

April 25, 2025

Sandy Smith
Cleanup Project Manager
Toxics Cleanup Program – Southwest Regional Office
Washington State Department of Ecology
PO Box 47775
Olympia, Washington 98504-7775

RE: CONFIRMATIONAL GROUNDWATER MONITORING AND

SAMPLING STATUS REPORT - 2024 FORMER EVERGREEN FUEL FACILITY

661 EAST PINE STREET, SHELTON, WASHINGTON

FARALLON PN: 863-001

Dear Sandy Smith:

Farallon Consulting, L.L.C. (Farallon) has prepared this letter report to present the results from the December 2024 confirmational groundwater monitoring and sampling event conducted at the former Evergreen Fuel Facility at 661 East Pine Street in Shelton, Washington (herein referred to as the Site) (Figure 1). As detailed in the requirements set forth under Exhibit C, Scope of Work and Schedule, Task 1, Section q-2 and Task 4 of Agreed Order No. DE 3937 (AO) entered into by the Washington State Department of Ecology (Ecology) and Chevron U.S.A. Inc. and C.C. Cole and Sons, Inc., confirmational monitoring and reporting was required to be conducted on a semi-annual basis (January to June and July to December). However, based on the stability of historical groundwater data at monitoring well MW-10, and detailed in the email regarding Evergreen Fuels-Expectation Letter (DSARS 113119) dated June 27, 2022 from Sandy Smith of Ecology to Javan Ruark of Farallon, Ecology agreed to eliminate the semiannual confirmational groundwater monitoring and sampling event but retain the December annual events.

The December 2024 confirmational groundwater monitoring and sampling was conducted to evaluate whether constituents of concern (COCs), which consist of total petroleum hydrocarbons as gasoline-range organics (GRO), as diesel-range organics (DRO), and as oil-range organics (ORO); and benzene, toluene, ethylbenzene, and xylenes (BTEX), have attenuated to concentrations less than Washington State Model Toxics Control Act Cleanup Regulation (MTCA) Method A cleanup levels identified in the Cleanup Action Plan (CAP). The confirmational groundwater sampling was conducted in compliance with the AO and its



exhibits, including the CAP. Ecology executed informal amendments to the groundwater sampling requirements via letter on two occasions:

- Letter regarding Transmittal of Ecology Comments on Request for No Further Action
 Determination and Revised Groundwater Monitoring Status Report May 2013,
 Evergreen Fuel Facility, 661 East Pine Street, Shelton Washington, Agreed Order No.
 DE 3937 dated March 10, 2014, Facility/Site ID No. 6773108, Cleanup Site ID No.
 4306, dated August 25, 2014 from Scott Rose of Ecology to Peter Jewett of Farallon
 (Ecology Comments Letter); and
- Email regarding Evergreen Fuels Monitoring dated August 6, 2015 from Jason
 Landskron of Ecology to Javan Ruark of Farallon (Ecology Email), detailing the
 required decommissioning of monitoring wells MW-5 and MW-6 based on historical
 concentrations of COCs not exceeding laboratory practical quantitation limits (PQLs).

This report includes a summary of the Site background information, details of the confirmational groundwater monitoring and sampling, a discussion of the sampling results, and conclusions.

SITE BACKGROUND

The cleanup action was completed pursuant to MTCA under the AO that was entered into by Ecology and potentially liable persons Chevron U.S.A. Inc. and C.C. Cole and Sons, Inc. The cleanup action was completed in accordance with the scope of work documented in Ecology's CAP, which was an exhibit to the AO. Details regarding the cleanup action activities are presented in the *Cleanup Action Summary Report, December 2006 to June 2007, Evergreen Fuel Facility, 661 East Pine Street, Shelton, Washington* dated July 30, 2007 prepared by Farallon. A general description of the cleanup action activities pertinent to the ongoing confirmational groundwater monitoring being conducted is provided below.

Cleanup action activities completed in January 2007 included excavation and disposal at a licensed disposal facility of 7,508 tons of soil containing COCs, which consist of GRO, DRO, ORO, and BTEX, at concentrations exceeding the cleanup levels in the CAP. The excavation areas were backfilled with quarry spalls to above the water table at a depth of approximately 3 feet below ground surface. A total of 4,000 pounds of Advanced Oxygen Release Compound manufactured by Regenesis, Inc. of San Clemente, California was mixed with the quarry spalls used for backfill beneath the water table prior to placement, to enhance aerobic biodegradation of residual COCs in saturated soil and groundwater. Confirmational groundwater monitoring and sampling was initiated in April 2007 to document the effects of



the source removal action and ongoing biodegradation of residual COCs in groundwater. The Site is currently not paved and is used as a parking lot for the SYC.

Confirmational groundwater monitoring and sampling conducted from 2007 to 2013 indicated that source removal and oxygen release compound treatment had resulted in a significant reduction of COCs, with overall decreasing to stable conditions throughout the Site. DRO continued to be detected at concentrations exceeding the MTCA Method A cleanup level in six of eight groundwater samples collected from monitoring well MW-10 between 2007 and 2013.

Farallon submitted the letter regarding Request for No Further Action Determination, Evergreen Fuel Facility, 661 East Pine Street, Shelton, Washington dated March 10, 2014, from Javan Ruark and Peter Jewett to Dominick Reale of Ecology (Request Letter). In its response to the Request Letter and as detailed in the Ecology Comments Letter, Ecology indicated that additional performance soil and confirmational groundwater monitoring and sampling were required to receive a No Further Action determination and closure of the AO requirements for the Site. Ecology indicated in its response to the Request Letter that confirmational groundwater monitoring would be altered, consistent with MTCA, with the goal to achieve compliance for soil. The amended performance soil and confirmational groundwater monitoring and sampling required by Ecology consisted of the following:

- Collecting additional soil samples at locations where residual COCs were left in-place, to determine whether current concentrations were less than MTCA Method A cleanup levels for protection of groundwater. If concentrations of residual COCs still exceeded MTCA Method A cleanup levels, the locations with the highest concentrations of DRO were to be used to develop Site-specific Method B cleanup levels for direct contact and continued protection of groundwater.
- Performing semiannual confirmational groundwater monitoring and sampling at
 existing Site monitoring wells until MTCA Method A cleanup levels had been achieved
 and maintained for 1 year at all monitoring wells required to be sampled, as detailed
 in the AO. Once groundwater analytical results indicated that COCs were less than
 MTCA Method A cleanup levels for 1 year, four consecutive quarters of confirmational
 groundwater monitoring and sampling were to be conducted to demonstrate that
 MTCA Method A cleanup levels for groundwater had been achieved for the Site.
 Neither of these requirements have been attained for DRO at monitoring well MW-10.



Ecology subsequently provided additional details regarding confirmational groundwater monitoring and sampling to occur at the Site in August 2015. The details included:

- Confirmational groundwater monitoring and sampling were to be conducted in accordance with the AO, and would include monitoring wells MW-8 through MW-10; and
- Monitoring wells MW-5 and MW-6, which were covered during re-grading activities conducted in the Site parking lot, were to be located and decommissioned in accordance with Chapter 173-160 of the Washington Administrative Code.

Monitoring well decommissioning activities were conducted in December 2017. The results from the confirmational groundwater sampling conducted in 2019 indicated that further confirmational groundwater monitoring and sampling at the Site was necessary pursuant to the AO and subsequent Ecology communications.

On June 26, 2021, Ecology requested that groundwater samples collected from monitoring wells MW-9 and MW-10 be analyzed using the silica gel cleanup procedure. The purposes of the additional analysis were to gather supportive information for Ecology's update of the Northwest Total Petroleum Hydrocarbons-Dx method analysis, and to evaluate whether DRO detected in groundwater was associated with petroleum hydrocarbons or due to polar metabolites resulting from biodegradation and/or naturally occurring organic materials. Details of the Ecology request were provided in the email regarding Evergreen Fuels Shelton dated June 16, 2021, from Charles San Juan of Ecology to Javan Ruark of Farallon.

