

February 1, 2021

Nicholas Acklam  
VCP/II-SHA/LUST Unit Supervisor  
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 – 2020  
FORMER EVERGREEN FUEL FACILITY  
661 EAST PINE STREET, SHELTON, WASHINGTON  
FARALLON PN: 863-001**

Dear Nicholas Acklam:

Farallon Consulting, L.L.C. (Farallon) has prepared this letter to present the results of the June and December 2020 confirmational groundwater monitoring and sampling events conducted at the former Evergreen Fuel Facility at 661 East Pine Street in Shelton, Washington (herein referred to as the Site) (Figure 1). The confirmational groundwater monitoring and sampling was conducted to evaluate whether constituents of concern (COCs), which include total petroleum hydrocarbons as gasoline-range organics (GRO), as diesel-range organics (DRO), and as oil-range organics (ORO); and/or 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. The confirmational groundwater sampling also was conducted to comply with the requirements set forth in the following:

- Draft Cleanup Action Plan, Evergreen Fuel Facility, 661 East Pine Street, Shelton, Washington dated July 18, 2006, prepared by Farallon (Draft Cleanup Action Plan);
- Agreed Order No. DE 3937 dated November 29, 2006, entered into by the Washington State Department of Ecology (Ecology) and Chevron U.S.A. Inc. and C.C. Cole and Sons, Inc. (AO);
- 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 the laboratory practical quantitation limits (PQLs).



This letter 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

A cleanup action was completed 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 the Draft Cleanup Action Plan, which was reviewed and approved by Ecology. Details regarding the cleanup 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 removal of 7,508 tons of soil containing COCs, which included GRO, DRO, ORO, and BTEX, at concentrations exceeding applicable regulatory cleanup levels. 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 Regenesys, 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 were initiated in April 2007 to document the effects of the source removal action and ongoing biodegradation of the residual COCs in groundwater. The Site currently is paved and used as a parking lot for the Shelton Yacht Club.

Confirmational groundwater monitoring and sampling conducted from 2007 to 2013 indicate that source removal and oxygen release compound treatment have resulted in a reduction of COCs, with overall decreasing to stable conditions throughout the Site. However, DRO was detected at concentrations exceeding the MTCA Method A cleanup level in six of eight groundwater samples collected from monitoring well MW-10 during the 2007 to 2013 time period.

Farallon submitted the letter regarding Request for No Further Action Determination, Evergreen Fuel Facility, 661 East Pine Street, Shelton, Washington, from Javan Ruark and Peter Jewett to Dominick Reale of Ecology, on March 10, 2014 (Request Letter). In 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 for the Site. The additional performance soil and confirmational groundwater monitoring and sampling required by Ecology included the following:

- Collecting additional soil samples at locations where residual COCs were left in-place to determine whether current concentrations are less than MTCA Method A cleanup levels for protection of groundwater. If concentrations of residual COCs still exceed MTCA Method A cleanup levels, the locations with the highest concentrations of DRO will be used to develop Site-specific Method B cleanup levels for direct contact and protection of groundwater.



- Performing semiannual confirmational groundwater monitoring and sampling at existing Site monitoring wells until MTCA Method A cleanup levels have been achieved and maintained for 1 year at all monitoring wells required to be sampled, as detailed in the AO. Once the groundwater analytical results indicate that COCs are less than MTCA Method A cleanup levels for 1 year, four consecutive quarters of confirmational groundwater monitoring and sampling will be conducted to demonstrate that MTCA Method A cleanup levels for groundwater have been achieved for the Site. Neither of these guidelines have been attained for DRO in monitoring well MW-10.

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

- Confirmational groundwater monitoring and sampling will be conducted in accordance with the AO and will include monitoring wells MW-8 through MW-10; and
- Monitoring wells MW-5 and MW-6, which were covered during regrading activities for the parking lot at the Site, are 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 required soil sampling work will not be required by Ecology as a component of the ongoing confirmational groundwater monitoring and sampling until groundwater quality meets MTCA Method A cleanup levels for all COCs at the Site, and confirmation of achieving the cleanup standards in the media of concern is necessary to support a closure request. The results from the confirmational groundwater sampling conducted in 2019 indicated that further confirmational groundwater monitoring and sampling was warranted at the Site to comply with the AO. The required confirmational groundwater monitoring and sampling is described in the sections that follow.

## **CONFIRMATIONAL GROUNDWATER MONITORING AND SAMPLING**

Confirmational groundwater monitoring and sampling events were conducted on June 30 and December 23, 2020 at monitoring wells MW-8 through MW-10 (Figure 2). The confirmational groundwater monitoring included measuring the depth to groundwater at all accessible monitoring wells and collecting groundwater samples for laboratory analysis from monitoring wells MW-8 through MW-10. 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 a water-level meter.

Monitoring wells MW-8 through MW-10 were purged and sampled using a peristaltic pump and dedicated polyethylene tubing at flow rates ranging from 150 to 200 milliliters per minute. The tubing intake was placed at 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 included temperature, pH, specific conductance, dissolved oxygen, turbidity, and oxidation-reduction



potential. Each monitoring well was purged until water-quality parameters temperature, pH, specific conductance, dissolved oxygen, and oxidation-reduction potential 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 DRO and ORO by Northwest Method NWTPH-Dx. Analysis for GRO and BTEX was not performed, based on the following:

- Previous analytical data demonstrated that concentrations of GRO and/or BTEX were less than MTCA Method A cleanup levels in samples collected from the Site for four consecutive quarters; and
- Ecology has not required further analysis for GRO or BTEX per the Ecology Comments Letter.

Purge water generated during the confirmational groundwater monitoring and sampling 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 events conducted on June 30 and December 23, 2020 are presented below. The groundwater-level measurements and elevations are summarized in Table 1. Groundwater elevation contours for the June 30 and December 23, 2020 confirmational groundwater monitoring events are shown on Figures 3 and 4, respectively. Groundwater analytical results are summarized in Table 2 and shown on Figure 5. Figures 6 and 7 depict the trends in concentrations of DRO and groundwater elevations at monitoring wells MW-9 and MW-10, respectively. The groundwater geochemical parameters are summarized in Table 3. The laboratory analytical reports are provided in Attachment A.

The June 30 and December 23, 2020 groundwater elevation data indicate a southeastern groundwater flow direction toward Oakland Bay (Figures 3 and 4). During the June 30, 2020 confirmational groundwater monitoring event, groundwater levels were measured during a low tide cycle, which had a minimum height of 0.74 feet above mean sea level at 9:58 a.m., according to National Ocean Service tidal prediction data accessed on January 7, 2021<sup>1</sup>. During the December 23, 2020 confirmational groundwater monitoring event, groundwater levels were measured during a low tide cycle, which had a minimum height of 4.33 feet above mean sea level at 7:11 a.m., according to the National Ocean Service tidal prediction data accessed on January 7, 2021<sup>2</sup>.

<sup>1</sup><https://tidesandcurrents.noaa.gov/noaatidepredictions.html?id=9446628&units=standard&bdate=20200630&edate=20200630&timezone=LST/LDT&clock=12hour&datum=MLLW&interval=hilo&action=data>

<sup>2</sup><https://tidesandcurrents.noaa.gov/noaatidepredictions.html?id=9446628&units=standard&bdate=20201223&edate=20201223&timezone=LST/LDT&clock=12hour&datum=MLLW&interval=hilo&action=data>



Groundwater analytical results for monitoring well MW-10 included the following:

DRO and ORO were detected at concentrations exceeding the MTCA Method A cleanup level during the June 30 and December 23, 2020 confirmational groundwater monitoring and sampling events (Table 2; Figure 5).

