

Post UST Decommissioning Groundwater Monitoring Report - January 2026

Cornelius Estby II Property, 1021 E Baseline Street, Cornelius, Oregon 97113, UST
Facility 5112, LUST #34-06-1375

Prepared for

Metro
600 NE Grand Avenue
Portland, Oregon

Prepared by

Terraphase Engineering Inc.
5331 S. Macadam Avenue, Suite 210
Portland, Oregon 97239

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Acronyms and Abbreviations

µg/L	micrograms per liter
amsl	above mean sea level
bgs	below ground surface
City	City of Cornelius
CSM	conceptual site model
ESA	Environmental Site Assessment
HASP	Health and Safety Plan
LUST	Leaking Underground Storage Tank
MFA	Maul Foster & Alongi
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ODEQ	Oregon Department of Environmental Quality
PAH	polycyclic aromatic hydrocarbon
Programmatic QAPP	<i>Programmatic Quality Assurance Project Plan</i>
QA	quality assurance
QC	quality control
RBC	risk-based concentration
SAP	<i>Sampling and Analysis Plan</i>
Site	1021 E Baseline Street, Cornelius, Oregon 97113
SOP	Standard Operating Procedure
SSA Work Plan	<i>Site-Specific Assessment Work Plan</i>
TOC	top of casing
Terraphase	Terraphase Engineering, Inc.
TPH	total petroleum hydrocarbons
TPH-d	diesel-range total petroleum hydrocarbons
TPH-g	gasoline-range total petroleum hydrocarbons
TPH-o	oil-range total petroleum hydrocarbons
USEPA	United States Environmental Protection Agency
UST	underground storage tank
VOC	volatile organic compound

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Signatures

All geologic information, conclusions, and recommendations in this document have been prepared under the responsible charge of an Oregon Professional Geologist.



Adrienne Venegas, RG, LG
Project Geologist, Terraphase Engineering Inc.

March 19, 2026

Date



James Farrow, RG, LHg, CEM
Principal Hydrogeologist, Terraphase Engineering Inc.

March 19, 2026

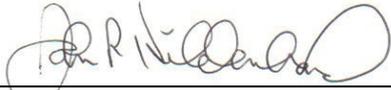
Date



Don Malkemus, RG, LHg
Associate Hydrogeologist, Terraphase Engineering Inc

March 19, 2026

Date



John Hildenbrand
Principal Environmental Scientist, Terraphase Engineering
Inc.

March 19, 2026

Date



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1 Introduction

Terraphase Engineering Inc. (Terraphase) has prepared this *Post UST Decommissioning Groundwater Monitoring Report – January 2026* on behalf of Metro for the property located at 1021 E Baseline Street in Cornelius, Oregon (Site; Figure 1). Metro has agreed to assist the City of Cornelius (the City) with environmental monitoring activities under Metro’s Brownfield United States Environmental Protection Agency (USEPA) funding. This work scope is a subset of the Scope of Work included in the Prospective Purchaser Agreement (PPA) between the City and the Oregon Department of Environmental Quality (ODEQ [2025]).

All work was conducted in accordance with the ODEQ- and USEPA-approved *Sampling and Analysis Plan* (SAP) (Terraphase 2026) and the *Programmatic Quality Assurance Project Plan* (Programmatic QAPP) (Maul Foster Alongi [MFA] 2025). The SAP was prepared in general accordance with the 2025 Site Specific Assessment Work Plan prepared for ODEQ by GSI Water Solutions (GSI 2025).

1.1 Background

The Site is a former gasoline service station on the southeast corner of the intersection of East Baseline Street and South 10th Avenue in Cornelius, Oregon. The Site was first developed with a railroad spur associated with the adjacent Southern Pacific Railroad by at least 1912 and was used commercially as a fueling station between 1953 and 2007. Prior to 1994, the fueling station consisted of a building in the center of tax lot 1S304AB00200 with fueling dispensers on the northern portion. In 1994, the station was reconfigured to its current layout, with three fueling islands under a canopy on the west side of tax lot 1S304AB00100. The Site has been unused since the fueling station ceased operation in 2007 (GSI 2025).

Remedial action is required at the Site due to petroleum hydrocarbon releases from USTs resulting in impacts to soil, groundwater, and soil vapor. The PPA required the decommissioning of existing USTs and subsequent groundwater and soil-vapor monitoring (ODEQ 2025). In November 2025, GSI, under contract with ODEQ, oversaw Anderson Environmental Contracting, LLC (AEC) in remedial activities that included the decommissioning by removal and in place closure of various USTs (AEC 2025).

Terraphase was contracted by Metro to conduct the post-decommissioning groundwater and soil-vapor monitoring activities in addition to the reinstallation of monitoring well MW-2, which was decommissioned in accordance with Oregon Water Resource Department regulations prior to the UST decommissioning process. This report presents the results of groundwater monitoring conducted in January 2026 immediately following UST decommissioning. A second groundwater monitoring event in addition to vapor sampling is planned to be conducted in the summer of 2026.

The SAP contains additional information regarding previous environmental activities conducted at the Site not presented herein for brevity.



1.2 Site Description

The Site consists of three contiguous land parcels—identified by Washington County’s Department of Assessment as tax lots 1S304AB00100, 1S304AB00200, and 1S304AB00201— at 1021 E Baseline Street in Cornelius, Oregon. The approximately 0.53-acre Site is currently vacant, predominantly asphalt-covered, and developed with three out-of-use fueling islands and a kiosk underneath a fueling canopy on the central portion (tax lot 1S304AB00100) and a bathroom/office building on the southwestern portion (tax lot 1S304AB00200; Figure 2). The northwest portion of the Site (tax lot 1S304AB00201) is public right-of-way (sidewalk and roadway).

ODEQ identifies the Site as UST Facility 5112. The following USTs in the western portion of the Site were decommissioned by GSI in November 2025:

- Two 3,000-gallon diesel USTs - removed from the Site (previously decommissioned-in-place by others).
- One 3,000-gallon diesel UST installed in 1985 - removed from the Site.
- One 4,000-gallon gasoline UST installed in 1985 - filled with controlled-density fill and decommissioned-in-place.
- One 5,000-gallon gasoline UST installed in 1981 - removed from the Site.
- One 8,000-gallon gasoline UST installed in 1983 - filled with controlled-density fill and closed in place.
- One 10,000-gallon gasoline UST installed in 1985 - filled with controlled-density fill and decommissioned-in-place.

1.3 Site Geology and Hydrogeology

The Site is approximately 182 feet above mean sea level and slopes slightly to the southwest . The nearest surface water bodies are Council Creek and the Tualatin River approximately 0.5 miles north and 0.6 miles southeast of the Site, respectively.

Boring logs for borings previously advanced at the Site record poorly graded sand and silt with gravel from the surface to about 2 feet below ground surface (bgs), with very poorly graded silty clays to approximately 15 feet bgs, the maximum depth explored (GSI 2025). This is consistent with Quaternary young alluvium mapped in the vicinity of the Site (Schlicker 1967). Based on geologic mapping, the alluvium is underlain by the Pliocene Troutdale Formation, comprised of older alluvial silt, clay, and sand with occasional gravel and cobble interbeds. Basalt lava flows of the Columbia River Basalt underlie the Troutdale Formation up to 900 feet bgs in the vicinity of the Site (Schlicker 1967).

Depths to first encountered groundwater have been measured in groundwater monitoring wells between 3 and 11 feet below the top of casing. Previous site assessments have reported the primary groundwater flow direction to be to the south and southeast, though the most recent assessment completed in 2025 reported groundwater flow to the north (Eastern Research Group, Inc. [ERG] 2025).

2 Scope of Work

This section describes the scope of the groundwater monitoring well installation and groundwater monitoring, well development, and sampling conducted between January 9 and 13, 2026.

2.1 Pre-Field Work

Terraphase prepared a site-specific Health and Safety Plan (HASP) (Terraphase 2026). The HASP specifies personal protective equipment and procedures for the sampling work. Terraphase contacted Oregon One-Call on December 30, 2025, to identify the location of underground public utilities within the vicinity of the proposed boring location. As an additional precaution, Terraphase contracted with Locates Down Under of Portland, Oregon, to identify underground private utilities prior to re-installing MW-2.

2.2 Groundwater Monitoring Well Installation and Development

On January 9, 2026, Cascade Drilling of Clackamas, Oregon, reinstalled MW-02 as MW-02R. The monitoring well was constructed within a 4-inch-diameter borehole advanced to 15 feet using a direct-push drilling rig. The core barrel of the direct-push tooling contained an acetate sleeve liner, which was removed and cut open with a stainless-steel blade once the core barrel was extracted from the ground. Continuous soil samples were examined, described in general accordance with the Unified Soil Classification System nomenclature, and recorded on a soil boring log (Appendix A). The soil was screened in the field for visible staining, sheen, or olfactory indications of contamination, and a photoionization detector (PID) was used to monitor for the presence of volatile organic compounds (VOCs). The PID was calibrated using isobutylene prior to use.

A 2-inch diameter well was installed within the borehole, constructed with 10 feet of pre-perforated 0.010-inch slotted screen with a pre-packed #12/20 silica sand. A sand pack of #0/20 silica sand was placed from the bottom of the borehole to 1 foot above the top of the screen interval (i.e., to 4 feet bgs). Hydrated bentonite was placed from the top of the sand pack to approximately 1-foot bgs. Concrete was added in the upper 1-foot bgs, and a protective well monument was placed securely in the concrete. The monitoring well was also fitted with a water-tight, locking well cap.

On January 12, 2026, Terraphase developed the well using a surge block and peristaltic pump. Observations and photographs taken at the time of well installation and development are included in daily field reports provided in Appendix B.

2.3 Site Survey

On January 12, 2026, Centerline Concepts of Molalla, Oregon, surveyed the ground surface elevation (top of monitoring well box) of the groundwater and soil vapor monitoring wells above mean sea level (amsl), the top of the groundwater monitoring well PVC casing elevations amsl, and the extents of the



remedial UST decommissioning excavation. Survey data for the top of well casing elevations is provided in Table 1 and all survey data is provided in Appendix C.

2.4 Groundwater Monitoring and Sampling

On January 13, 2026, Terraphase collected groundwater samples from five groundwater monitoring wells (MW-2R and MW-3 through MW-6; Figure 2) using low-flow sampling methods in accordance with the SAP (Terraphase 2025). Prior to sampling the depth to the water table was measured and the potential presence of free-phase petroleum hydrocarbons was measured using an oil/water interface probe, and a Horiba multi-parameter meter with a flow-through cell was used to measure groundwater parameters including pH, temperature, electrical conductivity, dissolved oxygen (DO), oxidation reduction potential, and turbidity. Low-flow samples were collected when the water-quality parameters were near stabilization (pH ± 0.1 standard units, conductivity ± 3 percent, temperature ± 3 percent, oxidation/reduction potential ± 10 millivolts, DO ± 10 percent for values greater than 0.5 mg/L and turbidity less than 10 nephelometric turbidity units or until there is no noticeable decrease, in accordance with the programmatic QAPP).

Groundwater samples were labeled, placed in an ice-filled cooler immediately after collection and transported to Apex Laboratories in Tigard, Oregon, under chain-of-custody procedures for the following analyses under a normal 10-day turn-around time:

- Total petroleum hydrocarbons (TPH) in the gasoline range (TPH-g) using NWTPH-Gx;
- TPH in the diesel and oil ranges (TPH-d and TPH-o, respectively, using NWTPH-Dx);
- TPH-related VOCs (12 total analytes) using USEPA Method 8260D;
- Polycyclic aromatic hydrocarbons (PAHs) using USEPA Method 8270E; and
- Dissolved and total lead using USEPA Method 6020B (a 0.45-micron filter was used to remove entrained particulates prior to dissolved lead analysis)

Groundwater sampling forms are included in Appendix D.

2.4.1 Equipment Decontamination and Quality Assurance/Quality Control

Decontamination of non-disposable sampling equipment (the oil/water interface probe) was completed using a non-phosphate detergent and deionized water between each sampling location to prevent the introduction of extraneous material into samples and potential cross-contamination as a quality assurance (QA)/quality control (QC) measure.

A duplicate sample was collected to provide data to assess precision of the field sampling procedure and contract laboratory. However, it should be noted that variability in field duplicate sample results can be an indicator of matrix variability and heterogeneity. The following field QA/QC samples were submitted for analysis:

- One duplicate groundwater sample collected from groundwater monitoring well MW-02R;
- One aqueous filter blank;

- One trip blank (laboratory-supplied); and
- One matrix spike and matrix spike duplicate sample (MS and MSD, respectively).

The QA/QC samples were submitted for the same analyses as the respective primary samples, except for the trip blank, which was submitted for analysis of VOCs using USEPA Method 8260D only. A temperature blank was provided in each cooler submitted to Apex Laboratories.

2.5 Investigation-Derived Waste

Two 55-gallon drums of investigation-derived waste, one consisting of soil and one consisting of decontamination and purge water generated during drilling, well installation, and well development and sampling activities were stored on the property. The drums were labeled with its contents, the date of generation, and Terraphase's contact information. On March 12, 2026, the drums were removed from the Site by a licensed waste disposal company. Disposal documentation is included as Appendix E.

2.6 Screening Criteria

Groundwater analytical results were compared to ODEQ Risk Based Concentrations (RBCs) (ODEQ 2025) and EPA Regional Screening Levels (RSLs) using EPA's Vapor Intrusion Screening Level Calculator¹ where an RBC has not been established for an assessment of risk to human health based on the likelihood of exposure.² The property is currently undeveloped, and future development has not been determined; therefore, the RBCs for the occupational/commercial worker scenario and residential receptor scenario (the most stringent scenario) for vapor intrusion exposure pathway were used to compare results. Due to the availability of municipal water to the site and surrounding area, the leaching to groundwater and tap water exposure pathways are considered incomplete.

3 Results

This section describes lithological observations, groundwater flow, and analytical results of the groundwater sampling.

¹ <https://www.epa.gov/vaporintrusion/vapor-intrusion-screening-level-calculator>

² RSLs were calculated based on a hazard quotient of 1, target risk of 10^{-6} , the default screening level type, a groundwater temperature of 11 degrees C (the regional average groundwater temperature according to <https://epa-visl.ornl.gov/Images/GroundwaterTemperatureMap.png>), and chronic reference concentrations, and where the chemical met the definition for volatility and vapor inhalation toxicity information was available.



3.1 Lithology and Field Observations

Lithology encountered below the concrete-surfaced lot consisted of sand and gravel fill to a depth of 2.5 feet bgs overlying native lean clay to a depth of 6 feet bgs and clayey sand to the final exploration depth (15.5 feet bgs). Soils encountered were generally consistent with those encountered during previous investigations and the alluvium mapped in the vicinity of the Site (Section 1.4). Groundwater was encountered at 10 feet bgs, consistent with previous investigations.

PID measurements were taken in approximately 1-foot intervals and ranged from 0 to 517.1 parts per million, with the highest concentrations measured below the water table (10 feet bgs). Hydrocarbon odor was observed below 8 feet bgs and a sheen was observed in soil samples at 11.5 feet bgs. Lithology, encountered groundwater, and PID results are recorded on the boring log provided in Appendix A.

3.2 Groundwater Monitoring

The groundwater elevation measurements, analytical results, and field parameters are discussed in the following subsections and shown in Tables 1 and 2. Groundwater sampling forms are included in Appendix D.

3.2.1 Groundwater Elevation Measurements

Groundwater level measurements during sampling ranged from 175.19 to 176.07 feet amsl in monitoring wells MW-06 and MW-03, respectively. Based on measured elevations, groundwater flow direction was to the southwest at a gradient of 0.019 feet/foot. Groundwater levels and flow directions are relatively consistent with previous assessments. Groundwater elevation measurements are presented in Table 1 and on sampling forms included as Appendix D. A potentiometric surface map is included as Figure 3.

3.2.2 Groundwater Sampling

Groundwater analytical results and exceedances of screening criteria are summarized below and presented in Table 2 and Figure 4. Laboratory analytical results are provided in Appendix F.

Metals

- Total lead was detected above laboratory reporting limits in all samples, with concentrations ranging from 0.116 to 0.945 micrograms per liter ($\mu\text{g/L}$) in samples collected from MW-03 and MW-02R, respectively. The reported concentrations are below the USEPA maximum contaminant level of 10 $\mu\text{g/L}$. Vapor intrusion screening criteria are not applicable for lead as it is non-volatile in its elemental form.
- Dissolved lead was not detected above laboratory reporting limits in any groundwater samples.

TPH

- TPH-g was detected above laboratory reporting limits in samples collected from MW-02R, MW-05 and MW-06 at concentrations of 5,860 (primary) and 6,220 (duplicate), 2,460, and 28,000 µg/L, respectively. All concentrations exceeded the ODEQ RBCs for the residential and commercial worker scenarios for the vapor intrusion pathway of 120 and 520 µg/L, respectively.
- TPH-d was detected above laboratory reporting limits in samples collected from MW-02R, MW-05, and MW-06, at concentrations of 316 (primary) and 469 (duplicate), 211, and 1,270 µg/L, respectively. Concentrations in the duplicate sample collected from MW-02R and the sample collected from MW-06 exceeded the ODEQ RBC for the residential scenario for the vapor intrusion pathway of 400 µg/L.
- TPH-o was not detected above laboratory reporting limits in any groundwater samples. Laboratory reporting limits ranged from 388 to 417 µg/L, which are all above the ODEQ RBC for the residential scenario for the vapor intrusion pathway of 360 µg/L.

VOCs

- 1,2,4-Trimethylbenzene, 1,3,5-trimethylbenzene, and total xylenes were detected above laboratory reporting limits samples collected from MW-02R and MW-06 at concentrations of 26.3 and 864 µg/L, 16.0 and 132 µg/L, and 11.9 and 528 µg/L, respectively. Concentrations of 1,2,4-trimethylbenzene in the sample collected from MW-06 exceeded the ODEQ RBC for the residential scenario for the vapor intrusion pathway of 560 µg/L.
- Benzene, ethylbenzene, isopropylbenzene, n-propylbenzene, and toluene were detected above laboratory reporting limits samples collected from MW-02R, MW-05, and MW-06, with concentrations ranging from 0.150 to 38.5 µg/L, 2.98 to 2,740 µg/L, 5.20 to 114 µg/L, and 0.930 to 5.20 µg/L, respectively (MW-05 and MW-06, respectively). Concentrations of benzene in the sample collected from MW-06 exceeded the ODEQ RBCs for the residential and commercial worker scenarios for the vapor intrusion pathway of 2.8 and 12 µg/L, respectively. Concentrations of ethylbenzene in the samples collected from MW-02R (primary and duplicate) and MW-06 exceeded the ODEQ RBCs for the residential and commercial worker scenarios for the vapor intrusion pathway of 7.1 and 31 µg/L, respectively.
- Naphthalene was detected above laboratory reporting limits samples collected from MW-02R, MW-03, and MW-06 at concentrations of 40.2 and 50.7 (primary and duplicate, respectively), 0.0514, and 516 µg/L, respectively. Concentrations in samples collected from MW-02R and MW-06 exceeded the ODEQ RBCs for the residential and commercial worker scenarios for the vapor intrusion pathway of 11 and 50 µg/L, respectively.

PAHs

- 1-Methylnaphthalene was detected above laboratory reporting limits in samples collected from MW-02R, MW-03, MW-05, and MW-06, with concentrations ranging from 0.0784 to 94.9 µg/L (MW-03 and MW-06, respectively). Concentrations in MW-02R (primary and duplicate), MW-05, and MW-06 exceeded the ODEQ RBC for the residential scenario for the vapor intrusion



pathway of 0.4 µg/L, and the calculated EPA residential and commercial worker RSLs of 0.453 and 1.9 µg/L, respectively.

- 2-Methylnaphthalene was detected above laboratory reporting limits in samples collected from MW-02R, MW-05, and MW-06, with concentrations ranging from 0.193 to 168 µg/L (MW-05 and MW-06, respectively). ODEQ RBCs for 2-methylnaphthalene have not been established, and an RSL could not be calculated (no vapor inhalation toxicity information available).
- Fluorene was detected above laboratory reporting limits in the sample collected from MW-05 at a concentration of 0.249 µg/L. ODEQ RBCs for fluorene have not been established, and an RSL could not be calculated (no vapor inhalation toxicity information available).

3.3 QA/QC

The laboratory analyses were reviewed by Terraphase as a check of overall quality in accordance with the SAP. The data quality check process included a review of chain-of-custody forms, holding times, laboratory analytical reports, method blanks, surrogate recoveries, matrix spike, matrix spike duplicates, and detection limits. The laboratory data validation reports are included as Appendix G. QA/QC information to note include the following:

- All data are considered usable and support the environmental monitoring objectives.
- Several laboratory flags related to laboratory QC issues were reported. A review of the flags suggests that none had a significant impact on the conclusion of the environmental monitoring. Flags are included in Table 2 and discussed in the data validation reports (Appendix G).
- No compounds were detected in the aqueous filter blank or trip blank.
- All calculated RPDs were within the accepted limit of 30% except for TPH-d (39%).

4 Conclusions

On January 9th and 12th, 2026, Terraphase installed and developed replacement monitoring well MW-02R. On January 13th, 2026, Terraphase conducted the first of two planned groundwater monitoring events. The following conclusions are presented:

- The lithology encountered during drilling consisted of sand and gravel fill to a depth of 2.5 feet bgs underlain by native lean clay to a depth 6 feet bgs and clayey sand to the final exploration depth (15.5 feet bgs). This lithology is consistent with that described in previous investigations.
- Groundwater was encountered at a depth of 10 feet bgs during drilling and installation of monitoring well MW-02R, with static groundwater levels of 5.74 feet bgs (176 feet amsl) during groundwater monitoring. Groundwater levels in monitoring wells MW-03 through MW-06 ranged from 175.19 to 176.07 feet amsl. Groundwater flow direction was to the southwest at a gradient of 0.019 feet/foot.

- Total lead was detected above laboratory reporting limits in all samples, with concentrations ranging from 0.116 to 0.945 µg/L. Vapor intrusion screening criteria are not applicable for lead.
- TPH-g and TPH-d were detected above applicable RBCs in samples collected from MW-02R, MW-05 and MW-06. Concentrations of TPH-g at MW-02/MW-02R and MW-06 were higher as compared to previous sampling events, likely due to the substantial soil disturbance below the water table during recent tank decommissioning activities.
- Several petroleum-related VOCs were detected above laboratory reporting limits in at least one sample collected from all monitoring wells except MW-04, with highest concentrations in the sample collected from MW-06. VOC concentrations were above applicable RBCs in samples collected from MW-02R and MW-06. Concentrations of benzene, ethylbenzene, and naphthalene were generally lower than previous sampling events except at MW-06.
- PAHs were detected above laboratory reporting limits in samples collected from all monitoring wells except MW-04, with highest concentrations in the sample collected from MW-06. Concentrations of 1-methylnaphthalene in samples collected from MW-02R, MW-05, and MW-06 exceeded the ODEQ RBC for the residential scenario for the vapor intrusion pathway.
- The lateral extent of TPH-g, benzene, ethylbenzene and naphthalene at concentrations in exceedance of the ODEQ RBC for the commercial worker scenario for the vapor intrusion pathway is undelineated to the southwest in the direction of groundwater flow. The extent of these compounds has been approximated.

5 Limitations

This document was prepared for the sole use of Metro and their successors and assignees for specific application to the Site. No other party should rely on the information contained herein without the prior written consent of Terraphase, Metro, USEPA, and the City of Cornelius. The opinions and conclusions presented in this report are based upon the scope of services, information obtained through the performance of the services, and the schedule as agreed upon by Terraphase and Metro. This report was prepared in accordance with the generally accepted standards and level of skill and care under similar conditions and circumstances established by the environmental consulting industry as practiced in Oregon. It is important to recognize that even the most comprehensive scope of services may fail to detect environmental liabilities on a particular site. Therefore, Terraphase cannot “certify” that a site is free of environmental contamination. No expressed or implied representation or warranty is included or intended in our reports, except that our services were performed as described by our scope of services in accordance with the standard of care of our profession. Additionally, subsurface conditions will vary between exploration locations, perhaps significantly. The impacts of future events may require further investigation of the subject property and subsequent data analysis along with revision of recommendations or conclusions.



6 References

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Tables

- 1 Groundwater Elevation Data
- 2 Groundwater Analytical Results and Water Quality Parameters



Table 1
Groundwater Elevation Data
 Groundwater Monitoring Report, Cornelius Estby II Property

Location	Date Measured	Screen Interval	TOC Elevation	Depth to Water	Depth to Bottom	Groundwater Elevation
		feet	feet amsl	feet below TOC	feet	feet amsl
MW-02	7/28/2008	5-15	181.32	9.19	-	172.13*
	1/31/2025			7.12	-	174.20*
MW-02R	1/12/2026	5-15	181.32	5.02	14.89	176.30
	1/13/2026			5.32	14.89	176.00
MW-03	7/28/2008	5-15	181.30	9.36	-	171.94*
	1/31/2025			7.29	-	174.01*
	1/12/2026			5.05	14.65	176.25
	1/13/2026			5.23	14.65	176.07
MW-04	7/28/2008	5-15	180.38	8.00	-	172.38*
	1/31/2025			5.95	-	174.43*
	1/12/2026			4.21	14.54	176.17
	1/13/2026			4.34	14.54	176.04
MW-05	2/1/2025	5-15	181.45	6.61	-	174.84*
	1/12/2026			5.60	14.68	175.85
	1/13/2026			5.80	14.68	175.65
MW-06	2/1/2025	5-15	181.00	6.35	-	174.65*
	1/12/2026			7.32	14.46	173.68
	1/13/2026			5.81	14.46	175.19

Note:

* = calculated groundwater elevation based on assumption that the TOC elevations are consistent with those measured during the 2026 site survey

- = not available

amsl = above mean sea level

bgs = below ground surface

TOC = top of casing

TOC elevations based on survey completed January 12, 2026

Table 2
Groundwater Analytical Results and Parameters
Groundwater Monitoring Report, Cornelius Estby II Property

Location Code	Date	Metal		TPH				VOC											
		Lead (Total) µg/L	Lead (Dissolved) µg/L	TPH as Gasoline µg/L	TPH as Diesel µg/L	TPH as Oil µg/L	TPH as Diesel + Oil (Sum) µg/L	1,2,4-Trimethylbenzene µg/L	1,2-Dibromoethane µg/L	1,2-Dichloroethane µg/L	1,3,5-Trimethylbenzene µg/L	Benzene µg/L	Ethylbenzene µg/L	Isopropylbenzene µg/L	Methyl Tertiary Butyl Ether µg/L	Naphthalene µg/L	n-propylbenzene µg/L	Toluene µg/L	Xylenes (total) µg/L
ODEQ RBC - 2025 - GW - VI- Residential		-	-	120	400	400	400	560	0.34	4	400	2.8	7.1	2,200	740	11	5,300	36,000	780
ODEQ RBC - 2023 - GW - VI - Commercial		-	-	520	1,700	1,700	1,700	2,400	1.5	18	1,700	12	31	9,100	3,200	50	22,000	150,000	3,300
EPA VI RSL - Residential		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EPA VI RSL - Commercial		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-02	07/28/2008	-	-	48,300	12,700	<467	12,700	2,770	<5.00	<5.00	665	998	3,390	148	<10.0	1,310	388	986	7,790
	01/31/2025	4.96 J	-	5,070	1,700	-	1,700	59.8	<0.126	<0.0819	14.3	<0.0941	362	49.2	<0.101	104 C3	137	4.19	85.2
MW-02R	01/13/2026	<2.43	-	5,390	1,830	-	1,830	72.1	<0.126	<0.0819	18.6	0.594 J	428	50.7	<0.101	135 C3	180	3.39	88.8
	01/13/2026	0.717	<0.200	5,860	316 F-18	<417	316	26.3	<1.00	<0.800	16.0	0.920	189	25.4	<2.00	40.2	79.5	2.12	11.9
MW-03	07/28/2008	0.945	<0.200	6,220	469 F-18	<417	469	28.7	<1.00	<0.800	18.2	0.960	209	29.6	<2.00	50.7	85.2	2.20	13.0
	01/31/2025	-	-	4,180	1,870	<467	1,870	106	<0.500	<0.500	21.7	1.50	450	38.7	<1.00	209	92.6	6.21	213
	01/13/2026	2.95 J	-	771	356	-	356	<0.322	<0.126	<0.0819	0.127 J	<0.0941	0.323 J	5.15	<0.101	3.17 C3	13.7	<0.278	0.237 J
MW-04	07/28/2008	0.116 J	<0.200	<100	<206	<412	<206	<1.00	<0.500	<0.400	<1.00	<0.200	<0.500	<1.00	<1.00	0.0514 J	<0.500	<1.00	<1.50
	01/31/2025	-	-	537	403	<467	403	<1.00	<0.500	<0.500	<1.00	0.310	0.780	0.700	<1.00	<5.00	1.47	<1.00	<1.50
	01/13/2026	3.11 J	-	84.5 B	320	-	320	<0.322	<0.126	<0.0819	<0.104	<0.0941	<0.137	<0.105	<0.101	<1	<0.0993	<0.278	<0.174
MW-05	02/01/2025	0.141 J	<0.200	<100	<204	<408	<204	<1.00	<0.500	<0.400	<1.00	<0.200	<0.500	<1.00	<1.00	<0.0743	<0.500	<1.00	<1.50
	01/13/2026	<2.43	-	3,340	909	-	909	<0.322	<0.126	<0.0819	0.165 J	0.925 J	0.929 J	6.72	<0.101	<1	4.72	<0.278	<0.174
MW-06	02/01/2025	0.375	<0.200	2,460	211 F-26	<388	211	<1.00	<0.500	<0.400	<1.00	0.150 J	2.98	5.20 J	<1.00	<1.79	12.3	0.930 J	<1.50
	01/13/2026	<2.43	-	9,870	2,000	-	2,000	104	<0.126	<0.0819	99.1	23.6	855	64.3	<0.101	125 J	190	3.97	376
		0.278	<0.200	28,000	1,270 F-18	<400	1,270	864	<5.00	<4.00	132	38.5	2,740	114	<10.0	516	388	5.20 J	528

Table 2
Groundwater Analytical Results and Parameters
Groundwater Monitoring Report, Cornelius Estby II Property

