142			5.82	20
Methyl tert-butyl ether	5.00	5.04	4.94	101	98.8	68.0-125			2.00	20
Naphthalene	5.00	4.97	6.45	99.4	129	54.0-135		J3	25.9	20
n-Propylbenzene	5.00	4.54	4.57	90.8	91.4	77.0-124			0.659	20
Styrene	5.00	4.81	4.94	96.2	98.8	73.0-130			2.67	20
1,1,1,2-Tetrachloroethane	5.00	5.15	5.33	103	107	75.0-125			3.44	20
1,1,2,2-Tetrachloroethane	5.00	4.36	4.65	87.2	93.0	65.0-130			6.44	20
1,1,2-Trichlorotrifluoroethane	5.00	5.57	5.06	111	101	69.0-132			9.60	20
Tetrachloroethene	5.00	5.83	5.87	117	117	72.0-132			0.684	20
Toluene	5.00	4.89	4.94	97.8	98.8	79.0-120			1.02	20
1,2,3-Trichlorobenzene	5.00	5.27	6.75	105	135	50.0-138		J3	24.6	20
1,2,4-Trichlorobenzene	5.00	4.84	5.72	96.8	114	57.0-137			16.7	20
1,1,1-Trichloroethane	5.00	5.77	5.49	115	110	73.0-124			4.97	20
1,1,2-Trichloroethane	5.00	4.90	5.12	98.0	102	80.0-120			4.39	20
Trichloroethene	5.00	5.60	5.48	112	110	78.0-124			2.17	20
Trichlorofluoromethane	5.00	4.44	4.51	88.8	90.2	59.0-147			1.56	20
1,2,3-Trichloropropane	5.00	4.34	4.69	86.8	93.8	73.0-130			7.75	20
1,2,4-Trimethylbenzene	5.00	4.31	4.41	86.2	88.2	76.0-121			2.29	20
1,2,3-Trimethylbenzene	5.00	4.39	4.55	87.8	91.0	77.0-120			3.58	20
1,3,5-Trimethylbenzene	5.00	4.51	4.73	90.2	94.6	76.0-122			4.76	20
Vinyl chloride	5.00	5.77	5.45	115	109	67.0-131			5.70	20
Xylenes, Total	15.0	15.4	15.4	103	103	79.0-123			0.000	20
(S) Toluene-d8				101	102	80.0-120				
(S) 4-Bromofluorobenzene				106	104	77.0-126				
(S) 1,2-Dichloroethane-d4				109	110	70.0-130				

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Cp

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Sc

Method Blank (MB)

(MB) R3981032-3 09/30/23 22:02

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		11.3	50.0
Acrolein	U		2.54	50.0
Acrylonitrile	U		0.671	10.0
Benzene	U		0.0941	1.00
Bromobenzene	U		0.118	1.00
Bromodichloromethane	U		0.136	1.00
Bromoform	U		0.129	1.00
Bromomethane	U		0.605	5.00
n-Butylbenzene	U		0.157	1.00
sec-Butylbenzene	U		0.125	1.00
tert-Butylbenzene	U		0.127	1.00
Carbon disulfide	U		0.0962	1.00
Carbon tetrachloride	U		0.128	1.00
Chlorobenzene	U		0.116	1.00
Chlorodibromomethane	U		0.140	1.00
Chloroethane	U		0.192	5.00
Chloroform	U		0.111	5.00
Chloromethane	U		0.960	2.50
2-Chlorotoluene	U		0.106	1.00
4-Chlorotoluene	U		0.114	1.00
1,2-Dibromo-3-Chloropropane	U		0.276	5.00
1,2-Dibromoethane	U		0.126	1.00
Dibromomethane	U		0.122	1.00
1,2-Dichlorobenzene	U		0.107	1.00
1,3-Dichlorobenzene	U		0.110	1.00
1,4-Dichlorobenzene	U		0.120	1.00
Dichlorodifluoromethane	U		0.374	5.00
1,1-Dichloroethane	U		0.100	1.00
1,2-Dichloroethane	U		0.0819	1.00
1,1-Dichloroethene	U		0.188	1.00
cis-1,2-Dichloroethene	U		0.126	1.00
trans-1,2-Dichloroethene	U		0.149	1.00
1,2-Dichloropropane	U		0.149	1.00
1,1-Dichloropropene	U		0.142	1.00
1,3-Dichloropropane	U		0.110	1.00
cis-1,3-Dichloropropene	U		0.111	1.00
trans-1,3-Dichloropropene	U		0.118	1.00
2,2-Dichloropropane	U		0.161	1.00
Di-isopropyl ether	U		0.105	1.00
Ethylbenzene	U		0.137	1.00

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3981032-3 09/30/23 22:02

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Hexachloro-1,3-butadiene	U		0.337	1.00
Isopropylbenzene	U		0.105	1.00
p-Isopropyltoluene	U		0.120	1.00
2-Butanone (MEK)	U		1.19	10.0
Methylene Chloride	U		0.430	5.00
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0
Methyl tert-butyl ether	U		0.101	1.00
Naphthalene	U		1.00	5.00
n-Propylbenzene	U		0.0993	1.00
Styrene	U		0.118	1.00
1,1,1,2-Tetrachloroethane	U		0.147	1.00
1,1,2,2-Tetrachloroethane	U		0.133	1.00
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00
Tetrachloroethene	U		0.300	1.00
Toluene	U		0.278	1.00
1,2,3-Trichlorobenzene	U		0.230	1.00
1,2,4-Trichlorobenzene	U		0.481	1.00
1,1,1-Trichloroethane	U		0.149	1.00
1,1,2-Trichloroethane	U		0.158	1.00
Trichloroethene	U		0.190	1.00
Trichlorofluoromethane	U		0.160	5.00
1,2,3-Trichloropropane	U		0.237	2.50
1,2,4-Trimethylbenzene	U		0.322	1.00
1,2,3-Trimethylbenzene	U		0.104	1.00
1,3,5-Trimethylbenzene	U		0.104	1.00
Vinyl chloride	U		0.234	1.00
Xylenes, Total	U		0.174	3.00
(S) Toluene-d8	102			80.0-120
(S) 4-Bromofluorobenzene	101			77.0-126
(S) 1,2-Dichloroethane-d4	105			70.0-130