Confirmational groundwater sampling has continued on a periodic basis to assess stability and natural attenuation of the COCs in groundwater, and evaluate whether further action may be required to protect human health or the environment.

CONFIRMATIONAL GROUNDWATER MONITORING AND SAMPLING

A confirmational groundwater monitoring and sampling event was conducted on December 5, 2024, at monitoring wells MW-8 through MW-10 (Figure 2). Confirmational groundwater monitoring and sampling included measuring the depth to groundwater and collecting groundwater samples from monitoring wells MW-8 through MW-10 for laboratory analysis. Upon Farallon's arrival at the Site, monitoring wells MW-8 through MW-10 were opened, and the water level was permitted to equilibrate with atmospheric pressure for a minimum of 15 minutes before groundwater levels in the wells were measured. Groundwater levels were measured to an accuracy of 0.01 foot using an electronic water-



level meter. The monitoring well MW-9 water level could not be gauged due to a damaged well casing, which appeared to have been hit by a vehicle despite protective piles established by the Shelton Yacht Club. Monitoring well MW-9 was repaired in February 2025.

Monitoring wells MW-8 through MW-10 were purged and sampled using a peristaltic pump and dedicated polyethylene tubing at a flow rate of 120 milliliters per minute. The tubing intake was placed approximately 2 to 3 feet below the top of the water table in each monitoring well. During purging, water quality was monitored using a YSI water-quality meter equipped with a flow-through cell. The water-quality parameters monitored and recorded consisted of temperature, pH, specific conductance, dissolved oxygen, turbidity, and oxidation-reduction potential. Each monitoring well was purged until the temperature, pH, specific conductance, dissolved oxygen, and oxidation-reduction potential parameters stabilized.

Following purging, groundwater samples were collected directly from the pump outlet tubing located upstream of the flow-through cell, and placed directly into laboratory-prepared sample containers. The containers were placed on ice in a cooler and transported under standard chain-of-custody protocols to OnSite Environmental Inc. of Redmond, Washington for laboratory analysis for GRO by Northwest Method NWTPH-Gx, for BTEX by EPA Method 8260D, and for DRO and ORO by Northwest Method NWTPH-Dx with and without the silica gel cleanup procedure. Silica gel cleanup procedures were conducted in accordance with Ecology's *Guidance for Use of Silica Gel Cleanup in Washington State, Toxics Cleanup Program, Washington State Department of Ecology, Olympia, Washington*, Publication No. 22-09-059 dated September 2022 and revised November 2023, prepared by Ecology (SGC Guidance).

The silica gel cleanup procedure is being used to evaluate the nature of detections of DRO/ORO. Silica gel is used by the laboratory to remove both polar metabolites and naturally occurring biogenic organic compounds. Polar metabolites result from the degradation of petroleum hydrocarbons, primarily from biodegradation processes in the subsurface. Biogenic organic compounds include naturally occurring organic materials typically associated with degradation of plant-based materials and can exist in groundwater as particulate/colloidal matter or as dissolved matter. The silica gel cleanup procedure is indiscriminate in nature and removes both the polar metabolites and biogenic organic compounds. Evaluation of whether the extracted materials are polar metabolites versus biogenic organic compounds was performed as a component of the performance soil, and



confirmational groundwater sampling conducted in 2022, which indicated that the biogenic organic compounds are not likely present.

Purge water generated during the confirmational groundwater monitoring and sampling event was placed into a labeled 55-gallon steel drum and stored on the Site.

RESULTS

The results from the field activities and the laboratory analytical results for the confirmational groundwater monitoring and sampling event conducted on December 5, 2024 are presented below. Historical and current groundwater-level measurements and elevations are summarized in Table 1. Groundwater analytical results are summarized in Table 2 and shown on Figure 3. Chart 1 depicts the trends in concentrations of DRO and groundwater elevations at monitoring well MW-10. Groundwater geochemical parameters are summarized in Table 3. The laboratory analytical report is provided in Attachment A.

Groundwater levels were measured following a high tide at 10:03 a.m. with a maximum daytime height of 15.29 feet mean lower low water according to National Ocean Service tidal prediction data accessed on January 22, 2025. Groundwater contouring was not performed due to the inability to obtain a groundwater level measurement from damaged monitoring well MW-9. Based on historical groundwater elevation data, the typical flow direction and gradient is southeast toward Oakland Bay at an estimated horizontal hydraulic gradient of 0.01 foot per foot.

The groundwater analytical results indicate that MW-10 continues to be the only monitoring well with COCs present. MW-8 and MW-9 had no exceedances of cleanup levels and GRO and BTEX concentrations were less than the laboratory PQLs. Groundwater analytical results for monitoring well MW-10 were as follows:

- DRO and ORO were detected at concentrations exceeding the MTCA Method A
 cleanup level without the silica gel cleanup procedure (Table 2; Figure 4). Neither
 DRO nor ORO was detected with the silica gel cleanup procedure at concentrations
 exceeding laboratory PQLs (Table 2; Figure 4).
- GRO and BTEX were not detected at concentrations exceeding laboratory PQLs.

¹ Tide Predictions - NOAA Tides & Currents



CONCLUSIONS

Concentrations of GRO and BTEX compounds were less than the laboratory PQLs at all monitoring well locations. These compounds were analyzed in groundwater again due to the detections of these compounds in soil during a performance soil sampling event conducted in October 2022 to evaluate current conditions at the Site. The continued absence of GRO and BTEX compounds in groundwater despite the MTCA exceedances of these compounds in saturated soil indicate that desorption to groundwater is either not occurring or the rate of biodegradation exceeds the rate of desorption.

Concentrations of DRO and ORO at monitoring wells MW-8 and MW-9 were less than MTCA Method A cleanup levels, which is consistent with historical trends for concentrations of DRO and ORO detected at these monitoring wells.

DRO and ORO concentrations without the silica gel cleanup procedure at monitoring well MW-10 continue to fluctuate. The concentration trends have not directly correlated with the groundwater elevation data since 2022. This fluctuation suggests that residual DRO present in the smear zone at the capillary fringe may have attenuated and that remaining DRO that is biodegrading and resulting in the polar metabolites present is in the saturated zone (9.5 to 10 feet below the ground surface). Polar metabolites are expected to further biodegrade to non-toxic compounds.

Groundwater analytical results from the December 2024 confirmational groundwater monitoring and sampling event indicate that DRO/ORO concentrations do not exceed MTCA Method A cleanup levels when using the silica gel cleanup procedure. Polar metabolites are the primary and sole source of the DRO/ORO detections at monitoring well MW-10 based on prior evaluation of naturally occurring organic materials in the soil matrix, which were negligible.

According to the SGC Guidance, Ecology has recommended using the following cleanup levels for polar metabolites at sites with detectable concentrations of petroleum hydrocarbons:

- Petroleum cleanup level DRO with silica gel cleanup (SGC) = 500 micrograms per liter; and
- Polar organic cleanup level² = 500 micrograms per liter.

www.farallonconsulting.com

² The polar organic concentration is defined as DRO without SGC less DRO with SGC.



As previously discussed, DRO was not detected at monitoring well MW-10 when analyzed using SGC. DRO polar metabolites were detected at a concentration of 1,800 micrograms per liter at MW-10, which exceeds the polar organic cleanup level of 500 micrograms per liter. The results of the performance soil sampling event conducted in October 2022 to evaluate current conditions at the Site indicated that neither DRO nor ORO were present in soil at concentrations exceeding the MTCA cleanup levels established for the Site. Therefore, the polar metabolites may be associated with groundwater in the vicinity of monitoring well MW-10 since this monitoring well is located within the 2007 excavation area.