		PAH																	
		1-Methylnaphthalene	2-Methylnaphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenzofuran	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Phenanthrene	Pyrene
Location Code	Date	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ODEQ RBC - 2025 - GW - VI- Residential		0.4	-	-	-	-	190	-	-	-	-	-	-	-	-	-	-	-	-
ODEQ RBC - 2023 - GW - VI - Commercial		-	-	-	-	-	2,300	-	-	-	-	-	-	-	-	-	-	-	-
EPA VI RSL - Residential		0.453	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EPA VI RSL - Commercial		1.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-02	07/28/2008	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	01/31/2025	-	-	0.676	-	0.0798 B	-	<0.0184	<0.0168	-	<0.0202	0.0222 B	-	<0.016	0.0349 B	0.347	0.0173 B	-	0.0459 B
MW-02R	01/13/2026	32.2	30.4	<3.54	<3.54	<3.54	<1.77	<1.77	<1.77	<3.54	<1.77	<1.77	<3.54	<1.77	<3.54	<3.54	<1.77	<7.08	<3.54
		39.4	39.6	<3.51	<3.51	<3.51	<1.75	<1.75	<1.75	<3.51	<1.75	<1.75	<3.51	<1.75	<3.51	<3.51	<1.75	<7.02	<3.51
MW-03	07/28/2008	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	01/31/2025	-	-	0.163	-	<0.019	-	<0.0184	<0.0168	-	<0.0202	0.0215 B	-	<0.016	<0.027	0.143	0.016 B	-	0.0174 B
	01/13/2026	0.0784	<0.0697	<0.0348	<0.0348	<0.0348	<0.0174	<0.0174	<0.0174	<0.0348	<0.0174	<0.0174	<0.0348	<0.0174	<0.0348	<0.0348	<0.0174	<0.0697	<0.0348
MW-04	07/28/2008	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	01/31/2025	-	-	<0.019	-	<0.019	-	<0.0184	<0.0168	-	<0.0202	0.0209 B	-	<0.016	<0.027	<0.0169	0.0174 B	-	0.0258 B
	01/13/2026	<0.0743	<0.0743	<0.0371	<0.0371	<0.0371	<0.0186	<0.0186	<0.0186	<0.0371	<0.0186	<0.0186	<0.0371	<0.0186	<0.0371	<0.0371	<0.0186	<0.0743	<0.0371
MW-05	02/01/2025	-	-	0.536	-	<0.019	-	<0.0184	<0.0168	-	<0.0202	0.025 B	-	<0.016	<0.027	<0.0169	<0.0158	-	0.021 B
	01/13/2026	20.7	0.193 J	<0.392	<0.179	<0.179	<0.0896	<0.0896	<0.0896	<0.179	<0.0896	<0.0896	<0.179	<0.0896	<0.179	0.249	<0.0896	<0.359	<0.179
MW-06	02/01/2025	-	-	0.353	-	0.0241 B	-	<0.0184	<0.0168	-	<0.0202	0.018 B	-	<0.016	<0.027	0.207	<0.0158	-	0.0187 B
	01/13/2026	94.9	168	<4.11	<4.11	<4.11	<2.06	<2.06	<2.06	<4.11	<2.06	<2.06	<4.11	<2.06	<4.11	<4.11	<2.06	<8.22	<4.11

Table 2
Groundwater Analytical Results and Water Quality Parameters
Groundwater Monitoring Report, Cornelius Estby II Property

		Field Parameters					
		Temperature	pH	Dissolved Oxygen	Conductivity	Turbidity	Oxidation Reduction Potential
Location Code	Date	°C	SU	mg/L	µS/cm	NTU	mV
ODEQ RBC - 2025 - GW - VI- Residential		-	-	-	-	-	-
ODEQ RBC - 2023 - GW - VI - Commercial		-	-	-	-	-	-
EPA VI RSL - Residential		-	-	-	-	-	-
EPA VI RLS - Commercial		-	-	-	-	-	-
MW-02	07/28/2008	-	-	-	-	-	-
	01/31/2025	-	-	-	-	-	-
MW-02R	01/13/2026	13.3	6.61	1.89	1038	5.75	4.2
MW-03	07/28/2008	-	-	-	-	-	-
	01/31/2025	-	-	-	-	-	-
	01/13/2026	12.7	6.04	2.76	657	7.06	162.2
MW-04	07/28/2008	-	-	-	-	-	-
	01/31/2025	-	-	-	-	-	-
	01/13/2026	13.2	6.73	0.63	568	6.91	93.4
MW-05	02/01/2025	-	-	-	-	-	-
	01/13/2026	13.4	6.24	0.64	1161	7.56	2.5
MW-06	02/01/2025	-	-	-	-	-	-
	01/13/2026	13.9	6.34	0.43	1143	6.06	-80.0

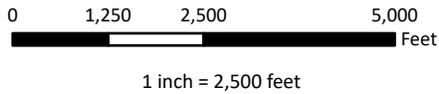
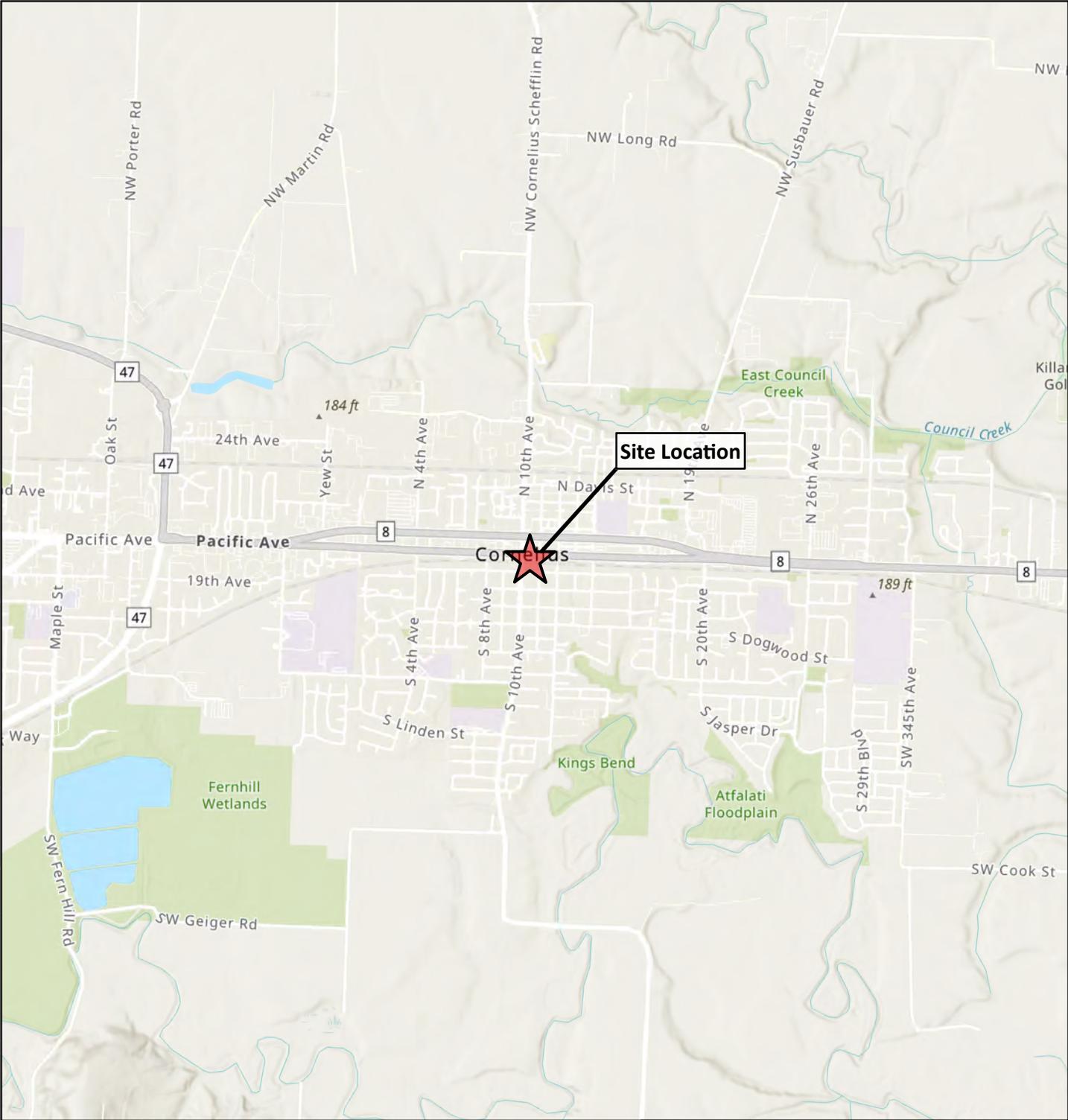
Note:
Detected concentrations are **bold-faced**
µg/L= micrograms per Liter
- = Not available (for EPA RSLs - unable to be calculated as there is no inhalation toxicity data, per EPA RSL Calculator outputs)
< = analyte not detected at or above the laboratory reporting limit, or for historical samples (pre-2026), not detected at or above the method detection limit.
B = Blank detection
C3 = Low CCS
EPA = United States Environmental Protection Agency
ODEQ = State of Oregon Department of Environmental Quality
RBC = Risk-Based Concentration
RSL = Regional Screening Levels
J = Estimated Result. Result detected below the lowest point of the calibration curve, but above the specified DL. For pre-2026 samples, results detected below the reporting limit
F-18 = Result for Diesel (Diesel Range Organics, C12-C25) is due to overlap from Gasoline or a Gasoline Range product.
F-26 = Result for Diesel (Diesel Range Organics, C12-C18) is due to overlap from Gasoline or a Gasoline Range product.
VI = vapor intrusion

Environmental Standards
EPA RSLs calculated using EPA's Vapor Intrusion Screening Level Calculator (<https://www.epa.gov/vaporintrusion/vapor-intrusion-screening-level-calculator>)
Oregon Department of Environmental Quality (ODEQ). 2025. "Vapor Intrusion Risk-Based Concentrations". March.

Figures

- 1 Site Location
- 2 Site Map
- 3 Potentiometric Surface Map – January 13, 2026
- 4 Groundwater Sampling Results





Legend

★ Site Location

Service Layer Credits: World Topographic Map: Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community
World Hillshade: Esri, NASA, NGA, USGS, FEMA

SAFETY FIRST

CLIENT: Metro



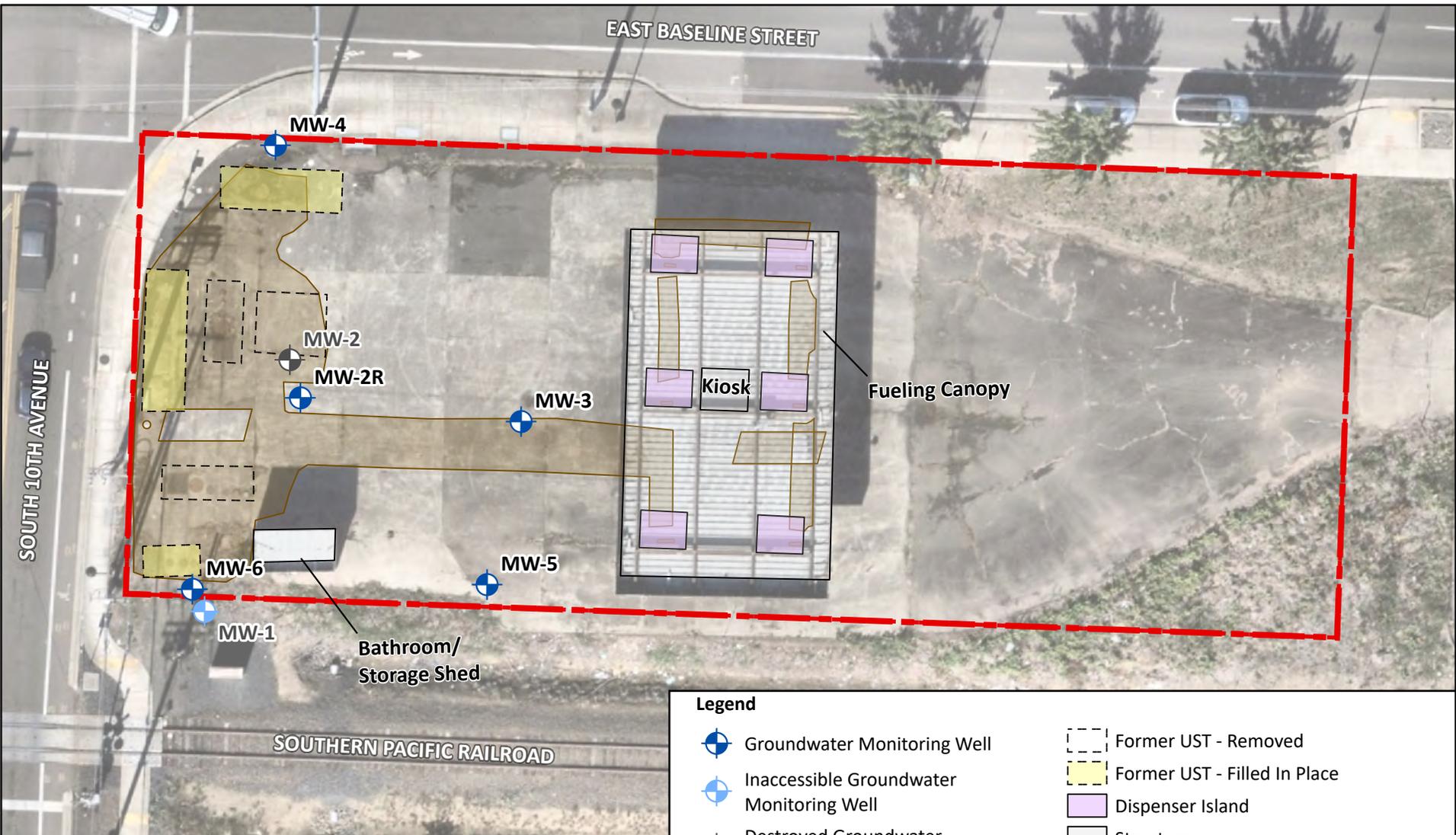
PROJECT: Cornelius Estby II
Environmental Monitoring SAP
1021 E Baseline Street, Cornelius, OR

PROJECT NUMBER: 0010.014.005

Site Location

FIGURE 1

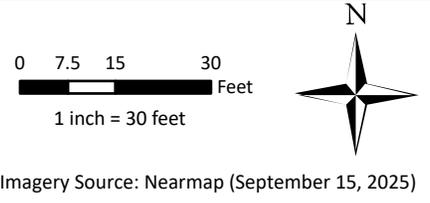
File: N:\GIS\Proj\0010 Metro\014_Cornelius Estby\Pro Project\Cornelius Estby.aprx 2/14/2026 Created by: A.Venegas Coordinate System: NAD 1983 2011 StatePlane Oregon North FIPS 3601 Ft. Intl



Legend

- Groundwater Monitoring Well
- Inaccessible Groundwater Monitoring Well
- Destroyed Groundwater Monitoring Well
- 2025 Remedial Excavation Extent
- Former UST - Removed
- Former UST - Filled In Place
- Dispenser Island
- Structure
- Site Boundary

Notes:
 - All locations are approximate.
 - Locations of former USTs based on Figure 2 of GSI's 2025 Site-Specific Assessment Work Plan.
 - Monitoring wells and remedial excavation extent based on survey completed January 12, 2026.
 - UST - Underground Storage Tank



Imagery Source: Nearmap (September 15, 2025)

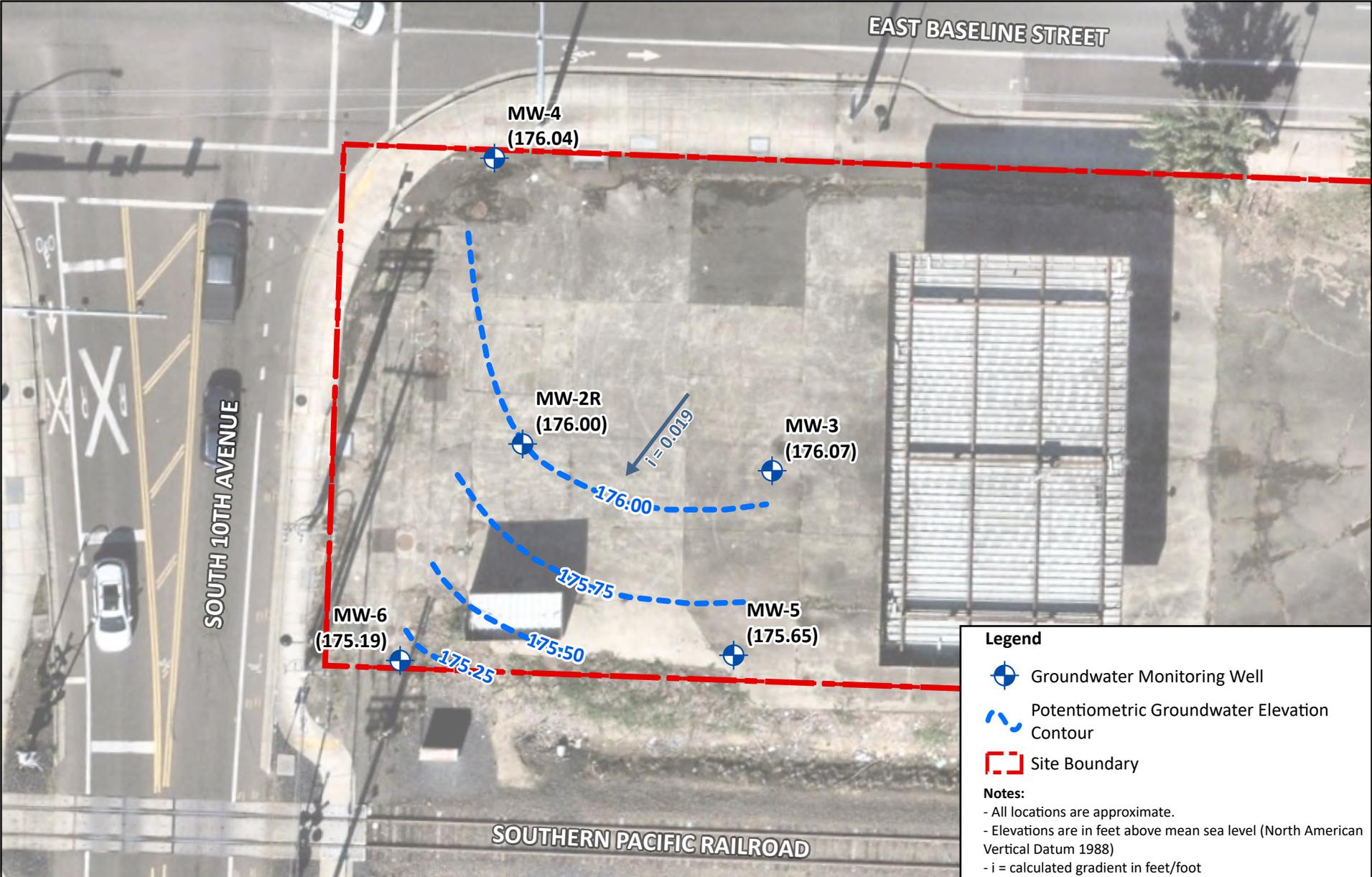
SAFETY FIRST

CLIENT:	Metro
PROJECT:	Cornelius Estby II Environmental Monitoring SAP 1021 E Baseline Street, Cornelius, OR
PROJECT NUMBER:	0010.014.005

Site Map

FIGURE 2

File: N:\GIS\Prj\0010 Metro\014_Cornelius Estby\Pro Project\Cornelius Estby.aprx 2/14/2026 Created by: A.Venegas Coordinate System: NAD 1983 2011 StatePlane Oregon North FIPS 3601 Ft. Intl

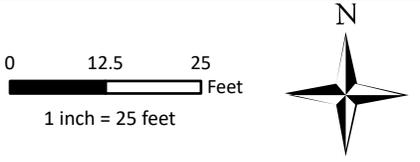


Legend

- Groundwater Monitoring Well
- Potentiometric Groundwater Elevation Contour
- Site Boundary

Notes:

- All locations are approximate.
- Elevations are in feet above mean sea level (North American Vertical Datum 1988)
- i = calculated gradient in feet/foot



Imagery Source: Nearmap (September 15, 2025)

SAFETY FIRST

CLIENT:	Metro
PROJECT:	Cornelius Estby II Environmental Monitoring SAP 1021 E Baseline Street, Cornelius, OR
PROJECT NUMBER:	0010.014.005

**Potentiometric Surface Map -
January 13, 2026**

FIGURE 3

File: N:\GIS\Proj\0010\Metro\014_Cornelius Estby\Pro Project\Cornelius Estby.aprx - Figure 4 - Groundwater Sampling Results - 2/17/2026 Created by: Terraphase2 Coordinate System: NAD 1983 2011 StatePlane Oregon North FIPS 3601 Ft Intl

MW-02						
Date	TPH-g	TPH-d	B	E	N	1-M
7/28/2008	48,300	12,700	998	3,390	1,310	-
1/31/2025	5,070	1,700	<0.0941	362	104	-
	5,390	1,830	0.594 J	428	135	-

MW-02R / MW-02R-DUP						
Date	TPH-g	TPH-d	B	E	N	1-M
1/13/2026	5,860	316	0.920	189	40.2	32.2
	6,220	469	0.960	209	50.7	39.4

MW-06						
Date	TPH-g	TPH-d	B	E	N	1-M
2/1/2025	9,870	2,000	23.6	855	125	-
1/13/2026	28,000	1,270	38.5	2,740	516	94.9

MW-04						
Date	TPH-g	TPH-d	B	E	N	1-M
7/28/2008	537	403	0.310	0.780	<5.00	-
1/31/2025	84.5	320	<0.0941	<0.137	<1	-
1/13/2026	<100	<204	<0.200	<0.500	<0.0743	<0.0743

MW-03						
Date	TPH-g	TPH-d	B	E	N	1-M
7/28/2008	4,180	1,870	1.50	450	209	-
1/31/2025	771	356	<0.0941	0.323	3.17	-
1/13/2026	<100	<206	<0.200	<0.500	0.0514	0.0784

MW-05						
Date	TPH-g	TPH-d	B	E	N	1-M
2/1/2025	3,340	909	0.925	0.929	<1	-
1/13/2026	2,460	211	0.150	2.98	<1.79	20.7

Notes:

- All locations are approximate.
- Underground storage tanks (USTs), and site features based on Figure 2 of GSI's 2025 Site-Specific Assessment Work Plan.
- All concentrations shown in micrograms per liter.
- < = analyte not detected at or above the laboratory reporting limit or method detection limit
- Shaded text indicates an exceedance of the State of Oregon Department of Environmental Quality (ODEQ) Risk Based Concentration (RBC) for the residential scenario for the vapor intrusion pathway.
- Red text indicates an exceedance of the ODEQ RBC for the commercial worker scenario for the vapor intrusion pathway.
- *Italicized text* indicates an exceedance of the calculated United States Environmental Protection Agency (EPA) Regional Screening Levels (RSL) for the residential scenario for the vapor intrusion pathway.
- Underlined text indicates an exceedances of the calculated EPA RSL for the commercial scenario for the vapor intrusion pathway.

Legend

- Groundwater Monitoring Well
- Destroyed Groundwater Monitoring Well
- Estimated Extent of TPH-g in Groundwater
- Former UST - Removed
- Former UST - Filled In Place
- Dispenser Island
- Structure
- Site Boundary

Abbreviations:

- B = Benzene
- E = Ethylbenzene
- N = Naphthalene
- TPH-d = Diesel-range TPH
- TPH-g = Gasoline-range TPH
- 1-M = 1-Methylnaphthalene

Imagery Source: Nearmap (September 15, 2025)

	CLIENT: Metro	Groundwater Sampling Results
	PROJECT: Cornelius Estby II Environmental Monitoring SAP 1021 E Baseline Street, Cornelius, OR	
PROJECT NUMBER: 0010.014.005	FIGURE 4	

Appendix A

MW-2R Boring Log



Project Number: O010.014.005 **Drilling Company:** Cascade Environmental **Coordinates:** 45.519843, -123.059284
Project Name: Cornelius Estby II **Driller:** Dave Allen **Coords Sys:** Lat/Lon
Client: Metro **Drill Rig:** Geoprobe 7822DT **Surface Elevation:** 181.74'
Address: 1021 E Baseline St, Cornelius, OR **Drilling Method:** Direct Push **Logged By:** Adrienne Venegas
Drilling Date: 01/09/2026 **Total Depth:** 15.5' **Checked By:** Don Malkemus
Borehole Diameter: 3.75"

Comments Hand auger used in upper 5 feet bgs for utility clearance.

Depth (ft)	PID (ppm)	Recovery Length (in)	Water Levels (ft)	Graphic Log	USCS	Visual Classification and Remarks	Well	
0.0						CONCRETE , 8-inches thick	Concrete	
0.0					SP-SM	POORLY GRADED SAND (SP-SM), loose to medium dense, dark brown (10YR-3/3), moist, fine- to medium-grained, with low plasticity silt, trace angular to subrounded gravel up to 0.5 inches in diameter FILL		
0.0					GP-GM	(Gravel: 2%, Sand: 93%, Fines: 5%)		
0.0		60			CL	POORLY GRADED GRAVEL (GP-GM), loose to medium dense, dark olive brown (2.5Y-3/3), moist to wet (perched), subrounded to rounded, up to 2 inches in diameter, with fine- to coarse-grained sand and low plasticity silt (85%, 10%, 5%), FILL	Bentonite Chips (Hydrated)	
0.0					CL	LEAN CLAY (CL), medium stiff, very dark grayish brown (10YR-3/2) with gray and orange mottling, wet, low plasticity, with fine- to coarse-grained sand, some subrounded gravel up to 1 inch in diameter and wood debris (4%, 20%, 75%)	2-inch diameter Schedule 40 PVC Casing	
0.0					CL	Olive brown (2.5Y-4/3) with orange mottling, moist to wet, low to medium plasticity, decrease in sand content, no wood debris or gravel below approximately 3.5 feet bgs (0%, 10%, 90%).		
5			1-13-26		SC	CLAYEY SAND (SC), medium dense, dark greenish gray (GLE Y1-4/10Y) with orange mottling, moist, very fine- to fine-grained, low plasticity clay (0%, 55%, 45%)		
0.0					SC	Dense, petroleum hydrocarbon odor below approximately 8 feet bgs.		
0.0		48			SC	3-inch lense of sandy clay at approximately 9 feet bgs.		
0.3					SC	3-inch lense of sandy clay at approximately 9.75 feet bgs.		
5.3					SC	Wet below approximately 10 feet bgs.		
10	102.8		1-9-26		SC	Interbedded lenses of loose, brown, moist sandy clay and clayey sand below approximately 11 feet bgs.	0/20 Silica	
290.4					SC	Sheen observed in free water in soil sample at approximately 11.5 feet bgs.	0.010 Slot Screen, #12/20 Pre-Pack Sand	
20.1		66			SC			
262.4					SC			
15	517.1				SC		2-inch diameter Schedule 40 PVC Sump	
End of boring at 15.5' bgs.							15.5	

Appendix B

Daily Field Reports



By: Adrienne Venegas

Date	1/9/2026	Contractor	Cascade Locates Down Under
Staff On-Site	Adrienne Venegas	Crew	Dave and Jacob Phillip
Staff From Time	07:45	From Time	08:00
Staff To Time	15:00	To Time	15:00
Weather	Partly Sunny	Tailgate Meeting?	YES
Equipment	Geoprobe, PID	Remarks	

Work Summary

Install replacement well MW-2R

Time	Notes
07:52	TEI on site. Calibrating PID: Zero: 0.0 ppm Span: 100.0 ppm

08:02 Locates Down Under and Cascade onsite. Discussing scope of work and assessing public utilities

	<p>Picture taken at: 08:26 Caption: Utilities along west side of property Latitude: 45.52020277777776 Longitude: -123.05974444444445</p>
	<p>Picture taken at: 08:26 Caption: Utilities along west side of property Latitude: 45.519866666666665 Longitude: -123.05937222222222</p>

Time Notes



Picture taken at: 08:26
Caption: Utilities in northwest corner of property
Latitude: 45.51993611111111
Longitude: -123.05947222222223



Picture taken at: 08:26
Caption: Utilities along north side of property
Latitude: 45.52000833333333
Longitude: -123.05941666666666



Picture taken at: 08:26
Caption: Utilities in north side of property
Latitude: 45.52002777777778
Longitude: -123.05922777777778

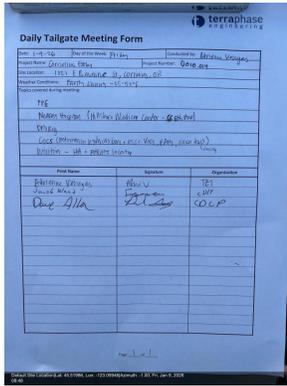
08:11 LDU identifies potential electrical conduit approximately 5 ft east of proposed boring location. Driller agrees sufficient distance from proposed boring



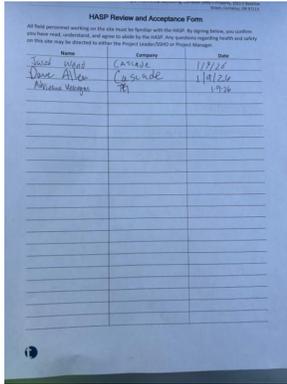
Picture taken at: 08:27
Caption: Utilities in area of MW-2R
Latitude: 45.51985555555555
Longitude: -123.05938611111111

08:20 DTM

Time Notes



Picture taken at: 08:48
Caption: Daily Tailgate Meeting Form
Latitude: 45.51986111111111
Longitude: -123.05945555555556



Picture taken at: 09:02
Caption: HASP Acceptance Form
Latitude: 45.51998611111111
Longitude: -123.05931111111111

08:40 Setting up at MW-2R

09:12 Coring



Picture taken at: 09:13
Caption: Concrete coring
Latitude: 45.52002777777778
Longitude: -123.05922777777778

09:37 Coring complete. Hand auger to 5'.

Time Notes



Picture taken at: 09:37
Caption: 8-inch concrete core
Latitude: 45.51999444444444
Longitude: -123.05935555555556



Picture taken at: 10:22
Caption: Soils at 1' bgs
Latitude: 45.51982777777778
Longitude: -123.05931944444444



Picture taken at: 10:22
Caption: Soils at 2' bgs
Latitude: 45.51983333333333
Longitude: -123.059325



Picture taken at: 10:22
Caption: Soils at 3' bgs
Latitude: 45.51983333333333
Longitude: -123.05931944444444

Time Notes



Picture taken at: 10:22
Caption: Organic wood debris at 3' bgs
Latitude: 45.51984722222222
Longitude: -123.05934166666667



Picture taken at: 10:22
Caption: Soils at 5' bgs
Latitude: 45.51983333333333
Longitude: -123.059325



Picture taken at: 10:22
Caption: Soils at 4' bgs
Latitude: 45.51983333333333
Longitude: -123.05931944444444

10:21 HA to 5' complete. Prepping to drill

10:27 Drilling



Picture taken at: 11:48
Caption: Soils 5-15' bgs
Latitude: 45.51980555555556
Longitude: -123.05934166666667

Time Notes



Picture taken at: 11:48
Caption: Detail of interbedded clayey sand to sandy clay to 15' bgs (down to the left)
Latitude: 45.519822222222224
Longitude: -123.05935



Picture taken at: 11:48
Caption: Sheen at ~11.5' bgs
Latitude: 45.519780555555556
Longitude: -123.059311111111111

11:00 Drilling complete. Discussing findings with TEI team

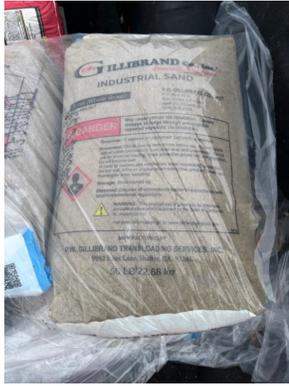
11:32 Advancing larger diameter (4") bit to 15.33' bgs (4" sump)



Picture taken at: 11:49
Caption: Advancing 4" diameter casing
Latitude: 45.519897222222222
Longitude: -123.05935

12:30 Installing well

Time Notes



Picture taken at: 12:41
Caption: Sand for filter pack to 4' bgs
Latitude: 45.519927777777774
Longitude: -123.05929444444445



Picture taken at: 12:41
Caption: Quikrete for cement around well box upper ~1' bgs
Latitude: 45.519980555555556
Longitude: -123.059280555555555



Picture taken at: 12:41
Caption: Prepack screen 5-15' bgs
Latitude: 45.519897222222222
Longitude: -123.059319444444444



Picture taken at: 12:41
Caption: Well monument
Latitude: 45.519852777777778
Longitude: -123.059294444444445

Time Notes



Picture taken at: 12:41
Caption: Upper 5' of casing
Latitude: 45.51983888888889
Longitude: -123.05930277777777



Picture taken at: 13:17
Caption: Bentonite used for seal
Latitude: 45.519888888888886
Longitude: -123.05930277777777



Picture taken at: 13:17
Caption: Bentonite used for seal
Latitude: 45.51985833333333
Longitude: -123.05930277777777



Picture taken at: 13:17
Caption: Pouring bentonite
Latitude: 45.51985555555555
Longitude: -123.05937222222222

Time	Notes
13:17	Allowing seal to set
13:33	Assessing condition of other groundwater and soil vapor wells All VP wells in good condition except VP-5 (broken lid) MW-1 full of water MW-3 full of water (no bolts) and locked MW-4 full of water MW-5 tiny bit of water and locked MW-6 no water but locked
14:22	Well monument set. Cascade packing up. Post-field PID calibration: Zero: 0.0 ppm Span: 99.7 ppm

Time Notes



Picture taken at: 14:22
Caption: Well ID
Latitude: 45.51985277777778
Longitude: -123.05928888888889



Picture taken at: 14:22
Caption: Completed well
Latitude: 45.52001944444444
Longitude: -123.059325



Picture taken at: 14:22
Caption: Well tag on well
Latitude: 45.519875
Longitude: -123.05926388888889

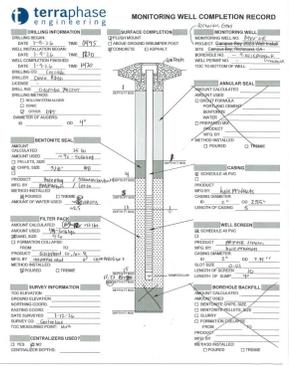
Time Notes



Picture taken at: 14:32
Caption: MW-2R location
Latitude: 45.51995
Longitude: -123.0592722222222



Picture taken at: 14:44
Caption: Drums closed and labeled
Latitude: 45.51985277777778
Longitude: -123.05928888888889



Picture taken at: 12:48
Caption: MW completion record
Latitude: 45.48460015672915
Longitude: -122.67512791377843

15:00 Cascade and TEI off site

By: Adrienne Venegas

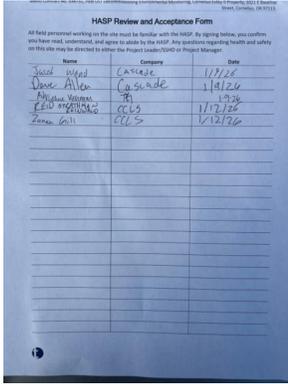
Date	1/12/2026	Contractor	Centerline
Staff On-Site	Adrienne Venegas	Crew	Reid and Zanen
Staff From Time	08:40	From Time	09:00
Staff To Time	16:45	To Time	13:00
Weather	Partly Sunny	Tailgate Meeting?	YES
Equipment	Survey equipment, well development equipment, YSI, oil/water interface meter	Remarks	

Work Summary

Develop newly installed MW-2R and survey all wells and site features

Time	Notes
08:41	TEI on site. Open wells and clear water from well boxes, where present.

