

March 8, 2024

AECOM No. 60701804

Thomas Praisewater
Cleanup Project Manager
Toxics Cleanup Program
PO Box 47775
Olympia, Washington 98504-7775

**Subject: Fourth Quarter and Annual 2023 Groundwater Monitoring Report
Chevron Bulk Plant USA 1348, Facility/Site ID 1234, Cleanup Site ID 3762
1656 E J St., Tacoma, Pierce County, WA 98421**

Dear Mr. Praisewater:

Please find enclosed, the Fourth Quarter and Annual 2023 Groundwater Monitoring Report (Report) which has been prepared by AECOM Technical Services, Inc (AECOM) on behalf of Chevron Environmental Management Company (CEMC). This report presents the field activities and analytical results of the 2023 four quarter groundwater monitoring event as well as an overall summary of 2023 groundwater data, at the Former Chevron Bulk Terminal in Tacoma, Washington.

Please reach out to Brad Wynne at 214-971-1829 or via email below, if you have any additional questions, comments, or concerns.

Sincerely,



Brad Wynne, PMP
Project Manager
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Brian Webb, RG, LG
Project Geologist
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cc via email: James Kiernan – CEMC
Marian Abbett – Ecology

Fourth Quarter and 2023 Annual Groundwater Monitoring Report

Former Chevron Bulk Terminal, Facility No. 1001348
Tacoma, Washington
Facility/Site ID 1234, Cleanup Site ID 3762

Chevron Environmental Management Company (CEMC)

March 8, 2024

Quality information

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Revision History

Revision	Revision date	Details	Authorized	Name	Position

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Prepared for:

Chevron Environmental Management Company

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1. Introduction

Groundwater monitoring is conducted at the Former Chevron Bulk Terminal (Property) number (No.) 1001348 located in Tacoma, Washington (**Figure 1**), in accordance with the Washington State Department of Ecology (Ecology) Agreed Order (AO) No. DE7111¹ (**Table 1**). This Report includes a description of groundwater monitoring activities completed in the fourth quarter of 2023, a summary of corresponding water quality and analytical data, and a year-end summary of the Site. The Site boundary (based on Ecology Administrative Code²) is variable and is defined by the estimated horizontal extent of soil and groundwater with petroleum constituent concentrations exceeding Model Toxics Control Act (MTCA) Method A Cleanup Levels (CULs).

The Property is located at 1656 E J Street, adjacent to Richlite (formerly Rainier Plywood) to the north, Steeler, Inc. to the west, the Northwest Detention Center to the east, and a Burlington Northern Santa Fe (BNSF) railroad switchyard to the south. The Property and surrounding properties are zoned for heavy industrial, warehousing, and storage purposes³. The Property is currently used for vehicle storage for the Northwest Detention Center.

2. Background and Environmental History

The Property operated as a fuel storage and distribution facility from 1905 through 1988 with 13 above-ground storage tanks (ASTs), four underground storage tanks (USTs), two tanker truck-loading racks, two office buildings, several garages, and three pipelines that transported hydrocarbon products to the Thea Foss/Wheeler-Osgood Waterway (**Figure 2A** and **2B**). Decommissioning and removal of historical Site infrastructure began in 1989, with all underground piping removed by April 27, 1989⁴.

Previous activities and investigations provided evidence of petroleum hydrocarbon releases at the Property, including:

- 1984: Visual evidence of hydrocarbon contamination was identified in soil during well installation and test pit digging activities⁴.
- 1989: The City of Tacoma identified petroleum product entering the municipal sewer system through a manhole adjacent to the Property⁵.
- 2010: Remedial investigation activities indicated remaining gasoline-, diesel-, and oil-range hydrocarbons in soil and groundwater in exceedance of MTCA Method A CULs⁶.

Thirty-nine (39) groundwater monitoring wells, 25 hand-augered borings, and 103 test pits were dug/drilled/installed on the Property between 1984 and 2010⁶. Groundwater monitoring wells were later installed on adjacent properties and nearby streets to determine the extent of dissolved-phase hydrocarbon plume migration⁷.

¹Ecology. 2009. Agreed Order No. DE 7111. State of Washington Department of Ecology.

² Washington Administrative Code (WAC) 173-340-200

³ PublicGIS. 2023. Pierce County PublicGIS. <https://matterhornwab.co.pierce.wa.us/publicgis/>. Visited on June 30.

⁴ SAIC. 2006. Current Use and Site Summary for Former Standard Oil Bulk Fuel Terminal #100-1348, Tacoma, Washington. Science Applications International Corporation. Bothell, Washington. October 27.

⁵ GeoEngineers. 1989. Report of Geotechnical Services Subsurface Contamination Study, Tacoma Bulk Fuel Terminal, Tacoma, Washington. March 22.

⁶ SAIC. 2010. Remedial Investigation Work Plan. Science Application International Corporation. Bothell, Washington. June 4.

⁷ Leidos. 2022. Third Quarter 2022 Groundwater Monitoring and Sampling Report, Former Chevron Bulk Terminal No. 1001348. November 8.

3. Geology and Hydrogeology

Site geology consists of well-sorted, fine-to-coarse sand with less than 10 percent (%) silt fill above 10 feet (ft) below ground surface (bgs) that overlies native material alternating between silt and well-sorted sand below 10 ft bgs.

Two groundwater-bearing zones (GWBU) have been identified beneath the Site:

- An upper GWBU herein referred to as the perched GWBU.
- A lower confined to semi-confined GWBU herein referred to as the sand aquifer.

The GWBUs are separated by a discontinuous, approximately 1 to 6 ft thick, semi-permeable to impermeable, organic-rich silt lens that likely represents the original ground surface (tidal flats) prior to infilling and commercial development.

Groundwater within the perched GWBU fluctuates seasonally from approximately 0.5 to 7 ft bgs and may become dry during prolonged periods of drought⁸. Groundwater elevation contours and flow direction determined during the fourth quarter of 2023 for the perched GWBU is shown in **Figure 2A**.

Groundwater within the sand aquifer ranges from approximately 7 to 10 ft bgs and is influenced by tidal fluctuations from the Puyallup River and Wheeler-Osgood Waterway, confirming a hydraulic connection⁸. Groundwater elevation contours and flow direction for the fourth quarter of 2023 for the sand aquifer is shown in **Figure 2B**.

During October 2023, a professional State of Washington licensed surveyor was contracted to survey the top-of-casings (TOC) and ground elevations for all groundwater wells within the monitoring network in order to accurately derive groundwater elevations from the well gauging data. Groundwater elevation contours presented in **Figures 2A** and **2B** were prepared using the updated survey information.

4. Fourth Quarter 2023 Gauging and Sampling

4.1 Groundwater and SPH Gauging

Forty-four (44) monitoring wells were gauged, and forty-two (42) monitoring wells were sampled during the fourth quarter of 2023, in accordance with the groundwater monitoring program outlined in **Table 1**. Monitoring wells MW-20 and D-13 were not sampled due to the presence of separate-phase hydrocarbons (SPH) at the time of sampling. Groundwater sampling field data sheets are included in **Appendix A**. Gauging data, including derived groundwater elevations for each quarterly sampling event through 2023 are presented in **Table 2**, and **Figures 2A** and **2B** presents the fourth quarter groundwater elevations. The fourth quarter data is further summarized below:

Perched GWBU:

- Well MW-20 had trace SPH thickness (one inch or less).
- Depth to groundwater during fourth quarter 2023 ranged from 1.99 ft below top of casing (BTOC) (MW-32) to 8.34 ft BTOC (MW-18) and ranged in elevation from 6.92 ft (MW-31) to 11.90 ft (MW-14) (NAVD88).
- During the fourth quarter of 2023, groundwater in the perched GWBU flowed north-northeast, with a small component flowing to the north (**Figure 2A**). Groundwater within this GWBU is thought to possibly follow now-buried paleochannels of the original tidal flats.

Sand Aquifer:

⁸ SAIC. 2010. Remedial Investigation Work Plan. Science Applications International Corporation. Bothell, Washington. June 4.

- Well D-13 had trace SPH thickness (one inch or less).
- Groundwater depths observed in the fourth quarter of 2023 ranged from 5.58 ft BTOC (D-17) to 11.01 ft BTOC (D-6) and ranged in elevation from 6.42 ft (D-22) to 7.84 ft (D-13) (NAVD 88).
- Groundwater in the sand aquifer was observed to primarily flow in the west-to-northwest direction, with an apparent groundwater divide in the northeast corner of the Property flowing to the northeast (**Figure 2B**). Groundwater gauging during the fourth quarter of 2023 was completed during a falling tide near/at low tide.

4.2 Groundwater Sampling and Analysis

Fourth quarter groundwater sampling was conducted from November 13th through November 17th, 2023, at forty-two monitoring wells, in accordance with the groundwater monitoring program (**Table 1**). Groundwater was not collected at MW-20 and D-13 due to presence of SPH. Monitoring wells were purged prior to sampling until water quality parameters (temperature, pH, specific conductance, turbidity, dissolved oxygen [DO], and oxidation-reduction potential [ORP]) stabilized. Water quality parameter data (final reading prior to sampling) are presented in **Table 3** and field data sheets are included in **Appendix A**.

Groundwater samples were collected in laboratory-supplied containers after water quality parameter stabilization, placed on ice, and shipped under standard chain-of-custody procedures to Eurofins Lancaster Laboratories Environmental Testing, LLC (ELLE), in Lancaster, Pennsylvania, for the following analyses:

- Gasoline-Range total petroleum hydrocarbons (TPH-g) via the Northwest Total Petroleum Hydrocarbon (NWTPH) Volatile Petroleum Products (NWTPH-Gx) Method.
- Diesel (TPH-d) and Motor Oil-Range (TPH-o) total petroleum hydrocarbons via the NWTPH Semi-Volatile Petroleum Products (NWTPH-Dx) Method.
- Benzene, toluene, ethylbenzene, and xylenes (collectively referred to as BTEX)/Methyl tert-Butyl Ether (MTBE) via the United States Environmental Protection Agency (EPA) Method 8260D.

Fourth quarter 2023 groundwater analytical results were compared to MTCA Method A CULs, in accordance with the *Remedial Investigation Quality Assurance Project Plan*⁹. **Figure 3A** and **3B** present 2023 groundwater analytical data for applicable analytes (primarily for exceedances of TPH) collected first through fourth quarters. **Figure 3A** and **3B** additionally present the contour depicting MTCA A CUL exceedances for the dissolved-phase TPH-g, TPH-d and/or TPH-o based on the fourth quarter results.

Analytical data for the first through fourth quarter 2023 are presented in **Table 2** and the laboratory analytical report for the fourth quarter is provided in **Appendix B**. Data validation was completed for the fourth quarter 2023 groundwater samples and is summarized in the data quality review provided in **Appendix C**. As mentioned above, groundwater gradients were not evaluated before the fourth quarter due to a lack of accurate well survey information.

Concentration trend graphs along with groundwater elevations for select wells (important delineation and/or leading edge/perimeter wells) are presented in **Appendix D**. Graphs for SPH thicknesses over time compared to groundwater elevations for MW-10 and D-13 are also presented in **Appendix D**.

Significant differences in results between samples analyzed with and without silica gel cleanup for TPH-d and TPH-o were again reported for the fourth quarter and likely indicate natural attenuation (intrinsic biodegradation) is occurring in groundwater at the Site as per the Ecology guidance on silica-gel cleanup and/or it may indicate the presence of natural organic (non-petroleum) matter.

Further analysis of the overall 2023 results compared to data from 2005 to 2022 for select wells (i.e. delineation and/or leading edge/perimeter wells) is presented in **Table A** and **Table B** below. Both tables include a summary of maximum concentrations reported for each well during 2023, along with the most recent previous maximum concentration from 2005 through 2022.

⁹ SAIC. 2010. Remedial Investigation Quality Assurance Project Plan. Science Applications International Corporation, Bothell, Washington. May 25.

Table A – Summary of Maximum Concentrations for 2023 vs Prior Maximum Concentrations - Perched GWBU

Well ID	Sample Year	BTEX (µg/L)	MTBE (µg/L)	TPH-g (µg/L)	TPH-d (w/out Silica Gel) (µg/L)	TPH-o (w/out Silica Gel) (µg/L)
MTCA Method A CUL		**	20	800*	500	500
MW-10	2023	ND	ND	ND	1,500 (Q1 & Q2)	540 (Q2)
	Pre-2023	ND	ND	12,000 (2014)	1,100 (2022)	1,300 (2021)
MW-14	2023	ND	ND	43 UJ (Q1)	510 (Q3)	130 J (Q3)
	Pre-2023	ND	ND	ND	1,200 (2021)	670 (2021)
MW-23	2023	ND	ND	ND	ND	ND
	Pre-2023	ND	ND	ND	64 (2020)	ND
MW-24	2023	ND	ND	ND	1,000 (Q1)	230 J (Q3)
	Pre-2023	ND	ND	29 (2022)	64 (2024)	ND
MW-25	2023	ND	ND	1,700 (Q3)	340 (Q3)	ND
	Pre-2023	ND	ND	1,400 (2022)	320 (2022)	930 (2021)
MW-26	2023	ND	ND	ND	1,500 (Q3)	470 (Q2 & Q3)
	Pre-2023	ND	ND	1,400 (2022)	1,200 (2022)	520 (2022)
MW-29	2023	ND	ND	1,100 (Q1)	7,000 (Q3)	930 (Q1)
	Pre-2023	ND	ND	1,000 (2022)	6,900 (2022)	710 (2022)
MW-31	2023	ND	ND	ND	100 UJ (Q3 & Q4)	ND
	Pre-2023	ND	ND	24 (2020)	510 (2020)	480 (2022)
MW-38	2023	ND	ND	ND	ND	ND
	Pre-2023	ND	ND	ND	57 (2022)	650 (2022)
MW-39	2023	ND	ND	180 J (Q3)	5,200 (Q3)	760 (Q3)
	Pre-2023	ND	ND	200 (2022)	10,000 (2022)	2,400 (2022)
Notes: * = Two TPH-g CULs exist, the conservative value is presented in table ** = CUL varies by analyte Bold = Exceedance of MCTA Method A CUL ND = non-detect Q = Quarterly Sampling Event ug/L = micrograms per liter U = analyte is qualified as not detected, based on the data validation review J = estimated concentration above the Method Detection Limit (MDL) UJ = analyte was not detected above MDL, but the MDL is estimated						

Based on **Table A** (perched GWBU) and previous data (**Appendix E**):

- BTEX and MTBE have not been detected in these wells from 2005 through 2023.
- TPH-g concentrations have previously exceeded MTCA Method A CUL at five wells (MW-10, MW-14, MW-25, MW-26, MW-29) for the selected TPH perimeter wells in **Table A**. Of those five wells, two wells (MW-25 and MW-29) continued to exceed the CUL for TPH-g in 2023.
- TPH-d concentrations have previously exceeded MTCA Method A CUL at five wells (MW-10, MW-14, MW-26, MW-29, MW-39) for the selected TPH perimeter wells in **Table A**. All five wells also exceeded cleanup levels for TPH-d in 2023. The reported concentration for MW-39 may indicate a decreasing trend for 2023 compared to previous maximum concentrations (although notable fluctuations have occurred) while the other four wells indicate stable trends.

- TPH-o concentrations have previously exceeded MTCA Method A CUL at seven wells (MW-10, MW-14, MW-25, MW-26, MW-29, MW-38, and MW-39) for the selected TPH perimeter wells in **Table A**. Of those seven wells, MW-10 and MW-29 exceeded cleanup levels for TPH-d in 2023. The reported concentration for MW-10 of TPH-g indicates a decreasing trend for 2023 compared to the previous maximum concentration while MW-29 indicates a slight increasing trend.
- Based on the latest results, some additional delineation for the perched GWBU is still required.

Table B – Summary of Maximum Concentrations for 2023 vs Prior Maximum Concentrations - Sand Aquifer

Well ID	Sample Year	BTEX (µg/L)	MTBE (µg/L)	TPH-g (µg/L)	TPH-d (µg/L)	TPH-o (µg/L)
MTCA Method A CUL		**	20	800*	500	500
D-03A	2023	ND	ND	49 J (Q4)	3,000 (Q1)	730 (Q1)
	Pre- 2023	ND	ND	170 (2022)	3,400 (2022)	910 (2022)
D-08	2023	ND	ND	50 J (Q4)	1,700 (Q1)	360 (Q4)
	Pre- 2023	ND	ND	86 (2022)	2,300 (2022)	530 (2022)
D-10	2023	ND	ND	93 J (Q4)	2,200 (Q3)	190 J (Q4)
	Pre- 2023	ND	ND	130 (2020)	2,700 (2020)	640 (2020)
D-12	2023	ND	ND	ND	270 (Q4)	190 J (Q4)
	Pre- 2023	ND	ND	ND	540 (2020)	540 (2020)
D-15	2023	ND	ND	67 (Q3)	2,000 (Q1)	800 (Q2)
	Pre- 2023	ND	ND	57 (2022)	1,400 (2022)	640 (2021)
D-17	2023	ND	ND	ND	180 J (Q4)	110 UJ (Q2)
	Pre- 2023	ND	ND	21 (2021)	330 (2022)	560 (2020)
D-19	2023	ND	ND	ND	610 (Q2)	140 J (Q4)
	Pre- 2023	ND	ND	ND	530 (2020)	450 (2020)
D-22	2023	ND	ND	72 J (Q3 & Q4)	500 (Q4)	ND
	Pre- 2023	ND	ND	44 (2022)	700 (2022)	ND
D-24	2023	ND	ND	ND	250 (Q4)	ND
	Pre- 2023	ND	ND	20 (2021)	73 (2021)	ND
D-25	2023	ND	ND	ND	1,200 (Q2 & Q4)	420 (Q4)
	Pre- 2023	ND	ND	21 (2021)	2,200 (2022)	690 (2022)
D-26	2023	ND	ND	ND	170 J (Q4)	120 J (Q2)
	Pre- 2023	ND	ND	21 (2022)	630 (2022)	590 (2021)

Notes:

* = Two TPH-g CULs exist, the conservative value is presented in table

** = CUL varies by analyte

Bold = Exceedance of MCTA Method A CUL

ND = Non-detect

Q = Quarterly Sampling Event

ug/L = micrograms per liter

U = analyte is qualified as not detected, based on the data validation review

J = estimated concentration above the Method Detection Limit (MDL)

UJ = analyte was not detected above MDL, but the MDL is estimated

Based on the **Table B** (sand aquifer) and the previous data table (**Appendix E**):

- BTEX and MTBE have not been detected in these wells from 2005 through 2023.
- TPH-g has not been detected and/or reported above the CUL in these wells from 2005 through 2023.
- TPH-d concentrations have previously exceeded MTCA Method A CUL at nine wells (D-03A, D-08, D-10, D-12, D-15, D-19, D-22, D-25, D-26) for the selected TPH perimeter wells on **Table B**. Of those wells, six wells (D-03A, D-08, D-10, D-15, D-19, D-25) again exceeded cleanup levels for TPH-d in 2023. D-12 and D-26 indicate a stable to slightly decreasing concentration of TPH-d and consistently below MTCA Method A CUL in 2023. D-10 indicated a recent increasing trend for TPH-d to above the CUL, after remaining below the CUL since late 2020 (however was previously reported at 2,700 ug/L in second quarter 2020). The remaining five wells, D-08 and D-15, D-19, D-22, and D-25 indicate relatively stable concentrations of TPH-d but continue to remain above the MTCA Method A CUL.
- TPH-o concentrations have previously exceeded MTCA Method A CUL at eight wells (D-03A, D-08, D-10, D-12, D-15, D-17, D-25, D-26) for the selected TPH perimeter wells on **Table B**. Of those eight wells, two wells (D-03A and D-15) were also reported above the cleanup levels for TPH-d in 2023. The remaining wells indicate stable to decreasing concentrations for TPH-o to below the CUL. Monitoring wells D-22 and D-24 have continued to be reported as non-detect through 2023.
- Based on the latest results, some additional delineation for the sand aquifer is still required.

5. 2023 Waste Disposal Summary

Groundwater accumulated from purging during sampling and well re-development was placed in sealed drums on-site and sampled for disposal characterization during 2023. Following proper waste profiling, five drums were labeled as non-hazardous. The drums were picked up on November 13, 2023, by Clean Harbors and transported to Grantsville, Utah for disposal. Copies of the waste manifests are provided in **Appendix F**.

6. Conclusions and Recommendations

Conclusions from the first through fourth quarter 2023 groundwater monitoring events include:

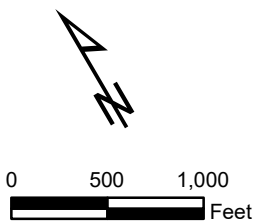
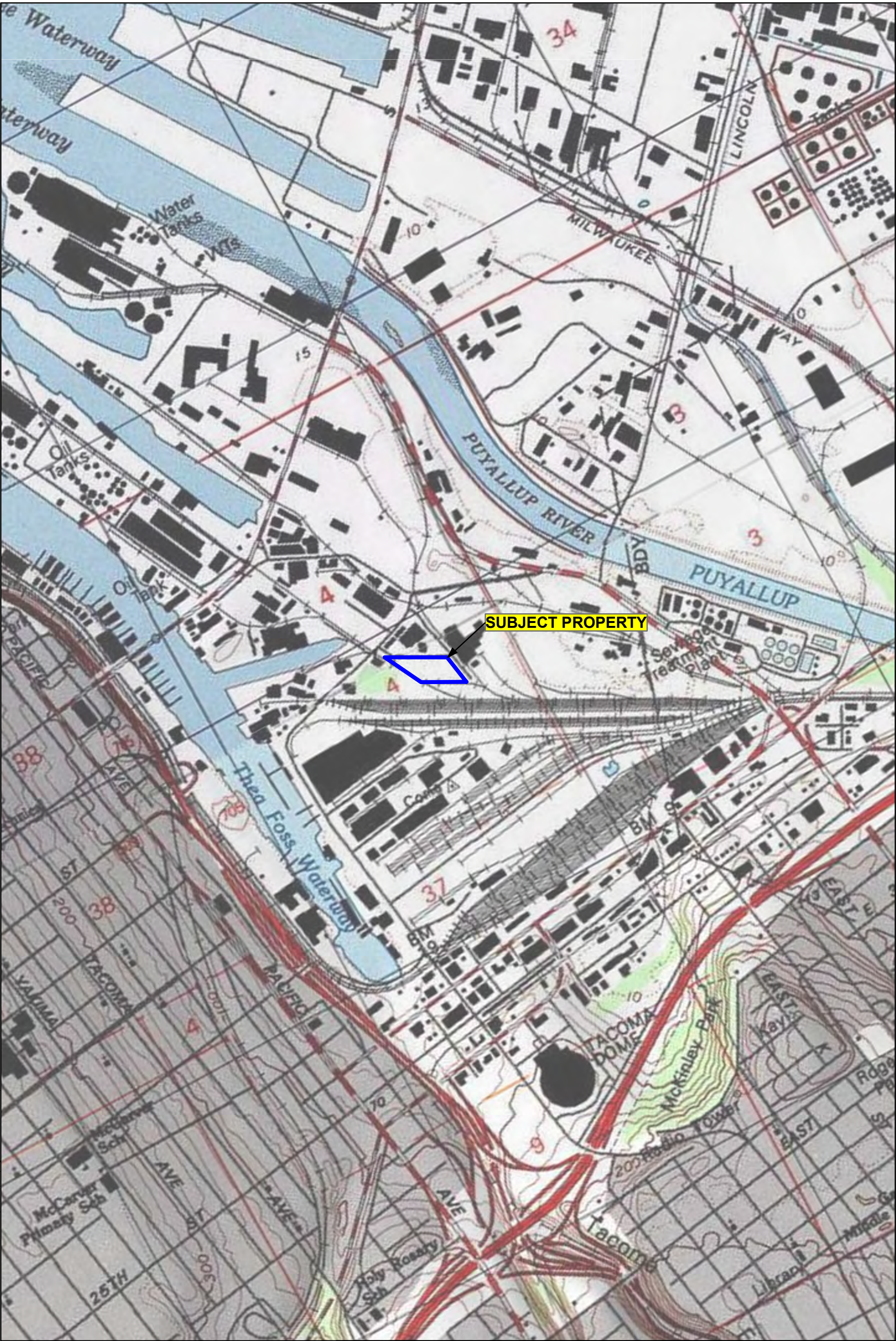
- SPH presence and thickness in perched GWBU and sand aquifer wells is consistent with previously recorded data, however, MW-20 SPH thicknesses indicates an overall decreasing trend since 2016 (**Appendix D**).
- Analytical results for perched GWBU and sand aquifer wells are consistent with previously recorded data.
- Low reported concentrations of TPH via the silica-gel cleanup method compared to non-silica gel cleanup results may indicate that natural attenuation (intrinsic biodegradation) is occurring in Site groundwater, as indicated with the Ecology silica-gel cleanup guidance and/or it may indicate the presence of natural organic (non-petroleum) matter.
- Additional delineation in groundwater for both the perched and sand aquifer is required.

The following recommendations are proposed based on results from the 2023 groundwater monitoring events:

- Continue quarterly groundwater monitoring per the current groundwater monitoring schedule (**Table 1**). Results will be presented in quarterly groundwater monitoring reports.
- Proceed with advancing the additional groundwater monitoring wells and soil borings as proposed in the 2020 RI Work Plan¹⁰. Keeping in mind that an amendment to the placement of additional wells and borings will likely be recommended. Additional work will be scheduled following submission of the Updated Draft Remedial Investigation (RI) and Revised Work Plan (anticipated third quarter 2024).
- Once data gaps are addressed and comments/approval for the Updated Draft RI received, a Final RI Report will be submitted, options for a remedial path forward will be evaluated, and a Feasibility Study (FS) developed to identify remedial action alternatives and develop future cleanup actions for the Site (and/or a combined RI/FS will be submitted).
- Conduct SPH transmissivity testing to assess product recovery rates, if needed.
- Further assess the need for additional tidal influence data following the installation of additional monitoring wells.

¹⁰ Leidos. 2020. Remedial Investigation Work Plan Addendum. Leidos Engineering, LLC. San Ramon, California. January 30.

Figures



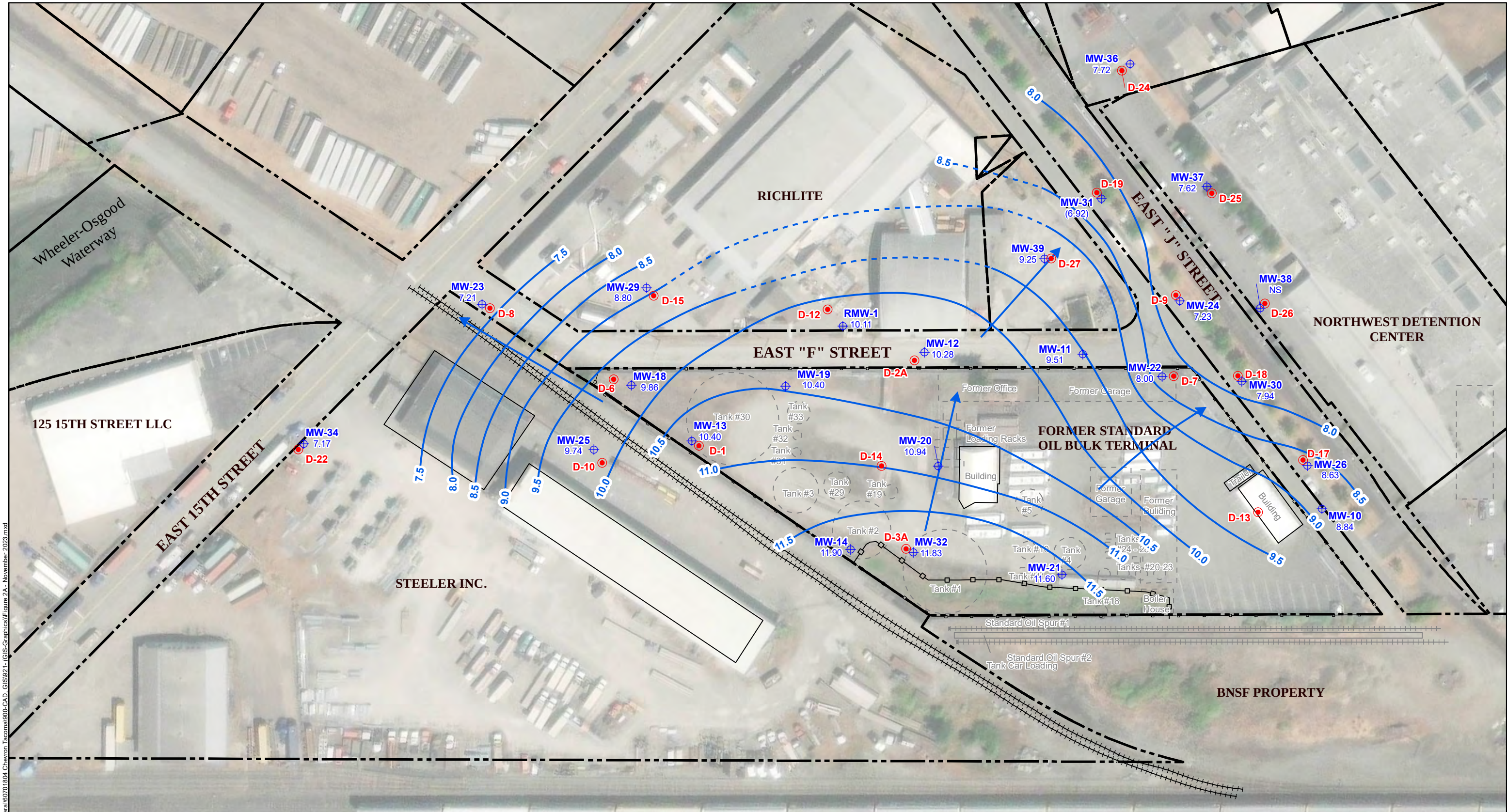
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Former Chevron Bulk Terminal
Facility No. 1001348
1656 East J Street
Tacoma, Washington

Figure 1
Site Location Map

Date: February 2024

Project No.: 60701804



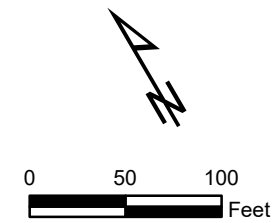
C:\Users\lazar\AECOM\Chevron - Legacy PNW - General\60701804 Chevron Tacoma\60701804-CAD_GIS\921-L (GIS-Graphics)\Figure 2A- November 2023.mxd

LEGEND

- Former Above-Ground Storage Tanks, Buildings, and Structures
- Current Buildings and Structures
- Parcel Boundary

- D-12** Deep Aquifer Monitoring Well
- MW-25** Shallow Aquifer Monitoring Well
- 9.74 Groundwater Elevation in feet NAVD88 (Perched Groundwater-bearing Unit)
- (6.92) Groundwater Elevation in feet NAVD88 Excluded from Contour Lines
- NS Not Surveyed

- Groundwater Elevation Contour in feet NAVD88 (Dashed where inferred)
- Approximate Groundwater Flow Direction
- Feet NAVD88 North American Vertical Datum 88 feet

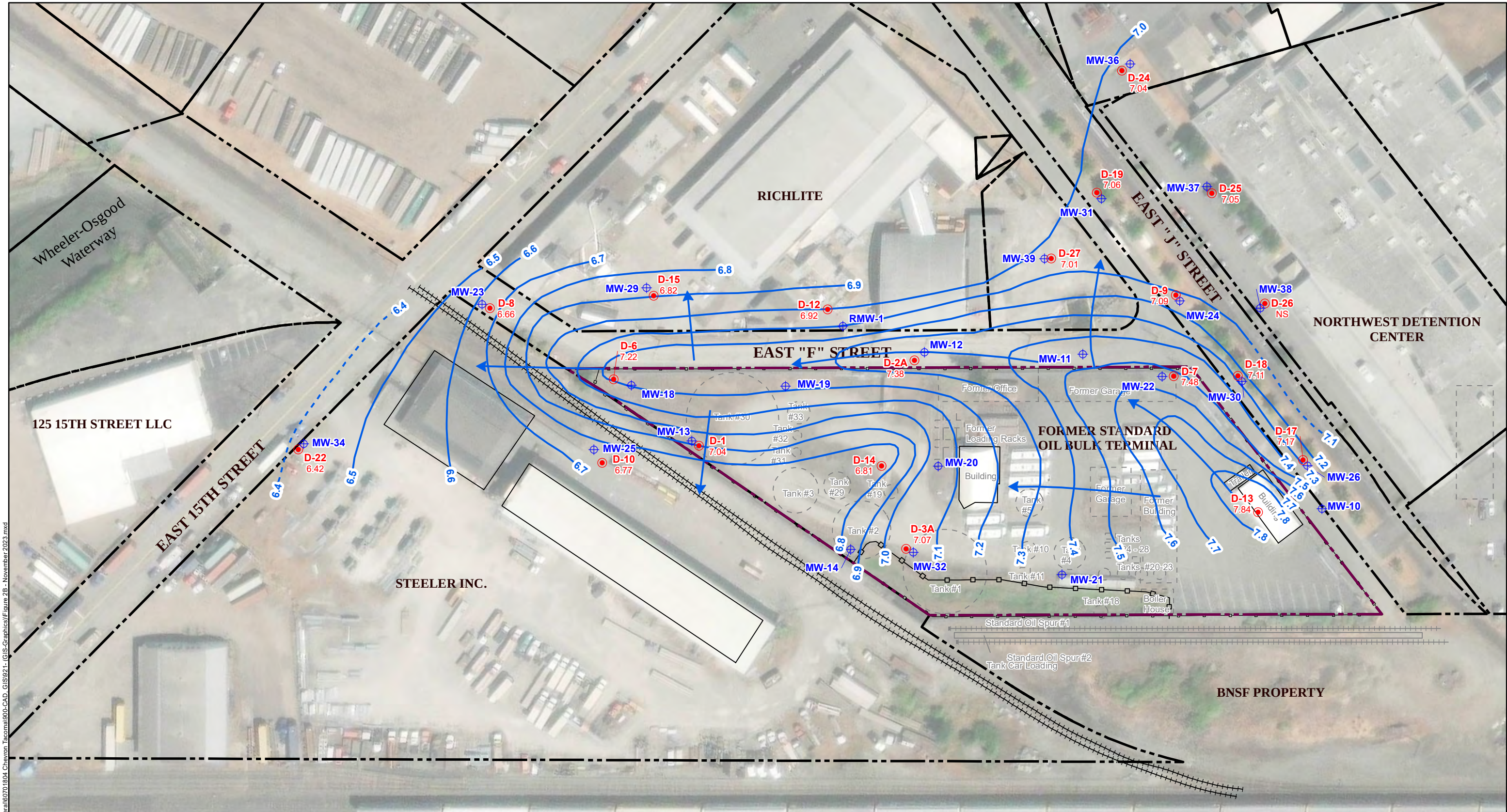


Former Chevron Bulk Terminal
Facility No. 1001348
1656 East J Street
Tacoma, Washington

Figure 2A
Groundwater Elevation Contours -
Perched Groundwater Bearing Unit -
Fourth Quarter, November 13, 2023

Date: February 2024

Project No.: 60701804

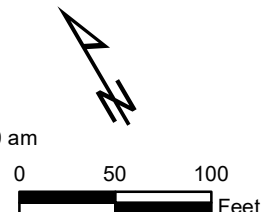


C:\Users\lazar\AECOM\Chevron - Legacy PNW - General\60701804 Chevron Tacoma\600-CAD_GIS\921-L (GIS-Graphics)\Figure 2B - November 2023.mxd

