

Final

Post-Interim Action Construction
Groundwater Monitoring Report –
Supplemental Groundwater
Characterization

Quiet Cove Site
Anacortes, Washington
Ecology Agreed Order No. DE 11346

for
**Washington State Department of Ecology
on Behalf of Port of Anacortes**

July 17, 2026

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File No. 5147-024-14
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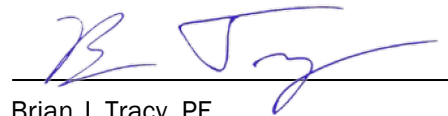
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1.0 Introduction

This report presents the results of additional groundwater monitoring completed by the Port of Anacortes (Port) at the Quiet Cove Site (Site) located in Anacortes, Washington. The Site is situated along the southern shoreline of Guemes Channel at 202 O Avenue (the intersection of 2nd Street and O Avenue) and is subject to remedial investigation (RI) pursuant to Agreed Order No. DE11346 (Agreed Order) to collect sufficient environmental data to evaluate cleanup action alternatives for addressing Site contamination resulting from historical land use. Additional groundwater monitoring activities at the Site were completed pursuant to Addendum No. 2 to the Remedial Investigation/Feasibility Study (RI/FS) Work Plan (RI/FS Work Plan Addendum No. 2; GeoEngineers 2024) approved by Washington State Department of Ecology (Ecology) to further evaluate groundwater conditions following completion of the 2020 Interim Action¹.

This report has been prepared to describe the additional groundwater monitoring activities and chemical analytical results to further characterize groundwater conditions at the Site as required by Ecology. The additional groundwater sampling and analysis was completed between October 2024 and August 2025 on a quarterly basis and are summarized in the following sections. Detailed information regarding Site description, historical use, and subsurface soil and groundwater conditions prior to completion of the 2020 Interim Action are presented in the Remedial Investigation/Feasibility Study (RI/FS) Work Plan (GeoEngineers 2017).

The Site is shown relative to the surrounding area in Figure 1. Site features including monitoring well locations, 2020 Interim Action Area and surrounding areas are shown in Figure 2. Additional groundwater monitoring activities completed are further discussed below.

2.0 Background

In accordance with the Ecology-approved RI/FS Work Plan and as required by the Agreed Order, remedial investigation activities are being completed by the Port to collect sufficient environmental data at the Site to evaluate cleanup action alternatives to address Site contamination resulting from historical land use. The Agreed Order requires the Port to complete a RI and FS to determine the nature and extent of contamination and identify a preferred cleanup alternative for the Site. To date, the Port has completed the following:

- Initial RI to characterize Site conditions in accordance with the Ecology-approved RI/FS Work Plan (GeoEngineers 2017). Initial RI results are presented in the Ecology-approved Interim Action Work Plan (GeoEngineers 2020).
- Implemented an interim action cleanup (2020 Interim Action) to address soil contamination within the primary source area (former bulk fuel facility) in accordance with the Ecology-approved Interim Action

¹ Pursuant to the Agreed Order, initial RI sampling and analysis was completed by the Port in 2017/2018 to evaluate Site conditions and define the nature and extent of contamination. In addition to the initial RI sampling and analysis, an Interim Action was completed in 2020 to remediate a portion of the Site. Based on review of the soil, groundwater and sediment data generated by the initial RI and Interim Action, Ecology identified that additional sampling and analysis is required to more completely define the nature and extent of contamination at the Site for the purposes of completing the RI. Details of the 2020 Interim Action Cleanup are presented in the Interim Action Construction Completion Report (GeoEngineers 2021a).

Work Plan. Details of the 2020 Interim Action Cleanup are presented in the Interim Action Construction Completion Report (GeoEngineers 2021a).

- Completed one year of post-interim action construction groundwater monitoring on a quarterly following completion of the 2020 Interim Action (GeoEngineers 2022a). Groundwater monitoring activities were completed in accordance with the Ecology-approved Post-Interim Action Construction Groundwater Monitoring Plan (GeoEngineers 2021b).
- Completed additional soil investigation activities within the 2nd Street Right-of-Way (ROW) to further evaluate the nature and extent of contamination in accordance with Addendum No. 1 to the Ecology-approved RI/FS Work Plan (GeoEngineers 2022b). Details of the 2nd Street ROW soil investigation are presented in the Supplemental 2nd Street Right-of-Way Soil Investigation Data Report (GeoEngineers 2022c).

Following review of the existing Site data, and results of the post-interim action construction groundwater monitoring events completed between October 2021 and March 2022, Ecology identified that additional sampling and analysis is required to more completely define the nature and extent of contamination at the Site for the purposes of completing the RI. Additional groundwater monitoring activities described in this report were completed in accordance with RI/FS Work Plan Addendum No. 2. Additional soil investigation activities completed for the southern property boundary area in accordance with RI/FS Work Plan Addendum No. 2 will be presented under a separate cover.

3.0 Additional Post-Interim Action Groundwater Monitoring

Quarterly groundwater monitoring was performed at the Site to further evaluate groundwater conditions following the 2020 Interim Action cleanup construction activities (Rounds 5 through 8). Existing groundwater monitoring wells (Figure 2) were sampled on a quarterly basis over a 1-year duration to capture seasonal and temporal conditions and for consistency with the Post-Interim Action Construction Groundwater Monitoring Plan. Additional post-interim action groundwater samples were collected during the following monitoring events:

- Round 5 Groundwater Monitoring Event – Completed on October 30, 2024.
- Round 6 Groundwater Monitoring Event – Completed on February 4 and 5, 2025.
- Round 7 Groundwater Monitoring Event – Completed on April 29 and 30, 2025.
- Round 8 Groundwater Monitoring Event – Completed on August 25 through 27, 2025.

The sampling locations, procedures and chemical analysis that were used for the additional quarterly post-interim action groundwater monitoring activities are summarized in the following sections.

3.1 MONITORING WELL NETWORK

In accordance with the RI/FS Work Plan Addendum No. 2, eight existing monitoring wells were utilized to further evaluate groundwater conditions at the Site. The monitoring well locations are shown relative to the Site and 2020 Interim Action area in Figure 2. In accordance with the Post-Interim Action Construction Groundwater Monitoring Plan, monitoring wells are positioned to document the following:

- **Shoreline Area Monitoring Wells** – Monitoring wells MW-1A, MW-2A, and MW-13 are positioned to document groundwater conditions along the shoreline of Guemes Channel downgradient and cross-gradient of the 2020 Interim Action area.
- **2nd Street Area Monitoring Wells** – Monitoring wells MW-3, MW-4 and MW-15 are positioned to document groundwater conditions downgradient of the residual petroleum-related contamination remaining in-place beneath the 2nd Street ROW north of the 2020 Interim Action area.
- **Southern Property Boundary Area** – Monitoring wells MW-8 and MW-14 are positioned to document groundwater conditions in the southern portion of the Site. MW-8 is positioned to document groundwater conditions south and cross-gradient of the 2020 Interim Action area. Monitoring well MW-14 is positioned downgradient of the residual petroleum-related contamination remaining in-place along the southwest sidewall of the completed 2020 Interim Action excavation to evaluate the potential for recontamination of the imported backfill placed as part of the interim action.

Construction details for existing monitoring wells utilized are presented in Appendix A.

3.2 GROUNDWATER SAMPLING AND ANALYSIS

3.2.1 *Groundwater Sample Collection*

Groundwater samples were collected at or around the predicted day-time low tide during each sampling event based on the tide elevation for the United States National Oceanic and Atmospheric Administration (NOAA) Guemes Channel tide station (Station ID 9448794). Prior to sampling, groundwater levels were measured in each monitoring well using an electric water level indicator (e-tape). Measurements were made to the nearest 0.01 foot relative to the surveyed well-casing rim elevations. Measured groundwater levels are summarized in Table 1.

Groundwater samples were collected using low-flow/low-turbidity sampling techniques during each monitoring event to minimize the suspension of sediment in groundwater samples. Using a peristaltic pump, groundwater was pumped from the well at a rate not exceeding 0.5 liter per minute through dedicated polyethylene tubing with the end positioned at the approximate midpoint of the saturated screened interval. A YSI ProQuatro water quality meter with flow-through-cell was used to monitor the following parameters during purging:

- Acidity (pH)
- Electrical conductivity (EC)
- Turbidity
- Dissolved oxygen (DO)
- Temperature
- Total dissolved solids (TDS)
- Oxygen reduction potential (ORP)
- Salinity

Collection of water samples began once these parameters were observed to vary by less than 10 percent on three consecutive measurements. The stabilized field measurements for each monitoring event are summarized in Table 1.

3.2.2 Analytical Testing

Groundwater samples collected during the quarterly groundwater monitoring events were submitted to OnSite Environmental, Inc. in Redmond, Washington (Ecology-accredited laboratory) for the following parameters:

■ Chemical Parameters:

- Total and dissolved metals including arsenic, cadmium, chromium, lead, and mercury by U.S. Environmental Protection Agency (EPA) Method 6000/7000 series
- Gasoline-range petroleum hydrocarbons by Ecology Method NWTPH-Gx
- Diesel- and heavy oil-range petroleum hydrocarbons by Ecology Method NWTPH-Dx with and without the sulfuric acid and silica gel cleanup (SGC) preparation method
- Volatile organic compounds (VOCs) including benzene, toluene, ethylbenzene, and xylenes (BTEX), n-hexane, methyl tert-butyl ether (MTBE), ethylene dibromide (EDB) and ethylene dichloride (EDC) by EPA Method 8260

■ Geochemical Parameters:

- Total alkalinity by SM 2420 B-97
- Ferrous iron by SM 3500-Fe B-97
- Nitrate and sulfate by EPA 300.0
- Dissolved manganese by EPA 6020A
- Dissolved methane by EPA RSK-175

3.2.3 Quality Control/Quality Assurance

Laboratory data reports for each quarterly monitoring event are presented in Appendix B. An EPA-defined Stage 2B validation (EPA Document 540-R-08-005; EPA 2009) was completed on the laboratory data. Based on the results of the Stage 2B validation, the data were determined to be acceptable for their intended use as qualified. The data validation review is presented in Appendix C.

3.2.4 Investigation Derived Waste

Purge and decontamination water generated by the groundwater monitoring activities was collected and placed in a labeled and secured 55-gallon drum on Site pending transport to a permitted disposal facility. Incidental waste generated during sampling activities included items such as gloves, plastic sheeting, sample tubing, paper towels and similar expended and discarded field supplies were considered *de minimis* and were transferred from the Site for landfill disposal via dumpster or trash receptacle at a GeoEngineers office.

3.2.5 Work Plan Deviations and Quality Control/Quality Assurance

Deviations to the groundwater monitoring program included the following:

- Due to construction activities on 2nd Street as part of the Port's paving project, the well monument for MW-3 (Figure 2) was observed to be damaged and therefore was not sampled during the October 2024 groundwater monitoring event. In coordination with Ecology, the well monument for MW-3 was subsequently repaired by Magna Services, a Washington State licensed driller. Repair activities included replacement of the damaged section of polyvinyl chloride (PVC) well casing (approximate upper 1-foot) and setting a new flush-mount steel well monument in concrete to form the surface seal. Following repair, monitoring well MW-3 was redeveloped by GeoEngineers prior to the February 2025 sampling event to remove possible dirt or debris that may have entered the well. Groundwater sample collection for the February 2025 and subsequent monitoring events were completed at MW-3 in accordance with RI/FS Work Plan Addendum No. 2.

Other deviations from the RI/FS Work Plan Addendum No. 2 were not observed.

3.3 POST-INTERIM ACTION GROUNDWATER CONDITIONS

3.3.1 *Groundwater Flow and Direction*

Based on the measured groundwater elevations and previous groundwater investigations, the predominant groundwater flow direction across the Site is to the north and west toward the Guemes Channel. During the 2024-2025 groundwater monitoring activities, groundwater elevations across the Site ranged between 6.35 and 9.62 feet (North American Vertical Datum [NAVD] 1988) with an average wet season elevation of 7.70 feet and dry season elevation of 7.60 feet. Groundwater elevations measured during each sampling event are summarized in Table 1.

3.3.2 *Chemical Analytical Results*

The analytical results for the additional post-interim action groundwater monitoring events (Round 5 through Round 8) are presented in Table 1 and are summarized in Figures 3 through 6. These data are compared against preliminary screening levels (PSLs) developed as part of the Post-Interim Action Construction Groundwater Monitoring Plan with the following exceptions. The PSL for arsenic has been revised from the Post-Interim Action Construction Groundwater Monitoring Plan and is currently based on Ecology Publication 14-09-044 for Natural Background Groundwater Arsenic Concentrations in Washington State (Ecology 2022) for the Puget Sound Region. Additionally, in accordance with Ecology Implementation Memorandum No. 4 and Guidance for Silica Gel Cleanup in Washington State (Ecology Guidance for Silica Gel Cleanup; Ecology 2004 and 2023), the polar organic concentration for total diesel- and heavy oil-range petroleum hydrocarbons analyzed with and without the SGC preparation method have been calculated for comparison to the polar metabolite screening level of 500 micrograms per liter (µg/L). However, the concentrations have not been adjusted to account for potential concentrations of naturally occurring organic content per Ecology Guidance for Silica Gel Cleanup.

Chemical analytical results for the additional post-interim action groundwater monitoring events are summarized below.

■ **Shoreline Area Monitoring Wells:**

- **MW-1/1A** – Total arsenic was detected at a concentration of 8.5 µg/L during the August 2025 groundwater event which exceeded the PSL of 8 µg/L. However, dissolved arsenic during this monitoring event was detected at a concentration of 6.2 µg/L which is less than the PSL. Other

contaminants of concern either were not detected or were detected at concentrations less than the PSL.

- **MW-2A** – Exceedances of the PSLs were not observed during each of the additional quarterly post-interim action groundwater monitoring events.
- **MW-13** – Total diesel- and heavy oil-range petroleum hydrocarbons were detected greater than the PSL of 500 µg/L during the February 2025 (520 µg/L) and August 2025 (750 µg/L) monitoring events. However, the adjusted total diesel- and heavy oil-range petroleum hydrocarbon concentration for each of these monitoring events were less than the polar metabolite screening level of 500 µg/L. In addition, benzene was detected at a concentration of 2.9 µg/L during the August 2025 which exceeded the PSL of 2.4 µg/L. Other contaminants of concern either were not detected or were detected at concentrations less than the PSL.

■ **2nd Street Area Monitoring Wells:**

- **MW-3** – Total diesel- and heavy oil-range petroleum hydrocarbons were detected at concentrations greater than the PSL of 500 µg/L during the February 2025 (900 µg/L), April 2025 (620 µg/L) and August 2025 (610 µg/L) monitoring events. However, the adjusted total diesel- and heavy oil-range petroleum hydrocarbon concentration for each of these monitoring events were less than the polar metabolite screening level of 500 µg/L. Other contaminants of concern either were not detected or were detected at concentrations less than the PSL.
- **MW-4** – Total diesel- and heavy oil-range petroleum hydrocarbons were detected at concentrations greater than the PSL of 500 µg/L during the October 2024 (590 µg/L), April 2025 (710 µg/L) and August 2025 (680 µg/L) monitoring events. However, the adjusted total diesel- and heavy oil-range petroleum hydrocarbon concentration for each of these monitoring events were less than the polar metabolite screening level of 500 µg/L. Other contaminants of concern either were not detected or were detected at concentrations less than the PSL.
- **MW-15** – Total and dissolved arsenic was detected at concentrations ranging between 8.8 µg/L and 10 µg/L during the October 2024 and August 2025 groundwater monitoring events, which exceeded the PSL of 8 µg/L. Additionally, total diesel- and heavy oil-range petroleum hydrocarbons were detected at concentrations ranging between 1,340 µg/L and 2,420 µg/L, which is greater than the PSL of 500 µg/L during each of the quarterly monitoring events. Adjusted total diesel- and heavy oil-range petroleum hydrocarbons (ranging between 940 µg/L and 2,020 µg/L) also exceeded the PSL of 500 µg/L during each of these monitoring events. However, the potential for naturally occurring organic matter in the diesel range has not been evaluated nor have the concentrations been adjusted to account for naturally occurring material per Ecology Guidance for Silica Gel Cleanup. Other contaminants of concern either were not detected or were detected at concentrations less than the PSL.

■ **Southern Property Boundary Area:**

- **MW-8** – Total diesel- and heavy oil-range petroleum hydrocarbons were detected at concentrations ranging between 530 µg/L and 1,950 µg/L (parent or duplicate result), which is greater than the PSL of 500 µg/L during each of the quarterly monitoring events. Adjusted total diesel- and heavy oil-range petroleum hydrocarbons (ranging between 600 µg/L and 1,550 µg/L) also exceeded the PSL of 500 µg/L during each of these monitoring events with the exception of the February 2025 event in which the adjusted concentration for both the parent and duplicate sample were less than the PSL. However, the potential for naturally occurring organic matter in the diesel range has not been evaluated nor have the concentrations been adjusted to account for naturally occurring material per Ecology Guidance for Silica Gel Cleanup. In addition, benzene was detected at a concentrations ranging between 5 µg/L and 16 µg/L (parent and duplicate sample), which

exceeded the PSL of 2.4 µg/L during each of the quarterly monitoring events. Other contaminants of concern either were not detected or were detected at concentrations less than the PSL.

- **MW-14.** Exceedances of the PSLs were not observed during each of the additional quarterly post-interim action groundwater monitoring events.

A description of contaminant trends over time are further discussed below.

3.3.3 *Trend Analysis*

Trend plots in which contaminants of concern were detected at concentrations greater than the PSL during one or more monitoring event are presented in Figures 7 through 9. These trend plots include both recent and previous sample results. Historical groundwater monitoring results collected from the Site are presented in Appendix D. Overall, the trend analysis for total and dissolved arsenic (Figure 7), gasoline-range petroleum hydrocarbons and benzene (Figure 8) and diesel- and heavy oil-range petroleum hydrocarbons (adjusted and non-adjusted; Figure 9) show stable or decreasing contaminant concentration since completion of the 2020 Interim Action at the Site. PSL exceedances of arsenic at MW-15 prior to the October 2024 monitoring event have historically not been observed and may be the result of localized ground disturbance activities associate with the 2nd Street paving project.

While concentrations in most wells located down and cross-gradient of the 2020 Interim Action have remained consistent or declined, concentrations of total diesel- and heavy oil-range petroleum hydrocarbons at MW-8 and MW-15, and benzene at MW-8 generally remain within the range as previously detected. These two wells are located down gradient of the Reisner property, which is also the location of a former bulk fuel facility. The discrepancy between the results in MW-8 and MW-13 compared to the other wells suggests the Reisner property may be a source of contamination to these wells.

PSL exceedance of adjusted total diesel- and heavy oil-range petroleum hydrocarbons and/or benzene previously observed at MW-1, MW-2, MW-3 and MW-13 are decreased and are stable at a concentration less than the PSL since completion of the 2020 Interim Action.

3.3.4 *Geochemical Parameter Evaluation*

Geochemical field parameter measurements (i.e., dissolved oxygen, redox potential, pH, specific conductivity and temperature) and laboratory parameters analyzed (i.e., ferrous iron, nitrate, sulfate, alkalinity, methane and dissolved manganese) provide an indication of whether site conditions support the biodegradation of organic compounds including petroleum hydrocarbons.

Field and geochemical parameters collected to date generally indicate decreased levels of dissolved oxygen, redox potential and sulfate concentrations as well as increase levels of ferrous iron and methane concentrations in monitoring wells in which elevated concentration of diesel- and heavy oil-range petroleum hydrocarbons exceeding the PSL are observed. As for alkalinity and nitrate, the observed concentrations in monitoring wells with elevated diesel- and heavy oil-range petroleum hydrocarbon concentrations exceeding the PSL are similar to monitoring wells in which diesel- and heavy oil-range petroleum hydrocarbons are not detected or below the PSL. Overall, these results indicate that Site conditions support active biodegradation in areas of the Site where petroleum contamination is present.

4.0 Conclusions

Groundwater monitoring was completed between October 2024 and August 2025 in accordance with RI/FS Work Plan Addendum No. 2 and as required by Ecology to collect sufficient environmental data to more completely define the nature and extent of contamination at the Site for the purposes of completing the RI. Based on the results of the additional post-interim action groundwater monitoring data, concentrations of total diesel- and heavy oil-range petroleum hydrocarbons (adjusted for polar metabolites), benzene and dissolved arsenic are stable, however continue to exceed the PSL in groundwater to the north (MW-15) and southwest (MW-8 and MW-13) of the 2020 Interim Action area. PSL exceedances of total diesel- and heavy oil-range petroleum hydrocarbons and benzene previously identified in groundwater at other locations have since decreased and are stable at concentrations less than the PSL. Other contaminants of concern continue to remain stable at concentrations less than the PSL. Where petroleum related contamination is present, groundwater conditions support active biodegradation.

5.0 Limitations

This report has been prepared for the exclusive use of the Port of Anacortes, their authorized agents and regulatory agencies in their evaluation of the Quiet Cove Site in Anacortes, Washington. Within the limitations of scope, schedule and budget, our services have been executed in accordance with generally accepted environmental science practices in this area at the time this report was prepared. No warranty or other conditions, express or implied, should be understood.

No other party may rely on the product of our services unless we agree in advance and in writing to such reliance. Any electronic form, facsimile or hard copy of the original document (email, text, table, and/or figure), if provided, and any attachments are only a copy of the original document. The original document is stored by GeoEngineers, Inc. and will serve as the official document of record.

6.0 References

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Tables

Table 1
Post-Interim Action Groundwater Field Parameters, Groundwater Levels and Chemical Analytical Data

Quiet Cove Site
Anacortes, Washington

Sample Location ¹	Units	MW-1A				MW-2A				MW-3				Preliminary Screening Level ²
Sample Location		MW_1A	MW_1A	MW_1A	MW_1A	MW_2A	MW_2A	MW_2A	MW_2A	MW_3	MW_3	MW_3	MW_3	
Sample Identification		MW-1A-103024	MW-1A-020425	MW-1A-042925	MW-1A-082725	MW-2A-103024	MW-2A-020425	MW-2A-043025	MW-2A-082725	MW-3-103024	MW-3-020525	MW-3-043025	MW-3-082525	
Date Sampled		10/30/24	02/04/25	04/29/25	08/27/25	10/30/24	02/04/25	04/30/25	08/27/25	10/30/24	02/05/25	04/30/25	08/25/25	
Field Measured Parameters														
Top of Casing Elevation ³	Feet	12.49	12.49	12.49	12.49	12.20	12.20	12.20	12.20	--	12.97	12.97	12.97	NE
Depth to Groundwater ⁴	Feet	--	4.63	5.31	5.03	4.67	4.67	5.16	4.92	--	4.83	6.03	5.09	NE
Groundwater Elevation	Feet	7.81	7.86	7.18	7.46	7.53	7.53	7.04	7.28	--	8.14	6.94	7.88	NE
pH	n/a	6.99	7.03	7.05	6.69	6.89	715.0	7.22	6.98	--	6.58	6.69	6.25	NE
Conductivity	µS/cm	399.3	355.0	339.0	348.2	470.0	377.0	421.0	470.0	--	931.0	294.0	369.1	NE
Turbidity	NTU	9.3	4.8	8.1	4.0	5.8	6.5	7.8	6.7	--	4.1	3.9	2.9	NE
Dissolved Oxygen	mg/L	0.08	0.24	0.09	1.10	0.46	0.58	0.07	0.11	--	1.28	1.61	0.51	NE
Temperature	°C	14.2	10.5	11.3	14.9	14.9	9.2	12.0	17.0	--	10.2	12.6	19.2	NE
Total Dissolved Solids	mg/L	326.5	--	297.7	279.0	500.5	--	390.0	370.4	--	--	250.9	269.8	NE
Oxidation Reduction Potential	mV	-43.7	-61.2	33.7	59.2	-31.1	-66.3	36.1	0.4	--	18.0	21.3	12.3	NE
Salinity	%	0.24	--	0.22	0.21	0.29	--	0.29	0.27	--	--	0.18	0.20	NE
Geochemical Parameters by SM 2320/3500-Fe and EPA 300.0/6020/RSK-175/200.8														
Total Alkalinity	mg/L	220	220	200	190	230	210	210	210	--	120	120	150	NE
Ferrous Iron	mg/L	0.404	0.793	2.54	3.34	0.15 U	0.727	2.73	3.32	--	0.372	0.15 U	0.461 J	NE
Nitrate	mg/L	0.4 U	0.15 UJ	0.2 U	2 UJ	0.456	0.244 J	1.6 J	2 UJ	--	3.38	1.69	1.18	NE
Sulfate	mg/L	15.7	13.9	13.4	13.4	37.8	37.1	36 J	21.3	--	88.3	36.2	18.6	NE
Methane	µg/L	39	12	5.8	16	23	21	18	30	--	13	16	34	NE
Dissolved Manganese	µg/L	--	52	52	56	--	81	99	89	--	240	66	52	NE
Total Metals by EPA 200.8/7470														
Arsenic	µg/L	4.9	5.5	6.4	8.5	4.4	6.0	7.7	7.6	--	3.3 U	3.3 U	3.3 U	8.0 ⁵
Cadmium	µg/L	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	--	4.4 U	4.4 U	4.4 U	8.8
Chromium	µg/L	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	--	11 U	11 U	11 U	50
Lead	µg/L	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	--	1.1 U	1.1 U	1.1 U	2.1
Mercury	µg/L	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	--	0.025 U	0.025 U	0.025 U	0.025
Dissolved Metals by EPA 200.8/7470														
Arsenic	µg/L	5.1	3.8	4.7	6.2	3.8	4.2	4.8	5.3	--	3.0 U	3.0 U	3.0 U	8.0 ⁵
Cadmium	µg/L	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	--	4.0 U	4.0 U	4.0 U	8.8
Chromium	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	--	10 U	10 U	10 U	50
Lead	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	1.0 U	1.0 U	1.0 U	2.1
Mercury	µg/L	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	--	0.025 U	0.025 U	0.025 U	0.025
Petroleum Hydrocarbons by NWTPH-G/Dx														
Gasoline-Range Hydrocarbons	µg/L	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	--	100 U	100 U	100 U	800 ⁶
Diesel-Range Hydrocarbons	µg/L	200 U	200 U	200 U	210 U	210 U	200 U	230	230	--	450	310	290	500
Heavy Oil-Range Hydrocarbons	µg/L	280	200 U	280	250	210 U	200 U	200 U	220	--	410	310	320	500
Total Diesel/Heavy Oil-Range ⁷	µg/L	480	400 U	480	460	420 U	400 U	430	450	--	860	620	610	500
Petroleum Hydrocarbons by NWTPH-Dx with SGC														
Diesel-Range Hydrocarbons	µg/L	200 U	200 U	200 U	200 U	210 U	200 U	200 U	200 U	--	210 U	200 U	200 U	500
Heavy Oil-Range Hydrocarbons	µg/L	200 U	200 U	200 U	200 U	210 U	200 U	200 U	200 U	--	210 U	200 U	200 U	500
Total Diesel/Heavy Oil-Range ⁷	µg/L	400 U	400 U	400 U	400 U	420 U	400 U	400 U	400 U	--	420 U	400 U	400 U	500
Petroleum Hydrocarbons by NWTPH-Dx Adjusted														
Total Diesel/Heavy Oil-Range ⁸	µg/L	80	0 U	80	60	0 U	0 U	30	50	--	440	220	210	500
Volatile Organic Compounds (VOCs) by EPA 8360														
Benzene	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	--	0.20 U	0.20 U	0.20 U	2.4
Toluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	1.0 U	1.0 U	1.0 U	520
Ethylbenzene	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	--	0.20 U	0.20 U	0.20 U	130
Total Xylenes	µg/L	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	--	0.40 U	0.40 U	0.40 U	310
1,2-Dibromoethane (EDB)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	--	0.20 U	0.20 U	0.20 U	0.30
1,2-Dichloroethane (EDC)	µg/L	0.20 U	0.20 U	0.50 U	0.20 U	0.20 U	0.20 U	0.50 U	0.20 U	--	0.20 U	0.50 U	0.20 U	4.2
Methyl t-butyl ether (MTBE)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	--	0.20 U	0.20 U	0.20 U	610
n-Hexane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	1.0 U	1.0 U	1.0 U	7.8

Notes:

- ¹ Sample locations are shown in Figure 2.
- ² Preliminary screening levels referenced from the Post Interim Action Construction Groundwater Monitoring Plan (GeoEngineers 2021b).
- ³ Casing elevation referenced to surveys completed by Sound Development Group (October 2017) or Pacific Surveying and Engineering, Inc. (March 2022). MW-3 re-surveyed by LDES, Inc. (May 2025). Vertical Datum is referenced to North American Vertical Datum 1988 (NAVD88; US Survey Feet Units).
- ⁴ Depth measured from top of casing.
- ⁵ The preliminary screening level for arsenic has been updated based on Ecology Publication 14-09-044 for Natural Background Groundwater Arsenic Concentrations in Washington State (Ecology 2022) for the Puget Sound Region.
- ⁶ Preliminary screening level for gasoline-range petroleum hydrocarbons is 800 µg/L when benzene is present and 1,000 µg/L when not present.
- ⁷ Sum of diesel- and heavy oil-range petroleum hydrocarbon result (detect or non-detect).
- ⁸ Adjusted concentration calculated by subtracting the total diesel- and heavy oil-range petroleum hydrocarbon with SGC from the total diesel- and heavy oil-range petroleum hydrocarbon result.

-- = Not Analyzed

NE = Not Established

µg/L = microgram per liter

mg/L = milligram per liter

µS/cm = microseimens per centimeter

°C = degrees Celsius

mV = millivolt

NTU = Nephelometric Turbidity Unit

ppt = parts per thousand

SGC = acid silica gel cleanup preparation method

U = The analyte was not detected at a concentration greater than the value identified.

UJ = The analyte was not detected at an estimated concentration greater than the value identified.

J = The analyte was detected and the detected concentration is considered an estimate.

Yellow shading indicates that the identified concentration is greater than the preliminary screening level.

Bold font type indicates the analyte was detected at the reported concentration.

Table 1
Post-Interim Action Groundwater Field Parameters, Groundwater Levels and Chemical Analytical Data

Quiet Cove Site
Anacortes, Washington

Sample Location ¹	Units	MW-4				MW-8								Preliminary Screening Level ²
Sample Location		MW_4	MW_4	MW_4	MW_4	MW_8	MW_8	MW_8	MW_8	MW_8	MW_8	MW_8	MW_8	
Sample Identification		MW-4-103024	MW-4-020525	MW-4-043025	MW-4-082725	MW-8-103024	DUP-103024	MW-8-020525	DUP-020525	MW-8-042925	DUP-042925	MW-8-082625	MW-DUP-082625	
Date Sampled		10/30/24	02/05/25	04/30/25	08/27/25	10/30/24	10/30/24	02/05/25	02/05/25	04/29/25	04/29/25	08/26/25	08/26/25	
Field Measured Parameters														
Top of Casing Elevation ³	Feet	12.34	12.34	12.34	12.34	13.07	13.07	13.07	13.07	13.07	13.07	13.07	13.07	NE
Depth to Groundwater ⁴	Feet	4.96	4.91	4.96	5.18	4.68	4.68	3.96	3.96	4.71	4.71	4.23	4.23	NE
Groundwater Elevation	Feet	7.38	7.43	7.38	7.16	8.39	8.39	9.11	9.11	8.36	8.36	8.84	8.84	NE
pH	n/a	6.69	6.62	6.50	6.33	4.76	4.76	7.11	7.11	6.89	6.89	6.60	6.60	NE
Conductivity	µS/cm	758.0	723.0	401.0	173.4	460.0	460.0	269.0	269.0	321.0	321.0	318.2	318.2	NE
Turbidity	NTU	2.9	5.0	3.6	1.1	4.8	4.8	4.3	4.3	6.4	6.4	6.7	6.7	NE
Dissolved Oxygen	mg/L	0.13	0.89	0.18	0.05	0.59	0.59	0.21	0.21	0.46	0.46	0.15	0.15	NE
Temperature	°C	15.3	11.3	12.4	15.6	15.5	15.5	10.5	10.5	11.7	11.7	17.3	17.3	NE
Total Dissolved Solids	mg/L	608.0	–	3,432.0	1,363.0	205.5	205.5	–	–	280.2	280.2	252.7	252.7	NE
Oxidation Reduction Potential	mV	-60.3	-68.9	97.8	-1.1	-40.1	-40.1	-68.1	-68.1	39.9	39.9	2.5	2.5	NE
Salinity	%	0.45	–	2.94	1.08	0.27	0.27	–	–	0.20	0.20	0.19	0.19	NE
Geochemical Parameters by SM 2320/3500-Fe and EPA 300.0/6020/RSK-175/200.8														
Total Alkalinity	mg/L	280	260	220	320	240	250	170	180	210	220	210	220	NE
Ferrous Iron	mg/L	14.8	1.5	17.6	38.6	17.4 J	1.21 J	1.33	1.38	15.1 J	19.4 J	19.3 J	24.9 J	NE
Nitrate	mg/L	0.4 U	0.283	0.2 U	2 UJ	2.23 J	0.4 UJ	0.15 UJ	2.16 J	0.2 U	0.368	4 UJ	4 UJ	NE
Sulfate	mg/L	20.4	18.6	53.5	10 U	4.06	3.7	5.03	4.88	3.01	3.08	20 U	20 U	NE
Methane	µg/L	3,100	1,800	390	1,400	710	850	280	350	240	290	270	370	NE
Dissolved Manganese	µg/L	–	1,500	2,500	3,000	–	–	1,400	1,300	2,000	2,000	1,900	2,000	NE
Total Metals by EPA 200.8/7470														
Arsenic	µg/L	3.3 U	3.3 U	3.3 U	3.3 U	5.5	4.3	3.5	3.3 U	3.5	3.3 U	4.8	5.5	8.0 ⁵
Cadmium	µg/L	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	8.8
Chromium	µg/L	11 U	11 U	11 U	12	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	50
Lead	µg/L	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	2.1
Mercury	µg/L	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025
Dissolved Metals by EPA 200.8/7470														
Arsenic	µg/L	3.0 U	3.0 U	3.0 U	3.3 U	4.1	3.5	3.0 U	3.1	3.2	3.1	4.9	5.7	8.0 ⁵
Cadmium	µg/L	4.0 U	4.0 U	4.0 U	4.4 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	8.8
Chromium	µg/L	10 U	10 U	10 U	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50
Lead	µg/L	1.0 U	1.0 U	1.0 U	1.1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.1
Mercury	µg/L	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025
Petroleum Hydrocarbons by NWTPH-G/Dx														
Gasoline-Range Hydrocarbons	µg/L	100 U	100 U	100 U	100 U	170	190	100 U	110	190	190	340	370	800 ⁶
Diesel-Range Hydrocarbons	µg/L	340	260	400	390	900	990	220	300	610	660	700	700	500
Heavy Oil-Range Hydrocarbons	µg/L	250	200 U	310	290	1,000	960	160	230	480	340	470	470	500
Total Diesel/Heavy Oil-Range ⁷	µg/L	590	460	710	680	1,900	1,950	380	530	1,090	1,000	1,170	1,170	500
Petroleum Hydrocarbons by NWTPH-Dx with SGC														
Diesel-Range Hydrocarbons	µg/L	200 U	200 U	200 U	190 U	210 U	200 U	160 U	200 U	200 U	200 U	200 U	200 U	500
Heavy Oil-Range Hydrocarbons	µg/L	200 U	200 U	200 U	190 U	210 U	200 U	160 U	200 U	200 U	200 U	200 U	200 U	500
Total Diesel/Heavy Oil-Range ⁷	µg/L	400 U	400 U	400 U	380 U	420 U	400 U	320 U	400 U	400 U	400 U	400 U	400 U	500
Petroleum Hydrocarbons by NWTPH-Dx Adjusted														
Total Diesel/Heavy Oil-Range ⁸	µg/L	190	60	310	300	1,480	1,550	60	130	690	600	770	770	500
Volatile Organic Compounds (VOCs) by EPA 8360														
Benzene	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	12	13	5.2	5.0	8.2	8.4	16	16	2.4
Toluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	520
Ethylbenzene	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	130
Total Xylenes	µg/L	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	–	0.40 U	0.40 U	0.45	0.45	0.44	0.46	310
1,2-Dibromoethane (EDB)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.30
1,2-Dichloroethane (EDC)	µg/L	0.20 U	0.20 U	0.50 U	0.20 U	0.20 U	0.20 U	0.26 U	0.26 U	0.50 U	0.50 U	0.20 U	0.20 U	4.2
Methyl t-butyl ether (MTBE)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	610
n-Hexane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.1	1.2	1.1	1.1	2.5	2.4	2.9	3.0	7.8

Notes:

- ¹ Sample locations are shown in Figure 2.
- ² Preliminary screening levels referenced from the Post Interim Action Construction Groundwater Monitoring Plan (GeoEngineers 2021b).
- ³ Casing elevation referenced to surveys completed by Sound Development Group (October 2017) or Pacific Surveying and Engineering, Inc. (March 2022). MW-3 re-surveyed by LDES, Inc. (May 2025). Vertical Datum is referenced to North American Vertical Datum 1988 (NAVD88; US Survey Feet Units).
- ⁴ Depth measured from top of casing.
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- ⁶ Preliminary screening level for gasoline-range petroleum hydrocarbons is 800 µg/L when benzene is present and 1,000 µg/L when not present.
- ⁷ Sum of diesel- and heavy oil-range petroleum hydrocarbon result (detect or non-detect).
- ⁸ Adjusted concentration calculated by subtracting the total diesel- and heavy oil-range petroleum hydrocarbon with SGC from the total diesel- and heavy oil-range petroleum hydrocarbon result.

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µg/L = microgram per liter

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NTU = Nephelometric Turbidity Unit

ppt = parts per thousand

SGC = acid silica gel cleanup preparation method

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Yellow shading indicates that the identified concentration is greater than the preliminary screening level.

Bold font type indicates the analyte was detected at the reported concentration.

Table 1
Post-Interim Action Groundwater Field Parameters, Groundwater Levels and Chemical Analytical Data

Quiet Cove Site
Anacortes, Washington

Sample Location ¹	Units	MW-13				MW-14				MW-15				Preliminary Screening Level ²
Sample Location		MW_13	MW_13	MW_13	MW_13	MW_14	MW_14	MW_14	MW_14	MW_15	MW_15	MW_15	MW_15	
Sample Identification		MW-13-103024	MW-13-020525	MW-13-042925	MW-13-082725	MW-14-020425	MW-14-042925	MW-14-082525	MW-14-103024	MW-15-103024	MW-15-020525	MW-15-043025	MW-15-082625	
Date Sampled		10/30/24	02/05/25	04/29/25	08/27/25	02/04/25	04/29/25	08/25/25	10/30/24	10/30/24	02/04/25	04/30/25	08/26/25	
Field Measured Parameters														
Top of Casing Elevation ³	Feet	11.94	11.94	11.94	11.94	12.14	12.14	12.14	12.14	12.20	12.07	12.07	12.07	NE
Depth to Groundwater ⁴	Feet	4.63	4.44	4.89	4.97	4.45	3.09	4.11	4.63	4.61	4.48	5.72	5.23	NE
Groundwater Elevation	Feet	7.31	7.50	7.05	6.97	7.69	9.05	8.03	7.51	7.59	7.59	6.35	6.84	NE
pH	n/a	7.03	7.08	7.18	6.81	8.17	7.82	7.71	7.03	6.45	6.48	6.61	6.33	NE
Conductivity	µS/cm	370.6	332.0	325.0	395.4	191.0	222.0	294.5	370.6	2,098.0	1,541.0	2,010.0	2,287.0	NE
Turbidity	NTU	5.0	6.9	4.3	0.9	7.8	6.3	6.5	5.0	2.2	6.5	3.9	4.0	NE
Dissolved Oxygen	mg/L	0.21	0.08	0.11	0.14	3.23	1.98	0.31	0.21	0.15	0.18	0.14	0.09	NE
Temperature	°C	13.6	9.6	11.2	14.8	8.6	11.0	17.2	13.6	15.0	7.5	14.2	21.2	NE
Total Dissolved Solids	mg/L	306.8	–	286.7	319.0	–	201.5	226.7	306.8	1,604.0	–	1,644.5	1,566.0	NE
Oxidation Reduction Potential	mV	-68.4	-80.9	14.8	16.9	118.1	31.1	3.6	-68.4	-58.5	-80.9	33.3	-37.1	NE
Salinity	%	0.22	–	0.21	0.24	–	0.14	0.16	0.22	1.35	–	1.31	1.21	NE
Geochemical Parameters by SM 2320/3500-Fe and EPA 300.0/6020/RSK-175/200.8														
Total Alkalinity	mg/L	230	210	200	240	110	130	150	110	500	470	490	470	NE
Ferrous Iron	mg/L	3.4	0.733	0.15 U	3.65	0.516	0.991	0.15 U	0.15 U	97.4	56.3	76.4	63.8	NE
Nitrate	mg/L	0.4 U	0.553	0.2 U	2 UJ	0.315 J	3.73	0.292	1.15	0.4 U	0.682	0.2 U	4 UJ	NE
Sulfate	mg/L	9.09	9.45	9.14	10 U	16.7	14.4	10.6	35.9	2 U	4.13	2.09	20 U	NE
Methane	µg/L	360	240	76	230	15	13	9.0	5.3	7,900	5,100	2,400	3,200	NE
Dissolved Manganese	µg/L	–	92	89	99	10 U	10 U	11	–	–	5,100	6,200	5,600	NE
Total Metals by EPA 200.8/7470														
Arsenic	µg/L	3.3 U	3.3 U	3.3 U	3.3 U	4.2	3.9	5.1	3.9	8.8	4.2	6.3	9.5	8.0 ⁵
Cadmium	µg/L	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	8.8
Chromium	µg/L	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	50
Lead	µg/L	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	2.1
Mercury	µg/L	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025
Dissolved Metals by EPA 200.8/7470														
Arsenic	µg/L	3.0 U	3.0 U	3.0 U	3.0 U	3.8	4.0	4.9	3.5	9.3	4.5	6.7	10	8.0 ⁵
Cadmium	µg/L	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	8.8
Chromium	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50
Lead	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.1
Mercury	µg/L	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025
Petroleum Hydrocarbons by NWTPH-G/Dx														
Gasoline-Range Hydrocarbons	µg/L	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	150	140	120	170	800 ⁶
Diesel-Range Hydrocarbons	µg/L	280	180	210	330	200 U	200 U	200 U	200 U	1,200	1,000	1,200	1,500	500
Heavy Oil-Range Hydrocarbons	µg/L	350	340	210	420	200 U	200 U	200 U	200 U	960	340	510	920	500
Total Diesel/Heavy Oil-Range ⁷	µg/L	630	520	420	750	400 U	400 U	400 U	400 U	2,160	1,340	1,710	2,420	500
Petroleum Hydrocarbons by NWTPH-Dx with SGC														
Diesel-Range Hydrocarbons	µg/L	200 U	180 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	210 U	500
Heavy Oil-Range Hydrocarbons	µg/L	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	210 U	500
Total Diesel/Heavy Oil-Range ⁷	µg/L	400 U	380 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	420 U	500
Petroleum Hydrocarbons by NWTPH-Dx Adjusted														
Total Diesel/Heavy Oil-Range ⁸	µg/L	230	140	20	350	0 U	0 U	0 U	0 U	1,760	940	1,310	2,000	500
Volatile Organic Compounds (VOCs) by EPA 8360														
Benzene	µg/L	2.2	2.3	2.1	2.9	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	2.4
Toluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	520
Ethylbenzene	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	130
Total Xylenes	µg/L	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	310
1,2-Dibromoethane (EDB)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.30
1,2-Dichloroethane (EDC)	µg/L	0.20 U	0.34 U	0.50 U	0.20 U	0.20 U	0.50 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.20 U	4.2
Methyl t-butyl ether (MTBE)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	610
n-Hexane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	7.8

Notes:

- ¹ Sample locations are shown in Figure 2.
- ² Preliminary screening levels referenced from the Post Interim Action Construction Groundwater Monitoring Plan (GeoEngineers 2021b).
- ³ Casing elevation referenced to surveys completed by Sound Development Group (October 2017) or Pacific Surveying and Engineering, Inc. (March 2022). MW-3 re-surveyed by LDES, Inc. (May 2025). Vertical Datum is referenced to North American Vertical Datum 1988 (NAVD88; US Survey Feet Units).
- ⁴ Depth measured from top of casing.
- ⁵ The preliminary screening level for arsenic has been updated based on Ecology Publication 14-09-044 for Natural Background Groundwater Arsenic Concentrations in Washington State (Ecology 2022) for the Puget Sound Region.
- ⁶ Preliminary screening level for gasoline-range petroleum hydrocarbons is 800 µg/L when benzene is present and 1,000 µg/L when not present.
- ⁷ Sum of diesel- and heavy oil-range petroleum hydrocarbon result (detect or non-detect).
- ⁸ Adjusted concentration calculated by subtracting the total diesel- and heavy oil-range petroleum hydrocarbon with SGC from the total diesel- and heavy oil-range petroleum hydrocarbon result.

-- = Not Analyzed

NE = Not Established

µg/L = microgram per liter

mg/L = milligram per liter

µS/cm = microseimens per centimeter

°C = degrees Celsius

mV = millivolt

NTU = Nephelometric Turbidity Unit

ppt = parts per thousand

SGC = acid silica gel cleanup preparation method

U = The analyte was not detected at a concentration greater than the value identified.

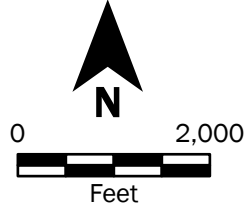
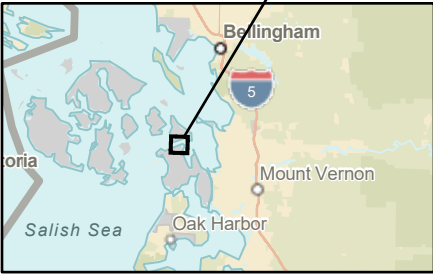
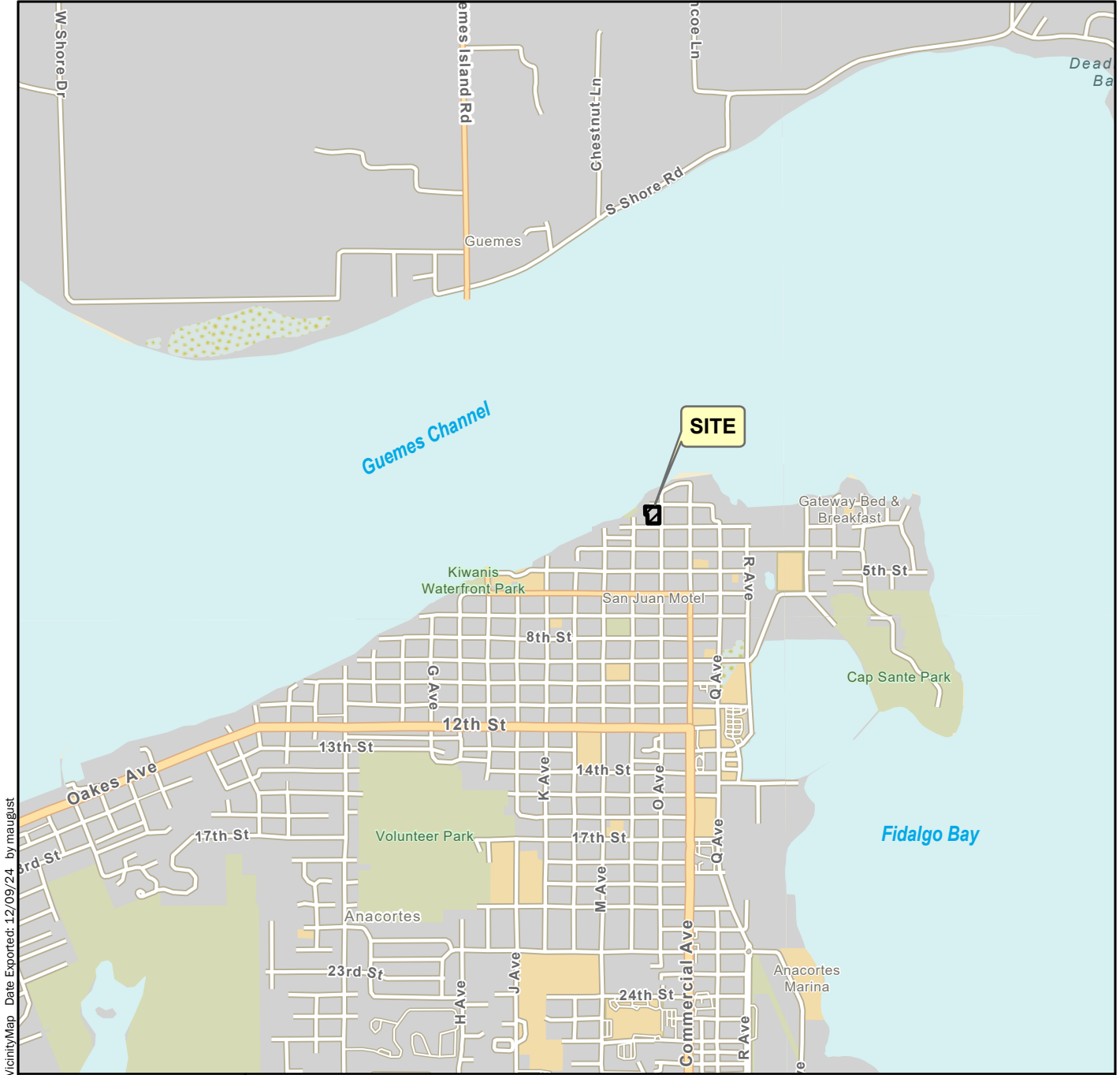
UJ = The analyte was not detected at an estimated concentration greater than the value identified.

J = The analyte was detected and the detected concentration is considered an estimate.

Yellow shading indicates that the identified concentration is greater than the preliminary screening level.

Bold font type indicates the analyte was detected at the reported concentration.

Figures



Source(s):
• ESRI

Coordinate System: NAD 1983 UTM Zone 10N

Disclaimer: This figure was created for a specific purpose and project. Any use of this figure for any other project or purpose shall be at the user's sole risk and without liability to GeoEngineers. The locations of features shown may be approximate. GeoEngineers makes no warranty or representation as to the accuracy, completeness, or suitability of the figure, or data contained therein. The file containing this figure is a copy of a master document, the original of which is retained by GeoEngineers and is the official document of record.

Vicinity Map

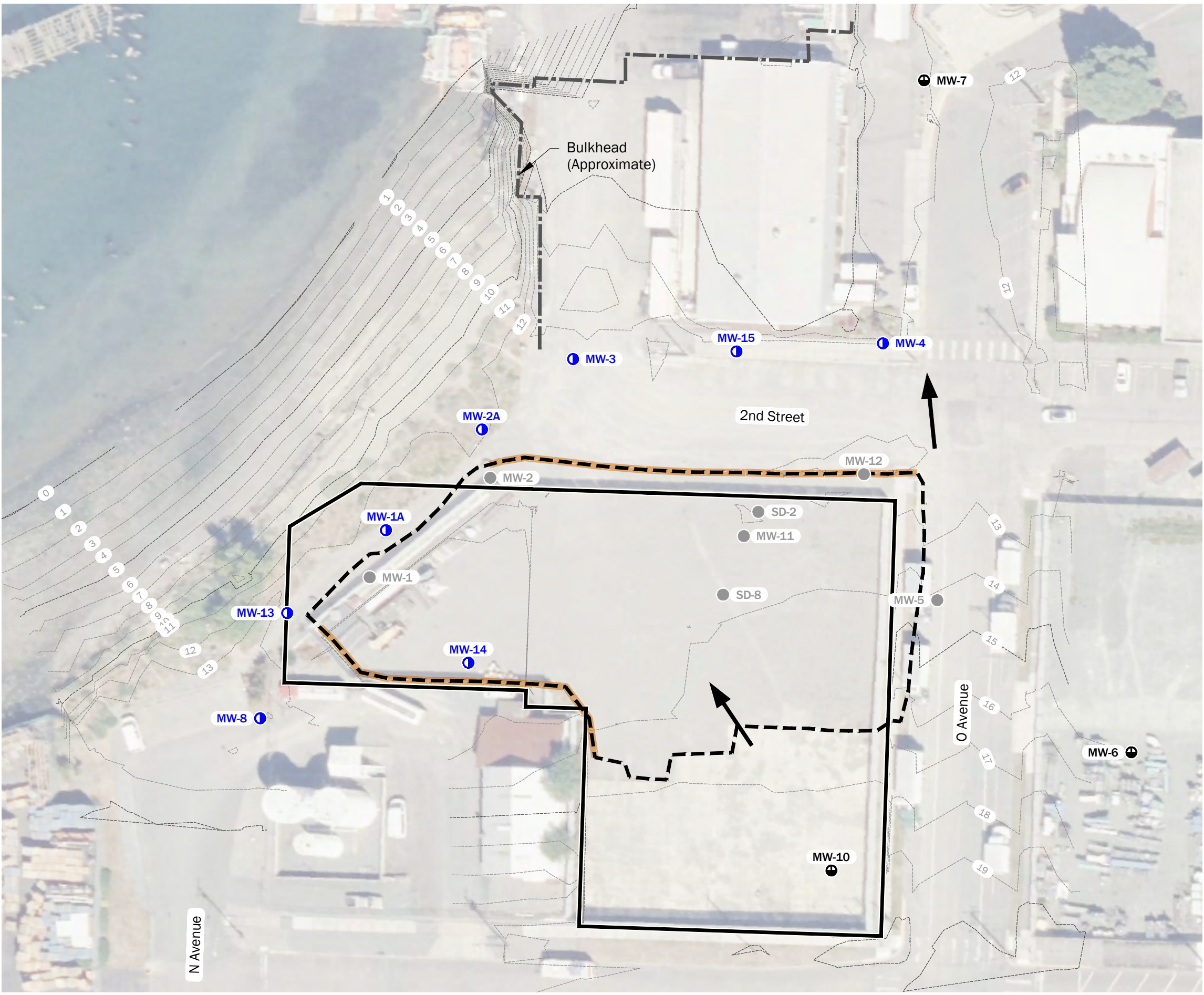
Quiet Cove Site
Anacortes, Washington



Figure 1

P:\5147024_GIS\5147024_Project\5147024_Project.aprx 5147024_14_F01_VicinityMap Date Exported: 12/09/24 by maugust

P:\5147024\CAD\14\Post 1A GWMR Oct 2025\514702414_F02_Groundwater Monitoring Well Sampling Locations.dwg TAB:F02 Date Exported: 10/22/25 - 13:48 by jfellow



Legend

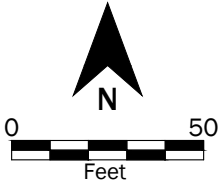
- Port of Anacortes Properties at Quiet Cove Site
- 10 Contour (Feet, NAVD 88)
- Interim Action Remedial Excavation Horizontal Limits
- Interim Action Excavation Sidewalls with the Presence of Petroleum Hydrocarbon-Related Contamination Exceeding Site Remediation Objectives
- MW-2 Monitoring Well Decommissioned During Interim Action Construction
- MW-6 Pre-Interim Action Groundwater Monitoring Location
- MW-1A Post Interim Action Groundwater Monitoring Location
- Inferred groundwater flow direction

Note:
• Interim action excavation limit based on surveys completed by Larry Steele & Associates, Inc. Dated 11/02/2020.

Sources:
• Base survey by Sound Development Group on 10/11/2017
• Aerial from Microsoft Bing, 2025

Coordinate System: WA State Plane, North Zone, NAD83, US Foot, NAVD88

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Groundwater Sampling Locations

Quiet Cove Site
Anacortes, Washington



Figure 2

P:\5147024\CAD\14\Post 1A GWMR Oct 2025\514702414_F03-F06_GW Results.dwg TAB:3 Date Exported: 10/22/25 - 13:46 by Jfellows



Legend

- Port of Anacortes Properties at Quiet Cove Site
- 10 Contour (Feet, NAVD 88)
- Interim Action Remedial Excavation Horizontal Limits
- Interim Action Excavation Sidewalls with the Presence of Petroleum Hydrocarbon-Related Contamination Exceeding Preliminary Screening Levels
- MW-6 Existing Monitoring Well Location
- MW-2 Monitoring Well Decommissioned During Interim Action Construction
- Inferred groundwater flow direction

Groundwater Analytical Results

Feb 2025 April 2025
Oct 2024 Aug 2025

Metals Either Not Detected or Detected at a Concentration Less Than the Preliminary Screening Level
Metals (One or More) Detected at a Concentration Greater Than the Preliminary Screening Level
No Sample Result

Note:

- Interim action excavation limit based on surveys completed by Larry Steele & Associates, Inc. Dated 11/02/2020.

Sources:

- Base survey by Sound Development Group on 10/11/2017
- Aerial from Microsoft Bing, 2025

Coordinate System: WA State Plane, North Zone, NAD83, US Foot, NAVD88

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0 N 50
Feet

Summary of Dissolved Metal Results in Groundwater

Quiet Cove Site
Anacortes, Washington

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Figure 3

P:\5147024\CAD\14\Post 1A GWMR Oct 2025\514702414_F03-F06_GW Results.dwg TAB:4 Date Exported: 10/22/25 - 13:46 by Jfellows



Legend

- Port of Anacortes Properties at Quiet Cove Site
- 10 Contour (Feet, NAVD 88)
- Interim Action Remedial Excavation Horizontal Limits
- Interim Action Excavation Sidewalls with the Presence of Petroleum Hydrocarbon-Related Contamination Exceeding Preliminary Screening Levels
- MW-6 Existing Monitoring Well Location
- MW-2 Monitoring Well Decommissioned During Interim Action Construction
- Inferred groundwater flow direction

Groundwater Analytical Results

Feb 2025 April 2025
Oct 2024 Aug 2025

Gasoline-Range Petroleum Hydrocarbons Either Not Detected or Detected at a Concentration Less Than the Preliminary Screening Level

Gasoline-Range Petroleum Hydrocarbons Detected at a Concentration Greater Than the Preliminary Screening Level

No Sample Result

Note:

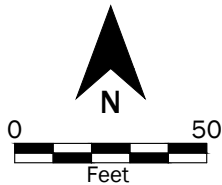
- Interim action excavation limit based on surveys completed by Larry Steele & Associates, Inc. Dated 11/02/2020.

Sources:

- Base survey by Sound Development Group on 10/11/2017
- Aerial from Microsoft Bing, 2025

Coordinate System: WA State Plane, North Zone, NAD83, US Foot, NAVD88

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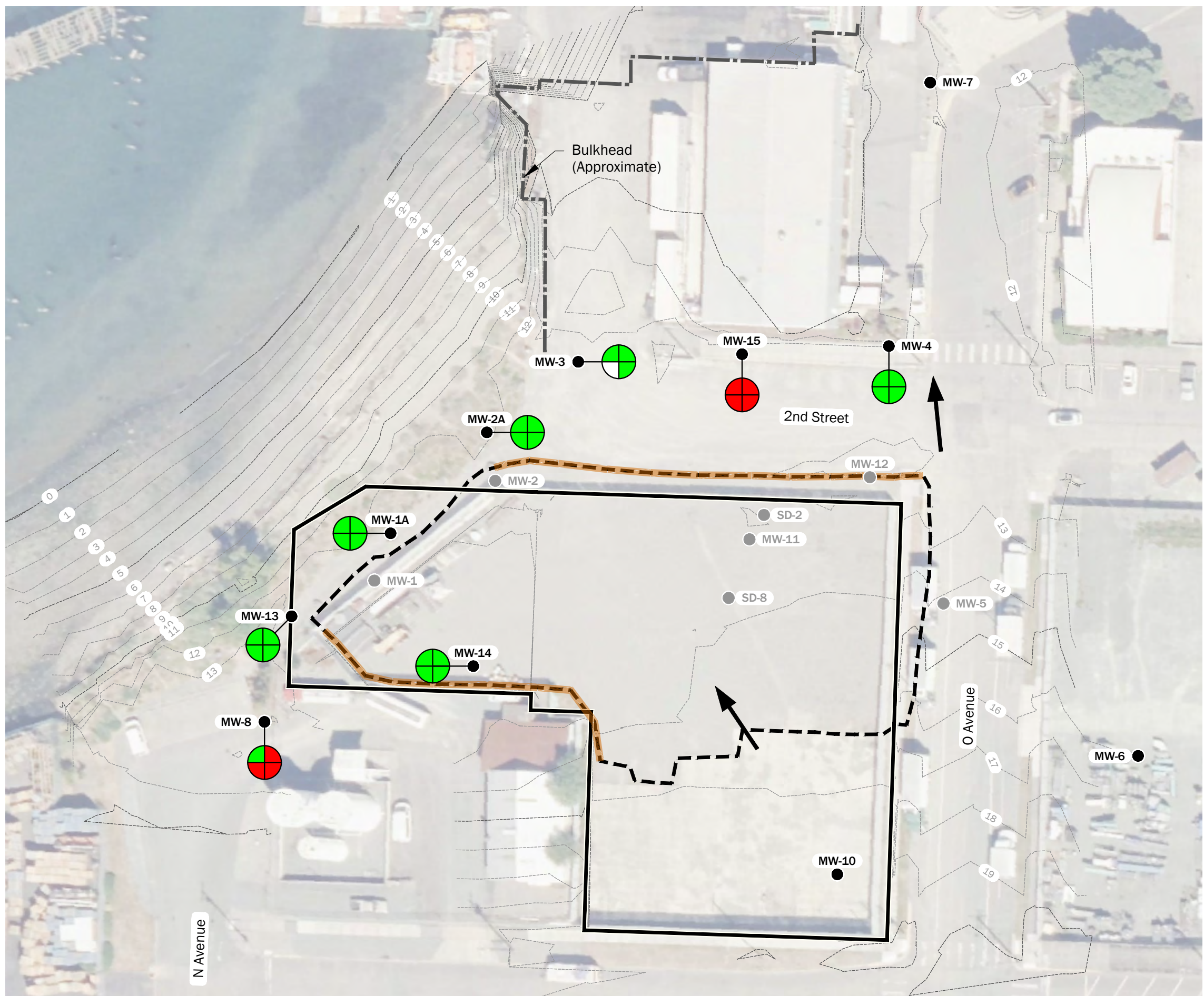
Summary of Gasoline-Range Petroleum Hydrocarbon Results in Groundwater

Quiet Cove Site
Anacortes, Washington

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Figure 4

P:\5147024\CAD\14\Post 1A GWMR Oct 2025\514702414_F03-F06_GW Results.dwg TAB:5 Date Exported: 10/22/25 - 13:46 by Jfellows



Legend

- Port of Anacortes Properties at Quiet Cove Site
- 10 Contour (Feet, NAVD 88)
- Interim Action Remedial Excavation Horizontal Limits
- Interim Action Excavation Sidewalls with the Presence of Petroleum Hydrocarbon-Related Contamination Exceeding Preliminary Screening Levels
- MW-6 Existing Monitoring Well Location
- MW-2 Monitoring Well Decommissioned During Interim Action Construction
- Inferred groundwater flow direction

Groundwater Analytical Results

Feb 2025 April 2025

Oct 2024 Aug 2025

Total Diesel/Heavy Oil-Range Petroleum Hydrocarbons* Either Not Detected or Detected at a Concentration Less Than the Preliminary Screening Level

Total Diesel/Heavy Oil-Range Petroleum Hydrocarbons* Detected at a Concentration Greater Than the Preliminary Screening Level

No Sample Result

* Sum of Diesel- and Heavy Oil-Range Petroleum Hydrocarbons Adjusted for Silica Acid-Gel Cleanup (See Table 1).

Note:

- Interim action excavation limit based on surveys completed by Larry Steele & Associates, Inc. Dated 11/02/2020.

Sources:

- Base survey by Sound Development Group on 10/11/2017
- Aerial from Microsoft Bing, 2025

Coordinate System: WA State Plane, North Zone, NAD83, US Foot, NAVD88

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Summary of Total Diesel/Heavy Oil-Range Petroleum Hydrocarbon Results in Groundwater

Quiet Cove Site
Anacortes, Washington

Figure 5

P:\5147024\CAD\14\Post 1A GWMR Oct 2025\514702414_F03-F06_GW Results.dwg TAB:6 Date Exported: 10/22/25 - 13:47 by Jfellows



Legend

- Port of Anacortes Properties at Quiet Cove Site
- 10 Contour (Feet, NAVD 88)
- Interim Action Remedial Excavation Horizontal Limits
- Interim Action Excavation Sidewalls with the Presence of Petroleum Hydrocarbon-Related Contamination Exceeding Preliminary Screening Levels
- MW-6 Existing Monitoring Well Location
- MW-2 Monitoring Well Decommissioned During Interim Action Construction
- Inferred groundwater flow direction

Groundwater Analytical Results

Feb 2025 April 2025
Oct 2024 Aug 2025

VOCs Either Not Detected or Detected at a Concentration Less Than the Preliminary Screening Level
VOCs (One or More) Detected at a Concentration Greater Than the Preliminary Screening Level
No Sample Result

VOC= Volatile Organic Compound

Note:

- Interim action excavation limit based on surveys completed by Larry Steele & Associates, Inc. Dated 11/02/2020.

Sources:

- Base survey by Sound Development Group on 10/11/2017
- Aerial from Microsoft Bing, 2025

Coordinate System: WA State Plane, North Zone, NAD83, US Foot, NAVD88

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0 N 50
Feet

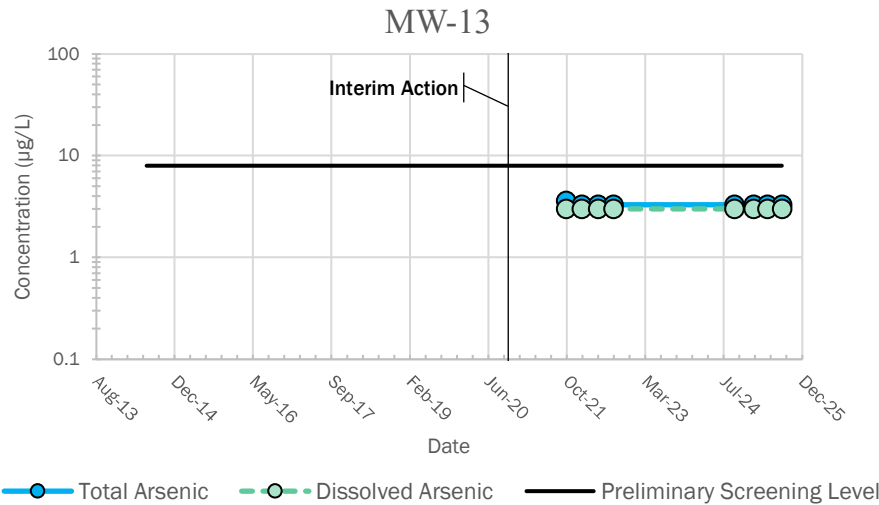
Summary of VOC Results in Groundwater

Quiet Cove Site
Anacortes, Washington

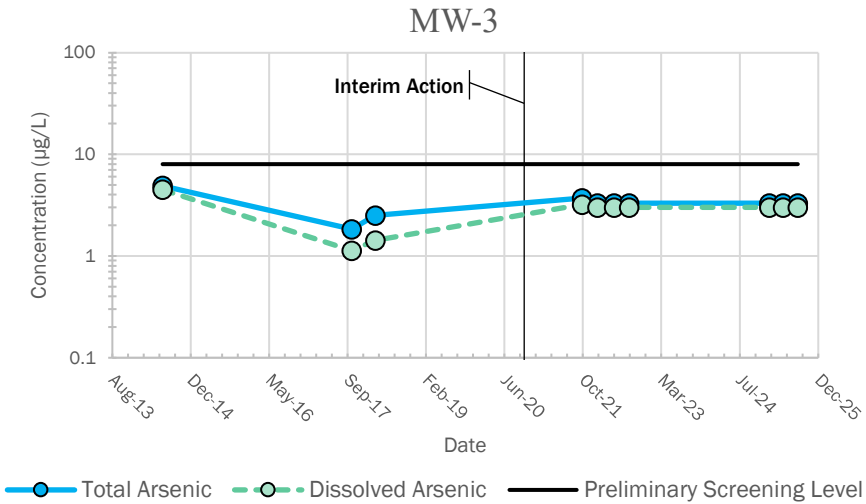
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Figure 6

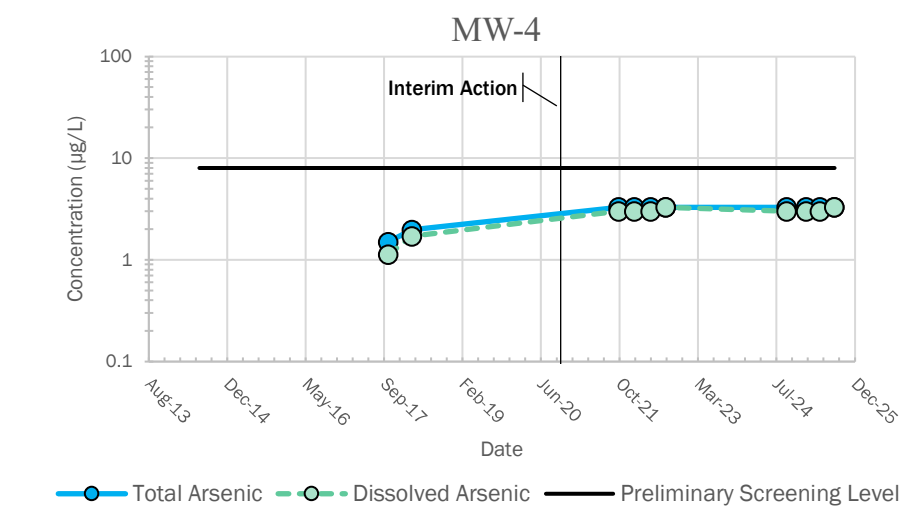
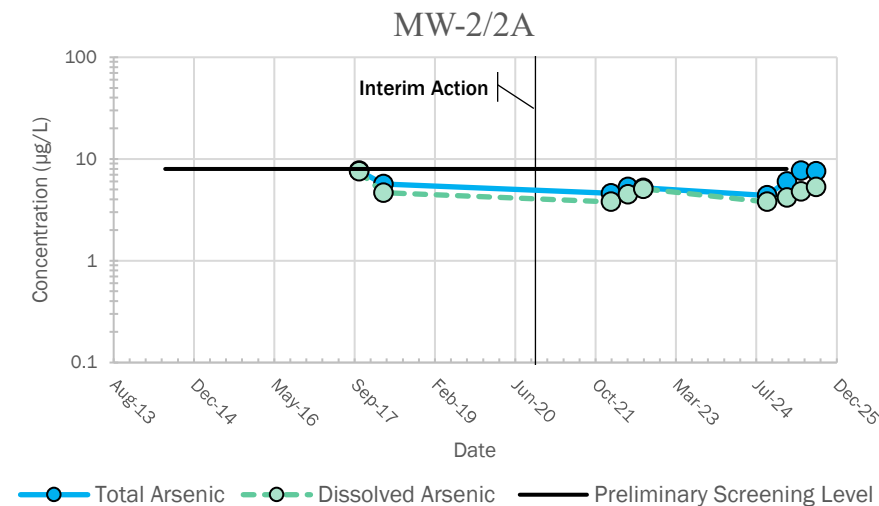
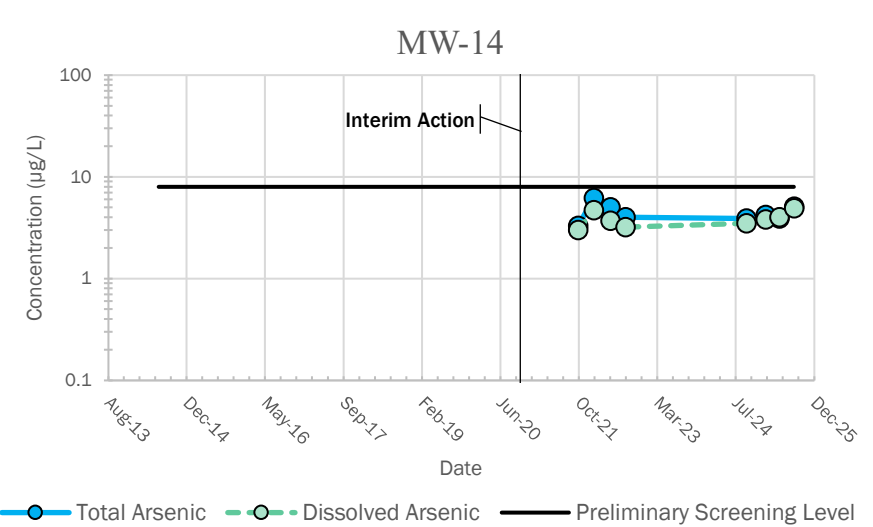
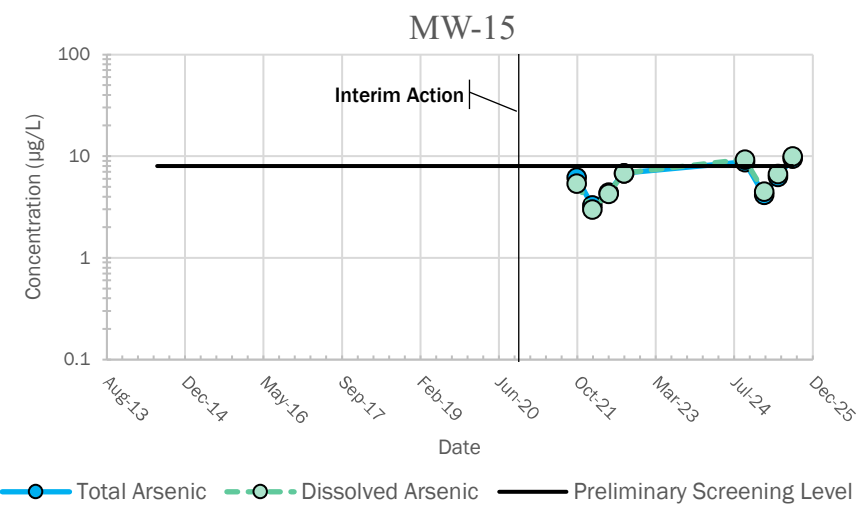
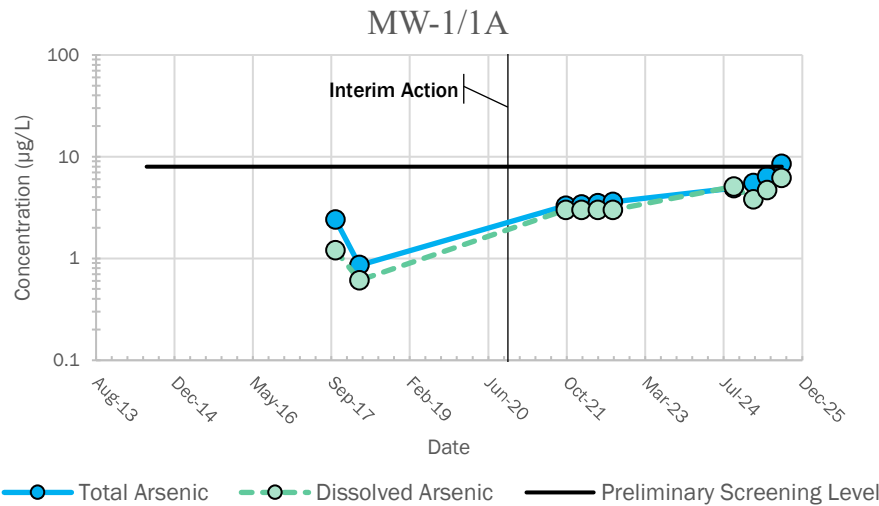
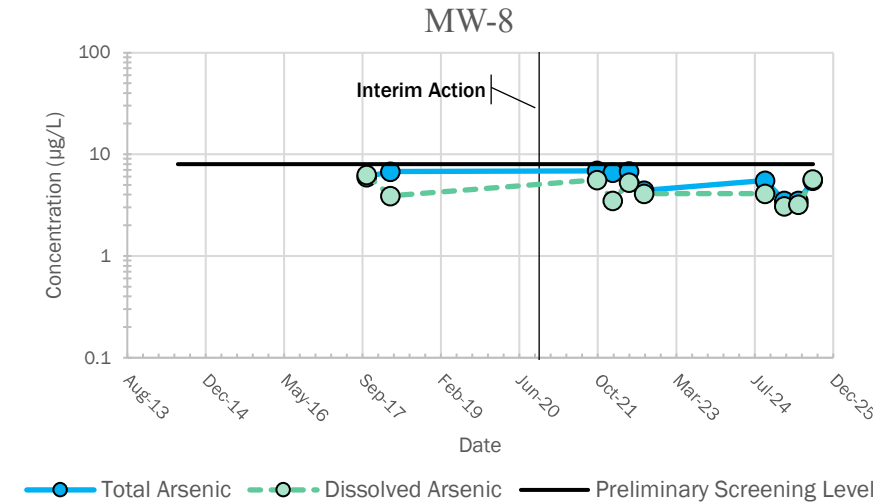
Shoreline Area Monitoring Wells



2nd Street Area Monitoring Wells



Southern Property Boundary Area Monitoring Wells



Notes:

1. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. can not guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Data Source: Table 1 – Groundwater Field Parameters and Chemical Analytical Data, Quiet Cove Site, Anacortes, WA