09:02 Centerline (surveyor) on site. Discussing scope of work. Daily tailgate meeting.



HASP Review and Acceptance Form

All field personnel working on this site must be familiar with this HASP. By signing below, you confirm you have read, understood, and agree to abide by the HASP. Any questions regarding health and safety on this site may be directed to either the Project Leader/SM/IC or Project Manager.

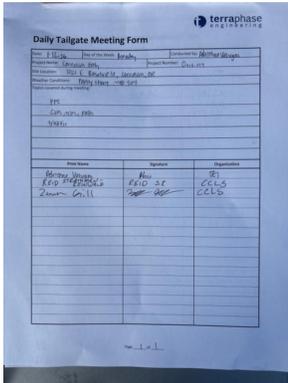
Name	Company	Date
Jesse Vogel	CASCADE	1/12/26
Derek Allen	CASCADE	1/12/26
Adrienne Venegas	PI	1/12/26
REID STEPHENS	CCLS	1/12/26
Zane Gill	CCLS	1/12/26

Picture taken at: 09:22

Caption: HASP acceptance form

Latitude: 45.51998611111111

Longitude: -123.05915833333333



Daily Tailgate Meeting Form

Prepared by: [Signature] Date: 1/12/26
Reviewed by: [Signature] Date: 1/12/26
Approved by: [Signature] Date: 1/12/26

Yes No

Site: [Blank]

Area Name	Inspector	Supervisor
Adrienne Venegas	REID SE	PI
REID STEPHENS	[Signature]	CCLS
Zane Gill	[Signature]	CCLS

Picture taken at: 09:22

Caption: Daily Tailgate Meeting Form

Latitude: 45.51998611111111

Longitude: -123.05915833333333

10:29	All wells open. Calibrating YSI while water levels equilibrate
10:55	Collecting groundwater level measurements in wells
12:25	Well development - surging

Time Notes



Picture taken at: 14:50
Caption: Surge block on pvc pipe for well development
Latitude: 45.51993055555554
Longitude: -123.05928055555555



Picture taken at: 14:50
Caption: Plastic sheeting placed around well for development
Latitude: 45.51985833333333
Longitude: -123.05930277777777

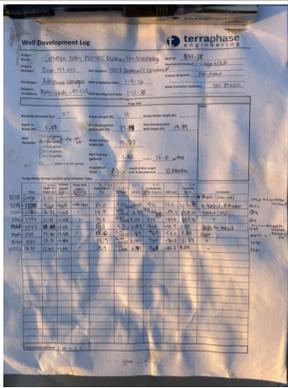


Picture taken at: 14:50
Caption: Piping for surging
Latitude: 45.51987777777778
Longitude: -123.05928055555555

12:45 Purging



Picture taken at: 14:52
Caption: Purge water during first well volume
Latitude: 45.52003888888889
Longitude: -123.05981388888888

Time	Notes
	 <p>Picture taken at: 14:52 Caption: Purge water during third well volume Latitude: 45.519875 Longitude: -123.05929444444445</p>
	 <p>Picture taken at: 14:52 Caption: Purge water during fifth well volume Latitude: 45.519877777777778 Longitude: -123.059302777777777</p>
13:00	Surveying complete. Centerline off site
16:30	Purging complete. Packing up and closing drum. Post-field YSI calibration.
	 <p>Picture taken at: 16:35 Caption: Development form Latitude: 45.519844444444445 Longitude: -123.059258333333333</p>
16:45	TEI off site

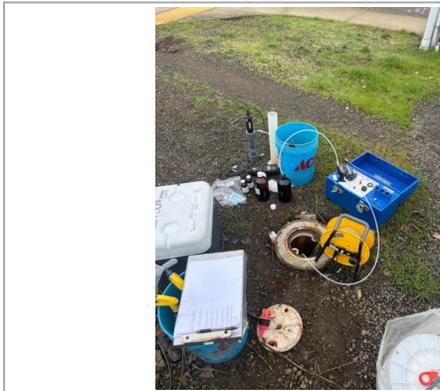
By: Adrienne Venegas

Date	<u>1/13/2026</u>	Contractor	<u>Not Applicable</u>
Staff On-Site	<u>Adrienne Venegas</u>	Crew	<u></u>
Staff From Time	<u>08:15</u>	From Time	<u></u>
Staff To Time	<u>18:55</u>	To Time	<u></u>
Weather	<u>Fog Partly Sunny</u>	Tailgate Meeting?	<u>NA</u>
Equipment	<u>GW sampling equipment, YSI, oil/water interface meter</u>	Remarks	<u></u>

Work Summary

Sample all GW wells

Time	Notes
08:15	TEI on site. Open all wells
08:43	Calibrating YSI
08:59	Collecting water level measurement
09:14	Setting up for sampling at MW-6
09:43	Notice lab provided incorrect bottles for PAH analysis. TEI off site to retrieve bottles
11:08	TEI back on site. Reopening wells
11:15	Set up at MW-06
12:33	Sampling MW-06



Picture taken at: 12:33

Caption:

Latitude: 45.51976111111111

Longitude: -123.05939444444444

Time Notes



Picture taken at: 12:38
Caption:
Latitude: 45.52008055555555
Longitude: -123.05976944444444



Picture taken at: 12:52
Caption: Sheen in purge water at MW-06
Latitude: 45.51973611111111
Longitude: -123.05939444444444

12:53 Setting up at MW-2R

13:48 Sampling MW-2R + duplicate.



Picture taken at: 13:48
Caption:
Latitude: 45.51984722222222
Longitude: -123.05928055555555



Picture taken at: 13:55
Caption:
Latitude: 45.51983888888889
Longitude: -123.05931944444444

Time Notes



Picture taken at: 14:21
Caption:
Latitude: 45.51983333333333
Longitude: -123.05927222222222

14:49 Setting up at MW-4

15:29 Sampling MW-04



Picture taken at: 15:29
Caption:
Latitude: 45.51998611111111
Longitude: -123.05933333333333



Picture taken at: 16:02
Caption:
Latitude: 45.51999166666666
Longitude: -123.05929444444445

16:23 Setting up at MW-03

16:50 Sampling MW-03

Time Notes



Picture taken at: 17:10
Caption:
Latitude: 45.51990277777778
Longitude: -123.05941111111111



Picture taken at: 17:11
Caption:
Latitude: 45.5200916666666666
Longitude: -123.05928055555555

17:12 Setting up at MW-05

18:02 Sampling MW-05



Picture taken at: 18:09
Caption:
Latitude: 45.519725
Longitude: -123.05915



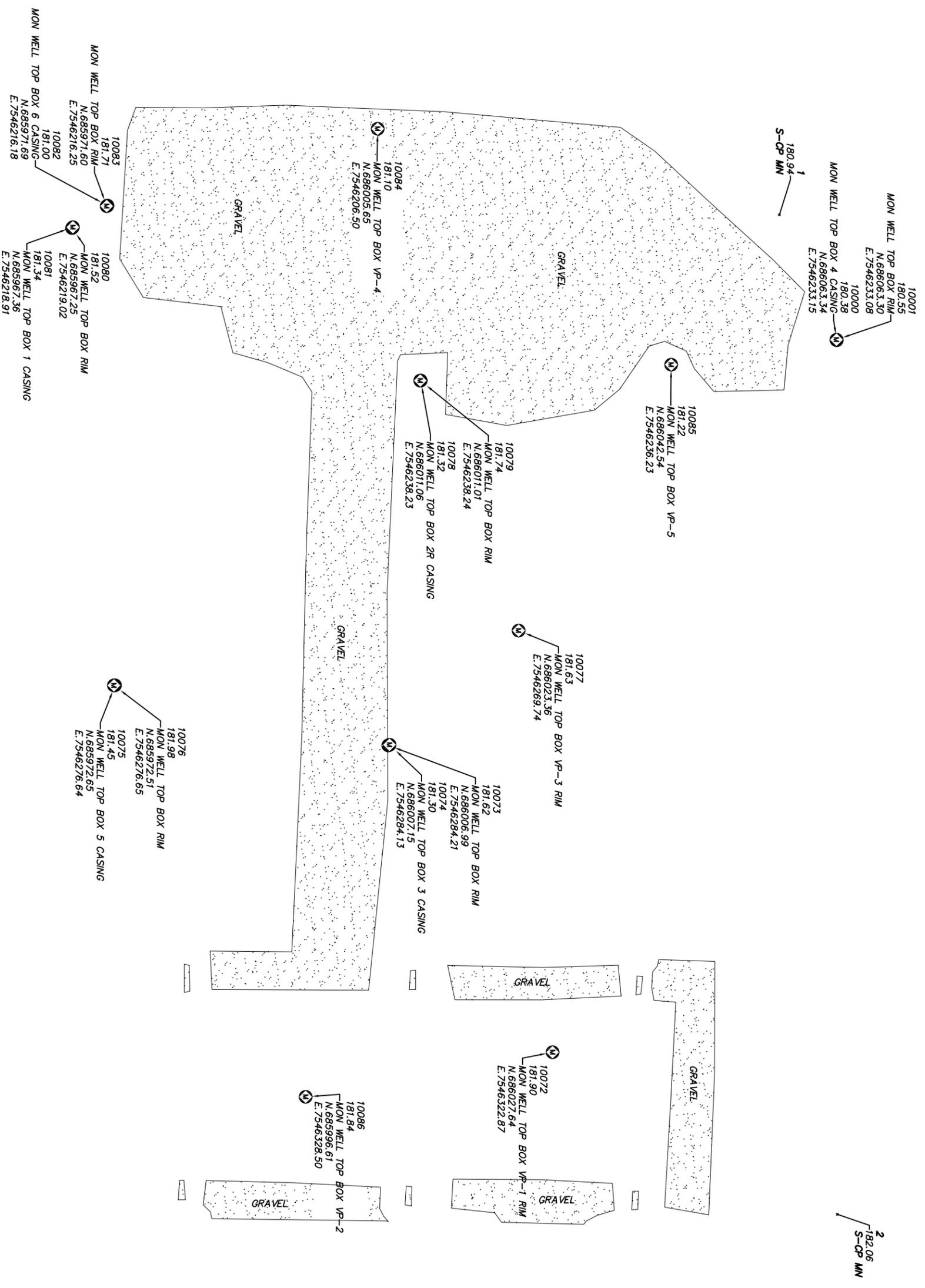
Picture taken at: 18:09
Caption:
Latitude: 45.519813888888889
Longitude: -123.05907499999999

Time	Notes
18:09	Post field calibration of YSI
18:30	Collecting filter blank
18:40	Packing and closing drum
18:55	TEI off site

Appendix C

Site Survey





SURVEYOR NOTE:
 COORDINATE SYSTEM IS OREGON STATE PLANE COORDINATES, NORTH ZONE, NAD83(2011), HOLDING OPUS COORDINATES FOR CONTROL. VERTICAL DATUM IS NAVD 1988. 2 HOUR STATIC OBSERVATION AT 3. POST PROCESSED THROUGH OPUS.

20
 181.73
 S-CP MN
 320
 181.84
 S-CP MN GPS#20

Appendix D

Groundwater Sampling Forms



MW-02R

Date:	1/13/2026	Casing Material:	PVC	Depth to Water (ft bmp):	5.22
Purge Method:	Low Flow	Casing Diameter (in):	2	Well Depth (ft bmp)	14.89
Volume Units:	mL	Pump Intake (ft bmp)	10	Water Column (ft)	9.67000
Purge Start Time:		Screen Interval (ft bmp):	5-15' bgs	Water Quality Meter:	YSI
Comments:					

Sampling Summary

Sample Date:	1/13/2026	COC:	
Sample Time:	13:45	Analysis:	TPH-Gx TPH-Dx Total Lead Dissolved Lead PAHs VOCs
Sample ID:	COEP-MW-02R-20260113	Bottles:	
Duplicate Sample ID:	COEP-MW-02R-DUP-20260113	Odor:	No
Duplicate Sample Time:	14:15	Remarks:	

Field Stabilization Parameters

Time	Flow Rate	Cuml Volume	DTW (ft bmp)	Temp (C)	pH	Conductivity (us/cm)	ORP (mV)	Disssolved Oxygen (mg/l)	Turbidity	Remarks
Historical Range:										
13:10:54	150	150	5.56	13.0	6.64	1033	39.5	3.96	15.63	
13:15:55	150	300	6.50	13.0	6.59	1035	11.0	2.14	33.30	
13:20:45	150	450	6.82	13.2	6.58	1033	6.2	1.94	26.32	
13:24:40	150	600	7.11	13.4	6.54	1036	4.3	1.83	24.59	
13:28:44	150	750	7.67	13.3	6.58	1032	3.7	1.72	24.83	
13:32:52	150	900	7.79	13.0	6.59	1035	5.0	1.73	5.88	
13:36:41	150	1050	7.85	13.1	6.60	1040	4.6	1.77	5.92	
13:40:01	150	1200	7.97	13.3	6.61	1038	4.2	1.89	5.75	

Well Integrity Checklist

Item	Yes	No	NA	Notes
Type of Well Head				Round 9-inch
Well secured on initial inspection	X			
Is well ID visible?	X			
Water in the well box		X		
Sleeve around the well box in good condition	X			
Any cleanup performed(explain)				
Any repairs/replacement(explain)				
Remarks				

Photos

MW-03

Date:	1/13/2026	Casing Material:	PVC	Depth to Water (ft bmp):	5.30
Purge Method:	Low Flow	Casing Diameter (in):	2	Well Depth (ft bmp)	14.65
Volume Units:	mL	Pump Intake (ft bmp)	10	Water Column (ft)	9.35000
Purge Start Time:		Screen Interval (ft bmp):	5-15' bgs	Water Quality Meter:	YSI
Comments:					

Sampling Summary

Sample Date:	1/13/2026	COC:	
Sample Time:	16:50	Analysis:	TPH-Gx TPH-Dx Total Lead Dissolved Lead PAHs VOCs
Sample ID:	COEP-MW-03-20260113	Bottles:	
Duplicate Sample ID:		Odor:	No
Duplicate Sample Time:		Remarks:	

Field Stabilization Parameters

Time	Flow Rate	Cuml Volume	DTW (ft bmp)	Temp (C)	pH	Conductivity (us/cm)	ORP (mV)	Disssolved Oxygen (mg/l)	Turbidity	Remarks
Historical Range:										
16:36:51	150	150	5.38	12.7	6.24	655	157.2	6.26	7.01	
16:40:56	200	350	5.47	12.9	6.13	660	160.8	3.24	6.88	
16:43:47	200	550	5.56	13.2	6.01	660	161.2	2.89	6.84	
16:46:27	200	750	5.65	12.9	6.03	659	161.8	2.79	7.06	
16:49:07	200	950	5.70	12.7	6.04	657	162.2	2.76	7.06	

Well Integrity Checklist

Item	Yes	No	NA	Notes
Type of Well Head				Round 9-inch
Well secured on initial inspection		X		
Is well ID visible?	X			
Water in the well box	X			
Sleeve around the well box in good condition	X			
Any cleanup performed(explain)				Water removed from well box on 1/12/26
Any repairs/replacement(explain)				New bolts
Remarks				Well box missing one bolt boss and no bolts present.

Photos

MW-04

Date:	1/13/2026	Casing Material:	PVC	Depth to Water (ft bmp):	4.39
Purge Method:	Low Flow	Casing Diameter (in):	2	Well Depth (ft bmp)	14.54
Volume Units:	mL	Pump Intake (ft bmp)	10	Water Column (ft)	10.15000
Purge Start Time:		Screen Interval (ft bmp):	5-15' bgs	Water Quality Meter:	YSI
Comments:					

Sampling Summary

Sample Date:	1/13/2026	COC:	
Sample Time:	15:30	Analysis:	TPH-Gx TPH-Dx Total Lead Dissolved Lead PAHs VOCs
Sample ID:	COEP-MW-04-20260113	Bottles:	
Duplicate Sample ID:		Odor:	No
Duplicate Sample Time:		Remarks:	

Field Stabilization Parameters

Time	Flow Rate	Cuml Volume	DTW (ft bmp)	Temp (C)	pH	Conductivity (us/cm)	ORP (mV)	Disssolved Oxygen (mg/l)	Turbidity	Remarks
Historical Range:										
14:55:51	100	100	4.45	13.3	7.44	582	109.2	3.55	25.01	
15:00:04	150	250	4.50	13.4	6.97	577	111.2	1.61	19.01	
15:04:43	150	400	4.55	13.3	6.78	573	108.9	0.97	14.04	
15:08:19	150	550	4.59	13.3	6.72	570	104.0	0.68	12.5	
15:12:38	150	700	4.61	13.3	6.71	570	99.8	0.62	11.51	
15:16:48	150	850	4.65	13.4	6.73	569	98.0	0.66	10.23	
15:20:52	150	1000	4.69	13.3	6.72	568	94.7	0.61	7.02	
15:25:10	150	1150	4.70	13.2	6.73	568	93.4	0.63	6.91	

Well Integrity Checklist

Item	Yes	No	NA	Notes
Type of Well Head				Round 9-inch
Well secured on initial inspection	X			
Is well ID visible?	X			
Water in the well box		X		
Sleeve around the well box in good condition	X			
Any cleanup performed(explain)				Removed water from well box on 1/12/2026
Any repairs/replacement(explain)				Replaced cap and bolts
Remarks				Cap with lid is too high to fit in well box.

Photos

MW-05

Date:	1/13/2026	Casing Material:	PVC	Depth to Water (ft bmp):	5.90
Purge Method:	Low Flow	Casing Diameter (in):	2	Well Depth (ft bmp)	14.68
Volume Units:	mL	Pump Intake (ft bmp)	10	Water Column (ft)	8.78
Purge Start Time:		Screen Interval (ft bmp):	5-15' bgs	Water Quality Meter:	YSI
Comments:					

Sampling Summary

Sample Date:	1/13/2026	COC:	
Sample Time:	18:02	Analysis:	TPH-Gx TPH-Dx Total Lead Dissolved Lead PAHs VOCs
Sample ID:	COEP-MW-05-20260113	Bottles:	
Duplicate Sample ID:		Odor:	No
Duplicate Sample Time:		Remarks:	

Field Stabilization Parameters

Time	Flow Rate	Cuml Volume	DTW (ft bmp)	Temp (C)	pH	Conductivity (us/cm)	ORP (mV)	Disssolved Oxygen (mg/l)	Turbidity	Remarks
Historical Range:										
17:40:23	150	150	6.24	13.2	6.15	1079	118.2	2.91	8.87	
17:44:09	150	300	6.55	13.3	6.22	1149	71.0	1.44	8.81	
17:48:57	150	450	6.89	13.4	6.29	1162	28.6	0.81	8.58	
17:52:27	150	600	7.13	13.6	6.22	1162	11.0	0.70	8.06	
17:56:46	150	750	7.45	13.5	6.23	1160	5.3	0.68	7.98	
18:00:29	150	900	7.69	13.4	6.24	1161	2.5	0.64	7.56	

Well Integrity Checklist

Item	Yes	No	NA	Notes
Type of Well Head				Round 9-inch
Well secured on initial inspection	X			
Is well ID visible?	X			
Water in the well box		X		
Sleeve around the well box in good condition	X			
Any cleanup performed(explain)				
Any repairs/replacement(explain)				
Remarks				

Photos

MW-06

Date:	1/13/2026	Casing Material:	PVC	Depth to Water (ft bmp):	5.72
Purge Method:	Low Flow	Casing Diameter (in):	2	Well Depth (ft bmp)	14.46
Volume Units:	mL	Pump Intake (ft bmp)	10	Water Column (ft)	8.74000
Purge Start Time:		Screen Interval (ft bmp):	5-15' bgs	Water Quality Meter:	YSI
Comments:					

Sampling Summary

Sample Date:	1/13/2026	COC:	
Sample Time:	12:25	Analysis:	TPH-Gx TPH-Dx Total Lead Dissolved Lead PAHs VOCs
Sample ID:	COEP-MW-06-20260113	Bottles:	
Duplicate Sample ID:		Odor:	Strong petroleum hydrocarbon odor
Duplicate Sample Time:		Remarks:	

Field Stabilization Parameters

Time	Flow Rate	Cuml Volume	DTW (ft bmp)	Temp (C)	pH	Conductivity (us/cm)	ORP (mV)	Disssolved Oxygen (mg/l)	Turbidity	Remarks
Historical Range:										
11:39:02	200	200	5.81	13.9	6.01	1081	60.0	2.80	30.45	Petroleum odor
11:42:19	150	350	6.49	14.1	6.08	1100	-11.2	1.23	30.54	
11:46:02	150	500	6.81	14.3	6.17	1112	-53.2	0.71	24.38	
11:50:49	100	600	7.24	14.5	6.23	1119	-68.4	0.53	18.36	
11:55:43	100	700	7.66	14.3	6.26	1123	-72.4	0.51	16.42	
12:00:09	100	800	8.04	14.4	6.28	1132	-76.4	0.46	14.10	
12:05:07	100	900	8.18	14.1	6.31	1139	-78.6	0.48	11.42	
12:10:26	100	1000	8.32	14.0	6.31	1138	-78.8	0.47	9.67	
12:15:03	100	1100	8.50	14.0	6.33	1138	-79.0	0.45	8.81	
12:20:54	100	1200	8.78	13.9	6.34	1143	-80.0	0.43	6.06	

Well Integrity Checklist

Item	Yes	No	NA	Notes
Type of Well Head				Round 9-inch
Well secured on initial inspection	X			
Is well ID visible?	X			
Water in the well box		X		
Sleeve around the well box in good condition	X			
Any cleanup performed(explain)				
Any repairs/replacement(explain)				
Remarks				

Photos

Well Development Log



Project Name: Cornelius Estby II Post UST Decommissioning Environmental Monitoring **Well ID:** MW-02R
Project Number: O010.014.002 **Site Location:** 1021 E Baseline St, Cornelius, OR **Development Method:** Surge Block
Developer: Adrienne Venegas **Well Installation Date:** 01/09/2026 **Purging Equipment:** Peristaltic Pump
Weather Conditions: Partly Cloudy, 45-50 F **Well Development Date:** 01/12/2026 **Water Parameter Equipment:** YSI Pro DSS

Purge Data		Notes
Borehole Diameter (in): <u>2</u>	Screen Length (ft): <u>10</u>	
Depth to Water (ft): <u>5.02</u>	Pre-Development Well Depth (ft): <u>14.89</u>	Post-Development Well Depth (ft): <u>14.89</u>
Well Diameter: <input type="checkbox"/> 1" (0.04 gal/feet) <input checked="" type="checkbox"/> 2" (0.17 gal/feet) <input type="checkbox"/> 4" (0.65 gal/feet) <input type="checkbox"/> 5" (1.02 gal/feet) <input type="checkbox"/> 6" (1.47 gal/feet) <input type="checkbox"/> _____" (Radius^2 (0.163) gal/feet)	Water Column Height (ft): <u>9.87</u>	
	Well Volume (gallons): <u>1.68</u> x 10 = <u>16.8</u> gal	
	Surge Block Used: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Length of time surged prior to development: <u>10 minutes</u>
Purge Water Storage Location and Container Type: _____		

Time	Depth To Water (ft BTOC)	Volume Purged (gal)	Purge Rate mL/min	Temperature (°C)	DO (mg/l)	pH (SU)	Conductivity (uS)	ORP (mV)	Turbidity (NTU)	Comments
1225	5.02									10 minute surge
1245-1300	9.60	1.68	500-800	15.0	3.55	6.68	932	13.5	1,230.74	very turbid, petroleum odor
1305-1325	11.32	1.68	500-800	14.9	4.47	6.94	934	-37.3	368.14	less turbid
1330-1350	12.71	1.68	500-800	14.7	4.83	7.00	939	-60.4	205.91	less turbid
1410-1440	10.69	1.68	500-800	15.1	4.31	6.84	948	-55.9	1.30	slightly turbid, allowed recovery
1445-1515	12.60	1.68	500-800	15.0	2.92	6.84	965	-52.1	3.83	clear
1520-1550	13.91	1.68	500-800	14.9	2.44	6.85	964	-46.5	2.59	clear
1555-1625	12.82	1.68	500-800	14.9	2.00	6.94	960	-51.7	3.09	clear
Total volume removed : (11.8 gal)										

Appendix E

Waste Disposal Manifest



NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number: **ORV SQG** 2. Page 1 of **1** 3. Emergency Response Phone: **(800) 899-4672** 4. Waste Tracking Number: **CLA212100-1**

5. Generator's Name and Mailing Address: **CITY OF CORNELIUS**
5331 S MACADAM AVENUE
SUITE 210
PORTLAND, OR 97239
 Generator's Phone: **(225) 287-6160**

Generator's Site Address (if different than mailing address):
1021 E BASELINE STREET
CORNELIUS, OR 97113

6. Transporter 1 Company Name: **Advanced Chemical Transport LLC** U.S. EPA ID Number: **CAR 000 070 540**

7. Transporter 2 Company Name: _____ U.S. EPA ID Number: _____

8. Designated Facility Name and Site Address: **PATRIOT ENVIRONMENTAL SERVICES**
4927 NW FRONT AVE
PORTLAND, OR 97210
 Facility's Phone: _____

U.S. EPA ID Number: **ORD 027 704 816**

9. Waste Shipping Name and Description	10. Containers		11. Total Quantity	12. Unit Wt./Vol.
	No.	Type		
1. Non-RCRA/Non-DOT Regulated Material, Soil	001	DM	100 250	P
2. Non-RCRA/Non-DOT Regulated Material, Water	001	DM	100 250	P
3.				
4.				

13. Special Handling Instructions and Additional Information
1. 563904 / Soil 2. 563904 / Water [W:79.10.212100] [P709.04371]
1x55DM 1x55DM **Tkg 394** **#172978** **12:19**

14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: **ORV Kyle Satterthwaite** Signature: _____ Month: **3** Day: **12** Year: **26**

15. International Shipments Import to U.S. Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: **Spencer Park** Signature: _____ Month: **3** Day: **12** Year: **26**

Transporter 2 Printed/Typed Name: _____ Signature: _____ Month: _____ Day: _____ Year: _____

17. Discrepancy

17a. Discrepancy Indication Space Quantity Type Residue Partial Rejection Full Rejection

Manifest Reference Number: _____

17b. Alternate Facility (or Generator) _____ U.S. EPA ID Number: _____

Facility's Phone: _____

17c. Signature of Alternate Facility (or Generator) _____ Month: _____ Day: _____ Year: _____

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: **Johnson Hoopes** Signature: _____ Month: **3** Day: **12** Year: **26**

Appendix F

Laboratory Analytical Report





ANALYTICAL REPORT

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

Wednesday, January 28, 2026

James Farrow
Terraphase Engineering
5331 S. Macadam Ave Suite #210
Portland, OR 97239

RE: A6A1401 - Cornelius Estby GW MW Install and Sampling - O010.014.002

Thank you for using Apex Laboratories. We greatly appreciate your business and strive to provide the highest quality services to the environmental industry.

Enclosed are the results of analyses for work order A6A1401, which was received by the laboratory on 1/14/2026 at 11:30:00AM.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: cobrien@apex-labs.com, or by phone at 503-718-2323.

Please note: All samples will be disposed of within 30 days of sample receipt, unless prior arrangements have been made.

Cooler Receipt Information					
<u>Acceptable Receipt Temperature is less than, or equal to, 6 degC (not frozen), or received on ice the same day as sampling.</u>					
(See Cooler Receipt Form for details)					
	Cooler #1	2.8	degC		Cooler #2 5.3 degC
	Cooler #3	5.1	degC		

This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report. All other deliverables derived from this data, including Electronic Data Deliverables (EDDs), CLP-like forms, client requested summary sheets, and all other products are considered secondary to this report.