LEGEND

- Former Above-Ground Storage Tanks, Buildings, and Structures
- Current Buildings and Structures
- Parcel Boundary
- Property Boundary
- D-12 Deep Aquifer Monitoring Well
- MW-25 Shallow Aquifer Monitoring Well
- 6.92 Groundwater Elevation in feet NAVD88 (Sand Aquifer)
- NS Not Surveyed

- Groundwater Elevation Contour in feet NAVD88 (Dashed where inferred)
- Approximate Groundwater Flow Direction
- Feet NAVD88 North American Vertical Datum 88 feet
- Notes:**
Gauging completed on November 13, 2023 between 8:30 am and 11:00 am
High tide registered at 5:21 am
Low tide registered at 10:41 am
(usharbors.com)



Former Chevron Bulk Terminal
Facility No. 1001348
1656 East J Street
Tacoma, Washington

Figure 2B
Groundwater Elevation Contours -
Sand Aquifer -
Fourth Quarter, November 13, 2023
(Low Tide Event)

Date: February 2024 Project No.: 60701804

Tables

Table 1
Groundwater Monitoring Program
Former Chevron Bulk Terminal, Facility No. 1001348
Tacoma, Washington



Well ID	Work Area	TOC Elevation (feet, NAVD88)	Well Screen Interval (feet, bgs)	Measured Depth to Bottom ^a (feet, BTOC)	Depth to SPH/ Groundwater	Analytical Constituents Method			
						TPH-g NWTPH-Gx	TPH-d NWTPH-Dx	TPH-o NWTPH-Dx	BTEX/MTBE EPA 8260D
Perched Groundwater-bearing Unit Wells									
MW-10	Tacoma City Streets	13.31	2.50 - 8.07	7.60 ^b	X	X	X	X	X
MW-11	Chevron Tacoma Site	14.99	2.50 - 7.22	6.95 ^b	X	X	X	X	X
MW-12	Tacoma City Streets	15.05	2.50 - 8.28	7.98 ^b	X	X	X	X	X
MW-13	Chevron Tacoma Site	16.83	6.00 - 11.00	11.15 ^b	X	X	X	X	X
MW-14	Chevron Tacoma Site	17.61	3.50 - 8.80	12.22 ^b	X	X	X	X	X
MW-18	Chevron Tacoma Site	18.20	3.00 - 9.00	10.48 ^b	X	X	X	X	X
MW-19	Tacoma City Streets	15.46	3.00 - 9.00	9.58	X	X	X	X	X
MW-20	Chevron Tacoma Site	15.01	3.00 - 9.00	9.00 ^c	X	X	X	X	X
MW-21	Chevron Tacoma Site	14.60	3.00 - 9.00	9.22 ^b	X	X	X	X	X
MW-22	Chevron Tacoma Site	14.67	3.00 - 8.00	7.75	X	X	X	X	X
MW-23	Tacoma City Streets	13.50	4.00 - 9.00	8.90	X	X	X	X	X
MW-24	Tacoma City Streets	13.15	4.00 - 9.00	10.08 ^b	X	X	X	X	X
MW-25	Steeler Inc. Property	14.08	5.00 - 10.00	10.22	X	X	X	X	X
MW-26	Tacoma City Streets	12.70	4.00 - 9.00	9.25 ^b	X	X	X	X	X
MW-29	Richlite	14.78	4.00 - 9.00	9.24	X	X	X	X	X
MW-30	Tacoma City Streets	13.07	4.00 - 9.00	9.00	X	X	X	X	X
MW-31	Tacoma City Streets	13.09	4.00 - 9.00	9.18 ^b	X	X	X	X	X
MW-32	Chevron Tacoma Site	13.82	TBD	9.13	X	X	X	X	X
MW-34	Steeler Inc. Property	TBD	TBD	12.70	X	X	X	X	X
MW-36	Detention Center Property	13.52	TBD	9.51	X	X	X	X	X
MW-37	Detention Center Property	14.54	TBD	9.90	X	X	X	X	X
MW-38	Detention Center Property	TBD	TBD	9.86	X	X	X	X	X
MW-39	Richlite	15.00	5.00 - 10.00	9.93	X	X	X	X	X
RMW-1	Richlite	14.97	TBD	9.85	X	X	X	X	X
Sand Aquifer Wells									
D-1	Chevron Tacoma Site	17.26	15.00 - 20.00	21.35 ^b	X	X	X	X	X
D-2A	Tacoma City Streets	15.16	15.00 - 20.00	19.53 ^b	X	X	X	X	X
D-3A	Chevron Tacoma Site	14.12	15.00 - 20.00	20.25	X	X	X	X	X
D-6	Chevron Tacoma Site	18.23	15.00 - 20.00	22.50 ^b	X	X	X	X	X
D-7	Chevron Tacoma Site	14.82	15.00 - 20.00	20.00	X	X	X	X	X
D-8	Tacoma City Streets	13.73	17.00 - 22.00	21.77	X	X	X	X	X
D-9	Tacoma City Streets	12.90	15.00 - 20.00	19.98	X	X	X	X	X
D-10	Steeler Inc. Property	14.03	14.00 - 24.00	24.50	X	X	X	X	X
D-12	Richlite	14.85	24.00 - 29.00	28.28	X	X	X	X	X
D-13	Chevron Tacoma Site	13.84	TBD	19.89	X	X	X	X	X
D-14	Chevron Tacoma Site	14.82	29.00 - 32.00	31.56 ^b	X	X	X	X	X
D-15	Richlite	14.80	16.00 - 21.00	20.82	X	X	X	X	X
D-17	Tacoma City Streets	12.75	14.00 - 19.00	18.86	X	X	X	X	X
D-18	Tacoma City Streets	13.29	14.00 - 19.00	18.87	X	X	X	X	X
D-19	Tacoma City Streets	13.22	17.00 - 22.00	21.99	X	X	X	X	X
D-22	Steeler Inc. Property	15.39	15.00 - 20.00	20.19	X	X	X	X	X
D-24	Detention Center Property	13.53	15.00 - 20.00	19.71 ^b	X	X	X	X	X
D-25	Detention Center Property	14.65	TBD	19.90	X	X	X	X	X
D-26	Detention Center Property	TBD	TBD	19.89	X	X	X	X	X
D-27	Richlite	14.99	TBD	19.85	X	X	X	X	X

Notes:

Sampling will be completed on a quarterly basis unless otherwise noted. Monitoring wells with detectable SPH at the time of gauging will not be sampled.

-- = Not measured/ not sampled.

^a Depth to bottom measured during the first quarter 2023 sampling event, unless noted otherwise.

^b Depth to bottom measured after well re-development in August 2023.

^c Depth to bottom reported from historical boring/well construction logs.

X = Collect measurement / collect sample.

bgs = below ground surface

BTEX = benzene, toluene, ethylbenzene, and xylenes

BTOT = below top of casing

EPA = United States Environmental Protection Agency

ID = identification

MTBE = Methyl tert-Butyl Ether

NAVD 88 = North American Vertical Datum of 1988, feet

NWTPH-DX = Northwest - Semi-Volatile Petroleum Products Method

NWTPH-GX = Northwest - Volatile Petroleum Products Method

TBD = To be determined - Well screen intervals, depth to bottom, and TOC elevations will be measured at a later date.

TOC = top of casing

TPH-d = diesel-range total petroleum hydrocarbons

TPH-g = gasoline-range total petroleum hydrocarbons

TPH-o = oil-range total petroleum hydrocarbons

Table 2
Fourth Quarter and Cumulative 2023 Gauging and Groundwater Analytical Data
Former Chevron Bulk Terminal, Facility No. 1001348
Tacoma, Washington



Well ID	Sample ID	Sample Date	TOC Elevation** (ft, NAVD88)	Depth to SPH (ft btoc)	SPH Thickness (ft)	Depth to Water (ft btoc)	Groundwater Elevation (ft, NAVD88)	Volatile Organic Compounds (VOCs)					Total Petroleum Hydrocarbons (TPH)				
								Benzene	Toluene	Ethylbenzene	Xylenes (Total)	MTBE	TPH-g	TPH-d	TPH-d (w/ SGT)	TPH-o	TPH-o (w/ SGT)
MTCA Method A Cleanup Levels ^a (µg/L)								5	1000	700	1000	20	800 ^b	500		500	
Perched Groundwater-bearing Unit Wells																	
MW-10	MW-10-W-230313	03/13/2023	13.46	ND	0.00	4.19	9.27	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20	< 43	1,500	NA	410	NA
	MW-10-W-230522	05/22/2023		ND	0.00	4.64	8.82	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20 UJ	< 43	1,500	NA	540	NA
	N/A	N/A		ND	0.00	6.15	7.31	Insufficient water to sample									
	MW-10-W-231113	11/13/2023	13.31	ND	0.00	4.47	8.84	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	< 43	280	< 46 UJ	240	< 100 UJ
MW-11	MW-11-W-230313	03/13/2023	15.10	ND	0.00	5.13	9.97	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20	43 UJ	1,800 J	NA	360	NA
	MW-11-W-230522	05/22/2023		ND	0.00	5.47	9.63	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20 UJ	< 43	NA	NA	NA	NA
	N/A	N/A		ND	0.00	6.83	8.27	Insufficient water to sample									
	MW-11-W-231114	11/14/2023	14.99	ND	0.00	5.48	9.51	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	< 43	430	< 46 UJ	280	< 100 UJ
MW-12	MW-12-W-230314	03/14/2023	NS	ND	0.00	4.52	NS	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20	61 J	3,200	NA	2,000 J	NA
	DUP-2-WD-230314			< 0.30	< 0.30	< 0.40	< 1.4	< 0.20	53 J	3,900	NA	1,400 J	NA				
	MW-12-W-230523	05/23/2023		ND	0.00	5.09	NS	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20 UJ	110 J	5,300	NA	1,400	NA
	MW-12-W-230808	08/08/2023		ND	0.00	6.16	NS	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	580	5,500	< 47	660	< 100
	MW-12-W-231114	11/14/2023	15.05	ND	0.00	4.77	10.28	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	82 J	1,500	< 46	630	< 100
MW-13	MW-13-W-230321	03/21/2023	16.88	ND	0.00	6.20	10.68	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20	160 J	790	NA	170 J	NA
	MW-13-W-230524	05/24/2023		ND	0.00	6.69	10.19	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20	270	740	NA	< 110	NA
	MW-13-W-230810	08/10/2023		ND	0.00	7.81	9.07	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	660	1,400	72 J	180 J	250 U
	MW-13-W-231117	11/17/2023	16.83	ND	0.00	6.43	10.40	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	1,300 U	3,900	< 46 UJ	440	< 100 UJ
MW-14	MW-14-W-230315	03/15/2023	17.64	ND	0.00	5.66	11.98	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20	< 43	110	NA	< 100	NA
	MW-14-W-230526	05/26/2023		ND	0.00	6.84	10.80	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20 UJ	< 43	140	NA	< 100	NA
	MW-14-W-230810	08/10/2023		ND	0.00	8.19	9.45	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	< 43	510	77 J	130 J	250 U
	MW-14-W-231116	11/16/2023	17.61	ND	0.00	5.71	11.90	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	< 43	170 J	< 46	< 100	< 100
MW-18	MW-18-W-230317	03/17/2023	18.25	ND	0.00	8.23	10.02	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20	360	2,100	NA	530	NA
	MW-18-W-230524	05/24/2023		ND	0.00	8.66	9.59	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20	590	2,600	NA	380	NA
	MW-18-W-230810	08/10/2023		ND	0.00	9.60	8.65	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	920 ^b	2,700	120	250	< 100
	MW-18-W-231116	11/16/2023	18.20	ND	0.00	8.34	9.86	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	550	1,300	59 J	240 J	< 100
MW-19	MW-19-W-230321	03/21/2023	15.53	ND	0.00	4.85	10.68	0.35 J	0.32 J	< 0.40	< 1.4	< 0.20	1,100	6,500	NA	1,600	NA
	MW-19-W-230526	05/26/2023		ND	0.00	5.27	10.26	0.39 J	0.32 J	< 0.40	1.4 J	< 0.20 UJ	1,300	7,100	NA	1,200	NA
	MW-19-W-230810	08/10/2023		ND	0.00	6.39	9.14	0.48 J	0.42 J	< 0.40	1.5 J	< 0.20	1,400	7,800	85 J	1,100	< 100
	MW-19-W-231117	11/17/2023	15.46	ND	0.00	5.06	10.40	0.68 J	0.43 J	0.40 J	1.4 J	< 0.20	970	8,600	81 J	1,500	< 100
MW-20 ^c	N/A	N/A	15.09	3.67	0.02	3.69	11.42	Not sampled due to presence of SPH									
	N/A	N/A		4.40	0.01	4.41	10.69	Not sampled due to presence of SPH									
	N/A	N/A		5.71	0.03	5.74	9.38	Not sampled due to presence of SPH									
	N/A	N/A	15.01	4.07	0.01	4.08	10.94	Not sampled due to presence of SPH									
MW-21	MW-21-W-230313	03/13/2023	14.70	ND	0.00	2.86	11.84	< 0.30 UJ	< 0.30 UJ	< 0.40 UJ	< 1.4 UJ	< 0.20 UJ	< 43	200 J	NA	280	NA
	MW-21-W-230526	05/26/2023		ND	0.00	3.95	10.75	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20 UJ	< 43	390	NA	340	NA
	MW-21-W-230807	08/07/2023		ND	0.00	6.37	8.33	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	< 43	500	< 45	280	< 100
	MW-21-W-231116	11/16/2023	14.60	ND	0.00	3.00	11.60	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	< 43	250	< 45	340	< 100
MW-22	MW-22-W-230315	03/15/2023	14.72	ND	0.00	5.30	9.42	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20	180 J	1,700	NA	1,400	NA
	MW-22-W-230526	05/26/2023		ND	0.00	5.58	9.14	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20 UJ	190 J	1,800	NA	900	NA
	DUP-2-WD-230526							< 0.30	< 0.30	< 0.40	< 0.40	< 0.20 UJ	200 J	1,900	NA	1,000	NA
	MW-22-W-230811	08/11/2023		ND	0.00	6.45	8.27	< 0.30	< 0.30	< 0.40	0.47 J	< 0.20	310	1,600	< 46	890	< 100
	DUP-2-WD-230811							< 0.30	< 0.30	< 0.40	0.50 J	< 0.20	310	1,600	< 45	960	< 100
	MW-22-W-231116	11/16/2023	14.67	ND	0.00	6.67	8.00	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	250 U	4,100	< 47	1,200	< 100
	DUP-1-WD-231116							< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	2,500 U	3,900	< 47	1,300	< 100

Table 2
Fourth Quarter and Cumulative 2023 Gauging and Groundwater Analytical Data
Former Chevron Bulk Terminal, Facility No. 1001348
Tacoma, Washington



Well ID	Sample ID	Sample Date	TOC Elevation** (ft, NAVD88)	Depth to SPH (ft btoc)	SPH Thickness (ft)	Depth to Water (ft btoc)	Groundwater Elevation (ft, NAVD88)	Volatile Organic Compounds (VOCs)					Total Petroleum Hydrocarbons (TPH)				
								Benzene	Toluene	Ethylbenzene	Xylenes (Total)	MTBE	TPH-g	TPH-d	TPH-d (w/ SGT)	TPH-o	TPH-o (w/ SGT)
MTCA Method A Cleanup Levels ^a (µg/L)								5	1000	700	1000	20	800 ^b	500		500	
MW-23	MW-23-W-230314	03/14/2023	NS	ND	0.00	6.19	NS	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20	< 43	< 46	NA	< 100	NA
	MW-23-W-230523	05/23/2023		ND	0.00	6.32	NS	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20 UJ	< 43	< 46	NA	< 100	NA
	MW-23-W-230808	08/08/2023		ND	0.00	7.06	NS	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	< 43	< 47	< 47	< 100	< 100
	MW-23-W-231114	11/14/2023	13.50	ND	0.00	6.29	7.21	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	< 43	< 46	NA	< 100	NA
MW-24	MW-24-W-230314	03/14/2023	NS	ND	0.00	5.56	NS	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20	< 43	1,000	NA	220 J	NA
	N/A	N/A		ND	0.00	5.68	NS	Insufficient water to sample									
	MW-24-W-230808	08/08/2023	13.15	ND	0.00	6.98	NS	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	< 43	870	< 46	230 J	< 100
	MW-24-W-231114	11/14/2023		ND	0.00	5.92	7.23	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	< 43	400	< 46 UJ	170 J	< 100 UJ
MW-25	MW-25-W-230317	03/17/2023	NS	ND	0.00	3.96	NS	1.10	0.33 J	1.20	< 1.4	< 0.20	720	87 J	NA	< 100	NA
	MW-25-W-230525	05/25/2023		ND	0.00	4.32	NS	1.50	0.51 J	1.80	< 1.4	< 0.20	1,200	160	NA	< 100	NA
	MW-25-W-230809	08/09/2023		ND	0.00	5.54	NS	2.40	0.88 J	3.30	< 0.40	< 0.20	1,700	340	47 J	< 100	< 100
	MW-25-W-231116	11/16/2023	14.08	ND	0.00	4.34	9.74	1.40	0.46 J	1.50	< 0.40	< 0.20	900	150 J	< 46	< 100	< 100
MW-26	MW-26-W-230314	03/14/2023	NS	ND	0.00	3.49	NS	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20	< 43	990	NA	360	NA
	MW-26-W-230523	05/23/2023		ND	0.00	3.99	NS	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20 UJ	< 43	1,400	NA	470	NA
	MW-26-W-230808	08/08/2023		ND	0.00	5.22	NS	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	< 43	1,500	< 46	470	< 100
	MW-26-W-231114	11/14/2023	12.70	ND	0.00	4.07	8.63	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	< 43	470	100 U	270	330 U
MW-29	MW-29-W-230316	03/16/2023	NS	ND	0.00	6.15	NS	< 0.30 UJ	< 0.30 UJ	< 0.40 UJ	< 1.4 UJ	< 0.20 UJ	1,100	4,800	NA	930	NA
	MW-29-W-230524	05/24/2023		ND	0.00	6.41	NS	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20	720	4,500	NA	420	NA
	MW-29-W-230809	08/09/2023		ND	0.00	6.99	NS	0.35 J	< 0.30	< 0.40	< 0.40	< 0.20	640	7,000	< 46	560	< 100
	MW-29-W-231115	11/15/2023	14.78	ND	0.00	5.98	8.80	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	580	3,000	< 46	470	< 100
MW-30	MW-30-W-230314	03/14/2023	NS	ND	0.00	4.79	NS	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20	79 J	9,000	NA	2,000	NA
	MW-30-W-230523	05/23/2023		ND	0.00	4.97	NS	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20 UJ	68 J	4,400 J	NA	1,200 J	NA
	MW-30-W-230808	08/08/2023		ND	0.00	5.95	NS	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	85 J	6,300	NA	2,200	NA
	MW-30-W-231114	11/14/2023	13.07	ND	0.00	5.13	7.94	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	59 J	5,300	< 46 UJ	1,600	< 100 UJ
MW-31	MW-31-W-230315	03/15/2023	NS	ND	0.00	6.16	NS	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20	< 43	NA	NA	NA	NA
	N/A	N/A		ND	0.00	6.03	NS	Insufficient water to sample									
	MW-31-W-230808	08/08/2023		ND	0.00	6.88	NS	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	NA	100 U	< 45	< 100	480
	MW-31-W-231114	11/14/2023	13.09	ND	0.00	6.17	6.92	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	< 220	100 U	< 46 UJ	< 100 UJ	< 100 UJ
MW-32	MW-32-W-230317	03/17/2023	NS	ND	0.00	2.13	NS	1.40	0.33 J	< 0.40	< 1.4	< 0.20	1,400	1,200	NA	140 J	NA
	MW-32-W-230526	05/26/2023		ND	0.00	3.00	NS	0.69 J	< 0.30	< 0.40	< 0.40	< 0.20 UJ	1,000 J	660	NA	< 110	NA
	MW-32-W-230811	08/11/2023		ND	0.00	4.39	NS	0.77 J	< 0.30	< 0.40	< 0.40	< 0.20	670	450	70 J	< 100	< 100
	MW-32-W-231116	11/16/2023	13.82	ND	0.00	1.99	11.83	1.10	0.48 J	< 0.40	< 0.40	< 0.20	1,300	4,900	73 J	220 J	< 100
MW-34	MW-34-W-230317	03/17/2023	NS	ND	0.00	7.84	NS	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20	< 43	< 47	NA	< 100	NA
	MW-34-W-230525	05/25/2023		ND	0.00	7.92	NS	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20	< 43	< 47	NA	< 100	NA
	MW-34-W-230809	08/09/2023		ND	0.00	8.54	NS	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	< 43	< 47	< 47	< 100	< 100
	MW-34-W-231116	11/16/2023		ND	0.00	7.98	NS	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	< 43	< 46	< 46	< 100	< 100
MW-36	MW-36-W-230315	03/15/2023	NS	ND	0.00	6.09	NS	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20	< 43	< 47	NA	< 100	NA
	MW-36-W-230525	05/25/2023		ND	0.00	6.08	NS	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20	< 43	< 50	NA	< 110	NA
	MW-36-W-230810	08/10/2023		ND	0.00	6.80	NS	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	< 43	< 46	< 46	< 100	< 100
	MW-36-W-231115	11/15/2023	13.52	ND	0.00	5.80	7.72	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	< 43	< 46	NA	< 100	NA
MW-37	MW-37-W-230315	03/15/2023	NS	ND	0.00	7.13	NS	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20	< 43	< 46	NA	< 100	NA
	MW-37-W-230525	05/25/2023		ND	0.00	7.12	NS	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20	< 43	84 J	NA	< 110	NA
	MW-37-W-230810	08/10/2023		ND	0.00	7.82	NS	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	< 43	140 J	< 46	< 100	< 100
	MW-37-W-231115	11/15/2023	14.54	ND	0.00	6.92	7.62	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	< 43	100 U	< 46	< 100	< 100

Table 2
Fourth Quarter and Cumulative 2023 Gauging and Groundwater Analytical Data
Former Chevron Bulk Terminal, Facility No. 1001348
Tacoma, Washington



Well ID	Sample ID	Sample Date	TOC Elevation** (ft, NAVD88)	Depth to SPH (ft btoc)	SPH Thickness (ft)	Depth to Water (ft btoc)	Groundwater Elevation (ft, NAVD88)	Volatile Organic Compounds (VOCs)					Total Petroleum Hydrocarbons (TPH)				
								Benzene	Toluene	Ethylbenzene	Xylenes (Total)	MTBE	TPH-g	TPH-d	TPH-d (w/ SGT)	TPH-o	TPH-o (w/ SGT)
MTCA Method A Cleanup Levels ^a (µg/L)								5	1000	700	1000	20	800 ^b	500		500	
MW-38	MW-38-W-230315	03/15/2023	NS	ND	0.00	7.62	NS	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20	< 43	46 UJ	NA	100 UJ	NA
	MW-38-W-230525	05/25/2023		ND	0.00	7.83	NS	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20	< 43	< 47	NA	< 100	NA
	MW-38-W-230810	08/10/2023		ND	0.00	8.77	NS	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	< 43	< 47	< 47	< 100	< 100
	MW-38-W-231115	11/15/2023		ND	0.00	7.45	NS	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	< 43	< 46	NA	< 100	NA
MW-39	MW-39-W-230316	03/16/2023	NS	ND	0.00	5.62	NS	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20	59 J	1,200	NA	120 J	NA
	MW-39-W-230525	05/25/2023		ND	0.00	5.91	NS	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20	82 J	2,000	NA	410	NA
	MW-39-W-230809	08/09/2023		ND	0.00	6.70	NS	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	180 J	5,200	< 45	760	< 100
	MW-39-W-231115	11/15/2023	15.00	ND	0.00	5.75	9.25	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	63 J	2,300	< 46	310	< 100
RMW-1	RMW-01-W-230316	03/16/2023	NS	ND	0.00	4.70	NS	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20	110 J	930	NA	550	NA
	RMW-01-W-230524	05/24/2023		ND	0.00	5.08	NS	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20 UJ	230 J	1,600	NA	320	NA
	RMW-01-W-230809	08/09/2023		ND	0.00	6.11	NS	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	370	2,900	< 46	400	< 100
	RWM-01-W-231115	11/15/2023	14.97	ND	0.00	4.86	10.11	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	250	1,300	54 J	210 J	1000 U
Sand Aquifer Wells																	
D-1	D-01-W-230321	03/21/2023	17.33	ND	0.00	9.96	7.37	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20	190 J	4,600	NA	720	NA
	DUP-1-WD-230321							< 0.30	< 0.30	< 0.40	< 1.4	< 0.20	180 J	4,800	NA	730	NA
	D-01-W-230524	05/24/2023		ND	0.00	10.17	7.16	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20	180 J	4,200	NA	650	NA
	DUP-1-WD-230524							< 0.30	< 0.30	< 0.40	< 1.4	< 0.20	180 J	4,400	NA	620	NA
	D-01-W-230811	08/11/2023		ND	0.00	11.46	5.87	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	200 J	3,400	< 46	380	< 100
	DUP-1-WD-230811							< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	220 J	3,300	< 46	440	< 100
	D-01-W-231117	11/17/2023	17.26	ND	0.00	10.22	7.04	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	< 430	4,300	52 UJ	780	920 J
DUP-2-WD-231117	< 0.30							< 0.30	< 0.40	< 0.40	< 0.20	< 430	4,500	< 47 UJ	850	< 100 UJ	
D-2A	D-02A-W-230314	03/14/2023	14.90	ND	0.00	7.59	7.31	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20	< 43	1,400	NA	580	NA
	D-02A-W-230523	05/23/2023		ND	0.00	7.77	7.13	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20 UJ	43 J	1,400	NA	520	NA
	D-02A-W-230808	08/08/2023		ND	0.00	8.76	6.14	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	75 J	1,200	< 45	390	< 100
	D-02A-W-231114	11/14/2023	15.16	ND	0.00	7.78	7.38	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	< 43	1,200	< 46	540	< 100
D-3A	D-03A-W-230317	03/17/2023	NS	ND	0.00	6.87	NS	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20	74 J	3,000	NA	730	NA
	D-03A-W-230526	05/26/2023		ND	0.00	6.93	NS	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20 UJ	< 43	1,900	NA	460	NA
	D-03A-W-230811	08/11/2023		ND	0.00	8.18	NS	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	59 J	1,500	< 46	520	< 100
	D-03A-W-231116	11/16/2023	14.12	ND	0.00	7.05	7.07	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	250 U	1,100	< 46	290	< 100
D-6	D-06-W-230317	03/17/2023	18.26	ND	0.00	10.90	7.36	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20	200 J	3,300	NA	420	NA
	D-06-W-230524	05/24/2023		ND	0.00	12.87	5.39	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20	210 J	2,100 J	NA	220 J	NA
	D-06-W-230810	08/10/2023		ND	0.00	12.54	5.72	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	260	3,500	< 45	410	< 100
	D-06-W-231116	11/16/2023	18.23	ND	0.00	11.01	7.22	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	250 J	2,600	54 J	280	130 J
D-7	D-07-W-230315	03/15/2023	14.47	ND	0.00	7.24	7.23	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20	< 43	210	NA	130 J	NA
	D-07-W-230526	05/26/2023		ND	0.00	7.55	6.92	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20 UJ	< 43	290	NA	100 J	NA
	D-07-W-230811	08/11/2023		ND	0.00	8.34	6.13	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	< 43	170 J	< 45	< 100	< 100
	D-7-W-231116	11/16/2023	14.82	ND	0.00	7.34	7.48	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	< 43	420	< 47	110 J	< 100
D-8	D-08-W-230314	03/14/2023	NS	ND	0.00	6.84	NS	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20	< 43	1,700	NA	440	NA
	D-08-W-230523	05/23/2023		ND	0.00	7.57	NS	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20 UJ	< 43	920	NA	230 J	NA
	D-08-W-230808	08/08/2023		ND	0.00	7.72	NS	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	62 J	1,200	< 45	290	< 100
	D-08-W-231114	11/14/2023	13.73	ND	0.00	7.07	6.66	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	50 J	1,100	< 47	360	< 100
D-9	D-09-W-230315	03/15/2023	NS	ND	0.00	5.71	NS	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20	< 43	2,400	NA	1,100	NA
	D-09-W-230523	05/23/2023		ND	0.00	5.70	NS	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20 UJ	< 43	1,700	NA	520	NA
	D-09-W-230808	08/08/2023		ND	0.00	6.83	NS	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	51 J	2,300	130	710	2000
	D-09-W-231114	11/14/2023	12.90	ND	0.00	5.81	7.09	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	< 43	2,400	< 46	1,100	< 100
D-10	D-10-W-230317	03/17/2023	NS	ND	0.00	7.02	NS	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20	43 J	870	NA	150 J	NA
	D-10-W-230525	05/25/2023		ND	0.00	7.45	NS	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20	43 J	1,200	NA	190 J	NA
	D-10-W-230809	08/09/2023		ND	0.00	8.00	NS	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	110 J	2,200	< 45	230 J	< 100
	D-10-W-231116	11/16/2023	14.03	ND	0.00	7.26	6.77	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	250 U	1,900	< 46	190 J	< 100

Table 2
Fourth Quarter and Cumulative 2023 Gauging and Groundwater Analytical Data
Former Chevron Bulk Terminal, Facility No. 1001348
Tacoma, Washington



Well ID	Sample ID	Sample Date	TOC Elevation** (ft, NAVD88)	Depth to SPH (ft btoc)	SPH Thickness (ft)	Depth to Water (ft btoc)	Groundwater Elevation (ft, NAVD88)	Volatile Organic Compounds (VOCs)					Total Petroleum Hydrocarbons (TPH)				
								Benzene	Toluene	Ethylbenzene	Xylenes (Total)	MTBE	TPH-g	TPH-d	TPH-d (w/ SGT)	TPH-o	TPH-o (w/ SGT)
MTCA Method A Cleanup Levels ^a (µg/L)								5	1000	700	1000	20	800 ^b	500		500	
D-12	D-12-W-230316	03/16/2023	NS	ND	0.00	7.80	NS	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20	< 43	280	NA	270	NA
	D-12-W-230524	05/24/2023		ND	0.00	8.17	NS	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20 UJ	< 43	330	NA	270	NA
	D-12-W-230809	08/09/2023		ND	0.00	8.79	NS	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	< 43	280	< 46	190 J	< 100
	D-12-W-231115	11/15/2023	14.85	ND	0.00	7.93	6.92	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	< 43	270	< 46	190 J	< 100
D-13 ^c	N/A	N/A	NS	5.68	0.46	6.14	NS	Not sampled due to presence of SPH									
	N/A	N/A		5.90	0.01	5.91	NS	Not sampled due to presence of SPH									
	N/A	N/A		7.39	0.04	7.43	NS	Not sampled due to presence of SPH									
	N/A	N/A	13.84	6.00	0.01	6.01	7.84	Not sampled due to presence of SPH									
D-14	D-14-W-230321	03/21/2023	NS	ND	0.00	8.17	NS	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20	< 43	71 J	NA	< 110	NA
	D-14-W-230526	05/26/2023		ND	0.00	7.75	NS	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20 UJ	45 J	< 48	NA	< 110	NA
	D-14-W-230810	08/10/2023		ND	0.00	8.94	NS	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	< 43	< 46	< 46	< 100	< 100
	D-14-W-231117	11/17/2023	14.82	ND	0.00	8.01	6.81	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	< 43	< 46	< 46	< 100	< 100
D-15	D-15-W-230316	03/16/2023	NS	ND	0.00	7.85	NS	< 0.30 UJ	< 0.30 UJ	< 0.40 UJ	< 1.4 UJ	< 0.20 UJ	< 43	2,000	NA	500	NA
	D-15-W-230524	05/24/2023		ND	0.00	8.43	NS	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20	< 43	1,900	NA	800	NA
	D-15-W-230809	08/09/2023		ND	0.00	8.76	NS	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	67 J	1,400	< 45	270	< 100
	D-15-W-231115	11/15/2023	14.80	ND	0.00	7.98	6.82	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	< 43	1,300	< 46	260	< 100
D-17	D-17-W-230314	03/14/2023	NS	ND	0.00	5.50	NS	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20	< 43	150	NA	< 100	NA
	D-17-W-230523	05/23/2023		ND	0.00	5.43	NS	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20 UJ	< 43	81 J	NA	110 UJ	NA
	D-17-W-230808	08/08/2023		ND	0.00	6.57	NS	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	< 43	100 U	< 46	< 100	< 100
	D-17-W-231114	11/14/2023	12.75	ND	0.00	5.58	7.17	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	< 43	180 J	< 46	< 100	< 100
D-18	D-18-W-230314	03/14/2023	NS	ND	0.00	6.07	NS	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20	< 43	500	NA	300	NA
	D-18-W-230523	05/23/2023		ND	0.00	6.04	NS	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20 UJ	< 43	650	NA	200 J	NA
	D-18-W-230808	08/08/2023		ND	0.00	7.17	NS	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	< 43	870	< 45	300	< 100
	D-18-W-231114	11/14/2023	13.29	ND	0.00	6.18	7.11	< 0.30	< 0.30	< 0.40	< 0.30	< 0.20	< 43	640	< 46	320	< 100
D-19	D-19-W-230314	03/14/2023	NS	ND	0.00	6.04	NS	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20	< 43	420	NA	160 J	NA
	D-19-W-230523	05/23/2023		ND	0.00	6.10	NS	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20 UJ	< 43	610	NA	180 J	NA
	D-19-W-230808	08/08/2023		ND	0.00	7.18	NS	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	< 43	380	< 46	130 J	< 100
	D-19-W-231114	11/14/2023	13.22	ND	0.00	6.16	7.06	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	< 43	410	< 46 UJ	140 J	< 100 UJ
D-22	D-22-W-230317	03/17/2023	NS	ND	0.00	8.92	NS	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20	< 43	89 J	NA	< 100	NA
	D-22-W-230525	05/25/2023		ND	0.00	10.27	NS	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20	< 43	230	NA	< 110	NA
	D-22-W-230809	08/09/2023		ND	0.00	9.27	NS	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	72 J	330	< 46	< 100	< 100
	D-22-W-231116	11/16/2023	15.39	ND	0.00	8.97	6.42	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	250 U	500	< 46 UJ	< 100	< 100 UJ
D-24	D-24-W-230315	03/15/2023	NS	ND	0.00	6.42	NS	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20	< 43	65 J	NA	< 100	NA
	D-24-W-230525	05/25/2023		ND	0.00	6.66	NS	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20	< 43	260	NA	< 110	NA
	D-24-W-230810	08/10/2023		ND	0.00	7.49	NS	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	< 43	100 J	< 47	< 100	< 100
	D-24-W-231115	11/15/2023	13.53	ND	0.00	6.49	7.04	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	< 43	250	< 46	< 100	400 U

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Tacoma, Washington



Well ID	Sample ID	Sample Date	TOC Elevation** (ft, NAVD88)	Depth to SPH (ft btoc)	SPH Thickness (ft)	Depth to Water (ft btoc)	Groundwater Elevation (ft, NAVD88)	Volatile Organic Compounds (VOCs)					Total Petroleum Hydrocarbons (TPH)				
								Benzene	Toluene	Ethylbenzene	Xylenes (Total)	MTBE	TPH-g	TPH-d	TPH-d (w/ SGT)	TPH-o	TPH-o (w/ SGT)
MTCA Method A Cleanup Levels ^a (µg/L)								5	1000	700	1000	20	800 ^b	500		500	
D-25	D-25-W-230315	03/15/2023	NS	ND	0.00	7.50	NS	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20	< 43	960	NA	360	NA
	D-25-W-230525	05/25/2023		ND	0.00	7.62	NS	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20	< 43	1,200	NA	380	NA
	D-25-W-230810	08/10/2023		ND	0.00	8.55	NS	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	< 43	900	< 46	280	< 100
	D-25-W-231115	11/15/2023	14.65	ND	0.00	7.60	7.05	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	< 43	1200	64 U	420	< 100
D-26	D-26-W-230315	03/15/2023	NS	ND	0.00	7.99	NS	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20	< 43	240	NA	140 J	NA
	D-26-W-230525	05/25/2023		ND	0.00	8.02	NS	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20	< 43	230	NA	120 J	NA
	D-26-W-230810	08/10/2023		ND	0.00	9.05	NS	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	< 43	130 J	< 47 UJ	< 100	< 100
	D-26-W-231115	11/15/2023		ND	0.00	8.12	NS	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	< 43	170 J	< 46 UJ	< 100	250 U
D-27	D-27-W-230315	03/15/2023	NS	ND	0.00	7.86	NS	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20	< 43	1,900	NA	800	NA
	D-27-W-230525	05/25/2023		ND	0.00	8.03	NS	< 0.30	< 0.30	< 0.40	< 1.4	< 0.20	47 J	2,000	NA	560	NA
	D-27-W-230809	08/09/2023		ND	0.00	8.91	NS	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	51 J	1,700	< 46	410	< 100
	D-27-W-231115	11/15/2023	14.99	ND	0.00	7.98	7.01	< 0.30	< 0.30	< 0.40	< 0.40	< 0.20	< 43	1,300	< 46	360	< 100

Notes:

TPH-g (or TPH-GRO) = Total Petroleum Hydrocarbons, Gasoline-Range; reported as (C7-C12) via the NWTPH-Gx Volatile Petroleum Products Method in the laboratory analytical report.
TPH-d (or TPH-DRO) = Total Petroluem Hydrocarbons, Diesel Range; reported as (C12-C24) via the NWTPH-Dx Semi-Volatile Petroleum Products Method in the laboratory analytical report.
TPH-o (or TPH-HRO) = Total Petroleum Hydrocarbons, Oil-Range; reported as (C24-C40) via the NWTPH-Dx Semi-Volatile Petroleum Products Method in the laboratory analytical report.

