



**THIRD AND FOURTH QUARTER 2023
GROUNDWATER MONITORING AND TREATMENT SYSTEM
OPERATION AND MAINTENANCE REPORT**

**CHS Auburn Site
Auburn, Washington**

Farallon PN: 301-004

February 23, 2024

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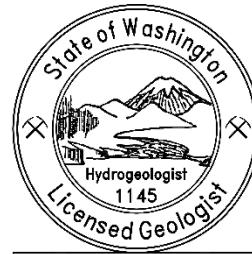


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1.0 INTRODUCTION

Farallon Consulting, L.L.C. (Farallon) has prepared this report on behalf of CHS Inc. (CHS) to document air sparge (AS) and soil vapor extraction (SVE) system routine operation and maintenance (O&M), AS/SVE system optimization, and groundwater monitoring activities for the third and fourth quarter 2023 conducted at the CHS Auburn facility at 238 8th Street Southeast in Auburn, Washington (CHS Auburn Facility) and contiguous areas where constituents of concern (COCs) in soil and groundwater exceed applicable cleanup levels from releases at the CHS Auburn Facility (herein referred to as the Site). The COCs for the Site are total petroleum hydrocarbons as diesel-range organics (DRO), as oil-range organics (ORO), and as gasoline-range organics (GRO); and benzene, toluene, ethylbenzene, and xylenes (BTEX). A Site vicinity map is provided on Figure 1, and a Site plan is provided on Figure 2.

Routine AS/SVE system O&M was conducted between July 13 and December 1, 2023 (herein referred to as the reporting period), and groundwater monitoring activities were conducted on November 27 and 28, 2023 at the Site (herein referred to as the November 2023 monitoring event). The scope of work for the AS/SVE system O&M and optimization activities and November 2023 monitoring event were conducted in accordance with the *Performance Monitoring Plan, CHS Auburn Site, Auburn, Washington, Facility Site No. 2487, Consent Decree No. 18-2-15430-8* dated February 15, 2019 (Farallon 2019) (Performance Monitoring Plan) that was approved by the Washington State Department of Ecology (Ecology) in January 2019.

1.1 BACKGROUND

A Remedial Investigation/Feasibility Study for the Site was conducted in accordance with the Washington State Model Toxics Control Act Cleanup Regulation (MTCA), as established in Chapter 173-340 of the Washington Administrative Code, and pursuant to the requirements of Agreed Order No. 4033 entered into between CHS and Ecology on June 12, 2007. The Remedial Investigation Report for the Site was submitted to Ecology on July 20, 2011 (Farallon 2011), and the Feasibility Study for the Site was submitted to Ecology on August 6, 2014 (Farallon 2014). The *Final Cleanup Action Plan, CHS Auburn Site, 238 8th Street Southeast and Contiguous Areas, Auburn, Washington, Agreed Order No. 4033, Facility Site No. 2487* dated May 8, 2018 (Ecology 2018) (Final Cleanup Action Plan) was included as



Exhibit B of Consent Decree No. 18-2-15430-8 between Ecology and CHS, with an effective date of June 20, 2018.

The cleanup action outlined in the Final Cleanup Action Plan for groundwater included installation of additional AS wells and expansion of the existing AS/SVE system to reduce concentrations of COCs in groundwater. The existing AS/SVE system consisted of three systems: the perimeter AS/SVE system installed in 1994, the down-gradient AS/SVE system installed in 1995, and the central AS/SVE system installed in 1996. Portions of the perimeter, down-gradient, and central AS/SVE systems were turned off with Ecology approval between the late 1990s and 2007. The down-gradient AS/SVE system was decommissioned in 2010 due to road improvements by the City of Auburn to D Street Southeast.

The current configuration of the AS/SVE system, which includes AS wells CAS-1 through CAS-22 and SVE wells CSVE-1, CSVE-5, CSV-7, CSVE-9, and CSVE-10, has been operating at the Site since June 2019¹ with the objective of reducing concentrations of COCs in groundwater to less than MTCA Method A cleanup levels within a reasonable restoration time frame. The current AS/SVE system is shown on Figure 3.

1.2 ORGANIZATION

This report is organized into the following sections:

- **Section 2, Treatment System Operation, Maintenance, and Optimization**, provides details on the operation, maintenance, and optimization of the AS/SVE system.
- **Section 3, Groundwater Monitoring Methods**, describes the sampling protocols and the selected monitoring wells and analyses for the November 2023 monitoring event.
- **Section 4, Groundwater Monitoring Results**, presents groundwater elevations and Site-wide analytical results from the November 2023 monitoring event, and the data validation conducted.
- **Section 5, Discussion**, presents a summary of contaminant distribution in groundwater at the Site prior to and after start-up of the reconfigured AS/SVE system in June 2019.

¹ Start-up testing of the AS/SVE system was conducted on May 29, 2019. The AS/SVE system was started for continuous operation on June 13, 2019.



- **Section 6, Ongoing and Planned Activities**, discusses planned activities for the first semiannual 2024 groundwater monitoring event scheduled for May 2024 at the Site.
- **Section 7, References**, provides a list of the documents cited in this report.



2.0 TREATMENT SYSTEM OPERATION, MAINTENANCE, AND OPTIMIZATION

This section provides details regarding the O&M and optimization of the current AS/SVE system in the central area of the Site during the reporting period. The areas targeted by the AS/SVE system include both the former source area(s) and areas down-gradient beyond the immediate influence of the AS wells in the central area of the Site (Figures 2 and 3).

2.1 AS/SVE SYSTEM OPERATION, MAINTENANCE, AND OPTIMIZATION

Routine O&M of the AS/SVE system was conducted bimonthly to optimize system performance. O&M parameters typically consisted of the following:

- AS compressor motor frequency, amperage, and total run time;
- SVE blower motor frequency, amperage, and total run time;
- SVE system total vacuum and flow rate;
- SVE system exhaust temperature;
- SVE well air flow, vacuum, and vapor volatile organic compound concentration measured by a photoionization detector;
- AS system pressure and temperature from the pre- and post-cooling piping array; and
- AS well airflow and pressure.

A summary of AS/SVE system operational parameters is provided in Tables 1 and 2. Based on the flow rates from or to individual AS and SVE wells and the pressure to individual AS wells, AS/SVE system operational settings were adjusted periodically to optimize flow and pressure to treat COCs in the subsurface more efficiently. The current operating AS wells include CAS-1, CAS-2, and CAS-14 through CAS-20, and the current operating SVE wells include CSVE-1, CSVE-5, CSVE-7, CSVE-9, and CSVE-10. AS/SVE system operational parameters for the reporting period are summarized as follows:

- Operating time (run time) totaled approximately 2,830 hours for the AS compressor SVE blower (July 13 to December 1, 2023);
- Total vacuum for the SVE system ranged from 11.8 to 16.5 inches of water;
- The total flow rate for the SVE system ranged from 69.49 to 78.93 standard cubic feet per minute;



- Total AS system pressure ranged from 15.3 to 17.2 pounds per square inch; and
- The total AS system flow rate ranged from 29.4 to 29.7 standard cubic feet per minute.

During the reporting period, no repairs or maintenance were required to optimize operation of the AS/SVE system. The AS/SVE system was shut down remotely prior to the November 2023 groundwater monitoring event on November 26, 2023 and was turned back on remotely on December 1, 2023 following completion of groundwater sampling.

SVE system effluent air samples were collected on September 29 and November 14, 2023 during the O&M Site visits. The air samples were collected from the SVE system exhaust stack for each event using a 1-liter Summa canister and were delivered under standard chain-of-custody protocols to Friedman and Bruya, Inc. of Seattle, Washington (F&B) for analysis of COCs by U.S. Environmental Protection Agency Method TO-15. Analytical results from the SVE system effluent air sampling are provided in Table 3. The laboratory analytical reports are provided in Appendix B. SVE system effluent air sampling data and the amount of benzene removed by the SVE system during the reporting period are summarized as follows:

- GRO was detected at concentrations ranging from 3.90 to 9.90 nanoliters per microliter in the effluent air samples collected on September 29 and November 14, 2023;
- BTEX constituents were not detected at concentrations exceeding the laboratory practical quantitation limits in the effluent air samples collected on September 29 and November 14, 2023;
- The calculated amount of benzene removed during the reporting period is estimated at 0.001 pound, for an estimated total benzene removal of 2.84 pounds since starting up the AS/SVE system in June 2019 (Table 1); and
- The calculated amount of GRO removed during this period is estimated at 26.57 pounds, for an estimated total GRO removal of 171.21 pounds since starting up the AS/SVE system in June 2019 (Table 1).²

² Note that the calculated amount of GRO removed that was reported in the First and Second Quarter 2023 Groundwater Monitoring and Treatment System Operation and Maintenance Report dated September 12, 2023 was understated and represented only the GRO mass removed during that reporting period versus the cumulative total. The cumulative total has been included in this report.



3.0 GROUNDWATER MONITORING METHODS

This section summarizes the sampling protocols and the selected monitoring wells and analyses for the November 2023 monitoring event conducted at the Site.

3.1 SAMPLING PROTOCOLS

Groundwater samples were collected on November 27 and 28, 2023 using low-flow sampling methods, as described in the Ecology-approved Performance Monitoring Plan, from monitoring wells CMW-2, CMW-8, CMW-10, CMW-12, CMW-13, CMW-25 through CMW-31, HMW-9 through HMW-11, and HMW-13. Monitoring well locations are provided on Figure 2. Before sampling was initiated, groundwater elevations and dissolved-oxygen content in groundwater also were measured in the monitoring wells listed above, on November 27, 2023. The groundwater elevation at each monitoring well was also measured during sampling. The depth to groundwater in each monitoring well was measured to the nearest 0.01 foot using an electronic water-level measuring device from the surveyed location on the top of the well casing. Measurements of dissolved-oxygen levels in groundwater were obtained using an InsiteIG Model 3100 dissolved-oxygen analyzer and optical fluorescence down-hole probe. Depth-to-groundwater measurements and the water-level elevations obtained prior to sampling for the groundwater monitoring events conducted from January 2018 through November 2023 are presented in Table 4, and the November 2023 elevations are shown on Figure 4.

Before the monitoring wells were purged, the intake of the dedicated polyethylene tubing was placed in the approximate middle of the saturated portion of the well screen. Before sampling was initiated, groundwater was purged from each monitoring well at flow rates ranging from 120 to 130 milliliters per minute. Groundwater quality parameters for temperature, specific conductivity, dissolved oxygen, and oxidation-reduction potential (ORP) were recorded during purging using a YSI Model ProDSS water quality analyzer equipped with a flow-through cell. Water quality parameter geochemical measurements are summarized in Table 5 and include the dissolved-oxygen measurements collected with the InsiteIG Model 3100 dissolved-oxygen analyzer and optical fluorescence down-hole probe. Groundwater samples were collected after the pH, temperature, and specific conductivity measurements stabilized. Stabilization was determined for pH as a change of +/-0.1 pH unit between readings for three consecutive measurements, and for temperature and specific



conductivity as a relative percent difference of less than 3 percent between readings for three consecutive measurements.

Following stabilization of the water quality parameters, samples were collected by pumping groundwater directly from each monitoring well through dedicated polyethylene tubing into laboratory-prepared containers, with care taken to minimize turbulence. Care was taken to not handle the container seal or lid when the samples were placed into the containers. The containers were filled to eliminate headspace, and the seal and the lid were secured. The samples were placed on ice in a cooler under standard chain-of-custody protocols, and delivered to OnSite Environmental Inc. of Redmond, Washington (OnSite) for laboratory analysis.

3.2 SELECTED MONITORING WELLS AND ANALYSES

Groundwater samples collected from monitoring wells CMW-2, CMW-8, CMW-10, CMW-12, CMW-13, CMW-25 through CMW-31, HMW-9 through HMW-11, and HMW-13 were analyzed for the following:

- DRO and ORO by Northwest Method NWTPH-Dx with and without silica gel cleanup procedure. Sulfuric acid was not used as part of the silica gel cleanup procedure.
- GRO by Northwest Method NWTPH-Gx.
- BTEX constituents by U.S. Environmental Protection Agency Method 8021B.

On October 20, 2021, Ecology stated that DRO and ORO groundwater samples collected during future monitoring events could be analyzed both with and without using the silica gel cleanup procedure in accordance with recent Ecology (2021) guidance. Details of the Ecology request were provided in the email regarding CHS Quarterly Progress Report 7/1 through 9/30/2021 dated October 20, 2021 from Jerome Cruz of Ecology to Javan Ruark of Farallon (Ecology 2021). The purpose of the silica gel cleanup procedure is to evaluate whether polar metabolites resulting from biodegradation of the dissolved DRO plume are present and contributing to the DRO values in the analysis conducted without the silica gel cleanup procedure.

Field duplicate groundwater samples were collected from monitoring wells CMW-12 and CMW-27 for quality assurance/quality control (QA/QC) purposes.



3.1 WASTE HANDLING AND DISPOSAL

Wastewater generated during purging of the monitoring wells was temporarily stored in a labeled 55-gallon drum in a secure area of the Site.

On January 15, 2024, ACTenviro of Seattle, Washington transported a total of six 55-gallon drums of purge water for disposal. All wastes generated at the Site associated with the cleanup action are designated as nonhazardous waste, based on analytical testing results. Waste disposal documentation is provided in Appendix A.



4.0 GROUNDWATER MONITORING RESULTS

This section presents groundwater elevations, geochemical parameters and data, and laboratory analytical results from the November 2023 monitoring event, and the data validation conducted.

4.1 GROUNDWATER ELEVATIONS

Groundwater elevations measured in the Site monitoring wells on November 27, 2023 ranged from 63.92 feet above mean sea level in monitoring well CMW-8 to 65.08 feet above mean sea level in monitoring well CMW-30 (Figure 4, Table 4). The groundwater flow direction was northeast, which is consistent with the historical groundwater flow direction. The average horizontal hydraulic gradient was 0.001 foot per foot. Groundwater elevations measured on November 27, 2023 were approximately 3 feet lower on average than those measured during the previous monitoring event, conducted in May 2023 (Table 4).

4.2 GROUNDWATER ANALYTICAL RESULTS

The analytical results from the November 2023 monitoring event are discussed in the following sections. Comparison of analytical results for DRO, ORO, GRO, and BTEX constituents with MTCA Method A groundwater cleanup levels, which were established as the Site cleanup levels in the Final Cleanup Action Plan, is shown in Table 6. Comparison of analytical results for DRO and ORO with and without the silica gel cleanup procedure to MTCA Method A groundwater cleanup levels is shown in Table 7. Analytical results for DRO, ORO, GRO, and BTEX constituents for the November 2023 monitoring event are presented on Figure 5. Analytical results for DRO and ORO with and without the silica gel cleanup procedure for the November 2023 monitoring event are presented on Figure 6. The laboratory analytical reports are provided in Appendix B.

4.2.1 Diesel-Range Organics

In groundwater samples analyzed without the silica gel cleanup procedure, DRO was detected at concentrations exceeding the MTCA Method A cleanup level of 0.5 milligram per liter (mg/L) in groundwater samples collected from six of the 16 monitoring wells sampled (Tables 6 and 7) and in the QA/QC duplicate sample collected from monitoring well CMW-27. Concentrations of DRO exceeding the MTCA Method A cleanup level ranged from 0.61 mg/L in the groundwater sample collected from monitoring well CMW-28 to 4.2 mg/L in the groundwater sample collected from monitoring well HMW-11.



For samples analyzed using the silica gel cleanup procedure, DRO was detected at or exceeding the MTCA Method A cleanup level of 0.5 mg/L in two of the 16 monitoring wells sampled (Tables 6 and 7) and in the QA/QC duplicate sample collected from monitoring well CMW-27. Concentrations of DRO at or exceeding the MTCA Method A cleanup level analyzed with silica gel cleanup procedure ranged from 0.50 mg/L in the groundwater sample collected from monitoring well HMW-11 to 0.75 mg/L in the QA/QC duplicate groundwater sample collected from monitoring well CMW-27.

4.2.2 Oil-Range Organics

For the samples analyzed without the silica gel cleanup procedure, ORO was detected at concentrations exceeding the MTCA Method A cleanup level of 0.5 mg/L in groundwater samples collected from five of the 16 monitoring wells sampled (Tables 6 and 7) and in the QA/QC duplicate sample collected from monitoring well CMW-27. Concentrations of ORO exceeding the MTCA Method A cleanup level ranged from 0.58 mg/L in the groundwater sample collected from monitoring well CMW-10 to 1.5 mg/L in the groundwater sample collected from monitoring well CMW-2.

For the samples analyzed using the silica gel cleanup procedure, ORO was not detected at a concentration exceeding the MTCA Method A cleanup level of 0.5 mg/L during the November 2023 monitoring event (Table 7).

4.2.3 Gasoline-Range Organics and Benzene, Toluene, Ethylbenzene, and Xylenes

GRO was detected at concentrations exceeding the MTCA Method A cleanup level of 800 micrograms per liter ($\mu\text{g}/\text{L}$) in the groundwater sample collected from monitoring well CMW-27 and the QA/QC duplicate sample collected from monitoring well CMW-27. Concentrations of GRO exceeding the MTCA Method A cleanup level ranged from 810 $\mu\text{g}/\text{L}$ in the groundwater sample collected from monitoring well CMW-27 to 840 $\mu\text{g}/\text{L}$ in the QA/QC sample collected from monitoring well CMW-27 (Table 6).

BTEX constituents were not detected at concentrations exceeding MTCA Method A cleanup levels in the groundwater samples collected from Site monitoring wells during the November 2023 sampling event.



4.2.4 Groundwater Geochemical Parameters and Data

Table 5 shows the dissolved-oxygen levels in groundwater measured on November 27, 2023 before purging of groundwater was conducted, and the final groundwater quality parameters recorded during purging of groundwater prior to sample collection (summarized below):

- Groundwater temperatures ranged from 10.6 to 12.5 degrees Celsius;
- pH values ranged from 5.80 to 6.48;
- Oxidation-reduction potential values ranged from -16.9 to 367.1 millivolts; and
- Dissolved-oxygen concentrations ranged from 0.45 to 6.18 mg/L.

4.3 DATA VALIDATION

Farallon reviewed the analytical data package provided by OnSite, laboratory reference No. 2311-247. The groundwater samples from this group were analyzed for DRO, ORO, GRO, and BTEX constituents by the analytical methods described in Section 3.2, Selected Monitoring Wells and Analyses. The groundwater samples were analyzed within the prescribed method holding times. The QA/QC testing performed by OnSite included surrogate recovery, method blank, and spike blank/spike blank duplicate samples. Results from the QA/QC testing were within established laboratory control limits. Based on Farallon's review of the QA/QC data generated during the November 2023 monitoring event, the groundwater analytical results are acceptable for use in characterizing groundwater quality at the Site relative to the groundwater quality cleanup levels used for comparative purposes in this report. The laboratory analytical reports for the groundwater samples analyzed by OnSite are provided in Appendix B.

Farallon reviewed the analytical data packages provided by F&B for air samples collected in September and November 2023 analyzed for GRO and BTEX constituents by the analytical methods described in Section 2.1, AS/SVE System Operation, Maintenance, and Optimization. The air samples were analyzed within the prescribed method holding time. The QA/QC testing performed by F&B included surrogate recovery, method blank, duplicate, and laboratory control samples. Results from the QA/QC testing were within established laboratory control limits. Based on Farallon's review of the QA/QC data generated during the September and November 2023 monitoring event, the air analytical results are acceptable for use in characterizing effluent concentrations recovered by the AS/SVE system. The laboratory analytical reports for the air samples analyzed by F&B are provided in Appendix B.



5.0 DISCUSSION

This section provides a summary of the distribution of DRO, ORO, GRO, and BTEX constituents detected in groundwater at the Site during the November 2023 monitoring event and a comparison of the current conditions with the monitoring events conducted in 2018 and 2019 before the start-up of the reconfigured AS/SVE system in June 2019. Trends in COC concentrations relative to groundwater elevation changes since 2018 also are discussed where trends appear evident. Data trends of select COC concentrations in groundwater for key monitoring wells are shown on Charts 1 through 8. The DRO and ORO results provided in the discussion and used to construct the charts are for samples analyzed without the silica gel cleanup procedure.

DRO and/or ORO were detected at concentrations exceeding MTCA Method A cleanup levels in groundwater samples collected from six of the 16 monitoring wells sampled during the November 2023 monitoring event, and GRO was detected at a concentration exceeding the MTCA Method A cleanup level in one of the 16 monitoring wells sampled (Figure 5). BTEX constituents were not detected at concentrations exceeding the MTCA Method A cleanup levels in the groundwater samples collected from the monitoring wells sampled during the November 2023 monitoring event.

The DRO and ORO analytical results from the November 2023 monitoring event suggest that dissolved-phase DRO and ORO concentrations detected in groundwater samples collected from the Site are highly weathered and consist mainly of polar metabolites from the breakdown of DRO and ORO. In general, DRO and/or ORO were not detected at concentrations exceeding the MTCA Method A cleanup levels in the groundwater samples analyzed from monitoring wells sampled in November 2023 at the Site using the silica gel cleanup procedure (Figure 6, Table 7). Guidance on the use of silica gel cleanup procedures and applicable cleanup levels was recently revised and finalized in November 2023 (Ecology 2023). Application of the recently updated silica gel cleanup guidance to the Site will be discussed with Ecology.

The expanded area of influence of the reconfigured AS/SVE system appears to continue to mobilize dissolved-phase DRO/ORO and associated polar metabolites from the smear zone soil, as shown by a general increase in DRO and ORO concentrations in groundwater following the AS/SVE system start-up in June 2019 in monitoring wells CMW-10, CMW-13, CMW-27, CMW-28, and HMW-11 (Charts 2, 4, 5, 6, and 8). Increases in concentrations of



DRO and ORO in monitoring wells CMW-12 and CMW-13 generally have correlated with seasonally higher groundwater elevations since reconfigured system start-up (Charts 3 and 4).

GRO concentrations in groundwater have shown a decrease to less than the MTCA Method A cleanup level in monitoring wells CMW-12 and HMW-11 following operation of the AS/SVE system (Charts 3 and 8). However, GRO at concentrations exceeding the MTCA Method A cleanup level have been detected in groundwater samples collected from monitoring well CMW-27 seasonally over the last 2 years and generally have correlated with lower groundwater elevations. When groundwater elevations are higher, the concentration of GRO detected in groundwater samples collected from monitoring well CMW-27 has not exceeded the MTCA Method A cleanup level (Table 6, Chart 5).

Except for intermittent shut-downs, the current configuration of the AS/SVE system has operated continuously from start-up in June 2019 through December 2023 and has removed a total of 2.84 pounds of benzene and 171.21 pounds of GRO from the vadose zone at the Site. The mass of benzene removed by the AS/SVE system has decreased to asymptotic levels since June 2019. The AS/SVE system no longer is removing significant benzene mass from the vadose zone (Table 1, Chart 9). The current AS/SVE system is continuing to remove some GRO from the vadose zone (Table 1, Chart 9).

Given the decreased mass removal by the AS/SVE system and general increase in DRO/ORO and associated polar metabolite concentrations in groundwater following the AS/SVE system start-up at select wells, a shut-down to evaluate the effects on COCs in groundwater, including the generation of polar metabolites from ongoing biodegradation processes, appears to be warranted. The potential for shutting down the AS/SVE system to evaluate the effect of system operation on COC concentrations in groundwater has been discussed with Ecology; it is understood that Ecology is in general agreement that a system shut-down evaluation is reasonable. A plan for shutting down the AS/SVE system and evaluating the effect on groundwater quality will be prepared and submitted to Ecology for review and approval.



6.0 ONGOING AND PLANNED ACTIVITIES

As detailed in Table 3 in the Final Cleanup Action Plan, quarterly performance groundwater monitoring and routine O&M of the AS/SVE system were conducted for the first four quarters following start-up of the AS/SVE system and were to be conducted semiannually thereafter. The November 2023 monitoring event was the seventh semiannual groundwater monitoring event; the eighth semiannual monitoring event is scheduled for May 2024.

Given the likely AS/SVE shut-down evaluation, the frequency and scope of groundwater monitoring activities at the Site will be assessed and potentially adjusted in consultation with Ecology during the AS/SVE system shut-down period. A technical memorandum detailing the proposed AS/SVE system shut-down and groundwater quality evaluation criteria will be prepared and submitted to Ecology for review in February 2024.