As discussed with Ecology, further clean up action, if practical, could potentially be completed in conjunction with or following the current property owner's planned shoreline improvement project. Ecology has indicated that additional cleanup action, if taken, will need to be consistent with technologies evaluated in the feasibility study and described in the CAP, which include soil excavation and enhanced natural attenuation. Coordination with Ecology will continue in order to evaluate the practicability and schedule for additional excavation.

CLOSING

Farallon trusts that this report provides sufficient information for your needs. Please contact either of the undersigned at (425) 295-0800 if you have questions or require additional information.

Sincerely,

Farallon Consulting, L.L.C.

John Kim, G.I.T.

Staff Geologist

Jeffrey Kaspar, L.G., L.H.G.

Principal Geologist

Attachments: Figure 1, Site Vicinity Map

Figure 2, Site Plan

Figure 3, Groundwater Analytical Data

Table 1, Summary of Groundwater Elevation Data Table 2, Summary of Groundwater Analytical Results

Table 3, Summary of Groundwater Geochemical Parameters



Chart 1, DRO Concentrations in Groundwater versus Groundwater Elevation Data Trends for Monitoring Well MW-10 Attachment A, Laboratory Analytical Reports

cc: Allyson Bazan, Hillis Clark Martin & Peterson P.S. William Joyce, Hillis Clark Martin & Peterson P.S. George Daly, Shelton Yacht Club Brandon Palmer, Port of Shelton Nathan Blomgren, Chevron U.S.A. Inc Cheryl Cameron, Chevron U.S.A. Inc. Robert Goodman, Rogers Joseph O'Donnell Jacob Lubarsky, Rogers Joseph O'Donnell

JK/JK:cm

LIMITATIONS

The conclusions contained in this report/assessment are based on professional opinions with regard to the subject matter. These opinions have been arrived at in accordance with currently accepted hydrogeologic and engineering standards and practices applicable to this location. The conclusions contained herein are subject to the following inherent limitations:

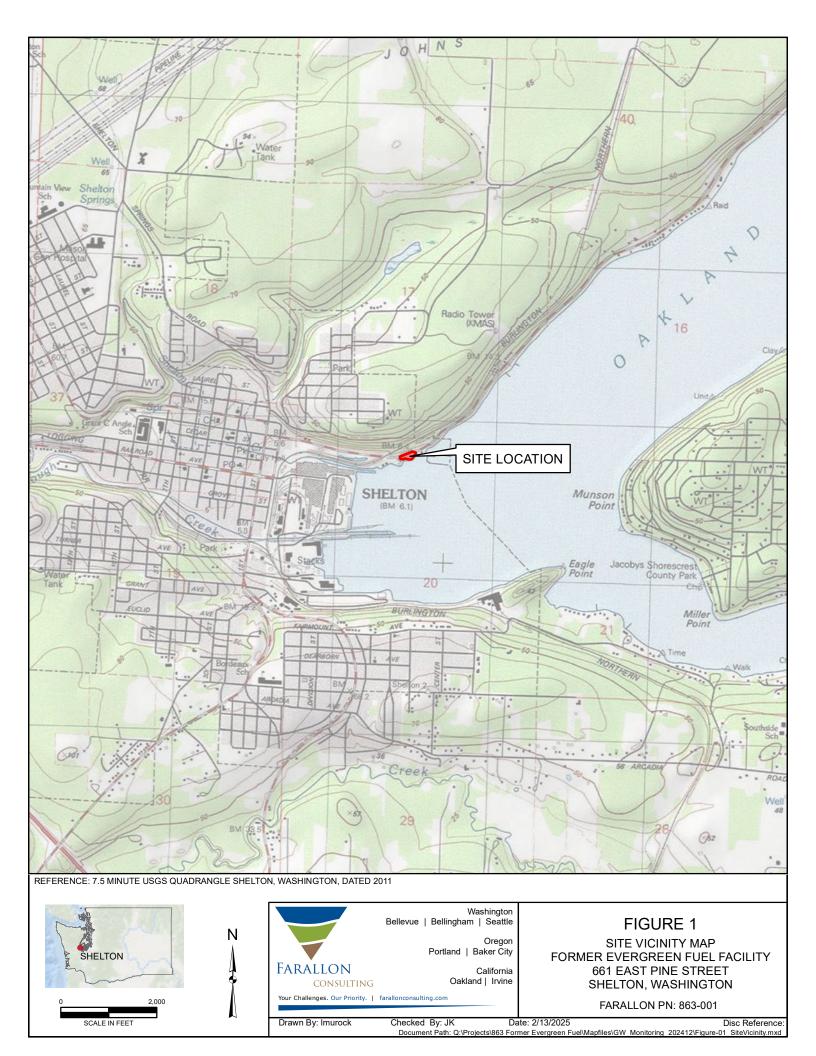
- Accuracy of Information. Farallon reviewed certain information used in this report/assessment
 from sources that were believed to be reliable. Farallon's conclusions, opinions, and
 recommendations are based in part on such information. Farallon's services did not include
 verification of its accuracy. Should the information upon which Farallon relied prove to be
 inaccurate, Farallon may revise its conclusions, opinions, and/or recommendations.
- Reconnaissance and/or Characterization. Farallon performed a reconnaissance and/or characterization of the Site that is the subject of this report/assessment to document current conditions. Farallon focused on areas deemed more likely to exhibit hazardous materials conditions. Contamination may exist in other areas of the Site that were not investigated or were inaccessible. Site activities beyond Farallon's control could change at any time after the completion of this report/assessment.

Farallon does not guarantee that the Site is free of hazardous or potentially hazardous substances or conditions, or that latent or undiscovered conditions will not become evident in the future. Farallon's observations, findings, and opinions are as of the date of the report.

This report/assessment has been prepared in accordance with the contract for services between Farallon and Chevron U.S.A. Inc. and CC Cole and Sons, Inc. No other warranties, representations, or certifications are made.

FIGURES

CONFIRMATIONAL GROUNDWATER MONITORING AND SAMPLING STATUS REPORT – 2024 Former Evergreen Fuel Facility 661 East Pine Street Shelton, Washington





MONITORING WELL (FARALLON 2007)

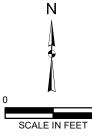
DECOMMISSIONED MONITORING WELL (FARALLON 2017)