** Top of Casing (TOC) elevations were (re-)surveyed by Bush, Roed & Hitching, Inc. on October 16-17, 2023.

^a Department of Ecology Model Toxics Control Act (MTCA) Method A Cleanup Levels

^b Two TPH-g cleanup levels exist in MTCA Method A Cleanup Levels. The more conservative cleanup level of 800 µg/L, for use when benzene is detected, is presented in this table.
When benzene is not detected, however, the cleanup level is 1,000 µg/L.

^c Corrected groundwater elevation for wells containing SPH: TOC - DTW + (T_{SPH} * SG_{SPH})
TOC = top of casing elevation T_{SPH} = SPH thickness (DTW - Depth to SPH)
DTW = depth to water (ft btoc) SG_{SPH} = specific gravity of SPH (assumes an average specific gravity of 0.87)

1. All TPH concentrations are reported in units of µg/L.
2. Reported values not detected above the laboratory Method Detection Limit (MDL) are preceded by "<".
3. Reported values followed by "J" indicate estimated concentrations above the MDL.
4. Reported values followed by "U" indicate analyte is qualified as not detected, based on the data validation review.
5. Reported values followed by "UJ" indicate the analyte was not detected above the MDL, but the MDL is estimated.

6. Results that are greater than the MTCA Method A Cleanup Levels are indicated by bolded and shaded values.

7. Results in Italics indicate non-detect value is greater than CUL

Abbreviations:

µg/L = micrograms per liter N/A = not applicable (sample not collected)
TOC = top of casing NS = not surveyed
NAVD88 = North American Vertical Datum of 1988 NA = not analyzed
ft btoc = feet below top of casing ND = SPH not detected in well
SPH = separate-phase hydrocarbon DUP = duplicate sample
SGT = Silica Gel Treatment
NWTPH = Northwest Total Petroleum Hydrocarbons

Table 3 - Fourth Quarter 2023 Water Quality Parameters

Former Chevron Bulk Terminal, Facility No. 1001348

Tacoma, Washington



Well ID	Date	Temperature	pH	Conductivity	Dissolved Oxygen	ORP	Turbidity
Units		°C	su	µS/cm	mg/L	mV	NTU
Perched Groundwater-bearing Unit Wells							
MW-10	11/13/2023	15.60	6.45	0.937	2.16	219.3	2.29
MW-11	11/14/2023	15.80	7.35	0.565	8.67	148.1	3.74
MW-12	11/14/2023	14.40	6.71	0.560	2.49	72.3	0.85
MW-13	11/17/2023	12.00	6.46	0.225	0.85	-24.9	4.09
MW-14	11/16/2023	12.30	6.81	0.173	7.95	42.7	4.55
MW-18	11/16/2023	12.70	6.94	0.359	1.08	-38.8	5.40
MW-19	11/17/2023	14.20	6.66	0.902	0.22	-41.4	5.03
MW-21	11/16/2023	13.40	6.41	0.385	0.94	94.9	3.71
MW-22	11/16/2023	15.10	6.67	1.130	1.09	-37.5	4.26
MW-23	11/14/2024	12.60	7.77	0.632	1.44	7.1	0.62
MW-24	11/14/2023	14.60	6.20	0.631	0.71	8.9	11.20
MW-25	11/16/2023	13.80	8.10	0.396	1.44	-160.8	3.90
MW-26	11/14/2023	10.80	6.61	0.893	1.59	87.2	0.59
MW-29	11/15/2023	13.10	6.60	0.683	0.26	-13.4	2.18
MW-30	11/14/2023	11.80	6.50	0.596	0.24	-53.6	18.40
MW-31	11/14/2023	14.90	6.30	0.572	0.49	-32.5	10.90
MW-32	11/16/2023	14.30	6.21	0.447	0.14	-51.5	13.40
MW-34	11/16/2023	10.10	7.16	0.357	6.85	36.9	1.35
MW-36	11/15/2023	16.20	7.23	0.958	0.58	-261.2	11.50
MW-37	11/15/2023	16.60	6.80	1.204	1.27	-199.9	1.88
MW-38	11/15/2023	15.00	5.95	0.469	0.77	122.7	2.98
MW-39	11/15/2023	13.30	6.84	0.789	0.27	-33.8	1.21
RMW-1	11/15/2023	13.00	6.95	0.428	2.24	-25.7	1.96
Sand Aquifer Wells							
D-1	11/17/2023	13.10	6.80	0.588	0.61	-126.7	3.21
D-2A	11/14/2023	13.50	6.81	0.505	0.16	-138.5	2.56
D-3A	11/16/2023	14.30	6.94	0.642	0.13	-155.7	4.18
D-6	11/16/2023	14.00	6.91	0.399	1.77	-155.0	1.91
D-7	11/16/2023	15.50	6.72	0.553	0.52	-132.3	2.56
D-8	11/14/2023	13.10	6.88	0.615	0.64	-132.3	5.52
D-9	11/14/2023	13.90	6.54	0.817	0.22	-67.1	4.33
D-10	11/16/2023	13.60	6.99	0.690	0.53	-173.1	1.30
D-12	11/15/2023	12.40	7.09	0.573	0.14	-151.0	1.20
D-14	11/17/2023	12.70	7.64	1.367	0.24	-133.9	3.24
D-15	11/15/2023	13.50	6.78	0.537	0.13	-120.5	8.34
D-17	11/14/2023	12.50	6.68	0.452	0.56	-112.5	4.84
D-18	11/14/2023	11.60	6.59	0.676	1.27	-51.6	5.75
D-19	11/14/2023	14.30	6.37	0.574	0.55	-42.6	49.6
D-22	11/16/2023	10.70	7.08	0.380	0.20	-127.4	4.20
D-24	11/15/2023	17.90	6.57	12.484	0.31	-335.9	0.89
D-25	11/15/2023	16.10	6.56	0.579	0.47	-110.0	1.98
D-26	11/15/2023	14.80	6.33	0.474	0.64	-22.3	1.45
D-27	11/15/2023	14.00	6.68	0.532	0.31	-102.1	2.79

Notes:

°C = degrees Celsius

µS/cm = microSiemens per centimeter

ID = identification

mg/L = milligram per liter

mV = millivolt

NTU = nephelometric turbidity unit

ORP = oxidation reduction potential

su = standard unit

Appendix A

Groundwater Sampling Field Data



GROUNDWATER SAMPLING LOG KEY

List of Abbreviations	
uS/cm	microSiemens per centimeter
deg C	degrees Celsius
DNAPL	dense non-aqueous phase liquid
ft	feet
HC	hydrocarbon
l	liter
LNAPL	light non-aqueous phase liquid
mg/L	micrograms per liter
MW	monitoring well
mV	millivolt
N/A	not applicable
NE	not entered – no detectable LNAPL or DNAPL
NM	not measured
NTU	Nephelometric Turbidity unit
su	standard unit
WL	water level



GROUNDWATER SAMPLING LOG

Client: Chevron Environmental Management Company
Site: Chevron Tacoma

Project #: 60701804
Event: 2023-Q4-GW

Sample Information			
Sample ID:	D-01-W-231117	Date:	11/17/2023 10:10:00 AM
Well ID:	D-01	Location Type:	MW
Duplicate ID:	DUP-2-WD-231117	Sampler:	Lillian Celovsky
Equipment:	Field param meter: Other # 37703 WL/int meter: Solinst 122 # 28300		
Comments:	Dup-2 collected at 0930		

Water Level			
Date:	11/17/2023 9:26:00 AM	Measured Depth of Well:	21.35 ft btoc
Is Well Dry?	No	Depth to DNAPL:	NE
Depth to Water:	10.27 ft btoc	Depth to LNAPL:	NE
Notes:	Assume screen 15-20bgs, purge depth btoc (18.5ft)		

Purge Information			
Begin Date and Time:	11/17/2023 9:33:00 AM	End Date and Time:	11/17/2023 10:06:00 AM
Initial Pump Depth:	18.5 ft btoc	Final Pump Depth:	18.5 ft btoc
Purge Method:	Low flow (pump type: Peristaltic)	Sample Method:	Low flow
Notes:	Not Recorded		

Time	Purge Rate (ml/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
9:40 AM	180		12.1	6.82	0.561	3.5	-83.5	24.8	10.25	Faint HC	Cloudy
9:45 AM	180		12.6	6.8	0.58	1.46	-107.6	14.2	10.25	"	"
9:50 AM	180		12.8	6.8	0.584	0.99	-116.8	9.33	10.25	"	More clear
9:55 AM	180		12.8	6.8	0.586	0.8	-121.4	6.92	10.25	"	"
10:00 AM	180		12.8	6.8	0.585	0.69	-124	5.53	10.25	"	Mostly clear
10:03 AM	180		13	6.8	0.587	0.64	-125.9	3.27	10.25	"	"
10:06 AM	180	6.5	13.1	6.8	0.588	0.61	-126.7	3.21	10.25	"	"



GROUNDWATER SAMPLING LOG

Client: Chevron Environmental Management Company
Site: Chevron Tacoma

Project #: 60701804
Event: 2023-Q4-GW

Sample Information			
Sample ID:	D-02A-W-231114	Date:	11/14/2023 3:21:00 PM
Well ID:	D-02A	Location Type:	MW
Duplicate ID:	Not Applicable	Sampler:	Suzanne Catlin
Equipment:	Field param meter: Other # 50631 WL/int meter: Solinst 122 # 12726		
Comments:	Not Recorded		

Water Level			
Date:	11/14/2023 2:32:00 PM	Measured Depth of Well:	19.53 ft btoc
Is Well Dry?	No	Depth to DNAPL:	NE
Depth to Water:	7.63 ft btoc	Depth to LNAPL:	NE
Notes:	Not Recorded		

Purge Information			
Begin Date and Time:	11/14/2023 2:39:00 PM	End Date and Time:	11/14/2023 3:16:00 PM
Initial Pump Depth:	17.5 ft btoc	Final Pump Depth:	17.5 ft btoc
Purge Method:	Low flow (pump type: Peristaltic)	Sample Method:	Low flow
Notes:	Not Recorded		

Time	Purge Rate (ml/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
2:45 PM	95		14	6.83	0.51	1.36	-138	5.87	7.61	Chemical odors	Clear
2:50 PM	95		13.7	6.83	0.507	0.48	-139.4	6.92	7.6	Chemical odors	Clear
2:55 PM	95		13.6	6.82	0.507	0.3	-139.3	6.1	7.6	Chemical odors	Clear
3:00 PM	95		13.6	6.82	0.506	0.24	-139.1	3.94	7.6	Chemical odors	Clear
3:05 PM	95		13.5	6.81	0.506	0.21	-138.7	2.55	7.6	Chemical odors	Clear
3:10 PM	95		13.4	6.81	0.504	0.17	-138.4	2.39	7.59	Chemical odors	Clear
3:13 PM	95		13.5	6.81	0.505	0.16	-138.5	2.98	7.59	Chemical odors	Clear
3:16 PM	95		13.5	6.81	0.505	0.16	-138.5	2.56	7.59	Chemical odors	Clear



GROUNDWATER SAMPLING LOG

Client: Chevron Environmental Management Company
Site: Chevron Tacoma

Project #: 60701804
Event: 2023-Q4-GW

Sample Information			
Sample ID:	D-03A-W-231116	Date:	11/16/2023 1:07:00 PM
Well ID:	D-03A	Location Type:	MW
Duplicate ID:	Not Applicable	Sampler:	Suzanne Catlin
Equipment:	Field param meter: Other # 50631 WL/int meter: Solinst 122 # 12726		
Comments:	Not Recorded		

Water Level			
Date:	11/16/2023 12:25:00 PM	Measured Depth of Well:	20.25 ft btoc
Is Well Dry?	No	Depth to DNAPL:	NE
Depth to Water:	6.97 ft btoc	Depth to LNAPL:	NE
Notes:	Not Recorded		

Purge Information			
Begin Date and Time:	11/16/2023 12:31:00 PM	End Date and Time:	11/16/2023 12:59:00 PM
Initial Pump Depth:	17.5 ft btoc	Final Pump Depth:	17.5 ft btoc
Purge Method:	Low flow (pump type: Peristaltic)	Sample Method:	Low flow
Notes:	Not Recorded		

Time	Purge Rate (ml/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
12:02 PM	115		14.2	6.95	0.644	0.13	-156.6	4.21	6.96	Slight chemical odor	Clear
12:36 PM	115		14.1	6.95	0.602	1.83	-129.9	14.5	6.96	Slight chemical odor	Clear w/ particles
12:41 PM	115		14	6.95	0.604	0.46	-146	6.98	6.96	Slight chemical odor	Clear
12:46 PM	115		14	6.94	0.609	0.24	-151.1	3.61	6.96	Slight chemical odor	Clear
12:51 PM	115		14.4	6.94	0.629	0.18	-153.7	3.88	6.96	Slight chemical odor	Clear
12:56 PM	115		14.1	6.94	0.631	0.14	-155.1	3.15	6.96	Slight chemical odor	Clear
12:59 PM	115		14.3	6.94	0.642	0.13	-155.7	4.18	6.96	Slight chemical odor	Clear w/ particles



GROUNDWATER SAMPLING LOG

Client: Chevron Environmental Management Company
Site: Chevron Tacoma

Project #: 60701804
Event: 2023-Q4-GW

Sample Information			
Sample ID:	D-06-W-231116	Date:	11/16/2023 2:25:00 PM
Well ID:	D-06	Location Type:	MW
Duplicate ID:	Not Applicable	Sampler:	Lillian Celovsky
Equipment:	Field param meter: Other # 37703 WL/int meter: Solinst 122 # 28300		
Comments:	Not Recorded		

Water Level			
Date:	11/16/2023 1:36:00 PM	Measured Depth of Well:	22.50 ft btoc
Is Well Dry?	No	Depth to DNAPL:	NE
Depth to Water:	10.94 ft btoc	Depth to LNAPL:	NE
Notes:	Not Recorded		

Purge Information			
Begin Date and Time:	11/16/2023 1:47:00 PM	End Date and Time:	11/16/2023 2:18:00 PM
Initial Pump Depth:	17.5 ft btoc	Final Pump Depth:	17.5 ft btoc
Purge Method:	Low flow (pump type: Peristaltic)	Sample Method:	Low flow
Notes:	Not Recorded		

Time	Purge Rate (ml/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
1:52 PM	80		13.88	7.01	0.412	5.34	-99.7	2.81	11.53	Strong HC	Clear
1:57 PM	80		14.1	6.94	0.405	3.22	-104.6	3.14	11.96	"	"
2:02 PM	80		14	6.92	0.402	2.37	-108.3	3.21	12.45	"	"
2:07 PM	80		14.1	6.91	0.402	1.89	-110.5	2.27	12.91	"	"
2:12 PM	80		14.2	6.91	0.402	1.67	-112.7	1.37	13.23	"	"
2:15 PM	80		14.1	6.91	0.401	1.68	-114	1.62	13.36	"	"
2:18 PM	80	4	14	6.91	0.399	1.77	-115	1.91	13.55	"	"



GROUNDWATER SAMPLING LOG

Client: Chevron Environmental Management Company
Site: Chevron Tacoma

Project #: 60701804
Event: 2023-Q4-GW

Sample Information			
Sample ID:	D-7-W-231116	Date:	11/16/2023 11:40:00 AM
Well ID:	D-07	Location Type:	MW
Duplicate ID:	Not Applicable	Sampler:	Lillian Celovsky
Equipment:	Field param meter: Other # 37703 WL/int meter: Solinst 122 # 28300		
Comments:	Not Recorded		

Water Level			
Date:	11/16/2023 11:00:00 AM	Measured Depth of Well:	20.00 ft btoc
Is Well Dry?	No	Depth to DNAPL:	NE
Depth to Water:	7.31 ft btoc	Depth to LNAPL:	NE
Notes:	Not Recorded		

Purge Information			
Begin Date and Time:	11/16/2023 11:08:00 AM	End Date and Time:	11/16/2023 11:36:00 AM
Initial Pump Depth:	17.5 ft btoc	Final Pump Depth:	17.5 ft btoc
Purge Method:	Low flow (pump type: Peristaltic)	Sample Method:	Low flow
Notes:	Not Recorded		

Time	Purge Rate (ml/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
11:10 AM	200		14.9	6.75	0.546	3.57	-110.3	8.28	7.31	Faint HC odor	Mostly clear particles
11:15 AM	200		15.5	6.72	0.557	1.07	-122.6	3.1	7.3	None	"
11:20 AM	200		15.5	6.72	0.558	0.83	-126.2	2.73	7.3	None	Clear
11:25 AM	200		15.5	6.73	0.556	0.67	-129.1	2.27	7.31	"	"
11:30 AM	200		15.5	6.73	0.554	0.58	-131	1.3	7.3	"	"
11:33 AM	200		15.5	6.73	0.554	0.55	-131.6	2.77	7.3	"	"
11:36 AM	200	6	15.5	6.72	0.553	0.52	-132.3	2.56	7.3	"	"



GROUNDWATER SAMPLING LOG

Client: Chevron Environmental Management Company
Site: Chevron Tacoma

Project #: 60701804
Event: 2023-Q4-GW

Sample Information

Sample ID:	D-08-W-231114	Date:	11/14/2023 4:35:00 PM
Well ID:	D-08	Location Type:	MW
Duplicate ID:	Not Applicable	Sampler:	Lillian Celovsky
Equipment:	Field param meter: Other # YSI pro DSS 37703 WL/int meter: Solinst 122 # 28300		
Comments:	Not Recorded		

Water Level

Date:	11/14/2023 3:55:00 PM	Measured Depth of Well:	22.00 ft btoc
Is Well Dry?	No	Depth to DNAPL:	NE
Depth to Water:	6.48 ft btoc	Depth to LNAPL:	NE
Notes:	Not Recorded		

Purge Information

Begin Date and Time:	11/14/2023 4:04:00 PM	End Date and Time:	11/14/2023 4:27:00 PM
Initial Pump Depth:	19.5 ft btoc	Final Pump Depth:	19.5 ft btoc
Purge Method:	Low flow (pump type: Peristaltic)	Sample Method:	Low flow
Notes:	Not Recorded		

Time	Purge Rate (ml/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
4:07 PM	200		13.1	6.92	0.604	3.86	-92.7	6.43	6.46	None	Clear w/particles
4:12 PM	200		13.1	6.89	0.616	1.3	-119.9	4.89	6.45	"	"
4:17 PM	200		13.1	6.89	0.616	0.92	-126.3	6.33	6.45	"	"
4:22 PM	200		13.1	6.88	0.616	0.72	-130.5	6.01	6.43	"	"
4:27 PM	200	5.5	13.1	6.88	0.615	0.64	-132.3	5.52	6.43		



GROUNDWATER SAMPLING LOG

Client: Chevron Environmental Management Company
Site: Chevron Tacoma

Project #: 60701804
Event: 2023-Q4-GW

Sample Information

Sample ID:	D-09-W-231114	Date:	11/14/2023 12:25:00 PM
Well ID:	D-09	Location Type:	MW
Duplicate ID:	Not Applicable	Sampler:	Suzanne Catlin
Equipment:	Field param meter: Other # 50631 WL/int meter: Solinst 122 # 12726		
Comments:	Not Recorded		

Water Level

Date:	11/14/2023 11:36:00 AM	Measured Depth of Well:	19.98 ft btoc
Is Well Dry?	No	Depth to DNAPL:	NE
Depth to Water:	5.74 ft btoc	Depth to LNAPL:	NE
Notes:	Not Recorded		

Purge Information

Begin Date and Time:	11/14/2023 11:44:00 AM	End Date and Time:	11/14/2023 12:19:00 PM
Initial Pump Depth:	17.5 ft btoc	Final Pump Depth:	17.5 ft btoc
Purge Method:	Low flow (pump type: Peristaltic)	Sample Method:	Low flow
Notes:	Not Recorded		

Time	Purge Rate (ml/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
11:50 AM	95		14.1	6.53	0.826	1.09	-64.3	16.2	5.73	Chemical odors	Clear
11:55 AM	95		14.2	6.53	0.829	0.62	-65.4	12.1	5.73	Chemical odors	Clear
12:00 PM	95		13.8	6.54	0.823	0.38	-66.6	5.56	5.73	Chemical odors	Clear
12:05 PM	95		13.6	6.54	0.816	0.32	-66.7	5.97	5.73	Chemical odors	Clear
12:10 PM	95		13.9	6.54	0.818	0.26	-66.9	5.14	5.72	Chemical odors	Clear
12:13 PM	95		13.9	6.54	0.819	0.24	-67	4.95	5.72	Chemical odors	Clear
12:16 PM	95		13.7	6.54	0.815	0.23	-67	4.23	5.72	Chemical odors	Clear
12:19 PM	95		13.9	6.54	0.817	0.22	-67.1	4.33	5.72	Chemical odors	Clear



GROUNDWATER SAMPLING LOG

Client: Chevron Environmental Management Company
Site: Chevron Tacoma

Project #: 60701804
Event: 2023-Q4-GW

Sample Information			
Sample ID:	D-10-W-231116	Date:	11/16/2023 10:25:00 AM
Well ID:	D-10	Location Type:	MW
Duplicate ID:	Not Applicable	Sampler:	Lillian Celovsky
Equipment:	Field param meter: Other # 37703 WL/int meter: Solinst 122 # 28300		
Comments:	Not Recorded		

Water Level			
Date:	11/16/2023 9:45:00 AM	Measured Depth of Well:	24.50 ft btoc
Is Well Dry?	No	Depth to DNAPL:	NE
Depth to Water:	6.93 ft btoc	Depth to LNAPL:	NE
Notes:	Assume screen 14-24		

Purge Information			
Begin Date and Time:	11/16/2023 9:53:00 AM	End Date and Time:	11/16/2023 10:21:00 AM
Initial Pump Depth:	19 ft btoc	Final Pump Depth:	19 ft btoc
Purge Method:	Low flow (pump type: Peristaltic)	Sample Method:	Low flow
Notes:	Not Recorded		

Time	Purge Rate (ml/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
9:55 AM	150		13	7.17	0.917	3.6	-165.5	7.84	6.95	Slight HC odor	Mostly clear
10:00 AM	150		13.3	7.11	0.905	1.26	-172.5	8.67	6.94	"	"
10:05 AM	150		13.3	7.05	0.816	0.85	-174	3.28	6.94	"	"
10:10 AM	150		13.4	7.01	0.732	0.68	-173.4	2.32	6.94	"	Clr w/blk particle
10:15 AM	150		13.5	6.99	0.696	0.57	-173.2	2.62	6.94	None	"
10:18 AM	150		13.6	6.99	0.693	0.55	-173.1	2.07	6.95	"	"
10:21 AM	150	5	13.6	6.99	0.69	0.53	-173.1	1.3	6.95	"	"



GROUNDWATER SAMPLING LOG

Client: Chevron Environmental Management Company
Site: Chevron Tacoma

Project #: 60701804
Event: 2023-Q4-GW

Sample Information			
Sample ID:	D-12-W-231115	Date:	11/15/2023 12:43:00 PM
Well ID:	D-12	Location Type:	MW
Duplicate ID:	Not Applicable	Sampler:	Suzanne Catlin
Equipment:	Field param meter: Other # 50631 WL/int meter: Solinst 122 # 12726		
Comments:	Not Recorded		

Water Level			
Date:	11/15/2023 11:58:00 AM	Measured Depth of Well:	28.28 ft btoc
Is Well Dry?	No	Depth to DNAPL:	NE
Depth to Water:	7.74 ft btoc	Depth to LNAPL:	NE
Notes:	Not Recorded		

Purge Information			
Begin Date and Time:	11/15/2023 12:05:00 PM	End Date and Time:	11/15/2023 12:40:00 PM
Initial Pump Depth:	26.5 ft btoc	Final Pump Depth:	26.5 ft btoc
Purge Method:	Low flow (pump type: Peristaltic)	Sample Method:	Low flow
Notes:	Not Recorded		

Time	Purge Rate (ml/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
12:11 PM	120		12.1	7.17	0.612	1.48	-132.8	10.3	7.75	Slight chemical odor	Clr with particles
12:16 PM	120		12.4	7.1	0.579	0.49	-143.2	16	7.75	Slight chmcl odor	Clr with particles
12:21 PM	120		12.2	7.09	0.572	0.29	-146.9	6.25	7.76	Slight chmcl odor	Clear
12:26 PM	120		12.6	7.09	0.575	0.22	-149.3	3.35	7.76	Slight chmcl odor	Clear
12:31 PM	120		12.6	7.09	0.573	0.17	-150.2	2.82	7.76	Slight chmcl odor	Clear
12:34 PM	120		12.3	7.09	0.571	0.15	-150.5	4.18	7.76	Slight chmcl odor	Clear
12:37 PM	120		12.4	7.09	0.572	0.14	-150.8	1.67	7.76	Slight chmcl odor	Clear
12:40 PM	120		12.4	7.09	0.573	0.14	-151	1.2	7.76	Slight chmcl odor	Clear



GROUNDWATER SAMPLING LOG

Client: Chevron Environmental Management Company
Site: Chevron Tacoma

Project #: 60701804
Event: 2023-Q4-GW

Sample Information

Sample ID:	D-13-W-231113	Date:	11/13/2023 10:32:00 AM
Well ID:	D-13	Location Type:	MW
Duplicate ID:	Not Applicable	Sampler:	Lillian Celovsky
Equipment:	Field param meter: Other # WL/int meter: Solinst 122 # 28300		
Comments:	No sample taken. Product encountered.		

Water Level

Date:	11/13/2023 10:31:00 AM	Measured Depth of Well:	Not Measured
Is Well Dry?	No	Depth to DNAPL:	NE
Depth to Water:	6.01 ft btoc	Depth to LNAPL:	Trace
Notes:	Interface probe did not measure product, but product was visible on the entire metal section of the probe. Product may be on the walls of the pvc transferring to the probe as we lower and raise it. Will not sample due to historic LNAPL in well and visible product on probe.		

Purge Information

Begin Date and Time:	Not Recorded	End Date and Time:	Not Recorded
Initial Pump Depth:	Not Recorded	Final Pump Depth:	Not Recorded
Purge Method:	Not Recorded	Sample Method:	Low flow
Notes:	Not Recorded		



GROUNDWATER SAMPLING LOG

Client: Chevron Environmental Management Company
Site: Chevron Tacoma

Project #: 60701804
Event: 2023-Q4-GW

Sample Information			
Sample ID:	D-14-W-231117	Date:	11/17/2023 10:15:00 AM
Well ID:	D-14	Location Type:	MW
Duplicate ID:	Not Applicable	Sampler:	Suzanne Catlin
Equipment:	Field param meter: Other # 50631 WL/int meter: Solinst 122 # 12726		
Comments:	Not Recorded		

Water Level			
Date:	11/17/2023 9:30:00 AM	Measured Depth of Well:	31.56 ft btoc
Is Well Dry?	No	Depth to DNAPL:	NE
Depth to Water:	8.04 ft btoc	Depth to LNAPL:	NE
Notes:	Not Recorded		

Purge Information			
Begin Date and Time:	11/17/2023 9:39:00 AM	End Date and Time:	11/17/2023 10:09:00 AM
Initial Pump Depth:	30.5 ft btoc	Final Pump Depth:	30.5 ft btoc
Purge Method:	Low flow (pump type: Peristaltic)	Sample Method:	Low flow
Notes:	Not Recorded		

Time	Purge Rate (ml/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
9:43 AM	150		12.8	7.66	1.365	1.68	-46.9	11.9	8.74	Sulfur	Clear w/ particles
9:48 AM	150		12.7	7.65	1.368	0.38	-109.6	5.21	9.98	Sulfur	Clear trace prtcls
9:53 AM	100		12.1	7.65	1.348	0.36	-111.7	4.27	10.62	Sulfur	Clear trace prtcls
9:58 AM	100		12.4	7.65	1.36	0.31	-120.4	3.14	11.17	Sulfur	Clear trace prtcls
10:03 AM	100		12.7	7.64	1.365	0.26	-126.3	4.28	11.78	Sulfur	Clear trace prtcls
10:06 AM	100		12.6	7.64	1.364	0.24	-130.7	4.17	12.01	Sulfur	Clear trace prtcls
10:09 AM	100		12.7	7.64	1.367	0.24	-133.9	3.24	12.25	Sulfur	Clear trace prtcls



GROUNDWATER SAMPLING LOG

Client: Chevron Environmental Management Company
Site: Chevron Tacoma

Project #: 60701804
Event: 2023-Q4-GW

Sample Information			
Sample ID:	D-15-W-231115	Date:	11/15/2023 1:58:00 PM
Well ID:	D-15	Location Type:	MW
Duplicate ID:	Not Applicable	Sampler:	Suzanne Catlin
Equipment:	Field param meter: Other # 50631 WL/int meter: Solinst 122 # 12726		
Comments:	Not Recorded		

Water Level			
Date:	11/15/2023 1:11:00 PM	Measured Depth of Well:	20.82 ft btoc
Is Well Dry?	No	Depth to DNAPL:	NE
Depth to Water:	7.76 ft btoc	Depth to LNAPL:	NE
Notes:	Not Recorded		

Purge Information			
Begin Date and Time:	11/15/2023 1:16:00 PM	End Date and Time:	11/15/2023 1:53:00 PM
Initial Pump Depth:	18.5 ft btoc	Final Pump Depth:	18.5 ft btoc
Purge Method:	Low flow (pump type: Peristaltic)	Sample Method:	Low flow
Notes:	Not Recorded		

Time	Purge Rate (ml/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
1:21 PM	125		12.5	6.71	0.52	1.37	-60.6	46.9	7.79	Chemical odors	Cloudy w/ particle
1:26 PM	125		13	6.72	0.521	0.53	-74.6	34.4	7.79	Slight chemical odor	Cloudy
1:31 PM	125		13.2	6.74	0.527	0.31	-91.1	22.1	7.79	No odor	Slightly cloudy
1:36 PM	125		13.6	6.75	0.536	0.25	-97.9	17.6	7.79	No odor	Clear
1:41 PM	125		13.3	6.77	0.533	0.18	-110.5	12.2	7.78	No odor	Clear
1:44 PM	125		13.5	6.78	0.534	0.16	-113.5	11	7.78	No odor	Clear
1:47 PM	125		13.7	6.78	-116.6	0.14	-116.7	8.39	7.78	No odor	Clear
1:50 PM	125		13.5	6.79	0.536	0.14	-119.5	8.89	7.77	No odor	Clear
1:53 PM	125		13.5	6.78	0.537	0.13	-120.5	8.34	7.77	No odor	Clear



GROUNDWATER SAMPLING LOG

Client: Chevron Environmental Management Company
Site: Chevron Tacoma

Project #: 60701804
Event: 2023-Q4-GW

Sample Information

Sample ID:	D-17-W-231114	Date:	11/14/2023 10:45:00 AM
Well ID:	D-17	Location Type:	MW
Duplicate ID:	Not Applicable	Sampler:	Lillian Celovsky
Equipment:	Field param meter: YSI Pro Plus # 37703 WL/int meter: Solinst 122 # 28300		
Comments:	Not Recorded		

Water Level

Date:	11/14/2023 10:00:00 AM	Measured Depth of Well:	19.00 ft btoc
Is Well Dry?	No	Depth to DNAPL:	NE
Depth to Water:	5.54 ft btoc	Depth to LNAPL:	NE
Notes:	Not Recorded		

Purge Information

Begin Date and Time:	11/14/2023 10:07:00 AM	End Date and Time:	11/14/2023 10:40:00 AM
Initial Pump Depth:	16.5 ft btoc	Final Pump Depth:	16.5 ft btoc
Purge Method:	Low flow (pump type: Peristaltic)	Sample Method:	Low flow
Notes:	Not Recorded		

Time	Purge Rate (ml/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
10:11 AM	180		10.8	6.8	0.423	4.89	-112.6	13.2	5.55	none	Mostly clear, particles
10:16 AM	180		11.8	6.7	0.433	1.47	-109.3	13.9	5.55	"	"
10:21 AM	180		11.7	6.68	0.433	0.99	-110	11.2	5.55	"	"
10:26 AM	180		12.1	6.68	0.439	0.72	-111.3	5.54	5.55	"	"
10:31 AM	180		12.5	6.68	0.447	0.65	-111.9	6.04	5.55	"	"
10:34 AM	180		12.5	6.68	0.447	0.62	-112.2	4.97	5.55	"	"
10:37 AM	180		12.4	6.68	0.449	0.58	-112.2	4	5.55	"	"
10:40 AM	180		12.5	6.68	0.452	0.56	-112.5	4.84	5.54	"	"



GROUNDWATER SAMPLING LOG

Client: Chevron Environmental Management Company
Site: Chevron Tacoma

Project #: 60701804
Event: 2023-Q4-GW

Sample Information			
Sample ID:	D-18-W-231114	Date:	11/14/2023 10:01:00 AM
Well ID:	D-18	Location Type:	MW
Duplicate ID:	Not Applicable	Sampler:	Suzanne Catlin
Equipment:	Field param meter: Other # 50631 WL/int meter: Solinst 122 # 12726		
Comments:	Not Recorded		

Water Level			
Date:	11/14/2023 9:13:00 AM	Measured Depth of Well:	18.87 ft btoc
Is Well Dry?	No	Depth to DNAPL:	NE
Depth to Water:	6.16 ft btoc	Depth to LNAPL:	NE
Notes:	Not Recorded		

Purge Information			
Begin Date and Time:	11/14/2023 9:23:00 AM	End Date and Time:	11/14/2023 9:56:00 AM
Initial Pump Depth:	16.5 ft btoc	Final Pump Depth:	Not Recorded
Purge Method:	Low flow (pump type: Peristaltic)	Sample Method:	Low flow
Notes:	Not Recorded		