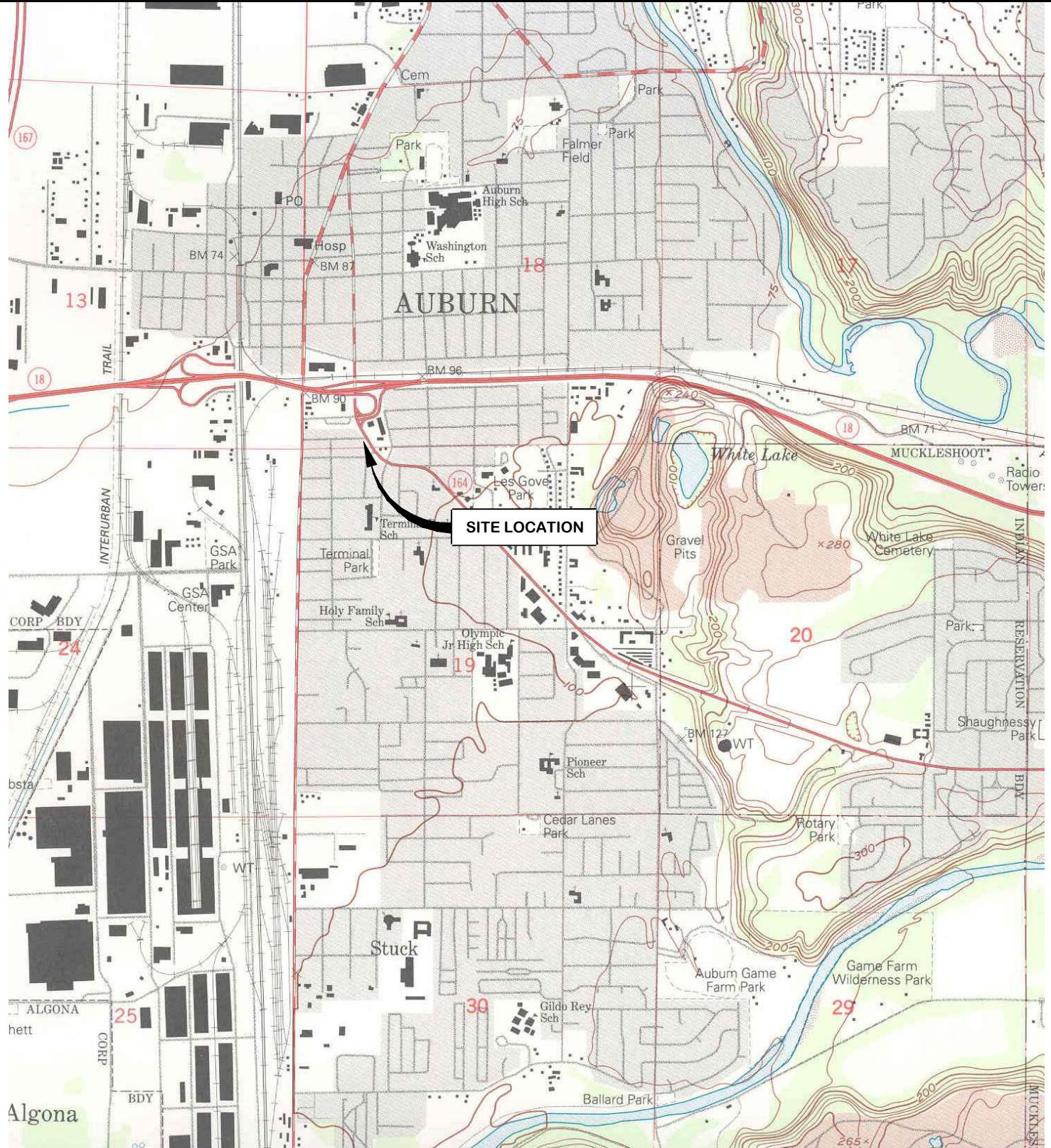
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FIGURES

THIRD AND FOURTH QUARTER 2023
GROUNDWATER MONITORING AND TREATMENT SYSTEM
OPERATION AND MAINTENANCE REPORT
CHS Auburn Site
Auburn, Washington

Farallon PN: 301-004



REFERENCE: 7.5 MINUTE USGS QUADRANGLE AUBURN, WASHINGTON. DATED 1949 AND PHOTOREVISED 1994

FIGURE PRODUCED IN COLOR. GRAYSCALE COPIES MAY NOT REPRODUCE ALL ORIGINAL INFORMATION

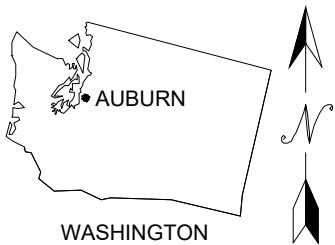
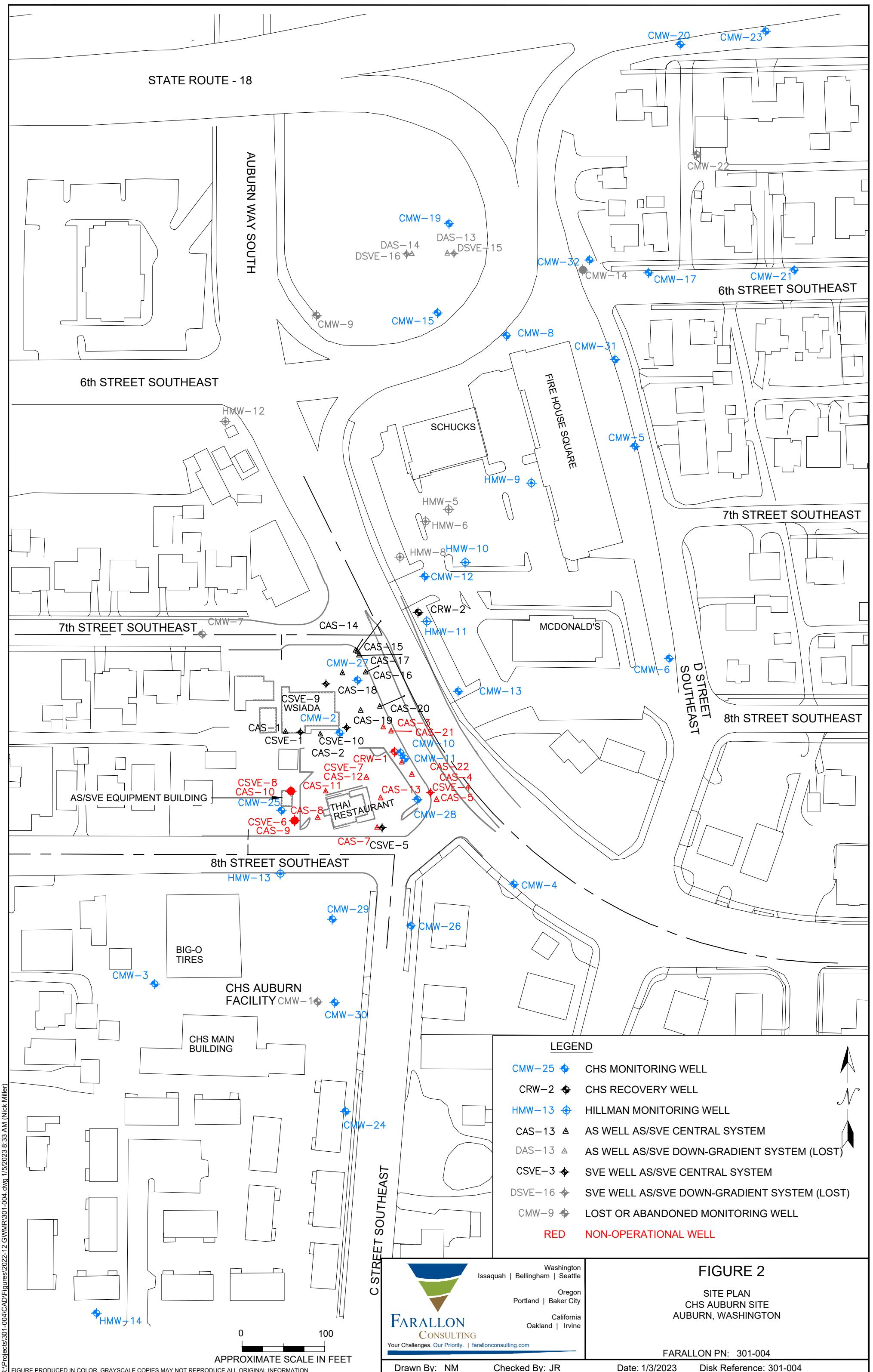


FIGURE 1

SITE VICINITY MAP
CHS AUBURN SITE
AUBURN, WASHINGTON



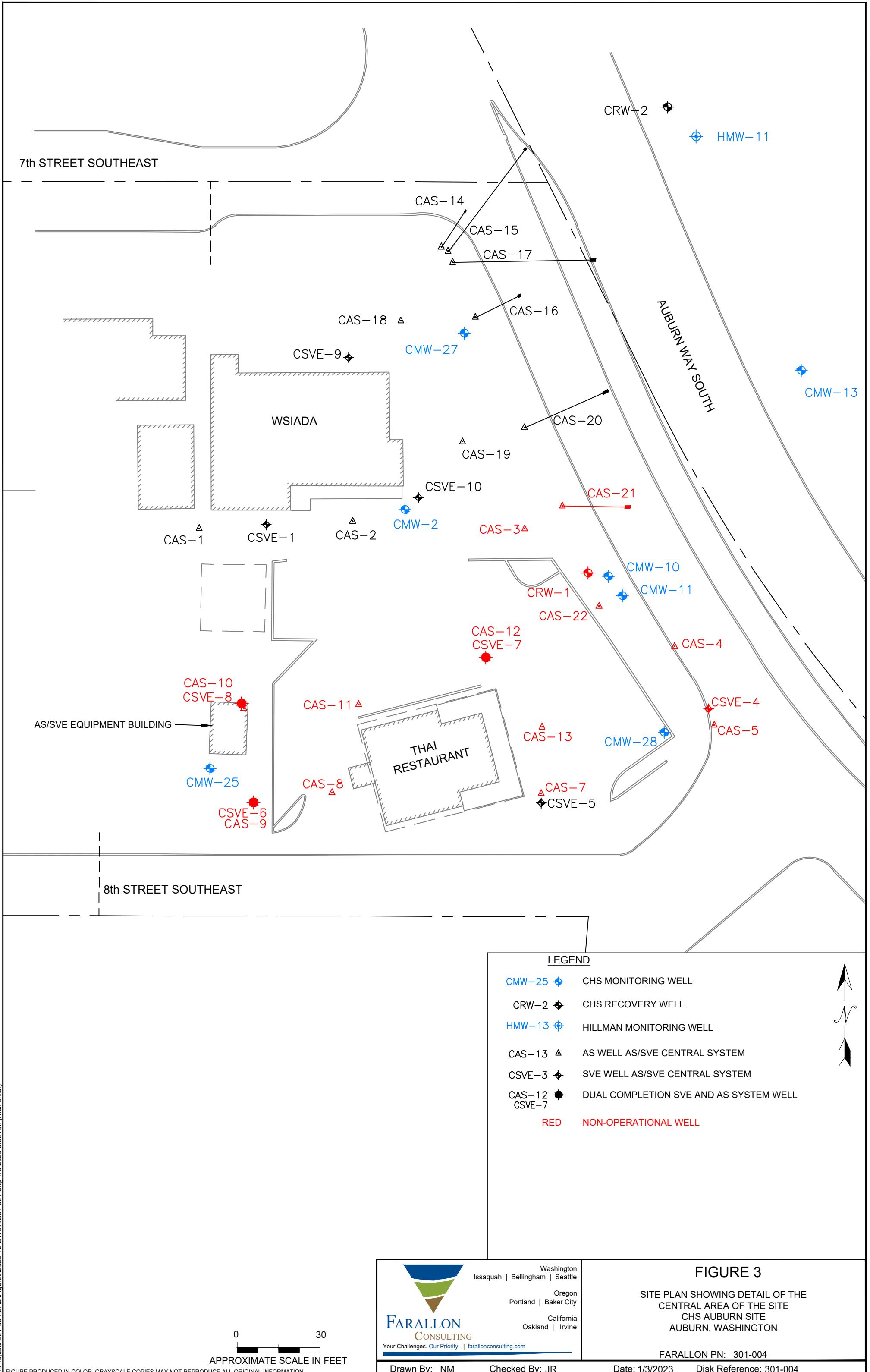


FIGURE 3

SITE PLAN SHOWING DETAIL OF THE
CENTRAL AREA OF THE SITE
CHS AUBURN SITE
AUBURN, WASHINGTON

FARALLON PN: 301-004

3/2023 Disk Reference: 301-004



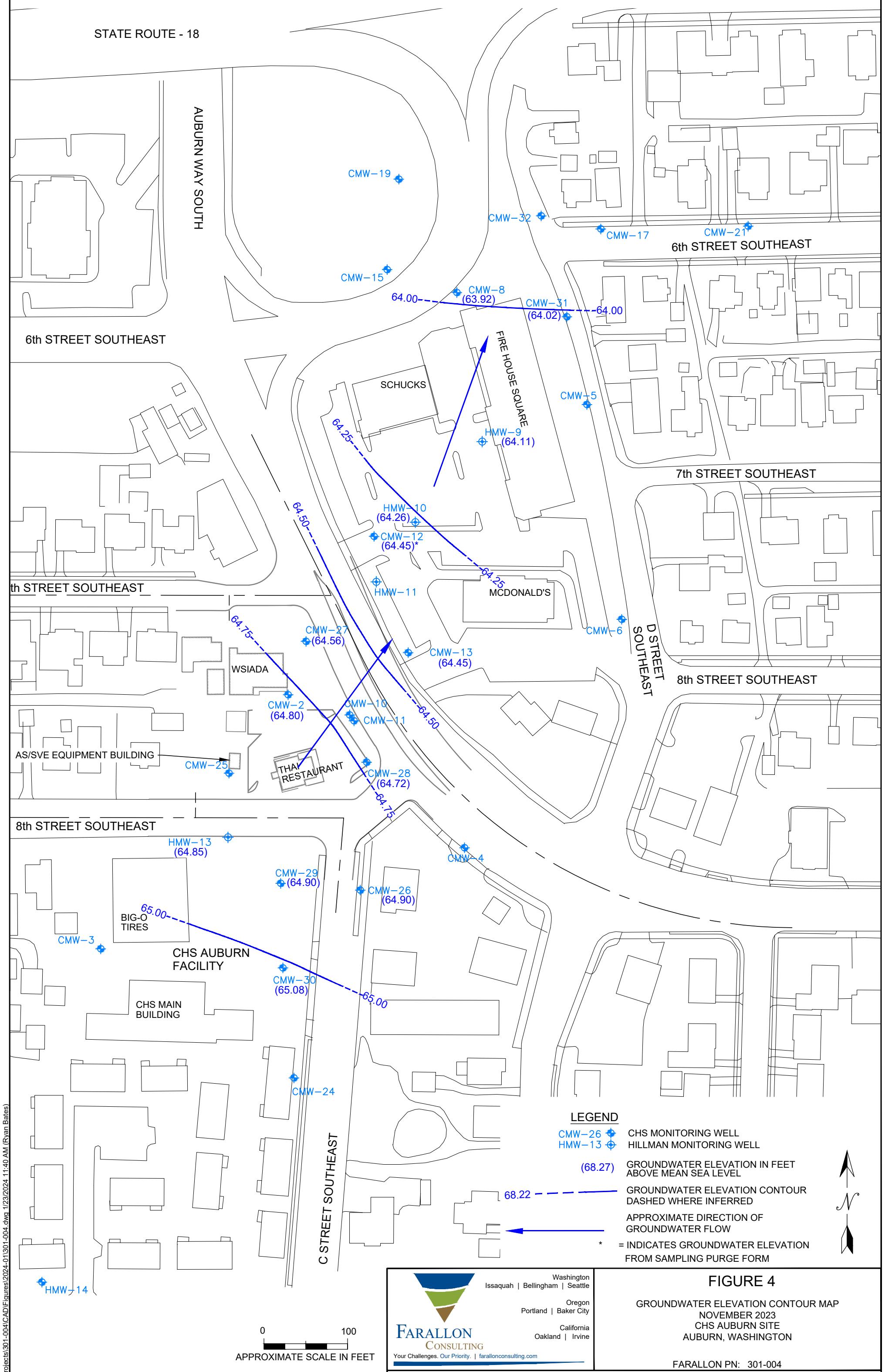
Drawn By: NM

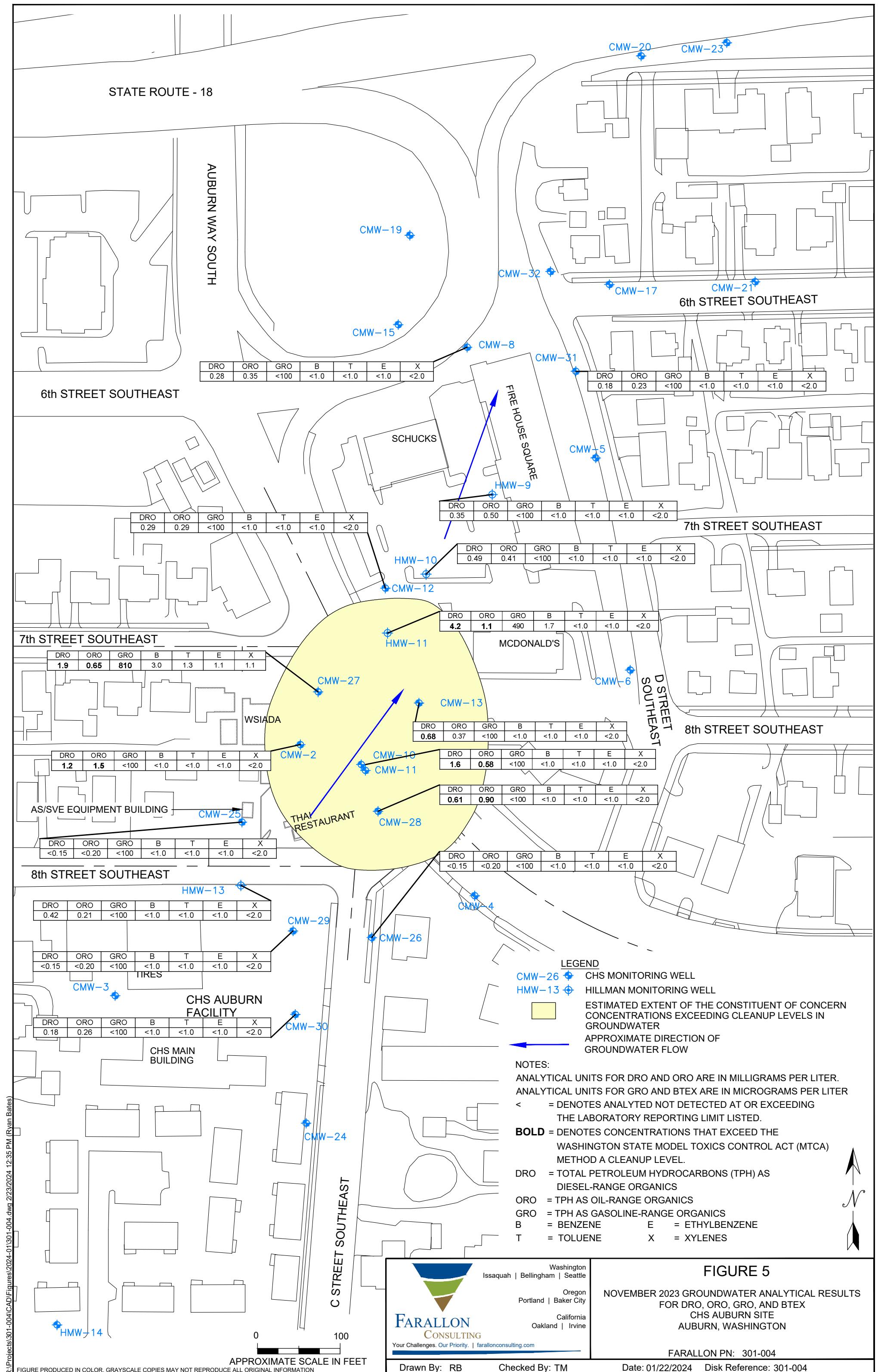
Drawn By: NM Checked

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STATE ROUTE - 18





TABLES

**THIRD AND FOURTH QUARTER 2023
GROUNDWATER MONITORING AND TREATMENT SYSTEM
OPERATION AND MAINTENANCE REPORT
CHS Auburn Site
Auburn, Washington**

Farallon PN: 301-004

Table 1
SVE System and Well Data
Cenex Auburn Site
Auburn, Washington
Farallon PN: 301-004

**Table 2
AS System and Well Data
Cenex Auburn Site
Auburn, Washington
Farallon PN: 301-004**

Table 2
AS System and Well Data
Cenex Auburn Site
Auburn, Washington
Farallon PN: 301-004

Date	Time	Compressor Total Run Time (hrs)	Compressor Running Amps	Compressor Frequency (Hz)	Pre-Cooling Temperature (F)	Post-Cooling Temperature (F)	System Pressure (psi)	CAS-1		CAS-2		CAS-3		CAS-4		CAS-5		CAS-7		CAS-12		CAS-14		CAS-15		CAS-16		CAS-17		CAS-18		CAS-19		CAS-20		CAS-21		CAS-22	
								Well Pressure (psi)	Flow Rate (SCFM)																														
10/13/2021	1205	15261	7.9	60	132	96	18.0	Closed	11.0	1.4	Closed	Closed	Closed	Closed	8.0	3.4	10.1	4.0	11.2	5.9	12.3	3.7	12.5	7.0	9.0	5.0	10.2	4.5	Closed	Closed	34.9								
1/3/2022	1330	16676	8.9	60	175	105	19.5	15.6	2.3	13.0	1.3	Closed	Closed	Closed	Closed	9.9	3.1	12.0	3.7	13.0	5.2	14.1	3.3	12.9	7.1	10.6	4.1	10.8	4.1	Closed	Closed	34.2							
2/23/2022	1135	17897	9.1	60	170	110	20.0	18.0	1.9	13.9	1.2	Closed	Closed	Closed	Closed	10.9	3.1	12.9	3.9	13.5	5.3	14.9	3.6	13.5	7.3	11.1	4.6	11.3	4.2	Closed	Closed	35.1							
5/12/2022	915	19740	9.0	60	185	110	20.0	17.5	2.1	13.0	1.3	Closed	Closed	Closed	Closed	9.5	2.7	11.5	3.9	12.5	5.5	14.0	3.5	12.8	7.2	10.0	4.7	10.6	4.2	Closed	Closed	35.1							
5/26/2022	1404	19936	9.1	60	145	86	19.5	16.8	1.0	12.1	2.0	Closed	Closed	Closed	Closed	10.0	3.4	12.1	3.8	12.8	5.1	14.1	3.2	13.9	6.4	10.2	4.4	10.1	3.9	Closed	Closed	33.2							
8/10/2022	1020	21479	8.8	60	185	124	17.9	15.0	1.0	0.0	3.4	Closed	Closed	Closed	Closed	7.9	3.5	10.0	4.0	10.8	5.3	12.1	3.2	10.2	7.2	8.0	4.5	8.3	4.1	Closed	Closed	36.2							
8/10/2022	1200	21491	8.8	60	185	124	--	15.9	1.5	Closed	Closed	Closed	Closed	7.9	3.7	10.0	4.3	11.0	5.7	12.0	3.5	10.1	7.6	8.0	4.8	8.4	4.3	Closed	Closed	35.4									
10/10/2022	1420	22861	8.7	60	195	124	18.1	15.3	1.0	Closed	Closed	Closed	Closed	7.9	3.9	9.8	4.3	10.8	5.9	12.0	3.8	10.5	7.7	7.9	4.8	7.9	4.3	Closed	Closed	35.7									
12/16/2022	1200	24179	8.9	60	195	106	19.5	16.9	2.5	Closed	Closed	Closed	Closed	9.5	4.0	11.9	4.3	12.1	5.9	13.6	3.8	12.1	7.7	10.1	4.9	8.9	4.3	Closed	Closed	37.4									
12/29/2022	1130	24415	9.2	60	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--										
3/10/2023	903	24546	0.0	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--										
3/17/2023	1345	24547	8.9	60	180	116	20.0	17.2	0.1	12.8	1.0	Closed	Closed	Closed	Closed	10.3	3.7	12.9	4.1	13.0	5.7	14.7	3.5	13.1	7.5	11.0	4.6	9.9	3.6	Closed	Closed	33.8							
4/10/2023	1439	25061	-	-	-	-	-	-	-	-	-	Closed	Closed	Closed	Closed	-	-	-	-	-	-	-	-	-	-	-	-	Closed	Closed	-									
5/11/2023	1315	25801	8.6	50.0	176	112	16.5	13.8	0.5	11.5	0.5	Closed	Closed	Closed	Closed	9.0	3.1	11.1	3.3	11.2	4.3	13.0	2.4	10.9	6.3	9.1	3.8	7.9	3.0	Closed	Closed	27.2							
5/22/2023	1200	25840	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-										
7/12/2023	1150	26873	8.4	50.0	170	120	15.5	12.5	0.5	10.2	-	Closed	Closed	Closed	Closed	8.0	3.2	10.0	3.4	10.5	4.5	12.0	2.6	9.5	6.3	8.0	3.9	6.1	3.1	Closed	Closed	28.0							
8/2/2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-										
9/29/2023	1021	28597	8.4	50.0	115	78	17.2	13.3	0.7	11.3	-	Closed	Closed	Closed	Closed	9.9	3.4	12.1	3.6	12.0	4.7	13.2	2.7	15.0	6.5	11.2	4.0	12.9	3.2	Closed	Closed	29.4							
11/14/2023	1015	29702	8.4	50.0	143	90	15.3	13.5	1.0	11.3	0.6	Closed	Closed	Closed	Closed	9.3	3.3	11.8	3.6	11.9	4.7	13.1	2.7	13.1	6.6	10.2	4.0	9.7	3.2	Closed	Closed	29.7							

NOTES:

- denotes not collected

AS = air sparge

dp = differential pressure

hrs = hours

Hz - hertz

F = degrees Fahrenheit

IOW = inches of water

psi = pounds per square inch

SCFM = standard cubic feet per minute

Table 3
Air Analytical Data
Cenex Auburn Site
Auburn, Washington
Farallon PN: 301-004

Sample Location	Sample Identification	Sample Methodology	Sample Date	Analytical Results (nanoliter per microliter [ppmv])				
				Benzene	Toluene	Ethylbenzene	Total Xylenes	GRO
SVE System	EFFLUENT-052919	EPA 2021B	5/29/2019	< 0.31	< 0.26	< 0.23	< 0.46	< 21
	EFFLUENT-062419	EPA 2021B	6/24/2019	0.72	< 0.26	< 0.23	< 0.46	< 21
	EFFLUENT-071819	EPA TO-15	7/18/2019	0.000181	0.000623	0.00171	0.0031	8.030 ^{E*}
	EFFLUENT-082319	EPA TO-15	8/23/2019	0.000116	0.000610	0.00287	0.0126	0.647
	EFFLUENT-092319	EPA TO-15	9/23/2019	< 0.0000895	< 0.0004	0.00294	0.0075	36.9 ^E
	EFFLUENT-102219	EPA TO-15	10/22/2019	< 0.0000895	< 0.0040	< 0.0040	< 0.016	27.0 ^E
	EFFLUENT-121819	EPA TO-15	12/18/2019	< 0.0000895	< 0.00040	< 0.00040	< 0.0016	0.205
	EFFLUENT-020420	EPA TO-15	2/4/2020	< 0.0000895	< 0.00040	< 0.00040	< 0.0016	0.026
	EFFLUENT-040120	EPA TO-15	4/1/2020	< 0.0000895	< 0.00040	< 0.00040	< 0.0016	0.011
	EFFLUENT-050720	EPA TO-15	5/7/2020	< 0.0000895	< 0.00040	< 0.00040	< 0.0016	0.007
	EFFLUENT-060220	EPA TO-15	6/2/2020	< 0.0000895	< 0.00040	< 0.00040	< 0.0016	0.057
	EFFLUENT-110620	EPA TO-15	11/6/2020	< 0.0000895	< 0.00040	< 0.00040	< 0.0016	0.385
	INFLUENT-030221	EPA TO-15	3/2/2021	< 0.000100	< 0.00100	< 0.00400	< 0.0060	< 0.040
	INFLUENT-051721	EPA TO-15	5/17/2021	< 0.0008	< 0.04	< 0.0008	0.00323	14
	EFFLUENT-061521	EPA TO-15	6/15/2021	< 0.0018	< 0.09	< 0.0018	< 0.0054	21
	EFFLUENT-082521	EPA TO-15	8/25/2021	< 0.00061	< 0.03	< 0.00061	< 0.00181	0.87
	INFLUENT-022322	EPA TO-15	2/23/2022	< 0.0006	< 0.03	< 0.0006	0.00210	1.70
	INFLUENT-051222	EPA TO-15	5/12/2022	< 0.00046	< 0.023	< 0.00046	< 0.00138	< 0.370
	INFLUENT-081022	EPA TO-15	8/10/2022	< 0.0011	< 0.055	< 0.0011	< 0.0033	3.80
	INFLUENT-101022	EPA TO-15	10/10/2022	< 0.00087	< 0.043	0.0012	0.0093	8.30
	OVERALL-121622	EPA TO-15	12/16/2022	< 0.0016	< 0.080	< 0.0016	< 0.0048	4.40

Table 3
Air Analytical Data
Cenex Auburn Site
Auburn, Washington
Farallon PN: 301-004

Sample Location	Sample Identification	Sample Methodology	Sample Date	Analytical Results (nanoliter per microliter [ppmv])				
				Benzene	Toluene	Ethylbenzene	Total Xylenes	GRO
SVE System	OVERALL-031023	EPA TO-15	3/10/2023	0.0017	<0.039	<0.00078	<0.00238	0.65
	OVERALL-051123	EPA TO-15	5/11/2023	<0.00078	<0.039	<0.00078	0.00450	2.80
	OVERALL-071223	EPA TO-15	7/12/2023	<0.00082	<0.016	0.0012	0.00770	9.50
	OVERALL-092923	EPA TO-15	9/29/2023	<0.00086	<0.017	<0.00086	<0.00256	9.90
	OVERALL-111423	EPA TO-15	11/14/2023	<0.00084	<0.017	<0.00084	<0.00254	3.90

NOTES:

< denotes analyte not detected at or exceeding the reporting limit listed.