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

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

(LCS) R3981032-1 09/30/23 21:04 • (LCSD) R3981032-2 09/30/23 21:23

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	25.0	21.4	30.3	85.6	121	19.0-160		J3	34.4	27
Acrolein	25.0	10.0	12.4	40.0	49.6	10.0-160			21.4	26
Acrylonitrile	25.0	20.6	31.3	82.4	125	55.0-149		J3	41.2	20

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

(LCS) R3981032-1 09/30/23 21:04 • (LCSD) R3981032-2 09/30/23 21:23

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	5.00	5.00	5.08	100	102	70.0-123			1.59	20
Bromobenzene	5.00	5.50	5.23	110	105	73.0-121			5.03	20
Bromodichloromethane	5.00	4.02	4.71	80.4	94.2	75.0-120			15.8	20
Bromoform	5.00	2.00	2.64	40.0	52.8	68.0-132	J4	J3 J4	27.6	20
Bromomethane	5.00	5.32	5.39	106	108	10.0-160			1.31	25
n-Butylbenzene	5.00	5.14	5.19	103	104	73.0-125			0.968	20
sec-Butylbenzene	5.00	5.34	5.13	107	103	75.0-125			4.01	20
tert-Butylbenzene	5.00	5.17	5.04	103	101	76.0-124			2.55	20
Carbon disulfide	5.00	4.84	5.34	96.8	107	61.0-128			9.82	20
Carbon tetrachloride	5.00	5.83	6.01	117	120	68.0-126			3.04	20
Chlorobenzene	5.00	5.52	5.69	110	114	80.0-121			3.03	20
Chlorodibromomethane	5.00	3.13	3.76	62.6	75.2	77.0-125	J4	J4	18.3	20
Chloroethane	5.00	5.46	5.55	109	111	47.0-150			1.63	20
Chloroform	5.00	5.53	5.76	111	115	73.0-120			4.07	20
Chloromethane	5.00	5.77	5.68	115	114	41.0-142			1.57	20
2-Chlorotoluene	5.00	5.43	5.17	109	103	76.0-123			4.91	20
4-Chlorotoluene	5.00	5.26	4.98	105	99.6	75.0-122			5.47	20
1,2-Dibromo-3-Chloropropane	5.00	4.44	4.70	88.8	94.0	58.0-134			5.69	20
1,2-Dibromoethane	5.00	5.60	5.80	112	116	80.0-122			3.51	20
Dibromomethane	5.00	6.25	5.63	125	113	80.0-120	J4		10.4	20
1,2-Dichlorobenzene	5.00	5.38	5.18	108	104	79.0-121			3.79	20
1,3-Dichlorobenzene	5.00	5.63	5.50	113	110	79.0-120			2.34	20
1,4-Dichlorobenzene	5.00	5.06	4.91	101	98.2	79.0-120			3.01	20
Dichlorodifluoromethane	5.00	4.93	5.02	98.6	100	51.0-149			1.81	20
1,1-Dichloroethane	5.00	5.96	6.18	119	124	70.0-126			3.62	20
1,2-Dichloroethane	5.00	5.02	5.64	100	113	70.0-128			11.6	20
1,1-Dichloroethene	5.00	6.35	6.27	127	125	71.0-124	J4	J4	1.27	20
cis-1,2-Dichloroethene	5.00	5.44	5.76	109	115	73.0-120			5.71	20
trans-1,2-Dichloroethene	5.00	5.64	5.87	113	117	73.0-120			4.00	20
1,2-Dichloropropane	5.00	5.79	5.79	116	116	77.0-125			0.000	20
1,1-Dichloropropene	5.00	5.93	5.73	119	115	74.0-126			3.43	20
1,3-Dichloropropane	5.00	5.16	5.49	103	110	80.0-120			6.20	20
cis-1,3-Dichloropropene	5.00	2.99	3.56	59.8	71.2	80.0-123	J4	J4	17.4	20
trans-1,3-Dichloropropene	5.00	2.87	3.61	57.4	72.2	78.0-124	J4	J3 J4	22.8	20
2,2-Dichloropropane	5.00	4.99	5.34	99.8	107	58.0-130			6.78	20
Di-isopropyl ether	5.00	5.72	6.03	114	121	58.0-138			5.28	20
Ethylbenzene	5.00	5.57	5.82	111	116	79.0-123			4.39	20
Hexachloro-1,3-butadiene	5.00	5.01	5.53	100	111	54.0-138			9.87	20
Isopropylbenzene	5.00	5.67	5.88	113	118	76.0-127			3.64	20
p-Isopropyltoluene	5.00	5.45	5.35	109	107	76.0-125			1.85	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