Time	Purge Rate (ml/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
9:25 AM	100		11.7	6.6	0.676	4.6	-20.1	9.57	6.17	No odor	Clear
9:30 AM	100		11.2	6.6	0.671	2.79	-32.3	6.41	6.17	No odor	Clear
9:35 AM	100		10.9	6.6	0.666	2.2	-40	5.79	6.17	No odor	Clear
9:40 AM	100		11.1	6.6	0.669	1.73	-44.4	6.12	6.16	No odor	Clear
9:45 AM	100		11.2	6.6	0.669	1.46	-47	5.37	6.16	No odor	Clear
9:50 AM	100		11.5	6.59	0.676	1.36	-49.8	5.42	6.16	No odor	Clear
9:53 AM	100		11.8	6.59	0.681	1.29	-50.7	5.72	6.15	No odor	Clear
9:56 AM	100		11.6	6.59	0.676	1.27	-51.6	5.75	6.15	No odor	Clear



GROUNDWATER SAMPLING LOG

Client: Chevron Environmental Management Company
Site: Chevron Tacoma

Project #: 60701804
Event: 2023-Q4-GW

Sample Information			
Sample ID:	D-19-W-231114	Date:	11/14/2023 1:00:00 PM
Well ID:	D-19	Location Type:	MW
Duplicate ID:	Not Applicable	Sampler:	Lillian Celovsky
Equipment:	Field param meter: Other # YSI pro DSS 37703 WL/int meter: Solinst 122 # 28300		
Comments:	Not Recorded		

Water Level			
Date:	11/14/2023 12:10:00 PM	Measured Depth of Well:	22.00 ft btoc
Is Well Dry?	No	Depth to DNAPL:	NE
Depth to Water:	6.09 ft btoc	Depth to LNAPL:	NE
Notes:	Not Recorded		

Purge Information			
Begin Date and Time:	11/14/2023 12:21:00 PM	End Date and Time:	11/14/2023 12:54:00 PM
Initial Pump Depth:	19.5 ft btoc	Final Pump Depth:	19.5 ft btoc
Purge Method:	Low flow (pump type: Peristaltic)	Sample Method:	Low flow
Notes:	Not Recorded		

Time	Purge Rate (ml/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
12:25 PM	190		14.4	6.41	0.574	2.92	-20.4	214	6.1	None	Light brown
12:30 PM	190		14.3	6.38	0.577	1.21	-31.5	151	6.1	"	"
12:35 PM	190		14.1	6.38	0.569	0.86	-36.1	97.3	6.1	"	"
12:40 PM	190		14.1	6.37	0.57	0.7	-38.7	66.8	6.1	"	"
12:45 PM	190		14.2	6.37	0.571	0.62	-40.4	58.3	6.1	"	"
12:48 PM	190		14.2	6.37	0.571	0.59	-41.2	52.2	6.1	"	"
12:51 PM	190		14.2	6.37	0.579	0.58	-41.7	54.4	6.1	"	"
12:54 PM	190	7.5	14.3	6.37	0.574	0.55	-42.6	49.6	6.09	"	"



GROUNDWATER SAMPLING LOG

Client: Chevron Environmental Management Company
Site: Chevron Tacoma

Project #: 60701804
Event: 2023-Q4-GW

Sample Information			
Sample ID:	D-22-W-231116	Date:	11/16/2023 9:35:00 AM
Well ID:	D-22	Location Type:	MW
Duplicate ID:	Not Applicable	Sampler:	Suzanne Catlin
Equipment:	Field param meter: Other # 50631 WL/int meter: Solinst 122 # 12726		
Comments:	Not Recorded		

Water Level			
Date:	11/16/2023 8:46:00 AM	Measured Depth of Well:	20.19 ft btoc
Is Well Dry?	No	Depth to DNAPL:	NE
Depth to Water:	7.82 ft btoc	Depth to LNAPL:	NE
Notes:	Not Recorded		

Purge Information			
Begin Date and Time:	11/16/2023 8:53:00 AM	End Date and Time:	11/16/2023 9:30:00 AM
Initial Pump Depth:	Not Recorded	Final Pump Depth:	17.5 ft btoc
Purge Method:	Low flow (pump type: Peristaltic)	Sample Method:	Low flow
Notes:	Not Recorded		

Time	Purge Rate (ml/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
8:58 AM	140		8.8	7.18	0.366	3.49	-80	60.3	7.93	Chemical odors	Yellow cldy prtcls
9:03 AM	140		9.2	7.15	0.376	0.71	-120.5	10.4	7.92	Chemical odors	Clr with particles
9:08 AM	140		9.8	7.13	0.378	0.49	-124.1	7.47	7.93	Chemical odors	Clr with particles
9:13 AM	140		9.5	7.12	0.373	0.36	-125.5	3.67	7.92	Chemical odors	Clear
9:18 AM	140		9.8	7.1	0.372	0.28	-126	4.49	7.92	Chemical odors	Clear
9:21 AM	140		10.2	7.1	0.376	0.25	-126.2	4.91	7.92	Chemical odors	Clear
9:24 AM	140		10.1	7.09	0.374	0.22	-126.3	4.23	7.92	Chemical odors	Clear
9:27 AM	140		10.5	7.09	0.378	0.21	-126.7	2.83	7.93	Chemical odors	Clear
9:30 AM	140		10.7	7.08	0.38	0.2	-127.4	4.2	7.93	Chemical odors	Clear



GROUNDWATER SAMPLING LOG

Client: Chevron Environmental Management Company
Site: Chevron Tacoma

Project #: 60701804
Event: 2023-Q4-GW

Sample Information			
Sample ID:	D-24-W-231115	Date:	11/15/2023 12:00:00 PM
Well ID:	D-24	Location Type:	MW
Duplicate ID:	Not Applicable	Sampler:	Lillian Celovsky
Equipment:	Field param meter: Other # 37703 WL/int meter: Solinst 122 # 28300		
Comments:	Not Recorded		

Water Level			
Date:	11/15/2023 11:11:00 AM	Measured Depth of Well:	19.71 ft btoc
Is Well Dry?	No	Depth to DNAPL:	NE
Depth to Water:	6.39 ft btoc	Depth to LNAPL:	NE
Notes:	Assume screen 15-20		

Purge Information			
Begin Date and Time:	11/15/2023 11:21:00 AM	End Date and Time:	11/15/2023 11:56:00 AM
Initial Pump Depth:	17.5 ft btoc	Final Pump Depth:	17.5 ft btoc
Purge Method:	Low flow (pump type: Peristaltic)	Sample Method:	Low flow
Notes:	Not Recorded		

Time	Purge Rate (ml/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
11:24 AM	225		17.5	6.21	16.4	3.31	-66.1	4.1	6.4	Strong sulfur	Clear
11:29 AM	225		17.7	6.39	16.22	1.23	-140.8	3.64	6.4	"	"
11:34 AM	225		17.8	6.49	15.431	0.77	-191	3.33	6.4	"	Faint charcoal color
11:39 AM	225		17.9	6.53	14.681	0.54	-257.8	2.61	6.41	"	"
11:44 AM	225		17.8	6.55	14.08	0.44	-275.5	1.26	6.41	"	"
11:47 AM	225		17.9	6.56	13.661	0.39	-294.3	1.65	6.41	"	"
11:50 AM	225		17.9	6.57	13.188	0.35	-321.2	1.75	6.41	"	"
11:53 AM	225		17.9	6.57	12.884	0.32	330.9	1.56	6.4	"	"
11:56 AM	225	10	17.9	6.57	12.484 ¹	0.31	-335.9	0.89	6.41	"	"

¹ Anomalous reading, this will be checked during next sampling event.



GROUNDWATER SAMPLING LOG

Client: Chevron Environmental Management Company
Site: Chevron Tacoma

Project #: 60701804
Event: 2023-Q4-GW

Sample Information			
Sample ID:	D-25-W-231115	Date:	11/15/2023 2:55:00 PM
Well ID:	D-25	Location Type:	MW
Duplicate ID:	Not Applicable	Sampler:	Lillian Celovsky
Equipment:	Field param meter: Other # 37703 WL/int meter: Solinst 122 # 28300		
Comments:	Not Recorded		

Water Level			
Date:	11/15/2023 2:14:00 PM	Measured Depth of Well:	19.90 ft btoc
Is Well Dry?	No	Depth to DNAPL:	NE
Depth to Water:	7.44 ft btoc	Depth to LNAPL:	NE
Notes:	Assume screen 15-20		

Purge Information			
Begin Date and Time:	11/15/2023 2:19:00 PM	End Date and Time:	11/15/2023 2:44:00 PM
Initial Pump Depth:	17.5 ft btoc	Final Pump Depth:	17.5 ft btoc
Purge Method:	Low flow (pump type: Peristaltic)	Sample Method:	Low flow
Notes:	Not Recorded		

Time	Purge Rate (ml/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
2:21 PM	150		16.4	6.69	0.549	3.27	-103.7	15	7.44	Faint HC odor	Mostly clear
2:26 PM	175		16.4	6.59	0.57	1.06	-103	4.58	7.44	"	Clear
2:31 PM	175		16.3	6.57	0.573	0.64	-105.7	2.4	7.44	"	", particles
2:36 PM	175		16.2	6.57	0.577	0.54	-108	2.4	7.44	"	"
2:41 PM	175		16	6.57	0.576	0.49	-109.3	2.2	7.44	"	"
2:44 PM	175	6	16.1	6.56	0.579	0.47	-110	1.98	7.44	"	"



GROUNDWATER SAMPLING LOG

Client: Chevron Environmental Management Company
Site: Chevron Tacoma

Project #: 60701804
Event: 2023-Q4-GW

Sample Information			
Sample ID:	D-26-W-231115	Date:	11/15/2023 10:25:00 AM
Well ID:	D-26	Location Type:	MW
Duplicate ID:	Not Applicable	Sampler:	Lillian Celovsky
Equipment:	WL/int meter: Solinst 122 # 28300		
Comments:	MS/MSD		

Water Level			
Date:	11/15/2023 9:46:00 AM	Measured Depth of Well:	19.89 ft btoc
Is Well Dry?	No	Depth to DNAPL:	NE
Depth to Water:	8.09 ft btoc	Depth to LNAPL:	NE
Notes:	assume screen 15-20		

Purge Information			
Begin Date and Time:	11/15/2023 9:55:00 AM	End Date and Time:	11/15/2023 10:20:00 AM
Initial Pump Depth:	17.5 ft btoc	Final Pump Depth:	17.5 ft btoc
Purge Method:	Low flow (pump type: Peristaltic)	Sample Method:	Low flow
Notes:	Not Recorded		

Time	Purge Rate (ml/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
9:57 AM	200		14.1	6.31	0.46	3.6	72.9	4.63	8.1	Slight sulfur	Clear, few particles
10:02 AM	200		14.7	6.31	0.474	1.14	1	1.84	8.1	"	"
10:07 AM	200		14.7	6.32	0.473	0.92	-8	1.61	8.1	"	"
10:12 AM	200		14.7	6.32	0.474	0.75	-16	2.17	8.09	"	Clr, lgr particle
10:17 AM	200		14.8	6.32	0.473	0.66	-20.3	1.1	8.09	"	Clear
10:20 AM	200	4	14.8	6.33	0.474	0.64	-22.3	1.45	8.09	"	"



GROUNDWATER SAMPLING LOG

Client: Chevron Environmental Management Company
Site: Chevron Tacoma

Project #: 60701804
Event: 2023-Q4-GW

Sample Information			
Sample ID:	D-27-W-231115	Date:	11/15/2023 9:17:00 AM
Well ID:	D-27	Location Type:	MW
Duplicate ID:	Not Applicable	Sampler:	Suzanne Catlin
Equipment:	Field param meter: Other # 50631 WL/int meter: Solinst 122 # 12726		
Comments:	Not Recorded		

Water Level			
Date:	11/15/2023 8:37:00 AM	Measured Depth of Well:	19.85 ft btoc
Is Well Dry?	No	Depth to DNAPL:	NE
Depth to Water:	7.98 ft btoc	Depth to LNAPL:	NE
Notes:	Not Recorded		

Purge Information			
Begin Date and Time:	11/15/2023 8:46:00 AM	End Date and Time:	11/15/2023 9:12:00 AM
Initial Pump Depth:	17.5 ft btoc	Final Pump Depth:	17.5 ft btoc
Purge Method:	Low flow (pump type: Peristaltic)	Sample Method:	Low flow
Notes:	Not Recorded		

Time	Purge Rate (ml/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
8:52 AM	90		13.3	6.7	0.529	1.46	-90.3	5.38	7.96	Slight chemcl odor	Clear
8:57 AM	145		13.9	6.69	0.531	0.63	-97.4	3.58	7.96	Slight chmcl odor	Clear
9:02 AM	145		14.7	6.68	0.542	0.38	-101.5	4.12	7.96	Slight chmcl odor	Clear
9:07 AM	145		14.7	6.68	0.541	0.32	-102.9	2.67	7.95	Slight chmcl odor	Clear
9:12 AM	145		14	6.68	0.532	0.31	-102.1	2.79	7.94	Slight chmcl odor	Clear



GROUNDWATER SAMPLING LOG

Client: Chevron Environmental Management Company
Site: Chevron Tacoma

Project #: 60701804
Event: 2023-Q4-GW

Sample Information

Sample ID:	MW-10-W-231113	Date:	11/13/2023 1:25:00 PM
Well ID:	MW-10	Location Type:	MW
Duplicate ID:	Not Applicable	Sampler:	Lillian Celovsky
Equipment:	WL/int meter: Solinst 122 # 28300		
Comments:	Not Recorded		

Water Level

Date:	11/13/2023 12:40:00 PM	Measured Depth of Well:	NM
Is Well Dry?	No	Depth to DNAPL:	NE
Depth to Water:	4.47 ft btoc	Depth to LNAPL:	NE
Notes:	Not Recorded		

Purge Information

Begin Date and Time:	11/13/2023 12:54:00 PM	End Date and Time:	11/15/2023 1:21:00 PM
Initial Pump Depth:	6.27 ft btoc	Final Pump Depth:	6.27 ft btoc
Purge Method:	Low flow (pump type: Peristaltic)	Sample Method:	Low flow
Notes:	Not Recorded		

Time	Purge Rate (ml/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
12:58 PM	100		15.5	6.34	0.931	3.76	241.3	5.69	4.66	None	Mostly clear
1:03 PM	100		15.5	6.37	0.942	2.71	241.6	5.39	4.68	"	"
1:08 PM	100		15.7	6.4	0.947	2.36	234.2	4.89	4.73	"	"
1:13 PM	100		15.8	6.42	0.945	2.11	228.2	3.41	4.75	"	"
1:18 PM	100		15.6	6.44	0.941	2.2	221.7	2.01	4.76	"	"
1:21 PM	100	4	15.6	6.45	0.937	2.16	219.3	2.29	4.77	"	"



GROUNDWATER SAMPLING LOG

Client: Chevron Environmental Management Company
Site: Chevron Tacoma

Project #: 60701804
Event: 2023-Q4-GW

Sample Information

Sample ID:	MW-11-W-231114	Date:	11/14/2023 11:30:00 AM
Well ID:	MW-11	Location Type:	MW
Duplicate ID:	Not Applicable	Sampler:	Lillian Celovsky
Equipment:	Field param meter: Other # YSI pro DSS 37703 WL/int meter: Solinst 122 # 28300		
Comments:	Taken day after purge when well is recharged		

Water Level

Date:	11/14/2023 11:15:00 AM	Measured Depth of Well:	6.95 ft btoc
Is Well Dry?	No	Depth to DNAPL:	NE
Depth to Water:	5.44 ft btoc	Depth to LNAPL:	NE
Notes:	Not Recorded		

Purge Information

Begin Date and Time:	11/13/2023 1:53:00 PM	End Date and Time:	11/13/2023 2:02:00 PM
Initial Pump Depth:	6.2 ft btoc	Final Pump Depth:	6.95 ft btoc
Purge Method:	Low flow (pump type: Peristaltic)	Sample Method:	Not Recorded
Notes:	Well ran dry		

Time	Purge Rate (ml/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
1:57 PM	100		15.7	7.35	0.56	8.7	147.7	3.44	6.39		
2:02 PM	100		15.8	7.35	0.565	8.67	148.1	3.74	6.5		



GROUNDWATER SAMPLING LOG

Client: Chevron Environmental Management Company
Site: Chevron Tacoma

Project #: 60701804
Event: 2023-Q4-GW

Sample Information			
Sample ID:	MW-12-W-231114	Date:	11/14/2023 3:40:00 PM
Well ID:	MW-12	Location Type:	MW
Duplicate ID:	Not Applicable	Sampler:	Lillian Celovsky
Equipment:	Field param meter: Other # YSI pro DSS 37703 WL/int meter: Solinst 122 # 28300		
Comments:	Not Recorded		

Water Level			
Date:	11/14/2023 2:58:00 PM	Measured Depth of Well:	7.98 ft btoc
Is Well Dry?	No	Depth to DNAPL:	NE
Depth to Water:	4.81 ft btoc	Depth to LNAPL:	NE
Notes:	Not Recorded		

Purge Information			
Begin Date and Time:	11/14/2023 3:05:00 PM	End Date and Time:	11/14/2023 3:35:00 PM
Initial Pump Depth:	6.4 ft btoc	Final Pump Depth:	Not Recorded
Purge Method:	Low flow (pump type: Peristaltic)	Sample Method:	Low flow
Notes:	Not Recorded		

Time	Purge Rate (ml/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
3:09 PM	120		14.6	6.8	0.617	4.25	81.8	10.9	4.85	None	Clear, particles
3:14 PM	120		14.7	6.74	0.614	1.65	78.2	3.85	4.85	Faint HC odor	"
3:19 PM	120		14.7	6.73	0.606	1.52	76.8	4.87	4.85	"	"
3:24 PM	120		14.5	6.72	0.592	1.68	75.4	2.54	4.85	"	"
3:29 PM	120		14.4	6.72	0.578	2.15	73	2.33	4.86	"	"
3:32 PM	120		14.4	6.72	0.572	2.27	72.4	1.02	4.86	"	"
3:35 PM	120	2.5	14.4	6.71	0.56	2.49	72.3	0.85	4.86	"	"



GROUNDWATER SAMPLING LOG

Client: Chevron Environmental Management Company
Site: Chevron Tacoma

Project #: 60701804
Event: 2023-Q4-GW

Sample Information

Sample ID:	MW-13-W-231117	Date:	11/17/2023 9:15:00 AM
Well ID:	MW-13	Location Type:	MW
Duplicate ID:	Not Applicable	Sampler:	Lillian Celovsky
Equipment:	Field param meter: Other # 37703 WL/int meter: Solinst 122 # 28300		
Comments:	Not Recorded		

Water Level

Date:	11/17/2023 8:35:00 AM	Measured Depth of Well:	11.15 ft btoc
Is Well Dry?	No	Depth to DNAPL:	NE
Depth to Water:	6.33 ft btoc	Depth to LNAPL:	NE
Notes:	Assume screen 6-11		

Purge Information

Begin Date and Time:	11/17/2023 8:37:00 AM	End Date and Time:	11/17/2023 9:07:00 AM
Initial Pump Depth:	8.7 ft btoc	Final Pump Depth:	8.7 ft btoc
Purge Method:	Low flow (pump type: Peristaltic)	Sample Method:	Low flow
Notes:	Not Recorded		

Time	Purge Rate (ml/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
8:41 AM	125		10	6.77	0.2	3.91	68	9.7	6.36	None	Mostly clear
8:46 AM	125		11	6.58	0.204	1.94	11.5	5.86	6.36	"	"
8:51 AM	125		11.3	6.53	0.211	1.38	-8.8	4.74	6.37	"	"
8:56 AM	125		11.7	6.5	0.219	1.05	-15.9	4.21	6.38	None	"
9:01 AM	125		12.1	6.48	0.224	0.92	-21.9	3.8	6.38	"	"
9:04 AM	125		12.1	6.46	0.225	0.88	-22.9	3.39	6.38	"	"
9:07 AM	125	4	12	6.46	0.225	0.85	-24.9	4.09	6.38		"



GROUNDWATER SAMPLING LOG

Client: Chevron Environmental Management Company
Site: Chevron Tacoma

Project #: 60701804
Event: 2023-Q4-GW

Sample Information			
Sample ID:	MW-14-W-231116	Date:	11/16/2023 3:15:00 PM
Well ID:	MW-14	Location Type:	MW
Duplicate ID:	Not Applicable	Sampler:	Suzanne Catlin
Equipment:	Field param meter: Other # 50631 WL/int meter: Solinst 122 # 12726		
Comments:	Not Recorded		

Water Level			
Date:	11/16/2023 2:33:00 PM	Measured Depth of Well:	12.22 ft btoc
Is Well Dry?	No	Depth to DNAPL:	NE
Depth to Water:	6.08 ft btoc	Depth to LNAPL:	NE
Notes:	Not Recorded		

Purge Information			
Begin Date and Time:	11/16/2023 2:39:00 PM	End Date and Time:	11/16/2023 3:13:00 PM
Initial Pump Depth:	7 ft btoc	Final Pump Depth:	7 ft btoc
Purge Method:	Low flow (pump type: Peristaltic)	Sample Method:	Low flow
Notes:	Not Recorded		

Time	Purge Rate (ml/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
2:44 PM	100		13.3	6.81	0.177	7.8	5.6	8	6.11	Chemical odors	Clear trace prtcls
2:49 PM	100		13.1	6.78	0.174	7.72	14.1	6.86	6.11	Chemical odors	Clear
2:54 PM	100		13.3	6.8	0.175	7.9	24	5.98	6.11	Chemical odors	Clear
2:59 PM	100		12.4	6.78	0.172	7.65	32.9	5.23	6.11	Chemical odors	Clear
3:04 PM	100		12.3	6.79	0.171	7.78	39.1	5	6.11	Chemical odors	Clear
3:07 PM	100		12.3	6.79	0.172	7.8	41.6	4.68	6.11	Chemical odors	Clear
3:10 PM	100		12.3	6.8	0.172	7.84	45.6	4.86	6.11	Chemical odors	Clear
3:13 PM	100		12.3	6.81	0.173	7.95	42.7	4.55	6.11	Chemical odors	Clear



GROUNDWATER SAMPLING LOG

Client: Chevron Environmental Management Company
Site: Chevron Tacoma

Project #: 60701804
Event: 2023-Q4-GW

Sample Information			
Sample ID:	MW-18-W-231116	Date:	11/16/2023 3:28:00 PM
Well ID:	MW-18	Location Type:	MW
Duplicate ID:	Not Applicable	Sampler:	Lillian Celovsky
Equipment:	Field param meter: Other # 37703 WL/int meter: Solinst 122 # 28300		
Comments:	Not Recorded		

Water Level			
Date:	11/16/2023 2:43:00 PM	Measured Depth of Well:	10.48 ft btoc
Is Well Dry?	No	Depth to DNAPL:	NE
Depth to Water:	8.26 ft btoc	Depth to LNAPL:	NE
Notes:	Dtb from toc not bgs		

Purge Information			
Begin Date and Time:	11/16/2023 2:52:00 PM	End Date and Time:	11/16/2023 3:23:00 PM
Initial Pump Depth:	9.37 ft btoc	Final Pump Depth:	9.37 ft btoc
Purge Method:	Low flow (pump type: Peristaltic)	Sample Method:	Low flow
Notes:	Not Recorded		

Time	Purge Rate (ml/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
2:57 PM	90		12.3	7.08	0.355	2.98	-9.6	20	8.29	Strong HC odor	Cloudy
3:02 PM	90		12.6	7.03	0.355	1.88	-11.8	15.1	8.29	"	"
3:07 PM	90		12.7	7	0.355	1.38	-26.5	12	8.28	"	"
3:12 PM	90		12.8	6.97	0.358	1.23	-31.1	9.63	8.28	"	"
3:17 PM	90		12.7	6.96	0.357	1.09	-37.2	6.13	8.29	"	Mostly clear
3:20 PM	90		12.7	6.94	0.358	1.06	-38.4	5.67	8.29	"	"
3:23 PM	90		12.7	6.94	0.359	1.08	-38.8	5.4	8.29	"	"



GROUNDWATER SAMPLING LOG

Client: Chevron Environmental Management Company
Site: Chevron Tacoma

Project #: 60701804
Event: 2023-Q4-GW

Sample Information			
Sample ID:	MW-19-W-231117	Date:	11/17/2023 9:10:00 AM
Well ID:	MW-19	Location Type:	MW
Duplicate ID:	Not Applicable	Sampler:	Suzanne Catlin
Equipment:	Field param meter: Other # 50631 WL/int meter: Solinst 122 # 12726		
Comments:	Not Recorded		

Water Level			
Date:	11/17/2023 8:24:00 AM	Measured Depth of Well:	9.58 ft btoc
Is Well Dry?	No	Depth to DNAPL:	NE
Depth to Water:	4.98 ft btoc	Depth to LNAPL:	NE
Notes:	Not Recorded		

Purge Information			
Begin Date and Time:	11/17/2023 8:28:00 AM	End Date and Time:	11/17/2023 9:05:00 AM
Initial Pump Depth:	7 ft btoc	Final Pump Depth:	7 ft btoc
Purge Method:	Low flow (pump type: Peristaltic)	Sample Method:	Low flow
Notes:	Not Recorded		

Time	Purge Rate (ml/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
8:34 AM	110		13	6.65	1.023	1.7	21.1	37	5.03	Chemical odors	Clear w/ particles
8:39 AM	110		13.2	6.66	0.977	0.69	-27.2	33.6	5.03	Chemical odors	Clear w/ particles
8:44 AM	110		13.6	6.66	0.969	0.46	-33.7	21.9	5.03	Chemical odors	Clear w/ particles
8:49 AM	110		13.6	6.66	0.944	0.33	-37.3	19.9	5.03	Chemical odors	Clear w/ particles
8:54 AM	110		13.7	6.66	0.921	0.27	-39.1	17.6	5.03	Chemical odors	Clear w/ particles

GROUNDWATER SAMPLING LOG

Time	Purge Rate (ml/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
8:59 AM	110		13.8	6.67	0.91	0.23	-40.7	17.3	5.03	Chemical odors	Clear w/ particles
9:02 AM	110		14.1	6.66	0.908	0.21	-41.5	16.5	5.03	Chemical odors	Clear trace prtcls
9:05 AM	110		14.2	6.66	0.902	0.22	-41.4	16.1	5.03	Chemical odors	Clear trace prtcls



GROUNDWATER SAMPLING LOG

Client: Chevron Environmental Management Company
Site: Chevron Tacoma

Project #: 60701804
Event: 2023-Q4-GW

Sample Information

Sample ID:	MW-20-W-231113	Date:	11/13/2023 10:34:00 AM
Well ID:	MW-20	Location Type:	MW
Duplicate ID:	Not Applicable	Sampler:	Lillian Celovsky
Equipment:	Field param meter: Other # WL/int meter: Solinst 122 # 28300		
Comments:	No sample taken. Product encountered.		

Water Level

Date:	11/13/2023 9:14:00 AM	Measured Depth of Well:	NM
Is Well Dry?	No	Depth to DNAPL:	NE
Depth to Water:	4.08 ft btoc	Depth to LNAPL:	NE
Notes:	no product detected but strong HC odor on probe. Not sampling, historically detected product.		

Purge Information

Begin Date and Time:	Not Recorded	End Date and Time:	Not Recorded
Initial Pump Depth:	Not Recorded	Final Pump Depth:	Not Recorded
Purge Method:	Not Recorded	Sample Method:	Low flow
Notes:	Not Recorded		



GROUNDWATER SAMPLING LOG

Client: Chevron Environmental Management Company
Site: Chevron Tacoma

Project #: 60701804
Event: 2023-Q4-GW

Sample Information

Sample ID:	MW-21-W-231116	Date:	11/16/2023 12:05:00 PM
Well ID:	MW-21	Location Type:	MW
Duplicate ID:	Not Applicable	Sampler:	Suzanne Catlin
Equipment:	WL/int meter: Solinst 122 # 12726		
Comments:	Not Recorded		

Water Level

Date:	11/16/2023 11:26:00 AM	Measured Depth of Well:	9.22 ft btoc
Is Well Dry?	No	Depth to DNAPL:	NE
Depth to Water:	3.16 ft btoc	Depth to LNAPL:	NE
Notes:	Not Recorded		

Purge Information

Begin Date and Time:	11/16/2023 11:33:00 AM	End Date and Time:	11/16/2023 12:01:00 PM
Initial Pump Depth:	6 ft btoc	Final Pump Depth:	6 ft btoc
Purge Method:	Low flow (pump type: Peristaltic)	Sample Method:	Low flow
Notes:	Not Recorded		

Time	Purge Rate (ml/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
11:38 AM	115		13.7	6.46	0.392	2.16	85.5	6.56	3.27	No odor	Clear w/ particles
11:43 AM	100		12.9	6.42	0.384	1.33	90.5	7	3.37	No odor	Clear
11:48 AM	100		13.2	6.41	0.385	1.14	92.1	5.31	3.46	No odor	Clear
11:53 AM	100		13.2	6.41	0.386	1.07	93.6	4.38	3.53	No odor	Clear
11:58 AM	100		13.4	6.41	0.382	0.97	94.6	3.24	3.58	No odor	Clear
12:01 PM	100		13.4	6.41	0.385	0.94	94.9	3.71	3.61	No odor	Clear



GROUNDWATER SAMPLING LOG

Client: Chevron Environmental Management Company
Site: Chevron Tacoma

Project #: 60701804
Event: 2023-Q4-GW

Sample Information

Sample ID:	MW-22-W-231116	Date:	11/16/2023 12:40:00 PM
Well ID:	MW-22	Location Type:	MW
Duplicate ID:	DUP-1-WD-231116	Sampler:	Lillian Celovsky
Equipment:	Field param meter: Other # 37703 WL/int meter: Solinst 122 # 28300		
Comments:	Dup-1 collect at 1210		

Water Level

Date:	11/16/2023 12:33:00 PM	Measured Depth of Well:	NM
Is Well Dry?	No	Depth to DNAPL:	NE
Depth to Water:	5.65 ft btoc	Depth to LNAPL:	NE
Notes:	Not Recorded		

Purge Information

Begin Date and Time:	11/16/2023 12:34:00 PM	End Date and Time:	11/16/2023 12:34:00 PM
Initial Pump Depth:	6.7 ft btoc	Final Pump Depth:	6.7 ft btoc
Purge Method:	Low flow (pump type: Peristaltic)	Sample Method:	Low flow
Notes:	Parameters application crashed when last round of parameters were being collects. The crash resulted in all but last parameters being lost.		