EPA = U.S. Environmental Protection Agency

E denotes estimated analytical value, result exceeds the linear working range of the laboratory equipment.

GRO = total petroleum hydrocarbons as gasoline-range organics

* denotes result not within established laboratory control limits.

ppmv = parts per million volume

SVE = soil vapor extraction

Table 4
Summary of Groundwater Elevation Data – January 2018 through November 2023
CHS Auburn Site
Auburn, Washington
Farallon PN: 301-004

Well Identification	Well Casing (feet) ¹	Measurement Date	Depth to Water (feet) ²	Elevation (feet) ¹
CMW-2	88.9	1/17/2018	18.52	70.38
		7/31/2018	23.24	65.66
		1/22/2019	20.92	67.98
		8/21/2019	24.51	64.39
		11/25/2019	23.92	64.98
		2/25/2020	16.80	72.10
		5/27/2020	20.77	68.13
		11/11/2020	23.52	65.38
		5/24/2021	21.05	67.85
		11/29/2021	20.07	68.83
		5/26/2022	19.17	69.73
		11/30/2022	23.31	65.59
		5/30/2023	21.01	67.89
		11/27/2023	24.10	64.80
CMW-4	90.68	1/17/2018	20.08	70.60
		7/31/2018	25.60	65.08
CMW-6	90.66	1/17/2018	20.94	69.72
		7/31/2018	dry	dry
CMW-8	89.94	1/17/2018	20.55	69.39
		7/31/2018	25.31	64.63
		1/22/2019	22.95	66.99
		8/21/2019	26.52	63.42
		11/25/2019	25.90	64.04
		2/24/2020	18.88	71.06
		5/27/2020	22.86	67.08
		11/11/2020	25.45	64.49
		5/24/2021	23.12	66.82
		11/29/2021	22.23	67.71
		5/25/2022	21.25	68.69
		11/29/2022	25.55	64.39
		5/30/2023	23.05	66.89
		11/27/2023	26.02	63.92
CMW-10	NS	1/17/2018	18.80	NS
		7/31/2018	23.71	NS
		1/22/2019	21.32	NS
		8/21/2019	24.96	NS
		11/25/2019	24.40	NS
		2/25/2020	17.20	NS
		5/27/2020	21.23	NS
		11/11/2020	24.00	NS
		5/24/2021	21.48	NS
		11/29/2021	20.61	NS
		5/25/2022	19.57	NS
		11/29/2022	24.00	NS
		5/30/2023	21.45	NS
		11/27/2023	24.55	NS

Table 4
Summary of Groundwater Elevation Data – January 2018 through November 2023
CHS Auburn Site
Auburn, Washington
Farallon PN: 301-004

Well Identification	Well Casing (feet) ¹	Measurement Date	Depth to Water (feet) ²	Elevation (feet) ¹
CMW-12	90.02	1/17/2018	20.12	69.90
		7/31/2018	25.84	64.18
		1/22/2019	22.45	67.57
		8/21/2019	26.07	63.95
		11/25/2019	25.47	64.55
		2/25/2020	18.43	71.59
		5/27/2020	22.35	67.67
		11/11/2020	25.04	64.98
		5/24/2021	22.60	67.42
		11/29/2021	21.77	68.25
		5/25/2022	20.68	69.34
		11/29/2022	25.08	64.94
		5/30/2023	22.55	67.47
		11/27/2023	25.57 ³	64.45
CMW-13	89.67	1/17/2018	19.63	70.04
		7/31/2018	22.48 ⁴	67.19 ⁴
		1/22/2019	22.03	67.64
		8/21/2019	25.71	63.96
		11/25/2019	25.06	64.61
		2/25/2020	17.89	71.78
		5/27/2020	21.91	67.76
		11/11/2020	24.65	65.02
		5/24/2021	22.16	67.51
		11/29/2021	21.32	68.35
		5/25/2022	20.33	69.34
		11/29/2022	24.68	64.99
		5/30/2023	22.15	67.52
		11/27/2023	25.22	64.45
CMW-15	87.22	1/17/2018	17.78	69.44
		7/31/2018	22.53	64.69
CMW-25	NS	1/17/2018	18.96	NS
		7/31/2018	23.64	NS
		1/22/2019	21.35	NS
		8/21/2019	24.91	NS
		11/25/2019	24.40	NS
		2/24/2020	17.25	NS
		5/27/2020	21.16	NS
		11/11/2020	23.98	NS
		5/24/2021	21.44	NS
		11/29/2021	20.63	NS
		5/25/2022	19.57	NS
		11/29/2022	23.96	NS
		5/30/2023	21.45	NS
		11/27/2023	24.58	NS

Table 4
Summary of Groundwater Elevation Data – January 2018 through November 2023
CHS Auburn Site
Auburn, Washington
Farallon PN: 301-004

Well Identification	Well Casing (feet) ¹	Measurement Date	Depth to Water (feet) ²	Elevation (feet) ¹
CMW-26	87.80	1/17/2018	17.31	70.49
		7/31/2018	21.97	65.83
		1/22/2019	19.64	68.16
		8/21/2019	23.24	64.56
		11/25/2019	22.67	65.13
		2/25/2020	15.56	72.24
		5/27/2020	19.50	68.30
		11/11/2020	22.30	65.50
		5/24/2021	19.74	68.06
		11/29/2021	18.93	68.87
		5/25/2022	17.90	69.90
		11/29/2022	22.30	65.50
		5/30/2023	19.77	68.03
		11/27/2023	22.90	64.90
CMW-27	89.10	1/17/2018	18.79	70.31
		7/31/2018	23.70	65.40
		1/22/2019	21.35	67.75
		8/21/2019	24.96	64.14
		11/25/2019	24.37	64.73
		2/25/2020	17.17	71.93
		5/27/2020	21.22	67.88
		11/11/2020	23.97	65.13
		5/24/2021	21.47	67.63
		11/29/2021	20.68	68.42
		5/25/2022	19.56	69.54
		11/29/2022	24.03	65.07
		5/30/2023	21.46	67.64
		11/27/2023	24.54	64.56
CMW-28	89.48	1/17/2018	19.13	70.35
		7/31/2018	23.89	65.59
		1/22/2019	21.55	67.93
		8/21/2019	25.14	64.34
		11/25/2019	24.56	64.92
		2/24/2020	17.39	72.09
		5/27/2020	21.39	68.09
		11/11/2020	24.15	65.33
		5/24/2021	21.64	67.84
		11/29/2021	20.80	68.68
		5/25/2022	19.77	69.71
		11/29/2022	24.16	65.32
		5/30/2023	21.70	67.78
		11/27/2023	24.76	64.72

Table 4
Summary of Groundwater Elevation Data – January 2018 through November 2023
CHS Auburn Site
Auburn, Washington
Farallon PN: 301-004

Well Identification	Well Casing (feet) ¹	Measurement Date	Depth to Water (feet) ²	Elevation (feet) ¹
CMW-29	88.03	1/17/2018	17.48	70.55
		7/31/2018	22.19	65.84
		1/22/2019	19.85	68.18
		8/21/2019	23.47	64.56
		11/25/2019	22.91	65.12
		2/24/2020	15.76	72.27
		5/27/2020	19.66	68.37
		11/11/2020	22.51	65.52
		5/24/2021	19.93	68.10
		11/29/2021	19.13	68.90
		5/25/2022	18.10	69.93
		11/29/2022	22.52	65.51
		5/30/2023	19.96	68.07
		11/27/2023	23.13	64.90
CMW-30	87.58	1/17/2018	16.82	70.76
		7/31/2018	21.52	66.06
		1/22/2019	19.19	68.39
		8/21/2019	22.84	64.74
		11/25/2019	22.28	65.30
		2/25/2020	15.16	72.42
		5/27/2020	19.02	68.56
		11/11/2020	21.88	65.70
		5/24/2021	19.28	68.30
		11/29/2021	18.53	69.05
		5/25/2022	17.45	70.13
		11/29/2022	21.81	65.77
		5/30/2023	19.31	68.27
		11/27/2023	22.50	65.08
CMW-31	89.02	1/17/2018	19.49	69.53
		7/31/2018	24.32	64.70
		1/22/2019	21.90	67.12
		8/21/2019	25.54	63.48
		11/25/2019	24.91	64.11
		2/24/2020	17.80	71.22
		5/27/2020	21.81	67.21
		11/11/2020	24.43	64.59
		5/24/2021	22.06	66.96
		11/29/2021	21.18	67.84
		5/25/2022	20.22	68.80
		11/29/2022	24.56	64.46
		5/30/2023	22.04	66.98
		11/27/2023	25.00	64.02

Table 4
Summary of Groundwater Elevation Data – January 2018 through November 2023
CHS Auburn Site
Auburn, Washington
Farallon PN: 301-004

Well Identification	Well Casing (feet) ¹	Measurement Date	Depth to Water (feet) ²	Elevation (feet) ¹
HMW-9	89.07	1/17/2018	19.47	69.60
		7/31/2018	24.25	64.82
		1/22/2019	21.85	67.22
		8/21/2019	25.45	63.62
		11/25/2019	24.84	64.23
		2/25/2020	17.84	71.23
		5/27/2020	21.76	67.31
		11/11/2020	24.40	64.67
		5/24/2021	22.00	67.07
		11/29/2021	21.18	67.89
		5/25/2022	20.18	68.89
		11/29/2022	24.50	64.57
		5/30/2023	21.97	67.10
		11/27/2023	24.96	64.11
HMW-10	89.18	1/17/2018	19.40	69.78
		7/31/2018	24.13	65.05
		1/22/2019	21.77	67.41
		8/21/2019	23.35	65.83
		11/25/2019	24.78	64.40
		2/24/2020	17.70	71.48
		5/27/2020	21.66	67.52
		11/11/2020	24.34	64.84
		5/24/2021	21.91	67.27
		11/29/2021	21.08	68.10
		5/25/2022	20.04	69.14
		11/29/2022	24.39	64.79
		5/30/2023	21.86	67.32
		11/27/2023	24.92	64.26
HMW-11	NS	1/17/2018	17.51	NS
		7/31/2018	22.27	NS
		1/22/2019	19.89	NS
		8/21/2019	23.30	NS
		11/25/2019	22.87	NS
		2/25/2020	15.82	NS
		5/27/2020	19.76	NS
		11/11/2020	22.46	NS
		5/24/2021	20.03	NS
		11/29/2021	19.25	NS
		5/25/2022	18.21	NS
		11/29/2022	22.52	NS
		5/30/2023	20.02	NS
		11/27/2023	23.03	NS

Table 4
Summary of Groundwater Elevation Data – January 2018 through November 2023
CHS Auburn Site
Auburn, Washington
Farallon PN: 301-004

Well Identification	Well Casing (feet) ¹	Measurement Date	Depth to Water (feet) ²	Elevation (feet) ¹
HMW-13	88.32	1/17/2018	17.82	70.50
		7/31/2018	22.51	65.81
		1/22/2019	20.21	68.11
		8/21/2019	23.80	64.52
		11/25/2019	23.24	65.08
		2/24/2020	16.13	72.19
		5/27/2020	20.02	68.30
		11/11/2020	22.85	65.47
		5/24/2021	16.00	72.32
		11/29/2021	19.50	68.82
		5/25/2022	16.32	72.00
		11/29/2022	16.20	72.12
		5/30/2023	20.29	68.03
		11/27/2023	23.47	64.85

NOTES:

¹Elevation in feet above mean sea level.

NS = well not surveyed; groundwater elevation
could not be determined

²Depth to water in feet below the top of the well casing.

³Depth to water measured during sampling on November 27, 2023.

⁴Depth to water measurement appears to be erroneous;

depth to water measured during sampling on July 31, 2018
was 24.45 feet below the top of the well casing.

Table 5
Groundwater Water Quality Data – January 2018 through November 2023
CHS Auburn Site
Auburn, Washington
Farallon PN: 301-004

Sample Location	Date ¹	Temperature ² (°Celsius)	pH ²	ORP ² (millivolts)	Specific Conductivity ² (mS/cm)	Dissolved Oxygen ¹ (milligrams per liter)
CMW-2	1/18/2018	13.5	6.03	252.3	---	1.15
	7/31/2018	15.5	6.14	164.0	---	0.47
	1/22/2019	12.9	5.99	214.1	---	1.20
	8/22/2019	14.7	6.16	175.1	---	2.09
	11/26/2019	13.8	6.20	44.5	---	3.29
	2/25/2020	12.2	6.60	143.6	---	6.76
	5/28/2020	14.8	7.32	201.4	---	8.58
	11/12/2020	13.4	6.23	17.5	---	0.95
	5/25/2021	13.7	6.49	354.9	---	7.03
	11/30/2021	14.6	6.48	238.3	---	4.52
	5/26/2022	14.9	6.12	505.8	---	3.76
	11/30/2022	12.5	6.72	292.7	---	2.00
	5/31/2023	14.5	6.23	210.6	---	3.96
	11/28/2023	11.9	6.32	348.2	0.556	6.18
CMW-4	1/17/2018	---	---	---	---	4.52
CMW-6	1/17/2018	---	---	---	---	4.09
CMW-8	1/18/2018	12.0	6.66	-14.3	---	0.29
	8/1/2018	14.5	6.33	-32.3	---	0.52
	1/22/2019	12.2	6.29	8.8	---	0.64
	8/21/2019	13.9	6.21	8.4	---	1.71
	11/25/2019	12.6	6.37	21.8	---	1.05
	2/25/2020	12.5	6.27	-1.3	---	0.99
	5/28/2020	13.3	6.52	-9.9	---	0.60
	11/11/2020	12.3	6.31	-31.9	---	6.67
	5/24/2021	13.3	6.08	41.2	---	0.75
	11/30/2021	12.9	6.51	-12.5	---	1.17
	5/25/2022	15.7	6.09	328.8	---	0.93
	11/30/2022	11.5	6.47	127.3	---	0.76
	5/31/2023	15.1	6.45	15.8	---	1.48
	11/28/2023	10.9	6.48	106.5	0.175	0.78
CMW-10	1/18/2018	13.4	6.12	194.4	---	0.70
	8/1/2018	14.9	6.12	-40.1	---	0.26
	1/23/2019	13.0	5.76	176.7	---	0.75
	8/22/2019	14.3	6.00	-37.4	---	0.76
	11/25/2019	14.6	4.87	87.3	---	1.18
	2/25/2020	13.3	6.08	158	---	5.58
	5/28/2020	15.2	6.52	120.8	---	2.27
	11/12/2020	13.1	5.75	36.6	---	1.20
	5/25/2021	14.1	6.13	319.2	---	1.36
	11/30/2021	15.1	6.25	174.8	---	1.56
	5/26/2022	15.1	6.12	463.7	---	1.58
	11/30/2022	12.9	6.55	42.5	---	0.95
	5/31/2023	15.7	5.84	163.2	---	1.51
	11/28/2023	11.9	6.40	-10.6	0.271	0.83

Table 5
Groundwater Water Quality Data – January 2018 through November 2023
CHS Auburn Site
Auburn, Washington
Farallon PN: 301-004

Sample Location	Date ¹	Temperature ² (°Celsius)	pH ²	ORP ² (millivolts)	Specific Conductivity ² (mS/cm)	Dissolved Oxygen ¹ (milligrams per liter)
CMW-12	1/18/2018	12.8	6.46	-47.0	---	0.18
	8/1/2018	15.8	6.19	-22.5	---	0.41
	1/23/2019	12.5	6.36	-25.7	---	0.60
	8/22/2019	15.1	6.25	-61.5	---	1.71
	11/26/2019	12.4	6.36	-6.5	---	0.97
	2/25/2020	12.8	6.12	-13.9	---	1.01
	5/28/2020	18.3	6.50	-35.5	---	0.59
	11/12/2020	13.6	6.29	-93.6	---	0.73
	5/25/2021	14.6	6.13	86.8	---	0.86
	11/30/2021	13.9	6.38	93.4	---	2.17
	5/26/2022	15.8	6.21	-121.8	---	0.84
	11/30/2022	12.6	6.14	189.4	---	0.73
	5/31/2023	15.7	6.27	14.3	---	1.63
	11/27/2023	12.5	6.16	54.3	0.201	0.84
CMW-13	1/18/2018	13.1	6.30	107.2	---	1.25
	7/31/2018	15.9	6.18	-40.3	---	0.26
	1/23/2019	12.5	5.91	78.6	---	1.28
	8/22/2019	14.5	6.34	-31.7	---	1.85
	11/26/2019	13.1	6.41	-0.9	---	1.51
	2/25/2020	12.8	6.13	155.9	---	1.54
	5/28/2020	16.5	6.17	77.5	---	0.71
	11/12/2020	13.3	6.44	-80.0	---	2.30
	5/24/2021	14.5	5.79	116.3	---	1.15
	11/30/2021	14.3	6.27	60.3	---	4.52
	5/25/2022	16.4	6.08	526.1	---	0.66
	11/30/2022	11.8	6.67	31.9	---	1.27
	5/31/2023	13.9	6.21	48.5	---	1.46
	11/27/2023	12.3	6.14	24.6	0.238	2.54
CMW-15	1/17/2018	---	---	---	---	0.37
CMW-25	1/18/2018	12.7	6.14	269.4	---	4.68
	7/31/2018	16.3	6.03	88.5	---	0.75
	1/22/2019	12.4	6.03	315.1	---	4.59
	8/21/2019	15.6	6.03	117.8	---	1.03
	11/25/2019	12.8	6.13	63.5	---	1.74
	2/24/2020	12.1	6.00	114.2	---	8.05
	5/27/2020	15.1	6.18	251.5	---	4.24
	11/12/2020	12.5	5.97	12.4	---	1.32
	5/24/2021	13.2	5.77	345.6	---	4.00
	11/29/2021	15.0	6.19	279.6	---	6.85
	5/25/2022	14.9	6.02	519.7	---	6.48
	11/30/2022	12.3	6.10	224.8	---	1.12
	5/30/2023	16.0	6.11	305.0	---	5.21
	11/28/2023	11.0	6.20	254.7	0.167	5.53

Table 5
Groundwater Water Quality Data – January 2018 through November 2023
CHS Auburn Site
Auburn, Washington
Farallon PN: 301-004

Sample Location	Date ¹	Temperature ² (°Celsius)	pH ²	ORP ² (millivolts)	Specific Conductivity ² (mS/cm)	Dissolved Oxygen ¹ (milligrams per liter)
CMW-26	1/18/2018	10.7	6.44	233.6	---	4.04
	8/1/2018	16.0	6.22	160.6	---	4.32
	1/22/2019	11.9	6.07	98.6	---	4.08
	8/21/2019	16.0	6.05	206.1	---	4.18
	11/26/2019	11.6	6.27	218.2	---	2.98
	2/25/2020	11.4	6.33	155.2	---	4.61
	5/27/2020	16.4	6.35	266.0	---	4.21
	11/11/2020	12.5	6.05	49.6	---	0.77
	5/25/2021	13.0	6.05	338.3	---	4.53
	11/29/2021	14.0	6.36	273.5	---	4.61
	5/25/2022	16.2	6.24	503.0	---	4.40
	11/30/2022	11.3	7.99	228.0	---	4.55
	5/30/2023	14.1	6.16	184.1	---	4.52
	11/27/2023	11.0	6.27	360.0	0.211	5.00
CMW-27	1/18/2018	14.0	6.12	155.5	---	0.44
	8/1/2018	16.0	6.05	-26.7	---	0.21
	1/23/2019	12.7	6.27	-106.1	---	0.73
	8/22/2019	16.7	6.45	-53.7	---	0.69
	11/26/2019	14.6	6.29	-156.8	---	0.47
	2/25/2020	13.9	6.14	276.2	---	1.95
	5/28/2020	16.1	6.49	-31.0	---	0.76
	11/12/2020	14.5	6.28	-73.2	---	0.90
	5/25/2021	14.5	6.11	29.2	---	0.63
	11/30/2021	15.2	6.18	50.9	---	0.99
	5/26/2022	14.7	6.37	87.2	---	0.77
	11/30/2022	11.2	6.66	16.7	---	0.91
	5/31/2023	15.7	5.78	85.5	---	1.07
	11/28/2023	12.3	6.41	-16.9	0.436	1.36
CMW-28	1/18/2018	9.3	6.17	204.4	---	2.04
	8/1/2018	15.2	5.98	44.9	---	0.52
	1/23/2019	12.0	5.56	184.9	---	1.87
	8/21/2019	15.2	5.65	161.3	---	1.55
	11/26/2019	14.8	5.66	245.0	---	1.93
	2/24/2020	11.1	5.54	146.7	---	7.51
	5/27/2020	15.5	6.03	292.3	---	7.44
	11/12/2020	14.2	5.90	52.1	---	3.91
	5/25/2021	13.6	5.63	296.5	---	3.08
	11/30/2021	14.1	6.04	286.6	---	1.15
	5/25/2022	15.8	5.86	520.4	---	3.54
	11/29/2022	12.3	6.10	201.9	---	6.26
	5/30/2023	15.4	5.93	242.0	---	6.04
	11/27/2023	11.3	5.80	367.1	0.071	3.83

Table 5
Groundwater Water Quality Data – January 2018 through November 2023
CHS Auburn Site
Auburn, Washington
Farallon PN: 301-004

Sample Location	Date ¹	Temperature ² (°Celsius)	pH ²	ORP ² (millivolts)	Specific Conductivity ² (mS/cm)	Dissolved Oxygen ¹ (milligrams per liter)
CMW-29	1/17/2018	11.9	6.15	109.6	---	0.55
	7/31/2018	16.7	6.07	43.2	---	0.41
	1/22/2019	13.1	5.90	180.3	---	1.28
	8/22/2019	14.1	5.59	103.4	---	0.87
	11/25/2019	13.6	5.94	112.3	---	0.85
	2/24/2020	13.1	6.03	90.0	---	1.49
	5/27/2020	17.4	6.05	243.7	---	1.66
	11/11/2020	13.1	5.72	24.2	---	5.06
	5/24/2021	14.0	5.60	267.0	---	7.19
	11/29/2021	15.3	5.96	294.7	---	1.53
	5/25/2022	15.2	5.98	492.8	---	0.88
	11/30/2022	11.9	6.17	281.8	---	2.07
	5/30/2023	14.5	5.87	158.8	---	2.37
	11/27/2023	10.9	5.91	316.5	0.251	1.26
CMW-30	1/17/2018	---	---	---	---	1.11
	1/22/2019	13.4	6.19	179.1	---	0.91
	8/21/2019	15.1	5.90	163.9	---	0.90
	11/25/2019	14.5	6.09	124.4	---	0.56
	2/25/2020	12.0	6.20	148.2	---	2.26
	5/27/2020	15.6	6.29	193.3	---	0.71
	11/11/2020	14.3	6.03	15.0	---	0.89
	5/24/2021	13.9	5.80	241.9	---	0.40
	11/29/2021	15.1	6.24	210.2	---	0.93
	5/25/2022	13.9	6.08	505.5	---	1.08
	11/29/2022	12.2	6.16	202.6	---	0.89
	5/30/2023	14.3	5.96	114.8	---	1.42
	11/27/2023	12.0	6.03	297.1	0.228	0.45
CMW-31	1/18/2018	12.0	6.34	153.3	---	2.90
	7/31/2018	14.6	6.03	97.6	---	0.71
	1/22/2019	12.7	5.95	161.2	---	3.34
	8/22/2019	13.5	6.11	143.8	---	2.07
	11/25/2019	12.3	6.20	109.3	---	1.60
	2/24/2020	12.5	5.88	277.9	---	3.91
	5/28/2020	13.9	6.21	163.2	---	1.17
	11/11/2020	12.6	6.08	53.4	---	1.11
	5/24/2021	13.7	6.15	270.8	---	1.09
	11/29/2021	14.1	6.15	297.5	---	1.28
	5/25/2022	15.5	6.13	321.7	---	1.87
	11/29/2022	11.6	6.42	200.6	---	1.13
	5/31/2023	14.4	6.12	162.7	---	1.99
	11/28/2023	10.6	6.34	268.6	0.179	1.14

Table 5
Groundwater Water Quality Data – January 2018 through November 2023
CHS Auburn Site
Auburn, Washington
Farallon PN: 301-004

Sample Location	Date ¹	Temperature ² (°Celsius)	pH ²	ORP ² (millivolts)	Specific Conductivity ² (mS/cm)	Dissolved Oxygen ¹ (milligrams per liter)
HMW-9	1/18/2018	12.6	6.51	-13.0	---	0.51
	8/1/2018	14.8	6.23	-20.0	---	0.25
	1/22/2019	13.3	6.16	28.8	---	0.59
	8/21/2019	16.7	6.23	-5.1	---	1.89
	11/25/2019	14.0	6.25	25.3	---	0.33
	2/25/2020	13.0	6.18	35.7	---	2.84
	5/28/2020	14.0	6.38	-18.7	---	0.88
	11/11/2020	13.9	6.23	-67.3	---	3.82
	5/25/2021	14.9	5.99	36.6	---	2.66
	11/30/2021	14.1	6.44	13	---	1.1
	5/26/2022	14.6	6.00	-202.6	---	0.62
	11/30/2022	9.2	5.35	217.5	---	4.76
	5/31/2023	14.4	6.34	-53.8	---	1.38
	11/27/2023	11.3	6.16	39.5	0.190	0.87
HMW-10	1/17/2018	12.3	6.49	-38.1	---	0.47
	7/31/2018	14.8	6.22	-43.1	---	0.26
	1/22/2019	13.0	6.14	30.5	---	0.53
	8/21/2019	14.6	6.25	-26.0	---	2.02
	11/25/2019	13.3	6.18	27.3	---	2.76
	2/24/2020	13.5	6.07	7.8	---	7.1
	5/28/2020	14.1	6.43	-9.0	---	0.59
	11/12/2020	13.1	6.26	-57.4	---	2.70
	5/24/2021	14.6	5.85	26.7	---	0.80
	11/30/2021	13.5	6.48	-7.8	---	0.85
	5/26/2022	15.0	6.32	-162.1	---	0.64
	11/30/2022	11.5	7.96	184.0	---	0.89
	5/31/2023	14.1	6.21	4.6	---	1.35
	11/28/2023	11.2	6.41	28.0	0.228	0.68
HMW-11	1/18/2018	13.7	6.07	176.6	---	0.46
	8/1/2018	15.3	6.20	-27.6	---	0.29
	1/23/2019	12.9	6.30	-30.4	---	0.96
	8/22/2019	14.6	6.20	-40.1	---	1.70
	11/26/2019	13.3	6.35	-3.9	---	0.78
	2/25/2020	14.1	6.00	188.7	---	0.63
	5/28/2020	16.2	6.38	-16.6	---	0.70
	11/12/2020	13.8	6.37	-108.8	---	0.67
	5/25/2021	14.6	6.22	1.6	---	1.10
	11/30/2021	15.3	6.23	255.3	---	4.12
	5/26/2022	15.3	6.07	-62.7	---	0.98
	11/30/2022	6.7	6.57	54.1	---	1.60
	5/31/2023	14.1	6.03	11.7	---	1.64
	11/28/2023	11.9	6.23	7.6	0.510	0.74

Table 5
Groundwater Water Quality Data – January 2018 through November 2023
CHS Auburn Site
Auburn, Washington
Farallon PN: 301-004

Sample Location	Date ¹	Temperature ² (°Celsius)	pH ²	ORP ² (millivolts)	Specific Conductivity ² (mS/cm)	Dissolved Oxygen ¹ (milligrams per liter)
HMW-13	1/18/2018	12.2	6.18	233.4	---	0.55
	8/1/2018	14.7	5.95	157.5	---	0.85
	1/23/2019	12.5	5.64	196.8	---	1.23
	8/21/2019	15.9	5.97	211.9	---	2.72
	11/26/2019	12.1	6.06	235.3	---	1.51
	2/24/2020	11.7	5.89	140.1	---	2.92
	5/27/2020	16.8	6.16	233.0	---	1.10
	11/11/2020	12.6	5.77	59.2	---	2.70
	5/25/2021	14.7	5.96	250.9	---	1.93
	11/30/2021	13.6	6.19	281.1	---	1.86
	5/26/2022	16.1	6.10	-36.1	---	1.89
	11/30/2022	12.5	6.05	233.7	---	3.22
	5/30/2023	14.8	5.96	208.1	---	3.01
	11/27/2023	11.9	6.00	341.6	0.199	---

NOTES:

--- = not measured or data unavailable

mS/cm = millSiemens per centimeter

ORP = oxidation-reduction potential

¹Date shown represents date of groundwater sample collection. Dissolved-oxygen measurements typically were collected 1 to 2 days prior using a dissolved-oxygen analyzer with a down-hole probe.