UTILITY POLE

FIRE HYRDANT

BULKHEAD RETAINING WALL

APPROXIMATE SITE BOUNDARY





Portland | Baker City

California Oakland | Irvine

FARALLON PN: 863-001

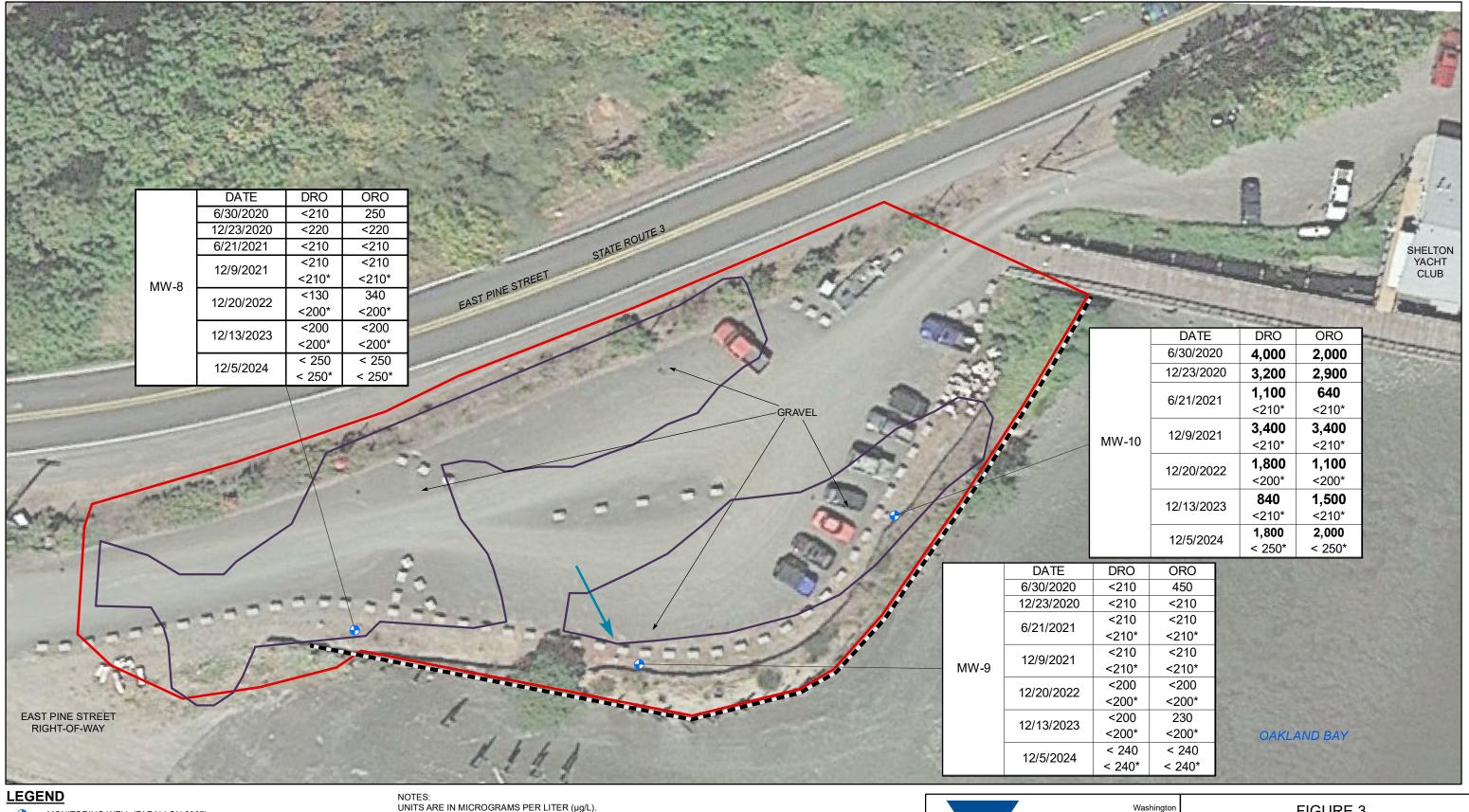
SITE PLAN

FORMER EVERGREEN FUEL FACILITY

661 EAST PINE STREET

SHELTON, WASHINGTON

By: JK Date: 2/13/2025 Disc Reference: Document Path: Q:\Projects\863 Former Evergreen Fue\Mapfiles\GW Monitoring 202412\Figure-02 SitePlan.mxd



MONITORING WELL (FARALLON 2007)

ESTIMATED GROUNDWATER FLOW DIRECTION

BULKHEAD RETAINING WALL

ESTIMATED LIMITS OF FORMER EXCAVATION AREA

APPROXIMATE SITE BOUNDARY

UNITS ARE IN MICROGRAMS PER LITER (µg/L).

BOLD = DENOTES CONCENTRATIONS IN GROUNDWATER THAT EXCEED THE WASHINGTON STATE MODEL TOXICS CONTROL ACT CLEANUP REGULATION (MTCA) CLEANUP LEVEL

- < = DENOTES ANALYTE NOT DETECTED AT OR EXCEEDING THE REPORTING LIMIT LISTED.
- * = SILICA GEL CLEANUP PROCESS APPLIED TO SAMPLE PRIOR TO ANALYSIS.

DRO = TOTAL PETROLEUM HYDROCARBONS (TPH) AS DIESEL-RANGE ORGANICS. ORO = TPH AS OIL-RANGE ORGANICS

ALL LOCATIONS ARE APPROXIMATE. FIGURES WERE PRODUCED IN COLOR. GRAYSCALE COPIES MAY NOT REPRODUCE ALL ORIGINAL INFORMATION.



Bellevue | Bellingham | Seattle

Oregon Portland | Baker City

> California Oakland | Irvine

FIGURE 3

GROUNDWATER ANALYTICAL DATA FORMER EVERGREEN FUEL FACILITY 661 EAST PINE STREET SHELTON, WASHINGTON

FARALLON PN: 863-001

ecked By: JK Date: 2/13/2025 Disc Reference:

Document Path: Q:\Projects\863 Former Evergreen Fuel\Mapfiles\GW Monitoring 202412\Figure-03 GW TPH 2024.mxd

TABLES

CONFIRMATIONAL GROUNDWATER MONITORING AND SAMPLING STATUS REPORT – 2024 Former Evergreen Fuel Facility 661 East Pine Street Shelton, Washington

Table 1 Summary of Groundwater Elevation Data Former Evergreen Fuel Facility Shelton, Washington

NA/-II	Well Screened Interval	Top of Monument	Top of Casing	Dete	Depth to Water	Groundwater
Well			_	Date		
Identification	(feet bgs) ¹	Elevation ²	Elevation ²	Measured	(feet) 3	Elevation ²
				4/5/2007	6.1	12.38
				7/11/2007	5.18	13.3
				10/11/2007	4.86	13.62
				1/11/2008	5.08	13.4
				5/13/2008	9.27	9.21
				10/1/2009	6.62	11.86
				1/19/2010	4.60	13.88
				5/1/2013	5.35	13.13
				2/16/2016	4.75	13.73
				8/23/2016	5.84	12.64
				8/10/2017	5.57	12.91
MW-8	3-15	18.85	18.48	12/14/2017	5.22	13.26
IVIVV-O	3-13	10.00	10.40	6/28/2018	5.42	13.06
				12/27/2018	4.91	13.57
				6/27/2019	5.45	13.03
				12/5/2019	5.25	13.23
				6/30/2020	5.32	13.16
				12/23/2020	4.75	13.73
				6/21/2021	5.35	13.13
				12/9/2021	4.82	13.66
				12/13/2021	4.51	13.97
				12/20/2022	5.20	13.28
				12/13/2023	4.88	13.60
				12/5/2024	6.05	12.43

Table 1 Summary of Groundwater Elevation Data Former Evergreen Fuel Facility Shelton, Washington

Farallon PN: 863-001

	Well Screened	Top of	Top of		Depth to	
Well	Interval	Monument	Casing	Date	Water	Groundwater
Identification	(feet bgs) 1	Elevation ²	Elevation ²	Measured	(feet) 3	Elevation ²
	· • • ·			4/5/2007	10.05	8.88
				7/11/2007	9.50	9.43
				10/11/2007	7.50	11.43
				1/11/2008	7.68	11.25
				5/13/2008	5.78	13.15
				10/1/2009	10.21	8.72
				1/19/2010	6.99	11.94
				5/1/2013	8.84	10.09
				2/16/2016	8.3	10.63
				8/23/2016	9.94	8.99
			40.00	8/10/2017	9.14	9.79
MW-9	3-15	19.25	18.93	12/14/2017	8.62	10.31
				6/28/2018	9.29	9.64
				12/27/2018	7.82	11.11
				6/27/2019	9.49	9.44
				12/5/2019	8.65	10.28
				6/30/2020	8.68	10.25
				12/23/2020	8.50	10.43
				6/21/2021	8.50	10.43
				12/13/2021	8.31	10.62
				12/20/2022	8.16	10.77
				12/13/2023	NM	NA
			NA	12/5/2024	NM	NA
				4/5/2007	9.14	10.79
				7/11/2007	8.65	11.28
				10/11/2007	7.00	12.93
				1/11/2008	7.73	12.20
				5/13/2008	8.82	11.11
				10/1/2009	10.5	9.43
				1/19/2010	7.13	12.80
				5/1/2013	8.43	11.50
				2/16/2016	7.89	12.04
				8/23/2016	10.51	9.42
				8/10/2017	10.17	9.76
MW-10	2-17	20.26	19.93	12/14/2017	9.00	10.93
10100-10	2-17	20.20	13.33	6/28/2018	10.32	9.61
				12/27/2018	8.27	11.66
				6/27/2019	10.40	9.53
				12/5/2019	9.64	10.29
				6/30/2020	9.81	10.12
				12/23/2020	8.48	11.45
				6/21/2021	9.42	10.51
				12/9/2021	8.55	11.38
				12/13/2021	8.35	11.58
				12/20/2022	8.90	11.03
				12/13/2023	8.57	11.36
				12/5/2024	9.15	10.78

NOTES:

NA = not available

NM = not measured

¹Screened interval in feet below ground surface (bgs).