Time	Purge Rate (ml/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
12:34 PM	100	5	15.1	6.67	1.13	1.09	-37.5	4.26	5.72	HC odor	Mostly clear



GROUNDWATER SAMPLING LOG

Client: Chevron Environmental Management Company
Site: Chevron Tacoma

Project #: 60701804
Event: 2023-Q4-GW

Sample Information			
Sample ID:	MW-23-W-231114	Date:	11/14/2023 4:33:00 PM
Well ID:	MW-23	Location Type:	MW
Duplicate ID:	Not Applicable	Sampler:	Suzanne Catlin
Equipment:	Field param meter: Other # 50631 WL/int meter: Solinst 122 # 12726		
Comments:	Not Recorded		

Water Level			
Date:	11/14/2023 3:55:00 PM	Measured Depth of Well:	8.90 ft btoc
Is Well Dry?	No	Depth to DNAPL:	NE
Depth to Water:	6.22 ft btoc	Depth to LNAPL:	NE
Notes:	Not Recorded		

Purge Information			
Begin Date and Time:	11/14/2023 4:01:00 PM	End Date and Time:	11/14/2023 4:27:00 PM
Initial Pump Depth:	8 ft btoc	Final Pump Depth:	8 ft btoc
Purge Method:	Low flow (pump type: Peristaltic)	Sample Method:	Low flow
Notes:	Not Recorded		

Time	Purge Rate (ml/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
4:07 PM	95		12.6	7.74	0.587	2.18	15.9	2.08	6.24	No odor	Clear
4:12 PM	95		12.7	7.76	0.601	1.57	8.8	1.27	6.24	No odor	Clear
4:17 PM	95		12.5	7.76	0.611	1.46	6.8	1.26	6.24	No odor	Clear
4:22 PM	95		12.4	7.77	0.617	1.44	6.4	0.86	6.24	No odor	Clear
4:27 PM	95		12.6	7.77	0.632	1.44	7.1	0.62	6.23	No odor	Clear



GROUNDWATER SAMPLING LOG

Client: Chevron Environmental Management Company
Site: Chevron Tacoma

Project #: 60701804
Event: 2023-Q4-GW

Sample Information

Sample ID:	MW-24-W-231114	Date:	11/14/2023 2:03:00 PM
Well ID:	MW-24	Location Type:	MW
Duplicate ID:	Not Applicable	Sampler:	Suzanne Catlin
Equipment:	Field param meter: Other # 50631 WL/int meter: Solinst 122 # 12726		
Comments:	Not Recorded		

Water Level

Date:	11/14/2023 12:44:00 PM	Measured Depth of Well:	9.90 ft btoc
Is Well Dry?	No	Depth to DNAPL:	NE
Depth to Water:	5.84 ft btoc	Depth to LNAPL:	NE
Notes:	Not Recorded		

Purge Information

Begin Date and Time:	11/14/2023 12:49:00 PM	End Date and Time:	11/14/2023 1:27:00 PM
Initial Pump Depth:	8 ft btoc	Final Pump Depth:	9.9 ft btoc
Purge Method:	Low flow (pump type: Peristaltic)	Sample Method:	Low flow
Notes:	Not Recorded		

Time	Purge Rate (ml/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
12:55 PM	100		14.1	6.22	0.616	1.06	84.3	26.9	6.67	No odor	Clr with particles
1:00 PM	100		14.2	6.21	0.62	0.51	86.8	16.9	7.3	No odor	Clr with particles
1:05 PM	100		14.2	6.21	0.616	0.33	82.8	9.38	7.85	No odor	Clr with particles
1:10 PM	100		14.4	6.19	0.618	0.23	84.5	11.6	8.41	No odor	Clr with particles
1:15 PM	100		14.4	6.18	0.617	0.18	72.8	7.61	8.88	No odor	Clr with particles
1:18 PM	100		14.4	6.17	0.607	0.18	52.3	6.51	9.12	No odor	Clear

Time	Purge Rate (ml/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
1:21 PM	100		14.1	6.13	0.599	0.37	41.4	5.39	9.4	No odor	Clear
1:24 PM	100		14.4	6.15	0.614	0.49	30.6	25.1	9.75	No odor	Clr with particles
1:27 PM	100		14.6	6.2	0.631	0.71	8.9	11.2	9.9	No odor	Clr with particles



GROUNDWATER SAMPLING LOG

Client: Chevron Environmental Management Company
Site: Chevron Tacoma

Project #: 60701804
Event: 2023-Q4-GW

Sample Information			
Sample ID:	MW-25-W-231116	Date:	11/16/2023 9:25:00 AM
Well ID:	MW-25	Location Type:	MW
Duplicate ID:	Not Applicable	Sampler:	Lillian Celovsky
Equipment:	Field param meter: Other # 37703 WL/int meter: Solinst 122 # 28300		
Comments:	Not Recorded		

Water Level			
Date:	11/16/2023 8:35:00 AM	Measured Depth of Well:	10.22 ft btoc
Is Well Dry?	No	Depth to DNAPL:	NE
Depth to Water:	4.28 ft btoc	Depth to LNAPL:	NE
Notes:	Assume screen 5-10		

Purge Information			
Begin Date and Time:	11/16/2023 8:43:00 AM	End Date and Time:	11/16/2023 9:19:00 AM
Initial Pump Depth:	7.5 ft btoc	Final Pump Depth:	7.5 ft btoc
Purge Method:	Low flow (pump type: Peristaltic)	Sample Method:	Low flow
Notes:	Not Recorded		

Time	Purge Rate (ml/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
8:47 AM	100		12.5	7.87	0.359	2.87	-59	11.2	4.43	Strong HC odor	Mostly clear
8:52 AM	100		13.3	7.93	0.371	1.38	-111.2	10.1	4.45	"	"
8:57 AM	100		13.8	7.96	0.386	1.12	-132.9	9.7	4.47	"	"
9:02 AM	100		13.8	7.99	0.387	1.09	-141.5	7.49	4.47	"	"
9:07 AM	100		13.8	8.02	0.392	1.15	-149.7	5.62	4.48	"	"
9:10 AM	100		13.9	8.05	0.396	1.26	-153.1	5.61	4.49	"	"
9:13 AM	100		14	8.06	0.397	1.33	-155.7	4.87	4.5	"	"
9:16 AM	100		13.9	8.09	0.396	1.37	-159.4	4.07	4.51	"	Clear
9:19 AM	100	6	13.8	8.1	0.396	1.44	-160.8	3.9	4.5	"	"



GROUNDWATER SAMPLING LOG

Client: Chevron Environmental Management Company
Site: Chevron Tacoma

Project #: 60701804
Event: 2023-Q4-GW

Sample Information			
Sample ID:	MW-26-W-231114	Date:	11/14/2023 9:35:00 AM
Well ID:	MW-26	Location Type:	MW
Duplicate ID:	Not Applicable	Sampler:	Lillian Celovsky
Equipment:	Field param meter: Other # YSI pro DSS 37703 WL/int meter: Solinst 122 # 28300		
Comments:	Not Recorded		

Water Level			
Date:	11/14/2023 8:41:00 AM	Measured Depth of Well:	9.25 ft btoc
Is Well Dry?	No	Depth to DNAPL:	NE
Depth to Water:	4.04 ft btoc	Depth to LNAPL:	NE
Notes:	Not Recorded		

Purge Information			
Begin Date and Time:	11/14/2023 8:50:00 AM	End Date and Time:	11/14/2023 9:29:00 AM
Initial Pump Depth:	6.5 ft btoc	Final Pump Depth:	6.5 ft btoc
Purge Method:	Low flow (pump type: Peristaltic)	Sample Method:	Low flow
Notes:	Not Recorded		

Time	Purge Rate (ml/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
8:57 AM	125		9.7	6.66	0.894	5.83	186.2	3.29	4.16	None	Mstly clr, particl e
9:02 AM	125		10.7	6.61	0.915	2.17	180.6	5.33	4.18	"	"
9:07 AM	125		10.8	6.6	0.918	1.51	166.8	1.59	4.18	"	"
9:12 AM	125		10.4	6.6	0.909	1.39	146.3	1.32	4.19	"	Clr, few particl es
9:17 AM	125		10.7	6.6	0.911	1.3	118.2	1.05	4.21	"	"
9:20 AM	125		10.7	6.6	0.909	1.4	111.9	0.72	4.22	"	"
9:23 AM	125		10.7	6.61	0.901	1.41	101.1	0.99	4.23	"	"
9:26 AM	125		10.8	6.61	0.889	1.62	94.6	0.67	4.23	"	"
9:29 AM	125	5	10.8	6.61	0.893	1.59	87.2	0.59	4.24	"	"



GROUNDWATER SAMPLING LOG

Client: Chevron Environmental Management Company
Site: Chevron Tacoma

Project #: 60701804
Event: 2023-Q4-GW

Sample Information			
Sample ID:	MW-29-W-231115	Date:	11/15/2023 2:58:00 PM
Well ID:	MW-29	Location Type:	MW
Duplicate ID:	Not Applicable	Sampler:	Suzanne Catlin
Equipment:	Field param meter: Other # 50631 WL/int meter: Solinst 122 # 12726		
Comments:	Not Recorded		

Water Level			
Date:	11/15/2023 2:15:00 PM	Measured Depth of Well:	9.24 ft btoc
Is Well Dry?	No	Depth to DNAPL:	NE
Depth to Water:	5.92 ft btoc	Depth to LNAPL:	NE
Notes:	Not Recorded		

Purge Information			
Begin Date and Time:	11/15/2023 2:19:00 PM	End Date and Time:	11/15/2023 2:53:00 PM
Initial Pump Depth:	7.5 ft btoc	Final Pump Depth:	7.5 ft btoc
Purge Method:	Low flow (pump type: Peristaltic)	Sample Method:	Low flow
Notes:	Not Recorded		

Time	Purge Rate (ml/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
2:25 PM	110		12.5	6.54	0.713	2.46	15.2	21	6.19	Slight chmcl odor	Cloudy w/ particle
2:30 PM	100		13.3	6.55	0.722	0.51	9.5	9.63	6.29	Slight chmcl odor	Clr with particles
2:35 PM	100		12.9	6.57	0.704	0.39	1.9	4.27	6.28	Slight chmcl odor	Clear with p
2:40 PM	100		13.1	6.59	0.689	0.3	-9.7	4.33	6.28	Slight chmcl odor	Clear
2:45 PM	100		13.2	6.59	0.69	0.28	-10.3	3.34	6.31	Slight chmcl odor	Clear
2:50 PM	100		13.1	6.6	0.685	0.26	-13	3.18	6.32	Slight chmcl odor	Clear



GROUNDWATER SAMPLING LOG

Time	Purge Rate (ml/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
2:53 PM	100		13.1	6.6	0.683	0.26	-13.4	2.18	6.33	Slight chmcl odor	Clear



GROUNDWATER SAMPLING LOG

Client: Chevron Environmental Management Company
Site: Chevron Tacoma

Project #: 60701804
Event: 2023-Q4-GW

Sample Information			
Sample ID:	MW-30-W-231114	Date:	11/14/2023 11:01:00 AM
Well ID:	MW-30	Location Type:	MW
Duplicate ID:	Not Applicable	Sampler:	Suzanne Catlin
Equipment:	Field param meter: Other # 50631 WL/int meter: Solinst 122 # 12726		
Comments:	Not Recorded		

Water Level			
Date:	11/14/2023 10:17:00 AM	Measured Depth of Well:	9.00 ft btoc
Is Well Dry?	No	Depth to DNAPL:	NE
Depth to Water:	5.10 ft btoc	Depth to LNAPL:	NE Encountered
Notes:	Not Recorded		

Purge Information			
Begin Date and Time:	11/14/2023 10:22:00 AM	End Date and Time:	11/14/2023 10:56:00 AM
Initial Pump Depth:	7.1 ft btoc	Final Pump Depth:	9 ft btoc
Purge Method:	Low flow (pump type: Peristaltic)	Sample Method:	Low flow
Notes:	Not Recorded		

Time	Purge Rate (ml/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
10:26 AM	95		9.7	6.55	0.578	1.69	-57.8	32.2	5.73	No odor	Clear
10:32 AM	95		9.6	6.54	0.575	0.67	-50.1	46.7	6.18	Slight chmca l odor	Clr with particl eb
10:37 AM	95		9.9	6.54	0.576	0.49	-52	31.6	6.51	Slight chmca l odor	Clr with particl es
10:42 AM	95		10.5	6.5	0.566	0.33	-57.1	15.7	6.83	Slight chmca l odor	Clear
10:47 AM	95		11.2	6.51	0.591	0.32	-49.7	19.5	7.16	Slight chmca l odor	Clear
10:50 AM	95		11.7	6.51	0.599	0.25	-50.5	18.9	7.35	Slight chmca l odor	Clear
10:53 AM	95		11.5	6.51	0.595	0.23	-52.6	17.1	7.64	Slight chmca l odor	Clear



GROUNDWATER SAMPLING LOG

Time	Purge Rate (ml/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
10:56 AM	95		11.8	6.5	0.596	0.24	-53.6	18.4	7.83	Slight chemica l odor	Clear



GROUNDWATER SAMPLING LOG

Client: Chevron Environmental Management Company
Site: Chevron Tacoma

Project #: 60701804
Event: 2023-Q4-GW

Sample Information

Sample ID:	MW-31-W-231114	Date:	11/14/2023 1:50:00 PM
Well ID:	MW-31	Location Type:	MW
Duplicate ID:	Not Applicable	Sampler:	Lillian Celovsky
Equipment:	Field param meter: Other # YSI pro DSS 37703 WL/int meter: Solinst 122 # 28300		
Comments:	not enough water, had to et recharge and couldn't fill all the bottles		

Water Level

Date:	11/14/2023 1:10:00 PM	Measured Depth of Well:	9.00 ft btoc
Is Well Dry?	No	Depth to DNAPL:	NE
Depth to Water:	6.09 ft btoc	Depth to LNAPL:	NE
Notes:	Not Recorded		

Purge Information

Begin Date and Time:	11/14/2023 1:18:00 PM	End Date and Time:	11/14/2023 1:44:00 PM
Initial Pump Depth:	7.55 ft btoc	Final Pump Depth:	9 ft btoc
Purge Method:	Low flow (pump type: Peristaltic)	Sample Method:	Low flow
Notes:	Not Recorded		

Time	Purge Rate (ml/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
1:24 PM	80		15.1	6.38	0.587	3.35	-31.4	23.2	6.49	None	Light brown
1:29 PM	80		14.8	6.37	0.591	1.3	-31.4	15.5	6.84	"	, particles
1:34 PM	80		15	6.36	0.592	0.76	-33.2	11.7	7.45	"	"
1:39 PM	80		14.9	6.36	0.594	0.55	-35.3	11.5	8.18	"	"
1:44 PM	80	2.5	14.9	6.3	0.572	0.49	-32.5	10.9	8.75	"	"



GROUNDWATER SAMPLING LOG

Client: Chevron Environmental Management Company
Site: Chevron Tacoma

Project #: 60701804
Event: 2023-Q4-GW

Sample Information			
Sample ID:	MW-32-W-231116	Date:	11/16/2023 2:09:00 PM
Well ID:	MW-32	Location Type:	MW
Duplicate ID:	Not Applicable	Sampler:	Suzanne Catlin
Equipment:	Field param meter: Other # 50631 WL/int meter: Solinst 122 # 12726		
Comments:	Not Recorded		

Water Level			
Date:	11/16/2023 1:24:00 PM	Measured Depth of Well:	9.13 ft btoc
Is Well Dry?	No	Depth to DNAPL:	NE
Depth to Water:	2.20 ft btoc	Depth to LNAPL:	NE
Notes:	Not Recorded		

Purge Information			
Begin Date and Time:	11/16/2023 1:30:00 PM	End Date and Time:	11/16/2023 1:58:00 PM
Initial Pump Depth:	6.5 ft btoc	Final Pump Depth:	6.5 ft btoc
Purge Method:	Low flow (pump type: Peristaltic)	Sample Method:	Low flow
Notes:	Not Recorded		

Time	Purge Rate (ml/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
1:01 PM	115		13.9	6.21	0.443	0.13	-53.3	13.4	2.27	Chemical odors	Clear w/ particles
1:04 PM	115		14.1	6.24	0.446	0.13	-56.4	12.6	2.27	Chemical odors	Clear w/ particles
1:35 PM	115		13.7	6.05	0.411	1.34	-11.3	31.5	2.26	Chemical odors	Clear w/ particles
1:40 PM	115		13.8	6.13	0.429	0.43	-29.2	26.5	2.26	Chemical odors	Clear w/ particles
1:45 PM	115		13.9	6.15	0.431	0.28	-35.8	21.7	2.27	Chemical odors	Clear w/ particles

GROUNDWATER SAMPLING LOG

Time	Purge Rate (ml/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
1:50 PM	115		14.3	6.17	0.439	0.21	-41.2	22.9	2.27	Chemical odors	Clear w/ particles
1:55 PM	115		14.4	6.2	0.441	0.16	-47.9	16.9	2.28	Chemical odors	Clear w/ particles
1:58 PM	115		14.3	6.21	0.447	0.14	-51.5	13.4	2.27	Chemical odors	Clear w/ particles



GROUNDWATER SAMPLING LOG

Client: Chevron Environmental Management Company
Site: Chevron Tacoma

Project #: 60701804
Event: 2023-Q4-GW

Sample Information			
Sample ID:	MW-34-W-231116	Date:	11/16/2023 10:36:00 AM
Well ID:	MW-34	Location Type:	MW
Duplicate ID:	Not Applicable	Sampler:	Suzanne Catlin
Equipment:	Field param meter: Other # 50631 WL/int meter: Solinst 122 # 12726		
Comments:	Ms/msd		

Water Level			
Date:	11/16/2023 9:50:00 AM	Measured Depth of Well:	12.70 ft btoc
Is Well Dry?	No	Depth to DNAPL:	NE
Depth to Water:	7.86 ft btoc	Depth to LNAPL:	NE
Notes:	Not Recorded		

Purge Information			
Begin Date and Time:	11/16/2023 9:56:00 AM	End Date and Time:	11/16/2023 10:28:00 AM
Initial Pump Depth:	9.5 ft btoc	Final Pump Depth:	9.5 ft btoc
Purge Method:	Low flow (pump type: Peristaltic)	Sample Method:	Low flow
Notes:	Not Recorded		

Time	Purge Rate (ml/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
10:02 AM	140		9.4	7.2	0.349	7.96	-0.9	8.64	7.81	No odor	Clr with particles
10:07 AM	140		10.1	7.17	0.355	7.36	15.4	4.39	7.85	No odor	Clear
10:12 AM	100		9.2	7.17	0.348	7.33	23.3	3.28	7.83	No odor	Clear
10:17 AM	100		9.6	7.17	0.351	7.32	28.2	2.99	7.83	No odor	Clear
10:22 AM	100		9.8	7.17	0.354	7.11	33.6	1.9	9.83	No odor	Clear
10:25 AM	100		9.9	7.17	0.356	6.99	35.6	1.53	9.84	No odor	Clear
10:28 AM	100		10.1	7.16	0.357	6.85	36.9	1.35	9.84	No odor	Clear



GROUNDWATER SAMPLING LOG

Client: Chevron
Site: Chevron Tacoma

Project #: 60701804
Event: 2023-Q4-GW

Sample Information

Sample ID:	MW-36-W-231115	Date:	11/15/2023 12:55:00 PM
Well ID:	MW-36	Location Type:	MW
Duplicate ID:	Not Applicable	Sampler:	Lillian Celovsky
Equipment:	Field param meter: Other # 37703 WL/int meter: Solinst 122 # 28300		
Comments:	Not Recorded		

Water Level

Date:	11/15/2023 12:14:00 PM	Measured Depth of Well:	9.51 ft btoc
Is Well Dry?	No	Depth to DNAPL:	NE
Depth to Water:	5.75 ft btoc	Depth to LNAPL:	NE
Notes:	Assume screen 5-10		

Purge Information

Begin Date and Time:	11/15/2023 12:21:00 PM	End Date and Time:	11/15/2023 12:51:00 PM
Initial Pump Depth:	7.63 ft btoc	Final Pump Depth:	9.1 ft btoc
Purge Method:	Low flow (pump type: Peristaltic)	Sample Method:	Low flow
Notes:	Not Recorded		

Time	Purge Rate (ml/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
12:25 PM	90		15.4	7.39	0.679	1.27	-252.9	16.3	6.44	None	Mostly clear
12:30 PM	90		15.4	7.36	0.611	1.07	-254.2	16.1	6.69	"	"
12:35 PM	90		16	7.33	0.597	0.74	-256.7	15	7.13	"	"
12:40 PM	90		15.3	7.32	0.584	0.68	-257.8	14.4	7.34	"	"
12:45 PM	90		16.1	7.2	1.186	0.6	-255.5	13.2	7.43	"	"
12:48 PM	90		16.2	7.23	1.062	0.6	-259.7	12.1	7.55	"	"
12:51 PM	90		16.2	7.23	0.958	0.58	-261.2	11.5	7.69	"	"



GROUNDWATER SAMPLING LOG

Client: Chevron Environmental Management Company
Site: Chevron Tacoma

Project #: 60701804
Event: 2023-Q4-GW

Sample Information

Sample ID:	MW-37-W-231115	Date:	11/15/2023 1:55:00 PM
Well ID:	MW-37	Location Type:	MW
Duplicate ID:	Not Applicable	Sampler:	Lillian Celovsky
Equipment:	Field param meter: Other # 37703 WL/int meter: Solinst 122 # 28300		
Comments:	Not Recorded		

Water Level

Date:	11/15/2023 1:20:00 PM	Measured Depth of Well:	9.90 ft btoc
Is Well Dry?	No	Depth to DNAPL:	NE
Depth to Water:	6.82 ft btoc	Depth to LNAPL:	NE
Notes:	Assume screen 5-10		

Purge Information

Begin Date and Time:	11/15/2023 1:25:00 PM	End Date and Time:	11/15/2023 1:53:00 PM
Initial Pump Depth:	8.36 ft btoc	Final Pump Depth:	8.36 ft btoc
Purge Method:	Low flow (pump type: Peristaltic)	Sample Method:	Low flow
Notes:	Not Recorded		

Time	Purge Rate (ml/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
1:30 PM	100		16.1	6.84	1.192	3.09	-183.3	4.01	6.84	None	Clear
1:35 PM	100		16.7	6.81	1.203	2.15	-193.1	3.98	6.84	"	"
1:40 PM	100		16.6	6.8	1.2	1.47	-197.1	3.01	6.83	"	"
1:45 PM	100		16.9	6.8	1.21	1.41	-200	3	6.84	"	"
1:50 PM	100		16.9	6.79	1.209	1.38	-201.3	2.03	6.84	"	"
1:53 PM	100		16.6	6.8	1.204	1.27	-199.9	1.88	6.83	"	"



GROUNDWATER SAMPLING LOG

Client: Chevron Environmental Management Company
Site: Chevron Tacoma

Project #: 60701804
Event: 2023-Q4-GW

Sample Information			
Sample ID:	MW-38-W-231115	Date:	11/15/2023 9:25:00 AM
Well ID:	MW-38	Location Type:	MW
Duplicate ID:	Not Applicable	Sampler:	Lillian Celovsky
Equipment:	WL/int meter: Solinst 122 # 28300		
Comments:	Not Recorded		

Water Level			
Date:	11/15/2023 8:40:00 AM	Measured Depth of Well:	9.89 ft btoc
Is Well Dry?	No	Depth to DNAPL:	NE
Depth to Water:	7.38 ft btoc	Depth to LNAPL:	NE
Notes:	Assume screen 5-10		

Purge Information			
Begin Date and Time:	11/15/2023 8:53:00 AM	End Date and Time:	11/15/2023 9:20:00 AM
Initial Pump Depth:	8.64 ft btoc	Final Pump Depth:	8.64 ft btoc
Purge Method:	Low flow (pump type: Peristaltic)	Sample Method:	Low flow
Notes:	Not Recorded		

Time	Purge Rate (ml/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
8:57 AM	100		13.5	6.12	0.456	3.58	157.4	22.4	7.39	None	Pale brown, prtcls
9:02 AM	100		14.5	6.05	0.481	1.64	106.4	13.2	7.39	"	"
9:07 AM	100		14.6	5.99	0.474	1.18	106.6	4.81	7.4	"	More clr, few part
9:12 AM	100		14.9	5.96	0.472	0.96	113.6	1.55	7.39	"	"
9:17 AM	100		14.9	5.96	0.47	0.83	120.1	3.61	7.39	"	"
9:20 AM	100	4	15	5.95	0.469	0.77	122.7	2.98	7.39	"	"



GROUNDWATER SAMPLING LOG

Client: Chevron Environmental Management Company
Site: Chevron Tacoma

Project #: 60701804
Event: 2023-Q4-GW

Sample Information			
Sample ID:	MW-39-W-231115	Date:	11/15/2023 10:12:00 AM
Well ID:	MW-39	Location Type:	MW
Duplicate ID:	Not Applicable	Sampler:	Suzanne Catlin
Equipment:	Field param meter: Other # 50631 WL/int meter: Solinst 122 # 12726		
Comments:	Not Recorded		

Water Level			
Date:	11/15/2023 9:32:00 AM	Measured Depth of Well:	9.93 ft btoc
Is Well Dry?	No	Depth to DNAPL:	NE
Depth to Water:	5.68 ft btoc	Depth to LNAPL:	NE
Notes:	Not Recorded		

Purge Information			
Begin Date and Time:	11/15/2023 9:38:00 AM	End Date and Time:	11/15/2023 10:08:00 AM
Initial Pump Depth:	8 ft btoc	Final Pump Depth:	8 ft btoc
Purge Method:	Low flow (pump type: Peristaltic)	Sample Method:	Low flow
Notes:	Not Recorded		

Time	Purge Rate (ml/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
9:45 AM	110		13	6.84	0.784	1.14	-7.1	9.07	5.77	Chemical odors	Clr with particles
9:50 AM	110		13.5	6.84	0.797	0.48	-19.3	3.93	5.76	Chemical odors	Clr with particles
9:55 AM	110		13.7	6.84	0.801	0.37	-25.7	2.76	5.76	Chemical odors	Clear
10:00 AM	110		13.8	6.85	0.805	0.3	-30.6	1.47	5.76	Chemical odors	Clear
10:05 AM	110		13.3	6.85	0.795	0.28	-32.7	1.17	5.76	Chemical odors	Clear
10:08 AM	110		13.3	6.84	0.789	0.27	-33.8	1.21	5.76	Chemical odors	Clear



GROUNDWATER SAMPLING LOG

Client: Chevron Environmental Management Company
Site: Chevron Tacoma

Project #: 60701804
Event: 2023-Q4-GW

Sample Information			
Sample ID:	RMW-01-W-231115	Date:	11/15/2023 11:41:00 AM
Well ID:	RMW-01	Location Type:	MW
Duplicate ID:	Not Applicable	Sampler:	Suzanne Catlin
Equipment:	Field param meter: Other # 50631 WL/int meter: Solinst 122 # 12726		
Comments:	Not Recorded		

Water Level			
Date:	11/15/2023 10:39:00 AM	Measured Depth of Well:	9.85 ft btoc
Is Well Dry?	No	Depth to DNAPL:	NE
Depth to Water:	4.85 ft btoc	Depth to LNAPL:	NE
Notes:	Not Recorded		

Purge Information			
Begin Date and Time:	11/15/2023 10:46:00 AM	End Date and Time:	11/15/2023 11:37:00 AM
Initial Pump Depth:	7.5 ft btoc	Final Pump Depth:	7.5 ft btoc
Purge Method:	Low flow (pump type: Peristaltic)	Sample Method:	Low flow
Notes:	Not Recorded		

Time	Purge Rate (ml/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
10:54 AM	110		12.4	6.98	0.435	1.13	26.4	7.06	4.89	Slight chmcl odor	Clr with particl es
11:10 AM	170		12.3	6.95	0.442	1.36	1.2	6.65	4.89	Slight chmcl odor	Clr with particl es
11:15 AM	170		12.7	6.94	0.448	0.74	-14.8	4.8	4.91	Slight chmcl odor	Clear
11:20 AM	170		12.8	6.93	0.453	0.47	-25.7	4.93	4.9	Slight chmcl odor	Clear
11:25 AM	170		13	6.94	0.45	0.71	-27.3	2.5	4.91	Slight chmcl odor	Clear
11:28 AM	170		13.1	6.95	0.439	1.83	-26.7	2.34	4.91	Slight chmcl odor	Clear

Time	Purge Rate (ml/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
11:31 AM	170		12.9	6.95	0.434	2.08	-26.9	2.07	4.91	Slight chmcl odor	Clear
11:34 AM	170		13.1	6.95	0.434	2.1	-26.6	1.86	4.91	Slight chmcl odor	Clear
11:37 AM	170		13	6.95	0.428	2.24	-25.7	1.96	4.91	Slight chmcl odor	Clear

Appendix B

Laboratory Analytical Reports

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Bradley Wynne
AECOM
13355 Noel Road
Suite 400
Dallas, Texas 75240

Generated 1/17/2024 3:09:25 PM Revision 1

JOB DESCRIPTION

CEMREC Legacy Sites – Tacoma

JOB NUMBER

410-151795-1

Eurofins Lancaster Laboratories Environment Testing, LLC

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization



Authorized for release by
Amek Carter, Project Manager
Loran.Carter@et.eurofinsus.com
(717)556-7252

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Revision 1

Compliance Statement

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- QC results that exceed the upper limits and are associated with non-detect samples are qualified but further narration is not required since the bias is high and does not change a non-detect result. Further narration is also not required with QC blank detection when the associated sample concentration is non-detect or more than ten times the level in the blank.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD is performed, unless otherwise specified in the method.

- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Measurement uncertainty values, as applicable, are available upon request.

Test results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" and tested in the laboratory are not performed within 15 minutes of collection.

This report shall not be reproduced except in full, without the written approval of the laboratory.

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Definitions/Glossary

Client: AECOM

Job ID: 410-151795-1

Project/Site: CEMREC Legacy Sites – Tacoma

Qualifiers

GC VOA

Qualifier	Qualifier Description
cn	Refer to Case Narrative for further detail
F1	MS and/or MSD recovery exceeds control limits.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
H3	Sample was received and analyzed past holding time. This does not meet regulatory requirements.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
B	Compound was found in the blank and sample.
cn	Refer to Case Narrative for further detail
F1	MS and/or MSD recovery exceeds control limits.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: AECOM
Project: CEMREC Legacy Sites – Tacoma

Job ID: 410-151795-1

Job ID: 410-151795-1

Eurofins Lancaster Laboratories Environment

Job Narrative 410-151795-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Revision

The report being provided is a revision of the original report sent on 12/13/2023. The report (revision 1) is being revised due to: Correct sample ID for MW-10.

Receipt

The samples were received on 11/17/2023 9:57 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 0.4°C, 0.5°C, 1.2°C and 4.8°C

GC/MS VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC VOA

Method NWTPH_Gx: The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: MW-31-W-231114 (410-151795-6). Elevated reporting limits (RLs) are provided.

Method NWTPH_Gx: The continuing calibration verification (CCV) analyzed on 410-446883 is compliant under 8260C/D method criteria for C7-C12. The software does not display the % Drift data to the whole number as is listed in the method (i.e. limit of 20%). When applying the evaluation to a whole number, the check passes the criteria with a value of 20% Drift.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC Semi VOA

Method NWTPH_Dx: The surrogate recovery for the blank and laboratory control sample (LCS) associated with preparation batch 410-446260 and 410-447811 and analytical batch 410-448229 was outside the lower control limits.

Method NWTPH_Dx: Surrogate recovery for the following sample was outside of acceptance limits: MW-1D-W-231113 (410-151795-1). There was insufficient sample to perform a re-extraction; therefore, the data have been reported.

Method NWTPH_Dx: The method blank for preparation batch 410-448167 and 410-449581 contained C24-C40 with Silica Gel clean up above the reporting limit (RL). None of the samples associated with this method blank contained the target compound; therefore, re-extraction and/or re-analysis of samples were not performed. MW-38-W-231115 (410-151795-9), D-27-W-231115 (410-151795-18), MW-39-W-231115 (410-151795-19), D-12-W-231115 (410-151795-21), D-15-W-231115 (410-151795-22), MW-36-W-231115 (410-151795-23) and MW-37-W-231115 (410-151795-24)

Method NWTPH_Dx: Surrogate recovery for the following sample was outside control limits: MW-31-W-231114 (410-151795-6). Re-extraction and/or re-analysis was performed outside of holding time with acceptable results.

Method NWTPH_Dx: The method blank for preparation batch 410-447356 and 410-449353 contained C12-C24 with Silica Gel clean up and C24-C40 with Silica Gel clean up above the reporting limit (RL). None of the samples associated with this method blank contained the target compound; therefore, re-extraction and/or re-analysis of samples were not performed. MW-31-W-231114 (410-151795-6), MW-12-W-231114 (410-151795-7) and D-08-W-231114 (410-151795-8)

Method NWTPH_Dx: The method blank for preparation batch 410-447356 and 410-449353 contained C12-C24 with Silica Gel clean up and C24-C40 with Silica Gel clean up above the reporting limit (RL). None of the samples associated with this method

Eurofins Lancaster Laboratories Environment Testing, LLC

Case Narrative

Client: AECOM
Project: CEMREC Legacy Sites – Tacoma

Job ID: 410-151795-1

Job ID: 410-151795-1 (Continued)

Eurofins Lancaster Laboratories Environment

blank contained the target compound; therefore, re-extraction and/or re-analysis of samples were not performed. D-02A-W-231114 (410-151795-16)

Method NWTPH_Dx: The software does not display the % Drift data to the whole number as is listed in the method (i.e. limit of 15%). When the -15.1% drift is evaluated to the whole number, the continuing calibration verification (CCV) passes the method criteria for o- terphenyl (Surr). D-02A-W-231114 (410-151795-16), D-25-W-231115 (410-151795-25), MW-29-W-231115 (410-151795-27), (410-151795-H-25-C DU) and (410-151795-H-27-C DU)

Method NWTPH_Dx: The method blank for preparation batch 410-447356 and 410-449353 contained C12-C24 with Silica Gel clean up and C24-C40 with Silica Gel clean up above the reporting limit (RL). There was insufficient sample to perform a re-extraction and/or re-analysis; therefore, the data have been reported.

Method NWTPH_Dx: Samples D-26-W-231115 (410-151795-10) and RMW-01-W-231115 (410-151795-20) had a detection for the C24-C40 range due to silica gel contamination. Sample was re-extracted outside of the method hold time. Re-extract was non-detect for the C24-C40 range.

Method NWTPH_Dx: Sample D-24-W-231115 (410-151795-11) had a detection for the C24-C40 range due to silica gel contamination. Sample was re-extracted outside of the method hold time. Re-extract had a detection for the C24-C40 range due to silica gel contamination.

Method NWTPH_Dx: Samples MW-26-W-231114 (410-151795-2) had a detection for the C24-C40 range due to silica gel contamination. Sample was re-extracted outside of the method hold time. Re-extract was non-detect for the C24-C40 range.

Method NWTPH_Dx: The continuing calibration verification (CCV) associated with batch 410-449762 recovered outside acceptance criteria, low biased, for C12-C24 with Silica Gel clean up, C24-C40 with Silica Gel clean up and o- terphenyl (Surr). There was no extract volume available to re-analyze the samples; therefore, the samples were re-extracted outside of method holding time. The data for the re-extraction is not usable due to laboratory error. There is no sample volume for a third trial. The original data is reported. D-17-W-231114 (410-151795-3), D-18-W-231114 (410-151795-12) and D-09-W-231114 (410-151795-14)

Method NWTPH_Dx: The method blank for preparation batch 410-446264 contained C12-C24 above the reporting limit (RL). There was insufficient sample to perform a re-extraction and/or re-analysis; therefore, the data have been reported.

MW-1D-W-231113 (410-151795-1) and (410-151795-H-1-B DU)

Method NWTPH_Dx: Surrogate recovery for the following sample was outside control limits: MW-31-W-231114 (410-151795-6). Re-extraction and/or re-analysis was performed outside of holding time with acceptable results. Since holding time expired prior to re-analysis, results are reported from the initial trial.

Method NWTPH_Dx: The sample results were non-detect for C12-C24 and C24-C40, therefore the silica gel cleanup is not needed.

MW-38-W-231115 (410-151795-9) and MW-36-W-231115 (410-151795-23)

Method NWTPH_Dx: The sample results were non-detect for C12-C24 and C24-C40, therefore the silica gel cleanup is not needed. MW-23-W-231114 (410-151795-17)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Detection Summary

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151795-1

Client Sample ID: MW-10-W-231113

Lab Sample ID: 410-151795-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C12-C24	280	B cn	100	46	ug/L	1		NWTPH-Dx	Total/NA
C24-C40	240	J	250	100	ug/L	1		NWTPH-Dx	Total/NA

Client Sample ID: MW-26-W-231114

Lab Sample ID: 410-151795-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C12-C24	470	*1	100	46	ug/L	1		NWTPH-Dx	Total/NA
C12-C24 with Silica Gel clean up	90	J B *1 cn	100	46	ug/L	1		NWTPH-Dx	Total/NA
C24-C40	270		250	100	ug/L	1		NWTPH-Dx	Total/NA
C24-C40 with Silica Gel clean up	330	B cn	250	100	ug/L	1		NWTPH-Dx	Total/NA

Client Sample ID: D-17-W-231114

Lab Sample ID: 410-151795-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C12-C24	180	*1	100	46	ug/L	1		NWTPH-Dx	Total/NA

Client Sample ID: MW-11-W-231114

Lab Sample ID: 410-151795-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C12-C24	430	*1	100	46	ug/L	1		NWTPH-Dx	Total/NA
C24-C40	280		260	100	ug/L	1		NWTPH-Dx	Total/NA

Client Sample ID: D-19-W-231114

Lab Sample ID: 410-151795-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C12-C24	410	*1	100	45	ug/L	1		NWTPH-Dx	Total/NA
C24-C40	140	J	250	100	ug/L	1		NWTPH-Dx	Total/NA

Client Sample ID: MW-31-W-231114

Lab Sample ID: 410-151795-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C12-C24	71	J *1 cn	100	46	ug/L	1		NWTPH-Dx	Total/NA

Client Sample ID: MW-12-W-231114

Lab Sample ID: 410-151795-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C7-C12 (1C)	82	J	250	43	ug/L	1		NWTPH-Gx	Total/NA
C12-C24	1500	*1	100	46	ug/L	1		NWTPH-Dx	Total/NA
C24-C40	630		260	100	ug/L	1		NWTPH-Dx	Total/NA

Client Sample ID: D-08-W-231114

Lab Sample ID: 410-151795-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C7-C12 (1C)	50	J	250	43	ug/L	1		NWTPH-Gx	Total/NA
C12-C24	1100	*1	100	47	ug/L	1		NWTPH-Dx	Total/NA
C24-C40	360		260	100	ug/L	1		NWTPH-Dx	Total/NA

Client Sample ID: MW-38-W-231115

Lab Sample ID: 410-151795-9

No Detections.

Client Sample ID: D-26-W-231115

Lab Sample ID: 410-151795-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C12-C24	170	F1	100	46	ug/L	1		NWTPH-Dx	Total/NA
C24-C40 with Silica Gel clean up	250	B cn	250	100	ug/L	1		NWTPH-Dx	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Lancaster Laboratories Environment Testing, LLC

Detection Summary

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151795-1

Client Sample ID: D-24-W-231115

Lab Sample ID: 410-151795-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C12-C24	250		100	46	ug/L	1		NWTPH-Dx	Total/NA
C24-C40 with Silica Gel clean up	400	B cn	250	100	ug/L	1		NWTPH-Dx	Total/NA

Client Sample ID: D-18-W-231114

Lab Sample ID: 410-151795-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C12-C24	640	*1	100	46	ug/L	1		NWTPH-Dx	Total/NA
C24-C40	320		250	100	ug/L	1		NWTPH-Dx	Total/NA

Client Sample ID: MW-30-W-231114

Lab Sample ID: 410-151795-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C7-C12 (1C)	59	J	250	43	ug/L	1		NWTPH-Gx	Total/NA
C12-C24	5300	*1	100	46	ug/L	1		NWTPH-Dx	Total/NA
C24-C40	1600		250	100	ug/L	1		NWTPH-Dx	Total/NA

Client Sample ID: D-09-W-231114

Lab Sample ID: 410-151795-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C12-C24	2400	*1	100	46	ug/L	1		NWTPH-Dx	Total/NA
C24-C40	1100		260	100	ug/L	1		NWTPH-Dx	Total/NA

Client Sample ID: MW-24-W-231114

Lab Sample ID: 410-151795-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C12-C24	400	*1	100	45	ug/L	1		NWTPH-Dx	Total/NA
C24-C40	170	J	250	100	ug/L	1		NWTPH-Dx	Total/NA

Client Sample ID: D-02A-W-231114

Lab Sample ID: 410-151795-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C12-C24	1200	*1	100	46	ug/L	1		NWTPH-Dx	Total/NA
C24-C40	540		260	100	ug/L	1		NWTPH-Dx	Total/NA

Client Sample ID: MW-23-W-231114

Lab Sample ID: 410-151795-17

No Detections.