²Temperature, pH, specific conductivity, and ORP were measured using a YSI or Horiba multiparameter water quality analyzer.

³Dissolved-oxygen reading erroneous.

Table 6
Summary of Laboratory Analytical Results for TPH and BTEX in Groundwater – January 2018 through November 2023
CHS Auburn Site
Auburn, Washington
Farallon PN: 301-004

Well Identification	Sample Identification	Sample Date	Analytical Results (milligrams per liter)		Analytical Results (micrograms per liter)				
			DRO ¹	ORO ¹	GRO ²	Benzene ³	Toluene ³	Ethylbenzene ³	Total Xylenes ³
CMW-2	CMW-2-011818	1/18/2018	0.93	<0.62 ⁴	<100	<1.0	<1.0	<1.0	<2.0
	CMW-2-073118	7/31/2018	0.63	<0.41	<100	<1.0	<1.0	<1.0	<2.0
	CMW-2-012219	1/22/2019	2.2	1.1⁵	<100	<1.0	<1.0	<1.0	<2.0
	CMW-2-082219	8/22/2019	1.0	0.69⁵	<100	<1.0	<1.0	<1.0	<2.0
	CMW-2-112619	11/26/2019	5.2	3.3⁵	<100	<1.0	<1.0	<1.0	<2.0
	CMW-2-022520	2/25/2020	0.63	1.0	<100	<1.0	<1.0	<1.0	<2.0
	CMW-2-052820	5/28/2020	0.76	0.94	<100	<1.0	<1.0	<1.0	<2.0
	CMW-2-111220	11/12/2020	1.9	1.1⁵	<100	<1.0	<1.0	<1.0	<2.0
	CMW-2-052521	5/25/2021	0.34	0.63	<100	<1.0	<1.0	<1.0	<2.0
	CMW-2-113021	11/30/2021	1.4	1.2	<100	<1.0	<1.0	<1.0	<2.0
	CMW-2-052622	5/26/2022	0.20	0.25	<100	<1.0	<1.0	<1.0	<2.0
	CMW-2-113022	11/30/2022	0.57	0.59	<100	<1.0	<1.0	<1.0	<2.0
	CMW-2-053123	5/31/2023	0.43	0.64	<100	<1.0	<1.0	<1.0	<2.0
	CMW-2-112823	11/28/2023	1.2	1.5	<100	<1.0	<1.0	<1.0	<2.0
CMW-8	CMW-8-011818	1/18/2018	0.38	<0.41	<100	<1.0	<1.0	<1.0	<2.0
	CMW-8-080118	8/1/2018	0.31	<0.42	<100	<1.0	<1.0	<1.0	<2.0
	CMW-8-012219	1/22/2019	0.50	<0.41	<100	<1.0	<1.0	<1.0	<2.0
	CMW-8-082119	8/21/2019	0.51	<0.40	<100	<1.0	<1.0	<1.0	<2.0
	CMW-8-112519	11/25/2019	0.53	0.36	<100	<1.0	<1.0	<1.0	<2.0
	CMW-8-022420	2/24/2020	0.60	0.25	<100	<1.0	<1.0	<1.0	<2.0
	CMW-8-052820	5/28/2020	0.97	0.56	<100	<1.0	<1.0	<1.0	<2.0
	CMW-8-111120	11/11/2020	0.47	0.22 ⁵	<100	<1.0	<1.0	<1.0	<2.0
	CMW-8-052421	5/24/2021	0.53	0.26	<100	<1.0	<1.0	<1.0	<2.0
	CMW-8-113021	11/30/2021	0.58	0.35	<100	<1.0	<1.0	<1.0	<2.0
	CMW-8-052522	5/25/2022	0.79	0.60	<100	<1.0	<1.0	<1.0	<2.0
	CMW-8-113022	11/30/2022	0.28	0.29	<100	<1.0	<1.0	<1.0	<2.0
	CMW-8-053123	5/31/2023	0.64	0.71	<100	<1.0	<1.0	<1.0	<2.0
	CMW-8-112823	11/28/2023	0.28	0.35	<100	<1.0	<1.0	<1.0	<2.0
MTCA Method A Cleanup Levels for Groundwater⁶			0.5	0.5	800	5	1,000	700	1,000

Table 6
Summary of Laboratory Analytical Results for TPH and BTEX in Groundwater – January 2018 through November 2023
CHS Auburn Site
Auburn, Washington
Farallon PN: 301-004

Well Identification	Sample Identification	Sample Date	Analytical Results (milligrams per liter)		Analytical Results (micrograms per liter)				
			DRO ¹	ORO ¹	GRO ²	Benzene ³	Toluene ³	Ethylbenzene ³	Total Xylenes ³
CMW-10	CMW-10-011818	1/18/2018	1.4	<0.89 ⁴	<100	<1.0	<1.0	<1.0	<2.0
	CMW-10-080118	8/1/2018	1.5	0.67 ⁵	<100	<1.0	<1.0	<1.0	<2.0
	CMW-10-012319	1/23/2019	2.1	1.4 ⁵	<100	<1.0	<1.0	<1.0	<2.0
	CMW-10-082219	8/22/2019	2.9	0.80 ⁵	<400	<4.0	<4.0	<4.0	<8.0
	CMW-10-112519	11/25/2019	0.73	0.37	<100	<1.0	<1.0	<1.0	<2.0
	CMW-10-022520	2/25/2020	2.3	1.4	<100	<1.0	<1.0	<1.0	<2.0
	CMW-10-052820	5/28/2020	3.4	2.9	<100	<1.0	<1.0	<1.0	<2.0
	CMW-10-111220	11/12/2020	1.6	0.70 ⁵	<100	<1.0	<1.0	<1.0	<2.0
	CMW-10-052521	5/25/2021	2.1	3.1	<100	<1.0	<1.0	<1.0	<2.0
	CMW-10-113021	11/30/2021	2.8	2.9	<100	<1.0	<1.0	<1.0	<2.0
	CMW-10-052622	5/26/2022	0.62	0.51	<100	<1.0	<1.0	<1.0	<2.0
	CMW-10-113022	11/30/2022	1.8	0.77	<100	<1.0	<1.0	<1.0	<2.0
	CMW-10-053123	5/31/2023	3.0	4.5	<100	<1.0	<1.0	<1.0	<2.0
	CMW-10-112823	11/28/2023	1.6	0.58	<100	<1.0	<1.0	<1.0	<2.0
CMW-12	CMW-12-011818	1/18/2018	2.1 ¹¹	<0.55 ⁴	1,300	3.0	<1.0	<1.0	<2.0
	QA/QC-1-011818 ⁹	1/18/2018	2.2 ¹¹	<0.70 ⁴	1,200	2.6	<1.0	<1.0	<2.0
	CMW-12-080118	8/1/2018	1.5 ¹¹	0.77 ⁵	1,500	1.2	<1.0	<1.0	1.6
	QA/QC-1-080118 ⁹	8/1/2018	1.4 ¹¹	0.56 ⁵	1,500	1.1	<1.0	<1.0	1.9
	CMW-12-012319	1/23/2019	1.6 ¹¹	0.43 ⁵	1,500 ⁸	1.7	<1.0	<1.0	<2.0
	QA/QC-1-012319 ⁹	1/23/2019	1.6 ¹¹	<0.42	1,500 ⁸	1.6	<1.0	<1.0	<2.0
	CMW-12-082219	8/22/2019	2.5 ¹¹	0.51 ⁵	920	<4.0	<4.0	<4.0	<8.0
	QA/QC-1-082219 ⁹	8/22/2019	2.1 ¹¹	<0.41	950	<4.0	<4.0	<4.0	<8.0
	CMW-12-112619	11/26/2019	2.3 ¹¹	0.51 ⁵	620 ⁸	<1.0	<1.0	<1.0	<2.0
	QA/QC-1-112619 ⁹	11/26/2019	2.3 ¹¹	0.46 ⁵	620 ⁸	<1.0	<1.0	<1.0	<2.0
	CMW-12-022520	2/25/2020	4.2	1.4	1,000	2.0	1.8	<1.0	<2.0
	QAQC-1-022520 ⁹	2/25/2020	4.2	1.5	950	2.0	1.8	<1.0	<2.0
	CMW-12-052820	5/28/2020	2.4 ¹¹	1.1	510 ⁸	<1.0	<1.0	<1.0	<2.0
	QA/QC-2-052820 ⁹	5/28/2020	2.3 ¹¹	1.1	490 ⁸	<1.0	<1.0	<1.0	<2.0
	CMW-12-111220	11/12/2020	0.85 ¹¹	0.34 ⁵	200 ⁸	<1.0	<1.0	<1.0	<2.0
	QA/QC-1-111220 ⁹	11/12/2020	0.90 ¹¹	0.37 ⁵	200 ⁸	<1.0	<1.0	<1.0	<2.0
	CMW-12-052521	5/25/2021	1.1	0.95	<130 ⁴	<1.0	<1.0	<1.0	<2.0
	QA/QC-1-052521 ⁹	5/25/2021	1.0	0.98	<120 ⁴	<1.0	<1.0	<1.0	<2.0
	CMW-12-113021	11/30/2021	0.64	0.33	<100	<1.0	<1.0	<1.0	<2.0
	QA/QC-1-113021 ⁹	11/30/2021	0.65	0.32	<100	<1.0	<1.0	<1.0	<2.0
	CMW-12-052622	5/26/2022	0.80	0.44	<100	<1.0	<1.0	<1.0	<2.0
	QA/QC-2-052622 ⁹	5/26/2022	0.84	0.49	<100	<1.0	<1.0	<1.0	<2.0
	CMW-12-113022	11/30/2022	0.43	0.26	<100	<1.0	<1.0	<1.0	<2.0
	QA/QC-1-113022 ⁹	11/30/2022	0.39	0.30	<100	<1.0	<1.0	<1.0	<2.0
	CMW-12-053123	5/31/2023	1.0	1.1	<100	<1.0	<1.0	<1.0	<2.0
	QA/QC-1-053123 ⁹	5/31/2023	0.88	0.89	<100	<1.0	<1.0	<1.0	<2.0
	CMW-12-112723	11/27/2023	0.29	0.29	<100	<1.0	<1.0	<1.0	<2.0
	QA/QC-1-112723 ⁹	11/27/2023	0.32	0.36	<100	<1.0	<1.0	<1.0	<2.0
MTCA Method A Cleanup Levels for Groundwater^b			0.5	0.5	800	5	1,000	700	1,000

Table 6
Summary of Laboratory Analytical Results for TPH and BTEX in Groundwater – January 2018 through November 2023
CHS Auburn Site
Auburn, Washington
Farallon PN: 301-004

Well Identification	Sample Identification	Sample Date	Analytical Results (milligrams per liter)		Analytical Results (micrograms per liter)				
			DRO ¹	ORO ¹	GRO ²	Benzene ³	Toluene ³	Ethylbenzene ³	Total Xylenes ³
CMW-13	CMW-13-011818	1/18/2018	0.29	<0.41	<100	<1.0	<1.0	<1.0	<2.0
	CMW-13-073118	7/31/2018	0.62¹¹	<0.41	240	1.1	<1.0	<1.0	<2.0
	CMW-13-012319	1/23/2019	0.57	<0.41	<100	<1.0	<1.0	<1.0	<2.0
	CMW-13-082219	8/22/2019	0.38	<0.41	<400	<4.0	<4.0	<4.0	<8.0
	CMW-13-112619	11/26/2019	0.70	0.35 ⁵	<100	<1.0	<1.0	<1.0	<2.0
	CMW-13-022520	2/25/2020	3.3	2.0	<100	<1.0	<1.0	<1.0	<2.0
	CMW-13-052820	5/28/2020	1.7	1.1	<100	<1.0	<1.0	<1.0	<2.0
	CMW-13-111220	11/12/2020	0.48	0.25 ⁵	<100	<1.0	<1.0	<1.0	<2.0
	CMW-13-052421	5/24/2021	1.4	0.72	<100	<1.0	<1.0	<1.0	<2.0
	CMW-13-113021	11/30/2021	0.57	0.34	<100	<1.0	<1.0	<1.0	<2.0
	CMW-13-052522	5/25/2022	1.4	0.67	<100	<1.0	<1.0	<1.0	<2.0
	CMW-13-113022	11/30/2022	0.44 ¹¹	0.22	150	1.5	<1.0	<1.0	<2.0
	CMW-13-053123	5/31/2023	1.5	1.2	<100	<1.0	<1.0	<1.0	<2.0
	CMW-13-112723	11/27/2023	0.68	0.37	<100	<1.0	<1.0	<1.0	<2.0
CMW-25	CMW-25-011818	1/18/2018	<0.26	<0.41	<100	<1.0	<1.0	<1.0	<2.0
	CMW-25-073118	7/31/2018	<0.26	<0.42	<100	<1.0	<1.0	<1.0	<2.0
	CMW-25-012219	1/22/2019	<0.26	<0.41	<100	<1.0	<1.0	<1.0	<2.0
	CMW-25-082119	8/21/2019	<0.25	<0.41	<100	<1.0	<1.0	<1.0	<2.0
	CMW-25-112519	11/25/2019	0.14	0.22	<100	<1.0	<1.0	<1.0	<2.0
	CMW-25-022420	2/24/2020	<0.21	<0.21	<100	<1.0	<1.0	<1.0	<2.0
	CMW-25-052720	5/27/2020	<0.21	<0.21	<100	<1.0	<1.0	<1.0	<2.0
	CMW-25-111220	11/12/2020	<0.21	<0.21	<100	<1.0	<1.0	<1.0	<2.0
	CMW-25-052421	5/24/2021	<0.20	<0.20	<100	<1.0	<1.0	<1.0	<2.0
	CMW-25-112921	11/29/2021	<0.20	<0.20	<100	<1.0	<1.0	<1.0	<2.0
	CMW-25-052522	5/25/2022	<0.11	<0.22	<100	<1.0	<1.0	<1.0	<2.0
	CMW-25-113022	11/30/2022	<0.13	<0.20	<100	<1.0	<1.0	<1.0	<2.0
	CMW-25-053023	5/30/2023	<0.21	<0.15	<400	<4.0	<4.0	<4.0	<8.0
	CMW-25-112823	11/28/2023	<0.15	<0.20	<100	<1.0	<1.0	<1.0	<2.0
CMW-26	CMW-26-011818	1/18/2018	<0.26	<0.42	<100	<1.0	<1.0	<1.0	<2.0
	CMW-26-080118	8/1/2018	<0.26	<0.42	<100	<1.0	<1.0	<1.0	<2.0
	CMW-26-012219	1/22/2019	<0.26	<0.41	<100	<1.0	<1.0	<1.0	<2.0
	CMW-26-082119	8/21/2019	<0.25	<0.41	<100	<1.0	<1.0	<1.0	<2.0
	CMW-26-112619	11/26/2019	<0.21	<0.21	<100	<1.0	<1.0	<1.0	<2.0
	CMW-26-022520	2/25/2020	<0.21	<0.21	<100	<1.0	<1.0	<1.0	<2.0
	CMW-26-052720	5/27/2020	<0.21	<0.21	<100	<1.0	<1.0	<1.0	<2.0
	CMW-26-111120	11/11/2020	<0.21	<0.21	<100	<1.0	<1.0	<1.0	<2.0
	CMW-26-052521	5/25/2021	<0.20	<0.20	<100	<1.0	<1.0	<1.0	<2.0
	CMW-26-112921	11/29/2021	<0.20	<0.20	<100	<1.0	<1.0	<1.0	<2.0
	CMW-26-052522	5/25/2022	<0.11	<0.21	<100	<1.0	<1.0	<1.0	<2.0
	CMW-26-113022	11/30/2022	<0.13	<0.20	<100	<1.0	<1.0	<1.0	<2.0
	CMW-26-053023	5/30/2023	<0.21	<0.15	<400	<4.0	<4.0	<4.0	<8.0
	CMW-26-112723	11/27/2023	<0.15	<0.20	<100	<1.0	<1.0	<1.0	<2.0
MTCA Method A Cleanup Levels for Groundwater^b			0.5	0.5	800	5	1,000	700	1,000

Table 6
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CHS Auburn Site
Auburn, Washington
Farallon PN: 301-004

Well Identification	Sample Identification	Sample Date	Analytical Results (milligrams per liter)		Analytical Results (micrograms per liter)				
			DRO ¹	ORO ¹	GRO ²	Benzene ³	Toluene ³	Ethylbenzene ³	Total Xylenes ³
CMW-27	CMW-27-011818	1/18/2018	1.7	<1.0 ⁴	<100	<1.0	<1.0	<1.0	<2.0
	QA/QC-2-011818 ⁹	1/18/2018	1.6	<0.96 ⁴	<100	<1.0	<1.0	<1.0	<2.0
	CMW-27-080118	8/1/2018	2.7¹¹	1.0⁵	1,000	<1.0	1.3	5.9	7.4
	QA/QC-2-080118 ⁹	8/1/2018	2.6¹¹	0.89⁵	1,100	<1.0	1.3	5.8	7.8
	CMW-27-012319	1/23/2019	6.9¹¹	1.6⁵	900⁸	1.5	3.4	19	17
	QA/QC-2-012319 ⁹	1/23/2019	6.9¹¹	1.5⁵	940⁸	1.3	3.3	20	17
	CMW-27-082219	8/22/2019	2.7¹¹	0.56⁵	1,500	1.2	<1.0	5.2	7.9
	QA/QC-2-082219 ⁹	8/22/2019	3.4¹¹	0.82⁵	1,300	<4.0	<4.0	4.9	5.9
	CMW-27-112619	11/26/2019	3.3¹¹	0.94⁵	860⁸	<1.0	1.2	<1.0	2.0
	QA/QC-2-112619 ⁹	11/26/2019	3.9¹¹	1.1⁵	940⁸	<1.0	1.6	1.3	2.5
	CMW-27-022520	2/25/2020	1.2	1.2	<100	<1.0	<1.0	<1.0	<2.0
	QAQC-2-022520 ⁹	2/25/2020	1.0	1.1	<100	<1.0	<1.0	<1.0	<2.0
	CMW-27-052820	5/28/2020	3.5¹¹	2.0	1,300⁸	<1.0	3.4	16	4.1
	QA/QC-1-052820 ⁹	5/28/2020	4.5¹¹	2.4	1,000⁸	<1.0	2.6	13	3.6
	CMW-27-111220	11/12/2020	2.1¹¹	0.70⁵	1,700⁸	<1.0	<1.0	1.8	3.9
	QA/QC-2-111220 ⁹	11/12/2020	2.4¹¹	0.76⁵	1,800⁸	<1.0	<1.0	1.8	4.0
	CMW-27-052521	5/25/2021	3.1¹¹	1.4	1,100⁸	<1.0	<1.0	15	3.5
	QA/QC-2-052521 ⁹	5/25/2021	3.1¹¹	2.3	1,200⁸	3.9	<1.0	15	3.4
	CMW-27-113021	11/30/2021	8.9¹¹	4.8	770	<1.0	<1.0	5.0	1.7
	QA/QC-2-113021 ⁹	11/30/2021	6.7¹¹	2.8	960	1.2	<1.0	6.5	2.1
	CMW-27-052622	5/26/2022	1.6	1.0	<100	<1.0	<1.0	<1.0	<2.0
	QA/QC-1-052622 ⁹	5/26/2022	1.6	1.1	<100	<1.0	<1.0	<1.0	<2.0
	CMW-27-113022	11/30/2022	2.1¹¹	0.61	1,300	3.8	<1.0	3.2	1.5
	QA/QC-2-113022 ⁹	11/30/2022	1.7¹¹	0.61	1,300	4.0	<1.0	3.3	1.5
	CMW-27-053123	5/31/2023	2.5	3.0	710	1.2	<1.0	1.7	<2.0
	QA/QC-2-053123 ⁹	5/31/2023	2.9	4.2	680	1.5	<1.0	2.0	1.1
	CMW-27-112823	11/28/2023	1.9¹¹	0.65	810	3.0	1.3	1.1	1.1
	QA/QC-2-112823 ⁹	11/28/2023	2.7¹¹	0.62	840	3.5	1.3	1.1	1.1
CMW-28	CMW-28-011818	1/18/2018	<0.26	<0.42	<100	<1.0	<1.0	<1.0	<2.0
	CMW-28-080118	8/1/2018	0.81	0.52⁵	<100	<1.0	<1.0	<1.0	<2.0
	CMW-28-012319	1/23/2019	<0.26	<0.41	<100	<1.0	<1.0	<1.0	<2.0
	CMW-28-082119	8/21/2019	0.63	<0.44	<100	<1.0	<1.0	<1.0	<2.0
	CMW-28-112619	11/26/2019	2.8	1.9⁵	<100	<1.0	<1.0	<1.0	<2.0
	CMW-28-022420	2/24/2020	0.45	0.32	<100	<1.0	<1.0	<1.0	<2.0
	CMW-28-052720	5/27/2020	<0.21	0.23	<100	<1.0	<1.0	<1.0	<2.0
	CMW-28-111220	11/12/2020	0.70	0.42⁵	<100	<1.0	<1.0	<1.0	<2.0
	CMW-28-052521	5/25/2021	0.49	0.43	<100	<1.0	<1.0	<1.0	<2.0
	CMW-28-113021	11/30/2021	<0.20	<0.20	<100	<1.0	<1.0	<1.0	<2.0
	CMW-28-052522	5/25/2022	1.1	0.68	<100	<1.0	<1.0	<1.0	<2.0
	CMW-28-112922	11/29/2022	0.24	0.31	<100	<1.0	<1.0	<1.0	<2.0
	CMW-28-053023	5/30/2023	1.5	1.1	<100	<1.0	<1.0	<1.0	<2.0
	CMW-28-112723	11/27/2023	0.61	0.90	<100	<1.0	<1.0	<1.0	<2.0
MTCA Method A Cleanup Levels for Groundwater⁶			0.5	0.5	800	5	1,000	700	1,000

Table 6
Summary of Laboratory Analytical Results for TPH and BTEX in Groundwater – January 2018 through November 2023
CHS Auburn Site
Auburn, Washington
Farallon PN: 301-004