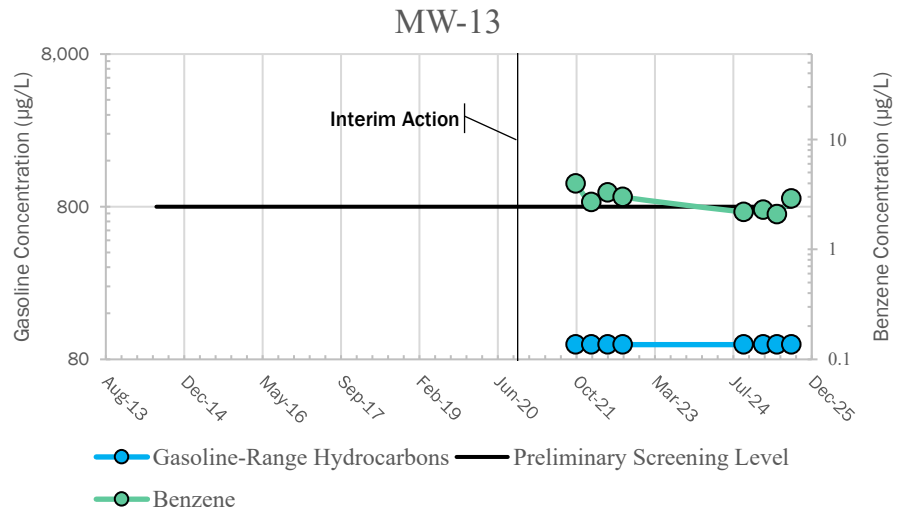
Summary of Total and Dissolved Arsenic Results

Quiet Cove Site
Anacortes, Washington

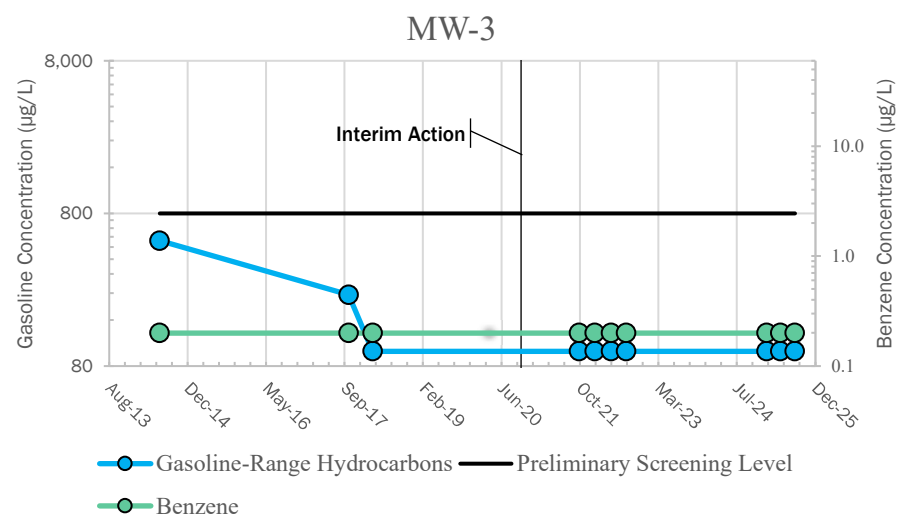
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Figure 7

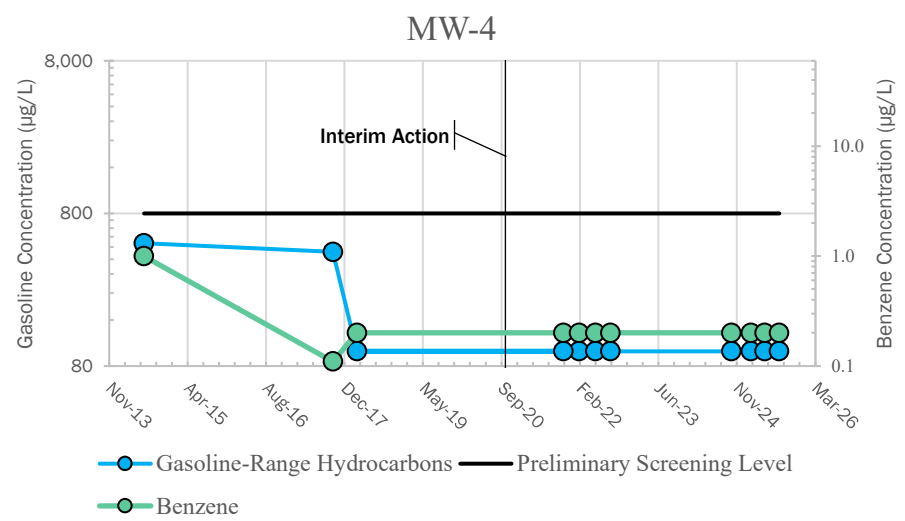
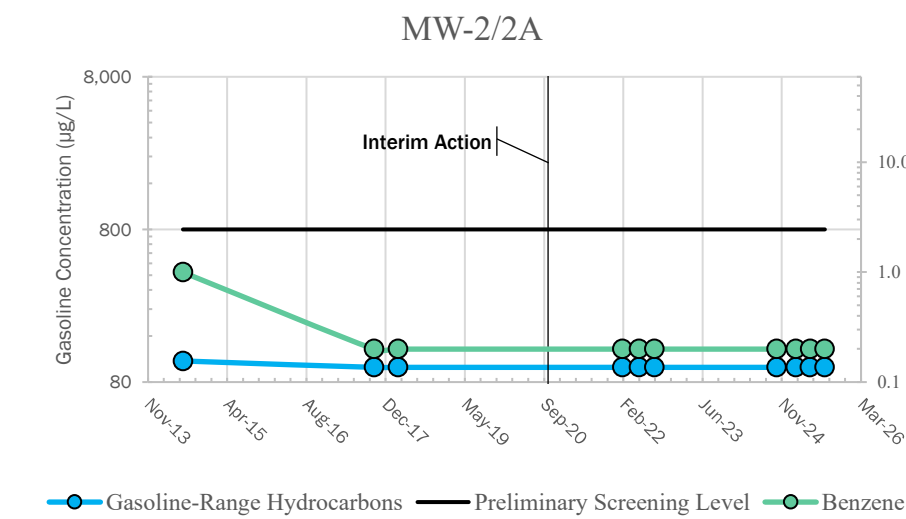
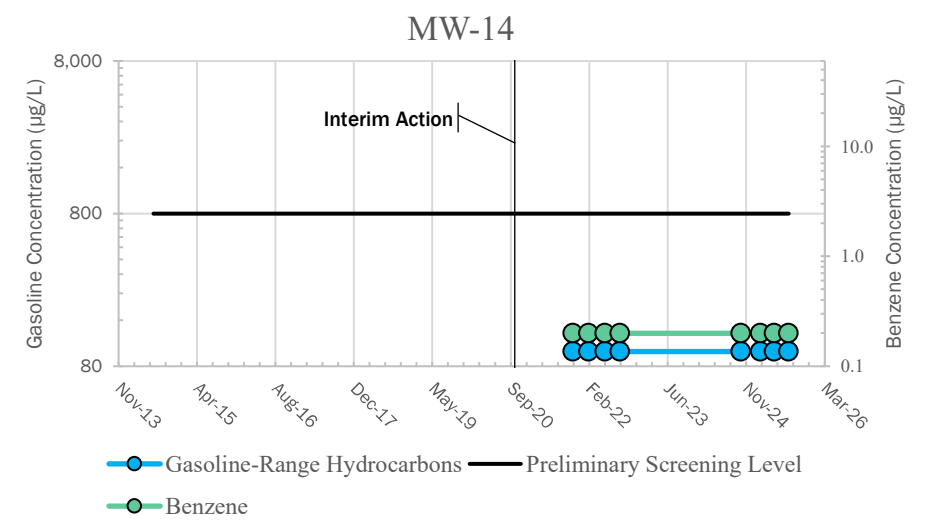
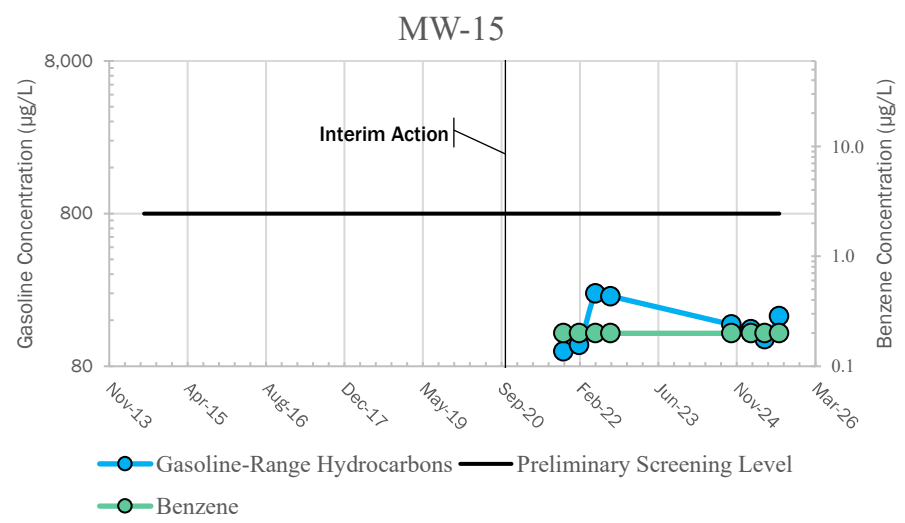
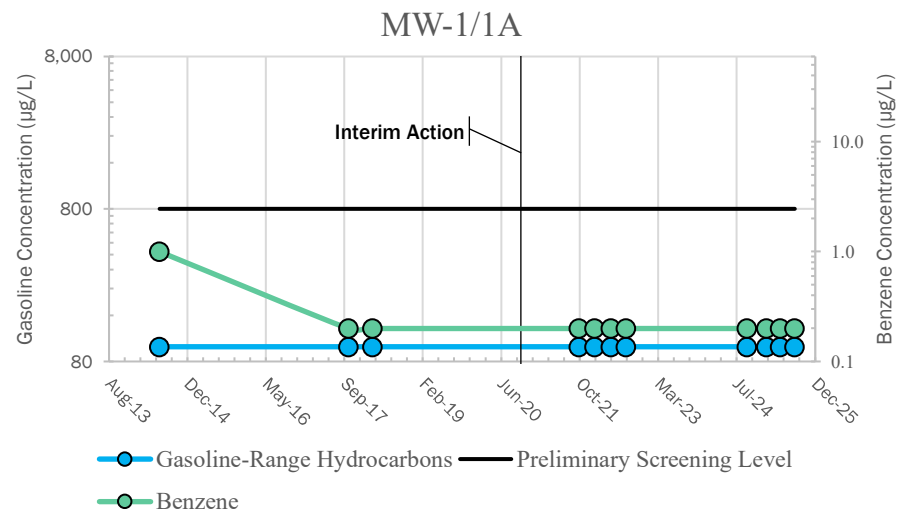
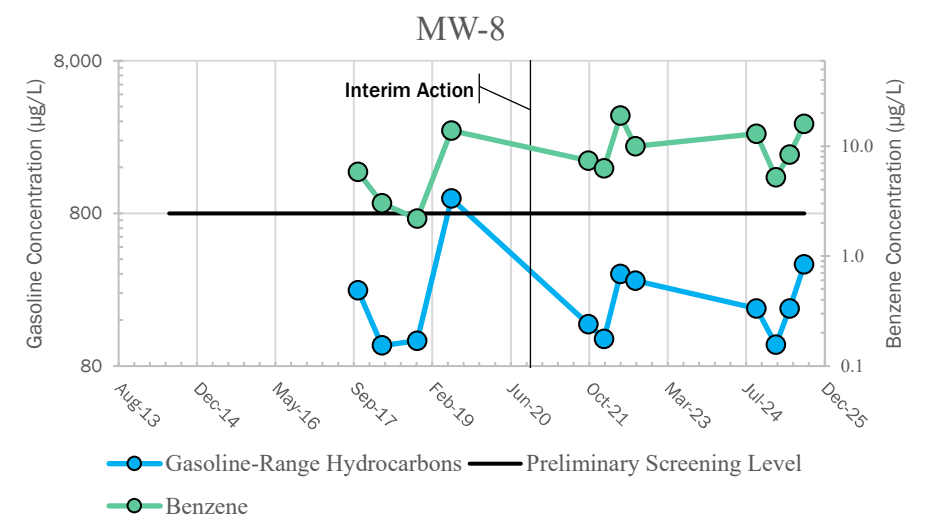
Shoreline Area Monitoring Wells



2nd Street Area Monitoring Wells



Southern Property Boundary Area Monitoring Wells



Notes:

1. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. can not guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Data Source: Table 1 – Groundwater Field Parameters and Chemical Analytical Data, Quiet Cove Site, Anacortes, WA

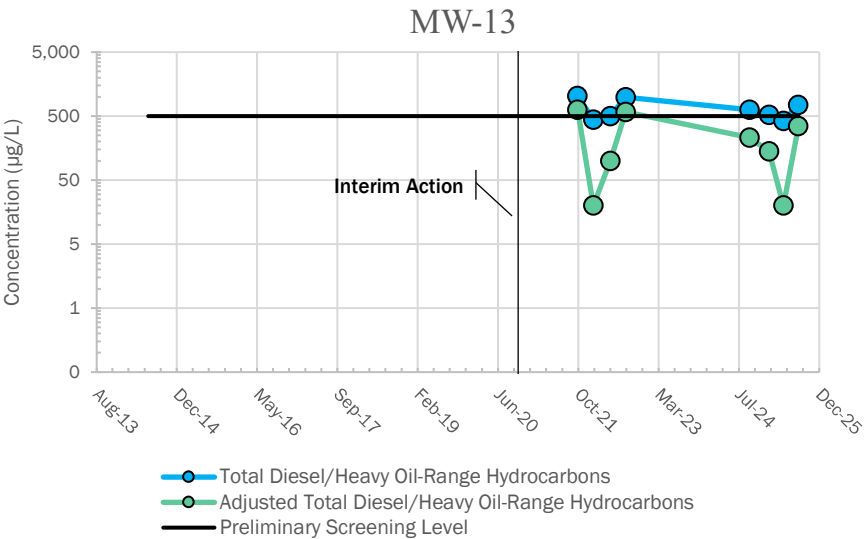
Summary of Gasoline-Range Petroleum Hydrocarbon and Benzene Results

Quiet Cove Site
Anacortes, Washington

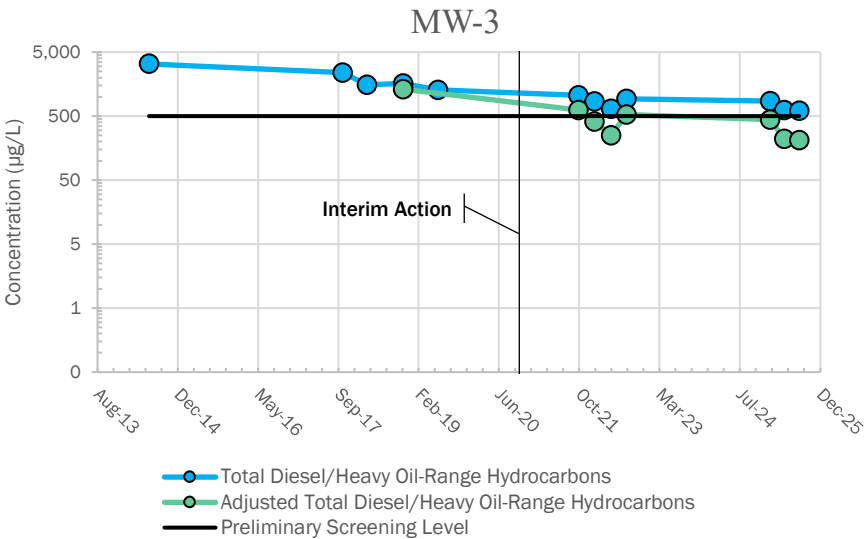


Figure 8

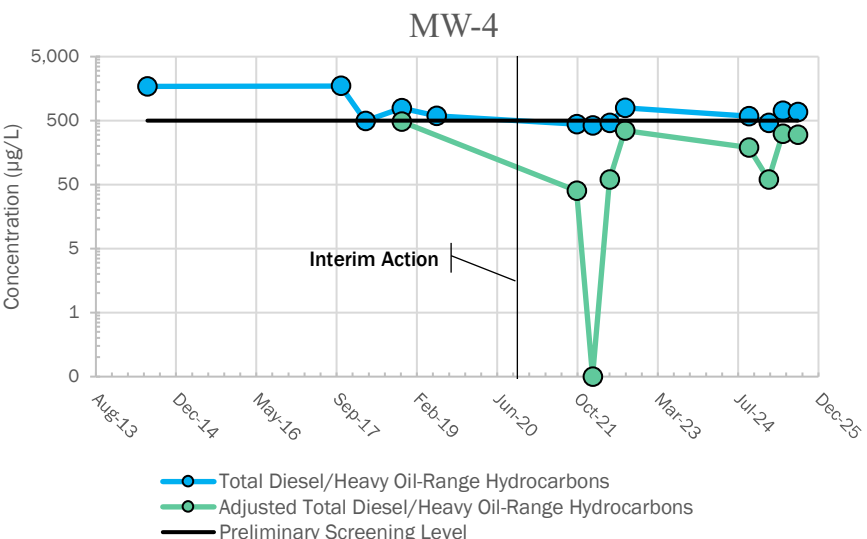
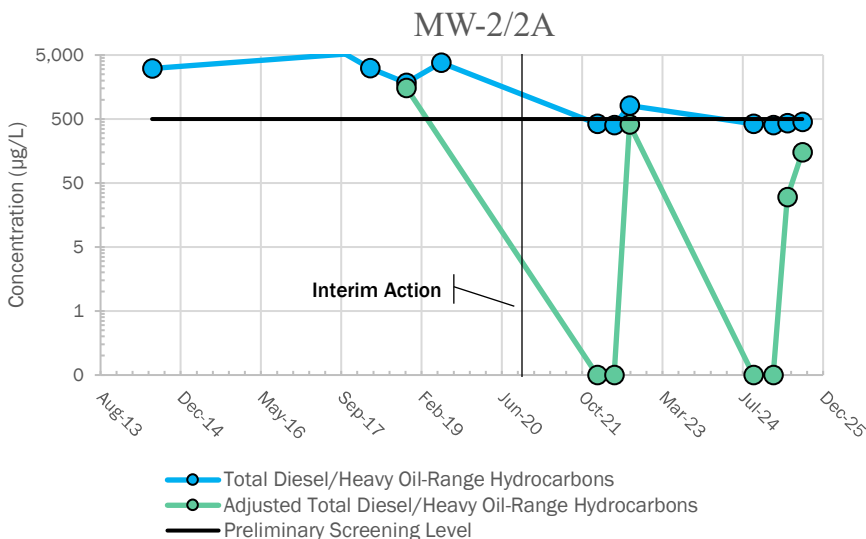
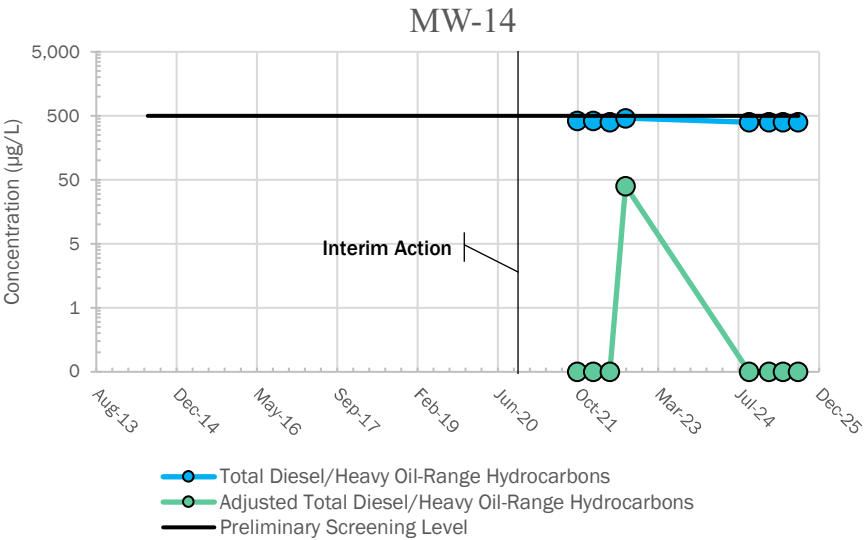
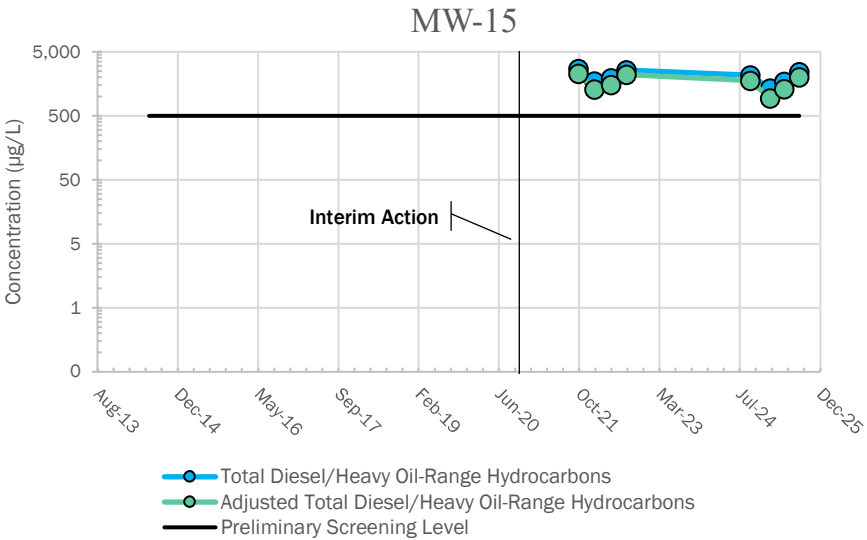
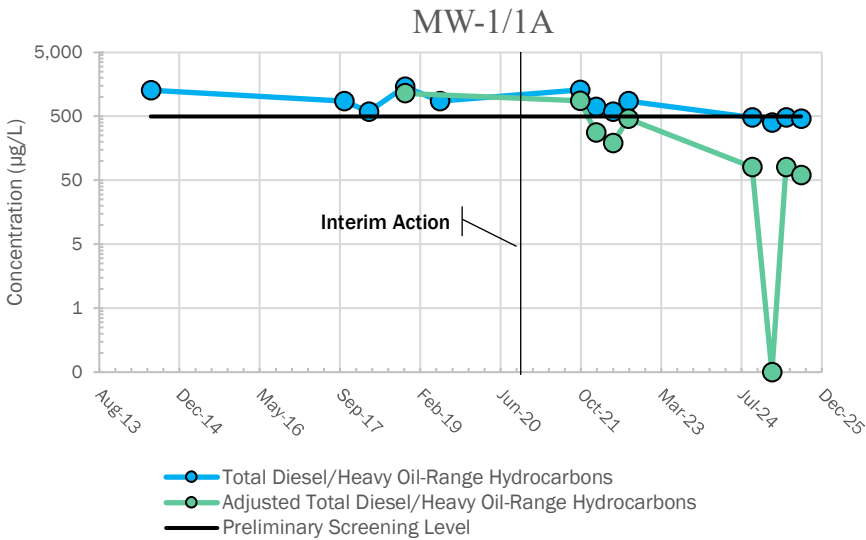
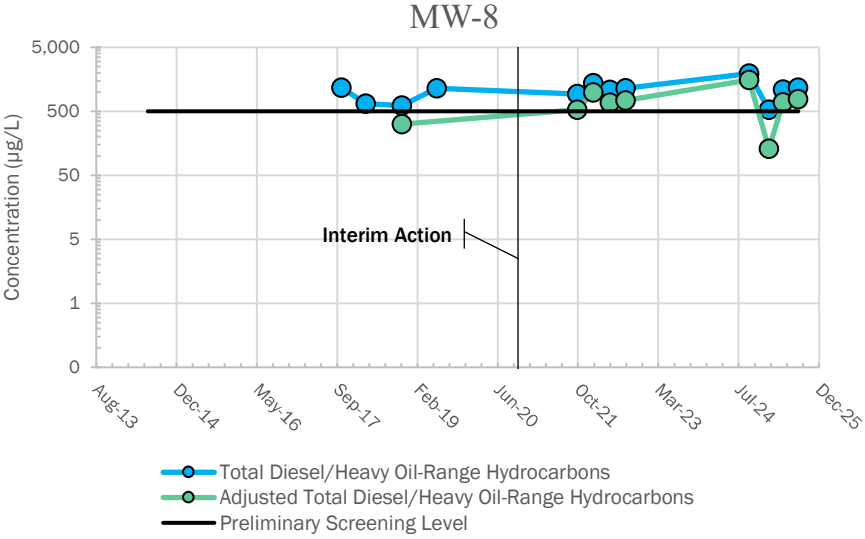
Shoreline Area Monitoring Wells



2nd Street Area Monitoring Wells



Southern Property Boundary Area Monitoring Wells



Notes:

1. Results shown are for total diesel- and heavy oil-range petroleum hydrocarbons with and without acid silica gel preparation method.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. can not guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Data Source: Table 1 – Groundwater Field Parameters and Chemical Analytical Data, Quiet Cove Site, Anacortes, WA

Summary of Total Diesel/Heavy Oil-Range Hydrocarbon Results

Quiet Cove Site
Anacortes, Washington

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Figure 9

Appendices

Appendix A

Monitoring Well Completion Logs

SOIL CLASSIFICATION CHART

MAJOR DIVISIONS			SYMBOLS		TYPICAL DESCRIPTIONS	
			GRAPH	LETTER		
COARSE GRAINED SOILS	GRAVEL AND GRAVELLY SOILS	CLEAN GRAVELS		GW	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES	
		(LITTLE OR NO FINES)		GP	POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES	
		GRAVELS WITH FINES		GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES	
		(APPRECIABLE AMOUNT OF FINES)		GC	CLAYEY GRAVELS, GRAVEL - SAND - CLAY MIXTURES	
	MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	SAND AND SANDY SOILS	CLEAN SANDS		SW	WELL-GRADED SANDS, GRAVELLY SANDS
			(LITTLE OR NO FINES)		SP	POORLY-GRADED SANDS, GRAVELLY SAND
SANDS WITH FINES				SM	SILTY SANDS, SAND - SILT MIXTURES	
(APPRECIABLE AMOUNT OF FINES)				SC	CLAYEY SANDS, SAND - CLAY MIXTURES	
FINE GRAINED SOILS	SILTS AND CLAYS	LIQUID LIMIT LESS THAN 50		ML	INORGANIC SILTS, ROCK FLOUR, CLAYEY SILTS WITH SLIGHT PLASTICITY	
				CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS	
				OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY	
	MORE THAN 50% PASSING NO. 200 SIEVE	SILTS AND CLAYS	LIQUID LIMIT GREATER THAN 50		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS SILTY SOILS
					CH	INORGANIC CLAYS OF HIGH PLASTICITY
					OH	ORGANIC CLAYS AND SILTS OF MEDIUM TO HIGH PLASTICITY
HIGHLY ORGANIC SOILS				PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS	

NOTE: Multiple symbols are used to indicate borderline or dual soil classifications

Sampler Symbol Descriptions

	2.4-inch I.D. split barrel
	Standard Penetration Test (SPT)
	Shelby tube
	Piston
	Direct-Push
	Bulk or grab
	Continuous Coring

Blowcount is recorded for driven samplers as the number of blows required to advance sampler 12 inches (or distance noted). See exploration log for hammer weight and drop.

"P" indicates sampler pushed using the weight of the drill rig.

"WOH" indicates sampler pushed using the weight of the hammer.

NOTE: The reader must refer to the discussion in the report text and the logs of explorations for a proper understanding of subsurface conditions. Descriptions on the logs apply only at the specific exploration locations and at the time the explorations were made; they are not warranted to be representative of subsurface conditions at other locations or times.

ADDITIONAL MATERIAL SYMBOLS

SYMBOLS		TYPICAL DESCRIPTIONS
GRAPH	LETTER	
	AC	Asphalt Concrete
	CC	Cement Concrete
	CR	Crushed Rock/Quarry Spalls
	SOD	Sod/Forest Duff
	TS	Topsoil

Groundwater Contact



Measured groundwater level in exploration, well, or piezometer



Measured free product in well or piezometer

Graphic Log Contact



Distinct contact between soil strata



Approximate contact between soil strata

Material Description Contact



Contact between geologic units



Contact between soil of the same geologic unit

Laboratory / Field Tests

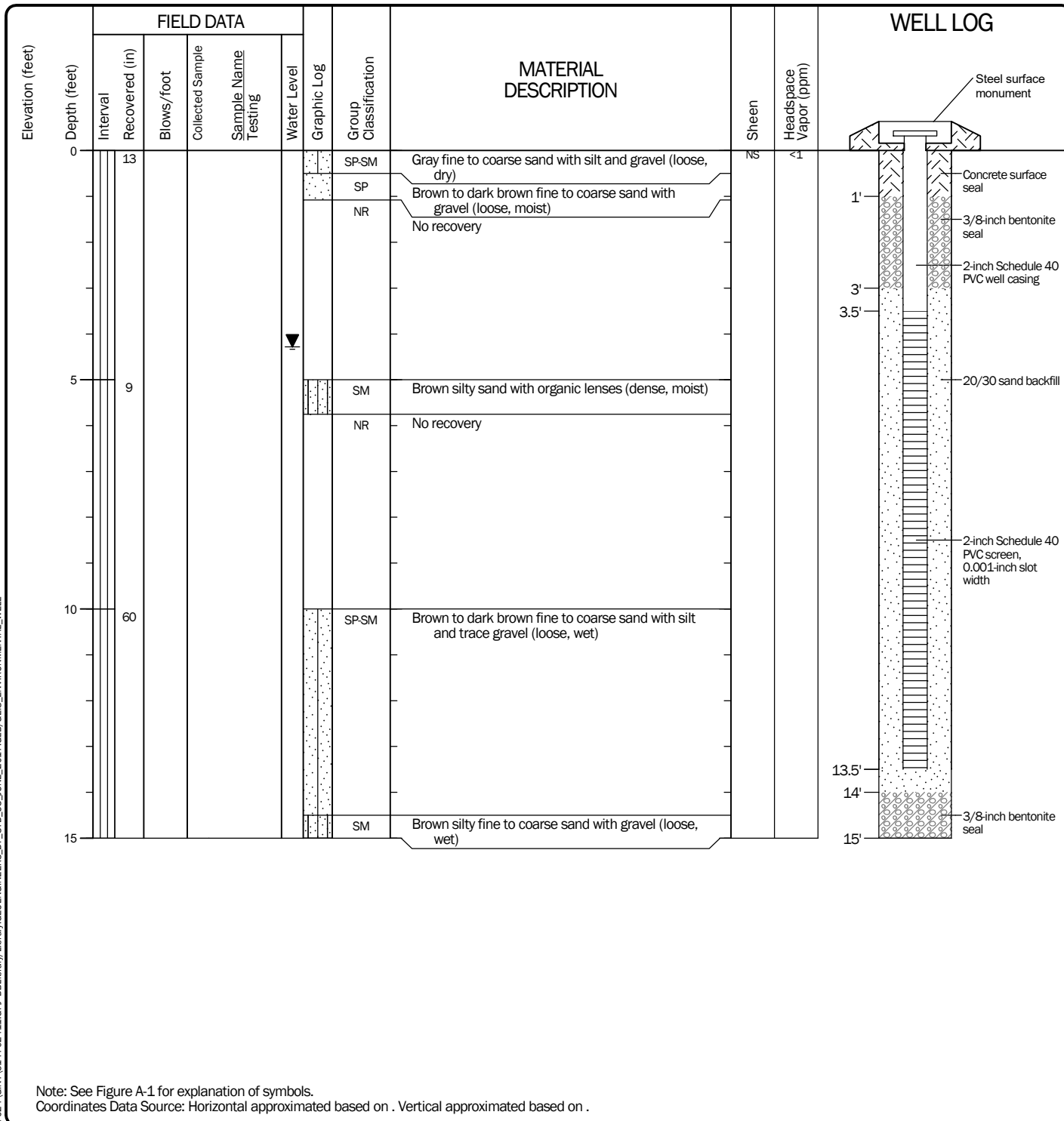
%F	Percent fines
%G	Percent gravel
AL	Atterberg limits
CA	Chemical analysis
CP	Laboratory compaction test
CS	Consolidation test
DD	Dry density
DS	Direct shear
HA	Hydrometer analysis
MC	Moisture content
MD	Moisture content and dry density
Mohs	Mohs hardness scale
OC	Organic content
PM	Permeability or hydraulic conductivity
PI	Plasticity index
PL	Point load test
PP	Pocket penetrometer
SA	Sieve analysis
TX	Triaxial compression
UC	Unconfined compression
VS	Vane shear

Sheen Classification

NS	No Visible Sheen
SS	Slight Sheen
MS	Moderate Sheen
HS	Heavy Sheen

Key to Exploration Logs

Start Drilled 10/21/2021	End 10/21/2021	Total Depth (ft) 15	Logged By Checked By NRS	Driller Cascade Drilling, LP	Drilling Method Direct Push
Hammer Data N/A		Drilling Equipment Track-mounted Auger Rig		DOE Well I.D.: BMM-965 A 2-in well was installed on 10/21/2021 to a depth of 13.5 ft.	
Surface Elevation (ft) Vertical Datum Undetermined		Top of Casing Elevation (ft)		Groundwater Date Measured 10/22/2021	
Easting (X) Northing (Y)		Horizontal Datum		Depth to Water (ft) 4.28	Elevation (ft)
Notes:					



Log of Monitoring Well MW-1A



Project: Quiet Cove - Post Interim Action Construction Groundwater Monitoring
Project Location: Anacortes, Washington
Project Number: 5147-024-11

Figure A-2
Sheet 1 of 1

Start Drilled 10/21/2021	End 10/21/2021	Total Depth (ft) 15	Logged By Checked By NRS	Driller Cascade Drilling, LP	Drilling Method Direct Push
Surface Elevation (ft) Vertical Datum Undetermined			Hammer Data N/A		Drilling Equipment Track-mounted Auger Rig
Easting (X) Northing (Y)			System Datum		Groundwater not observed at time of exploration
Notes: Due to shell midden no well was constructed					

Elevation (feet)	FIELD DATA					MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	Interval	Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing				
0		32				CR Crushed base course gravel	NS	<1	
						SM Brown silty fine to coarse sand with occasional gravel and layers of coal throughout (dense, moist)			
						SP Light gray fine to medium sand with gravel	SS	<1	
						ML Tan silt with orange oxidation staining	NS	<1	Shell fragments observed
						SM Black to dark gray silty fine to medium sand with shell fragments			
5		49				SP-SM Light gray to light brown fine to medium sand with silt	NS	<1	
						Becomes gray, very dense, moist to wet			
						Becomes wet			Groundwater observed at approximately 6½ feet during drilling
						With trace gravel			
10		60							
						SM Dark gray silty fine to coarse sand with gravel			
15									

Note: See Figure A-1 for explanation of symbols.
Coordinates Data Source: Horizontal approximated based on . Vertical approximated based on .

Log of Boring MW-2A

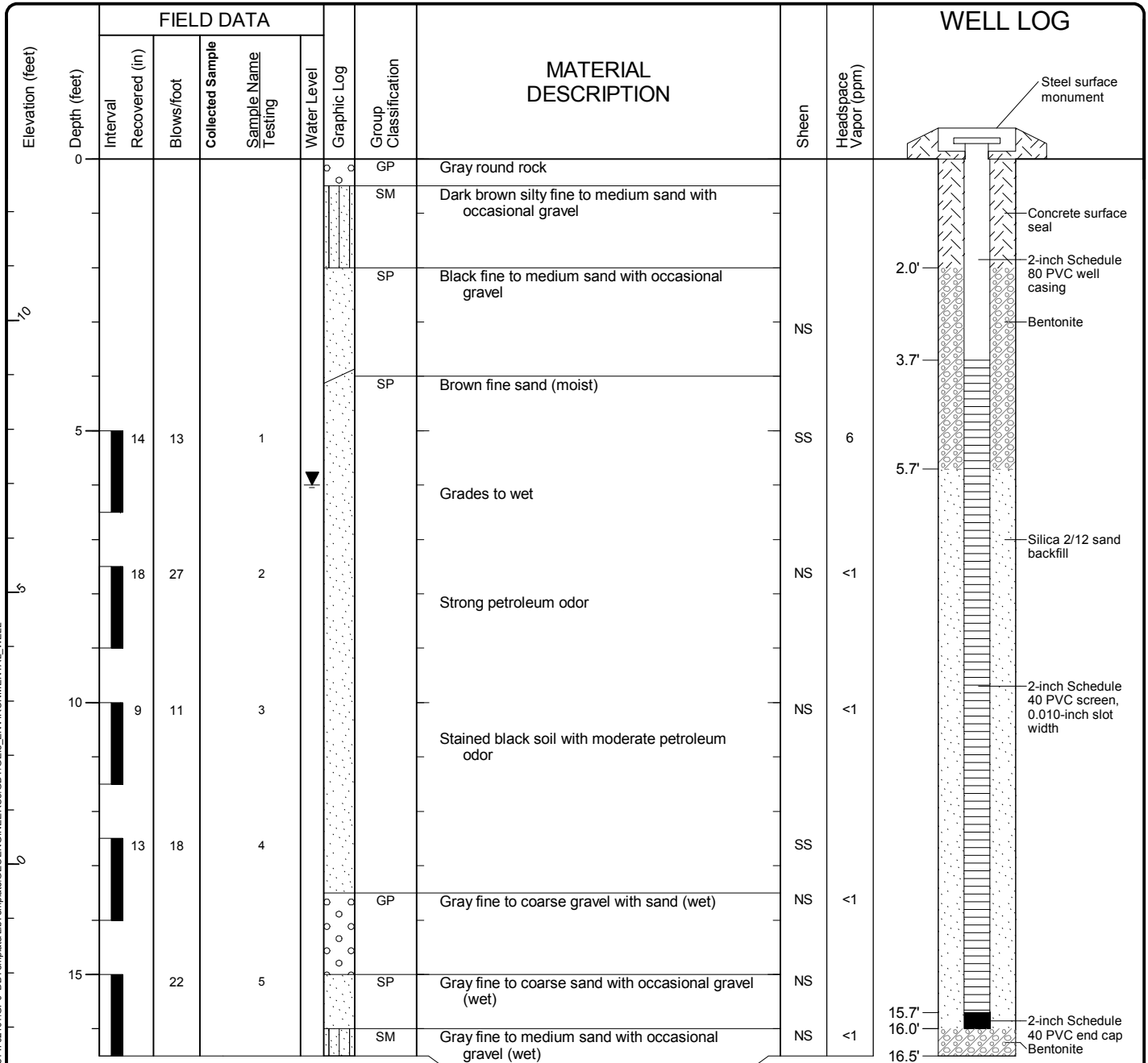


Project: Quiet Cove - Post Interim Action Construction Groundwater Monitoring
Project Location: Anacortes, Washington
Project Number: 5147-024-11

Figure A-3
Sheet 1 of 1

Date: 1/4/22 Path: \\GEOENGINEERS.COM\WAN\PROJECTS\5147024\GINT\5147024\GIB\ENVIRONMENTAL_STANDARD_NO_GW DBLibrary\Library\GEOENGINEERS_DF_STD_US_JUNE_2017.GLB\GIB_ENVIRONMENTAL_STANDARD_NO_GW

Start Drilled 6/23/2014	End 6/23/2014	Total Depth (ft) 16.5	Logged By NRS	Checked By	Driller Cascade Drilling, L.P.	Drilling Method Hollow-Stem Auger
Hammer Data Automatic 140 (lbs) / 30 (in) Drop		Drilling Equipment		DOE Well I.D.: BID 548 A 2 (in) well was installed on 6/23/2014 to a depth of 16 (ft).		
Surface Elevation (ft) Vertical Datum 12.97 NAVD88		Top of Casing Elevation (ft)		Groundwater Date Measured 6/23/2014		
Easting (X) Northing (Y) 559756.678468316 1208701.08910405		Horizontal Datum NAD83		Depth to Water (ft) 6.0		Elevation (ft) 7.0
Notes:						



Note: See Figure A-1 for explanation of symbols.

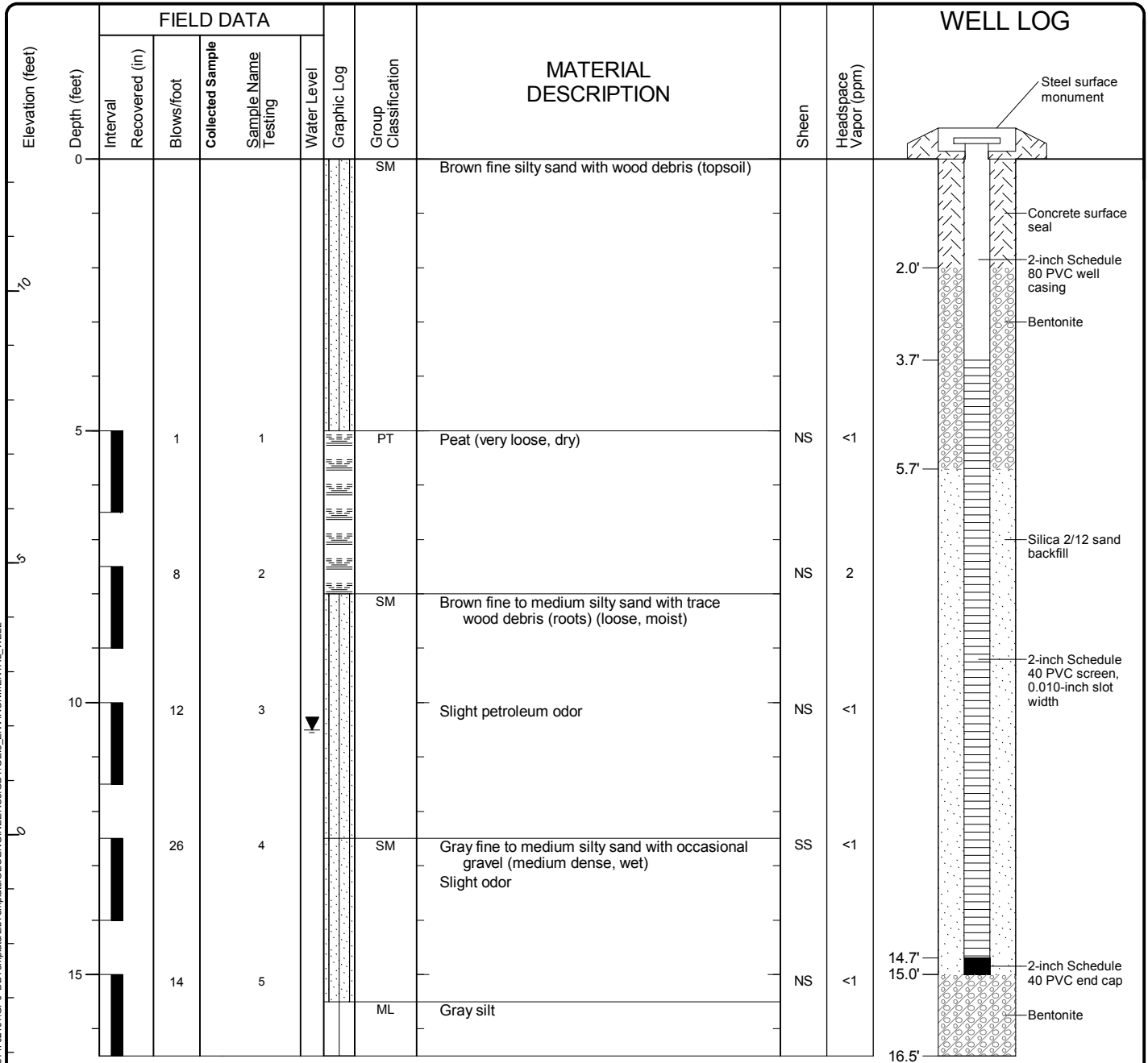
Log of Monitoring Well MW-3



Project: Quiet Cove Property
 Project Location: Anacortes, Washington
 Project Number: 5147-024-01

Figure A-32
 Sheet 1 of 1

Start Drilled 6/24/2014	End 6/24/2014	Total Depth (ft) 16.5	Logged By Checked By NRS	Driller Cascade Drilling, L.P.	Drilling Method Hollow-Stem Auger
Hammer Data Automatic 140 (lbs) / 30 (in) Drop		Drilling Equipment		A 2 (in) well was installed on 6/24/2014 to a depth of 15 (ft).	
Surface Elevation (ft) Vertical Datum 12.43 NAVD88		Top of Casing Elevation (ft)		Groundwater Date Measured 6/24/2014	
Easting (X) Northing (Y) 559760.5958 1208852.2931		Horizontal Datum NAD83		Depth to Water (ft) 10.5	Elevation (ft) 1.9
Notes:					



Note: See Figure A-1 for explanation of symbols.

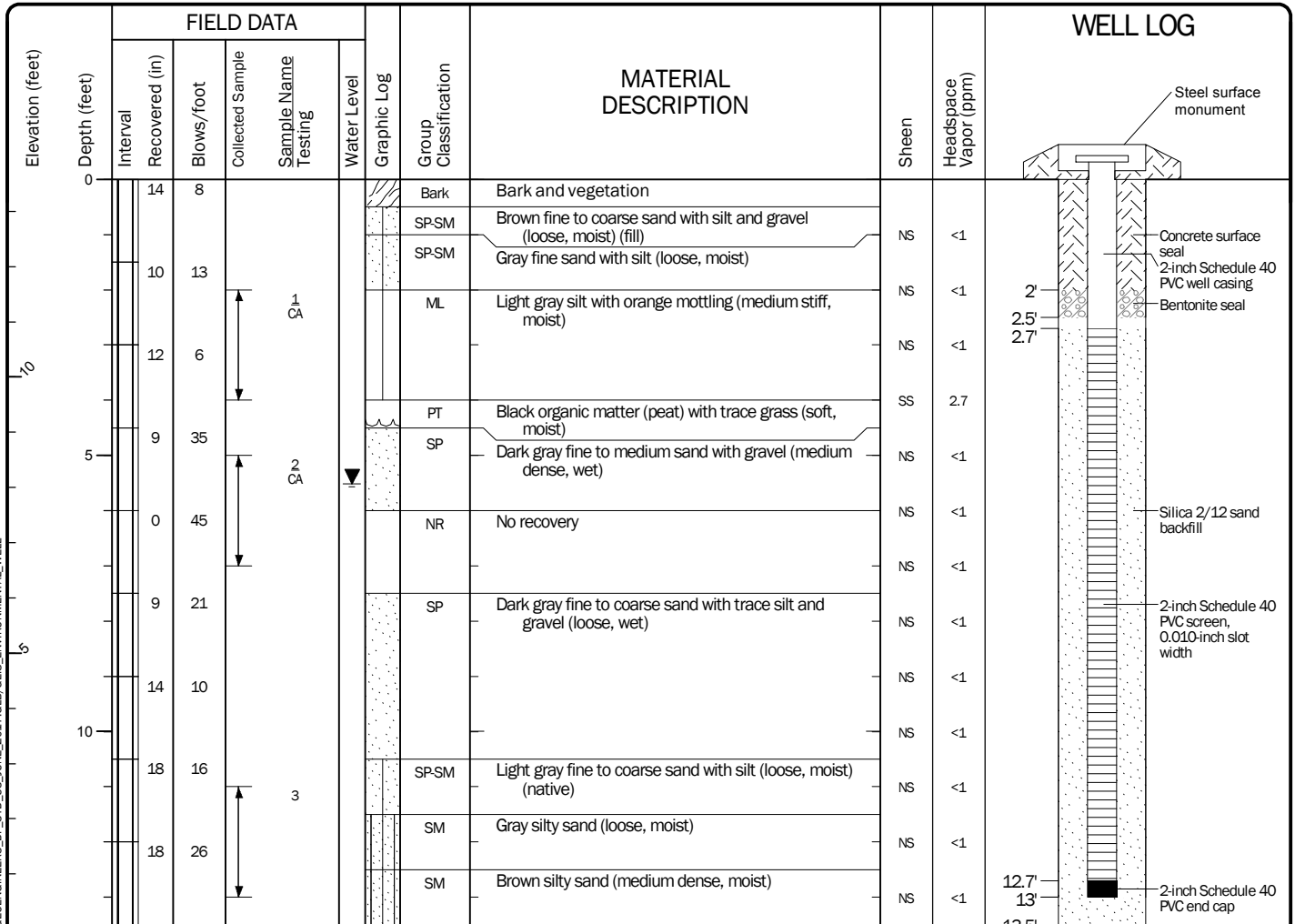
Log of Monitoring Well MW-4



Project: Quiet Cove Property
 Project Location: Anacortes, Washington
 Project Number: 5147-024-01

Figure A-33
 Sheet 1 of 1

Start Drilled 9/19/2017	End 9/19/2017	Total Depth (ft) 13.5	Logged By Checked By NS BJT	Driller Cascade Drilling, LP	Drilling Method Hollow-stem Auger
Hammer Data		Rope & Cathead 140 (lbs) / 30 (in) Drop	Drilling Equipment CME 75		DOE Well I.D.: BKA-356 A 2 (in) well was installed on 9/19/2017 to a depth of 13 (ft).
Surface Elevation (ft) Vertical Datum		13.58 NAVD88	Top of Casing Elevation (ft) 13.13		Groundwater Date Measured 10/17/2017
Easting (X) Northing (Y)		1208872.65 559890.97	Horizontal Datum WA State Plane North NAD83 (feet)		Depth to Water (ft) 5.51 Elevation (ft) 7.62
Notes:					



Note: See Figure B-1 for explanation of symbols.
Coordinates Data Source: Horizontal approximated based on topographic land survey completed by Sound Development Group October 6, 2017. Vertical approximated based on topographic land survey completed by Sound Development Group October 6, 2017.

Log of Monitoring Well MW-8

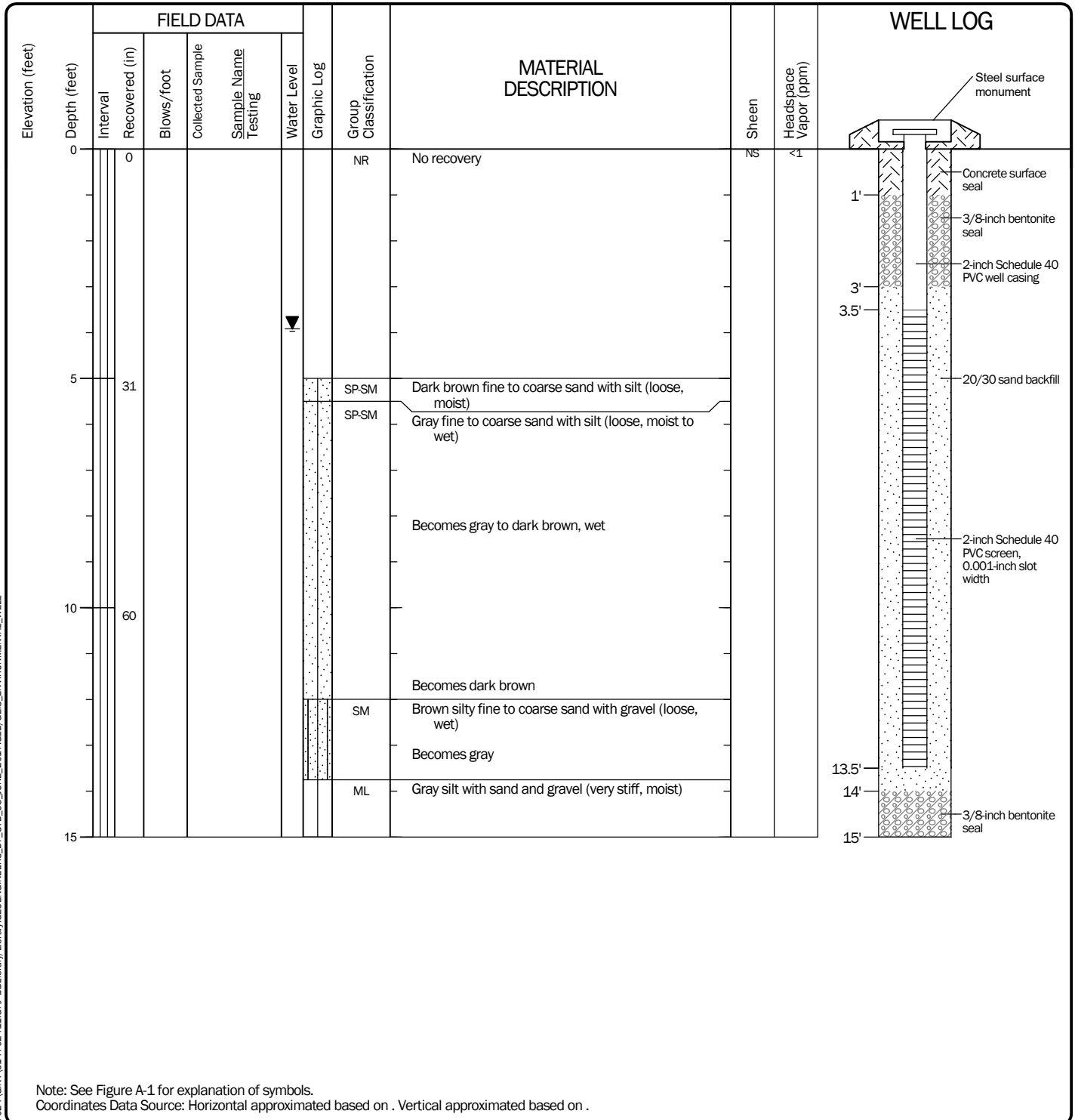


Project: Quiet Cove
Project Location: Anacortes, Washington
Project Number: 5147-024-05

Figure B-20
Sheet 1 of 1

Date: 5/9/18 Path: \\GEOENGINEERS.COM\W\PROJECTS\5147-024\GINT\514702405.GPJ DBLlibrary\Library\GEOENGINEERS_DF_STD_US_JUNE_2017.GLB\GEB_ENVIRONMENTAL_WELL

Start Drilled 10/20/2021	End 10/20/2021	Total Depth (ft) 15	Logged By Checked By NRS	Driller Cascade Drilling, LP	Drilling Method Direct Push
Hammer Data N/A		Drilling Equipment Track-mounted Auger Rig		DOE Well I.D.: BMM-963 A 2-in well was installed on 10/20/2021 to a depth of 13.5 ft.	
Surface Elevation (ft) Vertical Datum Undetermined		Top of Casing Elevation (ft)		Groundwater Date Measured 10/22/2021	
Easting (X) Northing (Y)		Horizontal Datum		Depth to Water (ft) 3.92	Elevation (ft)
Notes:					



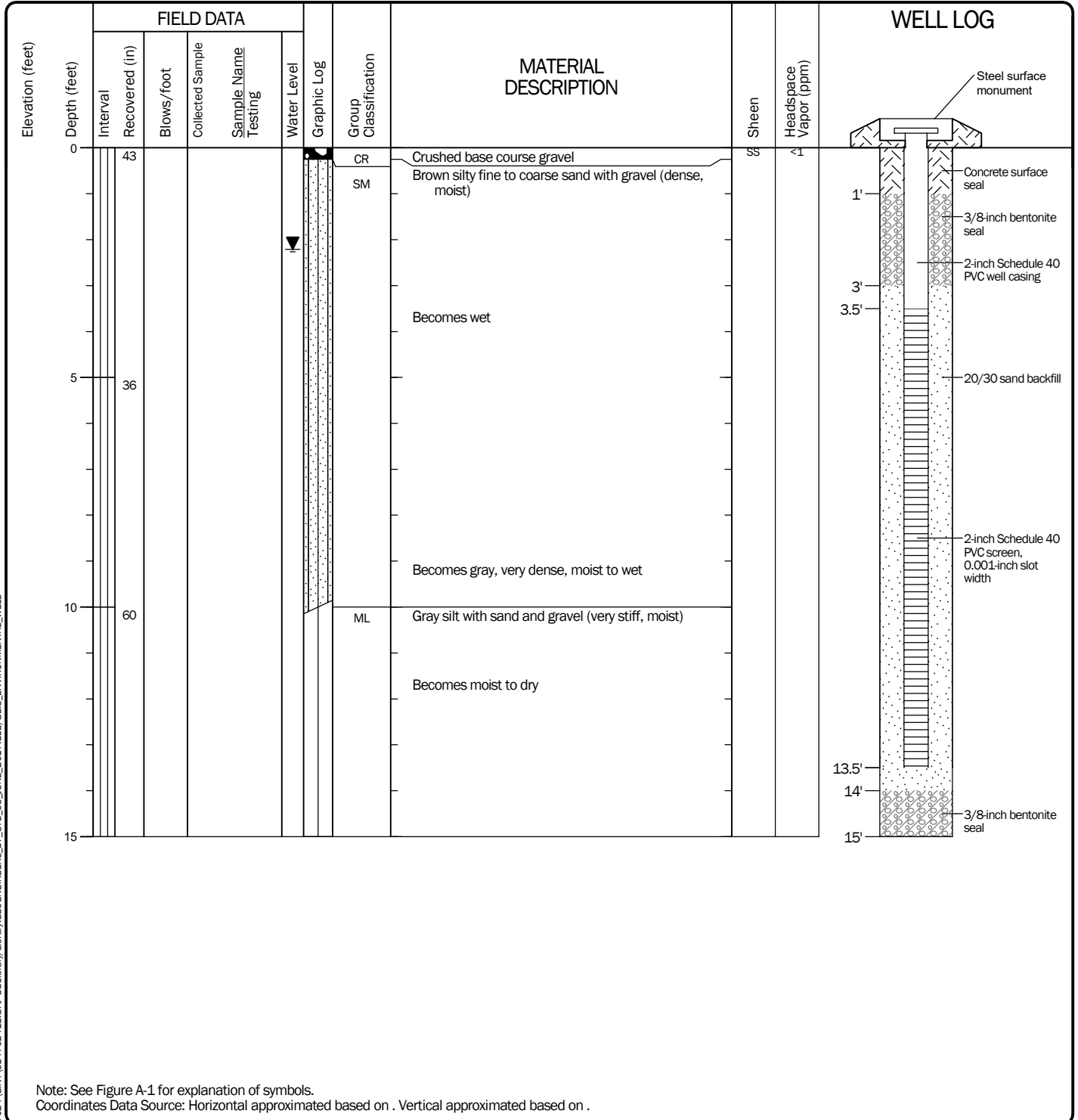
Log of Monitoring Well MW-13



Project: Quiet Cove - Post Interim Action Construction Groundwater Monitoring
 Project Location: Anacortes, Washington
 Project Number: 5147-024-11

Figure A-4
 Sheet 1 of 1

Start Drilled 10/20/2021	End 10/20/2021	Total Depth (ft) 15	Logged By Checked By NRS	Driller Cascade Drilling, LP	Drilling Method Direct Push
Hammer Data N/A		Drilling Equipment Track-mounted Auger Rig		DOE Well I.D.: BMM-966 A 2-in well was installed on 10/20/2021 to a depth of 13.5 ft.	
Surface Elevation (ft) Vertical Datum Undetermined		Top of Casing Elevation (ft)		Groundwater Date Measured 10/22/2021	
Easting (X) Northing (Y)		Horizontal Datum		Depth to Water (ft) 2.21 Elevation (ft)	
Notes:					



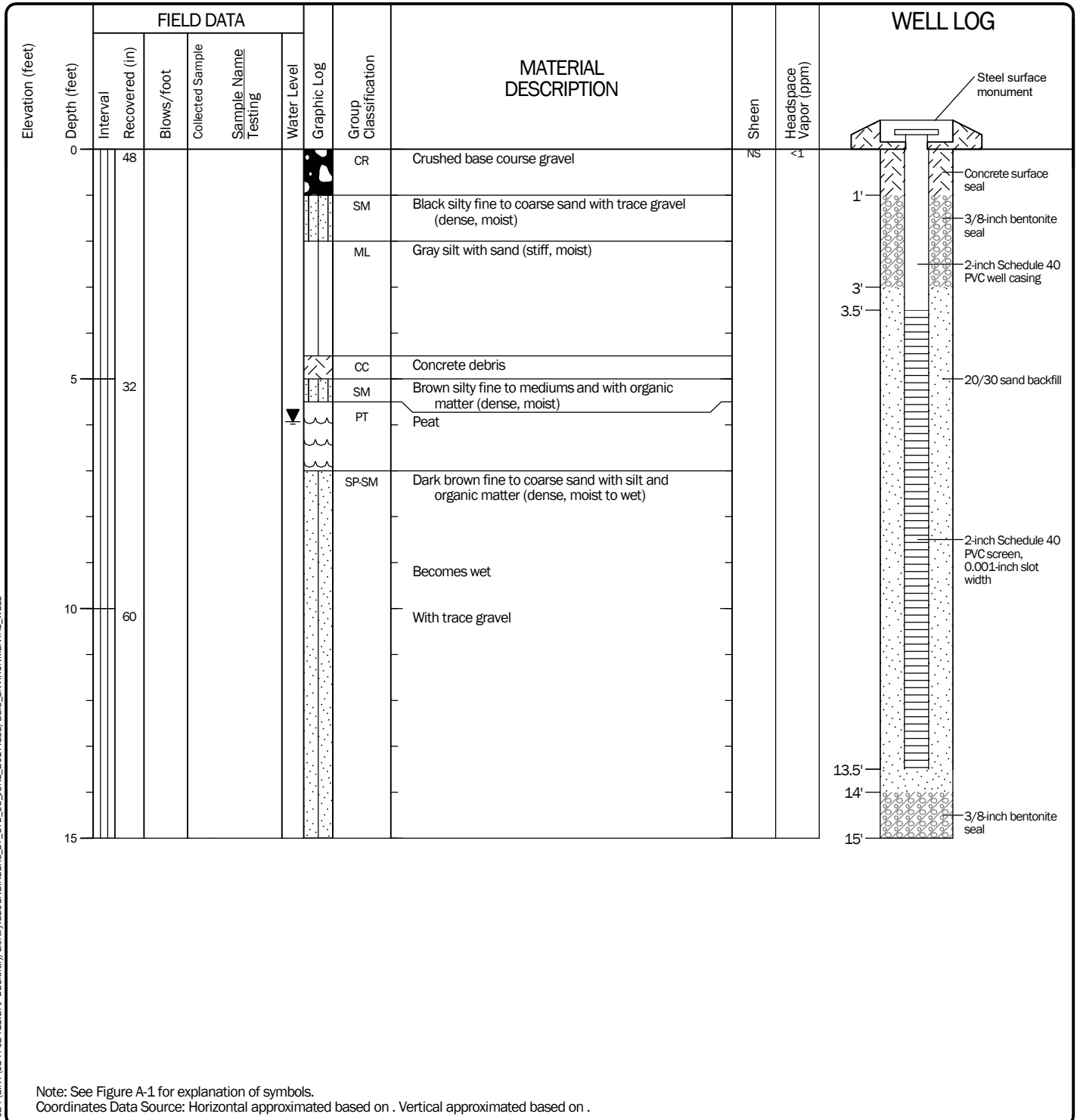
Log of Monitoring Well MW-14



Project: Quiet Cove - Post Interim Action Construction Groundwater Monitoring
 Project Location: Anacortes, Washington
 Project Number: 5147-024-11

Figure A-5
 Sheet 1 of 1

Start Drilled 10/20/2021	End 10/20/2021	Total Depth (ft) 15	Logged By Checked By NRS	Driller Cascade Drilling, LP	Drilling Method Direct Push
Hammer Data N/A		Drilling Equipment Track-mounted Auger Rig		DOE Well I.D.: BMM-964 A 2-in well was installed on 10/20/2021 to a depth of 13.5 ft.	
Surface Elevation (ft) Vertical Datum Undetermined		Top of Casing Elevation (ft)		Groundwater Date Measured 10/22/2021	
Easting (X) Northing (Y)		Horizontal Datum		Depth to Water (ft) 5.93	Elevation (ft)
Notes:					



Log of Monitoring Well MW-15



Project: Quiet Cove - Post Interim Action Construction Groundwater Monitoring
 Project Location: Anacortes, Washington
 Project Number: 5147-024-11

Figure A-6
 Sheet 1 of 1

Appendix B

Laboratory Data Reports



14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

November 12, 2024

Brian Tracy
GeoEngineers, Inc.
2101 4th Avenue, Suite 950
Seattle, WA 98121

Re: Analytical Data for Project 5147-024-14 Task 300
Laboratory Reference No. 2410-423

Dear Brian:

Enclosed are the analytical results and associated quality control data for samples submitted on October 31, 2024.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

A handwritten signature in black ink, appearing to read "Blair Goodrow", enclosed within a large, loopy oval shape.

Blair Goodrow
Project Manager

Enclosures



OnSite Environmental, Inc. 14648 NE 95th Street, Redmond, WA 98052 (425) 883-3881

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: November 12, 2024
Samples Submitted: October 31, 2024
Laboratory Reference: 2410-423
Project: 5147-024-14 Task 300

Case Narrative

Samples were collected on October 30, 2024 and received by the laboratory on October 31, 2024. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

Volatiles EPA 8260D Analysis

Only one VOA vial was provided for each trip blank; therefore, these two samples could not be analyzed for n-Hexane.

Any other QA/QC issues associated with this extraction and analysis will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.



Date of Report: November 12, 2024
 Samples Submitted: October 31, 2024
 Laboratory Reference: 2410-423
 Project: 5147-024-14 Task 300

ANALYTICAL REPORT FOR SAMPLES

Client ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
MW-1A-103024	10-423-01	Water	10-30-24	10-31-24	
MW-2A-103024	10-423-02	Water	10-30-24	10-31-24	
MW-4-103024	10-423-03	Water	10-30-24	10-31-24	
MW-8-103024	10-423-04	Water	10-30-24	10-31-24	
MW-13-103024	10-423-05	Water	10-30-24	10-31-24	
MW-14-103024	10-423-06	Water	10-30-24	10-31-24	
MW-15-103024	10-423-07	Water	10-30-24	10-31-24	
DUP-103024	10-423-08	Water	10-30-24	10-31-24	
TB-1-103024	10-423-09	Water	---	10-31-24	
TB-2-103024	10-423-10	Water	---	10-31-24	



Date of Report: November 12, 2024
 Samples Submitted: October 31, 2024
 Laboratory Reference: 2410-423
 Project: 5147-024-14 Task 300

GASOLINE RANGE ORGANICS
NWTPH-Gx

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-1A-103024					
Laboratory ID:	10-423-01					
Gasoline	ND	100	NWTPH-Gx	11-1-24	11-1-24	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	87	61-122				
Client ID:	MW-2A-103024					
Laboratory ID:	10-423-02					
Gasoline	ND	100	NWTPH-Gx	11-1-24	11-1-24	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	87	61-122				
Client ID:	MW-4-103024					
Laboratory ID:	10-423-03					
Gasoline	ND	100	NWTPH-Gx	11-1-24	11-1-24	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	88	61-122				
Client ID:	MW-8-103024					
Laboratory ID:	10-423-04					
Gasoline	170	100	NWTPH-Gx	11-1-24	11-1-24	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	93	61-122				
Client ID:	MW-13-103024					
Laboratory ID:	10-423-05					
Gasoline	ND	100	NWTPH-Gx	11-1-24	11-1-24	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	88	61-122				
Client ID:	MW-14-103024					
Laboratory ID:	10-423-06					
Gasoline	ND	100	NWTPH-Gx	11-1-24	11-1-24	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	87	61-122				
Client ID:	MW-15-103024					
Laboratory ID:	10-423-07					
Gasoline	150	100	NWTPH-Gx	11-1-24	11-1-24	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	88	61-122				



Date of Report: November 12, 2024
 Samples Submitted: October 31, 2024
 Laboratory Reference: 2410-423
 Project: 5147-024-14 Task 300

GASOLINE RANGE ORGANICS
NWTPH-Gx

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	DUP-103024					
Laboratory ID:	10-423-08					
Gasoline	190	100	NWTPH-Gx	11-1-24	11-1-24	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	90	61-122				



Date of Report: November 12, 2024
 Samples Submitted: October 31, 2024
 Laboratory Reference: 2410-423
 Project: 5147-024-14 Task 300

**DIESEL AND HEAVY OIL RANGE ORGANICS
 NWTPH-Dx**

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-1A-103024					
Laboratory ID:	10-423-01					
Diesel Range Organics	ND	0.20	NWTPH-Dx	11-4-24	11-4-24	
Lube Oil Range Organics	0.28	0.20	NWTPH-Dx	11-4-24	11-4-24	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	104	50-150				

Client ID:	MW-1A-103024					
Laboratory ID:	10-423-01					
Diesel Range Organics	ND	0.20	NWTPH-Dx	11-4-24	11-4-24	X2
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	11-4-24	11-4-24	X2
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	92	50-150				

Client ID:	MW-2A-103024					
Laboratory ID:	10-423-02					
Diesel Range Organics	ND	0.21	NWTPH-Dx	11-4-24	11-4-24	
Lube Oil Range Organics	ND	0.21	NWTPH-Dx	11-4-24	11-4-24	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	86	50-150				

Client ID:	MW-2A-103024					
Laboratory ID:	10-423-02					
Diesel Range Organics	ND	0.21	NWTPH-Dx	11-4-24	11-4-24	X2
Lube Oil Range Organics	ND	0.21	NWTPH-Dx	11-4-24	11-4-24	X2
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	91	50-150				

Client ID:	MW-4-103024					
Laboratory ID:	10-423-03					
Diesel Range Organics	0.34	0.20	NWTPH-Dx	11-4-24	11-4-24	
Lube Oil Range Organics	0.25	0.20	NWTPH-Dx	11-4-24	11-4-24	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	99	50-150				

Client ID:	MW-4-103024					
Laboratory ID:	10-423-03					
Diesel Range Organics	ND	0.20	NWTPH-Dx	11-4-24	11-4-24	X2
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	11-4-24	11-4-24	X2
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	101	50-150				



Date of Report: November 12, 2024
 Samples Submitted: October 31, 2024
 Laboratory Reference: 2410-423
 Project: 5147-024-14 Task 300

**DIESEL AND HEAVY OIL RANGE ORGANICS
 NWTPH-Dx**

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-8-103024					
Laboratory ID:	10-423-04					
Diesel Range Organics	0.90	0.21	NWTPH-Dx	11-4-24	11-4-24	
Lube Oil Range Organics	1.0	0.21	NWTPH-Dx	11-4-24	11-4-24	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	84	50-150				

Client ID:	MW-8-103024					
Laboratory ID:	10-423-04					
Diesel Range Organics	ND	0.21	NWTPH-Dx	11-4-24	11-4-24	X2
Lube Oil Range Organics	ND	0.21	NWTPH-Dx	11-4-24	11-4-24	X2
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	83	50-150				

Client ID:	MW-13-103024					
Laboratory ID:	10-423-05					
Diesel Range Organics	0.28	0.20	NWTPH-Dx	11-4-24	11-4-24	
Lube Oil Range Organics	0.35	0.20	NWTPH-Dx	11-4-24	11-4-24	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	110	50-150				

Client ID:	MW-13-103024					
Laboratory ID:	10-423-05					
Diesel Range Organics	ND	0.20	NWTPH-Dx	11-4-24	11-4-24	X2
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	11-4-24	11-4-24	X2
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	119	50-150				

Client ID:	MW-14-103024					
Laboratory ID:	10-423-06					
Diesel Range Organics	ND	0.20	NWTPH-Dx	11-4-24	11-4-24	
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	11-4-24	11-4-24	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	91	50-150				

Client ID:	MW-14-103024					
Laboratory ID:	10-423-06					
Diesel Range Organics	ND	0.20	NWTPH-Dx	11-4-24	11-4-24	X2
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	11-4-24	11-4-24	X2
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	99	50-150				



Date of Report: November 12, 2024
 Samples Submitted: October 31, 2024
 Laboratory Reference: 2410-423
 Project: 5147-024-14 Task 300

**DIESEL AND HEAVY OIL RANGE ORGANICS
 NWTPH-Dx**

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-15-103024					
Laboratory ID:	10-423-07					
Diesel Range Organics	1.2	0.20	NWTPH-Dx	11-4-24	11-4-24	
Lube Oil Range Organics	0.96	0.20	NWTPH-Dx	11-4-24	11-4-24	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	80	50-150				

Client ID:	MW-15-103024					
Laboratory ID:	10-423-07					
Diesel Range Organics	ND	0.20	NWTPH-Dx	11-4-24	11-4-24	X2
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	11-4-24	11-4-24	X2
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	80	50-150				

Client ID:	DUP-103024					
Laboratory ID:	10-423-08					
Diesel Range Organics	0.99	0.20	NWTPH-Dx	11-4-24	11-4-24	
Lube Oil Range Organics	0.96	0.20	NWTPH-Dx	11-4-24	11-4-24	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	95	50-150				

Client ID:	DUP-103024					
Laboratory ID:	10-423-08					
Diesel Range Organics	ND	0.20	NWTPH-Dx	11-4-24	11-4-24	X2
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	11-4-24	11-4-24	X2
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	91	50-150				



Date of Report: November 12, 2024
 Samples Submitted: October 31, 2024
 Laboratory Reference: 2410-423
 Project: 5147-024-14 Task 300

VOLATILE ORGANICS EPA 8260D

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: MW-1A-103024						
Laboratory ID: 10-423-01						
Methyl t-Butyl Ether	ND	0.20	EPA 8260D	11-1-24	11-1-24	
n-Hexane	ND	1.0	EPA 8260D	11-8-24	11-8-24	
Benzene	ND	0.20	EPA 8260D	11-1-24	11-1-24	
1,2-Dichloroethane	ND	0.20	EPA 8260D	11-1-24	11-1-24	
Toluene	ND	1.0	EPA 8260D	11-1-24	11-1-24	
1,2-Dibromoethane	ND	0.20	EPA 8260D	11-1-24	11-1-24	
Ethylbenzene	ND	0.20	EPA 8260D	11-1-24	11-1-24	
m,p-Xylene	ND	0.40	EPA 8260D	11-1-24	11-1-24	
o-Xylene	ND	0.20	EPA 8260D	11-1-24	11-1-24	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	99	68-133				
<i>Toluene-d8</i>	99	79-123				
<i>4-Bromofluorobenzene</i>	106	78-117				

Client ID: MW-2A-103024						
Laboratory ID: 10-423-02						
Methyl t-Butyl Ether	ND	0.20	EPA 8260D	11-1-24	11-1-24	
n-Hexane	ND	1.0	EPA 8260D	11-8-24	11-8-24	
Benzene	ND	0.20	EPA 8260D	11-1-24	11-1-24	
1,2-Dichloroethane	ND	0.20	EPA 8260D	11-1-24	11-1-24	
Toluene	ND	1.0	EPA 8260D	11-1-24	11-1-24	
1,2-Dibromoethane	ND	0.20	EPA 8260D	11-1-24	11-1-24	
Ethylbenzene	ND	0.20	EPA 8260D	11-1-24	11-1-24	
m,p-Xylene	ND	0.40	EPA 8260D	11-1-24	11-1-24	
o-Xylene	ND	0.20	EPA 8260D	11-1-24	11-1-24	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	100	68-133				
<i>Toluene-d8</i>	100	79-123				
<i>4-Bromofluorobenzene</i>	107	78-117				



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VOLATILE ORGANICS EPA 8260D

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: MW-4-103024						
Laboratory ID: 10-423-03						
Methyl t-Butyl Ether	ND	0.20	EPA 8260D	11-1-24	11-1-24	
n-Hexane	ND	1.0	EPA 8260D	11-8-24	11-8-24	
Benzene	ND	0.20	EPA 8260D	11-1-24	11-1-24	
1,2-Dichloroethane	ND	0.20	EPA 8260D	11-1-24	11-1-24	
Toluene	ND	1.0	EPA 8260D	11-1-24	11-1-24	
1,2-Dibromoethane	ND	0.20	EPA 8260D	11-1-24	11-1-24	
Ethylbenzene	ND	0.20	EPA 8260D	11-1-24	11-1-24	
m,p-Xylene	ND	0.40	EPA 8260D	11-1-24	11-1-24	
o-Xylene	ND	0.20	EPA 8260D	11-1-24	11-1-24	

<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>
<i>Dibromofluoromethane</i>	<i>101</i>	<i>68-133</i>
<i>Toluene-d8</i>	<i>100</i>	<i>79-123</i>
<i>4-Bromofluorobenzene</i>	<i>108</i>	<i>78-117</i>

Client ID: MW-8-103024						
Laboratory ID: 10-423-04						
Methyl t-Butyl Ether	ND	0.20	EPA 8260D	11-1-24	11-1-24	
n-Hexane	1.1	1.0	EPA 8260D	11-8-24	11-8-24	
Benzene	12	0.20	EPA 8260D	11-1-24	11-1-24	
1,2-Dichloroethane	ND	0.20	EPA 8260D	11-1-24	11-1-24	
Toluene	ND	1.0	EPA 8260D	11-1-24	11-1-24	
1,2-Dibromoethane	ND	0.20	EPA 8260D	11-1-24	11-1-24	
Ethylbenzene	ND	0.20	EPA 8260D	11-1-24	11-1-24	
m,p-Xylene	ND	0.40	EPA 8260D	11-1-24	11-1-24	
o-Xylene	ND	0.20	EPA 8260D	11-1-24	11-1-24	

<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>
<i>Dibromofluoromethane</i>	<i>101</i>	<i>68-133</i>
<i>Toluene-d8</i>	<i>108</i>	<i>79-123</i>
<i>4-Bromofluorobenzene</i>	<i>107</i>	<i>78-117</i>



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: MW-13-103024						
Laboratory ID: 10-423-05						
Methyl t-Butyl Ether	ND	0.20	EPA 8260D	11-1-24	11-1-24	
n-Hexane	ND	1.0	EPA 8260D	11-8-24	11-8-24	
Benzene	2.2	0.20	EPA 8260D	11-1-24	11-1-24	
1,2-Dichloroethane	ND	0.20	EPA 8260D	11-1-24	11-1-24	
Toluene	ND	1.0	EPA 8260D	11-1-24	11-1-24	
1,2-Dibromoethane	ND	0.20	EPA 8260D	11-1-24	11-1-24	
Ethylbenzene	ND	0.20	EPA 8260D	11-1-24	11-1-24	
m,p-Xylene	ND	0.40	EPA 8260D	11-1-24	11-1-24	
o-Xylene	ND	0.20	EPA 8260D	11-1-24	11-1-24	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>101</i>	<i>68-133</i>				
<i>Toluene-d8</i>	<i>99</i>	<i>79-123</i>				
<i>4-Bromofluorobenzene</i>	<i>107</i>	<i>78-117</i>				