²Elevations relative to vertical survey datum that is based on a mean lower low water of 44.11 feet and referenced from a Washington State Department of Transportation brass set in a monument with a published elevation of 47.58 feet North American Vertical Datum.

³Depth to water measured in feet below the top of the well casing.

Table 2 Summary of Groundwater Analytical Results Former Evergreen Fuel Facility Shelton, Washington

				Analytical Results (micrograms per liter)								
Sample	Sample	Sample							Total			
Identification	Location	Date	GRO ¹	DRO ²	ORO ²	Benzene ³	Toluene ³	Ethylbenzene ³	Xylenes ³			
MW8-040507		4/5/2007	190 ⁴	<250	<410	1.4	<1.0	<1.0	4.0			
MW8-071107		7/11/2007	<100	<250	<400	2.6	<1.0	<1.0	<1.0			
MW8-101107		10/11/2007	<100	<250	<400	5.7	<1.0	<1.0	<1.0			
MW8-011108		1/11/2008	<100	<270	<440	<1.0	<1.0	<1.0	<1.0			
MW8-051308		5/13/2008	<100	<270	<430	2.7	<1.0	<1.0	<1.0			
MW8-100109		10/1/2009		<250	<400	1.4						
MW8-011910		1/19/2010		<260	<410	<1.0						
MW-8-050113		5/1/2013	<100	<250	<410	<1.0	<1.0	<1.0	<2.0			
MW-8-021616		2/16/2016		<260	<410							
MW-8-082316		8/23/2016		280	<410							
MW-8-081017		8/10/2017		<260	<410							
MW-8-121417		12/14/2017	-	<270	<440							
MW-8-062818		6/28/2018	-	<260	<410							
MW-8-122718	MW-8	12/27/2018	-	<260	<410							
MW-8-062719	10100-0	6/27/2019	-	<260	<410							
MW-8-120519		12/5/2019		<230	<240							
MW-8-063020		6/30/2020	-	<210	250							
MW-8-122320		12/23/2020		<220	<220							
MW-8-062121		6/21/2021		< 210	< 210							
NAMA 0 400004		40/0/0004		< 210	< 210							
MW-8-120921		12/9/2021		< 210 ⁵	< 210 ⁵							
		40/00/0000		<130	340							
MW-08-122022		12/20/2022		<200 ⁵	<200 ⁵							
MW-8-121323		12/13/2023	< 100	<200	<200	<0.20	<1.0	<0.20	<0.60			
10100-0-121323		12/13/2023	< 100	<200 ⁵	<200 ⁵	<u.zu< td=""><td>\1.0</td><td>~0.20</td><td><0.00</td></u.zu<>	\1.0	~ 0.20	<0.00			
MW-8-120524		12/5/2024	< 100	< 250	< 250	< 0.20	< 1.0	< 0.20	< 0.60			
			- 100	< 250 ⁵	< 250 ⁵	- 0.20	- 1.0		- 0.00			
MTCA Method A	Cleanup Lev	∕els ⁶	800/1,000	500	500	5	1,000	700	1,000			

Table 2

Summary of Groundwater Analytical Results Former Evergreen Fuel Facility

Shelton, Washington **Farallon PN: 863-001**

			Analytical Results (micrograms per liter)								
Sample	Sample	Sample							Total		
Identification	Location	Date	GRO ¹	DRO ²	ORO ²	Benzene ³	Toluene ³	Ethylbenzene ³	Xylenes ³		
MW9-040507		4/5/2007	<100	<260	<410	<1.0	<1.0	<1.0	<1.0		
MW9-071107		7/11/2007	<100	<250	<400	<1.0	<1.0	<1.0	<1.0		
MW9-101107		10/11/2007	<100	<250	<410	<1.0	<1.0	<1.0	<1.0		
MW9-011108		1/11/2008	<100	<260	<410	<1.0	<1.0	<1.0	<1.0		
MW-9-050113		5/1/2013	<100	310	<400	<1.0	<1.0	<1.0	<2.0		
MW-9-021616		2/16/2016		<260	<410		-				
MW-9-082316		8/23/2016		1,200	<550 U1		-				
MW-9-081017		8/10/2017		420	<410		-				
MW-9-121417		12/14/2017		<300	<480		-				
MW-9-062818		6/28/2018		<260	<410						
MW-9-122718		12/27/2018		280	<420						
MW-9-062719		6/27/2019		<260	<410						
MW-9-120519		12/5/2019		<200	<240						
MW-9-063020	MW-9	6/30/2020		<210	450						
MW-9-122320		12/23/2020		<210	<210						
MIVI O IZZOZO		12/20/2020		< 210	< 210						
MW-9-062121		6/21/2021		-	_						
				< 210 ⁵	< 210 ⁵						
MW-9-120921		12/9/2021		< 210	< 210						
10100-3-120321		12/3/2021		< 210 ⁵	< 210 ⁵						
		40/00/0000		<200	<200						
MW-09-122022		12/20/2022		<200 ⁵	<200 ⁵						
				<200	230						
MW-9-121323		12/13/2023	< 100			<0.20	<1.0	<0.20	< 0.60		
				<200 ⁵	<200 ⁵						
MW-9-120524		12/5/2024	< 100	< 240	< 240	< 0.20	< 1.0	< 0.20	< 0.60		
10100-9-120024		12/3/2024	\ 100	< 240 ⁵	< 240 ⁵	\ 0.20	\ 1.0	V 0.20	₹ 0.00		
MW10-040507		4/5/2007	<400	1,000	<420	<4.0	<4.0	<4.0	<4.0		
MW10-071107		7/11/2007	<100	580	<400	<1.0	<1.0	<1.0	<1.0		
MW10-101107		10/11/2007	<400	590	<400	<4.0	<4.0	<4.0	<4.0		
MW10-011108		1/11/2008	<100	<250	<410	<1.0	<1.0	<1.0	<1.0		
MW10-051308		5/13/2008	220	620	<430	<1.0	<1.0	<1.0	<1.0		
MW10-100109		10/1/2009		750	<410	<1.0	-				
MW10-011910		1/19/2010		<260	<410	<1.0					
MW-10-050113		5/1/2013	<100	1,700	<410	<1.0	<1.0	<1.0	<2.0		
MW-10-021616		2/16/2016		3,500	<410						
MW-10-021616		8/23/2016		1,900	<640 U1						
MW-10-081017		8/10/2017		3,000	<580 U1						
MW-10-121417		12/14/2017		4,600	<3,400 U1						
MW-10-062818		6/28/2018		1,900	<520 U1						
MW-10-122718		12/27/2018		2,100	<1.400 U1						
MW-10-122718	MW-10	6/27/2019		1,600	580 N						
MW-10-002719	IVIVV-IU	12/5/2019		6,300	3,100 N						
MW-10-063020		6/30/2020		4,000	2,000						
MW-10-063020		12/23/2020	<u></u>	3,200	2,000						
14144-10-122320		12/23/2020			640						
MW-10-062121		6/21/2021		1,100							
				< 210 ⁵	< 210 ⁵						
MW 10 120021		12/0/2024		3,400	3,400						
MW-10-120921		12/9/2021		< 210 ⁵	< 210 ⁵						
				1,800	1,100			1			
MW-10-122022		12/20/2022		<200 ⁵	<200 ⁵						
								1			
MW-10-121323		12/13/2023	< 100	840	1,500	<0.20	<1.0	<0.20	<0.60		
13 121020		. 2, . 3, 2023		<210 ⁵	<210 ⁵	3.20	1.0	J.20			
MW 40 400504		40/5/0004	. 400	1,800	2,000	. 0.00	. 4.0	10.00	. 0 00		
MW-10-120524		12/5/2024	< 100	< 250 ⁵	< 250 ⁵	< 0.20	< 1.0	< 0.20	< 0.60		
MTCA Method A	Cleanun I o	vols ⁶	800	500	500	5	1,000	700	1,000		
	Oleanup Let	7613	000	300	300		1,000	100	1,000		
NOTES:											