Well Identification	Sample Identification	Sample Date	Analytical Results (milligrams per liter)		Analytical Results (micrograms per liter)				
			DRO ¹	ORO ¹	GRO ²	Benzene ³	Toluene ³	Ethylbenzene ³	Total Xylenes ³
CMW-29	CMW-29-011718	1/17/2018	0.70	<0.54 ⁴	<100	<1.0	<1.0	<1.0	<2.0
	CMW-29-073118	7/31/2018	0.33	<0.41	<100	<1.0	<1.0	<1.0	<2.0
	CMW-29-012219	1/22/2019	1.0	0.50 ⁵	<100	<1.0	<1.0	<1.0	<2.0
	CMW-29-082219	8/22/2019	<0.25	<0.41	<100	<1.0	<1.0	<1.0	<2.0
	CMW-29-112519	11/25/2019	0.55	0.38	<100	<1.0	<1.0	<1.0	<2.0
	CMW-29-022420	2/24/2020	0.67	0.28	<100	<1.0	<1.0	<1.0	<2.0
	CMW-29-052720	5/27/2020	0.97	0.71	<100	<1.0	<1.0	<1.0	<2.0
	CMW-29-111120	11/11/2020	0.25	<0.20	<100	<1.0	<1.0	<1.0	<2.0
	CMW-29-052421	5/24/2021	0.71	0.43	<100	<1.0	<1.0	<1.0	<2.0
	CMW-29-112921	11/29/2021	0.74	0.87	<100	<1.0	<1.0	<1.0	<2.0
	CMW-29-052522	5/25/2022	0.74	0.56	<100	<1.0	<1.0	<1.0	<2.0
	CMW-29-113022	11/30/2022	0.17	0.20	<100	<1.0	<1.0	<1.0	<2.0
	CMW-29-053023	5/30/2023	0.48	0.46	<100	<1.0	<1.0	<1.0	<2.0
CMW-30	CMW-30-012219	1/22/2019	0.26	<0.42	<100	<1.0	<1.0	<1.0	<2.0
	CMW-30-082119	8/21/2019	<0.25	<0.40	<100	<1.0	<1.0	<1.0	<2.0
	CMW-30-112519	11/25/2019	0.19	0.22	<100	<1.0	<1.0	<1.0	<2.0
	CMW-30-022520	2/25/2020	<0.20	<0.20	<100	<1.0	<1.0	<1.0	<2.0
	CMW-30-052720	5/27/2020	0.36	0.30	<100	<1.0	<1.0	<1.0	<2.0
	CMW-30-111120	11/11/2020	0.22	<0.20	<100	<1.0	<1.0	<1.0	<2.0
	CMW-30-052421	5/24/2021	0.29	<0.21	<100	<1.0	<1.0	<1.0	<2.0
	CMW-30-112921	11/29/2021	0.23	<0.20	<100	<1.0	<1.0	<1.0	<2.0
	CMW-30-052522	5/25/2022	0.40	0.29	<100	<1.0	<1.0	<1.0	<2.0
	CMW-30-112922	11/29/2022	0.47	<0.20	<100	<1.0	<1.0	<1.0	<2.0
	CMW-30-053023	5/30/2023	0.33	0.21	<100	<1.0	<1.0	<1.0	<2.0
	CMW-30-112723	11/27/2023	0.18	0.26	<100	<1.0	<1.0	<1.0	<2.0
CMW-31	CMW-31-011818	1/18/2018	<0.26	<0.41	<100	<1.0	<1.0	<1.0	<2.0
	CMW-31-073118	7/31/2018	<0.26	<0.41	<100	<1.0	<1.0	<1.0	<2.0
	CMW-31-012219	1/22/2019	<0.26	<0.41	<100	<1.0	<1.0	<1.0	<2.0
	CMW-31-082219	8/22/2019	0.34	<0.45	<100	<1.0	<1.0	<1.0	<2.0
	CMW-31-112519	11/25/2019	0.22	0.27	<100	<1.0	<1.0	<1.0	<2.0
	CMW-31-022420	2/24/2020	<0.21	<0.21	<100	<1.0	<1.0	<1.0	<2.0
	CMW-31-052820	5/28/2020	<0.21	0.32	<100	<1.0	<1.0	<1.0	<2.0
	CMW-31-111120	11/11/2020	0.29	<0.20	<100	<1.0	<1.0	<1.0	<2.0
	CMW-31-052421	5/24/2021	<0.20	0.27	<100	<1.0	<1.0	<1.0	<2.0
	CMW-31-112921	11/29/2021	<0.20	<0.20	<100	<1.0	<1.0	<1.0	<2.0
	CMW-31-052522	5/25/2022	<0.10	<0.20	<100	<1.0	<1.0	<1.0	<2.0
	CMW-31-112922	11/29/2022	0.25	<0.20	<100	<1.0	<1.0	<1.0	<2.0
	CMW-31-053123	5/31/2023	<0.21	0.27	<100	<1.0	<1.0	<1.0	<2.0
	CMW-31-112823	11/28/2023	0.18	0.23	<100	<1.0	<1.0	<1.0	<2.0
MTCA Method A Cleanup Levels for Groundwater⁶			0.5	0.5	800	5	1,000	700	1,000

Table 6
Summary of Laboratory Analytical Results for TPH and BTEX in Groundwater – January 2018 through November 2023
CHS Auburn Site
Auburn, Washington
Farallon PN: 301-004

Well Identification	Sample Identification	Sample Date	Analytical Results (milligrams per liter)		Analytical Results (micrograms per liter)				
			DRO ¹	ORO ¹	GRO ²	Benzene ³	Toluene ³	Ethylbenzene ³	Total Xylenes ³
HMW-9	HMW-9-011818	1/18/2018	0.35	<0.41	<100	<1.0	<1.0	<1.0	<2.0
	HMW-9-080118	8/1/2018	0.46	<0.41	<100	<1.0	<1.0	<1.0	<2.0
	HMW-9-012219	1/22/2019	0.26	<0.41	<100	<1.0	<1.0	<1.0	<2.0
	HMW-9-082119	8/21/2019	0.34	<0.44	<100	<1.0	<1.0	<1.0	<2.0
	HMW-9-112519	11/25/2019	0.40	0.42	<100	<1.0	<1.0	<1.0	<2.0
	HMW-9-022520	2/25/2020	0.39	1.2	<100	<1.0	<1.0	<1.0	<2.0
	HMW-9-052820	5/28/2020	0.98	2.1	<100	<1.0	<1.0	<1.0	<2.0
	HMW-9-111120	11/11/2020	0.47	0.69	<100	<1.0	<1.0	<1.0	<2.0
	HMW-9-052521	5/25/2021	0.55	1.2	<100	<1.0	<1.0	<1.0	<2.0
	HMW-9-113021	11/30/2021	0.30	0.32	<100	<1.0	<1.0	<1.0	<2.0
	HMW-9-052622	5/26/2022	0.77	0.65	<100	<1.0	<1.0	<1.0	<2.0
	HMW-9-113022	11/30/2022	0.18	0.45	<100	<1.0	<1.0	<1.0	<2.0
	HMW-09-053123	5/31/2023	0.96	1.3	<100	<1.0	<1.0	<1.0	<2.0
	HMW-9-112723	11/27/2023	0.35	0.50	<100	<1.0	<1.0	<1.0	<2.0
HMW-10	HMW-10-011718	1/17/2018	0.72	<0.41	<100	<1.0	<1.0	<1.0	<2.0
	HMW-10-073118	7/31/2018	0.60 ¹¹	<0.40	<100	<1.0	<1.0	<1.0	<2.0
	HMW-10-012219	1/22/2019	0.38	<0.41	<100	<1.0	<1.0	<1.0	<2.0
	HMW-10-082119	8/21/2019	0.51	<0.41	<400	<4.0	<4.0	<4.0	<8.0
	HMW-10-112519	11/25/2019	5.0	1.7 ⁵	<100	<1.0	<1.0	<1.0	<2.0
	HMW-10-022420	2/24/2020	0.71	0.34	<100	<1.0	<1.0	<1.0	<2.0
	HMW-10-052820	5/28/2020	1.2	0.77	<100	<1.0	<1.0	<1.0	<2.0
	HMW-10-111220	11/12/2020	0.50	<0.21	<100	<1.0	<1.0	<1.0	<2.0
	HMW-10-052421	5/24/2021	0.95	0.51	<100	<1.0	<1.0	<1.0	<2.0
	HMW-10-113021	11/30/2021	0.50	0.23	<100	<1.0	<1.0	<1.0	<2.0
	HMW-10-052622	5/26/2022	1.5	0.75	<100	<1.0	<1.0	<1.0	<2.0
	HMW-10-113022	11/30/2022	0.52	0.28	<100	<1.0	<1.0	<1.0	<2.0
	HMW-10-053123	5/31/2023	1.0	0.75	<100	<1.0	<1.0	<1.0	<2.0
	HMW-10-112823	11/28/2023	0.49	0.41	<100	<1.0	<1.0	<1.0	<2.0
HMW-11	HMW-11-011818	1/18/2018	2.5	<1.3 ⁴	<100	<1.0	<1.0	<1.0	<2.0
	HMW-11-080118	8/1/2018	1.6 ¹¹	0.48 ⁵	1,600	1.0	<1.0	<1.0	<2.0
	HMW-11-012319	1/23/2019	1.9 ¹¹	<0.41	1,900 ⁸	1.4	<1.0	1.2	<2.0
	HMW-11-082219	8/22/2019	3.3 ¹¹	0.49 ⁵	1,400	<4.0	<4.0	<4.0	<8.0
	HMW-11-112619	11/26/2019	3.2 ¹¹	0.63 ⁵	1,200 ⁸	1.0	1.0	<1.0	<2.0
	HMW-11-022520	2/25/2020	4.9	2.1	<100	<1.0	<1.0	<1.0	<2.0
	HMW-11-052820	5/28/2020	4.1 ¹¹	2.1	920 ⁸	<1.0	1.5	<1.0	<2.0
	HMW-11-111220	11/12/2020	1.4 ¹¹	0.51 ⁵	410 ⁸	<1.0	<1.0	<1.0	<2.0
	HMW-11-052521	5/25/2021	3.5 ¹¹	1.1	730 ⁸	<1.0	<1.0	<1.0	<2.0
	HMW-11-113021	11/30/2021	0.36	0.38	<100	<1.0	<1.0	<1.0	<2.0
	HMW-11-052622	5/26/2022	2.5	1.4	<100	<1.0	<1.0	<1.0	<2.0
	HMW-11-113022	11/30/2022	1.3 ¹¹	0.51	480	2.1	<1.0	<1.0	<2.0
	HMW-11-053123	5/31/2023	3.5	2.5	770	1.7	<1.0	<1.0	<2.0
	HMW-11-112823	11/28/2023	4.2 ¹¹	1.1	490	1.7	<1.0	<1.0	<2.0
MTCA Method A Cleanup Levels for Groundwater⁶			0.5	0.5	800	5	1,000	700	1,000

Table 6
Summary of Laboratory Analytical Results for TPH and BTEX in Groundwater – January 2018 through November 2023
CHS Auburn Site
Auburn, Washington
Farallon PN: 301-004

Well Identification	Sample Identification	Sample Date	Analytical Results (milligrams per liter)		Analytical Results (micrograms per liter)				
			DRO ¹	ORO ¹	GRO ²	Benzene ³	Toluene ³	Ethylbenzene ³	Total Xylenes ³
HMW-13	HMW-13-011818	1/18/2018	<0.26	<0.41	<100	<1.0	<1.0	<1.0	<2.0
	HMW-13-080118	8/1/2018	<0.26	<0.41	<100	<1.0	<1.0	<1.0	<2.0
	HMW-13-012319	1/23/2019	<0.26	<0.41	<100	<1.0	<1.0	<1.0	<2.0
	HMW-13-082119	8/21/2019	<0.30	<0.48	<100	<1.0	<1.0	<1.0	<2.0
	HMW-13-112619	11/26/2019	0.27	<0.21	<100	<1.0	<1.0	<1.0	<2.0
	HMW-13-022420	2/24/2020	<0.21	0.22	<100	<1.0	<1.0	<1.0	<2.0
	HMW-13-052720	5/27/2020	<0.21	0.24	<100	<1.0	<1.0	<1.0	<2.0
	HMW-13-111120	11/11/2020	<0.20	<0.20	<100	<1.0	<1.0	<1.0	<2.0
	HMW-13-052521	5/25/2021	<0.20	0.24	<100	<1.0	<1.0	<1.0	<2.0
	HMW-13-113021	11/30/2021	<0.20	<0.20	<100	<1.0	<1.0	<1.0	<2.0
	HMW-13-052622	5/26/2022	<0.11	<0.22	<100	<1.0	<1.0	<1.0	<2.0
	HMW-13-113022	11/30/2022	<0.13	<0.20	<100	<1.0	<1.0	<1.0	<2.0
	HMW-13-053023	5/30/2023	<0.22	<0.17	<100	<1.0	<1.0	<1.0	<2.0
	HMW-13-112723	11/27/2023	0.42	0.21	<100	<1.0	<1.0	<1.0	<2.0
MTCA Method A Cleanup Levels for Groundwater⁶			0.5	0.5	800	5	1,000	700	1,000

NOTES:

< denotes analyte not detected at or exceeding the laboratory reporting limit listed.

Results in **bold** denote sample result or reporting limit exceeds applicable MTCA Method A cleanup levels for groundwater.

¹Analyzed by Northwest Method NWTPH-Dx. Samples analyzed by OnSite Environmental Inc. between June 2008 and November 2016 were analyzed using acid silica gel cleanup procedure.

²Analyzed by Northwest Method NWTPH-Gx.

³Analyzed by U.S. Environmental Protection Agency Method 8021B.

⁴The practical quantitation limit is elevated due to interferences in the sample.

⁵Hydrocarbons in the diesel range are impacting the oil-range result.

⁶MTCA Method A Cleanup Levels for Groundwater, Table 720-1 of Section 900 of Chapter 173-340 of the Washington Administrative Code, as revised 2013.

⁷Sample collected using a disposable bailer.

⁸Hydrocarbons indicative of heavier fuels present in the sample are impacting the gasoline result.

⁹Quality assurance/quality control field duplicate sample.

¹⁰Duplicate sample analyzed at TestAmerica Laboratories Inc.

¹¹Hydrocarbons in the gasoline-range are impacting the diesel-range result.

BTEX = benzene, toluene, ethylbenzene, and xylenes

DRO = TPH as diesel-range organics

GRO = TPH as gasoline-range organics

MTCA = Washington State Model Toxics Control Act Cleanup Regulation

ORO = TPH as oil-range organics

TPH = total petroleum hydrocarbons

Table 7
Summary of Laboratory Analytical Results for DRO and ORO in Groundwater – November 2021 through November 2023
CHS Auburn Site
Auburn, Washington
Farallon PN: 301-004

Well Identification	Sample Identification	Sample Date	Analytical Results (milligrams per liter)			
			NWTPH-Dx without Sulfuric Acid Silica Gel or Silica Gel ¹		NWTPH-Dx with Sulfuric Acid Silica Gel or Silica Gel	
			DRO	ORO	DRO	ORO
CMW-2	CMW-2-113021	11/30/2021	1.4	1.2	<0.20 ²	<0.20 ²
	CMW-2-052622	5/26/2022	0.20	0.25	<0.24 ³	<0.24 ³
	CMW-2-113022	11/30/2022	0.57	0.59	<0.12 ³	<0.20 ³
	CMW-2-053123	5/31/2023	0.43	0.64	<0.22 ³	<0.22 ³
	CMW-2-112823	11/28/2023	1.2	1.5	<0.20 ³	<0.20 ³
CMW-8	CMW-8-113021	11/30/2021	0.58	0.35	<0.20 ²	<0.20 ²
	CMW-8-052522	5/25/2022	0.79	0.60	<0.20 ³	<0.20 ³
	CMW-8-113022	11/30/2022	0.28	0.29	<0.11 ³	<0.20 ³
	CMW-8-053123	5/31/2023	0.64	0.71	<0.20 ³	<0.20 ³
	CMW-8-112823	11/28/2023	0.28	0.35	<0.20 ³	<0.20 ³
CMW-10	CMW-10-113021	11/30/2021	2.8	2.9	<0.20 ²	<0.20 ²
	CMW-10-052622	5/26/2022	0.62	0.51	<0.23 ³	<0.23 ³
	CMW-10-113022	11/30/2022	1.8	0.77	<0.12 ³	<0.20 ³
	CMW-10-053123	5/31/2023	3.0	4.5	0.28 ³	<0.22 ³
	CMW-10-112823	11/28/2023	1.6	0.58	0.27 ³	<0.20 ³
CMW-12	CMW-12-113021	11/30/2021	0.64	0.33	<0.20 ²	<0.20 ²
	QA/QC-1-113021 ⁴	11/30/2021	0.65	0.32	<0.21 ²	<0.21 ²
	CMW-12-052622	5/26/2022	0.80	0.44	<0.22 ³	<0.22 ³
	QA/QC-2-052622 ⁴	5/26/2022	0.84	0.49	<0.20 ³	<0.20 ³
	CMW-12-113022	11/30/2022	0.43	0.26	<0.12 ³	<0.20 ³
	QA/QC-1-113022 ⁴	11/30/2022	0.39	0.30	<0.12 ³	<0.20 ³
	CMW-12-053123	5/31/2023	1.0	1.1	<0.20 ³	<0.20 ³
	QA/QC-1-053123 ⁴	5/31/2023	0.88	0.89	<0.21 ³	<0.21 ³
	CMW-12-112723	11/27/2023	0.29	0.29	<0.21 ³	<0.21 ³
	QA/QC-1-112723 ⁴	11/27/2023	0.32	0.36	<0.20 ³	<0.20 ³
CMW-13	CMW-13-113021	11/30/2021	0.57	0.34	<0.21 ²	<0.21 ²
	CMW-13-052522	5/25/2022	1.4	0.67	<0.22 ³	<0.22 ³
	CMW-13-113022	11/30/2022	0.44 ⁵	0.22	<0.16 ³	<0.20 ³
	CMW-13-053123	5/31/2023	1.5	1.2	<0.20 ³	<0.20 ³
	CMW-13-112723	11/27/2023	0.68	0.37	<0.20 ³	<0.20 ³
MTCA Method A Cleanup Levels for Groundwater⁶			0.5	0.5	0.5	0.5

Table 7
Summary of Laboratory Analytical Results for DRO and ORO in Groundwater – November 2021 through November 2023
CHS Auburn Site
Auburn, Washington
Farallon PN: 301-004

Well Identification	Sample Identification	Sample Date	Analytical Results (milligrams per liter)			
			NWTPH-Dx without Sulfuric Acid Silica Gel or Silica Gel ¹		NWTPH-Dx with Sulfuric Acid Silica Gel or Silica Gel	
			DRO	ORO	DRO	ORO
CMW-25	CMW-25-112921	11/29/2021	<0.20	<0.20	<0.20 ²	<0.20 ²
	CMW-25-052522	5/25/2022	<0.11	<0.22	<0.22 ³	<0.22 ³
	CMW-25-113022	11/30/2022	<0.13	<0.20	<0.12 ³	<0.20 ³
	CMW-25-053023	5/30/2023	<0.21	<0.15	<0.21 ³	<0.21 ³
	CMW-25-112823	11/28/2023	<0.15	<0.20	<0.20 ³	<0.20 ³
CMW-26	CMW-26-112921	11/29/2021	<0.20	<0.20	<0.20 ²	<0.20 ²
	CMW-26-052522	5/25/2022	<0.11	<0.21	<0.21 ³	<0.21 ³
	CMW-26-113022	11/30/2022	<0.13	<0.20	<0.12 ³	<0.20 ³
	CMW-26-053023	5/30/2023	<0.21	<0.15	<0.21 ³	<0.21 ³
	CMW-26-112723	11/27/2023	<0.15	<0.20	<0.20 ³	<0.20 ³
CMW-27	CMW-27-113021	11/30/2021	8.9⁵	4.8	0.88^{5,2}	<0.21 ²
	QA/QC-2-113021 ⁴	11/30/2021	6.7⁵	2.8	0.93^{5,2}	<0.21 ²
	CMW-27-052622	5/26/2022	1.6	1.0	0.28 ³	<0.22 ³
	QA/QC-1-052622 ⁴	5/26/2022	1.6	1.1	0.32 ³	<0.23 ³
	CMW-27-113022	11/30/2022	2.1⁵	0.61	0.75^{3,5}	<0.20 ³
	QA/QC-2-113022 ⁴	11/30/2022	1.7⁵	0.61	0.64^{3,5}	<0.20 ³
	CMW-27-053123	5/31/2023	2.5	3.0	0.23 ³	<0.20 ³
	QA/QC-2-053123 ⁴	5/31/2023	2.9	4.2	0.24 ³	<0.21 ³
	CMW-27-112823	11/28/2023	1.9⁵	0.65	0.51^{3,5}	<0.20 ³
	QA/QC-2-112823 ⁴	11/28/2023	2.7⁵	0.62	0.75^{3,5}	<0.20 ³
CMW-28	CMW-28-113021	11/30/2021	<0.20	<0.20	<0.20 ²	<0.20 ²
	CMW-28-052522	5/25/2022	1.1	0.68	<0.23 ³	<0.23 ³
	CMW-28-112922	11/29/2022	0.24	0.31	<0.12 ³	<0.20 ³
	CMW-28-053023	5/30/2023	1.5	1.1	<0.20 ³	<0.20 ³
	CMW-28-112723	11/27/2023	0.61	0.90	<0.20 ³	<0.20 ³
CMW-29	CMW-29-112921	11/29/2021	0.74	0.87	<0.20 ²	<0.20 ²
	CMW-29-052522	5/25/2022	0.74	0.56	<0.23 ³	<0.23 ³
	CMW-29-113022	11/30/2022	0.17	0.20	<0.12 ³	<0.20 ³
	CMW-29-053023	5/30/2023	0.48	0.46	<0.22 ³	<0.22 ³
	CMW-29-112723	11/27/2023	<0.15	<0.20	<0.20 ³	<0.20 ³
MTCA Method A Cleanup Levels for Groundwater⁶			0.5	0.5	0.5	0.5

Table 7
Summary of Laboratory Analytical Results for DRO and ORO in Groundwater – November 2021 through November 2023
CHS Auburn Site
Auburn, Washington
Farallon PN: 301-004

Well Identification	Sample Identification	Sample Date	Analytical Results (milligrams per liter)			
			NWTPH-Dx without Sulfuric Acid Silica Gel or Silica Gel ¹		NWTPH-Dx with Sulfuric Acid Silica Gel or Silica Gel	
			DRO	ORO	DRO	ORO
CMW-30	CMW-30-112921	11/29/2021	0.23	<0.20	<0.20 ²	<0.20 ²
	CMW-30-052522	5/25/2022	0.40	0.29	<0.21 ³	<0.21 ³
	CMW-30-112922	11/29/2022	0.47	<0.20	<0.12 ³	<0.20 ³
	CMW-30-053023	5/30/2023	0.33	0.21	<0.22 ³	<0.22 ³
	CMW-30-112723	11/27/2023	0.18	0.26	<0.20 ³	<0.20 ³
CMW-31	CMW-31-112921	11/29/2021	<0.20	<0.20	<0.20 ²	<0.20 ²
	CMW-31-052522	5/25/2022	<0.10	<0.20	<0.20 ³	<0.20 ³
	CMW-31-112922	11/29/2022	0.25	<0.20	<0.12 ³	<0.20 ³
	CMW-31-053123	5/31/2023	<0.21	0.27	<0.21 ³	<0.21 ³
	CMW-31-112823	11/28/2023	0.18	0.23	<0.21 ³	<0.21 ³
HMW-9	HMW-9-113021	11/30/2021	0.30	0.32	<0.21 ²	<0.21 ²
	HMW-9-052622	5/26/2022	0.77	0.65	<0.21 ³	<0.21 ³
	HMW-9-113022	11/30/2022	0.18	0.45	<0.12 ³	0.35 ³
	HMW-09-053123	5/31/2023	0.96	1.3	<0.20 ³	0.22 ³
	HMW-9-112723	11/27/2023	0.35	0.50	<0.20 ³	<0.20 ³
HMW-10	HMW-10-113021	11/30/2021	0.50	0.23	<0.20 ²	<0.20 ²
	HMW-10-052622	5/26/2022	1.5	0.75	<0.20 ³	<0.20 ³
	HMW-10-113022	11/30/2022	0.52	0.28	<0.12 ³	<0.20 ³
	HMW-10-053123	5/31/2023	1.0	0.75	<0.22 ³	<0.22 ³
	HMW-10-112823	11/28/2023	0.49	0.41	<0.20 ³	<0.20 ³
HMW-11	HMW-11-113021	11/30/2021	0.36	0.38	<0.20 ²	<0.20 ²
	HMW-11-052622	5/26/2022	2.5	1.4	<0.20 ³	<0.20 ³
	HMW-11-113022	11/30/2022	1.3⁵	0.51	0.36 ^{3,5}	<0.20 ³
	HMW-11-053123	5/31/2023	3.5	2.5	0.42 ³	<0.22 ³
	HMW-11-112823	11/28/2023	4.2⁵	1.1	0.50 ^{3,5}	<0.20 ³
MTCA Method A Cleanup Levels for Groundwater⁶			0.5	0.5	0.5	0.5

Table 7
Summary of Laboratory Analytical Results for DRO and ORO in Groundwater – November 2021 through November 2023
CHS Auburn Site
Auburn, Washington
Farallon PN: 301-004

Well Identification	Sample Identification	Sample Date	Analytical Results (milligrams per liter)			
			NWTPH-Dx without Sulfuric Acid Silica Gel or Silica Gel ¹		NWTPH-Dx with Sulfuric Acid Silica Gel or Silica Gel	
			DRO	ORO	DRO	ORO
HMW-13	HMW-13-113021	11/30/2021	<0.20	<0.20	<0.20 ²	<0.20 ²
	HMW-13-052622	5/26/2022	<0.11	<0.22	<0.22 ³	<0.22 ³
	HMW-13-113022	11/30/2022	<0.13	<0.20	<0.12 ³	<0.20 ³
	HMW-13-053023	5/30/2023	<0.22	<0.17	<0.22 ³	<0.22 ³
	HMW-13-112723	11/27/2023	0.42	0.21	<0.20 ³	<0.20 ³
MTCA Method A Cleanup Levels for Groundwater⁶			0.5	0.5	0.5	0.5

NOTES:

<denotes analyte not detected at or exceeding the laboratory reporting limit listed.

Results in **bold** denote sample result or reporting limit exceeds applicable MTCA Method A cleanup levels for groundwater.

¹Analyzed by Northwest Method NWTPH-Dx without a sulfuric acid/silica gel or silica gel cleanup procedure.

²Analyzed by Northwest Method NWTPH-Dx with a sulfuric acid/silica gel cleanup procedure.

³Analyzed by Northwest Method NWTPH-Dx with a silica gel cleanup procedure.

⁴Quality assurance/quality control field duplicate sample.

⁵Hydrocarbons in the gasoline-range are impacting the diesel-range result.

⁶MTCA Method A Cleanup Levels for Groundwater, Table 720-1 of Section 900 of Chapter 173-340 of the Washington Administrative Code, as revised 2013.