Groundwater analytical results for monitoring wells MW-8 and MW-9 included the following:

DRO and ORO were not detected at concentrations exceeding laboratory PQLs during the June 30 and December 23, 2020 confirmational groundwater monitoring and sampling events (Table 2; Figure 5).

## CONCLUSIONS

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

The highest detected concentrations of DRO during the 2020 confirmational groundwater monitoring and sampling events were observed at monitoring well MW-10 on June 30, 2020, which correlates with seasonal low groundwater elevation data (Figure 7). This represents a deviation from the trend at monitoring well MW-10, where concentrations of DRO historically have correlated with seasonal high groundwater elevation data beginning in May 2013 (Figure 7).

From April 2007 to December 2018, concentrations of ORO in groundwater at monitoring well MW-10 have not exceeded the laboratory PQL. During the June 30 and December 23, 2020 confirmational groundwater monitoring and sampling events, concentrations of ORO exceeded the MTCA Method A cleanup level (Table 2; Figure 5), which is consistent with trends in concentrations of ORO since June 2019 (Table 2; Figure 5).

Residual soil contamination proximate to monitoring well MW-10 that was left in-place following the cleanup activities may be desorbing from the soil matrix at times when groundwater is in direct contact with affected soil. The residual soil contamination likely is up- or cross-gradient of monitoring well MW-10. The prior remedial investigation work leading up to the cleanup action has indicated that DRO and ORO and associated compounds comprising the petroleum release(s) in the shallow groundwater do not pose a threat to human or marine receptors. The fluctuations in concentrations of DRO and ORO observed do not require further action to protect human health and the environment.

The results from the confirmational groundwater sampling conducted from 2007 to 2020 demonstrate that soil contamination left in-place is continuing to result in exceedances of MTCA Method A cleanup levels for DRO and ORO in groundwater at monitoring well MW-10, and that further confirmational groundwater monitoring and sampling is warranted at the Site to comply with the AO and evaluate whether further action is required to meet the cleanup action objectives.



## 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.**

Javan Ruark, L.G.  
Associate Geologist

Jeffrey Kaspar, L.G., L.H.G.  
Principal Geologist

Attachments: Figure 1, *Site Vicinity Map*  
Figure 2, *Site Plan*  
Figure 3, *Groundwater Elevation Contours and Flow Direction, June 30, 2020*  
Figure 4, *Groundwater Elevation Contours and Flow Direction, December 23, 2020*  
Figure 5, *Groundwater Analytical Data*  
Figure 6, *DRO Concentrations versus Groundwater Elevation Data Trends for Monitoring Well MW-9*  
Figure 7, *DRO Concentrations versus Groundwater Elevation Data Trends for Monitoring Well MW-10*  
Table 1, *Summary of Groundwater Elevation Data*  
Table 2, *Summary of Groundwater Analytical Results*  
Table 3, *Summary of Groundwater Geochemical Parameters*  
Attachment A, *Laboratory Analytical Reports*

cc: Stephanie Weir, Joyce Ziker Parkinson, PLLC  
Dave Mariano, Shelton Yacht Club  
Brandon Palmer, Port of Shelton  
Eric Hetrick, Chevron U.S.A. Inc  
Timothy Bishop, Chevron U.S.A. Inc  
Cheryl Cameron, Chevron U.S.A. Inc.  
Stefanie Haines, Resolute Management, Inc.

JR/JK:sw

## **FIGURES**

### **CONFIRMATIONAL GROUNDWATER MONITORING AND SAMPLING STATUS REPORT – 2020**

**Former Evergreen Fuel Facility  
661 East Pine Street  
Shelton, Washington**

**Farallon PN: 863-001**



REFERENCE: 7.5 MINUTE USGS QUADRANGLE SHELTON, WASHINGTON, DATED 2011



Quality Service for Environmental Solutions | [farallonconsulting.com](http://farallonconsulting.com)

Washington  
Issaquah | Bellingham | Seattle

Oregon  
Portland | Baker City

California  
Oakland | Folsom | Irvine

Drawn By: jones

Checked By: JR

Date: 1/9/2020

Disc Reference:

Document Path: \\edgfs02\GIS\Projects\663 Former Evergreen Fuel\Mapfiles\GW\_Monitoring\_1912\Figure-01\_SiteVicinity.mxd

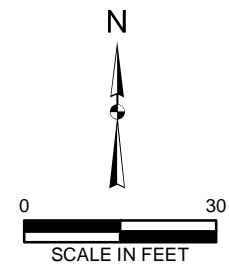
## FIGURE 1

SITE VICINITY MAP  
FORMER EVERGREEN FUEL FACILITY  
661 EAST PINE STREET  
SHELTON, WASHINGTON  
FARALLON PN: 863-001





- LEGEND**
- UTILITY POLE
  - ⊙ FIRE HYDRANT
  - ⊕ MONITORING WELL (FARALLON 2005 AND 2007)
  - ⊕ DECOMMISSIONED MONITORING WELL (FARALLON 2017)
  - ← Site\_line\_arrows



**FARALLON**  
CONSULTING

Quality Service for Environmental Solutions | farallonconsulting.com

Washington  
Issaquah | Bellingham | Seattle

Oregon  
Portland | Baker City

California  
Oakland | Folsom | Irvine

Drawn By: tperrin      Checked By: JR      Date: 1/13/2021

**FIGURE 2**






SITE PLAN  
FORMER EVERGREEN FUEL FACILITY  
661 EAST PINE STREET  
SHELTON, WASHINGTON




FARALLON PN: 863-001

Disc Reference:  
Document Path: Q:\Projects\863 Former Evergreen Fuel\Mapfiles\GW\_Monitoring\_202012\Figure-02\_SitePlan.mxd

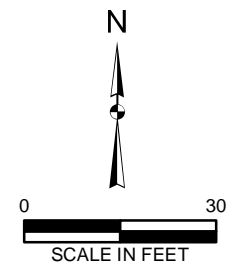


**LEGEND**

-  UTILITY POLE
-  FIRE HYDRANT
-  MONITORING WELL (FARALLON 2005 AND 2007)
-  DECOMMISSIONED MONITORING WELL (FARALLON 12/14/2017)
-  SITE BOUNDARY

-  12.00 GROUNDWATER ELEVATION CONTOUR (DASHED WHERE INFERRED)
-  GROUNDWATER FLOW DIRECTION
-  (13.16) GROUNDWATER ELEVATION (6/30/2020)