Apex Laboratories

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ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

Terraphase Engineering 5331 S. Macadam Ave Suite #210 Portland, OR 97239	Project: Cornelius Estby GW MW Install and Sampling Project Number: O010.014.002 Project Manager: James Farrow	Report ID: A6A1401 - 01 28 26 1705
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ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
COEP-MW-02R-20260113	A6A1401-01	Water	01/13/26 13:45	01/14/26 11:30
COEP-MW-02R-DUP-20260113	A6A1401-02	Water	01/13/26 14:15	01/14/26 11:30
COEP- MW-03-20260113	A6A1401-03	Water	01/13/26 16:50	01/14/26 11:30
COEP-MW-04-20260113	A6A1401-04	Water	01/13/26 15:30	01/14/26 11:30
COEP- MW-05-20260113	A6A1401-05	Water	01/13/26 18:02	01/14/26 11:30
COEP- MW-06-20260113	A6A1401-06	Water	01/13/26 12:25	01/14/26 11:30
COEP-AQ-FB-20260113	A6A1401-07	Water	01/13/26 18:30	01/14/26 11:30
COEP-TB-20260113	A6A1401-08	Water	01/13/26 18:45	01/14/26 11:30

Apex Laboratories

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Cameron O'Brien, Project Manager



ANALYTICAL REPORT

Apex Laboratories, LLC

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Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

Terraphase Engineering 5331 S. Macadam Ave Suite #210 Portland, OR 97239	Project: Cornelius Estby GW MW Install and Sampling Project Number: O010.014.002 Project Manager: James Farrow	Report ID: A6A1401 - 01 28 26 1705
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ANALYTICAL SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
COEP-MW-02R-20260113 (A6A1401-01)				Matrix: Water		Batch: 26A0707		
Diesel	316	104	208	ug/L	1	01/23/26 18:01	NWTPH-Dx	F-18
Oil	ND	208	417	ug/L	1	01/23/26 18:01	NWTPH-Dx	
<i>Surrogate: o-Terphenyl (Surr)</i>		<i>Recovery: 79 %</i>		<i>Limits: 50-150 %</i>		<i>1</i>	<i>01/23/26 18:01</i>	<i>NWTPH-Dx</i>
COEP-MW-02R-DUP-20260113 (A6A1401-02)				Matrix: Water		Batch: 26A0707		
Diesel	469	104	208	ug/L	1	01/23/26 18:25	NWTPH-Dx	F-18
Oil	ND	208	417	ug/L	1	01/23/26 18:25	NWTPH-Dx	
<i>Surrogate: o-Terphenyl (Surr)</i>		<i>Recovery: 77 %</i>		<i>Limits: 50-150 %</i>		<i>1</i>	<i>01/23/26 18:25</i>	<i>NWTPH-Dx</i>
COEP- MW-03-20260113 (A6A1401-03)				Matrix: Water		Batch: 26A0707		
Diesel	ND	103	206	ug/L	1	01/23/26 19:13	NWTPH-Dx	
Oil	ND	206	412	ug/L	1	01/23/26 19:13	NWTPH-Dx	
<i>Surrogate: o-Terphenyl (Surr)</i>		<i>Recovery: 78 %</i>		<i>Limits: 50-150 %</i>		<i>1</i>	<i>01/23/26 19:13</i>	<i>NWTPH-Dx</i>
COEP-MW-04-20260113 (A6A1401-04)				Matrix: Water		Batch: 26A0707		
Diesel	ND	102	204	ug/L	1	01/23/26 19:36	NWTPH-Dx	
Oil	ND	204	408	ug/L	1	01/23/26 19:36	NWTPH-Dx	
<i>Surrogate: o-Terphenyl (Surr)</i>		<i>Recovery: 79 %</i>		<i>Limits: 50-150 %</i>		<i>1</i>	<i>01/23/26 19:36</i>	<i>NWTPH-Dx</i>
COEP- MW-05-20260113 (A6A1401-05)				Matrix: Water		Batch: 26A0707		
Diesel	211	97.1	194	ug/L	1	01/23/26 21:35	NWTPH-Dx	F-26
Oil	ND	194	388	ug/L	1	01/23/26 21:35	NWTPH-Dx	
<i>Surrogate: o-Terphenyl (Surr)</i>		<i>Recovery: 81 %</i>		<i>Limits: 50-150 %</i>		<i>1</i>	<i>01/23/26 21:35</i>	<i>NWTPH-Dx</i>
COEP- MW-06-20260113 (A6A1401-06)				Matrix: Water		Batch: 26A0707		
Diesel	1270	100	200	ug/L	1	01/23/26 21:59	NWTPH-Dx	F-18
Oil	ND	200	400	ug/L	1	01/23/26 21:59	NWTPH-Dx	
<i>Surrogate: o-Terphenyl (Surr)</i>		<i>Recovery: 83 %</i>		<i>Limits: 50-150 %</i>		<i>1</i>	<i>01/23/26 21:59</i>	<i>NWTPH-Dx</i>

Apex Laboratories

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ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
 Tigard, OR 97223
 503-718-2323
 ORELAP ID: OR100062

Terraphase Engineering 5331 S. Macadam Ave Suite #210 Portland, OR 97239	Project: Cornelius Estby GW MW Install and Sampling Project Number: O010.014.002 Project Manager: James Farrow	Report ID: A6A1401 - 01 28 26 1705
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ANALYTICAL SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
COEP-MW-02R-20260113 (A6A1401-01RE1)				Matrix: Water		Batch: 26A0560		
Gasoline Range Organics	5860	100	200	ug/L	2	01/20/26 15:30	NWTPH-Gx (MS)	
<i>Surrogate: 4-Bromofluorobenzene (Sur)</i>		<i>Recovery: 98 %</i>		<i>Limits: 50-150 %</i>		<i>1</i>	<i>01/20/26 15:30</i>	<i>NWTPH-Gx (MS)</i>
<i>1,4-Difluorobenzene (Sur)</i>		<i>101 %</i>		<i>50-150 %</i>		<i>1</i>	<i>01/20/26 15:30</i>	<i>NWTPH-Gx (MS)</i>
COEP-MW-02R-DUP-20260113 (A6A1401-02RE1)				Matrix: Water		Batch: 26A0560		
Gasoline Range Organics	6220	100	200	ug/L	2	01/20/26 15:57	NWTPH-Gx (MS)	
<i>Surrogate: 4-Bromofluorobenzene (Sur)</i>		<i>Recovery: 98 %</i>		<i>Limits: 50-150 %</i>		<i>1</i>	<i>01/20/26 15:57</i>	<i>NWTPH-Gx (MS)</i>
<i>1,4-Difluorobenzene (Sur)</i>		<i>101 %</i>		<i>50-150 %</i>		<i>1</i>	<i>01/20/26 15:57</i>	<i>NWTPH-Gx (MS)</i>
COEP-MW-03-20260113 (A6A1401-03RE1)				Matrix: Water		Batch: 26A0560		
Gasoline Range Organics	ND	50.0	100	ug/L	1	01/20/26 14:35	NWTPH-Gx (MS)	
<i>Surrogate: 4-Bromofluorobenzene (Sur)</i>		<i>Recovery: 107 %</i>		<i>Limits: 50-150 %</i>		<i>1</i>	<i>01/20/26 14:35</i>	<i>NWTPH-Gx (MS)</i>
<i>1,4-Difluorobenzene (Sur)</i>		<i>100 %</i>		<i>50-150 %</i>		<i>1</i>	<i>01/20/26 14:35</i>	<i>NWTPH-Gx (MS)</i>
COEP-MW-04-20260113 (A6A1401-04RE1)				Matrix: Water		Batch: 26A0560		
Gasoline Range Organics	ND	50.0	100	ug/L	1	01/20/26 13:41	NWTPH-Gx (MS)	
<i>Surrogate: 4-Bromofluorobenzene (Sur)</i>		<i>Recovery: 107 %</i>		<i>Limits: 50-150 %</i>		<i>1</i>	<i>01/20/26 13:41</i>	<i>NWTPH-Gx (MS)</i>
<i>1,4-Difluorobenzene (Sur)</i>		<i>99 %</i>		<i>50-150 %</i>		<i>1</i>	<i>01/20/26 13:41</i>	<i>NWTPH-Gx (MS)</i>
COEP-MW-05-20260113 (A6A1401-05RE1)				Matrix: Water		Batch: 26A0560		
Gasoline Range Organics	2460	50.0	100	ug/L	1	01/20/26 15:03	NWTPH-Gx (MS)	
<i>Surrogate: 4-Bromofluorobenzene (Sur)</i>		<i>Recovery: 100 %</i>		<i>Limits: 50-150 %</i>		<i>1</i>	<i>01/20/26 15:03</i>	<i>NWTPH-Gx (MS)</i>
<i>1,4-Difluorobenzene (Sur)</i>		<i>102 %</i>		<i>50-150 %</i>		<i>1</i>	<i>01/20/26 15:03</i>	<i>NWTPH-Gx (MS)</i>
COEP-MW-06-20260113 (A6A1401-06)				Matrix: Water		Batch: 26A0510		
Gasoline Range Organics	28000	500	1000	ug/L	10	01/19/26 15:47	NWTPH-Gx (MS)	
<i>Surrogate: 4-Bromofluorobenzene (Sur)</i>		<i>Recovery: 100 %</i>		<i>Limits: 50-150 %</i>		<i>1</i>	<i>01/19/26 15:47</i>	<i>NWTPH-Gx (MS)</i>
<i>1,4-Difluorobenzene (Sur)</i>		<i>103 %</i>		<i>50-150 %</i>		<i>1</i>	<i>01/19/26 15:47</i>	<i>NWTPH-Gx (MS)</i>

Apex Laboratories

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ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

Terraphase Engineering 5331 S. Macadam Ave Suite #210 Portland, OR 97239	Project: Cornelius Estby GW MW Install and Sampling Project Number: O010.014.002 Project Manager: James Farrow	Report ID: A6A1401 - 01 28 26 1705
---	---	---

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
COEP-MW-02R-20260113 (A6A1401-01)				Matrix: Water		Batch: 26A0510		
Isopropylbenzene	25.4	5.00	10.0	ug/L	10	01/19/26 14:17	EPA 8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 103 %</i>		<i>Limits: 80-120 %</i>		<i>1</i>	<i>01/19/26 14:17</i>	<i>EPA 8260D</i>
<i>Toluene-d8 (Surr)</i>				<i>80-120 %</i>		<i>1</i>	<i>01/19/26 14:17</i>	<i>EPA 8260D</i>
<i>4-Bromofluorobenzene (Surr)</i>				<i>80-120 %</i>		<i>1</i>	<i>01/19/26 14:17</i>	<i>EPA 8260D</i>
COEP-MW-02R-20260113 (A6A1401-01RE1)				Matrix: Water		Batch: 26A0560		
Benzene	0.920	0.200	0.400	ug/L	2	01/20/26 15:30	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.500	1.00	ug/L	2	01/20/26 15:30	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	0.400	0.800	ug/L	2	01/20/26 15:30	EPA 8260D	
Ethylbenzene	189	0.500	1.00	ug/L	2	01/20/26 15:30	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	1.00	2.00	ug/L	2	01/20/26 15:30	EPA 8260D	
n-Propylbenzene	79.5	0.500	1.00	ug/L	2	01/20/26 15:30	EPA 8260D	
Toluene	2.12	1.00	2.00	ug/L	2	01/20/26 15:30	EPA 8260D	
1,2,4-Trimethylbenzene	26.3	1.00	2.00	ug/L	2	01/20/26 15:30	EPA 8260D	
1,3,5-Trimethylbenzene	16.0	1.00	2.00	ug/L	2	01/20/26 15:30	EPA 8260D	
Xylenes, total	11.9	1.50	3.00	ug/L	2	01/20/26 15:30	EPA 8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 102 %</i>		<i>Limits: 80-120 %</i>		<i>1</i>	<i>01/20/26 15:30</i>	<i>EPA 8260D</i>
<i>Toluene-d8 (Surr)</i>				<i>80-120 %</i>		<i>1</i>	<i>01/20/26 15:30</i>	<i>EPA 8260D</i>
<i>4-Bromofluorobenzene (Surr)</i>				<i>80-120 %</i>		<i>1</i>	<i>01/20/26 15:30</i>	<i>EPA 8260D</i>
COEP-MW-02R-DUP-20260113 (A6A1401-02)				Matrix: Water		Batch: 26A0510		
Isopropylbenzene	29.6	5.00	10.0	ug/L	10	01/19/26 14:40	EPA 8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 103 %</i>		<i>Limits: 80-120 %</i>		<i>1</i>	<i>01/19/26 14:40</i>	<i>EPA 8260D</i>
<i>Toluene-d8 (Surr)</i>				<i>80-120 %</i>		<i>1</i>	<i>01/19/26 14:40</i>	<i>EPA 8260D</i>
<i>4-Bromofluorobenzene (Surr)</i>				<i>80-120 %</i>		<i>1</i>	<i>01/19/26 14:40</i>	<i>EPA 8260D</i>
COEP-MW-02R-DUP-20260113 (A6A1401-02RE1)				Matrix: Water		Batch: 26A0560		
Benzene	0.960	0.200	0.400	ug/L	2	01/20/26 15:57	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.500	1.00	ug/L	2	01/20/26 15:57	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	0.400	0.800	ug/L	2	01/20/26 15:57	EPA 8260D	
Ethylbenzene	209	0.500	1.00	ug/L	2	01/20/26 15:57	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	1.00	2.00	ug/L	2	01/20/26 15:57	EPA 8260D	
n-Propylbenzene	85.2	0.500	1.00	ug/L	2	01/20/26 15:57	EPA 8260D	
Toluene	2.20	1.00	2.00	ug/L	2	01/20/26 15:57	EPA 8260D	
1,2,4-Trimethylbenzene	28.7	1.00	2.00	ug/L	2	01/20/26 15:57	EPA 8260D	
1,3,5-Trimethylbenzene	18.2	1.00	2.00	ug/L	2	01/20/26 15:57	EPA 8260D	

Apex Laboratories

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Cameron O'Brien, Project Manager



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

Terraphase Engineering 5331 S. Macadam Ave Suite #210 Portland, OR 97239	Project: Cornelius Estby GW MW Install and Sampling Project Number: O010.014.002 Project Manager: James Farrow	Report ID: A6A1401 - 01 28 26 1705
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ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
COEP-MW-02R-DUP-20260113 (A6A1401-02RE1)				Matrix: Water		Batch: 26A0560		
Xylenes, total	13.0	1.50	3.00	ug/L	2	01/20/26 15:57	EPA 8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 103 %</i>		<i>Limits: 80-120 %</i>		<i>1</i>	<i>01/20/26 15:57</i>	<i>EPA 8260D</i>
<i>Toluene-d8 (Surr)</i>				<i>80-120 %</i>		<i>1</i>	<i>01/20/26 15:57</i>	<i>EPA 8260D</i>
<i>4-Bromofluorobenzene (Surr)</i>				<i>80-120 %</i>		<i>1</i>	<i>01/20/26 15:57</i>	<i>EPA 8260D</i>
COEP-MW-03-20260113 (A6A1401-03RE1)				Matrix: Water		Batch: 26A0560		
Benzene	ND	0.100	0.200	ug/L	1	01/20/26 14:35	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	01/20/26 14:35	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	01/20/26 14:35	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	01/20/26 14:35	EPA 8260D	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	01/20/26 14:35	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	01/20/26 14:35	EPA 8260D	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	01/20/26 14:35	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	01/20/26 14:35	EPA 8260D	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	01/20/26 14:35	EPA 8260D	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	01/20/26 14:35	EPA 8260D	
Xylenes, total	ND	0.750	1.50	ug/L	1	01/20/26 14:35	EPA 8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 103 %</i>		<i>Limits: 80-120 %</i>		<i>1</i>	<i>01/20/26 14:35</i>	<i>EPA 8260D</i>
<i>Toluene-d8 (Surr)</i>				<i>80-120 %</i>		<i>1</i>	<i>01/20/26 14:35</i>	<i>EPA 8260D</i>
<i>4-Bromofluorobenzene (Surr)</i>				<i>80-120 %</i>		<i>1</i>	<i>01/20/26 14:35</i>	<i>EPA 8260D</i>
COEP-MW-04-20260113 (A6A1401-04RE1)				Matrix: Water		Batch: 26A0560		
Benzene	ND	0.100	0.200	ug/L	1	01/20/26 13:41	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	01/20/26 13:41	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	01/20/26 13:41	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	01/20/26 13:41	EPA 8260D	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	01/20/26 13:41	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	01/20/26 13:41	EPA 8260D	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	01/20/26 13:41	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	01/20/26 13:41	EPA 8260D	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	01/20/26 13:41	EPA 8260D	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	01/20/26 13:41	EPA 8260D	
Xylenes, total	ND	0.750	1.50	ug/L	1	01/20/26 13:41	EPA 8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 102 %</i>		<i>Limits: 80-120 %</i>		<i>1</i>	<i>01/20/26 13:41</i>	<i>EPA 8260D</i>
<i>Toluene-d8 (Surr)</i>				<i>80-120 %</i>		<i>1</i>	<i>01/20/26 13:41</i>	<i>EPA 8260D</i>
<i>4-Bromofluorobenzene (Surr)</i>				<i>80-120 %</i>		<i>1</i>	<i>01/20/26 13:41</i>	<i>EPA 8260D</i>

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Cameron O'Brien, Project Manager



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

Terraphase Engineering 5331 S. Macadam Ave Suite #210 Portland, OR 97239	Project: Cornelius Estby GW MW Install and Sampling Project Number: O010.014.002 Project Manager: James Farrow	Report ID: A6A1401 - 01 28 26 1705
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ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
COEP- MW-05-20260113 (A6A1401-05)			Matrix: Water		Batch: 26A0510			
Isopropylbenzene	5.20	5.00	10.0	ug/L	10	01/19/26 15:25	EPA 8260D	J
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 104 %</i>		<i>Limits: 80-120 %</i>		<i>1</i>	<i>01/19/26 15:25</i>	<i>EPA 8260D</i>
<i>Toluene-d8 (Surr)</i>		<i>100 %</i>		<i>80-120 %</i>		<i>1</i>	<i>01/19/26 15:25</i>	<i>EPA 8260D</i>
<i>4-Bromofluorobenzene (Surr)</i>		<i>99 %</i>		<i>80-120 %</i>		<i>1</i>	<i>01/19/26 15:25</i>	<i>EPA 8260D</i>
COEP- MW-05-20260113 (A6A1401-05RE1)			Matrix: Water		Batch: 26A0560			
Benzene	0.150	0.100	0.200	ug/L	1	01/20/26 15:03	EPA 8260D	J
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	01/20/26 15:03	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	01/20/26 15:03	EPA 8260D	
Ethylbenzene	2.98	0.250	0.500	ug/L	1	01/20/26 15:03	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	01/20/26 15:03	EPA 8260D	
n-Propylbenzene	12.3	0.250	0.500	ug/L	1	01/20/26 15:03	EPA 8260D	
Toluene	0.930	0.500	1.00	ug/L	1	01/20/26 15:03	EPA 8260D	J
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	01/20/26 15:03	EPA 8260D	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	01/20/26 15:03	EPA 8260D	
Xylenes, total	ND	0.750	1.50	ug/L	1	01/20/26 15:03	EPA 8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 103 %</i>		<i>Limits: 80-120 %</i>		<i>1</i>	<i>01/20/26 15:03</i>	<i>EPA 8260D</i>
<i>Toluene-d8 (Surr)</i>		<i>101 %</i>		<i>80-120 %</i>		<i>1</i>	<i>01/20/26 15:03</i>	<i>EPA 8260D</i>
<i>4-Bromofluorobenzene (Surr)</i>		<i>101 %</i>		<i>80-120 %</i>		<i>1</i>	<i>01/20/26 15:03</i>	<i>EPA 8260D</i>
COEP- MW-06-20260113 (A6A1401-06)			Matrix: Water		Batch: 26A0510			
Benzene	38.5	1.00	2.00	ug/L	10	01/19/26 15:47	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	2.50	5.00	ug/L	10	01/19/26 15:47	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	2.00	4.00	ug/L	10	01/19/26 15:47	EPA 8260D	
Isopropylbenzene	114	5.00	10.0	ug/L	10	01/19/26 15:47	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	5.00	10.0	ug/L	10	01/19/26 15:47	EPA 8260D	
n-Propylbenzene	388	2.50	5.00	ug/L	10	01/19/26 15:47	EPA 8260D	
Toluene	5.20	5.00	10.0	ug/L	10	01/19/26 15:47	EPA 8260D	J
1,2,4-Trimethylbenzene	864	5.00	10.0	ug/L	10	01/19/26 15:47	EPA 8260D	
1,3,5-Trimethylbenzene	132	5.00	10.0	ug/L	10	01/19/26 15:47	EPA 8260D	
Xylenes, total	528	7.50	15.0	ug/L	10	01/19/26 15:47	EPA 8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 102 %</i>		<i>Limits: 80-120 %</i>		<i>1</i>	<i>01/19/26 15:47</i>	<i>EPA 8260D</i>
<i>Toluene-d8 (Surr)</i>		<i>99 %</i>		<i>80-120 %</i>		<i>1</i>	<i>01/19/26 15:47</i>	<i>EPA 8260D</i>
<i>4-Bromofluorobenzene (Surr)</i>		<i>97 %</i>		<i>80-120 %</i>		<i>1</i>	<i>01/19/26 15:47</i>	<i>EPA 8260D</i>

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Cameron O'Brien, Project Manager



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

Terraphase Engineering 5331 S. Macadam Ave Suite #210 Portland, OR 97239	Project: Cornelius Estby GW MW Install and Sampling Project Number: 0010.014.002 Project Manager: James Farrow	Report ID: A6A1401 - 01 28 26 1705
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ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes	
COEP- MW-06-20260113 (A6A1401-06RE1)			Matrix: Water		Batch: 26A0560				
Ethylbenzene	2740	50.0	100	ug/L	200	01/20/26 14:08	EPA 8260D		
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 102 %</i>		<i>Limits: 80-120 %</i>		<i>1</i>	<i>01/20/26 14:08</i>	<i>EPA 8260D</i>	
<i>Toluene-d8 (Surr)</i>				<i>99 %</i>		<i>80-120 %</i>	<i>1</i>	<i>01/20/26 14:08</i>	<i>EPA 8260D</i>
<i>4-Bromofluorobenzene (Surr)</i>				<i>96 %</i>		<i>80-120 %</i>	<i>1</i>	<i>01/20/26 14:08</i>	<i>EPA 8260D</i>
COEP-TB-20260113 (A6A1401-08)			Matrix: Water		Batch: 26A0510				
Benzene	ND	0.100	0.200	ug/L	1	01/19/26 10:32	EPA 8260D		
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	01/19/26 10:32	EPA 8260D		
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	01/19/26 10:32	EPA 8260D		
Ethylbenzene	ND	0.250	0.500	ug/L	1	01/19/26 10:32	EPA 8260D		
Isopropylbenzene	ND	0.500	1.00	ug/L	1	01/19/26 10:32	EPA 8260D		
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	01/19/26 10:32	EPA 8260D		
n-Propylbenzene	ND	0.250	0.500	ug/L	1	01/19/26 10:32	EPA 8260D		
Toluene	ND	0.500	1.00	ug/L	1	01/19/26 10:32	EPA 8260D		
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	01/19/26 10:32	EPA 8260D		
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	01/19/26 10:32	EPA 8260D		
Xylenes, total	ND	0.750	1.50	ug/L	1	01/19/26 10:32	EPA 8260D		
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 103 %</i>		<i>Limits: 80-120 %</i>		<i>1</i>	<i>01/19/26 10:32</i>	<i>EPA 8260D</i>	
<i>Toluene-d8 (Surr)</i>				<i>100 %</i>		<i>80-120 %</i>	<i>1</i>	<i>01/19/26 10:32</i>	<i>EPA 8260D</i>
<i>4-Bromofluorobenzene (Surr)</i>				<i>100 %</i>		<i>80-120 %</i>	<i>1</i>	<i>01/19/26 10:32</i>	<i>EPA 8260D</i>

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Cameron O'Brien, Project Manager



ANALYTICAL REPORT

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Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

Terraphase Engineering 5331 S. Macadam Ave Suite #210 Portland, OR 97239	Project: Cornelius Estby GWMW Install and Sampling Project Number: O010.014.002 Project Manager: James Farrow	Report ID: A6A1401 - 01 28 26 1705
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ANALYTICAL SAMPLE RESULTS

Polycyclic Aromatic Hydrocarbons (PAHs) by EPA 8270E (Large Volume Injection)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes	
COEP-MW-02R-20260113 (A6A1401-01)				Matrix: Water		Batch: 26A0437			
Acenaphthene	ND	1.77	3.54	ug/L	100	01/16/26 12:47	EPA 8270E LVI		
Acenaphthylene	ND	1.77	3.54	ug/L	100	01/16/26 12:47	EPA 8270E LVI		
Anthracene	ND	1.77	3.54	ug/L	100	01/16/26 12:47	EPA 8270E LVI		
Benz(a)anthracene	ND	0.886	1.77	ug/L	100	01/16/26 12:47	EPA 8270E LVI		
Benzo(a)pyrene	ND	0.886	1.77	ug/L	100	01/16/26 12:47	EPA 8270E LVI		
Benzo(b)fluoranthene	ND	0.886	1.77	ug/L	100	01/16/26 12:47	EPA 8270E LVI		
Benzo(k)fluoranthene	ND	0.886	1.77	ug/L	100	01/16/26 12:47	EPA 8270E LVI		
Benzo(g,h,i)perylene	ND	1.77	3.54	ug/L	100	01/16/26 12:47	EPA 8270E LVI		
Chrysene	ND	0.886	1.77	ug/L	100	01/16/26 12:47	EPA 8270E LVI		
Dibenz(a,h)anthracene	ND	0.886	1.77	ug/L	100	01/16/26 12:47	EPA 8270E LVI		
Fluoranthene	ND	1.77	3.54	ug/L	100	01/16/26 12:47	EPA 8270E LVI		
Fluorene	ND	1.77	3.54	ug/L	100	01/16/26 12:47	EPA 8270E LVI		
Indeno(1,2,3-cd)pyrene	ND	0.886	1.77	ug/L	100	01/16/26 12:47	EPA 8270E LVI		
1-Methylnaphthalene	32.2	3.54	7.08	ug/L	100	01/16/26 12:47	EPA 8270E LVI		
2-Methylnaphthalene	30.4	3.54	7.08	ug/L	100	01/16/26 12:47	EPA 8270E LVI		
Naphthalene	40.2	3.54	7.08	ug/L	100	01/16/26 12:47	EPA 8270E LVI		
Phenanthrene	ND	3.54	7.08	ug/L	100	01/16/26 12:47	EPA 8270E LVI		
Pyrene	ND	1.77	3.54	ug/L	100	01/16/26 12:47	EPA 8270E LVI		
Dibenzofuran	ND	1.77	3.54	ug/L	100	01/16/26 12:47	EPA 8270E LVI		
<i>Surrogate: Acenaphthylene-d8 (Surr)</i>		<i>Recovery: 654 %</i>		<i>Limits: 78-134 %</i>		<i>100</i>	<i>01/16/26 12:47</i>	<i>EPA 8270E LVI</i>	<i>S-05</i>
<i>Benzo(a)pyrene-d12 (Surr)</i>		<i>102 %</i>		<i>80-132 %</i>		<i>100</i>	<i>01/16/26 12:47</i>	<i>EPA 8270E LVI</i>	<i>S-05</i>

COEP-MW-02R-DUP-20260113 (A6A1401-02)				Matrix: Water		Batch: 26A0437		
Acenaphthene	ND	1.75	3.51	ug/L	100	01/16/26 13:19	EPA 8270E LVI	
Acenaphthylene	ND	1.75	3.51	ug/L	100	01/16/26 13:19	EPA 8270E LVI	
Anthracene	ND	1.75	3.51	ug/L	100	01/16/26 13:19	EPA 8270E LVI	
Benz(a)anthracene	ND	0.877	1.75	ug/L	100	01/16/26 13:19	EPA 8270E LVI	
Benzo(a)pyrene	ND	0.877	1.75	ug/L	100	01/16/26 13:19	EPA 8270E LVI	
Benzo(b)fluoranthene	ND	0.877	1.75	ug/L	100	01/16/26 13:19	EPA 8270E LVI	
Benzo(k)fluoranthene	ND	0.877	1.75	ug/L	100	01/16/26 13:19	EPA 8270E LVI	
Benzo(g,h,i)perylene	ND	1.75	3.51	ug/L	100	01/16/26 13:19	EPA 8270E LVI	
Chrysene	ND	0.877	1.75	ug/L	100	01/16/26 13:19	EPA 8270E LVI	
Dibenz(a,h)anthracene	ND	0.877	1.75	ug/L	100	01/16/26 13:19	EPA 8270E LVI	
Fluoranthene	ND	1.75	3.51	ug/L	100	01/16/26 13:19	EPA 8270E LVI	
Fluorene	ND	1.75	3.51	ug/L	100	01/16/26 13:19	EPA 8270E LVI	
Indeno(1,2,3-cd)pyrene	ND	0.877	1.75	ug/L	100	01/16/26 13:19	EPA 8270E LVI	
1-Methylnaphthalene	39.4	3.51	7.02	ug/L	100	01/16/26 13:19	EPA 8270E LVI	

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ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

Terraphase Engineering 5331 S. Macadam Ave Suite #210 Portland, OR 97239	Project: Cornelius Estby GW MW Install and Sampling Project Number: O010.014.002 Project Manager: James Farrow	Report ID: A6A1401 - 01 28 26 1705
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ANALYTICAL SAMPLE RESULTS

Polycyclic Aromatic Hydrocarbons (PAHs) by EPA 8270E (Large Volume Injection)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes		
COEP-MW-02R-DUP-20260113 (A6A1401-02)				Matrix: Water		Batch: 26A0437				
2-Methylnaphthalene	39.6	3.51	7.02	ug/L	100	01/16/26 13:19	EPA 8270E LVI			
Naphthalene	50.7	3.51	7.02	ug/L	100	01/16/26 13:19	EPA 8270E LVI			
Phenanthrene	ND	3.51	7.02	ug/L	100	01/16/26 13:19	EPA 8270E LVI			
Pyrene	ND	1.75	3.51	ug/L	100	01/16/26 13:19	EPA 8270E LVI			
Dibenzofuran	ND	1.75	3.51	ug/L	100	01/16/26 13:19	EPA 8270E LVI			
<i>Surrogate: Acenaphthylene-d8 (Surr)</i>		<i>Recovery: 812 %</i>		<i>Limits: 78-134 %</i>		<i>100</i>	<i>01/16/26 13:19</i>	<i>EPA 8270E LVI</i>	<i>S-05</i>	
<i>Benzo(a)pyrene-d12 (Surr)</i>				<i>94 %</i>		<i>80-132 %</i>	<i>100</i>	<i>01/16/26 13:19</i>	<i>EPA 8270E LVI</i>	<i>S-05</i>

COEP- MW-03-20260113 (A6A1401-03RE1)				Matrix: Water		Batch: 26A0437			
Acenaphthene	ND	0.0174	0.0348	ug/L	1	01/16/26 20:47	EPA 8270E LVI		
Acenaphthylene	ND	0.0174	0.0348	ug/L	1	01/16/26 20:47	EPA 8270E LVI		
Anthracene	ND	0.0174	0.0348	ug/L	1	01/16/26 20:47	EPA 8270E LVI		
Benz(a)anthracene	ND	0.00871	0.0174	ug/L	1	01/16/26 20:47	EPA 8270E LVI		
Benzo(a)pyrene	ND	0.00871	0.0174	ug/L	1	01/16/26 20:47	EPA 8270E LVI		
Benzo(b)fluoranthene	ND	0.00871	0.0174	ug/L	1	01/16/26 20:47	EPA 8270E LVI		
Benzo(k)fluoranthene	ND	0.00871	0.0174	ug/L	1	01/16/26 20:47	EPA 8270E LVI		
Benzo(g,h,i)perylene	ND	0.0174	0.0348	ug/L	1	01/16/26 20:47	EPA 8270E LVI		
Chrysene	ND	0.00871	0.0174	ug/L	1	01/16/26 20:47	EPA 8270E LVI		
Dibenz(a,h)anthracene	ND	0.00871	0.0174	ug/L	1	01/16/26 20:47	EPA 8270E LVI		
Fluoranthene	ND	0.0174	0.0348	ug/L	1	01/16/26 20:47	EPA 8270E LVI		
Fluorene	ND	0.0174	0.0348	ug/L	1	01/16/26 20:47	EPA 8270E LVI		
Indeno(1,2,3-cd)pyrene	ND	0.00871	0.0174	ug/L	1	01/16/26 20:47	EPA 8270E LVI		
1-Methylnaphthalene	0.0784	0.0348	0.0697	ug/L	1	01/16/26 20:47	EPA 8270E LVI		
2-Methylnaphthalene	ND	0.0348	0.0697	ug/L	1	01/16/26 20:47	EPA 8270E LVI		
Naphthalene	0.0514	0.0348	0.0697	ug/L	1	01/16/26 20:47	EPA 8270E LVI	J	
Phenanthrene	ND	0.0348	0.0697	ug/L	1	01/16/26 20:47	EPA 8270E LVI		
Pyrene	ND	0.0174	0.0348	ug/L	1	01/16/26 20:47	EPA 8270E LVI		
Dibenzofuran	ND	0.0174	0.0348	ug/L	1	01/16/26 20:47	EPA 8270E LVI		
<i>Surrogate: Acenaphthylene-d8 (Surr)</i>		<i>Recovery: 104 %</i>		<i>Limits: 78-134 %</i>		<i>1</i>	<i>01/16/26 20:47</i>	<i>EPA 8270E LVI</i>	
<i>Benzo(a)pyrene-d12 (Surr)</i>				<i>126 %</i>		<i>80-132 %</i>	<i>1</i>	<i>01/16/26 20:47</i>	<i>EPA 8270E LVI</i>