(LCS) R3981032-1 09/30/23 21:04 • (LCSD) R3981032-2 09/30/23 21:23

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
2-Butanone (MEK)	25.0	23.0	26.2	92.0	105	44.0-160			13.0	20
Methylene Chloride	5.00	5.09	5.69	102	114	67.0-120			11.1	20
4-Methyl-2-pentanone (MIBK)	25.0	30.5	33.0	122	132	68.0-142			7.87	20
Methyl tert-butyl ether	5.00	5.10	5.78	102	116	68.0-125			12.5	20
Naphthalene	5.00	6.93	7.18	139	144	54.0-135	J4	J4	3.54	20
n-Propylbenzene	5.00	5.24	5.01	105	100	77.0-124			4.49	20
Styrene	5.00	5.16	5.42	103	108	73.0-130			4.91	20
1,1,1,2-Tetrachloroethane	5.00	4.96	5.53	99.2	111	75.0-125			10.9	20
1,1,2,2-Tetrachloroethane	5.00	5.03	4.88	101	97.6	65.0-130			3.03	20
1,1,2-Trichlorotrifluoroethane	5.00	5.62	5.77	112	115	69.0-132			2.63	20
Tetrachloroethene	5.00	6.10	6.16	122	123	72.0-132			0.979	20
Toluene	5.00	5.24	5.28	105	106	79.0-120			0.760	20
1,2,3-Trichlorobenzene	5.00	7.41	7.57	148	151	50.0-138	J4	J4	2.14	20
1,2,4-Trichlorobenzene	5.00	6.14	6.27	123	125	57.0-137			2.10	20
1,1,1-Trichloroethane	5.00	6.18	6.01	124	120	73.0-124			2.79	20
1,1,2-Trichloroethane	5.00	5.43	5.63	109	113	80.0-120			3.62	20
Trichloroethene	5.00	6.27	6.03	125	121	78.0-124	J4		3.90	20
Trichlorofluoromethane	5.00	4.97	5.79	99.4	116	59.0-147			15.2	20
1,2,3-Trichloropropane	5.00	5.56	5.41	111	108	73.0-130			2.73	20
1,2,4-Trimethylbenzene	5.00	4.95	4.81	99.0	96.2	76.0-121			2.87	20
1,2,3-Trimethylbenzene	5.00	5.19	5.06	104	101	77.0-120			2.54	20
1,3,5-Trimethylbenzene	5.00	5.22	5.03	104	101	76.0-122			3.71	20
Vinyl chloride	5.00	5.93	5.85	119	117	67.0-131			1.36	20
Xylenes, Total	15.0	16.4	17.0	109	113	79.0-123			3.59	20
(S) Toluene-d8				103	99.7	80.0-120				
(S) 4-Bromofluorobenzene				104	106	77.0-126				
(S) 1,2-Dichloroethane-d4				103	120	70.0-130				

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

Method Blank (MB)

(MB) R3981109-3 10/01/23 21:01

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		11.3	50.0
Acrolein	U		2.54	50.0
Acrylonitrile	U		0.671	10.0
Benzene	U		0.0941	1.00
Bromobenzene	U		0.118	1.00
Bromodichloromethane	U		0.136	1.00
Bromoform	U		0.129	1.00
Bromomethane	U		0.605	5.00
n-Butylbenzene	U		0.157	1.00
sec-Butylbenzene	U		0.125	1.00
tert-Butylbenzene	U		0.127	1.00
Carbon disulfide	U		0.0962	1.00
Carbon tetrachloride	U		0.128	1.00
Chlorobenzene	U		0.116	1.00
Chlorodibromomethane	U		0.140	1.00
Chloroethane	U		0.192	5.00
Chloroform	0.177	U	0.111	5.00
Chloromethane	U		0.960	2.50
2-Chlorotoluene	U		0.106	1.00
4-Chlorotoluene	U		0.114	1.00
1,2-Dibromo-3-Chloropropane	U		0.276	5.00
1,2-Dibromoethane	U		0.126	1.00
Dibromomethane	U		0.122	1.00
1,2-Dichlorobenzene	U		0.107	1.00
1,3-Dichlorobenzene	U		0.110	1.00
1,4-Dichlorobenzene	U		0.120	1.00
Dichlorodifluoromethane	U		0.374	5.00
1,1-Dichloroethane	U		0.100	1.00
1,2-Dichloroethane	U		0.0819	1.00
1,1-Dichloroethene	U		0.188	1.00
cis-1,2-Dichloroethene	U		0.126	1.00
trans-1,2-Dichloroethene	U		0.149	1.00
1,2-Dichloropropane	U		0.149	1.00
1,1-Dichloropropene	U		0.142	1.00
1,3-Dichloropropane	U		0.110	1.00
cis-1,3-Dichloropropene	U		0.111	1.00
trans-1,3-Dichloropropene	U		0.118	1.00
2,2-Dichloropropane	U		0.161	1.00
Di-isopropyl ether	U		0.105	1.00
Ethylbenzene	U		0.137	1.00

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3981109-3 10/01/23 21:01

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Hexachloro-1,3-butadiene	U		0.337	1.00
Isopropylbenzene	U		0.105	1.00
p-Isopropyltoluene	U		0.120	1.00
2-Butanone (MEK)	U		1.19	10.0
Methylene Chloride	U		0.430	5.00
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0
Methyl tert-butyl ether	U		0.101	1.00
Naphthalene	U		1.00	5.00
n-Propylbenzene	U		0.0993	1.00
Styrene	U		0.118	1.00
1,1,1,2-Tetrachloroethane	U		0.147	1.00
1,1,2,2-Tetrachloroethane	U		0.133	1.00
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00
Tetrachloroethene	U		0.300	1.00
Toluene	U		0.278	1.00
1,2,3-Trichlorobenzene	U		0.230	1.00
1,2,4-Trichlorobenzene	U		0.481	1.00
1,1,1-Trichloroethane	U		0.149	1.00
1,1,2-Trichloroethane	U		0.158	1.00
Trichloroethene	U		0.190	1.00
Trichlorofluoromethane	U		0.160	5.00
1,2,3-Trichloropropane	U		0.237	2.50
1,2,4-Trimethylbenzene	U		0.322	1.00
1,2,3-Trimethylbenzene	U		0.104	1.00
1,3,5-Trimethylbenzene	U		0.104	1.00
Vinyl chloride	U		0.234	1.00
Xylenes, Total	U		0.174	3.00
(S) Toluene-d8	92.9			80.0-120
(S) 4-Bromofluorobenzene	90.1			77.0-126
(S) 1,2-Dichloroethane-d4	87.2			70.0-130