Results in **bold** denote concentrations exceeding applicable cleanup levels.

DRO = total petroleum hydrocarbons as diesel-range organics

GRO = total petroleum hydrocarbons as gasoline-range organics

N = hydrocarbons in the diesel range are impacting the oil result

U1 = the practical quantitation limit is elevated due to interferences present in the sample

ORO = total petroleum hydrocarbons as oil-range organics

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

⁻⁻ denotes sample not analyzed

¹Analyzed by Northwest Method NWTPH-Gx.

²Analyzed by Northwest Method NWTPH-Dx.

 $^{^3\!}$ Analyzed by U.S. Environmental Protection Agency (EPA) Method 8260B/8260D.

⁴Laboratory analytical report indicated gasoline results are being influenced by the presence of diesel.

⁵Analyzed by Northwest Method NWTPH-Dx with silica-gel cleanup procedure.

⁶Cleanup levels for the Site presented in the Draft Cleanup Action Plan dated July 18, 2006 that were based on the Washington State Model Toxics Control Act Cleanup Regulation (MTCA)

Table 3 Summary of Groundwater Geochemical Parameters Former Evergreen Fuel Facility Shelton, Washington

			G	eochemical R	esults	
Well		Temperature	Specific Conductance	рН	Dissolved	Oxidation- Reduction
Identification	Sample Date	(°C)	(mS/cm)	(pH units)	Oxygen (mg/l)	Potential (mV)
	4/5/2007	11.43	0.270	6.70	1.29	443.6
	7/11/2007	21.54	0.386	4.12	0.93	511.9
	10/11/2007	14.59	0.323	7.17	1.62	68.2
	1/11/2008	8.38	0.252	7.37	2.48	-30.4
	5/13/2008	12.1	0.346	7.05	0.98	-44.4
	10/1/2009	17.53	0.468	7.21	4.22	-76
	1/19/2010	9.66	0.12	6.97	6.7	49.7
	5/1/2013	14.83	0.204	6.22	2.06	-7
	2/16/2016	10.62	0.092	6.64	4.37	147
	8/23/2016	21.60	0.235	6.72	0.61	-26
	8/10/2017	21.4	0.180	6.71	0.43	-31.5
MW-8	12/14/2017	11.0	0.190	6.64	0.71	9.1
	6/28/2018	17.7	0.224	6.46	1.03	-1.9
	12/27/2018	9.6	0.12	7.2	4.75	120.7
	6/27/2019	15.1	0.266	6.39	1.23	48.1
	12/5/2019	11.7	0.271	6.44	3.26	-255.3
	6/30/2020	18.5	0.198	13.37*	0.26	-176.5
	12/23/2020	8.9	0.082	6.96	6.18	179.6
	6/21/2021	20.6	0.244	6.29	1.10	-54.8
	12/9/2021	10.0	0.191	6.55	1.15	123.6
	12/20/2022	8.7	0.212	6.65	3.93	295.6
	12/13/2023	8.8	0.143	6.63	2.91	204.1
	12/5/2024	12.3	0.181	6.15	3.53	209.3

Table 3 **Summary of Groundwater Geochemical Parameters** Former Evergreen Fuel Facility Shelton, Washington

Farallon PN: 863-001

		Geochemical Results								
			Specific			Oxidation-				
Well		Temperature	Conductance	рН	Dissolved	Reduction				
Identification		(°C)	(mS/cm)	(pH units)	Oxygen (mg/l)	Potential (mV)				
	4/5/2007	12.44	0.361	6.12	3.57	478.6				
	7/11/2007	21.25	0.56	4.64	3.41	420				
	10/11/2007	15.11	0.326	6.57	6.4	79.8				
	1/11/2008	8.66	0.129	7.25	1.92	69.5				
	5/13/2008	NS	NS	NS	NS	NS				
	10/1/2009	NS	NS	NS	NS	NS				
	1/19/2010	NS	NS	NS	NS	NS				
	5/1/2013	16.20	0.135	6.25	0.89	-25				
	2/16/2016	10.61	0.150	6.59	2.23	85				
	8/23/2016	21.80	0.860	6.78	0.54	-40				
	8/10/2017	19.4	0.248	6.61	0.41	-44.9				
MW-9	12/14/2017	11.8	0.194	6.74	0.51	-47.3				
	6/28/2018	16.2	0.331	6.63	1.14	-10.4				
	12/27/2018	10.4	0.188	6.91	4.09	132.9				
	6/27/2019	15.0	0.359	6.52	1.71	65.2				
	12/5/2019	11.9	0.346	6.62	3.61	-218.7				
	6/30/2020	16.0	0.315	12.35*	0.32	-182.2				
	12/23/2020	9.9	0.119	6.99	4.94	178.7				
	6/21/2021	19.7	0.281	6.68	2.90	-30.6				
	12/9/2021	11.3	0.198	6.94	5.01	182.5				
	12/20/2022	9.8	0.299	7.06	6.34	315.2				
	12/13/2023	10.3	0.249	6.82	6.98	232.2				
	12/5/2024	13.2	0.331	6.61	2.10	192.5				
	4/5/2007	11.84	0.252	5.87	0.96	480.3				
	7/11/2007	20.54	0.316	5.77	0.73	175				
	10/11/2007	15.07	0.309	6.56	0.48	-12.7				
	1/11/2008	9.4	0.141	6.66	6.13	109.8				
	5/13/2008	12.21	0.209	6.72	1.28	-57.8				
	10/1/2009	17.16	0.379	6.80	0.07	-91.8				
	1/19/2010	10.65	0.108	6.72	1.95	23.2				
	5/1/2013	13.99	0.133	5.99	1.00	-16				
	2/16/2016	11.33	0.274	6.24	0.88	44				
	8/23/2016	18.31	0.343	6.69	0.79	-70				
	8/10/2017	18.0	0.201	6.70	0.28	-96.5				
MW-10	12/14/2017	12.1	0.269	6.26	0.29	-108.9				
	6/28/2018	15.5	0.277	6.70	0.9	-77.5				
	12/27/2018	11.6	0.427	6.17	2.32	167.6				
	6/27/2019	14.0	0.339	6.51	1.49	-15.2				
	12/5/2019	13.3	0.536	6.20	2.67	-234.2				
-	6/30/2020	16.0	0.282	12.22*	0.24	-174.0				
	12/23/2020	10.7	0.223	6.11	0.97	121.1				
	6/21/2021	20.7	0.273	6.22	1.03	-56.6				
	12/9/2021	12.2	0.329	5.93	0.33	77.8				
	12/20/2022	10.1	0.279	6.34	1.17	191.3				
	12/13/2023	10.9	0.177	5.78	1.94	239.4				
NOTES:	12/5/2024	13.5	0.187	5.77	2.15	254.6				