COEP-MW-04-20260113 (A6A1401-04)				Matrix: Water		Batch: 26A0437		
Acenaphthene	ND	0.0186	0.0371	ug/L	1	01/15/26 16:51	EPA 8270E LVI	
Acenaphthylene	ND	0.0186	0.0371	ug/L	1	01/15/26 16:51	EPA 8270E LVI	
Anthracene	ND	0.0186	0.0371	ug/L	1	01/15/26 16:51	EPA 8270E LVI	
Benz(a)anthracene	ND	0.00928	0.0186	ug/L	1	01/15/26 16:51	EPA 8270E LVI	

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ORELAP ID: OR100062

Terraphase Engineering 5331 S. Macadam Ave Suite #210 Portland, OR 97239	Project: Cornelius Estby GW MW Install and Sampling Project Number: O010.014.002 Project Manager: James Farrow	Report ID: A6A1401 - 01 28 26 1705
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ANALYTICAL SAMPLE RESULTS

Polycyclic Aromatic Hydrocarbons (PAHs) by EPA 8270E (Large Volume Injection)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes	
COEP-MW-04-20260113 (A6A1401-04)				Matrix: Water		Batch: 26A0437			
Benzo(a)pyrene	ND	0.00928	0.0186	ug/L	1	01/15/26 16:51	EPA 8270E LVI		
Benzo(b)fluoranthene	ND	0.00928	0.0186	ug/L	1	01/15/26 16:51	EPA 8270E LVI		
Benzo(k)fluoranthene	ND	0.00928	0.0186	ug/L	1	01/15/26 16:51	EPA 8270E LVI		
Benzo(g,h,i)perylene	ND	0.0186	0.0371	ug/L	1	01/15/26 16:51	EPA 8270E LVI	Q-42	
Chrysene	ND	0.00928	0.0186	ug/L	1	01/15/26 16:51	EPA 8270E LVI		
Dibenz(a,h)anthracene	ND	0.00928	0.0186	ug/L	1	01/15/26 16:51	EPA 8270E LVI		
Fluoranthene	ND	0.0186	0.0371	ug/L	1	01/15/26 16:51	EPA 8270E LVI		
Fluorene	ND	0.0186	0.0371	ug/L	1	01/15/26 16:51	EPA 8270E LVI		
Indeno(1,2,3-cd)pyrene	ND	0.00928	0.0186	ug/L	1	01/15/26 16:51	EPA 8270E LVI	Q-42	
1-Methylnaphthalene	ND	0.0371	0.0743	ug/L	1	01/15/26 16:51	EPA 8270E LVI		
2-Methylnaphthalene	ND	0.0371	0.0743	ug/L	1	01/15/26 16:51	EPA 8270E LVI		
Naphthalene	ND	0.0371	0.0743	ug/L	1	01/15/26 16:51	EPA 8270E LVI		
Phenanthrene	ND	0.0371	0.0743	ug/L	1	01/15/26 16:51	EPA 8270E LVI		
Pyrene	ND	0.0186	0.0371	ug/L	1	01/15/26 16:51	EPA 8270E LVI		
Dibenzofuran	ND	0.0186	0.0371	ug/L	1	01/15/26 16:51	EPA 8270E LVI		
<i>Surrogate: Acenaphthylene-d8 (Surr)</i>		<i>Recovery: 102 %</i>		<i>Limits: 78-134 %</i>		<i>1</i>	<i>01/15/26 16:51</i>	<i>EPA 8270E LVI</i>	
<i>Benzo(a)pyrene-d12 (Surr)</i>		<i>147 %</i>		<i>80-132 %</i>		<i>1</i>	<i>01/15/26 16:51</i>	<i>EPA 8270E LVI</i>	<i>S-03</i>
COEP- MW-05-20260113 (A6A1401-05RE1)				Matrix: Water		Batch: 26A0437			
Acenaphthene	ND	0.392	0.392	ug/L	5	01/16/26 21:19	EPA 8270E LVI	R-02	
Acenaphthylene	ND	0.179	0.179	ug/L	5	01/16/26 21:19	EPA 8270E LVI		
Anthracene	ND	0.0896	0.179	ug/L	5	01/16/26 21:19	EPA 8270E LVI		
Benz(a)anthracene	ND	0.0448	0.0896	ug/L	5	01/16/26 21:19	EPA 8270E LVI		
Benzo(a)pyrene	ND	0.0448	0.0896	ug/L	5	01/16/26 21:19	EPA 8270E LVI		
Benzo(b)fluoranthene	ND	0.0448	0.0896	ug/L	5	01/16/26 21:19	EPA 8270E LVI		
Benzo(k)fluoranthene	ND	0.0448	0.0896	ug/L	5	01/16/26 21:19	EPA 8270E LVI		
Benzo(g,h,i)perylene	ND	0.0896	0.179	ug/L	5	01/16/26 21:19	EPA 8270E LVI		
Chrysene	ND	0.0448	0.0896	ug/L	5	01/16/26 21:19	EPA 8270E LVI		
Dibenz(a,h)anthracene	ND	0.0448	0.0896	ug/L	5	01/16/26 21:19	EPA 8270E LVI		
Fluoranthene	ND	0.0896	0.179	ug/L	5	01/16/26 21:19	EPA 8270E LVI		
Fluorene	0.249	0.0896	0.179	ug/L	5	01/16/26 21:19	EPA 8270E LVI		
Indeno(1,2,3-cd)pyrene	ND	0.0448	0.0896	ug/L	5	01/16/26 21:19	EPA 8270E LVI		
1-Methylnaphthalene	20.7	0.179	0.359	ug/L	5	01/16/26 21:19	EPA 8270E LVI		
2-Methylnaphthalene	0.193	0.179	0.359	ug/L	5	01/16/26 21:19	EPA 8270E LVI	J	
Naphthalene	ND	1.79	1.79	ug/L	5	01/16/26 21:19	EPA 8270E LVI	R-02	
Phenanthrene	ND	0.179	0.359	ug/L	5	01/16/26 21:19	EPA 8270E LVI		
Pyrene	ND	0.0896	0.179	ug/L	5	01/16/26 21:19	EPA 8270E LVI		

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Cameron O'Brien, Project Manager



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Terraphase Engineering 5331 S. Macadam Ave Suite #210 Portland, OR 97239	Project: Cornelius Estby GW MW Install and Sampling Project Number: O010.014.002 Project Manager: James Farrow	Report ID: A6A1401 - 01 28 26 1705
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ANALYTICAL SAMPLE RESULTS

Polycyclic Aromatic Hydrocarbons (PAHs) by EPA 8270E (Large Volume Injection)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes	
COEP- MW-05-20260113 (A6A1401-05RE1)			Matrix: Water			Batch: 26A0437			
Dibenzofuran	ND	0.0896	0.179	ug/L	5	01/16/26 21:19	EPA 8270E LVI		
<i>Surrogate: Acenaphthylene-d8 (Surr)</i>		<i>Recovery: 88 %</i>		<i>Limits: 78-134 %</i>		<i>5</i>	<i>01/16/26 21:19</i>	<i>EPA 8270E LVI</i>	
<i>Benzo(a)pyrene-d12 (Surr)</i>		<i>122 %</i>		<i>80-132 %</i>		<i>5</i>	<i>01/16/26 21:19</i>	<i>EPA 8270E LVI</i>	
COEP- MW-06-20260113 (A6A1401-06)			Matrix: Water			Batch: 26A0437		DCNT	
Acenaphthene	ND	2.06	4.11	ug/L	100	01/16/26 14:55	EPA 8270E LVI		
Acenaphthylene	ND	2.06	4.11	ug/L	100	01/16/26 14:55	EPA 8270E LVI		
Anthracene	ND	2.06	4.11	ug/L	100	01/16/26 14:55	EPA 8270E LVI		
Benz(a)anthracene	ND	1.03	2.06	ug/L	100	01/16/26 14:55	EPA 8270E LVI		
Benzo(a)pyrene	ND	1.03	2.06	ug/L	100	01/16/26 14:55	EPA 8270E LVI		
Benzo(b)fluoranthene	ND	1.03	2.06	ug/L	100	01/16/26 14:55	EPA 8270E LVI		
Benzo(k)fluoranthene	ND	1.03	2.06	ug/L	100	01/16/26 14:55	EPA 8270E LVI		
Benzo(g,h,i)perylene	ND	2.06	4.11	ug/L	100	01/16/26 14:55	EPA 8270E LVI		
Chrysene	ND	1.03	2.06	ug/L	100	01/16/26 14:55	EPA 8270E LVI		
Dibenz(a,h)anthracene	ND	1.03	2.06	ug/L	100	01/16/26 14:55	EPA 8270E LVI		
Fluoranthene	ND	2.06	4.11	ug/L	100	01/16/26 14:55	EPA 8270E LVI		
Fluorene	ND	2.06	4.11	ug/L	100	01/16/26 14:55	EPA 8270E LVI		
Indeno(1,2,3-cd)pyrene	ND	1.03	2.06	ug/L	100	01/16/26 14:55	EPA 8270E LVI		
1-Methylnaphthalene	94.9	4.11	8.22	ug/L	100	01/16/26 14:55	EPA 8270E LVI		
2-Methylnaphthalene	168	4.11	8.22	ug/L	100	01/16/26 14:55	EPA 8270E LVI		
Naphthalene	516	4.11	8.22	ug/L	100	01/16/26 14:55	EPA 8270E LVI		
Phenanthrene	ND	4.11	8.22	ug/L	100	01/16/26 14:55	EPA 8270E LVI		
Pyrene	ND	2.06	4.11	ug/L	100	01/16/26 14:55	EPA 8270E LVI		
Dibenzofuran	ND	2.06	4.11	ug/L	100	01/16/26 14:55	EPA 8270E LVI		
<i>Surrogate: Acenaphthylene-d8 (Surr)</i>		<i>Recovery: 862 %</i>		<i>Limits: 78-134 %</i>		<i>100</i>	<i>01/16/26 14:55</i>	<i>EPA 8270E LVI</i>	<i>S-05</i>
<i>Benzo(a)pyrene-d12 (Surr)</i>		<i>92 %</i>		<i>80-132 %</i>		<i>100</i>	<i>01/16/26 14:55</i>	<i>EPA 8270E LVI</i>	<i>S-05</i>

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ORELAP ID: OR100062

Terraphase Engineering 5331 S. Macadam Ave Suite #210 Portland, OR 97239	Project: Cornelius Estby GW MW Install and Sampling Project Number: O010.014.002 Project Manager: James Farrow	Report ID: A6A1401 - 01 28 26 1705
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ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
COEP-MW-02R-20260113 (A6A1401-01RE1)				Matrix: Water				
<u>Batch: 26A0778</u>								
Lead	0.717	0.110	0.200	ug/L	1	01/26/26 15:03	EPA 6020B	
COEP-MW-02R-DUP-20260113 (A6A1401-02RE1)				Matrix: Water				
<u>Batch: 26A0778</u>								
Lead	0.945	0.110	0.200	ug/L	1	01/26/26 15:10	EPA 6020B	
COEP-MW-03-20260113 (A6A1401-03)				Matrix: Water				
<u>Batch: 26A0687</u>								
Lead	0.116	0.110	0.200	ug/L	1	01/22/26 22:24	EPA 6020B	J
COEP-MW-04-20260113 (A6A1401-04)				Matrix: Water				
<u>Batch: 26A0687</u>								
Lead	0.141	0.110	0.200	ug/L	1	01/22/26 22:29	EPA 6020B	J
COEP-MW-05-20260113 (A6A1401-05RE1)				Matrix: Water				
<u>Batch: 26A0778</u>								
Lead	0.375	0.110	0.200	ug/L	1	01/26/26 15:16	EPA 6020B	
COEP-MW-06-20260113 (A6A1401-06RE1)				Matrix: Water				
<u>Batch: 26A0778</u>								
Lead	0.278	0.110	0.200	ug/L	1	01/26/26 15:22	EPA 6020B	

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ANALYTICAL SAMPLE RESULTS

Dissolved Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes	
COEP-MW-02R-20260113 (A6A1401-01)				Matrix: Water					
<u>Batch: 26A0734</u>									
Lead	ND	0.100	0.200	ug/L	1	01/23/26 23:28	EPA 6020B (Diss)		
COEP-MW-02R-DUP-20260113 (A6A1401-02)				Matrix: Water					
<u>Batch: 26A0734</u>									
Lead	ND	0.100	0.200	ug/L	1	01/23/26 23:45	EPA 6020B (Diss)		
COEP-MW-03-20260113 (A6A1401-03)				Matrix: Water					
<u>Batch: 26A0734</u>									
Lead	ND	0.100	0.200	ug/L	1	01/23/26 23:51	EPA 6020B (Diss)		
COEP-MW-04-20260113 (A6A1401-04)				Matrix: Water					
<u>Batch: 26A0734</u>									
Lead	ND	0.100	0.200	ug/L	1	01/23/26 23:56	EPA 6020B (Diss)		
COEP-MW-05-20260113 (A6A1401-05)				Matrix: Water					
<u>Batch: 26A0734</u>									
Lead	ND	0.100	0.200	ug/L	1	01/24/26 00:19	EPA 6020B (Diss)		
COEP-MW-06-20260113 (A6A1401-06)				Matrix: Water					
<u>Batch: 26A0734</u>									
Lead	ND	0.100	0.200	ug/L	1	01/24/26 00:24	EPA 6020B (Diss)		
COEP-AQ-FB-20260113 (A6A1401-07)				Matrix: Water					
<u>Batch: 26A0734</u>									
Lead	ND	0.100	0.200	ug/L	1	01/24/26 00:30	EPA 6020B (Diss)		

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Cameron O'Brien, Project Manager



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QUALITY CONTROL (QC) SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 26A0707 - EPA 3510C (Fuels/Acid Ext.)						Water						
Blank (26A0707-BLK1)		Prepared: 01/23/26 07:51 Analyzed: 01/23/26 17:14										
<u>NWTPH-Dx</u>												
Diesel	ND	100	200	ug/L	1	---	---	---	---	---	---	---
Oil	ND	200	400	ug/L	1	---	---	---	---	---	---	---
<i>Surr: o-Terphenyl (Surr)</i>		<i>Recovery: 74 %</i>			<i>Limits: 50-150 %</i>		<i>Dilution: 1x</i>					
LCS (26A0707-BS1)		Prepared: 01/23/26 07:51 Analyzed: 01/23/26 17:38										
<u>NWTPH-Dx</u>												
Diesel	957	100	200	ug/L	1	1250	---	77	36 - 132%	---	---	---
<i>Surr: o-Terphenyl (Surr)</i>		<i>Recovery: 83 %</i>			<i>Limits: 50-150 %</i>		<i>Dilution: 1x</i>					
Matrix Spike (26A0707-MS1)		Prepared: 01/23/26 07:51 Analyzed: 01/23/26 20:24										
<u>QC Source Sample: COEP-MW-04-20260113 (A6A1401-04)</u>												
<u>NWTPH-Dx</u>												
Diesel	986	106	213	ug/L	1	1330	ND	74	36 - 132%	---	---	---
<i>Surr: o-Terphenyl (Surr)</i>		<i>Recovery: 82 %</i>			<i>Limits: 50-150 %</i>		<i>Dilution: 1x</i>					
Matrix Spike Dup (26A0707-MSD1)		Prepared: 01/23/26 07:51 Analyzed: 01/23/26 20:47										
<u>QC Source Sample: COEP-MW-04-20260113 (A6A1401-04)</u>												
<u>NWTPH-Dx</u>												
Diesel	958	101	202	ug/L	1	1260	ND	76	36 - 132%	3	30%	---
<i>Surr: o-Terphenyl (Surr)</i>		<i>Recovery: 85 %</i>			<i>Limits: 50-150 %</i>		<i>Dilution: 1x</i>					

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QUALITY CONTROL (QC) SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 26A0510 - EPA 5030C						Water						
Blank (26A0510-BLK1)		Prepared: 01/19/26 07:50 Analyzed: 01/19/26 10:09										
<u>NWTPH-Gx (MS)</u>												
Gasoline Range Organics	ND	50.0	100	ug/L	1	---	---	---	---	---	---	---
<i>Surr: 4-Bromofluorobenzene (Sur)</i>		<i>Recovery: 97 %</i>		<i>Limits: 50-150 %</i>		<i>Dilution: 1x</i>						
<i>1,4-Difluorobenzene (Sur)</i>		<i>103 %</i>		<i>50-150 %</i>		<i>"</i>						
LCS (26A0510-BS2)		Prepared: 01/19/26 07:50 Analyzed: 01/19/26 09:47										
<u>NWTPH-Gx (MS)</u>												
Gasoline Range Organics	549	50.0	100	ug/L	1	500	---	110	80 - 120%	---	---	---
<i>Surr: 4-Bromofluorobenzene (Sur)</i>		<i>Recovery: 101 %</i>		<i>Limits: 50-150 %</i>		<i>Dilution: 1x</i>						
<i>1,4-Difluorobenzene (Sur)</i>		<i>103 %</i>		<i>50-150 %</i>		<i>"</i>						

No Client related Batch QC samples analyzed for this batch. See notes page for more information.

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QUALITY CONTROL (QC) SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 26A0560 - EPA 5030C						Water						
Blank (26A0560-BLK1)		Prepared: 01/20/26 07:29 Analyzed: 01/20/26 10:04										
<u>NWTPH-Gx (MS)</u>												
Gasoline Range Organics	ND	50.0	100	ug/L	1	---	---	---	---	---	---	---
<i>Surr: 4-Bromofluorobenzene (Sur)</i>		<i>Recovery: 101 %</i>		<i>Limits: 50-150 %</i>		<i>Dilution: 1x</i>						
<i>1,4-Difluorobenzene (Sur)</i>		<i>98 %</i>		<i>50-150 %</i>		<i>"</i>						
LCS (26A0560-BS2)		Prepared: 01/20/26 07:29 Analyzed: 01/20/26 09:38										
<u>NWTPH-Gx (MS)</u>												
Gasoline Range Organics	536	50.0	100	ug/L	1	500	---	107	80 - 120%	---	---	---
<i>Surr: 4-Bromofluorobenzene (Sur)</i>		<i>Recovery: 98 %</i>		<i>Limits: 50-150 %</i>		<i>Dilution: 1x</i>						
<i>1,4-Difluorobenzene (Sur)</i>		<i>97 %</i>		<i>50-150 %</i>		<i>"</i>						

No Client related Batch QC samples analyzed for this batch. See notes page for more information.

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QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 26A0510 - EPA 5030C						Water						
Blank (26A0510-BLK1)		Prepared: 01/19/26 07:50 Analyzed: 01/19/26 10:09										
EPA 8260D												
Acetone	ND	10.0	20.0	ug/L	1	---	---	---	---	---	---	
Acrylonitrile	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
Benzene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Bromobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Bromochloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Bromoform	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Bromomethane	ND	5.00	5.00	ug/L	1	---	---	---	---	---	---	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Carbon disulfide	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Chlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Chloroethane	ND	5.00	5.00	ug/L	1	---	---	---	---	---	---	
Chloroform	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Chloromethane	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Dibromomethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	1.00	1.00	ug/L	1	---	---	---	---	---	---	ICV-02
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	

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ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

Terraphase Engineering 5331 S. Macadam Ave Suite #210 Portland, OR 97239	Project: Cornelius Estby GW MW Install and Sampling Project Number: O010.014.002 Project Manager: James Farrow	Report ID: A6A1401 - 01 28 26 1705
---	---	--

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 26A0510 - EPA 5030C						Water						
Blank (26A0510-BLK1)		Prepared: 01/19/26 07:50		Analyzed: 01/19/26 10:09								
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Ethylbenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
2-Hexanone	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Methylene chloride	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Naphthalene	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Styrene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
Toluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Vinyl chloride	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
m,p-Xylene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
o-Xylene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	

Surr: 1,4-Difluorobenzene (Surr) Recovery: 102 % Limits: 80-120 % Dilution: 1x

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Cameron O'Brien, Project Manager



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

Terraphase Engineering 5331 S. Macadam Ave Suite #210 Portland, OR 97239	Project: Cornelius Estby GW MW Install and Sampling Project Number: O010.014.002 Project Manager: James Farrow	Report ID: A6A1401 - 01 28 26 1705
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QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 26A0510 - EPA 5030C						Water						
Blank (26A0510-BLK1)		Prepared: 01/19/26 07:50 Analyzed: 01/19/26 10:09										
<i>Surr: Toluene-d8 (Surr)</i>		Recovery: 99 %		Limits: 80-120 %		Dilution: 1x						
<i>4-Bromofluorobenzene (Surr)</i>		97 %		80-120 %		"						
LCS (26A0510-BS1)		Prepared: 01/19/26 07:50 Analyzed: 01/19/26 09:24										
EPA 8260D												
Acetone	38.8	10.0	20.0	ug/L	1	40.0	---	97	80 - 120%	---	---	
Acrylonitrile	21.3	1.00	2.00	ug/L	1	20.0	---	107	80 - 120%	---	---	
Benzene	21.6	0.100	0.200	ug/L	1	20.0	---	108	80 - 120%	---	---	
Bromobenzene	20.2	0.250	0.500	ug/L	1	20.0	---	101	80 - 120%	---	---	
Bromochloromethane	23.1	0.500	1.00	ug/L	1	20.0	---	115	80 - 120%	---	---	
Bromodichloromethane	21.8	0.500	1.00	ug/L	1	20.0	---	109	80 - 120%	---	---	
Bromoform	20.4	0.500	1.00	ug/L	1	20.0	---	102	80 - 120%	---	---	
Bromomethane	23.7	5.00	5.00	ug/L	1	20.0	---	118	80 - 120%	---	---	
2-Butanone (MEK)	44.5	5.00	10.0	ug/L	1	40.0	---	111	80 - 120%	---	---	
n-Butylbenzene	20.5	0.500	1.00	ug/L	1	20.0	---	103	80 - 120%	---	---	
sec-Butylbenzene	20.5	0.500	1.00	ug/L	1	20.0	---	102	80 - 120%	---	---	
tert-Butylbenzene	19.8	0.500	1.00	ug/L	1	20.0	---	99	80 - 120%	---	---	
Carbon disulfide	23.8	5.00	10.0	ug/L	1	20.0	---	119	80 - 120%	---	---	
Carbon tetrachloride	21.8	0.500	1.00	ug/L	1	20.0	---	109	80 - 120%	---	---	
Chlorobenzene	21.0	0.250	0.500	ug/L	1	20.0	---	105	80 - 120%	---	---	
Chloroethane	24.7	5.00	5.00	ug/L	1	20.0	---	124	80 - 120%	---	---	Q-56
Chloroform	19.5	0.500	1.00	ug/L	1	20.0	---	98	80 - 120%	---	---	
Chloromethane	20.9	2.50	5.00	ug/L	1	20.0	---	105	80 - 120%	---	---	
2-Chlorotoluene	20.4	0.500	1.00	ug/L	1	20.0	---	102	80 - 120%	---	---	
4-Chlorotoluene	20.8	0.500	1.00	ug/L	1	20.0	---	104	80 - 120%	---	---	
Dibromochloromethane	21.7	0.500	1.00	ug/L	1	20.0	---	108	80 - 120%	---	---	
1,2-Dibromo-3-chloropropane	18.3	2.50	5.00	ug/L	1	20.0	---	92	80 - 120%	---	---	
1,2-Dibromoethane (EDB)	21.1	0.250	0.500	ug/L	1	20.0	---	106	80 - 120%	---	---	
Dibromomethane	21.8	0.500	1.00	ug/L	1	20.0	---	109	80 - 120%	---	---	
1,2-Dichlorobenzene	20.5	0.250	0.500	ug/L	1	20.0	---	102	80 - 120%	---	---	
1,3-Dichlorobenzene	20.7	0.250	0.500	ug/L	1	20.0	---	104	80 - 120%	---	---	
1,4-Dichlorobenzene	21.2	0.250	0.500	ug/L	1	20.0	---	106	80 - 120%	---	---	
Dichlorodifluoromethane	21.0	1.00	1.00	ug/L	1	20.0	---	105	80 - 120%	---	---	ICV-02
1,1-Dichloroethane	22.4	0.200	0.400	ug/L	1	20.0	---	112	80 - 120%	---	---	

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Terraphase Engineering 5331 S. Macadam Ave Suite #210 Portland, OR 97239	Project: Cornelius Estby GWMW Install and Sampling Project Number: 0010.014.002 Project Manager: James Farrow	Report ID: A6A1401 - 01 28 26 1705
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QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 26A0510 - EPA 5030C						Water						
LCS (26A0510-BS1)		Prepared: 01/19/26 07:50		Analyzed: 01/19/26 09:24								
1,2-Dichloroethane (EDC)	21.7	0.200	0.400	ug/L	1	20.0	---	108	80 - 120%	---	---	
1,1-Dichloroethene	20.1	0.200	0.400	ug/L	1	20.0	---	100	80 - 120%	---	---	
cis-1,2-Dichloroethene	21.3	0.200	0.400	ug/L	1	20.0	---	106	80 - 120%	---	---	
trans-1,2-Dichloroethene	21.0	0.200	0.400	ug/L	1	20.0	---	105	80 - 120%	---	---	
1,2-Dichloropropane	21.2	0.250	0.500	ug/L	1	20.0	---	106	80 - 120%	---	---	
1,3-Dichloropropane	20.9	0.500	1.00	ug/L	1	20.0	---	104	80 - 120%	---	---	
2,2-Dichloropropane	25.8	0.500	1.00	ug/L	1	20.0	---	129	80 - 120%	---	---	Q-56
1,1-Dichloropropene	20.8	0.500	1.00	ug/L	1	20.0	---	104	80 - 120%	---	---	
cis-1,3-Dichloropropene	22.5	0.500	1.00	ug/L	1	20.0	---	113	80 - 120%	---	---	
trans-1,3-Dichloropropene	22.6	0.500	1.00	ug/L	1	20.0	---	113	80 - 120%	---	---	
Ethylbenzene	21.0	0.250	0.500	ug/L	1	20.0	---	105	80 - 120%	---	---	
Hexachlorobutadiene	20.0	2.50	5.00	ug/L	1	20.0	---	100	80 - 120%	---	---	
2-Hexanone	37.8	5.00	10.0	ug/L	1	40.0	---	95	80 - 120%	---	---	
Isopropylbenzene	19.7	0.500	1.00	ug/L	1	20.0	---	98	80 - 120%	---	---	
4-Isopropyltoluene	20.2	0.500	1.00	ug/L	1	20.0	---	101	80 - 120%	---	---	
Methylene chloride	21.1	5.00	10.0	ug/L	1	20.0	---	105	80 - 120%	---	---	
4-Methyl-2-pentanone (MiBK)	40.3	5.00	10.0	ug/L	1	40.0	---	101	80 - 120%	---	---	
Methyl tert-butyl ether (MTBE)	20.9	0.500	1.00	ug/L	1	20.0	---	104	80 - 120%	---	---	
Naphthalene	18.4	2.50	5.00	ug/L	1	20.0	---	92	80 - 120%	---	---	
n-Propylbenzene	20.1	0.250	0.500	ug/L	1	20.0	---	100	80 - 120%	---	---	
Styrene	19.2	0.500	1.00	ug/L	1	20.0	---	96	80 - 120%	---	---	
1,1,1,2-Tetrachloroethane	21.3	0.200	0.400	ug/L	1	20.0	---	106	80 - 120%	---	---	
1,1,2,2-Tetrachloroethane	21.8	0.250	0.500	ug/L	1	20.0	---	109	80 - 120%	---	---	
Tetrachloroethene (PCE)	21.3	0.200	0.400	ug/L	1	20.0	---	106	80 - 120%	---	---	
Toluene	20.2	0.500	1.00	ug/L	1	20.0	---	101	80 - 120%	---	---	
1,2,3-Trichlorobenzene	19.5	1.00	2.00	ug/L	1	20.0	---	97	80 - 120%	---	---	
1,2,4-Trichlorobenzene	19.1	1.00	2.00	ug/L	1	20.0	---	96	80 - 120%	---	---	
1,1,1-Trichloroethane	20.1	0.200	0.400	ug/L	1	20.0	---	100	80 - 120%	---	---	
1,1,2-Trichloroethane	21.6	0.250	0.500	ug/L	1	20.0	---	108	80 - 120%	---	---	
Trichloroethene (TCE)	21.0	0.200	0.400	ug/L	1	20.0	---	105	80 - 120%	---	---	
Trichlorofluoromethane	21.6	1.00	2.00	ug/L	1	20.0	---	108	80 - 120%	---	---	
1,2,3-Trichloropropane	20.6	0.500	1.00	ug/L	1	20.0	---	103	80 - 120%	---	---	
1,2,4-Trimethylbenzene	20.1	0.500	1.00	ug/L	1	20.0	---	100	80 - 120%	---	---	
1,3,5-Trimethylbenzene	20.1	0.500	1.00	ug/L	1	20.0	---	101	80 - 120%	---	---	

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Cameron O'Brien, Project Manager



ANALYTICAL REPORT

Apex Laboratories, LLC

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ORELAP ID: OR100062

Terraphase Engineering 5331 S. Macadam Ave Suite #210 Portland, OR 97239	Project: Cornelius Estby GWMW Install and Sampling Project Number: O010.014.002 Project Manager: James Farrow	Report ID: A6A1401 - 01 28 26 1705
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QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 26A0510 - EPA 5030C						Water						
LCS (26A0510-BS1)		Prepared: 01/19/26 07:50		Analyzed: 01/19/26 09:24								
Vinyl chloride	19.7	0.100	0.200	ug/L	1	20.0	---	99	80 - 120%	---	---	
m,p-Xylene	41.5	0.500	1.00	ug/L	1	40.0	---	104	80 - 120%	---	---	
o-Xylene	20.1	0.250	0.500	ug/L	1	20.0	---	100	80 - 120%	---	---	
<i>Surr: 1,4-Difluorobenzene (Surr)</i>		Recovery: 103 %		Limits: 80-120 %		Dilution: 1x						
<i>Toluene-d8 (Surr)</i>		99 %		80-120 %		"						
<i>4-Bromofluorobenzene (Surr)</i>		95 %		80-120 %		"						

Matrix Spike (26A0510-MS1) Prepared: 01/19/26 07:50 Analyzed: 01/19/26 16:32

QC Source Sample: COEP-MW-04-20260113 (A6A1401-04)