Client ID: MW-14-103024						
Laboratory ID: 10-423-06						
Methyl t-Butyl Ether	ND	0.20	EPA 8260D	11-1-24	11-1-24	
n-Hexane	ND	1.0	EPA 8260D	11-8-24	11-8-24	
Benzene	ND	0.20	EPA 8260D	11-1-24	11-1-24	
1,2-Dichloroethane	ND	0.20	EPA 8260D	11-1-24	11-1-24	
Toluene	ND	1.0	EPA 8260D	11-1-24	11-1-24	
1,2-Dibromoethane	ND	0.20	EPA 8260D	11-1-24	11-1-24	
Ethylbenzene	ND	0.20	EPA 8260D	11-1-24	11-1-24	
m,p-Xylene	ND	0.40	EPA 8260D	11-1-24	11-1-24	
o-Xylene	ND	0.20	EPA 8260D	11-1-24	11-1-24	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>101</i>	<i>68-133</i>				
<i>Toluene-d8</i>	<i>98</i>	<i>79-123</i>				
<i>4-Bromofluorobenzene</i>	<i>107</i>	<i>78-117</i>				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: MW-15-103024						
Laboratory ID: 10-423-07						
Methyl t-Butyl Ether	ND	0.20	EPA 8260D	11-1-24	11-1-24	
n-Hexane	ND	1.0	EPA 8260D	11-8-24	11-8-24	
Benzene	ND	0.20	EPA 8260D	11-1-24	11-1-24	
1,2-Dichloroethane	ND	0.20	EPA 8260D	11-1-24	11-1-24	
Toluene	ND	1.0	EPA 8260D	11-1-24	11-1-24	
1,2-Dibromoethane	ND	0.20	EPA 8260D	11-1-24	11-1-24	
Ethylbenzene	ND	0.20	EPA 8260D	11-1-24	11-1-24	
m,p-Xylene	ND	0.40	EPA 8260D	11-1-24	11-1-24	
o-Xylene	ND	0.20	EPA 8260D	11-1-24	11-1-24	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>101</i>	<i>68-133</i>				
<i>Toluene-d8</i>	<i>99</i>	<i>79-123</i>				
<i>4-Bromofluorobenzene</i>	<i>106</i>	<i>78-117</i>				

Client ID: DUP-103024						
Laboratory ID: 10-423-08						
Methyl t-Butyl Ether	ND	0.20	EPA 8260D	11-1-24	11-1-24	
n-Hexane	1.2	1.0	EPA 8260D	11-8-24	11-8-24	
Benzene	13	0.20	EPA 8260D	11-1-24	11-1-24	
1,2-Dichloroethane	ND	0.20	EPA 8260D	11-1-24	11-1-24	
Toluene	ND	1.0	EPA 8260D	11-1-24	11-1-24	
1,2-Dibromoethane	ND	0.20	EPA 8260D	11-1-24	11-1-24	
Ethylbenzene	ND	0.20	EPA 8260D	11-1-24	11-1-24	
m,p-Xylene	ND	0.40	EPA 8260D	11-1-24	11-1-24	
o-Xylene	ND	0.20	EPA 8260D	11-1-24	11-1-24	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>98</i>	<i>68-133</i>				
<i>Toluene-d8</i>	<i>102</i>	<i>79-123</i>				
<i>4-Bromofluorobenzene</i>	<i>108</i>	<i>78-117</i>				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: TB-1-103024						
Laboratory ID: 10-423-09						
Methyl t-Butyl Ether	ND	0.20	EPA 8260D	11-1-24	11-1-24	
Benzene	ND	0.20	EPA 8260D	11-1-24	11-1-24	
1,2-Dichloroethane	ND	0.20	EPA 8260D	11-1-24	11-1-24	
Toluene	ND	1.0	EPA 8260D	11-1-24	11-1-24	
1,2-Dibromoethane	ND	0.20	EPA 8260D	11-1-24	11-1-24	
Ethylbenzene	ND	0.20	EPA 8260D	11-1-24	11-1-24	
m,p-Xylene	ND	0.40	EPA 8260D	11-1-24	11-1-24	
o-Xylene	ND	0.20	EPA 8260D	11-1-24	11-1-24	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>101</i>	<i>68-133</i>				
<i>Toluene-d8</i>	<i>98</i>	<i>79-123</i>				
<i>4-Bromofluorobenzene</i>	<i>105</i>	<i>78-117</i>				

Client ID: TB-2-103024						
Laboratory ID: 10-423-10						
Methyl t-Butyl Ether	ND	0.20	EPA 8260D	11-1-24	11-1-24	
Benzene	ND	0.20	EPA 8260D	11-1-24	11-1-24	
1,2-Dichloroethane	ND	0.20	EPA 8260D	11-1-24	11-1-24	
Toluene	ND	1.0	EPA 8260D	11-1-24	11-1-24	
1,2-Dibromoethane	ND	0.20	EPA 8260D	11-1-24	11-1-24	
Ethylbenzene	ND	0.20	EPA 8260D	11-1-24	11-1-24	
m,p-Xylene	ND	0.40	EPA 8260D	11-1-24	11-1-24	
o-Xylene	ND	0.20	EPA 8260D	11-1-24	11-1-24	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>98</i>	<i>68-133</i>				
<i>Toluene-d8</i>	<i>98</i>	<i>79-123</i>				
<i>4-Bromofluorobenzene</i>	<i>108</i>	<i>78-117</i>				



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TOTAL METALS
EPA 200.8/245.1

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: MW-1A-103024						
Laboratory ID: 10-423-01						
Arsenic	4.9	3.3	EPA 200.8	11-8-24	11-8-24	
Cadmium	ND	4.4	EPA 200.8	11-8-24	11-8-24	
Chromium	ND	11	EPA 200.8	11-8-24	11-8-24	
Lead	ND	1.1	EPA 200.8	11-8-24	11-8-24	
Mercury	ND	0.025	EPA 245.1	11-11-24	11-12-24	

Client ID: MW-2A-103024						
Laboratory ID: 10-423-02						
Arsenic	4.4	3.3	EPA 200.8	11-8-24	11-8-24	
Cadmium	ND	4.4	EPA 200.8	11-8-24	11-8-24	
Chromium	ND	11	EPA 200.8	11-8-24	11-8-24	
Lead	ND	1.1	EPA 200.8	11-8-24	11-8-24	
Mercury	ND	0.025	EPA 245.1	11-11-24	11-12-24	

Client ID: MW-4-103024						
Laboratory ID: 10-423-03						
Arsenic	ND	3.3	EPA 200.8	11-8-24	11-8-24	
Cadmium	ND	4.4	EPA 200.8	11-8-24	11-8-24	
Chromium	ND	11	EPA 200.8	11-8-24	11-8-24	
Lead	ND	1.1	EPA 200.8	11-8-24	11-8-24	
Mercury	ND	0.025	EPA 245.1	11-11-24	11-12-24	

Client ID: MW-8-103024						
Laboratory ID: 10-423-04						
Arsenic	5.5	3.3	EPA 200.8	11-8-24	11-8-24	
Cadmium	ND	4.4	EPA 200.8	11-8-24	11-8-24	
Chromium	ND	11	EPA 200.8	11-8-24	11-8-24	
Lead	ND	1.1	EPA 200.8	11-8-24	11-8-24	
Mercury	ND	0.025	EPA 245.1	11-11-24	11-12-24	



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TOTAL METALS
EPA 200.8/245.1

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: MW-13-103024						
Laboratory ID: 10-423-05						
Arsenic	ND	3.3	EPA 200.8	11-8-24	11-8-24	
Cadmium	ND	4.4	EPA 200.8	11-8-24	11-8-24	
Chromium	ND	11	EPA 200.8	11-8-24	11-8-24	
Lead	ND	1.1	EPA 200.8	11-8-24	11-8-24	
Mercury	ND	0.025	EPA 245.1	11-11-24	11-12-24	

Client ID: MW-14-103024						
Laboratory ID: 10-423-06						
Arsenic	3.9	3.3	EPA 200.8	11-8-24	11-8-24	
Cadmium	ND	4.4	EPA 200.8	11-8-24	11-8-24	
Chromium	ND	11	EPA 200.8	11-8-24	11-8-24	
Lead	ND	1.1	EPA 200.8	11-8-24	11-8-24	
Mercury	ND	0.025	EPA 245.1	11-11-24	11-12-24	

Client ID: MW-15-103024						
Laboratory ID: 10-423-07						
Arsenic	8.8	3.3	EPA 200.8	11-8-24	11-8-24	
Cadmium	ND	4.4	EPA 200.8	11-8-24	11-8-24	
Chromium	ND	11	EPA 200.8	11-8-24	11-8-24	
Lead	ND	1.1	EPA 200.8	11-8-24	11-8-24	
Mercury	ND	0.025	EPA 245.1	11-11-24	11-12-24	

Client ID: DUP-103024						
Laboratory ID: 10-423-08						
Arsenic	4.3	3.3	EPA 200.8	11-8-24	11-8-24	
Cadmium	ND	4.4	EPA 200.8	11-8-24	11-8-24	
Chromium	ND	11	EPA 200.8	11-8-24	11-8-24	
Lead	ND	1.1	EPA 200.8	11-8-24	11-8-24	
Mercury	ND	0.025	EPA 245.1	11-11-24	11-12-24	



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DISSOLVED METALS
EPA 200.8/245.1

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: MW-1A-103024						
Laboratory ID: 10-423-01						
Arsenic	5.1	3.0	EPA 200.8		11-8-24	
Cadmium	ND	4.0	EPA 200.8		11-8-24	
Chromium	ND	10	EPA 200.8		11-8-24	
Lead	ND	1.0	EPA 200.8		11-8-24	
Mercury	ND	0.025	EPA 245.1		11-12-24	

Client ID: MW-2A-103024						
Laboratory ID: 10-423-02						
Arsenic	3.8	3.0	EPA 200.8		11-8-24	
Cadmium	ND	4.0	EPA 200.8		11-8-24	
Chromium	ND	10	EPA 200.8		11-8-24	
Lead	ND	1.0	EPA 200.8		11-8-24	
Mercury	ND	0.025	EPA 245.1		11-12-24	

Client ID: MW-4-103024						
Laboratory ID: 10-423-03						
Arsenic	ND	3.0	EPA 200.8		11-8-24	
Cadmium	ND	4.0	EPA 200.8		11-8-24	
Chromium	ND	10	EPA 200.8		11-8-24	
Lead	ND	1.0	EPA 200.8		11-8-24	
Mercury	ND	0.025	EPA 245.1		11-12-24	

Client ID: MW-8-103024						
Laboratory ID: 10-423-04						
Arsenic	4.1	3.0	EPA 200.8		11-8-24	
Cadmium	ND	4.0	EPA 200.8		11-8-24	
Chromium	ND	10	EPA 200.8		11-8-24	
Lead	ND	1.0	EPA 200.8		11-8-24	
Mercury	ND	0.025	EPA 245.1		11-12-24	



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DISSOLVED METALS
EPA 200.8/245.1

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: MW-13-103024						
Laboratory ID: 10-423-05						
Arsenic	ND	3.0	EPA 200.8		11-8-24	
Cadmium	ND	4.0	EPA 200.8		11-8-24	
Chromium	ND	10	EPA 200.8		11-8-24	
Lead	ND	1.0	EPA 200.8		11-8-24	
Mercury	ND	0.025	EPA 245.1		11-12-24	

Client ID: MW-14-103024						
Laboratory ID: 10-423-06						
Arsenic	3.5	3.0	EPA 200.8		11-8-24	
Cadmium	ND	4.0	EPA 200.8		11-8-24	
Chromium	ND	10	EPA 200.8		11-8-24	
Lead	ND	1.0	EPA 200.8		11-8-24	
Mercury	ND	0.025	EPA 245.1		11-12-24	

Client ID: MW-15-103024						
Laboratory ID: 10-423-07						
Arsenic	9.3	3.0	EPA 200.8		11-8-24	
Cadmium	ND	4.0	EPA 200.8		11-8-24	
Chromium	ND	10	EPA 200.8		11-8-24	
Lead	ND	1.0	EPA 200.8		11-8-24	
Mercury	ND	0.025	EPA 245.1		11-12-24	

Client ID: DUP-103024						
Laboratory ID: 10-423-08						
Arsenic	3.5	3.0	EPA 200.8		11-8-24	
Cadmium	ND	4.0	EPA 200.8		11-8-24	
Chromium	ND	10	EPA 200.8		11-8-24	
Lead	ND	1.0	EPA 200.8		11-8-24	
Mercury	ND	0.025	EPA 245.1		11-12-24	



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**TOTAL ALKALINITY
SM 2320B**

Matrix: Water
 Units: mg CaCO₃/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-1A-103024					
Laboratory ID:	10-423-01					
Total Alkalinity	220	2.0	SM 2320B	11-7-24	11-7-24	

Client ID:	MW-2A-103024					
Laboratory ID:	10-423-02					
Total Alkalinity	230	2.0	SM 2320B	11-7-24	11-7-24	

Client ID:	MW-4-103024					
Laboratory ID:	10-423-03					
Total Alkalinity	280	2.0	SM 2320B	11-7-24	11-7-24	

Client ID:	MW-8-103024					
Laboratory ID:	10-423-04					
Total Alkalinity	240	2.0	SM 2320B	11-7-24	11-7-24	

Client ID:	MW-13-103024					
Laboratory ID:	10-423-05					
Total Alkalinity	230	2.0	SM 2320B	11-7-24	11-7-24	

Client ID:	MW-14-103024					
Laboratory ID:	10-423-06					
Total Alkalinity	110	2.0	SM 2320B	11-7-24	11-7-24	

Client ID:	MW-15-103024					
Laboratory ID:	10-423-07					
Total Alkalinity	500	2.0	SM 2320B	11-7-24	11-7-24	

Client ID:	DUP-103024					
Laboratory ID:	10-423-08					
Total Alkalinity	250	2.0	SM 2320B	11-7-24	11-7-24	



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**DISSOLVED GASSES
RSK 175**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-1A-103024					
Laboratory ID:	10-423-01					
Methane	39	0.55	RSK 175	11-1-24	11-1-24	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>1-Butene</i>	89	50-150				
Client ID:	MW-2A-103024					
Laboratory ID:	10-423-02					
Methane	23	0.55	RSK 175	11-1-24	11-1-24	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>1-Butene</i>	116	50-150				
Client ID:	MW-4-103024					
Laboratory ID:	10-423-03					
Methane	3100	28	RSK 175	11-1-24	11-1-24	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>1-Butene</i>	108	50-150				
Client ID:	MW-8-103024					
Laboratory ID:	10-423-04					
Methane	710	5.5	RSK 175	11-1-24	11-1-24	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>1-Butene</i>	103	50-150				
Client ID:	MW-13-103024					
Laboratory ID:	10-423-05					
Methane	360	3.3	RSK 175	11-1-24	11-1-24	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>1-Butene</i>	102	50-150				
Client ID:	MW-14-103024					
Laboratory ID:	10-423-06					
Methane	5.3	0.55	RSK 175	11-1-24	11-1-24	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>1-Butene</i>	111	50-150				



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DISSOLVED GASSES
RSK 175

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-15-103024					
Laboratory ID:	10-423-07					
Methane	7900	55	RSK 175	11-1-24	11-1-24	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>1-Butene</i>	79	50-150				
Client ID:	DUP-103024					
Laboratory ID:	10-423-08					
Methane	850	5.5	RSK 175	11-1-24	11-1-24	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>1-Butene</i>	99	50-150				



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**GASOLINE RANGE ORGANICS
 NWTPH-Gx
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1101W1					
Gasoline	ND	100	NWTPH-Gx	11-1-24	11-1-24	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	72	61-122				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	10-428-01							
	ORIG	DUP						
Gasoline	ND	ND	NA	NA	NA	NA	NA	30
Surrogate:								
Fluorobenzene				89	77	61-122		



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**GASOLINE RANGE ORGANICS
 NWTPH-Gx
 CONTINUING CALIBRATION SUMMARY**

Lab ID	True Value (ppm)	Calc. Value	Percent Difference	Control Limits
CCVH1101G-1	5.00	4.48	10	+/- 20%
CCVH1101G-2	5.00	4.04	19	+/- 20%



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**DIESEL AND HEAVY OIL RANGE ORGANICS
 NWTPH-Dx
 QUALITY CONTROL**

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1104W1					
Diesel Range Organics	ND	0.16	NWTPH-Dx	11-4-24	11-4-24	
Lube Oil Range Organics	ND	0.16	NWTPH-Dx	11-4-24	11-4-24	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	82	50-150				
Laboratory ID:	MB1104W1					
Diesel Range Organics	ND	0.16	NWTPH-Dx	11-4-24	11-4-24	X2
Lube Oil Range Organics	ND	0.16	NWTPH-Dx	11-4-24	11-4-24	X2
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	93	50-150				

Analyte	Result		Spike Level		Source Result	Percent Recovery	Recovery Limits	RPD	Limit	Flags
DUPLICATE										
Laboratory ID:	10-423-01									
	ORIG	DUP								
Diesel Range Organics	0.116	0.0998	NA	NA		NA	NA	15	40	
Lube Oil Range Organics	0.242	0.235	NA	NA		NA	NA	3	40	
Surrogate:										
o-Terphenyl						104	86	50-150		
Laboratory ID:	10-423-01									
	ORIG	DUP								
Diesel Range	ND	ND	NA	NA		NA	NA	NA	40	X2
Lube Oil Range	ND	ND	NA	NA		NA	NA	NA	40	X2
Surrogate:										
o-Terphenyl						92	104	50-150		



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**DIESEL AND HEAVY OIL RANGE ORGANICS
 NWTPH-Dx
 CONTINUING CALIBRATION SUMMARY**

Lab ID	True Value (ppm)	Calc. Value	Percent Difference	Control Limits
CCV1104F-T1	100	94.4	5.6	+/-15%
CCV1104F-T2	100	95.5	4.5	+/-15%
CCV1104F-T3	100	104.2	-4.2	+/-15%
CCV1104R-T2	100	97.3	2.7	+/-15%
CCV1104R-T3	100	96.5	3.5	+/-15%
CCV1104F-T4	100	97.5	2.5	+/-15%
CCV1104R-V2	100	106.6	-6.6	+/-15%
CCV1104R-V3	100	104.3	-4.3	+/-15%



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**VOLATILE ORGANICS EPA 8260D
 QUALITY CONTROL**

Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1101W2					
Methyl t-Butyl Ether	ND	0.20	EPA 8260D	11-1-24	11-1-24	
Benzene	ND	0.20	EPA 8260D	11-1-24	11-1-24	
1,2-Dichloroethane	ND	0.20	EPA 8260D	11-1-24	11-1-24	
Toluene	ND	1.0	EPA 8260D	11-1-24	11-1-24	
1,2-Dibromoethane	ND	0.20	EPA 8260D	11-1-24	11-1-24	
Ethylbenzene	ND	0.20	EPA 8260D	11-1-24	11-1-24	
m,p-Xylene	ND	0.40	EPA 8260D	11-1-24	11-1-24	
o-Xylene	ND	0.20	EPA 8260D	11-1-24	11-1-24	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	99	68-133				
Toluene-d8	100	79-123				
4-Bromofluorobenzene	105	78-117				
Laboratory ID:	MB1108W2					
n-Hexane	ND	1.0	EPA 8260D	11-8-24	11-8-24	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	99	68-133				
Toluene-d8	100	79-123				
4-Bromofluorobenzene	105	78-117				



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**VOLATILE ORGANICS EPA 8260D
 QUALITY CONTROL**

Matrix: Water

Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB1101W2									
	SB	SBD	SB	SBD	SB	SBD				
Methyl t-Butyl Ether	10.7	11.0	10.0	10.0	107	110	64-133	3	15	
Benzene	10.4	10.6	10.0	10.0	104	106	76-124	2	15	
1,2-Dichloroethane	10.6	10.9	10.0	10.0	106	109	68-133	3	15	
Toluene	10.4	10.4	10.0	10.0	104	104	75-120	0	15	
1,2-Dibromoethane	9.72	10.0	10.0	10.0	97	100	82-129	3	15	
Ethylbenzene	9.62	9.89	10.0	10.0	96	99	80-121	3	15	
m,p-Xylene	19.5	19.9	20.0	20.0	98	100	80-122	2	15	
o-Xylene	9.73	9.97	10.0	10.0	97	100	80-121	2	15	
Surrogate:										
Dibromofluoromethane					98	100	68-133			
Toluene-d8					100	100	79-123			
4-Bromofluorobenzene					104	106	78-117			
Laboratory ID:	SB1108W2									
	SB	SBD	SB	SBD	SB	SBD				
n-Hexane	9.43	10.5	10.0	10.0	94	105	70-130	11	20	
Surrogate:										
Dibromofluoromethane					104	102	68-133			
Toluene-d8					92	94	79-123			
4-Bromofluorobenzene					113	112	78-117			



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**TOTAL METALS
 EPA 200.8/245.1
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1108WM1					
Arsenic	ND	3.3	EPA 200.8	11-8-24	11-8-24	
Cadmium	ND	4.4	EPA 200.8	11-8-24	11-8-24	
Chromium	ND	11	EPA 200.8	11-8-24	11-8-24	
Lead	ND	1.1	EPA 200.8	11-8-24	11-8-24	

Laboratory ID:	MB1111W1					
Mercury	ND	0.025	EPA 245.1	11-11-24	11-12-24	

					Source	Percent	Recovery	RPD		
Analyte	Result		Spike Level		Result	Recovery	Limits	RPD	Limit	Flags
DUPLICATE										
Laboratory ID:		10-403-05								
	ORIG	DUP								
Arsenic	ND	ND	NA	NA		NA	NA	NA	20	
Cadmium	ND	ND	NA	NA		NA	NA	NA	20	
Chromium	ND	ND	NA	NA		NA	NA	NA	20	
Lead	ND	ND	NA	NA		NA	NA	NA	20	

Laboratory ID:	10-423-01								
Mercury	ND	ND	NA	NA	NA	NA	NA	20	

MATRIX SPIKES

Laboratory ID:	10-403-05									
	MS	MSD	MS	MSD		MS	MSD			
Arsenic	108	105	111	111	ND	97	94	75-125	3	20
Cadmium	105	99.6	111	111	ND	94	90	75-125	5	20
Chromium	106	102	111	111	ND	95	92	75-125	3	20
Lead	107	102	111	111	ND	97	92	75-125	5	20

Laboratory ID:	10-423-01									
Mercury	6.25	6.23	6.25	6.25	ND	100	100	75-125	0	20



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**TOTAL METALS
 EPA 200.8/245.1
 CONTINUING CALIBRATION SUMMARY**

Analyte	Lab ID	True Value (ppb)	Calc. Value	Percent Difference	Control Limits
Arsenic	ICV110824Y	50.0	48.2	3.6	+/- 10%
Cadmium	ICV110824Y	50.0	48.8	2.4	+/- 10%
Chromium	ICV110824Y	50.0	48.8	2.4	+/- 10%
Lead	ICV110824Y	50.0	51.1	-2.2	+/- 10%
Mercury	ICV111224I	2.50	2.54	-1.6	+/- 10%
Arsenic	CCV1110824Y	40.0	38.2	4.5	+/- 10%
Cadmium	CCV1110824Y	40.0	38.4	4.0	+/- 10%
Chromium	CCV1110824Y	40.0	38.6	3.5	+/- 10%
Lead	CCV1110824Y	40.0	40.3	-0.75	+/- 10%
Mercury	CCV1111224I	2.50	2.52	-0.80	+/- 20%
Arsenic	CCV1110824Y	20.0	19.3	3.5	+/- 10%
Cadmium	CCV1110824Y	20.0	19.1	4.5	+/- 10%
Chromium	CCV1110824Y	20.0	19.4	3.0	+/- 10%
Lead	CCV1110824Y	20.0	20.1	-0.50	+/- 10%
Arsenic	CCV2110824Y	40.0	38.8	3.0	+/- 10%
Cadmium	CCV2110824Y	40.0	37.6	6.0	+/- 10%
Chromium	CCV2110824Y	40.0	38.2	4.5	+/- 10%
Lead	CCV2110824Y	40.0	39.4	1.5	+/- 10%
Mercury	CCV2111124I	2.50	2.56	-2.4	+/- 20%
Arsenic	CCV2110824Y	20.0	19.1	4.5	+/- 10%
Cadmium	CCV2110824Y	20.0	18.6	7.0	+/- 10%
Chromium	CCV2110824Y	20.0	18.7	6.5	+/- 10%
Lead	CCV2110824Y	20.0	19.8	1.0	+/- 10%
Arsenic	CCV3110824Y	40.0	38.3	4.3	+/- 10%
Cadmium	CCV3110824Y	40.0	37.5	6.3	+/- 10%
Chromium	CCV3110824Y	40.0	38.3	4.3	+/- 10%
Lead	CCV3110824Y	40.0	39.0	2.5	+/- 10%
Mercury	CCV3111124I	2.50	2.57	-2.8	+/- 20%
Arsenic	CCV3110824Y	20.0	19.4	3.0	+/- 10%
Cadmium	CCV3110824Y	20.0	18.5	7.5	+/- 10%
Chromium	CCV3110824Y	20.0	19.1	4.5	+/- 10%
Lead	CCV3110824Y	20.0	19.5	2.5	+/- 10%



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**TOTAL METALS
 EPA 200.8/245.1
 CONTINUING CALIBRATION SUMMARY**

Analyte	Lab ID	True Value (ppb)	Calc. Value	Percent Difference	Control Limits
Arsenic	CCV4110824Y	40.0	38.4	4.0	+/- 10%
Cadmium	CCV4110824Y	40.0	37.9	5.3	+/- 10%
Chromium	CCV4110824Y	40.0	38.2	4.5	+/- 10%
Lead	CCV4110824Y	40.0	39.4	1.5	+/- 10%
Mercury	CCV4111224I	2.50	2.62	-4.8	+/- 20%
Arsenic	CCV4110824Y	20.0	19.0	5.0	+/- 10%
Cadmium	CCV4110824Y	20.0	18.9	5.5	+/- 10%
Chromium	CCV4110824Y	20.0	19.3	3.5	+/- 10%
Lead	CCV4110824Y	20.0	19.5	2.5	+/- 10%
Arsenic	CCV5110824Y	40.0	38.3	4.3	+/- 10%
Cadmium	CCV5110824Y	40.0	37.8	5.5	+/- 10%
Chromium	CCV5110824Y	40.0	37.6	6.0	+/- 10%
Lead	CCV5110824Y	40.0	39.7	0.75	+/- 10%
Mercury	CCV5111124I	2.50	2.61	-4.4	+/- 20%
Arsenic	CCV5110824Y	20.0	19.7	1.5	+/- 10%
Cadmium	CCV5110824Y	20.0	18.7	6.5	+/- 10%
Chromium	CCV5110824Y	20.0	18.9	5.5	+/- 10%
Lead	CCV5110824Y	20.0	19.5	2.5	+/- 10%



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**DISSOLVED METALS
 EPA 200.8/245.1
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1108D1					
Arsenic	ND	3.0	EPA 200.8		11-8-24	
Cadmium	ND	4.0	EPA 200.8		11-8-24	
Chromium	ND	10	EPA 200.8		11-8-24	
Lead	ND	1.0	EPA 200.8		11-8-24	

Laboratory ID:	MB1111D1					
Mercury	ND	0.025	EPA 245.1		11-12-24	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	10-423-08							
	ORIG	DUP						
Arsenic	3.52	4.20	NA	NA	NA	NA	18	20
Cadmium	ND	ND	NA	NA	NA	NA	NA	20
Chromium	ND	ND	NA	NA	NA	NA	NA	20
Lead	ND	ND	NA	NA	NA	NA	NA	20

Laboratory ID:	10-423-01							
Mercury	ND	ND	NA	NA	NA	NA	NA	20

MATRIX SPIKES

Laboratory ID:	10-423-08									
	MS	MSD	MS	MSD		MS	MSD			
Arsenic	87.6	86.8	80.0	80.0	3.52	105	104	75-125	1	20
Cadmium	75.6	76.8	80.0	80.0	ND	95	96	75-125	2	20
Chromium	78.4	77.2	80.0	80.0	ND	98	97	75-125	2	20
Lead	77.6	77.6	80.0	80.0	ND	97	97	75-125	0	20

Laboratory ID:	10-423-01									
Mercury	6.05	6.13	6.25	6.25	ND	97	98	75-125	1	20



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**DISSOLVED METALS
 EPA 200.8/245.1
 CONTINUING CALIBRATION SUMMARY**

Analyte	Lab ID	True Value (ppb)	Calc. Value	Percent Difference	Control Limits
Arsenic	ICV110824Y	50.0	48.2	3.6	+/- 10%
Cadmium	ICV110824Y	50.0	48.8	2.4	+/- 10%
Chromium	ICV110824Y	50.0	48.8	2.4	+/- 10%
Lead	ICV110824Y	50.0	51.1	-2.2	+/- 10%
Mercury	ICV111224I	2.50	2.54	-1.6	+/- 10%
Arsenic	CCV1110824Y	40.0	38.2	4.5	+/- 10%
Cadmium	CCV1110824Y	40.0	38.4	4.0	+/- 10%
Chromium	CCV1110824Y	40.0	38.6	3.5	+/- 10%
Lead	CCV1110824Y	40.0	40.3	-0.75	+/- 10%
Mercury	CCV1111224I	2.50	2.52	-0.80	+/- 20%
Arsenic	CCV1110824Y	20.0	19.3	3.5	+/- 10%
Cadmium	CCV1110824Y	20.0	19.1	4.5	+/- 10%
Chromium	CCV1110824Y	20.0	19.4	3.0	+/- 10%
Lead	CCV1110824Y	20.0	20.1	-0.50	+/- 10%
Arsenic	CCV2110824Y	40.0	38.8	3.0	+/- 10%
Cadmium	CCV2110824Y	40.0	37.6	6.0	+/- 10%
Chromium	CCV2110824Y	40.0	38.2	4.5	+/- 10%
Lead	CCV2110824Y	40.0	39.4	1.5	+/- 10%
Mercury	CCV2111124I	2.50	2.56	-2.4	+/- 20%
Arsenic	CCV2110824Y	20.0	19.1	4.5	+/- 10%
Cadmium	CCV2110824Y	20.0	18.6	7.0	+/- 10%
Chromium	CCV2110824Y	20.0	18.7	6.5	+/- 10%
Lead	CCV2110824Y	20.0	19.8	1.0	+/- 10%
Arsenic	CCV3110824Y	40.0	38.3	4.3	+/- 10%
Cadmium	CCV3110824Y	40.0	37.5	6.3	+/- 10%
Chromium	CCV3110824Y	40.0	38.3	4.3	+/- 10%
Lead	CCV3110824Y	40.0	39.0	2.5	+/- 10%
Mercury	CCV3111124I	2.50	2.57	-2.8	+/- 20%
Arsenic	CCV3110824Y	20.0	19.4	3.0	+/- 10%
Cadmium	CCV3110824Y	20.0	18.5	7.5	+/- 10%
Chromium	CCV3110824Y	20.0	19.1	4.5	+/- 10%
Lead	CCV3110824Y	20.0	19.5	2.5	+/- 10%



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**TOTAL ALKALINITY
 SM 2320B
 QUALITY CONTROL**

Matrix: Water
 Units: mg CaCO₃/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1107W1					
Total Alkalinity	ND	2.0	SM 2320B	11-7-24	11-7-24	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	10-402-01							
	ORIG	DUP						
Total Alkalinity	36.0	38.0	NA	NA	NA	NA	5	10

SPIKE BLANK								
Laboratory ID:	SB1107W1							
	SB	SB		SB				
Total Alkalinity	94.0	100	NA	94	82-101	NA	NA	



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**DISSOLVED GASSES
 RSK 175
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1101W1					
Methane	ND	0.55	RSK 175	11-1-24	11-1-24	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>1-Butene</i>	<i>102</i>	<i>50-150</i>				

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANK										
Laboratory ID:	SB1101W1									
	SB	SBD	SB	SBD	SB	SBD				
Methane	45.7	45.1	44.2	44.2	103	102	75-125	1	25	
Surrogate:										
1-Butene					108	105	50-150			



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**DISSOLVED GASSES
 RSK 175
 CONTINUING CALIBRATION SUMMARY**

Analyte	Lab ID	True Value (ppm)	Calc. Value	Percent Difference	Control Limits
Methane	CCV240729-DG1	500	515	-3.0	+/- 15%
Ethane	CCV240729-DG1	500	509	-1.7	+/- 15%
Ethene	CCV240729-DG1	500	486	2.9	+/- 15%
Acetylene	CCV240729-DG1	500	0	100.0	+/- 15%
Methane	CCV240709-DG2	500	492	1.7	+/- 15%
Ethane	CCV240709-DG2	500	477	4.7	+/- 15%
Ethene	CCV240709-DG2	500	472	5.6	+/- 15%
Acetylene	CCV240709-DG2	500	0	100.0	+/- 15%





Data Qualifiers and Abbreviations

- A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.
- B - The analyte indicated was also found in the blank sample.
- C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.
- E - The value reported exceeds the quantitation range and is an estimate.
- F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.
- H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.
- I - Compound recovery is outside of the control limits.
- J - The value reported was below the practical quantitation limit. The value is an estimate.
- K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.
- L - The RPD is outside of the control limits.
- M - Hydrocarbons in the gasoline range are impacting the diesel range result.
- M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.
- N - Hydrocarbons in the lube oil range are impacting the diesel range result.
- N1 - Hydrocarbons in diesel range are impacting lube oil range results.
- O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.
- P - The RPD of the detected concentrations between the two columns is greater than 40.
- Q - Surrogate recovery is outside of the control limits.
- S - Surrogate recovery data is not available due to the necessary dilution of the sample.
- T - The sample chromatogram is not similar to a typical _____.
- U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- U1 - The practical quantitation limit is elevated due to interferences present in the sample.
- V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.
- W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.
- X - Sample extract treated with a mercury cleanup procedure.
- X1 - Sample extract treated with a sulfuric acid/silica gel cleanup procedure.
- X2 - Sample extract treated with a silica gel cleanup procedure.
- Y - The calibration verification for this analyte exceeded the 20% drift specified in methods 8260 & 8270, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.
- Y1 - Negative effects of the matrix from this sample on the instrument caused values for this analyte in the bracketing continuing calibration verification standard (CCVs) to be outside of 20% acceptance criteria. Because of this, quantitation limits and sample concentrations should be considered estimates.
- Z -
- ND - Not Detected at PQL
- PQL - Practical Quantitation Limit
- RPD - Relative Percent Difference





3600 Fremont Ave N

Seattle, WA 98103

T: (206) 352-3790

F: (206) 352-7178

info@fremontanalytical.com

OnSite Environmental Inc

David Baumeister

14648 NE 95th Street

Redmond, WA 98052

RE: Quiet Cove, Port of Ancortes, UWS-RI, 5147-024-14

Work Order Number: 2410599

November 05, 2024

Attention David Baumeister:

Fremont Analytical, Inc, an Alliance Technical Group company, received 8 sample(s) on 10/31/2024 for the analyses presented in the following report.

Ferrous Iron by SM3500-Fe B

Ion Chromatography by EPA 300.0

All analyses were performed according to our accredited Quality Assurance program. Please contact the laboratory if you should have any questions about the results.

Please note, while the appearance of our logo and branding will update, our commitment to accuracy, speed, and customer service remain values celebrated and shared by Alliance Technical Group. Thank you for the opportunity to serve you.

Sincerely,

A handwritten signature in blue ink, appearing to read "Brianna Barnes".

Brianna Barnes

Project Manager

DoD-ELAP Accreditation #79636 by PJLA, ISO/IEC 17025:2017 and QSM 5.4 for Environmental Testing
ORELAP Certification: WA 100009 (NELAP Recognized) for Environmental Testing
Washington State Department of Ecology Accredited for Environmental Testing, Lab ID C910



Original

www.fremontanalytical.com



Date: 11/05/2024

CLIENT: OnSite Environmental Inc
Project: Quiet Cove, Port of Ancortes, UWS-RI
Work Order: 2410599

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2410599-001	MW-1A-103024	10/30/2024 11:40 AM	10/31/2024 8:12 AM
2410599-002	MW-2A-103024	10/30/2024 12:10 PM	10/31/2024 8:12 AM
2410599-003	MW-4-103024	10/30/2024 3:20 PM	10/31/2024 8:12 AM
2410599-004	MW-8-103024	10/30/2024 10:15 AM	10/31/2024 8:12 AM
2410599-005	MW-13-103024	10/30/2024 10:05 AM	10/31/2024 8:12 AM
2410599-006	MW-14-103024	10/30/2024 2:25 PM	10/31/2024 8:12 AM
2410599-007	MW-15-103024	10/30/2024 1:30 PM	10/31/2024 8:12 AM
2410599-008	DUP-103024	10/30/2024 12:00 PM	10/31/2024 8:12 AM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

Original

CLIENT: OnSite Environmental Inc
Project: Quiet Cove, Port of Ancortes, UWS-RI

I. SAMPLE RECEIPT:

Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:

Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Qualifiers:

- * - Flagged value is not within established control limits
- B - Analyte detected in the associated Method Blank
- D - Dilution was required
- E - Value above quantitation range
- H - Holding times for preparation or analysis exceeded
- I - Analyte with an internal standard that does not meet established acceptance criteria
- J - Analyte detected below Reporting Limit
- N - Tentatively Identified Compound (TIC)
- Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria
- S - Spike recovery outside accepted recovery limits
- ND - Not detected at the Reporting Limit
- R - High relative percent difference observed

Acronyms:

- %Rec - Percent Recovery
- CCB - Continued Calibration Blank
- CCV - Continued Calibration Verification
- DF - Dilution Factor
- DUP - Sample Duplicate
- HEM - Hexane Extractable Material
- ICV - Initial Calibration Verification
- LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
- MCL - Maximum Contaminant Level
- MB or MBLANK - Method Blank
- MDL - Method Detection Limit
- MS/MSD - Matrix Spike / Matrix Spike Duplicate
- PDS - Post Digestion Spike
- Ref Val - Reference Value
- REP - Sample Replicate
- RL - Reporting Limit
- RPD - Relative Percent Difference
- SD - Serial Dilution
- SGT - Silica Gel Treatment
- SPK - Spike
- Surr - Surrogate

CLIENT: OnSite Environmental Inc
Project: Quiet Cove, Port of Ancortes, UWS-RI

Lab ID: 2410599-001 **Collection Date:** 10/30/2024 11:40:00 AM
Client Sample ID: MW-1A-103024 **Matrix:** Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>Ion Chromatography by EPA 300.0</u>				Batch ID: 45723		Analyst: OP
Nitrate (as N)	ND	0.400	D	mg/L	2	10/31/2024 9:29:00 PM
Sulfate	15.7	2.00	D	mg/L	2	10/31/2024 9:29:00 PM
<u>Ferrous Iron by SM3500-Fe B</u>				Batch ID: R95364		Analyst: BB
Ferrous Iron	0.404	0.150		mg/L	1	10/31/2024 8:21:25 AM

Lab ID: 2410599-002 **Collection Date:** 10/30/2024 12:10:00 PM
Client Sample ID: MW-2A-103024 **Matrix:** Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>Ion Chromatography by EPA 300.0</u>				Batch ID: 45723		Analyst: OP
Nitrate (as N)	0.456	0.400	D	mg/L	2	10/31/2024 9:52:00 PM
Sulfate	37.8	2.00	D	mg/L	2	10/31/2024 9:52:00 PM
<u>Ferrous Iron by SM3500-Fe B</u>				Batch ID: R95364		Analyst: BB
Ferrous Iron	ND	0.150		mg/L	1	10/31/2024 8:21:25 AM

Lab ID: 2410599-003 **Collection Date:** 10/30/2024 3:20:00 PM
Client Sample ID: MW-4-103024 **Matrix:** Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>Ion Chromatography by EPA 300.0</u>				Batch ID: 45723		Analyst: OP
Nitrate (as N)	ND	0.400	D	mg/L	2	10/31/2024 10:15:00 PM
Sulfate	20.4	2.00	D	mg/L	2	10/31/2024 10:15:00 PM
NOTES: Diluted due to high levels of non-target analytes.						
<u>Ferrous Iron by SM3500-Fe B</u>				Batch ID: R95364		Analyst: BB
Ferrous Iron	14.8	3.75	D	mg/L	25	10/31/2024 8:21:25 AM

CLIENT: OnSite Environmental Inc
Project: Quiet Cove, Port of Ancortes, UWS-RI

Lab ID: 2410599-004

Collection Date: 10/30/2024 10:15:00 AM

Client Sample ID: MW-8-103024

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Ion Chromatography by EPA 300.0

Batch ID: 45723 Analyst: OP

Nitrate (as N)	2.23	0.400	D	mg/L	2	10/31/2024 11:25:00 PM
Sulfate	4.06	2.00	D	mg/L	2	10/31/2024 11:25:00 PM

Ferrous Iron by SM3500-Fe B

Batch ID: R95364 Analyst: BB

Ferrous Iron	17.4	3.75	D	mg/L	25	10/31/2024 8:21:25 AM
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Lab ID: 2410599-005

Collection Date: 10/30/2024 10:05:00 AM

Client Sample ID: MW-13-103024

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Ion Chromatography by EPA 300.0

Batch ID: 45723 Analyst: OP

Nitrate (as N)	ND	0.400	D	mg/L	2	10/31/2024 11:48:00 PM
Sulfate	9.09	2.00	D	mg/L	2	10/31/2024 11:48:00 PM

Ferrous Iron by SM3500-Fe B

Batch ID: R95364 Analyst: BB

Ferrous Iron	3.40	1.50	D	mg/L	10	10/31/2024 8:21:25 AM
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Lab ID: 2410599-006

Collection Date: 10/30/2024 2:25:00 PM

Client Sample ID: MW-14-103024

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Ion Chromatography by EPA 300.0

Batch ID: 45723 Analyst: OP

Nitrate (as N)	1.15	0.400	D	mg/L	2	11/1/2024 12:11:00 AM
Sulfate	35.9	2.00	D	mg/L	2	11/1/2024 12:11:00 AM

Ferrous Iron by SM3500-Fe B

Batch ID: R95364 Analyst: BB

Ferrous Iron	ND	0.150		mg/L	1	10/31/2024 8:21:25 AM
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CLIENT: OnSite Environmental Inc
Project: Quiet Cove, Port of Ancortes, UWS-RI

Lab ID: 2410599-007

Collection Date: 10/30/2024 1:30:00 PM

Client Sample ID: MW-15-103024

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Ion Chromatography by EPA 300.0

Batch ID: 45723 Analyst: OP

Nitrate (as N)	ND	0.400	D	mg/L	2	11/1/2024 12:35:00 AM
Sulfate	ND	2.00	D	mg/L	2	11/1/2024 12:35:00 AM

NOTES:

Diluted due to high levels of non-target analytes.

Ferrous Iron by SM3500-Fe B

Batch ID: R95364 Analyst: BB

Ferrous Iron	97.4	37.5	D	mg/L	250	10/31/2024 8:21:25 AM
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Lab ID: 2410599-008

Collection Date: 10/30/2024 12:00:00 PM

Client Sample ID: DUP-103024

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Ion Chromatography by EPA 300.0

Batch ID: 45723 Analyst: OP

Nitrate (as N)	ND	0.400	D	mg/L	2	11/1/2024 12:58:00 AM
Sulfate	3.70	2.00	D	mg/L	2	11/1/2024 12:58:00 AM

Ferrous Iron by SM3500-Fe B

Batch ID: R95364 Analyst: BB

Ferrous Iron	1.21	0.150		mg/L	1	10/31/2024 8:21:25 AM
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Work Order: 2410599
CLIENT: OnSite Environmental Inc
Project: Quiet Cove, Port of Ancortes, UWS-RI

QC SUMMARY REPORT

Ferrous Iron by SM3500-Fe B

Sample ID: MB-R95364		SampType: MBLK			Units: mg/L		Prep Date: 10/31/2024			RunNo: 95364		
Client ID: MBLKW		Batch ID: R95364			Analysis Date: 10/31/2024					SeqNo: 1990319		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Ferrous Iron	ND	0.150									
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Sample ID: LCS-R95364		SampType: LCS			Units: mg/L		Prep Date: 10/31/2024			RunNo: 95364		
Client ID: LCSW		Batch ID: R95364			Analysis Date: 10/31/2024					SeqNo: 1990320		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Ferrous Iron	0.372	0.150	0.4000	0	93.1	85	115				
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Sample ID: 2410599-005ADUP		SampType: DUP			Units: mg/L		Prep Date: 10/31/2024			RunNo: 95364		
Client ID: MW-13-103024		Batch ID: R95364			Analysis Date: 10/31/2024					SeqNo: 1990322		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Ferrous Iron	3.40	1.50						3.404	0	20	D
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Sample ID: 2410599-005AMS		SampType: MS			Units: mg/L		Prep Date: 10/31/2024			RunNo: 95364		
Client ID: MW-13-103024		Batch ID: R95364			Analysis Date: 10/31/2024					SeqNo: 1990323		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Ferrous Iron	7.12	1.50	4.000	3.404	92.9	70	130				D
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Sample ID: 2410599-005AMSD		SampType: MSD			Units: mg/L		Prep Date: 10/31/2024			RunNo: 95364		
Client ID: MW-13-103024		Batch ID: R95364			Analysis Date: 10/31/2024					SeqNo: 1990324		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Ferrous Iron	7.38	1.50	4.000	3.404	99.4	70	130	7.118	3.60	30	D
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Work Order: 2410599
CLIENT: OnSite Environmental Inc
Project: Quiet Cove, Port of Ancortes, UWS-RI

QC SUMMARY REPORT

Ion Chromatography by EPA 300.0

Sample ID: MB-45723		SampType: MBLK			Units: mg/L		Prep Date: 10/31/2024			RunNo: 95433		
Client ID: MBLKW		Batch ID: 45723			Analysis Date: 10/31/2024					SeqNo: 1991764		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Nitrate (as N)	ND	0.200									
Sulfate	ND	1.00									

Sample ID: LCS-45723		SampType: LCS			Units: mg/L		Prep Date: 10/31/2024			RunNo: 95433		
Client ID: LCSW		Batch ID: 45723			Analysis Date: 10/31/2024					SeqNo: 1991766		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Nitrate (as N)	0.718	0.200	0.7500	0	95.7	90	110				
Sulfate	3.59	1.00	3.750	0	95.8	90	110				

Sample ID: 2410593-002ADUP		SampType: DUP			Units: mg/L		Prep Date: 10/31/2024			RunNo: 95433		
Client ID: BATCH		Batch ID: 45723			Analysis Date: 10/31/2024					SeqNo: 1991769		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Nitrate (as N)	ND	0.200						0		20	
Sulfate	1.11	1.00						1.104	0.271	20	

Sample ID: 2410593-002AMS		SampType: MS			Units: mg/L		Prep Date: 10/31/2024			RunNo: 95433		
Client ID: BATCH		Batch ID: 45723			Analysis Date: 10/31/2024					SeqNo: 1991770		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Nitrate (as N)	0.747	0.200	0.7500	0	99.6	80	120				
Sulfate	4.85	1.00	3.750	1.104	99.9	80	120				

Sample ID: 2410593-002AMSD		SampType: MSD			Units: mg/L		Prep Date: 10/31/2024			RunNo: 95433		
Client ID: BATCH		Batch ID: 45723			Analysis Date: 10/31/2024					SeqNo: 1991771		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Nitrate (as N)	0.763	0.200	0.7500	0	102	80	120	0.7470	2.12	20	
Sulfate	4.98	1.00	3.750	1.104	103	80	120	4.849	2.63	20	

Work Order: 2410599
CLIENT: OnSite Environmental Inc
Project: Quiet Cove, Port of Ancortes, UWS-RI

QC SUMMARY REPORT
Ion Chromatography by EPA 300.0

Sample ID: 2410593-002AMSD		SampType: MSD			Units: mg/L		Prep Date: 10/31/2024			RunNo: 95433		
Client ID: BATCH		Batch ID: 45723			Analysis Date: 10/31/2024					SeqNo: 1991771		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Client Name: ONSITE

Work Order Number: 2410599

Logged by: Clare Griggs

Date Received: 10/31/2024 8:12:00 AM

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Client

Log In

3. Custody Seals present on shipping container/cooler?
(Refer to comments for Custody Seals not intact) Yes ☐ No ☐ Not Present ☒
4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all items received at a temperature of >2°C to 6°C * Yes ☒ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples properly preserved? Yes ☒ No ☐
9. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
10. Is there headspace in the VOA vials? Yes ☐ No ☐ NA ☒
11. Did all samples containers arrive in good condition(unbroken)? Yes ☒ No ☐
12. Does paperwork match bottle labels? Yes ☒ No ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
14. Is it clear what analyses were requested? Yes ☒ No ☐
15. Were all hold times (except field parameters, pH e.g.) able to be met? Yes ☒ No ☐

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☒ No ☐ NA ☐

Person Notified:	David Baumeister, Brian T	Date:	10/31/2024
By Whom:	Brianna Barnes	Via:	☒ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:	Confirming client.		
Client Instructions:	Report and invoice to Onsite.		

17. Additional remarks:

Item Information

Item #	Temp °C
Sample	3.3

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C



OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Chain of Custody

Turnaround Request
(in working days)

(Check One)

☐ Same Day ☐ 1 Day

☐ 2 Days ☐ 3 Days

☒ Standard (7 Days)

☐ (other) _____

Laboratory Number: **10-423**

Page 1 of 1

MTCA

MTCA

MTCA

MTCA

MTCA

Company: **GEODESIGNERS INC.**
Project Number: **5147-021-14 Task 300**
Project Name: **GOVER COVE**
Project Manager: **BRIAN TRACY**
Sampled by: **ALAN SANCHEZ / DIVYA KHANDUWAL**

Lab ID Sample Identification

1	MW-2A-103024
2	MW-2A-103024
3	MW-4-103024
4	MW-8-103024
5	MW-13-103024
6	MW-14-103024
7	MW-15-103024
8	DUP-103024
9	TB-1-103024
10	TB-2-103024

Date Sampled Time Sampled Matrix

10/30/24	1140	WATER
	1210	
	1520	
	1015	
	1005	
	1425	
	1330	
	1200	
10/30/24		

Number of Containers

NWTPH-HCID	
NWTPH-Gx/BTEX (8021 ☐ 8260 ☐)	
NWTPH-Gx	X
NWTPH-Dx (SG Clean-up ☒)	X
Volatiles 8260 WITH + WITHOUT Project List	X
Halogenated Volatiles 8260	
EDB EPA 8011 (Waters Only)	
Semivolatiles 8270/SIM (with low-level PAHs)	
PAHs 8270/SIM (low-level)	
PCBs 8082	
Organochlorine Pesticides 8081	
Organophosphorus Pesticides 8270/SIM	
Chlorinated Acid Herbicides 8151	
Total RCRA Metals	
Total MTCA Metals EPA 200.8/7420	X
TCLP Metals	
HEM (oil and grease) 1664	
Dissolved Metals 200.8/2470A CFF	X
Total Alkalinity	X
Dissolved Methane	X
Nitrate/Sulfate EPA 800	X
% Moisture	X
Ferrous Iron	X

Signature

Divya Khanduwal

Company

Gei

Date

10/31/24

Time

1016

Comments/Special Instructions

* Subdirectly to Alliances.

* * - BTEX, EDB, EDC, MTBE, n-Hexane

Received

Reviewed/Date

Data Package: Standard ☐ Level III ☒ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☒

Sample/Cooler Receipt and Acceptance Checklist

Client: GES

Client Project Name/Number: 5147-024-14, Task 300

OnSite Project Number: 10-423

Initiated by: NB

Date Initiated: 10/31/24

1.0 Cooler Verification

1.1 Were there custody seals on the outside of the cooler?	Yes	<u>No</u>	N/A	1	2	3	4
1.2 Were the custody seals intact?	Yes	No	<u>N/A</u>	1	2	3	4
1.3 Were the custody seals signed and dated by last custodian?	Yes	No	<u>N/A</u>	1	2	3	4
1.4 Were the samples delivered on ice or blue ice?	<u>Yes</u>	No	N/A	1	2	3	4
1.5 Were samples received between 0-6 degrees Celsius?	<u>Yes</u>	No	N/A	Temperature: <u>3.1</u>			
1.6 Have shipping bills (if any) been attached to the back of this form?	Yes	<u>N/A</u>					
1.7 How were the samples delivered?	<u>Client</u>	Courier	UPS/FedEx	OSE Pickup	Other		

2.0 Chain of Custody Verification

2.1 Was a Chain of Custody submitted with the samples?	<u>Yes</u>	No	1	2	3	4
2.2 Was the COC legible and written in permanent ink?	<u>Yes</u>	No	1	2	3	4
2.3 Have samples been relinquished and accepted by each custodian?	<u>Yes</u>	No	1	2	3	4
2.4 Did the sample labels (ID, date, time, preservative) agree with COC?	<u>Yes</u>	No	1	2	3	4
2.5 Were all of the samples listed on the COC submitted?	<u>Yes</u>	No	1	2	3	4
2.6 Were any of the samples submitted omitted from the COC?	Yes	<u>No</u>	1	2	3	4

3.0 Sample Verification

3.1 Were any sample containers broken or compromised?	Yes	<u>No</u>	1	2	3	4	
3.2 Were any sample labels missing or illegible?	Yes	<u>No</u>	1	2	3	4	
3.3 Have the correct containers been used for each analysis requested?	<u>Yes</u>	No	1	2	3	4	
3.4 Have the samples been correctly preserved?	<u>Yes</u>	No	N/A	1	2	3	4
3.5 Are volatile samples free from headspace and bubbles greater than 6mm?	<u>Yes</u>	No	N/A	1	2	3	4
3.6 Is there sufficient sample submitted to perform requested analyses?	<u>Yes</u>	No	1	2	3	4	
3.7 Have any holding times already expired or will expire in 24 hours?	<u>Yes</u>	No	1	2	3	4	
3.8 Was method 5035A used?	Yes	No	<u>N/A</u>	1	2	3	4
3.9 If 5035A was used, which sampling option was used (#1, 2, or 3).	#		<u>N/A</u>	1	2	3	4

Explain any discrepancies:

<u>3.7) Ferrous Iron will expire.</u>

1 - Discuss issue in Case Narrative

2 - Process Sample As-is

3 - Client contacted to discuss problem

4 - Sample cannot be analyzed or client does not wish to proceed



14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

March 7, 2025

Brian Tracy
GeoEngineers, Inc.
2101 4th Avenue, Suite 950
Seattle, WA 98121

Re: Analytical Data for Project 05147-024-11
Laboratory Reference No. 2502-067

Dear Brian:

Enclosed are the analytical results and associated quality control data for samples submitted on February 6, 2025.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

A handwritten signature in black ink, appearing to read "DB", with a long horizontal flourish extending to the right.

David Baumeister
Project Manager

Enclosures



OnSite Environmental, Inc. 14648 NE 95th Street, Redmond, WA 98052 (425) 883-3881

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: March 7, 2025
Samples Submitted: February 6, 2025
Laboratory Reference: 2502-067
Project: 05147-024-11

Case Narrative

Samples were collected on February 4 and 5, 2025 and received by the laboratory on February 6, 2025. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.



Date of Report: March 7, 2025
Samples Submitted: February 6, 2025
Laboratory Reference: 2502-067
Project: 05147-024-11

ANALYTICAL REPORT FOR SAMPLES

Client ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
MW-1A-020425	02-067-01	Water	2-4-25	2-6-25	
MW-2A-020425	02-067-02	Water	2-4-25	2-6-25	
MW-3-020525	02-067-03	Water	2-5-25	2-6-25	
MW-4-020525	02-067-04	Water	2-5-25	2-6-25	
MW-8-020525	02-067-05	Water	2-5-25	2-6-25	
MW-13-020525	02-067-06	Water	2-5-25	2-6-25	
MW-14-020425	02-067-07	Water	2-4-25	2-6-25	
MW-15-020525	02-067-08	Water	2-5-25	2-6-25	
DUP-020525	02-067-09	Water	2-5-25	2-6-25	



Date of Report: March 7, 2025
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GASOLINE RANGE ORGANICS
NWTPH-Gx

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-1A-020425					
Laboratory ID:	02-067-01					
Gasoline	ND	100	NWTPH-Gx	2-7-25	2-7-25	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	81	61-122				
Client ID:	MW-2A-020425					
Laboratory ID:	02-067-02					
Gasoline	ND	100	NWTPH-Gx	2-7-25	2-7-25	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	79	61-122				
Client ID:	MW-3-020525					
Laboratory ID:	02-067-03					
Gasoline	ND	100	NWTPH-Gx	2-7-25	2-7-25	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	81	61-122				
Client ID:	MW-4-020525					
Laboratory ID:	02-067-04					
Gasoline	ND	100	NWTPH-Gx	2-7-25	2-7-25	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	79	61-122				
Client ID:	MW-8-020525					
Laboratory ID:	02-067-05					
Gasoline	ND	100	NWTPH-Gx	2-7-25	2-7-25	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	80	61-122				
Client ID:	MW-13-020525					
Laboratory ID:	02-067-06					
Gasoline	ND	100	NWTPH-Gx	2-7-25	2-7-25	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	79	61-122				
Client ID:	MW-14-020425					
Laboratory ID:	02-067-07					
Gasoline	ND	100	NWTPH-Gx	2-7-25	2-7-25	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	78	61-122				



Date of Report: March 7, 2025
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GASOLINE RANGE ORGANICS
NWTPH-Gx

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-15-020525					
Laboratory ID:	02-067-08					
Gasoline	140	100	NWTPH-Gx	2-7-25	2-7-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	78	61-122				
Client ID:	DUP-020525					
Laboratory ID:	02-067-09					
Gasoline	110	100	NWTPH-Gx	2-7-25	2-7-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	82	61-122				



Date of Report: March 7, 2025
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 Laboratory Reference: 2502-067
 Project: 05147-024-11

**DIESEL AND HEAVY OIL RANGE ORGANICS
 NWTPH-Dx**

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-1A-020425					
Laboratory ID:	02-067-01					
Diesel Range Organics	ND	0.20	NWTPH-Dx	2-11-25	2-12-25	
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	2-11-25	2-12-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	110	50-150				

Client ID:	MW-1A-020425					
Laboratory ID:	02-067-01					
Diesel Range Organics	ND	0.20	NWTPH-Dx	2-11-25	2-12-25	X2
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	2-11-25	2-12-25	X2
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	121	50-150				

Client ID:	MW-2A-020425					
Laboratory ID:	02-067-02					
Diesel Range Organics	ND	0.20	NWTPH-Dx	2-11-25	2-11-25	
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	2-11-25	2-11-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	108	50-150				

Client ID:	MW-2A-020425					
Laboratory ID:	02-067-02					
Diesel Range Organics	ND	0.20	NWTPH-Dx	2-11-25	2-11-25	X2
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	2-11-25	2-11-25	X2
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	119	50-150				

Client ID:	MW-3-020525					
Laboratory ID:	02-067-03					
Diesel Range Organics	0.45	0.21	NWTPH-Dx	2-11-25	2-12-25	
Lube Oil Range Organics	0.41	0.21	NWTPH-Dx	2-11-25	2-12-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	110	50-150				

Client ID:	MW-3-020525					
Laboratory ID:	02-067-03					
Diesel Range Organics	ND	0.21	NWTPH-Dx	2-11-25	2-12-25	X2
Lube Oil Range Organics	ND	0.21	NWTPH-Dx	2-11-25	2-12-25	X2
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	148	50-150				



Date of Report: March 7, 2025
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 Project: 05147-024-11

**DIESEL AND HEAVY OIL RANGE ORGANICS
 NWTPH-Dx**

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-4-020525					
Laboratory ID:	02-067-04					
Diesel Range Organics	0.26	0.20	NWTPH-Dx	2-11-25	2-12-25	
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	2-11-25	2-12-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	96	50-150				

Client ID:	MW-4-020525					
Laboratory ID:	02-067-04					
Diesel Range Organics	ND	0.20	NWTPH-Dx	2-11-25	2-12-25	X2
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	2-11-25	2-12-25	X2
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	99	50-150				

Client ID:	MW-8-020525					
Laboratory ID:	02-067-05					
Diesel Range Organics	0.22	0.16	NWTPH-Dx	2-11-25	2-14-25	
Lube Oil Range Organics	0.16	0.16	NWTPH-Dx	2-11-25	2-14-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	97	50-150				

Client ID:	MW-8-020525					
Laboratory ID:	02-067-05					
Diesel Range Organics	ND	0.16	NWTPH-Dx	2-11-25	2-14-25	X2
Lube Oil Range Organics	ND	0.16	NWTPH-Dx	2-11-25	2-14-25	X2
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	105	50-150				

Client ID:	MW-13-020525					
Laboratory ID:	02-067-06					
Diesel Range Organics	0.18	0.18	NWTPH-Dx	2-11-25	2-11-25	
Lube Oil Range Organics	0.34	0.20	NWTPH-Dx	2-11-25	2-11-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	98	50-150				

Client ID:	MW-13-020525					
Laboratory ID:	02-067-06					
Diesel Range Organics	ND	0.18	NWTPH-Dx	2-11-25	2-11-25	X2
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	2-11-25	2-11-25	X2
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	103	50-150				



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**DIESEL AND HEAVY OIL RANGE ORGANICS
 NWTPH-Dx**

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-14-020425					
Laboratory ID:	02-067-07					
Diesel Range Organics	ND	0.20	NWTPH-Dx	2-11-25	2-12-25	
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	2-11-25	2-12-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	109	50-150				

Client ID:	MW-14-020425					
Laboratory ID:	02-067-07					
Diesel Range Organics	ND	0.20	NWTPH-Dx	2-11-25	2-12-25	X2
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	2-11-25	2-12-25	X2
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	113	50-150				

Client ID:	MW-15-020525					
Laboratory ID:	02-067-08					
Diesel Range Organics	1.0	0.20	NWTPH-Dx	2-11-25	2-12-25	
Lube Oil Range Organics	0.34	0.20	NWTPH-Dx	2-11-25	2-12-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	101	50-150				

Client ID:	MW-15-020525					
Laboratory ID:	02-067-08					
Diesel Range Organics	ND	0.20	NWTPH-Dx	2-11-25	2-12-25	X2
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	2-11-25	2-12-25	X2
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	109	50-150				

Client ID:	DUP-020525					
Laboratory ID:	02-067-09					
Diesel Range Organics	0.30	0.20	NWTPH-Dx	2-11-25	2-12-25	
Lube Oil Range Organics	0.23	0.20	NWTPH-Dx	2-11-25	2-12-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	95	50-150				

Client ID:	DUP-020525					
Laboratory ID:	02-067-09					
Diesel Range Organics	ND	0.20	NWTPH-Dx	2-11-25	2-12-25	X2
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	2-11-25	2-12-25	X2
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	102	50-150				



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 Project: 05147-024-11

VOLATILE ORGANICS EPA 8260D

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: MW-1A-020425						
Laboratory ID: 02-067-01						
Methyl t-Butyl Ether	ND	0.20	EPA 8260D	2-10-25	2-10-25	
n-Hexane	ND	1.0	EPA 8260D	2-10-25	2-10-25	
Benzene	ND	0.20	EPA 8260D	2-10-25	2-10-25	
1,2-Dichloroethane	ND	0.20	EPA 8260D	2-10-25	2-10-25	
Toluene	ND	1.0	EPA 8260D	2-10-25	2-10-25	
1,2-Dibromoethane	ND	0.20	EPA 8260D	2-10-25	2-10-25	
Ethylbenzene	ND	0.20	EPA 8260D	2-10-25	2-10-25	
m,p-Xylene	ND	0.40	EPA 8260D	2-10-25	2-10-25	
o-Xylene	ND	0.20	EPA 8260D	2-10-25	2-10-25	

<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>
<i>Dibromofluoromethane</i>	<i>104</i>	<i>68-133</i>
<i>Toluene-d8</i>	<i>102</i>	<i>79-123</i>
<i>4-Bromofluorobenzene</i>	<i>106</i>	<i>78-117</i>

Client ID: MW-2A-020425						
Laboratory ID: 02-067-02						
Methyl t-Butyl Ether	ND	0.20	EPA 8260D	2-10-25	2-10-25	
n-Hexane	ND	1.0	EPA 8260D	2-10-25	2-10-25	
Benzene	ND	0.20	EPA 8260D	2-10-25	2-10-25	
1,2-Dichloroethane	ND	0.20	EPA 8260D	2-10-25	2-10-25	
Toluene	ND	1.0	EPA 8260D	2-10-25	2-10-25	
1,2-Dibromoethane	ND	0.20	EPA 8260D	2-10-25	2-10-25	
Ethylbenzene	ND	0.20	EPA 8260D	2-10-25	2-10-25	
m,p-Xylene	ND	0.40	EPA 8260D	2-10-25	2-10-25	
o-Xylene	ND	0.20	EPA 8260D	2-10-25	2-10-25	

<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>
<i>Dibromofluoromethane</i>	<i>100</i>	<i>68-133</i>
<i>Toluene-d8</i>	<i>101</i>	<i>79-123</i>
<i>4-Bromofluorobenzene</i>	<i>106</i>	<i>78-117</i>



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 Project: 05147-024-11

VOLATILE ORGANICS EPA 8260D

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: MW-3-020525						
Laboratory ID: 02-067-03						
Methyl t-Butyl Ether	ND	0.20	EPA 8260D	2-10-25	2-10-25	
n-Hexane	ND	1.0	EPA 8260D	2-10-25	2-10-25	
Benzene	ND	0.20	EPA 8260D	2-10-25	2-10-25	
1,2-Dichloroethane	ND	0.20	EPA 8260D	2-10-25	2-10-25	
Toluene	ND	1.0	EPA 8260D	2-10-25	2-10-25	
1,2-Dibromoethane	ND	0.20	EPA 8260D	2-10-25	2-10-25	
Ethylbenzene	ND	0.20	EPA 8260D	2-10-25	2-10-25	
m,p-Xylene	ND	0.40	EPA 8260D	2-10-25	2-10-25	
o-Xylene	ND	0.20	EPA 8260D	2-10-25	2-10-25	

<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>
<i>Dibromofluoromethane</i>	<i>101</i>	<i>68-133</i>
<i>Toluene-d8</i>	<i>101</i>	<i>79-123</i>
<i>4-Bromofluorobenzene</i>	<i>105</i>	<i>78-117</i>

Client ID: MW-4-020525						
Laboratory ID: 02-067-04						
Methyl t-Butyl Ether	ND	0.20	EPA 8260D	2-10-25	2-10-25	
n-Hexane	ND	1.0	EPA 8260D	2-10-25	2-10-25	
Benzene	ND	0.20	EPA 8260D	2-10-25	2-10-25	
1,2-Dichloroethane	ND	0.20	EPA 8260D	2-10-25	2-10-25	
Toluene	ND	1.0	EPA 8260D	2-10-25	2-10-25	
1,2-Dibromoethane	ND	0.20	EPA 8260D	2-10-25	2-10-25	
Ethylbenzene	ND	0.20	EPA 8260D	2-10-25	2-10-25	
m,p-Xylene	ND	0.40	EPA 8260D	2-10-25	2-10-25	
o-Xylene	ND	0.20	EPA 8260D	2-10-25	2-10-25	

<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>
<i>Dibromofluoromethane</i>	<i>103</i>	<i>68-133</i>
<i>Toluene-d8</i>	<i>103</i>	<i>79-123</i>
<i>4-Bromofluorobenzene</i>	<i>107</i>	<i>78-117</i>



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VOLATILE ORGANICS EPA 8260D

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: MW-8-020525						
Laboratory ID: 02-067-05						
Methyl t-Butyl Ether	ND	0.20	EPA 8260D	2-10-25	2-10-25	
n-Hexane	1.1	1.0	EPA 8260D	2-10-25	2-10-25	
Benzene	5.2	0.20	EPA 8260D	2-10-25	2-10-25	
1,2-Dichloroethane	ND	0.26	EPA 8260D	2-10-25	2-10-25	U1
Toluene	ND	1.0	EPA 8260D	2-10-25	2-10-25	
1,2-Dibromoethane	ND	0.20	EPA 8260D	2-10-25	2-10-25	
Ethylbenzene	ND	0.20	EPA 8260D	2-10-25	2-10-25	
m,p-Xylene	ND	0.40	EPA 8260D	2-10-25	2-10-25	
o-Xylene	ND	0.20	EPA 8260D	2-10-25	2-10-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>102</i>	<i>68-133</i>				
<i>Toluene-d8</i>	<i>104</i>	<i>79-123</i>				
<i>4-Bromofluorobenzene</i>	<i>109</i>	<i>78-117</i>				

Client ID: MW-13-020525						
Laboratory ID: 02-067-06						
Methyl t-Butyl Ether	ND	0.20	EPA 8260D	2-10-25	2-10-25	
n-Hexane	ND	1.0	EPA 8260D	2-10-25	2-10-25	
Benzene	2.3	0.20	EPA 8260D	2-10-25	2-10-25	
1,2-Dichloroethane	ND	0.34	EPA 8260D	2-10-25	2-10-25	U1
Toluene	ND	1.0	EPA 8260D	2-10-25	2-10-25	
1,2-Dibromoethane	ND	0.20	EPA 8260D	2-10-25	2-10-25	
Ethylbenzene	ND	0.20	EPA 8260D	2-10-25	2-10-25	
m,p-Xylene	ND	0.40	EPA 8260D	2-10-25	2-10-25	
o-Xylene	ND	0.20	EPA 8260D	2-10-25	2-10-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>100</i>	<i>68-133</i>				
<i>Toluene-d8</i>	<i>102</i>	<i>79-123</i>				
<i>4-Bromofluorobenzene</i>	<i>107</i>	<i>78-117</i>				



Date of Report: March 7, 2025
 Samples Submitted: February 6, 2025
 Laboratory Reference: 2502-067
 Project: 05147-024-11

VOLATILE ORGANICS EPA 8260D

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: MW-14-020425						
Laboratory ID: 02-067-07						
Methyl t-Butyl Ether	ND	0.20	EPA 8260D	2-10-25	2-10-25	
n-Hexane	ND	1.0	EPA 8260D	2-10-25	2-10-25	
Benzene	ND	0.20	EPA 8260D	2-10-25	2-10-25	
1,2-Dichloroethane	ND	0.20	EPA 8260D	2-10-25	2-10-25	
Toluene	ND	1.0	EPA 8260D	2-10-25	2-10-25	
1,2-Dibromoethane	ND	0.20	EPA 8260D	2-10-25	2-10-25	
Ethylbenzene	ND	0.20	EPA 8260D	2-10-25	2-10-25	
m,p-Xylene	ND	0.40	EPA 8260D	2-10-25	2-10-25	
o-Xylene	ND	0.20	EPA 8260D	2-10-25	2-10-25	

<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>
<i>Dibromofluoromethane</i>	101	68-133
<i>Toluene-d8</i>	101	79-123
<i>4-Bromofluorobenzene</i>	106	78-117

Client ID: MW-15-020525						
Laboratory ID: 02-067-08						
Methyl t-Butyl Ether	ND	0.20	EPA 8260D	2-10-25	2-10-25	
n-Hexane	ND	1.0	EPA 8260D	2-10-25	2-10-25	
Benzene	ND	0.20	EPA 8260D	2-10-25	2-10-25	
1,2-Dichloroethane	ND	0.20	EPA 8260D	2-10-25	2-10-25	
Toluene	ND	1.0	EPA 8260D	2-10-25	2-10-25	
1,2-Dibromoethane	ND	0.20	EPA 8260D	2-10-25	2-10-25	
Ethylbenzene	ND	0.20	EPA 8260D	2-10-25	2-10-25	
m,p-Xylene	ND	0.40	EPA 8260D	2-10-25	2-10-25	
o-Xylene	ND	0.20	EPA 8260D	2-10-25	2-10-25	

<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>
<i>Dibromofluoromethane</i>	107	68-133
<i>Toluene-d8</i>	102	79-123
<i>4-Bromofluorobenzene</i>	105	78-117



Date of Report: March 7, 2025
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VOLATILE ORGANICS EPA 8260D

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	DUP-020525					
Laboratory ID:	02-067-09					
Methyl t-Butyl Ether	ND	0.20	EPA 8260D	2-10-25	2-10-25	U1
n-Hexane	1.1	1.0	EPA 8260D	2-10-25	2-10-25	
Benzene	5.0	0.20	EPA 8260D	2-10-25	2-10-25	
1,2-Dichloroethane	ND	0.26	EPA 8260D	2-10-25	2-10-25	
Toluene	ND	1.0	EPA 8260D	2-10-25	2-10-25	
1,2-Dibromoethane	ND	0.20	EPA 8260D	2-10-25	2-10-25	
Ethylbenzene	ND	0.20	EPA 8260D	2-10-25	2-10-25	
m,p-Xylene	ND	0.40	EPA 8260D	2-10-25	2-10-25	
o-Xylene	ND	0.20	EPA 8260D	2-10-25	2-10-25	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	100	68-133				
Toluene-d8	102	79-123				
4-Bromofluorobenzene	108	78-117				



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 Project: 05147-024-11

TOTAL METALS
EPA 200.8/7470A

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: MW-1A-020425						
Laboratory ID: 02-067-01						
Arsenic	5.5	3.3	EPA 200.8		2-13-25	
Cadmium	ND	4.4	EPA 200.8		2-13-25	
Chromium	ND	11	EPA 200.8		2-13-25	
Lead	ND	1.1	EPA 200.8		2-13-25	
Mercury	ND	0.025	EPA 7470A		2-14-25	

Client ID: MW-2A-020425						
Laboratory ID: 02-067-02						
Arsenic	6.0	3.3	EPA 200.8		2-13-25	
Cadmium	ND	4.4	EPA 200.8		2-13-25	
Chromium	ND	11	EPA 200.8		2-13-25	
Lead	ND	1.1	EPA 200.8		2-13-25	
Mercury	ND	0.025	EPA 7470A		2-14-25	

Client ID: MW-3-020525						
Laboratory ID: 02-067-03						
Arsenic	ND	3.3	EPA 200.8		2-13-25	
Cadmium	ND	4.4	EPA 200.8		2-13-25	
Chromium	ND	11	EPA 200.8		2-13-25	
Lead	ND	1.1	EPA 200.8		2-13-25	
Mercury	ND	0.025	EPA 7470A		2-14-25	

Client ID: MW-4-020525						
Laboratory ID: 02-067-04						
Arsenic	ND	3.3	EPA 200.8		2-13-25	
Cadmium	ND	4.4	EPA 200.8		2-13-25	
Chromium	ND	11	EPA 200.8		2-13-25	
Lead	ND	1.1	EPA 200.8		2-13-25	
Mercury	ND	0.025	EPA 7470A		2-14-25	



Date of Report: March 7, 2025
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 Laboratory Reference: 2502-067
 Project: 05147-024-11

TOTAL METALS
EPA 200.8/7470A

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: MW-8-020525						
Laboratory ID: 02-067-05						
Arsenic	3.5	3.3	EPA 200.8		2-13-25	
Cadmium	ND	4.4	EPA 200.8		2-13-25	
Chromium	ND	11	EPA 200.8		2-13-25	
Lead	ND	1.1	EPA 200.8		2-13-25	
Mercury	ND	0.025	EPA 7470A		2-14-25	

Client ID: MW-13-020525						
Laboratory ID: 02-067-06						
Arsenic	ND	3.3	EPA 200.8		2-13-25	
Cadmium	ND	4.4	EPA 200.8		2-13-25	
Chromium	ND	11	EPA 200.8		2-13-25	
Lead	ND	1.1	EPA 200.8		2-13-25	
Mercury	ND	0.025	EPA 7470A		2-14-25	

Client ID: MW-14-020425						
Laboratory ID: 02-067-07						
Arsenic	4.2	3.3	EPA 200.8		2-13-25	
Cadmium	ND	4.4	EPA 200.8		2-13-25	
Chromium	ND	11	EPA 200.8		2-13-25	
Lead	ND	1.1	EPA 200.8		2-13-25	
Mercury	ND	0.025	EPA 7470A		2-14-25	

Client ID: MW-15-020525						
Laboratory ID: 02-067-08						
Arsenic	4.2	3.3	EPA 200.8		2-13-25	
Cadmium	ND	4.4	EPA 200.8		2-13-25	
Chromium	ND	11	EPA 200.8		2-13-25	
Lead	ND	1.1	EPA 200.8		2-13-25	
Mercury	ND	0.025	EPA 7470A		2-14-25	



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TOTAL METALS
EPA 200.8/7470A

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	DUP-020525					
Laboratory ID:	02-067-09					
Arsenic	ND	3.3	EPA 200.8		2-13-25	
Cadmium	ND	4.4	EPA 200.8		2-13-25	
Chromium	ND	11	EPA 200.8		2-13-25	
Lead	ND	1.1	EPA 200.8		2-13-25	
Mercury	ND	0.025	EPA 7470A		2-14-25	



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**TOTAL ALKALINITY
 SM 2320B**

Matrix: Water
 Units: mg CaCO₃/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-1A-020425					
Laboratory ID:	02-067-01					
Total Alkalinity	220	2.0	SM 2320B	2-11-25	2-11-25	

Client ID:	MW-2A-020425					
Laboratory ID:	02-067-02					
Total Alkalinity	210	2.0	SM 2320B	2-11-25	2-11-25	

Client ID:	MW-3-020525					
Laboratory ID:	02-067-03					
Total Alkalinity	120	2.0	SM 2320B	2-11-25	2-11-25	

Client ID:	MW-4-020525					
Laboratory ID:	02-067-04					
Total Alkalinity	260	2.0	SM 2320B	2-11-25	2-11-25	

Client ID:	MW-8-020525					
Laboratory ID:	02-067-05					
Total Alkalinity	170	2.0	SM 2320B	2-11-25	2-11-25	

Client ID:	MW-13-020525					
Laboratory ID:	02-067-06					
Total Alkalinity	210	2.0	SM 2320B	2-11-25	2-11-25	

Client ID:	MW-14-020425					
Laboratory ID:	02-067-07					
Total Alkalinity	110	2.0	SM 2320B	2-11-25	2-11-25	

Client ID:	MW-15-020525					
Laboratory ID:	02-067-08					
Total Alkalinity	470	2.0	SM 2320B	2-11-25	2-11-25	