NOTES:

mg/l = milligrams per liter

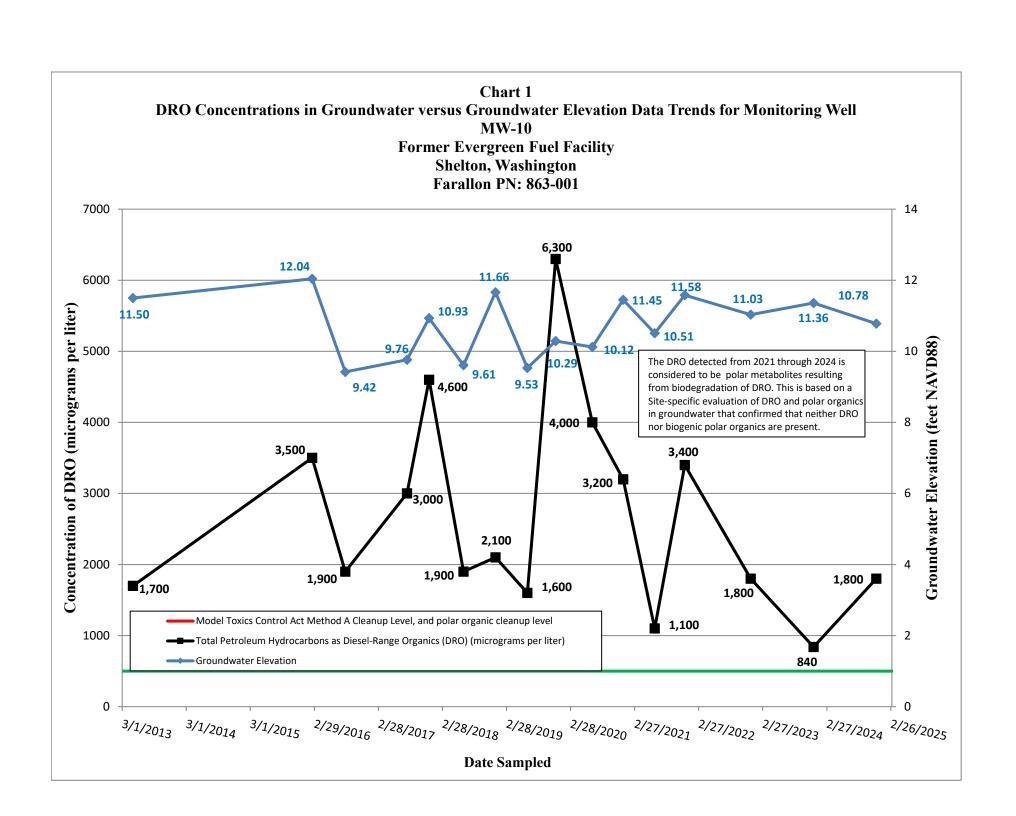
mS/cm = milliSiemens per centimeter

mV = millivolts NS = not sampled

[°]C = degrees Celsius
* = instrument error

CHART

CONFIRMATIONAL GROUNDWATER MONITORING AND SAMPLING STATUS REPORT – 2024 Former Evergreen Fuel Facility 661 East Pine Street Shelton, Washington



ATTACHMENT A LABORATORY ANALYTICAL REPORTS

CONFIRMATIONAL GROUNDWATER MONITORING AND SAMPLING
STATUS REPORT – 2024
Former Evergreen Fuel Facility
661 East Pine Street
Shelton, Washington



December 16, 2024

Elsa Ticken Farallon Consulting, LLC 330 Franklin Street, Suite 200 Oakland, CA 94607

Re: Analytical Data for Project 863-001 Laboratory Reference No. 2412-085

Dear Elsa:

Enclosed are the analytical results and associated quality control data for samples submitted on December 6, 2024.

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

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

Sincerely,

David Baumeister Project Manager

Enclosures

Project: 863-001

Case Narrative

Samples were collected on December 5, 2024 and received by the laboratory on December 6, 2024. They were maintained at the laboratory at a temperature of 2° C to 6° C.

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

Project: 863-001

GASOLINE RANGE ORGANICS NWTPH-Gx

Matrix: Water
Units: ug/L (ppb)

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	MW-8-120524					
Laboratory ID:	12-085-01					
Gasoline	ND	100	NWTPH-Gx	12-12-24	12-12-24	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	90	61-122				
Client ID:	MW-9-120524					
Laboratory ID:	12-085-02					
Gasoline	ND	100	NWTPH-Gx	12-12-24	12-12-24	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	92	61-122				
Client ID:	MW-10-120524					
Laboratory ID:	12-085-03					
Gasoline	ND	100	NWTPH-Gx	12-12-24	12-12-24	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	92	61-122				

Project: 863-001

GASOLINE RANGE ORGANICS NWTPH-Gx QUALITY CONTROL

Matrix: Water Units: ug/L (ppb)

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1212W2					
Gasoline	ND	100	NWTPH-Gx	12-12-24	12-12-24	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	90	61-122				

					Source	Percent	Recovery		RPD	
Analyte	Res	sult	Spike	Level	Result	Recovery	Limits	RPD	Limit	Flags
DUPLICATE										
Laboratory ID:	12-08	35-01								
	ORIG	DUP								
Gasoline	ND	ND	NA	NA		NA	NA	NA	30	
Surrogate:										

Project: 863-001

VOLATILE ORGANICS EPA 8260D

Matrix: Water Units: ug/L

· ·				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	MW-8-120524					
Laboratory ID:	12-085-01					
Benzene	ND	0.20	EPA 8260D	12-9-24	12-9-24	
Toluene	ND	1.0	EPA 8260D	12-9-24	12-9-24	
Ethylbenzene	ND	0.20	EPA 8260D	12-9-24	12-9-24	
m,p-Xylene	ND	0.40	EPA 8260D	12-9-24	12-9-24	
o-Xylene	ND	0.20	EPA 8260D	12-9-24	12-9-24	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	111	68-133				
Toluene-d8	101	79-123				
4-Bromofluorobenzene	94	78-117				
Client ID:	MW-9-120524					
Laboratory ID:	12-085-02					
Benzene	ND	0.20	EPA 8260D	12-9-24	12-9-24	
Toluene	ND	1.0	EPA 8260D	12-9-24	12-9-24	
Ethylbenzene	ND	0.20	EPA 8260D	12-9-24	12-9-24	
m,p-Xylene	ND	0.40	EPA 8260D	12-9-24	12-9-24	
o-Xylene	ND	0.20	EPA 8260D	12-9-24	12-9-24	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	108	68-133				
Toluene-d8	100	79-123				
4-Bromofluorobenzene	94	78-117				
Client ID:	MW-10-120524					
Laboratory ID:	12-085-03					
Benzene	ND	0.20	EPA 8260D	12-9-24	12-9-24	
Toluene	ND	1.0	EPA 8260D	12-9-24	12-9-24	
Ethylbenzene	ND	0.20	EPA 8260D	12-9-24	12-9-24	
m,p-Xylene	ND	0.40	EPA 8260D	12-9-24	12-9-24	
o-Xylene	ND	0.20	EPA 8260D	12-9-24	12-9-24	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	107	68-133				
Toluene-d8	100	79-123				
4-Bromofluorobenzene	93	78-117				