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





Washington  
Issaquah | Bellingham | Seattle

Oregon  
Portland | Baker City

California  
Oakland | Folsom | Irvine

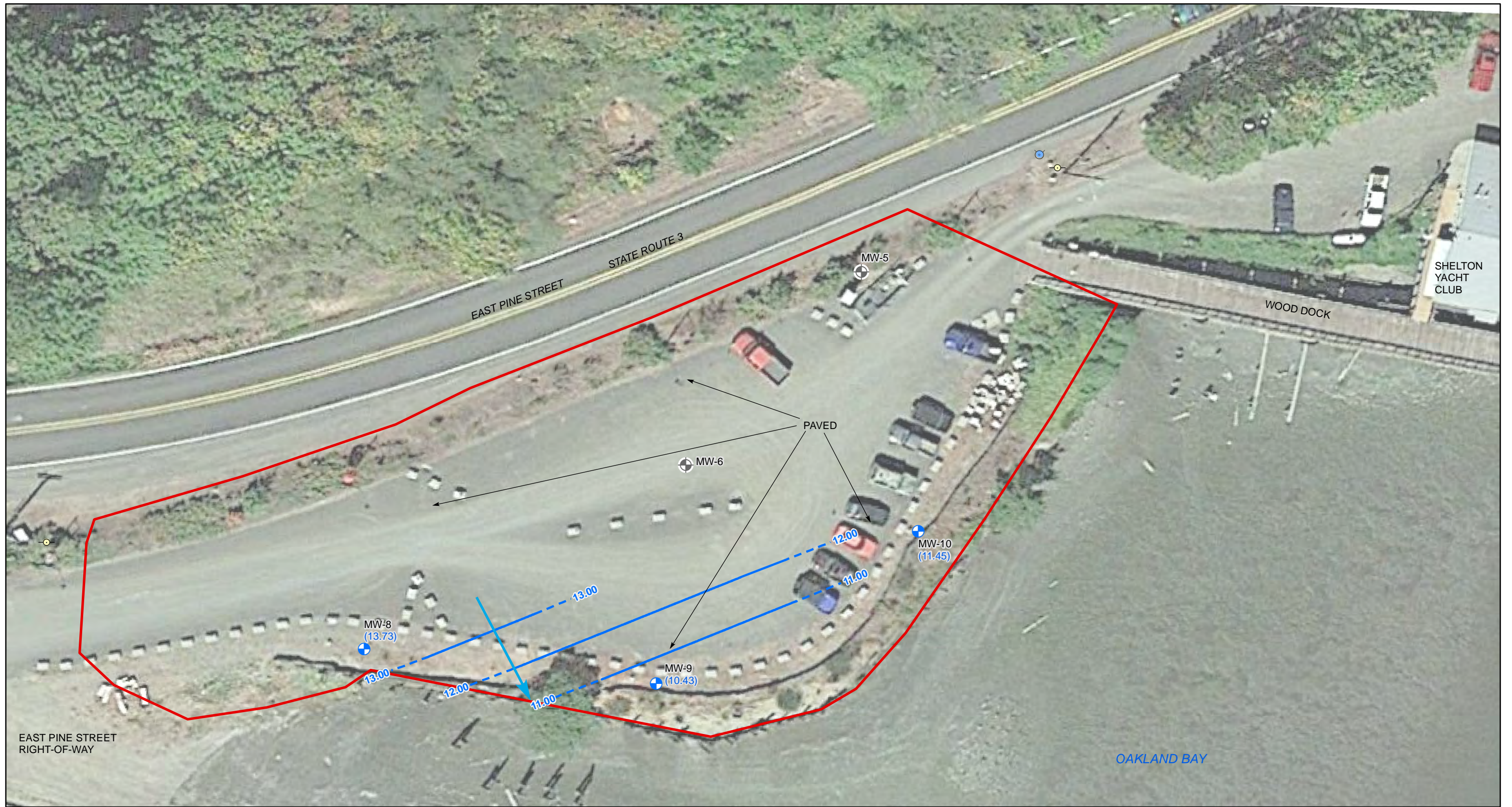
Quality Service for Environmental Solutions | farallonconsulting.com

**FIGURE 3**






GROUNDWATER ELEVATION CONTOURS  
AND FLOW DIRECTION  
JUNE 30, 2020




FORMER EVERGREEN FUEL FACILITY  
661 EAST PINE STREET  
SHELTON, WASHINGTON

FARALLON PN: 863-001

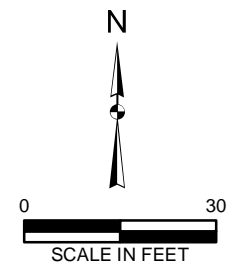


**LEGEND**

-  UTILITY POLE
-  FIRE HYDRANT
-  MONITORING WELL (FARALLON 2005 AND 2007)
-  DECOMMISSIONED MONITORING WELL (FARALLON 12/14/2017)
-  SITE BOUNDARY

-  12.00 --- GROUNDWATER ELEVATION CONTOUR (DASHED WHERE INFERRED)
-  GROUNDWATER FLOW DIRECTION
-  (13.73) GROUNDWATER ELEVATION (12/23/2020)

NOTES:  
 1. ALL LOCATIONS ARE APPROXIMATE.  
 2. FIGURES WERE PRODUCED IN COLOR.  
 GRAYSACLE COPIES MAY NOT REPRODUCE ALL ORIGINAL INFORMATION.





Washington  
Issaquah | Bellingham | Seattle

Oregon  
Portland | Baker City

California  
Oakland | Folsom | Irvine

Quality Service for Environmental Solutions | farallonconsulting.com

**FIGURE 4**

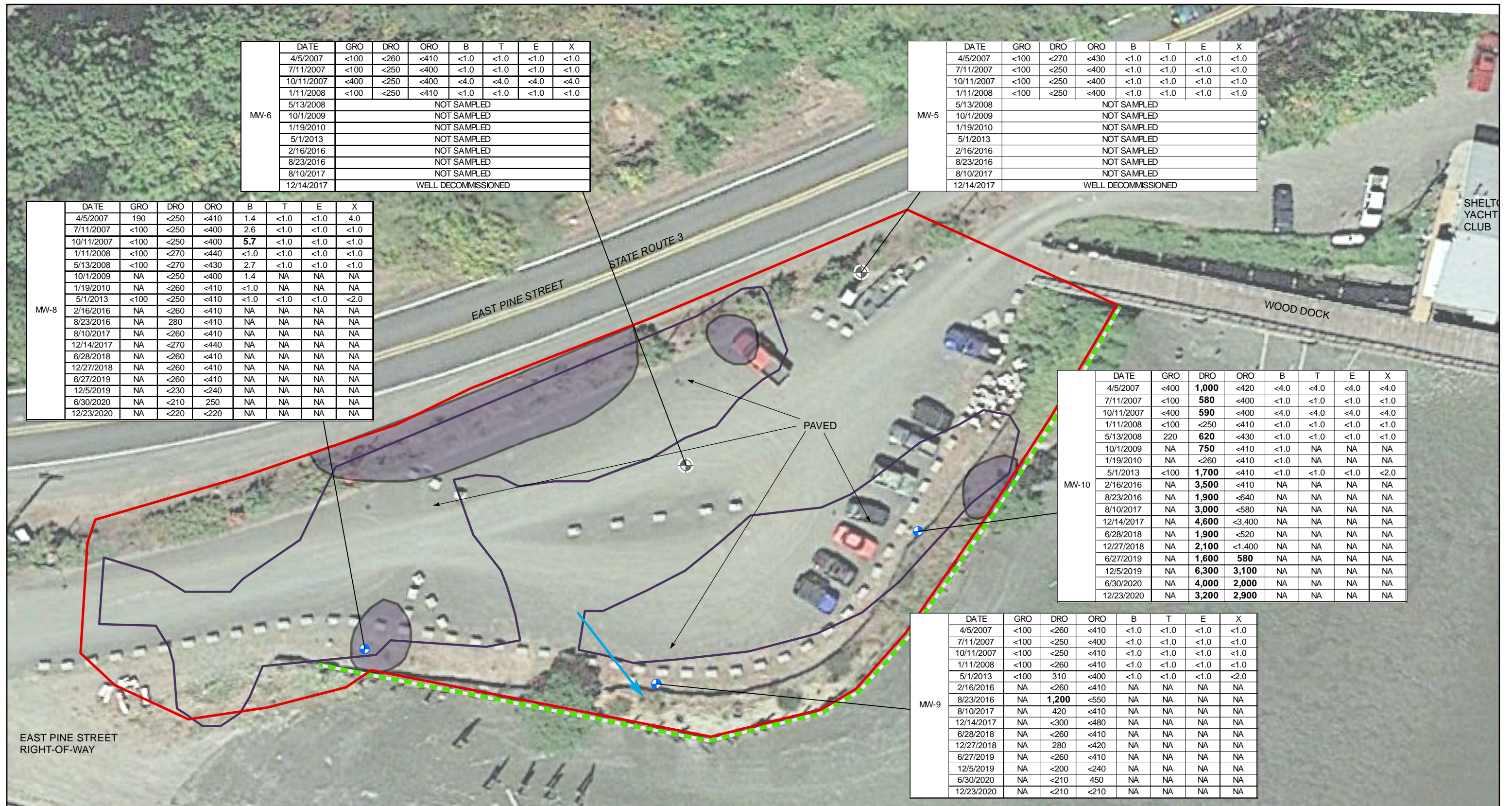
GROUNDWATER ELEVATION CONTOURS  
AND FLOW DIRECTION  
DECEMBER 23, 2020  
FORMER EVERGREEN FUEL FACILITY  
661 EAST PINE STREET  
SHELTON, WASHINGTON  
FARALLON PN: 863-001