Client ID:	DUP-020525					
Laboratory ID:	02-067-09					
Total Alkalinity	180	2.0	SM 2320B	2-11-25	2-11-25	



OnSite Environmental, Inc. 14648 NE 95th Street, Redmond, WA 98052 (425) 883-3881

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: March 7, 2025
 Samples Submitted: February 6, 2025
 Laboratory Reference: 2502-067
 Project: 05147-024-11

**DISSOLVED METHANE
RSK 175**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: MW-1A-020425						
Laboratory ID:	02-067-01					
Methane	12	0.55	RSK 175	2-10-25	2-10-25	
Surrogate:	Percent Recovery	Control Limits				
1-Butene	67	50-150				
Client ID: MW-2A-020425						
Laboratory ID:	02-067-02					
Methane	21	0.55	RSK 175	2-10-25	2-10-25	
Surrogate:	Percent Recovery	Control Limits				
1-Butene	102	50-150				
Client ID: MW-3-020525						
Laboratory ID:	02-067-03					
Methane	13	0.55	RSK 175	2-10-25	2-10-25	
Surrogate:	Percent Recovery	Control Limits				
1-Butene	109	50-150				
Client ID: MW-4-020525						
Laboratory ID:	02-067-04					
Methane	1800	14	RSK 175	2-10-25	2-10-25	
Surrogate:	Percent Recovery	Control Limits				
1-Butene	98	50-150				
Client ID: MW-8-020525						
Laboratory ID:	02-067-05					
Methane	280	2.2	RSK 175	2-10-25	2-10-25	
Surrogate:	Percent Recovery	Control Limits				
1-Butene	122	50-150				
Client ID: MW-13-020525						
Laboratory ID:	02-067-06					
Methane	240	2.2	RSK 175	2-10-25	2-10-25	
Surrogate:	Percent Recovery	Control Limits				
1-Butene	103	50-150				



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**DISSOLVED METHANE
RSK 175**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-14-020425					
Laboratory ID:	02-067-07					
Methane	15	0.55	RSK 175	2-10-25	2-10-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>1-Butene</i>	97	50-150				
Client ID:	MW-15-020525					
Laboratory ID:	02-067-08					
Methane	5100	42	RSK 175	2-10-25	2-10-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>1-Butene</i>	84	50-150				
Client ID:	DUP-020525					
Laboratory ID:	02-067-09					
Methane	350	2.8	RSK 175	2-10-25	2-10-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>1-Butene</i>	113	50-150				



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DISSOLVED METALS
EPA 200.8/7470A

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: MW-1A-020425						
Laboratory ID: 02-067-01						
Arsenic	3.8	3.0	EPA 200.8		2-13-25	
Cadmium	ND	4.0	EPA 200.8		2-13-25	
Chromium	ND	10	EPA 200.8		2-13-25	
Lead	ND	1.0	EPA 200.8		2-13-25	
Manganese	52	10	EPA 200.8		2-13-25	
Mercury	ND	0.025	EPA 7470A		2-14-25	

Client ID: MW-2A-020425						
Laboratory ID: 02-067-02						
Arsenic	4.2	3.0	EPA 200.8		2-13-25	
Cadmium	ND	4.0	EPA 200.8		2-13-25	
Chromium	ND	10	EPA 200.8		2-13-25	
Lead	ND	1.0	EPA 200.8		2-13-25	
Manganese	81	10	EPA 200.8		2-13-25	
Mercury	ND	0.025	EPA 7470A		2-14-25	

Client ID: MW-3-020525						
Laboratory ID: 02-067-03						
Arsenic	ND	3.0	EPA 200.8		2-13-25	
Cadmium	ND	4.0	EPA 200.8		2-13-25	
Chromium	ND	10	EPA 200.8		2-13-25	
Lead	ND	1.0	EPA 200.8		2-13-25	
Manganese	240	25	EPA 200.8		2-13-25	
Mercury	ND	0.025	EPA 7470A		2-14-25	

Client ID: MW-4-020525						
Laboratory ID: 02-067-04						
Arsenic	ND	3.0	EPA 200.8		2-13-25	
Cadmium	ND	4.0	EPA 200.8		2-13-25	
Chromium	ND	10	EPA 200.8		2-13-25	
Lead	ND	1.0	EPA 200.8		2-13-25	
Manganese	1500	250	EPA 200.8		2-13-25	
Mercury	ND	0.025	EPA 7470A		2-14-25	



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DISSOLVED METALS
EPA 200.8/7470A

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: MW-8-020525						
Laboratory ID: 02-067-05						
Arsenic	ND	3.0	EPA 200.8		2-13-25	
Cadmium	ND	4.0	EPA 200.8		2-13-25	
Chromium	ND	10	EPA 200.8		2-13-25	
Lead	ND	1.0	EPA 200.8		2-13-25	
Manganese	1400	250	EPA 200.8		2-13-25	
Mercury	ND	0.025	EPA 7470A		2-14-25	

Client ID: MW-13-020525						
Laboratory ID: 02-067-06						
Arsenic	ND	3.0	EPA 200.8		2-13-25	
Cadmium	ND	4.0	EPA 200.8		2-13-25	
Chromium	ND	10	EPA 200.8		2-13-25	
Lead	ND	1.0	EPA 200.8		2-13-25	
Manganese	92	10	EPA 200.8		2-13-25	
Mercury	ND	0.025	EPA 7470A		2-14-25	

Client ID: MW-14-020425						
Laboratory ID: 02-067-07						
Arsenic	3.8	3.0	EPA 200.8		2-13-25	
Cadmium	ND	4.0	EPA 200.8		2-13-25	
Chromium	ND	10	EPA 200.8		2-13-25	
Lead	ND	1.0	EPA 200.8		2-13-25	
Manganese	ND	10	EPA 200.8		2-13-25	
Mercury	ND	0.025	EPA 7470A		2-14-25	

Client ID: MW-15-020525						
Laboratory ID: 02-067-08						
Arsenic	4.5	3.0	EPA 200.8		2-13-25	
Cadmium	ND	4.0	EPA 200.8		2-13-25	
Chromium	ND	10	EPA 200.8		2-13-25	
Lead	ND	1.0	EPA 200.8		2-13-25	
Manganese	5100	500	EPA 200.8		2-13-25	
Mercury	ND	0.025	EPA 7470A		2-14-25	



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DISSOLVED METALS
EPA 200.8/7470A

Matrix: Water

Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	DUP-020525					
Laboratory ID:	02-067-09					
Arsenic	3.1	3.0	EPA 200.8		2-13-25	
Cadmium	ND	4.0	EPA 200.8		2-13-25	
Chromium	ND	10	EPA 200.8		2-13-25	
Lead	ND	1.0	EPA 200.8		2-13-25	
Manganese	1300	250	EPA 200.8		2-13-25	
Mercury	ND	0.025	EPA 7470A		2-14-25	



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**GASOLINE RANGE ORGANICS
 NWTPH-Gx
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0207W1					
Gasoline	ND	100	NWTPH-Gx	2-7-25	2-7-25	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	79	61-122				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	02-067-01							
	ORIG	DUP						
Gasoline	ND	ND	NA	NA	NA	NA	NA	30
Surrogate:								
Fluorobenzene				81	74	61-122		



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**GASOLINE RANGE ORGANICS
NWTPH-Gx
CONTINUING CALIBRATION SUMMARY**

Lab ID	True Value (ppm)	Calc. Value	Percent Difference	Control Limits
CCVH0207G-1	5.00	5.29	-6	+/- 20%
CCVH0207G-2	5.00	5.05	-1	+/- 20%



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**DIESEL AND HEAVY OIL RANGE ORGANICS
 NWTPH-Dx
 QUALITY CONTROL**

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0211W1					
Diesel Range Organics	ND	0.16	NWTPH-Dx	2-11-25	2-11-25	
Lube Oil Range Organics	ND	0.16	NWTPH-Dx	2-11-25	2-11-25	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	89	50-150				
Laboratory ID:	MB0211W1					
Diesel Range Organics	ND	0.16	NWTPH-Dx	2-11-25	2-11-25	X2
Lube Oil Range Organics	ND	0.16	NWTPH-Dx	2-11-25	2-11-25	X2
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	92	50-150				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	02-073-02							
	ORIG	DUP						
Diesel Range	ND	ND	NA	NA	NA	NA	NA	40
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	40
Surrogate:								
o-Terphenyl				104	103	50-150		
Laboratory ID:	02-073-02							
	ORIG	DUP						
Diesel Range	ND	ND	NA	NA	NA	NA	NA	40 X2
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	40 X2
Surrogate:								
o-Terphenyl				108	105	50-150		



Date of Report: March 7, 2025
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 Laboratory Reference: 2502-067
 Project: 05147-024-11

**DIESEL AND HEAVY OIL RANGE ORGANICS
 NWTPH-Dx
 CONTINUING CALIBRATION SUMMARY**

Lab ID	True Value (ppm)	Calc. Value	Percent Difference	Control Limits
CCV0211F-T2	100	100.8	-0.8	+/-15%
CCV0211F-T3	100	113.0	-13.0	+/-15%
CCV0211F-T4	100	103.0	-3.0	+/-15%
CCV0212F-T1	100	97.7	2.3	+/-15%
CCV0212F-T2	100	98.1	1.9	+/-15%
CCV0211R-T1	100	97.4	2.6	+/-15%
CCV0211R-T2	100	104.7	-4.7	+/-15%
CCV0211R-T3	100	100.0	0.0	+/-15%
CCV0211R-T4	100	105.0	-5.0	+/-15%
CCV0212R-T1	100	101.9	-1.9	+/-15%
CCV0212R-T2	100	109.2	-9.2	+/-15%
CCV0211F-V1	100	101.6	-1.6	+/-15%
CCV0211F-V2	100	106.1	-6.1	+/-15%
CCV0214R-V1	100	92.3	7.7	+/-15%
CCV0214R-V2	100	100.6	-0.6	+/-15%



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 Project: 05147-024-11

**VOLATILE ORGANICS EPA 8260D
 QUALITY CONTROL**

Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0210W1					
Methyl t-Butyl Ether	ND	0.20	EPA 8260D	2-10-25	2-10-25	
n-Hexane	ND	1.0	EPA 8260D	2-10-25	2-10-25	
Benzene	ND	0.20	EPA 8260D	2-10-25	2-10-25	
1,2-Dichloroethane	ND	0.20	EPA 8260D	2-10-25	2-10-25	
Toluene	ND	1.0	EPA 8260D	2-10-25	2-10-25	
1,2-Dibromoethane	ND	0.20	EPA 8260D	2-10-25	2-10-25	
Ethylbenzene	ND	0.20	EPA 8260D	2-10-25	2-10-25	
m,p-Xylene	ND	0.40	EPA 8260D	2-10-25	2-10-25	
o-Xylene	ND	0.20	EPA 8260D	2-10-25	2-10-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>106</i>	<i>68-133</i>				
<i>Toluene-d8</i>	<i>101</i>	<i>79-123</i>				
<i>4-Bromofluorobenzene</i>	<i>103</i>	<i>78-117</i>				

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0210W1									
	SB	SBD	SB	SBD	SB	SBD				
Methyl t-Butyl Ether	11.4	11.8	10.0	10.0	114	118	64-133	3	15	
Benzene	10.7	11.2	10.0	10.0	107	112	76-124	5	15	
1,2-Dichloroethane	10.8	10.9	10.0	10.0	108	109	68-133	1	15	
Toluene	10.2	10.7	10.0	10.0	102	107	75-120	5	15	
1,2-Dibromoethane	9.93	10.5	10.0	10.0	99	105	82-129	6	15	
Ethylbenzene	9.75	10.1	10.0	10.0	98	101	80-121	4	15	
m,p-Xylene	19.0	19.8	20.0	20.0	95	99	80-122	4	15	
o-Xylene	9.58	9.96	10.0	10.0	96	100	80-121	4	15	
Surrogate:										
Dibromofluoromethane					108	108	68-133			
Toluene-d8					102	102	79-123			
4-Bromofluorobenzene					105	105	78-117			



Date of Report: March 7, 2025
 Samples Submitted: February 6, 2025
 Laboratory Reference: 2502-067
 Project: 05147-024-11

**TOTAL METALS
 EPA 200.8/7470A
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0213WM1					
Arsenic	ND	3.3	EPA 200.8	2-13-25	2-13-25	
Cadmium	ND	4.4	EPA 200.8	2-13-25	2-13-25	
Chromium	ND	11	EPA 200.8	2-13-25	2-13-25	
Lead	ND	1.1	EPA 200.8	2-13-25	2-13-25	

Laboratory ID:	MB0214WM1					
Mercury	ND	0.025	EPA 7470A	2-14-25	2-14-25	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	02-017-07							
	ORIG	DUP						
Arsenic	ND	ND	NA	NA	NA	NA	NA	20
Cadmium	ND	ND	NA	NA	NA	NA	NA	20
Chromium	ND	ND	NA	NA	NA	NA	NA	20
Lead	ND	ND	NA	NA	NA	NA	NA	20

Laboratory ID:	02-067-01							
Mercury	ND	ND	NA	NA	NA	NA	NA	20

MATRIX SPIKES

Laboratory ID:	02-017-07									
	MS	MSD	MS	MSD		MS	MSD			
Arsenic	110	109	111	111	ND	99	98	75-125	1	20
Cadmium	102	101	111	111	ND	92	91	75-125	2	20
Chromium	101	98.9	111	111	ND	91	89	75-125	2	20
Lead	106	105	111	111	ND	96	95	75-125	1	20

Laboratory ID:	02-067-01									
Mercury	6.28	6.20	6.25	6.25	ND	100	99	75-125	1	20



Date of Report: March 7, 2025
 Samples Submitted: February 6, 2025
 Laboratory Reference: 2502-067
 Project: 05147-024-11

**TOTAL METALS
 EPA 200.8/7470A
 CONTINUING CALIBRATION SUMMARY**

Analyte	Lab ID	True Value (ppb)	Calc. Value	Percent Difference	Control Limits
Arsenic	ICV021325Y	50.0	47.9	4.2	+/- 10%
Cadmium	ICV021325Y	50.0	47.0	6.0	+/- 10%
Chromium	ICV021325Y	50.0	46.0	8.0	+/- 10%
Lead	ICV021325Y	50.0	47.8	4.4	+/- 10%
Mercury	ICV021425I	2.50	2.57	-2.8	+/- 10%
Arsenic	CCV1021325Y	40.0	41.0	-2.5	+/- 10%
Cadmium	CCV1021325Y	40.0	39.9	0.25	+/- 10%
Chromium	CCV1021325Y	40.0	39.3	1.8	+/- 10%
Lead	CCV1021325Y	40.0	40.8	-2.0	+/- 10%
Mercury	CCV1021425I	2.50	2.60	-4.0	+/- 20%
Arsenic	CCV1021325Y	20.0	19.5	2.5	+/- 10%
Cadmium	CCV1021325Y	20.0	19.4	3.0	+/- 10%
Chromium	CCV1021325Y	20.0	19.2	4.0	+/- 10%
Lead	CCV1021325Y	20.0	19.9	0.50	+/- 10%
Arsenic	CCV2021325Y	40.0	41.1	-2.8	+/- 10%
Cadmium	CCV2021325Y	40.0	38.4	4.0	+/- 10%
Chromium	CCV2021325Y	40.0	39.0	2.5	+/- 10%
Lead	CCV2021325Y	40.0	41.2	-3.0	+/- 10%
Mercury	CCV20213425I	2.50	2.57	-2.8	+/- 20%
Arsenic	CCV2021325Y	20.0	20.3	-1.5	+/- 10%
Cadmium	CCV2021325Y	20.0	18.7	6.5	+/- 10%
Chromium	CCV2021325Y	20.0	19.0	5.0	+/- 10%
Lead	CCV2021325Y	20.0	19.8	1.0	+/- 10%
Arsenic	CCV3021325Y	40.0	41.6	-4.0	+/- 10%
Cadmium	CCV3021325Y	40.0	38.9	2.8	+/- 10%
Chromium	CCV3021325Y	40.0	39.2	2.0	+/- 10%
Lead	CCV3021325Y	40.0	40.8	-2.0	+/- 10%
Mercury	CCV30213425I	2.50	2.55	-2.0	+/- 20%



Date of Report: March 7, 2025
 Samples Submitted: February 6, 2025
 Laboratory Reference: 2502-067
 Project: 05147-024-11

**TOTAL METALS
 EPA 200.8/7470A
 CONTINUING CALIBRATION SUMMARY**

Analyte	Lab ID	True Value (ppb)	Calc. Value	Percent Difference	Control Limits
Arsenic	CCV3021325Y	20.0	20.3	-1.5	+/- 10%
Cadmium	CCV3021325Y	20.0	18.9	5.5	+/- 10%
Chromium	CCV3021325Y	20.0	19.0	5.0	+/- 10%
Lead	CCV3021325Y	20.0	19.9	0.50	+/- 10%
Arsenic	CCV4021325Y	40.0	40.8	-2.0	+/- 10%
Cadmium	CCV4021325Y	40.0	38.8	3.0	+/- 10%
Chromium	CCV4021325Y	40.0	38.9	2.8	+/- 10%
Lead	CCV4021325Y	40.0	40.9	-2.3	+/- 10%
Mercury	CCV4021425I	2.50	2.54	-1.6	+/- 20%
Arsenic	CCV4021325Y	20.0	19.7	1.5	+/- 10%
Cadmium	CCV4021325Y	20.0	19.2	4.0	+/- 10%
Chromium	CCV4021325Y	20.0	19.1	4.5	+/- 10%
Lead	CCV4021325Y	20.0	19.8	1.0	+/- 10%
Arsenic	CCV5021325Y	40.0	42.1	-5.3	+/- 10%
Cadmium	CCV5021325Y	40.0	38.7	3.2	+/- 10%
Chromium	CCV5021325Y	40.0	39.0	2.5	+/- 10%
Lead	CCV5021325Y	40.0	40.9	-2.3	+/- 10%
Mercury	CCV50213425I	2.50	2.55	-2.0	+/- 20%
Arsenic	CCV5021325Y	20.0	20.2	-1.0	+/- 10%
Cadmium	CCV5021325Y	20.0	18.8	6.0	+/- 10%
Chromium	CCV5021325Y	20.0	19.0	5.0	+/- 10%
Lead	CCV5021325Y	20.0	19.6	2.0	+/- 10%



Date of Report: March 7, 2025
 Samples Submitted: February 6, 2025
 Laboratory Reference: 2502-067
 Project: 05147-024-11

**TOTAL ALKALINITY
 SM 2320B
 QUALITY CONTROL**

Matrix: Water
 Units: mg CaCO₃/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0211W1					
Total Alkalinity	ND	2.0	SM 2320B	2-11-25	2-11-25	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	02-067-01							
	ORIG	DUP						
Total Alkalinity	216	214	NA	NA	NA	1	10	

SPIKE BLANK								
Laboratory ID:	SB0211W1							
	SB	SB		SB				
Total Alkalinity	98.0	100	NA	98	82-101	NA	NA	



Date of Report: March 7, 2025
 Samples Submitted: February 6, 2025
 Laboratory Reference: 2502-067
 Project: 05147-024-11

**DISSOLVED METHANE
 RSK 175
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0210W1					
Methane	ND	0.55	RSK 175	2-10-25	2-10-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>1-Butene</i>	67	50-150				

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANK										
Laboratory ID:	SB0210W1									
	SB	SBD	SB	SBD	SB	SBD				
Methane	42.5	45.1	44.2	44.2	96	102	75-125	6	25	
Surrogate:										
1-Butene					106	112	50-150			



Date of Report: March 7, 2025
Samples Submitted: February 6, 2025
Laboratory Reference: 2502-067
Project: 05147-024-11

**DISSOLVED METHANE
RSK 175
CONTINUING CALIBRATION SUMMARY**

Analyte	Lab ID	True Value (ppm)	Calc. Value	Percent Difference	Control Limits
Methane	CCV1023DG-L1	500	538	-7.6	+/- 15%
Methane	CCV1023DG-L3	500	494	1.2	+/- 15%



Date of Report: March 7, 2025
 Samples Submitted: February 6, 2025
 Laboratory Reference: 2502-067
 Project: 05147-024-11

**DISSOLVED METALS
 EPA 200.8/7470A
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0213D1					
Arsenic	ND	3.0	EPA 200.8		2-13-25	
Cadmium	ND	4.0	EPA 200.8		2-13-25	
Chromium	ND	10	EPA 200.8		2-13-25	
Lead	ND	1.0	EPA 200.8		2-13-25	
Manganese	ND	10	EPA 200.8		2-13-25	

Laboratory ID:	MB0214D1					
Mercury	ND	0.025	EPA 7470A		2-14-25	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	02-067-01							
	ORIG	DUP						
Arsenic	3.80	3.76	NA	NA	NA	NA	1	20
Cadmium	ND	ND	NA	NA	NA	NA	NA	20
Chromium	ND	ND	NA	NA	NA	NA	NA	20
Lead	ND	ND	NA	NA	NA	NA	NA	20
Manganese	52.0	51.8	NA	NA	NA	NA	0	20

Laboratory ID:	02-067-01							
Mercury	ND	ND	NA	NA	NA	NA	NA	20

MATRIX SPIKES

Laboratory ID:	02-067-01									
	MS	MSD	MS	MSD		MS	MSD			
Arsenic	80.6	80.8	80.0	80.0	3.80	96	96	75-125	0	20
Cadmium	70.6	72.2	80.0	80.0	ND	88	90	75-125	2	20
Chromium	72.0	73.0	80.0	80.0	ND	90	91	75-125	1	20
Lead	72.2	72.4	80.0	80.0	ND	90	91	75-125	0	20
Manganese	124	122	80.0	80.0	52.0	90	88	75-125	1	20

Laboratory ID:	02-067-01									
Mercury	6.05	6.15	6.25	6.25	ND	97	98	75-125	2	20



Date of Report: March 7, 2025
 Samples Submitted: February 6, 2025
 Laboratory Reference: 2502-067
 Project: 05147-024-11

**DISSOLVED METALS
 EPA 200.8/7470A
 CONTINUING CALIBRATION SUMMARY**

Analyte	Lab ID	True Value (ppb)	Calc. Value	Percent Difference	Control Limits
Arsenic	ICV021325Y	50.0	47.9	4.2	+/- 10%
Cadmium	ICV021325Y	50.0	47.0	6.0	+/- 10%
Chromium	ICV021325Y	50.0	46.0	8.0	+/- 10%
Lead	ICV021325Y	50.0	47.8	4.4	+/- 10%
Manganese	ICV021325Y	50.0	47.5	5.0	+/- 10%
Mercury	ICV021425I	2.50	2.57	-2.8	+/- 10%
Arsenic	CCV1021325Y	40.0	41.0	-2.5	+/- 10%
Cadmium	CCV1021325Y	40.0	39.9	0.25	+/- 10%
Chromium	CCV1021325Y	40.0	39.3	1.8	+/- 10%
Lead	CCV1021325Y	40.0	40.8	-2.0	+/- 10%
Manganese	CCV1021325Y	40.0	39.9	0.25	+/- 10%
Mercury	CCV1021425I	2.50	2.60	-4.0	+/- 20%
Arsenic	CCV1021325Y	20.0	19.5	2.5	+/- 10%
Cadmium	CCV1021325Y	20.0	19.4	3.0	+/- 10%
Chromium	CCV1021325Y	20.0	19.2	4.0	+/- 10%
Lead	CCV1021325Y	20.0	19.9	0.50	+/- 10%
Manganese	CCV1021325Y	20.0	19.4	3.0	+/- 10%
Arsenic	CCV2021325Y	40.0	41.1	-2.8	+/- 10%
Cadmium	CCV2021325Y	40.0	38.4	4.0	+/- 10%
Chromium	CCV2021325Y	40.0	39.0	2.5	+/- 10%
Lead	CCV2021325Y	40.0	41.2	-3.0	+/- 10%
Manganese	CCV2021325Y	40.0	39.4	1.5	+/- 10%
Mercury	CCV20213425I	2.50	2.57	-2.8	+/- 20%
Arsenic	CCV2021325Y	20.0	20.3	-1.5	+/- 10%
Cadmium	CCV2021325Y	20.0	18.7	6.5	+/- 10%
Chromium	CCV2021325Y	20.0	19.0	5.0	+/- 10%
Lead	CCV2021325Y	20.0	19.8	1.0	+/- 10%
Manganese	CCV2021325Y	20.0	19.3	3.5	+/- 10%
Arsenic	CCV3021325Y	40.0	41.6	-4.0	+/- 10%
Cadmium	CCV3021325Y	40.0	38.9	2.8	+/- 10%
Chromium	CCV3021325Y	40.0	39.2	2.0	+/- 10%
Lead	CCV3021325Y	40.0	40.8	-2.0	+/- 10%
Manganese	CCV3021325Y	40.0	40.0	0	+/- 10%
Mercury	CCV30213425I	2.50	2.55	-2.0	+/- 20%



Date of Report: March 7, 2025
 Samples Submitted: February 6, 2025
 Laboratory Reference: 2502-067
 Project: 05147-024-11

**DISSOLVED METALS
 EPA 200.8/7470A
 CONTINUING CALIBRATION SUMMARY**

Analyte	Lab ID	True Value (ppb)	Calc. Value	Percent Difference	Control Limits
Arsenic	CCV3021325Y	20.0	20.3	-1.5	+/- 10%
Cadmium	CCV3021325Y	20.0	18.9	5.5	+/- 10%
Chromium	CCV3021325Y	20.0	19.0	5.0	+/- 10%
Lead	CCV3021325Y	20.0	19.9	0.50	+/- 10%
Manganese	CCV3021325Y	20.0	19.4	3.0	+/- 10%
Arsenic	CCV4021325Y	40.0	40.8	-2.0	+/- 10%
Cadmium	CCV4021325Y	40.0	38.8	3.0	+/- 10%
Chromium	CCV4021325Y	40.0	38.9	2.8	+/- 10%
Lead	CCV4021325Y	40.0	40.9	-2.3	+/- 10%
Manganese	CCV4021325Y	40.0	38.9	2.8	+/- 10%
Mercury	CCV4021425I	2.50	2.54	-1.6	+/- 20%
Arsenic	CCV4021325Y	20.0	19.7	1.5	+/- 10%
Cadmium	CCV4021325Y	20.0	19.2	4.0	+/- 10%
Chromium	CCV4021325Y	20.0	19.1	4.5	+/- 10%
Lead	CCV4021325Y	20.0	19.8	1.0	+/- 10%
Manganese	CCV4021325Y	20.0	19.2	4.0	+/- 10%
Arsenic	CCV5021325Y	40.0	42.1	-5.3	+/- 10%
Cadmium	CCV5021325Y	40.0	38.7	3.2	+/- 10%
Chromium	CCV5021325Y	40.0	39.0	2.5	+/- 10%
Lead	CCV5021325Y	40.0	40.9	-2.3	+/- 10%
Manganese	CCV5021325Y	40.0	38.7	3.2	+/- 10%
Mercury	CCV50213425I	2.50	2.55	-2.0	+/- 20%
Arsenic	CCV5021325Y	20.0	20.2	-1.0	+/- 10%
Cadmium	CCV5021325Y	20.0	18.8	6.0	+/- 10%
Chromium	CCV5021325Y	20.0	19.0	5.0	+/- 10%
Lead	CCV5021325Y	20.0	19.6	2.0	+/- 10%
Manganese	CCV5021325Y	20.0	19.0	5.0	+/- 10%
Manganese	CCV6021325Y	40.0	38.8	3.0	+/- 10%
Manganese	CCV6021325Y	20.0	19.2	4.0	+/- 10%





Data Qualifiers and Abbreviations

- A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.
- B - The analyte indicated was also found in the blank sample.
- C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.
- E - The value reported exceeds the quantitation range and is an estimate.
- F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.
- H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.
- I - Compound recovery is outside of the control limits.
- J - The value reported was below the practical quantitation limit. The value is an estimate.
- K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.
- L - The RPD is outside of the control limits.
- M - Hydrocarbons in the gasoline range are impacting the diesel range result.
- M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.
- N - Hydrocarbons in the lube oil range are impacting the diesel range result.
- N1 - Hydrocarbons in diesel range are impacting lube oil range results.
- O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.
- P - The RPD of the detected concentrations between the two columns is greater than 40.
- Q - Surrogate recovery is outside of the control limits.
- S - Surrogate recovery data is not available due to the necessary dilution of the sample.
- T - The sample chromatogram is not similar to a typical _____.
- U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- U1 - The practical quantitation limit is elevated due to interferences present in the sample.
- V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.
- W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.
- X - Sample extract treated with a mercury cleanup procedure.
- X1 - Sample extract treated with a sulfuric acid/silica gel cleanup procedure.
- X2 - Sample extract treated with a silica gel cleanup procedure.
- Y - The calibration verification for this analyte exceeded the 20% drift specified in methods 8260 & 8270, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.
- Y1 - Negative effects of the matrix from this sample on the instrument caused values for this analyte in the bracketing continuing calibration verification standard (CCVs) to be outside of 20% acceptance criteria. Because of this, quantitation limits and sample concentrations should be considered estimates.
- Z -
- ND - Not Detected at PQL
- PQL - Practical Quantitation Limit
- RPD - Relative Percent Difference





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OnSite Environmental Inc

David Baumeister

14648 NE 95th Street

Redmond, WA 98052

RE: POA-Quiet Cove QRT GWM, 05147-024-01

Work Order Number: 2502050

March 07, 2025

Attention David Baumeister:

Alliance Technical Group, LLC - Seattle received 3 sample(s) on 2/5/2025 for the analyses presented in the following report.

Ferrous Iron by SM3500-Fe B

Ion Chromatography by EPA 300.0

All analyses were performed according to our accredited Quality Assurance program. Please contact the laboratory if you should have any questions about the results.

Alliance Technical Group is committed to accuracy, speed, and customer service. Thank you for choosing Alliance Technical Group's Seattle laboratory team for your analytical needs. We appreciate this opportunity to serve you!

Sincerely,

A handwritten signature in blue ink, appearing to read "Brianna Barnes", is positioned above the printed name.

Brianna Barnes
Project Manager

DoD-ELAP Accreditation #79636 by PJLA, ISO/IEC 17025:2017 and QSM 5.4 for Environmental Testing
ORELAP Certification: WA 100009 (NELAP Recognized) for Environmental Testing
Washington State Department of Ecology Accredited for Environmental Testing, Lab ID C910



Revision v1

www.fremontanalytical.com

CLIENT: OnSite Environmental Inc
Project: POA-Quiet Cove QRT GWM
Work Order: 2502050

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2502050-001	MW-1A-020425	02/04/2025 3:35 PM	02/05/2025 8:15 AM
2502050-002	MW-2A-020425	02/04/2025 1:50 PM	02/05/2025 8:15 AM
2502050-003	MW-14-020425	02/04/2025 12:00 PM	02/05/2025 8:15 AM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

CLIENT: OnSite Environmental Inc
Project: POA-Quiet Cove QRT GWM

I. SAMPLE RECEIPT:

Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:

Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

3/7/2025: Rev1 includes additional analysis per client request.

Qualifiers:

- * - Flagged value is not within established control limits
- B - Analyte detected in the associated Method Blank
- D - Dilution was required
- E - Value above quantitation range
- H - Holding times for preparation or analysis exceeded
- I - Analyte with an internal standard that does not meet established acceptance criteria
- J - Analyte detected below Reporting Limit
- N - Tentatively Identified Compound (TIC)
- Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria
- S - Spike recovery outside accepted recovery limits
- ND - Not detected at the Reporting Limit
- R - High relative percent difference observed

Acronyms:

- %Rec - Percent Recovery
- CCB - Continued Calibration Blank
- CCV - Continued Calibration Verification
- DF - Dilution Factor
- DUP - Sample Duplicate
- HEM - Hexane Extractable Material
- ICV - Initial Calibration Verification
- LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
- MCL - Maximum Contaminant Level
- MB or MBLANK - Method Blank
- MDL - Method Detection Limit
- MS/MSD - Matrix Spike / Matrix Spike Duplicate
- PDS - Post Digestion Spike
- Ref Val - Reference Value
- REP - Sample Replicate
- RL - Reporting Limit
- RPD - Relative Percent Difference
- SD - Serial Dilution
- SGT - Silica Gel Treatment
- SPK - Spike
- Surr - Surrogate

CLIENT: OnSite Environmental Inc
Project: POA-Quiet Cove QRT GWM

Lab ID: 2502050-001 **Collection Date:** 2/4/2025 3:35:00 PM
Client Sample ID: MW-1A-020425 **Matrix:** Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>Ion Chromatography by EPA 300.0</u>				Batch ID: 46675		Analyst: OP
Nitrate (as N)	ND	0.150	H	mg/L	1	2/6/2025 6:31:00 PM
Sulfate	13.9	1.00		mg/L	1	2/6/2025 6:31:00 PM
<u>Ferrous Iron by SM3500-Fe B</u>				Batch ID: R97407		Analyst: OP
Ferrous Iron	0.793	0.150		mg/L	1	2/5/2025 10:04:16 AM

Lab ID: 2502050-002 **Collection Date:** 2/4/2025 1:50:00 PM
Client Sample ID: MW-2A-020425 **Matrix:** Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>Ion Chromatography by EPA 300.0</u>				Batch ID: 46675		Analyst: OP
Nitrate (as N)	0.244	0.150	H	mg/L	1	2/6/2025 6:44:00 PM
Sulfate	37.1	1.00		mg/L	1	2/6/2025 6:44:00 PM
<u>Ferrous Iron by SM3500-Fe B</u>				Batch ID: R97407		Analyst: OP
Ferrous Iron	0.727	0.150		mg/L	1	2/5/2025 10:04:16 AM

Lab ID: 2502050-003 **Collection Date:** 2/4/2025 12:00:00 PM
Client Sample ID: MW-14-020425 **Matrix:** Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>Ion Chromatography by EPA 300.0</u>				Batch ID: 46675		Analyst: OP
Nitrate (as N)	0.315	0.150	H	mg/L	1	2/6/2025 6:57:00 PM
Sulfate	16.7	1.00		mg/L	1	2/6/2025 6:57:00 PM
<u>Ferrous Iron by SM3500-Fe B</u>				Batch ID: R97407		Analyst: OP
Ferrous Iron	0.516	0.150		mg/L	1	2/5/2025 10:04:16 AM

Work Order: 2502050
CLIENT: OnSite Environmental Inc
Project: POA-Quiet Cove QRT GWM

QC SUMMARY REPORT

Ferrous Iron by SM3500-Fe B

Sample ID: MB-R97407	SampType: MBLK	Units: mg/L		Prep Date: 2/5/2025	RunNo: 97407						
Client ID: MBLKW	Batch ID: R97407			Analysis Date: 2/5/2025	SeqNo: 2029976						
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ferrous Iron	ND	0.150									

Sample ID: LCS-R97407	SampType: LCS	Units: mg/L		Prep Date: 2/5/2025	RunNo: 97407						
Client ID: LCSW	Batch ID: R97407			Analysis Date: 2/5/2025	SeqNo: 2029977						
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ferrous Iron	0.353	0.150	0.4000	0	88.2	85	115				

Sample ID: 2502050-001ADUP	SampType: DUP	Units: mg/L		Prep Date: 2/5/2025	RunNo: 97407						
Client ID: MW-1A-020425	Batch ID: R97407			Analysis Date: 2/5/2025	SeqNo: 2029983						
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ferrous Iron	0.805	0.150						0.7927	1.57	20	

Sample ID: 2502050-001AMS	SampType: MS	Units: mg/L		Prep Date: 2/5/2025	RunNo: 97407						
Client ID: MW-1A-020425	Batch ID: R97407			Analysis Date: 2/5/2025	SeqNo: 2029984						
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ferrous Iron	1.29	0.150	0.4000	0.7927	125	70	130				

Sample ID: 2502050-001AMSD	SampType: MSD	Units: mg/L		Prep Date: 2/5/2025	RunNo: 97407						
Client ID: MW-1A-020425	Batch ID: R97407			Analysis Date: 2/5/2025	SeqNo: 2029985						
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ferrous Iron	1.33	0.150	0.4000	0.7927	134	70	130	1.292	2.88	30	S

NOTES:

S - Outlying spike recovery observed. A duplicate analysis was performed and recovered within range.

Work Order: 2502050
CLIENT: OnSite Environmental Inc
Project: POA-Quiet Cove QRT GWM

QC SUMMARY REPORT

Ion Chromatography by EPA 300.0

Sample ID: LCS-46675	SampType: LCS	Units: mg/L			Prep Date: 2/6/2025			RunNo: 97481			
Client ID: LCSW	Batch ID: 46675				Analysis Date: 2/6/2025			SeqNo: 2031344			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	2.18	0.150	2.259	0	96.4	90	110				
Sulfate	9.55	1.00	10.00	0	95.5	90	110				

Sample ID: MB-46675	SampType: MBLK	Units: mg/L			Prep Date: 2/6/2025			RunNo: 97481			
Client ID: MBLKW	Batch ID: 46675				Analysis Date: 2/6/2025			SeqNo: 2031346			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	ND	0.150									
Sulfate	ND	1.00									

Sample ID: 2502032-001BDUP	SampType: DUP	Units: mg/L			Prep Date: 2/6/2025			RunNo: 97481			
Client ID: BATCH	Batch ID: 46675				Analysis Date: 2/6/2025			SeqNo: 2031349			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	0.157	0.150						0.1590	1.27	20	H
Sulfate	3.12	1.00						3.127	0.0640	20	

Sample ID: 2502032-001BMS	SampType: MS	Units: mg/L			Prep Date: 2/6/2025			RunNo: 97481			
Client ID: BATCH	Batch ID: 46675				Analysis Date: 2/6/2025			SeqNo: 2031350			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	2.30	0.150	2.259	0.1590	94.8	80	120				H
Sulfate	13.1	1.00	10.00	3.127	99.6	80	120				

Sample ID: 2502032-001BMSD	SampType: MSD	Units: mg/L			Prep Date: 2/6/2025			RunNo: 97481			
Client ID: BATCH	Batch ID: 46675				Analysis Date: 2/6/2025			SeqNo: 2031351			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	2.40	0.150	2.259	0.1590	99.3	80	120	2.300	4.38	20	H
Sulfate	13.5	1.00	10.00	3.127	104	80	120	13.09	3.41	20	

Work Order: 2502050
CLIENT: OnSite Environmental Inc
Project: POA-Quiet Cove QRT GWM

QC SUMMARY REPORT

Ion Chromatography by EPA 300.0

Sample ID: 2502032-001BMSD	SampType: MSD	Units: mg/L			Prep Date: 2/6/2025			RunNo: 97481			
Client ID: BATCH	Batch ID: 46675				Analysis Date: 2/6/2025			SeqNo: 2031351			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID: 2502065-005ADUP	SampType: DUP	Units: mg/L			Prep Date: 2/6/2025			RunNo: 97481			
Client ID: BATCH	Batch ID: 46675				Analysis Date: 2/6/2025			SeqNo: 2031363			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	ND	0.150						0		20	H
Sulfate	ND	1.00						0		20	

Sample ID: 2502065-005AMS	SampType: MS	Units: mg/L			Prep Date: 2/6/2025			RunNo: 97481			
Client ID: BATCH	Batch ID: 46675				Analysis Date: 2/6/2025			SeqNo: 2031364			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	2.13	0.150	2.259	0	94.3	80	120				H
Sulfate	10.1	1.00	10.00	0.4530	96.0	80	120				

Client Name: ONSITE

Work Order Number: 2502050

Logged by: Clare Griggs

Date Received: 2/5/2025 8:15:00 AM

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Client

Log In

3. Custody Seals present on shipping container/cooler?
(Refer to comments for Custody Seals not intact) Yes ☐ No ☐ Not Present ☒
4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all items received at a temperature of >2°C to 6°C * Yes ☒ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples properly preserved? Yes ☒ No ☐
9. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
10. Is there headspace in the VOA vials? Yes ☐ No ☐ NA ☒
11. Did all samples containers arrive in good condition(unbroken)? Yes ☒ No ☐
12. Does paperwork match bottle labels? Yes ☒ No ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
14. Is it clear what analyses were requested? Yes ☒ No ☐
15. Were all hold times (except field parameters, pH e.g.) able to be met? Yes ☐ No ☒

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:		Date:	
By Whom:		Via:	☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:			
Client Instructions:			

17. Additional remarks:

Item Information

Item #	Temp °C
Sample	3.3

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C



OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 96th Street - Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Chain of Custody

Company:

GEODESINIERS

Project Number:

05147 - 024 - 01

Project Name:

POA - OILIER CANS - GAS GYM

Project Manager:

BRIAN TRACY

Sampled By:

MARTIN SAMMON

Turnaround Request (in working days)

(Check One)

☐ Same Day ☐ 1 Day

☐ 2 Days ☐ 3 Days

☒ Standard (7 Days)

☐ _____ (other)

Lab ID

Sample Identification

Date Sampled

Time Sampled

Matrix

Number of Containers

NWTPH-HCID

NWTPH-Gx/BTEX (8021 ☐ 8260 ☐)

NWTPH-Gx

NWTPH-Dx (SG Clean-up ☐)

Volatiles 8260

Halogenated Volatiles 8260

EDB EPA 8011 (Waters Only)

Semivolatiles 8270/SIM (with low-level PAHs)

PAHs 8270/SIM (low-level)

PCBs 8082

Organochlorine Pesticides 8081

Organophosphorus Pesticides 8270/SIM

Chlorinated Acid Herbicides 8151

Total RCRA Metals

Total MTCA Metals

TCLP Metals

HEM (oil and grease) 1664

FERROUS IRON

NITRATE

% Moisture

Laboratory Number: 2502050

Signature

Company

Date

Time

Comments/Special Instructions

Relinquished

[Signature]

GEI

02/04/25 19:30

Received

[Signature]

ATG

2/5/25 8:15

Relinquished

Received

Relinquished

Received

Reviewed/Date

Reviewed/Date

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

Data Package: Standard ☐ Level III ☐ Level IV ☐



3600 Fremont Ave N

Seattle, WA 98103

T: (206) 352-3790

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info@fremontanalytical.com

OnSite Environmental Inc

David Baumeister

14648 NE 95th Street

Redmond, WA 98052

RE: Quiet Cove QRT GWM, 05147-024-01

Work Order Number: 2502086

March 07, 2025

Attention David Baumeister:

Alliance Technical Group, LLC - Seattle received 6 sample(s) on 2/6/2025 for the analyses presented in the following report.

Ferrous Iron by SM3500-Fe B

Ion Chromatography by EPA 300.0

All analyses were performed according to our accredited Quality Assurance program. Please contact the laboratory if you should have any questions about the results.

Alliance Technical Group is committed to accuracy, speed, and customer service. Thank you for choosing Alliance Technical Group's Seattle laboratory team for your analytical needs. We appreciate this opportunity to serve you!

Sincerely,

A handwritten signature in blue ink, appearing to read "Brianna Barnes".

Brianna Barnes
Project Manager

DoD-ELAP Accreditation #79636 by PJLA, ISO/IEC 17025:2017 and QSM 5.4 for Environmental Testing
ORELAP Certification: WA 100009 (NELAP Recognized) for Environmental Testing
Washington State Department of Ecology Accredited for Environmental Testing, Lab ID C910



Revision v1

www.fremontanalytical.com

CLIENT: OnSite Environmental Inc
Project: Quiet Cove QRT GWM
Work Order: 2502086

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2502086-001	MW-3-020525	02/05/2025 5:45 PM	02/06/2025 8:25 AM
2502086-002	MW-4-020525	02/05/2025 11:30 AM	02/06/2025 8:25 AM
2502086-003	MW-8-020525	02/05/2025 3:40 PM	02/06/2025 8:25 AM
2502086-004	MW-13-020525	02/05/2025 4:40 PM	02/06/2025 8:25 AM
2502086-005	MW-15-020525	02/05/2025 1:20 PM	02/06/2025 8:25 AM
2502086-006	DUP-020525	02/05/2025 12:00 PM	02/06/2025 8:25 AM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

CLIENT: OnSite Environmental Inc

Project: Quiet Cove QRT GWM

I. SAMPLE RECEIPT:

Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:

Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

3/7/2025: Rev1 includes additional analysis per client request.

Qualifiers:

- * - Flagged value is not within established control limits
- B - Analyte detected in the associated Method Blank
- D - Dilution was required
- E - Value above quantitation range
- H - Holding times for preparation or analysis exceeded
- I - Analyte with an internal standard that does not meet established acceptance criteria
- J - Analyte detected below Reporting Limit
- N - Tentatively Identified Compound (TIC)
- Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria
- S - Spike recovery outside accepted recovery limits
- ND - Not detected at the Reporting Limit
- R - High relative percent difference observed

Acronyms:

- %Rec - Percent Recovery
- CCB - Continued Calibration Blank
- CCV - Continued Calibration Verification
- DF - Dilution Factor
- DUP - Sample Duplicate
- HEM - Hexane Extractable Material
- ICV - Initial Calibration Verification
- LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
- MCL - Maximum Contaminant Level
- MB or MBLANK - Method Blank
- MDL - Method Detection Limit
- MS/MSD - Matrix Spike / Matrix Spike Duplicate
- PDS - Post Digestion Spike
- Ref Val - Reference Value
- REP - Sample Replicate
- RL - Reporting Limit
- RPD - Relative Percent Difference
- SD - Serial Dilution
- SGT - Silica Gel Treatment
- SPK - Spike
- Surr - Surrogate

CLIENT: OnSite Environmental Inc
Project: Quiet Cove QRT GWM

Lab ID: 2502086-001

Client Sample ID: MW-3-020525

Collection Date: 2/5/2025 5:45:00 PM

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Ion Chromatography by EPA 300.0

Batch ID: 46675

Analyst: OP

Nitrate (as N)	3.38	0.150		mg/L	1	2/6/2025 9:42:00 PM
Sulfate	88.3	10.0	D	mg/L	10	3/6/2025 4:37:00 PM

Ferrous Iron by SM3500-Fe B

Batch ID: R97430

Analyst: BB

Ferrous Iron	0.372	0.150		mg/L	1	2/6/2025 9:17:08 AM
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Lab ID: 2502086-002

Client Sample ID: MW-4-020525

Collection Date: 2/5/2025 11:30:00 AM

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Ion Chromatography by EPA 300.0

Batch ID: 46675

Analyst: OP

Nitrate (as N)	0.283	0.150		mg/L	1	2/6/2025 9:55:00 PM
Sulfate	18.6	1.00		mg/L	1	2/6/2025 9:55:00 PM

Ferrous Iron by SM3500-Fe B

Batch ID: R97430

Analyst: BB

Ferrous Iron	1.50	0.150		mg/L	1	2/6/2025 9:17:08 AM
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Lab ID: 2502086-003

Client Sample ID: MW-8-020525

Collection Date: 2/5/2025 3:40:00 PM

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Ion Chromatography by EPA 300.0

Batch ID: 46675

Analyst: OP

Nitrate (as N)	ND	0.150		mg/L	1	2/6/2025 10:33:00 PM
Sulfate	5.03	1.00		mg/L	1	2/6/2025 10:33:00 PM

Ferrous Iron by SM3500-Fe B

Batch ID: R97430

Analyst: BB

Ferrous Iron	1.33	0.150		mg/L	1	2/6/2025 9:17:08 AM
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CLIENT: OnSite Environmental Inc
Project: Quiet Cove QRT GWM

Lab ID: 2502086-004

Client Sample ID: MW-13-020525

Collection Date: 2/5/2025 4:40:00 PM

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>Ion Chromatography by EPA 300.0</u>				Batch ID: 46675		Analyst: OP
Nitrate (as N)	0.553	0.150		mg/L	1	2/6/2025 10:45:00 PM
Sulfate	9.45	1.00		mg/L	1	2/6/2025 10:45:00 PM
<u>Ferrous Iron by SM3500-Fe B</u>				Batch ID: R97430		Analyst: BB
Ferrous Iron	0.733	0.150		mg/L	1	2/6/2025 9:17:08 AM

Lab ID: 2502086-005

Client Sample ID: MW-15-020525

Collection Date: 2/5/2025 1:20:00 PM

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>Ion Chromatography by EPA 300.0</u>				Batch ID: 46675		Analyst: OP
Nitrate (as N)	0.682	0.150		mg/L	1	2/6/2025 10:58:00 PM
Sulfate	4.13	1.00		mg/L	1	2/6/2025 10:58:00 PM
<u>Ferrous Iron by SM3500-Fe B</u>				Batch ID: R97430		Analyst: BB
Ferrous Iron	56.3	7.50	D	mg/L	50	2/6/2025 9:17:08 AM

Lab ID: 2502086-006

Client Sample ID: DUP-020525

Collection Date: 2/5/2025 12:00:00 PM

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>Ion Chromatography by EPA 300.0</u>				Batch ID: 46675		Analyst: OP
Nitrate (as N)	2.16	0.150		mg/L	1	2/6/2025 11:11:00 PM
Sulfate	4.88	1.00		mg/L	1	2/6/2025 11:11:00 PM
<u>Ferrous Iron by SM3500-Fe B</u>				Batch ID: R97430		Analyst: BB
Ferrous Iron	1.38	0.150		mg/L	1	2/6/2025 9:17:08 AM

Work Order: 2502086
CLIENT: OnSite Environmental Inc
Project: Quiet Cove QRT GWM

QC SUMMARY REPORT

Ferrous Iron by SM3500-Fe B

Sample ID: MB-R97430	SampType: MBLK	Units: mg/L		Prep Date: 2/6/2025	RunNo: 97430							
Client ID: MBLKW	Batch ID: R97430			Analysis Date: 2/6/2025	SeqNo: 2030389							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Ferrous Iron	ND	0.150										

Sample ID: LCS-R97430	SampType: LCS	Units: mg/L		Prep Date: 2/6/2025	RunNo: 97430							
Client ID: LCSW	Batch ID: R97430			Analysis Date: 2/6/2025	SeqNo: 2030390							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Ferrous Iron	0.425	0.150	0.4000	0	106	85	115					

Sample ID: 2502086-001BDUP	SampType: DUP	Units: mg/L		Prep Date: 2/6/2025	RunNo: 97430							
Client ID: MW-3-020525	Batch ID: R97430			Analysis Date: 2/6/2025	SeqNo: 2030392							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Ferrous Iron	0.409	0.150						0.3716	9.66	20		

Sample ID: 2502086-001BMS	SampType: MS	Units: mg/L		Prep Date: 2/6/2025	RunNo: 97430							
Client ID: MW-3-020525	Batch ID: R97430			Analysis Date: 2/6/2025	SeqNo: 2030393							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Ferrous Iron	0.676	0.150	0.4000	0.3716	76.2	70	130					

Sample ID: 2502086-001BMSD	SampType: MSD	Units: mg/L		Prep Date: 2/6/2025	RunNo: 97430							
Client ID: MW-3-020525	Batch ID: R97430			Analysis Date: 2/6/2025	SeqNo: 2030394							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Ferrous Iron	0.714	0.150	0.4000	0.3716	85.6	70	130	0.6764	5.42	30		

Work Order: 2502086
CLIENT: OnSite Environmental Inc
Project: Quiet Cove QRT GWM

QC SUMMARY REPORT

Ion Chromatography by EPA 300.0

Sample ID: LCS-46675		SampType: LCS			Units: mg/L		Prep Date: 2/6/2025		RunNo: 97481		
Client ID: LCSW		Batch ID: 46675			Analysis Date: 2/6/2025				SeqNo: 2031344		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	2.18	0.150	2.259	0	96.4	90	110				
Sulfate	9.55	1.00	10.00	0	95.5	90	110				

Sample ID: MB-46675	SampType: MBLK	Units: mg/L			Prep Date: 2/6/2025			RunNo: 97481			
Client ID: MBLKW	Batch ID: 46675				Analysis Date: 2/6/2025			SeqNo: 2031346			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	ND	0.150									
Sulfate	ND	1.00									

Sample ID: 2502032-001BDUP		SampType: DUP			Units: mg/L		Prep Date: 2/6/2025			RunNo: 97481		
Client ID: BATCH		Batch ID: 46675			Analysis Date: 2/6/2025				SeqNo: 2031349			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Nitrate (as N)	0.157	0.150						0.1590	1.27	20	H	
Sulfate	3.12	1.00						3.127	0.0640	20		

Sample ID: 2502032-001BMS		SampType: MS			Units: mg/L		Prep Date: 2/6/2025		RunNo: 97481		
Client ID: BATCH		Batch ID: 46675			Analysis Date: 2/6/2025				SeqNo: 2031350		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	2.30	0.150	2.259	0.1590	94.8	80	120				H
Sulfate	13.1	1.00	10.00	3.127	99.6	80	120				

Sample ID: 2502032-001BMSD	SampType: MSD	Units: mg/L				Prep Date: 2/6/2025			RunNo: 97481		
Client ID: BATCH	Batch ID: 46675					Analysis Date: 2/6/2025			SeqNo: 2031351		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	2.40	0.150	2.259	0.1590	99.3	80	120	2.300	4.38	20	H
Sulfate	13.5	1.00	10.00	3.127	104	80	120	13.09	3.41	20	

Work Order: 2502086
CLIENT: OnSite Environmental Inc
Project: Quiet Cove QRT GWM

QC SUMMARY REPORT

Ion Chromatography by EPA 300.0

Sample ID: 2502032-001BMSD	SampType: MSD	Units: mg/L			Prep Date: 2/6/2025			RunNo: 97481			
Client ID: BATCH	Batch ID: 46675	Analysis Date: 2/6/2025						SeqNo: 2031351			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID: 2502065-005ADUP	SampType: DUP	Units: mg/L			Prep Date: 2/6/2025			RunNo: 97481			
Client ID: BATCH	Batch ID: 46675	Analysis Date: 2/6/2025						SeqNo: 2031363			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	ND	0.150						0		20	H
Sulfate	ND	1.00						0		20	

Sample ID: 2502065-005AMS	SampType: MS	Units: mg/L			Prep Date: 2/6/2025			RunNo: 97481			
Client ID: BATCH	Batch ID: 46675	Analysis Date: 2/6/2025						SeqNo: 2031364			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	2.13	0.150	2.259	0	94.3	80	120				H
Sulfate	10.1	1.00	10.00	0.4530	96.0	80	120				

Sample ID: MB-46968	SampType: MBLK	Units: mg/L			Prep Date: 3/6/2025			RunNo: 98095			
Client ID: MBLKW	Batch ID: 46968	Analysis Date: 3/6/2025						SeqNo: 2044511			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	ND	1.00									

Sample ID: LCS-46968	SampType: LCS	Units: mg/L			Prep Date: 3/6/2025			RunNo: 98095			
Client ID: LCSW	Batch ID: 46968	Analysis Date: 3/6/2025						SeqNo: 2044512			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	9.82	1.00	10.00	0	98.2	90	110				

Work Order: 2502086
CLIENT: OnSite Environmental Inc
Project: Quiet Cove QRT GWM

QC SUMMARY REPORT

Ion Chromatography by EPA 300.0

Sample ID: 2502594-003BDUP	SampType: DUP	Units: mg/L			Prep Date: 3/6/2025			RunNo: 98095			
Client ID: BATCH	Batch ID: 46968				Analysis Date: 3/6/2025			SeqNo: 2044516			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	8.92	1.00						8.880	0.405	20	

Sample ID: 2502594-003BMS	SampType: MS	Units: mg/L			Prep Date: 3/6/2025			RunNo: 98095			
Client ID: BATCH	Batch ID: 46968				Analysis Date: 3/6/2025			SeqNo: 2044517			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	18.4	1.00	10.00	8.880	95.0	80	120				

Sample ID: 2502594-003BMSD	SampType: MSD	Units: mg/L			Prep Date: 3/6/2025			RunNo: 98095			
Client ID: BATCH	Batch ID: 46968				Analysis Date: 3/6/2025			SeqNo: 2044518			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	18.6	1.00	10.00	8.880	96.7	80	120	18.38	0.953	20	

Client Name: ONSITE

Work Order Number: 2502086

Logged by: Clare Griggs

Date Received: 2/6/2025 8:25:00 AM

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Client

Log In

3. Custody Seals present on shipping container/cooler?
(Refer to comments for Custody Seals not intact) Yes ☐ No ☐ Not Present ☒
4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all items received at a temperature of >2°C to 6°C * Yes ☒ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples properly preserved? Yes ☒ No ☐
9. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
10. Is there headspace in the VOA vials? Yes ☐ No ☐ NA ☒
11. Did all samples containers arrive in good condition(unbroken)? Yes ☒ No ☐
12. Does paperwork match bottle labels? Yes ☒ No ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
14. Is it clear what analyses were requested? Yes ☒ No ☐
15. Were all hold times (except field parameters, pH e.g.) able to be met? Yes ☒ No ☐

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:		Date:	
By Whom:		Via:	☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:			
Client Instructions:			

17. Additional remarks:

Item Information

Item #	Temp °C
Sample	3.3

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C



MVA Onsite Environmental Inc.

Analytical Laboratory Testing Services
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Phone: (425) 883-3881 • www.onsite-env.com

Chain of Custody

Page 1 of 1

Company:

Geo Environmental Services

Project Number:

05147-024-01

Project Name:

QUEST CORP GRS GUM

Project Manager:

Brian Tracy

Sampled by:

Nathan Solomon

Lab ID Sample Identification

Turnaround Request (in working days)

(Check One)

☐ Same Day ☐ 1 Day

☐ 2 Days ☐ 3 Days

☒ Standard (7 Days)

☐ _____ (other)

Laboratory Number:

2502086

Number of Containers

NWTPH-HCID

NWTPH-Gx/BTEX (8021 ☐ 8260 ☐)

NWTPH-Gx

NWTPH-Dx (SG Clean-up ☐)

Volatiles 8260

Halogenated Volatiles 8260

EDB EPA 8011 (Waters Only)

Semivolatiles 8270/SIM

(with low-level PAHs)

PAHs 8270/SIM (low-level)

PCBs 8082

Organochlorine Pesticides 8081

Organophosphorus Pesticides 8270/SIM

Chlorinated Acid Herbicides 8151

Total RCRA Metals

Total MTCA Metals

TCLP Metals

HEM (oil and grease) 1664

FERROUS IRON

NITRATE

% Moisture

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX (8021 ☐ 8260 ☐)	NWTPH-Gx	NWTPH-Dx (SG Clean-up ☐)	Volatiles 8260	Halogenated Volatiles 8260	EDB EPA 8011 (Waters Only)	Semivolatiles 8270/SIM (with low-level PAHs)	PAHs 8270/SIM (low-level)	PCBs 8082	Organochlorine Pesticides 8081	Organophosphorus Pesticides 8270/SIM	Chlorinated Acid Herbicides 8151	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664	FERROUS IRON	NITRATE	% Moisture
MW-8-020525		020525	1745	Water	2																		X	X	
MW-4-020525			1120		2																	X	X		
MW-8-020525			1540		2																	X	X		
MW-13-020525			1640		2																	X	X		
MW-15-020525			1320		2																	X	X		
DUP-020525			1200		2																	X	X		

Signature

Company

Date

Time

Comments/Special Instructions

Relinquished

Received

Relinquished

Received

Relinquished

Received

Reviewed/Date

GEI

ATC

020525

2/6/15

1945

835

Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐



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Chain of Custody

Page 1 of 1

Company:

Geo Environmental Services

Project Number:

05147-024-01

Project Name:

Quincy Cove G&S GUM

Project Manager:

Brian Tracy

Sampled by:

Nathan Solomon

Lab ID

Sample Identification

Turnaround Request (in working days)

(Check One)

☐ Same Day ☐ 1 Day

☐ 2 Days ☐ 3 Days

☒ Standard (7 Days)

☐ _____ (other)

Laboratory Number:

2502086

Number of Containers

NWTPH-HCID

NWTPH-Gx/BTEX (8021 ☐ 8260 ☐)

NWTPH-Gx

NWTPH-Dx (SG Clean-up ☐)

Volatiles 8260

Halogenated Volatiles 8260

EDB EPA 8011 (Waters Only)

Semivolatiles 8270/SIM

(with low-level PAHs)

PAHs 8270/SIM (low-level)

PCBs 8082

Organochlorine Pesticides 8081

Organophosphorus Pesticides 8270/SIM

Chlorinated Acid Herbicides 8151

Total RCRA Metals

Total MTCA Metals

TCLP Metals

HEM (oil and grease) 1664

FERROUS IRON

NITRATE

% Moisture

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX (8021 ☐ 8260 ☐)	NWTPH-Gx	NWTPH-Dx (SG Clean-up ☐)	Volatiles 8260	Halogenated Volatiles 8260	EDB EPA 8011 (Waters Only)	Semivolatiles 8270/SIM (with low-level PAHs)	PAHs 8270/SIM (low-level)	PCBs 8082	Organochlorine Pesticides 8081	Organophosphorus Pesticides 8270/SIM	Chlorinated Acid Herbicides 8151	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664	FERROUS IRON	NITRATE	% Moisture
MW-8-020525		020525	1745	Water	2																		X	X	
MW-4-020525			1120		2																		X	X	
MW-8-020525			1540		2																		X	X	
MW-13-020525			1640		2																		X	X	
MW-15-020525			1320		2																		X	X	
DUP-020525			1200		2																		X	X	

Signature

Company

Date

Time

Comments/Special Instructions

Add sulfate to all samples per D.B. 2/28/25 -BB

Relinquished

Received

Relinquished

Received

Relinquished

Received

Reviewed/Date

Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐



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Chain of Custody

Page 1 of 1

Company: GEOENVIRONNEERS		Turnaround Request (In working days)		Laboratory Number: 02-067													
Project Number: 06147-024-01		☐ Same Day ☐ 1 Day															
Project Name: QUIET COVE GRTLY GWM		☐ 2 Days ☐ 3 Days															
Project Manager: BRIAN TRACY		☒ Standard (7 Days)															
Sampled by: NATHAN SOLOMON		☐ (other) _____															
Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers												
1	MW-1A-020425	02.04.25	1535	Water	12												
2	MW-2A-020425	02.04.25	1850		12												
3	MW-3-020525	02.05.25	1745		12												
4	MW-4-020525	02.05.25	1130		12												
5	MW-8-020525	02.05.25	1540		12												
6	MW-13-020525	02.05.25	1640		12												
7	MW-14-020425	02.04.25	1200		12												
8	MW-15-020525	02.05.25	1320		12												
9	DUP-020525	02.05.25	1200		12												
Signature		Company		Date		Time		Comments/Special Instructions									
[Signature]		GEOENVIRONNEERS		02.06.25		11:51		DISC METALS = FIELD FILTER. 45 MICRON. *Subbed directly to Alliance. ** - Special Chem List.									
Relinquished																	
Received																	
Relinquished																	
Received																	
Relinquished																	
Received																	
Relinquished																	
Reviewed/Date		Reviewed/Date						Data Package: Standard ☐ Level III ☒ Level IV ☐									
								Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☒									

Sample/Cooler Receipt and Acceptance Checklist

Client: GER

Client Project Name/Number: DS147-024-01

OnSite Project Number: 02-067

Initiated by: MB

Date Initiated: 2/16/25

1.0 Cooler Verification

1.1 Were there custody seals on the outside of the cooler?	Yes	<u>No</u>	N/A	1	2	3	4
1.2 Were the custody seals intact?	Yes	No	<u>N/A</u>	1	2	3	4
1.3 Were the custody seals signed and dated by last custodian?	Yes	No	<u>N/A</u>	1	2	3	4
1.4 Were the samples delivered on ice or blue ice?	<u>Yes</u>	No	N/A	1	2	3	4
1.5 Were samples received between 0-6 degrees Celsius?	<u>Yes</u>	No	N/A	Temperature: <u>1.1</u>			
1.6 Have shipping bills (if any) been attached to the back of this form?	Yes	<u>N/A</u>					
1.7 How were the samples delivered?	<u>Client</u>	Courier	UPS/FedEx	OSE Pickup	Other		

2.0 Chain of Custody Verification

2.1 Was a Chain of Custody submitted with the samples?	<u>Yes</u>	No	1	2	3	4
2.2 Was the COC legible and written in permanent ink?	<u>Yes</u>	No	1	2	3	4
2.3 Have samples been relinquished and accepted by each custodian?	<u>Yes</u>	No	1	2	3	4
2.4 Did the sample labels (ID, date, time, preservative) agree with COC?	Yes	<u>No</u>	1	2	3	4
2.5 Were all of the samples listed on the COC submitted?	<u>Yes</u>	No	1	2	3	4
2.6 Were any of the samples submitted omitted from the COC?	Yes	<u>No</u>	1	2	3	4

3.0 Sample Verification

3.1 Were any sample containers broken or compromised?	Yes	<u>No</u>	1	2	3	4	
3.2 Were any sample labels missing or illegible?	Yes	<u>No</u>	1	2	3	4	
3.3 Have the correct containers been used for each analysis requested?	<u>Yes</u>	No	1	2	3	4	
3.4 Have the samples been correctly preserved?	<u>Yes</u>	No	N/A	1	2	3	4
3.5 Are volatile samples free from headspace and bubbles greater than 6mm?	<u>Yes</u>	No	N/A	1	2	3	4
3.6 Is there sufficient sample submitted to perform requested analyses?	<u>Yes</u>	No	1	2	3	4	
3.7 Have any holding times already expired or will expire in 24 hours?	Yes	<u>No</u>	1	2	3	4	
3.8 Was method 5035A used?	Yes	No	<u>N/A</u>	1	2	3	4
3.9 If 5035A was used, which sampling option was used (#1, 2, or 3).	#		<u>N/A</u>	1	2	3	4

Explain any discrepancies:

2.4) #3 @ 17:45

1 - Discuss issue in Case Narrative

2 - Process Sample As-is

3 - Client contacted to discuss problem

4 - Sample cannot be analyzed or client does not wish to proceed



14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

May 16, 2025

Brian Tracy
GeoEngineers, Inc.
2101 4th Avenue, Suite 950
Seattle, WA 98121

Re: Analytical Data for Project 5147-024-12
Laboratory Reference No. 2505-004

Dear Brian:

Enclosed are the analytical results and associated quality control data for samples submitted on May 1, 2025.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

A handwritten signature in black ink, appearing to read "DB", with a long horizontal flourish extending to the right.

David Baumeister
Project Manager

Enclosures



OnSite Environmental, Inc. 14648 NE 95th Street, Redmond, WA 98052 (425) 883-3881

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: May 16, 2025
Samples Submitted: May 1, 2025
Laboratory Reference: 2505-004
Project: 5147-024-12

Case Narrative

Samples were collected on April 29 and 30, 2025 and received by the laboratory on May 1, 2025. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.