Laboratory Reference. 24

Project: 863-001

VOLATILE ORGANICS EPA 8260D QUALITY CONTROL

Matrix: Water Units: ug/L

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1209W1					
Benzene	ND	0.20	EPA 8260D	12-9-24	12-9-24	
Toluene	ND	1.0	EPA 8260D	12-9-24	12-9-24	
Ethylbenzene	ND	0.20	EPA 8260D	12-9-24	12-9-24	
m,p-Xylene	ND	0.40	EPA 8260D	12-9-24	12-9-24	
o-Xylene	ND	0.20	EPA 8260D	12-9-24	12-9-24	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	104	68-133				
Toluene-d8	100	79-123				
4-Bromofluorobenzene	92	78-117				

Analyte	Res	sult	Snike	Level	_	cent overv	Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS	1100	, uit	Орико	20101	1100	overy	Lilinto	IXI D		i lugo
Laboratory ID:	SB120	09W1								
	SB	SBD	SB	SBD	SB	SBD				
Benzene	8.42	8.42	10.0	10.0	84	84	76-124	0	15	
Toluene	8.59	8.41	10.0	10.0	86	84	75-120	2	15	
Ethylbenzene	10.5	10.4	10.0	10.0	105	104	80-121	1	15	
m,p-Xylene	21.2	20.8	20.0	20.0	106	104	80-122	2	15	
o-Xylene	10.3	10.2	10.0	10.0	103	102	80-121	1	15	
Surrogate:										
Dibromofluoromethane					100	104	68-133			
Toluene-d8					101	98	79-123			
4-Bromofluorobenzene					97	97	78-117			

Project: 863-001

DIESEL AND HEAVY OIL RANGE ORGANICS NWTPH-Dx

Matrix: Water Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-8-120524	·		•	•	
Laboratory ID:	12-085-01					
Diesel Range Organics	ND	0.25	NWTPH-Dx	12-12-24	12-12-24	
Lube Oil Range Organics	ND	0.25	NWTPH-Dx	12-12-24	12-12-24	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	117	50-150				
Client ID:	MW-8-120524					
Laboratory ID:	12-085-01					
Diesel Range Organics	ND	0.25	NWTPH-Dx	12-12-24	12-12-24	X2
Lube Oil Range Organics	ND	0.25	NWTPH-Dx	12-12-24	12-12-24	X2
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	113	50-150				
Client ID:	MW-9-120524					
	12-085-02					
Laboratory ID:	ND	0.04	NWTPH-Dx	40.40.04	40.40.04	
Diesel Range Organics	ND ND	0.24 0.24		12-12-24	12-12-24	
Lube Oil Range Organics	Percent Recovery	Control Limits	NWTPH-Dx	12-12-24	12-12-24	
Surrogate: o-Terphenyl	95	50-150				
0-Terprientyi	93	30-130				
Client ID:	MW-9-120524					
Laboratory ID:	12-085-02					
Diesel Range Organics	ND	0.24	NWTPH-Dx	12-12-24	12-12-24	X2
Lube Oil Range Organics	ND	0.24	NWTPH-Dx	12-12-24	12-12-24	X2
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	94	50-150				
Client ID:	MW-10-120524					
Laboratory ID:	12-085-03					
Diesel Range Organics	1.8	0.25	NWTPH-Dx	12-12-24	12-12-24	
Lube Oil Range Organics	2.0	0.25	NWTPH-DX	12-12-24	12-12-24	
Surrogate:	Percent Recovery	Control Limits	INVVII II-DA	14-14-4	14-14-4	
o-Terphenyl	113	50-150				
o . o.p.iony.		00 100				
Client ID:	MW-10-120524					
Laboratory ID:	MW-10-120524 12-085-03					
Laboratory ID: Diesel Range Organics	12-085-03 ND	0.25	NWTPH-Dx	12-12-24	12-12-24	X2
Laboratory ID:	12-085-03	0.25	NWTPH-Dx NWTPH-Dx	12-12-24 12-12-24	12-12-24 12-12-24	X2 X2
Laboratory ID: Diesel Range Organics	12-085-03 ND					

Project: 863-001

DIESEL AND HEAVY OIL RANGE ORGANICS NWTPH-Dx QUALITY CONTROL

Matrix: Water Units: mg/L (ppm)

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1212W1					
Diesel Range Organics	ND	0.16	NWTPH-Dx	12-12-24	12-12-24	
Lube Oil Range Organics	ND	0.16	NWTPH-Dx	12-12-24	12-12-24	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	106	50-150				
Laboratory ID:	MB1212W1					
Diesel Range Organics	ND	0.16	NWTPH-Dx	12-12-24	12-12-24	X2
Lube Oil Range Organics	ND	0.16	NWTPH-Dx	12-12-24	12-12-24	X2
Surrogate:	Percent Recovery	Control Limits	•		•	
a Tarahanul	102	EO 1EO				

o-Terphenyl 103 50-150

					Source	Percent	Recovery		RPD	
Analyte	Res	sult	Spike	Level	Result	Recovery	Limits	RPD	Limit	Flags
DUPLICATE										
Laboratory ID:	12-09	90-01								
	ORIG	DUP								
Diesel Range	ND	ND	NA	NA		NA	NA	NA	40	
Lube Oil Range	ND	ND	NA	NA		NA	NA	NA	40	
Surrogate:										
o-Terphenyl						94 95	50-150			
Laboratory ID:	12-09	90-01								
	ORIG	DUP								
Diesel Range	ND	ND	NA	NA		NA	NA	NA	40	X2
Lube Oil Range	ND	ND	NA	NA		NA	NA	NA	40	X2
Surrogate: o-Terphenyl						97 100	50-150			



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



Environmental Inc. Analytical Laboratory Testing Services 14648 NE 95th Street • Redmond, WA 98052

Chain of Custody

(100	0	
	(1)	-0
	2	h	
	-		

Revie	Received	Relin	Received	Relin	Received	Relina								W	1	1	Lab ID	Sampled by:	riojec.	Project Name	U S	Project	Company:
Reviewed/Date	ived	Relinquished	ived	Relinquished	ived	Relinquished							/	MW-10-	Mw-9.	Mw-8-		4	ill ge	FORMER	83-w/	FARALON	INV:
			0	The state of the s		Min	Signature							- 120524	- 120524	Mw-8-120524	Sample Identification	ACL	TICKEN	FORMER ENERGIPEEN FUEL FACTORY	0/	W	
77			4		*		Cor							6		12-5-11	Date Sampled	[Standard (7 Days)	2 Days	Same Day	_
Reviewed/Date		0	ALPHA	ALPHA	FARAHON	Company		2				•	147	123	125 H20	Time Sampled Matrix	(other)		ırd (7 Days)	3 Days	Day 🔲 1 Day	,	
			M							OBSTRUCTION OF THE PROPERTY OF		#N 41151	DOCUMENTS.	6	STATE STATE OF	7	Numb	er of C		ers	/S		
		4	12/6	12/6	12/6/24	12-6-24	Date							×	X	X	NWTP		BTEX (8	021 8	3260	l	_
			K	24	74	74								X	X	X				an-up	ĵ		_
			1428	1429	1233	0530	Time										Haloge	es 8260 enated	Volatile	s 8260 ers Only	\		_
Chr	Ch Da			-			Col										Semiv	olatiles	8270/S	IM			_
Data Package: Standard ☐ Leve			5)	KETH	Comments/Special Instructions											8270/SI					_	
			(,		s/Spec												ne Pesti	icides 8	081		_	
with fi	Standard			1	7 3	٠٠,	al inst										Organo	ophosp	horus F	Pesticide	es 8270)/SIM	
nal rep	ard 🗆			-	2	MATTHON	tructio										Chlorin	nated A	cid Her	bicides	8151		
ort	Level			-	7	200	ns										Total F	RCRA M	letals				
Elec	=					1											-0	ITCA N	letals				
tronic						3		-									TCLP I		areaca)	1664	.*)	*	_
Electronic Data Deliverables (EDDs)	Level IV					CLEAN UP											HEM (oil and (grease)	1664			_
es (ED)						B																	_
Ds)																	% Mois						