DRO = TPH as diesel-range organics

MTCA = Washington State Model Toxics Control

Act Cleanup Regulation

ORO = TPH as oil-range organics

TPH = total petroleum hydrocarbons

CHARTS

**THIRD AND FOURTH QUARTER 2023
GROUNDWATER MONITORING AND TREATMENT SYSTEM
OPERATION AND MAINTENANCE REPORT
CHS Auburn Site
Auburn, Washington**

Farallon PN: 301-004

Chart 1
DRO and ORO Concentration Data Trends for Monitoring Well CMW-2
CHS Auburn Site
Auburn, Washington
Farallon PN: 301-004

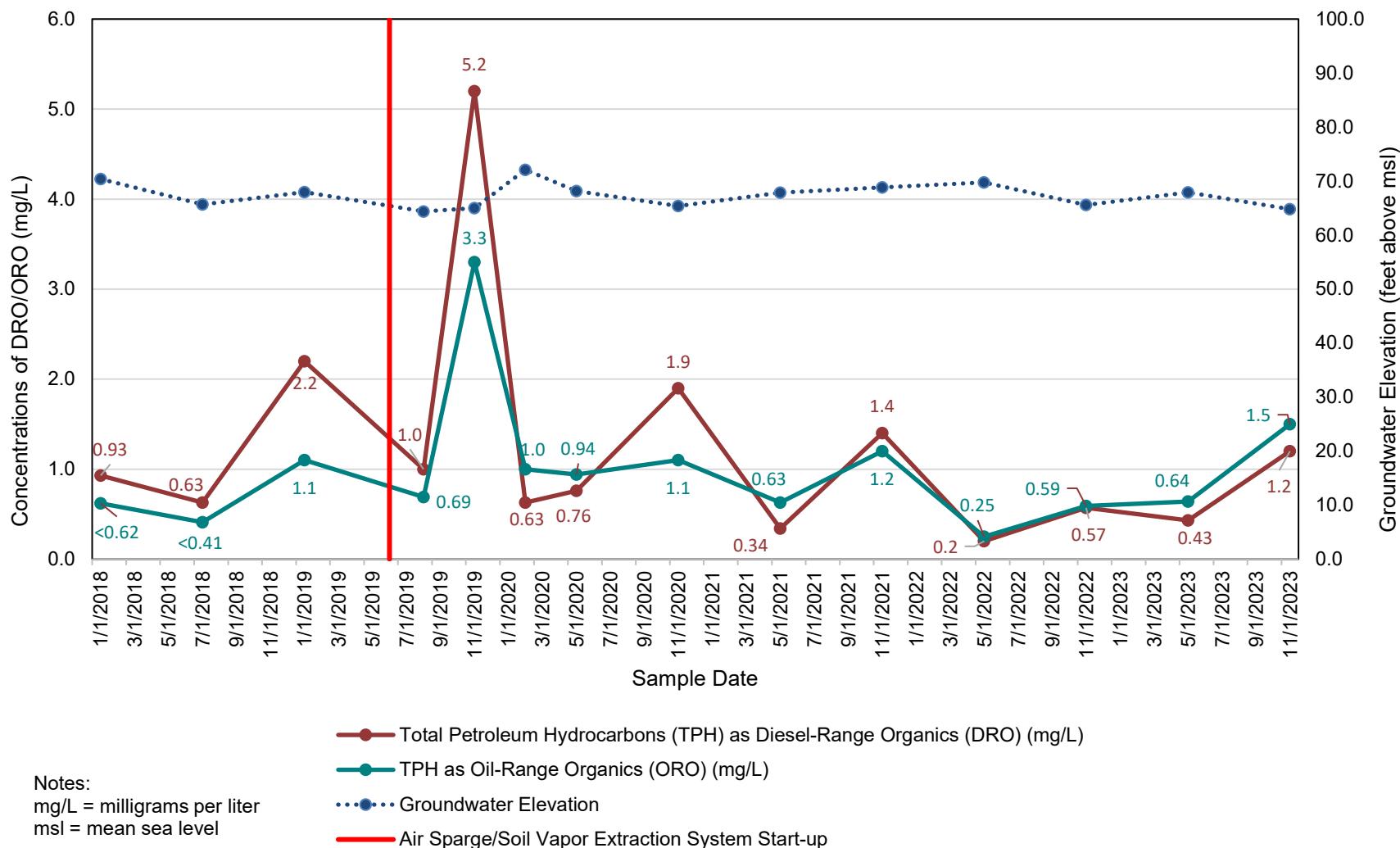


Chart 2
DRO and ORO Concentration Data Trends for Monitoring Well CMW-10
CHS Auburn Site
Auburn, Washington
Farallon PN: 301-004

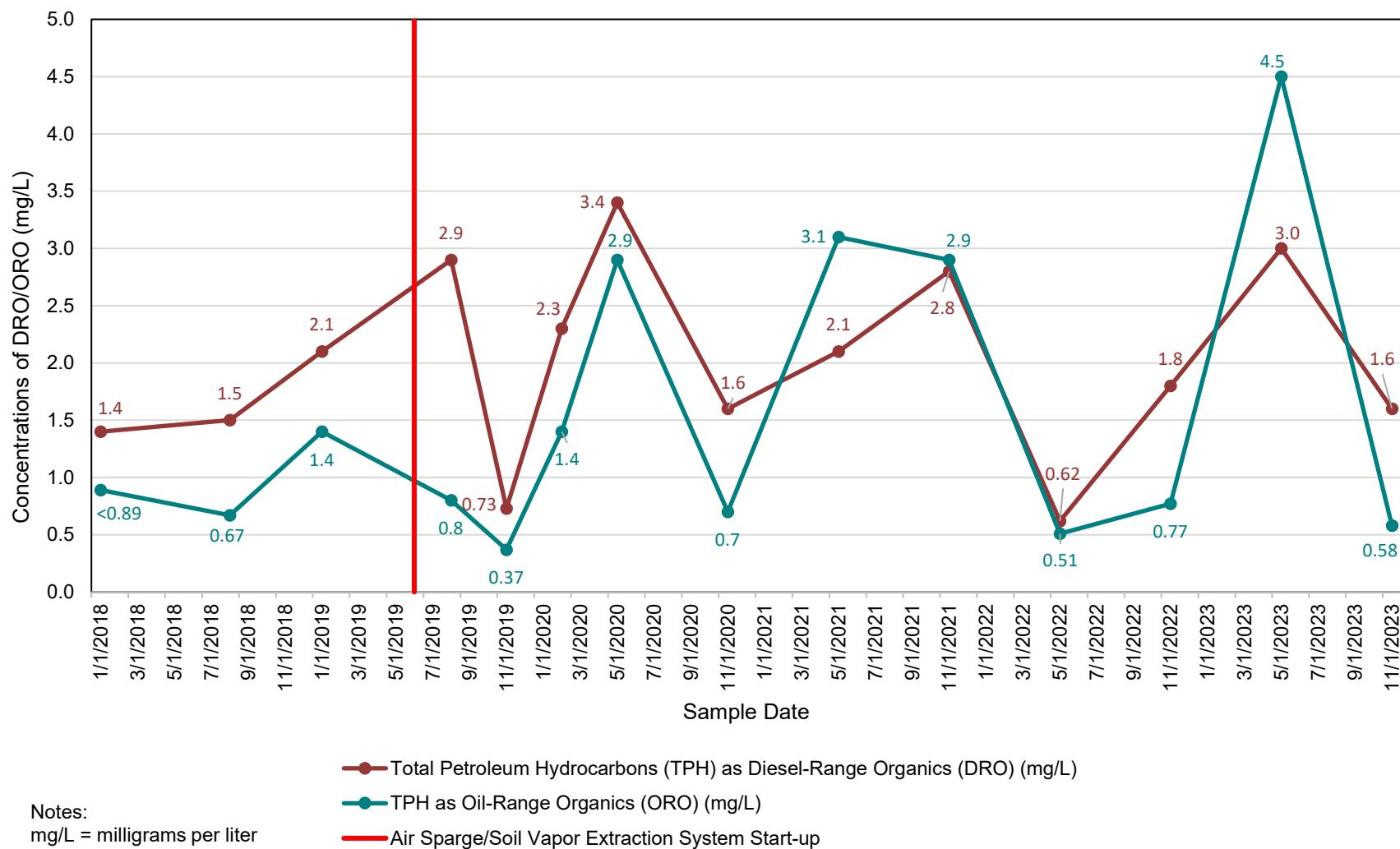


Chart 3
DRO, ORO, and GRO Concentration Data Trends for Monitoring Well CMW-12
CHS Auburn Site
Auburn, Washington
Farallon PN: 301-004

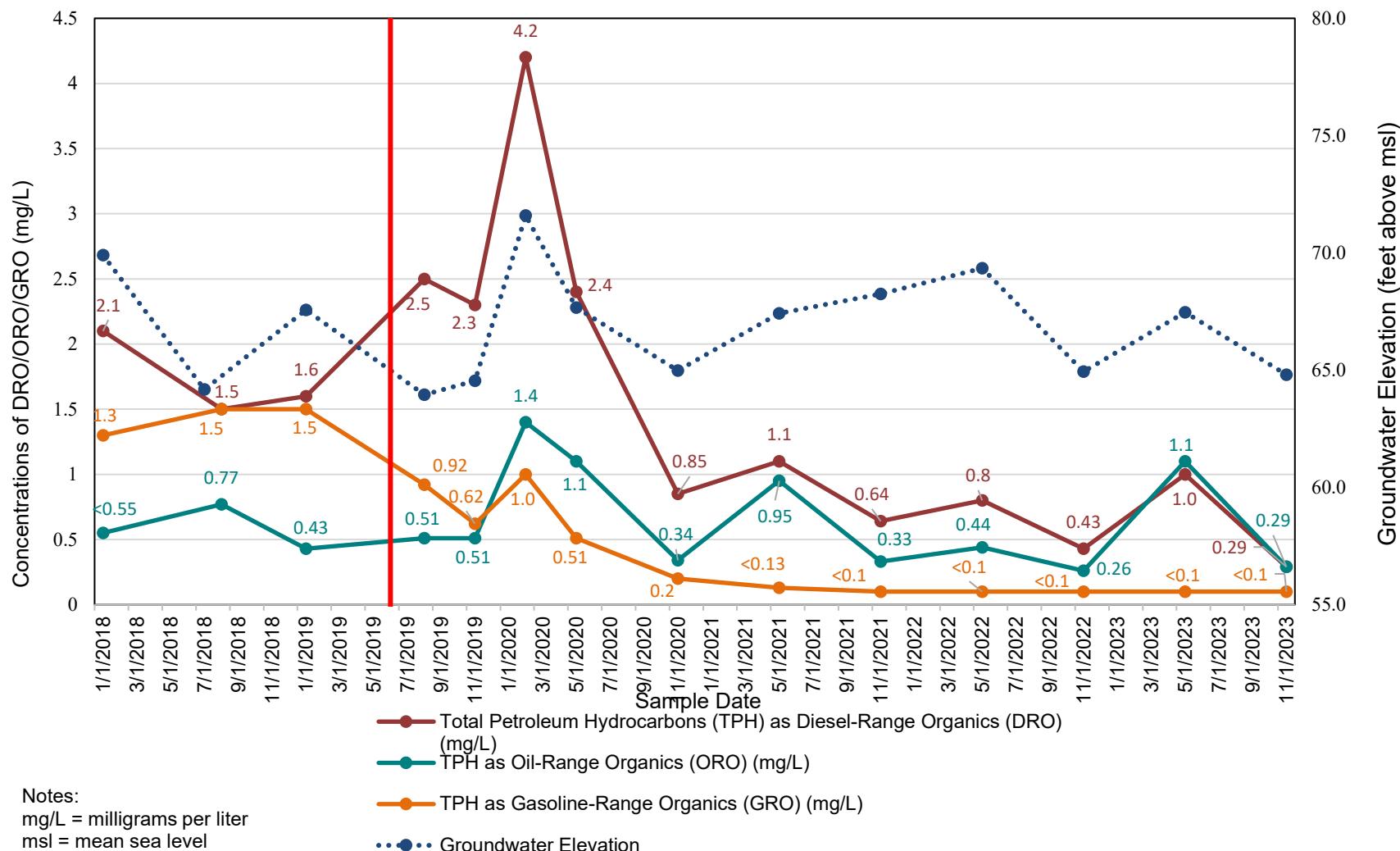


Chart 4
DRO Concentration Data Trend for Monitoring Well CMW-13
CHS Auburn Site
Auburn, Washington
Farallon PN: 301-004

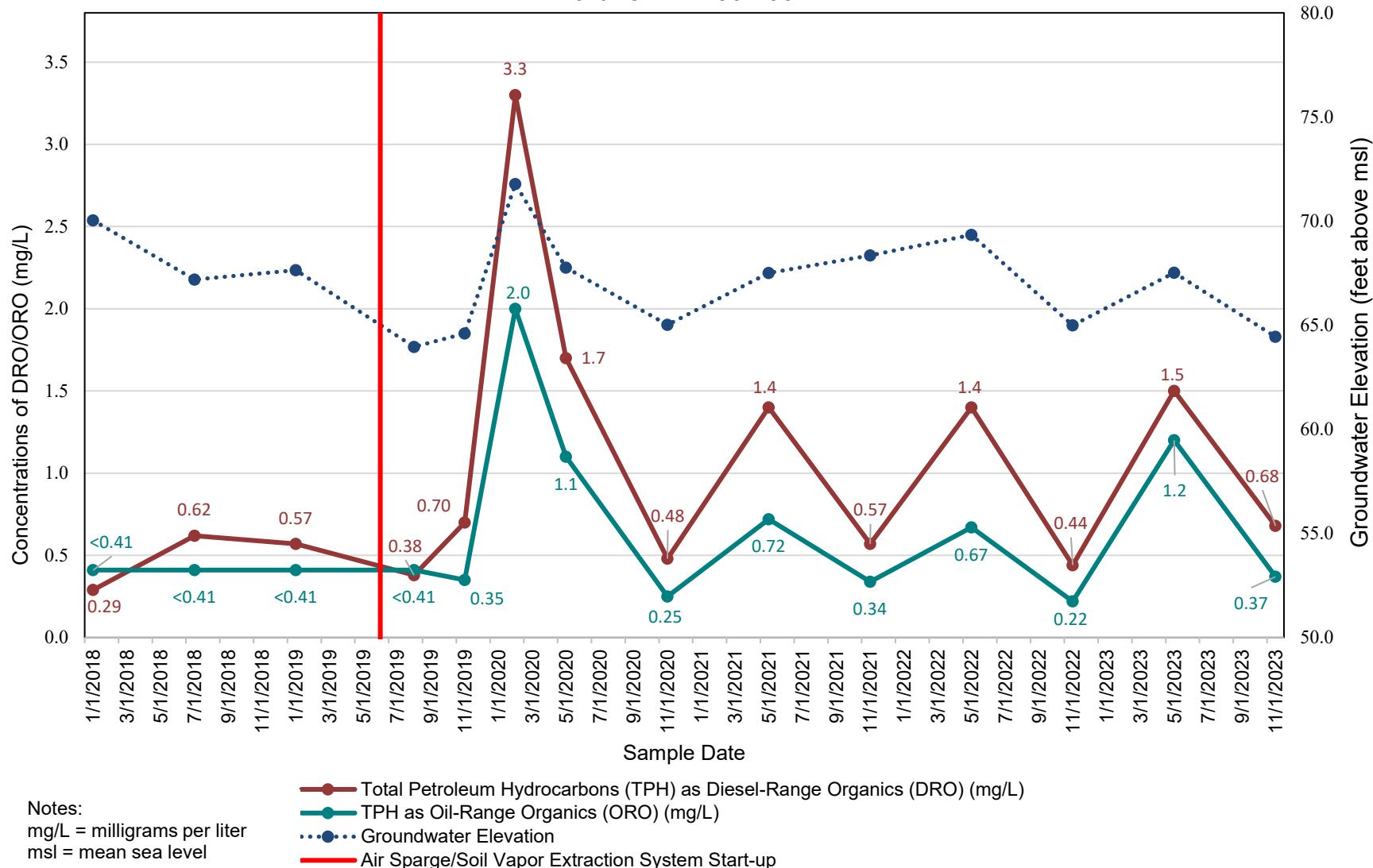


Chart 5
DRO, ORO, and GRO Concentration Data Trends for Monitoring Well CMW-27
CHS Auburn Site
Auburn, Washington
Farallon PN: 301-004

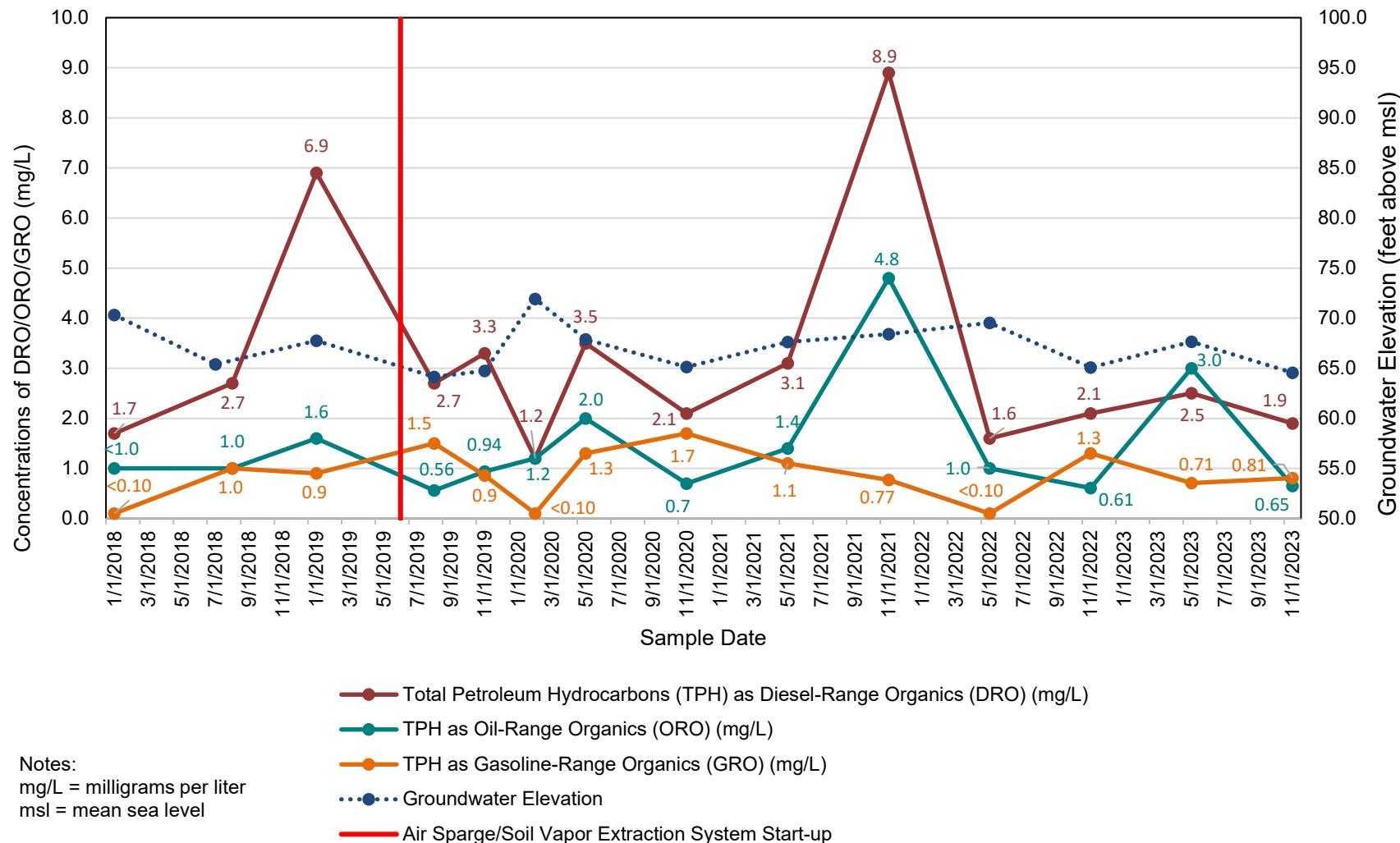


Chart 6
DRO and ORO Concentration Data Trends for Monitoring Well CMW-28
CHS Auburn Site
Auburn, Washington
Farallon PN: 301-004

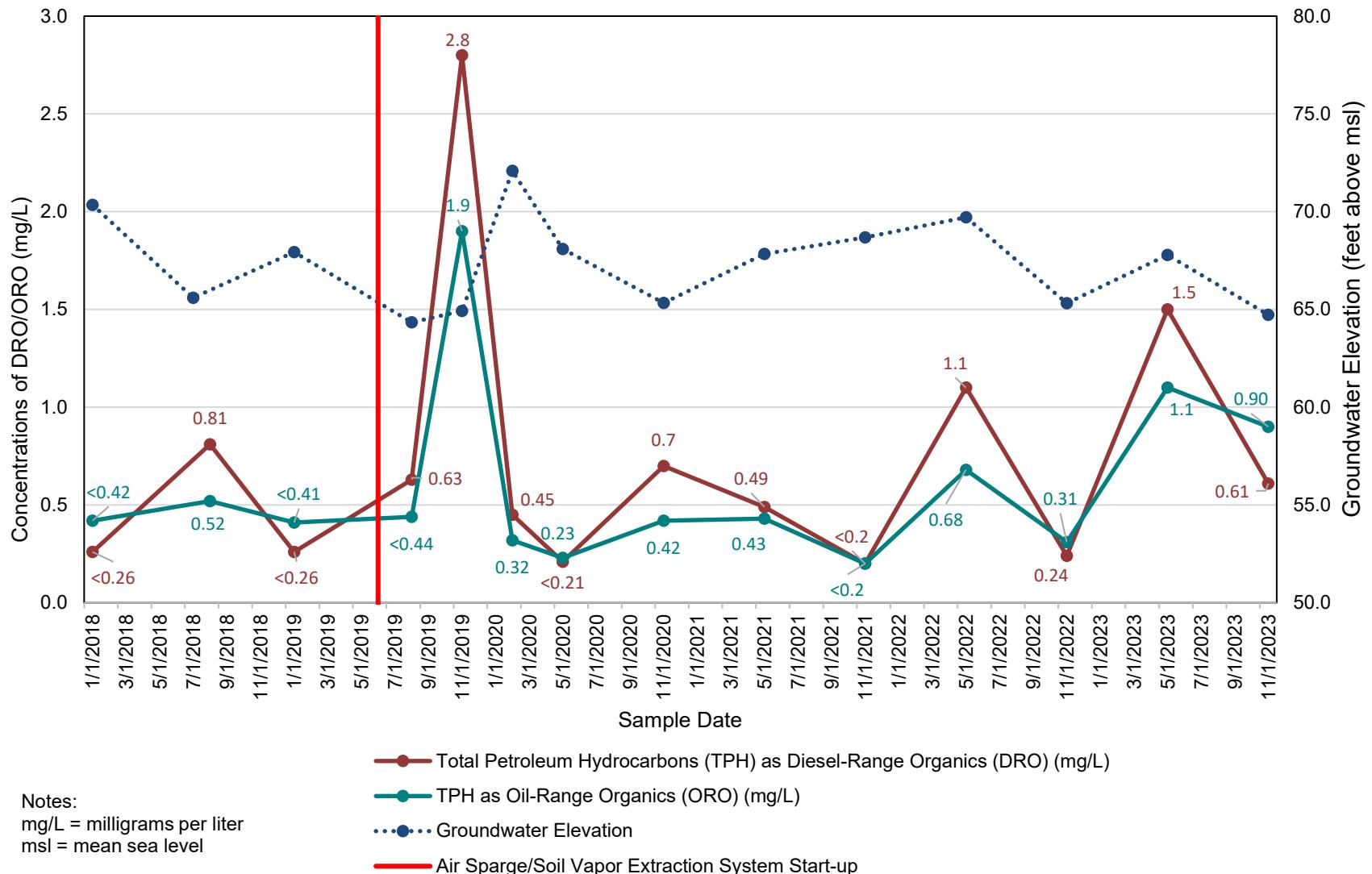


Chart 7
DRO Concentration Data Trend for Monitoring Well HMW-10
CHS Auburn Site
Auburn, Washington
Farallon PN: 301-004