Date of Report: May 16, 2025
 Samples Submitted: May 1, 2025
 Laboratory Reference: 2505-004
 Project: 5147-024-12

ANALYTICAL REPORT FOR SAMPLES

Client ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
MW-1A-042925	05-004-01	Water	4-29-25	5-1-25	
MW-2A-043025	05-004-02	Water	4-30-25	5-1-25	
MW-3-043025	05-004-03	Water	4-30-25	5-1-25	
MW-4-043025	05-004-04	Water	4-30-25	5-1-25	
MW-8-042925	05-004-05	Water	4-29-25	5-1-25	
MW-13-042925	05-004-06	Water	4-29-25	5-1-25	
MW-14-042925	05-004-07	Water	4-29-25	5-1-25	
MW-15-043025	05-004-08	Water	4-30-25	5-1-25	
DUP-042925	05-004-09	Water	4-29-25	5-1-25	
TRIP BLANK	05-004-10	Water	---	5-1-25	



Date of Report: May 16, 2025
 Samples Submitted: May 1, 2025
 Laboratory Reference: 2505-004
 Project: 5147-024-12

GASOLINE RANGE ORGANICS
NWTPH-Gx

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: MW-1A-042925						
Laboratory ID:	05-004-01					
Gasoline	ND	100	NWTPH-Gx	5-2-25	5-2-25	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	82	62-122				
Client ID: MW-2A-043025						
Laboratory ID:	05-004-02					
Gasoline	ND	100	NWTPH-Gx	5-2-25	5-2-25	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	82	62-122				
Client ID: MW-3-043025						
Laboratory ID:	05-004-03					
Gasoline	ND	100	NWTPH-Gx	5-2-25	5-2-25	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	82	62-122				
Client ID: MW-4-043025						
Laboratory ID:	05-004-04					
Gasoline	ND	100	NWTPH-Gx	5-2-25	5-2-25	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	81	62-122				
Client ID: MW-8-042925						
Laboratory ID:	05-004-05					
Gasoline Range Organics	190	100	NWTPH-Gx	5-2-25	5-2-25	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	86	62-122				
Client ID: MW-13-042925						
Laboratory ID:	05-004-06					
Gasoline	ND	100	NWTPH-Gx	5-2-25	5-2-25	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	84	62-122				
Client ID: MW-14-042925						
Laboratory ID:	05-004-07					
Gasoline	ND	100	NWTPH-Gx	5-2-25	5-2-25	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	82	62-122				



Date of Report: May 16, 2025
 Samples Submitted: May 1, 2025
 Laboratory Reference: 2505-004
 Project: 5147-024-12

GASOLINE RANGE ORGANICS
NWTPH-Gx

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-15-043025					
Laboratory ID:	05-004-08					
Gasoline Range Organics	120	100	NWTPH-Gx	5-2-25	5-2-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	82	62-122				
Client ID:	DUP-042925					
Laboratory ID:	05-004-09					
Gasoline Range Organics	190	100	NWTPH-Gx	5-2-25	5-2-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	86	62-122				



Date of Report: May 16, 2025
 Samples Submitted: May 1, 2025
 Laboratory Reference: 2505-004
 Project: 5147-024-12

**DIESEL AND HEAVY OIL RANGE ORGANICS
 NWTPH-Dx**

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-1A-042925					
Laboratory ID:	05-004-01					
Diesel Range Organics	ND	0.20	NWTPH-Dx	5-5-25	5-5-25	
Lube Oil Range Organics	0.28	0.20	NWTPH-Dx	5-5-25	5-5-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	107	50-150				

Client ID:	MW-1A-042925					
Laboratory ID:	05-004-01					
Diesel Range Organics	ND	0.20	NWTPH-Dx	5-5-25	5-5-25	X2
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	5-5-25	5-5-25	X2
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	105	50-150				

Client ID:	MW-2A-043025					
Laboratory ID:	05-004-02					
Diesel Range Organics	0.23	0.20	NWTPH-Dx	5-5-25	5-5-25	
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	5-5-25	5-5-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	102	50-150				

Client ID:	MW-2A-043025					
Laboratory ID:	05-004-02					
Diesel Range Organics	ND	0.20	NWTPH-Dx	5-5-25	5-5-25	X2
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	5-5-25	5-5-25	X2
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	103	50-150				

Client ID:	MW-3-043025					
Laboratory ID:	05-004-03					
Diesel Range Organics	0.31	0.20	NWTPH-Dx	5-5-25	5-5-25	
Lube Oil Range Organics	0.31	0.20	NWTPH-Dx	5-5-25	5-5-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	91	50-150				

Client ID:	MW-3-043025					
Laboratory ID:	05-004-03					
Diesel Range Organics	ND	0.20	NWTPH-Dx	5-5-25	5-5-25	X2
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	5-5-25	5-5-25	X2
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	93	50-150				



Date of Report: May 16, 2025
 Samples Submitted: May 1, 2025
 Laboratory Reference: 2505-004
 Project: 5147-024-12

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-4-043025					
Laboratory ID:	05-004-04					
Diesel Range Organics	0.40	0.20	NWTPH-Dx	5-5-25	5-5-25	
Lube Oil Range Organics	0.31	0.20	NWTPH-Dx	5-5-25	5-5-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	123	50-150				

Client ID:	MW-4-043025					
Laboratory ID:	05-004-04					
Diesel Range Organics	ND	0.20	NWTPH-Dx	5-5-25	5-5-25	X2
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	5-5-25	5-5-25	X2
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	120	50-150				

Client ID:	MW-8-042925					
Laboratory ID:	05-004-05					
Diesel Range Organics	0.61	0.20	NWTPH-Dx	5-5-25	5-5-25	
Lube Oil Range Organics	0.48	0.20	NWTPH-Dx	5-5-25	5-5-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	88	50-150				

Client ID:	MW-8-042925					
Laboratory ID:	05-004-05					
Diesel Range Organics	ND	0.20	NWTPH-Dx	5-5-25	5-5-25	X2
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	5-5-25	5-5-25	X2
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	84	50-150				

Client ID:	MW-13-042925					
Laboratory ID:	05-004-06					
Diesel Range Organics	0.21	0.20	NWTPH-Dx	5-5-25	5-5-25	
Lube Oil Range Organics	0.21	0.20	NWTPH-Dx	5-5-25	5-5-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	96	50-150				

Client ID:	MW-13-042925					
Laboratory ID:	05-004-06					
Diesel Range Organics	ND	0.20	NWTPH-Dx	5-5-25	5-5-25	X2
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	5-5-25	5-5-25	X2
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	94	50-150				



Date of Report: May 16, 2025
 Samples Submitted: May 1, 2025
 Laboratory Reference: 2505-004
 Project: 5147-024-12

**DIESEL AND HEAVY OIL RANGE ORGANICS
 NWTPH-Dx**

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-14-042925					
Laboratory ID:	05-004-07					
Diesel Range Organics	ND	0.20	NWTPH-Dx	5-5-25	5-5-25	
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	5-5-25	5-5-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	98	50-150				

Client ID:	MW-14-042925					
Laboratory ID:	05-004-07					
Diesel Range Organics	ND	0.20	NWTPH-Dx	5-5-25	5-5-25	X2
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	5-5-25	5-5-25	X2
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	100	50-150				

Client ID:	MW-15-043025					
Laboratory ID:	05-004-08					
Diesel Range Organics	1.2	0.20	NWTPH-Dx	5-5-25	5-5-25	
Lube Oil Range Organics	0.51	0.20	NWTPH-Dx	5-5-25	5-5-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	93	50-150				

Client ID:	MW-15-043025					
Laboratory ID:	05-004-08					
Diesel Range Organics	ND	0.20	NWTPH-Dx	5-5-25	5-5-25	X2
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	5-5-25	5-5-25	X2
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	92	50-150				

Client ID:	DUP-042925					
Laboratory ID:	05-004-09					
Diesel Range Organics	0.66	0.20	NWTPH-Dx	5-5-25	5-5-25	
Lube Oil Range Organics	0.34	0.20	NWTPH-Dx	5-5-25	5-5-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	96	50-150				

Client ID:	DUP-042925					
Laboratory ID:	05-004-09					
Diesel Range Organics	ND	0.20	NWTPH-Dx	5-5-25	5-5-25	X2
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	5-5-25	5-5-25	X2
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	96	50-150				



Date of Report: May 16, 2025
 Samples Submitted: May 1, 2025
 Laboratory Reference: 2505-004
 Project: 5147-024-12

VOLATILE ORGANICS EPA 8260D

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:		MW-1A-042925				
Laboratory ID:		05-004-01				
Methyl t-Butyl Ether	ND	0.20	EPA 8260D	5-5-25	5-5-25	
n-Hexane	ND	1.0	EPA 8260D	5-5-25	5-5-25	
Benzene	ND	0.20	EPA 8260D	5-5-25	5-5-25	
1,2-Dichloroethane	ND	0.50	EPA 8260D	5-5-25	5-5-25	
Toluene	ND	1.0	EPA 8260D	5-5-25	5-5-25	
1,2-Dibromoethane	ND	0.20	EPA 8260D	5-5-25	5-5-25	
Ethylbenzene	ND	0.20	EPA 8260D	5-5-25	5-5-25	
m,p-Xylene	ND	0.40	EPA 8260D	5-5-25	5-5-25	
o-Xylene	ND	0.20	EPA 8260D	5-5-25	5-5-25	

<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>
<i>Dibromofluoromethane</i>	104	68-133
<i>Toluene-d8</i>	104	79-123
<i>4-Bromofluorobenzene</i>	98	78-117

Client ID:		MW-2A-043025				
Laboratory ID:		05-004-02				
Methyl t-Butyl Ether	ND	0.20	EPA 8260D	5-5-25	5-5-25	
n-Hexane	ND	1.0	EPA 8260D	5-5-25	5-5-25	
Benzene	ND	0.20	EPA 8260D	5-5-25	5-5-25	
1,2-Dichloroethane	ND	0.50	EPA 8260D	5-5-25	5-5-25	
Toluene	ND	1.0	EPA 8260D	5-5-25	5-5-25	
1,2-Dibromoethane	ND	0.20	EPA 8260D	5-5-25	5-5-25	
Ethylbenzene	ND	0.20	EPA 8260D	5-5-25	5-5-25	
m,p-Xylene	ND	0.40	EPA 8260D	5-5-25	5-5-25	
o-Xylene	ND	0.20	EPA 8260D	5-5-25	5-5-25	

<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>
<i>Dibromofluoromethane</i>	102	68-133
<i>Toluene-d8</i>	102	79-123
<i>4-Bromofluorobenzene</i>	97	78-117



Date of Report: May 16, 2025
 Samples Submitted: May 1, 2025
 Laboratory Reference: 2505-004
 Project: 5147-024-12

VOLATILE ORGANICS EPA 8260D

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: MW-3-043025						
Laboratory ID: 05-004-03						
Methyl t-Butyl Ether	ND	0.20	EPA 8260D	5-5-25	5-5-25	
n-Hexane	ND	1.0	EPA 8260D	5-5-25	5-5-25	
Benzene	ND	0.20	EPA 8260D	5-5-25	5-5-25	
1,2-Dichloroethane	ND	0.50	EPA 8260D	5-5-25	5-5-25	
Toluene	ND	1.0	EPA 8260D	5-5-25	5-5-25	
1,2-Dibromoethane	ND	0.20	EPA 8260D	5-5-25	5-5-25	
Ethylbenzene	ND	0.20	EPA 8260D	5-5-25	5-5-25	
m,p-Xylene	ND	0.40	EPA 8260D	5-5-25	5-5-25	
o-Xylene	ND	0.20	EPA 8260D	5-5-25	5-5-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>103</i>	<i>68-133</i>				
<i>Toluene-d8</i>	<i>103</i>	<i>79-123</i>				
<i>4-Bromofluorobenzene</i>	<i>98</i>	<i>78-117</i>				

Client ID: MW-4-043025						
Laboratory ID: 05-004-04						
Methyl t-Butyl Ether	ND	0.20	EPA 8260D	5-5-25	5-5-25	
n-Hexane	ND	1.0	EPA 8260D	5-5-25	5-5-25	
Benzene	ND	0.20	EPA 8260D	5-5-25	5-5-25	
1,2-Dichloroethane	ND	0.50	EPA 8260D	5-5-25	5-5-25	
Toluene	ND	1.0	EPA 8260D	5-5-25	5-5-25	
1,2-Dibromoethane	ND	0.20	EPA 8260D	5-5-25	5-5-25	
Ethylbenzene	ND	0.20	EPA 8260D	5-5-25	5-5-25	
m,p-Xylene	ND	0.40	EPA 8260D	5-5-25	5-5-25	
o-Xylene	ND	0.20	EPA 8260D	5-5-25	5-5-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>104</i>	<i>68-133</i>				
<i>Toluene-d8</i>	<i>104</i>	<i>79-123</i>				
<i>4-Bromofluorobenzene</i>	<i>99</i>	<i>78-117</i>				



Date of Report: May 16, 2025
 Samples Submitted: May 1, 2025
 Laboratory Reference: 2505-004
 Project: 5147-024-12

VOLATILE ORGANICS EPA 8260D

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: MW-8-042925						
Laboratory ID: 05-004-05						
Methyl t-Butyl Ether	ND	0.20	EPA 8260D	5-5-25	5-5-25	
n-Hexane	2.5	1.0	EPA 8260D	5-5-25	5-5-25	
Benzene	8.2	0.20	EPA 8260D	5-5-25	5-5-25	
1,2-Dichloroethane	ND	0.50	EPA 8260D	5-5-25	5-5-25	
Toluene	ND	1.0	EPA 8260D	5-5-25	5-5-25	
1,2-Dibromoethane	ND	0.20	EPA 8260D	5-5-25	5-5-25	
Ethylbenzene	ND	0.20	EPA 8260D	5-5-25	5-5-25	
m,p-Xylene	0.45	0.40	EPA 8260D	5-5-25	5-5-25	
o-Xylene	ND	0.20	EPA 8260D	5-5-25	5-5-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>102</i>	<i>68-133</i>				
<i>Toluene-d8</i>	<i>105</i>	<i>79-123</i>				
<i>4-Bromofluorobenzene</i>	<i>99</i>	<i>78-117</i>				

Client ID: MW-13-042925						
Laboratory ID: 05-004-06						
Methyl t-Butyl Ether	ND	0.20	EPA 8260D	5-5-25	5-5-25	
n-Hexane	ND	1.0	EPA 8260D	5-5-25	5-5-25	
Benzene	2.1	0.20	EPA 8260D	5-5-25	5-5-25	
1,2-Dichloroethane	ND	0.50	EPA 8260D	5-5-25	5-5-25	
Toluene	ND	1.0	EPA 8260D	5-5-25	5-5-25	
1,2-Dibromoethane	ND	0.20	EPA 8260D	5-5-25	5-5-25	
Ethylbenzene	ND	0.20	EPA 8260D	5-5-25	5-5-25	
m,p-Xylene	ND	0.40	EPA 8260D	5-5-25	5-5-25	
o-Xylene	ND	0.20	EPA 8260D	5-5-25	5-5-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>103</i>	<i>68-133</i>				
<i>Toluene-d8</i>	<i>104</i>	<i>79-123</i>				
<i>4-Bromofluorobenzene</i>	<i>98</i>	<i>78-117</i>				



Date of Report: May 16, 2025
 Samples Submitted: May 1, 2025
 Laboratory Reference: 2505-004
 Project: 5147-024-12

VOLATILE ORGANICS EPA 8260D

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: MW-14-042925						
Laboratory ID: 05-004-07						
Methyl t-Butyl Ether	ND	0.20	EPA 8260D	5-5-25	5-5-25	
n-Hexane	ND	1.0	EPA 8260D	5-5-25	5-5-25	
Benzene	ND	0.20	EPA 8260D	5-5-25	5-5-25	
1,2-Dichloroethane	ND	0.50	EPA 8260D	5-5-25	5-5-25	
Toluene	ND	1.0	EPA 8260D	5-5-25	5-5-25	
1,2-Dibromoethane	ND	0.20	EPA 8260D	5-5-25	5-5-25	
Ethylbenzene	ND	0.20	EPA 8260D	5-5-25	5-5-25	
m,p-Xylene	ND	0.40	EPA 8260D	5-5-25	5-5-25	
o-Xylene	ND	0.20	EPA 8260D	5-5-25	5-5-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>105</i>	<i>68-133</i>				
<i>Toluene-d8</i>	<i>104</i>	<i>79-123</i>				
<i>4-Bromofluorobenzene</i>	<i>98</i>	<i>78-117</i>				

Client ID: MW-15-043025						
Laboratory ID: 05-004-08						
Methyl t-Butyl Ether	ND	0.20	EPA 8260D	5-5-25	5-5-25	
n-Hexane	ND	1.0	EPA 8260D	5-5-25	5-5-25	
Benzene	ND	0.20	EPA 8260D	5-5-25	5-5-25	
1,2-Dichloroethane	ND	0.50	EPA 8260D	5-5-25	5-5-25	
Toluene	ND	1.0	EPA 8260D	5-5-25	5-5-25	
1,2-Dibromoethane	ND	0.20	EPA 8260D	5-5-25	5-5-25	
Ethylbenzene	ND	0.20	EPA 8260D	5-5-25	5-5-25	
m,p-Xylene	ND	0.40	EPA 8260D	5-5-25	5-5-25	
o-Xylene	ND	0.20	EPA 8260D	5-5-25	5-5-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>103</i>	<i>68-133</i>				
<i>Toluene-d8</i>	<i>103</i>	<i>79-123</i>				
<i>4-Bromofluorobenzene</i>	<i>98</i>	<i>78-117</i>				



Date of Report: May 16, 2025
 Samples Submitted: May 1, 2025
 Laboratory Reference: 2505-004
 Project: 5147-024-12

VOLATILE ORGANICS EPA 8260D

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: DUP-042925						
Laboratory ID: 05-004-09						
Methyl t-Butyl Ether	ND	0.20	EPA 8260D	5-5-25	5-5-25	
n-Hexane	2.4	1.0	EPA 8260D	5-5-25	5-5-25	
Benzene	8.4	0.20	EPA 8260D	5-5-25	5-5-25	
1,2-Dichloroethane	ND	0.50	EPA 8260D	5-5-25	5-5-25	
Toluene	ND	1.0	EPA 8260D	5-5-25	5-5-25	
1,2-Dibromoethane	ND	0.20	EPA 8260D	5-5-25	5-5-25	
Ethylbenzene	ND	0.20	EPA 8260D	5-5-25	5-5-25	
m,p-Xylene	0.45	0.40	EPA 8260D	5-5-25	5-5-25	
o-Xylene	ND	0.20	EPA 8260D	5-5-25	5-5-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>103</i>	<i>68-133</i>				
<i>Toluene-d8</i>	<i>106</i>	<i>79-123</i>				
<i>4-Bromofluorobenzene</i>	<i>99</i>	<i>78-117</i>				

Client ID: TRIP BLANK						
Laboratory ID: 05-004-10						
Methyl t-Butyl Ether	ND	0.20	EPA 8260D	5-5-25	5-5-25	
n-Hexane	ND	1.0	EPA 8260D	5-5-25	5-5-25	
Benzene	ND	0.20	EPA 8260D	5-5-25	5-5-25	
1,2-Dichloroethane	ND	0.50	EPA 8260D	5-5-25	5-5-25	
Toluene	ND	1.0	EPA 8260D	5-5-25	5-5-25	
1,2-Dibromoethane	ND	0.20	EPA 8260D	5-5-25	5-5-25	
Ethylbenzene	ND	0.20	EPA 8260D	5-5-25	5-5-25	
m,p-Xylene	ND	0.40	EPA 8260D	5-5-25	5-5-25	
o-Xylene	ND	0.20	EPA 8260D	5-5-25	5-5-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>104</i>	<i>68-133</i>				
<i>Toluene-d8</i>	<i>103</i>	<i>79-123</i>				
<i>4-Bromofluorobenzene</i>	<i>97</i>	<i>78-117</i>				



Date of Report: May 16, 2025
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 Laboratory Reference: 2505-004
 Project: 5147-024-12

TOTAL METALS
EPA 200.8/7470A

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: MW-1A-042925						
Laboratory ID: 05-004-01						
Arsenic	6.4	3.3	EPA 200.8	5-8-25	5-8-25	
Cadmium	ND	4.4	EPA 200.8	5-8-25	5-8-25	
Chromium	ND	11	EPA 200.8	5-8-25	5-8-25	
Lead	ND	1.1	EPA 200.8	5-8-25	5-8-25	
Mercury	ND	0.025	EPA 7470A	5-7-25	5-7-25	

Client ID: MW-2A-043025						
Laboratory ID: 05-004-02						
Arsenic	7.7	3.3	EPA 200.8	5-8-25	5-8-25	
Cadmium	ND	4.4	EPA 200.8	5-8-25	5-8-25	
Chromium	ND	11	EPA 200.8	5-8-25	5-8-25	
Lead	ND	1.1	EPA 200.8	5-8-25	5-8-25	
Mercury	ND	0.025	EPA 7470A	5-7-25	5-7-25	

Client ID: MW-3-043025						
Laboratory ID: 05-004-03						
Arsenic	ND	3.3	EPA 200.8	5-8-25	5-8-25	
Cadmium	ND	4.4	EPA 200.8	5-8-25	5-8-25	
Chromium	ND	11	EPA 200.8	5-8-25	5-8-25	
Lead	ND	1.1	EPA 200.8	5-8-25	5-8-25	
Mercury	ND	0.025	EPA 7470A	5-7-25	5-7-25	

Client ID: MW-4-043025						
Laboratory ID: 05-004-04						
Arsenic	ND	3.3	EPA 200.8	5-8-25	5-8-25	
Cadmium	ND	4.4	EPA 200.8	5-8-25	5-8-25	
Chromium	ND	11	EPA 200.8	5-8-25	5-8-25	
Lead	ND	1.1	EPA 200.8	5-8-25	5-8-25	
Mercury	ND	0.025	EPA 7470A	5-7-25	5-7-25	



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TOTAL METALS
EPA 200.8/7470A

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: MW-8-042925						
Laboratory ID: 05-004-05						
Arsenic	3.5	3.3	EPA 200.8	5-8-25	5-8-25	
Cadmium	ND	4.4	EPA 200.8	5-8-25	5-8-25	
Chromium	ND	11	EPA 200.8	5-8-25	5-8-25	
Lead	ND	1.1	EPA 200.8	5-8-25	5-8-25	
Mercury	ND	0.025	EPA 7470A	5-7-25	5-7-25	

Client ID: MW-13-042925						
Laboratory ID: 05-004-06						
Arsenic	ND	3.3	EPA 200.8	5-8-25	5-8-25	
Cadmium	ND	4.4	EPA 200.8	5-8-25	5-8-25	
Chromium	ND	11	EPA 200.8	5-8-25	5-8-25	
Lead	ND	1.1	EPA 200.8	5-8-25	5-8-25	
Mercury	ND	0.025	EPA 7470A	5-7-25	5-7-25	

Client ID: MW-14-042925						
Laboratory ID: 05-004-07						
Arsenic	3.9	3.3	EPA 200.8	5-8-25	5-8-25	
Cadmium	ND	4.4	EPA 200.8	5-8-25	5-8-25	
Chromium	ND	11	EPA 200.8	5-8-25	5-8-25	
Lead	ND	1.1	EPA 200.8	5-8-25	5-8-25	
Mercury	ND	0.025	EPA 7470A	5-7-25	5-7-25	

Client ID: MW-15-043025						
Laboratory ID: 05-004-08						
Arsenic	6.3	3.3	EPA 200.8	5-8-25	5-8-25	
Cadmium	ND	4.4	EPA 200.8	5-8-25	5-8-25	
Chromium	ND	11	EPA 200.8	5-8-25	5-8-25	
Lead	ND	1.1	EPA 200.8	5-8-25	5-8-25	
Mercury	ND	0.025	EPA 7470A	5-7-25	5-7-25	



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TOTAL METALS
EPA 200.8/7470A

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:		DUP-042925				
Laboratory ID:		05-004-09				
Arsenic	ND	3.3	EPA 200.8	5-8-25	5-8-25	
Cadmium	ND	4.4	EPA 200.8	5-8-25	5-8-25	
Chromium	ND	11	EPA 200.8	5-8-25	5-8-25	
Lead	ND	1.1	EPA 200.8	5-8-25	5-8-25	
Mercury	ND	0.025	EPA 7470A	5-7-25	5-7-25	



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DISSOLVED METALS
EPA 200.8/7470A

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: MW-1A-042925						
Laboratory ID: 05-004-01						
Arsenic	4.7	3.0	EPA 200.8		5-8-25	
Cadmium	ND	4.0	EPA 200.8		5-8-25	
Chromium	ND	10	EPA 200.8		5-8-25	
Lead	ND	1.0	EPA 200.8		5-8-25	
Manganese	52	10	EPA 200.8		5-8-25	
Mercury	ND	0.025	EPA 7470A		5-7-25	

Client ID: MW-2A-043025						
Laboratory ID: 05-004-02						
Arsenic	4.8	3.0	EPA 200.8		5-8-25	
Cadmium	ND	4.0	EPA 200.8		5-8-25	
Chromium	ND	10	EPA 200.8		5-8-25	
Lead	ND	1.0	EPA 200.8		5-8-25	
Manganese	99	10	EPA 200.8		5-8-25	
Mercury	ND	0.025	EPA 7470A		5-7-25	

Client ID: MW-3-043025						
Laboratory ID: 05-004-03						
Arsenic	ND	3.0	EPA 200.8		5-8-25	
Cadmium	ND	4.0	EPA 200.8		5-8-25	
Chromium	ND	10	EPA 200.8		5-8-25	
Lead	ND	1.0	EPA 200.8		5-8-25	
Manganese	66	10	EPA 200.8		5-8-25	
Mercury	ND	0.025	EPA 7470A		5-7-25	

Client ID: MW-4-043025						
Laboratory ID: 05-004-04						
Arsenic	ND	3.0	EPA 200.8		5-8-25	
Cadmium	ND	4.0	EPA 200.8		5-8-25	
Chromium	ND	10	EPA 200.8		5-8-25	
Lead	ND	1.0	EPA 200.8		5-8-25	
Manganese	2500	250	EPA 200.8		5-8-25	
Mercury	ND	0.025	EPA 7470A		5-7-25	



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DISSOLVED METALS
EPA 200.8/7470A

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: MW-8-042925						
Laboratory ID: 05-004-05						
Arsenic	3.2	3.0	EPA 200.8		5-8-25	
Cadmium	ND	4.0	EPA 200.8		5-8-25	
Chromium	ND	10	EPA 200.8		5-8-25	
Lead	ND	1.0	EPA 200.8		5-8-25	
Manganese	2000	250	EPA 200.8		5-8-25	
Mercury	ND	0.025	EPA 7470A		5-7-25	

Client ID: MW-13-042925						
Laboratory ID: 05-004-06						
Arsenic	ND	3.0	EPA 200.8		5-8-25	
Cadmium	ND	4.0	EPA 200.8		5-8-25	
Chromium	ND	10	EPA 200.8		5-8-25	
Lead	ND	1.0	EPA 200.8		5-8-25	
Manganese	89	10	EPA 200.8		5-8-25	
Mercury	ND	0.025	EPA 7470A		5-7-25	

Client ID: MW-14-042925						
Laboratory ID: 05-004-07						
Arsenic	4.0	3.0	EPA 200.8		5-8-25	
Cadmium	ND	4.0	EPA 200.8		5-8-25	
Chromium	ND	10	EPA 200.8		5-8-25	
Lead	ND	1.0	EPA 200.8		5-8-25	
Manganese	ND	10	EPA 200.8		5-8-25	
Mercury	ND	0.025	EPA 7470A		5-7-25	

Client ID: MW-15-043025						
Laboratory ID: 05-004-08						
Arsenic	6.7	3.0	EPA 200.8		5-8-25	
Cadmium	ND	4.0	EPA 200.8		5-8-25	
Chromium	ND	10	EPA 200.8		5-8-25	
Lead	ND	1.0	EPA 200.8		5-8-25	
Manganese	6200	500	EPA 200.8		5-8-25	
Mercury	ND	0.025	EPA 7470A		5-7-25	



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DISSOLVED METALS
EPA 200.8/7470A

Matrix: Water

Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	DUP-042925					
Laboratory ID:	05-004-09					
Arsenic	3.1	3.0	EPA 200.8		5-8-25	
Cadmium	ND	4.0	EPA 200.8		5-8-25	
Chromium	ND	10	EPA 200.8		5-8-25	
Lead	ND	1.0	EPA 200.8		5-8-25	
Manganese	2000	250	EPA 200.8		5-8-25	
Mercury	ND	0.025	EPA 7470A		5-7-25	



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TOTAL ALKALINITY
SM 2320B

Matrix: Water
 Units: mg CaCO₃/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-1A-042925					
Laboratory ID:	05-004-01					
Total Alkalinity	200	2.0	SM 2320B	5-6-25	5-6-25	

Client ID:	MW-2A-043025					
Laboratory ID:	05-004-02					
Total Alkalinity	210	2.0	SM 2320B	5-6-25	5-6-25	

Client ID:	MW-3-043025					
Laboratory ID:	05-004-03					
Total Alkalinity	120	2.0	SM 2320B	5-6-25	5-6-25	

Client ID:	MW-4-043025					
Laboratory ID:	05-004-04					
Total Alkalinity	220	2.0	SM 2320B	5-6-25	5-6-25	

Client ID:	MW-8-042925					
Laboratory ID:	05-004-05					
Total Alkalinity	210	2.0	SM 2320B	5-6-25	5-6-25	

Client ID:	MW-13-042925					
Laboratory ID:	05-004-06					
Total Alkalinity	200	2.0	SM 2320B	5-6-25	5-6-25	

Client ID:	MW-14-042925					
Laboratory ID:	05-004-07					
Total Alkalinity	130	2.0	SM 2320B	5-6-25	5-6-25	

Client ID:	MW-15-043025					
Laboratory ID:	05-004-08					
Total Alkalinity	490	2.0	SM 2320B	5-6-25	5-6-25	

Client ID:	DUP-042925					
Laboratory ID:	05-004-09					
Total Alkalinity	220	2.0	SM 2320B	5-6-25	5-6-25	



OnSite Environmental, Inc. 14648 NE 95th Street, Redmond, WA 98052 (425) 883-3881

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

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**DISSOLVED METHANE
RSK 175**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: MW-1A-042925						
Laboratory ID:	05-004-01					
Methane	5.8	0.55	RSK 175	5-2-25	5-2-25	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
1-Butene	146	50-150				
Client ID: MW-2A-043025						
Laboratory ID:	05-004-02					
Methane	18	0.55	RSK 175	5-2-25	5-2-25	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
1-Butene	143	50-150				
Client ID: MW-3-043025						
Laboratory ID:	05-004-03					
Methane	16	0.55	RSK 175	5-2-25	5-2-25	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
1-Butene	138	50-150				
Client ID: MW-4-043025						
Laboratory ID:	05-004-04					
Methane	390	2.8	RSK 175	5-2-25	5-2-25	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
1-Butene	147	50-150				
Client ID: MW-8-042925						
Laboratory ID:	05-004-05					
Methane	240	2.8	RSK 175	5-2-25	5-2-25	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
1-Butene	147	50-150				
Client ID: MW-13-042925						
Laboratory ID:	05-004-06					
Methane	76	0.55	RSK 175	5-2-25	5-2-25	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
1-Butene	139	50-150				



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**DISSOLVED METHANE
RSK 175**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-14-042925					
Laboratory ID:	05-004-07					
Methane	13	0.55	RSK 175	5-2-25	5-2-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>1-Butene</i>	<i>139</i>	<i>50-150</i>				
Client ID:	MW-15-043025					
Laboratory ID:	05-004-08					
Methane	2400	33	RSK 175	5-2-25	5-2-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>1-Butene</i>	<i>125</i>	<i>50-150</i>				
Client ID:	DUP-042925					
Laboratory ID:	05-004-09					
Methane	290	2.8	RSK 175	5-2-25	5-2-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>1-Butene</i>	<i>135</i>	<i>50-150</i>				



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**GASOLINE RANGE ORGANICS
 NWTPH-Gx
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0502W1					
Gasoline	ND	100	NWTPH-Gx	5-2-25	5-2-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	82	62-122				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	05-004-01							
	ORIG	DUP						
Gasoline	ND	ND	NA	NA	NA	NA	NA	30
<i>Surrogate:</i>								
<i>Fluorobenzene</i>				82	81	62-122		



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**GASOLINE RANGE ORGANICS
NWTPH-Gx
CONTINUING CALIBRATION SUMMARY**

Lab ID	True Value (ppm)	Calc. Value	Percent Difference	Control Limits
CCVH0502G-1	5.00	5.03	-1	+/- 20%
CCVH0502G-2	5.00	4.92	2	+/- 20%



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**DIESEL AND HEAVY OIL RANGE ORGANICS
 NWTPH-Dx
 QUALITY CONTROL**

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0505W1					
Diesel Range Organics	ND	0.16	NWTPH-Dx	5-5-25	5-5-25	
Lube Oil Range Organics	ND	0.16	NWTPH-Dx	5-5-25	5-5-25	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	100	50-150				
Laboratory ID:	MB0505W1					
Diesel Range Organics	ND	0.16	NWTPH-Dx	5-5-25	5-5-25	X2
Lube Oil Range Organics	ND	0.16	NWTPH-Dx	5-5-25	5-5-25	X2
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	101	50-150				

Analyte	Result		Spike Level		Source Result	Percent Recovery	Recovery Limits	RPD	Limit	Flags
DUPLICATE										
Laboratory ID:	05-004-01									
	ORIG	DUP								
Diesel Range Organics	0.178	0.153	NA	NA		NA	NA	15	40	
Lube Oil Range Organics	0.279	0.207	NA	NA		NA	NA	30	40	
Surrogate:										
o-Terphenyl						107	103	50-150		
Laboratory ID:	05-004-01									
	ORIG	DUP								
Diesel Range	ND	ND	NA	NA		NA	NA	NA	40	X2
Lube Oil Range	ND	ND	NA	NA		NA	NA	NA	40	X2
Surrogate:										
o-Terphenyl						105	103	50-150		



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**DIESEL AND HEAVY OIL RANGE ORGANICS
 NWTPH-Dx
 CONTINUING CALIBRATION SUMMARY**

Lab ID	True Value (ppm)	Calc. Value	Percent Difference	Control Limits
CCV0505F-T2	100	93.9	6.1	+/-15%
CCV0505F-T3	100	94.8	5.2	+/-15%
CCV0505R-T2	100	99.5	0.5	+/-15%
CCV0505R-T3	100	96.3	3.7	+/-15%
CCV0505F-V2	100	101.9	-1.9	+/-15%
CCV0505F-V3	100	101.8	-1.8	+/-15%
CCV0505R-V1	100	101.7	-1.7	+/-15%
CCV0505R-V2	100	101.5	-1.5	+/-15%
CCV0505R-V3	100	107.8	-7.8	+/-15%



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**VOLATILE ORGANICS EPA 8260D
 QUALITY CONTROL**

Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0505W1					
Methyl t-Butyl Ether	ND	0.20	EPA 8260D	5-5-25	5-5-25	
n-Hexane	ND	1.0	EPA 8260D	5-5-25	5-5-25	
Benzene	ND	0.20	EPA 8260D	5-5-25	5-5-25	
1,2-Dichloroethane	ND	0.50	EPA 8260D	5-5-25	5-5-25	
Toluene	ND	1.0	EPA 8260D	5-5-25	5-5-25	
1,2-Dibromoethane	ND	0.20	EPA 8260D	5-5-25	5-5-25	
Ethylbenzene	ND	0.20	EPA 8260D	5-5-25	5-5-25	
m,p-Xylene	ND	0.40	EPA 8260D	5-5-25	5-5-25	
o-Xylene	ND	0.20	EPA 8260D	5-5-25	5-5-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>102</i>	<i>68-133</i>				
<i>Toluene-d8</i>	<i>103</i>	<i>79-123</i>				
<i>4-Bromofluorobenzene</i>	<i>97</i>	<i>78-117</i>				

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits		RPD	RPD Limit	Flags
					Recovery						
SPIKE BLANKS											
Laboratory ID:	SB0505W1										
	SB	SBD	SB	SBD	SB	SBD					
Methyl t-Butyl Ether	9.77	10.2	10.0	10.0	98	102	73-129	4		15	
Benzene	9.86	10.3	10.0	10.0	99	103	75-126	4		15	
1,2-Dichloroethane	10.5	11.0	10.0	10.0	105	110	74-128	5		15	
Toluene	10.1	10.4	10.0	10.0	101	104	75-127	3		15	
1,2-Dibromoethane	10.5	11.1	10.0	10.0	105	111	82-127	6		15	
Ethylbenzene	10.1	10.5	10.0	10.0	101	105	80-124	4		15	
m,p-Xylene	19.8	20.3	20.0	20.0	99	102	80-124	2		15	
o-Xylene	10.2	10.6	10.0	10.0	102	106	80-123	4		15	
Surrogate:											
Dibromofluoromethane					103	104	68-133				
Toluene-d8					103	103	79-123				
4-Bromofluorobenzene					102	100	78-117				



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**TOTAL METALS
 EPA 200.8/7470A
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0508WM1					
Arsenic	ND	3.3	EPA 200.8	5-8-25	5-8-25	
Cadmium	ND	4.4	EPA 200.8	5-8-25	5-8-25	
Chromium	ND	11	EPA 200.8	5-8-25	5-8-25	
Lead	ND	1.1	EPA 200.8	5-8-25	5-8-25	

Laboratory ID:	MB0507W1					
Mercury	ND	0.50	EPA 7470A	5-7-25	5-7-25	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-409-02							
	ORIG	DUP						
Arsenic	ND	ND	NA	NA	NA	NA	NA	20
Cadmium	ND	ND	NA	NA	NA	NA	NA	20
Chromium	ND	ND	NA	NA	NA	NA	NA	20
Lead	ND	ND	NA	NA	NA	NA	NA	20

Laboratory ID:	05-004-01							
Mercury	ND	ND	NA	NA	NA	NA	NA	20

MATRIX SPIKES

Laboratory ID:	04-409-02									
	MS	MSD	MS	MSD		MS	MSD			
Arsenic	109	110	111	111	ND	98	99	75-125	1	20
Cadmium	101	102	111	111	ND	91	92	75-125	1	20
Chromium	95.2	95.3	111	111	ND	86	86	75-125	0	20
Lead	96.0	96.1	111	111	ND	87	87	75-125	0	20

Laboratory ID:	05-004-01									
Mercury	6.00	5.93	6.25	6.25	ND	96	95	75-125	1	20



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**TOTAL METALS
 EPA 200.8/7470A
 CONTINUING CALIBRATION SUMMARY**

Analyte	Lab ID	True Value (ppb)	Calc. Value	Percent Difference	Control Limits
Arsenic	ICV050825Y	50.0	50.3	-0.60	+/- 10%
Cadmium	ICV050825Y	50.0	48.6	2.8	+/- 10%
Chromium	ICV050825Y	50.0	49.0	2.0	+/- 10%
Lead	ICV050825Y	50.0	49.7	0.60	+/- 10%
Mercury	ICV050725I	2.50	2.51	-0.40	+/- 10%
Arsenic	CCV1050825Y	40.0	41.4	-3.5	+/- 10%
Cadmium	CCV1050825Y	40.0	40.7	-1.8	+/- 10%
Chromium	CCV1050825Y	40.0	39.8	0.50	+/- 10%
Lead	CCV1050825Y	40.0	40.5	-1.3	+/- 10%
Mercury	CCV1050725I	2.50	2.53	-1.2	+/- 20%
Arsenic	CCV1050825Y	20.0	21.1	-5.5	+/- 10%
Cadmium	CCV1050825Y	20.0	20.7	-3.5	+/- 10%
Chromium	CCV1050825Y	20.0	20.4	-2.0	+/- 10%
Lead	CCV1050825Y	20.0	21.0	-5.0	+/- 10%
Arsenic	CCV2050825Y	40.0	41.4	-3.5	+/- 10%
Cadmium	CCV2050825Y	40.0	39.9	0.25	+/- 10%
Chromium	CCV2050825Y	40.0	38.0	5.0	+/- 10%
Lead	CCV2050825Y	40.0	43.4	-8.5	+/- 10%
Mercury	CCV2050725I	2.50	2.49	0.40	+/- 20%
Arsenic	CCV2050825Y	20.0	21.4	-7.0	+/- 10%
Cadmium	CCV2050825Y	20.0	20.1	-0.50	+/- 10%
Chromium	CCV2050825Y	20.0	19.4	3.0	+/- 10%
Lead	CCV2050825Y	20.0	19.7	1.5	+/- 10%
Arsenic	CCV3050825Y	40.0	41.9	-4.8	+/- 10%
Cadmium	CCV3050825Y	40.0	39.9	0.25	+/- 10%
Chromium	CCV3050825Y	40.0	37.3	6.8	+/- 10%
Lead	CCV3050825Y	40.0	38.5	3.8	+/- 10%
Mercury	CCV3050725I	2.50	2.53	-1.2	+/- 20%
Arsenic	CCV3050825Y	20.0	21.3	-6.5	+/- 10%
Cadmium	CCV3050825Y	20.0	20.1	-0.50	+/- 10%
Chromium	CCV3050825Y	20.0	19.3	3.5	+/- 10%
Lead	CCV3050825Y	20.0	19.2	4.0	+/- 10%



Date of Report: May 16, 2025
 Samples Submitted: May 1, 2025
 Laboratory Reference: 2505-004
 Project: 5147-024-12

**TOTAL METALS
 EPA 200.8/7470A
 CONTINUING CALIBRATION SUMMARY**

Analyte	Lab ID	True Value (ppb)	Calc. Value	Percent Difference	Control Limits
Arsenic	CCV4050825Y	40.0	41.7	-4.3	+/- 10%
Cadmium	CCV4050825Y	40.0	39.9	0.25	+/- 10%
Chromium	CCV4050825Y	40.0	38.2	4.5	+/- 10%
Lead	CCV4050825Y	40.0	37.8	5.5	+/- 10%
Arsenic	CCV4050825Y	20.0	21.3	-6.5	+/- 10%
Cadmium	CCV4050825Y	20.0	20.3	-1.5	+/- 10%
Chromium	CCV4050825Y	20.0	19.2	4.0	+/- 10%
Lead	CCV4050825Y	20.0	19.6	2.0	+/- 10%
Arsenic	CCV5050825Y	40.0	41.8	-4.5	+/- 10%
Cadmium	CCV5050825Y	40.0	39.6	1.0	+/- 10%
Chromium	CCV5050825Y	40.0	37.7	5.7	+/- 10%
Lead	CCV5050825Y	40.0	37.7	5.7	+/- 10%
Arsenic	CCV5050825Y	20.0	21.1	-5.5	+/- 10%
Cadmium	CCV5050825Y	20.0	20.2	-1.0	+/- 10%
Chromium	CCV5050825Y	20.0	19.2	4.0	+/- 10%
Lead	CCV5050825Y	20.0	19.0	5.0	+/- 10%



Date of Report: May 16, 2025
 Samples Submitted: May 1, 2025
 Laboratory Reference: 2505-004
 Project: 5147-024-12

**DISSOLVED METALS
 EPA 200.8/7470A
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0508D1					
Arsenic	ND	3.0	EPA 200.8		5-8-25	
Cadmium	ND	4.0	EPA 200.8		5-8-25	
Chromium	ND	10	EPA 200.8		5-8-25	
Lead	ND	1.0	EPA 200.8		5-8-25	
Manganese	ND	10	EPA 200.8		5-8-25	

Laboratory ID:	MB0507D1					
Mercury	ND	0.50	EPA 7470A		5-7-25	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	05-004-01							
	ORIG	DUP						
Arsenic	4.68	4.82	NA	NA	NA	NA	3	20
Cadmium	ND	ND	NA	NA	NA	NA	NA	20
Chromium	ND	ND	NA	NA	NA	NA	NA	20
Lead	ND	ND	NA	NA	NA	NA	NA	20
Manganese	51.8	56.2	NA	NA	NA	NA	8	20

Laboratory ID:	05-004-01							
Mercury	ND	ND	NA	NA	NA	NA	NA	20

MATRIX SPIKES

Laboratory ID:	05-004-01									
	MS	MSD	MS	MSD		MS	MSD			
Arsenic	90.8	88.9	80.0	80.0	4.68	108	105	75-125	2	20
Cadmium	76.4	75.4	80.0	80.0	ND	96	94	75-125	1	20
Chromium	75.2	73.9	80.0	80.0	ND	94	92	75-125	2	20
Lead	72.7	72.4	80.0	80.0	ND	91	91	75-125	0	20
Manganese	137	135	80.0	80.0	51.8	106	104	75-125	1	20

Laboratory ID:	05-004-01									
Mercury	5.95	5.85	6.25	6.25	ND	95	94	75-125	2	20



Date of Report: May 16, 2025
 Samples Submitted: May 1, 2025
 Laboratory Reference: 2505-004
 Project: 5147-024-12

**DISSOLVED METALS
 EPA 200.8/7470A
 CONTINUING CALIBRATION SUMMARY**

Analyte	Lab ID	True Value (ppb)	Calc. Value	Percent Difference	Control Limits
Arsenic	ICV050825Y	50.0	50.3	-0.60	+/- 10%
Cadmium	ICV050825Y	50.0	48.6	2.8	+/- 10%
Chromium	ICV050825Y	50.0	49.0	2.0	+/- 10%
Lead	ICV050825Y	50.0	49.7	0.60	+/- 10%
Manganese	ICV050825Y	50.0	51.0	-2.0	+/- 10%
Mercury	ICV050725I	2.50	2.51	-0.40	+/- 10%
Arsenic	CCV1050825Y	40.0	41.4	-3.5	+/- 10%
Cadmium	CCV1050825Y	40.0	40.7	-1.8	+/- 10%
Chromium	CCV1050825Y	40.0	39.8	0.50	+/- 10%
Lead	CCV1050825Y	40.0	40.5	-1.3	+/- 10%
Manganese	CCV1050825Y	40.0	41.1	-2.8	+/- 10%
Mercury	CCV1050725I	2.50	2.53	-1.2	+/- 20%
Arsenic	CCV1050825Y	20.0	21.1	-5.5	+/- 10%
Cadmium	CCV1050825Y	20.0	20.7	-3.5	+/- 10%
Chromium	CCV1050825Y	20.0	20.4	-2.0	+/- 10%
Lead	CCV1050825Y	20.0	21.0	-5.0	+/- 10%
Manganese	CCV1050825Y	20.0	20.3	-1.5	+/- 20%
Arsenic	CCV2050825Y	40.0	41.4	-3.5	+/- 10%
Cadmium	CCV2050825Y	40.0	39.9	0.25	+/- 10%
Chromium	CCV2050825Y	40.0	38.0	5.0	+/- 10%
Lead	CCV2050825Y	40.0	43.4	-8.5	+/- 10%
Manganese	CCV2050825Y	40.0	46.4	-16.0	+/- 10%
Mercury	CCV2050725I	2.50	2.49	0.40	+/- 20%
Arsenic	CCV2050825Y	20.0	21.4	-7.0	+/- 10%
Cadmium	CCV2050825Y	20.0	20.1	-0.50	+/- 10%
Chromium	CCV2050825Y	20.0	19.4	3.0	+/- 10%
Lead	CCV2050825Y	20.0	19.7	1.5	+/- 10%
Manganese	CCV2050825Y	20.0	21.6	-8.0	+/- 20%
Arsenic	CCV3050825Y	40.0	41.9	-4.8	+/- 10%
Cadmium	CCV3050825Y	40.0	39.9	0.25	+/- 10%
Chromium	CCV3050825Y	40.0	37.3	6.8	+/- 10%
Lead	CCV3050825Y	40.0	38.5	3.8	+/- 10%
Manganese	CCV3050825Y	40.0	43.5	-8.8	+/- 10%
Mercury	CCV3050725I	2.50	2.53	-1.2	+/- 20%



Date of Report: May 16, 2025
 Samples Submitted: May 1, 2025
 Laboratory Reference: 2505-004
 Project: 5147-024-12

**DISSOLVED METALS
 EPA 200.8/7470A
 CONTINUING CALIBRATION SUMMARY**

Analyte	Lab ID	True Value (ppb)	Calc. Value	Percent Difference	Control Limits
Arsenic	CCV3050825Y	20.0	21.3	-6.5	+/- 10%
Cadmium	CCV3050825Y	20.0	20.1	-0.50	+/- 10%
Chromium	CCV3050825Y	20.0	19.3	3.5	+/- 10%
Lead	CCV3050825Y	20.0	19.2	4.0	+/- 10%
Manganese	CCV3050825Y	20.0	21.5	-7.5	+/- 20%
Mercury	CCV4050725I	2.50	2.51	-0.40	+/- 20%
Mercury	CCV5050725I	2.50	2.54	-1.6	+/- 20%



Date of Report: May 16, 2025
 Samples Submitted: May 1, 2025
 Laboratory Reference: 2505-004
 Project: 5147-024-12

**TOTAL ALKALINITY
 SM 2320B
 QUALITY CONTROL**

Matrix: Water
 Units: mg CaCO₃/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0506W1					
Total Alkalinity	ND	2.0	SM 2320B	5-6-25	5-6-25	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	05-004-01							
	ORIG	DUP						
Total Alkalinity	200	204	NA	NA	NA	NA	2	10

SPIKE BLANK								
Laboratory ID:	SB0506W1							
	SB	SB		SB				
Total Alkalinity	98.0	100	NA	98	81-104	NA	NA	



Date of Report: May 16, 2025
 Samples Submitted: May 1, 2025
 Laboratory Reference: 2505-004
 Project: 5147-024-12

**DISSOLVED METHANE
 RSK 175
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0502W1					
Methane	ND	0.55	RSK 175	5-2-25	5-2-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>1-Butene</i>	126	50-150				

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
					Recovery					
SPIKE BLANK										
Laboratory ID:	SB0502W1									
	SB	SBD	SB	SBD	SB	SBD				
Methane	42.6	41.4	44.2	44.2	96	94	75-125	3	25	
Surrogate:										
1-Butene					115	116	50-150			



Date of Report: May 16, 2025
 Samples Submitted: May 1, 2025
 Laboratory Reference: 2505-004
 Project: 5147-024-12

**DISSOLVED METHANE
 RSK 175
 CONTINUING CALIBRATION SUMMARY**

Analyte	Lab ID	True Value (ppm)	Calc. Value	Percent Difference	Control Limits
Methane	CCV1023DG-L1	500	502	-0.3	+/- 15%
Ethane	CCV1023DG-L1	500	502	-0.4	+/- 15%
Ethene	CCV1023DG-L1	500	465	7.0	+/- 15%
Methane	CCV1023DG-L3	500	522	-4.4	+/- 15%
Ethane	CCV1023DG-L3	500	520	-4.1	+/- 15%
Ethene	CCV1023DG-L3	500	483	3.4	+/- 15%





Data Qualifiers and Abbreviations

- A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.
- B - The analyte indicated was also found in the blank sample.
- C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.
- E - The value reported exceeds the quantitation range and is an estimate.
- F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.
- H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.
- I - Compound recovery is outside of the control limits.
- J - The value reported was below the practical quantitation limit. The value is an estimate.
- K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.
- L - The RPD is outside of the control limits.
- M - Hydrocarbons in the gasoline range are impacting the diesel range result.
- M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.
- N - Hydrocarbons in the lube oil range are impacting the diesel range result.
- N1 - Hydrocarbons in diesel range are impacting lube oil range results.
- O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.
- P - The RPD of the detected concentrations between the two columns is greater than 40.
- Q - Surrogate recovery is outside of the control limits.
- S - Surrogate recovery data is not available due to the necessary dilution of the sample.
- T - The sample chromatogram is not similar to a typical _____.
- U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- U1 - The practical quantitation limit is elevated due to interferences present in the sample.
- V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.
- W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.
- X - Sample extract treated with a mercury cleanup procedure.
- X1 - Sample extract treated with a sulfuric acid/silica gel cleanup procedure.
- X2 - Sample extract treated with a silica gel cleanup procedure.
- Y - The calibration verification for this analyte exceeded the 20% drift specified in methods 8260 & 8270, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.
- Y1 - Negative effects of the matrix from this sample on the instrument caused values for this analyte in the bracketing continuing calibration verification standard (CCVs) to be outside of 20% acceptance criteria. Because of this, quantitation limits and sample concentrations should be considered estimates.
- Z -
- ND - Not Detected at PQL
- PQL - Practical Quantitation Limit
- RPD - Relative Percent Difference





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OnSite Environmental Inc

David Baumeister

14648 NE 95th Street

Redmond, WA 98052

RE: Port of Anacortes - Quiet Cove, 05147-024-12

Work Order Number: 2504692

May 06, 2025

Attention David Baumeister:

Alliance Technical Group, LLC - Seattle received 5 sample(s) on 4/29/2025 for the analyses presented in the following report.

Ferrous Iron by SM3500-Fe B

Ion Chromatography by EPA 300.0

All analyses were performed according to our accredited Quality Assurance program. Please contact the laboratory if you should have any questions about the results.

Alliance Technical Group is committed to accuracy, speed, and customer service. Thank you for choosing Alliance Technical Group's Seattle laboratory team for your analytical needs. We appreciate this opportunity to serve you!

Sincerely,

A handwritten signature in blue ink, appearing to read "Brianna Barnes".

Brianna Barnes
Project Manager

DoD-ELAP Accreditation #79636 by PJLA, ISO/IEC 17025:2017 and QSM 5.4 for Environmental Testing
ORELAP Certification: WA 100009 (NELAP Recognized) for Environmental Testing
Washington State Department of Ecology Accredited for Environmental Testing, Lab ID C910

Original



www.fremontanalytical.com

CLIENT: OnSite Environmental Inc
Project: Port of Anacortes - Quiet Cove
Work Order: 2504692

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2504692-001	MW-1A-042825	04/29/2025 12:40 PM	04/29/2025 4:02 PM
2504692-002	MW-8-042825	04/29/2025 11:35 AM	04/29/2025 4:02 PM
2504692-003	MW-13-042825	04/29/2025 1:25 PM	04/29/2025 4:02 PM
2504692-004	MW-14-042825	04/29/2025 10:05 AM	04/29/2025 4:02 PM
2504692-005	MW-DUP-042825	04/29/2025 12:00 PM	04/29/2025 4:02 PM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

CLIENT: OnSite Environmental Inc
Project: Port of Anacortes - Quiet Cove

I. SAMPLE RECEIPT:

Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:

Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Qualifiers:

- * - Flagged value is not within established control limits
- B - Analyte detected in the associated Method Blank
- D - Dilution was required
- E - Value above quantitation range
- H - Holding times for preparation or analysis exceeded
- I - Analyte with an internal standard that does not meet established acceptance criteria
- J - Analyte detected below Reporting Limit
- N - Tentatively Identified Compound (TIC)
- Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria
- S - Spike recovery outside accepted recovery limits
- ND - Not detected at the Reporting Limit
- R - High relative percent difference observed

Acronyms:

- %Rec - Percent Recovery
- CCB - Continued Calibration Blank
- CCV - Continued Calibration Verification
- DF - Dilution Factor
- DUP - Sample Duplicate
- HEM - Hexane Extractable Material
- ICV - Initial Calibration Verification
- LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
- MCL - Maximum Contaminant Level
- MB or MBLANK - Method Blank
- MDL - Method Detection Limit
- MS/MSD - Matrix Spike / Matrix Spike Duplicate
- PDS - Post Digestion Spike
- Ref Val - Reference Value
- REP - Sample Replicate
- RL - Reporting Limit
- RPD - Relative Percent Difference
- SD - Serial Dilution
- SGT - Silica Gel Treatment
- SPK - Spike
- Surr - Surrogate



Analytical Report

Work Order: 2504692
Date Reported: 5/6/2025

Client: OnSite Environmental Inc
Project: Port of Anacortes - Quiet Cove
Lab ID: 2504692-001
Client Sample ID: MW-1A-042825

Collection Date: 4/29/2025 12:40:00 PM

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Ion Chromatography by EPA 300.0

Batch ID: 47572 Analyst: OP

Nitrate (as N)	ND	0.200		mg/L	1	4/30/2025 4:15:00 AM
Sulfate	13.4	1.00		mg/L	1	4/30/2025 4:15:00 AM

Ferrous Iron by SM3500-Fe B

Batch ID: R99349 Analyst: BB

Ferrous Iron	2.54	0.375	D	mg/L	2.5	4/29/2025 4:16:54 PM
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Analytical Report

Work Order: 2504692
Date Reported: 5/6/2025

Client: OnSite Environmental Inc
Project: Port of Anacortes - Quiet Cove
Lab ID: 2504692-002
Client Sample ID: MW-8-042825

Collection Date: 4/29/2025 11:35:00 AM

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Ion Chromatography by EPA 300.0

Batch ID: 47572 Analyst: OP

Nitrate (as N)	ND	0.200		mg/L	1	4/30/2025 5:02:00 AM
Sulfate	3.01	1.00		mg/L	1	4/30/2025 5:02:00 AM

Ferrous Iron by SM3500-Fe B

Batch ID: R99349 Analyst: BB

Ferrous Iron	15.1	3.75	D	mg/L	25	4/29/2025 4:16:54 PM
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Analytical Report

Work Order: 2504692
Date Reported: 5/6/2025

Client: OnSite Environmental Inc
Project: Port of Anacortes - Quiet Cove
Lab ID: 2504692-003
Client Sample ID: MW-13-042825

Collection Date: 4/29/2025 1:25:00 PM

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>Ion Chromatography by EPA 300.0</u>				Batch ID: 47572		Analyst: OP
Nitrate (as N)	ND	0.200		mg/L	1	4/30/2025 5:25:00 AM
Sulfate	9.14	1.00		mg/L	1	4/30/2025 5:25:00 AM
<u>Ferrous Iron by SM3500-Fe B</u>				Batch ID: R99349		Analyst: BB
Ferrous Iron	ND	0.150		mg/L	1	4/29/2025 4:16:54 PM



Analytical Report

Work Order: 2504692
Date Reported: 5/6/2025

Client: OnSite Environmental Inc
Project: Port of Anacortes - Quiet Cove
Lab ID: 2504692-004
Client Sample ID: MW-14-042825

Collection Date: 4/29/2025 10:05:00 AM

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Ion Chromatography by EPA 300.0

Batch ID: 47572 Analyst: OP

Nitrate (as N)	3.73	0.200		mg/L	1	4/30/2025 5:48:00 AM
Sulfate	14.4	1.00		mg/L	1	4/30/2025 5:48:00 AM

Ferrous Iron by SM3500-Fe B

Batch ID: R99349 Analyst: BB

Ferrous Iron	0.991	0.188	D	mg/L	1.25	4/29/2025 4:16:54 PM
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Analytical Report

Work Order: 2504692
Date Reported: 5/6/2025

Client: OnSite Environmental Inc
Project: Port of Anacortes - Quiet Cove
Lab ID: 2504692-005
Client Sample ID: MW-DUP-042825

Collection Date: 4/29/2025 12:00:00 PM

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Ion Chromatography by EPA 300.0

Batch ID: 47572 Analyst: OP

Nitrate (as N)	0.368	0.200		mg/L	1	4/30/2025 4:38:00 AM
Sulfate	3.08	1.00		mg/L	1	4/30/2025 4:38:00 AM

Ferrous Iron by SM3500-Fe B

Batch ID: R99349 Analyst: BB

Ferrous Iron	19.4	3.75	D	mg/L	25	4/29/2025 4:16:54 PM
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Work Order: 2504692
CLIENT: OnSite Environmental Inc
Project: Port of Anacortes - Quiet Cove

QC SUMMARY REPORT

Ferrous Iron by SM3500-Fe B

Sample ID: MB-R99349	SampType: MBLK	Units: mg/L		Prep Date: 4/29/2025	RunNo: 99349						
Client ID: MBLKW	Batch ID: R99349			Analysis Date: 4/29/2025	SeqNo: 2069326						
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ferrous Iron	ND	0.150									

Sample ID: LCS-R99349	SampType: LCS	Units: mg/L		Prep Date: 4/29/2025	RunNo: 99349						
Client ID: LCSW	Batch ID: R99349			Analysis Date: 4/29/2025	SeqNo: 2069327						
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ferrous Iron	0.368	0.150	0.4000	0	92.1	85	115				

Sample ID: 2504692-001ADUP	SampType: DUP	Units: mg/L		Prep Date: 4/29/2025	RunNo: 99349						
Client ID: MW-1A-042825	Batch ID: R99349			Analysis Date: 4/29/2025	SeqNo: 2069329						
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ferrous Iron	2.41	0.375						2.540	5.08	20	D

Sample ID: 2504692-001AMS	SampType: MS	Units: mg/L		Prep Date: 4/29/2025	RunNo: 99349						
Client ID: MW-1A-042825	Batch ID: R99349			Analysis Date: 4/29/2025	SeqNo: 2069330						
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ferrous Iron	3.66	0.375	1.000	2.540	112	70	130				D

Sample ID: 2504692-001AMSD	SampType: MSD	Units: mg/L		Prep Date: 4/29/2025	RunNo: 99349						
Client ID: MW-1A-042825	Batch ID: R99349			Analysis Date: 4/29/2025	SeqNo: 2069331						
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ferrous Iron	3.62	0.375	1.000	2.540	108	70	130	3.655	0.864	30	D

Work Order: 2504692
CLIENT: OnSite Environmental Inc
Project: Port of Anacortes - Quiet Cove

QC SUMMARY REPORT

Ion Chromatography by EPA 300.0

Sample ID: MB-47572		SampType: MBLK			Units: mg/L		Prep Date: 4/29/2025			RunNo: 99511		
Client ID: MBLKW		Batch ID: 47572			Analysis Date: 4/29/2025				SeqNo: 2073219			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Nitrate (as N)	ND	0.200									
Sulfate	ND	1.00									

Sample ID: LCS-47572		SampType: LCS			Units: mg/L		Prep Date: 4/29/2025		RunNo: 99511		
Client ID: LCSW		Batch ID: 47572			Analysis Date: 4/30/2025				SeqNo: 2073220		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Nitrate (as N)	0.747	0.200	0.7500	0	99.6	90	110				
Sulfate	3.57	1.00	3.750	0	95.3	90	110				

Sample ID: 2504576-001ADUP	SampType: DUP	Units: mg/L			Prep Date: 4/29/2025			RunNo: 99511			
Client ID: BATCH	Batch ID: 47572				Analysis Date: 4/30/2025			SeqNo: 2073222			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Nitrate (as N)	0.667	0.200						0.6670	0	20	H
Sulfate	1.56	1.00						1.587	2.04	20	

Sample ID: 2504576-001AMS		SampType: MS			Units: mg/L		Prep Date: 4/29/2025			RunNo: 99511		
Client ID: BATCH		Batch ID: 47572			Analysis Date: 4/30/2025			SeqNo: 2073223				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Nitrate (as N)	1.49	0.200	0.7500	0.6670	110	80	120				H
Sulfate	5.45	1.00	3.750	1.587	103	80	120				

Sample ID: 2504576-001AMSD		SampType: MSD			Units: mg/L		Prep Date: 4/29/2025			RunNo: 99511		
Client ID: BATCH		Batch ID: 47572			Analysis Date: 4/30/2025			SeqNo: 2073224				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Nitrate (as N)	1.49	0.200	0.7500	0.6670	110	80	120	1.489	0.335	20	H
Sulfate	5.49	1.00	3.750	1.587	104	80	120	5.451	0.731	20	

Work Order: 2504692
CLIENT: OnSite Environmental Inc
Project: Port of Anacortes - Quiet Cove

QC SUMMARY REPORT
Ion Chromatography by EPA 300.0

Sample ID: 2504576-001AMSD		SampType: MSD			Units: mg/L		Prep Date: 4/29/2025			RunNo: 99511		
Client ID: BATCH		Batch ID: 47572			Analysis Date: 4/30/2025			SeqNo: 2073224				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Client Name: ONSITE

Work Order Number: 2504692

Logged by: Morgan Wilson

Date Received: 4/29/2025 4:02:00 PM

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Client

Log In

3. Custody Seals present on shipping container/cooler?
(Refer to comments for Custody Seals not intact) Yes ☐ No ☐ Not Present ☒
4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all items received at a temperature of >2°C to 6°C * Yes ☒ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples properly preserved? Yes ☒ No ☐
9. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
10. Is there headspace in the VOA vials? Yes ☐ No ☐ NA ☒
11. Did all samples containers arrive in good condition(unbroken)? Yes ☒ No ☐
12. Does paperwork match bottle labels? Yes ☒ No ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
14. Is it clear what analyses were requested? Yes ☒ No ☐
15. Were all hold times (except field parameters, pH e.g.) able to be met? Yes ☒ No ☐

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☒ No ☐ NA ☐

Person Notified:	Brian Tracy	Date:	4/29/2025
By Whom:	Morgan Wilson	Via:	☐ eMail ☒ Phone ☐ Fax ☐ In Person
Regarding:	Sample Date, TAT		
Client Instructions:	4/29/25, Std TAT		

17. Additional remarks:

Item Information

Item #	Temp °C
Sample	1.6

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C



3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790

Chain of Custody Record & Laboratory Services Agreement

Date: 4.28.2025 Page: 1 of 1

Project Name: Port of Anacortes - Quist Cove

Project No: 05147-024-012

Collected by: Nathan Solomon

Location: Anacortes WA

Report to (pm): Brian Tracy

Laboratory Project No (Internal): 25041692

Special Remarks:

SAMPLE RESULTS TO BE REPORTED TO ONSITE ATTN: DAVID BAUMEISTER (SM 3600-EG) (EPA 800.0)

Disposal: Samples will be disposed in 30 days unless otherwise requested.
☐ Retain volume (specify above) ☐ Return to client

Client: GEOTECHNICAL INC.
Address: 2101 4TH AVE, SUITE 950
City/State/Zip: SEATTLE WA 98121
Telephone:

Email(s): BTRACY@GEOTECHNICAL.COM NSOLOMON@GEOTECHNICAL.COM

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	# of Cont.															Comments	
					VOCS (EPA 8260 / 624)	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/heavy Oil Range Organics (DO)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) Dissolved (D)	Anions (IC)**	EDB (8011)	FERROUS / NITRATE / SULFATE			
1 MW-1A - 042825	4.28.25	1240	W	2																
2 MW-B - 042825		1135		2																
3 MW-13 - 042825		1325		2																
4 MW-14 - 042825		1005		2																
5 MW-DPF - 042825		1200		2																
6																				
7																				
8																				
9																				
10																				

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL Individual: Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Si Sn Ti Tl V Zn

**Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate-Nitrite

I represent that I am authorized to enter into this Agreement with Alliance Technical Group LLC on behalf of the Client named above, that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Requisitioned (Signature) Nathan Solomon Date/Time 4.28.25 1601

Print Name Nathan Solomon Date/Time 4.28.25 1601

Received (Signature) David Baumeister Date/Time 4/29/25 9:02PM

Print Name David Baumeister Date/Time 4/29/25 9:02PM

Turn-around Time:
☐ Standard ☒ Next Day
☐ 3 Day ☐ Same Day
☐ 2 Day (specify)



3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790

Chain of Custody Record & Laboratory Services Agreement

Date: 4/28/2025

Page: 1 of 1

Project Name: Port of Anacortes - Quist Cove

Project No: OS47-024-012

Collected by: Nathan Solomon

Location: Anacortes WA

Report to (pm): Brian Tracy

Laboratory Project No (Internal): 25041692

Special Remarks: Updates per BT - nmw 4/29/25

SAMPLE RESULTS TO BE REPORTED TO

ONSITE ATTN: DAVID BAUMEISTER

(SM 3600-EG)
(EPA 800.0)

Disposal: Samples will be disposed in 30 days unless otherwise requested.
☐ Retain volume (specify above) ☐ Return to client

Telephone:

City/State/Zip: SEATTLE WA 98121

Client: GEOTECHNICAL INC.

Address: 2101 4TH AVE, SUITE 950

Email(s): BTBAY@GEOTECHNICAL.COM NSOLOMON@GEOTECHNICAL.COM

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	# of Cont.	VOCS (EPA 8260 / 624)	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) Dissolved (D)	Anions (801)	EDB (801)	FERROUS / NITRATE / SULFATE	Comments
1 MW-1A - 042825	4/28/25	1240	W	2								X	X				24 hr Hand
2 MW-B - 042825		1135		2								X	X				
3 MW-13 - 042825		1325		2								X	X				
4 MW-14 - 042825		1005		2								X	X				
5 MW-DPF - 042825	4/29/25	1200	W	2								X	X				
6																	
7																	
8																	
9																	
10																	

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL Individual: Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Si Sn Ti Tl V Zn

**Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate-Nitrite

I represent that I am authorized to enter into this Agreement with Alliance Technical Group LLC on behalf of the Client named above, that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Reinquished (Signature) Nathan Solomon 4/28/25 1601 Received (Signature) David Baumeister 4/29/25 9:02PM

Print Name Date/Time Print Name Date/Time

Turn-around Time:
☒ Standard 15 business days
☐ 3 Day
☐ Same Day
☐ 2 Day (specify)



3600 Fremont Ave N

Seattle, WA 98103

T: (206) 352-3790

F: (206) 352-7178

info@fremontanalytical.com

OnSite Environmental Inc

David Baumeister

14648 NE 95th Street

Redmond, WA 98052

RE: POA-Quiet Cove, 05417-024-12

Work Order Number: 2504730

May 08, 2025

Attention David Baumeister:

Alliance Technical Group, LLC - Seattle received 4 sample(s) on 4/30/2025 for the analyses presented in the following report.

Ferrous Iron by SM3500-Fe B

Ion Chromatography by EPA 300.0

All analyses were performed according to our accredited Quality Assurance program. Please contact the laboratory if you should have any questions about the results.

Alliance Technical Group is committed to accuracy, speed, and customer service. Thank you for choosing Alliance Technical Group's Seattle laboratory team for your analytical needs. We appreciate this opportunity to serve you!

Sincerely,

A handwritten signature in blue ink, appearing to read "Brianna Barnes", is positioned above the printed name.

Brianna Barnes
Project Manager

*DoD-ELAP Accreditation #79636 by PJLA, ISO/IEC 17025:2017 and QSM 5.4 for Environmental Testing
ORELAP Certification: WA 100009 (NELAP Recognized) for Environmental Testing
Washington State Department of Ecology Accredited for Environmental Testing, Lab ID C910*

Original



www.fremontanalytical.com

CLIENT: OnSite Environmental Inc
Project: POA-Quiet Cove
Work Order: 2504730

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2504730-001	MW-2A-043025	04/30/2025 2:35 PM	04/30/2025 5:11 PM
2504730-002	MW-3-043025	04/30/2025 1:40 PM	04/30/2025 5:11 PM
2504730-003	MW-4-043025	04/30/2025 11:55 AM	04/30/2025 5:11 PM
2504730-004	MW-15-043025	04/30/2025 12:50 PM	04/30/2025 5:11 PM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

CLIENT: OnSite Environmental Inc

Project: POA-Quiet Cove

I. SAMPLE RECEIPT:

Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:

Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Qualifiers:

- * - Flagged value is not within established control limits
- B - Analyte detected in the associated Method Blank
- D - Dilution was required
- E - Value above quantitation range
- H - Holding times for preparation or analysis exceeded
- I - Analyte with an internal standard that does not meet established acceptance criteria
- J - Analyte detected below Reporting Limit
- N - Tentatively Identified Compound (TIC)
- Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria
- S - Spike recovery outside accepted recovery limits
- ND - Not detected at the Reporting Limit
- R - High relative percent difference observed

Acronyms:

- %Rec - Percent Recovery
- CCB - Continued Calibration Blank
- CCV - Continued Calibration Verification
- DF - Dilution Factor
- DUP - Sample Duplicate
- HEM - Hexane Extractable Material
- ICV - Initial Calibration Verification
- LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
- MCL - Maximum Contaminant Level
- MB or MBLANK - Method Blank
- MDL - Method Detection Limit
- MS/MSD - Matrix Spike / Matrix Spike Duplicate
- PDS - Post Digestion Spike
- Ref Val - Reference Value
- REP - Sample Replicate
- RL - Reporting Limit
- RPD - Relative Percent Difference
- SD - Serial Dilution
- SGT - Silica Gel Treatment
- SPK - Spike
- Surr - Surrogate

CLIENT: OnSite Environmental Inc
Project: POA-Quiet Cove

Lab ID: 2504730-001

Collection Date: 4/30/2025 2:35:00 PM

Client Sample ID: MW-2A-043025

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Ion Chromatography by EPA 300.0

Batch ID: 47606

Analyst: OP

Nitrate (as N)	1.60	0.200		mg/L	1	5/1/2025 5:00:00 PM
Sulfate	36.0	2.00	D	mg/L	2	5/7/2025 8:07:00 PM

Ferrous Iron by SM3500-Fe B

Batch ID: R99384

Analyst: BB

Ferrous Iron	2.73	0.375	D	mg/L	2.5	5/1/2025 8:41:30 AM
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Lab ID: 2504730-002

Collection Date: 4/30/2025 1:40:00 PM

Client Sample ID: MW-3-043025

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Ion Chromatography by EPA 300.0

Batch ID: 47606

Analyst: OP

Nitrate (as N)	1.69	0.200		mg/L	1	5/1/2025 6:32:00 PM
Sulfate	36.2	2.00	D	mg/L	2	5/7/2025 8:30:00 PM

Ferrous Iron by SM3500-Fe B

Batch ID: R99384

Analyst: BB

Ferrous Iron	ND	0.150		mg/L	1	5/1/2025 8:41:30 AM
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Lab ID: 2504730-003

Collection Date: 4/30/2025 11:55:00 AM

Client Sample ID: MW-4-043025

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Ion Chromatography by EPA 300.0

Batch ID: 47606

Analyst: OP

Nitrate (as N)	ND	0.200		mg/L	1	5/1/2025 6:55:00 PM
Sulfate	53.5	2.00	D	mg/L	2	5/7/2025 8:53:00 PM

Ferrous Iron by SM3500-Fe B

Batch ID: R99384

Analyst: BB

Ferrous Iron	17.6	3.75	D	mg/L	25	5/1/2025 8:41:30 AM
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CLIENT: OnSite Environmental Inc
Project: POA-Quiet Cove

Lab ID: 2504730-004

Collection Date: 4/30/2025 12:50:00 PM

Client Sample ID: MW-15-043025

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>Ion Chromatography by EPA 300.0</u>				Batch ID: 47606		Analyst: OP
Nitrate (as N)	ND	0.200		mg/L	1	5/1/2025 7:19:00 PM
Sulfate	2.09	1.00		mg/L	1	5/1/2025 7:19:00 PM
<u>Ferrous Iron by SM3500-Fe B</u>				Batch ID: R99384		Analyst: BB
Ferrous Iron	76.4	37.5	D	mg/L	250	5/1/2025 8:41:30 AM

Work Order: 2504730
CLIENT: OnSite Environmental Inc
Project: POA-Quiet Cove

QC SUMMARY REPORT

Ferrous Iron by SM3500-Fe B

Sample ID: MB-R99384	SampType: MBLK	Units: mg/L				Prep Date: 5/1/2025			RunNo: 99384		
Client ID: MBLKW	Batch ID: R99384					Analysis Date: 5/1/2025			SeqNo: 2070078		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ferrous Iron	ND	0.150									

Sample ID: LCS-R99384	SampType: LCS	Units: mg/L				Prep Date: 5/1/2025			RunNo: 99384		
Client ID: LCSW	Batch ID: R99384					Analysis Date: 5/1/2025			SeqNo: 2070079		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ferrous Iron	0.406	0.150	0.4000	0	102	85	115				

Sample ID: 2504730-001ADUP	SampType: DUP	Units: mg/L				Prep Date: 5/1/2025			RunNo: 99384		
Client ID: MW-2A-043025	Batch ID: R99384					Analysis Date: 5/1/2025			SeqNo: 2070081		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ferrous Iron	2.79	0.375						2.728	2.28	20	D

Sample ID: 2504730-001AMS	SampType: MS	Units: mg/L				Prep Date: 5/1/2025			RunNo: 99384		
Client ID: MW-2A-043025	Batch ID: R99384					Analysis Date: 5/1/2025			SeqNo: 2070082		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ferrous Iron	3.99	0.375	1.000	2.728	126	70	130				D

Sample ID: 2504730-001AMSD	SampType: MSD	Units: mg/L				Prep Date: 5/1/2025			RunNo: 99384		
Client ID: MW-2A-043025	Batch ID: R99384					Analysis Date: 5/1/2025			SeqNo: 2070083		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ferrous Iron	4.02	0.375	1.000	2.728	130	70	130	3.985	0.981	30	D

Work Order: 2504730
CLIENT: OnSite Environmental Inc
Project: POA-Quiet Cove

QC SUMMARY REPORT

Ion Chromatography by EPA 300.0

Sample ID: MB-47606	SampType: MBLK	Units: mg/L			Prep Date: 5/1/2025				RunNo: 99544			
Client ID: MBLKW	Batch ID: 47606					Analysis Date: 5/1/2025				SeqNo: 2073899		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Nitrate (as N)	ND	0.200										
Sulfate	ND	1.00										

Sample ID: LCS-47606		SampType: LCS			Units: mg/L		Prep Date: 5/1/2025		RunNo: 99544		
Client ID: LCSW		Batch ID: 47606			Analysis Date: 5/1/2025				SeqNo: 2073900		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	0.788	0.200	0.7500	0	105	90	110				
Sulfate	3.94	1.00	3.750	0	105	90	110				

Sample ID: 2504730-001BDUP	SampType: DUP	Units: mg/L			Prep Date: 5/1/2025				RunNo: 99544		
Client ID: MW-2A-043025	Batch ID: 47606				Analysis Date: 5/1/2025				SeqNo: 2073902		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	1.07	0.200						1.604	40.3	20	R
Sulfate	34.1	1.00						34.53	1.23	20	E

NOTES:

R - High RPD observed.

Sample ID: 2504730-001BMS		SampType: MS			Units: mg/L		Prep Date: 5/1/2025		RunNo: 99544		
Client ID: MW-2A-043025		Batch ID: 47606			Analysis Date: 5/1/2025				SeqNo: 2073903		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	1.91	0.200	0.7500	1.604	40.9	80	120				S
Sulfate	37.3	1.00	3.750	34.53	73.2	80	120				ES

NOTES:

S - Spiked amount was low relative to sample concentration. Outlying spike recoveries may be expected.

Work Order: 2504730
CLIENT: OnSite Environmental Inc
Project: POA-Quiet Cove

QC SUMMARY REPORT

Ion Chromatography by EPA 300.0

Sample ID: 2504730-001BMSD	SampType: MSD	Units: mg/L			Prep Date: 5/1/2025			RunNo: 99544			
Client ID: MW-2A-043025	Batch ID: 47606				Analysis Date: 5/1/2025			SeqNo: 2073904			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	1.95	0.200	0.7500	1.604	46.5	80	120	1.911	2.17	20	S
Sulfate	37.3	1.00	3.750	34.53	75.0	80	120	37.28	0.180	20	ES

NOTES:

S - Spiked amount was low relative to sample concentration. Outlying spike recoveries may be expected.

Sample ID: 2505001-001ADUP	SampType: DUP	Units: mg/L			Prep Date: 5/1/2025			RunNo: 99544			
Client ID: BATCH	Batch ID: 47606				Analysis Date: 5/1/2025			SeqNo: 2073909			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	ND	0.200						0		20	
Sulfate	34.3	1.00						34.33	0.0816	20	E

Sample ID: 2505001-001AMS	SampType: MS	Units: mg/L			Prep Date: 5/1/2025			RunNo: 99544			
Client ID: BATCH	Batch ID: 47606				Analysis Date: 5/1/2025			SeqNo: 2073912			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	0.829	0.200	0.7500	0	111	80	120				
Sulfate	37.4	1.00	3.750	34.33	82.6	80	120				E

Client Name: ONSITE

Work Order Number: 2504730

Logged by: Morgan Wilson

Date Received: 4/30/2025 5:11:00 PM

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Client

Log In

3. Custody Seals present on shipping container/cooler?
(Refer to comments for Custody Seals not intact) Yes ☐ No ☐ Not Present ☒
4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all items received at a temperature of >2°C to 6°C * Yes ☒ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples properly preserved? Yes ☒ No ☐
9. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
10. Is there headspace in the VOA vials? Yes ☐ No ☐ NA ☒
11. Did all samples containers arrive in good condition(unbroken)? Yes ☒ No ☐
12. Does paperwork match bottle labels? Yes ☒ No ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
14. Is it clear what analyses were requested? Yes ☒ No ☐
15. Were all hold times (except field parameters, pH e.g.) able to be met? Yes ☒ No ☐

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:		Date:	
By Whom:		Via:	☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:			
Client Instructions:			

17. Additional remarks:

Item Information

Item #	Temp °C
Sample	4.5

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C



3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790

Chain of Custody Record & Laboratory Services Agreement

Date: 4.30.2025 Page: 1 of 1

Project Name: POA - QUIET CASE

Project No: OS417 - 024-12

Collected by: Nathaniel Soudal

Location: ANACOSTA WA

Report to (PM): BRIAN TRACY

Laboratory Project No (Internal): 2504730

Special Remarks:

Disposal: Samples will be disposed in 30 days unless otherwise requested.
☐ Retain volume (specify above) ☐ Return to client

Client: GEOTECHNICAL

Address:

City, State, Zip:

Telephone:

Email(s): BRACY@GEOTECHNICAL NISOLANON@GEOTECHNICAL

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	# of Cont.	VOCS (EPA 8260 / 624)	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (HX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) Dissolved (D)	Anions (IC)***	EDB (8011)	FERROUS IRON	NITRATE SULFATE	Comments
1 MW-2A-043025	4.30.25	1455															X		
2 MW-3-043025		1540															X		
3 MW-4-043025		1555															X		
4 MW-15-043025		1200															X		
5																			
6																			
7																			
8																			
9																			
10																			

*Matrix: A - Air, AQ - Aqueous, B - Bulk, O - Other, P - Product, S - Soil, SD - Sediment, SL - Solid, W - Water, DW - Drinking Water, GW - Ground Water, SW - Storm Water, WW - Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL Individual: Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate-Nitrite

I represent that I am authorized to enter into this Agreement with Alliance Technical Group LLC on behalf of the Client named above, that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished (Signature) *Nathaniel Soudal* Print Name Nathaniel Soudal Date/Time 4.30.25 17:12 Received (Signature) *Gina Genard* Print Name Gina Genard Date/Time 4/30/25 5:11PM

Relinquished (Signature) *Nathaniel Soudal* Print Name Nathaniel Soudal Date/Time 4.30.25 17:12 Received (Signature) *Gina Genard* Print Name Gina Genard Date/Time 4/30/25 5:11PM



Onsite Environmental Inc.

Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Chain of Custody

Page 1 of 1

Company: GEOENGINEERS INC.		Turnaround Request (in working days)		Laboratory Number: 05-004	
Project Number: RILES GWN QRT3-BOA GUEST CAFE		(Check One)			
Project Name: 5147-024-12		☐ Same Day ☐ 1 Day			
Project Manager: BRAD TRACY		☐ 2 Days ☐ 3 Days			
Sampled by: NATHAN SOLOMON		☒ Standard (7 Days)			
		☐ (other)			
Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers
1	MW-1A-042925	4.29.25	1240	Water	1
2	MW-2A-043025	4.30.25	1435	Water	1
3	MW-3-043025	4.30.25	1340	Water	1
4	MW-4-043025	4.30.25	1155	Water	1
5	MW-8-042925	4.29.25	1135	Water	1
6	MW-13-042925	4.29.25	1325	Water	1
7	MW-14-042925	4.29.25	1005	Water	1
8	MW-15-043025	4.30.25	1250	Water	1
9	DUP-042925	4.29.25	1200	Water	1
10	TRIP BLANK	—	—	Water	2
Signature: Nathan Solomon		Company: GEI	Date: 5.1.25	Time: 11:53	Comments/Special Instructions: DISSOLVED METALS = FIELD FILTER
Relinquished		Company: OSI	Date: 5/1/2025	Time: 11:53	Comments/Special Instructions: FERROUS IRON, NITRATE, SULFATE DELIVERED TO ALLIANCE TECH.
Relinquished					Comments/Special Instructions: ** Project List
Relinquished					Comments/Special Instructions: Data Package: Standard ☐ Level III ☒ Level IV ☐
Received					Comments/Special Instructions: Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☒
Reviewed/Date					

Sample/Cooler Receipt and Acceptance Checklist

Client: GE

Client Project Name/Number: 5147-024-12

OnSite Project Number: 05-004

Initiated by: MM

Date Initiated: 5/1/25

1.0 Cooler Verification

1.1 Were there custody seals on the outside of the cooler?	Yes	<u>No</u>	N/A	1	2	3	4
1.2 Were the custody seals intact?	Yes	No	<u>N/A</u>	1	2	3	4
1.3 Were the custody seals signed and dated by last custodian?	Yes	No	<u>N/A</u>	1	2	3	4
1.4 Were the samples delivered on ice or blue ice?	<u>Yes</u>	No	N/A	1	2	3	4
1.5 Were samples received between 0-6 degrees Celsius?	<u>Yes</u>	No	N/A	Temperature: <u>6.34</u>			
1.6 Have shipping bills (if any) been attached to the back of this form?	Yes	<u>N/A</u>					
1.7 How were the samples delivered?	<u>Client</u>	Courier	UPS/FedEx	OSE Pickup	Other		

2.0 Chain of Custody Verification

2.1 Was a Chain of Custody submitted with the samples?	<u>Yes</u>	No	1	2	3	4
2.2 Was the COC legible and written in permanent ink?	<u>Yes</u>	No	1	2	3	4
2.3 Have samples been relinquished and accepted by each custodian?	<u>Yes</u>	No	1	2	3	4
2.4 Did the sample labels (ID, date, time, preservative) agree with COC?	<u>Yes</u>	No	1	2	3	4
2.5 Were all of the samples listed on the COC submitted?	<u>Yes</u>	No	1	2	3	4
2.6 Were any of the samples submitted omitted from the COC?	<u>Yes</u>	No	1	2	3	4

3.0 Sample Verification

3.1 Were any sample containers broken or compromised?	<u>Yes</u>	No	1	2	3	4	
3.2 Were any sample labels missing or illegible?	Yes	<u>No</u>	1	2	3	4	
3.3 Have the correct containers been used for each analysis requested?	<u>Yes</u>	No	1	2	3	4	
3.4 Have the samples been correctly preserved?	<u>Yes</u>	No	N/A	1	2	3	4
3.5 Are volatile samples free from headspace and bubbles greater than 6mm?	<u>Yes</u>	No	N/A	1	2	3	4
3.6 Is there sufficient sample submitted to perform requested analyses?	<u>Yes</u>	No		1	2	3	4
3.7 Have any holding times already expired or will expire in 24 hours?	<u>Yes</u>	No		1	2	3	4
3.8 Was method 5035A used?	Yes	No	<u>N/A</u>	1	2	3	4
3.9 If 5035A was used, which sampling option was used (#1, 2, or 3).	#		<u>N/A</u>	1	2	3	4

Explain any discrepancies:

2.6) TRIP BLANK not on LOC (2)

3.1) Alk w/ bubble

3.7) Ferrus Iron will expire < 24 hrs

1 - Discuss issue in Case Narrative

2 - Process Sample As-is

3 - Client contacted to discuss problem

4 - Sample cannot be analyzed or client does not wish to proceed



14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

September 9, 2025

Brian Tracy
GeoEngineers, Inc.
2101 4th Avenue, Suite 950
Seattle, WA 98121

Re: Analytical Data for Project 5147-024-14
Laboratory Reference No. 2508-357

Dear Brian:

Enclosed are the analytical results and associated quality control data for samples submitted on August 27, 2025.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

A handwritten signature in black ink, appearing to read 'DB', followed by a horizontal line.

David Baumeister
Project Manager

Enclosures



Date of Report: September 9, 2025
Samples Submitted: August 27, 2025
Laboratory Reference: 2508-357
Project: 5147-024-14

Case Narrative

Samples were collected on August 25, 26 and 27, 2025 and received by the laboratory on August 27, 2025. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below. However the soil results for the QA/QC samples are reported on a wet-weight basis.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

Dissolved Metals by EPA 200.8/7470A Analysis

The dissolved field filter sample MW-4-082725 was received containing solid material. The sample was digested according to OnSite Environmental standard operating procedure.

Any other QA/QC issues associated with this extraction and analysis will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.