Drawn By: tperrin

Checked By: JR

Date: 1/13/2021

Disc Reference: Q:\Projects\863 Former Evergreen Fuel\Mapfiles\GW\_Monitoring\_202012\Figure-04\_GW\_Contours\_202012.mxd



	DATE	GRO	DRO	ORO	B	T	E	X
MW-6	4/5/2007	<100	<260	<410	<1.0	<1.0	<1.0	<1.0
	7/11/2007	<100	<250	<400	<1.0	<1.0	<1.0	<1.0
	10/11/2007	<400	<250	<400	<4.0	<4.0	<4.0	<4.0
	1/11/2008	<100	<250	<410	<1.0	<1.0	<1.0	<1.0
	5/13/2008							
	10/1/2009							
	1/19/2010							
	5/1/2013							
	2/16/2016							
	8/23/2016							
	8/10/2017							
	12/14/2017							

	DATE	GRO	DRO	ORO	B	T	E	X
MW-5	4/5/2007	<100	<270	<430	<1.0	<1.0	<1.0	<1.0
	7/11/2007	<100	<250	<400	<1.0	<1.0	<1.0	<1.0
	10/11/2007	<100	<250	<400	<1.0	<1.0	<1.0	<1.0
	1/11/2008	<100	<250	<400	<1.0	<1.0	<1.0	<1.0
	5/13/2008							
	10/1/2009							
	1/19/2010							
	5/1/2013							
	2/16/2016							
	8/23/2016							
	8/10/2017							
	12/14/2017							

	DATE	GRO	DRO	ORO	B	T	E	X
MW-8	4/5/2007	190	<250	<410	1.4	<1.0	<1.0	4.0
	7/11/2007	<100	<250	<400	2.6	<1.0	<1.0	<1.0
	10/11/2007	<100	<250	<400	<b>5.7</b>	<1.0	<1.0	<1.0
	1/11/2008	<100	<270	<440	<1.0	<1.0	<1.0	<1.0
	5/13/2008	<100	<270	<430	2.7	<1.0	<1.0	<1.0
	10/1/2009	NA	<250	<400	1.4	NA	NA	NA
	1/19/2010	NA	<260	<410	<1.0	NA	NA	NA
	5/1/2013	<100	<250	<410	<1.0	<1.0	<1.0	<2.0
	2/16/2016	NA	<260	<410	NA	NA	NA	NA
	8/23/2016	NA	280	<410	NA	NA	NA	NA
	8/10/2017	NA	<260	<410	NA	NA	NA	NA
	12/14/2017	NA	<270	<440	NA	NA	NA	NA
	6/28/2018	NA	<260	<410	NA	NA	NA	NA
	12/27/2018	NA	<260	<410	NA	NA	NA	NA
	6/27/2019	NA	<260	<410	NA	NA	NA	NA
	12/5/2019	NA	<230	<240	NA	NA	NA	NA
6/30/2020	NA	<210	250	NA	NA	NA	NA	
12/23/2020	NA	<220	<220	NA	NA	NA	NA	

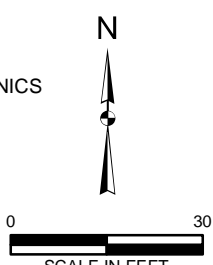
	DATE	GRO	DRO	ORO	B	T	E	X
MW-10	4/5/2007	<400	<b>1,000</b>	<420	<4.0	<4.0	<4.0	<4.0
	7/11/2007	<100	<b>580</b>	<400	<1.0	<1.0	<1.0	<1.0
	10/11/2007	<400	<b>590</b>	<400	<4.0	<4.0	<4.0	<4.0
	1/11/2008	<100	<250	<410	<1.0	<1.0	<1.0	<1.0
	5/13/2008	220	<b>620</b>	<430	<1.0	<1.0	<1.0	<1.0
	10/1/2009	NA	<b>750</b>	<410	<1.0	NA	NA	NA
	1/19/2010	NA	<260	<410	<1.0	NA	NA	NA
	5/1/2013	<100	<b>1,700</b>	<410	<1.0	<1.0	<1.0	<2.0
	2/16/2016	NA	<b>3,500</b>	<410	NA	NA	NA	NA
	8/23/2016	NA	<b>1,900</b>	<640	NA	NA	NA	NA
	8/10/2017	NA	<b>3,000</b>	<580	NA	NA	NA	NA
	12/14/2017	NA	<b>4,600</b>	<3,400	NA	NA	NA	NA
	6/28/2018	NA	<b>1,900</b>	<520	NA	NA	NA	NA
	12/27/2018	NA	<b>2,100</b>	<1,400	NA	NA	NA	NA
	6/27/2019	NA	<b>1,600</b>	<b>580</b>	NA	NA	NA	NA
	12/5/2019	NA	<b>6,300</b>	<b>3,100</b>	NA	NA	NA	NA
6/30/2020	NA	<b>4,000</b>	<b>2,000</b>	NA	NA	NA	NA	
12/23/2020	NA	<b>3,200</b>	<b>2,900</b>	NA	NA	NA	NA	

	DATE	GRO	DRO	ORO	B	T	E	X
MW-9	4/5/2007	<100	<260	<410	<1.0	<1.0	<1.0	<1.0
	7/11/2007	<100	<250	<400	<1.0	<1.0	<1.0	<1.0
	10/11/2007	<100	<250	<410	<1.0	<1.0	<1.0	<1.0
	1/11/2008	<100	<260	<410	<1.0	<1.0	<1.0	<1.0
	5/1/2013	<100	310	<400	<1.0	<1.0	<1.0	<2.0
	2/16/2016	NA	<260	<410	NA	NA	NA	NA
	8/23/2016	NA	<b>1,200</b>	<550	NA	NA	NA	NA
	8/10/2017	NA	420	<410	NA	NA	NA	NA
	12/14/2017	NA	<300	<480	NA	NA	NA	NA
	6/28/2018	NA	<260	<410	NA	NA	NA	NA
	12/27/2018	NA	280	<420	NA	NA	NA	NA
	6/27/2019	NA	<260	<410	NA	NA	NA	NA
12/5/2019	NA	<200	<240	NA	NA	NA	NA	
6/30/2020	NA	<210	450	NA	NA	NA	NA	
12/23/2020	NA	<210	<210	NA	NA	NA	NA	

**LEGEND**

- Monitoring Well (Farallon 2005 and 2017)
- Decommissioned Monitoring Well (Farallon 2017)
- Site\_line\_arrows
- Inferred Groundwater Flow Direction
- Approximate Site Boundary
- Bulkhead Retaining Wall
- Former Excavation Area
- Residual Soil Contamination Area