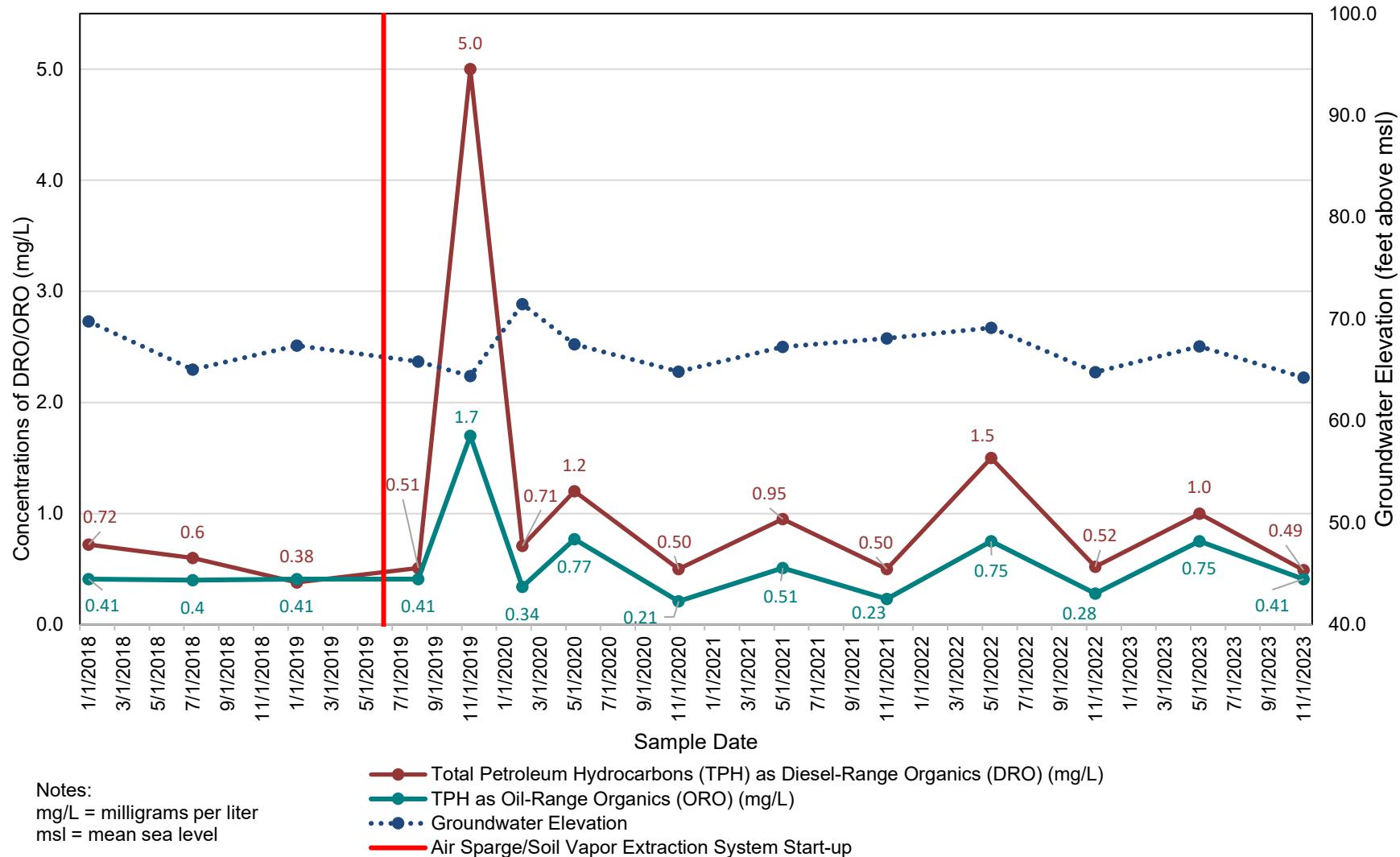
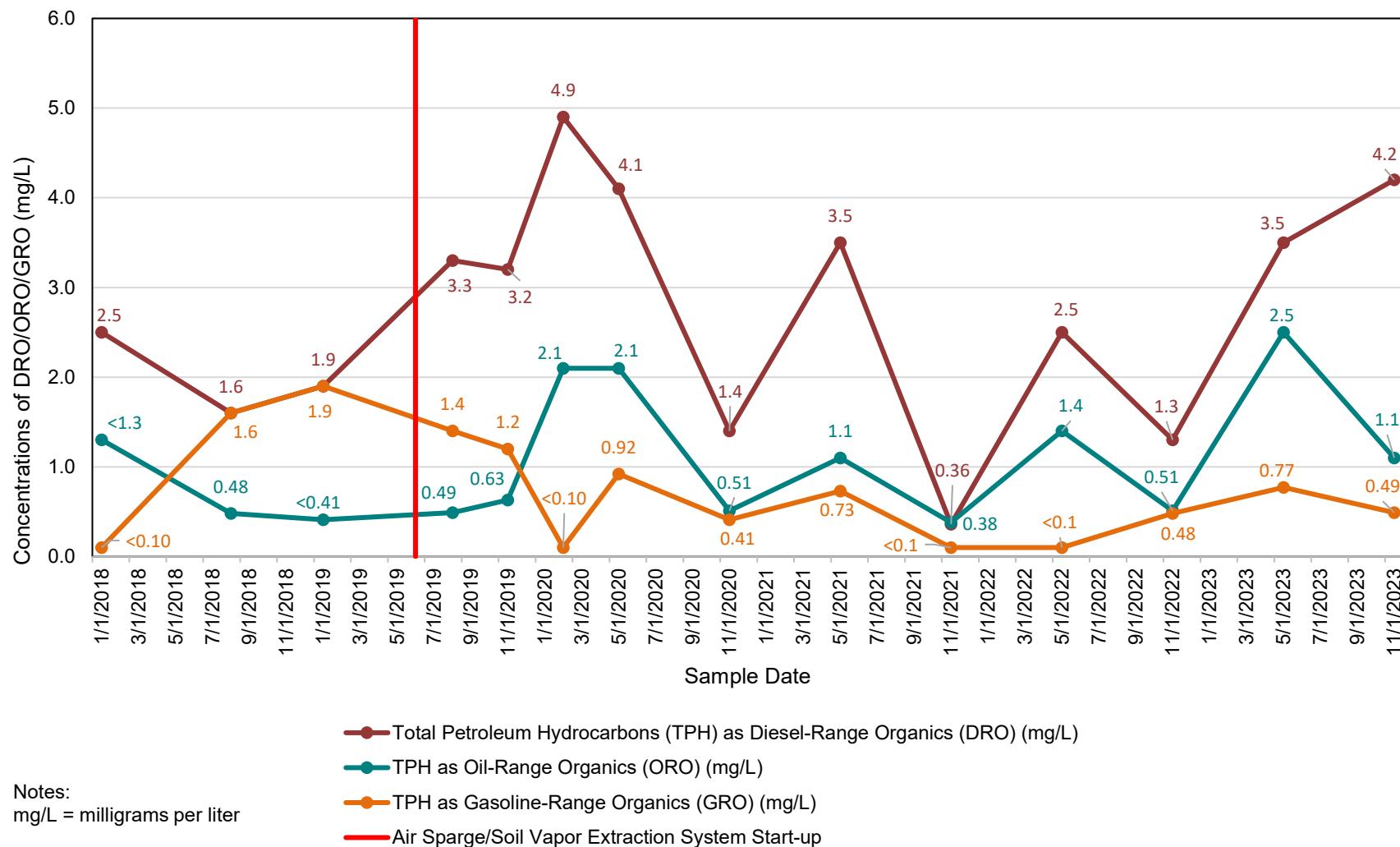
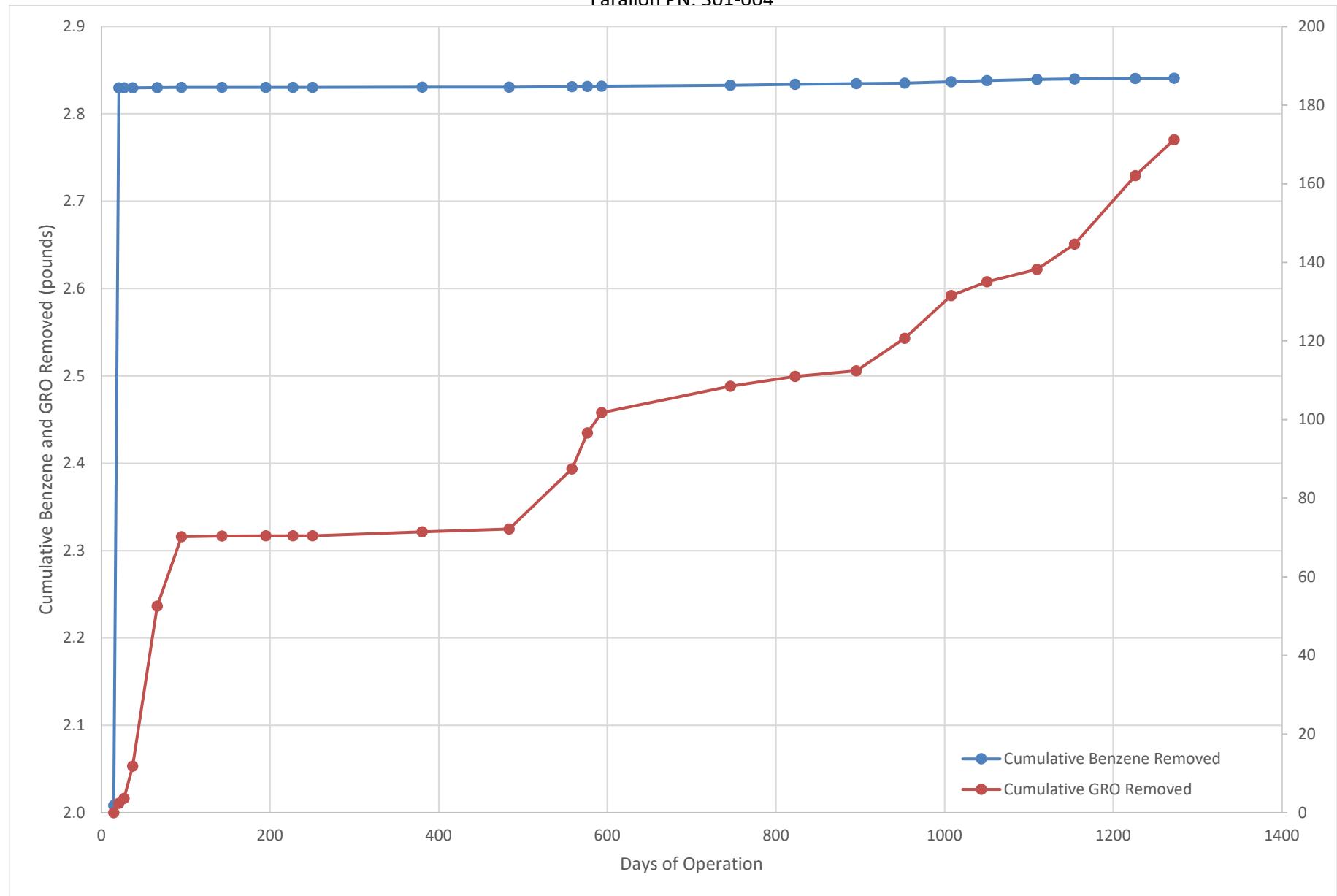


Chart 8
DRO, ORO, and GRO Concentration Data Trends for Monitoring Well HMW-11
CHS Auburn Site
Auburn, Washington
Farallon PN: 301-004



Notes:
mg/L = milligrams per liter

Chart 9
Cumulative Pounds of Benzene and GRO Removed
CHS Auburn Site
Auburn, Washington
Farallon PN: 301-004



**APPENDIX A
WASTE DISPOSAL DOCUMENTATION**

**THIRD AND FOURTH QUARTER 2023
GROUNDWATER MONITORING AND TREATMENT SYSTEM
OPERATION AND MAINTENANCE REPORT
CHS Auburn Site
Auburn, Washington**

Farallon PN: 301-004



TSDF

GENERATOR WASTE PROFILE SHEET

Treatment Code

A. GENERAL INFORMATION

Generator Name:	CHS Inc			Profile Number			
Mailing Address:	c/o Farallon 975 5th Ave NW Issaquah, WA 98027			Generator US EPA ID:	N/A		
Site Pick-up Address:	235 8th Street SE Auburn WA 98002			Treatment Code	Generator State ID:	N/A	
Technical Contact:	Javan Ruark	Title	PM	Phone:	425-295-0827		
Name of Waste:	Non Hazardous Water			Fax:			
Process Generating Waste:	Investigation Derived Waste, Water, from drilling and sampling at a fueling facility			Email:			
NAICS CODE:	44711	SOURCE CODE:	G49	FORM CODE:	W219		

B. PHYSICAL CHARACTERISTICS OF WASTE AT 25 C OR 77 F

Physical State:	Water	Color: (Describe)	Cloudy Brown	Clarity:	Cloudy	Phase Separation	Number of Layers = One	One
pH:	<2	>12.5	Specific Gravity:	<0.8 X 0.8-1.0 1.0	>1.2	Flash Point (F):	<73 73-100 101-140 141-200	X >200 BTU Value: < 2000 2,000 - 5000 5000 - 10,000 > 10,000
(Select one of the following ranges)	4-6							
	7							
	X 7-12.4							

C. CHEMICAL COMPOSITION / UHC's

BASED UPON: ANALYTICAL (INCLUDED) X GENERATOR KNOWLEDGE			D. METALS	Total	Total (PPB)	EPA Extraction Process (MG/ML)
Constituent:	Lower	Upper	N/A	Arsenic		
Groundwater	95	100	N/A	Barium	N/A	Silver
Sediment	0	5	%	Cadmium	N/A	Copper
Diesel	0	4.9	%	Chromium	N/A	Nickel
Gasoline	0	1800	mg/l	Mercury	N/A	Zinc
Benzene	0	4	ug/l	Lead		
Ethylbenzene	0	16	ug/l			
Xylene	0	7.9	ug/l	Selenium		
Oil	0	5.1	mg/l			
Toluene	0	3.4	ug/l			

F. SHIPPING INFORMATION

DOT Hazardous Material	Yes	NO	X	Exempted	<input type="checkbox"/>	HALOGENATED ORGANIC COMPOUNDS PER 40 CFR 268, APPENDIX III	YES	X	NO
Proper Shipping Name						Debris	YES	X	NO
Hazard Class	N/A			N/A					
ID #	N/A	PG:	N/A	RQ:	N/A	Subject to NESHAP Regulations	YES	X	NO
Anticipated Volume (Units):		6 x 55DM				<500 PPM VOC as generated	X	YES	NO
Per	One time	X				US EPA Hazardous Waste:	Yes	No	X
	Quarter	Year				US EPA Hazardous Waste Codes:			WW
									NWW

G. Special Handling Information:

H. GENERATOR'S CERTIFICATION:

I hereby certify that all information in this and all attached documents is complete and accurate, and that all known or suspected hazards have been disclosed. I further certify that any samples submitted with this profile are representative of the waste to be shipped and are taken in accordance with SW 846 or other approved procedures. I agree to notify ACT in writing when the process generating this waste stream changes or when I have reason to believe the data contained herein is not complete and accurate.

Signature: Shawna Conroy Title: Sr. Environmental Specialist Date: 01.03.24
 Print Name: Shawna Conroy

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number <i>WA535204</i>	2. Page 1 of <i>1</i>	3. Emergency Response Phone <i>800-555-1234</i>	4. Waste Tracking Number <i>123456789012345678901234</i>
	5. Generator's Name and Mailing Address <i>ABC Corp. of America 123 Main Street Somewhere, USA 12345</i>		Generator's Site Address (if different than mailing address) <i>123 Main Street Somewhere, USA 12345</i>	
GENERATOR	Generator's Phone: 6. Transporter 1 Company Name <i>Defender Environmental Services, Inc.</i>			
	U.S. EPA ID Number <i>123456789012345678901234</i>			
	7. Transporter 2 Company Name <i>Defender Environmental Services, Inc.</i>			
	U.S. EPA ID Number <i>123456789012345678901234</i>			
	8. Designated Facility Name and Site Address <i>Defender Environmental Services, Inc. 123 Main Street Somewhere, USA 12345</i>			
	U.S. EPA ID Number <i>123456789012345678901234</i>			
Facility's Phone: <i>555-1234</i>				
INT'L	9. Waste Shipping Name and Description <i>1. DEFENDER ENVIRONMENTAL SERVICES, INC. 2. DEFENDER ENVIRONMENTAL SERVICES, INC. 3. DEFENDER ENVIRONMENTAL SERVICES, INC. 4. DEFENDER ENVIRONMENTAL SERVICES, INC.</i>	10. Containers <i>No. 6</i>	11. Total Quantity <i>150</i>	12. Unit Wt./Vol.
DESIGNATED FACILITY	13. Special Handling Instructions and Additional Information <i>None</i>			
TRANSPORTER	14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.			
	Generator's/Officer's Printed/Typed Name <i>John Doe</i>	Signature	Month <i>1</i>	Day <i>1</i>
			Year <i>2008</i>	
	15. International Shipments <input type="checkbox"/> Import to U.S. Transporter Signature (for exports only): <i>John Doe</i>	<input type="checkbox"/> Export from U.S.	Port of entry/exit: Date leaving U.S.: <i>None</i>	
	16. Transporter Acknowledgment of Receipt of Materials Transporter 1 Printed/Typed Name <i>John Doe</i>	Signature	Month <i>1</i>	Day <i>1</i>
	Transporter 2 Printed/Typed Name <i>John Doe</i>	Signature	Month <i>1</i>	Day <i>1</i>
	17. Discrepancy 17a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection	Manifest Reference Number: <i>None</i>		
	17b. Alternate Facility (or Generator) 17c. Signature of Alternate Facility (or Generator) <i>John Doe</i>	U.S. EPA ID Number Month Day Year <i>1 1 2008</i>		
	18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a Printed/Typed Name <i>John Doe</i>	Signature	Month <i>1</i>	Day <i>1</i>
			Year <i>2008</i>	

**APPENDIX B
LABORATORY ANALYTICAL REPORTS**

**THIRD AND FOURTH QUARTER 2023
GROUNDWATER MONITORING AND TREATMENT SYSTEM
OPERATION AND MAINTENANCE REPORT
CHS Auburn Site
Auburn, Washington**

Farallon PN: 301-004



**OnSite
Environmental Inc.**

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

December 7, 2023

Tracey Mulhern
Farallon Consulting
1201 Cornwall Avenue, Suite 105
Bellingham, WA 98225

Re: Analytical Data for Project 301-004
Laboratory Reference No. 2311-274

Dear Tracey:

Enclosed are the analytical results and associated quality control data for samples submitted on November 29, 2023.

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 cursive surname.

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: December 7, 2023
Samples Submitted: November 29, 2023
Laboratory Reference: 2311-274
Project: 301-004

Case Narrative

Samples were collected on November 27 and 28, 2023 and received by the laboratory on November 29, 2023. 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.



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This report pertains to the samples analyzed in accordance with the chain of custody,
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Date of Report: December 7, 2023
 Samples Submitted: November 29, 2023
 Laboratory Reference: 2311-274
 Project: 301-004

GASOLINE RANGE ORGANICS/BTEX
NWTPH-Gx/EPA 8021B

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	CMW-13-112723					
Laboratory ID:	11-274-01					
Benzene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
Toluene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
Ethylbenzene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
m,p-Xylene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
o-Xylene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
Gasoline	ND	100	NWTPH-Gx	11-29-23	11-29-23	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	83	65-122				
Client ID:	HMW-9-112723					
Laboratory ID:	11-274-02					
Benzene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
Toluene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
Ethylbenzene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
m,p-Xylene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
o-Xylene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
Gasoline	ND	100	NWTPH-Gx	11-29-23	11-29-23	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	77	65-122				
Client ID:	CMW-12-112723					
Laboratory ID:	11-274-03					
Benzene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
Toluene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
Ethylbenzene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
m,p-Xylene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
o-Xylene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
Gasoline	ND	100	NWTPH-Gx	11-29-23	11-29-23	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	75	65-122				



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

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Date of Report: December 7, 2023
 Samples Submitted: November 29, 2023
 Laboratory Reference: 2311-274
 Project: 301-004

GASOLINE RANGE ORGANICS/BTEX
NWTPH-Gx/EPA 8021B

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	QA/QC-1-112723					
Laboratory ID:	11-274-04					
Benzene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
Toluene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
Ethylbenzene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
m,p-Xylene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
o-Xylene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
Gasoline	ND	100	NWTPH-Gx	11-29-23	11-29-23	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	73	65-122				
Client ID:	CMW-30-112723					
Laboratory ID:	11-274-05					
Benzene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
Toluene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
Ethylbenzene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
m,p-Xylene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
o-Xylene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
Gasoline	ND	100	NWTPH-Gx	11-29-23	11-29-23	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	74	65-122				
Client ID:	CMW-29-112723					
Laboratory ID:	11-274-06					
Benzene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
Toluene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
Ethylbenzene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
m,p-Xylene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
o-Xylene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
Gasoline	ND	100	NWTPH-Gx	11-29-23	11-29-23	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	72	65-122				



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: December 7, 2023
 Samples Submitted: November 29, 2023
 Laboratory Reference: 2311-274
 Project: 301-004

GASOLINE RANGE ORGANICS/BTEX
NWTPH-Gx/EPA 8021B

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	HMW-13-112723					
Laboratory ID:	11-274-07					
Benzene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
Toluene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
Ethylbenzene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
m,p-Xylene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
o-Xylene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
Gasoline	ND	100	NWTPH-Gx	11-29-23	11-29-23	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	67	65-122				
Client ID:	CMW-26-112723					
Laboratory ID:	11-274-08					
Benzene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
Toluene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
Ethylbenzene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
m,p-Xylene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
o-Xylene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
Gasoline	ND	100	NWTPH-Gx	11-29-23	11-29-23	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	70	65-122				
Client ID:	CMW-28-112723					
Laboratory ID:	11-274-09					
Benzene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
Toluene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
Ethylbenzene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
m,p-Xylene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
o-Xylene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
Gasoline	ND	100	NWTPH-Gx	11-29-23	11-29-23	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	66	65-122				



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Date of Report: December 7, 2023
 Samples Submitted: November 29, 2023
 Laboratory Reference: 2311-274
 Project: 301-004

GASOLINE RANGE ORGANICS/BTEX
NWTPH-Gx/EPA 8021B

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	CMW-25-112823					
Laboratory ID:	11-274-10					
Benzene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
Toluene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
Ethylbenzene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
m,p-Xylene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
o-Xylene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
Gasoline	ND	100	NWTPH-Gx	11-29-23	11-29-23	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	74	65-122				
Client ID:	CMW-31-112823					
Laboratory ID:	11-274-11					
Benzene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
Toluene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
Ethylbenzene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
m,p-Xylene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
o-Xylene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
Gasoline	ND	100	NWTPH-Gx	11-29-23	11-29-23	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	67	65-122				
Client ID:	CMW-8-112823					
Laboratory ID:	11-274-12					
Benzene	ND	1.0	EPA 8021B	12-1-23	12-1-23	
Toluene	ND	1.0	EPA 8021B	12-1-23	12-1-23	
Ethylbenzene	ND	1.0	EPA 8021B	12-1-23	12-1-23	
m,p-Xylene	ND	1.0	EPA 8021B	12-1-23	12-1-23	
o-Xylene	ND	1.0	EPA 8021B	12-1-23	12-1-23	
Gasoline	ND	100	NWTPH-Gx	12-1-23	12-1-23	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	83	65-122				



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 Laboratory Reference: 2311-274
 Project: 301-004

GASOLINE RANGE ORGANICS/BTEX
NWTPH-Gx/EPA 8021B

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	CMW-10-112823					
Laboratory ID:	11-274-13					
Benzene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
Toluene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
Ethylbenzene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
m,p-Xylene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
o-Xylene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
Gasoline	ND	100	NWTPH-Gx	11-29-23	11-29-23	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	67	65-122				
Client ID:	CMW-27-112823					
Laboratory ID:	11-274-14					
Benzene	3.0	1.0	EPA 8021B	11-29-23	11-29-23	
Toluene	1.3	1.0	EPA 8021B	11-29-23	11-29-23	
Ethylbenzene	1.1	1.0	EPA 8021B	11-29-23	11-29-23	
m,p-Xylene	1.1	1.0	EPA 8021B	11-29-23	11-29-23	
o-Xylene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
Gasoline	810	100	NWTPH-Gx	11-29-23	11-29-23	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	69	65-122				
Client ID:	QA/QC-2-112823					
Laboratory ID:	11-274-15					
Benzene	3.5	1.0	EPA 8021B	11-29-23	11-29-23	
Toluene	1.3	1.0	EPA 8021B	11-29-23	11-29-23	
Ethylbenzene	1.1	1.0	EPA 8021B	11-29-23	11-29-23	
m,p-Xylene	1.1	1.0	EPA 8021B	11-29-23	11-29-23	
o-Xylene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
Gasoline	840	100	NWTPH-Gx	11-29-23	11-29-23	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	65	65-122				



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 Project: 301-004

GASOLINE RANGE ORGANICS/BTEX
NWTPH-Gx/EPA 8021B

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	HMW-11-112823					
Laboratory ID:	11-274-16					
Benzene	1.7	1.0	EPA 8021B	11-30-23	11-30-23	
Toluene	ND	1.0	EPA 8021B	11-30-23	11-30-23	
Ethylbenzene	ND	1.0	EPA 8021B	11-30-23	11-30-23	
m,p-Xylene	ND	1.0	EPA 8021B	11-30-23	11-30-23	
o-Xylene	ND	1.0	EPA 8021B	11-30-23	11-30-23	
Gasoline	490	100	NWTPH-Gx	11-30-23	11-30-23	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	72	65-122				
Client ID:	HMW-10-112823					
Laboratory ID:	11-274-17					
Benzene	ND	1.0	EPA 8021B	11-30-23	11-30-23	
Toluene	ND	1.0	EPA 8021B	11-30-23	11-30-23	
Ethylbenzene	ND	1.0	EPA 8021B	11-30-23	11-30-23	
m,p-Xylene	ND	1.0	EPA 8021B	11-30-23	11-30-23	
o-Xylene	ND	1.0	EPA 8021B	11-30-23	11-30-23	
Gasoline	ND	100	NWTPH-Gx	11-30-23	11-30-23	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	73	65-122				
Client ID:	CMW-2-112823					
Laboratory ID:	11-274-18					
Benzene	ND	1.0	EPA 8021B	11-30-23	11-30-23	
Toluene	ND	1.0	EPA 8021B	11-30-23	11-30-23	
Ethylbenzene	ND	1.0	EPA 8021B	11-30-23	11-30-23	
m,p-Xylene	ND	1.0	EPA 8021B	11-30-23	11-30-23	
o-Xylene	ND	1.0	EPA 8021B	11-30-23	11-30-23	
Gasoline	ND	100	NWTPH-Gx	11-30-23	11-30-23	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	73	65-122				



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 Project: 301-004

GASOLINE RANGE ORGANICS/BTEX
NWTPH-Gx/EPA 8021B
QUALITY CONTROL

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1129W1					
Benzene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
Toluene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
Ethylbenzene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
m,p-Xylene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
o-Xylene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
Gasoline	ND	100	NWTPH-Gx	11-29-23	11-29-23	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	83	65-122				
Laboratory ID:	MB1129W2					
Benzene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
Toluene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
Ethylbenzene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
m,p-Xylene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
o-Xylene	ND	1.0	EPA 8021B	11-29-23	11-29-23	
Gasoline	ND	100	NWTPH-Gx	11-29-23	11-29-23	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	83	65-122				
Laboratory ID:	MB1130W1					
Benzene	ND	1.0	EPA 8021B	11-30-23	11-30-23	
Toluene	ND	1.0	EPA 8021B	11-30-23	11-30-23	
Ethylbenzene	ND	1.0	EPA 8021B	11-30-23	11-30-23	
m,p-Xylene	ND	1.0	EPA 8021B	11-30-23	11-30-23	
o-Xylene	ND	1.0	EPA 8021B	11-30-23	11-30-23	
Gasoline	ND	100	NWTPH-Gx	11-30-23	11-30-23	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	71	65-122				
Laboratory ID:	MB1201W1					
Benzene	ND	1.0	EPA 8021B	12-1-23	12-1-23	
Toluene	ND	1.0	EPA 8021B	12-1-23	12-1-23	
Ethylbenzene	ND	1.0	EPA 8021B	12-1-23	12-1-23	
m,p-Xylene	ND	1.0	EPA 8021B	12-1-23	12-1-23	
o-Xylene	ND	1.0	EPA 8021B	12-1-23	12-1-23	
Gasoline	ND	100	NWTPH-Gx	12-1-23	12-1-23	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	84	65-122				



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 Project: 301-004

GASOLINE RANGE ORGANICS/BTEX
NWTPH-Gx/EPA 8021B
QUALITY CONTROL

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result		Spike Level		Source Result	Percent Recovery	Recovery Limits	RPD RPD	RPD Limit	Flags				
DUPLICATE														
Laboratory ID: 11-274-01														
Benzene	ND	ND	NA	NA		NA	NA	NA	NA	30				
Toluene	ND	ND	NA	NA		NA	NA	NA	NA	30				
Ethylbenzene	ND	ND	NA	NA		NA	NA	NA	NA	30				
m,p-Xylene	ND	ND	NA	NA		NA	NA	NA	NA	30				
o-Xylene	ND	ND	NA	NA		NA	NA	NA	NA	30				
Gasoline	ND	ND	NA	NA		NA	NA	NA	NA	30				
<i>Surrogate:</i>														
Fluorobenzene														
83 80 65-122														
Laboratory ID: 11-274-02														
Benzene	ND	ND	NA	NA		NA	NA	NA	NA	30				
Toluene	ND	ND	NA	NA		NA	NA	NA	NA	30				
Ethylbenzene	ND	ND	NA	NA		NA	NA	NA	NA	30				
m,p-Xylene	ND	ND	NA	NA		NA	NA	NA	NA	30				
o-Xylene	ND	ND	NA	NA		NA	NA	NA	NA	30				
Gasoline	ND	ND	NA	NA		NA	NA	NA	NA	30				
<i>Surrogate:</i>														
Fluorobenzene														
77 79 65-122														
SPIKE BLANKS														
Laboratory ID: SB1129W1														
	SB	SBD	SB	SBD		SB	SBD							
Benzene	55.3	57.3	50.0	50.0		111	115	81-118	4	12				
Toluene	54.9	56.8	50.0	50.0		110	114	82-119	3	12				
Ethylbenzene	54.5	56.6	50.0	50.0		109	113	81-118	4	12				
m,p-Xylene	54.7	56.7	50.0	50.0		109	113	82-118	4	12				
o-Xylene	54.8	56.6	50.0	50.0		110	113	81-119	3	11				
<i>Surrogate:</i>														
Fluorobenzene														
77 75 65-122														



Date of Report: December 7, 2023
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 Laboratory Reference: 2311-274
 Project: 301-004

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:	CMW-13-112723					
Laboratory ID:	11-274-01					
Diesel Range Organics	0.68	0.15	NWTPH-Dx	11-30-23	11-30-23	
Lube Oil Range Organics	0.37	0.20	NWTPH-Dx	11-30-23	11-30-23	

<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>
<i>o-Terphenyl</i>	73	50-150