Client Sample ID: D-27-W-231115

Lab Sample ID: 410-151795-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C12-C24	1300		100	46	ug/L	1		NWTPH-Dx	Total/NA
C24-C40	360		250	100	ug/L	1		NWTPH-Dx	Total/NA

Client Sample ID: MW-39-W-231115

Lab Sample ID: 410-151795-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C7-C12 (1C)	63	J	250	43	ug/L	1		NWTPH-Gx	Total/NA
C12-C24	2300		100	46	ug/L	1		NWTPH-Dx	Total/NA
C24-C40	310		250	100	ug/L	1		NWTPH-Dx	Total/NA

Client Sample ID: RMW-01-W-231115

Lab Sample ID: 410-151795-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C7-C12 (1C)	250	cn	250	43	ug/L	1		NWTPH-Gx	Total/NA
C12-C24	1300		100	46	ug/L	1		NWTPH-Dx	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Lancaster Laboratories Environment Testing, LLC

Detection Summary

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151795-1

Client Sample ID: RMW-01-W-231115 (Continued)

Lab Sample ID: 410-151795-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C12-C24 with Silica Gel clean up	54	J cn	100	46	ug/L	1		NWTPH-Dx	Total/NA
C24-C40	210	J	260	100	ug/L	1		NWTPH-Dx	Total/NA
C24-C40 with Silica Gel clean up	1000	B cn	260	100	ug/L	1		NWTPH-Dx	Total/NA

Client Sample ID: D-12-W-231115

Lab Sample ID: 410-151795-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C12-C24	270		100	46	ug/L	1		NWTPH-Dx	Total/NA
C24-C40	190	J	260	100	ug/L	1		NWTPH-Dx	Total/NA

Client Sample ID: D-15-W-231115

Lab Sample ID: 410-151795-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C12-C24	1300		100	46	ug/L	1		NWTPH-Dx	Total/NA
C24-C40	260		250	100	ug/L	1		NWTPH-Dx	Total/NA

Client Sample ID: MW-36-W-231115

Lab Sample ID: 410-151795-23

No Detections.

Client Sample ID: MW-37-W-231115

Lab Sample ID: 410-151795-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C12-C24	73	J	100	46	ug/L	1		NWTPH-Dx	Total/NA

Client Sample ID: D-25-W-231115

Lab Sample ID: 410-151795-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C12-C24	1200	*1	100	46	ug/L	1		NWTPH-Dx	Total/NA
C12-C24 with Silica Gel clean up	64	J cn	100	46	ug/L	1		NWTPH-Dx	Total/NA
C24-C40	420		250	100	ug/L	1		NWTPH-Dx	Total/NA

Client Sample ID: TB-1-T-231115

Lab Sample ID: 410-151795-26

No Detections.

Client Sample ID: MW-29-W-231115

Lab Sample ID: 410-151795-27

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C7-C12 (1C)	580	cn	250	43	ug/L	1		NWTPH-Gx	Total/NA
C12-C24	3000	*1	100	46	ug/L	1		NWTPH-Dx	Total/NA
C24-C40	470		250	100	ug/L	1		NWTPH-Dx	Total/NA

Client Sample ID: TB2-T-231115

Lab Sample ID: 410-151795-28

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Lancaster Laboratories Environment Testing, LLC

Client Sample Results

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151795-1

Client Sample ID: MW-10-W-231113

Lab Sample ID: 410-151795-1

Date Collected: 11/13/23 13:25

Matrix: Water

Date Received: 11/17/23 09:57

Method: SW846 8260D/UST - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.30	ug/L			11/22/23 19:35	1
Ethylbenzene	ND		1.0	0.40	ug/L			11/22/23 19:35	1
Methyl tertiary butyl ether	ND		1.0	0.20	ug/L			11/22/23 19:35	1
Toluene	ND		1.0	0.30	ug/L			11/22/23 19:35	1
Xylenes, Total	ND		6.0	0.40	ug/L			11/22/23 19:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		80 - 120		11/22/23 19:35	1
4-Bromofluorobenzene (Surr)	97		80 - 120		11/22/23 19:35	1
Dibromofluoromethane (Surr)	99		80 - 120		11/22/23 19:35	1
Toluene-d8 (Surr)	99		80 - 120		11/22/23 19:35	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	ND		250	43	ug/L			11/20/23 17:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	98		50 - 150		11/20/23 17:11	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	280	B cn	100	46	ug/L		11/22/23 07:54	11/22/23 23:47	1
C12-C24 with Silica Gel clean up	ND	cn	100	46	ug/L		11/22/23 07:47	11/30/23 06:45	1
C24-C40	240	J	250	100	ug/L		11/22/23 07:54	11/22/23 23:47	1
C24-C40 with Silica Gel clean up	ND	cn	250	100	ug/L		11/22/23 07:47	11/30/23 06:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o- terphenyl (Surr)	79		50 - 150	11/22/23 07:54	11/22/23 23:47	1
o- terphenyl (Surr)	49	S1- cn	50 - 150	11/22/23 07:47	11/30/23 06:45	1

Client Sample ID: MW-26-W-231114

Lab Sample ID: 410-151795-2

Date Collected: 11/14/23 09:35

Matrix: Water

Date Received: 11/17/23 09:57

Method: SW846 8260D/UST - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.30	ug/L			11/22/23 19:59	1
Ethylbenzene	ND		1.0	0.40	ug/L			11/22/23 19:59	1
Methyl tertiary butyl ether	ND		1.0	0.20	ug/L			11/22/23 19:59	1
Toluene	ND		1.0	0.30	ug/L			11/22/23 19:59	1
Xylenes, Total	ND		6.0	0.40	ug/L			11/22/23 19:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		80 - 120		11/22/23 19:59	1
4-Bromofluorobenzene (Surr)	98		80 - 120		11/22/23 19:59	1
Dibromofluoromethane (Surr)	99		80 - 120		11/22/23 19:59	1
Toluene-d8 (Surr)	100		80 - 120		11/22/23 19:59	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	ND		250	43	ug/L			11/20/23 17:36	1

Eurofins Lancaster Laboratories Environment Testing, LLC

Client Sample Results

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151795-1

Client Sample ID: MW-26-W-231114

Lab Sample ID: 410-151795-2

Date Collected: 11/14/23 09:35

Matrix: Water

Date Received: 11/17/23 09:57

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	98		50 - 150		11/20/23 17:36	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	470	*1	100	46	ug/L		11/28/23 08:09	11/29/23 00:52	1
C12-C24 with Silica Gel clean up	90	J B *1 cn	100	46	ug/L		11/28/23 08:04	12/06/23 21:27	1
C24-C40	270		250	100	ug/L		11/28/23 08:09	11/29/23 00:52	1
C24-C40 with Silica Gel clean up	330	B cn	250	100	ug/L		11/28/23 08:04	12/06/23 21:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o- terphenyl (Surr)	79		50 - 150	11/28/23 08:09	11/29/23 00:52	1
o- terphenyl (Surr)	101	cn	50 - 150	11/28/23 08:04	12/06/23 21:27	1

Client Sample ID: D-17-W-231114

Lab Sample ID: 410-151795-3

Date Collected: 11/14/23 10:45

Matrix: Water

Date Received: 11/17/23 09:57

Method: SW846 8260D/UST - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.30	ug/L			11/22/23 20:23	1
Ethylbenzene	ND		1.0	0.40	ug/L			11/22/23 20:23	1
Methyl tertiary butyl ether	ND		1.0	0.20	ug/L			11/22/23 20:23	1
Toluene	ND		1.0	0.30	ug/L			11/22/23 20:23	1
Xylenes, Total	ND		6.0	0.40	ug/L			11/22/23 20:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		80 - 120		11/22/23 20:23	1
4-Bromofluorobenzene (Surr)	96		80 - 120		11/22/23 20:23	1
Dibromofluoromethane (Surr)	97		80 - 120		11/22/23 20:23	1
Toluene-d8 (Surr)	100		80 - 120		11/22/23 20:23	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	ND		250	43	ug/L			11/20/23 18:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	97		50 - 150		11/20/23 18:01	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	180	*1	100	46	ug/L		11/28/23 08:09	11/29/23 01:15	1
C12-C24 with Silica Gel clean up	ND	cn	100	46	ug/L		11/28/23 08:04	12/04/23 16:52	1
C24-C40	ND		250	100	ug/L		11/28/23 08:09	11/29/23 01:15	1
C24-C40 with Silica Gel clean up	ND	cn	250	100	ug/L		11/28/23 08:04	12/04/23 16:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o- terphenyl (Surr)	83		50 - 150	11/28/23 08:09	11/29/23 01:15	1
o- terphenyl (Surr)	70	cn	50 - 150	11/28/23 08:04	12/04/23 16:52	1

Client Sample Results

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151795-1

Client Sample ID: MW-11-W-231114

Lab Sample ID: 410-151795-4

Date Collected: 11/14/23 11:30

Matrix: Water

Date Received: 11/17/23 09:57

Method: SW846 8260D/UST - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.30	ug/L			11/22/23 20:47	1
Ethylbenzene	ND		1.0	0.40	ug/L			11/22/23 20:47	1
Methyl tertiary butyl ether	ND		1.0	0.20	ug/L			11/22/23 20:47	1
Toluene	ND		1.0	0.30	ug/L			11/22/23 20:47	1
Xylenes, Total	ND		6.0	0.40	ug/L			11/22/23 20:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		80 - 120		11/22/23 20:47	1
4-Bromofluorobenzene (Surr)	98		80 - 120		11/22/23 20:47	1
Dibromofluoromethane (Surr)	97		80 - 120		11/22/23 20:47	1
Toluene-d8 (Surr)	101		80 - 120		11/22/23 20:47	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	ND		250	43	ug/L			11/20/23 18:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	97		50 - 150		11/20/23 18:27	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	430	*1	100	46	ug/L		11/28/23 08:09	11/29/23 01:38	1
C12-C24 with Silica Gel clean up	ND	H	100	46	ug/L		12/07/23 15:43	12/09/23 01:30	1
C24-C40	280		260	100	ug/L		11/28/23 08:09	11/29/23 01:38	1
C24-C40 with Silica Gel clean up	ND	H	260	100	ug/L		12/07/23 15:43	12/09/23 01:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-terphenyl (Surr)	73		50 - 150	11/28/23 08:09	11/29/23 01:38	1
o-terphenyl (Surr)	66		50 - 150	12/07/23 15:43	12/09/23 01:30	1

Client Sample ID: D-19-W-231114

Lab Sample ID: 410-151795-5

Date Collected: 11/14/23 13:00

Matrix: Water

Date Received: 11/17/23 09:57

Method: SW846 8260D/UST - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.30	ug/L			11/22/23 21:11	1
Ethylbenzene	ND		1.0	0.40	ug/L			11/22/23 21:11	1
Methyl tertiary butyl ether	ND		1.0	0.20	ug/L			11/22/23 21:11	1
Toluene	ND		1.0	0.30	ug/L			11/22/23 21:11	1
Xylenes, Total	ND		6.0	0.40	ug/L			11/22/23 21:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		80 - 120		11/22/23 21:11	1
4-Bromofluorobenzene (Surr)	97		80 - 120		11/22/23 21:11	1
Dibromofluoromethane (Surr)	97		80 - 120		11/22/23 21:11	1
Toluene-d8 (Surr)	100		80 - 120		11/22/23 21:11	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	ND		250	43	ug/L			11/20/23 18:52	1

Eurofins Lancaster Laboratories Environment Testing, LLC

Client Sample Results

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151795-1

Client Sample ID: D-19-W-231114

Lab Sample ID: 410-151795-5

Date Collected: 11/14/23 13:00

Matrix: Water

Date Received: 11/17/23 09:57

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	97		50 - 150					11/20/23 18:52	1
Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	410	*1	100	45	ug/L		11/28/23 08:09	11/29/23 02:01	1
C12-C24 with Silica Gel clean up	ND	H	100	46	ug/L		12/07/23 15:43	12/09/23 01:53	1
C24-C40	140	J	250	100	ug/L		11/28/23 08:09	11/29/23 02:01	1
C24-C40 with Silica Gel clean up	ND	H	250	100	ug/L		12/07/23 15:43	12/09/23 01:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o- terphenyl (Surr)	82		50 - 150				11/28/23 08:09	11/29/23 02:01	1
o- terphenyl (Surr)	64		50 - 150				12/07/23 15:43	12/09/23 01:53	1

Client Sample ID: MW-31-W-231114

Lab Sample ID: 410-151795-6

Date Collected: 11/14/23 13:50

Matrix: Water

Date Received: 11/17/23 09:57

Method: SW846 8260D/UST - Volatile Organic Compounds by GC/MS									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.30	ug/L			11/22/23 21:35	1
Ethylbenzene	ND		1.0	0.40	ug/L			11/22/23 21:35	1
Methyl tertiary butyl ether	ND		1.0	0.20	ug/L			11/22/23 21:35	1
Toluene	ND		1.0	0.30	ug/L			11/22/23 21:35	1
Xylenes, Total	ND		6.0	0.40	ug/L			11/22/23 21:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		80 - 120					11/22/23 21:35	1
4-Bromofluorobenzene (Surr)	98		80 - 120					11/22/23 21:35	1
Dibromofluoromethane (Surr)	97		80 - 120					11/22/23 21:35	1
Toluene-d8 (Surr)	100		80 - 120					11/22/23 21:35	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	ND	cn	1300	220	ug/L			11/20/23 23:58	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	97	cn	50 - 150					11/20/23 23:58	5

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	71	J *1 cn	100	46	ug/L		11/28/23 08:09	11/29/23 02:23	1
C12-C24 with Silica Gel clean up	ND	*1 cn	100	46	ug/L		11/28/23 08:04	12/06/23 22:59	1
C24-C40	ND	cn	260	100	ug/L		11/28/23 08:09	11/29/23 02:23	1
C24-C40 with Silica Gel clean up	ND	cn	260	100	ug/L		11/28/23 08:04	12/06/23 22:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-terphenyl (Surr)	34	S1- cn	50 - 150				11/28/23 08:09	11/29/23 02:23	1
o-terphenyl (Surr)	31	S1- cn	50 - 150				11/28/23 08:04	12/06/23 22:59	1
n-Decanoic Acid (Surr)	0.0009	cn	0 - 1				11/28/23 08:04	12/06/23 22:59	1

Euofins Lancaster Laboratories Environment Testing, LLC

Client Sample Results

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151795-1

Client Sample ID: MW-12-W-231114

Lab Sample ID: 410-151795-7

Date Collected: 11/14/23 15:40

Matrix: Water

Date Received: 11/17/23 09:57

Method: SW846 8260D/UST - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.30	ug/L			11/22/23 21:58	1
Ethylbenzene	ND		1.0	0.40	ug/L			11/22/23 21:58	1
Methyl tertiary butyl ether	ND		1.0	0.20	ug/L			11/22/23 21:58	1
Toluene	ND		1.0	0.30	ug/L			11/22/23 21:58	1
Xylenes, Total	ND		6.0	0.40	ug/L			11/22/23 21:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		80 - 120		11/22/23 21:58	1
4-Bromofluorobenzene (Surr)	97		80 - 120		11/22/23 21:58	1
Dibromofluoromethane (Surr)	98		80 - 120		11/22/23 21:58	1
Toluene-d8 (Surr)	99		80 - 120		11/22/23 21:58	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	82	J	250	43	ug/L			11/21/23 19:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	99		50 - 150		11/21/23 19:34	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	1500	*1	100	46	ug/L		11/28/23 08:09	11/29/23 02:46	1
C12-C24 with Silica Gel clean up	ND	*1 cn	100	46	ug/L		11/28/23 08:04	12/06/23 23:22	1
C24-C40	630		260	100	ug/L		11/28/23 08:09	11/29/23 02:46	1
C24-C40 with Silica Gel clean up	ND	cn	260	100	ug/L		11/28/23 08:04	12/06/23 23:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-terphenyl (Surr)	51		50 - 150	11/28/23 08:09	11/29/23 02:46	1
o-terphenyl (Surr)	53		50 - 150	11/28/23 08:04	12/06/23 23:22	1
n-Decanoic Acid (Surr)	0.002		0 - 1	11/28/23 08:04	12/06/23 23:22	1

Client Sample ID: D-08-W-231114

Lab Sample ID: 410-151795-8

Date Collected: 11/14/23 16:35

Matrix: Water

Date Received: 11/17/23 09:57

Method: SW846 8260D/UST - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.30	ug/L			11/22/23 22:23	1
Ethylbenzene	ND		1.0	0.40	ug/L			11/22/23 22:23	1
Methyl tertiary butyl ether	ND		1.0	0.20	ug/L			11/22/23 22:23	1
Toluene	ND		1.0	0.30	ug/L			11/22/23 22:23	1
Xylenes, Total	ND		6.0	0.40	ug/L			11/22/23 22:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		80 - 120		11/22/23 22:23	1
4-Bromofluorobenzene (Surr)	95		80 - 120		11/22/23 22:23	1
Dibromofluoromethane (Surr)	99		80 - 120		11/22/23 22:23	1
Toluene-d8 (Surr)	99		80 - 120		11/22/23 22:23	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	50	J	250	43	ug/L			11/21/23 20:52	1

Eurofins Lancaster Laboratories Environment Testing, LLC

Client Sample Results

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151795-1

Client Sample ID: D-08-W-231114

Lab Sample ID: 410-151795-8

Date Collected: 11/14/23 16:35

Matrix: Water

Date Received: 11/17/23 09:57

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	100		50 - 150					11/21/23 20:52	1
Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	1100	*1	100	47	ug/L		11/28/23 08:09	11/29/23 03:09	1
C12-C24 with Silica Gel clean up	ND	*1 cn	100	47	ug/L		11/28/23 08:04	12/06/23 23:45	1
C24-C40	360		260	100	ug/L		11/28/23 08:09	11/29/23 03:09	1
C24-C40 with Silica Gel clean up	ND	cn	260	100	ug/L		11/28/23 08:04	12/06/23 23:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-terphenyl (Surr)	68		50 - 150				11/28/23 08:09	11/29/23 03:09	1
o-terphenyl (Surr)	76		50 - 150				11/28/23 08:04	12/06/23 23:45	1
n-Decanoic Acid (Surr)	0.0006		0 - 1				11/28/23 08:04	12/06/23 23:45	1

Client Sample ID: MW-38-W-231115

Lab Sample ID: 410-151795-9

Date Collected: 11/15/23 09:25

Matrix: Water

Date Received: 11/17/23 09:57

Method: SW846 8260D/UST - Volatile Organic Compounds by GC/MS									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.30	ug/L			11/26/23 15:06	1
Ethylbenzene	ND		1.0	0.40	ug/L			11/26/23 15:06	1
Methyl tertiary butyl ether	ND		1.0	0.20	ug/L			11/26/23 15:06	1
Toluene	ND		1.0	0.30	ug/L			11/26/23 15:06	1
Xylenes, Total	ND		6.0	0.40	ug/L			11/26/23 15:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		80 - 120					11/26/23 15:06	1
4-Bromofluorobenzene (Surr)	100		80 - 120					11/26/23 15:06	1
Dibromofluoromethane (Surr)	96		80 - 120					11/26/23 15:06	1
Toluene-d8 (Surr)	98		80 - 120					11/26/23 15:06	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	ND		250	43	ug/L			11/27/23 14:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	99		50 - 150					11/27/23 14:50	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	ND	cn	100	46	ug/L		11/29/23 15:22	12/01/23 11:36	1
C24-C40	ND	cn	260	100	ug/L		11/29/23 15:22	12/01/23 11:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-terphenyl (Surr)	72		50 - 150				11/29/23 15:22	12/01/23 11:36	1

Client Sample Results

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151795-1

Client Sample ID: D-26-W-231115

Lab Sample ID: 410-151795-10

Date Collected: 11/15/23 10:25

Matrix: Water

Date Received: 11/17/23 09:57

Method: SW846 8260D/UST - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.30	ug/L			11/26/23 15:30	1
Ethylbenzene	ND		1.0	0.40	ug/L			11/26/23 15:30	1
Methyl tertiary butyl ether	ND		1.0	0.20	ug/L			11/26/23 15:30	1
Toluene	ND		1.0	0.30	ug/L			11/26/23 15:30	1
Xylenes, Total	ND		6.0	0.40	ug/L			11/26/23 15:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		80 - 120		11/26/23 15:30	1
4-Bromofluorobenzene (Surr)	98		80 - 120		11/26/23 15:30	1
Dibromofluoromethane (Surr)	98		80 - 120		11/26/23 15:30	1
Toluene-d8 (Surr)	98		80 - 120		11/26/23 15:30	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	ND	F1	250	43	ug/L			11/27/23 15:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	99		50 - 150		11/27/23 15:15	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	170	F1	100	46	ug/L		11/29/23 15:22	12/01/23 11:59	1
C12-C24 with Silica Gel clean up	ND	F1 cn	100	46	ug/L		11/29/23 15:27	12/04/23 16:06	1
C24-C40	ND		250	100	ug/L		11/29/23 15:22	12/01/23 11:59	1
C24-C40 with Silica Gel clean up	250	B cn	250	100	ug/L		11/29/23 15:27	12/04/23 16:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-terphenyl (Surr)	80		50 - 150	11/29/23 15:22	12/01/23 11:59	1
o-terphenyl (Surr)	81	cn	50 - 150	11/29/23 15:27	12/04/23 16:06	1

Client Sample ID: D-24-W-231115

Lab Sample ID: 410-151795-11

Date Collected: 11/15/23 12:00

Matrix: Water

Date Received: 11/17/23 09:57

Method: SW846 8260D/UST - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.30	ug/L			11/26/23 16:42	1
Ethylbenzene	ND		1.0	0.40	ug/L			11/26/23 16:42	1
Methyl tertiary butyl ether	ND		1.0	0.20	ug/L			11/26/23 16:42	1
Toluene	ND		1.0	0.30	ug/L			11/26/23 16:42	1
Xylenes, Total	ND		6.0	0.40	ug/L			11/26/23 16:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		80 - 120		11/26/23 16:42	1
4-Bromofluorobenzene (Surr)	98		80 - 120		11/26/23 16:42	1
Dibromofluoromethane (Surr)	98		80 - 120		11/26/23 16:42	1
Toluene-d8 (Surr)	99		80 - 120		11/26/23 16:42	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	ND		250	43	ug/L			11/27/23 16:32	1

Eurofins Lancaster Laboratories Environment Testing, LLC

Client Sample Results

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151795-1

Client Sample ID: D-24-W-231115

Lab Sample ID: 410-151795-11

Date Collected: 11/15/23 12:00

Matrix: Water

Date Received: 11/17/23 09:57

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	100		50 - 150					11/27/23 16:32	1
Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	250		100	46	ug/L		11/29/23 15:22	12/01/23 12:22	1
C12-C24 with Silica Gel clean up	ND	cn	100	46	ug/L		11/29/23 15:27	12/04/23 17:15	1
C24-C40	ND		250	100	ug/L		11/29/23 15:22	12/01/23 12:22	1
C24-C40 with Silica Gel clean up	400	B cn	250	100	ug/L		11/29/23 15:27	12/04/23 17:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o- terphenyl (Surr)	75		50 - 150				11/29/23 15:22	12/01/23 12:22	1
o- terphenyl (Surr)	75	cn	50 - 150				11/29/23 15:27	12/04/23 17:15	1

Client Sample ID: D-18-W-231114

Lab Sample ID: 410-151795-12

Date Collected: 11/14/23 10:01

Matrix: Water

Date Received: 11/17/23 09:57

Method: SW846 8260D/UST - Volatile Organic Compounds by GC/MS									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.30	ug/L			11/26/23 17:06	1
Ethylbenzene	ND		1.0	0.40	ug/L			11/26/23 17:06	1
Methyl tertiary butyl ether	ND		1.0	0.20	ug/L			11/26/23 17:06	1
Toluene	ND		1.0	0.30	ug/L			11/26/23 17:06	1
Xylenes, Total	ND		6.0	0.40	ug/L			11/26/23 17:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		80 - 120					11/26/23 17:06	1
4-Bromofluorobenzene (Surr)	98		80 - 120					11/26/23 17:06	1
Dibromofluoromethane (Surr)	96		80 - 120					11/26/23 17:06	1
Toluene-d8 (Surr)	98		80 - 120					11/26/23 17:06	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	ND		250	43	ug/L			11/21/23 21:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	101		50 - 150					11/21/23 21:18	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	640	*1	100	46	ug/L		11/28/23 08:09	11/29/23 03:32	1
C12-C24 with Silica Gel clean up	ND	cn	100	46	ug/L		11/28/23 08:04	12/04/23 19:33	1
C24-C40	320		250	100	ug/L		11/28/23 08:09	11/29/23 03:32	1
C24-C40 with Silica Gel clean up	ND	cn	250	100	ug/L		11/28/23 08:04	12/04/23 19:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o- terphenyl (Surr)	74		50 - 150				11/28/23 08:09	11/29/23 03:32	1
o- terphenyl (Surr)	50	cn	50 - 150				11/28/23 08:04	12/04/23 19:33	1

Client Sample Results

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151795-1

Client Sample ID: MW-30-W-231114

Lab Sample ID: 410-151795-13

Date Collected: 11/14/23 11:01

Matrix: Water

Date Received: 11/17/23 09:57

Method: SW846 8260D/UST - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.30	ug/L			11/26/23 17:30	1
Ethylbenzene	ND		1.0	0.40	ug/L			11/26/23 17:30	1
Methyl tertiary butyl ether	ND		1.0	0.20	ug/L			11/26/23 17:30	1
Toluene	ND		1.0	0.30	ug/L			11/26/23 17:30	1
Xylenes, Total	ND		6.0	0.40	ug/L			11/26/23 17:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		80 - 120		11/26/23 17:30	1
4-Bromofluorobenzene (Surr)	97		80 - 120		11/26/23 17:30	1
Dibromofluoromethane (Surr)	99		80 - 120		11/26/23 17:30	1
Toluene-d8 (Surr)	98		80 - 120		11/26/23 17:30	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	59	J	250	43	ug/L			11/21/23 21:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	100		50 - 150		11/21/23 21:43	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	5300	*1	100	46	ug/L		11/28/23 08:09	11/29/23 03:54	1
C12-C24 with Silica Gel clean up	ND	H	100	46	ug/L		12/07/23 15:43	12/09/23 02:39	1
C24-C40	1600		250	100	ug/L		11/28/23 08:09	11/29/23 03:54	1
C24-C40 with Silica Gel clean up	ND	H	250	100	ug/L		12/07/23 15:43	12/09/23 02:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-terphenyl (Surr)	62		50 - 150	11/28/23 08:09	11/29/23 03:54	1
o-terphenyl (Surr)	68		50 - 150	12/07/23 15:43	12/09/23 02:39	1

Client Sample ID: D-09-W-231114

Lab Sample ID: 410-151795-14

Date Collected: 11/14/23 12:25

Matrix: Water

Date Received: 11/17/23 09:57

Method: SW846 8260D/UST - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.30	ug/L			11/26/23 17:54	1
Ethylbenzene	ND		1.0	0.40	ug/L			11/26/23 17:54	1
Methyl tertiary butyl ether	ND		1.0	0.20	ug/L			11/26/23 17:54	1
Toluene	ND		1.0	0.30	ug/L			11/26/23 17:54	1
Xylenes, Total	ND		6.0	0.40	ug/L			11/26/23 17:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		80 - 120		11/26/23 17:54	1
4-Bromofluorobenzene (Surr)	100		80 - 120		11/26/23 17:54	1
Dibromofluoromethane (Surr)	99		80 - 120		11/26/23 17:54	1
Toluene-d8 (Surr)	99		80 - 120		11/26/23 17:54	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	ND		250	43	ug/L			11/21/23 22:09	1

Eurofins Lancaster Laboratories Environment Testing, LLC

Client Sample Results

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151795-1

Client Sample ID: D-09-W-231114

Lab Sample ID: 410-151795-14

Date Collected: 11/14/23 12:25

Matrix: Water

Date Received: 11/17/23 09:57

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	101		50 - 150					11/21/23 22:09	1
Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	2400	*1	100	46	ug/L		11/28/23 08:09	11/29/23 04:17	1
C12-C24 with Silica Gel clean up	ND	cn	100	46	ug/L		11/28/23 08:04	12/04/23 20:19	1
C24-C40	1100		260	100	ug/L		11/28/23 08:09	11/29/23 04:17	1
C24-C40 with Silica Gel clean up	ND	cn	260	100	ug/L		11/28/23 08:04	12/04/23 20:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o- terphenyl (Surr)	65		50 - 150				11/28/23 08:09	11/29/23 04:17	1
o- terphenyl (Surr)	62	cn	50 - 150				11/28/23 08:04	12/04/23 20:19	1

Client Sample ID: MW-24-W-231114

Lab Sample ID: 410-151795-15

Date Collected: 11/14/23 14:03

Matrix: Water

Date Received: 11/17/23 09:57

Method: SW846 8260D/UST - Volatile Organic Compounds by GC/MS									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.30	ug/L			11/26/23 18:18	1
Ethylbenzene	ND		1.0	0.40	ug/L			11/26/23 18:18	1
Methyl tertiary butyl ether	ND		1.0	0.20	ug/L			11/26/23 18:18	1
Toluene	ND		1.0	0.30	ug/L			11/26/23 18:18	1
Xylenes, Total	ND		6.0	0.40	ug/L			11/26/23 18:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		80 - 120					11/26/23 18:18	1
4-Bromofluorobenzene (Surr)	97		80 - 120					11/26/23 18:18	1
Dibromofluoromethane (Surr)	99		80 - 120					11/26/23 18:18	1
Toluene-d8 (Surr)	100		80 - 120					11/26/23 18:18	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	ND		250	43	ug/L			11/21/23 22:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	99		50 - 150					11/21/23 22:34	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	400	*1	100	45	ug/L		11/28/23 08:09	11/29/23 05:02	1
C12-C24 with Silica Gel clean up	ND	H	100	46	ug/L		12/07/23 15:43	12/09/23 03:25	1
C24-C40	170	J	250	100	ug/L		11/28/23 08:09	11/29/23 05:02	1
C24-C40 with Silica Gel clean up	ND	H	250	100	ug/L		12/07/23 15:43	12/09/23 03:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o- terphenyl (Surr)	75		50 - 150				11/28/23 08:09	11/29/23 05:02	1
o- terphenyl (Surr)	59		50 - 150				12/07/23 15:43	12/09/23 03:25	1

Client Sample Results

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151795-1

Client Sample ID: D-02A-W-231114

Lab Sample ID: 410-151795-16

Date Collected: 11/14/23 15:21

Matrix: Water

Date Received: 11/17/23 09:57

Method: SW846 8260D/UST - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.30	ug/L			11/26/23 18:42	1
Ethylbenzene	ND		1.0	0.40	ug/L			11/26/23 18:42	1
Methyl tertiary butyl ether	ND		1.0	0.20	ug/L			11/26/23 18:42	1
Toluene	ND		1.0	0.30	ug/L			11/26/23 18:42	1
Xylenes, Total	ND		6.0	0.40	ug/L			11/26/23 18:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		80 - 120		11/26/23 18:42	1
4-Bromofluorobenzene (Surr)	97		80 - 120		11/26/23 18:42	1
Dibromofluoromethane (Surr)	99		80 - 120		11/26/23 18:42	1
Toluene-d8 (Surr)	97		80 - 120		11/26/23 18:42	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	ND		250	43	ug/L			11/21/23 23:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	100		50 - 150		11/21/23 23:00	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	1200	*1	100	46	ug/L		11/28/23 08:09	11/29/23 05:25	1
C12-C24 with Silica Gel clean up	ND	*1 cn	100	46	ug/L		11/28/23 08:04	12/06/23 21:50	1
C24-C40	540		260	100	ug/L		11/28/23 08:09	11/29/23 05:25	1
C24-C40 with Silica Gel clean up	ND	cn	260	100	ug/L		11/28/23 08:04	12/06/23 21:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-terphenyl (Surr)	67		50 - 150	11/28/23 08:09	11/29/23 05:25	1
o-terphenyl (Surr)	79	cn	50 - 150	11/28/23 08:04	12/06/23 21:50	1

Client Sample ID: MW-23-W-231114

Lab Sample ID: 410-151795-17

Date Collected: 11/14/23 16:33

Matrix: Water

Date Received: 11/17/23 09:57

Method: SW846 8260D/UST - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.30	ug/L			11/26/23 19:06	1
Ethylbenzene	ND		1.0	0.40	ug/L			11/26/23 19:06	1
Methyl tertiary butyl ether	ND		1.0	0.20	ug/L			11/26/23 19:06	1
Toluene	ND		1.0	0.30	ug/L			11/26/23 19:06	1
Xylenes, Total	ND		6.0	0.40	ug/L			11/26/23 19:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		80 - 120		11/26/23 19:06	1
4-Bromofluorobenzene (Surr)	99		80 - 120		11/26/23 19:06	1
Dibromofluoromethane (Surr)	99		80 - 120		11/26/23 19:06	1
Toluene-d8 (Surr)	98		80 - 120		11/26/23 19:06	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	ND		250	43	ug/L			11/21/23 23:26	1

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Client Sample Results

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151795-1

Client Sample ID: MW-23-W-231114

Lab Sample ID: 410-151795-17

Date Collected: 11/14/23 16:33

Matrix: Water

Date Received: 11/17/23 09:57

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	101		50 - 150		11/21/23 23:26	1
Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D
C12-C24	ND	*1 cn	100	46	ug/L	
C24-C40	ND	cn	250	100	ug/L	
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-terphenyl (Surr)	79		50 - 150	11/28/23 08:09	11/29/23 05:48	1

Client Sample ID: D-27-W-231115

Lab Sample ID: 410-151795-18

Date Collected: 11/15/23 09:17

Matrix: Water

Date Received: 11/17/23 09:57

Method: SW846 8260D/UST - Volatile Organic Compounds by GC/MS						
Analyte	Result	Qualifier	RL	MDL	Unit	D
Benzene	ND		1.0	0.30	ug/L	
Ethylbenzene	ND		1.0	0.40	ug/L	
Methyl tertiary butyl ether	ND		1.0	0.20	ug/L	
Toluene	ND		1.0	0.30	ug/L	
Xylenes, Total	ND		6.0	0.40	ug/L	
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		80 - 120		11/26/23 19:30	1
4-Bromofluorobenzene (Surr)	98		80 - 120		11/26/23 19:30	1
Dibromofluoromethane (Surr)	98		80 - 120		11/26/23 19:30	1
Toluene-d8 (Surr)	99		80 - 120		11/26/23 19:30	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D
C7-C12 (1C)	ND		250	43	ug/L	
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	101		50 - 150		11/27/23 16:57	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D
C12-C24	1300		100	46	ug/L	
C12-C24 with Silica Gel clean up	ND		100	46	ug/L	
C24-C40	360		250	100	ug/L	
C24-C40 with Silica Gel clean up	ND	cn	250	100	ug/L	
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-terphenyl (Surr)	65		50 - 150	11/29/23 15:22	12/01/23 12:44	1
o-terphenyl (Surr)	72		50 - 150	11/29/23 15:27	12/04/23 17:38	1