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

(LCS) R3981109-1 10/01/23 20:03 • (LCSD) R3981109-2 10/01/23 20:23

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	25.0	41.5	38.8	166	155	19.0-160	J4		6.72	27
Acrolein	25.0	29.7	29.6	119	118	10.0-160			0.337	26
Acrylonitrile	25.0	28.8	28.3	115	113	55.0-149			1.75	20

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

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Gl

8
Al

9
Sc

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

(LCS) R3981109-1 10/01/23 20:03 • (LCSD) R3981109-2 10/01/23 20:23

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	5.00	5.35	5.23	107	105	70.0-123			2.27	20
Bromobenzene	5.00	4.94	4.88	98.8	97.6	73.0-121			1.22	20
Bromodichloromethane	5.00	5.31	4.95	106	99.0	75.0-120			7.02	20
Bromoform	5.00	4.95	4.93	99.0	98.6	68.0-132			0.405	20
Bromomethane	5.00	5.37	5.12	107	102	10.0-160			4.77	25
n-Butylbenzene	5.00	5.56	5.26	111	105	73.0-125			5.55	20
sec-Butylbenzene	5.00	5.75	5.69	115	114	75.0-125			1.05	20
tert-Butylbenzene	5.00	5.58	5.42	112	108	76.0-124			2.91	20
Carbon disulfide	5.00	5.61	5.42	112	108	61.0-128			3.45	20
Carbon tetrachloride	5.00	5.57	5.90	111	118	68.0-126			5.75	20
Chlorobenzene	5.00	5.30	5.02	106	100	80.0-121			5.43	20
Chlorodibromomethane	5.00	5.06	4.99	101	99.8	77.0-125			1.39	20
Chloroethane	5.00	5.00	4.84	100	96.8	47.0-150			3.25	20
Chloroform	5.00	5.55	5.32	111	106	73.0-120			4.23	20
Chloromethane	5.00	5.53	5.54	111	111	41.0-142			0.181	20
2-Chlorotoluene	5.00	5.18	5.10	104	102	76.0-123			1.56	20
4-Chlorotoluene	5.00	5.30	5.19	106	104	75.0-122			2.10	20
1,2-Dibromo-3-Chloropropane	5.00	5.18	4.97	104	99.4	58.0-134			4.14	20
1,2-Dibromoethane	5.00	5.19	5.08	104	102	80.0-122			2.14	20
Dibromomethane	5.00	5.24	5.16	105	103	80.0-120			1.54	20
1,2-Dichlorobenzene	5.00	5.39	5.07	108	101	79.0-121			6.12	20
1,3-Dichlorobenzene	5.00	5.55	5.04	111	101	79.0-120			9.63	20
1,4-Dichlorobenzene	5.00	5.11	4.89	102	97.8	79.0-120			4.40	20
Dichlorodifluoromethane	5.00	4.56	5.11	91.2	102	51.0-149			11.4	20
1,1-Dichloroethane	5.00	5.58	5.39	112	108	70.0-126			3.46	20
1,2-Dichloroethane	5.00	5.18	5.16	104	103	70.0-128			0.387	20
1,1-Dichloroethene	5.00	5.30	5.47	106	109	71.0-124			3.16	20
cis-1,2-Dichloroethene	5.00	5.31	5.26	106	105	73.0-120			0.946	20
trans-1,2-Dichloroethene	5.00	5.25	5.29	105	106	73.0-120			0.759	20
1,2-Dichloropropane	5.00	5.26	5.12	105	102	77.0-125			2.70	20
1,1-Dichloropropene	5.00	5.57	5.65	111	113	74.0-126			1.43	20
1,3-Dichloropropane	5.00	5.15	5.08	103	102	80.0-120			1.37	20
cis-1,3-Dichloropropene	5.00	5.00	4.95	100	99.0	80.0-123			1.01	20
trans-1,3-Dichloropropene	5.00	4.93	4.82	98.6	96.4	78.0-124			2.26	20
2,2-Dichloropropane	5.00	6.57	6.56	131	131	58.0-130	J4	J4	0.152	20
Di-isopropyl ether	5.00	5.61	5.42	112	108	58.0-138			3.45	20
Ethylbenzene	5.00	5.16	4.94	103	98.8	79.0-123			4.36	20
Hexachloro-1,3-butadiene	5.00	6.36	5.15	127	103	54.0-138		J3	21.0	20
Isopropylbenzene	5.00	5.87	5.69	117	114	76.0-127			3.11	20
p-Isopropyltoluene	5.00	5.65	5.42	113	108	76.0-125			4.16	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