EPA 8260D

Acetone	383	100	200	ug/L	10	400	ND	96	39 - 160%	---	---	
Acrylonitrile	208	10.0	20.0	ug/L	10	200	ND	104	63 - 135%	---	---	
Benzene	217	1.00	2.00	ug/L	10	200	ND	109	79 - 120%	---	---	
Bromobenzene	207	2.50	5.00	ug/L	10	200	ND	104	80 - 120%	---	---	
Bromochloromethane	232	5.00	10.0	ug/L	10	200	ND	116	78 - 123%	---	---	
Bromodichloromethane	216	5.00	10.0	ug/L	10	200	ND	108	79 - 125%	---	---	
Bromoform	197	5.00	10.0	ug/L	10	200	ND	98	66 - 130%	---	---	
Bromomethane	255	50.0	50.0	ug/L	10	200	ND	127	53 - 141%	---	---	
2-Butanone (MEK)	429	50.0	100	ug/L	10	400	ND	107	56 - 143%	---	---	
n-Butylbenzene	209	5.00	10.0	ug/L	10	200	ND	105	75 - 128%	---	---	
sec-Butylbenzene	211	5.00	10.0	ug/L	10	200	ND	106	77 - 126%	---	---	
tert-Butylbenzene	206	5.00	10.0	ug/L	10	200	ND	103	78 - 124%	---	---	
Carbon disulfide	233	50.0	100	ug/L	10	200	ND	116	64 - 133%	---	---	
Carbon tetrachloride	214	5.00	10.0	ug/L	10	200	ND	107	72 - 136%	---	---	
Chlorobenzene	211	2.50	5.00	ug/L	10	200	ND	106	80 - 120%	---	---	
Chloroethane	236	50.0	50.0	ug/L	10	200	ND	118	60 - 138%	---	---	Q-54c
Chloroform	198	5.00	10.0	ug/L	10	200	ND	99	79 - 124%	---	---	
Chloromethane	212	25.0	50.0	ug/L	10	200	ND	106	50 - 139%	---	---	
2-Chlorotoluene	213	5.00	10.0	ug/L	10	200	ND	107	79 - 122%	---	---	
4-Chlorotoluene	214	5.00	10.0	ug/L	10	200	ND	107	78 - 122%	---	---	
Dibromochloromethane	214	5.00	10.0	ug/L	10	200	ND	107	74 - 126%	---	---	
1,2-Dibromo-3-chloropropane	185	25.0	50.0	ug/L	10	200	ND	92	62 - 128%	---	---	
1,2-Dibromoethane (EDB)	207	2.50	5.00	ug/L	10	200	ND	104	77 - 121%	---	---	
Dibromomethane	216	5.00	10.0	ug/L	10	200	ND	108	79 - 123%	---	---	

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ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

Terraphase Engineering 5331 S. Macadam Ave Suite #210 Portland, OR 97239	Project: Cornelius Estby GW MW Install and Sampling Project Number: 0010.014.002 Project Manager: James Farrow	Report ID: A6A1401 - 01 28 26 1705
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QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 26A0510 - EPA 5030C						Water						
Matrix Spike (26A0510-MS1)		Prepared: 01/19/26 07:50 Analyzed: 01/19/26 16:32										
QC Source Sample: COEP-MW-04-20260113 (A6A1401-04)												
1,2-Dichlorobenzene	210	2.50	5.00	ug/L	10	200	ND	105	80 - 120%	---	---	
1,3-Dichlorobenzene	212	2.50	5.00	ug/L	10	200	ND	106	80 - 120%	---	---	
1,4-Dichlorobenzene	215	2.50	5.00	ug/L	10	200	ND	107	79 - 120%	---	---	
Dichlorodifluoromethane	204	10.0	10.0	ug/L	10	200	ND	102	32 - 152%	---	---	ICV-02
1,1-Dichloroethane	222	2.00	4.00	ug/L	10	200	ND	111	77 - 125%	---	---	
1,2-Dichloroethane (EDC)	214	2.00	4.00	ug/L	10	200	ND	107	73 - 128%	---	---	
1,1-Dichloroethene	201	2.00	4.00	ug/L	10	200	ND	100	71 - 131%	---	---	
cis-1,2-Dichloroethene	215	2.00	4.00	ug/L	10	200	ND	108	78 - 123%	---	---	
trans-1,2-Dichloroethene	214	2.00	4.00	ug/L	10	200	ND	107	75 - 124%	---	---	
1,2-Dichloropropane	215	2.50	5.00	ug/L	10	200	ND	107	78 - 122%	---	---	
1,3-Dichloropropane	208	5.00	10.0	ug/L	10	200	ND	104	80 - 120%	---	---	
2,2-Dichloropropane	226	5.00	10.0	ug/L	10	200	ND	113	60 - 139%	---	---	Q-54e
1,1-Dichloropropene	209	5.00	10.0	ug/L	10	200	ND	104	79 - 125%	---	---	
cis-1,3-Dichloropropene	204	5.00	10.0	ug/L	10	200	ND	102	75 - 124%	---	---	
trans-1,3-Dichloropropene	216	5.00	10.0	ug/L	10	200	ND	108	73 - 127%	---	---	
Ethylbenzene	212	2.50	5.00	ug/L	10	200	ND	104	79 - 121%	---	---	
Hexachlorobutadiene	201	25.0	50.0	ug/L	10	200	ND	100	66 - 134%	---	---	
2-Hexanone	368	50.0	100	ug/L	10	400	ND	92	57 - 139%	---	---	
Isopropylbenzene	201	5.00	10.0	ug/L	10	200	ND	101	72 - 131%	---	---	
4-Isopropyltoluene	208	5.00	10.0	ug/L	10	200	ND	104	77 - 127%	---	---	
Methylene chloride	208	50.0	100	ug/L	10	200	ND	104	74 - 124%	---	---	
4-Methyl-2-pentanone (MIBK)	400	50.0	100	ug/L	10	400	ND	100	67 - 130%	---	---	
Methyl tert-butyl ether (MTBE)	210	5.00	10.0	ug/L	10	200	ND	105	71 - 124%	---	---	
Naphthalene	189	25.0	50.0	ug/L	10	200	ND	95	61 - 128%	---	---	
n-Propylbenzene	208	2.50	5.00	ug/L	10	200	ND	104	76 - 126%	---	---	
Styrene	195	5.00	10.0	ug/L	10	200	ND	97	78 - 123%	---	---	
1,1,1,2-Tetrachloroethane	215	2.00	4.00	ug/L	10	200	ND	108	78 - 124%	---	---	
1,1,2,2-Tetrachloroethane	220	2.50	5.00	ug/L	10	200	ND	110	71 - 121%	---	---	
Tetrachloroethene (PCE)	212	2.00	4.00	ug/L	10	200	ND	106	74 - 129%	---	---	
Toluene	204	5.00	10.0	ug/L	10	200	ND	102	80 - 121%	---	---	
1,2,3-Trichlorobenzene	200	10.0	20.0	ug/L	10	200	ND	100	69 - 129%	---	---	
1,2,4-Trichlorobenzene	201	10.0	20.0	ug/L	10	200	ND	100	69 - 130%	---	---	
1,1,1-Trichloroethane	201	2.00	4.00	ug/L	10	200	ND	101	74 - 131%	---	---	

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ANALYTICAL REPORT

Apex Laboratories, LLC

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Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

Terraphase Engineering 5331 S. Macadam Ave Suite #210 Portland, OR 97239	Project: Cornelius Estby GW MW Install and Sampling Project Number: O010.014.002 Project Manager: James Farrow	Report ID: A6A1401 - 01 28 26 1705
---	---	---

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 26A0510 - EPA 5030C						Water						
Matrix Spike (26A0510-MS1)		Prepared: 01/19/26 07:50 Analyzed: 01/19/26 16:32										
QC Source Sample: COEP-MW-04-20260113 (A6A1401-04)												
1,1,2-Trichloroethane	211	2.50	5.00	ug/L	10	200	ND	105	80 - 120%	---	---	
Trichloroethene (TCE)	211	2.00	4.00	ug/L	10	200	ND	106	79 - 123%	---	---	
Trichlorofluoromethane	212	10.0	20.0	ug/L	10	200	ND	106	65 - 141%	---	---	
1,2,3-Trichloropropane	207	5.00	10.0	ug/L	10	200	ND	103	73 - 122%	---	---	
1,2,4-Trimethylbenzene	208	5.00	10.0	ug/L	10	200	ND	104	76 - 124%	---	---	
1,3,5-Trimethylbenzene	208	5.00	10.0	ug/L	10	200	ND	104	75 - 124%	---	---	
Vinyl chloride	198	1.00	2.00	ug/L	10	200	ND	99	58 - 137%	---	---	
m,p-Xylene	421	5.00	10.0	ug/L	10	400	ND	105	80 - 121%	---	---	
o-Xylene	203	2.50	5.00	ug/L	10	200	ND	102	78 - 122%	---	---	
<i>Surr: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 101 %</i>		<i>Limits: 80-120 %</i>		<i>Dilution: 1x</i>						
<i>Toluene-d8 (Surr)</i>		<i>97 %</i>		<i>80-120 %</i>		<i>"</i>						
<i>4-Bromofluorobenzene (Surr)</i>		<i>97 %</i>		<i>80-120 %</i>		<i>"</i>						

Matrix Spike Dup (26A0510-MSD1)		Prepared: 01/19/26 07:50 Analyzed: 01/19/26 16:55										
QC Source Sample: COEP-MW-04-20260113 (A6A1401-04)												
EPA 8260D												
Acetone	406	100	200	ug/L	10	400	ND	101	39 - 160%	6	30%	
Acrylonitrile	220	10.0	20.0	ug/L	10	200	ND	110	63 - 135%	6	30%	
Benzene	232	1.00	2.00	ug/L	10	200	ND	116	79 - 120%	6	30%	
Bromobenzene	217	2.50	5.00	ug/L	10	200	ND	109	80 - 120%	5	30%	
Bromochloromethane	242	5.00	10.0	ug/L	10	200	ND	121	78 - 123%	4	30%	
Bromodichloromethane	231	5.00	10.0	ug/L	10	200	ND	116	79 - 125%	6	30%	
Bromoform	206	5.00	10.0	ug/L	10	200	ND	103	66 - 130%	5	30%	
Bromomethane	271	50.0	50.0	ug/L	10	200	ND	136	53 - 141%	6	30%	
2-Butanone (MEK)	450	50.0	100	ug/L	10	400	ND	113	56 - 143%	5	30%	
n-Butylbenzene	221	5.00	10.0	ug/L	10	200	ND	110	75 - 128%	5	30%	
sec-Butylbenzene	222	5.00	10.0	ug/L	10	200	ND	111	77 - 126%	5	30%	
tert-Butylbenzene	216	5.00	10.0	ug/L	10	200	ND	108	78 - 124%	4	30%	
Carbon disulfide	251	50.0	100	ug/L	10	200	ND	126	64 - 133%	7	30%	
Carbon tetrachloride	227	5.00	10.0	ug/L	10	200	ND	113	72 - 136%	6	30%	
Chlorobenzene	224	2.50	5.00	ug/L	10	200	ND	112	80 - 120%	6	30%	
Chloroethane	260	50.0	50.0	ug/L	10	200	ND	130	60 - 138%	10	30%	Q-54c

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Cameron O'Brien, Project Manager



ANALYTICAL REPORT

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503-718-2323
ORELAP ID: OR100062

Terraphase Engineering 5331 S. Macadam Ave Suite #210 Portland, OR 97239	Project: Cornelius Estby GWMW Install and Sampling Project Number: 0010.014.002 Project Manager: James Farrow	Report ID: A6A1401 - 01 28 26 1705
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QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 26A0510 - EPA 5030C						Water						
Matrix Spike Dup (26A0510-MSD1)		Prepared: 01/19/26 07:50 Analyzed: 01/19/26 16:55										
QC Source Sample: COEP-MW-04-20260113 (A6A1401-04)												
Chloroform	208	5.00	10.0	ug/L	10	200	ND	104	79 - 124%	5	30%	
Chloromethane	226	25.0	50.0	ug/L	10	200	ND	113	50 - 139%	6	30%	
2-Chlorotoluene	221	5.00	10.0	ug/L	10	200	ND	110	79 - 122%	3	30%	
4-Chlorotoluene	226	5.00	10.0	ug/L	10	200	ND	113	78 - 122%	6	30%	
Dibromochloromethane	223	5.00	10.0	ug/L	10	200	ND	112	74 - 126%	4	30%	
1,2-Dibromo-3-chloropropane	194	25.0	50.0	ug/L	10	200	ND	97	62 - 128%	5	30%	
1,2-Dibromoethane (EDB)	218	2.50	5.00	ug/L	10	200	ND	109	77 - 121%	5	30%	
Dibromomethane	225	5.00	10.0	ug/L	10	200	ND	113	79 - 123%	4	30%	
1,2-Dichlorobenzene	219	2.50	5.00	ug/L	10	200	ND	110	80 - 120%	4	30%	
1,3-Dichlorobenzene	223	2.50	5.00	ug/L	10	200	ND	111	80 - 120%	5	30%	
1,4-Dichlorobenzene	228	2.50	5.00	ug/L	10	200	ND	114	79 - 120%	6	30%	
Dichlorodifluoromethane	218	10.0	10.0	ug/L	10	200	ND	109	32 - 152%	6	30%	ICV-02
1,1-Dichloroethane	237	2.00	4.00	ug/L	10	200	ND	119	77 - 125%	7	30%	
1,2-Dichloroethane (EDC)	228	2.00	4.00	ug/L	10	200	ND	114	73 - 128%	7	30%	
1,1-Dichloroethene	213	2.00	4.00	ug/L	10	200	ND	107	71 - 131%	6	30%	
cis-1,2-Dichloroethene	230	2.00	4.00	ug/L	10	200	ND	115	78 - 123%	7	30%	
trans-1,2-Dichloroethene	227	2.00	4.00	ug/L	10	200	ND	114	75 - 124%	6	30%	
1,2-Dichloropropane	228	2.50	5.00	ug/L	10	200	ND	114	78 - 122%	6	30%	
1,3-Dichloropropane	221	5.00	10.0	ug/L	10	200	ND	111	80 - 120%	6	30%	
2,2-Dichloropropane	241	5.00	10.0	ug/L	10	200	ND	120	60 - 139%	6	30%	Q-54e
1,1-Dichloropropene	223	5.00	10.0	ug/L	10	200	ND	112	79 - 125%	7	30%	
cis-1,3-Dichloropropene	218	5.00	10.0	ug/L	10	200	ND	109	75 - 124%	7	30%	
trans-1,3-Dichloropropene	230	5.00	10.0	ug/L	10	200	ND	115	73 - 127%	6	30%	
Ethylbenzene	225	2.50	5.00	ug/L	10	200	ND	110	79 - 121%	6	30%	
Hexachlorobutadiene	216	25.0	50.0	ug/L	10	200	ND	108	66 - 134%	7	30%	
2-Hexanone	390	50.0	100	ug/L	10	400	ND	98	57 - 139%	6	30%	
Isopropylbenzene	214	5.00	10.0	ug/L	10	200	ND	107	72 - 131%	6	30%	
4-Isopropyltoluene	218	5.00	10.0	ug/L	10	200	ND	109	77 - 127%	5	30%	
Methylene chloride	218	50.0	100	ug/L	10	200	ND	109	74 - 124%	4	30%	
4-Methyl-2-pentanone (MiBK)	417	50.0	100	ug/L	10	400	ND	104	67 - 130%	4	30%	
Methyl tert-butyl ether (MTBE)	220	5.00	10.0	ug/L	10	200	ND	110	71 - 124%	5	30%	
Naphthalene	202	25.0	50.0	ug/L	10	200	ND	101	61 - 128%	7	30%	
n-Propylbenzene	217	2.50	5.00	ug/L	10	200	ND	109	76 - 126%	4	30%	

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ANALYTICAL REPORT

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6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

Terraphase Engineering 5331 S. Macadam Ave Suite #210 Portland, OR 97239	Project: Cornelius Estby GW MW Install and Sampling Project Number: 0010.014.002 Project Manager: James Farrow	Report ID: A6A1401 - 01 28 26 1705
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QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 26A0510 - EPA 5030C						Water						
Matrix Spike Dup (26A0510-MSD1)		Prepared: 01/19/26 07:50 Analyzed: 01/19/26 16:55										
QC Source Sample: COEP-MW-04-20260113 (A6A1401-04)												
Styrene	206	5.00	10.0	ug/L	10	200	ND	103	78 - 123%	5	30%	
1,1,1,2-Tetrachloroethane	224	2.00	4.00	ug/L	10	200	ND	112	78 - 124%	4	30%	
1,1,2,2-Tetrachloroethane	225	2.50	5.00	ug/L	10	200	ND	112	71 - 121%	2	30%	
Tetrachloroethene (PCE)	224	2.00	4.00	ug/L	10	200	ND	112	74 - 129%	6	30%	
Toluene	215	5.00	10.0	ug/L	10	200	ND	108	80 - 121%	5	30%	
1,2,3-Trichlorobenzene	214	10.0	20.0	ug/L	10	200	ND	107	69 - 129%	7	30%	
1,2,4-Trichlorobenzene	212	10.0	20.0	ug/L	10	200	ND	106	69 - 130%	5	30%	
1,1,1-Trichloroethane	213	2.00	4.00	ug/L	10	200	ND	107	74 - 131%	6	30%	
1,1,2-Trichloroethane	221	2.50	5.00	ug/L	10	200	ND	110	80 - 120%	5	30%	
Trichloroethene (TCE)	224	2.00	4.00	ug/L	10	200	ND	112	79 - 123%	6	30%	
Trichlorofluoromethane	225	10.0	20.0	ug/L	10	200	ND	113	65 - 141%	6	30%	
1,2,3-Trichloropropane	220	5.00	10.0	ug/L	10	200	ND	110	73 - 122%	6	30%	
1,2,4-Trimethylbenzene	221	5.00	10.0	ug/L	10	200	ND	110	76 - 124%	6	30%	
1,3,5-Trimethylbenzene	219	5.00	10.0	ug/L	10	200	ND	110	75 - 124%	5	30%	
Vinyl chloride	213	1.00	2.00	ug/L	10	200	ND	106	58 - 137%	7	30%	
m,p-Xylene	446	5.00	10.0	ug/L	10	400	ND	112	80 - 121%	6	30%	
o-Xylene	216	2.50	5.00	ug/L	10	200	ND	108	78 - 122%	6	30%	
<i>Surr: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 102 %</i>		<i>Limits: 80-120 %</i>		<i>Dilution: 1x</i>						
<i>Toluene-d8 (Surr)</i>		<i>98 %</i>		<i>80-120 %</i>		<i>"</i>						
<i>4-Bromofluorobenzene (Surr)</i>		<i>97 %</i>		<i>80-120 %</i>		<i>"</i>						

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Terraphase Engineering 5331 S. Macadam Ave Suite #210 Portland, OR 97239	Project: Cornelius Estby GW MW Install and Sampling Project Number: O010.014.002 Project Manager: James Farrow	Report ID: A6A1401 - 01 28 26 1705
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QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 26A0560 - EPA 5030C						Water						
Blank (26A0560-BLK1)		Prepared: 01/20/26 07:29 Analyzed: 01/20/26 10:04										
EPA 8260D												
Acetone	ND	10.0	20.0	ug/L	1	---	---	---	---	---	---	---
Acrylonitrile	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	---
Benzene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	---
Bromobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	---
Bromochloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	---
Bromodichloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	---
Bromoform	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	---
Bromomethane	ND	5.00	5.00	ug/L	1	---	---	---	---	---	---	---
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	---
n-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	---
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	---
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	---
Carbon disulfide	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	---
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	---
Chlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	---
Chloroethane	ND	5.00	5.00	ug/L	1	---	---	---	---	---	---	---
Chloroform	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	---
Chloromethane	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	---
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	---
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	---
Dibromochloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	---
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	---
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	---
Dibromomethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	---
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	---
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	---
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	---
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	---
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	---
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	---
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	---
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	---
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	---

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ORELAP ID: OR100062

Terraphase Engineering 5331 S. Macadam Ave Suite #210 Portland, OR 97239	Project: Cornelius Estby GW MW Install and Sampling Project Number: O010.014.002 Project Manager: James Farrow	Report ID: A6A1401 - 01 28 26 1705
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QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 26A0560 - EPA 5030C						Water						
Blank (26A0560-BLK1)		Prepared: 01/20/26 07:29		Analyzed: 01/20/26 10:04								
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Ethylbenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
2-Hexanone	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Methylene chloride	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Naphthalene	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Styrene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
Toluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Vinyl chloride	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
m,p-Xylene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
o-Xylene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	

Surr: 1,4-Difluorobenzene (Surr) Recovery: 99 % Limits: 80-120 % Dilution: 1x

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Cameron O'Brien, Project Manager



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

Terraphase Engineering 5331 S. Macadam Ave Suite #210 Portland, OR 97239	Project: Cornelius Estby GW MW Install and Sampling Project Number: O010.014.002 Project Manager: James Farrow	Report ID: A6A1401 - 01 28 26 1705
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QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 26A0560 - EPA 5030C						Water						
Blank (26A0560-BLK1)		Prepared: 01/20/26 07:29 Analyzed: 01/20/26 10:04										
<i>Surr: Toluene-d8 (Surr)</i>		Recovery: 99 %		Limits: 80-120 %		Dilution: 1x						
<i>4-Bromofluorobenzene (Surr)</i>		96 %		80-120 %		"						
LCS (26A0560-BS1)		Prepared: 01/20/26 07:29 Analyzed: 01/20/26 09:10										
EPA 8260D												
Acetone	34.6	10.0	20.0	ug/L	1	40.0	---	86	80 - 120%	---	---	
Acrylonitrile	18.2	1.00	2.00	ug/L	1	20.0	---	91	80 - 120%	---	---	
Benzene	19.8	0.100	0.200	ug/L	1	20.0	---	99	80 - 120%	---	---	
Bromobenzene	20.9	0.250	0.500	ug/L	1	20.0	---	105	80 - 120%	---	---	
Bromochloromethane	19.2	0.500	1.00	ug/L	1	20.0	---	96	80 - 120%	---	---	
Bromodichloromethane	20.4	0.500	1.00	ug/L	1	20.0	---	102	80 - 120%	---	---	
Bromoform	19.0	0.500	1.00	ug/L	1	20.0	---	95	80 - 120%	---	---	
Bromomethane	18.3	5.00	5.00	ug/L	1	20.0	---	91	80 - 120%	---	---	
2-Butanone (MEK)	39.0	5.00	10.0	ug/L	1	40.0	---	98	80 - 120%	---	---	
n-Butylbenzene	25.2	0.500	1.00	ug/L	1	20.0	---	126	80 - 120%	---	---	Q-56
sec-Butylbenzene	21.6	0.500	1.00	ug/L	1	20.0	---	108	80 - 120%	---	---	
tert-Butylbenzene	23.8	0.500	1.00	ug/L	1	20.0	---	119	80 - 120%	---	---	
Carbon disulfide	19.0	5.00	10.0	ug/L	1	20.0	---	95	80 - 120%	---	---	
Carbon tetrachloride	24.2	0.500	1.00	ug/L	1	20.0	---	121	80 - 120%	---	---	Q-56
Chlorobenzene	20.2	0.250	0.500	ug/L	1	20.0	---	101	80 - 120%	---	---	
Chloroethane	18.7	5.00	5.00	ug/L	1	20.0	---	94	80 - 120%	---	---	
Chloroform	19.4	0.500	1.00	ug/L	1	20.0	---	97	80 - 120%	---	---	
Chloromethane	17.8	2.50	5.00	ug/L	1	20.0	---	89	80 - 120%	---	---	
2-Chlorotoluene	22.6	0.500	1.00	ug/L	1	20.0	---	113	80 - 120%	---	---	
4-Chlorotoluene	22.0	0.500	1.00	ug/L	1	20.0	---	110	80 - 120%	---	---	
Dibromochloromethane	21.5	0.500	1.00	ug/L	1	20.0	---	108	80 - 120%	---	---	
1,2-Dibromo-3-chloropropane	21.3	2.50	5.00	ug/L	1	20.0	---	106	80 - 120%	---	---	
1,2-Dibromoethane (EDB)	21.5	0.250	0.500	ug/L	1	20.0	---	108	80 - 120%	---	---	
Dibromomethane	20.3	0.500	1.00	ug/L	1	20.0	---	101	80 - 120%	---	---	
1,2-Dichlorobenzene	22.0	0.250	0.500	ug/L	1	20.0	---	110	80 - 120%	---	---	
1,3-Dichlorobenzene	21.9	0.250	0.500	ug/L	1	20.0	---	109	80 - 120%	---	---	
1,4-Dichlorobenzene	20.5	0.250	0.500	ug/L	1	20.0	---	102	80 - 120%	---	---	
Dichlorodifluoromethane	24.8	0.500	1.00	ug/L	1	20.0	---	124	80 - 120%	---	---	Q-56
1,1-Dichloroethane	20.5	0.200	0.400	ug/L	1	20.0	---	102	80 - 120%	---	---	

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Cameron O'Brien, Project Manager



ANALYTICAL REPORT

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ORELAP ID: OR100062

Terraphase Engineering 5331 S. Macadam Ave Suite #210 Portland, OR 97239	Project: Cornelius Estby GWMW Install and Sampling Project Number: O010.014.002 Project Manager: James Farrow	Report ID: A6A1401 - 01 28 26 1705
---	--	---

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 26A0560 - EPA 5030C						Water						
LCS (26A0560-BS1)	Prepared: 01/20/26 07:29		Analyzed: 01/20/26 09:10									
1,2-Dichloroethane (EDC)	19.3	0.200	0.400	ug/L	1	20.0	---	97	80 - 120%	---	---	
1,1-Dichloroethene	20.5	0.200	0.400	ug/L	1	20.0	---	102	80 - 120%	---	---	
cis-1,2-Dichloroethene	20.0	0.200	0.400	ug/L	1	20.0	---	100	80 - 120%	---	---	
trans-1,2-Dichloroethene	20.8	0.200	0.400	ug/L	1	20.0	---	104	80 - 120%	---	---	
1,2-Dichloropropane	20.0	0.250	0.500	ug/L	1	20.0	---	100	80 - 120%	---	---	
1,3-Dichloropropane	21.4	0.500	1.00	ug/L	1	20.0	---	107	80 - 120%	---	---	
2,2-Dichloropropane	26.7	0.500	1.00	ug/L	1	20.0	---	134	80 - 120%	---	---	Q-56
1,1-Dichloropropene	22.7	0.500	1.00	ug/L	1	20.0	---	113	80 - 120%	---	---	
cis-1,3-Dichloropropene	20.3	0.500	1.00	ug/L	1	20.0	---	102	80 - 120%	---	---	
trans-1,3-Dichloropropene	19.8	0.500	1.00	ug/L	1	20.0	---	99	80 - 120%	---	---	
Ethylbenzene	21.8	0.250	0.500	ug/L	1	20.0	---	109	80 - 120%	---	---	
Hexachlorobutadiene	24.2	2.50	5.00	ug/L	1	20.0	---	121	80 - 120%	---	---	Q-56
2-Hexanone	38.4	5.00	10.0	ug/L	1	40.0	---	96	80 - 120%	---	---	
Isopropylbenzene	24.4	0.500	1.00	ug/L	1	20.0	---	122	80 - 120%	---	---	Q-56
4-Isopropyltoluene	21.6	0.500	1.00	ug/L	1	20.0	---	108	80 - 120%	---	---	
Methylene chloride	19.9	5.00	10.0	ug/L	1	20.0	---	100	80 - 120%	---	---	
4-Methyl-2-pentanone (MiBK)	41.6	5.00	10.0	ug/L	1	40.0	---	104	80 - 120%	---	---	
Methyl tert-butyl ether (MTBE)	21.9	0.500	1.00	ug/L	1	20.0	---	109	80 - 120%	---	---	
Naphthalene	19.1	2.50	5.00	ug/L	1	20.0	---	96	80 - 120%	---	---	
n-Propylbenzene	22.4	0.250	0.500	ug/L	1	20.0	---	112	80 - 120%	---	---	
Styrene	23.2	0.500	1.00	ug/L	1	20.0	---	116	80 - 120%	---	---	
1,1,1,2-Tetrachloroethane	22.2	0.200	0.400	ug/L	1	20.0	---	111	80 - 120%	---	---	
1,1,2,2-Tetrachloroethane	21.1	0.250	0.500	ug/L	1	20.0	---	105	80 - 120%	---	---	
Tetrachloroethene (PCE)	21.5	0.200	0.400	ug/L	1	20.0	---	107	80 - 120%	---	---	
Toluene	20.1	0.500	1.00	ug/L	1	20.0	---	101	80 - 120%	---	---	
1,2,3-Trichlorobenzene	20.1	1.00	2.00	ug/L	1	20.0	---	100	80 - 120%	---	---	
1,2,4-Trichlorobenzene	19.8	1.00	2.00	ug/L	1	20.0	---	99	80 - 120%	---	---	
1,1,1-Trichloroethane	21.8	0.200	0.400	ug/L	1	20.0	---	109	80 - 120%	---	---	
1,1,2-Trichloroethane	20.6	0.250	0.500	ug/L	1	20.0	---	103	80 - 120%	---	---	
Trichloroethene (TCE)	20.9	0.200	0.400	ug/L	1	20.0	---	104	80 - 120%	---	---	
Trichlorofluoromethane	24.1	1.00	2.00	ug/L	1	20.0	---	120	80 - 120%	---	---	
1,2,3-Trichloropropane	20.6	0.500	1.00	ug/L	1	20.0	---	103	80 - 120%	---	---	
1,2,4-Trimethylbenzene	21.0	0.500	1.00	ug/L	1	20.0	---	105	80 - 120%	---	---	
1,3,5-Trimethylbenzene	21.1	0.500	1.00	ug/L	1	20.0	---	105	80 - 120%	---	---	

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Cameron O'Brien, Project Manager



ANALYTICAL REPORT

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---	--	--

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 26A0560 - EPA 5030C						Water						
LCS (26A0560-BS1)		Prepared: 01/20/26 07:29		Analyzed: 01/20/26 09:10								
Vinyl chloride	21.8	0.100	0.200	ug/L	1	20.0	---	109	80 - 120%	---	---	
m,p-Xylene	44.4	0.500	1.00	ug/L	1	40.0	---	111	80 - 120%	---	---	
o-Xylene	22.9	0.250	0.500	ug/L	1	20.0	---	115	80 - 120%	---	---	
<i>Surr: 1,4-Difluorobenzene (Surr)</i>		Recovery: 98 %		Limits: 80-120 %		Dilution: 1x						
<i>Toluene-d8 (Surr)</i>		100 %		80-120 %		"						
<i>4-Bromofluorobenzene (Surr)</i>		103 %		80-120 %		"						

Matrix Spike (26A0560-MS1) Prepared: 01/20/26 07:29 Analyzed: 01/20/26 12:20

QC Source Sample: COEP-MW-04-20260113 (A6A1401-04RE1)

EPA 8260D

Acetone	55.0	10.0	20.0	ug/L	1	40.0	ND	138	39 - 160%	---	---	
Acrylonitrile	19.3	1.00	2.00	ug/L	1	20.0	ND	96	63 - 135%	---	---	
Benzene	20.6	0.100	0.200	ug/L	1	20.0	ND	103	79 - 120%	---	---	
Bromobenzene	20.2	0.250	0.500	ug/L	1	20.0	ND	101	80 - 120%	---	---	
Bromochloromethane	20.1	0.500	1.00	ug/L	1	20.0	ND	100	78 - 123%	---	---	
Bromodichloromethane	20.8	0.500	1.00	ug/L	1	20.0	ND	104	79 - 125%	---	---	
Bromoform	18.4	0.500	1.00	ug/L	1	20.0	ND	92	66 - 130%	---	---	
Bromomethane	20.2	5.00	5.00	ug/L	1	20.0	ND	101	53 - 141%	---	---	
2-Butanone (MEK)	41.4	5.00	10.0	ug/L	1	40.0	ND	103	56 - 143%	---	---	
n-Butylbenzene	25.5	0.500	1.00	ug/L	1	20.0	ND	127	75 - 128%	---	---	Q-54d
sec-Butylbenzene	21.4	0.500	1.00	ug/L	1	20.0	ND	107	77 - 126%	---	---	
tert-Butylbenzene	23.2	0.500	1.00	ug/L	1	20.0	ND	116	78 - 124%	---	---	
Carbon disulfide	21.4	5.00	10.0	ug/L	1	20.0	ND	107	64 - 133%	---	---	
Carbon tetrachloride	24.3	0.500	1.00	ug/L	1	20.0	ND	122	72 - 136%	---	---	Q-54
Chlorobenzene	20.3	0.250	0.500	ug/L	1	20.0	ND	101	80 - 120%	---	---	
Chloroethane	21.6	5.00	5.00	ug/L	1	20.0	ND	108	60 - 138%	---	---	
Chloroform	19.5	0.500	1.00	ug/L	1	20.0	ND	97	79 - 124%	---	---	
Chloromethane	19.4	2.50	5.00	ug/L	1	20.0	ND	97	50 - 139%	---	---	
2-Chlorotoluene	22.0	0.500	1.00	ug/L	1	20.0	ND	110	79 - 122%	---	---	
4-Chlorotoluene	21.7	0.500	1.00	ug/L	1	20.0	ND	108	78 - 122%	---	---	
Dibromochloromethane	20.8	0.500	1.00	ug/L	1	20.0	ND	104	74 - 126%	---	---	
1,2-Dibromo-3-chloropropane	20.7	2.50	5.00	ug/L	1	20.0	ND	103	62 - 128%	---	---	
1,2-Dibromoethane (EDB)	21.0	0.250	0.500	ug/L	1	20.0	ND	105	77 - 121%	---	---	
Dibromomethane	20.6	0.500	1.00	ug/L	1	20.0	ND	103	79 - 123%	---	---	