Client Sample ID: MW-39-W-231115

Lab Sample ID: 410-151795-19

Date Collected: 11/15/23 10:12

Matrix: Water

Date Received: 11/17/23 09:57

Method: SW846 8260D/UST - Volatile Organic Compounds by GC/MS						
Analyte	Result	Qualifier	RL	MDL	Unit	D
Benzene	ND		1.0	0.30	ug/L	

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Client Sample Results

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151795-1

Client Sample ID: MW-39-W-231115

Lab Sample ID: 410-151795-19

Date Collected: 11/15/23 10:12

Matrix: Water

Date Received: 11/17/23 09:57

Method: SW846 8260D/UST - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		1.0	0.40	ug/L			11/26/23 19:54	1
Methyl tertiary butyl ether	ND		1.0	0.20	ug/L			11/26/23 19:54	1
Toluene	ND		1.0	0.30	ug/L			11/26/23 19:54	1
Xylenes, Total	ND		6.0	0.40	ug/L			11/26/23 19:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		80 - 120		11/26/23 19:54	1
4-Bromofluorobenzene (Surr)	98		80 - 120		11/26/23 19:54	1
Dibromofluoromethane (Surr)	100		80 - 120		11/26/23 19:54	1
Toluene-d8 (Surr)	99		80 - 120		11/26/23 19:54	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	63	J	250	43	ug/L			11/27/23 17:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	104		50 - 150		11/27/23 17:22	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	2300		100	46	ug/L		11/29/23 15:22	12/01/23 13:07	1
C12-C24 with Silica Gel clean up	ND		100	46	ug/L		11/29/23 15:27	12/04/23 18:01	1
C24-C40	310		250	100	ug/L		11/29/23 15:22	12/01/23 13:07	1
C24-C40 with Silica Gel clean up	ND	cn	250	100	ug/L		11/29/23 15:27	12/04/23 18:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o- terphenyl (Surr)	62		50 - 150	11/29/23 15:22	12/01/23 13:07	1
o- terphenyl (Surr)	78		50 - 150	11/29/23 15:27	12/04/23 18:01	1

Client Sample ID: RMW-01-W-231115

Lab Sample ID: 410-151795-20

Date Collected: 11/15/23 11:41

Matrix: Water

Date Received: 11/17/23 09:57

Method: SW846 8260D/UST - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.30	ug/L			11/26/23 20:18	1
Ethylbenzene	ND		1.0	0.40	ug/L			11/26/23 20:18	1
Methyl tertiary butyl ether	ND		1.0	0.20	ug/L			11/26/23 20:18	1
Toluene	ND		1.0	0.30	ug/L			11/26/23 20:18	1
Xylenes, Total	ND		6.0	0.40	ug/L			11/26/23 20:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		80 - 120		11/26/23 20:18	1
4-Bromofluorobenzene (Surr)	99		80 - 120		11/26/23 20:18	1
Dibromofluoromethane (Surr)	101		80 - 120		11/26/23 20:18	1
Toluene-d8 (Surr)	97		80 - 120		11/26/23 20:18	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	250	cn	250	43	ug/L			11/27/23 18:39	1

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Client Sample Results

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151795-1

Client Sample ID: RMW-01-W-231115

Lab Sample ID: 410-151795-20

Date Collected: 11/15/23 11:41

Matrix: Water

Date Received: 11/17/23 09:57

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	99		50 - 150					11/27/23 18:39	1
Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	1300		100	46	ug/L		11/29/23 15:22	12/01/23 13:30	1
C12-C24 with Silica Gel clean up	54	J cn	100	46	ug/L		11/29/23 15:27	12/04/23 18:24	1
C24-C40	210	J	260	100	ug/L		11/29/23 15:22	12/01/23 13:30	1
C24-C40 with Silica Gel clean up	1000	B cn	260	100	ug/L		11/29/23 15:27	12/04/23 18:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o- terphenyl (Surr)	72		50 - 150				11/29/23 15:22	12/01/23 13:30	1
o- terphenyl (Surr)	64	cn	50 - 150				11/29/23 15:27	12/04/23 18:24	1

Client Sample ID: D-12-W-231115

Lab Sample ID: 410-151795-21

Date Collected: 11/15/23 12:43

Matrix: Water

Date Received: 11/17/23 09:57

Method: SW846 8260D/UST - Volatile Organic Compounds by GC/MS									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.30	ug/L			11/26/23 20:42	1
Ethylbenzene	ND		1.0	0.40	ug/L			11/26/23 20:42	1
Methyl tertiary butyl ether	ND		1.0	0.20	ug/L			11/26/23 20:42	1
Toluene	ND		1.0	0.30	ug/L			11/26/23 20:42	1
Xylenes, Total	ND		6.0	0.40	ug/L			11/26/23 20:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		80 - 120					11/26/23 20:42	1
4-Bromofluorobenzene (Surr)	97		80 - 120					11/26/23 20:42	1
Dibromofluoromethane (Surr)	99		80 - 120					11/26/23 20:42	1
Toluene-d8 (Surr)	98		80 - 120					11/26/23 20:42	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	ND	cn	250	43	ug/L			11/27/23 19:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	98		50 - 150					11/27/23 19:04	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	270		100	46	ug/L		11/29/23 15:22	12/01/23 13:52	1
C12-C24 with Silica Gel clean up	ND		100	46	ug/L		11/29/23 15:27	12/04/23 18:47	1
C24-C40	190	J	260	100	ug/L		11/29/23 15:22	12/01/23 13:52	1
C24-C40 with Silica Gel clean up	ND	cn	260	100	ug/L		11/29/23 15:27	12/04/23 18:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o- terphenyl (Surr)	71		50 - 150				11/29/23 15:22	12/01/23 13:52	1
o- terphenyl (Surr)	64		50 - 150				11/29/23 15:27	12/04/23 18:47	1

Client Sample Results

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151795-1

Client Sample ID: D-15-W-231115

Lab Sample ID: 410-151795-22

Date Collected: 11/15/23 13:58

Matrix: Water

Date Received: 11/17/23 09:57

Method: SW846 8260D/UST - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.30	ug/L			11/26/23 21:06	1
Ethylbenzene	ND		1.0	0.40	ug/L			11/26/23 21:06	1
Methyl tertiary butyl ether	ND		1.0	0.20	ug/L			11/26/23 21:06	1
Toluene	ND		1.0	0.30	ug/L			11/26/23 21:06	1
Xylenes, Total	ND		6.0	0.40	ug/L			11/26/23 21:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		80 - 120		11/26/23 21:06	1
4-Bromofluorobenzene (Surr)	100		80 - 120		11/26/23 21:06	1
Dibromofluoromethane (Surr)	99		80 - 120		11/26/23 21:06	1
Toluene-d8 (Surr)	98		80 - 120		11/26/23 21:06	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	ND	cn	250	43	ug/L			11/27/23 19:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	100		50 - 150		11/27/23 19:29	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	1300		100	46	ug/L		11/29/23 15:22	12/01/23 14:15	1
C12-C24 with Silica Gel clean up	ND		100	46	ug/L		11/29/23 15:27	12/04/23 19:10	1
C24-C40	260		250	100	ug/L		11/29/23 15:22	12/01/23 14:15	1
C24-C40 with Silica Gel clean up	ND	cn	250	100	ug/L		11/29/23 15:27	12/04/23 19:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-terphenyl (Surr)	64		50 - 150	11/29/23 15:22	12/01/23 14:15	1
o-terphenyl (Surr)	74		50 - 150	11/29/23 15:27	12/04/23 19:10	1

Client Sample ID: MW-36-W-231115

Lab Sample ID: 410-151795-23

Date Collected: 11/15/23 12:55

Matrix: Water

Date Received: 11/17/23 09:57

Method: SW846 8260D/UST - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.30	ug/L			11/26/23 21:30	1
Ethylbenzene	ND		1.0	0.40	ug/L			11/26/23 21:30	1
Methyl tertiary butyl ether	ND		1.0	0.20	ug/L			11/26/23 21:30	1
Toluene	ND		1.0	0.30	ug/L			11/26/23 21:30	1
Xylenes, Total	ND		6.0	0.40	ug/L			11/26/23 21:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		80 - 120		11/26/23 21:30	1
4-Bromofluorobenzene (Surr)	95		80 - 120		11/26/23 21:30	1
Dibromofluoromethane (Surr)	99		80 - 120		11/26/23 21:30	1
Toluene-d8 (Surr)	98		80 - 120		11/26/23 21:30	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	ND	cn	250	43	ug/L			11/27/23 19:55	1

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Client Sample Results

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151795-1

Client Sample ID: MW-36-W-231115

Lab Sample ID: 410-151795-23

Date Collected: 11/15/23 12:55

Matrix: Water

Date Received: 11/17/23 09:57

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	99		50 - 150		11/27/23 19:55	1
Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D
C12-C24	ND	cn	100	46	ug/L	
C24-C40	ND	cn	260	100	ug/L	
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o- terphenyl (Surr)	73		50 - 150	11/29/23 15:22	12/01/23 14:38	1

Client Sample ID: MW-37-W-231115

Lab Sample ID: 410-151795-24

Date Collected: 11/15/23 13:55

Matrix: Water

Date Received: 11/17/23 09:57

Method: SW846 8260D/UST - Volatile Organic Compounds by GC/MS						
Analyte	Result	Qualifier	RL	MDL	Unit	D
Benzene	ND		1.0	0.30	ug/L	
Ethylbenzene	ND		1.0	0.40	ug/L	
Methyl tertiary butyl ether	ND		1.0	0.20	ug/L	
Toluene	ND		1.0	0.30	ug/L	
Xylenes, Total	ND		6.0	0.40	ug/L	
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		80 - 120		11/26/23 21:54	1
4-Bromofluorobenzene (Surr)	99		80 - 120		11/26/23 21:54	1
Dibromofluoromethane (Surr)	99		80 - 120		11/26/23 21:54	1
Toluene-d8 (Surr)	99		80 - 120		11/26/23 21:54	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D
C7-C12 (1C)	ND	cn	250	43	ug/L	
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	99		50 - 150		11/27/23 20:20	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D
C12-C24	73	J	100	46	ug/L	
C12-C24 with Silica Gel clean up	ND		100	46	ug/L	
C24-C40	ND		260	100	ug/L	
C24-C40 with Silica Gel clean up	ND	cn	260	100	ug/L	
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o- terphenyl (Surr)	73		50 - 150	11/29/23 15:22	12/01/23 15:01	1
o- terphenyl (Surr)	58		50 - 150	11/29/23 15:27	12/04/23 19:56	1

Client Sample ID: D-25-W-231115

Lab Sample ID: 410-151795-25

Date Collected: 11/15/23 14:50

Matrix: Water

Date Received: 11/17/23 09:57

Method: SW846 8260D/UST - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D
Benzene	ND		1.0	0.30	ug/L	

Eurofins Lancaster Laboratories Environment Testing, LLC

Client Sample Results

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151795-1

Client Sample ID: D-25-W-231115

Lab Sample ID: 410-151795-25

Date Collected: 11/15/23 14:50

Matrix: Water

Date Received: 11/17/23 09:57

Method: SW846 8260D/UST - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		1.0	0.40	ug/L			11/26/23 22:18	1
Methyl tertiary butyl ether	ND		1.0	0.20	ug/L			11/26/23 22:18	1
Toluene	ND		1.0	0.30	ug/L			11/26/23 22:18	1
Xylenes, Total	ND		6.0	0.40	ug/L			11/26/23 22:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		80 - 120		11/26/23 22:18	1
4-Bromofluorobenzene (Surr)	97		80 - 120		11/26/23 22:18	1
Dibromofluoromethane (Surr)	99		80 - 120		11/26/23 22:18	1
Toluene-d8 (Surr)	99		80 - 120		11/26/23 22:18	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	ND	cn	250	43	ug/L			11/27/23 20:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	100		50 - 150		11/27/23 20:46	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	1200	*1	100	46	ug/L		11/28/23 08:09	11/29/23 06:11	1
C12-C24 with Silica Gel clean up	64	J cn	100	46	ug/L		11/28/23 08:04	12/06/23 22:36	1
C24-C40	420		250	100	ug/L		11/28/23 08:09	11/29/23 06:11	1
C24-C40 with Silica Gel clean up	ND	cn	250	100	ug/L		11/28/23 08:04	12/06/23 22:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-terphenyl (Surr)	66		50 - 150	11/28/23 08:09	11/29/23 06:11	1
o-terphenyl (Surr)	80	cn	50 - 150	11/28/23 08:04	12/06/23 22:36	1
n-Decanoic Acid (Surr)	0.0001		0 - 1	11/28/23 08:04	12/06/23 22:36	1

Client Sample ID: TB-1-T-231115

Lab Sample ID: 410-151795-26

Date Collected: 10/26/23 00:00

Matrix: Water

Date Received: 11/17/23 09:57

Method: SW846 8260D/UST - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.30	ug/L			11/22/23 15:59	1
Ethylbenzene	ND		1.0	0.40	ug/L			11/22/23 15:59	1
Methyl tertiary butyl ether	ND		1.0	0.20	ug/L			11/22/23 15:59	1
Toluene	ND		1.0	0.30	ug/L			11/22/23 15:59	1
Xylenes, Total	ND		6.0	0.40	ug/L			11/22/23 15:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		80 - 120		11/22/23 15:59	1
4-Bromofluorobenzene (Surr)	96		80 - 120		11/22/23 15:59	1
Dibromofluoromethane (Surr)	99		80 - 120		11/22/23 15:59	1
Toluene-d8 (Surr)	99		80 - 120		11/22/23 15:59	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	ND	H H3	250	43	ug/L			11/20/23 16:44	1

Eurofins Lancaster Laboratories Environment Testing, LLC

Client Sample Results

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151795-1

Client Sample ID: TB-1-T-231115

Lab Sample ID: 410-151795-26

Date Collected: 10/26/23 00:00

Matrix: Water

Date Received: 11/17/23 09:57

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	100		50 - 150		11/20/23 16:44	1

Client Sample ID: MW-29-W-231115

Lab Sample ID: 410-151795-27

Date Collected: 11/15/23 14:58

Matrix: Water

Date Received: 11/17/23 09:57

Method: SW846 8260D/UST - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.30	ug/L			11/26/23 22:42	1
Ethylbenzene	ND		1.0	0.40	ug/L			11/26/23 22:42	1
Methyl tertiary butyl ether	ND		1.0	0.20	ug/L			11/26/23 22:42	1
Toluene	ND		1.0	0.30	ug/L			11/26/23 22:42	1
Xylenes, Total	ND		6.0	0.40	ug/L			11/26/23 22:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		80 - 120		11/26/23 22:42	1
4-Bromofluorobenzene (Surr)	100		80 - 120		11/26/23 22:42	1
Dibromofluoromethane (Surr)	99		80 - 120		11/26/23 22:42	1
Toluene-d8 (Surr)	96		80 - 120		11/26/23 22:42	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	580	cn	250	43	ug/L			11/27/23 21:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	99		50 - 150		11/27/23 21:11	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	3000	*1	100	46	ug/L		11/28/23 08:09	11/29/23 06:56	1
C12-C24 with Silica Gel clean up	ND		100	46	ug/L		11/28/23 08:04	12/06/23 23:22	1
C24-C40	470		250	100	ug/L		11/28/23 08:09	11/29/23 06:56	1
C24-C40 with Silica Gel clean up	ND		250	100	ug/L		11/28/23 08:04	12/06/23 23:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-terphenyl (Surr)	59		50 - 150	11/28/23 08:09	11/29/23 06:56	1
o-terphenyl (Surr)	71	cn	50 - 150	11/28/23 08:04	12/06/23 23:22	1
n-Decanoic Acid (Surr)	0.01		0 - 1	11/28/23 08:04	12/06/23 23:22	1

Client Sample ID: TB2-T-231115

Lab Sample ID: 410-151795-28

Date Collected: 10/26/23 00:00

Matrix: Water

Date Received: 11/17/23 09:57

Method: SW846 8260D/UST - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.30	ug/L			11/22/23 16:23	1
Ethylbenzene	ND		1.0	0.40	ug/L			11/22/23 16:23	1
Methyl tertiary butyl ether	ND		1.0	0.20	ug/L			11/22/23 16:23	1
Toluene	ND		1.0	0.30	ug/L			11/22/23 16:23	1
Xylenes, Total	ND		6.0	0.40	ug/L			11/22/23 16:23	1

Client Sample Results

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151795-1

Client Sample ID: TB2-T-231115

Lab Sample ID: 410-151795-28

Date Collected: 10/26/23 00:00

Matrix: Water

Date Received: 11/17/23 09:57

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		80 - 120		11/22/23 16:23	1
4-Bromofluorobenzene (Surr)	97		80 - 120		11/22/23 16:23	1
Dibromofluoromethane (Surr)	98		80 - 120		11/22/23 16:23	1
Toluene-d8 (Surr)	100		80 - 120		11/22/23 16:23	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	ND	H H3	250	43	ug/L			11/20/23 17:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	101		50 - 150					11/20/23 17:09	1

Surrogate Summary

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151795-1

Method: 8260D/UST - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (80-120)	BFB (80-120)	DBFM (80-120)	TOL (80-120)
410-151795-1	MW-10-W-231113	94	97	99	99
410-151795-2	MW-26-W-231114	93	98	99	100
410-151795-3	D-17-W-231114	93	96	97	100
410-151795-4	MW-11-W-231114	92	98	97	101
410-151795-5	D-19-W-231114	93	97	97	100
410-151795-6	MW-31-W-231114	94	98	97	100
410-151795-7	MW-12-W-231114	95	97	98	99
410-151795-8	D-08-W-231114	95	95	99	99
410-151795-9	MW-38-W-231115	91	100	96	98
410-151795-10	D-26-W-231115	92	98	98	98
410-151795-10 MS	D-26-W-231115	95	98	98	99
410-151795-10 MSD	D-26-W-231115	94	99	98	96
410-151795-11	D-24-W-231115	93	98	98	99
410-151795-12	D-18-W-231114	92	98	96	98
410-151795-13	MW-30-W-231114	91	97	99	98
410-151795-14	D-09-W-231114	91	100	99	99
410-151795-15	MW-24-W-231114	92	97	99	100
410-151795-16	D-02A-W-231114	91	97	99	97
410-151795-17	MW-23-W-231114	93	99	99	98
410-151795-18	D-27-W-231115	91	98	98	99
410-151795-19	MW-39-W-231115	93	98	100	99
410-151795-20	RMW-01-W-231115	92	99	101	97
410-151795-21	D-12-W-231115	92	97	99	98
410-151795-22	D-15-W-231115	92	100	99	98
410-151795-23	MW-36-W-231115	91	95	99	98
410-151795-24	MW-37-W-231115	91	99	99	99
410-151795-25	D-25-W-231115	91	97	99	99
410-151795-26	TB-1-T-231115	94	96	99	99
410-151795-27	MW-29-W-231115	92	100	99	96
410-151795-28	TB2-T-231115	94	97	98	100
LCS 410-446440/4	Lab Control Sample	95	99	99	99
LCS 410-446766/4	Lab Control Sample	93	100	99	98
LCSD 410-446440/5	Lab Control Sample Dup	98	98	100	99
LCSD 410-446766/5	Lab Control Sample Dup	95	100	98	98
MB 410-446440/6	Method Blank	94	96	101	98
MB 410-446766/6	Method Blank	93	98	98	97

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		TFT-F1 (50-150)			
410-151795-1	MW-10-W-231113	98			

Eurofins Lancaster Laboratories Environment Testing, LLC

Surrogate Summary

Client: AECOM

Job ID: 410-151795-1

Project/Site: CEMREC Legacy Sites – Tacoma

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC) (Continued)

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)		
Lab Sample ID	Client Sample ID	TFT-F1 (50-150)
410-151795-2	MW-26-W-231114	98
410-151795-3	D-17-W-231114	97
410-151795-4	MW-11-W-231114	97
410-151795-5	D-19-W-231114	97
410-151795-6	MW-31-W-231114	97 cn
410-151795-7	MW-12-W-231114	99
410-151795-8	D-08-W-231114	100
410-151795-9	MW-38-W-231115	99
410-151795-10	D-26-W-231115	99
410-151795-10 MS	D-26-W-231115	94
410-151795-10 MSD	D-26-W-231115	96
410-151795-11	D-24-W-231115	100
410-151795-12	D-18-W-231114	101
410-151795-13	MW-30-W-231114	100
410-151795-14	D-09-W-231114	101
410-151795-15	MW-24-W-231114	99
410-151795-16	D-02A-W-231114	100
410-151795-17	MW-23-W-231114	101
410-151795-18	D-27-W-231115	101
410-151795-19	MW-39-W-231115	104
410-151795-20	RMW-01-W-231115	99
410-151795-21	D-12-W-231115	98
410-151795-22	D-15-W-231115	100
410-151795-23	MW-36-W-231115	99
410-151795-24	MW-37-W-231115	99
410-151795-25	D-25-W-231115	100
410-151795-26	TB-1-T-231115	100
410-151795-27	MW-29-W-231115	99
410-151795-28	TB2-T-231115	101
LCS 410-445458/6	Lab Control Sample	91
LCS 410-445460/6	Lab Control Sample	91
LCS 410-445905/6	Lab Control Sample	92
LCS 410-446883/6	Lab Control Sample	90
LCS 410-448447/6	Lab Control Sample	93
LCSD 410-445458/7	Lab Control Sample Dup	91
LCSD 410-445460/7	Lab Control Sample Dup	91
LCSD 410-445905/7	Lab Control Sample Dup	93
LCSD 410-446883/7	Lab Control Sample Dup	91
LCSD 410-448447/7	Lab Control Sample Dup	96
MB 410-445458/5	Method Blank	102
MB 410-445460/5	Method Blank	98
MB 410-445905/5	Method Blank	102
MB 410-446883/5	Method Blank	99
MB 410-448447/5	Method Blank	102

Surrogate Legend

TFT-F = a,a,a-Trifluorotoluene (fid)

Surrogate Summary

Client: AECOM

Job ID: 410-151795-1

Project/Site: CEMREC Legacy Sites – Tacoma

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	OTP (50-150)	NDA (0-1)
410-151795-1	MW-10-W-231113	79	
410-151795-1	MW-10-W-231113	49 S1- cn	
410-151795-1 DU	MW-10-W-231113	84	
410-151795-2	MW-26-W-231114	79	
410-151795-2	MW-26-W-231114	101 cn	
410-151795-3	D-17-W-231114	83	
410-151795-3	D-17-W-231114	70 cn	
410-151795-4	MW-11-W-231114	73	
410-151795-4	MW-11-W-231114	66	
410-151795-5	D-19-W-231114	82	
410-151795-5	D-19-W-231114	64	
410-151795-6	MW-31-W-231114	34 S1- cn	
410-151795-6	MW-31-W-231114	31 S1- cn	0.0009 cn
410-151795-7	MW-12-W-231114	51	
410-151795-7	MW-12-W-231114	53	0.002
410-151795-8	D-08-W-231114	68	
410-151795-8	D-08-W-231114	76	0.0006
410-151795-9	MW-38-W-231115	72	
410-151795-10	D-26-W-231115	80	
410-151795-10	D-26-W-231115	81 cn	
410-151795-10 MS	D-26-W-231115	72	
410-151795-10 MS	D-26-W-231115	60	
410-151795-10 MSD	D-26-W-231115	65	
410-151795-10 MSD	D-26-W-231115	60	
410-151795-11	D-24-W-231115	75	
410-151795-11	D-24-W-231115	75 cn	
410-151795-12	D-18-W-231114	74	
410-151795-12	D-18-W-231114	50 cn	
410-151795-13	MW-30-W-231114	62	
410-151795-13	MW-30-W-231114	68	
410-151795-14	D-09-W-231114	65	
410-151795-14	D-09-W-231114	62 cn	
410-151795-15	MW-24-W-231114	75	
410-151795-15	MW-24-W-231114	59	
410-151795-16	D-02A-W-231114	67	
410-151795-16	D-02A-W-231114	79 cn	
410-151795-17	MW-23-W-231114	79	
410-151795-18	D-27-W-231115	65	
410-151795-18	D-27-W-231115	72	
410-151795-19	MW-39-W-231115	62	
410-151795-19	MW-39-W-231115	78	
410-151795-20	RMW-01-W-231115	72	
410-151795-20	RMW-01-W-231115	64 cn	
410-151795-21	D-12-W-231115	71	
410-151795-21	D-12-W-231115	64	
410-151795-22	D-15-W-231115	64	
410-151795-22	D-15-W-231115	74	
410-151795-23	MW-36-W-231115	73	
410-151795-24	MW-37-W-231115	73	
410-151795-24	MW-37-W-231115	58	

Eurofins Lancaster Laboratories Environment Testing, LLC

Surrogate Summary

Client: AECOM

Job ID: 410-151795-1

Project/Site: CEMREC Legacy Sites – Tacoma

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) (Continued)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		OTP (50-150)	NDA (0-1)
410-151795-25	D-25-W-231115	66	
410-151795-25	D-25-W-231115	80 cn	0.0001
410-151795-25 DU	D-25-W-231115	71	
410-151795-25 DU	D-25-W-231115	55 cn	0.0001
410-151795-27	MW-29-W-231115	59	
410-151795-27	MW-29-W-231115	71 cn	0.01
410-151795-27 DU	MW-29-W-231115	72	
410-151795-27 DU	MW-29-W-231115	70 cn	0.02
LCS 410-446260/2-B	Lab Control Sample	47 S1-	
LCS 410-446264/2-A	Lab Control Sample	76	
LCS 410-447356/2-B	Lab Control Sample	57	
LCS 410-447356/2-B	Lab Control Sample	86	0.02
LCS 410-447360/2-A	Lab Control Sample	67	
LCS 410-448163/2-A	Lab Control Sample	81	
LCS 410-448167/2-B	Lab Control Sample	76	
LCS 410-451387/2-B	Lab Control Sample	65	
LCSD 410-447356/3-C	Lab Control Sample Dup	58	
LCSD 410-447356/3-C	Lab Control Sample Dup	87	0.01
LCSD 410-447360/3-A	Lab Control Sample Dup	82	
LCSD 410-451387/3-B	Lab Control Sample Dup	55	
MB 410-446260/1-B	Method Blank	46 S1-	
MB 410-446264/1-A	Method Blank	81	
MB 410-447356/1-B	Method Blank	60	
MB 410-447356/1-B	Method Blank	97	0.02
MB 410-447360/1-A	Method Blank	78	
MB 410-448163/1-A	Method Blank	72	
MB 410-448167/1-B	Method Blank	81	
MB 410-451387/1-B	Method Blank	53	

Surrogate Legend

OTP = o- terphenyl (Surr)

NDA = n-Decanoic Acid (Surr)

QC Sample Results

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151795-1

Method: 8260D/UST - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 410-446440/6

Matrix: Water

Analysis Batch: 446440

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.30	ug/L			11/22/23 14:24	1
Ethylbenzene	ND		1.0	0.40	ug/L			11/22/23 14:24	1
Methyl tertiary butyl ether	ND		1.0	0.20	ug/L			11/22/23 14:24	1
Toluene	ND		1.0	0.30	ug/L			11/22/23 14:24	1
Xylenes, Total	ND		6.0	0.40	ug/L			11/22/23 14:24	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		80 - 120		11/22/23 14:24	1
4-Bromofluorobenzene (Surr)	96		80 - 120		11/22/23 14:24	1
Dibromofluoromethane (Surr)	101		80 - 120		11/22/23 14:24	1
Toluene-d8 (Surr)	98		80 - 120		11/22/23 14:24	1

Lab Sample ID: LCS 410-446440/4

Matrix: Water

Analysis Batch: 446440

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	20.0	19.0		ug/L		95	80 - 120
Ethylbenzene	20.0	18.6		ug/L		93	80 - 120
Methyl tertiary butyl ether	20.0	19.9		ug/L		100	69 - 122
Toluene	20.0	18.9		ug/L		94	80 - 120
Xylenes, Total	60.0	57.5		ug/L		96	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	95		80 - 120
4-Bromofluorobenzene (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	99		80 - 120
Toluene-d8 (Surr)	99		80 - 120

Lab Sample ID: LCSD 410-446440/5

Matrix: Water

Analysis Batch: 446440

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	20.0	18.6		ug/L		93	80 - 120	2	30
Ethylbenzene	20.0	18.0		ug/L		90	80 - 120	3	30
Methyl tertiary butyl ether	20.0	18.7		ug/L		93	69 - 122	7	30
Toluene	20.0	18.4		ug/L		92	80 - 120	2	30
Xylenes, Total	60.0	55.9		ug/L		93	80 - 120	3	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	98		80 - 120
4-Bromofluorobenzene (Surr)	98		80 - 120
Dibromofluoromethane (Surr)	100		80 - 120
Toluene-d8 (Surr)	99		80 - 120

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QC Sample Results

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151795-1

Method: 8260D/UST - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 410-446766/6

Matrix: Water

Analysis Batch: 446766

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.30	ug/L			11/26/23 13:54	1
Ethylbenzene	ND		1.0	0.40	ug/L			11/26/23 13:54	1
Methyl tertiary butyl ether	ND		1.0	0.20	ug/L			11/26/23 13:54	1
Toluene	ND		1.0	0.30	ug/L			11/26/23 13:54	1
Xylenes, Total	ND		6.0	0.40	ug/L			11/26/23 13:54	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		80 - 120		11/26/23 13:54	1
4-Bromofluorobenzene (Surr)	98		80 - 120		11/26/23 13:54	1
Dibromofluoromethane (Surr)	98		80 - 120		11/26/23 13:54	1
Toluene-d8 (Surr)	97		80 - 120		11/26/23 13:54	1

Lab Sample ID: LCS 410-446766/4

Matrix: Water

Analysis Batch: 446766

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	20.0	17.0		ug/L		85	80 - 120
Ethylbenzene	20.0	16.9		ug/L		85	80 - 120
Methyl tertiary butyl ether	20.0	18.2		ug/L		91	69 - 122
Toluene	20.0	16.8		ug/L		84	80 - 120
Xylenes, Total	60.0	52.0		ug/L		87	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	93		80 - 120
4-Bromofluorobenzene (Surr)	100		80 - 120
Dibromofluoromethane (Surr)	99		80 - 120
Toluene-d8 (Surr)	98		80 - 120

Lab Sample ID: LCSD 410-446766/5

Matrix: Water

Analysis Batch: 446766

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	20.0	18.9		ug/L		95	80 - 120	10	30
Ethylbenzene	20.0	18.7		ug/L		93	80 - 120	10	30
Methyl tertiary butyl ether	20.0	19.7		ug/L		99	69 - 122	8	30
Toluene	20.0	18.6		ug/L		93	80 - 120	10	30
Xylenes, Total	60.0	57.7		ug/L		96	80 - 120	10	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	95		80 - 120
4-Bromofluorobenzene (Surr)	100		80 - 120
Dibromofluoromethane (Surr)	98		80 - 120
Toluene-d8 (Surr)	98		80 - 120

QC Sample Results

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151795-1

Method: 8260D/UST - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 410-151795-10 MS

Matrix: Water

Analysis Batch: 446766

Client Sample ID: D-26-W-231115

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	ND		20.0	19.1		ug/L		95	80 - 120
Ethylbenzene	ND		20.0	18.7		ug/L		94	80 - 120
Methyl tertiary butyl ether	ND		20.0	18.7		ug/L		94	69 - 122
Toluene	ND		20.0	18.5		ug/L		92	80 - 120
Xylenes, Total	ND		60.0	57.6		ug/L		96	80 - 120

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	95		80 - 120
4-Bromofluorobenzene (Surr)	98		80 - 120
Dibromofluoromethane (Surr)	98		80 - 120
Toluene-d8 (Surr)	99		80 - 120

Lab Sample ID: 410-151795-10 MSD

Matrix: Water

Analysis Batch: 446766

Client Sample ID: D-26-W-231115

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	ND		20.0	20.3		ug/L		102	80 - 120	6	30
Ethylbenzene	ND		20.0	19.9		ug/L		100	80 - 120	6	30
Methyl tertiary butyl ether	ND		20.0	20.1		ug/L		101	69 - 122	7	30
Toluene	ND		20.0	19.2		ug/L		96	80 - 120	4	30
Xylenes, Total	ND		60.0	60.1		ug/L		100	80 - 120	4	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	94		80 - 120
4-Bromofluorobenzene (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	98		80 - 120
Toluene-d8 (Surr)	96		80 - 120

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Lab Sample ID: MB 410-445458/5

Matrix: Water

Analysis Batch: 445458

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	ND		250	43	ug/L			11/20/23 12:58	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	102		50 - 150		11/20/23 12:58	1

Lab Sample ID: LCS 410-445458/6

Matrix: Water

Analysis Batch: 445458

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
C7-C12 (1C)	1100	1110		ug/L		101	64 - 131

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QC Sample Results

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151795-1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: LCS 410-445458/6

Matrix: Water

Analysis Batch: 445458

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
a,a,a-Trifluorotoluene (fid) (1C)	91		50 - 150

Lab Sample ID: LCSD 410-445458/7

Matrix: Water

Analysis Batch: 445458

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C7-C12 (1C)	1100	1110		ug/L		101	64 - 131	1	30

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
a,a,a-Trifluorotoluene (fid) (1C)	91		50 - 150

Lab Sample ID: MB 410-445460/5

Matrix: Water

Analysis Batch: 445460

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	ND		250	43	ug/L			11/20/23 12:57	1

	MB	MB		Prepared	Analyzed	Dil Fac
Surrogate	%Recovery	Qualifier	Limits			
a,a,a-Trifluorotoluene (fid) (1C)	98		50 - 150		11/20/23 12:57	1

Lab Sample ID: LCS 410-445460/6

Matrix: Water

Analysis Batch: 445460

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
C7-C12 (1C)	1100	928		ug/L		84	64 - 131		

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
a,a,a-Trifluorotoluene (fid) (1C)	91		50 - 150

Lab Sample ID: LCSD 410-445460/7

Matrix: Water

Analysis Batch: 445460

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C7-C12 (1C)	1100	911		ug/L		83	64 - 131	2	30

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
a,a,a-Trifluorotoluene (fid) (1C)	91		50 - 150

QC Sample Results

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151795-1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: MB 410-445905/5

Matrix: Water

Analysis Batch: 445905

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	ND		250	43	ug/L			11/21/23 13:08	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	102		50 - 150					11/21/23 13:08	1

Lab Sample ID: LCS 410-445905/6

Matrix: Water

Analysis Batch: 445905

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
C7-C12 (1C)	1100	1080		ug/L		98	64 - 131
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
a,a,a-Trifluorotoluene (fid) (1C)	92		50 - 150				

Lab Sample ID: LCSD 410-445905/7

Matrix: Water

Analysis Batch: 445905

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C7-C12 (1C)	1100	1110		ug/L		101	64 - 131	3	30
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
a,a,a-Trifluorotoluene (fid) (1C)	93		50 - 150						

Lab Sample ID: MB 410-446883/5

Matrix: Water

Analysis Batch: 446883

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	ND		250	43	ug/L			11/27/23 11:01	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	99		50 - 150					11/27/23 11:01	1

Lab Sample ID: LCS 410-446883/6

Matrix: Water

Analysis Batch: 446883

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
C7-C12 (1C)	1100	897		ug/L		82	64 - 131
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
a,a,a-Trifluorotoluene (fid) (1C)	90		50 - 150				

QC Sample Results

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151795-1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: LCSD 410-446883/7

Matrix: Water

Analysis Batch: 446883

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C7-C12 (1C)	1100	927		ug/L		84	64 - 131	3	30
Surrogate	%Recovery	LCSD Qualifier	Limits						
a,a,a-Trifluorotoluene (fid) (1C)	91		50 - 150						