Date of Report: September 9, 2025
 Samples Submitted: August 27, 2025
 Laboratory Reference: 2508-357
 Project: 5147-024-14

ANALYTICAL REPORT FOR SAMPLES

Client ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
MW-1A-082725	08-357-01	Water	8-27-25	8-27-25	
MW-2A-082725	08-357-02	Water	8-27-25	8-27-25	
MW-3-082525	08-357-03	Water	8-25-25	8-27-25	
MW-4-082725	08-357-04	Water	8-27-25	8-27-25	
MW-8-082625	08-357-05	Water	8-26-25	8-27-25	
MW-13-082725	08-357-06	Water	8-27-25	8-27-25	
MW-14-082525	08-357-07	Water	8-25-25	8-27-25	
MW-15-082625	08-357-08	Water	8-26-25	8-27-25	
MW-DUP-082625	08-357-09	Water	8-26-25	8-27-25	



Date of Report: September 9, 2025
 Samples Submitted: August 27, 2025
 Laboratory Reference: 2508-357
 Project: 5147-024-14

GASOLINE RANGE ORGANICS
NWTPH-Gx

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-1A-082725					
Laboratory ID:	08-357-01					
Gasoline	ND	100	NWTPH-Gx	8-29-25	8-29-25	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	97	62-122				
Client ID:	MW-2A-082725					
Laboratory ID:	08-357-02					
Gasoline	ND	100	NWTPH-Gx	8-29-25	8-29-25	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	95	62-122				
Client ID:	MW-3-082525					
Laboratory ID:	08-357-03					
Gasoline	ND	100	NWTPH-Gx	8-29-25	8-29-25	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	94	62-122				
Client ID:	MW-4-082725					
Laboratory ID:	08-357-04					
Gasoline	ND	100	NWTPH-Gx	8-29-25	8-29-25	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	95	62-122				
Client ID:	MW-8-082625					
Laboratory ID:	08-357-05					
Gasoline	340	100	NWTPH-Gx	8-29-25	8-29-25	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	101	62-122				
Client ID:	MW-13-082725					
Laboratory ID:	08-357-06					
Gasoline	ND	100	NWTPH-Gx	8-29-25	8-29-25	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	96	62-122				
Client ID:	MW-14-082525					
Laboratory ID:	08-357-07					
Gasoline	ND	100	NWTPH-Gx	8-29-25	8-29-25	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	98	62-122				



Date of Report: September 9, 2025
 Samples Submitted: August 27, 2025
 Laboratory Reference: 2508-357
 Project: 5147-024-14

GASOLINE RANGE ORGANICS
NWTPH-Gx

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-15-082625					
Laboratory ID:	08-357-08					
Gasoline Range Organics	170	100	NWTPH-Gx	8-29-25	8-29-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	94	62-122				
Client ID:	MW-DUP-082625					
Laboratory ID:	08-357-09					
Gasoline	370	100	NWTPH-Gx	8-29-25	8-29-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	104	62-122				



Date of Report: September 9, 2025
 Samples Submitted: August 27, 2025
 Laboratory Reference: 2508-357
 Project: 5147-024-14

**DIESEL AND HEAVY OIL RANGE ORGANICS
 NWTPH-Dx**

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-1A-082725					
Laboratory ID:	08-357-01					
Diesel Range Organics	ND	0.21	NWTPH-Dx	9-2-25	9-2-25	
Lube Oil Range Organics	0.25	0.21	NWTPH-Dx	9-2-25	9-2-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	103	50-150				

Client ID:	MW-1A-082725					
Laboratory ID:	08-357-01					
Diesel Range Organics	ND	0.20	NWTPH-Dx	9-2-25	9-2-25	X2
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	9-2-25	9-2-25	X2
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	95	50-150				

Client ID:	MW-2A-082725					
Laboratory ID:	08-357-02					
Diesel Range Organics	0.23	0.20	NWTPH-Dx	9-2-25	9-2-25	
Lube Oil Range Organics	0.22	0.20	NWTPH-Dx	9-2-25	9-2-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	89	50-150				

Client ID:	MW-2A-082725					
Laboratory ID:	08-357-02					
Diesel Range Organics	ND	0.20	NWTPH-Dx	9-2-25	9-2-25	X2
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	9-2-25	9-2-25	X2
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	98	50-150				

Client ID:	MW-3-082525					
Laboratory ID:	08-357-03					
Diesel Range Organics	0.29	0.20	NWTPH-Dx	9-2-25	9-3-25	
Lube Oil Range Organics	0.32	0.20	NWTPH-Dx	9-2-25	9-3-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	89	50-150				

Client ID:	MW-3-082525					
Laboratory ID:	08-357-03					
Diesel Range Organics	ND	0.20	NWTPH-Dx	9-2-25	9-3-25	X2
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	9-2-25	9-3-25	X2
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	91	50-150				



Date of Report: September 9, 2025
 Samples Submitted: August 27, 2025
 Laboratory Reference: 2508-357
 Project: 5147-024-14

**DIESEL AND HEAVY OIL RANGE ORGANICS
 NWTPH-Dx**

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-4-082725					
Laboratory ID:	08-357-04					
Diesel Range Organics	0.39	0.19	NWTPH-Dx	9-2-25	9-3-25	
Lube Oil Range Organics	0.29	0.19	NWTPH-Dx	9-2-25	9-3-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	60	50-150				

Client ID:	MW-4-082725					
Laboratory ID:	08-357-04					
Diesel Range Organics	ND	0.19	NWTPH-Dx	9-2-25	9-3-25	X2
Lube Oil Range Organics	ND	0.19	NWTPH-Dx	9-2-25	9-3-25	X2
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	64	50-150				

Client ID:	MW-8-082625					
Laboratory ID:	08-357-05					
Diesel Range Organics	0.70	0.20	NWTPH-Dx	9-2-25	9-3-25	
Lube Oil Range Organics	0.47	0.20	NWTPH-Dx	9-2-25	9-3-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	98	50-150				

Client ID:	MW-8-082625					
Laboratory ID:	08-357-05					
Diesel Range Organics	ND	0.20	NWTPH-Dx	9-2-25	9-2-25	X2
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	9-2-25	9-2-25	X2
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	109	50-150				

Client ID:	MW-13-082725					
Laboratory ID:	08-357-06					
Diesel Range Organics	0.33	0.20	NWTPH-Dx	9-2-25	9-2-25	
Lube Oil Range Organics	0.42	0.20	NWTPH-Dx	9-2-25	9-2-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	89	50-150				

Client ID:	MW-13-082725					
Laboratory ID:	08-357-06					
Diesel Range Organics	ND	0.20	NWTPH-Dx	9-2-25	9-2-25	X2
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	9-2-25	9-2-25	X2
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	92	50-150				



Date of Report: September 9, 2025
 Samples Submitted: August 27, 2025
 Laboratory Reference: 2508-357
 Project: 5147-024-14

**DIESEL AND HEAVY OIL RANGE ORGANICS
 NWTPH-Dx**

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-14-082525					
Laboratory ID:	08-357-07					
Diesel Range Organics	ND	0.20	NWTPH-Dx	9-2-25	9-2-25	
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	9-2-25	9-2-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	95	50-150				

Client ID:	MW-14-082525					
Laboratory ID:	08-357-07					
Diesel Range Organics	ND	0.20	NWTPH-Dx	9-2-25	9-2-25	X2
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	9-2-25	9-2-25	X2
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	98	50-150				

Client ID:	MW-15-082625					
Laboratory ID:	08-357-08					
Diesel Range Organics	1.5	0.21	NWTPH-Dx	9-2-25	9-3-25	
Lube Oil Range Organics	0.92	0.21	NWTPH-Dx	9-2-25	9-3-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	101	50-150				

Client ID:	MW-15-082625					
Laboratory ID:	08-357-08					
Diesel Range Organics	ND	0.21	NWTPH-Dx	9-2-25	9-3-25	X2
Lube Oil Range Organics	ND	0.21	NWTPH-Dx	9-2-25	9-3-25	X2
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	101	50-150				

Client ID:	MW-DUP-082625					
Laboratory ID:	08-357-09					
Diesel Range Organics	0.70	0.20	NWTPH-Dx	9-2-25	9-2-25	
Lube Oil Range Organics	0.47	0.20	NWTPH-Dx	9-2-25	9-2-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	97	50-150				

Client ID:	MW-DUP-082625					
Laboratory ID:	08-357-09					
Diesel Range Organics	ND	0.20	NWTPH-Dx	9-2-25	9-2-25	X2
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	9-2-25	9-2-25	X2
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	101	50-150				



Date of Report: September 9, 2025
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 Laboratory Reference: 2508-357
 Project: 5147-024-14

VOLATILE ORGANICS EPA 8260D

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: MW-1A-082725						
Laboratory ID: 08-357-01						
Methyl t-Butyl Ether	ND	0.20	EPA 8260D	9-4-25	9-4-25	
n-Hexane	ND	1.0	EPA 8260D	9-3-25	9-3-25	
Benzene	ND	0.20	EPA 8260D	9-4-25	9-4-25	
1,2-Dichloroethane	ND	0.20	EPA 8260D	9-4-25	9-4-25	
Toluene	ND	1.0	EPA 8260D	9-4-25	9-4-25	
1,2-Dibromoethane	ND	0.20	EPA 8260D	9-4-25	9-4-25	
Ethylbenzene	ND	0.20	EPA 8260D	9-4-25	9-4-25	
m,p-Xylene	ND	0.40	EPA 8260D	9-4-25	9-4-25	
o-Xylene	ND	0.20	EPA 8260D	9-4-25	9-4-25	

<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>
<i>Dibromofluoromethane</i>	105	68-133
<i>Toluene-d8</i>	96	79-123
<i>4-Bromofluorobenzene</i>	96	78-117

Client ID: MW-2A-082725

Laboratory ID: 08-357-02

Methyl t-Butyl Ether	ND	0.20	EPA 8260D	9-4-25	9-4-25	
n-Hexane	ND	1.0	EPA 8260D	9-3-25	9-3-25	
Benzene	ND	0.20	EPA 8260D	9-4-25	9-4-25	
1,2-Dichloroethane	ND	0.20	EPA 8260D	9-4-25	9-4-25	
Toluene	ND	1.0	EPA 8260D	9-4-25	9-4-25	
1,2-Dibromoethane	ND	0.20	EPA 8260D	9-4-25	9-4-25	
Ethylbenzene	ND	0.20	EPA 8260D	9-4-25	9-4-25	
m,p-Xylene	ND	0.40	EPA 8260D	9-4-25	9-4-25	
o-Xylene	ND	0.20	EPA 8260D	9-4-25	9-4-25	

<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>
<i>Dibromofluoromethane</i>	107	68-133
<i>Toluene-d8</i>	96	79-123
<i>4-Bromofluorobenzene</i>	99	78-117



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VOLATILE ORGANICS EPA 8260D

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: MW-3-082525						
Laboratory ID: 08-357-03						
Methyl t-Butyl Ether	ND	0.20	EPA 8260D	9-4-25	9-4-25	
n-Hexane	ND	1.0	EPA 8260D	9-3-25	9-3-25	
Benzene	ND	0.20	EPA 8260D	9-4-25	9-4-25	
1,2-Dichloroethane	ND	0.20	EPA 8260D	9-4-25	9-4-25	
Toluene	ND	1.0	EPA 8260D	9-4-25	9-4-25	
1,2-Dibromoethane	ND	0.20	EPA 8260D	9-4-25	9-4-25	
Ethylbenzene	ND	0.20	EPA 8260D	9-4-25	9-4-25	
m,p-Xylene	ND	0.40	EPA 8260D	9-4-25	9-4-25	
o-Xylene	ND	0.20	EPA 8260D	9-4-25	9-4-25	

<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>
<i>Dibromofluoromethane</i>	112	68-133
<i>Toluene-d8</i>	96	79-123
<i>4-Bromofluorobenzene</i>	96	78-117

Client ID: MW-4-082725						
Laboratory ID: 08-357-04						
Methyl t-Butyl Ether	ND	0.20	EPA 8260D	9-4-25	9-4-25	
n-Hexane	ND	1.0	EPA 8260D	9-3-25	9-3-25	
Benzene	ND	0.20	EPA 8260D	9-4-25	9-4-25	
1,2-Dichloroethane	ND	0.20	EPA 8260D	9-4-25	9-4-25	
Toluene	ND	1.0	EPA 8260D	9-4-25	9-4-25	
1,2-Dibromoethane	ND	0.20	EPA 8260D	9-4-25	9-4-25	
Ethylbenzene	ND	0.20	EPA 8260D	9-4-25	9-4-25	
m,p-Xylene	ND	0.40	EPA 8260D	9-4-25	9-4-25	
o-Xylene	ND	0.20	EPA 8260D	9-4-25	9-4-25	

<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>
<i>Dibromofluoromethane</i>	121	68-133
<i>Toluene-d8</i>	107	79-123
<i>4-Bromofluorobenzene</i>	104	78-117



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 Laboratory Reference: 2508-357
 Project: 5147-024-14

VOLATILE ORGANICS EPA 8260D

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: MW-8-082625						
Laboratory ID: 08-357-05						
Methyl t-Butyl Ether	ND	0.20	EPA 8260D	9-4-25	9-4-25	
n-Hexane	2.9	1.0	EPA 8260D	9-3-25	9-3-25	
Benzene	16	0.20	EPA 8260D	9-4-25	9-4-25	
1,2-Dichloroethane	ND	0.20	EPA 8260D	9-4-25	9-4-25	
Toluene	ND	1.0	EPA 8260D	9-4-25	9-4-25	
1,2-Dibromoethane	ND	0.20	EPA 8260D	9-4-25	9-4-25	
Ethylbenzene	ND	0.20	EPA 8260D	9-4-25	9-4-25	
m,p-Xylene	0.44	0.40	EPA 8260D	9-4-25	9-4-25	
o-Xylene	ND	0.20	EPA 8260D	9-4-25	9-4-25	

<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>
<i>Dibromofluoromethane</i>	<i>117</i>	<i>68-133</i>
<i>Toluene-d8</i>	<i>104</i>	<i>79-123</i>
<i>4-Bromofluorobenzene</i>	<i>100</i>	<i>78-117</i>

Client ID: MW-13-082725

Laboratory ID: 08-357-06						
Methyl t-Butyl Ether	ND	0.20	EPA 8260D	9-4-25	9-4-25	
n-Hexane	ND	1.0	EPA 8260D	9-3-25	9-3-25	
Benzene	2.9	0.20	EPA 8260D	9-4-25	9-4-25	
1,2-Dichloroethane	ND	0.20	EPA 8260D	9-4-25	9-4-25	
Toluene	ND	1.0	EPA 8260D	9-4-25	9-4-25	
1,2-Dibromoethane	ND	0.20	EPA 8260D	9-4-25	9-4-25	
Ethylbenzene	ND	0.20	EPA 8260D	9-4-25	9-4-25	
m,p-Xylene	ND	0.40	EPA 8260D	9-4-25	9-4-25	
o-Xylene	ND	0.20	EPA 8260D	9-4-25	9-4-25	

<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>
<i>Dibromofluoromethane</i>	<i>110</i>	<i>68-133</i>
<i>Toluene-d8</i>	<i>100</i>	<i>79-123</i>
<i>4-Bromofluorobenzene</i>	<i>96</i>	<i>78-117</i>



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 Laboratory Reference: 2508-357
 Project: 5147-024-14

VOLATILE ORGANICS EPA 8260D

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: MW-14-082525						
Laboratory ID: 08-357-07						
Methyl t-Butyl Ether	ND	0.20	EPA 8260D	9-4-25	9-4-25	
n-Hexane	ND	1.0	EPA 8260D	9-3-25	9-3-25	
Benzene	ND	0.20	EPA 8260D	9-4-25	9-4-25	
1,2-Dichloroethane	ND	0.20	EPA 8260D	9-4-25	9-4-25	
Toluene	ND	1.0	EPA 8260D	9-4-25	9-4-25	
1,2-Dibromoethane	ND	0.20	EPA 8260D	9-4-25	9-4-25	
Ethylbenzene	ND	0.20	EPA 8260D	9-4-25	9-4-25	
m,p-Xylene	ND	0.40	EPA 8260D	9-4-25	9-4-25	
o-Xylene	ND	0.20	EPA 8260D	9-4-25	9-4-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>114</i>	<i>68-133</i>				
<i>Toluene-d8</i>	<i>96</i>	<i>79-123</i>				
<i>4-Bromofluorobenzene</i>	<i>97</i>	<i>78-117</i>				

Client ID: MW-15-082625						
Laboratory ID: 08-357-08						
Methyl t-Butyl Ether	ND	0.20	EPA 8260D	9-4-25	9-4-25	
n-Hexane	ND	1.0	EPA 8260D	9-3-25	9-3-25	
Benzene	ND	0.20	EPA 8260D	9-4-25	9-4-25	
1,2-Dichloroethane	ND	0.20	EPA 8260D	9-4-25	9-4-25	
Toluene	ND	1.0	EPA 8260D	9-4-25	9-4-25	
1,2-Dibromoethane	ND	0.20	EPA 8260D	9-4-25	9-4-25	
Ethylbenzene	ND	0.20	EPA 8260D	9-4-25	9-4-25	
m,p-Xylene	ND	0.40	EPA 8260D	9-4-25	9-4-25	
o-Xylene	ND	0.20	EPA 8260D	9-4-25	9-4-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>120</i>	<i>68-133</i>				
<i>Toluene-d8</i>	<i>103</i>	<i>79-123</i>				
<i>4-Bromofluorobenzene</i>	<i>102</i>	<i>78-117</i>				



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 Laboratory Reference: 2508-357
 Project: 5147-024-14

VOLATILE ORGANICS EPA 8260D

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: MW-DUP-082625						
Laboratory ID: 08-357-09						
Methyl t-Butyl Ether	ND	0.20	EPA 8260D	9-4-25	9-4-25	
n-Hexane	3.0	1.0	EPA 8260D	9-3-25	9-3-25	
Benzene	16	0.20	EPA 8260D	9-4-25	9-4-25	
1,2-Dichloroethane	ND	0.20	EPA 8260D	9-4-25	9-4-25	
Toluene	ND	1.0	EPA 8260D	9-4-25	9-4-25	
1,2-Dibromoethane	ND	0.20	EPA 8260D	9-4-25	9-4-25	
Ethylbenzene	ND	0.20	EPA 8260D	9-4-25	9-4-25	
m,p-Xylene	0.46	0.40	EPA 8260D	9-4-25	9-4-25	
o-Xylene	ND	0.20	EPA 8260D	9-4-25	9-4-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>116</i>	<i>68-133</i>				
<i>Toluene-d8</i>	<i>104</i>	<i>79-123</i>				
<i>4-Bromofluorobenzene</i>	<i>102</i>	<i>78-117</i>				



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 Project: 5147-024-14

TOTAL METALS
EPA 200.8/7470A

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: MW-1A-082725						
Laboratory ID: 08-357-01						
Arsenic	8.5	3.3	EPA 200.8	9-3-25	9-3-25	
Cadmium	ND	4.4	EPA 200.8	9-3-25	9-3-25	
Chromium	ND	11	EPA 200.8	9-3-25	9-3-25	
Lead	ND	1.1	EPA 200.8	9-3-25	9-3-25	
Mercury	ND	0.025	EPA 7470A	9-8-25	9-8-25	

Client ID: MW-2A-082725						
Laboratory ID: 08-357-02						
Arsenic	7.6	3.3	EPA 200.8	9-3-25	9-3-25	
Cadmium	ND	4.4	EPA 200.8	9-3-25	9-3-25	
Chromium	ND	11	EPA 200.8	9-3-25	9-3-25	
Lead	ND	1.1	EPA 200.8	9-3-25	9-3-25	
Mercury	ND	0.025	EPA 7470A	9-8-25	9-8-25	

Client ID: MW-3-082525						
Laboratory ID: 08-357-03						
Arsenic	ND	3.3	EPA 200.8	9-3-25	9-3-25	
Cadmium	ND	4.4	EPA 200.8	9-3-25	9-3-25	
Chromium	ND	11	EPA 200.8	9-3-25	9-3-25	
Lead	ND	1.1	EPA 200.8	9-3-25	9-3-25	
Mercury	ND	0.025	EPA 7470A	9-8-25	9-8-25	

Client ID: MW-4-082725						
Laboratory ID: 08-357-04						
Arsenic	ND	3.3	EPA 200.8	9-3-25	9-3-25	
Cadmium	ND	4.4	EPA 200.8	9-3-25	9-3-25	
Chromium	12	11	EPA 200.8	9-3-25	9-3-25	
Lead	ND	1.1	EPA 200.8	9-3-25	9-3-25	
Mercury	ND	0.025	EPA 7470A	9-8-25	9-8-25	



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 Project: 5147-024-14

TOTAL METALS
EPA 200.8/7470A

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: MW-8-082625						
Laboratory ID: 08-357-05						
Arsenic	4.8	3.3	EPA 200.8	9-3-25	9-3-25	
Cadmium	ND	4.4	EPA 200.8	9-3-25	9-3-25	
Chromium	ND	11	EPA 200.8	9-3-25	9-3-25	
Lead	ND	1.1	EPA 200.8	9-3-25	9-3-25	
Mercury	ND	0.025	EPA 7470A	9-8-25	9-8-25	

Client ID: MW-13-082725						
Laboratory ID: 08-357-06						
Arsenic	ND	3.3	EPA 200.8	9-3-25	9-3-25	
Cadmium	ND	4.4	EPA 200.8	9-3-25	9-3-25	
Chromium	ND	11	EPA 200.8	9-3-25	9-3-25	
Lead	ND	1.1	EPA 200.8	9-3-25	9-3-25	
Mercury	ND	0.025	EPA 7470A	9-8-25	9-8-25	

Client ID: MW-14-082525						
Laboratory ID: 08-357-07						
Arsenic	5.1	3.3	EPA 200.8	9-3-25	9-3-25	
Cadmium	ND	4.4	EPA 200.8	9-3-25	9-3-25	
Chromium	ND	11	EPA 200.8	9-3-25	9-3-25	
Lead	ND	1.1	EPA 200.8	9-3-25	9-3-25	
Mercury	ND	0.025	EPA 7470A	9-8-25	9-8-25	

Client ID: MW-15-082625						
Laboratory ID: 08-357-08						
Arsenic	9.5	3.3	EPA 200.8	9-3-25	9-3-25	
Cadmium	ND	4.4	EPA 200.8	9-3-25	9-3-25	
Chromium	ND	11	EPA 200.8	9-3-25	9-3-25	
Lead	ND	1.1	EPA 200.8	9-3-25	9-3-25	
Mercury	ND	0.025	EPA 7470A	9-8-25	9-8-25	



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TOTAL METALS
EPA 200.8/7470A

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: MW-DUP-082625						
Laboratory ID: 08-357-09						
Arsenic	5.5	3.3	EPA 200.8	9-3-25	9-3-25	
Cadmium	ND	4.4	EPA 200.8	9-3-25	9-3-25	
Chromium	ND	11	EPA 200.8	9-3-25	9-3-25	
Lead	ND	1.1	EPA 200.8	9-3-25	9-3-25	
Mercury	ND	0.025	EPA 7470A	9-8-25	9-8-25	



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DISSOLVED METALS
EPA 200.8/7470A

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: MW-1A-082725						
Laboratory ID: 08-357-01						
Arsenic	6.2	3.0	EPA 200.8		9-3-25	
Cadmium	ND	4.0	EPA 200.8		9-3-25	
Chromium	ND	10	EPA 200.8		9-3-25	
Lead	ND	1.0	EPA 200.8		9-3-25	
Manganese	56	10	EPA 200.8		9-3-25	
Mercury	ND	0.025	EPA 7470A		9-8-25	

Client ID: MW-2A-082725						
Laboratory ID: 08-357-02						
Arsenic	5.3	3.0	EPA 200.8		9-3-25	
Cadmium	ND	4.0	EPA 200.8		9-3-25	
Chromium	ND	10	EPA 200.8		9-3-25	
Lead	ND	1.0	EPA 200.8		9-3-25	
Manganese	89	10	EPA 200.8		9-3-25	
Mercury	ND	0.025	EPA 7470A		9-8-25	

Client ID: MW-3-082525						
Laboratory ID: 08-357-03						
Arsenic	ND	3.0	EPA 200.8		9-3-25	
Cadmium	ND	4.0	EPA 200.8		9-3-25	
Chromium	ND	10	EPA 200.8		9-3-25	
Lead	ND	1.0	EPA 200.8		9-3-25	
Manganese	52	10	EPA 200.8		9-3-25	
Mercury	ND	0.025	EPA 7470A		9-8-25	

Client ID: MW-4-082725						
Laboratory ID: 08-357-04						
Arsenic	ND	3.3	EPA 200.8		9-3-25	
Cadmium	ND	4.4	EPA 200.8		9-3-25	
Chromium	ND	11	EPA 200.8		9-3-25	
Lead	ND	1.1	EPA 200.8		9-3-25	
Manganese	3000	280	EPA 200.8		9-3-25	
Mercury	ND	0.025	EPA 7470A		9-8-25	



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 Laboratory Reference: 2508-357
 Project: 5147-024-14

DISSOLVED METALS
EPA 200.8/7470A

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: MW-8-082625						
Laboratory ID: 08-357-05						
Arsenic	4.9	3.0	EPA 200.8		9-3-25	
Cadmium	ND	4.0	EPA 200.8		9-3-25	
Chromium	ND	10	EPA 200.8		9-3-25	
Lead	ND	1.0	EPA 200.8		9-3-25	
Manganese	1900	250	EPA 200.8		9-3-25	
Mercury	ND	0.025	EPA 7470A		9-8-25	

Client ID: MW-13-082725						
Laboratory ID: 08-357-06						
Arsenic	ND	3.0	EPA 200.8		9-3-25	
Cadmium	ND	4.0	EPA 200.8		9-3-25	
Chromium	ND	10	EPA 200.8		9-3-25	
Lead	ND	1.0	EPA 200.8		9-3-25	
Manganese	99	10	EPA 200.8		9-3-25	
Mercury	ND	0.025	EPA 7470A		9-8-25	

Client ID: MW-14-082525						
Laboratory ID: 08-357-07						
Arsenic	4.9	3.0	EPA 200.8		9-3-25	
Cadmium	ND	4.0	EPA 200.8		9-3-25	
Chromium	ND	10	EPA 200.8		9-3-25	
Lead	ND	1.0	EPA 200.8		9-3-25	
Manganese	11	10	EPA 200.8		9-3-25	
Mercury	ND	0.025	EPA 7470A		9-8-25	

Client ID: MW-15-082625						
Laboratory ID: 08-357-08						
Arsenic	10	3.0	EPA 200.8		9-3-25	
Cadmium	ND	4.0	EPA 200.8		9-3-25	
Chromium	ND	10	EPA 200.8		9-3-25	
Lead	ND	1.0	EPA 200.8		9-3-25	
Manganese	5600	500	EPA 200.8		9-3-25	
Mercury	ND	0.025	EPA 7470A		9-8-25	



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DISSOLVED METALS
EPA 200.8/7470A

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: MW-DUP-082625						
Laboratory ID: 08-357-09						
Arsenic	5.7	3.0	EPA 200.8		9-3-25	
Cadmium	ND	4.0	EPA 200.8		9-3-25	
Chromium	ND	10	EPA 200.8		9-3-25	
Lead	ND	1.0	EPA 200.8		9-3-25	
Manganese	2000	250	EPA 200.8		9-3-25	
Mercury	ND	0.025	EPA 7470A		9-8-25	



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TOTAL ALKALINITY
SM 2320B

Matrix: Water
 Units: mg CaCO₃/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-1A-082725					
Laboratory ID:	08-357-01					
Total Alkalinity	190	2.0	SM 2320B	9-3-25	9-3-25	

Client ID:	MW-2A-082725					
Laboratory ID:	08-357-02					
Total Alkalinity	210	2.0	SM 2320B	9-3-25	9-3-25	

Client ID:	MW-3-082525					
Laboratory ID:	08-357-03					
Total Alkalinity	150	2.0	SM 2320B	9-3-25	9-3-25	

Client ID:	MW-4-082725					
Laboratory ID:	08-357-04					
Total Alkalinity	320	2.0	SM 2320B	9-3-25	9-3-25	

Client ID:	MW-8-082625					
Laboratory ID:	08-357-05					
Total Alkalinity	210	2.0	SM 2320B	9-3-25	9-3-25	

Client ID:	MW-13-082725					
Laboratory ID:	08-357-06					
Total Alkalinity	240	2.0	SM 2320B	9-3-25	9-3-25	

Client ID:	MW-14-082525					
Laboratory ID:	08-357-07					
Total Alkalinity	150	2.0	SM 2320B	9-3-25	9-3-25	

Client ID:	MW-15-082625					
Laboratory ID:	08-357-08					
Total Alkalinity	470	2.0	SM 2320B	9-3-25	9-3-25	

Client ID:	MW-DUP-082625					
Laboratory ID:	08-357-09					
Total Alkalinity	220	2.0	SM 2320B	9-3-25	9-3-25	



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**DISSOLVED GASES
RSK 175**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: MW-1A-082725						
Laboratory ID:	08-357-01					
Methane	16	0.55	RSK 175	8-29-25	8-29-25	
Surrogate:	Percent Recovery	Control Limits				
1-Butene	135	50-150				
Client ID: MW-2A-082725						
Laboratory ID:	08-357-02					
Methane	30	0.55	RSK 175	8-29-25	8-29-25	
Surrogate:	Percent Recovery	Control Limits				
1-Butene	138	50-150				
Client ID: MW-3-082525						
Laboratory ID:	08-357-03					
Methane	34	0.55	RSK 175	8-29-25	8-29-25	
Surrogate:	Percent Recovery	Control Limits				
1-Butene	137	50-150				
Client ID: MW-4-082725						
Laboratory ID:	08-357-04					
Methane	1400	11	RSK 175	8-29-25	8-29-25	
Surrogate:	Percent Recovery	Control Limits				
1-Butene	140	50-150				
Client ID: MW-8-082625						
Laboratory ID:	08-357-05					
Methane	270	2.8	RSK 175	8-29-25	8-29-25	
Surrogate:	Percent Recovery	Control Limits				
1-Butene	150	50-150				
Client ID: MW-13-082725						
Laboratory ID:	08-357-06					
Methane	230	2.8	RSK 175	8-29-25	8-29-25	
Surrogate:	Percent Recovery	Control Limits				
1-Butene	140	50-150				



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DISSOLVED GASES
RSK 175

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-14-082525					
Laboratory ID:	08-357-07					
Methane	9.0	0.55	RSK 175	8-29-25	8-29-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>1-Butene</i>	<i>141</i>	<i>50-150</i>				
Client ID:	MW-15-082625					
Laboratory ID:	08-357-08					
Methane	3200	33	RSK 175	8-29-25	8-29-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>1-Butene</i>	<i>128</i>	<i>50-150</i>				
Client ID:	MW-DUP-082625					
Laboratory ID:	08-357-09					
Methane	370	2.8	RSK 175	8-29-25	8-29-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>1-Butene</i>	<i>137</i>	<i>50-150</i>				



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**GASOLINE RANGE ORGANICS
 NWTPH-Gx
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0829W2					
Gasoline	ND	100	NWTPH-Gx	8-29-25	8-29-25	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	100	62-122				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	08-357-01							
	ORIG	DUP						
Gasoline	ND	ND	NA	NA	NA	NA	NA	30
Surrogate:								
Fluorobenzene				97	85	62-122		



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NWTPH-Gx
CONTINUING CALIBRATION SUMMARY

Lab ID	True Value (ppm)	Calc. Value	Percent Difference	Control Limits
CCVH0829G-1	5.00	5.45	-9	+/- 20%
CCVH0829G-2	5.00	5.10	-2	+/- 20%



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**DIESEL AND HEAVY OIL RANGE ORGANICS
 NWTPH-Dx
 QUALITY CONTROL**

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0902W1					
Diesel Range Organics	ND	0.16	NWTPH-Dx	9-2-25	9-2-25	
Lube Oil Range Organics	ND	0.16	NWTPH-Dx	9-2-25	9-2-25	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	96	50-150				
Laboratory ID:	MB0902W1					
Diesel Range Organics	ND	0.16	NWTPH-Dx	9-2-25	9-2-25	X2
Lube Oil Range Organics	ND	0.16	NWTPH-Dx	9-2-25	9-2-25	X2
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	107	50-150				

Analyte	Result		Spike Level		Source Result	Percent Recovery	Recovery Limits	RPD	Limit	Flags
DUPLICATE										
Laboratory ID:	08-357-01									
	ORIG	DUP								
Diesel Range	ND	ND	NA	NA		NA	NA	NA	40	
Lube Oil Range Organics	0.247	0.206	NA	NA		NA	NA	18	40	
Surrogate:										
o-Terphenyl						103	86	50-150		
Laboratory ID: 08-357-01										
	ORIG	DUP								
Diesel Range	ND	ND	NA	NA		NA	NA	NA	40	X2
Lube Oil Range	ND	ND	NA	NA		NA	NA	NA	40	X2
Surrogate:										
o-Terphenyl						95	106	50-150		



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**NWTPH-Dx
 CONTINUING CALIBRATION SUMMARY**

Lab ID	True Value (ppm)	Calc. Value	Percent Difference	Control Limits
CCV0902F-T2	100	107.5	-7.5	+/-15%
CCV0902F-T3	100	103.8	-3.8	+/-15%
CCV0902F-T4	100	107.2	-7.2	+/-15%
CCV0902R-T2	100	104.3	-4.3	+/-15%
CCV0902R-T3	100	106.6	-6.6	+/-15%
CCV0902R-T4	100	107.4	-7.4	+/-15%



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**VOLATILE ORGANICS EPA 8260D
 QUALITY CONTROL**

Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0904W1					
Methyl t-Butyl Ether	ND	0.20	EPA 8260D	9-4-25	9-4-25	
n-Hexane	ND	1.0	EPA 8260D	9-3-25	9-3-25	
Benzene	ND	0.20	EPA 8260D	9-4-25	9-4-25	
1,2-Dichloroethane	ND	0.20	EPA 8260D	9-4-25	9-4-25	
Toluene	ND	1.0	EPA 8260D	9-4-25	9-4-25	
1,2-Dibromoethane	ND	0.20	EPA 8260D	9-4-25	9-4-25	
Ethylbenzene	ND	0.20	EPA 8260D	9-4-25	9-4-25	
m,p-Xylene	ND	0.40	EPA 8260D	9-4-25	9-4-25	
o-Xylene	ND	0.20	EPA 8260D	9-4-25	9-4-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>104</i>	<i>68-133</i>				
<i>Toluene-d8</i>	<i>96</i>	<i>79-123</i>				
<i>4-Bromofluorobenzene</i>	<i>99</i>	<i>78-117</i>				

Analyte	Result		Spike Level		Percent		Recovery		RPD	
					Recovery		Limits		RPD	Limit
SPIKE BLANKS										
Laboratory ID:	SB0904W2									
	SB	SBD	SB	SBD	SB	SBD				
Methyl t-Butyl Ether	10.6	10.2	10.0	10.0	106	102	73-129	4	15	
Benzene	9.99	9.82	10.0	10.0	100	98	75-126	2	15	
1,2-Dichloroethane	9.81	9.60	10.0	10.0	98	96	74-128	2	15	
Toluene	9.63	9.52	10.0	10.0	96	95	75-127	1	15	
1,2-Dibromoethane	10.6	9.80	10.0	10.0	106	98	82-127	8	15	
Ethylbenzene	9.84	9.73	10.0	10.0	98	97	80-124	1	15	
m,p-Xylene	20.3	19.4	20.0	20.0	102	97	80-124	5	15	
o-Xylene	10.1	9.52	10.0	10.0	101	95	80-123	6	15	
Surrogate:										
Dibromofluoromethane					100	103	68-133			
Toluene-d8					99	100	79-123			
4-Bromofluorobenzene					103	104	78-117			



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**TOTAL METALS
 EPA 200.8/7470A
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0903WM1					
Arsenic	ND	3.3	EPA 200.8	9-3-25	9-3-25	
Cadmium	ND	4.4	EPA 200.8	9-3-25	9-3-25	
Chromium	ND	11	EPA 200.8	9-3-25	9-3-25	
Lead	ND	1.1	EPA 200.8	9-3-25	9-3-25	

Laboratory ID:	MB0908W1					
Mercury	ND	0.025	EPA 7470A	9-8-25	9-8-25	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	08-333-08							
	ORIG	DUP						
Arsenic	ND	ND	NA	NA	NA	NA	NA	20
Cadmium	ND	ND	NA	NA	NA	NA	NA	20
Chromium	ND	ND	NA	NA	NA	NA	NA	20
Lead	ND	ND	NA	NA	NA	NA	NA	20

Laboratory ID:	08-357-01							
Mercury	ND	ND	NA	NA	NA	NA	NA	20

MATRIX SPIKES

Laboratory ID:	08-333-08									
	MS	MSD	MS	MSD		MS	MSD			
Arsenic	113	120	111	111	ND	101	108	75-125	6	20
Cadmium	104	111	111	111	ND	94	100	75-125	7	20
Chromium	105	113	111	111	ND	94	101	75-125	7	20
Lead	105	113	111	111	ND	94	102	75-125	7	20

Laboratory ID:	08-357-01									
Mercury	5.73	5.53	6.25	6.25	ND	92	88	75-125	4	20



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**TOTAL METALS
 EPA 200.8/7470A
 CONTINUING CALIBRATION SUMMARY**

Analyte	Lab ID	True Value (ppb)	Calc. Value	Percent Difference	Control Limits
Arsenic	ICV090325Y	50.0	50.2	-0.40	+/- 10%
Cadmium	ICV090325Y	50.0	49.8	0.40	+/- 10%
Chromium	ICV090325Y	50.0	50.7	-1.4	+/- 10%
Lead	ICV090325Y	50.0	50.4	-0.80	+/- 10%
Mercury	ICV090825I	2.50	2.49	0.40	+/- 10%
Arsenic	CCV1090325Y	40.0	39.7	0.75	+/- 10%
Cadmium	CCV1090325Y	40.0	39.6	1.0	+/- 10%
Chromium	CCV1090325Y	40.0	39.8	0.50	+/- 10%
Lead	CCV1090325Y	40.0	40.3	-0.75	+/- 10%
Mercury	CCV1090825I	2.50	2.52	-0.80	+/- 20%
Arsenic	CCV1090325Y	20.0	20.3	-1.5	+/- 10%
Cadmium	CCV1090325Y	20.0	20.3	-1.5	+/- 10%
Chromium	CCV1090325Y	20.0	20.6	-3.0	+/- 10%
Lead	CCV1090325Y	20.0	20.3	-1.5	+/- 10%
Arsenic	CCV2090325Y	40.0	39.0	2.5	+/- 10%
Cadmium	CCV2090325Y	40.0	38.9	2.8	+/- 10%
Chromium	CCV2090325Y	40.0	39.4	1.5	+/- 10%
Lead	CCV2090325Y	40.0	40.0	0	+/- 10%
Mercury	CCV2090825I	2.50	2.48	0.80	+/- 20%
Arsenic	CCV2090325Y	20.0	19.8	1.0	+/- 10%
Cadmium	CCV2090325Y	20.0	19.5	2.5	+/- 10%
Chromium	CCV2090325Y	20.0	20.3	-1.5	+/- 10%
Lead	CCV2090325Y	20.0	20.4	-2.0	+/- 10%
Arsenic	CCV3090325Y	40.0	39.0	2.5	+/- 10%
Cadmium	CCV3090325Y	40.0	38.2	4.5	+/- 10%
Chromium	CCV3090325Y	40.0	39.0	2.5	+/- 10%
Lead	CCV3090325Y	40.0	40.4	-1.0	+/- 10%
Mercury	CCV3090825I	2.50	2.49	0.40	+/- 20%
Arsenic	CCV3090325Y	20.0	19.9	0.50	+/- 10%
Cadmium	CCV3090325Y	20.0	19.7	1.5	+/- 10%
Chromium	CCV3090325Y	20.0	19.9	0.50	+/- 10%
Lead	CCV3090325Y	20.0	20.6	-3.0	+/- 10%



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**TOTAL METALS
 EPA 200.8/7470A
 CONTINUING CALIBRATION SUMMARY**

Analyte	Lab ID	True Value (ppb)	Calc. Value	Percent Difference	Control Limits
Arsenic	CCV4090325Y	40.0	39.1	2.3	+/- 10%
Cadmium	CCV4090325Y	40.0	38.1	4.8	+/- 10%
Chromium	CCV4090325Y	40.0	39.0	2.5	+/- 10%
Lead	CCV4090325Y	40.0	40.5	-1.3	+/- 10%
Mercury	CCV4090825I	2.50	2.42	3.2	+/- 20%
Arsenic	CCV4090325Y	20.0	19.9	0.50	+/- 10%
Cadmium	CCV4090325Y	20.0	19.0	5.0	+/- 10%
Chromium	CCV4090325Y	20.0	19.9	0.50	+/- 10%
Lead	CCV4090325Y	20.0	20.5	-2.5	+/- 10%
Arsenic	CCV5090325Y	40.0	38.3	4.3	+/- 10%
Cadmium	CCV5090325Y	40.0	37.8	5.5	+/- 10%
Chromium	CCV5090325Y	40.0	38.3	4.3	+/- 10%
Lead	CCV5090325Y	40.0	39.7	0.75	+/- 10%
Arsenic	CCV5090325Y	20.0	19.6	2.0	+/- 10%
Cadmium	CCV5090325Y	20.0	19.3	3.5	+/- 10%
Chromium	CCV5090325Y	20.0	19.5	2.5	+/- 10%
Lead	CCV5090325Y	20.0	20.2	-1.0	+/- 10%



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**DISSOLVED METALS
 EPA 200.8/7470A
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0903D1					
Arsenic	ND	3.0	EPA 200.8		9-3-25	
Cadmium	ND	4.0	EPA 200.8		9-3-25	
Chromium	ND	10	EPA 200.8		9-3-25	
Lead	ND	1.0	EPA 200.8		9-3-25	
Manganese	ND	10	EPA 200.8		9-3-25	
Laboratory ID:	MB0908D1					
Mercury	ND	0.025	EPA 7470A		9-8-25	
Laboratory ID:	MB0903WM1					
Arsenic	ND	3.3	EPA 200.8	9-3-25	9-3-25	
Cadmium	ND	4.4	EPA 200.8	9-3-25	9-3-25	
Chromium	ND	11	EPA 200.8	9-3-25	9-3-25	
Lead	ND	1.1	EPA 200.8	9-3-25	9-3-25	
Manganese	ND	11	EPA 200.8	9-3-25	9-3-25	



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**DISSOLVED METALS
 EPA 200.8/7470A
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	08-357-03							
	ORIG	DUP						
Arsenic	ND	ND	NA	NA	NA	NA	NA	20
Cadmium	ND	ND	NA	NA	NA	NA	NA	20
Chromium	ND	ND	NA	NA	NA	NA	NA	20
Lead	ND	ND	NA	NA	NA	NA	NA	20
Manganese	52.2	56.8	NA	NA	NA	NA	8	20

Laboratory ID:	08-357-01							
Mercury	ND	ND	NA	NA	NA	NA	NA	20

Laboratory ID:	08-333-08							
	ORIG	DUP						
Arsenic	ND	ND	NA	NA	NA	NA	NA	20
Cadmium	ND	ND	NA	NA	NA	NA	NA	20
Chromium	ND	ND	NA	NA	NA	NA	NA	20
Lead	ND	ND	NA	NA	NA	NA	NA	20
Manganese	168	155	NA	NA	NA	NA	8	20

MATRIX SPIKES

Laboratory ID:	08-357-03									
	MS	MSD	MS	MSD		MS	MSD			
Arsenic	79.4	80.2	80.0	80.0	ND	99	100	75-125	1	20
Cadmium	74.2	74.8	80.0	80.0	ND	93	93	75-125	1	20
Chromium	75.9	76.2	80.0	80.0	ND	95	95	75-125	0	20
Lead	73.2	75.3	80.0	80.0	ND	92	94	75-125	3	20
Manganese	120	121	80.0	80.0	52.2	85	86	75-125	1	20

Laboratory ID:	08-357-01									
Mercury	6.08	6.08	6.25	6.25	ND	97	97	75-125	0	20

Laboratory ID:	08-333-08									
	MS	MSD	MS	MSD		MS	MSD			
Arsenic	113	120	111	111	ND	101	108	75-125	6	20
Cadmium	104	111	111	111	ND	94	100	75-125	7	20
Chromium	105	113	111	111	ND	94	101	75-125	7	20
Lead	105	113	111	111	ND	94	102	75-125	7	20
Manganese	278	277	111	111	168	100	98	75-125	0	20



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**DISSOLVED METALS
 EPA 200.8/7470A
 CONTINUING CALIBRATION SUMMARY**

Analyte	Lab ID	True Value (ppb)	Calc. Value	Percent Difference	Control Limits
Arsenic	ICV090325Y	50.0	50.2	-0.40	+/- 10%
Cadmium	ICV090325Y	50.0	49.8	0.40	+/- 10%
Chromium	ICV090325Y	50.0	50.7	-1.4	+/- 10%
Lead	ICV090325Y	50.0	50.4	-0.80	+/- 10%
Manganese	ICV090325Y	50.0	53.3	-6.60	+/- 10%
Mercury	ICV090825I	2.50	2.49	0.40	+/- 10%
Arsenic	CCV1090325Y	40.0	39.7	0.75	+/- 10%
Cadmium	CCV1090325Y	40.0	39.6	1.0	+/- 10%
Chromium	CCV1090325Y	40.0	39.8	0.50	+/- 10%
Lead	CCV1090325Y	40.0	40.3	-0.75	+/- 10%
Manganese	CCV1090325Y	40.0	38.8	3.00	+/- 10%
Mercury	CCV1090825I	2.50	2.52	-0.80	+/- 20%
Arsenic	CCV1090325Y	20.0	20.3	-1.5	+/- 10%
Cadmium	CCV1090325Y	20.0	20.3	-1.5	+/- 10%
Chromium	CCV1090325Y	20.0	20.6	-3.0	+/- 10%
Lead	CCV1090325Y	20.0	20.3	-1.5	+/- 10%
Manganese	CCV1090325Y	20.0	19.3	3.5	+/- 10%
Arsenic	CCV2090325Y	40.0	39.0	2.5	+/- 10%
Cadmium	CCV2090325Y	40.0	38.9	2.8	+/- 10%
Chromium	CCV2090325Y	40.0	39.4	1.5	+/- 10%
Lead	CCV2090325Y	40.0	40.0	0	+/- 10%
Manganese	CCV2090325Y	40.0	40.5	-1	+/- 10%
Mercury	CCV2090825I	2.50	2.48	0.80	+/- 20%
Arsenic	CCV2090325Y	20.0	19.8	1.0	+/- 10%
Cadmium	CCV2090325Y	20.0	19.5	2.5	+/- 10%
Chromium	CCV2090325Y	20.0	20.3	-1.5	+/- 10%
Lead	CCV2090325Y	20.0	20.4	-2.0	+/- 10%
Manganese	CCV2090325Y	20.0	20.6	-3.0	+/- 10%
Arsenic	CCV3090325Y	40.0	39.0	2.5	+/- 10%
Cadmium	CCV3090325Y	40.0	38.2	4.5	+/- 10%
Chromium	CCV3090325Y	40.0	39.0	2.5	+/- 10%
Lead	CCV3090325Y	40.0	40.4	-1.0	+/- 10%
Manganese	CCV3090325Y	40.0	40.9	-2.3	+/- 10%
Mercury	CCV3090825I	2.50	2.49	0.40	+/- 20%



Date of Report: September 9, 2025
 Samples Submitted: August 27, 2025
 Laboratory Reference: 2508-357
 Project: 5147-024-14

**DISSOLVED METALS
 EPA 200.8/7470A
 CONTINUING CALIBRATION SUMMARY**

Analyte	Lab ID	True Value (ppb)	Calc. Value	Percent Difference	Control Limits
Arsenic	CCV3090325Y	20.0	19.9	0.50	+/- 10%
Cadmium	CCV3090325Y	20.0	19.7	1.5	+/- 10%
Chromium	CCV3090325Y	20.0	19.9	0.50	+/- 10%
Lead	CCV3090325Y	20.0	20.6	-3.0	+/- 10%
Manganese	CCV3090325Y	20.0	20.5	-2.5	+/- 10%
Arsenic	CCV4090325Y	40.0	39.1	2.3	+/- 10%
Cadmium	CCV4090325Y	40.0	38.1	4.8	+/- 10%
Chromium	CCV4090325Y	40.0	39.0	2.5	+/- 10%
Lead	CCV4090325Y	40.0	40.5	-1.3	+/- 10%
Manganese	CCV4090325Y	40.0	40.3	-0.75	+/- 10%
Mercury	CCV4090825I	2.50	2.42	3.2	+/- 20%
Arsenic	CCV4090325Y	20.0	19.9	0.50	+/- 10%
Cadmium	CCV4090325Y	20.0	19.0	5.0	+/- 10%
Chromium	CCV4090325Y	20.0	19.9	0.50	+/- 10%
Lead	CCV4090325Y	20.0	20.5	-2.5	+/- 10%
Manganese	CCV4090325Y	20.0	20.6	-3.0	+/- 10%
Arsenic	CCV5090325Y	40.0	38.3	4.3	+/- 10%
Cadmium	CCV5090325Y	40.0	37.8	5.5	+/- 10%
Chromium	CCV5090325Y	40.0	38.3	4.3	+/- 10%
Lead	CCV5090325Y	40.0	39.7	0.75	+/- 10%
Arsenic	CCV5090325Y	20.0	19.6	2.0	+/- 10%
Cadmium	CCV5090325Y	20.0	19.3	3.5	+/- 10%
Chromium	CCV5090325Y	20.0	19.5	2.5	+/- 10%
Lead	CCV5090325Y	20.0	20.2	-1.0	+/- 10%



Date of Report: September 9, 2025
 Samples Submitted: August 27, 2025
 Laboratory Reference: 2508-357
 Project: 5147-024-14

**TOTAL ALKALINITY
 SM 2320B
 QUALITY CONTROL**

Matrix: Water
 Units: mg CaCO₃/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0903W1					
Total Alkalinity	ND	2.0	SM 2320B	9-3-25	9-3-25	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	08-357-01							
	ORIG	DUP						
Total Alkalinity	192	192	NA	NA	NA	NA	0	10

SPIKE BLANK								
Laboratory ID:	SB0903W1							
	SB	SB		SB				
Total Alkalinity	100	100	NA	100	81-104	NA	NA	



Date of Report: September 9, 2025
 Samples Submitted: August 27, 2025
 Laboratory Reference: 2508-357
 Project: 5147-024-14

**DISSOLVED GASES
 RSK 175
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0829W1					
Methane	ND	0.55	RSK 175	8-29-25	8-29-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>1-Butene</i>	123	50-150				

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits		RPD	RPD Limit	Flags
					Recovery		Limits				
SPIKE BLANK											
Laboratory ID:	SB0829W1										
	SB	SBD	SB	SBD	SB	SBD					
Methane	38.5	35.4	44.2	44.2	87	80	75-125	8		25	
Surrogate:											
1-Butene					107	96	50-150				



Date of Report: September 9, 2025
 Samples Submitted: August 27, 2025
 Laboratory Reference: 2508-357
 Project: 5147-024-14

**DISSOLVED GASES
 RSK 175
 CONTINUING CALIBRATION SUMMARY**

Analyte	Lab ID	True Value (ppm)	Calc. Value	Percent Difference	Control Limits
Methane	CCV0829DG-L1	500	500	0.0	+/- 15%
Ethane	CCV0829DG-L1	500	503	-0.7	+/- 15%
Ethene	CCV0829DG-L1	500	474	5.3	+/- 15%
Methane	CCV0829DG-L3	500	511	-2.2	+/- 15%
Ethane	CCV0829DG-L3	500	507	-1.4	+/- 15%
Ethene	CCV0829DG-L3	500	481	3.8	+/- 15%





Data Qualifiers and Abbreviations

- A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.
- B - The analyte indicated was also found in the blank sample.
- C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.
- E - The value reported exceeds the quantitation range and is an estimate.
- F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.
- H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.
- I - Compound recovery is outside of the control limits.
- J - The value reported was below the practical quantitation limit. The value is an estimate.
- K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.
- L - The RPD is outside of the control limits.
- M - Hydrocarbons in the gasoline range are impacting the diesel range result.
- M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.
- N - Hydrocarbons in the lube oil range are impacting the diesel range result.
- N1 - Hydrocarbons in diesel range are impacting lube oil range results.
- O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.
- P - The RPD of the detected concentrations between the two columns is greater than 40.
- Q - Surrogate recovery is outside of the control limits.
- S - Surrogate recovery data is not available due to the necessary dilution of the sample.
- T - The sample chromatogram is not similar to a typical _____.
- U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- U1 - The practical quantitation limit is elevated due to interferences present in the sample.
- V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.
- W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.
- X - Sample extract treated with a mercury cleanup procedure.
- X1 - Sample extract treated with a sulfuric acid/silica gel cleanup procedure.
- X2 - Sample extract treated with a silica gel cleanup procedure.
- Y - The calibration verification for this analyte exceeded the 20% drift specified in methods 8260 & 8270, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.
- Y1 - Negative effects of the matrix from this sample on the instrument caused values for this analyte in the bracketing continuing calibration verification standard (CCVs) to be outside of 20% acceptance criteria. Because of this, quantitation limits and sample concentrations should be considered estimates.
- Z -
- ND - Not Detected at PQL
- PQL - Practical Quantitation Limit
- RPD - Relative Percent Difference





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OnSite Environmental Inc

David Baumeister

14648 NE 95th Street

Redmond, WA 98052

RE: POA - Quietcove GWM Qrt 4, 5147-024-14

Work Order Number: 2508478

August 29, 2025

Attention David Baumeister:

Alliance Technical Group, LLC - Seattle received 2 sample(s) on 8/25/2025 for the analyses presented in the following report.

Ferrous Iron by SM3500-Fe B

Ion Chromatography by EPA 300.0

All analyses were performed according to our accredited Quality Assurance program. Please contact the laboratory if you should have any questions about the results.

Alliance Technical Group is committed to accuracy, speed, and customer service. Thank you for choosing Alliance Technical Group's Seattle laboratory team for your analytical needs. We appreciate this opportunity to serve you!

Sincerely,

A handwritten signature in black ink, appearing to read "LR", is positioned above the printed name of the sender.

Lyann Rivera

Project Manager

*DoD-ELAP Accreditation #79636 by PJLA, ISO/IEC 17025:2017 and QSM 5.4 for Environmental Testing
ORELAP Certification: WA 100009 (NELAP Recognized) for Environmental Testing
Washington State Department of Ecology Accredited for Environmental Testing, Lab ID C910*

Original



www.fremontanalytical.com

CLIENT: OnSite Environmental Inc
Project: POA - Quietcove GWM Qrt 4
Work Order: 2508478

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2508478-001	MW-3-082525	08/25/2025 1:25 PM	08/25/2025 3:24 PM
2508478-002	MW-14-082525	08/25/2025 11:50 AM	08/26/2025 10:36 AM
2508478-002	MW-14-082525	08/25/2025 11:50 AM	08/25/2025 3:24 PM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

CLIENT: OnSite Environmental Inc
Project: POA - Quietcove GWM Qrt 4

I. SAMPLE RECEIPT:

Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:

Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Qualifiers:

- * - Flagged value is not within established control limits
- B - Analyte detected in the associated Method Blank
- D - Dilution was required
- E - Value above quantitation range
- H - Holding times for preparation or analysis exceeded
- I - Analyte with an internal standard that does not meet established acceptance criteria
- J - Analyte detected below Reporting Limit
- N - Tentatively Identified Compound (TIC)
- Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria
- S - Spike recovery outside accepted recovery limits
- ND - Not detected at the Reporting Limit
- R - High relative percent difference observed

Acronyms:

- %Rec - Percent Recovery
- CCB - Continued Calibration Blank
- CCV - Continued Calibration Verification
- DF - Dilution Factor
- DUP - Sample Duplicate
- HEM - Hexane Extractable Material
- ICV - Initial Calibration Verification
- LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
- MCL - Maximum Contaminant Level
- MB or MBLANK - Method Blank
- MDL - Method Detection Limit
- MS/MSD - Matrix Spike / Matrix Spike Duplicate
- PDS - Post Digestion Spike
- Ref Val - Reference Value
- REP - Sample Replicate
- RL - Reporting Limit
- RPD - Relative Percent Difference
- SD - Serial Dilution
- SGT - Silica Gel Treatment
- SPK - Spike
- Surr - Surrogate

CLIENT: OnSite Environmental Inc
Project: POA - Quietcove GWM Qrt 4

Lab ID: 2508478-001

Collection Date: 8/25/2025 1:25:00 PM

Client Sample ID: MW-3-082525

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Ion Chromatography by EPA 300.0

Batch ID: 48958 Analyst: SS

Nitrate (as N)	1.18	0.150		mg/L	1	8/25/2025 10:22:00 PM
Sulfate	18.6	1.00		mg/L	1	8/25/2025 10:22:00 PM

Ferrous Iron by SM3500-Fe B

Batch ID: R10238 Analyst: SLL

Ferrous Iron	0.461	0.150		mg/L	1	8/26/2025 8:35:07 AM
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Lab ID: 2508478-002

Collection Date: 8/25/2025 11:50:00 AM

Client Sample ID: MW-14-082525

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Ion Chromatography by EPA 300.0

Batch ID: 48977 Analyst: BB

Nitrate (as N)	0.292	0.150		mg/L	1	8/26/2025 7:30:00 PM
Sulfate	10.6	1.00		mg/L	1	8/26/2025 7:30:00 PM

Ferrous Iron by SM3500-Fe B

Batch ID: R10238 Analyst: SLL

Ferrous Iron	ND	0.150		mg/L	1	8/26/2025 8:35:07 AM
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Work Order: 2508478
CLIENT: OnSite Environmental Inc
Project: POA - Quietcove GWM Qrt 4

QC SUMMARY REPORT

Ferrous Iron by SM3500-Fe B

Sample ID: MB-R102381		SampType: MBLK			Units: mg/L		Prep Date: 8/26/2025			RunNo: 102381		
Client ID: MBLKW		Batch ID: R102381						Analysis Date: 8/26/2025			SeqNo: 2135781	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Ferrous Iron ND 0.150

Sample ID: LCS-R102381		SampType: LCS			Units: mg/L		Prep Date: 8/26/2025			RunNo: 102381		
Client ID: LCSW		Batch ID: R102381			Analysis Date: 8/26/2025			SeqNo: 2135782				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Ferrous Iron 0.457 0.150 0.4000 0 114 85 115

Sample ID: 2508478-001ADUP		SampType: DUP			Units: mg/L		Prep Date: 8/26/2025			RunNo: 102381		
Client ID: MW-3-082525		Batch ID: R102381			Analysis Date: 8/26/2025			SeqNo: 2135784				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Ferrous Iron 0.440 0.150 0.4607 4.57 20

Sample ID: 2508478-001AMS		SampType: MS			Units: mg/L		Prep Date: 8/26/2025			RunNo: 102381		
Client ID: MW-3-082525		Batch ID: R102381			Analysis Date: 8/26/2025			SeqNo: 2135785				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Ferrous Iron 1.17 0.150 0.4000 0.4607 176 70 130 S

NOTES:

S - Outlying spike recovery observed. A duplicate analysis was performed with similar results indicating a possible matrix effect.

Sample ID: 2508478-001AMSD		SampType: MSD			Units: mg/L		Prep Date: 8/26/2025			RunNo: 102381		
Client ID: MW-3-082525		Batch ID: R102381			Analysis Date: 8/26/2025			SeqNo: 2135786				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Ferrous Iron 1.03 0.150 0.4000 0.4607 141 70 130 1.165 12.8 30 S

NOTES:

S - Outlying spike recovery observed. A duplicate analysis was performed with similar results indicating a possible matrix effect.

Work Order: 2508478
CLIENT: OnSite Environmental Inc
Project: POA - Quietcove GWM Qrt 4

QC SUMMARY REPORT

Ion Chromatography by EPA 300.0

Sample ID: LCS-48958		SampType: LCS			Units: mg/L		Prep Date: 8/25/2025			RunNo: 102383		
Client ID: LCSW		Batch ID: 48958			Analysis Date: 8/25/2025			SeqNo: 2136214				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Nitrate (as N)	2.27	0.150	2.259	0	100	90	110				
Sulfate	9.93	1.00	10.00	0	99.3	90	110				

Sample ID: MB-48958		SampType: MBLK			Units: mg/L		Prep Date: 8/25/2025			RunNo: 102383		
Client ID: MBLKW		Batch ID: 48958			Analysis Date: 8/25/2025			SeqNo: 2136216				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Nitrate (as N)	ND	0.150									
Sulfate	ND	1.00									

Sample ID: 2508462-001ADUP		SampType: DUP			Units: mg/L		Prep Date: 8/25/2025			RunNo: 102383		
Client ID: BATCH		Batch ID: 48958			Analysis Date: 8/25/2025			SeqNo: 2136219				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Nitrate (as N)	1.16	0.150						1.164	0.517	20	
Sulfate	3.19	1.00						3.240	1.52	20	

Sample ID: 2508462-001AMS		SampType: MS			Units: mg/L		Prep Date: 8/25/2025			RunNo: 102383		
Client ID: BATCH		Batch ID: 48958			Analysis Date: 8/25/2025			SeqNo: 2136220				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Nitrate (as N)	3.55	0.150	2.259	1.164	106	80	120				
Sulfate	13.0	1.00	10.00	3.240	98.0	80	120				

Sample ID: 2508462-001AMSD		SampType: MSD			Units: mg/L		Prep Date: 8/25/2025			RunNo: 102383		
Client ID: BATCH		Batch ID: 48958			Analysis Date: 8/25/2025			SeqNo: 2136221				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Nitrate (as N)	3.64	0.150	2.259	1.164	110	80	120	3.548	2.67	20	
Sulfate	13.4	1.00	10.00	3.240	102	80	120	13.04	2.99	20	

Work Order: 2508478
CLIENT: OnSite Environmental Inc
Project: POA - Quietcove GWM Qrt 4

QC SUMMARY REPORT

Ion Chromatography by EPA 300.0

Sample ID: 2508462-001AMSD	SampType: MSD	Units: mg/L			Prep Date: 8/25/2025	RunNo: 102383
Client ID: BATCH	Batch ID: 48958				Analysis Date: 8/25/2025	SeqNo: 2136221
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual

Sample ID: 2508373-010BDUP	SampType: DUP	Units: mg/L			Prep Date: 8/25/2025	RunNo: 102383
Client ID: BATCH	Batch ID: 48958				Analysis Date: 8/26/2025	SeqNo: 2136238
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual

Nitrate (as N)	0.204	0.150				0.2010	1.48	20
Sulfate	5.26	1.00				5.121	2.66	20

Sample ID: 2508373-010BMS	SampType: MS	Units: mg/L			Prep Date: 8/25/2025	RunNo: 102383
Client ID: BATCH	Batch ID: 48958				Analysis Date: 8/26/2025	SeqNo: 2136239
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual

Nitrate (as N)	2.56	0.150	2.259	0.2010	104	80	120
Sulfate	15.5	1.00	10.00	5.121	103	80	120

Sample ID: MB-48977	SampType: MBLK	Units: mg/L			Prep Date: 8/26/2025	RunNo: 102441
Client ID: MBLKW	Batch ID: 48977				Analysis Date: 8/26/2025	SeqNo: 2137038
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual

Nitrate (as N)	ND	0.150				
Sulfate	ND	1.00				

Sample ID: LCS-48977	SampType: LCS	Units: mg/L			Prep Date: 8/26/2025	RunNo: 102441
Client ID: LCSW	Batch ID: 48977				Analysis Date: 8/26/2025	SeqNo: 2137039
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual

Nitrate (as N)	2.25	0.150	2.259	0	99.6	90	110
Sulfate	10.3	1.00	10.00	0	103	90	110

Work Order: 2508478
CLIENT: OnSite Environmental Inc
Project: POA - Quietcove GWM Qrt 4

QC SUMMARY REPORT

Ion Chromatography by EPA 300.0

Sample ID: 2508478-002BDUP		SampType: DUP			Units: mg/L		Prep Date: 8/26/2025		RunNo: 102441		
Client ID: MW-14-082525		Batch ID: 48977					Analysis Date: 8/26/2025		SeqNo: 2137041		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	0.298	0.150						0.2920	2.03	20	
Sulfate	10.6	1.00						10.56	0.407	20	

Sample ID: 2508478-002BMS		SampType: MS		Units: mg/L		Prep Date: 8/26/2025			RunNo: 102441		
Client ID: MW-14-082525		Batch ID: 48977					Analysis Date: 8/26/2025			SeqNo: 2137042	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	2.73	0.150	2.259	0.2920	108	80	120				
Sulfate	21.0	1.00	10.00	10.56	104	80	120				

Sample ID: 2508478-002BMSD		SampType: MSD		Units: mg/L		Prep Date: 8/26/2025			RunNo: 102441		
Client ID: MW-14-082525		Batch ID: 48977					Analysis Date: 8/26/2025			SeqNo: 2137043	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	2.77	0.150	2.259	0.2920	110	80	120	2.726	1.46	20	
Sulfate	21.4	1.00	10.00	10.56	108	80	120	20.98	1.86	20	

Sample ID: 2508381-001DDUP		SampType: DUP			Units: mg/L		Prep Date: 8/26/2025		RunNo: 102441		
Client ID: BATCH		Batch ID: 48977			Analysis Date: 8/26/2025				SeqNo: 2137045		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	ND	0.300						0		20	DH
Sulfate	196	2.00						200.5	2.48	20	DE

Sample ID: 2508381-001DMS		SampType: MS			Units: mg/L		Prep Date: 8/26/2025		RunNo: 102441		
Client ID: BATCH		Batch ID: 48977			Analysis Date: 8/26/2025				SeqNo: 2137046		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	4.61	0.300	4.518	0.09200	100	80	120				DH
Sulfate	211	2.00	20.00	200.5	50.9	80	120				DES

Work Order: 2508478
CLIENT: OnSite Environmental Inc
Project: POA - Quietcove GWM Qrt 4

QC SUMMARY REPORT

Ion Chromatography by EPA 300.0

Sample ID: 2508381-001DMS		SampType: MS		Units: mg/L		Prep Date: 8/26/2025			RunNo: 102441		
Client ID: BATCH		Batch ID: 48977					Analysis Date: 8/26/2025			SeqNo: 2137046	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

NOTES:

S - Spiked amount was low relative to sample concentration. Outlying spike recoveries may be expected.

Client Name: ONSITE

Work Order Number: 2508478

Logged by: Morgan Wilson

Date Received: 8/25/2025 3:24:00 PM

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Client

Log In

3. Custody Seals present on shipping container/cooler?
(Refer to comments for Custody Seals not intact) Yes ☐ No ☐ Not Present ☒
4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all items received at a temperature of >2°C to 6°C * Yes ☒ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples properly preserved? Yes ☒ No ☐
9. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
10. Is there headspace in the VOA vials? Yes ☐ No ☐ NA ☒
11. Did all samples containers arrive in good condition(unbroken)? Yes ☒ No ☐
12. Does paperwork match bottle labels? Yes ☒ No ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
14. Is it clear what analyses were requested? Yes ☒ No ☐
15. Were all hold times (except field parameters, pH e.g.) able to be met? Yes ☒ No ☐

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☒ No ☐ NA ☐

Person Notified:	David Baumeister	Date:	8/25/2025
By Whom:	Morgan Wilson	Via:	☒ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:	Sample 2 - No Unpreserved Volume for Anions		
Client Instructions:	Will Bring Add. Volume. Need Nitric Pres Back		

17. Additional remarks:

Item Information

Item #	Temp °C
Sample	0.6

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C

Client Name: ONSITE

Work Order Number: 2508478

Logged by: Morgan Wilson

Date Received: 8/25/2025 3:24:00 PM

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Client

Log In

3. Custody Seals present on shipping container/cooler?
(Refer to comments for Custody Seals not intact) Yes ☐ No ☐ Not Present ☒
4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all items received at a temperature of >2°C to 6°C * Yes ☒ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples properly preserved? Yes ☒ No ☐
9. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
10. Is there headspace in the VOA vials? Yes ☐ No ☐ NA ☒
11. Did all samples containers arrive in good condition(unbroken)? Yes ☒ No ☐
12. Does paperwork match bottle labels? Yes ☒ No ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
14. Is it clear what analyses were requested? Yes ☒ No ☐
15. Were all hold times (except field parameters, pH e.g.) able to be met? Yes ☒ No ☐

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:		Date:	
By Whom:		Via:	☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:			
Client Instructions:			

17. Additional remarks:

Additional Unpreserved Volume Received 8/26, Nitric Volume Returned

Item Information

Item #	Temp °C
Sample	5.9

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C



Onsite Environmental Inc.
Analytical Laboratory Testing Services
14848 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Chain of Custody

Page 1 of 1

Turnaround Request (in working days)

(Check One)

☐ Same Day ☐ 1 Day

☐ 2 Days ☐ 3 Days

☒ Standard (7 Days)

☐ _____ (other)

Laboratory Number:

2508478

Company: GEOENGLER INC
Project Number: 5147-024-14
Project Name: PCA-QUIET COVE GWA QCT 4
Project Manager: Brent Tracy
Sampled by: Nathaniel Solomon

Lab ID Sample Identification

MW-3-082525

MW-14-082525

825.25 1325 W 2

↓ 1150 ↓ 2

Number of Containers

NWTPH-HCID

NWTPH-Gx/BTEX (8021 ☐ 8260 ☐)

NWTPH-Gx

NWTPH-Dx (SG Clean-up ☐)

Volatiles 8260

Halogenated Volatiles 8260

EDB EPA 8011 (Waters Only)

Semivolatiles 8270/SIM
(with low-level PAHs)

PAHs 8270/SIM (low-level)

PCBs 8082

Organochlorine Pesticides 8081

Organophosphorus Pesticides 8270/SIM

Chlorinated Acid Herbicides 8151

Total RCRA Metals

Total MTCA Metals

TCLP Metals

HEM (oil and grease) 1664

FERROS IRON

NITRATE & SULFATE

% Moisture

Signature

Company

Date

Time

Comments/Special Instructions

GEI

8.25.25

15:24

PLEASE SEND REPORT
TO DAVID @ ONSITE

[Signature]

Full Hawthorne

8/25/25

1524

Received

Relinquished

Received

Reviewed/Date

Reviewed/Date

Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐



3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790

Chain of Custody Record & Laboratory Services Agreement

Client: **GEOENGINEERS**

Address:

City, State, Zip:

Telephone:

Email(s):

Date: _____ Page: _____ of: _____

Project Name: **POA-QUESTCOVE GRM CASEY**

Project No: **S147-024-14**

Collected by: **METTRIX SOLUMA**

Location:

Report To (PM):

Laboratory Project No (Internal): **2508478**

Special Remarks:

2508478 LAB ID

Disposal: Samples will be disposed in 30 days unless otherwise requested.
☐ Retain volume (specify above) ☐ Return to client

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	# of Cont.	VOCS (EPA 8260 / 624)	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) Dissolved (D)	Anions (IC)***	EDB (8011)	NITRATE/NITRITE	Comments
1 MW-14-082525	8-25-25	1150	W	1														
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL Individual: Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide Iodide O-Phosphate Fluoride Nitrate+Nitrite

I represent that I am authorized to enter into this Agreement with Alliance Technical Group LLC on behalf of the Client named above, that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Turn-around Time:
☐ Standard ☐ Next Day
☐ 3 Day ☐ Same Day
☐ 2 Day (specify)

Relinquished (Signature)

Print Name

Date/Time

Received (Signature)

Print Name

Date/Time

Relinquished (Signature)

Print Name

Date/Time

Received (Signature)

Print Name

Date/Time



3600 Fremont Ave N
Seattle, WA 98103

T: (206) 352-3790

F: (206) 352-7178

info@fremontanalytical.com

OnSite Environmental Inc

David Baumeister
14648 NE 95th Street
Redmond, WA 98052

RE: POA-Quiet Cove GWM QRT4, 5147-024-14

Work Order Number: 2508559

September 05, 2025

Attention David Baumeister:

Alliance Technical Group, LLC - Seattle received 4 sample(s) on 8/28/2025 for the analyses presented in the following report.

Ferrous Iron by SM3500-Fe B

Ion Chromatography by EPA 300.0

All analyses were performed according to our accredited Quality Assurance program. Please contact the laboratory if you should have any questions about the results.

Alliance Technical Group is committed to accuracy, speed, and customer service. Thank you for choosing Alliance Technical Group's Seattle laboratory team for your analytical needs. We appreciate this opportunity to serve you!

Sincerely,

A handwritten signature in black ink, appearing to read "B. Barnes", is written over a light blue horizontal line.

Brianna Barnes
Project Manager

DoD-ELAP Accreditation #79636 by PJLA, ISO/IEC 17025:2017 and QSM 5.4 for Environmental Testing
ORELAP Certification: WA 100009 (NELAP Recognized) for Environmental Testing
Washington State Department of Ecology Accredited for Environmental Testing, Lab ID C910



Original

www.fremontanalytical.com



Date: 09/05/2025

CLIENT: OnSite Environmental Inc
Project: POA-Quiet Cove GWM QRT4
Work Order: 2508559

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2508559-001	MW-1A-082725	08/27/2025 3:00 PM	08/28/2025 7:45 AM
2508559-002	MW-2A-082725	08/27/2025 1:05 PM	08/28/2025 7:45 AM
2508559-003	MW-4-082725	08/27/2025 12:05 PM	08/28/2025 7:45 AM
2508559-004	MW-13-082725	08/27/2025 2:50 PM	08/28/2025 7:45 AM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

Original

CLIENT: OnSite Environmental Inc
Project: POA-Quiet Cove GWM QRT4

I. SAMPLE RECEIPT:

Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:

Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Qualifiers:

- * - Flagged value is not within established control limits
- B - Analyte detected in the associated Method Blank
- D - Dilution was required
- E - Value above quantitation range
- H - Holding times for preparation or analysis exceeded
- I - Analyte with an internal standard that does not meet established acceptance criteria
- J - Analyte detected below Reporting Limit
- N - Tentatively Identified Compound (TIC)
- Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria
- S - Spike recovery outside accepted recovery limits
- ND - Not detected at the Reporting Limit
- R - High relative percent difference observed

Acronyms:

- %Rec - Percent Recovery
- CCB - Continued Calibration Blank
- CCV - Continued Calibration Verification
- DF - Dilution Factor
- DUP - Sample Duplicate
- HEM - Hexane Extractable Material
- ICV - Initial Calibration Verification
- LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
- MCL - Maximum Contaminant Level
- MB or MBLANK - Method Blank
- MDL - Method Detection Limit
- MS/MSD - Matrix Spike / Matrix Spike Duplicate
- PDS - Post Digestion Spike
- Ref Val - Reference Value
- REP - Sample Replicate
- RL - Reporting Limit
- RPD - Relative Percent Difference
- SD - Serial Dilution
- SGT - Silica Gel Treatment
- SPK - Spike
- Surr - Surrogate



Analytical Report

Work Order: 2508559

Date Reported: 9/5/2025

Client: OnSite Environmental Inc

Collection Date: 8/27/2025 3:00:00 PM

Project: POA-Quiet Cove GWM QRT4

Lab ID: 2508559-001

Matrix: Water

Client Sample ID: MW-1A-082725

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
----------	--------	----	------	-------	----	---------------

Ion Chromatography by EPA 300.0

Batch ID: 49087

Analyst: BB

Nitrate (as N)	ND	2.00	DH	mg/L	10	9/5/2025 6:24:00 AM
Sulfate	13.4	10.0	D	mg/L	10	9/5/2025 6:24:00 AM

NOTES:

Diluted due to matrix.

Ferrous Iron by SM3500-Fe B

Batch ID: R10247

Analyst: BB

Ferrous Iron	3.34	1.88	D	mg/L	12.5	8/28/2025 11:29:38 AM
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Analytical Report

Work Order: 2508559

Date Reported: 9/5/2025

Client: OnSite Environmental Inc

Collection Date: 8/27/2025 1:05:00 PM

Project: POA-Quiet Cove GWM QRT4

Lab ID: 2508559-002

Matrix: Water

Client Sample ID: MW-2A-082725

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
----------	--------	----	------	-------	----	---------------

Ion Chromatography by EPA 300.0

Batch ID: 49087

Analyst: BB

Nitrate (as N)	ND	2.00	DH	mg/L	10	9/5/2025 6:47:00 AM
Sulfate	21.3	10.0	D	mg/L	10	9/5/2025 6:47:00 AM

NOTES:

Diluted due to matrix.

Ferrous Iron by SM3500-Fe B

Batch ID: R10247

Analyst: BB

Ferrous Iron	3.32	0.375	D	mg/L	2.5	8/28/2025 11:29:38 AM
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Analytical Report

Work Order: 2508559

Date Reported: 9/5/2025

Client: OnSite Environmental Inc

Collection Date: 8/27/2025 12:05:00 PM

Project: POA-Quiet Cove GWM QRT4

Lab ID: 2508559-003

Matrix: Water

Client Sample ID: MW-4-082725

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
----------	--------	----	------	-------	----	---------------

Ion Chromatography by EPA 300.0

Batch ID: 49087

Analyst: BB

Nitrate (as N)	ND	2.00	DH	mg/L	10	9/5/2025 7:10:00 AM
Sulfate	ND	10.0	D	mg/L	10	9/5/2025 7:10:00 AM

NOTES:

Diluted due to matrix.

Ferrous Iron by SM3500-Fe B

Batch ID: R10247

Analyst: BB

Ferrous Iron	38.6	3.75	D	mg/L	25	8/28/2025 11:29:38 AM
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Analytical Report

Work Order: 2508559

Date Reported: 9/5/2025

Client: OnSite Environmental Inc

Collection Date: 8/27/2025 2:50:00 PM

Project: POA-Quiet Cove GWM QRT4

Lab ID: 2508559-004

Matrix: Water

Client Sample ID: MW-13-082725

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Ion Chromatography by EPA 300.0

Batch ID: 49087

Analyst: BB

Nitrate (as N)	ND	2.00	DH	mg/L	10	9/5/2025 8:20:00 AM
Sulfate	ND	10.0	D	mg/L	10	9/5/2025 8:20:00 AM

NOTES:

Diluted due to matrix.