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Cameron O'Brien, Project Manager



ANALYTICAL REPORT

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QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 26A0560 - EPA 5030C						Water						
Matrix Spike (26A0560-MS1)		Prepared: 01/20/26 07:29 Analyzed: 01/20/26 12:20										
QC Source Sample: COEP-MW-04-20260113 (A6A1401-04RE1)												
1,2-Dichlorobenzene	21.6	0.250	0.500	ug/L	1	20.0	ND	108	80 - 120%	---	---	
1,3-Dichlorobenzene	21.6	0.250	0.500	ug/L	1	20.0	ND	108	80 - 120%	---	---	
1,4-Dichlorobenzene	20.2	0.250	0.500	ug/L	1	20.0	ND	101	79 - 120%	---	---	
Dichlorodifluoromethane	25.1	0.500	1.00	ug/L	1	20.0	ND	125	32 - 152%	---	---	Q-54c
1,1-Dichloroethane	21.1	0.200	0.400	ug/L	1	20.0	ND	105	77 - 125%	---	---	
1,2-Dichloroethane (EDC)	19.4	0.200	0.400	ug/L	1	20.0	ND	97	73 - 128%	---	---	
1,1-Dichloroethene	22.2	0.200	0.400	ug/L	1	20.0	ND	111	71 - 131%	---	---	
cis-1,2-Dichloroethene	20.6	0.200	0.400	ug/L	1	20.0	ND	103	78 - 123%	---	---	
trans-1,2-Dichloroethene	21.7	0.200	0.400	ug/L	1	20.0	ND	109	75 - 124%	---	---	
1,2-Dichloropropane	20.5	0.250	0.500	ug/L	1	20.0	ND	102	78 - 122%	---	---	
1,3-Dichloropropane	21.1	0.500	1.00	ug/L	1	20.0	ND	105	80 - 120%	---	---	
2,2-Dichloropropane	26.6	0.500	1.00	ug/L	1	20.0	ND	133	60 - 139%	---	---	Q-54a
1,1-Dichloropropene	23.5	0.500	1.00	ug/L	1	20.0	ND	117	79 - 125%	---	---	
cis-1,3-Dichloropropene	18.7	0.500	1.00	ug/L	1	20.0	ND	94	75 - 124%	---	---	
trans-1,3-Dichloropropene	19.5	0.500	1.00	ug/L	1	20.0	ND	97	73 - 127%	---	---	
Ethylbenzene	21.6	0.250	0.500	ug/L	1	20.0	ND	108	79 - 121%	---	---	
Hexachlorobutadiene	23.2	2.50	5.00	ug/L	1	20.0	ND	116	66 - 134%	---	---	Q-54
2-Hexanone	39.0	5.00	10.0	ug/L	1	40.0	ND	98	57 - 139%	---	---	
Isopropylbenzene	23.8	0.500	1.00	ug/L	1	20.0	ND	119	72 - 131%	---	---	Q-54b
4-Isopropyltoluene	21.3	0.500	1.00	ug/L	1	20.0	ND	106	77 - 127%	---	---	
Methylene chloride	20.2	5.00	10.0	ug/L	1	20.0	ND	101	74 - 124%	---	---	
4-Methyl-2-pentanone (MIBK)	42.2	5.00	10.0	ug/L	1	40.0	ND	105	67 - 130%	---	---	
Methyl tert-butyl ether (MTBE)	21.7	0.500	1.00	ug/L	1	20.0	ND	108	71 - 124%	---	---	
Naphthalene	18.3	2.50	5.00	ug/L	1	20.0	ND	92	61 - 128%	---	---	
n-Propylbenzene	22.4	0.250	0.500	ug/L	1	20.0	ND	112	76 - 126%	---	---	
Styrene	22.4	0.500	1.00	ug/L	1	20.0	ND	112	78 - 123%	---	---	
1,1,1,2-Tetrachloroethane	21.7	0.200	0.400	ug/L	1	20.0	ND	108	78 - 124%	---	---	
1,1,2,2-Tetrachloroethane	21.6	0.250	0.500	ug/L	1	20.0	ND	108	71 - 121%	---	---	
Tetrachloroethene (PCE)	20.8	0.200	0.400	ug/L	1	20.0	ND	104	74 - 129%	---	---	
Toluene	20.0	0.500	1.00	ug/L	1	20.0	ND	100	80 - 121%	---	---	
1,2,3-Trichlorobenzene	19.3	1.00	2.00	ug/L	1	20.0	ND	97	69 - 129%	---	---	
1,2,4-Trichlorobenzene	18.9	1.00	2.00	ug/L	1	20.0	ND	95	69 - 130%	---	---	
1,1,1-Trichloroethane	21.8	0.200	0.400	ug/L	1	20.0	ND	109	74 - 131%	---	---	

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Cameron O'Brien, Project Manager



ANALYTICAL REPORT

Apex Laboratories, LLC

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Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

Terraphase Engineering 5331 S. Macadam Ave Suite #210 Portland, OR 97239	Project: Cornelius Estby GW MW Install and Sampling Project Number: O010.014.002 Project Manager: James Farrow	Report ID: A6A1401 - 01 28 26 1705
---	---	--

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 26A0560 - EPA 5030C						Water						
Matrix Spike (26A0560-MS1)		Prepared: 01/20/26 07:29 Analyzed: 01/20/26 12:20										
QC Source Sample: COEP-MW-04-20260113 (A6A1401-04RE1)												
1,1,2-Trichloroethane	20.3	0.250	0.500	ug/L	1	20.0	ND	102	80 - 120%	---	---	
Trichloroethene (TCE)	20.9	0.200	0.400	ug/L	1	20.0	ND	104	79 - 123%	---	---	
Trichlorofluoromethane	25.5	1.00	2.00	ug/L	1	20.0	ND	128	65 - 141%	---	---	
1,2,3-Trichloropropane	20.4	0.500	1.00	ug/L	1	20.0	ND	102	73 - 122%	---	---	
1,2,4-Trimethylbenzene	20.7	0.500	1.00	ug/L	1	20.0	ND	103	76 - 124%	---	---	
1,3,5-Trimethylbenzene	21.1	0.500	1.00	ug/L	1	20.0	ND	106	75 - 124%	---	---	
Vinyl chloride	23.2	0.100	0.200	ug/L	1	20.0	ND	116	58 - 137%	---	---	
m,p-Xylene	44.2	0.500	1.00	ug/L	1	40.0	ND	111	80 - 121%	---	---	
o-Xylene	22.4	0.250	0.500	ug/L	1	20.0	ND	112	78 - 122%	---	---	
<i>Surr: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 100 %</i>		<i>Limits: 80-120 %</i>		<i>Dilution: 1x</i>						
<i>Toluene-d8 (Surr)</i>		<i>100 %</i>		<i>80-120 %</i>		<i>"</i>						
<i>4-Bromofluorobenzene (Surr)</i>		<i>99 %</i>		<i>80-120 %</i>		<i>"</i>						

Matrix Spike Dup (26A0560-MSD1)		Prepared: 01/20/26 07:29 Analyzed: 01/20/26 12:47										
QC Source Sample: COEP-MW-04-20260113 (A6A1401-04RE1)												
EPA 8260D												
Acetone	48.5	10.0	20.0	ug/L	1	40.0	ND	121	39 - 160%	13	30%	
Acrylonitrile	19.1	1.00	2.00	ug/L	1	20.0	ND	96	63 - 135%	0.7	30%	
Benzene	20.6	0.100	0.200	ug/L	1	20.0	ND	103	79 - 120%	0.4	30%	
Bromobenzene	20.8	0.250	0.500	ug/L	1	20.0	ND	104	80 - 120%	3	30%	
Bromochloromethane	19.7	0.500	1.00	ug/L	1	20.0	ND	99	78 - 123%	2	30%	
Bromodichloromethane	20.9	0.500	1.00	ug/L	1	20.0	ND	105	79 - 125%	0.7	30%	
Bromoform	19.0	0.500	1.00	ug/L	1	20.0	ND	95	66 - 130%	3	30%	
Bromomethane	20.1	5.00	5.00	ug/L	1	20.0	ND	101	53 - 141%	0.5	30%	
2-Butanone (MEK)	40.3	5.00	10.0	ug/L	1	40.0	ND	101	56 - 143%	3	30%	
n-Butylbenzene	25.5	0.500	1.00	ug/L	1	20.0	ND	128	75 - 128%	0.3	30%	Q-54d
sec-Butylbenzene	22.0	0.500	1.00	ug/L	1	20.0	ND	110	77 - 126%	3	30%	
tert-Butylbenzene	23.7	0.500	1.00	ug/L	1	20.0	ND	118	78 - 124%	2	30%	
Carbon disulfide	21.4	5.00	10.0	ug/L	1	20.0	ND	107	64 - 133%	0	30%	
Carbon tetrachloride	24.5	0.500	1.00	ug/L	1	20.0	ND	123	72 - 136%	0.9	30%	Q-54
Chlorobenzene	20.7	0.250	0.500	ug/L	1	20.0	ND	103	80 - 120%	2	30%	
Chloroethane	21.6	5.00	5.00	ug/L	1	20.0	ND	108	60 - 138%	0	30%	

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Terraphase Engineering 5331 S. Macadam Ave Suite #210 Portland, OR 97239	Project: Cornelius Estby GW MW Install and Sampling Project Number: O010.014.002 Project Manager: James Farrow	Report ID: A6A1401 - 01 28 26 1705
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QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 26A0560 - EPA 5030C						Water						
Matrix Spike Dup (26A0560-MSD1)		Prepared: 01/20/26 07:29 Analyzed: 01/20/26 12:47										
QC Source Sample: COEP-MW-04-20260113 (A6A1401-04RE1)												
Chloroform	19.5	0.500	1.00	ug/L	1	20.0	ND	97	79 - 124%	0	30%	
Chloromethane	19.5	2.50	5.00	ug/L	1	20.0	ND	98	50 - 139%	0.4	30%	
2-Chlorotoluene	22.7	0.500	1.00	ug/L	1	20.0	ND	113	79 - 122%	3	30%	
4-Chlorotoluene	22.0	0.500	1.00	ug/L	1	20.0	ND	110	78 - 122%	1	30%	
Dibromochloromethane	21.0	0.500	1.00	ug/L	1	20.0	ND	105	74 - 126%	0.7	30%	
1,2-Dibromo-3-chloropropane	20.9	2.50	5.00	ug/L	1	20.0	ND	105	62 - 128%	1	30%	
1,2-Dibromoethane (EDB)	21.1	0.250	0.500	ug/L	1	20.0	ND	106	77 - 121%	0.5	30%	
Dibromomethane	20.5	0.500	1.00	ug/L	1	20.0	ND	102	79 - 123%	0.8	30%	
1,2-Dichlorobenzene	22.1	0.250	0.500	ug/L	1	20.0	ND	111	80 - 120%	2	30%	
1,3-Dichlorobenzene	22.2	0.250	0.500	ug/L	1	20.0	ND	111	80 - 120%	3	30%	
1,4-Dichlorobenzene	20.6	0.250	0.500	ug/L	1	20.0	ND	103	79 - 120%	2	30%	
Dichlorodifluoromethane	25.7	0.500	1.00	ug/L	1	20.0	ND	128	32 - 152%	2	30%	Q-54c
1,1-Dichloroethane	20.9	0.200	0.400	ug/L	1	20.0	ND	105	77 - 125%	0.7	30%	
1,2-Dichloroethane (EDC)	19.4	0.200	0.400	ug/L	1	20.0	ND	97	73 - 128%	0	30%	
1,1-Dichloroethene	21.6	0.200	0.400	ug/L	1	20.0	ND	108	71 - 131%	3	30%	
cis-1,2-Dichloroethene	20.5	0.200	0.400	ug/L	1	20.0	ND	102	78 - 123%	0.5	30%	
trans-1,2-Dichloroethene	21.7	0.200	0.400	ug/L	1	20.0	ND	108	75 - 124%	0.2	30%	
1,2-Dichloropropane	20.6	0.250	0.500	ug/L	1	20.0	ND	103	78 - 122%	0.8	30%	
1,3-Dichloropropane	21.0	0.500	1.00	ug/L	1	20.0	ND	105	80 - 120%	0.2	30%	
2,2-Dichloropropane	25.9	0.500	1.00	ug/L	1	20.0	ND	130	60 - 139%	3	30%	Q-54a
1,1-Dichloropropene	23.0	0.500	1.00	ug/L	1	20.0	ND	115	79 - 125%	2	30%	
cis-1,3-Dichloropropene	18.8	0.500	1.00	ug/L	1	20.0	ND	94	75 - 124%	0.7	30%	
trans-1,3-Dichloropropene	19.7	0.500	1.00	ug/L	1	20.0	ND	99	73 - 127%	1	30%	
Ethylbenzene	22.0	0.250	0.500	ug/L	1	20.0	ND	110	79 - 121%	2	30%	
Hexachlorobutadiene	24.0	2.50	5.00	ug/L	1	20.0	ND	120	66 - 134%	3	30%	Q-54
2-Hexanone	38.8	5.00	10.0	ug/L	1	40.0	ND	97	57 - 139%	0.6	30%	
Isopropylbenzene	24.6	0.500	1.00	ug/L	1	20.0	ND	123	72 - 131%	3	30%	Q-54b
4-Isopropyltoluene	21.6	0.500	1.00	ug/L	1	20.0	ND	108	77 - 127%	1	30%	
Methylene chloride	20.1	5.00	10.0	ug/L	1	20.0	ND	100	74 - 124%	0.7	30%	
4-Methyl-2-pentanone (MiBK)	42.5	5.00	10.0	ug/L	1	40.0	ND	106	67 - 130%	0.8	30%	
Methyl tert-butyl ether (MTBE)	21.8	0.500	1.00	ug/L	1	20.0	ND	109	71 - 124%	0.3	30%	
Naphthalene	18.9	2.50	5.00	ug/L	1	20.0	ND	94	61 - 128%	3	30%	
n-Propylbenzene	22.8	0.250	0.500	ug/L	1	20.0	ND	114	76 - 126%	2	30%	

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Terraphase Engineering 5331 S. Macadam Ave Suite #210 Portland, OR 97239	Project: Cornelius Estby GW MW Install and Sampling Project Number: O010.014.002 Project Manager: James Farrow	Report ID: A6A1401 - 01 28 26 1705
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QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 26A0560 - EPA 5030C						Water						
Matrix Spike Dup (26A0560-MSD1)		Prepared: 01/20/26 07:29 Analyzed: 01/20/26 12:47										
QC Source Sample: COEP-MW-04-20260113 (A6A1401-04RE1)												
Styrene	22.7	0.500	1.00	ug/L	1	20.0	ND	113	78 - 123%	1	30%	
1,1,1,2-Tetrachloroethane	22.0	0.200	0.400	ug/L	1	20.0	ND	110	78 - 124%	1	30%	
1,1,2,2-Tetrachloroethane	21.8	0.250	0.500	ug/L	1	20.0	ND	109	71 - 121%	1	30%	
Tetrachloroethene (PCE)	21.5	0.200	0.400	ug/L	1	20.0	ND	108	74 - 129%	3	30%	
Toluene	20.4	0.500	1.00	ug/L	1	20.0	ND	102	80 - 121%	2	30%	
1,2,3-Trichlorobenzene	19.9	1.00	2.00	ug/L	1	20.0	ND	99	69 - 129%	3	30%	
1,2,4-Trichlorobenzene	19.4	1.00	2.00	ug/L	1	20.0	ND	97	69 - 130%	3	30%	
1,1,1-Trichloroethane	21.8	0.200	0.400	ug/L	1	20.0	ND	109	74 - 131%	0.5	30%	
1,1,2-Trichloroethane	20.6	0.250	0.500	ug/L	1	20.0	ND	103	80 - 120%	1	30%	
Trichloroethene (TCE)	21.1	0.200	0.400	ug/L	1	20.0	ND	105	79 - 123%	0.9	30%	
Trichlorofluoromethane	25.7	1.00	2.00	ug/L	1	20.0	ND	128	65 - 141%	0.7	30%	
1,2,3-Trichloropropane	20.7	0.500	1.00	ug/L	1	20.0	ND	104	73 - 122%	1	30%	
1,2,4-Trimethylbenzene	21.0	0.500	1.00	ug/L	1	20.0	ND	105	76 - 124%	2	30%	
1,3,5-Trimethylbenzene	20.8	0.500	1.00	ug/L	1	20.0	ND	104	75 - 124%	2	30%	
Vinyl chloride	23.8	0.100	0.200	ug/L	1	20.0	ND	119	58 - 137%	2	30%	
m,p-Xylene	44.7	0.500	1.00	ug/L	1	40.0	ND	112	80 - 121%	1	30%	
o-Xylene	22.6	0.250	0.500	ug/L	1	20.0	ND	113	78 - 122%	0.4	30%	
<i>Surr: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 100 %</i>		<i>Limits: 80-120 %</i>		<i>Dilution: 1x</i>						
<i>Toluene-d8 (Surr)</i>		<i>99 %</i>		<i>80-120 %</i>		<i>"</i>						
<i>4-Bromofluorobenzene (Surr)</i>		<i>101 %</i>		<i>80-120 %</i>		<i>"</i>						

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QUALITY CONTROL (QC) SAMPLE RESULTS

Polycyclic Aromatic Hydrocarbons (PAHs) by EPA 8270E (Large Volume Injection)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 26A0437 - EPA 3511 (Bottle Extraction)						Water						
Blank (26A0437-BLK1)		Prepared: 01/15/26 10:52 Analyzed: 01/15/26 15:46										
EPA 8270E LVI												
Acenaphthene	ND	0.0160	0.0320	ug/L	1	---	---	---	---	---	---	---
Acenaphthylene	ND	0.0160	0.0320	ug/L	1	---	---	---	---	---	---	---
Anthracene	ND	0.0160	0.0320	ug/L	1	---	---	---	---	---	---	---
Benz(a)anthracene	ND	0.00800	0.0160	ug/L	1	---	---	---	---	---	---	---
Benzo(a)pyrene	ND	0.00800	0.0160	ug/L	1	---	---	---	---	---	---	---
Benzo(b)fluoranthene	ND	0.00800	0.0160	ug/L	1	---	---	---	---	---	---	---
Benzo(k)fluoranthene	ND	0.00800	0.0160	ug/L	1	---	---	---	---	---	---	---
Benzo(g,h,i)perylene	ND	0.0160	0.0320	ug/L	1	---	---	---	---	---	---	---
Chrysene	ND	0.00800	0.0160	ug/L	1	---	---	---	---	---	---	---
Dibenz(a,h)anthracene	ND	0.00800	0.0160	ug/L	1	---	---	---	---	---	---	---
Fluoranthene	ND	0.0160	0.0320	ug/L	1	---	---	---	---	---	---	---
Fluorene	ND	0.0160	0.0320	ug/L	1	---	---	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	ND	0.00800	0.0160	ug/L	1	---	---	---	---	---	---	---
1-Methylnaphthalene	ND	0.0320	0.0640	ug/L	1	---	---	---	---	---	---	---
2-Methylnaphthalene	ND	0.0320	0.0640	ug/L	1	---	---	---	---	---	---	---
Naphthalene	ND	0.0320	0.0640	ug/L	1	---	---	---	---	---	---	---
Phenanthrene	ND	0.0320	0.0640	ug/L	1	---	---	---	---	---	---	---
Pyrene	ND	0.0160	0.0320	ug/L	1	---	---	---	---	---	---	---
Carbazole	ND	0.0160	0.0320	ug/L	1	---	---	---	---	---	---	---
Dibenzofuran	ND	0.0160	0.0320	ug/L	1	---	---	---	---	---	---	---
<i>Surr: Acenaphthylene-d8 (Surr)</i>		<i>Recovery: 100 %</i>		<i>Limits: 78-134 %</i>		<i>Dilution: 1x</i>						
<i>Benzo(a)pyrene-d12 (Surr)</i>		<i>115 %</i>		<i>80-132 %</i>		<i>"</i>						

LCS (26A0437-BS1)		Prepared: 01/15/26 10:52 Analyzed: 01/15/26 16:19										
EPA 8270E LVI												
Acenaphthene	1.68	0.0160	0.0320	ug/L	1	1.60	---	105	80 - 120%	---	---	---
Acenaphthylene	1.67	0.0160	0.0320	ug/L	1	1.60	---	105	80 - 124%	---	---	---
Anthracene	1.74	0.0160	0.0320	ug/L	1	1.60	---	109	80 - 123%	---	---	---
Benz(a)anthracene	1.61	0.00800	0.0160	ug/L	1	1.60	---	100	80 - 122%	---	---	---
Benzo(a)pyrene	1.67	0.00800	0.0160	ug/L	1	1.60	---	104	80 - 129%	---	---	---
Benzo(b)fluoranthene	1.68	0.00800	0.0160	ug/L	1	1.60	---	105	80 - 124%	---	---	---
Benzo(k)fluoranthene	1.65	0.00800	0.0160	ug/L	1	1.60	---	103	80 - 125%	---	---	---
Benzo(g,h,i)perylene	1.58	0.0160	0.0320	ug/L	1	1.60	---	98	80 - 120%	---	---	---

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Cameron O'Brien, Project Manager



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QUALITY CONTROL (QC) SAMPLE RESULTS

Polycyclic Aromatic Hydrocarbons (PAHs) by EPA 8270E (Large Volume Injection)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 26A0437 - EPA 3511 (Bottle Extraction)						Water						
LCS (26A0437-BS1)		Prepared: 01/15/26 10:52		Analyzed: 01/15/26 16:19								
Chrysene	1.56	0.00800	0.0160	ug/L	1	1.60	---	97	80 - 120%	---	---	
Dibenz(a,h)anthracene	1.53	0.00800	0.0160	ug/L	1	1.60	---	96	80 - 120%	---	---	
Fluoranthene	1.71	0.0160	0.0320	ug/L	1	1.60	---	107	80 - 126%	---	---	
Fluorene	1.78	0.0160	0.0320	ug/L	1	1.60	---	111	77 - 127%	---	---	
Indeno(1,2,3-cd)pyrene	1.51	0.00800	0.0160	ug/L	1	1.60	---	94	80 - 121%	---	---	
1-Methylnaphthalene	1.94	0.0320	0.0640	ug/L	1	1.60	---	121	53 - 148%	---	---	
2-Methylnaphthalene	1.90	0.0320	0.0640	ug/L	1	1.60	---	119	48 - 150%	---	---	
Naphthalene	1.73	0.0320	0.0640	ug/L	1	1.60	---	108	78 - 120%	---	---	
Phenanthrene	1.50	0.0320	0.0640	ug/L	1	1.60	---	94	80 - 120%	---	---	
Pyrene	1.75	0.0160	0.0320	ug/L	1	1.60	---	109	80 - 125%	---	---	
Carbazole	1.71	0.0160	0.0320	ug/L	1	1.60	---	107	65 - 141%	---	---	
Dibenzofuran	1.61	0.0160	0.0320	ug/L	1	1.60	---	101	76 - 121%	---	---	
<i>Surr: Acenaphthylene-d8 (Surr)</i>		Recovery: 98 %		Limits: 78-134 %		Dilution: 1x						
<i>Benzo(a)pyrene-d12 (Surr)</i>		116 %		80-132 %		"						

Matrix Spike (26A0437-MS1)		Prepared: 01/15/26 10:52		Analyzed: 01/15/26 17:24								
QC Source Sample: COEP-MW-04-20260113 (A6A1401-04)												
EPA 8270E LVI												
Acenaphthene	1.95	0.0192	0.0384	ug/L	1	1.92	ND	101	80 - 120%	---	---	
Acenaphthylene	1.95	0.0192	0.0384	ug/L	1	1.92	ND	101	80 - 124%	---	---	
Anthracene	1.71	0.0192	0.0384	ug/L	1	1.92	ND	89	80 - 123%	---	---	
Benz(a)anthracene	1.80	0.00959	0.0192	ug/L	1	1.92	ND	94	80 - 122%	---	---	
Benzo(a)pyrene	1.67	0.00959	0.0192	ug/L	1	1.92	ND	87	80 - 129%	---	---	
Benzo(b)fluoranthene	2.49	0.00959	0.0192	ug/L	1	1.92	ND	130	80 - 124%	---	---	Q-01
Benzo(k)fluoranthene	2.40	0.00959	0.0192	ug/L	1	1.92	ND	125	80 - 125%	---	---	
Benzo(g,h,i)perylene	1.05	0.0192	0.0384	ug/L	1	1.92	ND	54	80 - 120%	---	---	Q-01
Chrysene	1.72	0.00959	0.0192	ug/L	1	1.92	ND	89	80 - 120%	---	---	
Dibenz(a,h)anthracene	1.55	0.00959	0.0192	ug/L	1	1.92	ND	81	80 - 120%	---	---	
Fluoranthene	1.95	0.0192	0.0384	ug/L	1	1.92	ND	102	80 - 126%	---	---	
Fluorene	2.16	0.0192	0.0384	ug/L	1	1.92	ND	112	77 - 127%	---	---	
Indeno(1,2,3-cd)pyrene	1.17	0.00959	0.0192	ug/L	1	1.92	ND	61	80 - 121%	---	---	Q-01
1-Methylnaphthalene	2.17	0.0384	0.0767	ug/L	1	1.92	ND	113	53 - 148%	---	---	
2-Methylnaphthalene	2.15	0.0384	0.0767	ug/L	1	1.92	ND	112	48 - 150%	---	---	
Naphthalene	2.06	0.0384	0.0767	ug/L	1	1.92	ND	107	78 - 120%	---	---	

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Cameron O'Brien, Project Manager



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503-718-2323
ORELAP ID: OR100062

Terraphase Engineering 5331 S. Macadam Ave Suite #210 Portland, OR 97239	Project: Cornelius Estby GW MW Install and Sampling Project Number: O010.014.002 Project Manager: James Farrow	Report ID: A6A1401 - 01 28 26 1705
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QUALITY CONTROL (QC) SAMPLE RESULTS

Polycyclic Aromatic Hydrocarbons (PAHs) by EPA 8270E (Large Volume Injection)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 26A0437 - EPA 3511 (Bottle Extraction)						Water						
Matrix Spike (26A0437-MS1)		Prepared: 01/15/26 10:52 Analyzed: 01/15/26 17:24										
QC Source Sample: COEP-MW-04-20260113 (A6A1401-04)												
Phenanthrene	1.75	0.0384	0.0767	ug/L	1	1.92	ND	91	80 - 120%	---	---	
Pyrene	1.83	0.0192	0.0384	ug/L	1	1.92	ND	95	80 - 125%	---	---	
Carbazole	1.91	0.0192	0.0384	ug/L	1	1.92	ND	99	65 - 141%	---	---	
Dibenzofuran	1.94	0.0192	0.0384	ug/L	1	1.92	ND	101	76 - 121%	---	---	
<i>Surr: Acenaphthylene-d8 (Surr)</i>		Recovery: 101 %		Limits: 78-134 %		Dilution: 1x						
<i>Benzo(a)pyrene-d12 (Surr)</i>		148 %		80-132 %		"						S-03

Matrix Spike Dup (26A0437-MSD1)						Prepared: 01/15/26 10:52 Analyzed: 01/15/26 17:56						
QC Source Sample: COEP-MW-04-20260113 (A6A1401-04)												
EPA 8270E LVI												
Acenaphthene	1.79	0.0171	0.0342	ug/L	1	1.71	ND	105	80 - 120%	8	30%	
Acenaphthylene	1.77	0.0171	0.0342	ug/L	1	1.71	ND	104	80 - 124%	9	30%	
Anthracene	1.63	0.0171	0.0342	ug/L	1	1.71	ND	96	80 - 123%	4	30%	
Benz(a)anthracene	1.69	0.00855	0.0171	ug/L	1	1.71	ND	99	80 - 122%	6	30%	
Benzo(a)pyrene	1.76	0.00855	0.0171	ug/L	1	1.71	ND	103	80 - 129%	5	30%	
Benzo(b)fluoranthene	2.21	0.00855	0.0171	ug/L	1	1.71	ND	129	80 - 124%	12	30%	Q-01
Benzo(k)fluoranthene	2.23	0.00855	0.0171	ug/L	1	1.71	ND	130	80 - 125%	7	30%	Q-01
Benzo(g,h,i)perylene	1.20	0.0171	0.0342	ug/L	1	1.71	ND	70	80 - 120%	14	30%	Q-01
Chrysene	1.60	0.00855	0.0171	ug/L	1	1.71	ND	94	80 - 120%	7	30%	
Dibenz(a,h)anthracene	1.50	0.00855	0.0171	ug/L	1	1.71	ND	88	80 - 120%	3	30%	
Fluoranthene	1.78	0.0171	0.0342	ug/L	1	1.71	ND	104	80 - 126%	9	30%	
Fluorene	1.97	0.0171	0.0342	ug/L	1	1.71	ND	115	77 - 127%	9	30%	
Indeno(1,2,3-cd)pyrene	1.27	0.00855	0.0171	ug/L	1	1.71	ND	74	80 - 121%	8	30%	Q-01
1-Methylnaphthalene	1.95	0.0342	0.0684	ug/L	1	1.71	ND	114	53 - 148%	11	30%	
2-Methylnaphthalene	1.94	0.0342	0.0684	ug/L	1	1.71	ND	113	48 - 150%	10	30%	
Naphthalene	1.81	0.0342	0.0684	ug/L	1	1.71	ND	106	78 - 120%	13	30%	
Phenanthrene	1.58	0.0342	0.0684	ug/L	1	1.71	ND	92	80 - 120%	10	30%	
Pyrene	1.70	0.0171	0.0342	ug/L	1	1.71	ND	100	80 - 125%	7	30%	
Carbazole	1.74	0.0171	0.0342	ug/L	1	1.71	ND	102	65 - 141%	9	30%	
Dibenzofuran	1.77	0.0171	0.0342	ug/L	1	1.71	ND	103	76 - 121%	9	30%	
<i>Surr: Acenaphthylene-d8 (Surr)</i>		Recovery: 100 %		Limits: 78-134 %		Dilution: 1x						
<i>Benzo(a)pyrene-d12 (Surr)</i>		146 %		80-132 %		"						S-03

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Cameron O'Brien, Project Manager