(LCS) R3981109-1 10/01/23 20:03 • (LCSD) R3981109-2 10/01/23 20:23

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
2-Butanone (MEK)	25.0	28.2	27.3	113	109	44.0-160			3.24	20
Methylene Chloride	5.00	5.08	4.91	102	98.2	67.0-120			3.40	20
4-Methyl-2-pentanone (MIBK)	25.0	28.0	27.2	112	109	68.0-142			2.90	20
Methyl tert-butyl ether	5.00	5.45	5.24	109	105	68.0-125			3.93	20
Naphthalene	5.00	5.47	4.43	109	88.6	54.0-135		J3	21.0	20
n-Propylbenzene	5.00	5.57	5.46	111	109	77.0-124			1.99	20
Styrene	5.00	5.24	5.08	105	102	73.0-130			3.10	20
1,1,1,2-Tetrachloroethane	5.00	5.31	5.11	106	102	75.0-125			3.84	20
1,1,2,2-Tetrachloroethane	5.00	5.36	5.46	107	109	65.0-130			1.85	20
1,1,2-Trichlorotrifluoroethane	5.00	4.91	5.55	98.2	111	69.0-132			12.2	20
Tetrachloroethene	5.00	5.27	5.35	105	107	72.0-132			1.51	20
Toluene	5.00	5.39	5.19	108	104	79.0-120			3.78	20
1,2,3-Trichlorobenzene	5.00	5.35	4.04	107	80.8	50.0-138		J3	27.9	20
1,2,4-Trichlorobenzene	5.00	5.51	4.26	110	85.2	57.0-137		J3	25.6	20
1,1,1-Trichloroethane	5.00	5.61	5.66	112	113	73.0-124			0.887	20
1,1,2-Trichloroethane	5.00	5.13	4.89	103	97.8	80.0-120			4.79	20
Trichloroethene	5.00	4.81	4.74	96.2	94.8	78.0-124			1.47	20
Trichlorofluoromethane	5.00	4.51	4.84	90.2	96.8	59.0-147			7.06	20
1,2,3-Trichloropropane	5.00	5.05	5.22	101	104	73.0-130			3.31	20
1,2,4-Trimethylbenzene	5.00	5.40	5.17	108	103	76.0-121			4.35	20
1,2,3-Trimethylbenzene	5.00	5.45	5.07	109	101	77.0-120			7.22	20
1,3,5-Trimethylbenzene	5.00	5.27	5.11	105	102	76.0-122			3.08	20
Vinyl chloride	5.00	5.57	5.83	111	117	67.0-131			4.56	20
Xylenes, Total	15.0	16.2	15.7	108	105	79.0-123			3.13	20
(S) Toluene-d8				90.1	91.1	80.0-120				
(S) 4-Bromofluorobenzene				91.1	89.1	77.0-126				
(S) 1,2-Dichloroethane-d4				91.4	90.3	70.0-130				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3981348-2 10/01/23 22:33

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		11.3	50.0
Acrolein	U		2.54	50.0
Acrylonitrile	U		0.671	10.0
Benzene	U		0.0941	1.00
Bromobenzene	U		0.118	1.00
Bromodichloromethane	U		0.136	1.00
Bromoform	U		0.129	1.00
Bromomethane	U		0.605	5.00
n-Butylbenzene	U		0.157	1.00
sec-Butylbenzene	U		0.125	1.00
tert-Butylbenzene	U		0.127	1.00
Carbon disulfide	0.190	U	0.0962	1.00
Carbon tetrachloride	U		0.128	1.00
Chlorobenzene	U		0.116	1.00
Chlorodibromomethane	U		0.140	1.00
Chloroethane	U		0.192	5.00
Chloroform	U		0.111	5.00
Chloromethane	U		0.960	2.50
2-Chlorotoluene	U		0.106	1.00
4-Chlorotoluene	U		0.114	1.00
1,2-Dibromo-3-Chloropropane	U		0.276	5.00
1,2-Dibromoethane	U		0.126	1.00
Dibromomethane	U		0.122	1.00
1,2-Dichlorobenzene	U		0.107	1.00
1,3-Dichlorobenzene	U		0.110	1.00
1,4-Dichlorobenzene	U		0.120	1.00
Dichlorodifluoromethane	U		0.374	5.00
1,1-Dichloroethane	U		0.100	1.00
1,2-Dichloroethane	U		0.0819	1.00
1,1-Dichloroethene	U		0.188	1.00
cis-1,2-Dichloroethene	U		0.126	1.00
trans-1,2-Dichloroethene	U		0.149	1.00
1,2-Dichloropropane	U		0.149	1.00
1,1-Dichloropropene	U		0.142	1.00
1,3-Dichloropropane	U		0.110	1.00
cis-1,3-Dichloropropene	U		0.111	1.00
trans-1,3-Dichloropropene	U		0.118	1.00
2,2-Dichloropropane	U		0.161	1.00
Di-isopropyl ether	U		0.105	1.00
Ethylbenzene	U		0.137	1.00

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc

Method Blank (MB)

(MB) R3981348-2 10/01/23 22:33

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Hexachloro-1,3-butadiene	U		0.337	1.00
Isopropylbenzene	U		0.105	1.00
p-Isopropyltoluene	U		0.120	1.00
2-Butanone (MEK)	U		1.19	10.0
Methylene Chloride	U		0.430	5.00
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0
Methyl tert-butyl ether	U		0.101	1.00
Naphthalene	U		1.00	5.00
n-Propylbenzene	U		0.0993	1.00
Styrene	U		0.118	1.00
1,1,1,2-Tetrachloroethane	U		0.147	1.00
1,1,2,2-Tetrachloroethane	U		0.133	1.00
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00
Tetrachloroethene	U		0.300	1.00
Toluene	U		0.278	1.00
1,2,3-Trichlorobenzene	U		0.230	1.00
1,2,4-Trichlorobenzene	U		0.481	1.00
1,1,1-Trichloroethane	U		0.149	1.00
1,1,2-Trichloroethane	U		0.158	1.00
Trichloroethene	U		0.190	1.00
Trichlorofluoromethane	U		0.160	5.00
1,2,3-Trichloropropane	U		0.237	2.50
1,2,4-Trimethylbenzene	U		0.322	1.00
1,2,3-Trimethylbenzene	U		0.104	1.00
1,3,5-Trimethylbenzene	U		0.104	1.00
Vinyl chloride	U		0.234	1.00
Xylenes, Total	U		0.174	3.00
(S) Toluene-d8	113			80.0-120
(S) 4-Bromofluorobenzene	90.5			77.0-126
(S) 1,2-Dichloroethane-d4	90.9			70.0-130