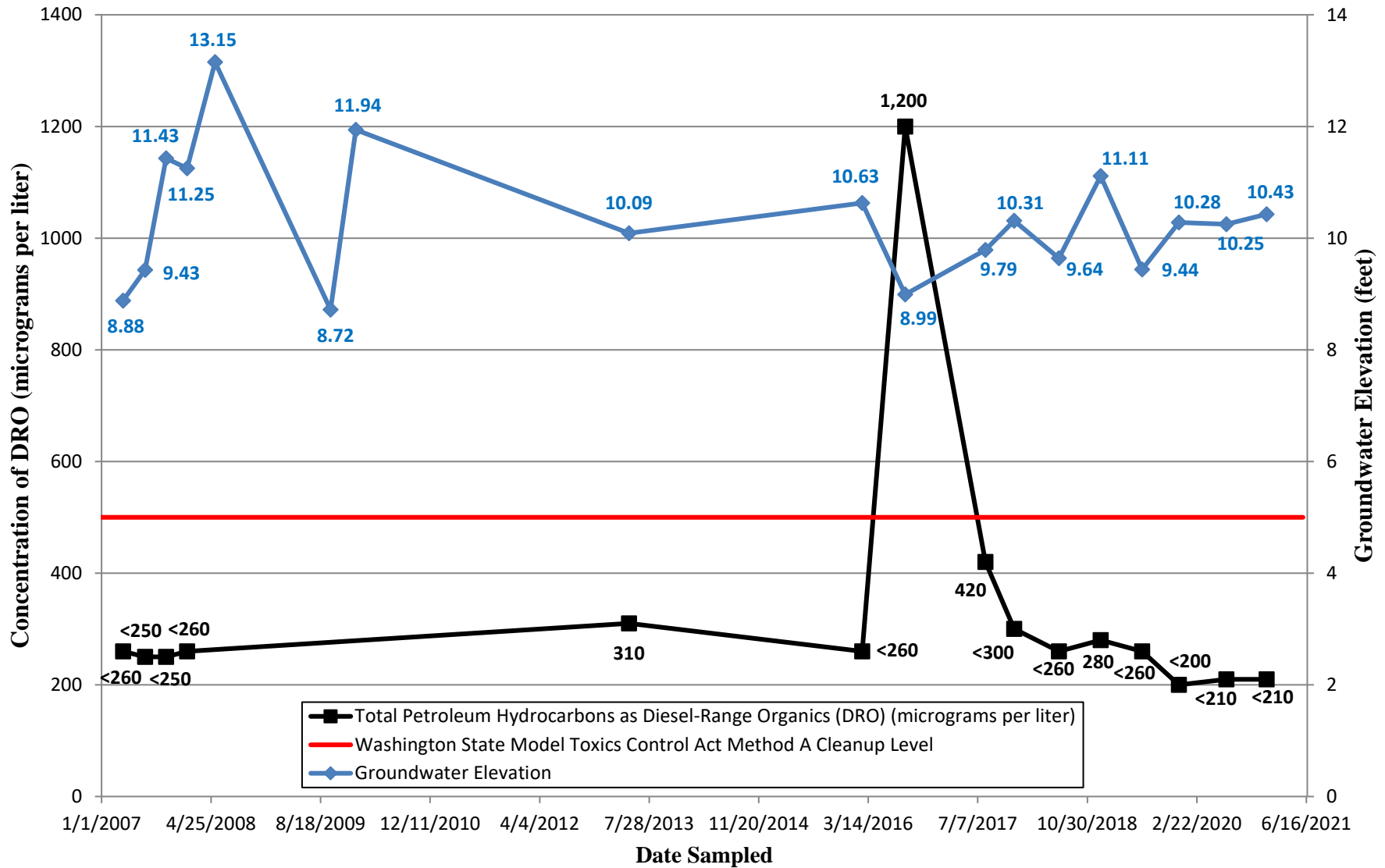
**NOTES:**  
 ANALYTICAL RESULTS ARE IN MICROGRAMS PER LITER (µg/l)  
 BTEX = BENZENE, TOLUENE, ETHYLBENZENE, AND XYLENES  
 DRO = TOTAL PETROLEUM HYDROCARBONS (TPH) AS DIESEL-RANGE ORGANICS  
 GRO = TPH AS GASOLINE-RANGE ORGANICS  
 ORO = TPH AS OIL-RANGE ORGANICS  
 NA = SAMPLE NOT ANALYZED FOR ANALYTE  
**BOLD** = CONCENTRATIONS THAT EXCEED THE WASHINGTON STATE MODEL TOXICS CONTROL ACT (MTCA) METHOD A CLEANUP LEVEL  
 < = DENOTES ANALYTE NOT DETECTED AT OR EXCEEDING THE REPORTING LIMIT LISTED



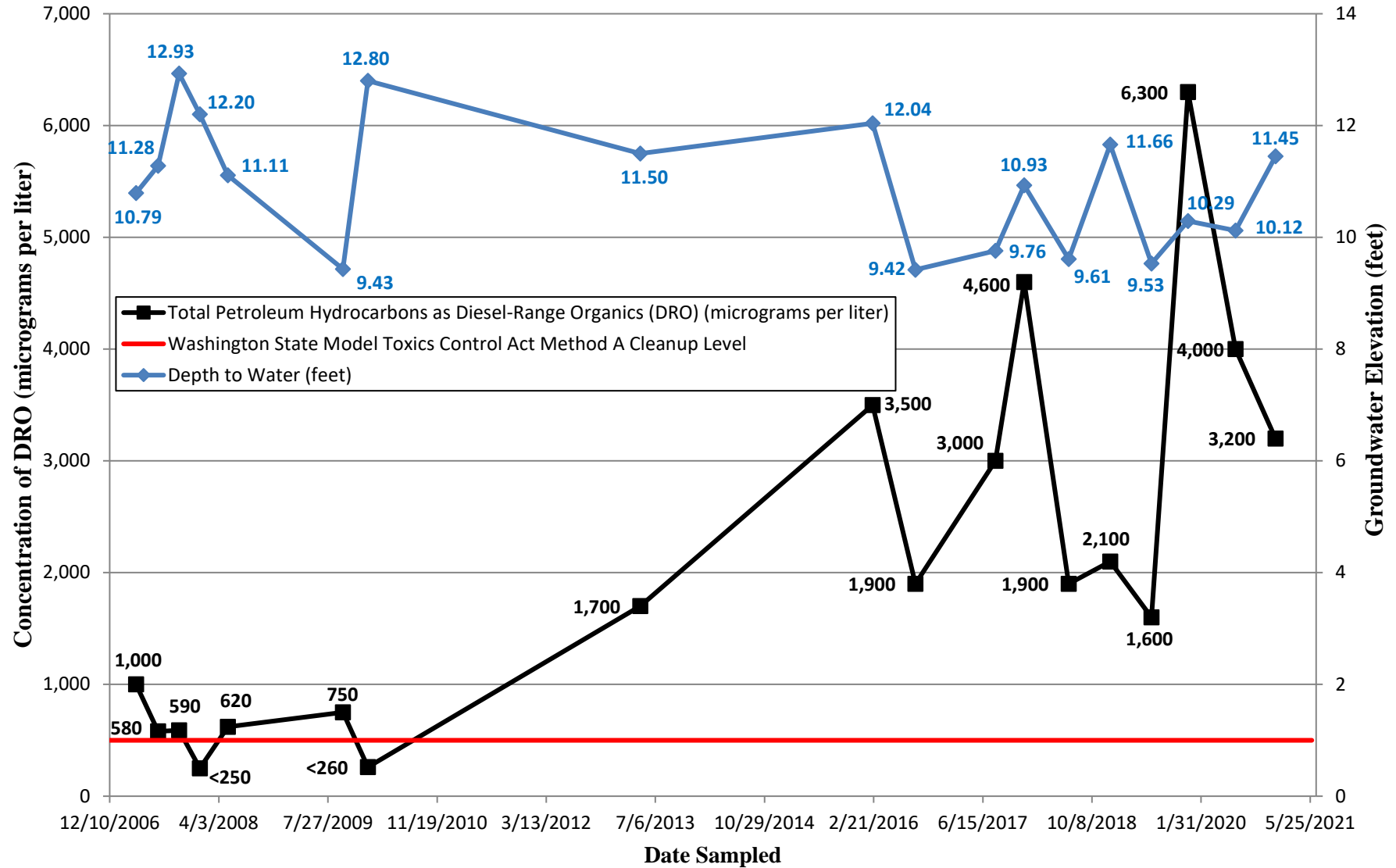
**FARALLON CONSULTING**  
 Quality Service for Environmental Solutions | farallonconsulting.com  
 Washington: Issaquah | Bellingham | Seattle  
 Oregon: Portland | Bend | Baker City  
 California: Oakland | Folsom | Irvine