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QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 26A0687 - EPA 3015A						Water						
Blank (26A0687-BLK1)		Prepared: 01/22/26 12:40 Analyzed: 01/22/26 21:53										
<u>EPA 6020B</u>												
Lead	0.176	0.110	0.200	ug/L	1	---	---	---	---	---	---	B-02, J
LCS (26A0687-BS1)		Prepared: 01/22/26 12:40 Analyzed: 01/22/26 22:09										
<u>EPA 6020B</u>												
Lead	55.5	0.110	0.200	ug/L	1	55.5	---	100	80 - 120%	---	---	
Duplicate (26A0687-DUP1)		Prepared: 01/22/26 12:40 Analyzed: 01/22/26 22:35										
<u>QC Source Sample: COEP-MW-04-20260113 (A6A1401-04)</u>												
<u>EPA 6020B</u>												
Lead	0.158	0.110	0.200	ug/L	1	---	0.141	---	---	12	20%	J
Matrix Spike (26A0687-MS1)		Prepared: 01/22/26 12:40 Analyzed: 01/22/26 22:40										
<u>QC Source Sample: COEP-MW-04-20260113 (A6A1401-04)</u>												
<u>EPA 6020B</u>												
Lead	52.4	0.110	0.200	ug/L	1	55.5	0.141	94	75 - 125%	---	---	
Matrix Spike Dup (26A0687-MSD1)		Prepared: 01/22/26 12:40 Analyzed: 01/22/26 22:45										
<u>QC Source Sample: COEP-MW-04-20260113 (A6A1401-04)</u>												
<u>EPA 6020B</u>												
Lead	52.0	0.110	0.200	ug/L	1	55.5	0.141	93	75 - 125%	0.8	20%	

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QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 26A0778 - EPA 3015A						Water						
Blank (26A0778-BLK1)		Prepared: 01/26/26 11:37 Analyzed: 01/26/26 14:50										
<u>EPA 6020B</u>												
Lead	ND	0.110	0.200	ug/L	1	---	---	---	---	---	---	---
LCS (26A0778-BS1)		Prepared: 01/26/26 11:37 Analyzed: 01/26/26 14:56										
<u>EPA 6020B</u>												
Lead	49.3	0.110	0.200	ug/L	1	55.5	---	89	80 - 120%	---	---	---
Duplicate (26A0778-DUP1)		Prepared: 01/26/26 11:37 Analyzed: 01/26/26 15:27										
<u>QC Source Sample: COEP- MW-06-20260113 (A6A1401-06RE1)</u>												
<u>EPA 6020B</u>												
Lead	0.262	0.110	0.200	ug/L	1	---	0.278	---	---	6	20%	---
Matrix Spike (26A0778-MS1)		Prepared: 01/26/26 11:37 Analyzed: 01/26/26 15:33										
<u>QC Source Sample: COEP- MW-06-20260113 (A6A1401-06RE1)</u>												
<u>EPA 6020B</u>												
Lead	56.8	0.110	0.200	ug/L	1	55.5	0.278	102	75 - 125%	---	---	---

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QUALITY CONTROL (QC) SAMPLE RESULTS

Dissolved Metals by EPA 6020B (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 26A0734 - Matrix Matched Direct Inject						Water						
Blank (26A0734-BLK1)		Prepared: 01/23/26 13:46 Analyzed: 01/23/26 23:17										
<u>EPA 6020B (Diss)</u>												
Lead	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	---
LCS (26A0734-BS1)		Prepared: 01/23/26 13:46 Analyzed: 01/23/26 23:23										
<u>EPA 6020B (Diss)</u>												
Lead	55.8	0.100	0.200	ug/L	1	55.5	---	101	80 - 120%	---	---	---
Duplicate (26A0734-DUP1)		Prepared: 01/23/26 13:46 Analyzed: 01/24/26 00:02										
<u>QC Source Sample: COEP-MW-04-20260113 (A6A1401-04)</u>												
<u>EPA 6020B (Diss)</u>												
Lead	ND	0.100	0.200	ug/L	1	---	ND	---	---	---	20%	---
Matrix Spike (26A0734-MS1)		Prepared: 01/23/26 13:46 Analyzed: 01/24/26 00:08										
<u>QC Source Sample: COEP-MW-04-20260113 (A6A1401-04)</u>												
<u>EPA 6020B (Diss)</u>												
Lead	56.1	0.100	0.200	ug/L	1	55.5	ND	101	75 - 125%	---	---	---
Matrix Spike Dup (26A0734-MSD1)		Prepared: 01/23/26 13:46 Analyzed: 01/24/26 00:13										
<u>QC Source Sample: COEP-MW-04-20260113 (A6A1401-04)</u>												
<u>EPA 6020B (Diss)</u>												
Lead	56.7	0.100	0.200	ug/L	1	55.5	ND	102	75 - 125%	1	20%	---

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SAMPLE PREPARATION INFORMATION

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Prep: EPA 3510C (Fuels/Acid Ext.)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
<u>Batch: 26A0707</u>							
A6A1401-01	Water	NWTPH-Dx	01/13/26 13:45	01/23/26 07:51	960mL/5mL	1000mL/5mL	1.04
A6A1401-02	Water	NWTPH-Dx	01/13/26 14:15	01/23/26 07:51	960mL/5mL	1000mL/5mL	1.04
A6A1401-03	Water	NWTPH-Dx	01/13/26 16:50	01/23/26 07:51	970mL/5mL	1000mL/5mL	1.03
A6A1401-04	Water	NWTPH-Dx	01/13/26 15:30	01/23/26 07:51	980mL/5mL	1000mL/5mL	1.02
A6A1401-05	Water	NWTPH-Dx	01/13/26 18:02	01/23/26 07:51	1030mL/5mL	1000mL/5mL	0.97
A6A1401-06	Water	NWTPH-Dx	01/13/26 12:25	01/23/26 07:51	1000mL/5mL	1000mL/5mL	1.00

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Prep: EPA 5030C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
<u>Batch: 26A0510</u>							
A6A1401-06	Water	NWTPH-Gx (MS)	01/13/26 12:25	01/19/26 10:10	5mL/5mL	5mL/5mL	1.00
<u>Batch: 26A0560</u>							
A6A1401-01RE1	Water	NWTPH-Gx (MS)	01/13/26 13:45	01/20/26 09:32	5mL/5mL	5mL/5mL	1.00
A6A1401-02RE1	Water	NWTPH-Gx (MS)	01/13/26 14:15	01/20/26 09:32	5mL/5mL	5mL/5mL	1.00
A6A1401-03RE1	Water	NWTPH-Gx (MS)	01/13/26 16:50	01/20/26 09:32	5mL/5mL	5mL/5mL	1.00
A6A1401-04RE1	Water	NWTPH-Gx (MS)	01/13/26 15:30	01/20/26 09:32	5mL/5mL	5mL/5mL	1.00
A6A1401-05RE1	Water	NWTPH-Gx (MS)	01/13/26 18:02	01/20/26 09:32	5mL/5mL	5mL/5mL	1.00

Volatile Organic Compounds by EPA 8260D

Prep: EPA 5030C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
<u>Batch: 26A0510</u>							
A6A1401-01	Water	EPA 8260D	01/13/26 13:45	01/19/26 10:10	5mL/5mL	5mL/5mL	1.00
A6A1401-02	Water	EPA 8260D	01/13/26 14:15	01/19/26 10:10	5mL/5mL	5mL/5mL	1.00
A6A1401-05	Water	EPA 8260D	01/13/26 18:02	01/19/26 10:10	5mL/5mL	5mL/5mL	1.00
A6A1401-06	Water	EPA 8260D	01/13/26 12:25	01/19/26 10:10	5mL/5mL	5mL/5mL	1.00
A6A1401-08	Water	EPA 8260D	01/13/26 18:45	01/19/26 10:10	5mL/5mL	5mL/5mL	1.00
<u>Batch: 26A0560</u>							
A6A1401-01RE1	Water	EPA 8260D	01/13/26 13:45	01/20/26 09:32	5mL/5mL	5mL/5mL	1.00
A6A1401-02RE1	Water	EPA 8260D	01/13/26 14:15	01/20/26 09:32	5mL/5mL	5mL/5mL	1.00
A6A1401-03RE1	Water	EPA 8260D	01/13/26 16:50	01/20/26 09:32	5mL/5mL	5mL/5mL	1.00
A6A1401-04RE1	Water	EPA 8260D	01/13/26 15:30	01/20/26 09:32	5mL/5mL	5mL/5mL	1.00

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SAMPLE PREPARATION INFORMATION

Volatile Organic Compounds by EPA 8260D

Prep: EPA 5030C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
A6A1401-05RE1	Water	EPA 8260D	01/13/26 18:02	01/20/26 09:32	5mL/5mL	5mL/5mL	1.00
A6A1401-06RE1	Water	EPA 8260D	01/13/26 12:25	01/20/26 09:32	5mL/5mL	5mL/5mL	1.00

Polycyclic Aromatic Hydrocarbons (PAHs) by EPA 8270E (Large Volume Injection)

Prep: EPA 3511 (Bottle Extraction)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 26A0437							
A6A1401-01	Water	EPA 8270E LVI	01/13/26 13:45	01/15/26 10:52	112.92mL/5mL	125mL/5mL	1.11
A6A1401-02	Water	EPA 8270E LVI	01/13/26 14:15	01/15/26 10:52	114.02mL/5mL	125mL/5mL	1.10
A6A1401-03RE1	Water	EPA 8270E LVI	01/13/26 16:50	01/15/26 10:52	114.79mL/5mL	125mL/5mL	1.09
A6A1401-04	Water	EPA 8270E LVI	01/13/26 15:30	01/15/26 10:52	107.707mL/5mL	125mL/5mL	1.16
A6A1401-05RE1	Water	EPA 8270E LVI	01/13/26 18:02	01/15/26 10:52	111.57mL/5mL	125mL/5mL	1.12
A6A1401-06	Water	EPA 8270E LVI	01/13/26 12:25	01/15/26 10:52	97.31mL/5mL	125mL/5mL	1.28

Total Metals by EPA 6020B (ICPMS)

Prep: EPA 3015A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 26A0687							
A6A1401-03	Water	EPA 6020B	01/13/26 16:50	01/22/26 12:40	45mL/50mL	45mL/50mL	1.00
A6A1401-04	Water	EPA 6020B	01/13/26 15:30	01/22/26 12:40	45mL/50mL	45mL/50mL	1.00
Batch: 26A0778							
A6A1401-01RE1	Water	EPA 6020B	01/13/26 13:45	01/26/26 11:37	45mL/50mL	45mL/50mL	1.00
A6A1401-02RE1	Water	EPA 6020B	01/13/26 14:15	01/26/26 11:37	45mL/50mL	45mL/50mL	1.00
A6A1401-05RE1	Water	EPA 6020B	01/13/26 18:02	01/26/26 11:37	45mL/50mL	45mL/50mL	1.00
A6A1401-06RE1	Water	EPA 6020B	01/13/26 12:25	01/26/26 11:37	45mL/50mL	45mL/50mL	1.00

Dissolved Metals by EPA 6020B (ICPMS)

Prep: Matrix Matched Direct Inject

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 26A0734							
A6A1401-01	Water	EPA 6020B (Diss)	01/13/26 13:45	01/23/26 13:46	45mL/50mL	45mL/50mL	1.00
A6A1401-02	Water	EPA 6020B (Diss)	01/13/26 14:15	01/23/26 13:46	45mL/50mL	45mL/50mL	1.00
A6A1401-03	Water	EPA 6020B (Diss)	01/13/26 16:50	01/23/26 13:46	45mL/50mL	45mL/50mL	1.00
A6A1401-04	Water	EPA 6020B (Diss)	01/13/26 15:30	01/23/26 13:46	45mL/50mL	45mL/50mL	1.00

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Cameron O'Brien, Project Manager



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

Terraphase Engineering 5331 S. Macadam Ave Suite #210 Portland, OR 97239	Project: Cornelius Estby GW MW Install and Sampling Project Number: O010.014.002 Project Manager: James Farrow	Report ID: A6A1401 - 01 28 26 1705
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SAMPLE PREPARATION INFORMATION

Dissolved Metals by EPA 6020B (ICPMS)

Prep: Matrix Matched Direct Inject

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
A6A1401-05	Water	EPA 6020B (Diss)	01/13/26 18:02	01/23/26 13:46	45mL/50mL	45mL/50mL	1.00
A6A1401-06	Water	EPA 6020B (Diss)	01/13/26 12:25	01/23/26 13:46	45mL/50mL	45mL/50mL	1.00
A6A1401-07	Water	EPA 6020B (Diss)	01/13/26 18:30	01/23/26 13:46	45mL/50mL	45mL/50mL	1.00

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QUALIFIER DEFINITIONS

Client Sample and Quality Control (QC) Sample Qualifier Definitions:

Apex Laboratories

- B-02** Analyte detected in an associated blank at a level between one-half the MRL and the MRL. (See Notes and Conventions below.)
- DCNT** Sample decanted due to the presence of sediment in water samples, or water in sediment or soil samples. (Note: Decanted aqueous sample bottles are not solvent rinsed.)
- F-18** Result for Diesel (Diesel Range Organics, C12-C25) is due to overlap from Gasoline or a Gasoline Range product.
- F-26** Result for Diesel (Diesel Range Organics, C12-C18) is due to overlap from Gasoline or a Gasoline Range product.
- ICV-02** Estimated Result. Initial Calibration Verification (ICV) failed low.
- J** Estimated Result. Result detected below the lowest point of the calibration curve, but above the specified DL.
- Q-01** Spike recovery and/or RPD is outside acceptance limits.
- Q-42** Matrix Spike and/or Duplicate analysis was performed on this sample. % Recovery or RPD for this analyte is outside laboratory control limits. (Refer to the QC Section of Analytical Report.)
- Q-54** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in the associated EPA method by +1%. The results are reported as Estimated Values.
- Q-54a** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in the associated EPA method by +14%. The results are reported as Estimated Values.
- Q-54b** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in the associated EPA method by +2%. The results are reported as Estimated Values.
- Q-54c** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in the associated EPA method by +4%. The results are reported as Estimated Values.
- Q-54d** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in the associated EPA method by +6%. The results are reported as Estimated Values.
- Q-54e** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in the associated EPA method by +9%. The results are reported as Estimated Values.
- Q-56** Daily CCV/LCS recovery for this analyte was above the +/-20% criteria listed in EPA 8260. Samples that are ND (Non-Detect) are not impacted.
- R-02** The Reporting Limit for this analyte has been raised to account for interference from coeluting organic compounds present in the sample.
- S-03** Sample re-extract, or the analysis of an associated Batch QC sample, confirms surrogate failure due to sample matrix effect.
- S-05** Surrogate recovery is estimated due to sample dilution required for high analyte concentration and/or matrix interference.

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REPORTING NOTES AND CONVENTIONS:

Abbreviations:

- DET Analyte DETECTED at or above the detection or reporting limit.
- ND Analyte NOT DETECTED at or above the detection or reporting limit.
- NR Result Not Reported.
- RPD Relative Percent Difference. RPDs for Matrix Spikes and Matrix Spike Duplicates are based on concentration, not recovery.

Detection Limits: Limit of Detection (LOD)

Limits of Detection (LODs) are normally set at a level of one half the validated Limit of Quantitation (LOQ).
If no value is listed ('-----'), then the data has not been evaluated below the Reporting Limit.

Reporting Limits: Limit of Quantitation (LOQ)

Validated Limits of Quantitation (LOQs) are reported as the Reporting Limits for all analyses where the LOQ, MRL, PQL or CRL are requested. The LOQ represents a level at or above the low point of the calibration curve, that has been validated according to Apex Laboratories' comprehensive LOQ policies and procedures.

Reporting and Detection Limits: Default Limits

Default Reporting and Detection Limits are based on 100% dry weight with the minimum dilution for the analysis. Reporting and Detection Limits are raised due to moisture content, additional dilutions required for analysis, matrix interferences and in other cases, as necessary.

Reporting Conventions:

- Basis: Results for soil samples are generally reported on a 100% dry weight basis.
The Result Basis is listed following the units as " dry", " wet", or " " (blank) designation.
- " dry" Sample results and Reporting Limits are reported on a dry weight basis. (i.e. "ug/kg dry")
See Percent Solids section for details of dry weight analysis.
- " wet" Sample results and Reporting Limits for this analysis are normally dry weight corrected, but have not been modified in this case.
- " " Results without 'wet' or 'dry' designation are not normally dry weight corrected. These results are considered 'As Received'.

QC Source:

In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) may be analyzed to demonstrate accuracy and precision of the extraction batch.

Non-Client Batch QC Samples (Duplicates and Matrix Spike/Duplicates) are not included in this report. Please request a Full QC report if this data is required.

Miscellaneous Notes:

- " --- " QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.
- " *** " Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

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REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks:

Standard practice is to evaluate the results from Blank QC Samples down to a level equal to one half of the Reporting Limit (RL). Blank results for gravimetric analyses are evaluated to the Reporting Level, not to half of the Reporting Level.

- For Blank hits falling between 1/2 the RL and the RL (J flagged hits), the associated sample and QC data will receive a 'B-02' qualifier.
- For Blank hits above the RL, the associated sample and QC data will receive a 'B' qualifier, per Apex Laboratories' Blank Policy.

For further details, please request a copy of this document.

Sample results flagged with a 'B' or 'B-02' qualifier are potentially biased high if the sample results are less than ten times the level found in the blank for inorganic analyses, or less than five times the level found in the blank for organic analyses.

'B' and 'B-02' qualifications are only applied to sample results detected above the Reporting Level.

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

Water samples containing significant amounts of sediment are decanted or separated prior to extraction, and only the water portion analyzed, unless otherwise directed by the client.

Soil and Sediment Samples:

Soil and Sediment samples containing significant amounts of water are decanted prior to extraction, and only the solid portion analyzed, unless otherwise directed by the client.

Sampling and Preservation Notes:

Certain regulatory programs, such as National Pollutant Discharge Elimination System (NPDES), require that activities such as sample filtration (for dissolved metals, orthophosphate, hexavalent chromium, etc.) and testing of short hold analytes (pH, Dissolved Oxygen, etc.) be performed in the field (on-site) within a short time window. In addition, sample matrix spikes are required for some analyses, and sufficient volume must be provided, and billable site specific QC requested, if this is required. All regulatory permits should be reviewed to ensure that these requirements are being met.

Data users should be aware of which regulations pertain to the samples they submit for testing. If related sample collection activities are not approved for a particular regulatory program, results should be considered estimates. Apex Laboratories will qualify these analytes according to the most stringent requirements, however results for samples that are for non-regulatory purposes may be acceptable.

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Decanted Samples:

Soils/Sediments:

Unless TCLP analysis is required or there is notification otherwise for a specific project, all Soil and Sediments containing excess water are decanted prior to analysis in order to provide the most representative sample for analysis.

Water Samples:

Water samples containing solids and sediment may need to be decanted in order to eliminate these particulates from the water extractions. In the case of organics extractions, a solvent rinse of the container will not be performed.

Volatiles Soils (5035s)

Samples that are field preserved by 5035 for volatiles are dry weight corrected using the same dry weight correction as for normal analyses. In the case of decanted samples, the dry weight may be performed on a decanted sample, while the aliquot for 5035 may not have been treated the same way. If this is a concern, please submit separate containers for dry weight analysis for volatiles can be provided.

All samples decanted in the laboratory are noted in this report with the DCNT qualifier indicating the sample was decanted.

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Table with 3 columns: Client info (Terraphase Engineering), Project info (Cornelius Estby GWMW Install and Sampling), and Report ID (A6A1401 - 01 28 26 1705).

LABORATORY ACCREDITATION INFORMATION

ORELAP Certification ID: OR100062 (Primary Accreditation)
EPA ID: OR01039

All methods and analytes reported from work performed at Apex Laboratories are included on Apex Laboratories' ORELAP Scope of Certification, with the exception of any analyte(s) listed below:

Apex Laboratories

Table header with columns: Matrix, Analysis, TNI_ID, Analyte, TNI_ID, Accreditation

All reported analytes are included in Apex Laboratories' current ORELAP scope.

Secondary Accreditations

Apex Laboratories also maintains reciprocal accreditation with non-TNI states (Washington DOE), as well as other state specific accreditations not listed here.

Subcontract Laboratory Accreditations

Subcontracted data falls outside of Apex Laboratories' Scope of Accreditation. Please see the Subcontract Laboratory report for full details, or contact your Project Manager for more information.

Field Testing Parameters

Results for Field Tested data are provided by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.

Apex Laboratories

Handwritten signature of Cameron O'Brien

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APEX LABS COOLER RECEIPT FORM

Client: Terraphase Element WO#: A6 A.H01

Project/Project #: Cornelius Estby / 0010.014.002

Delivery Info:

Date/time received: 1/14/26 @ 1130 By: [Signature]

Delivered by: Apex Client ESS FedEx UPS Radio Morgan SDS Evergreen Other

From USDA Regulated Origin? Yes No

Cooler Inspection Date/time inspected: 1/14/26 @ 11:30 By: [Signature]

Chain of Custody included? Yes No

Signed/dated by client? Yes No

Contains USDA Reg. Soils? Yes No Unsure (email RegSoils)

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	<u>2.8</u>	<u>5.3</u>	<u>5.1</u>				
Custody seals? (Y/N)	<u>N</u>	<u>N</u>	<u>N</u>				
Received on ice? (Y/N)	<u>Y</u>	<u>Y</u>	<u>Y</u>				
Temp. blanks? (Y/N)	<u>Y</u>	<u>Y</u>	<u>Y</u>				
Ice type: (Gel/Real/Other)	<u>Real</u>	<u>Real</u>	<u>Real</u>				
Condition (In/Out):	<u>In</u>	<u>In</u>	<u>In</u>				

Cooler out of temp? (Y/N) Possible reason why: [Blank]

Green dots applied to out of temperature samples? Yes No

Out of temperature samples form initiated? Yes No

Sample Inspection: Date/time inspected: 1/15/26 @ 0910 By: [Signature]

All samples intact? Yes No Comments: [Blank]

Bottle labels/COCs agree? Yes No Comments: [Blank]

COC/container discrepancies form initiated? Yes No

Containers/volumes received appropriate for analysis? Yes No Comments: [Blank]

Do VOA vials have visible headspace? Yes No NA

Comments: [Blank]

Water samples: pH checked: Yes No NA pH appropriate? Yes No NA pH ID: A256271

Comments: IB# 3968

Labeled by: [Signature] Witness: [Signature] Cooler Inspected by: [Signature] Form Y-003 R-02

[Signature]

Appendix G

Data Validation Report



Data Validation Report

Project Name: Cornelius Estby GW MW Install and Sampling	Lab Reference Number: A6A1401
Project Number: 0010.014.002	Laboratory: Apex Laboratories
Validated by: Brittany Abujudeh	Matrix: Water
Sampling Date: 1/13/2026	Number of Samples: 8
Data Validation Report Date: 1/30/2026	Analytical Report Date: 1/28/2026

The quality control (QC) elements that were reviewed are listed below.

Data Package Completeness	1	Surrogate Compound Recovery	1
Verification of EDD to Hardcopy Data Package	√	Sample Duplicate Analysis	1
Chain-of-Custody and Sample Preservation	√	Blank Spike/Blank Spike Duplicate Sample Analyses	NA
Holding Times	√	Matrix Spike/Matrix Spike Duplicate Sample Analyses	1
Retention Time Windows	NE	Trip Blank Sample Analysis	√
Initial Calibration	NE	Field Filter Blank Sample Analysis	√
Initial Calibration Verification	NE	Field Duplicate Sample Analysis	√
Continuing Calibration	NE	Reference Material Analysis	NE
Method Blank Analysis	1	Compound Quantitation	2
Laboratory Control Samples	1		

√ – Method quality objectives (MQO) and QC criteria have been met. No outliers are noted or discussed.

1 – Quality control results are discussed below, but no data were qualified.

2 – Quality control outliers that impact the reported data were noted. Data qualifiers were issued as discussed in this Data Validation Report.

NA – Not applicable

NE – Not evaluated

Overall Assessment

All data, as qualified, are acceptable for use.

Data Package Completeness

The data package was received without a case narrative. The data package included all other required elements: chain-of-custody, sample receipt checklist, results, and QC results.

Verification of EDD to Hardcopy Data Package

Sample results and related quality control data were received in both an electronic and hardcopy format. Electronic data were verified against the laboratory report; no errors were found.

Chain-of-Custody

All sample identification (ID) numbers listed on the chain-of-custody record are consistent with the sample ID reported in the laboratory electronic data deliverable (EDD) and hardcopy data package.

Sample Preservation

Samples were received at temperatures of 2.8, 5.1, and 5.3 degrees Celsius. Proper preservation includes water samples chilled to ≤ 6.0 degrees Celsius.

Holding Times

All samples were analyzed within the holding time.

Retention Time Windows

Not evaluated.

Initial Calibration

Not evaluated.

Initial Calibration Verification

Not evaluated.

Continuing Calibration

Not evaluated.

Method Blank Analysis

Lead was detected between the method detection limit and reporting limit in batch 26A0687 and was 'B-02' qualified. Sample results were not flagged with B-02 by the laboratory because detected concentrations were below the reporting limit.

No other target compounds were detected in the method blank sample.

Initial calibration verification for dichlorodifluoromethane failed low. Method blank results were qualified as estimated, and an ICV-02 flag was applied for batch 26A0510.

Laboratory Control Samples

All percent recovery values for laboratory control samples (LCSs) were within acceptable criteria established by the laboratory for the respective testing methods except for the following:

- High recovery was observed for chloroethane, and 2,2-Dichloropropane in the LCS for batch 26A0510. These analytes were not detected at or above the RL in the associated samples.



- High recovery was n-Butylbenzene, carbon tetrachloride, dichlorodifluoromethane, 2,2-dichloropropane, hexachlorobutadiene, and isopropylbenzene in the LCS for batch 26A0560. These analytes were not detected at or above the RL in the associated samples.
- Initial calibration verification for dichlorodifluoromethane failed low. LCS results were qualified as estimated, and an ICV-02 flag was applied for batch 26A0510.

Surrogate Compound Recovery

All percent recovery values for surrogate compounds were within acceptable criteria established by the laboratory for the respective testing methods except for the following:

- High surrogate recovery was observed in acenaphthylene-d8 and benzo(a)pyrene-d12 for project sample COEP-MW-02R-20260113 (A6A1401-01). Surrogate results were qualified S-05. Surrogate recovery is estimated due to sample dilution required for high analyte concentration and/or matrix interference.
- High surrogate recovery was observed in acenaphthylene-d8 and benzo(a)pyrene-d12 for project sample COEP-MW-02R-DUP-20260113 (A6A1401-02). Surrogate results were qualified S-05. Surrogate recovery is estimated due to sample dilution required for high analyte concentration and/or matrix interference
- High surrogate recovery was observed in benzo(a)pyrene-d12 for project sample COEP-MW-04-20260113 (A6A1401-04). Surrogate results were qualified with S-03. Sample re-extract, or the analysis of an associated Batch QC sample, confirms surrogate failure due to sample matrix effect.
- High surrogate recovery was observed in acenaphthylene-d8 and benzo(a)pyrene-d12 for project sample COEP- MW-06-20260113 (A6A1401-06). Surrogate results were qualified S-05. Surrogate recovery is estimated due to sample dilution required for high analyte concentration and/or matrix interference

Sample Duplicate Analysis

All relative percent differences (RPDs) for sample duplicates were within acceptable criteria established by the laboratory for the respective testing methods.

Blank Spike/Blank Spike Duplicate Sample Analyses

Blank spike and blank spike duplicate analysis was not performed for this sample batch.

Matrix Spike/Matrix Spike Duplicate Sample Analyses

The following are matrix spike/matrix spike duplicate (MS/MSD) outliers. A high recovery could indicate the associated sample result to be high biased. A low percent recovery could indicate the associate sample result to be low biased. All other percent recoveries and relative percent differences (RPDs) for matrix spikes and matrix spike duplicates were within acceptable criteria established by the laboratory for the respective testing methods.



- High recovery for was observed for benzo(b)fluoranthene and benzo(k)fluoranthene in the MS/MSD of COEP-MW-04-20260113 (A6A1401-04); the LCS was within limits.
- Low recovery for was observed for benzo(g,h,i)perylene and indeno(1,2,3-cd)pyrene in the MS/MSD duplicate of COEP-MW-04-20260113 (A6A1401-04); the LCS and the associated RPD were within limits.
- Initial calibration verification for dichlorodifluoromethane failed low. MS/MSD results were qualified as estimated and an ICV-02 flag was applied for batch 26A0510.
- Daily Continuing Calibration Verification recovery for several analytes were outside criteria and flagged with Q-54 through Q-54e. The MS/MSD results are considered an estimate.

Trip Blank Sample Analysis

COEP-TB-20260113 was collected on January 13, 2026 and is associated with this lab report. No target compounds were detected in the trip blank sample.

Field Filter Blank Sample Analysis

COEP-AQ-FB-20260113 was collected on January 13, 2026, and is associated with this lab report. No target compounds were detected in the field filter blank sample.

Field Duplicate Analyses

Sample COEP-MW-02R-DUP-20260113 was collected as a field duplicate sample for COEP-MW-02R-20260113. All calculated RPDs were within the accepted limit of 30% except for the following:

- Diesel Range Organics was detected in COEP-MW-02R-20260113 and COEP-MW-02R-DUP-20260113 at concentrations of 316 µg/L and 469 µg/L, respectively. The calculated RPD is 39%.

Reference Material Analysis

No reference material analysis was performed.

Compound Quantitation

The laboratory applied the following flags to project sample data:

- J Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Results for the following samples were J-flagged:

Sample Name	Analytes
COEP-MW-03-20260113	Lead, Naphthalene
COEP-MW-04-20260113	Lead
COEP-MW-05-20260113	2-methylnaphthalene, Benzene, Isopropylbenzene, Toluene



Sample Name	Analytes
COEP-MW-06-20260113	Toluene

F-18 Result for Diesel (Diesel Range Organics, C12-C25) is due to overlap from Gasoline or a Gasoline Range product.

Results for the following samples were flagged:

Sample Name	Analytes
COEP-MW-02R-20260113	Diesel Range Organics
COEP-MW-02R-DUP-20260113	Diesel Range Organics
COEP-MW-06-20260113	Diesel Range Organics

F-26 Result for Diesel (Diesel Range Organics, C12-C18) is due to overlap from Gasoline or a Gasoline Range product.

Results for the following samples were flagged:

Sample Name	Analytes
COEP-MW-02R-20260113	Diesel Range Organics

D Analyte was diluted

Results for the following samples were flagged:

Sample Name	Analytes
COEP-MW-02R-20260113	Gasoline Range Organics, 1-Methylnaphthalene, 2-methylnaphthalene, Naphthalene, 124-trimethylbenzene, 135-trimethylbenzene, Benzene, Ethylbenzene, Isopropylbenzene, n-propylbenzene, Toluene, Xylene Total
COEP-MW-02R-DUP-20260113	Gasoline Range Organics, 1-Methylnaphthalene, 2-methylnaphthalene, Naphthalene, 124-trimethylbenzene, 135-trimethylbenzene, Benzene, Ethylbenzene, Isopropylbenzene, n-propylbenzene, Toluene, Xylene Total
COEP-MW-05-20260113	1-Methylnaphthalene, 2-methylnaphthalene, Fluorene, Isopropylbenzene
COEP-MW-06-20260113	Gasoline Range Organics, 1-Methylnaphthalene, 2-methylnaphthalene, Naphthalene, 124-trimethylbenzene, 135-trimethylbenzene, Benzene, Ethylbenzene, Isopropylbenzene, n-propylbenzene, Toluene, Xylene Total



Sample Index

Sample Name	Lab ID	Matrix	Date Collected
COEP-MW-02R-20260113	A6A1401-01	Water	1/13/2026
COEP-MW-02R-DUP-20260113	A6A1401-02	Water	1/13/2026
COEP-MW-03-20260113	A6A1401-03	Water	1/13/2026
COEP-MW-04-20260113	A6A1401-04	Water	1/13/2026
COEP-MW-05-20260113	A6A1401-05	Water	1/13/2026
COEP-MW-06-20260113	A6A1401-06	Water	1/13/2026
COEP-AQ-FB-20260113	A6A1401-07	Water	1/13/2026
COEP-TB-20260113	A6A1401-08	Water	1/13/2026

END OF REPORT