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3981348-1 10/01/23 21:55

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	25.0	19.2	76.8	19.0-160	
Acrolein	25.0	18.5	74.0	10.0-160	
Acrylonitrile	25.0	16.8	67.2	55.0-149	

Laboratory Control Sample (LCS)

(LCS) R3981348-1 10/01/23 21:55

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Benzene	5.00	4.64	92.8	70.0-123	
Bromobenzene	5.00	4.63	92.6	73.0-121	
Bromodichloromethane	5.00	4.75	95.0	75.0-120	
Bromoform	5.00	5.83	117	68.0-132	
Bromomethane	5.00	5.47	109	10.0-160	
n-Butylbenzene	5.00	4.62	92.4	73.0-125	
sec-Butylbenzene	5.00	5.04	101	75.0-125	
tert-Butylbenzene	5.00	4.75	95.0	76.0-124	
Carbon disulfide	5.00	4.72	94.4	61.0-128	
Carbon tetrachloride	5.00	4.46	89.2	68.0-126	
Chlorobenzene	5.00	5.33	107	80.0-121	
Chlorodibromomethane	5.00	5.44	109	77.0-125	
Chloroethane	5.00	5.64	113	47.0-150	
Chloroform	5.00	4.66	93.2	73.0-120	
Chloromethane	5.00	5.21	104	41.0-142	
2-Chlorotoluene	5.00	4.66	93.2	76.0-123	
4-Chlorotoluene	5.00	4.80	96.0	75.0-122	
1,2-Dibromo-3-Chloropropane	5.00	4.85	97.0	58.0-134	
1,2-Dibromoethane	5.00	5.41	108	80.0-122	
Dibromomethane	5.00	4.56	91.2	80.0-120	
1,2-Dichlorobenzene	5.00	5.37	107	79.0-121	
1,3-Dichlorobenzene	5.00	5.36	107	79.0-120	
1,4-Dichlorobenzene	5.00	5.35	107	79.0-120	
Dichlorodifluoromethane	5.00	4.99	99.8	51.0-149	
1,1-Dichloroethane	5.00	4.57	91.4	70.0-126	
1,2-Dichloroethane	5.00	4.29	85.8	70.0-128	
1,1-Dichloroethene	5.00	4.62	92.4	71.0-124	
cis-1,2-Dichloroethene	5.00	4.59	91.8	73.0-120	
trans-1,2-Dichloroethene	5.00	4.67	93.4	73.0-120	
1,2-Dichloropropane	5.00	4.51	90.2	77.0-125	
1,1-Dichloropropene	5.00	4.38	87.6	74.0-126	
1,3-Dichloropropane	5.00	4.95	99.0	80.0-120	
cis-1,3-Dichloropropene	5.00	4.22	84.4	80.0-123	
trans-1,3-Dichloropropene	5.00	4.72	94.4	78.0-124	
2,2-Dichloropropane	5.00	4.15	83.0	58.0-130	
Di-isopropyl ether	5.00	4.24	84.8	58.0-138	
Ethylbenzene	5.00	5.09	102	79.0-123	
Hexachloro-1,3-butadiene	5.00	5.04	101	54.0-138	
Isopropylbenzene	5.00	5.00	100	76.0-127	
p-Isopropyltoluene	5.00	4.63	92.6	76.0-125	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3981348-1 10/01/23 21:55

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
2-Butanone (MEK)	25.0	19.0	76.0	44.0-160	
Methylene Chloride	5.00	4.90	98.0	67.0-120	
4-Methyl-2-pentanone (MIBK)	25.0	23.4	93.6	68.0-142	
Methyl tert-butyl ether	5.00	4.03	80.6	68.0-125	
Naphthalene	5.00	4.44	88.8	54.0-135	
n-Propylbenzene	5.00	4.95	99.0	77.0-124	
Styrene	5.00	4.93	98.6	73.0-130	
1,1,1,2-Tetrachloroethane	5.00	5.26	105	75.0-125	
1,1,2,2-Tetrachloroethane	5.00	5.32	106	65.0-130	
1,1,2-Trichlorotrifluoroethane	5.00	3.47	69.4	69.0-132	
Tetrachloroethene	5.00	5.42	108	72.0-132	
Toluene	5.00	5.59	112	79.0-120	
1,2,3-Trichlorobenzene	5.00	4.45	89.0	50.0-138	
1,2,4-Trichlorobenzene	5.00	4.45	89.0	57.0-137	
1,1,1-Trichloroethane	5.00	4.51	90.2	73.0-124	
1,1,2-Trichloroethane	5.00	5.25	105	80.0-120	
Trichloroethene	5.00	4.75	95.0	78.0-124	
Trichlorofluoromethane	5.00	5.04	101	59.0-147	
1,2,3-Trichloropropane	5.00	4.73	94.6	73.0-130	
1,2,4-Trimethylbenzene	5.00	4.70	94.0	76.0-121	
1,2,3-Trimethylbenzene	5.00	4.83	96.6	77.0-120	
1,3,5-Trimethylbenzene	5.00	4.85	97.0	76.0-122	
Vinyl chloride	5.00	5.72	114	67.0-131	
Xylenes, Total	15.0	15.1	101	79.0-123	
(S) Toluene-d8			114	80.0-120	
(S) 4-Bromofluorobenzene			94.4	77.0-126	
(S) 1,2-Dichloroethane-d4			93.1	70.0-130	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3981641-2 10/03/23 16:43

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
cis-1,2-Dichloroethene	U		0.126	1.00
Trichloroethene	U		0.190	1.00
(S) Toluene-d8	116			80.0-120
(S) 4-Bromofluorobenzene	88.8			77.0-126
(S) 1,2-Dichloroethane-d4	90.9			70.0-130