**FIGURE 5**  
 GROUNDWATER ANALYTICAL DATA  
 FORMER EVERGREEN FUEL FACILITY  
 661 EAST PINE STREET  
 SHELTON, WASHINGTON  
 FARALLON PN: 863-001

**Figure 6**  
**DRO Concentrations versus Groundwater Elevation Data Trends for Monitoring Well MW-9**  
**Former Evergreen Fuel Facility**  
**Shelton, Washington**  
**Farallon PN: 863-001**



**Figure 7**  
**DRO Concentrations versus Groundwater Elevation Data Trends for Monitoring Well MW-10**  
**Former Evergreen Fuel Facility**  
**Shelton, Washington**  
**Farallon PN: 863-001**



## **TABLES**

### **CONFIRMATIONAL GROUNDWATER MONITORING AND SAMPLING STATUS REPORT – 2020**

**Former Evergreen Fuel Facility  
661 East Pine Street  
Shelton, Washington**

**Farallon PN: 863-001**

**Table 1**  
**Summary of Groundwater Elevation Data**  
**Former Evergreen Fuel Facility**  
**Shelton, Washington**  
**Farallon PN: 863-001**

Well Identification	Well Screened Interval (feet bgs) <sup>1</sup>	Top of Monument Elevation <sup>2</sup>	Top of Casing Elevation <sup>2</sup>	Date Measured	Depth to Water (feet) <sup>3</sup>	Groundwater Elevation <sup>2</sup>
MW-5	5-15	16.94	16.46	4/5/2007	8.13	8.33
				7/11/2007	7.4	9.06
				10/11/2007	6.57	9.89
				1/11/2008	7.19	9.27
				5/13/2008	NM	NA
				10/1/2009	NM	NA
				1/19/2010	NM	NA
				5/1/2013	NM	NA
				2/16/2016	NM	NA
				8/23/2016	NM	NA
				8/10/2017	7.81	8.65
Decommissioned 12/14/2017						
MW-6	3-12	14.93	14.47	4/5/2007	6.24	8.23
				7/11/2007	5.29	9.18
				10/11/2007	4.4	10.07
				1/11/2008	5.1	9.37
				5/13/2008	NM	NA
				10/1/2009	NM	NA
				1/19/2010	NM	NA
				5/1/2013	NM	NA
				2/16/2016	NM	NA
				8/23/2016	NM	NA
				8/10/2017	6.43	8.04
Decommissioned 12/14/2017						
MW-8	3-15	18.85	18.48	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
				12/14/2017	5.22	13.26
				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				



**Table 1**  
**Summary of Groundwater Elevation Data**  
**Former Evergreen Fuel Facility**  
**Shelton, Washington**  
**Farallon PN: 863-001**

Well Identification	Well Screened Interval (feet bgs) <sup>1</sup>	Top of Monument Elevation <sup>2</sup>	Top of Casing Elevation <sup>2</sup>	Date Measured	Depth to Water (feet) <sup>3</sup>	Groundwater Elevation <sup>2</sup>
MW-9	3-15	19.25	18.93	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
				8/10/2017	9.14	9.79
				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				
MW-10	2-17	20.26	19.93	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
				12/14/2017	9.00	10.93
				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				

**NOTES:**

<sup>1</sup>Screened interval in feet below ground surface (bgs).

<sup>2</sup>Elevations relative to vertical survey datum that is based on a mean lower low water (MLLW) elevation of 44.11 feet and referenced from a Washington State Department of Transportation brass cap set in monument with a published elevation of 47.58 feet NAV.

<sup>3</sup>Depth to water measured in feet below the top of the well casing.

NM = not measured

NA = not available

**Table 2**  
**Summary of Groundwater Analytical Results**  
**Former Evergreen Fuel Facility**  
**Shelton, Washington**  
**Farallon PN: 863-001**

Sample Identification	Sample Location	Sample Date	Analytical Results (micrograms per liter)							
			GRO <sup>1</sup>	DRO <sup>2</sup>	ORO <sup>2</sup>	Benzene <sup>3</sup>	Toluene <sup>3</sup>	Ethylbenzene <sup>3</sup>	Total Xylenes <sup>3</sup>	
MW5-040507	MW-5	4/5/2007	<100	<270	<430	<1.0	<1.0	<1.0	<1.0	
MW5-071107		7/11/2007	<100	<250	<400	<1.0	<1.0	<1.0	<1.0	
MW5-101107		10/11/2007	<100	<250	<400	<1.0	<1.0	<1.0	<1.0	
MW5-011108		1/11/2008	<100	<250	<400	<1.0	<1.0	<1.0	<1.0	
NS		5/13/2008	--	--	--	--	--	--	--	
NS		10/1/2009	--	--	--	--	--	--	--	
NS		1/19/2010	--	--	--	--	--	--	--	
NS		5/1/2013	--	--	--	--	--	--	--	
NS		2/16/2016	--	--	--	--	--	--	--	
NS		8/23/2016	--	--	--	--	--	--	--	
NS		8/10/2017	--	--	--	--	--	--	--	
NS		12/14/2017	Well Decommissioned 12/14/2017							
MW6-040507		MW-6	4/5/2007	<100	<260	<410	<1.0	<1.0	<1.0	<1.0
MW6-071107	7/11/2007		<100	<250	<400	<1.0	<1.0	<1.0	<1.0	
MW6-101107	10/11/2007		<400	<250	<400	<4.0	<4.0	<4.0	<4.0	
MW6-011108	1/11/2008		<100	<250	<410	<1.0	<1.0	<1.0	<1.0	
NS	5/13/2008		--	--	--	--	--	--	--	
NS	10/1/2009		--	--	--	--	--	--	--	
NS	1/19/2010		--	--	--	--	--	--	--	
NS	5/1/2013		--	--	--	--	--	--	--	
NS	2/16/2016		--	--	--	--	--	--	--	
NS	8/23/2016		--	--	--	--	--	--	--	
NS	8/10/2017		--	--	--	--	--	--	--	
NS	12/14/2017		Well Decommissioned 12/14/2017							
MW8-040507	MW-8		4/5/2007	190 <sup>1</sup>	<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		12/27/2018	--	<260	<410	--	--	--	--	
MW-8-062719		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	--	--	--	--	
MW9-040507		MW-9	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	6/30/2020		--	<210	450	--	--	--	--	
MW-9-122320	12/23/2020		--	<210	<210	--	--	--	--	
MTCA Method A Cleanup Levels <sup>5</sup>			800/1,000 <sup>6</sup>	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**