Ferrous Iron by SM3500-Fe B

Batch ID: R10247

Analyst: BB

Ferrous Iron	3.65	1.88	D	mg/L	12.5	8/28/2025 11:29:38 AM
--------------	------	------	---	------	------	-----------------------

Work Order: 2508559
CLIENT: OnSite Environmental Inc
Project: POA-Quiet Cove GWM QRT4

QC SUMMARY REPORT

Ferrous Iron by SM3500-Fe B

Sample ID: MB-R102473	SampType: MBLK	Units: mg/L		Prep Date: 8/28/2025	RunNo: 102473							
Client ID: MBLKW	Batch ID: R102473			Analysis Date: 8/28/2025	SeqNo: 2137501							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Ferrous Iron	ND	0.150										

Sample ID: LCS-R102473	SampType: LCS	Units: mg/L		Prep Date: 8/28/2025	RunNo: 102473							
Client ID: LCSW	Batch ID: R102473			Analysis Date: 8/28/2025	SeqNo: 2137502							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Ferrous Iron	0.457	0.150	0.4000	0	114	85	115					

Sample ID: 2508559-001BDUP	SampType: DUP	Units: mg/L		Prep Date: 8/28/2025	RunNo: 102473							
Client ID: MW-1A-082725	Batch ID: R102473			Analysis Date: 8/28/2025	SeqNo: 2137504							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Ferrous Iron	3.29	1.88						3.339	1.55	20	D	

Sample ID: 2508559-001BMS	SampType: MS	Units: mg/L		Prep Date: 8/28/2025	RunNo: 102473							
Client ID: MW-1A-082725	Batch ID: R102473			Analysis Date: 8/28/2025	SeqNo: 2137505							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Ferrous Iron	9.16	1.88	5.000	3.339	116	70	130				D	

Sample ID: 2508559-001BMSD	SampType: MSD	Units: mg/L		Prep Date: 8/28/2025	RunNo: 102473							
Client ID: MW-1A-082725	Batch ID: R102473			Analysis Date: 8/28/2025	SeqNo: 2137506							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Ferrous Iron	9.72	1.88	5.000	3.339	128	70	130	9.157	6.00	30	D	

Work Order: 2508559
CLIENT: OnSite Environmental Inc
Project: POA-Quiet Cove GWM QRT4

QC SUMMARY REPORT

Ion Chromatography by EPA 300.0

Sample ID: LCS-49087		SampType: LCS			Units: mg/L		Prep Date: 9/4/2025			RunNo: 102649		
Client ID: LCSW		Batch ID: 49087			Analysis Date: 9/4/2025			SeqNo: 2142469				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Nitrate (as N)	0.769	0.200	0.7500	0	103	90	110					
Sulfate	3.79	1.00	3.750	0	101	90	110					

Sample ID: MB-49087	SampType: MBLK	Units: mg/L			Prep Date: 9/4/2025				RunNo: 102649			
Client ID: MBLKW	Batch ID: 49087					Analysis Date: 9/4/2025				SeqNo: 2142471		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Nitrate (as N)	ND	0.200										
Sulfate	ND	1.00										

Sample ID: 2509092-001CDUP	SampType: DUP	Units: mg/L			Prep Date: 9/4/2025				RunNo: 102649		
Client ID: BATCH	Batch ID: 49087				Analysis Date: 9/5/2025				SeqNo: 2142487		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	4.69	0.200						4.565	2.77	20	
Sulfate	18.7	1.00						17.80	4.80	20	

Sample ID: 2509092-001CMS		SampType: MS			Units: mg/L		Prep Date: 9/4/2025			RunNo: 102649		
Client ID: BATCH		Batch ID: 49087			Analysis Date: 9/5/2025				SeqNo: 2142488			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Nitrate (as N)	5.41	0.200	0.7500	4.565	112	80	120				E	
Sulfate	22.8	1.00	3.750	17.80	134	80	120				S	

NOTES:

S - Spiked amount was low relative to sample concentration. Outlying spike recoveries may be expected.

Sample ID: 2509092-001CMSD		SampType: MSD			Units: mg/L		Prep Date: 9/4/2025			RunNo: 102649	
Client ID: BATCH		Batch ID: 49087			Analysis Date: 9/5/2025			SeqNo: 2142489			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	5.48	0.200	0.7500	4.565	122	80	120	5.406	1.36	20	ES

Work Order: 2508559
CLIENT: OnSite Environmental Inc
Project: POA-Quiet Cove GWM QRT4

QC SUMMARY REPORT

Ion Chromatography by EPA 300.0

Sample ID: 2509092-001CMSD	SampType: MSD	Units: mg/L			Prep Date: 9/4/2025			RunNo: 102649			
Client ID: BATCH	Batch ID: 49087				Analysis Date: 9/5/2025			SeqNo: 2142489			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	23.5	1.00	3.750	17.80	153	80	120	22.83	2.97	20	S

NOTES:

S - Spiked amount was low relative to sample concentration. Outlying spike recoveries may be expected.

Sample ID: 2508574-001BMS	SampType: MS	Units: mg/L			Prep Date: 9/4/2025			RunNo: 102649			
Client ID: BATCH	Batch ID: 49087				Analysis Date: 9/5/2025			SeqNo: 2142502			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	0.697	0.200	0.7500	0	92.9	80	120				
Sulfate	11.3	1.00	3.750	7.865	91.9	80	120				

Client Name: ONSITE

Work Order Number: 2508559

Logged by: Clare Griggs

Date Received: 8/28/2025 7:45:00 AM

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Client

Log In

3. Custody Seals present on shipping container/cooler?
(Refer to comments for Custody Seals not intact) Yes ☐ No ☐ Not Present ☒
4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all items received at a temperature of >2°C to 6°C * Yes ☒ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples properly preserved? Yes ☒ No ☐
9. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
10. Is there headspace in the VOA vials? Yes ☐ No ☐ NA ☒
11. Did all samples containers arrive in good condition(unbroken)? Yes ☒ No ☐
12. Does paperwork match bottle labels? Yes ☒ No ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
14. Is it clear what analyses were requested? Yes ☒ No ☐
15. Were all hold times (except field parameters, pH e.g.) able to be met? Yes ☒ No ☐

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:		Date:	
By Whom:		Via:	☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:			
Client Instructions:			

17. Additional remarks:

Item Information

Item #	Temp °C
Sample	2.4

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C

Chain of Custody

[illegible]



3600 Fremont Ave N

Seattle, WA 98103

T: (206) 352-3790

F: (206) 352-7178

info@fremontanalytical.com

OnSite Environmental Inc

David Baumeister

14648 NE 95th Street

Redmond, WA 98052

RE: POA-Quiet Cove GWM QRT 4, 5147-024-14

Work Order Number: 2508521

September 05, 2025

Attention David Baumeister:

Alliance Technical Group, LLC - Seattle received 3 sample(s) on 8/27/2025 for the analyses presented in the following report.

Ferrous Iron by SM3500-Fe B

Ion Chromatography by EPA 300.0

All analyses were performed according to our accredited Quality Assurance program. Please contact the laboratory if you should have any questions about the results.

Alliance Technical Group is committed to accuracy, speed, and customer service. Thank you for choosing Alliance Technical Group's Seattle laboratory team for your analytical needs. We appreciate this opportunity to serve you!

Sincerely,

A handwritten signature in black ink, appearing to read "Brianna Barnes", is written over a light blue horizontal line.

Brianna Barnes
Project Manager

DoD-ELAP Accreditation #79636 by PJLA, ISO/IEC 17025:2017 and QSM 5.4 for Environmental Testing
ORELAP Certification: WA 100009 (NELAP Recognized) for Environmental Testing
Washington State Department of Ecology Accredited for Environmental Testing, Lab ID C910



Original

www.fremontanalytical.com

CLIENT: OnSite Environmental Inc
Project: POA-Quiet Cove GWM QRT 4
Work Order: 2508521

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2508521-001	MW-8-082625	08/26/2025 1:00 PM	08/27/2025 7:25 AM
2508521-002	MW-15-082625	08/26/2025 2:50 PM	08/27/2025 7:25 AM
2508521-003	MW-DUP-082625	08/26/2025 12:00 PM	08/27/2025 7:25 AM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

CLIENT: OnSite Environmental Inc
Project: POA-Quiet Cove GWM QRT 4

I. SAMPLE RECEIPT:

Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:

Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Qualifiers:

- * - Flagged value is not within established control limits
- B - Analyte detected in the associated Method Blank
- D - Dilution was required
- E - Value above quantitation range
- H - Holding times for preparation or analysis exceeded
- I - Analyte with an internal standard that does not meet established acceptance criteria
- J - Analyte detected below Reporting Limit
- N - Tentatively Identified Compound (TIC)
- Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria
- S - Spike recovery outside accepted recovery limits
- ND - Not detected at the Reporting Limit
- R - High relative percent difference observed

Acronyms:

- %Rec - Percent Recovery
- CCB - Continued Calibration Blank
- CCV - Continued Calibration Verification
- DF - Dilution Factor
- DUP - Sample Duplicate
- HEM - Hexane Extractable Material
- ICV - Initial Calibration Verification
- LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
- MCL - Maximum Contaminant Level
- MB or MBLANK - Method Blank
- MDL - Method Detection Limit
- MS/MSD - Matrix Spike / Matrix Spike Duplicate
- PDS - Post Digestion Spike
- Ref Val - Reference Value
- REP - Sample Replicate
- RL - Reporting Limit
- RPD - Relative Percent Difference
- SD - Serial Dilution
- SGT - Silica Gel Treatment
- SPK - Spike
- Surr - Surrogate



Analytical Report

Work Order: 2508521
Date Reported: 9/5/2025

Client: OnSite Environmental Inc
Project: POA-Quiet Cove GWM QRT 4
Lab ID: 2508521-001
Client Sample ID: MW-8-082625

Collection Date: 8/26/2025 1:00:00 PM

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Ion Chromatography by EPA 300.0

Batch ID: 49022 Analyst: BB

Nitrate (as N)	ND	4.00	DHQ	mg/L	20	8/28/2025 10:48:00 PM
Sulfate	ND	20.0	D	mg/L	20	9/4/2025 12:19:00 PM

NOTES:

Q - Sample results are estimated due to relative error exceedance in the calibration curve. The continuing calibration verification recovered low for nitrate (89%, nominal 90-110%) imparting low bias.

Ferrous Iron by SM3500-Fe B

Batch ID: R10242 Analyst: BB

Ferrous Iron	19.3	3.75	D	mg/L	25	8/27/2025 9:14:49 AM
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Analytical Report

Work Order: 2508521
Date Reported: 9/5/2025

Client: OnSite Environmental Inc
Project: POA-Quiet Cove GWM QRT 4
Lab ID: 2508521-002
Client Sample ID: MW-15-082625

Collection Date: 8/26/2025 2:50:00 PM

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Ion Chromatography by EPA 300.0

Batch ID: 49022 Analyst: BB

Nitrate (as N)	ND	4.00	DHQ	mg/L	20	8/28/2025 11:11:00 PM
Sulfate	ND	20.0	D	mg/L	20	9/4/2025 12:42:00 PM

NOTES:

Q - Sample results are estimated due to relative error exceedance in the calibration curve. The continuing calibration verification recovered low for nitrate (89%, nominal 90-110%) imparting low bias.

Ferrous Iron by SM3500-Fe B

Batch ID: R10242 Analyst: BB

Ferrous Iron	63.8	7.50	D	mg/L	50	8/27/2025 9:14:49 AM
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Analytical Report

Work Order: 2508521
Date Reported: 9/5/2025

Client: OnSite Environmental Inc
Project: POA-Quiet Cove GWM QRT 4
Lab ID: 2508521-003
Client Sample ID: MW-DUP-082625

Collection Date: 8/26/2025 12:00:00 PM

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Ion Chromatography by EPA 300.0

Batch ID: 49022 Analyst: BB

Nitrate (as N)	ND	4.00	DHQ	mg/L	20	8/28/2025 10:25:00 PM
Sulfate	ND	20.0	D	mg/L	20	9/4/2025 1:05:00 PM

NOTES:

Q - Sample results are estimated due to relative error exceedance in the calibration curve. The continuing calibration verification recovered low for nitrate (89%, nominal 90-110%) imparting low bias.

Ferrous Iron by SM3500-Fe B

Batch ID: R10242 Analyst: BB

Ferrous Iron	24.9	3.75	D	mg/L	25	8/27/2025 9:14:49 AM
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Work Order: 2508521
CLIENT: OnSite Environmental Inc
Project: POA-Quiet Cove GWM QRT 4

QC SUMMARY REPORT

Ferrous Iron by SM3500-Fe B

Sample ID: MB-R102421		SampType: MBLK			Units: mg/L		Prep Date: 8/27/2025			RunNo: 102421		
Client ID: MBLKW		Batch ID: R102421			Analysis Date: 8/27/2025			SeqNo: 2136528				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Ferrous Iron ND 0.150

Sample ID: LCS-R102421		SampType: LCS			Units: mg/L		Prep Date: 8/27/2025			RunNo: 102421		
Client ID: LCSW		Batch ID: R102421			Analysis Date: 8/27/2025			SeqNo: 2136529				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Ferrous Iron 0.457 0.150 0.4000 0 114 85 115

Sample ID: 2508521-003ADUP		SampType: DUP		Units: mg/L		Prep Date: 8/27/2025			RunNo: 102421		
Client ID: MW-DUP-082625		Batch ID: R102421					Analysis Date: 8/27/2025			SeqNo: 2136699	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Ferrous Iron 24.1 3.75 24.91 3.36 20 D

Sample ID: 2508521-003AMS		SampType: MS		Units: mg/L		Prep Date: 8/27/2025			RunNo: 102421		
Client ID: MW-DUP-082625		Batch ID: R102421					Analysis Date: 8/27/2025			SeqNo: 2136700	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Ferrous Iron 22.8 3.75 10.00 24.91 -20.6 70 130 DS

NOTES:

S - Spike recovery indicates a possible matrix effect.

Sample ID: 2508521-003AMSD		SampType: MSD		Units: mg/L		Prep Date: 8/27/2025			RunNo: 102421			
Client ID: MW-DUP-082625		Batch ID: R102421					Analysis Date: 8/27/2025			SeqNo: 2136701		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Ferrous Iron 24.7 3.75 10.00 24.91 -2.06 70 130 22.85 7.80 30 DS

NOTES:

S - Spike recovery indicates a possible matrix effect.

Work Order: 2508521
CLIENT: OnSite Environmental Inc
Project: POA-Quiet Cove GWM QRT 4

QC SUMMARY REPORT

Ion Chromatography by EPA 300.0

Sample ID: LCS-49022		SampType: LCS			Units: mg/L		Prep Date: 8/28/2025		RunNo: 102510		
Client ID: LCSW		Batch ID: 49022			Analysis Date: 8/28/2025				SeqNo: 2138735		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	0.678	0.200	0.7500	0	90.4	90	110				

Sample ID: MB-49022	SampType: MBLK	Units: mg/L				Prep Date: 8/28/2025				RunNo: 102510		
Client ID: MBLKW	Batch ID: 49022					Analysis Date: 8/28/2025				SeqNo: 2138737		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Nitrate (as N)	ND	0.200										

Sample ID: 2508520-001BDUP		SampType: DUP		Units: mg/L		Prep Date: 8/28/2025			RunNo: 102510		
Client ID: BATCH		Batch ID: 49022					Analysis Date: 8/28/2025			SeqNo: 2138742	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	ND	0.200						0		20	Q

NOTES:

Q - Sample results are estimated due to relative error exceedance in the calibration curve. The continuing calibration verification recovered low for nitrate (89%, nominal 90-110%) imparting low bias.

Sample ID: 2508520-001BMS		SampType: MS			Units: mg/L		Prep Date: 8/28/2025		RunNo: 102510		
Client ID: BATCH		Batch ID: 49022			Analysis Date: 8/28/2025				SeqNo: 2138743		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	0.608	0.200	0.7500	0	81.1	80	120				

Sample ID: 2508520-001BMSD		SampType: MSD		Units: mg/L		Prep Date: 8/28/2025			RunNo: 102510		
Client ID: BATCH		Batch ID: 49022		Analysis Date: 8/28/2025					SeqNo: 2138744		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	0.634	0.200	0.7500	0	84.5	80	120	0.6080	4.19	20	

Work Order: 2508521
CLIENT: OnSite Environmental Inc
Project: POA-Quiet Cove GWM QRT 4

QC SUMMARY REPORT

Ion Chromatography by EPA 300.0

Sample ID: 2508520-002BDUP		SampType: DUP			Units: mg/L		Prep Date: 8/28/2025			RunNo: 102510		
Client ID: BATCH		Batch ID: 49022			Analysis Date: 8/29/2025			SeqNo: 2138760				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Nitrate (as N)	ND	0.200						0		20	Q
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NOTES:

Q - Sample results are estimated due to relative error exceedance in the calibration curve. The continuing calibration verification recovered low for nitrate (87.8%, nominal 90-110%) imparting low bias.

Sample ID: 2508520-002BMS		SampType: MS			Units: mg/L		Prep Date: 8/28/2025			RunNo: 102510		
Client ID: BATCH		Batch ID: 49022			Analysis Date: 8/29/2025			SeqNo: 2138761				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Nitrate (as N)	0.527	0.200	0.7500	0	70.3	80	120				S
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NOTES:

S - Outlying spike recoveries were associated with this sample.

Sample ID: LCS-49068		SampType: LCS		Units: mg/L		Prep Date: 9/3/2025			RunNo: 102630		
Client ID: LCSW		Batch ID: 49068		Analysis Date: 9/3/2025						SeqNo: 2141790	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sulfate	4.02	1.00	3.750	0	107	90	110				
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Sample ID: MB-48068		SampType: MBLK			Units: mg/L		Prep Date: 9/3/2025			RunNo: 102630		
Client ID: MBLKW		Batch ID: 49068						Analysis Date: 9/3/2025			SeqNo: 2141792	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Sulfate	ND	1.00									
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Sample ID: 2508547-001CDUP		SampType: DUP			Units: mg/L		Prep Date: 9/3/2025		RunNo: 102630		
Client ID: BATCH		Batch ID: 49068			Analysis Date: 9/4/2025				SeqNo: 2141810		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sulfate	1.23	1.00						1.346	9.41	20	
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Work Order: 2508521
CLIENT: OnSite Environmental Inc
Project: POA-Quiet Cove GWM QRT 4

QC SUMMARY REPORT

Ion Chromatography by EPA 300.0

Sample ID: 2508547-001CMS	SampType: MS	Units: mg/L			Prep Date: 9/3/2025			RunNo: 102630			
Client ID: BATCH	Batch ID: 49068				Analysis Date: 9/4/2025			SeqNo: 2141811			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sulfate	4.70	1.00	3.750	1.346	89.4	80	120				
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Sample ID: 2508547-001CMSD	SampType: MSD	Units: mg/L			Prep Date: 9/3/2025			RunNo: 102630			
Client ID: BATCH	Batch ID: 49068				Analysis Date: 9/4/2025			SeqNo: 2141812			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sulfate	4.42	1.00	3.750	1.346	81.9	80	120	4.698	6.19	20	
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Sample ID: 2509062-002CDUP	SampType: DUP	Units: mg/L			Prep Date: 9/3/2025			RunNo: 102630			
Client ID: BATCH	Batch ID: 49068				Analysis Date: 9/4/2025			SeqNo: 2141814			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sulfate	2.45	1.00						2.434	0.614	20	
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Sample ID: 2509062-002CMS	SampType: MS	Units: mg/L			Prep Date: 9/3/2025			RunNo: 102630			
Client ID: BATCH	Batch ID: 49068				Analysis Date: 9/4/2025			SeqNo: 2141815			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sulfate	5.47	1.00	3.750	2.434	80.9	80	120				
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Client Name: ONSITE

Work Order Number: 2508521

Logged by: Morgan Wilson

Date Received: 8/27/2025 7:25:00 AM

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Client

Log In

3. Custody Seals present on shipping container/cooler?
(Refer to comments for Custody Seals not intact) Yes ☐ No ☐ Not Present ☒
4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all items received at a temperature of >2°C to 6°C * Yes ☒ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples properly preserved? Yes ☒ No ☐
9. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
10. Is there headspace in the VOA vials? Yes ☐ No ☐ NA ☒
11. Did all samples containers arrive in good condition(unbroken)? Yes ☒ No ☐
12. Does paperwork match bottle labels? Yes ☒ No ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
14. Is it clear what analyses were requested? Yes ☒ No ☐
15. Were all hold times (except field parameters, pH e.g.) able to be met? Yes ☒ No ☐

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:		Date:	
By Whom:		Via:	☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:			
Client Instructions:			

17. Additional remarks:

Item Information

Item #	Temp °C
Sample	1.4

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C



**OnSite
Environmental Inc.**

Analytical Laboratory Testing Services
14848 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Chain of Custody

Page 1 of 1

Company:

GEOENGINEERS INC

Turnaround Request
(in working days)

(Check One)

☐ Same Day ☐ 1 Day

☐ 2 Days ☐ 3 Days

☒ Standard (7 Days)

☐ (other) _____

Project Number:
5147 - 024-14

Project Name:
POA - Quiet Cove GWM QCT 4

Project Manager:
Brian Tracy

Sampled by:
Nathan Soward

Lab ID

Date Sampled

Time Sampled

Matrix

Number of Containers

NWTPH-HCID

NWTPH-Gx/BTEX (8021 ☐ 8260 ☐)

NWTPH-Gx

NWTPH-Dx (SG Clean-up ☐)

Volatiles 8260

Halogenated Volatiles 8260

EDB EPA 8011 (Waters Only)

Semivolatiles 8270/SIM
(with low-level PAHs)

PAHs 8270/SIM (low-level)

PCBs 8082

Organochlorine Pesticides 8081

Organophosphorus Pesticides 8270/SIM

Chlorinated Acid Herbicides 8151

Total RCRA Metals

Total MTCA Metals

TCLP Metals

HEM (oil and grease) 1664

NITRATE / SULFATE

FEROUS IRON

% Moisture

MW-8-082625

8.26.25 1300

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Comments/Special Instructions

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Comments/Special Instructions

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Time

Comments/Special Instructions

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Company

Date

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Comments/Special Instructions

Received

Signature

Company

Date

Time

Comments/Special Instructions

Data Package: Standard ☐ Level III ☐ Level IV ☐
Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

Sample/Cooler Receipt and Acceptance Checklist

Client: GE
 Client Project Name/Number: 5747-024-14
 OnSite Project Number: 08-357

Initiated by: [Signature]
 Date Initiated: 8/27/25

1.0 Cooler Verification

1.1 Were there custody seals on the outside of the cooler?	Yes	☒ No	N/A	1	2	3	4
1.2 Were the custody seals intact?	Yes	No	☒ N/A	1	2	3	4
1.3 Were the custody seals signed and dated by last custodian?	Yes	No	☒ N/A	1	2	3	4
1.4 Were the samples delivered on ice or blue ice?	☒ Yes	No	N/A	1	2	3	4
1.5 Were samples received between 0-6 degrees Celsius?	☒ Yes	No	N/A	Temperature: <u>6.4</u>			
1.6 Have shipping bills (if any) been attached to the back of this form?	Yes	☒ N/A					
1.7 How were the samples delivered?	☒ Client	☐ Courier	☐ UPS/FedEx	☐ OSE Pickup	☐ Other		

2.0 Chain of Custody Verification

2.1 Was a Chain of Custody submitted with the samples?	☒ Yes	No	1	2	3	4
2.2 Was the COC legible and written in permanent ink?	☒ Yes	No	1	2	3	4
2.3 Have samples been relinquished and accepted by each custodian?	☒ Yes	No	1	2	3	4
2.4 Did the sample labels (ID, date, time, preservative) agree with COC?	☒ Yes	No	1	2	3	4
2.5 Were all of the samples listed on the COC submitted?	☒ Yes	No	1	2	3	4
2.6 Were any of the samples submitted omitted from the COC?	Yes	☒ No	1	2	3	4

3.0 Sample Verification

3.1 Were any sample containers broken or compromised?	Yes	☒ No	1	2	3	4	
3.2 Were any sample labels missing or illegible?	Yes	☒ No	1	2	3	4	
3.3 Have the correct containers been used for each analysis requested?	☒ Yes	No	1	2	3	4	
3.4 Have the samples been correctly preserved?	☒ Yes	No	N/A	1	2	3	4
3.5 Are volatile samples free from headspace and bubbles greater than 6mm?	Yes	☒ No	N/A	1	2	3	4
3.6 Is there sufficient sample submitted to perform requested analyses?	☒ Yes	No	1	2	3	4	
3.7 Have any holding times already expired or will expire in 24 hours?	☒ Yes	No	1	2	3	4	
3.8 Was method 5035A used?	Yes	No	☒ N/A	1	2	3	4
3.9 If 5035A was used, which sampling option was used (#1, 2, or 3).	#		☒ N/A	1	2	3	4

Explain any discrepancies:

3.5) # 4) 4 vials w/ bubble
3.7) Fe

1 - Discuss issue in Case Narrative

2 - Process Sample As-is

3 - Client contacted to discuss problem

4 - Sample cannot be analyzed or client does not wish to proceed

Appendix C

Data Validation Report

Project: Port of Anacortes – Quiet Cove Property, Interim Action Construction Oversight
February 2025 Groundwater Samples

File: 05147-024-14

Date: March 11, 2025

This report documents the results of a United States Environmental Protection Agency (USEPA)-defined Stage 2B data validation (USEPA Document 540-R-08-005; USEPA 2009) of analytical data from the analyses of groundwater samples collected as part of the February 2025 sampling event, and the associated laboratory and field quality control (QC) samples. The samples were obtained from the Quiet Cove Site (Site) located at 2nd Street and O Avenue in Anacortes, Washington.

Objective and Quality Control Elements

GeoEngineers, Inc. (GeoEngineers) completed the data validation consistent with the USEPA Contract Laboratory Program National Functional Guidelines for Organic Superfund Methods Data Review (USEPA 2020a) and Inorganic Superfund Methods Data Review (USEPA 2020b) (National Functional Guidelines) to determine if the laboratory analytical results meet the project objectives and are usable for their intended purpose. Data usability was assessed by determining if:

Continuing Calibrations (CCALs)

Reporting Limits

Validated Sample Delivery Groups

This data validation included review of the sample delivery group (SDG) listed below in Table 1.

TABLE 1. SUMMARY OF VALIDATED SAMPLE DELIVERY GROUPS

LABORATORY SDG	SAMPLES VALIDATED
2502-067	MW-1A-020425, MW-2A-020425, MW-3-020525, MW-4-020525, MW-8-020525, DUP-103024, MW-13-020525, MW-14-020425, MW-15-020525

Chemical Analysis Performed

OnSite Environmental, Inc. (OnSite), located in Redmond, Washington, performed laboratory analyses on the samples using the following methods

Gasoline-range Hydrocarbons (NWTPH-Gx) by Method NWTPH-Gx;

Petroleum Hydrocarbons (NWTPH-Dx) by Method NWTPH-Dx;

Petroleum Hydrocarbons with Silica Gel (SG) Cleanup (NWTPH-Dx/SG) by Method NWTPH-Dx/SG;

Volatile Organic Compounds (VOCs) by Method SW8260D;

Total and Dissolved Metals by Methods EPA200.8 and EPA7470A;

Alkalinity by Method SM2320B; and

Dissolved Methane by Method RSK-175

OnSite subcontracted to Alliance Technical Group, Inc., (Alliance) located in Seattle, Washington for laboratory analyses on the water samples using the following methods:

Anions by Method EPA300.0; and

Ferrous Iron by Method SM3500-FeB

Data Validation Summary

The results for each of the QC elements are summarized below.

DATA PACKAGE COMPLETENESS

OnSite provided the required deliverables for the data validation according to the National Functional Guidelines. The laboratory followed adequate corrective action processes and the identified anomalies were discussed in the relevant laboratory case narrative.

CHAIN-OF-CUSTODY DOCUMENTATION

Chain-of-custody (COC) forms were provided with the laboratory analytical reports. The COCs were accurate and complete when submitted to the laboratory, with the following exception:

SDG 2502-067: The laboratory noted that for Sample MW-3-020525 the sample collection time listed on the sample vials did not match the sample collection time listed on the COC. The COC was corrected to reflect the sample collection time as listed on the sample vials.

HOLDING TIMES AND SAMPLE PRESERVATION

The sample holding time is defined as the time that elapses between sample collection and sample analysis. Maximum holding time criteria exist for each analysis to help ensure that the analyte concentrations found at the time of analysis reflect the concentration present at the time of sample collection. Established holding times were met for each analysis, with the exception noted below. The sample coolers arrived at the laboratory outside the appropriate temperatures of between two and six degrees Celsius. The out-of-compliance sample cooler temperatures are detailed below.

SDG 2502-067: (Anions) The 48-hour holding time for nitrate analysis was exceeded in Samples MW-1A-020425, MW-2A-020425, and MW-14-020425. The positive results and reporting limit for this target analyte were qualified as estimated (J and UJ, accordingly) in these samples.

The sample cooler temperatures recorded at the laboratory were each one degree Celsius. It was determined through professional judgment that since the samples were not frozen, these temperatures should not affect the sample analytical results.

SURROGATE RECOVERIES

A surrogate compound is a compound that is chemically similar to the organic analytes of interest, but unlikely to be found in an environmental sample. Surrogates are used for organic analyses and are added to the samples, standards, and blanks to serve as an accuracy and specificity check of each analysis. The surrogates are added to the samples at a known concentration and percent recoveries are calculated following analysis. The surrogate percent recoveries for field samples were within the laboratory control limits.

METHOD BLANKS

Method blanks are analyzed to ensure that laboratory procedures and reagents do not introduce measurable concentrations of the analytes of interest. A method blank was analyzed with each batch of samples, at a frequency of 1 per 20 samples. For each sample batch, method blanks for the applicable methods were analyzed at the required frequency. None of the analytes of interest were detected in the method blanks.

MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Since the actual analyte concentration in an environmental sample is not known, the accuracy of a particular analysis is usually inferred by performing a matrix spike (MS) analysis on one sample from the associated batch, known as the parent sample. One aliquot of the sample is analyzed in the normal manner and then a second aliquot of the sample is spiked with a known amount of analyte concentration and

analyzed. From these analyses, a percent recovery is calculated. Matrix spike duplicate (MSD) analyses are generally performed for organic analyses as a precision check and analyzed in the same sequence as a matrix spike. Using the result values from the MS and MSD, the relative percent difference (RPD) is calculated. The percent recovery control limits for MS and MSD analyses are specified in the laboratory documents, as are the RPD control limits for MS/MSD sample sets.

One MS/MSD analysis should be performed for every analytical batch or every 20 field samples, whichever is more frequent. The frequency requirements were met for each analysis and the percent recovery and RPD values were within the proper control limits, with the following exception:

SDG 2502-067: (Ferrous Iron) The laboratory performed an MS/MSD sample set on Sample MW-1A-020425. The percent recovery for ferrous iron was greater than the control limit in the MSD digested on 2/5/2025; however, the percent recovery for this target analyte was within the control limits in the corresponding MS. No action was required for this outlier.

LABORATORY CONTROL SAMPLES/LABORATORY CONTROL SAMPLE DUPLICATES

A laboratory control sample (LCS) is a blank sample that is spiked with a known amount of analyte and then analyzed. An LCS is similar to an MS, but without the possibility of matrix interference. Given that matrix interference is not an issue, the LCS/LCSD control limits for accuracy and precision are usually more rigorous than for MS/MSD analyses. Additionally, data qualification based on LCS/LCSD analyses would apply to all samples in the associated batch, instead of just the parent sample. The percent recovery control limits for LCS and LCSD analyses are specified in the laboratory documents, as are the RPD control limits for LCS/LCSD sample sets.

One LCS/LCSD analysis should be performed for every analytical batch or every 20 field samples, whichever is more frequent. The frequency requirements were met for each analysis and the percent recovery and RPD values were within the proper control limits.

LABORATORY DUPLICATES

Internal laboratory duplicate analyses are performed to monitor the precision of the analyses. Two separate aliquots of a sample are analyzed as distinct samples in the laboratory and the RPD between the two results is calculated. Duplicate analyses should be performed once per analytical batch. If one or more of the samples used has a concentration less than five times the reporting limit for that sample, the absolute difference is used instead of the RPD. The RPD control limits are specified in the laboratory documents. Laboratory duplicates were analyzed at the proper frequency and the specified acceptance criteria were met.

FIELD DUPLICATES

In order to assess precision, field duplicate samples were collected and analyzed along with the reviewed sample batches. The duplicate samples were analyzed for the same parameters as the associated parent samples. Precision is determined by calculating the RPD between each pair of samples. If one or more of the sample analytes has a concentration less than five times the reporting limit for that sample, then the absolute difference is used instead of the RPD. The RPD control limit for water samples is 35 percent.

SDG 2502-067: One field duplicate sample pair, MW-8-020525 and DUP-103024, was submitted with this SDG. The precision criteria for the target analytes were met in this sample pair, with the exception of nitrate. The positive result and reporting limit for this target analyte were qualified as estimated (J and UJ, accordingly) in this sample pair.

INSTRUMENT TUNING

Instrument tuning for analyses by gas chromatography/mass spectrometry (GC/MS) are completed to ensure that mass resolution, identification, and sensitivity of the analyses are acceptable. Instrument tuning should be performed at the beginning of each 12-hour period during which samples or standards are analyzed. The frequency and specified acceptance criteria were met for each applicable analysis.

INTERNAL STANDARDS (LOW RESOLUTION MASS SPECTROMETRY)

Like the surrogate, an internal standard is a compound that is chemically similar to the analytes of interest, but unlikely to be found in an environmental sample. Internal standards are used only for the mass spectrometry instrumentation and are usually added to the sample aliquot after extraction has taken place. The internal standard should be analyzed at the beginning of a 12-hour sample run and the control limits for internal standard recoveries are 50 percent to 200 percent of the calibration standard. The internal standard recoveries were within the control limits.

INITIAL CALIBRATIONS (ICALS)

The initial calibrations were conducted according to the laboratory methods and consisted of the appropriate number of standards. The relative standard deviation (%RSD) and relative response factors (RRF) were within the internal laboratory control limits, or the control limits stated in the National Functional Guidelines (USEPA 2020a, 2020b).

CONTINUING CALIBRATIONS (CCALS)

The continuing calibrations were conducted according to the laboratory methods and consisted of the appropriate number of standards. The percent difference (%D) and relative response factors (RRF) were within the internal laboratory control limits, or the control limits stated in the National Functional Guidelines (USEPA 2020a, 2020b).

REPORTING LIMITS

The contract required quantitation limits (CRQL) were met by the laboratory for the target analytes throughout this sampling event, with some exceptions where the CRQL was elevated due to required sample dilution.

Overall Assessment

As was determined by this data validation, the laboratory followed the specified analytical methods. Accuracy was acceptable, as demonstrated by the surrogate, LCS/LCSD, and MS/MSD percent recovery values, with the exception noted above. Precision was acceptable, as demonstrated by the LCS/LCSD, MS/MSD, and laboratory/field duplicate RPD values, with the exception noted above.

The data are acceptable for the intended use, with the following qualifications listed below in Table 2.

TABLE 2. SUMMARY OF QUALIFIED SAMPLES

SAMPLE ID	ANALYTE	QUALIFIER	REASON
MW-1A-020425	Nitrate	UJ	Holding Time
MW-2A-020425	Nitrate	J	Holding Time
MW-8-020525	Nitrate	UJ	Field Duplicate Precision
DUP-103024	Nitrate	J	Field Duplicate Precision
MW-14-020425	Nitrate	J	Holding Time

References

U.S. Environmental Protection Agency (USEPA). "Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use," EPA-540-R-08-005. January 2009.

U.S. Environmental Protection Agency (USEPA) 2020a. Contract Laboratory Program National Functional Guidelines for Organic Superfund Methods Data Review, EPA-540-R-20-005. November 2020.

U.S. Environmental Protection Agency (USEPA) 2020b. Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Methods Data Review, EPA-542-R-20-006. November 2020.

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Project: Port of Anacortes – Quiet Cove Property, Interim Action Construction Oversight
April 2025 Groundwater Samples

File: 05147-024-14

Date: June 23, 2025

This report documents the results of a United States Environmental Protection Agency (USEPA)-defined Stage 2B data validation (USEPA Document 540-R-08-005; USEPA 2009) of analytical data from the analyses of groundwater samples collected as part of the April 2025 sampling event, and the associated laboratory and field quality control (QC) samples. The samples were obtained from the Quiet Cove Site (Site) located at 2nd Street and O Avenue in Anacortes, Washington.

Objective and Quality Control Elements

GeoEngineers, Inc. (GeoEngineers) completed the data validation consistent with the USEPA Contract Laboratory Program National Functional Guidelines for Organic Superfund Methods Data Review (USEPA 2020a) and Inorganic Superfund Methods Data Review (USEPA 2020b) (National Functional Guidelines) to determine if the laboratory analytical results meet the project objectives and are usable for their intended purpose. Data usability was assessed by determining if:

Continuing Calibrations (CCALs)

Reporting Limits

Validated Sample Delivery Groups

This data validation included review of the sample delivery group (SDG) listed below in Table 1.

TABLE 1. SUMMARY OF VALIDATED SAMPLE DELIVERY GROUPS

LABORATORY SDG	SAMPLES VALIDATED
2505-004	MW-1A-042925, MW-2A-043025, MW-3-043025, MW-4-043025, MW-8-042925, DUP-042925, MW-13-042925, MW-14-042925, MW-15-043025, Trip Blank

Chemical Analysis Performed

OnSite Environmental, Inc. (OnSite), located in Redmond, Washington, performed laboratory analyses on the samples using one or more of the following methods

Gasoline-range Hydrocarbons (NWTPH-Gx) by Method NWTPH-Gx;

Petroleum Hydrocarbons (NWTPH-Dx) by Method NWTPH-Dx;

Petroleum Hydrocarbons with Silica Gel (SG) Cleanup (NWTPH-Dx/SG) by Method NWTPH-Dx/SG;

Volatile Organic Compounds (VOCs) by Method SW8260D;

Total and Dissolved Metals by Methods EPA200.8 and EPA7470A;

Alkalinity by Method SM2320B; and

Dissolved Methane by Method RSK-175

OnSite subcontracted to Alliance Technical Group, Inc., (Alliance) located in Seattle, Washington for laboratory analyses on select water samples using the following methods:

Anions by Method EPA300.0; and

Ferrous Iron by Method SM3500-FeB

Data Validation Summary

The results for each of the QC elements are summarized below.

DATA PACKAGE COMPLETENESS

OnSite provided the required deliverables for the data validation according to the National Functional Guidelines. The laboratory followed adequate corrective action processes and the identified anomalies were discussed in the relevant laboratory case narrative.

CHAIN-OF-CUSTODY DOCUMENTATION

Chain-of-custody (COC) forms were provided with the laboratory analytical reports. The COCs were accurate and complete when submitted to the laboratory, with the following exception:

SDG 2505-004: The laboratory noted that Sample Trip Blank was received at the laboratory, but was not listed on the COC. The sample was added to the COC and logged for VOC analysis.

HOLDING TIMES AND SAMPLE PRESERVATION

The sample holding time is defined as the time that elapses between sample collection and sample analysis. Maximum holding time criteria exist for each analysis to help ensure that the analyte concentrations found at the time of analysis reflect the concentration present at the time of sample collection. Established holding times were met for each analysis. The sample coolers arrived at the laboratory within the appropriate temperatures of between two and six degrees Celsius.

SURROGATE RECOVERIES

A surrogate compound is a compound that is chemically similar to the organic analytes of interest, but unlikely to be found in an environmental sample. Surrogates are used for organic analyses and are added to the samples, standards, and blanks to serve as an accuracy and specificity check of each analysis. The surrogates are added to the samples at a known concentration and percent recoveries are calculated following analysis. The surrogate percent recoveries for field samples were within the laboratory control limits.

METHOD AND TRIP BLANKS

Method blanks are analyzed to ensure that laboratory procedures and reagents do not introduce measurable concentrations of the analytes of interest. A method blank was analyzed with each batch of samples, at a frequency of 1 per 20 samples. For each sample batch, method blanks for the applicable methods were analyzed at the required frequency. None of the analytes of interest were detected in the method blanks.

Trip blanks are analyzed to provide an indication as to whether volatile compounds have cross-contaminated other like samples within the transportation process to the laboratory. None of the analytes of interest were detected in the trip blank.

MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Since the actual analyte concentration in an environmental sample is not known, the accuracy of a particular analysis is usually inferred by performing a matrix spike (MS) analysis on one sample from the associated batch, known as the parent sample. One aliquot of the sample is analyzed in the normal manner and then a second aliquot of the sample is spiked with a known amount of analyte concentration and analyzed. From these analyses, a percent recovery is calculated. Matrix spike duplicate (MSD) analyses are generally performed for organic analyses as a precision check and analyzed in the same sequence as a matrix spike. Using the result values from the MS and MSD, the relative percent difference (RPD) is

calculated. The percent recovery control limits for MS and MSD analyses are specified in the laboratory documents, as are the RPD control limits for MS/MSD sample sets.

One MS/MSD analysis should be performed for every analytical batch or every 20 field samples, whichever is more frequent. The frequency requirements were met for each analysis and the percent recovery and RPD values were within the proper control limits, with the following exceptions:

SDG 2505-004: (Anions) The laboratory performed an MS/MSD sample set on Sample MW-2A-043025. The percent recoveries for nitrate and sulfate were less than the control limits in the MS/MSD extracted on 5/1/2025. The positive results for these target analytes were qualified as estimated (J) in this sample.

LABORATORY CONTROL SAMPLES/LABORATORY CONTROL SAMPLE DUPLICATES

A laboratory control sample (LCS) is a blank sample that is spiked with a known amount of analyte and then analyzed. An LCS is similar to an MS, but without the possibility of matrix interference. Given that matrix interference is not an issue, the LCS/LCSD control limits for accuracy and precision are usually more rigorous than for MS/MSD analyses. Additionally, data qualification based on LCS/LCSD analyses would apply to all samples in the associated batch, instead of just the parent sample. The percent recovery control limits for LCS and LCSD analyses are specified in the laboratory documents, as are the RPD control limits for LCS/LCSD sample sets.

One LCS/LCSD analysis should be performed for every analytical batch or every 20 field samples, whichever is more frequent. The frequency requirements were met for each analysis and the percent recovery and RPD values were within the proper control limits.

LABORATORY DUPLICATES

Internal laboratory duplicate analyses are performed to monitor the precision of the analyses. Two separate aliquots of a sample are analyzed as distinct samples in the laboratory and the RPD between the two results is calculated. Duplicate analyses should be performed once per analytical batch. If one or more of the samples used has a concentration less than five times the reporting limit for that sample, the absolute difference is used instead of the RPD. The RPD control limits are specified in the laboratory documents. Laboratory duplicates were analyzed at the proper frequency and the specified acceptance criteria were met, with the following exception:

SDG 2505-004: (Anions) The laboratory performed a laboratory duplicate sample set on Sample MW-2A-043025. The RPD for nitrate was greater than the control limit in the laboratory duplicated extracted on 5/1/2025. The positive result for this target analyte was qualified as estimated (J) in this sample.

FIELD DUPLICATES

In order to assess precision, field duplicate samples were collected and analyzed along with the reviewed sample batches. The duplicate samples were analyzed for the same parameters as the associated parent samples. Precision is determined by calculating the RPD between each pair of samples. If one or more of the sample analytes has a concentration less than five times the reporting limit for that sample, then the absolute difference is used instead of the RPD. The RPD control limit for water samples is 35 percent.

SDG 2505-004: One field duplicate sample pair, MW-8-042925 and DUP-042925, was submitted with this SDG. The precision criteria for the target analytes were met in this sample pair, with the exception of ferrous iron. The positive results for this target analyte were qualified as estimated (J) in this sample pair.

INSTRUMENT TUNING

Instrument tuning for analyses by gas chromatography/mass spectrometry (GC/MS) are completed to ensure that mass resolution, identification, and sensitivity of the analyses are acceptable. Instrument tuning should be performed at the beginning of each 12-hour period during which samples or standards are analyzed. The frequency and specified acceptance criteria were met for each applicable analysis.

INTERNAL STANDARDS (LOW RESOLUTION MASS SPECTROMETRY)

Like the surrogate, an internal standard is a compound that is chemically similar to the analytes of interest, but unlikely to be found in an environmental sample. Internal standards are used only for the mass spectrometry instrumentation and are usually added to the sample aliquot after extraction has taken place. The internal standard should be analyzed at the beginning of a 12-hour sample run and the control limits for internal standard recoveries are 50 percent to 200 percent of the calibration standard. The internal standard recoveries were within the control limits.

INITIAL CALIBRATIONS (ICALS)

The initial calibrations were conducted according to the laboratory methods and consisted of the appropriate number of standards. The relative standard deviation (%RSD) and relative response factors (RRF) were within the internal laboratory control limits, or the control limits stated in the National Functional Guidelines (USEPA 2020a, 2020b).

CONTINUING CALIBRATIONS (CCALS)

The continuing calibrations were conducted according to the laboratory methods and consisted of the appropriate number of standards. The percent difference (%D) and relative response factors (RRF) were within the internal laboratory control limits, or the control limits stated in the National Functional Guidelines (USEPA 2020a, 2020b).

REPORTING LIMITS

The contract required quantitation limits (CRQL) were met by the laboratory for the target analytes throughout this sampling event, with some exceptions where the CRQL was elevated due to required sample dilution.

Overall Assessment

As was determined by this data validation, the laboratory followed the specified analytical methods. Accuracy was acceptable, as demonstrated by the surrogate, LCS/LCSD, and MS/MSD percent recovery values, with the exceptions noted above. Precision was acceptable, as demonstrated by the LCS/LCSD, MS/MSD, and laboratory/field duplicate RPD values, with the exceptions noted above.

The data are acceptable for the intended use, with the following qualifications listed below in Table 2.

TABLE 2. SUMMARY OF QUALIFIED SAMPLES

SAMPLE ID	ANALYTE	QUALIFIER	REASON
MW-2A-043025	Nitrate	J	MS/MSD Recovery/Laboratory Duplicate Precision
	Sulfate	J	MS/MSD Recovery
MW-8-042925	Ferrous iron	J	Field Duplicate Precision
DUP-042925	Ferrous iron	J	Field Duplicate Precision

References

U.S. Environmental Protection Agency (USEPA). "Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use," EPA-540-R-08-005. January 2009.

U.S. Environmental Protection Agency (USEPA) 2020a. Contract Laboratory Program National Functional Guidelines for Organic Superfund Methods Data Review, EPA-540-R-20-005. November 2020.

U.S. Environmental Protection Agency (USEPA) 2020b. Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Methods Data Review, EPA-542-R-20-006. November 2020.

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Project: Port of Anacortes – Quiet Cove Property, Interim Action Construction Oversight
August 2025 Groundwater Samples

File: 05147-024-14

Date: September 30, 2025

This report documents the results of a United States Environmental Protection Agency (USEPA)-defined Stage 2B data validation (USEPA Document 540-R-08-005; USEPA 2009) of analytical data from the analyses of groundwater samples collected as part of the August 2025 sampling event, and the associated laboratory and field quality control (QC) samples. The samples were obtained from the Quiet Cove Site (Site) located at 2nd Street and O Avenue in Anacortes, Washington.

Objective and Quality Control Elements

GeoEngineers, Inc. (GeoEngineers) completed the data validation consistent with the USEPA Contract Laboratory Program National Functional Guidelines for Organic Superfund Methods Data Review (USEPA 2020a) and Inorganic Superfund Methods Data Review (USEPA 2020b) (National Functional Guidelines) to determine if the laboratory analytical results meet the project objectives and are usable for their intended purpose. Data usability was assessed by determining if:

Continuing Calibrations (CCALs)

Reporting Limits

Validated Sample Delivery Groups

This data validation included review of the sample delivery group (SDG) listed below in Table 1.

TABLE 1. SUMMARY OF VALIDATED SAMPLE DELIVERY GROUPS

LABORATORY SDG	SAMPLES VALIDATED
2508-357	MW-1A-082725, MW-2A-082725, MW-3-082525, MW-4-082725, MW-8-082625, MW-DUP-082625, MW-13-082725, MW-14-082525, MW-15-082625

Chemical Analysis Performed

OnSite Environmental, Inc. (OnSite), located in Redmond, Washington, performed laboratory analyses on the samples using the following methods

Gasoline-range Hydrocarbons (NWTPH-Gx) by Method NWTPH-Gx;

Petroleum Hydrocarbons (NWTPH-Dx) by Method NWTPH-Dx;

Petroleum Hydrocarbons with Silica Gel (SG) Cleanup (NWTPH-Dx/SG) by Method NWTPH-Dx/SG;

Volatile Organic Compounds (VOCs) by Method SW8260D;

Total and Dissolved Metals by Methods EPA200.8 and EPA7470A;

Alkalinity by Method SM2320B; and

Dissolved Methane by Method RSK-175

OnSite subcontracted to Alliance Technical Group, Inc., (Alliance) located in Seattle, Washington for laboratory analyses on the samples using the following methods:

Anions by Method EPA300.0; and

Ferrous Iron by Method SM3500-FeB

Data Validation Summary

The results for each of the QC elements are summarized below.

DATA PACKAGE COMPLETENESS

OnSite provided the required deliverables for the data validation according to the National Functional Guidelines. The laboratory followed adequate corrective action processes and the identified anomalies were discussed in the relevant laboratory case narrative.

CHAIN-OF-CUSTODY DOCUMENTATION

Chain-of-custody (COC) forms were provided with the laboratory analytical reports. The COCs were accurate and complete when submitted to the laboratory.

HOLDING TIMES AND SAMPLE PRESERVATION

The sample holding time is defined as the time that elapses between sample collection and sample analysis. Maximum holding time criteria exist for each analysis to help ensure that the analyte concentrations found at the time of analysis reflect the concentration present at the time of sample collection. Established holding times were met for each analysis, with the exceptions noted below. The sample coolers arrived at the laboratory within the appropriate temperatures of between two and six degrees Celsius.

SDG 2508-357: (Anions) The 48-hour holding time for nitrate analysis was exceeded in Samples MW-1A-082725, MW-2A-082725, MW-4-082725, MW-8-082625, MW-DUP-082625, MW-13-082725, and MW-15-082625. The reporting limits for this target analyte were qualified as estimated (UJ) in these samples.

SURROGATE RECOVERIES

A surrogate compound is a compound that is chemically similar to the organic analytes of interest, but unlikely to be found in an environmental sample. Surrogates are used for organic analyses and are added to the samples, standards, and blanks to serve as an accuracy and specificity check of each analysis. The surrogates are added to the samples at a known concentration and percent recoveries are calculated following analysis. The surrogate percent recoveries for field samples were within the laboratory control limits.

METHOD BLANKS

Method blanks are analyzed to ensure that laboratory procedures and reagents do not introduce measurable concentrations of the analytes of interest. A method blank was analyzed with each batch of samples, at a frequency of 1 per 20 samples. For each sample batch, method blanks for the applicable methods were analyzed at the required frequency. None of the analytes of interest were detected in the method blanks.

MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Since the actual analyte concentration in an environmental sample is not known, the accuracy of a particular analysis is usually inferred by performing a matrix spike (MS) analysis on one sample from the associated batch, known as the parent sample. One aliquot of the sample is analyzed in the normal manner and then a second aliquot of the sample is spiked with a known amount of analyte concentration and analyzed. From these analyses, a percent recovery is calculated. Matrix spike duplicate (MSD) analyses are generally performed for organic analyses as a precision check and analyzed in the same sequence as a matrix spike. Using the result values from the MS and MSD, the relative percent difference (RPD) is calculated. The percent recovery control limits for MS and MSD analyses are specified in the laboratory documents, as are the RPD control limits for MS/MSD sample sets.

One MS/MSD analysis should be performed for every analytical batch or every 20 field samples, whichever is more frequent. The frequency requirements were met for each analysis and the percent recovery and RPD values were within the proper control limits, with the following exceptions:

SDG 2508-357: (Anions) The laboratory performed two MS samples and one MS/MSD sample set with QC outliers; however, they were performed on samples from a different SDG and are not associated with GeoEngineers' collected field samples. For this reason, no action was required.

(Ferrous Iron) The laboratory performed an MS/MSD sample set on Sample MW-3-082525. The percent recoveries for ferrous iron were greater than the control limits in the MS/MSD digested on 8/26/2025. The positive result for this target analyte was qualified as estimated (J) in this sample.

The laboratory performed an MS/MSD sample set on Sample MW-DUP-082625. The percent recoveries for ferrous iron were less than the control limits in the MS/MSD digested on 8/27/2025. The positive results for this target analyte were qualified as estimated (J) in Samples MW-8-082625 and MW-DUP-082625.

LABORATORY CONTROL SAMPLES/LABORATORY CONTROL SAMPLE DUPLICATES

A laboratory control sample (LCS) is a blank sample that is spiked with a known amount of analyte and then analyzed. An LCS is similar to an MS, but without the possibility of matrix interference. Given that matrix interference is not an issue, the LCS/LCSD control limits for accuracy and precision are usually more rigorous than for MS/MSD analyses. Additionally, data qualification based on LCS/LCSD analyses would apply to all samples in the associated batch, instead of just the parent sample. The percent recovery control limits for LCS and LCSD analyses are specified in the laboratory documents, as are the RPD control limits for LCS/LCSD sample sets.

One LCS/LCSD analysis should be performed for every analytical batch or every 20 field samples, whichever is more frequent. The frequency requirements were met for each analysis and the percent recovery and RPD values were within the proper control limits.

LABORATORY DUPLICATES

Internal laboratory duplicate analyses are performed to monitor the precision of the analyses. Two separate aliquots of a sample are analyzed as distinct samples in the laboratory and the RPD between the two results is calculated. Duplicate analyses should be performed once per analytical batch. If one or more of the samples used has a concentration less than five times the reporting limit for that sample, the absolute difference is used instead of the RPD. The RPD control limits are specified in the laboratory documents. Laboratory duplicates were analyzed at the proper frequency and the specified acceptance criteria were met.

FIELD DUPLICATES

In order to assess precision, field duplicate samples were collected and analyzed along with the reviewed sample batches. The duplicate samples were analyzed for the same parameters as the associated parent samples. Precision is determined by calculating the RPD between each pair of samples. If one or more of the sample analytes has a concentration less than five times the reporting limit for that sample, then the absolute difference is used instead of the RPD. The RPD control limit for water samples is 35 percent.

SDG 2508-357: One field duplicate sample pair, MW-8-082625 and MW-DUP-082625, was submitted with this SDG. The precision criteria for the target analytes were met in this sample pair.

INSTRUMENT TUNING

Instrument tuning for analyses by gas chromatography/mass spectrometry (GC/MS) are completed to ensure that mass resolution, identification, and sensitivity of the analyses are acceptable. Instrument tuning should be performed at the beginning of each 12-hour period during which samples or standards are analyzed. The frequency and specified acceptance criteria were met for each applicable analysis.

INTERNAL STANDARDS (LOW RESOLUTION MASS SPECTROMETRY)

Like the surrogate, an internal standard is a compound that is chemically similar to the analytes of interest, but unlikely to be found in an environmental sample. Internal standards are used only for the mass spectrometry instrumentation and are usually added to the sample aliquot after extraction has taken place. The internal standard should be analyzed at the beginning of a 12-hour sample run and the control limits for internal standard recoveries are 50 percent to 200 percent of the calibration standard. The internal standard recoveries were within the control limits.

INITIAL CALIBRATIONS (ICALS)

The initial calibrations were conducted according to the laboratory methods and consisted of the appropriate number of standards. The relative standard deviation (%RSD) and relative response factors (RRF) were within the internal laboratory control limits, or the control limits stated in the National Functional Guidelines (USEPA 2020a, 2020b).

CONTINUING CALIBRATIONS (CCALS)

The continuing calibrations were conducted according to the laboratory methods and consisted of the appropriate number of standards. The percent difference (%D) and relative response factors (RRF) were within the internal laboratory control limits, or the control limits stated in the National Functional Guidelines (USEPA 2020a, 2020b), with the following exception:

SDG 2508-357: (Anions) The %D for nitrate was outside the control limits in the continuing calibration verification performed on 8/27/2025. The reporting limits for this target analyte were qualified as estimated (UJ) in Samples MW-8-082625, MW-DUP-082625, and MW-15-082625.

REPORTING LIMITS

The contract required quantitation limits (CRQL) were met by the laboratory for the target analytes throughout this sampling event, with some exceptions where the CRQL was elevated due to required sample dilution.

Overall Assessment

As was determined by this data validation, the laboratory followed the specified analytical methods. Accuracy was acceptable, as demonstrated by the surrogate, LCS/LCSD, and MS/MSD percent recovery

values, with the exceptions noted above. Precision was acceptable, as demonstrated by the LCS/LCSD, MS/MSD, and laboratory/field duplicate RPD values.

The data are acceptable for the intended use, with the following qualifications listed below in Table 2.

TABLE 2. SUMMARY OF QUALIFIED SAMPLES

SAMPLE ID	ANALYTE	QUALIFIER	REASON
MW-1A-082725	Nitrate	UJ	Holding Time
MW-2A-082725	Nitrate	UJ	Holding Time
MW-3-082525	Ferrous iron	J	MS/MSD Recovery
MW-4-082725	Nitrate	UJ	Holding Time
MW-8-082625	Ferrous iron	J	MS/MSD Recovery
	Nitrate	UJ	Holding Time/CCAL
MW-DUP-082625	Ferrous iron	J	MS/MSD Recovery
	Nitrate	UJ	Holding Time/CCAL
MW-13-082725	Nitrate	UJ	Holding Time
MW-15-082625	Nitrate	UJ	Holding Time/CCAL

References

U.S. Environmental Protection Agency (USEPA). "Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use," EPA-540-R-08-005. January 2009.

U.S. Environmental Protection Agency (USEPA) 2020a. Contract Laboratory Program National Functional Guidelines for Organic Superfund Methods Data Review, EPA-540-R-20-005. November 2020.

U.S. Environmental Protection Agency (USEPA) 2020b. Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Methods Data Review, EPA-542-R-20-006. November 2020.

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Project: Port of Anacortes – Quiet Cove Property, Interim Action Construction Oversight
October 2024 Groundwater Samples

File: 05147-024-14

Date: December 9, 2024

This report documents the results of a United States Environmental Protection Agency (EPA)-defined Stage 2B data validation (EPA Document 540-R-08-005; USEPA 2009) of analytical data from the analyses of groundwater samples collected as part of the October 2024 sampling event, and the associated laboratory and field quality control (QC) samples. The samples were obtained from the Quiet Cove Site (Site) located at 2nd Street and O Avenue in Anacortes, Washington.

Objective and Quality Control Elements

GeoEngineers, Inc. (GeoEngineers) completed the data validation consistent with the EPA Contract Laboratory Program National Functional Guidelines for Organic Superfund Methods Data Review (EPA 2020a) and Inorganic Superfund Methods Data Review (EPA 2020b) to determine if the laboratory analytical results meet the project objectives and are usable for their intended purpose. Data usability was assessed by determining if:

Continuing Calibrations (CCALs)

Reporting Limits

Miscellaneous

Validated Sample Delivery Groups

This data validation included review of the sample delivery group (SDG) listed below in Table 1.

TABLE 1. SUMMARY OF VALIDATED SAMPLE DELIVERY GROUPS

LABORATORY SDG	SAMPLES VALIDATED
2410-423	MW-1A-103024, MW-2A-103024, MW-4-103024, MW-8-103024, DUP-103024, MW-13-103024, MW-14-103024, MW-15-103024, TB-1-103024, TB-2-103024

Chemical Analysis Performed

OnSite Environmental, Inc. (OnSite), located in Redmond, Washington, performed laboratory analyses on the samples using one or more of the following methods

Gasoline-range Hydrocarbons by Washington State Department of Ecology (Ecology) Method NWTPH-Gx;

Diesel- and heavy oil-range petroleum hydrocarbons by Ecology Method NWTPH-Dx with and without the silica gel cleanup preparation method

Volatile Organic Compounds (VOCs) by Environmental Protection Agency (EPA) Method 8260D;

Total and Dissolved Metals by EPA Methods 200.8/245.1/6020;

Alkalinity by Standard Method (SM) 2320B; and

Dissolved Methane by EPA Method RSK-175

OnSite subcontracted to Alliance Technical Group, Inc., (Alliance) located in Seattle, Washington for laboratory analyses on the water samples using the following methods:

Anions by EPA Method 300.0; and

Ferrous Iron by SM 3500-FeB

Data Validation Summary

The results for each of the QC elements are summarized below.

DATA PACKAGE COMPLETENESS

OnSite provided the required deliverables for the data validation according to the National Functional Guidelines. The laboratory followed adequate corrective action processes, and the identified anomalies were discussed in the relevant laboratory case narrative.

CHAIN-OF-CUSTODY DOCUMENTATION

Chain-of-custody (COC) forms were provided with the laboratory analytical reports. The COCs were accurate and complete when submitted to the laboratory.

HOLDING TIMES AND SAMPLE PRESERVATION

The sample holding time is defined as the time that elapses between sample collection and sample analysis. Maximum holding time criteria exist for each analysis to help ensure that the analyte concentrations found at the time of analysis reflect the concentration present at the time of sample collection. Established holding times were met for each analysis. The sample cooler arrived at the laboratory within the appropriate temperatures of between two and six degrees Celsius.

SURROGATE RECOVERIES

A surrogate compound is a compound that is chemically similar to the organic analytes of interest, but unlikely to be found in an environmental sample. Surrogates are used for organic analyses and are added to the samples, standards, and blanks to serve as an accuracy and specificity check of each analysis. The surrogates are added to the samples at a known concentration and percent recoveries are calculated following analysis. The surrogate percent recoveries for field samples were within the laboratory control limits.

METHOD AND TRIP BLANKS

Method blanks are analyzed to ensure that laboratory procedures and reagents do not introduce measurable concentrations of the analytes of interest. A method blank was analyzed with each batch of samples, at a frequency of 1 per 20 samples. For each sample batch, method blanks for the applicable methods were analyzed at the required frequency. None of the analytes of interest were detected in the method blanks.

Trip blanks are analyzed to provide an indication as to whether volatile compounds have cross-contaminated other like samples within the transportation process to the laboratory. None of the analytes of interest were detected in the trip blanks.

MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Since the actual analyte concentration in an environmental sample is not known, the accuracy of a particular analysis is usually inferred by performing a matrix spike (MS) analysis on one sample from the associated batch, known as the parent sample. One aliquot of the sample is analyzed in the normal manner and then a second aliquot of the sample is spiked with a known amount of analyte concentration and analyzed. From these analyses, a percent recovery is calculated. Matrix spike duplicate (MSD) analyses are generally performed for organic analyses as a precision check and analyzed in the same sequence as a matrix spike. Using the result values from the MS and MSD, the relative percent difference (RPD) is calculated. The percent recovery control limits for MS and MSD analyses are specified in the laboratory documents, as are the RPD control limits for MS/MSD sample sets.

One MS/MSD analysis should be performed for every analytical batch or every 20 field samples, whichever is more frequent. The frequency requirements were met for each analysis and the percent recovery and RPD values were within the proper control limits.

LABORATORY CONTROL SAMPLES/LABORATORY CONTROL SAMPLE DUPLICATES

A laboratory control sample (LCS) is a blank sample that is spiked with a known amount of analyte and then analyzed. An LCS is similar to an MS, but without the possibility of matrix interference. Given that matrix interference is not an issue, the LCS/LCSD control limits for accuracy and precision are usually more rigorous than for MS/MSD analyses. Additionally, data qualification based on LCS/LCSD analyses would apply to all samples in the associated batch, instead of just the parent sample. The percent recovery control limits for LCS and LCSD analyses are specified in the laboratory documents, as are the RPD control limits for LCS/LCSD sample sets.

One LCS/LCSD analysis should be performed for every analytical batch or every 20 field samples, whichever is more frequent. The frequency requirements were met for each analysis and the percent recovery and RPD values were within the proper control limits.

LABORATORY DUPLICATES

Internal laboratory duplicate analyses are performed to monitor the precision of the analyses. Two separate aliquots of a sample are analyzed as distinct samples in the laboratory and the RPD between the two results is calculated. Duplicate analyses should be performed once per analytical batch. If one or more of the samples used has a concentration less than five times the reporting limit for that sample, the absolute difference is used instead of the RPD. The RPD control limits are specified in the laboratory documents. Laboratory duplicates were analyzed at the proper frequency and the specified acceptance criteria were met.

FIELD DUPLICATES

In order to assess precision, field duplicate samples were collected and analyzed along with the reviewed sample batches. The duplicate samples were analyzed for the same parameters as the associated parent samples. Precision is determined by calculating the RPD between each pair of samples. If one or more of the sample analytes has a concentration less than five times the reporting limit for that sample, then the absolute difference is used instead of the RPD. The RPD control limit for water samples is 35 percent.

SDG 2410-423: One field duplicate sample pair, MW-8-103024 and DUP-103024, was submitted with this SDG. The precision criteria for the target analytes were met in this sample pair, with the exception of ferrous iron and nitrate. The positive results and reporting limit for these target analytes were qualified as estimated (J and UJ, accordingly) in this sample pair.

INSTRUMENT TUNING

Instrument tuning for analyses by gas chromatography/mass spectrometry (GC/MS) are completed to ensure that mass resolution, identification, and sensitivity of the analyses are acceptable. Instrument tuning should be performed at the beginning of each 12-hour period during which samples or standards are analyzed. The frequency and specified acceptance criteria were met for each applicable analysis.

INTERNAL STANDARDS (LOW RESOLUTION MASS SPECTROMETRY)

Like the surrogate, an internal standard is a compound that is chemically similar to the analytes of interest, but unlikely to be found in an environmental sample. Internal standards are used only for the mass spectrometry instrumentation and are usually added to the sample aliquot after extraction has taken place. The internal standard should be analyzed at the beginning of a 12-hour sample run and the control limits for internal standard recoveries are 50 percent to 200 percent of the calibration standard. The internal standard recoveries were within the control limits.

INITIAL CALIBRATIONS

The initial calibrations were conducted according to the laboratory methods and consisted of the appropriate number of standards. The relative standard deviation (%RSD) and relative response factors (RRF) were within the internal laboratory control limits, or the control limits stated in the National Functional Guidelines (EPA 2020a and 2020b).

CONTINUING CALIBRATIONS (CCALS)

The continuing calibrations were conducted according to the laboratory methods and consisted of the appropriate number of standards. The percent difference (%D) and relative response factors (RRF) were within the internal laboratory control limits, or the control limits stated in the National Functional Guidelines (EPA 2020a and 2020b).

REPORTING LIMITS

The contract required quantitation limits (CRQL) were met by the laboratory for the target analytes throughout this sampling event, with some exceptions where the CRQL was elevated due to required sample dilution.

MISCELLANEOUS

SDG 2410-423: (VOCs) The laboratory noted that only one sample vial was provided for each trip blank; therefore, Samples TB-1-103024 and TB-2-103024 could not be analyzed for n-Hexane.

Overall Assessment

As was determined by this data validation, the laboratory followed the specified analytical methods. Accuracy was acceptable, as demonstrated by the surrogate, LCS/LCSD, and MS/MSD percent recovery values. Precision was acceptable, as demonstrated by the LCS/LCSD, MS/MSD, and laboratory/field duplicate RPD values, with the exceptions noted above.

The data are acceptable for the intended use, with the following qualifications listed below in Table 2.

TABLE 2. SUMMARY OF QUALIFIED SAMPLES

SAMPLE ID	ANALYTE	QUALIFIER	REASON
MW-8-103024	Ferrous iron	J	Field Duplicate Precision
	Nitrate	J	Field Duplicate Precision

SAMPLE ID	ANALYTE	QUALIFIER	REASON
DUP-103024	Ferrous iron	J	Field Duplicate Precision
	Nitrate	UJ	Field Duplicate Precision

References

U.S. Environmental Protection Agency (EPA). Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use. Publication EPA-540-R-08-005. January 2009.

U.S. Environmental Protection Agency (EPA) 2020a. Contract Laboratory Program National Functional Guidelines for Organic Superfund Methods Data Review. Publication EPA-540-R-20-005. November 2020.

U.S. Environmental Protection Agency (EPA) 2020b. Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Methods Data Review. Publication EPA-542-R-20-006. November 2020.

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Appendix D

Historical Groundwater Data

Table D-1
Groundwater Field Parameters, Groundwater Levels and Chemical Analytical Data
Quiet Cove Site
Anacortes, Washington

Sample Location ¹		MW-1	MW-1	MW-1	MW-1	MW-1	MW-1A	MW-1A	MW-1A	MW-1A	MW-1A	MW-1A	MW-1A	MW-1A	
Sample Location		MW_1	MW_1	MW_1	MW_1	MW_1	MW_1A	MW_1A	MW_1A	MW_1A	MW_1A	MW_1A	MW_1A	MW_1A	
Sample Identification		QC-MW-1-7.1.14	MW-1-110917	MW-1_031918	MW-1_103118	MW-1_060519	MW-1A_102521	MW-1A_102521	MW-1A_020222	MW-1A_020222	MW-1A_051922	MW-1A_051922	MW-1A_082422	MW-1A_DUP-1	Preliminary Screening Level ²
Date Sampled	Units	07/01/14	11/09/17	03/19/18	10/31/18	06/05/19	10/25/21	10/25/21	02/02/22	02/02/22	05/19/22	05/19/22	08/24/22	08/24/22	
Field Measured Parameters															
Top of Casing Elevation ³	Feet	11.91	11.91	11.91	11.91	11.91	12.49	12.49	12.49	12.49	12.49	12.49	12.49	12.49	NE
Depth to Groundwater ⁴	Feet	5.14	3.93	4.56	4.35	4.76	4.26	4.26	4.76	5.76	4.99	4.99	5.62	5.62	NE
Groundwater Elevation	Feet	6.77	7.98	7.35	7.56	7.15	8.23	8.23	7.73	6.73	7.50	7.50	6.87	6.87	NE
pH	n/a	5.54	7.46	5.89	6.33	5.92	6.67	6.67	7.02	7.02	6.42	6.42	6.33	6.33	NE
Conductivity	µS/cm	237.0	195.2	132.0	162.9	421.0	550.0	550.0	458.2	458.2	442.0	442.0	457.0	457.0	NE
Turbidity	NTU	10.5	4.0	3.3	10.0	7.3	4.9	4.9	3.5	3.5	2.0	2.0	0.6	0.6	NE
Dissolved Oxygen	mg/L	0.17	1.27	1.53	2.99	0.72	0.14	0.14	0.53	0.53	1.31	1.31	0.32	0.32	NE
Temperature	°C	15.2	11.5	8.0	13.3	13.6	14.3	14.3	10.4	10.4	11.0	11.0	14.2	14.2	NE
Total Dissolved Solids	mg/L	--	171.0	126.7	136.0	351.0	448.5	448.5	408.6	408.6	389.8	389.8	372.6	372.6	NE
Oxidation Reduction Potential	mV	-4.7	113.9	39.2	31.4	103.7	-35.1	-35.1	20.9	20.9	19.8	19.8	24.9	24.9	NE
Salinity	%	--	0.13	0.09	0.10	0.26	0.34	0.34	0.31	0.31	0.30	0.30	0.28	0.28	NE
Geochemical Parameters by SM 2320/3500-Fe and EPA 300.0/6020/RSK-175/200.8															
Total Alkalinity	mg/L	--	--	--	69.0	124	310	300	280	280	270	280	270	270	NE
Ferrous Iron	mg/L	--	--	--	0.598	1.21	2.38 J	2.48	2.86	3.1	2.56	2.61	2.67	3.99 J	NE
Nitrate	mg/L	--	--	--	0.501	0.100 U	0.025 U	0.025 U	0.549 J	0.1 UJ	0.5 UJ	0.5 UJ	0.1 UJ	0.135 J	NE
Sulfate	mg/L	--	--	--	25.8	4.05	7.14	7.38	16.6	16.9	9.55	9.27	8.28	8.25	NE
Methane	µg/L	--	--	--	264	1,000	730	780	800	780	510	540	380	400	NE
Dissolved Manganese	µg/L	--	--	--	48.1	102	120	120	100	100	78	73	81	79	NE
Total Metals by EPA 200.8/7470															
Arsenic	µg/L	--	2.42 J	0.860	--	--	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	8.0 ⁵
Cadmium	µg/L	--	0.0420 J	0.100 U	--	--	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	8.8
Chromium	µg/L	--	0.520 J	0.323 J	--	--	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	50
Lead	µg/L	--	0.403 J	0.361	--	--	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	2.1
Mercury	µg/L	--	0.020 U	0.020 U	--	--	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025
Dissolved Metals by EPA 200.8/7470															
Arsenic	µg/L	--	1.20	0.614	--	--	3 U	3 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	8.0 ⁵
Cadmium	µg/L	--	0.0360 J	0.100 U	--	--	4 U	4 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	8.8
Chromium	µg/L	--	0.228 J	0.333 J	--	--	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50
Lead	µg/L	--	0.100 U	0.209	--	--	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.1
Mercury	µg/L	--	0.020 U	0.020 U	--	--	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025
Petroleum Hydrocarbons by NWTPH-G/Dx															
Gasoline-Range Hydrocarbons	µg/L	100 U	100 U	100 U	--	--	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	800 ⁶
Diesel-Range Hydrocarbons	µg/L	860	665 J	388	1,090	614	650	690	310	390	320	300	360	370	500
Heavy Oil-Range Hydrocarbons	µg/L	410 U	200 UJ	200 U	359	249	450	600	260	310	270	260	430	490	500
Total Diesel/Heavy Oil-Range ⁷	µg/L	1,270	865 J	588	1,449	863	1,100	1,290	570	700	590	560	790	860	500
Petroleum Hydrocarbons by NWTPH-Dx with SGC															
Total Diesel/Heavy Oil-Range ⁸	µg/L	--	--	--	100 U	--	200 U	210 U	210 U	210 U	200 U	200 U	200 U	200 U	500
Heavy Oil-Range Hydrocarbons	µg/L	--	--	--	200 U	--	200 U	210 U	210 U	210 U	200 U	200 U	200 U	200 U	500
Total Diesel/Heavy Oil-Range ⁷	µg/L	--	--	--	300 U	--	400 U	420 U	420 U	420 U	400 U	400 U	400 U	400 U	500
Petroleum Hydrocarbons by NWTPH-Dx Adjusted															
Total Diesel/Heavy Oil-Range ⁸	µg/L	--	--	--	1,149	--	700	870	150	280	190	160	390	460	500
Volatile Organic Compounds (VOCs) by EPA 8360															
Benzene	µg/L	1.0 U	0.20 U	0.20 U	--	--	0.2 U	0.2 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	2.4
Toluene	µg/L	1.0 U	0.20 U	0.20 U	--	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	520
Ethylbenzene	µg/L	1.0 U	0.20 U	0.20 U	--	--	0.2 U	0.2 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	130
Total Xylenes	µg/L	1.0 U	0.4 U	0.4 U	--	--	0.40 U	0.4 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	310
1,2-Dibromoethane (EDB)	µg/L	--	0.20 U	0.20 U	--	--	0.2 U	0.2 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.30
1,2-Dichloroethane (EDC)	µg/L	--	0.20 U	0.20 U	--	--	0.35 U	0.35 U	0.20 U	0.20 U	1.0 U	1.0 U	1.0 U	1.0 U	4.2
Methyl t-butyl ether (MTBE)	µg/L	10 U	0.50 U	0.50 U	--	--	0.2 U	0.2 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	610
n-Hexane	µg/L	--	0.20 U	0.20 U	--	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	7.8

Notes:

- ¹ Sample locations are shown in Figure 2.
- ² Preliminary screening levels referenced from the Post Interim Action Construction Groundwater Monitoring Plan (GeoEngineers 2021b).
- ³ Casing elevation referenced to surveys completed by Sound Development Group (October 2017) or Pacific Surveying and Engineering, Inc. (March 2022). MW-3 re-surveyed by LDES, Inc. (May 2025). Vertical Datum is referenced to North American Vertical Datum 1988 (NAVD88; US Survey Feet Units).
- ⁴ Depth measured from top of casing.
- ⁵ The preliminary screening level for arsenic has been updated based on Ecology Publication 14-09-044 for Natural Background Groundwater Arsenic Concentrations in Washington State (Ecology 2022) for the Puget Sound Region.
- ⁶ Preliminary screening level for gasoline-range petroleum hydrocarbons is 800 µg/L when benzene is present and 1,000 µg/L when not present.
- ⁷ Sum of diesel- and heavy oil-range petroleum hydrocarbon result (detect or non-detect).
- ⁸ Adjusted concentration calculated by subtracting the total diesel- and heavy oil-range petroleum hydrocarbon with SGC from the total diesel- and heavy oil-range petroleum hydrocarbon result.

-- = Not Analyzed

NE = Not Established

µg/L = microgram per liter

mg/L = milligram per liter

µS/cm = microseimens per centimeter

°C = degrees Celsius

mV = millivolt

NTU = Nephelometric Turbidity Unit

ppt = parts per thousand

SGC = acid silica gel cleanup preparation method

U = The analyte was not detected at a concentration greater than the value identified.

UJ = The analyte was not detected at an estimated concentration greater than the value identified.

J = The analyte was detected and the detected concentration is considered an estimate.

Yellow shading indicates that the identified concentration is greater than the preliminary screening level.

Bold font type indicates the analyte was detected at the reported concentration.