Laboratory Control Sample (LCS)

(LCS) R3981641-1 10/03/23 16:05

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
cis-1,2-Dichloroethene	5.00	4.27	85.4	73.0-120	
Trichloroethene	5.00	4.15	83.0	78.0-124	
(S) Toluene-d8			114	80.0-120	
(S) 4-Bromofluorobenzene			88.9	77.0-126	
(S) 1,2-Dichloroethane-d4			88.9	70.0-130	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

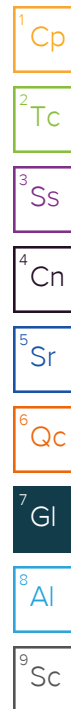
The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

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

Abbreviations and Definitions

MDL	Method Detection Limit.
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.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
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
B	The same analyte is found in the associated blank.
C3	The reported concentration is an estimate. The continuing calibration standard associated with this data responded low. Method sensitivity check is acceptable.
C5	The reported concentration is an estimate. The continuing calibration standard associated with this data responded high. Data is likely to show a high bias concerning the result.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.



ACCREDITATIONS & LOCATIONS

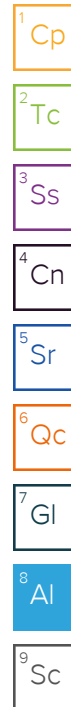
Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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

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

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

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



State of Oregon Chain of Custody

Agency, Authorized Purchaser or Agent: GSI Water Solutions for ODEQ Send Lab Report To: Mark Pugh Address: 700 NE Multnomah Street, Suite 600 Portland, OR 97232-4100 Tel. #: 503-229-5587 Email: Mark.PUGH@deq.oregon.gov, cmartin@gsiws.com, amccarthy@gsiws.com, mfaragher@gsiws.com, dbs@gsiws.com					Contract Laboratory Name: Pace Analytical National Lab Batch #: Invoice: ODEQ/Business Office 700 NE Multnomah Street, Suite 600 Portland, OR 97232 Email: DEQEXP@deq.state.or.us					Lab Selection Criteria: Proximity (if TAT < 48 hrs) Prior work on same project Cost (for anticipated analyses) Other labs disqualified or unable to perform requested services Emergency work					Turn Around Time: 10 days (std.) 5 days 72 hours 48 hours 24 hours Other _____						
Project Name: OREGON DEQ-MILWAUKIE INTERNATIONAL WAY Project #: 2060.007 Sampler Name: Alex McCarthy					Sample Preservative <table border="1"> <tr> <td>Solids: MeOH Liquids: HCl</td> <td>Liquids: HCl & Na2S2O3</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>					Solids: MeOH Liquids: HCl	Liquids: HCl & Na2S2O3									L1659125	
Solids: MeOH Liquids: HCl	Liquids: HCl & Na2S2O3																				
Requested Analyses <table border="1"> <tr> <td>VOCs by 8260D</td> <td>VOCs by 624</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>					VOCs by 8260D	VOCs by 624															
VOCs by 8260D	VOCs by 624																				
Sample ID#	Collection Date	Collection Time	Matrix	Number of Containers	VOCs by 8260D	VOCs by 624							Comments								
W-4S	9/20/2023	18:00	GW	3	X								-01								
OSB-3-130	9/21/2023	9:00	GW	3	X								-02								
W-2D	9/21/2023	9:10	GW	3	X								-03								
W-2I	9/21/2023	9:55	GW	3	X								-04								
OSB-3-71	9/21/2023	10:00	GW	3	X								-05								
EXT-2R	9/21/2023	10:50	GW	3	X								-06								
MW-10D	9/21/2023	11:05	GW	3	X								-07								
OSB-4	9/21/2023	11:35	GW	3	X								-08								
OSB-4-D	9/21/2023	11:36	GW	3	X								-09								
EXT-1R/TRENCH	9/21/2023	12:50	GW	3	X								-10								
EXT-3R	9/21/2023	12:55	GW	3	X								-11								
EXT-4	9/21/2023	13:45	GW	3	X								-12								
OSB-1	9/21/2023	14:10	GW	3	X								-13								
EXT-1	9/22/2023	9:15	GW	3	X								-14								
				3																	
NOTES: Contact Alex McCarthy (202.538.4166, amccarthy@gsiws.com) or Chris Martin (503.432.5979, cmartin@gsiws.com) with questions. Include DEQ EDD with final lab report.																					
Relinquished By: BRADON WARNER Signature: <i>Bradon Warner</i>				Agency/Agent: GSI WATER SOL. Time & Date: 9/22/2023 9:40				Received By: Eli Dossett Signature: <i>Eli Dossett</i> 17				Agency/Agent: POC Time & Date: 9/22/2023 9:23									
Relinquished By: Signature:				Agency/Agent: Time & Date:				Received By: Signature:				Agency/Agent: Time & Date:									

THIS PURCHASE IS SUBMITTED PURSUANT TO STATE OF OREGON SOLICITATION #102-1099-07 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.