Client ID: CMW-13-112723

Laboratory ID: 11-274-01

Diesel Range Organics	ND	0.20	NWTPH-Dx	11-30-23	11-30-23	X2
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	11-30-23	11-30-23	X2
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	84	50-150				

Client ID: HMW-9-112723

Laboratory ID: 11-274-02

Diesel Range Organics	0.35	0.15	NWTPH-Dx	11-30-23	12-1-23	
Lube Oil Range Organics	0.50	0.20	NWTPH-Dx	11-30-23	12-1-23	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	72	50-150				

Client ID: HMW-9-112723

Laboratory ID: 11-274-02

Diesel Range Organics	ND	0.20	NWTPH-Dx	11-30-23	11-30-23	X2
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	11-30-23	11-30-23	X2
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	103	50-150				

Client ID: CMW-12-112723

Laboratory ID: 11-274-03

Diesel Range Organics	0.29	0.15	NWTPH-Dx	11-30-23	11-30-23	
Lube Oil Range Organics	0.29	0.21	NWTPH-Dx	11-30-23	11-30-23	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	74	50-150				

Client ID: CMW-12-112723

Laboratory ID: 11-274-03

Diesel Range Organics	ND	0.21	NWTPH-Dx	11-30-23	11-30-23	X2
Lube Oil Range Organics	ND	0.21	NWTPH-Dx	11-30-23	11-30-23	X2
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	89	50-150				



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 Project: 301-004

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:	QA/QC-1-112723					
Laboratory ID:	11-274-04					
Diesel Range Organics	0.32	0.15	NWTPH-Dx	11-30-23	11-30-23	
Lube Oil Range Organics	0.36	0.20	NWTPH-Dx	11-30-23	11-30-23	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	72	50-150				

Client ID: QA/QC-1-112723
 Laboratory ID: 11-274-04

Diesel Range Organics	ND	0.20	NWTPH-Dx	11-30-23	11-30-23	X2
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	11-30-23	11-30-23	X2
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	92	50-150				

Client ID: CMW-30-112723
 Laboratory ID: 11-274-05

Diesel Range Organics	0.18	0.15	NWTPH-Dx	11-30-23	12-1-23	
Lube Oil Range Organics	0.26	0.20	NWTPH-Dx	11-30-23	12-1-23	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	76	50-150				

Client ID: CMW-30-112723
 Laboratory ID: 11-274-05

Diesel Range Organics	ND	0.20	NWTPH-Dx	11-30-23	11-30-23	X2
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	11-30-23	11-30-23	X2
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	98	50-150				

Client ID: CMW-29-112723
 Laboratory ID: 11-274-06

Diesel Range Organics	ND	0.15	NWTPH-Dx	11-30-23	12-1-23	
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	11-30-23	12-1-23	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	79	50-150				

Client ID: CMW-29-112723
 Laboratory ID: 11-274-06

Diesel Range Organics	ND	0.20	NWTPH-Dx	11-30-23	11-30-23	X2
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	11-30-23	11-30-23	X2
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	101	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:	HMW-13-112723					
Laboratory ID:	11-274-07					
Diesel Range Organics	0.42	0.15	NWTPH-Dx	11-30-23	12-6-23	
Lube Oil Range Organics	0.21	0.20	NWTPH-Dx	11-30-23	12-6-23	
Surrogate: <i>o-Terphenyl</i>	Percent Recovery 104	Control Limits 50-150				

Client ID: **HMW-13-112723**
 Laboratory ID: 11-274-07

Diesel Range Organics	ND	0.20	NWTPH-Dx	11-30-23	12-6-23	X2
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	11-30-23	12-6-23	X2
Surrogate: <i>o-Terphenyl</i>	Percent Recovery 117	Control Limits 50-150				

Client ID: **CMW-26-112723**
 Laboratory ID: 11-274-08

Diesel Range Organics	ND	0.15	NWTPH-Dx	11-30-23	11-30-23	
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	11-30-23	11-30-23	
Surrogate: <i>o-Terphenyl</i>	Percent Recovery 71	Control Limits 50-150				

Client ID: **CMW-26-112723**
 Laboratory ID: 11-274-08

Diesel Range Organics	ND	0.20	NWTPH-Dx	11-30-23	11-30-23	X2
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	11-30-23	11-30-23	X2
Surrogate: <i>o-Terphenyl</i>	Percent Recovery 96	Control Limits 50-150				

Client ID: **CMW-28-112723**
 Laboratory ID: 11-274-09

Diesel Range Organics	0.61	0.15	NWTPH-Dx	11-30-23	11-30-23	
Lube Oil Range Organics	0.90	0.20	NWTPH-Dx	11-30-23	11-30-23	
Surrogate: <i>o-Terphenyl</i>	Percent Recovery 81	Control Limits 50-150				

Client ID: **CMW-28-112723**
 Laboratory ID: 11-274-09

Diesel Range Organics	ND	0.20	NWTPH-Dx	11-30-23	11-30-23	X2
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	11-30-23	11-30-23	X2
Surrogate: <i>o-Terphenyl</i>	Percent Recovery 99	Control Limits 50-150				



Date of Report: December 7, 2023
 Samples Submitted: November 29, 2023
 Laboratory Reference: 2311-274
 Project: 301-004

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:	CMW-25-112823					
Laboratory ID:	11-274-10					
Diesel Range Organics	ND	0.15	NWTPH-Dx	11-30-23	11-30-23	
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	11-30-23	11-30-23	

Surrogate:	Percent Recovery	Control Limits
<i>o-Terphenyl</i>	92	50-150

Client ID: CMW-25-112823

Laboratory ID: 11-274-10

Diesel Range Organics	ND	0.20	NWTPH-Dx	11-30-23	11-30-23	X2
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	11-30-23	11-30-23	X2
Surrogate:	Percent Recovery	Control Limits				
<i>o-Terphenyl</i>	102	50-150				

Client ID: CMW-31-112823

Laboratory ID: 11-274-11

Diesel Range Organics	0.18	0.15	NWTPH-Dx	11-30-23	12-1-23	
Lube Oil Range Organics	0.23	0.21	NWTPH-Dx	11-30-23	12-1-23	
Surrogate:	Percent Recovery	Control Limits				
<i>o-Terphenyl</i>	74	50-150				

Client ID: CMW-31-112823

Laboratory ID: 11-274-11

Diesel Range Organics	ND	0.21	NWTPH-Dx	11-30-23	11-30-23	X2
Lube Oil Range Organics	ND	0.21	NWTPH-Dx	11-30-23	11-30-23	X2
Surrogate:	Percent Recovery	Control Limits				
<i>o-Terphenyl</i>	73	50-150				

Client ID: CMW-8-112823

Laboratory ID: 11-274-12

Diesel Range Organics	0.28	0.15	NWTPH-Dx	11-30-23	12-1-23	
Lube Oil Range Organics	0.35	0.20	NWTPH-Dx	11-30-23	12-1-23	
Surrogate:	Percent Recovery	Control Limits				
<i>o-Terphenyl</i>	76	50-150				

Client ID: CMW-8-112823

Laboratory ID: 11-274-12

Diesel Range Organics	ND	0.20	NWTPH-Dx	11-30-23	11-30-23	X2
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	11-30-23	11-30-23	X2
Surrogate:	Percent Recovery	Control Limits				
<i>o-Terphenyl</i>	84	50-150				



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

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Date of Report: December 7, 2023
 Samples Submitted: November 29, 2023
 Laboratory Reference: 2311-274
 Project: 301-004

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:	CMW-10-112823					
Laboratory ID:	11-274-13					
Diesel Range Organics	1.6	0.15	NWTPH-Dx	11-30-23	12-1-23	
Lube Oil Range Organics	0.58	0.20	NWTPH-Dx	11-30-23	12-1-23	

Surrogate:	Percent Recovery	Control Limits
<i>o-Terphenyl</i>	103	50-150

Client ID: CMW-10-112823

Laboratory ID: 11-274-13

Diesel Range Organics	0.27	0.20	NWTPH-Dx	11-30-23	12-1-23	X2
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	11-30-23	12-1-23	X2
Surrogate:	Percent Recovery	Control Limits				
<i>o-Terphenyl</i>	122	50-150				

Client ID: CMW-27-112823

Laboratory ID: 11-274-14

Diesel Range Organics	1.9	0.15	NWTPH-Dx	11-30-23	12-1-23	M
Lube Oil Range Organics	0.65	0.20	NWTPH-Dx	11-30-23	12-1-23	
Surrogate:	Percent Recovery	Control Limits				
<i>o-Terphenyl</i>	82	50-150				

Client ID: CMW-27-112823

Laboratory ID: 11-274-14

Diesel Range Organics	0.51	0.20	NWTPH-Dx	11-30-23	12-1-23	M,X2
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	11-30-23	12-1-23	X2
Surrogate:	Percent Recovery	Control Limits				
<i>o-Terphenyl</i>	89	50-150				

Client ID: QA/QC-2-112823

Laboratory ID: 11-274-15

Diesel Range Organics	2.7	0.15	NWTPH-Dx	11-30-23	12-1-23	M
Lube Oil Range Organics	0.62	0.20	NWTPH-Dx	11-30-23	12-1-23	
Surrogate:	Percent Recovery	Control Limits				
<i>o-Terphenyl</i>	111	50-150				

Client ID: QA/QC-2-112823

Laboratory ID: 11-274-15

Diesel Range Organics	0.75	0.20	NWTPH-Dx	11-30-23	12-1-23	M,X2
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	11-30-23	12-1-23	X2
Surrogate:	Percent Recovery	Control Limits				
<i>o-Terphenyl</i>	116	50-150				



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Date of Report: December 7, 2023
 Samples Submitted: November 29, 2023
 Laboratory Reference: 2311-274
 Project: 301-004

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:	HMW-11-112823					
Laboratory ID:	11-274-16					
Diesel Range Organics	4.2	0.15	NWTPH-Dx	11-30-23	12-1-23	M
Lube Oil Range Organics	1.1	0.20	NWTPH-Dx	11-30-23	12-1-23	

<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>
<i>o-Terphenyl</i>	115	50-150

Client ID:	HMW-11-112823					
Laboratory ID:	11-274-16					
Diesel Range Organics	0.50	0.20	NWTPH-Dx	11-30-23	12-1-23	M,X2
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	11-30-23	12-1-23	X2
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	122	50-150				

Client ID:	HMW-10-112823					
Laboratory ID:	11-274-17					
Diesel Range Organics	0.49	0.15	NWTPH-Dx	11-30-23	12-1-23	
Lube Oil Range Organics	0.41	0.20	NWTPH-Dx	11-30-23	12-1-23	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	79	50-150				

Client ID:	HMW-10-112823					
Laboratory ID:	11-274-17					
Diesel Range Organics	ND	0.20	NWTPH-Dx	11-30-23	11-30-23	X2
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	11-30-23	11-30-23	X2
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	99	50-150				

Client ID:	CMW-2-112823					
Laboratory ID:	11-274-18					
Diesel Range Organics	1.2	0.15	NWTPH-Dx	11-30-23	12-1-23	
Lube Oil Range Organics	1.5	0.20	NWTPH-Dx	11-30-23	12-1-23	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	93	50-150				

Client ID:	CMW-2-112823					
Laboratory ID:	11-274-18					
Diesel Range Organics	ND	0.20	NWTPH-Dx	11-30-23	11-30-23	X2
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	11-30-23	11-30-23	X2
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	127	50-150				



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Date of Report: December 7, 2023
 Samples Submitted: November 29, 2023
 Laboratory Reference: 2311-274
 Project: 301-004

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:	MB1130W1					
Diesel Range Organics	ND	0.080	NWTPH-Dx	11-30-23	11-30-23	
Lube Oil Range Organics	ND	0.16	NWTPH-Dx	11-30-23	11-30-23	
Surrogate:	Percent Recovery	Control Limits				
<i>o-Terphenyl</i>	77	50-150				

Laboratory ID:	MB1130W1					
Diesel Range Organics	ND	0.080	NWTPH-Dx	11-30-23	11-30-23	X2
Lube Oil Range Organics	ND	0.16	NWTPH-Dx	11-30-23	11-30-23	X2
Surrogate:	Percent Recovery	Control Limits				
<i>o-Terphenyl</i>	95	50-150				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	11-274-01							
	ORIG DUP							
Diesel Range Organics	0.681	0.636	NA	NA	NA	NA	7	40
Lube Oil Range Organics	0.373	0.401	NA	NA	NA	NA	7	40
Surrogate:								
<i>o-Terphenyl</i>				73	77	50-150		
Laboratory ID:	11-274-01							
	ORIG DUP							
Diesel Range	ND	ND	NA	NA	NA	NA	40	X2
Lube Oil Range	ND	ND	NA	NA	NA	NA	40	X2
Surrogate:								
<i>o-Terphenyl</i>				84	93	50-150		



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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





**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 2

Laboratory Number: **11-274**

Turnaround Request
(in working days)

Company: **Farrallon Consulting**

Project Number: **301-004**

Project Name: **Cenex Auburn**

Project Manager: **Tracey Mulhern**

Sampled by: **Michael Yzaguirre / Angie Osman**

(other)

Standard (7 Days)

Same Day

2 Days

3 Days

Number of Containers

NWTPH-HCID

NWTPH-Gx/BTEX (8021B 8260)

NWTPH-Gx

NWTPH-Dx (SG Clean-up with and without SG)

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

% Moisture

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix
1	CMW-13-112723	11/27/23	1322	H ₂ O
2	HMW-9-112723		1418	
3	CMW-12-112723		1515	
4	QA/QC-1-112723		1520	
5	CMW-30-112723		1125	
6	CMW-29-112723		1224	
7	HMW-13-112723		1346	
8	CMW-26-112723		1437	
9	CMW-28-112723		1530	
10	CMW-25-112823	11/28/23	1000	1

Signature	Company	Date	Time	Comments/Special Instructions
Relinquished	FLN	11/29/23	0905	DRO/IORO by NWTPH-Dx by Silica gel cleanup. Do not use acid as part of Silica gel cleanup procedure.
Received	Sonya Van	11/29/23	1040	
Relinquished	Van	11/29/23	1110	
Received	Nicole Daphne OSE	11/29/23	1110	
Relinquished				
Received				
Reviewed/Dates				

Data Package: Standard Level III Level IV

Chromatograms with final report Electronic Data Deliverables (EDDs)

Chain of Custody

 Page 2 of 2

Turnaround Request (in working days)				Laboratory Number: 11-274		
(Check One)						
Company: Farcillon Consulting	<input type="checkbox"/> Same Day	<input type="checkbox"/> 1 Day	<input type="checkbox"/> 3 Days			
Project Number: 301-004	<input type="checkbox"/> 2 Days					
Project Name: Cenex Auburn	<input checked="" type="checkbox"/> Standard (7 Days)					
Project Manager: Tracey Mulhern	<input type="checkbox"/>					
Sampled by: Michael Ysaguirre/ Angie Osman	<input type="checkbox"/> (other) _____					
Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	
11	CMW-31-112823	11/28/23	1155	H ₂ O	5	X X
12	CMW-8-112823		1405			X X
13	CMW-10-112823		1055			X X
14	CMW-27-112823		1146			X X
15	QA/QC-2-112823		1210			X X
16	HMW-11-112823		1415			X X
17	HMW-10-112823		1310			X X
18	CMW-2-112823		0957			X X
Signature	Company	Date	Time	Comments/Special Instructions		
Relinquished	FLN	11/29/23	0905			
Received	Van	11/29/23	1040	See page 1		
Relinquished	Van	11/29/23	1110			
Received	Nicholas B. Ose	11/29/23	1110			
Relinquished						
Received						
Reviewed						
Reviewed/Date						
				Data Package: Standard <input type="checkbox"/> Level III <input type="checkbox"/> Level IV <input type="checkbox"/>		
				Chromatograms with final report <input type="checkbox"/> Electronic Data Deliverables (EDDs) <input type="checkbox"/>		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Vineta Mills, M.S.
Eric Young, B.S.

5500 4th Avenue South
Seattle, WA 98108
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

October 13, 2023

Javan Ruark, Project Manager
Farallon Consulting, LLC
975 5th Avenue Northwest
Issaquah, WA 98027

Dear Mr Ruark:

Included are the results from the testing of material submitted on October 2, 2023 from the Cenex Auburn 301-004, F&BI 310003 project. There are 5 pages included in this report.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Farallon Data, Lisa Thompson
FLN1013R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on October 2, 2023 by Friedman & Bruya, Inc. from the Farallon Consulting, LLC Cenex Auburn 301-004, F&BI 310003 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Farallon Consulting, LLC</u>
310003 -01	OVERALL-092923

The TO-15 gasoline range concentrations were quantified using a single point calibration at 80 ppbv.

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	OVERALL-092923	Client:	Farallon Consulting, LLC
Date Received:	10/02/23	Project:	Cenex Auburn 301-004
Date Collected:	09/29/23	Lab ID:	310003-01 1/8.6
Date Analyzed:	10/07/23	Data File:	100635.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	bat

Surrogates:	Recovery:	%	Lower	Upper
4-Bromofluorobenzene	113		70	130

Compounds:	Concentration	
	ug/m3	ppbv
Benzene	<2.7	<0.86
Toluene	<65	<17
Ethylbenzene	<3.7	<0.86
m,p-Xylene	<7.5	<1.7
o-Xylene	<3.7	<0.86
Gasoline Range Organics	40,000	9,900

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	Method Blank	Client:	Farallon Consulting, LLC
Date Received:	Not Applicable	Project:	Cenex Auburn 301-004
Date Collected:	Not Applicable	Lab ID:	03-2319 MB
Date Analyzed:	10/06/23	Data File:	100612.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	bat

	% Recovery:	Lower Limit:	Upper Limit:
Surrogates: 4-Bromofluorobenzene	85	70	130

Compounds:	Concentration ug/m3	ppbv
Benzene	<0.32	<0.1
Toluene	<7.5	<2
Ethylbenzene	<0.43	<0.1
m,p-Xylene	<0.87	<0.2
o-Xylene	<0.43	<0.1
Gasoline Range Organics	<330	<80

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/13/23

Date Received: 10/02/23

Project: Cenex Auburn 301-004, F&BI 310003

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES
FOR VOLATILES BY METHOD TO-15**

Laboratory Code: 310114-01 1/4.9 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 30)
Benzene	ug/m3	<1.6	<1.6	nm
Toluene	ug/m3	<37	<37	nm
Ethylbenzene	ug/m3	12	12	0
m,p-Xylene	ug/m3	6.4	6.1	5
o-Xylene	ug/m3	2.4	2.1	13

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Percent Recovery		Acceptance Criteria
		Spike Level	LCS	
Benzene	ug/m3	43	96	70-130
Toluene	ug/m3	51	106	70-130
Ethylbenzene	ug/m3	59	99	70-130
m,p-Xylene	ug/m3	120	104	70-130
o-Xylene	ug/m3	59	110	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

- a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.
- b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.
- ca - The calibration results for the analyte were outside of acceptance criteria, biased low; or, the calibration results for the analyte were outside of acceptance criteria, biased high, with a detection for the analyte in the sample. The value reported is an estimate.
- c - The presence of the analyte may be due to carryover from previous sample injections.
- cf - The sample was centrifuged prior to analysis.
- d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.
- dv - Insufficient sample volume was available to achieve normal reporting limits.
- f - The sample was laboratory filtered prior to analysis.
- fb - The analyte was detected in the method blank.
- fc - The analyte is a common laboratory and field contaminant.
- hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.
- hs - Headspace was present in the container used for analysis.
- ht - The analysis was performed outside the method or client-specified holding time requirement.
- ip - Recovery fell outside of control limits due to sample matrix effects.
- j - The analyte concentration is reported below the standard reporting limit. The value reported is an estimate.
- J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.
- jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.
- js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- k - The calibration results for the analyte were outside of acceptance criteria, biased high, and the analyte was not detected in the sample.
- lc - The presence of the analyte is likely due to laboratory contamination.
- L - The reported concentration was generated from a library search.
- nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.
- pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.
- ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.
- vo - The value reported fell outside the control limits established for this analyte.
- x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

SAMPLE CHAIN OF CUSTODY 10/10/23

Page # 1 of 1

310003 Lisa Thompson
 Report To Jenyan Ruvak
 Company Fawcett
 Address _____
 City, State, ZIP Lynnwood, WA
 Phone (206) 283-5044
 Email lisa@fawcett.com

SAMPLERS (signature)	PO #
<u>Jenyan</u>	3C1-C64
PROJECT NAME & ADDRESS	
<u>Cnex Auburn</u>	
NOTES: * GRO & BTEX	
INVOICE TO	<u>AP</u>

THE NAROUND TIME
 Standard
 RUSH
 Rush charges authorized by _____

SAMPLE DISPOSAL
 Default: Clean following final report delivery
 Hold (Fee may apply): _____

SAMPLE INFORMATION										ANALYSIS REQUESTED			
Sample Name	Lab ID	Canister ID	Flow Cont.	Reporting Level: IA=Indoor Air SG=Soil Gas (Circle One)	Date Sampled	Initial Vac. ("Hg)	Field Time	Final Vac. ("Hg)	Field Final Time	TO15 Full Scan	TO15 BTEXN*	TO15 cVOCs	APH Helium Notes
OVERALL-CARS3	01	3255	12	IA / SG	9/29/23 28.3	1122	7	1130	X				
				IA / SG									
				IA / SG									
				IA / SG									
				IA / SG									
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<u>Ruvak</u>	<u>Mallin Lee</u>	<u>Fawcett</u>	10/10/23	08:04
Relinquished by:	Received by:			
<u>Ruvak</u>	<u>ANTH PHAN</u>	<u>Fawcett</u>	10/10/23	08:04
Relinquished by:	Received by:			

Friedman & Bruya, Inc.
 5500 4th Avenue South
 Seattle, WA 98108
 Ph. (206) 285-8282
 Fax (206) 283-5044

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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Vineta Mills, M.S.
Eric Young, B.S.

5500 4th Avenue South
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November 21, 2023

Lisa Thompson, Project Manager
Farallon Consulting, LLC
975 5th Avenue Northwest
Issaquah, WA 98027

Dear Ms Thompson:

Included are the results from the testing of material submitted on November 14, 2023 from the Cenex Auburn 301-004, F&BI 311229 project. There are 5 pages included in this report.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Farallon Data, Javan Ruark
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ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on November 14, 2023 by Friedman & Bruya, Inc. from the Farallon Consulting, LLC Cenex Auburn 301-004, F&BI 311229 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Farallon Consulting, LLC</u>
311229 -01	Overall-111423

The TO-15 gasoline range concentrations were quantified using a single point calibration at 80 ppbv.

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	Overall-111423	Client:	Farallon Consulting, LLC
Date Received:	11/14/23	Project:	Cenex Auburn 301-004
Date Collected:	11/14/23	Lab ID:	311229-01 1/8.4
Date Analyzed:	11/16/23	Data File:	111526.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	bat

	% Recovery:	Lower Limit:	Upper Limit:
Surrogates: 4-Bromofluorobenzene	104	70	130

Compounds:	Concentration ug/m3	ppbv
Benzene	<2.7	<0.84
Toluene	<63	<17
Ethylbenzene	<3.6	<0.84
m,p-Xylene	<7.3	<1.7
o-Xylene	<3.6	<0.84
Gasoline Range Organics	18,000	3,900

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	Method Blank	Client:	Farallon Consulting, LLC
Date Received:	Not Applicable	Project:	Cenex Auburn 301-004
Date Collected:	Not Applicable	Lab ID:	03-2647 MB
Date Analyzed:	11/15/23	Data File:	111512.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	bat

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
4-Bromofluorobenzene	95	70	130

Compounds:	Concentration ug/m3	ppbv
Benzene	<0.32	<0.1
Toluene	<7.5	<2
Ethylbenzene	<0.43	<0.1
m,p-Xylene	<0.87	<0.2
o-Xylene	<0.43	<0.1
Gasoline Range Organics	<330	<80

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 11/21/23

Date Received: 11/14/23

Project: Cenex Auburn 301-004, F&BI 311229

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES
FOR VOLATILES BY METHOD TO-15**

Laboratory Code: 311213-01 1/5.6 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 30)
Benzene	ug/m3	<1.8	<1.8	nm
Toluene	ug/m3	<42	<42	nm
Ethylbenzene	ug/m3	<2.4	<2.4	nm
m,p-Xylene	ug/m3	<4.9	<4.9	nm
o-Xylene	ug/m3	<2.4	<2.4	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Percent Recovery		Acceptance Criteria
		Spike Level	LCS	
Benzene	ug/m3	43	101	70-130
Toluene	ug/m3	51	107	70-130
Ethylbenzene	ug/m3	59	99	70-130
m,p-Xylene	ug/m3	120	103	70-130
o-Xylene	ug/m3	59	107	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

- a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.
- b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.
- ca - The calibration results for the analyte were outside of acceptance criteria, biased low; or, the calibration results for the analyte were outside of acceptance criteria, biased high, with a detection for the analyte in the sample. The value reported is an estimate.
- c - The presence of the analyte may be due to carryover from previous sample injections.
- cf - The sample was centrifuged prior to analysis.
- d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.
- dv - Insufficient sample volume was available to achieve normal reporting limits.
- f - The sample was laboratory filtered prior to analysis.
- fb - The analyte was detected in the method blank.
- fc - The analyte is a common laboratory and field contaminant.
- hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.
- hs - Headspace was present in the container used for analysis.
- ht - The analysis was performed outside the method or client-specified holding time requirement.
- ip - Recovery fell outside of control limits due to sample matrix effects.
- j - The analyte concentration is reported below the standard reporting limit. The value reported is an estimate.
- J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.
- jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.
- js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- k - The calibration results for the analyte were outside of acceptance criteria, biased high, and the analyte was not detected in the sample.
- lc - The presence of the analyte is likely due to laboratory contamination.
- L - The reported concentration was generated from a library search.
- nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.
- pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.
- ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.
- vo - The value reported fell outside the control limits established for this analyte.
- x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

311229

Eisa Thompson

SAMPLE CHAIN OF CUSTODY

Report To Jawan Kuark

Company
Kavalion

Address

Digitized by Google

Bl. -

אברהם בראון

Report To <u>Javan Ruark</u>		Page # <u>1</u> of <u>1</u>
Company <u>Favallon</u>		SAMPLE FEEERS (signature) <i>[Signature]</i>
Address _____		
City, State, ZIP <u>Thomaston, GA</u>		PROJECT NAME & ADDRESS
<u>X CERO & BETX</u>		NOTES: PO # <u>301-004</u>
		INVOICE TO <u>KAR</u>
		SAMPLE DISPOSAL Default: Clean following final report delivery
		<input type="checkbox"/> Hold (Fee may apply):

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Retained by: <i>Madelin Lee</i>	Madelin Lee	Torvallo	11/11/13	1153
Received by: <i>Erie Young</i>	Erie Young	F B	11/14/13	1153
Relinquished by: <i>Erie Young</i>				
Received by:				

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