Table D-1
Groundwater Field Parameters, Groundwater Levels and Chemical Analytical Data
Quiet Cove Site
Anacortes, Washington

Sample Location ¹	Units	MW-1A	MW-1A	MW-1A	MW-1A	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2A	MW-2A	Preliminary Screening Level ²
Sample Location		MW_1A	MW_1A	MW_1A	MW_1A	MW_2	MW_2	MW_2	MW_2	MW_2	MW_2	MW_2	MW_2A	MW_2A	
Sample Identification		MW-1A-103024	MW-1A-020425	MW-1A-042925	MW-1A-082725	QC-MW-2-7.1.14	MW-2-110917	DUP-1-110917	MW-2_032018	DUP-1_032018	MW-2_103118	MW-2_060419	MW-2A_020722	MW-2A_051722	
Date Sampled		10/30/24	02/04/25	04/29/25	08/27/25	07/02/14	11/09/17	11/09/17	03/20/18	03/20/18	10/31/18	06/04/19	02/07/22	05/17/22	
Field Measured Parameters															
Top of Casing Elevation ³	Feet	12.49	12.49	12.49	12.49	12.01	12.01	11.91	12.01	12.01	12.01	12.01	12.20	12.20	NE
Depth to Groundwater ⁴	Feet	--	4.63	5.31	5.03	5.67	5.12	3.93	5.48	5.48	5.70	4.60	4.93	4.98	NE
Groundwater Elevation	Feet	7.81	7.86	7.18	7.46	6.34	6.89	7.98	6.53	6.53	6.31	7.41	7.27	7.22	NE
pH	n/a	6.99	7.03	7.05	6.69	6.09	7.41	7.46	6.21	6.21	6.55	6.63	6.88	6.71	NE
Conductivity	µS/cm	399.3	355.0	339.0	348.2	845.0	492.5	195.2	362.0	362.0	452.7	130.0	473.0	530.0	NE
Turbidity	NTU	9.3	4.8	8.1	4.0	3.1	3.8	4.0	4.8	4.8	7.6	9.9	17.1	108.0	NE
Dissolved Oxygen	mg/L	0.08	0.24	0.09	1.10	0.39	0.28	1.27	2.02	2.02	1.07	1.05	3.35	1.43	NE
Temperature	°C	14.2	10.5	11.3	14.9	15.0	13.5	11.5	9.8	9.8	14.1	14.0	9.3	11.2	NE
Total Dissolved Solids	mg/L	326.5	--	297.7	279.0	--	411.5	170.9	332.8	332.8	367.0	980.0	438.3	468.9	NE
Oxidation Reduction Potential	mV	-43.7	-61.2	33.7	59.2	-16.2	93.2	113.9	70.1	70.1	-22.4	-29.8	16.2	-8.8	NE
Salinity	%	0.24	--	0.22	0.21	--	0.31	0.13	0.24	0.24	0.27	0.77	0.33	0.35	NE
Geochemical Parameters by SM 2320/3500-Fe and EPA 300.0/6020/RSK-175/200.8															
Total Alkalinity	mg/L	220	220	200	190	--	--	--	--	--	253	326	310	320	NE
Ferrous Iron	mg/L	0.404	0.793	2.54	3.34	--	--	--	--	--	4.21	--	1.01	1.96	NE
Nitrate	mg/L	0.4 U	0.15 UJ	0.2 U	2 UJ	--	--	--	--	--	1.73	0.119	0.584 J	1.12	NE
Sulfate	mg/L	15.7	13.9	13.4	13.4	--	--	--	--	--	20.7	6.11	54.5	43.6	NE
Methane	µg/L	39	12	5.8	16	--	--	--	--	--	2,830	2,660	220	180	NE
Dissolved Manganese	µg/L	--	52	52	56	--	--	--	--	--	156	238	160	130	NE
Total Metals by EPA 200.8/7470															
Arsenic	µg/L	4.9	5.5	6.4	8.5	--	7.69	7.25 J	5.69	4.56	--	--	4.6	5.3	8.0 ⁵
Cadmium	µg/L	4.4 U	4.4 U	4.4 U	4.4 U	--	0.0410 J	0.100 U	0.0350 J	0.0380 J	--	--	4.4 U	4.4 U	8.8
Chromium	µg/L	11 U	11 U	11 U	11 U	--	2.23	2.09 J	1.28	1.17	--	--	11 U	11 U	50
Lead	µg/L	1.1 U	1.1 U	1.1 U	1.1 U	--	0.261	0.266 J	0.204	0.187	--	--	1.1 U	1.1 U	2.1
Mercury	µg/L	0.025 U	0.025 U	0.025 U	0.025 U	--	0.020 U	0.020 U	0.020 U	0.020 U	--	--	0.025 U	0.025 U	0.025
Dissolved Metals by EPA 200.8/7470															
Arsenic	µg/L	5.1	3.8	4.7	6.2	--	7.57	7.10	4.66	4.01	--	--	3.8	4.5	8.0 ⁵
Cadmium	µg/L	4.0 U	4.0 U	4.0 U	4.0 U	--	0.100 U	0.100 U	0.100 U	0.0310 J	--	--	4.0 U	4.0 U	8.8
Chromium	µg/L	10 U	10 U	10 U	10 U	--	1.58	1.66	0.990	1.02	--	--	10 U	10 U	50
Lead	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	--	0.100 U	0.100 U	0.0860 J	0.0870 J	--	--	1.0 U	1.0 U	2.1
Mercury	µg/L	0.025 U	0.025 U	0.025 U	0.025 U	--	0.020 U	0.020 U	0.020 U	0.020 U	--	--	0.025 U	0.025 U	0.025
Petroleum Hydrocarbons by NWTPH-G/Dx															
Gasoline-Range Hydrocarbons	µg/L	100 U	100 U	100 U	100 U	110	100 U	100 U	100 U	100 U	--	--	100 U	100 U	800 ⁶
Diesel-Range Hydrocarbons	µg/L	200 U	200 U	200 U	210 U	2,100	3,530	3,780 J	1,600	2,140	1,210	2,600	210 U	200 U	500
Heavy Oil-Range Hydrocarbons	µg/L	280	200 U	280	250	980	1,080	1,410 J	700	963	616	1,210	210 U	200 U	500
Total Diesel/Heavy Oil-Range ⁷	µg/L	480	400 U	480	460	3,080	4,610	5,190 J	2,300	3,103	1,826	3,810	420 U	400 U	500
Petroleum Hydrocarbons by NWTPH-Dx with SGC															
Diesel-Range Hydrocarbons	µg/L	200 U	200 U	200 U	200 U	--	--	--	--	--	100 U	--	210 U	200 U	500
Heavy Oil-Range Hydrocarbons	µg/L	200 U	200 U	200 U	200 U	--	--	--	--	--	200 U	--	210 U	200 U	500
Total Diesel/Heavy Oil-Range ⁷	µg/L	400 U	400 U	400 U	400 U	--	--	--	--	--	300 U	--	420 U	400 U	500
Petroleum Hydrocarbons by NWTPH-Dx Adjusted															
Total Diesel/Heavy Oil-Range ⁸	µg/L	80	0 U	80	60	--	--	--	--	--	1,526	--	0 U	0 U	500
Volatile Organic Compounds (VOCs) by EPA 8360															
Benzene	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	--	--	0.20 U	0.20 U	2.4
Toluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	--	--	1.0 U	1.0 U	520
Ethylbenzene	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	--	--	0.20 U	0.20 U	130
Total Xylenes	µg/L	0.40 U	0.40 U	0.40 U	0.40 U	1.0 U	0.40 U	0.10	0.40 U	0.40 U	--	--	0.40 U	0.40 U	310
1,2-Dibromomethane (EDB)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	--	0.20 U	0.20 U	0.20 U	0.20 U	--	--	0.20 U	0.20 U	0.30
1,2-Dichloroethane (EDC)	µg/L	0.20 U	0.20 U	0.50 U	0.20 U	--	0.20 U	0.20 U	0.20 U	0.20 U	--	--	0.20 U	1.0 U	4.2
Methyl t-butyl ether (MTBE)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	10 U	0.50 U	0.50 U	0.50 U	0.50 U	--	--	0.20 U	0.20 U	610
n-Hexane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	--	0.20 U	0.20 U	0.20 U	0.20 U	--	--	1.0 U	1.0 U	7.8

Notes:

- ¹ Sample locations are shown in Figure 2.
- ² Preliminary screening levels referenced from the Post Interim Action Construction Groundwater Monitoring Plan (GeoEngineers 2021b).
- ³ Casing elevation referenced to surveys completed by Sound Development Group (October 2017) or Pacific Surveying and Engineering, Inc. (March 2022). MW-3 re-surveyed by LDES, Inc. (May 2025). Vertical Datum is referenced to North American Vertical Datum 1988 (NAVD88; US Survey Feet Units).
- ⁴ Depth measured from top of casing.
- ⁵ The preliminary screening level for arsenic has been updated based on Ecology Publication 14-09-044 for Natural Background Groundwater Arsenic Concentrations in Washington State (Ecology 2022) for the Puget Sound Region.
- ⁶ Preliminary screening level for gasoline-range petroleum hydrocarbons is 800 µg/L when benzene is present and 1,000 µg/L when not present.
- ⁷ Sum of diesel- and heavy oil-range petroleum hydrocarbon result (detect or non-detect).
- ⁸ Adjusted concentration calculated by subtracting the total diesel- and heavy oil-range petroleum hydrocarbon with SGC from the total diesel- and heavy oil-range petroleum hydrocarbon result.

-- = Not Analyzed

NE = Not Established

µg/L = microgram per liter

mg/L = milligram per liter

µS/cm = microseimens per centimeter

°C = degrees Celsius

mV = millivolt

NTU = Nephelometric Turbidity Unit

ppt = parts per thousand

SGC = acid silica gel cleanup preparation method

U = The analyte was not detected at a concentration greater than the value identified.

UJ = The analyte was not detected at an estimated concentration greater than the value identified.

J = The analyte was detected and the detected concentration is considered an estimate.

Yellow shading indicates that the identified concentration is greater than the preliminary screening level.

Bold font type indicates the analyte was detected at the reported concentration.

Table D-1
Groundwater Field Parameters, Groundwater Levels and Chemical Analytical Data
Quiet Cove Site
Anacortes, Washington

Sample Location ¹		MW-2A	MW-2A	MW-2A	MW-2A	MW-2A	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	
Sample Location		MW_2A	MW_2A	MW_2A	MW_2A	MW_2A	MW_3	MW_3	MW_3	MW_3	MW_3	MW_3	MW_3	MW_3	
Sample Identification		MW-2A_082322	MW-2A-103024	MW-2A-020425	MW-2A-043025	MW-2A-082725	QC-MW-3-7.1.14	QC-MW-3-DUP-7.1.14	MW-3_101817	MW-3_032018	MW-3_103018	MW-3_060419	MW-3_102521	MW-3_020722	Preliminary Screening Level ²
Date Sampled	Units	08/23/22	10/30/24	02/04/25	04/30/25	08/27/25	07/01/14	07/01/14	10/18/17	03/20/18	10/30/18	06/04/19	10/25/21	02/07/22	
Field Measured Parameters															
Top of Casing Elevation ³	Feet	12.20	12.20	12.20	12.20	12.20	12.33	12.33	12.33	12.33	12.33	12.33	12.33	12.20	NE
Depth to Groundwater ⁴	Feet	5.42	4.67	4.67	5.16	4.92	6.23	6.23	6.32	5.82	6.21	6.0	4.91	5.78	NE
Groundwater Elevation	Feet	6.78	7.53	7.53	7.04	7.28	6.10	6.10	6.01	6.51	6.12	6.33	7.42	6.55	NE
pH	n/a	6.14	6.89	715.0	7.22	6.98	6.21	6.21	6.36	6.21	6.61	6.22	6.51	5.90	NE
Conductivity	µS/cm	510.0	470.0	377.0	421.0	470.0	886.0	886.0	740.0	520.0	145.7	17.9	1.4	261.1	NE
Turbidity	NTU	13.5	5.8	6.5	7.8	6.7	10.5	10.5	9.3	6.8	8.5	21.7	12.1	14.2	NE
Dissolved Oxygen	mg/L	0.44	0.46	0.58	0.07	0.11	0.13	0.13	0.40	0.11	0.76	0.39	0.11	1.65	NE
Temperature	°C	15.4	14.9	9.2	12.0	17.0	14.8	14.8	15.0	10.9	15.3	13.2	15.4	10.8	NE
Total Dissolved Solids	mg/L	409.5	500.5	–	390.0	370.4	–	–	591.5	468.0	1,170.0	14.1	1,150.4	231.4	NE
Oxidation Reduction Potential	mV	48.6	-31.1	-66.3	36.1	0.4	-13.3	-13.3	75.6	64.9	-78.7	58.6	-8.5	49.8	NE
Salinity	%	0.31	0.29	–	0.29	0.27	–	–	0.45	0.35	0.92	1.39	0.91	0.17	NE
Geochemical Parameters by SM 2320/3500-Fe and EPA 300.0/6020/RSK-175/200.8															
Total Alkalinity	mg/L	300	230	210	210	210	–	–	–	–	406	234	190	130	NE
Ferrous Iron	mg/L	5.44	0.15 U	0.727	2.73	3.32	–	–	–	–	3.05 J	–	0.936	0.595	NE
Nitrate	mg/L	1 UJ	0.456	0.244 J	1.6 J	2 UJ	–	–	–	–	0.100 U	0.100 U	0.234	1.3 J	NE
Sulfate	mg/L	23.3 J	37.8	37.1	36 J	21.3	–	–	–	–	24.2	635	91	33.5	NE
Methane	µg/L	300	23	21	18	30	–	–	–	–	9,880	6,000	710	140	NE
Dissolved Manganese	µg/L	180	–	81	99	89	–	–	–	–	292	1,800	59	24	NE
Total Metals by EPA 200.8/7470															
Arsenic	µg/L	5.2	4.4	6.0	7.7	7.6	4.9	–	1.84	2.51	–	–	3.7	3.3 U	8.0 ⁵
Cadmium	µg/L	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	–	0.0710 J	0.0470 J	–	–	4.4 U	4.4 U	8.8
Chromium	µg/L	11 U	11 U	11 U	11 U	11 U	11	–	7.32	4.90	–	–	11 U	11 U	50
Lead	µg/L	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	–	0.227	0.276	–	–	1.1 U	1.1 U	2.1
Mercury	µg/L	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.50 U	–	0.020 U	0.020 U	–	–	0.025 U	0.025 U	0.025
Dissolved Metals by EPA 200.8/7470															
Arsenic	µg/L	5.1	3.8	4.2	4.8	5.3	4.5	–	1.13	1.42	–	–	3.2	3.0 U	8.0 ⁵
Cadmium	µg/L	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	–	0.100 U	0.100 U	–	–	4 U	4.0 U	8.8
Chromium	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	–	6.28	4.55	–	–	10 U	10 U	50
Lead	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	–	0.0950 J	0.113	–	–	1 U	1.0 U	2.1
Mercury	µg/L	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.50 U	–	0.020 U	0.020 U	–	–	0.025 U	0.025 U	0.025
Petroleum Hydrocarbons by NWTPH-G/Dx															
Gasoline-Range Hydrocarbons	µg/L	100 U	100 U	100 U	100 U	100 U	480	530	234	100 U	–	–	100 U	100 U	800 ⁶
Diesel-Range Hydrocarbons	µg/L	370	210 U	200 U	230	230	2,600 J	2,400 J	1,940	1,270	1,420	1,080	600	580	500
Heavy Oil-Range Hydrocarbons	µg/L	440	210 U	200 U	200 U	220	700	640	461	279	200 U	202	460	270 J	500
Total Diesel/Heavy Oil-Range ⁷	µg/L	810	420 U	400 U	430	450	3,300 J	3,040 J	2,401	1,549	1,620	1,282	1,060	850 J	500
Petroleum Hydrocarbons by NWTPH-Dx with SGC															
Diesel-Range Hydrocarbons	µg/L	200 U	210 U	200 U	200 U	200 U	–	–	–	–	100 U	–	220 U	220 U	500
Heavy Oil-Range Hydrocarbons	µg/L	200 U	210 U	200 U	200 U	200 U	–	–	–	–	200 U	–	220 U	220 U	500
Total Diesel/Heavy Oil-Range ⁷	µg/L	400 U	420 U	400 U	400 U	400 U	–	–	–	–	300 U	–	440 U	440 U	500
Petroleum Hydrocarbons by NWTPH-Dx Adjusted															
Total Diesel/Heavy Oil-Range ⁸	µg/L	410	0 U	0 U	30	50	–	–	–	–	1,320	–	620	410 J	500
Volatile Organic Compounds (VOCs) by EPA 8360															
Benzene	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	1.0 U	0.20 U	0.20 U	–	–	0.2 U	0.20 U	2.4
Toluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.040 J	0.20 U	–	–	1.0 U	1.0 U	520
Ethylbenzene	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.49	1.0 U	0.20 U	0.20 U	–	–	0.2 U	0.20 U	130
Total Xylenes	µg/L	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	1.6	1.8	0.25	0.40 U	–	–	0.4 U	0.40 U	310
1,2-Dibromoethane (EDB)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	–	0.20 U	0.20 U	–	–	0.2 U	0.20 U	0.30
1,2-Dichloroethane (EDC)	µg/L	1.0 U	0.20 U	0.20 U	0.50 U	0.20 U	0.20 U	–	0.20 U	0.20 U	–	–	0.35 U	0.20 U	4.2
Methyl t-butyl ether (MTBE)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	10 U	0.50 U	0.50 U	–	–	0.2 U	0.20 U	610
n-Hexane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	–	–	0.20 U	0.20 U	–	–	1.0 U	1.0 U	7.8

Notes:

- ¹ Sample locations are shown in Figure 2.
- ² Preliminary screening levels referenced from the Post Interim Action Construction Groundwater Monitoring Plan (GeoEngineers 2021b).
- ³ Casing elevation referenced to surveys completed by Sound Development Group (October 2017) or Pacific Surveying and Engineering, Inc. (March 2022). MW-3 re-surveyed by LDES, Inc. (May 2025). Vertical Datum is referenced to North American Vertical Datum 1988 (NAVD88; US Survey Feet Units).
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- ⁶ Preliminary screening level for gasoline-range petroleum hydrocarbons is 800 µg/L when benzene is present and 1,000 µg/L when not present.
- ⁷ Sum of diesel- and heavy oil-range petroleum hydrocarbon result (detect or non-detect).
- ⁸ Adjusted concentration calculated by subtracting the total diesel- and heavy oil-range petroleum hydrocarbon with SGC from the total diesel- and heavy oil-range petroleum hydrocarbon result.

– = Not Analyzed

NE = Not Established

µg/L = microgram per liter

mg/L = milligram per liter

µS/cm = microseimens per centimeter

°C = degrees Celsius

mV = millivolt

NTU = Nephelometric Turbidity Unit

ppt = parts per thousand

SGC = acid silica gel cleanup preparation method

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 Yellow shading indicates that the identified concentration is greater than the preliminary screening level.

Bold font type indicates the analyte was detected at the reported concentration.

Table D-1
Groundwater Field Parameters, Groundwater Levels and Chemical Analytical Data
Quiet Cove Site
Anacortes, Washington

Sample Location ¹	Units	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	Preliminary Screening Level ²
Sample Location		MW_3	MW_3	MW_3	MW_3	MW_3	MW_3	MW_3	MW_4	MW_4	MW_4	MW_4	MW_4	MW_4	MW_4	
Sample Identification		MW-3_051722	MW-3_082322	MW-3-103024	MW-3-020525	MW-3-043025	MW-3-082525	QC-MW-4-7.1.14	MW-4_101817	MW-4_031918	MW-4_102918	MW-4_060519	MW-4_102521	MW-4_020322		
Date Sampled		05/17/22	08/23/22	10/30/24	02/05/25	04/30/25	08/25/25	07/04/14	10/18/17	03/19/18	10/29/18	06/05/19	10/25/21	02/03/22		
Field Measured Parameters																
Top of Casing Elevation ³	Feet	12.33	12.33	--	12.97	12.97	12.97	12.34	12.34	12.34	12.34	12.34	12.34	12.34	NE	
Depth to Groundwater ⁴	Feet	5.91	6.12	--	4.83	6.03	5.09	5.48	5.68	5.62	5.71	5.57	4.54	6.30	NE	
Groundwater Elevation	Feet	6.42	6.21	--	8.14	6.94	7.88	6.86	6.66	6.72	6.63	6.77	7.80	6.04	NE	
pH	n/a	5.98	5.68	--	6.58	6.69	6.25	5.82	6.15	6.05	6.04	6.08	6.49	8.32	NE	
Conductivity	µS/cm	351.0	630.0	--	931.0	294.0	369.1	670.0	860.0	367.0	528.0	2,950.0	630.0	163.4	NE	
Turbidity	NTU	104.0	986.0	--	4.1	3.9	2.9	4.0	5.0	8.5	10.5	9.4	5.4	14.2	NE	
Dissolved Oxygen	mg/L	0.71	0.78	--	1.28	1.61	0.51	0.10	0.06	0.16	0.90	1.47	0.55	5.01	NE	
Temperature	°C	11.5	15.4	--	10.2	12.6	19.2	14.2	15.4	11.1	15.2	14.8	15.5	7.8	NE	
Total Dissolved Solids	mg/L	320.0	485.0	--	--	250.9	269.8	--	682.5	324.6	423.0	2,379.0	500.5	156.6	NE	
Oxidation Reduction Potential	mV	98.1	121.3	--	18.0	21.3	12.3	-22.7	66.5	76.9	-82.6	55.8	70.1	35.1	NE	
Salinity	%	0.23	0.33	--	--	0.18	0.20	--	0.52	0.24	0.32	0.19	0.38	0.11	NE	
Geochemical Parameters by SM 2320/3500-Fe and EPA 300.0/6020/RSK-175/200.8																
Total Alkalinity	mg/L	150	180	--	120	120	150	--	--	--	168	192	200	190	NE	
Ferrous Iron	mg/L	0.978	0.578 J	--	0.372	0.15 U	0.461 J	--	--	--	16.7 J	12.7	0.152	3.38	NE	
Nitrate	mg/L	0.57 J	1.91 J	--	3.38	1.69	1.18	--	--	--	0.454	0.100 U	1.28	0.5 U	NE	
Sulfate	mg/L	38.1	40.3 J	--	88.3	36.2	18.6	--	--	--	72.2	51.8	42.6	6.82	NE	
Methane	µg/L	94	220	--	13	16	34	--	--	--	7,560	2,920	420	1,700	NE	
Dissolved Manganese	µg/L	26	35	--	240	66	52	--	--	--	2,570	1,800	66	1,600	NE	
Total Metals by EPA 200.8/7470																
Arsenic	µg/L	3.3 U	3.3 U	--	3.3 U	3.3 U	3.3 U	--	1.50	1.97	--	--	3.3 U	3.3 U	8.0 ⁵	
Cadmium	µg/L	4.4 U	4.4 U	--	4.4 U	4.4 U	4.4 U	--	0.500 U	0.118	--	--	4.4 U	4.4 U	8.8	
Chromium	µg/L	11 U	11 U	--	11 U	11 U	11 U	--	3.29	0.394 J	--	--	11 U	11 U	50	
Lead	µg/L	1.1 U	1.1 U	--	1.1 U	1.1 U	1.1 U	--	3.75	0.0850 J	--	--	1.1 U	1.1 U	2.1	
Mercury	µg/L	0.025 U	0.025 U	--	0.025 U	0.025 U	0.025 U	--	0.020 U	0.020 U	--	--	0.025 U	0.025 U	0.025	
Dissolved Metals by EPA 200.8/7470																
Arsenic	µg/L	3.0 U	3.0 U	--	3.0 U	3.0 U	3.0 U	--	1.53	1.71	--	--	3 U	3.0 U	8.0 ⁵	
Cadmium	µg/L	4.0 U	4.0 U	--	4.0 U	4.0 U	4.0 U	--	0.200 U	0.0660 J	--	--	4 U	4.0 U	8.8	
Chromium	µg/L	10 U	10 U	--	10 U	10 U	10 U	--	4.45	0.355 J	--	--	10 U	10 U	50	
Lead	µg/L	1.0 U	1.0 U	--	1.0 U	1.0 U	1.0 U	--	0.200 U	0.100 U	--	--	1 U	1.0 U	2.1	
Mercury	µg/L	0.025 U	0.025 U	--	0.025 U	0.025 U	0.025 U	--	0.020 U	0.020 U	--	--	0.025 U	0.025 U	0.025	
Petroleum Hydrocarbons by NWTPH-G/Dx																
Gasoline-Range Hydrocarbons	µg/L	100 U	100 U	--	100 U	100 U	100 U	510	447	100 U	--	--	100 U	100 U	800 ⁶	
Diesel-Range Hydrocarbons	µg/L	420	400	--	450	310	290	1,300 J	1,460	293	584	391	210	210 U	500	
Heavy Oil-Range Hydrocarbons	µg/L	230	530	--	410	310	320	410 U	285	200 U	200 U	200 U	230	210 U	500	
Total Diesel/Heavy Oil-Range ⁷	µg/L	650	930	--	860	620	610	1,710 J	1,745	493	784	591	440	420 U	500	
Petroleum Hydrocarbons by NWTPH-Dx with SGC																
Diesel-Range Hydrocarbons	µg/L	200 U	200 U	--	210 U	200 U	200 U	--	--	--	100 U	--	200 U	210 U	500	
Heavy Oil-Range Hydrocarbons	µg/L	200 U	200 U	--	210 U	200 U	200 U	--	--	--	200 U	--	200 U	210 U	500	
Total Diesel/Heavy Oil-Range ⁷	µg/L	400 U	400 U	--	420 U	400 U	400 U	--	--	--	300 U	--	400 U	420 U	500	
Petroleum Hydrocarbons by NWTPH-Dx Adjusted																
Total Diesel/Heavy Oil-Range ⁸	µg/L	250	530	--	440	220	210	--	--	--	484	--	40	0 U	500	
Volatile Organic Compounds (VOCs) by EPA 8360																
Benzene	µg/L	0.20 U	0.20 U	--	0.20 U	0.20 U	0.20 U	1.0 U	0.11 J	0.20 U	--	--	0.2 U	0.20 U	2.4	
Toluene	µg/L	1.0 U	1.0 U	--	1.0 U	1.0 U	1.0 U	1.0 U	0.090 J	0.20 U	--	--	1.0 U	1.0 U	520	
Ethylbenzene	µg/L	0.20 U	0.20 U	--	0.20 U	0.20 U	0.20 U	1.0 U	0.20 U	0.20 U	--	--	0.2 U	0.20 U	130	
Total Xylenes	µg/L	0.40 U	0.40 U	--	0.40 U	0.40 U	0.40 U	1.0 U	0.21	0.40 U	--	--	0.4 U	0.40 U	310	
1,2-Dibromoethane (EDB)	µg/L	0.20 U	0.20 U	--	0.20 U	0.20 U	0.20 U	--	0.20 U	0.20 U	--	--	0.2 U	0.20 U	0.30	
1,2-Dichloroethane (EDC)	µg/L	1.0 U	1.0 U	--	0.20 U	0.50 U	0.20 U	--	0.20 U	0.20 U	--	--	0.35 U	0.20 U	4.2	
Methyl t-butyl ether (MTBE)	µg/L	0.20 U	0.20 U	--	0.20 U	0.20 U	0.20 U	10 U	0.50 U	0.50 U	--	--	0.2 U	0.20 U	610	
n-Hexane	µg/L	1.0 U	1.0 U	--	1.0 U	1.0 U	1.0 U	--	0.20 U	0.20 U	--	--	1.0 U	1.0 U	7.8	

Notes:

- ¹ Sample locations are shown in Figure 2.
- ² Preliminary screening levels referenced from the Post Interim Action Construction Groundwater Monitoring Plan (GeoEngineers 2021b).
- ³ Casing elevation referenced to surveys completed by Sound Development Group (October 2017) or Pacific Surveying and Engineering, Inc. (March 2022). MW-3 re-surveyed by LDES, Inc. (May 2025). Vertical Datum is referenced to North American Vertical Datum 1988 (NAVD88; US Survey Feet Units).
- ⁴ Depth measured from top of casing.
- ⁵ The preliminary screening level for arsenic has been updated based on Ecology Publication 14-09-044 for Natural Background Groundwater Arsenic Concentrations in Washington State (Ecology 2022) for the Puget Sound Region.
- ⁶ Preliminary screening level for gasoline-range petroleum hydrocarbons is 800 µg/L when benzene is present and 1,000 µg/L when not present.
- ⁷ Sum of diesel- and heavy oil-range petroleum hydrocarbon result (detect or non-detect).
- ⁸ Adjusted concentration calculated by subtracting the total diesel- and heavy oil-range petroleum hydrocarbon with SGC from the total diesel- and heavy oil-range petroleum hydrocarbon result.

-- = Not Analyzed

NE = Not Established

µg/L = microgram per liter

mg/L = milligram per liter

µS/cm = microseimens per centimeter

°C = degrees Celsius

mV = millivolt

NTU = Nephelometric Turbidity Unit

ppt = parts per thousand

SGC = acid silica gel cleanup preparation method

U = The analyte was not detected at a concentration greater than the value identified.

UJ = The analyte was not detected at an estimated concentration greater than the value identified.

J = The analyte was detected and the detected concentration is considered an estimate.

Yellow shading indicates that the identified concentration is greater than the preliminary screening level.

Bold font type indicates the analyte was detected at the reported concentration.

Table D-1
Groundwater Field Parameters, Groundwater Levels and Chemical Analytical Data
Quiet Cove Site
Anacortes, Washington

Sample Location ¹	Units	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-5	MW-5	MW-5	MW-5	MW-5	MW-6	MW-6	Preliminary Screening Level ²
Sample Location		MW_4	MW_4	MW_4	MW_4	MW_4	MW_4	MW_4	MW_5	MW_5	MW_5	MW_5	MW_5	MW_6	MW_6	
Sample Identification		MW-4_051722	MW-4_082322	MW-4_103024	MW-4_020525	MW-4_043025	MW-4_082725	QC-MW-5_7.1.14	MW-5_101817	MW-5_032018	MW-5_103118	MW-5_060419	MW-6_101817	MW-6_032018		
Date Sampled		05/17/22	08/23/22	10/30/24	02/05/25	04/30/25	08/27/25	07/04/14	10/18/17	03/20/18	10/31/18	06/04/19	10/18/17	03/20/18		
Field Measured Parameters																
Top of Casing Elevation ³	Feet	12.34	12.34	12.34	12.34	12.34	12.34	14.96	14.96	14.96	14.96	14.96	15.43	15.43	NE	
Depth to Groundwater ⁴	Feet	6.01	5.42	4.96	4.91	4.96	5.18	4.91	5.54	4.82	6.59	4.96	5.68	4.54	NE	
Groundwater Elevation	Feet	6.33	6.92	7.38	7.43	7.38	7.16	10.05	9.42	10.14	8.37	10.0	9.75	10.89	NE	
pH	n/a	6.27	5.95	6.69	6.62	6.50	6.33	5.54	6.14	5.79	6.41	5.97	7.08	6.39	NE	
Conductivity	µS/cm	740.0	980.0	758.0	723.0	401.0	173.4	237.0	384.0	141.0	320.8	395.0	314.0	229.0	NE	
Turbidity	NTU	3.0	0.0	2.9	5.0	3.6	1.1	10.5	17.8	21.4	10.5	8.7	5.8	3.0	NE	
Dissolved Oxygen	mg/L	0.84	0.28	0.13	0.89	0.18	0.05	0.17	0.10	0.89	1.03	1.68	5.47	6.31	NE	
Temperature	°C	11.9	15.1	15.3	11.3	12.4	15.6	--	15.4	9.7	15.1	13.2	14.3	9.6	NE	
Total Dissolved Solids	mg/L	643.0	786.5	608.0	--	3,432.0	1,363.0	--	298.9	128.1	257.0	331.0	256.8	211.2	NE	
Oxidation Reduction Potential	mV	30.8	-60.1	-60.3	-68.9	97.8	-1.1	-4.7	72.1	79.6	17.7	65.5	78.0	114.1	NE	
Salinity	%	0.49	0.61	0.45	--	2.94	1.08	--	0.23	0.09	0.19	2.50	0.19	0.16	NE	
Geochemical Parameters by SM 2320/3500-Fe and EPA 300.0/6020/RSK-175/200.8																
Total Alkalinity	mg/L	240	340	280	260	220	320	--	--	--	187	139	--	--	NE	
Ferrous Iron	mg/L	10.9	58.8	14.8	1.5	17.6	38.6	--	--	--	1.49	--	--	--	NE	
Nitrate	mg/L	0.5 UJ	1.05 J	0.4 U	0.283	0.2 U	2 UJ	--	--	--	0.100 U	0.115	--	--	NE	
Sulfate	mg/L	5.33	2.42 J	20.4	18.6	53.5	10 U	--	--	--	1.01	2.11	--	--	NE	
Methane	µg/L	2,300 J	7,200	3,100	1,800	390	1,400	--	--	--	794	3,210	--	--	NE	
Dissolved Manganese	µg/L	1,400	5,200	--	1,500	2,500	3,000	--	--	--	1,240	1,410	--	--	NE	
Total Metals by EPA 200.8/7470																
Arsenic	µg/L	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	10	4.55	2.13	--	--	1.59	0.705	8.0 ⁵	
Cadmium	µg/L	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	0.200 U	0.104	--	--	0.0510 J	0.100 U	8.8	
Chromium	µg/L	11 U	11 U	11 U	11 U	11 U	12	46	1.60	6.22	--	--	0.483 J	1.17	50	
Lead	µg/L	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	7.1	0.408	1.66	--	--	0.526	0.339	2.1	
Mercury	µg/L	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.50 U	0.020 U	0.020 U	--	--	0.020 U	0.020 U	0.025	
Dissolved Metals by EPA 200.8/7470																
Arsenic	µg/L	3.0 U	3.3 U	3.0 U	3.0 U	3.0 U	3.3 U	6.6	4.60	0.648	--	--	1.47	0.640	8.0 ⁵	
Cadmium	µg/L	4.0 U	4.4 U	4.0 U	4.0 U	4.0 U	4.4 U	4.0 U	0.0620 J	0.0450 J	--	--	0.100 U	0.100 U	8.8	
Chromium	µg/L	10 U	11 U	10 U	10 U	10 U	11 U	10 U	0.606 J	0.375 J	--	--	0.402 J	1.07	50	
Lead	µg/L	1.0 U	1.1 U	1.0 U	1.0 U	1.0 U	1.1 U	1.0 U	0.200 U	0.100 U	--	--	0.100 U	0.100 U	2.1	
Mercury	µg/L	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.50 U	0.020 U	0.020 U	--	--	0.020 U	0.020 U	0.025	
Petroleum Hydrocarbons by NWTPH-G/Dx																
Gasoline-Range Hydrocarbons	µg/L	100 U	100 U	100 U	100 U	100 U	100 U	440	112	100 U	--	--	100 U	100 U	800 ⁶	
Diesel-Range Hydrocarbons	µg/L	260	440	340	260	400	390	1,500 J	637	100 U	454	159	100 U	100 U	500	
Heavy Oil-Range Hydrocarbons	µg/L	200 U	350	250	200 U	310	290	450 U	200 U	200 U	200 U	200 U	200 U	200 U	500	
Total Diesel/Heavy Oil-Range ⁷	µg/L	460	790	590	460	710	680	1,950 J	837	300 U	654	359	300 U	300 U	500	
Petroleum Hydrocarbons by NWTPH-Dx with SGC																
Diesel-Range Hydrocarbons	µg/L	200 U	220 U	200 U	200 U	200 U	190 U	--	--	--	100 U	--	--	--	500	
Heavy Oil-Range Hydrocarbons	µg/L	200 U	220 U	200 U	200 U	200 U	190 U	--	--	--	200 U	--	--	--	500	
Total Diesel/Heavy Oil-Range ⁷	µg/L	400 U	440 U	400 U	400 U	400 U	380 U	--	--	--	300 U	--	--	--	500	
Petroleum Hydrocarbons by NWTPH-Dx Adjusted																
Total Diesel/Heavy Oil-Range ⁸	µg/L	60	350	190	60	310	300	--	--	--	354	--	--	--	500	
Volatile Organic Compounds (VOCs) by EPA 8360																
Benzene	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	--	--	0.20 U	0.20 U	2.4	
Toluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	0.20 U	--	--	0.20 U	0.20 U	520	
Ethylbenzene	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	--	--	0.20 U	0.20 U	130	
Total Xylenes	µg/L	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.22	0.070	0.40 U	--	--	0.40 U	0.40 U	310	
1,2-Dibromoethane (EDB)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	--	--	0.20 U	0.20 U	0.30	
1,2-Dichloroethane (EDC)	µg/L	1.0 U	1.0 U	0.20 U	0.20 U	0.50 U	0.20 U	0.20 U	0.20 U	0.20 U	--	--	0.20 U	0.20 U	4.2	
Methyl t-butyl ether (MTBE)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	--	--	0.50 U	0.50 U	610	
n-Hexane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	0.20 U	0.20 U	--	--	0.20 U	0.20 U	7.8	

Notes:

- ¹ Sample locations are shown in Figure 2.
- ² Preliminary screening levels referenced from the Post Interim Action Construction Groundwater Monitoring Plan (GeoEngineers 2021b).
- ³ Casing elevation referenced to surveys completed by Sound Development Group (October 2017) or Pacific Surveying and Engineering, Inc. (March 2022). MW-3 re-surveyed by LDES, Inc. (May 2025). Vertical Datum is referenced to North American Vertical Datum 1988 (NAVD88; US Survey Feet Units).
- ⁴ Depth measured from top of casing.
- ⁵ The preliminary screening level for arsenic has been updated based on Ecology Publication 14-09-044 for Natural Background Groundwater Arsenic Concentrations in Washington State (Ecology 2022) for the Puget Sound Region.
- ⁶ Preliminary screening level for gasoline-range petroleum hydrocarbons is 800 µg/L when benzene is present and 1,000 µg/L when not present.
- ⁷ Sum of diesel- and heavy oil-range petroleum hydrocarbon result (detect or non-detect).
- ⁸ Adjusted concentration calculated by subtracting the total diesel- and heavy oil-range petroleum hydrocarbon with SGC from the total diesel- and heavy oil-range petroleum hydrocarbon result.
- = Not Analyzed
- NE = Not Established
- µg/L = microgram per liter
- mg/L = milligram per liter
- µS/cm = microseimens per centimeter
- °C = degrees Celsius
- mV = millivolt
- NTU = Nephelometric Turbidity Unit
- ppt = parts per thousand
- SGC = acid silica gel cleanup preparation method
- U = The analyte was not detected at a concentration greater than the value identified.
- UJ = The analyte was not detected at an estimated concentration greater than the value identified.
- J = The analyte was detected and the detected concentration is considered an estimate.
- Yellow shading indicates that the identified concentration is greater than the preliminary screening level.
- Bold** font type indicates the analyte was detected at the reported concentration.

Table D-1
Groundwater Field Parameters, Groundwater Levels and Chemical Analytical Data
Quiet Cove Site
Anacortes, Washington

Sample Location ¹		MW-6	MW-6	MW-7	MW-7	MW-7	MW-7	MW-8	MW-8	MW-8	MW-8	MW-8	MW-8	MW-8	
Sample Location		MW_6	MW_6	MW_7	MW_7	MW_7	MW_7	MW_8	MW_8	MW_8	MW_8	MW_8	MW_8	MW_8	
Sample Identification		MW-6_102918	MW-6_060419	MW-7_101817	MW-7_032018	MW-7_103018	MW-7_060519	MW-8_110917	MW-8_031918	MW-8_102918	MW-8_060519	MW-DUP-1_060519	MW-8_102521	MW-8_020122	Preliminary Screening Level ²
Date Sampled	Units	10/29/18	06/04/19	10/18/17	03/20/18	10/30/18	06/05/19	11/09/17	03/19/18	10/29/18	06/05/19	06/05/19	10/25/21	02/01/22	
Field Measured Parameters															
Top of Casing Elevation ³	Feet	15.43	15.43	12.62	12.62	12.62	12.62	13.07	--	13.07	13.07	13.07	13.07	--	NE
Depth to Groundwater ⁴	Feet	5.31	5.82	6.69	6.38	6.47	6.32	4.60	4.89	5.97	4.78	4.78	4.06	4.50	NE
Groundwater Elevation	Feet	10.12	9.61	5.93	6.24	6.15	6.30	8.47	8.18	7.10	8.29	8.29	9.01	8.57	NE
pH	n/a	6.92	6.41	6.20	6.01	6.40	6.37	7.26	6.49	6.78	6.46	6.46	6.91	6.41	NE
Conductivity	µS/cm	278.9	500.0	147.0	710.0	158.3	284.0	566.8	283.0	324.6	690.0	690.0	373.0	359.3	NE
Turbidity	NTU	6.7	5.8	5.0	0.0	9.5	8.6	5.7	2.7	120.6	7.7	7.7	15.1	9.1	NE
Dissolved Oxygen	mg/L	1.17	1.21	1.66	5.67	1.40	2.18	0.28	0.22	0.87	0.61	0.61	0.16	1.09	NE
Temperature	°C	14.0	14.3	15.9	10.0	15.5	15.2	15.0	10.3	16.0	14.5	14.5	15.8	10.6	NE
Total Dissolved Solids	mg/L	227.0	409.0	1,168.0	637.0	1,256.0	2,265.0	294.5	260.0	259.0	559.8	559.8	295.1	331.4	NE
Oxidation Reduction Potential	mV	139.0	56.4	86.5	69.5	100.9	90.4	30.8	19.4	-65.0	-10.1	-10.1	-40.1	62.9	NE
Salinity	%	0.17	0.31	0.91	0.48	0.99	0.19	0.22	0.19	0.19	0.43	0.43	0.22	0.25	NE
Geochemical Parameters by SM 2320/3500-Fe and EPA 300.0/6020/RSK-175/200.8															
Total Alkalinity	mg/L	150	161	--	--	249	231	--	--	185	238	230	210	260	NE
Ferrous Iron	mg/L	0.040	--	--	--	0.040 U	0.114	--	--	5.61	17.7	17.5	15	24.3	NE
Nitrate	mg/L	0.199	0.100 U	--	--	2.74	3.47	--	--	0.242	0.100 U	0.100 U	0.098	1.14	NE
Sulfate	mg/L	15.8	11.6	--	--	22.4	35.8	--	--	10.5	4.23	4.45	4.69	9.08	NE
Methane	µg/L	0.65 U	1.58	--	--	14.7	9.95	--	--	1,000	1,920	2,270	430	1,000	NE
Dissolved Manganese	µg/L	8.36	392	--	--	203	146	--	--	1,130	2,450	2,810	2,000	2,500	NE
Total Metals by EPA 200.8/7470															
Arsenic	µg/L	--	--	4.16	0.974	--	--	5.96	6.75	--	--	--	6.9	6.6	8.0 ⁵
Cadmium	µg/L	--	--	0.500 U	0.100 U	--	--	0.100 U	0.100 U	--	--	--	4.4 U	4.4 U	8.8
Chromium	µg/L	--	--	2.04 J	0.398 J	--	--	1.92	1.09	--	--	--	11 U	11 U	50
Lead	µg/L	--	--	0.500 U	0.0830 J	--	--	0.164	0.143	--	--	--	1.1 U	1.1 U	2.1
Mercury	µg/L	--	--	0.020 U	0.020 U	--	--	0.020 U	0.020 U	--	--	--	0.025 U	0.025 U	0.025
Dissolved Metals by EPA 200.8/7470															
Arsenic	µg/L	--	--	1.71	0.989	--	--	6.29	3.91	--	--	--	5.6	3.5	8.0 ⁵
Cadmium	µg/L	--	--	0.500 U	0.100 U	--	--	0.100 U	0.100 U	--	--	--	4 U	4.0 U	8.8
Chromium	µg/L	--	--	1.42 J	0.356 J	--	--	1.41	1.13	--	--	--	10 U	10 U	50
Lead	µg/L	--	--	0.500 U	0.251	--	--	0.100 U	0.100 U	--	--	--	1 U	1.0 U	2.1
Mercury	µg/L	--	--	0.020 U	0.020 U	--	--	0.020 U	0.020 U	--	--	--	0.025 U	0.025 U	0.025
Petroleum Hydrocarbons by NWTPH-G/Dx															
Gasoline-Range Hydrocarbons	µg/L	--	--	100 U	100 U	--	--	251	109	117	970	1,000	150	120	800 ⁶
Diesel-Range Hydrocarbons	µg/L	100 U	100 U	100 U	100 U	100 U	100 U	828	455	415	881	762	530	650	500
Heavy Oil-Range Hydrocarbons	µg/L	200 U	200 U	200 U	200 U	200 U	200 U	342	200 U	200 U	264	217	400	730	500
Total Diesel/Heavy Oil-Range ⁷	µg/L	300 U	300 U	300 U	300 U	300 U	300 U	1,170	655	615	1,145	979	930	1,380	500
Petroleum Hydrocarbons by NWTPH-Dx with SGC															
Diesel-Range Hydrocarbons	µg/L	100 U	--	--	--	100 U	--	--	--	100 U	--	--	200 U	200 U	500
Heavy Oil-Range Hydrocarbons	µg/L	200 U	--	--	--	200 U	--	--	--	200 U	--	--	200 U	200 U	500
Total Diesel/Heavy Oil-Range ⁷	µg/L	300 U	--	--	--	300 U	--	--	--	300 U	--	--	400 U	400 U	500
Petroleum Hydrocarbons by NWTPH-Dx Adjusted															
Total Diesel/Heavy Oil-Range ⁸	µg/L	0 U	--	--	--	0 U	--	--	--	315	--	--	530	980	500
Volatile Organic Compounds (VOCs) by EPA 8360															
Benzene	µg/L	--	--	0.20 U	0.20 U	--	--	5.83	3.03	2.19	13.9	13.0	7.4	6.3	2.4
Toluene	µg/L	--	--	0.20 U	0.20 U	--	--	0.54	0.12 J	0.16 J	1.51	1.38	1.0 U	1.0 U	520
Ethylbenzene	µg/L	--	--	0.20 U	0.20 U	--	--	0.24	0.20 U	0.060 J	3.35	3.26	0.2 U	0.20 U	130
Total Xylenes	µg/L	--	--	0.40 U	0.40 U	--	--	0.64	0.11	0.19	1.56	1.48	0.4 U	0.40 U	310
1,2-Dibromoethane (EDB)	µg/L	--	--	0.20 U	0.20 U	--	--	0.20 U	0.20 U	--	--	--	0.2 U	0.20 U	0.30
1,2-Dichloroethane (EDC)	µg/L	--	--	0.20 U	0.20 U	--	--	0.20 U	0.15 J	--	--	--	0.35 U	0.20 U	4.2
Methyl t-butyl ether (MTBE)	µg/L	--	--	0.50 U	0.50 U	--	--	0.50 U	0.50 U	--	--	--	0.2 U	0.20 U	610
n-Hexane	µg/L	--	--	0.20 U	0.20 U	--	--	4.40	1.32	--	--	--	1.3	1.0 U	7.8

Notes:

- ¹ Sample locations are shown in Figure 2.
- ² Preliminary screening levels referenced from the Post Interim Action Construction Groundwater Monitoring Plan (GeoEngineers 2021b).
- ³ Casing elevation referenced to surveys completed by Sound Development Group (October 2017) or Pacific Surveying and Engineering, Inc. (March 2022). MW-3 re-surveyed by LDES, Inc. (May 2025). Vertical Datum is referenced to North American Vertical Datum 1988 (NAVD88; US Survey Feet Units).
- ⁴ Depth measured from top of casing.
- ⁵ The preliminary screening level for arsenic has been updated based on Ecology Publication 14-09-044 for Natural Background Groundwater Arsenic Concentrations in Washington State (Ecology 2022) for the Puget Sound Region.
- ⁶ Preliminary screening level for gasoline-range petroleum hydrocarbons is 800 µg/L when benzene is present and 1,000 µg/L when not present.
- ⁷ Sum of diesel- and heavy oil-range petroleum hydrocarbon result (detect or non-detect).
- ⁸ Adjusted concentration calculated by subtracting the total diesel- and heavy oil-range petroleum hydrocarbon with SGC from the total diesel- and heavy oil-range petroleum hydrocarbon result.
- = Not Analyzed
- NE = Not Established
- µg/L = microgram per liter
- mg/L = milligram per liter
- µS/cm = microseimens per centimeter
- °C = degrees Celsius
- mV = millivolt
- NTU = Nephelometric Turbidity Unit
- ppt = parts per thousand
- SGC = acid silica gel cleanup preparation method
- U = The analyte was not detected at a concentration greater than the value identified.
- UJ = The analyte was not detected at an estimated concentration greater than the value identified.
- J = The analyte was detected and the detected concentration is considered an estimate.
- Yellow shading indicates that the identified concentration is greater than the preliminary screening level.
- Bold** font type indicates the analyte was detected at the reported concentration.

Table D-1
Groundwater Field Parameters, Groundwater Levels and Chemical Analytical Data
Quiet Cove Site
Anacortes, Washington

Sample Location ¹	Units	MW-8	MW-8	MW-8	MW-8	MW-8	MW-8	MW-8	MW-8	MW-8	MW-8	MW-10	MW-10	MW-10	Preliminary Screening Level ²
Sample Location		MW_8	MW_8	MW_8	MW_8	MW_8	MW_8	MW_8	MW_8	MW_8	MW_8	MW_10	MW_10	MW_10	
Sample Identification		MW-8_051822	MW-8_082422	MW-8-103024	DUP-103024	MW-8-020525	DUP-020525	MW-8-042925	DUP-042925	MW-8-082625	MW-DUP-082625	MW-10-110917	MW-10_031918	MW-10_102918	
Date Sampled		05/18/22	08/24/22	10/30/24	10/30/24	02/05/25	02/05/25	04/29/25	04/29/25	08/26/25	08/26/25	11/09/17	03/19/18	10/29/18	
Field Measured Parameters															
Top of Casing Elevation ³	Feet	--	13.07	13.07	13.07	13.07	13.07	13.07	13.07	13.07	13.07	14.17	14.17	14.17	NE
Depth to Groundwater ⁴	Feet	5.11	5.48	4.68	4.68	3.96	3.96	4.71	4.71	4.23	4.23	4.49	3.46	6.72	NE
Groundwater Elevation	Feet	7.96	7.59	8.39	8.39	9.11	9.11	8.36	8.36	8.84	8.84	9.68	10.71	7.45	NE
pH	n/a	6.38	6.33	4.76	4.76	7.11	7.11	6.89	6.89	6.60	6.60	6.90	6.96	7.03	NE
Conductivity	µS/cm	367.0	312.0	460.0	460.0	269.0	269.0	321.0	321.0	318.2	318.2	406.0	301.0	347.4	NE
Turbidity	NTU	10.2	4.1	4.8	4.8	4.3	4.3	6.4	6.4	6.7	6.7	4.4	0.4	27.3	NE
Dissolved Oxygen	mg/L	0.82	0.50	0.59	0.59	0.21	0.21	0.46	0.46	0.15	0.15	3.83	0.37	1.02	NE
Temperature	°C	12.2	16.9	15.5	15.5	10.5	10.5	11.7	11.7	17.3	17.3	16.1	8.9	14.2	NE
Total Dissolved Solids	mg/L	206.9	240.9	205.5	205.5	--	--	280.2	280.2	252.7	252.7	318.5	282.7	277.0	NE
Oxidation Reduction Potential	mV	-29.5	28.7	-40.1	-40.1	-68.1	-68.1	39.9	39.9	2.5	2.5	77.2	251.1	161.9	NE
Salinity	%	0.21	0.15	0.27	0.27	--	--	0.20	0.20	0.19	0.19	0.25	0.21	0.20	NE
Geochemical Parameters by SM 2320/3500-Fe and EPA 300.0/6020/RSK-175/200.8															
Total Alkalinity	mg/L	240	180	240	250	170	180	210	220	210	220	--	--	184	NE
Ferrous Iron	mg/L	24.5	10.5	17.4 J	1.21 J	1.33	1.38	15.1 J	19.4 J	19.3 J	24.9 J	--	--	0.040 U	NE
Nitrate	mg/L	0.5 U	0.122 J	2.23 J	0.4 UJ	0.15 UJ	2.16 J	0.2 U	0.368	4 UJ	4 UJ	--	--	0.100 U	NE
Sulfate	mg/L	3.34	4.68	4.06	3.7	5.03	4.88	3.01	3.08	20 U	20 U	--	--	19.2	NE
Methane	µg/L	1,400	910	710	850	280	350	240	290	270	370	--	--	0.65 U	NE
Dissolved Manganese	µg/L	2,300	1,400	--	--	1,400	1,300	2,000	2,000	1,900	2,000	--	--	573	NE
Total Metals by EPA 200.8/7470															
Arsenic	µg/L	6.8	4.4	5.5	4.3	3.5	3.3 U	3.5	3.3 U	4.8	5.5	1.71	1.33	--	8.0 ⁵
Cadmium	µg/L	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	0.0360 J	0.0340 J	--	8.8
Chromium	µg/L	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	0.265 J	0.500 U	--	50
Lead	µg/L	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.231	0.100 U	--	2.1
Mercury	µg/L	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.020 U	0.020 U	--	0.025
Dissolved Metals by EPA 200.8/7470															
Arsenic	µg/L	5.3	4.1	4.1	3.5	3.0 U	3.1	3.2	3.1	4.9	5.7	1.67	1.32	--	8.0 ⁵
Cadmium	µg/L	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	0.0320 J	0.0730 J	--	8.8
Chromium	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	0.500 U	0.500 U	--	50
Lead	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.100 U	0.100 U	--	2.1
Mercury	µg/L	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.020 U	0.020 U	--	0.025
Petroleum Hydrocarbons by NWTPH-G/Dx															
Gasoline-Range Hydrocarbons	µg/L	320 J	290	170	190	100 U	110	190	190	340	370	100 U	100 U	--	800 ⁶
Diesel-Range Hydrocarbons	µg/L	700	570	900	990	220	300	610	660	700	700	100 U	100 U	100 U	500
Heavy Oil-Range Hydrocarbons	µg/L	380	570	1,000	960	160	230	480	340	470	470	200 U	200 U	200 U	500
Total Diesel/Heavy Oil-Range ⁷	µg/L	1,080	1,140	1,900	1,950	380	530	1,090	1,000	1,170	1,170	300 U	300 U	300 U	500
Petroleum Hydrocarbons by NWTPH-Dx with SGC															
Diesel-Range Hydrocarbons	µg/L	200 U	200 U	210 U	200 U	160 U	200 U	200 U	200 U	200 U	200 U	--	--	100 U	500
Heavy Oil-Range Hydrocarbons	µg/L	200 U	200 U	210 U	200 U	160 U	200 U	200 U	200 U	200 U	200 U	--	--	200 U	500
Total Diesel/Heavy Oil-Range ⁷	µg/L	400 U	400 U	420 U	400 U	320 U	400 U	400 U	400 U	400 U	400 U	--	--	300 U	500
Petroleum Hydrocarbons by NWTPH-Dx Adjusted															
Total Diesel/Heavy Oil-Range ⁸	µg/L	680	740	1,480	1,550	60	130	690	600	770	770	--	--	0 U	500
Volatile Organic Compounds (VOCs) by EPA 8360															
Benzene	µg/L	19	10	12	13	5.2	5.0	8.2	8.4	16	16	0.20 U	0.20 U	--	2.4
Toluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	0.20 U	--	520
Ethylbenzene	µg/L	0.61	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	--	130
Total Xylenes	µg/L	0.78	0.45	0.40 U	--	0.40 U	0.40 U	0.45	0.45	0.44	0.46	0.40 U	0.40 U	--	310
1,2-Dibromoethane (EDB)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	--	0.30
1,2-Dichloroethane (EDC)	µg/L	1.0 U	1.0 U	0.20 U	0.20 U	0.26 U	0.26 U	0.50 U	0.50 U	0.20 U	0.20 U	0.20 U	0.20 U	--	4.2
Methyl t-butyl ether (MTBE)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	--	610
n-Hexane	µg/L	8.4	4.3	1.1	1.2	1.1	1.1	2.5	2.4	2.9	3.0	0.20 U	0.20 U	--	7.8

Notes:

- ¹ Sample locations are shown in Figure 2.
- ² Preliminary screening levels referenced from the Post Interim Action Construction Groundwater Monitoring Plan (GeoEngineers 2021b).
- ³ Casing elevation referenced to surveys completed by Sound Development Group (October 2017) or Pacific Surveying and Engineering, Inc. (March 2022). MW-3 re-surveyed by LDES, Inc. (May 2025). Vertical Datum is referenced to North American Vertical Datum 1988 (NAVD88; US Survey Feet Units).
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- ⁶ Preliminary screening level for gasoline-range petroleum hydrocarbons is 800 µg/L when benzene is present and 1,000 µg/L when not present.
- ⁷ Sum of diesel- and heavy oil-range petroleum hydrocarbon result (detect or non-detect).
- ⁸ Adjusted concentration calculated by subtracting the total diesel- and heavy oil-range petroleum hydrocarbon with SGC from the total diesel- and heavy oil-range petroleum hydrocarbon result.

-- = Not Analyzed

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°C = degrees Celsius

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NTU = Nephelometric Turbidity Unit

ppt = parts per thousand

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U = The analyte was not detected at a concentration greater than the value identified.

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J = The analyte was detected and the detected concentration is considered an estimate.

Yellow shading indicates that the identified concentration is greater than the preliminary screening level.

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Table D-1
Groundwater Field Parameters, Groundwater Levels and Chemical Analytical Data
Quiet Cove Site
Anacortes, Washington

Sample Location ¹		MW-10	MW-11	MW-11	MW-11	MW-12	MW-12	MW-12	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13	
Sample Location		MW_10	MW_11	MW_11	MW_11	MW_12	MW_12	MW_12	MW_13	MW_13	MW_13	MW_13	MW_13	MW_13	
Sample Identification		MW-10_060519	MW-11-110917	MW-11-11_032018	MW-11-11_103118	MW-12-12_103018	MW-12-DUP-1_103018	MW-12-MW-12_060519	MW-13-MW-13_102521	MW-13-MW-13_020222	MW-13-MW-13_051822	MW-13-MW-13_082422	MW-13-103024	MW-13-020525	Preliminary Screening Level ²
Date Sampled	Units	06/05/19	11/09/17	03/20/18	10/31/18	10/30/18	10/30/18	06/05/19	10/25/21	02/02/22	05/18/22	08/24/22	10/30/24	02/05/25	
Field Measured Parameters															
Top of Casing Elevation ³	Feet	14.17	12.28	12.28	12.28	11.17	11.17	11.17	11.94	11.94	11.94	11.94	11.94	11.94	NE
Depth to Groundwater ⁴	Feet	4.32	3.58	--	6.12	2.85	2.85	2.79	3.91	4.56	4.84	5.31	4.63	4.44	NE
Groundwater Elevation	Feet	9.85	8.70	--	6.16	8.32	8.32	8.38	8.03	7.38	7.10	6.63	7.31	7.50	NE
pH	n/a	6.80	6.24	--	6.48	6.23	6.23	6.13	7.12	7.15	6.57	6.33	7.03	7.08	NE
Conductivity	µS/cm	610.0	830.0	--	789.0	436.1	436.1	720.0	522.0	369.3	360.0	400.0	370.6	332.0	NE
Turbidity	NTU	3.9	8.4	--	5.4	9.8	9.8	7.3	3.9	4.3	6.4	9.1	5.0	6.9	NE
Dissolved Oxygen	mg/L	1.09	0.10	--	0.76	0.86	0.86	3.14	0.16	0.68	0.75	0.58	0.21	0.08	NE
Temperature	°C	14.7	15.5	--	15.0	14.8	14.8	14.1	14.1	9.3	10.8	14.4	13.6	9.6	NE
Total Dissolved Solids	mg/L	500.5	656.5	--	627.0	352.0	352.0	598.0	429.0	342.6	317.9	326.3	306.8	--	NE
Oxidation Reduction Potential	mV	77.1	65.4	--	-80.3	-75.5	-75.5	-8.4	-42.3	29.8	-11.8	38.2	-68.4	-80.9	NE
Salinity	%	0.38	0.50	--	0.48	0.26	0.26	0.45	0.32	0.26	0.24	0.24	0.22	--	NE
Geochemical Parameters by SM 2320/3500-Fe and EPA 300.0/6020/RSK-175/200.8															
Total Alkalinity	mg/L	179	--	--	426	233	242	180	270	220	210	240	230	210	NE
Ferrous Iron	mg/L	0.040 U	--	--	32.0	25.5 J	25.6 J	23.4	1.66	2.92 J	3.43	3.41	3.4	0.733	NE
Nitrate	mg/L	0.451	--	--	0.100 U	0.100 U	0.100 U	0.100 U	0.053	0.1 U	0.5 U	0.15 J	0.4 U	0.553	NE
Sulfate	mg/L	21.3	--	--	0.100 U	7.93	9.98	0.245	56.6	40.2	25.5	19.6	9.09	9.45	NE
Methane	µg/L	0.74	--	--	14,000	16,900	17,500	15,400	440	490	530	920	360	240	NE
Dissolved Manganese	µg/L	376	--	--	3,350	3,010	2,950	2,950	190	150	88	110	--	92	NE
Total Metals by EPA 200.8/7470															
Arsenic	µg/L	--	10.4	7.01	--	--	--	--	3.6	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	8.0 ⁵
Cadmium	µg/L	--	0.0820 J	0.100 U	--	--	--	--	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	8.8
Chromium	µg/L	--	1.12	0.932	--	--	--	--	11 U	11 U	11 U	11 U	11 U	11 U	50
Lead	µg/L	--	0.278	0.0780 J	--	--	--	--	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	2.1
Mercury	µg/L	--	0.020 U	0.020 U	--	--	--	--	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025
Dissolved Metals by EPA 200.8/7470															
Arsenic	µg/L	--	11.6	6.74	--	--	--	--	3 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	8.0 ⁵
Cadmium	µg/L	--	0.100 U	0.100 U	--	--	--	--	4 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	8.8
Chromium	µg/L	--	1.18	1.05	--	--	--	--	10 U	10 U	10 U	10 U	10 U	10 U	50
Lead	µg/L	--	0.111	0.133	--	--	--	--	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.1
Mercury	µg/L	--	0.020 U	0.020 U	--	--	--	--	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025
Petroleum Hydrocarbons by NWTPH-G/Dx															
Gasoline-Range Hydrocarbons	µg/L	--	2,030	3,120	3,220	--	--	--	100 U	100 U	100 U	100 U	100 U	100 U	800 ⁶
Diesel-Range Hydrocarbons	µg/L	100 U	4,780	5,440	5,850	1,750	1,890	1,560	470	210	200 U	350	280	180	500
Heavy Oil-Range Hydrocarbons	µg/L	200 U	723	739	977	200 U	200 U	200 U	560	230	300	630	350	340	500
Total Diesel/Heavy Oil-Range ⁷	µg/L	300 U	5,503	6,179	6,827	1,950	2,090	1,760	1,030	440	500	980	630	520	500
Petroleum Hydrocarbons by NWTPH-Dx with SGC															
Diesel-Range Hydrocarbons	µg/L	--	--	--	1,110	188	202	--	200 U	210 U	200 U	200 U	200 U	180 U	500
Heavy Oil-Range Hydrocarbons	µg/L	--	--	--	200 U	200 U	200 U	--	200 U	210 U	200 U	200 U	200 U	200 U	500
Total Diesel/Heavy Oil-Range ⁷	µg/L	--	--	--	1,310	388	402	--	400 U	420 U	400 U	400 U	400 U	380 U	500
Petroleum Hydrocarbons by NWTPH-Dx Adjusted															
Total Diesel/Heavy Oil-Range ⁸	µg/L	--	--	--	5,517	1,562	1,688	--	630	20	100	580	230	140	500
Volatile Organic Compounds (VOCs) by EPA 8360															
Benzene	µg/L	--	30.5	25.1	29.1	--	--	--	4.0	2.7	3.3	3.0	2.2	2.3	2.4
Toluene	µg/L	--	2.29	2.05	2.45	--	--	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	520
Ethylbenzene	µg/L	--	1.17	1.21	1.39	--	--	--	0.2 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	130
Total Xylenes	µg/L	--	2.8	3.2	3.3	--	--	--	0.4 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	310
1,2-Dibromoethane (EDB)	µg/L	--	0.20 U	0.080 J	--	--	--	--	0.2 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.30
1,2-Dichloroethane (EDC)	µg/L	--	0.20 U	0.20 U	--	--	--	--	0.44	0.32	1.0 U	1.0 U	0.20 U	0.34 U	4.2
Methyl t-butyl ether (MTBE)	µg/L	--	0.50 U	0.50 U	--	--	--	--	0.2 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	610
n-Hexane	µg/L	--	0.20 U	5.86	--	--	--	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	7.8

Notes:

- ¹ Sample locations are shown in Figure 2.
- ² Preliminary screening levels referenced from the Post Interim Action Construction Groundwater Monitoring Plan (GeoEngineers 2021b).
- ³ Casing elevation referenced to surveys completed by Sound Development Group (October 2017) or Pacific Surveying and Engineering, Inc. (March 2022). MW-3 re-surveyed by LDES, Inc. (May 2025). Vertical Datum is referenced to North American Vertical Datum 1988 (NAVD88; US Survey Feet Units).
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- ⁸ Adjusted concentration calculated by subtracting the total diesel- and heavy oil-range petroleum hydrocarbon with SGC from the total diesel- and heavy oil-range petroleum hydrocarbon result.

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U = The analyte was not detected at a concentration greater than the value identified.

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Table D-1
Groundwater Field Parameters, Groundwater Levels and Chemical Analytical Data
Quiet Cove Site
Anacortes, Washington

Sample Location ¹		MW-13	MW-13	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14	MW-15	MW-15	MW-15	Preliminary Screening Level ²
Sample Location		MW_13	MW_13	MW_14	MW_14	MW_14	MW_14	MW_14	MW_14	MW_14	MW_14	MW_15	MW_15	MW_15	
Sample Identification		MW-13-042925	MW-13-082725	MW_14-14_102521	MW_14-14_020222	MW_14-14_051822	MW_14-14_082422	MW_14-103024	MW_14-020425	MW-14-042925	MW-14-082525	MW-15_102521	MW-15_020322	MW-15_051722	
Date Sampled	Units	04/29/25	08/27/25	10/25/21	02/02/22	05/18/22	08/24/22	10/30/24	02/04/25	04/29/25	08/25/25	10/25/21	02/03/22	05/17/22	
Field Measured Parameters															
Top of Casing Elevation ³	Feet	11.94	11.94	12.14	12.14	12.14	12.14	12.14	12.14	12.14	12.14	12.20	12.20	12.20	NE
Depth to Groundwater ⁴	Feet	4.89	4.97	1.70	4.76	10.05	3.18	4.63	4.45	3.09	4.11	4.38	4.78	5.41	NE
Groundwater Elevation	Feet	7.05	6.97	10.44	7.38	2.09	8.96	7.51	7.69	9.05	8.03	7.82	7.42	6.79	NE
pH	n/a	7.18	6.81	7.96	6.67	7.64	6.96	7.03	8.17	7.82	7.71	6.23	6.63	6.31	NE
Conductivity	µS/cm	325.0	395.4	511.0	934.0	235.0	292.0	370.6	191.0	222.0	294.5	1,730.0	1,332.0	1,510.0	NE
Turbidity	NTU	4.3	0.9	14.3	12.8	11.2	4.8	5.0	7.8	6.3	6.5	4.4	10.9	4.4	NE
Dissolved Oxygen	mg/L	0.11	0.14	1.91	1.48	3.83	0.54	0.21	3.23	1.98	0.31	0.18	0.52	0.89	NE
Temperature	°C	11.2	14.8	13.8	10.8	11.4	17.3	13.6	8.6	11.0	17.2	14.5	8.6	120.0	NE
Total Dissolved Solids	mg/L	286.7	319.0	423.0	832.0	204.9	218.1	306.8	–	201.5	226.7	1,384.9	1,258.5	1,306.5	NE
Oxidation Reduction Potential	mV	14.8	16.9	137.4	126.8	57.8	87.3	-68.4	118.1	31.1	3.6	-18.0	47.1	-38.2	NE
Salinity	%	0.21	0.24	0.32	0.64	0.15	0.16	0.22	–	0.14	0.16	1.12	0.99	1.03	NE
Geochemical Parameters by SM 2320/3500-Fe and EPA 300.0/6020/RSK-175/200.8															
Total Alkalinity	mg/L	200	240	120	100	110	150	110	110	130	150	570	440	390	NE
Ferrous Iron	mg/L	0.15 U	3.65	0.1 U	0.29	0.768	1.59 J	0.15 U	0.516	0.991	0.15 U	51.2	53.4	52.2	NE
Nitrate	mg/L	0.2 U	2 UJ	1.55	0.979	1.21	–	1.15	0.315 J	3.73	0.292	0.025 U	0.415 J	1 UJ	NE
Sulfate	mg/L	9.14	10 U	176	19	28.1	23	35.9	16.7	14.4	10.6	1.48	4.13	5.53 J	NE
Methane	µg/L	76	230	3.9	28	300	760	5.3	15	13	9.0	10,000	14,000	7,900 J	NE
Dissolved Manganese	µg/L	89	99	320	55	11	150	–	10 U	10 U	11	3,900	4,800	5,300	NE
Total Metals by EPA 200.8/7470															
Arsenic	µg/L	3.3 U	3.3 U	3.3 U	6.2	5.0	4.0	3.9	4.2	3.9	5.1	6.2	3.3 U	4.4	8.0 ⁵
Cadmium	µg/L	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	8.8
Chromium	µg/L	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	50
Lead	µg/L	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	2.1
Mercury	µg/L	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025
Dissolved Metals by EPA 200.8/7470															
Arsenic	µg/L	3.0 U	3.0 U	3 U	4.7	3.7	3.2	3.5	3.8	4.0	4.9	5.4	3.0 U	4.3	8.0 ⁵
Cadmium	µg/L	4.0 U	4.0 U	4 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4 U	4.0 U	4.0 U	8.8
Chromium	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50
Lead	µg/L	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	2.1
Mercury	µg/L	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025
Petroleum Hydrocarbons by NWTPH-G/Dx															
Gasoline-Range Hydrocarbons	µg/L	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	110 U	240 U	800 ⁶
Diesel-Range Hydrocarbons	µg/L	210	330	210 U	210 U	200 U	210 U	200 U	200 U	200 U	200 U	1,600	1,200	1,400	500
Heavy Oil-Range Hydrocarbons	µg/L	210	420	210 U	210 U	200 U	250	200 U	200 U	200 U	200 U	1,100	520	530	500
Total Diesel/Heavy Oil-Range ⁷	µg/L	420	750	420 U	420 U	400 U	460	400 U	400 U	400 U	400 U	2,700	1,720	1,930	500
Petroleum Hydrocarbons by NWTPH-Dx with SGC															
Diesel-Range Hydrocarbons	µg/L	200 U	200 U	210 U	210 U	200 U	210 U	200 U	200 U	200 U	200 U	210 U	210 U	200 U	500
Heavy Oil-Range Hydrocarbons	µg/L	200 U	200 U	210 U	210 U	200 U	210 U	200 U	200 U	200 U	200 U	210 U	210 U	200 U	500
Total Diesel/Heavy Oil-Range ⁷	µg/L	400 U	400 U	420 U	420 U	400 U	420 U	400 U	400 U	400 U	400 U	420 U	420 U	400 U	500
Petroleum Hydrocarbons by NWTPH-Dx Adjusted															
Total Diesel/Heavy Oil-Range ⁸	µg/L	20	350	0 U	0 U	0 U	40	0 U	0 U	0 U	0 U	2,280	1,300	1,530	500
Volatile Organic Compounds (VOCs) by EPA 8360															
Benzene	µg/L	2.1	2.9	0.2 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.2 U	0.20 U	0.20 U	2.4
Toluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	520
Ethylbenzene	µg/L	0.20 U	0.20 U	0.2 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.2 U	0.20 U	0.20 U	130
Total Xylenes	µg/L	0.40 U	0.40 U	0.4 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.4 U	0.40 U	0.40 U	310
1,2-Dibromoethane (EDB)	µg/L	0.20 U	0.20 U	0.2 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.2 U	0.20 U	0.20 U	0.30
1,2-Dichloroethane (EDC)	µg/L	0.50 U	0.20 U	0.35 U	0.20 U	1.0 U	1.0 U	0.20 U	0.20 U	0.50 U	0.20 U	0.35 U	0.20 U	1.0 U	4.2
Methyl t-butyl ether (MTBE)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.2 U	0.20 U	0.20 U	610
n-Hexane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	7.8

Notes:

- ¹ Sample locations are shown in Figure 2.
- ² Preliminary screening levels referenced from the Post Interim Action Construction Groundwater Monitoring Plan (GeoEngineers 2021b).
- ³ Casing elevation referenced to surveys completed by Sound Development Group (October 2017) or Pacific Surveying and Engineering, Inc. (March 2022). MW-3 re-surveyed by LDES, Inc. (May 2025). Vertical Datum is referenced to North American Vertical Datum 1988 (NAVD88; US Survey Feet Units).
- ⁴ Depth measured from top of casing.
- ⁵ The preliminary screening level for arsenic has been updated based on Ecology Publication 14-09-044 for Natural Background Groundwater Arsenic Concentrations in Washington State (Ecology 2022) for the Puget Sound Region.
- ⁶ Preliminary screening level for gasoline-range petroleum hydrocarbons is 800 µg/L when benzene is present and 1,000 µg/L when not present.
- ⁷ Sum of diesel- and heavy oil-range petroleum hydrocarbon result (detect or non-detect).
- ⁸ Adjusted concentration calculated by subtracting the total diesel- and heavy oil-range petroleum hydrocarbon with SGC from the total diesel- and heavy oil-range petroleum hydrocarbon result.

– = Not Analyzed

NE = Not Established

µg/L = microgram per liter

mg/L = milligram per liter

µS/cm = microseimens per centimeter

°C = degrees Celsius

mV = millivolt

NTU = Nephelometric Turbidity Unit

ppt = parts per thousand

SGC = acid silica gel cleanup preparation method

U = The analyte was not detected at a concentration greater than the value identified.

UJ = The analyte was not detected at an estimated concentration greater than the value identified.

J = The analyte was detected and the detected concentration is considered an estimate.

 Yellow shading indicates that the identified concentration is greater than the preliminary screening level.

Bold font type indicates the analyte was detected at the reported concentration.

Table D-1
Groundwater Field Parameters, Groundwater Levels and Chemical Analytical Data
Quiet Cove Site
Anacortes, Washington

Sample Location ¹		MW-15	MW-15	MW-15	MW-15	MW-15	
Sample Location		MW_15	MW_15	MW_15	MW_15	MW_15	
Sample Identification		MW-15_082322	MW-15-103024	MW-15-020525	MW-15-043025	MW-15-082625	Preliminary Screening Level ²
Date Sampled	Units	08/23/22	10/30/24	02/04/25	04/30/25	08/26/25	
Field Measured Parameters							
Top of Casing Elevation ³	Feet	12.20	12.20	12.07	12.07	12.07	NE
Depth to Groundwater ⁴	Feet	5.31	4.61	4.48	5.72	5.23	NE
Groundwater Elevation	Feet	6.89	7.59	7.59	6.35	6.84	NE
pH	n/a	5.81	6.45	6.48	6.61	6.33	NE
Conductivity	µS/cm	1,580.0	2,098.0	1,541.0	2,010.0	2,287.0	NE
Turbidity	NTU	1.8	2.2	6.5	3.9	4.0	NE
Dissolved Oxygen	mg/L	0.31	0.15	0.18	0.14	0.09	NE
Temperature	°C	17.3	15.0	7.5	14.2	21.2	NE
Total Dissolved Solids	mg/L	1,202.5	1,604.0	–	1,644.5	1,566.0	NE
Oxidation Reduction Potential	mV	-6.4	-58.5	-80.9	33.3	-37.1	NE
Salinity	%	0.94	1.35	–	1.31	1.21	NE
Geochemical Parameters by SM 2320/3500-Fe and EPA 300.0/6020/RSK-175/200.8							
Total Alkalinity	mg/L	450	500	470	490	470	NE
Ferrous Iron	mg/L	59.2	97.4	56.3	76.4	63.8	NE
Nitrate	mg/L	1 UJ	0.4 U	0.682	0.2 U	4 UJ	NE
Sulfate	mg/L	6 UJ	2 U	4.13	2.09	20 U	NE
Methane	µg/L	7,700	7,900	5,100	2,400	3,200	NE
Dissolved Manganese	µg/L	5,000	–	5,100	6,200	5,600	NE
Total Metals by EPA 200.8/7470							
Arsenic	µg/L	6.8	8.8	4.2	6.3	9.5	8.0 ⁵
Cadmium	µg/L	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	8.8
Chromium	µg/L	11 U	11 U	11 U	11 U	11 U	50
Lead	µg/L	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	2.1
Mercury	µg/L	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025
Dissolved Metals by EPA 200.8/7470							
Arsenic	µg/L	6.8	9.3	4.5	6.7	10	8.0 ⁵
Cadmium	µg/L	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	8.8
Chromium	µg/L	10 U	10 U	10 U	10 U	10 U	50
Lead	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.1
Mercury	µg/L	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025
Petroleum Hydrocarbons by NWTPH-G/Dx							
Gasoline-Range Hydrocarbons	µg/L	230	150	140	120	170	800 ⁶
Diesel-Range Hydrocarbons	µg/L	1,600	1,200	1,000	1,200	1,500	500
Heavy Oil-Range Hydrocarbons	µg/L	1,000	960	340	510	920	500
Total Diesel/Heavy Oil-Range ⁷	µg/L	2,600	2,160	1,340	1,710	2,420	500
Petroleum Hydrocarbons by NWTPH-Dx with SGC							
Diesel-Range Hydrocarbons	µg/L	200 U	200 U	200 U	200 U	210 U	500
Heavy Oil-Range Hydrocarbons	µg/L	200 U	200 U	200 U	200 U	210 U	500
Total Diesel/Heavy Oil-Range ⁷	µg/L	400 U	400 U	400 U	400 U	420 U	500
Petroleum Hydrocarbons by NWTPH-Dx Adjusted							
Total Diesel/Heavy Oil-Range ⁸	µg/L	2,200	1,760	940	1,310	2,000	500
Volatile Organic Compounds (VOCs) by EPA 8360							
Benzene	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	2.4
Toluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	520
Ethylbenzene	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	130
Total Xylenes	µg/L	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	310
1,2-Dibromoethane (EDB)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.30
1,2-Dichloroethane (EDC)	µg/L	1.0 U	0.20 U	0.20 U	0.50 U	0.20 U	4.2
Methyl t-butyl ether (MTBE)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	610
n-Hexane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	7.8

Notes:

- ¹ Sample locations are shown in Figure 2.
- ² Preliminary screening levels referenced from the Post Interim Action Construction Groundwater Monitoring Plan (GeoEngineers 2021b).
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- ⁷ Sum of diesel- and heavy oil-range petroleum hydrocarbon result (detect or non-detect).
- ⁸ Adjusted concentration calculated by subtracting the total diesel- and heavy oil-range petroleum hydrocarbon with SGC from the total diesel- and heavy oil-range petroleum hydrocarbon result.
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- µg/L = microgram per liter
- mg/L = milligram per liter
- µS/cm = microseimens per centimeter
- °C = degrees Celsius
- mV = millivolt
- NTU = Nephelometric Turbidity Unit
- ppt = parts per thousand
- SGC = acid silica gel cleanup preparation method
- U = The analyte was not detected at a concentration greater than the value identified.
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- Yellow shading indicates that the identified concentration is greater than the preliminary screening level.
- Bold** font type indicates the analyte was detected at the reported concentration.