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State of Oregon Chain of Custody

Agency, Authorized Purchaser or Agent: GSI Water Solutions for ODEQ Send Lab Report To: Mark Pugh Address: 700 NE Multnomah Street, Suite 600 Portland, OR 97232-4100 Tel. #: 503-229-5587 Email: Mark.PUGH@deq.oregon.gov, cmartin@gsiws.com, amccarthy@gsiws.com, mfargher@gsiws.com, dbs@gsiws.com					Contract Laboratory Name: Pace Analytical National Lab Batch #: Invoice: ODEQ/Business Office 700 NE Multnomah Street, Suite 600 Portland, OR 97232 Email: DEQEXP@deq.state.or.us					Lab Selection Criteria: Proximity (if TAT < 48 hrs) Prior work on same project Cost (for anticipated analyses) Other labs disqualified or unable to perform requested services Emergency work					Turn Around Time: 10 days (std.) 5 days 72 hours 48 hours 24 hours Other _____				
Project Name: OREGON DEQ-MILWAUKIE INTERNATIONAL WAY Project #: 2060.007 Sampler Name: Alex McCarthy					Sample Preservative Solids: MeOH Liquids: HCl Liquids: HCl & Na2S2O3					L16S9129									
Requested Analyses					Comments														
Sample ID#	Collection Date	Collection Time	Matrix	Number of Containers	VOCs by 8260D	VOCs by 624													
MW-7	9/19/2023	10:30	GW	3	X									-15					
OSB-9-95	9/19/2023	11:45	GW	3	X									-16					
MW-9	9/19/2023	12:20	GW	3	X									-17					
OSB-9-125	9/19/2023	12:45	GW	3	X									-18					
OSB-9-160	9/19/2023	13:35	GW	3	X									-19					
MW-6	9/19/2023	13:40	GW	3	X									-20					
MW-6-D	9/19/2023	13:41	GW	3	X									-21					
OSB-9-185	9/19/2023	14:20	GW	3	X									-22					
MW-5	9/19/2023	14:45	GW	3	X									-23					
OSB-9-218	9/19/2023	15:00	GW	3	X									-24					
OSB-9-218-D	9/19/2023	15:01	GW	3	X									-25					
MW-17S	9/19/2023	16:00	GW	3	X									-26					
OSB-6-95	9/19/2023	16:10	GW	3	X									-27					
OSB-6-125	9/19/2023	16:45	GW	3	X									-28					
OSB-6-160	9/19/2023	17:35	GW	3	X									-29					
NOTES: Contact Alex McCarthy (202.538.4166, amccarthy@gsiws.com) or Chris Martin (503.432.5979, cmartin@gsiws.com) with questions. Include DEQ EDD with final lab report.																			
Relinquished By: <i>BRADON WARNER</i>					Agency/Agent: <i>GSI WATER SOL.</i>					Received By: <i>Eli Possett</i>					Agency/Agent: <i>Pace</i>				
Signature: <i>[Signature]</i>					Time & Date: <i>9/22/2023 9:40</i>					Signature: <i>Eli Possett</i>					Time & Date: <i>1001-9-23-23</i>				
Relinquished By:					Agency/Agent:					Received By:					Agency/Agent:				
Signature:					Time & Date:					Signature:					Time & Date:				

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State of Oregon Chain of Custody

Agency, Authorized Purchaser or Agent: GSI Water Solutions for ODEQ Send Lab Report To: Mark Pugh Address: 700 NE Multnomah Street, Suite 600 Portland, OR 97232-4100 Tel #: 503-229-5587 Email: Mark.PUGH@deq.oregon.gov, cmartin@gsiws.com, amccarthy@gsiws.com, mfargher@gsiws.com, dbs@gsiws.com					Contract Laboratory Name: Pace Analytical National Lab Batch #: Invoice: ODEQ/Business Office 700 NE Multnomah Street, Suite 600 Portland, OR 97232 Email: DEQEXP@deq.state.or.us					Lab Selection Criteria: Proximity (if TAT < 48 hrs) Prior work on same project Cost (for anticipated analyses) Other labs disqualified or unable to perform requested services Emergency work					Turn Around Time: 10 days (std.) 5 days 72 hours 48 hours 24 hours Other _____	
Project Name: OREGON DEQ-MILWAUKIE INTERNATIONAL WAY Project #: 2060.007 Sampler Name: Alex McCarthy					Sample Preservative										11659125	
					Solids: MeOH Liquids: HCl	Liquids: HCl & Na2S2O3										
					Requested Analyses											
Sample ID#	Collection Date	Collection Time	Matrix	Number of Containers	VOCs by 8260D	VOCs by 624										Comments
OSB-5-100	9/20/2023	8:50	GW	3	X											-30
MW-6D	9/20/2023	10:40	GW	3	X											-31
OSB-10-154	9/20/2023	10:45	GW	3	X											-32
OSB-10-199	9/20/2023	11:25	GW	3	X											-33
MW-9D	9/20/2023	11:35	GW	3	X											-34
OSB-10-227	9/20/2023	12:25	GW	3	X											-35
MW-14D	9/20/2023	12:30	GW	3	X											-36
MW-12D	9/20/2023	14:15	GW	3	X											-37
MW-19-173	9/20/2023	14:45	GW	3	X											-38
MW-19-173-D	9/20/2023	14:46	GW	3	X											-39
MW-13D	9/20/2023	15:10	GW	3	X											-40
MW-19-136	9/20/2023	15:30	GW	3	X											-41
MW-19-100	9/20/2023	16:20	GW	3	X											-42
EXT-3 (MW-4)	9/20/2023	16:30	GW	3	X											-43
EXT-3(MW-4)-D	9/20/2023	16:31	GW	3	X											-44
NOTES: Contact Alex McCarthy (202.538.4166, amccarthy@gsiws.com) or Chris Martin (503.432.5979, cmartin@gsiws.com) with questions. Include DEQ EDD with final lab report.																
Relinquished By: BRADON WATNER Signature: <i>[Signature]</i>					Agency/Agent: GSI WATER SOL. Time & Date: 9/22/2023 9:40					Received By: EI: DOSSETT Signature: <i>[Signature]</i> 17					Agency/Agent: POLE Time & Date: 9/23/23	
Relinquished By: Signature:					Agency/Agent: Time & Date:					Received By: Signature:					Agency/Agent: Time & Date:	

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[illegible]

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