Sample Identification	Sample Location	Sample Date	Analytical Results (micrograms per liter)							
			GRO <sup>1</sup>	DRO <sup>2</sup>	ORO <sup>2</sup>	Benzene <sup>3</sup>	Toluene <sup>3</sup>	Ethylbenzene <sup>3</sup>	Total Xylenes <sup>3</sup>	
MW10-040507	MW-10	4/5/2007	<400	<b>1,000</b>	<420	<4.0	<4.0	<4.0	<4.0	
MW10-071107		7/11/2007	<100	<b>580</b>	<400	<1.0	<1.0	<1.0	<1.0	
MW10-101107		10/11/2007	<400	<b>590</b>	<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	<b>620</b>	<430	<1.0	<1.0	<1.0	<1.0	
MW10-100109		10/1/2009	--	<b>750</b>	<410	<1.0	--	--	--	
MW10-011910		1/19/2010	--	<260	<410	<1.0	--	--	--	
MW-10-050113		5/1/2013	<100	<b>1,700</b>	<410	<1.0	<1.0	<1.0	<2.0	
MW-10-021616		2/16/2016	--	<b>3,500</b>	<410	--	--	--	--	
MW-10-021616		8/23/2016	--	<b>1,900</b>	<640 U1	--	--	--	--	
MW-10-081017		8/10/2017	--	<b>3,000</b>	<580 U1	--	--	--	--	
MW-10-121417		12/14/2017	--	<b>4,600</b>	<3,400 U1	--	--	--	--	
MW-10-062818		6/28/2018	--	<b>1,900</b>	<520 U1	--	--	--	--	
MW-10-122718		12/27/2018	--	<b>2,100</b>	<1,400 U1	--	--	--	--	
MW-10-062719		6/27/2019	--	<b>1,600</b>	<b>580 N</b>	--	--	--	--	
MW-10-120519		12/5/2019	--	<b>6,300</b>	<b>3,100 N</b>	--	--	--	--	
MW-10-063020		6/30/2020	--	<b>4,000</b>	<b>2,000</b>	--	--	--	--	
MW-10-122320		12/23/2020	--	<b>3,200</b>	<b>2,900</b>	--	--	--	--	
<b>MTCA Method A Cleanup Levels<sup>5</sup></b>			<b>800/1,000<sup>6</sup></b>	<b>500</b>	<b>500</b>	<b>5</b>	<b>1,000</b>	<b>700</b>	<b>1,000</b>	

**NOTES:**

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

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

-- denotes sample not analyzed

<sup>1</sup>Analyzed by Northwest Method NWTPH-Gx.

<sup>2</sup>Analyzed by Northwest Method NWTPH-Dx.

<sup>3</sup>Analyzed by U.S. Environmental Protection Agency (EPA) Method 8260B.

<sup>4</sup>Laboratory analytical report indicates gasoline results are being influenced by the presence of diesel.

<sup>5</sup>Washington State Model Toxics Control Act Cleanup Regulation (MTCA) Method A Cleanup Levels for Groundwater, Table 720-1 of Section 900 of Chapter 173-340 of the Washington Administrative Code as revised November 2013.

<sup>6</sup>The cleanup level for GRO is without/with the presence of benzene.

DRO = total petroleum hydrocarbons as diesel-range organics

GRO = total petroleum hydrocarbons as gasoline-range organics

NS = not sampled

ORO = total petroleum hydrocarbons as oil-range organics

QA/QC = quality assurance/quality control

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

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

**Table 3**  
**Summary of Groundwater Geochemical Parameters**  
**Former Evergreen Fuel Facility**  
**Shelton, Washington**  
**Farallon PN: 863-001**

Well Identification	Sample Date	Geochemical Results				
		Temperature (°C)	Specific Conductance (mS/cm)	pH (pH units)	Dissolved Oxygen (mg/l)	Oxidation-Reduction Potential (mV)
MW-5	4/5/2007	12.4	0.131	6.12	0.65	471.1
	7/11/2007	19.65	0.147	4.77	1.03	413.2
	10/11/2007	14.96	0.143	6.74	0.91	-10.4
	1/11/2008	11.97	0.177	6.30	0.47	99.9
	5/13/2008	NS	NS	NS	NS	NS
	10/1/2009	NS	NS	NS	NS	NS
	1/19/2010	NS	NS	NS	NS	NS
	2/16/2016	NS	NS	NS	NS	NS
	8/23/2016	NS	NS	NS	NS	NS
	8/10/2017	NS	NS	NS	NS	NS
12/14/2017	Well Decommissioned 12/14/2017					
MW-6	4/5/2007	11.3	0.393	6.00	0.49	428.2
	7/11/2007	19.25	0.421	4.33	0.94	381.8
	10/11/2007	13.75	0.322	6.77	0.78	-82.8
	1/11/2008	9.6	0.32	6.70	0.74	-35.5
	5/13/2008	NS	NS	NS	NS	NS
	10/1/2009	NS	NS	NS	NS	NS
	1/19/2010	NS	NS	NS	NS	NS
	2/16/2016	NS	NS	NS	NS	NS
	8/23/2016	NS	NS	NS	NS	NS
	8/10/2017	NS	NS	NS	NS	NS
12/14/2017	Well Decommissioned 12/14/2017					
MW-8	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
	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	

**Table 3**  
**Summary of Groundwater Geochemical Parameters**  
**Former Evergreen Fuel Facility**  
**Shelton, Washington**  
**Farallon PN: 863-001**

Well Identification	Sample Date	Geochemical Results				
		Temperature (°C)	Specific Conductance (mS/cm)	pH (pH units)	Dissolved Oxygen (mg/l)	Oxidation-Reduction Potential (mV)
MW-9	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
	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	
MW-10	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
	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	

**NOTES:**

\* = instrument error

°C = degrees Celsius

mS/cm = millisemens per centimeter

mg/l = milligrams per liter

mV = millivolts

NS = not sampled

**ATTACHMENT A  
LABORATORY ANALYTICAL REPORTS**

CONFIRMATIONAL GROUNDWATER MONITORING AND SAMPLING  
STATUS REPORT – 2020  
Former Evergreen Fuel Facility  
661 East Pine Street  
Shelton, Washington

Farallon PN: 863-001



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

July 9, 2020

Javan Ruark  
Farallon Consulting, LLC  
975 5th Avenue NW  
Issaquah, WA 98027

Re: Analytical Data for Project 863-001  
Laboratory Reference No. 2007-010

Dear Javan:

Enclosed are the analytical results and associated quality control data for samples submitted on July 1, 2020.

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

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

Sincerely,

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

David Baumeister  
Project Manager

Enclosures



---

OnSite Environmental, Inc. 14648 NE 95<sup>th</sup> 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: July 9, 2020  
Samples Submitted: July 1, 2020  
Laboratory Reference: 2007-010  
Project: 863-001

### Case Narrative

Samples were collected on June 30, 2020 and received by the laboratory on July 1, 2020. They were maintained at the laboratory at a temperature of 2°C to 6°C.

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

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





Date of Report: July 9, 2020  
 Samples Submitted: July 1, 2020  
 Laboratory Reference: 2007-010  
 Project: 863-001

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

Matrix: Water  
 Units: mg/L (ppm)

<b>Analyte</b>	<b>Result</b>	<b>PQL</b>	<b>Method</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>	<b>Flags</b>
<b>Client ID:</b>	<b>MW-8-063020</b>					
Laboratory ID:	07-010-01					
Diesel Range Organics	<b>ND</b>	0.21	NWTPH-Dx	7-6-20	7-7-20	
Lube Oil Range Organics	<b>0.25</b>	0.21	NWTPH-Dx	7-6-20	7-7-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	96	50-150				
<b>Client ID:</b>	<b>MW-9-063020</b>					
Laboratory ID:	07-010-02					
Diesel Range Organics	<b>ND</b>	0.21	NWTPH-Dx	7-6-20	7-7-20	
Lube Oil Range Organics	<b>0.45</b>	0.21	NWTPH-Dx	7-6-20	7-7-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	91	50-150				
<b>Client ID:</b>	<b>MW-10-063020</b>					
Laboratory ID:	07-010-03					
Diesel Range Organics	<b>4.0</b>	0.21	NWTPH-Dx	7-6-20	7-7-20	
Lube Oil Range Organics	<b>2.0</b>	0.21	NWTPH-Dx	7-6-20	7-7-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	102	50-150				



Date of Report: July 9, 2020  
 Samples Submitted: July 1, 2020  
 Laboratory Reference: 2007-010  
 Project: 863-001

**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
<b>METHOD BLANK</b>						
Laboratory ID:	MB0706W1					
Diesel Range Organics	<b>ND</b>	0.20	NWTPH-Dx	7-6-20	7-6-20	
Lube Oil Range Organics	<b>ND</b>	0.20	NWTPH-Dx	7-6-20	7-6-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	88	50-150				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
<b>DUPLICATE</b>								
Laboratory ID:	07-002-01							
	ORIG	DUP						
Diesel Range Organics	<b>0.587</b>	<b>0.556</b>	NA	NA	NA	NA	5	NA
Lube Oil Range Organics	<b>0.885</b>	<b>0.852</b>	NA	NA	NA	NA	4	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				91	89	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.
  - 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.
  - Z -
- ND - Not Detected at PQL  
 PQL - Practical Quantitation Limit  
 RPD - Relative Percent Difference





# MVA Onsite Environmental Inc.

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

## Chain of Custody

Turnaround Request  
(in working days)

(Check One)

Same Day  1 Day

2 Days  3 Days

Standard (7 Days)

\_\_\_\_\_ (other)

Laboratory Number: **07-010**

Company: Farellon

Project Number: 863-001

Project Name: Former Evergreen Fuel Facility

Project Manager: Jovan Ruentz

Sampled by: Ryan Ostrow

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix
1	MW-8-063020	6/30/20	1217	W
2	MW-9-063020	↓	1304	↓
3	MW-10-063020	↓	1334	↓

Number of Containers

Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx ( <input type="checkbox"/> Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	% Moisture

Signature	Company	Date	Time	Comments/Special Instructions
<u>Ryan Ostrow</u>	<u>Farellon</u>	<u>6/30/20</u>	<u>1620</u>	
<u>Paul Bortko</u>	<u>Speedy</u>	<u>7-1-20</u>	<u>1050</u>	
<u>Paul Bortko</u>	<u>Speedy</u>	<u>7-1-20</u>	<u>1134</u>	
<u>Paul Bortko</u>	<u>Speedy</u>	<u>7/1/20</u>	<u>1134</u>	

Relinquished

Received

Relinquished

Received

Relinquished

Received

Reviewed/Date

Reviewed/Date

Data Package: Standard  Level III  Level IV

Chromatograms with final report  Electronic Data Deliverables (EDDs)



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

January 6, 2021

Javan Ruark  
Farallon Consulting, LLC  
975 5th Avenue NW  
Issaquah, WA 98027

Re: Analytical Data for Project 863-001  
Laboratory Reference No. 2012-243

Dear Javan:

Enclosed are the analytical results and associated quality control data for samples submitted on December 23, 2020.

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

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

Sincerely,

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

David Baumeister  
Project Manager

Enclosures



---

OnSite Environmental, Inc. 14648 NE 95<sup>th</sup> 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: January 6, 2021  
Samples Submitted: December 23, 2020  
Laboratory Reference: 2012-243  
Project: 863-001

### Case Narrative

Samples were collected on December 23, 2020 and received by the laboratory on December 23, 2020. They were maintained at the laboratory at a temperature of 2°C to 6°C.

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

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



Date of Report: January 6, 2021  
 Samples Submitted: December 23, 2020  
 Laboratory Reference: 2012-243  
 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
<b>Client ID:</b>	<b>MW-8-122320</b>					
Laboratory ID:	12-243-01					
Diesel Range Organics	<b>ND</b>	0.22	NWTPH-Dx	12-29-20	12-29-20	
Lube Oil Range Organics	<b>ND</b>	0.22	NWTPH-Dx	12-29-20	12-29-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	92	50-150				

<b>Client ID:</b>	<b>MW-9-122320</b>					
Laboratory ID:	12-243-02					
Diesel Range Organics	<b>ND</b>	0.21	NWTPH-Dx	12-29-20	12-29-20	
Lube Oil Range Organics	<b>ND</b>	0.21	NWTPH-Dx	12-29-20	12-29-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	92	50-150				

<b>Client ID:</b>	<b>MW-10-122320</b>					
Laboratory ID:	12-243-03					
Diesel Range Organics	<b>3.2</b>	0.21	NWTPH-Dx	12-29-20	12-29-20	
Lube Oil Range Organics	<b>2.9</b>	0.21	NWTPH-Dx	12-29-20	12-29-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	81	50-150				



Date of Report: January 6, 2021  
 Samples Submitted: December 23, 2020  
 Laboratory Reference: 2012-243  
 Project: 863-001

**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
<b>METHOD BLANK</b>						
Laboratory ID:	MB1229W1					
Diesel Range Organics	<b>ND</b>	0.20	NWTPH-Dx	12-29-20	12-29-20	
Lube Oil Range Organics	<b>ND</b>	0.20	NWTPH-Dx	12-29-20	12-29-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	89	50-150				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
<b>DUPLICATE</b>								
Laboratory ID:	SB1229W1							
	ORIG	DUP						
Diesel Fuel #2	<b>0.370</b>	<b>0.349</b>	NA	NA	NA	NA	6	NA
Lube Oil Range	<b>ND</b>	<b>ND</b>	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				99	94	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.
  - 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.
  - Z -
- ND - Not Detected at PQL  
 PQL - Practical Quantitation Limit  
 RPD - Relative Percent Difference





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

# Chain of Custody

Turnaround Request  
(in working days)

(Check One)

- Same Day
- 1 Day
- 2 Days
- 3 Days
- Standard (7 Days)

\_\_\_\_\_ (other)

Laboratory Number: **12-243**

Company: Excavation  
 Project Number: 803-001  
 Project Name: former Evergreen fuel  
 Project Manager: Jawan Rysse  
 Sampled by: Elise Budge

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers
1	MW-8-122320	12/23	1000	W	2
2	MW-9-122320		1045	W	2
3	MW-10-122320		1130	W	2
<del>_____</del>					

Lab ID	Sample Identification	Date	Time	Comments/Special Instructions
1	MW-8-122320	12/23	301550	* DPO + OPO
2	MW-9-122320	12-23-20	1530	
3	MW-10-122320	12/23/20	1800	

Signature	Company	Date	Time	Comments/Special Instructions
<u>[Signature]</u>	FLN	12/23	301550	* DPO + OPO
<u>[Signature]</u>	Speedy	12-23-20	1530	
<u>[Signature]</u>	Speedy	12-23-20	1800	
<u>[Signature]</u>	ORE	12/23/20	1800	

Data Package: Standard  Level III  Level IV   
 Chromatograms with final report  Electronic Data Deliverables (EDDs)