Lab Sample ID: MB 410-448447/5

Matrix: Water

Analysis Batch: 448447

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	ND		250	43	ug/L			11/30/23 12:27	1
Surrogate	%Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac	
a,a,a-Trifluorotoluene (fid) (1C)	102		50 - 150				11/30/23 12:27	1	

Lab Sample ID: LCS 410-448447/6

Matrix: Water

Analysis Batch: 448447

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

			Spike	LCS	LCS				%Rec		
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits		
C7-C12 (1C)			1100	1090		ug/L	-	99	64 - 131		
Surrogate	LCS	LCS									
	%Recovery	Qualifier	Limits								
a.a.a-Trifluorotoluene (fid) (1C)	93		50 - 150								

Lab Sample ID: LCSD 410-448447/7

Matrix: Water

Analysis Batch: 448447

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C7-C12 (1C)	1100	1140		ug/L		104	64 - 131	4	30
Surrogate	%Recovery	LCSD Qualifier	Limits						
a,a,a-Trifluorotoluene (fid) (1C)	96		50 - 150						

Lab Sample ID: 410-151795-10 MS

Matrix: Water

Analysis Batch: 448447

Client Sample ID: D-26-W-231115

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
C7-C12 (1C)	ND	F1	1120	1250	H	ug/L	-	112	80 - 120		
Surrogate	MS %Recovery	MS Qualifier	Limits								
a.a.a-Trifluorotoluene (fid) (1C)	94		50 - 150								

QC Sample Results

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151795-1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: 410-151795-10 MSD

Matrix: Water

Analysis Batch: 448447

Client Sample ID: D-26-W-231115

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C7-C12 (1C)	ND	F1	1120	1270	H	ug/L		114	80 - 120	2	30
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
a,a,a-Trifluorotoluene (fid) (1C)	96		50 - 150								

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 410-446260/1-B

Matrix: Water

Analysis Batch: 448229

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 446260

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24 with Silica Gel clean up	ND		100	45	ug/L		11/22/23 07:47	11/29/23 23:28	1
C24-C40 with Silica Gel clean up	ND		250	100	ug/L		11/22/23 07:47	11/29/23 23:28	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
o- terphenyl (Surr)	46	S1-	50 - 150				11/22/23 07:47	11/29/23 23:28	1

Lab Sample ID: LCS 410-446260/2-B

Matrix: Water

Analysis Batch: 448229

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 446260

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
C12-C24 with Silica Gel clean up	600	338		ug/L		56	14 - 115		
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
o- terphenyl (Surr)	47	S1-	50 - 150						

Lab Sample ID: MB 410-446264/1-A

Matrix: Water

Analysis Batch: 446556

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 446264

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	45.2	J	100	45	ug/L		11/22/23 07:54	11/22/23 16:37	1
C24-C40	ND		250	100	ug/L		11/22/23 07:54	11/22/23 16:37	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
o- terphenyl (Surr)	81		50 - 150				11/22/23 07:54	11/22/23 16:37	1

Lab Sample ID: LCS 410-446264/2-A

Matrix: Water

Analysis Batch: 446556

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 446264

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
C12-C24	600	457		ug/L		76	14 - 115		

QC Sample Results

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151795-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: LCS 410-446264/2-A

Matrix: Water

Analysis Batch: 446556

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 446264

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
<i>o</i> -terphenyl (Surr)	76		50 - 150

Lab Sample ID: 410-151795-1 DU

Matrix: Water

Analysis Batch: 446556

Client Sample ID: MW-10-W-231113

Prep Type: Total/NA

Prep Batch: 446264

	Sample	Sample		DU	DU					RPD
Analyte	Result	Qualifier		Result	Qualifier	Unit	D		RPD	Limit
C12-C24	280	B cn		270	cn	ug/L			4	20
C24-C40	240	J		251		ug/L			4	20
	DU	DU								
Surrogate	%Recovery	Qualifier	Limits							
<i>o</i> -terphenyl (Surr)	84		50 - 150							

Lab Sample ID: MB 410-447356/1-B

Matrix: Water

Analysis Batch: 449762

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 447356

	MB	MB								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
C12-C24 with Silica Gel clean up	ND		100	45	ug/L		11/28/23 08:04	12/04/23 15:19	1	
C24-C40 with Silica Gel clean up	ND		250	100	ug/L		11/28/23 08:04	12/04/23 15:19	1	
	MB	MB								
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
<i>o</i> -terphenyl (Surr)	60		50 - 150				11/28/23 08:04	12/04/23 15:19	1	

Lab Sample ID: MB 410-447356/1-B

Matrix: Water

Analysis Batch: 450931

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 447356

	MB	MB								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
C12-C24 with Silica Gel clean up	80.5	J	100	45	ug/L		11/28/23 08:04	12/06/23 20:18	1	
C24-C40 with Silica Gel clean up	337		250	100	ug/L		11/28/23 08:04	12/06/23 20:18	1	
	MB	MB								
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
<i>o</i> -terphenyl (Surr)	97		50 - 150				11/28/23 08:04	12/06/23 20:18	1	
<i>n</i> -Decanoic Acid (Surr)	0.02		0 - 1				11/28/23 08:04	12/06/23 20:18	1	

Lab Sample ID: LCS 410-447356/2-B

Matrix: Water

Analysis Batch: 449762

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 447356

		Spike	LCS	LCS					%Rec	
Analyte		Added	Result	Qualifier	Unit	D	%Rec	Limits		
C12-C24 with Silica Gel clean up		600	186		ug/L		31	14 - 115		
	LCS	LCS								
Surrogate	%Recovery	Qualifier	Limits							
<i>o</i> -terphenyl (Surr)	57		50 - 150							

QC Sample Results

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151795-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: LCS 410-447356/2-B

Matrix: Water

Analysis Batch: 450931

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 447356

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
C12-C24 with Silica Gel clean up			600	296		ug/L		49	14 - 115		
Surrogate	LCS %Recovery	LCS Qualifier	Limits								
<i>o</i> -terphenyl (Surr)	86		50 - 150								
<i>n</i> -Decanoic Acid (Surr)	0.02		0 - 1								

Lab Sample ID: LCSD 410-447356/3-C

Matrix: Water

Analysis Batch: 449762

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 447356

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C12-C24 with Silica Gel clean up			600	203		ug/L		34	14 - 115	9	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits								
<i>o</i> -terphenyl (Surr)	58		50 - 150								

Lab Sample ID: LCSD 410-447356/3-C

Matrix: Water

Analysis Batch: 450931

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 447356

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C12-C24 with Silica Gel clean up			600	429	*1	ug/L		72	14 - 115	37	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits								
<i>o</i> -terphenyl (Surr)	87		50 - 150								
<i>n</i> -Decanoic Acid (Surr)	0.01		0 - 1								

Lab Sample ID: 410-151795-25 DU

Matrix: Water

Analysis Batch: 450932

Client Sample ID: D-25-W-231115

Prep Type: Total/NA

Prep Batch: 447356

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
C12-C24 with Silica Gel clean up	64	J cn	ND		ug/L		NC	20
C24-C40 with Silica Gel clean up	ND	cn	ND		ug/L		NC	20
Surrogate	%Recovery	DU Qualifier	Limits					
<i>o</i> -terphenyl (Surr)	55	cn	50 - 150					
<i>n</i> -Decanoic Acid (Surr)	0.0001		0 - 1					

Lab Sample ID: 410-151795-27 DU

Matrix: Water

Analysis Batch: 450932

Client Sample ID: MW-29-W-231115

Prep Type: Total/NA

Prep Batch: 447356

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
C12-C24 with Silica Gel clean up	ND		ND		ug/L		NC	20
C24-C40 with Silica Gel clean up	ND		ND		ug/L		NC	20

Eurofins Lancaster Laboratories Environment Testing, LLC

QC Sample Results

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151795-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: 410-151795-27 DU

Matrix: Water

Analysis Batch: 450932

Client Sample ID: MW-29-W-231115

Prep Type: Total/NA

Prep Batch: 447356

	DU	DU	
Surrogate	%Recovery	Qualifier	Limits
o- terphenyl (Surr)	70	cn	50 - 150
n-Decanoic Acid (Surr)	0.02		0 - 1

Lab Sample ID: MB 410-447360/1-A

Matrix: Water

Analysis Batch: 447751

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 447360

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	ND				100	45	ug/L		11/28/23 08:09	11/28/23 23:44	1
C24-C40	ND				250	100	ug/L		11/28/23 08:09	11/28/23 23:44	1
Surrogate	MB	MB	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o- terphenyl (Surr)			78		50 - 150				11/28/23 08:09	11/28/23 23:44	1

Lab Sample ID: LCS 410-447360/2-A

Matrix: Water

Analysis Batch: 447751

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 447360

Analyte	Spike	LCS	LCS	Added	Result	Qualifier	Unit	D	%Rec	%Rec	Limits
C12-C24	600				215		ug/L		36		14 - 115
Surrogate	LCS	LCS	%Recovery	Qualifier	Limits						
o- terphenyl (Surr)			67		50 - 150						

Lab Sample ID: LCSD 410-447360/3-A

Matrix: Water

Analysis Batch: 447751

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 447360

Analyte	Spike	LCSD	LCSD	Added	Result	Qualifier	Unit	D	%Rec	%Rec	Limits	RPD	Limit
C12-C24	600				283	*1	ug/L		47		14 - 115	27	20
Surrogate	LCSD	LCSD	%Recovery	Qualifier	Limits								
o- terphenyl (Surr)			82		50 - 150								

Lab Sample ID: 410-151795-25 DU

Matrix: Water

Analysis Batch: 447751

Client Sample ID: D-25-W-231115

Prep Type: Total/NA

Prep Batch: 447360

Analyte	Sample	Sample	Result	Qualifier	DU	DU	Result	Qualifier	Unit	D	RPD	Limit
C12-C24	1200	*1			1220	*1			ug/L		6	20
C24-C40	420				478				ug/L		12	20
Surrogate	DU	DU	%Recovery	Qualifier	Limits							
o- terphenyl (Surr)			71		50 - 150							

QC Sample Results

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151795-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: 410-151795-27 DU

Matrix: Water

Analysis Batch: 447751

Client Sample ID: MW-29-W-231115

Prep Type: Total/NA

Prep Batch: 447360

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
C12-C24	3000	*1	3390	*1	ug/L		12	20
C24-C40	470		555		ug/L		17	20
Surrogate	%Recovery	Qualifier	Limits					
o- terphenyl (Surr)	72		50 - 150					

Lab Sample ID: MB 410-448163/1-A

Matrix: Water

Analysis Batch: 448780

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 448163

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	ND		100	45	ug/L		11/29/23 15:22	12/01/23 05:32	1
C24-C40	ND		250	100	ug/L		11/29/23 15:22	12/01/23 05:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o- terphenyl (Surr)	72		50 - 150				11/29/23 15:22	12/01/23 05:32	1

Lab Sample ID: LCS 410-448163/2-A

Matrix: Water

Analysis Batch: 448780

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 448163

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
C12-C24	600	274		ug/L		46	14 - 115
Surrogate	%Recovery	Qualifier	Limits				
o- terphenyl (Surr)	81		50 - 150				

Lab Sample ID: 410-151795-10 MS

Matrix: Water

Analysis Batch: 448780

Client Sample ID: D-26-W-231115

Prep Type: Total/NA

Prep Batch: 448163

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
C12-C24	170	F1	622	311	F1	ug/L		23	30 - 115
Surrogate	%Recovery	Qualifier	Limits						
o- terphenyl (Surr)	72		50 - 150						

Lab Sample ID: 410-151795-10 MSD

Matrix: Water

Analysis Batch: 448780

Client Sample ID: D-26-W-231115

Prep Type: Total/NA

Prep Batch: 448163

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
C12-C24	170	F1	618	298	F1	ug/L		21	30 - 115	4	20
Surrogate	%Recovery	Qualifier	Limits								
o- terphenyl (Surr)	65		50 - 150								

QC Sample Results

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151795-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: MB 410-448167/1-B

Matrix: Water

Analysis Batch: 449747

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 448167

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24 with Silica Gel clean up	ND		100	45	ug/L		11/29/23 15:27	12/04/23 12:38	1
C24-C40 with Silica Gel clean up	359		250	100	ug/L		11/29/23 15:27	12/04/23 12:38	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
o- terphenyl (Surr)	81		50 - 150				11/29/23 15:27	12/04/23 12:38	1

Lab Sample ID: LCS 410-448167/2-B

Matrix: Water

Analysis Batch: 449747

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 448167

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
C12-C24 with Silica Gel clean up	600	218		ug/L		36	14 - 115
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
o- terphenyl (Surr)	76		50 - 150				

Lab Sample ID: 410-151795-10 MS

Matrix: Water

Analysis Batch: 449747

Client Sample ID: D-26-W-231115

Prep Type: Total/NA

Prep Batch: 448167

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
C12-C24 with Silica Gel clean up	ND	F1 cn	621	173	F1	ug/L		28	30 - 115
Surrogate	MS %Recovery	MS Qualifier	Limits						
o- terphenyl (Surr)	60		50 - 150						

Lab Sample ID: 410-151795-10 MSD

Matrix: Water

Analysis Batch: 449747

Client Sample ID: D-26-W-231115

Prep Type: Total/NA

Prep Batch: 448167

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C12-C24 with Silica Gel clean up	ND	F1 cn	618	160	F1	ug/L		26	30 - 115	8	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
o- terphenyl (Surr)	60		50 - 150								

Lab Sample ID: MB 410-451387/1-B

Matrix: Water

Analysis Batch: 451978

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 451387

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24 with Silica Gel clean up	ND		100	45	ug/L		12/07/23 15:43	12/08/23 23:12	1
C24-C40 with Silica Gel clean up	ND		250	100	ug/L		12/07/23 15:43	12/08/23 23:12	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
o- terphenyl (Surr)	53		50 - 150				12/07/23 15:43	12/08/23 23:12	1

Eurofins Lancaster Laboratories Environment Testing, LLC

QC Sample Results

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151795-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: LCS 410-451387/2-B

Matrix: Water

Analysis Batch: 451978

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 451387

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
C12-C24 with Silica Gel clean up	600	192		ug/L		32	14 - 115

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o- terphenyl (Surr)	65		50 - 150

Lab Sample ID: LCSD 410-451387/3-B

Matrix: Water

Analysis Batch: 451978

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 451387

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C12-C24 with Silica Gel clean up	600	164		ug/L		27	14 - 115	16	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
o- terphenyl (Surr)	55		50 - 150

QC Association Summary

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151795-1

GC/MS VOA

Analysis Batch: 446440

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-151795-1	MW-10-W-231113	Total/NA	Water	8260D/UST	
410-151795-2	MW-26-W-231114	Total/NA	Water	8260D/UST	
410-151795-3	D-17-W-231114	Total/NA	Water	8260D/UST	
410-151795-4	MW-11-W-231114	Total/NA	Water	8260D/UST	
410-151795-5	D-19-W-231114	Total/NA	Water	8260D/UST	
410-151795-6	MW-31-W-231114	Total/NA	Water	8260D/UST	
410-151795-7	MW-12-W-231114	Total/NA	Water	8260D/UST	
410-151795-8	D-08-W-231114	Total/NA	Water	8260D/UST	
410-151795-26	TB-1-T-231115	Total/NA	Water	8260D/UST	
410-151795-28	TB2-T-231115	Total/NA	Water	8260D/UST	
MB 410-446440/6	Method Blank	Total/NA	Water	8260D/UST	
LCS 410-446440/4	Lab Control Sample	Total/NA	Water	8260D/UST	
LCSD 410-446440/5	Lab Control Sample Dup	Total/NA	Water	8260D/UST	

Analysis Batch: 446766

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-151795-9	MW-38-W-231115	Total/NA	Water	8260D/UST	
410-151795-10	D-26-W-231115	Total/NA	Water	8260D/UST	
410-151795-11	D-24-W-231115	Total/NA	Water	8260D/UST	
410-151795-12	D-18-W-231114	Total/NA	Water	8260D/UST	
410-151795-13	MW-30-W-231114	Total/NA	Water	8260D/UST	
410-151795-14	D-09-W-231114	Total/NA	Water	8260D/UST	
410-151795-15	MW-24-W-231114	Total/NA	Water	8260D/UST	
410-151795-16	D-02A-W-231114	Total/NA	Water	8260D/UST	
410-151795-17	MW-23-W-231114	Total/NA	Water	8260D/UST	
410-151795-18	D-27-W-231115	Total/NA	Water	8260D/UST	
410-151795-19	MW-39-W-231115	Total/NA	Water	8260D/UST	
410-151795-20	RMW-01-W-231115	Total/NA	Water	8260D/UST	
410-151795-21	D-12-W-231115	Total/NA	Water	8260D/UST	
410-151795-22	D-15-W-231115	Total/NA	Water	8260D/UST	
410-151795-23	MW-36-W-231115	Total/NA	Water	8260D/UST	
410-151795-24	MW-37-W-231115	Total/NA	Water	8260D/UST	
410-151795-25	D-25-W-231115	Total/NA	Water	8260D/UST	
410-151795-27	MW-29-W-231115	Total/NA	Water	8260D/UST	
MB 410-446766/6	Method Blank	Total/NA	Water	8260D/UST	
LCS 410-446766/4	Lab Control Sample	Total/NA	Water	8260D/UST	
LCSD 410-446766/5	Lab Control Sample Dup	Total/NA	Water	8260D/UST	
410-151795-10 MS	D-26-W-231115	Total/NA	Water	8260D/UST	
410-151795-10 MSD	D-26-W-231115	Total/NA	Water	8260D/UST	

GC VOA

Analysis Batch: 445458

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-151795-26	TB-1-T-231115	Total/NA	Water	NWTPH-Gx	
410-151795-28	TB2-T-231115	Total/NA	Water	NWTPH-Gx	
MB 410-445458/5	Method Blank	Total/NA	Water	NWTPH-Gx	
LCS 410-445458/6	Lab Control Sample	Total/NA	Water	NWTPH-Gx	
LCSD 410-445458/7	Lab Control Sample Dup	Total/NA	Water	NWTPH-Gx	

QC Association Summary

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151795-1

GC VOA

Analysis Batch: 445460

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-151795-1	MW-10-W-231113	Total/NA	Water	NWTPH-Gx	
410-151795-2	MW-26-W-231114	Total/NA	Water	NWTPH-Gx	
410-151795-3	D-17-W-231114	Total/NA	Water	NWTPH-Gx	
410-151795-4	MW-11-W-231114	Total/NA	Water	NWTPH-Gx	
410-151795-5	D-19-W-231114	Total/NA	Water	NWTPH-Gx	
410-151795-6	MW-31-W-231114	Total/NA	Water	NWTPH-Gx	
MB 410-445460/5	Method Blank	Total/NA	Water	NWTPH-Gx	
LCS 410-445460/6	Lab Control Sample	Total/NA	Water	NWTPH-Gx	
LCSD 410-445460/7	Lab Control Sample Dup	Total/NA	Water	NWTPH-Gx	

Analysis Batch: 445905

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-151795-7	MW-12-W-231114	Total/NA	Water	NWTPH-Gx	
410-151795-8	D-08-W-231114	Total/NA	Water	NWTPH-Gx	
410-151795-12	D-18-W-231114	Total/NA	Water	NWTPH-Gx	
410-151795-13	MW-30-W-231114	Total/NA	Water	NWTPH-Gx	
410-151795-14	D-09-W-231114	Total/NA	Water	NWTPH-Gx	
410-151795-15	MW-24-W-231114	Total/NA	Water	NWTPH-Gx	
410-151795-16	D-02A-W-231114	Total/NA	Water	NWTPH-Gx	
410-151795-17	MW-23-W-231114	Total/NA	Water	NWTPH-Gx	
MB 410-445905/5	Method Blank	Total/NA	Water	NWTPH-Gx	
LCS 410-445905/6	Lab Control Sample	Total/NA	Water	NWTPH-Gx	
LCSD 410-445905/7	Lab Control Sample Dup	Total/NA	Water	NWTPH-Gx	

Analysis Batch: 446883

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-151795-9	MW-38-W-231115	Total/NA	Water	NWTPH-Gx	
410-151795-10	D-26-W-231115	Total/NA	Water	NWTPH-Gx	
410-151795-11	D-24-W-231115	Total/NA	Water	NWTPH-Gx	
410-151795-18	D-27-W-231115	Total/NA	Water	NWTPH-Gx	
410-151795-19	MW-39-W-231115	Total/NA	Water	NWTPH-Gx	
410-151795-20	RMW-01-W-231115	Total/NA	Water	NWTPH-Gx	
410-151795-21	D-12-W-231115	Total/NA	Water	NWTPH-Gx	
410-151795-22	D-15-W-231115	Total/NA	Water	NWTPH-Gx	
410-151795-23	MW-36-W-231115	Total/NA	Water	NWTPH-Gx	
410-151795-24	MW-37-W-231115	Total/NA	Water	NWTPH-Gx	
410-151795-25	D-25-W-231115	Total/NA	Water	NWTPH-Gx	
410-151795-27	MW-29-W-231115	Total/NA	Water	NWTPH-Gx	
MB 410-446883/5	Method Blank	Total/NA	Water	NWTPH-Gx	
LCS 410-446883/6	Lab Control Sample	Total/NA	Water	NWTPH-Gx	
LCSD 410-446883/7	Lab Control Sample Dup	Total/NA	Water	NWTPH-Gx	

Analysis Batch: 448447

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 410-448447/5	Method Blank	Total/NA	Water	NWTPH-Gx	
LCS 410-448447/6	Lab Control Sample	Total/NA	Water	NWTPH-Gx	
LCSD 410-448447/7	Lab Control Sample Dup	Total/NA	Water	NWTPH-Gx	
410-151795-10 MS	D-26-W-231115	Total/NA	Water	NWTPH-Gx	
410-151795-10 MSD	D-26-W-231115	Total/NA	Water	NWTPH-Gx	

QC Association Summary

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151795-1

GC Semi VOA

Prep Batch: 446260

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-151795-1	MW-10-W-231113	Total/NA	Water	3510C	
MB 410-446260/1-B	Method Blank	Total/NA	Water	3510C	
LCS 410-446260/2-B	Lab Control Sample	Total/NA	Water	3510C	

Prep Batch: 446264

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-151795-1	MW-10-W-231113	Total/NA	Water	3510C	
MB 410-446264/1-A	Method Blank	Total/NA	Water	3510C	
LCS 410-446264/2-A	Lab Control Sample	Total/NA	Water	3510C	
410-151795-1 DU	MW-10-W-231113	Total/NA	Water	3510C	

Analysis Batch: 446556

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-151795-1	MW-10-W-231113	Total/NA	Water	NWTPH-Dx	446264
MB 410-446264/1-A	Method Blank	Total/NA	Water	NWTPH-Dx	446264
LCS 410-446264/2-A	Lab Control Sample	Total/NA	Water	NWTPH-Dx	446264
410-151795-1 DU	MW-10-W-231113	Total/NA	Water	NWTPH-Dx	446264

Prep Batch: 447356

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-151795-2	MW-26-W-231114	Total/NA	Water	3510C	
410-151795-3	D-17-W-231114	Total/NA	Water	3510C	
410-151795-6	MW-31-W-231114	Total/NA	Water	3510C	
410-151795-7	MW-12-W-231114	Total/NA	Water	3510C	
410-151795-8	D-08-W-231114	Total/NA	Water	3510C	
410-151795-12	D-18-W-231114	Total/NA	Water	3510C	
410-151795-14	D-09-W-231114	Total/NA	Water	3510C	
410-151795-16	D-02A-W-231114	Total/NA	Water	3510C	
410-151795-25	D-25-W-231115	Total/NA	Water	3510C	
410-151795-27	MW-29-W-231115	Total/NA	Water	3510C	
MB 410-447356/1-B	Method Blank	Total/NA	Water	3510C	
LCS 410-447356/2-B	Lab Control Sample	Total/NA	Water	3510C	
LCSD 410-447356/3-C	Lab Control Sample Dup	Total/NA	Water	3510C	
410-151795-25 DU	D-25-W-231115	Total/NA	Water	3510C	
410-151795-27 DU	MW-29-W-231115	Total/NA	Water	3510C	

Prep Batch: 447360

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-151795-2	MW-26-W-231114	Total/NA	Water	3510C	
410-151795-3	D-17-W-231114	Total/NA	Water	3510C	
410-151795-4	MW-11-W-231114	Total/NA	Water	3510C	
410-151795-5	D-19-W-231114	Total/NA	Water	3510C	
410-151795-6	MW-31-W-231114	Total/NA	Water	3510C	
410-151795-7	MW-12-W-231114	Total/NA	Water	3510C	
410-151795-8	D-08-W-231114	Total/NA	Water	3510C	
410-151795-12	D-18-W-231114	Total/NA	Water	3510C	
410-151795-13	MW-30-W-231114	Total/NA	Water	3510C	
410-151795-14	D-09-W-231114	Total/NA	Water	3510C	
410-151795-15	MW-24-W-231114	Total/NA	Water	3510C	
410-151795-16	D-02A-W-231114	Total/NA	Water	3510C	
410-151795-17	MW-23-W-231114	Total/NA	Water	3510C	

Eurofins Lancaster Laboratories Environment Testing, LLC

QC Association Summary

Client: AECOM

Job ID: 410-151795-1

Project/Site: CEMREC Legacy Sites – Tacoma

GC Semi VOA (Continued)

Prep Batch: 447360 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-151795-25	D-25-W-231115	Total/NA	Water	3510C	
410-151795-27	MW-29-W-231115	Total/NA	Water	3510C	
MB 410-447360/1-A	Method Blank	Total/NA	Water	3510C	
LCS 410-447360/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 410-447360/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
410-151795-25 DU	D-25-W-231115	Total/NA	Water	3510C	
410-151795-27 DU	MW-29-W-231115	Total/NA	Water	3510C	

Analysis Batch: 447751

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-151795-2	MW-26-W-231114	Total/NA	Water	NWTPH-Dx	447360
410-151795-3	D-17-W-231114	Total/NA	Water	NWTPH-Dx	447360
410-151795-4	MW-11-W-231114	Total/NA	Water	NWTPH-Dx	447360
410-151795-5	D-19-W-231114	Total/NA	Water	NWTPH-Dx	447360
410-151795-6	MW-31-W-231114	Total/NA	Water	NWTPH-Dx	447360
410-151795-7	MW-12-W-231114	Total/NA	Water	NWTPH-Dx	447360
410-151795-8	D-08-W-231114	Total/NA	Water	NWTPH-Dx	447360
410-151795-12	D-18-W-231114	Total/NA	Water	NWTPH-Dx	447360
410-151795-13	MW-30-W-231114	Total/NA	Water	NWTPH-Dx	447360
410-151795-14	D-09-W-231114	Total/NA	Water	NWTPH-Dx	447360
410-151795-15	MW-24-W-231114	Total/NA	Water	NWTPH-Dx	447360
410-151795-16	D-02A-W-231114	Total/NA	Water	NWTPH-Dx	447360
410-151795-17	MW-23-W-231114	Total/NA	Water	NWTPH-Dx	447360
410-151795-25	D-25-W-231115	Total/NA	Water	NWTPH-Dx	447360
410-151795-27	MW-29-W-231115	Total/NA	Water	NWTPH-Dx	447360
MB 410-447360/1-A	Method Blank	Total/NA	Water	NWTPH-Dx	447360
LCS 410-447360/2-A	Lab Control Sample	Total/NA	Water	NWTPH-Dx	447360
LCSD 410-447360/3-A	Lab Control Sample Dup	Total/NA	Water	NWTPH-Dx	447360
410-151795-25 DU	D-25-W-231115	Total/NA	Water	NWTPH-Dx	447360
410-151795-27 DU	MW-29-W-231115	Total/NA	Water	NWTPH-Dx	447360

Cleanup Batch: 447811

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-151795-1	MW-10-W-231113	Total/NA	Water	3630C	446260
MB 410-446260/1-B	Method Blank	Total/NA	Water	3630C	446260
LCS 410-446260/2-B	Lab Control Sample	Total/NA	Water	3630C	446260

Prep Batch: 448163

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-151795-9	MW-38-W-231115	Total/NA	Water	3510C	
410-151795-10	D-26-W-231115	Total/NA	Water	3510C	
410-151795-11	D-24-W-231115	Total/NA	Water	3510C	
410-151795-18	D-27-W-231115	Total/NA	Water	3510C	
410-151795-19	MW-39-W-231115	Total/NA	Water	3510C	
410-151795-20	RMW-01-W-231115	Total/NA	Water	3510C	
410-151795-21	D-12-W-231115	Total/NA	Water	3510C	
410-151795-22	D-15-W-231115	Total/NA	Water	3510C	
410-151795-23	MW-36-W-231115	Total/NA	Water	3510C	
410-151795-24	MW-37-W-231115	Total/NA	Water	3510C	
MB 410-448163/1-A	Method Blank	Total/NA	Water	3510C	
LCS 410-448163/2-A	Lab Control Sample	Total/NA	Water	3510C	

Eurofins Lancaster Laboratories Environment Testing, LLC

QC Association Summary

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151795-1

GC Semi VOA (Continued)

Prep Batch: 448163 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-151795-10 MS	D-26-W-231115	Total/NA	Water	3510C	
410-151795-10 MSD	D-26-W-231115	Total/NA	Water	3510C	

Prep Batch: 448167

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-151795-10	D-26-W-231115	Total/NA	Water	3510C	
410-151795-11	D-24-W-231115	Total/NA	Water	3510C	
410-151795-18	D-27-W-231115	Total/NA	Water	3510C	
410-151795-19	MW-39-W-231115	Total/NA	Water	3510C	
410-151795-20	RMW-01-W-231115	Total/NA	Water	3510C	
410-151795-21	D-12-W-231115	Total/NA	Water	3510C	
410-151795-22	D-15-W-231115	Total/NA	Water	3510C	
410-151795-24	MW-37-W-231115	Total/NA	Water	3510C	
MB 410-448167/1-B	Method Blank	Total/NA	Water	3510C	
LCS 410-448167/2-B	Lab Control Sample	Total/NA	Water	3510C	
410-151795-10 MS	D-26-W-231115	Total/NA	Water	3510C	
410-151795-10 MSD	D-26-W-231115	Total/NA	Water	3510C	

Analysis Batch: 448229

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-151795-1	MW-10-W-231113	Total/NA	Water	NWTPH-Dx	447811
MB 410-446260/1-B	Method Blank	Total/NA	Water	NWTPH-Dx	447811
LCS 410-446260/2-B	Lab Control Sample	Total/NA	Water	NWTPH-Dx	447811

Analysis Batch: 448780

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-151795-9	MW-38-W-231115	Total/NA	Water	NWTPH-Dx	448163
410-151795-10	D-26-W-231115	Total/NA	Water	NWTPH-Dx	448163
410-151795-11	D-24-W-231115	Total/NA	Water	NWTPH-Dx	448163
410-151795-18	D-27-W-231115	Total/NA	Water	NWTPH-Dx	448163
410-151795-19	MW-39-W-231115	Total/NA	Water	NWTPH-Dx	448163
410-151795-20	RMW-01-W-231115	Total/NA	Water	NWTPH-Dx	448163
410-151795-21	D-12-W-231115	Total/NA	Water	NWTPH-Dx	448163
410-151795-22	D-15-W-231115	Total/NA	Water	NWTPH-Dx	448163
410-151795-23	MW-36-W-231115	Total/NA	Water	NWTPH-Dx	448163
410-151795-24	MW-37-W-231115	Total/NA	Water	NWTPH-Dx	448163
MB 410-448163/1-A	Method Blank	Total/NA	Water	NWTPH-Dx	448163
LCS 410-448163/2-A	Lab Control Sample	Total/NA	Water	NWTPH-Dx	448163
410-151795-10 MS	D-26-W-231115	Total/NA	Water	NWTPH-Dx	448163
410-151795-10 MSD	D-26-W-231115	Total/NA	Water	NWTPH-Dx	448163

Cleanup Batch: 449353

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-151795-2	MW-26-W-231114	Total/NA	Water	3630C	447356
410-151795-3	D-17-W-231114	Total/NA	Water	3630C	447356
410-151795-6	MW-31-W-231114	Total/NA	Water	3630C	447356
410-151795-7	MW-12-W-231114	Total/NA	Water	3630C	447356
410-151795-8	D-08-W-231114	Total/NA	Water	3630C	447356
410-151795-12	D-18-W-231114	Total/NA	Water	3630C	447356
410-151795-14	D-09-W-231114	Total/NA	Water	3630C	447356
410-151795-16	D-02A-W-231114	Total/NA	Water	3630C	447356

Eurofins Lancaster Laboratories Environment Testing, LLC

QC Association Summary

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151795-1

GC Semi VOA (Continued)

Cleanup Batch: 449353 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-151795-25	D-25-W-231115	Total/NA	Water	3630C	447356
410-151795-27	MW-29-W-231115	Total/NA	Water	3630C	447356
MB 410-447356/1-B	Method Blank	Total/NA	Water	3630C	447356
LCS 410-447356/2-B	Lab Control Sample	Total/NA	Water	3630C	447356
LCSD 410-447356/3-C	Lab Control Sample Dup	Total/NA	Water	3630C	447356
410-151795-25 DU	D-25-W-231115	Total/NA	Water	3630C	447356
410-151795-27 DU	MW-29-W-231115	Total/NA	Water	3630C	447356

Cleanup Batch: 449581

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-151795-10	D-26-W-231115	Total/NA	Water	3630C	448167
410-151795-11	D-24-W-231115	Total/NA	Water	3630C	448167
410-151795-18	D-27-W-231115	Total/NA	Water	3630C	448167
410-151795-19	MW-39-W-231115	Total/NA	Water	3630C	448167
410-151795-20	RMW-01-W-231115	Total/NA	Water	3630C	448167
410-151795-21	D-12-W-231115	Total/NA	Water	3630C	448167
410-151795-22	D-15-W-231115	Total/NA	Water	3630C	448167
410-151795-24	MW-37-W-231115	Total/NA	Water	3630C	448167
MB 410-448167/1-B	Method Blank	Total/NA	Water	3630C	448167
LCS 410-448167/2-B	Lab Control Sample	Total/NA	Water	3630C	448167
410-151795-10 MS	D-26-W-231115	Total/NA	Water	3630C	448167
410-151795-10 MSD	D-26-W-231115	Total/NA	Water	3630C	448167

Analysis Batch: 449747

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-151795-10	D-26-W-231115	Total/NA	Water	NWTPH-Dx	449581
410-151795-11	D-24-W-231115	Total/NA	Water	NWTPH-Dx	449581
410-151795-18	D-27-W-231115	Total/NA	Water	NWTPH-Dx	449581
410-151795-19	MW-39-W-231115	Total/NA	Water	NWTPH-Dx	449581
410-151795-20	RMW-01-W-231115	Total/NA	Water	NWTPH-Dx	449581
410-151795-21	D-12-W-231115	Total/NA	Water	NWTPH-Dx	449581
410-151795-22	D-15-W-231115	Total/NA	Water	NWTPH-Dx	449581
410-151795-24	MW-37-W-231115	Total/NA	Water	NWTPH-Dx	449581
MB 410-448167/1-B	Method Blank	Total/NA	Water	NWTPH-Dx	449581
LCS 410-448167/2-B	Lab Control Sample	Total/NA	Water	NWTPH-Dx	449581
410-151795-10 MS	D-26-W-231115	Total/NA	Water	NWTPH-Dx	449581
410-151795-10 MSD	D-26-W-231115	Total/NA	Water	NWTPH-Dx	449581

Analysis Batch: 449762

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-151795-3	D-17-W-231114	Total/NA	Water	NWTPH-Dx	449353
410-151795-12	D-18-W-231114	Total/NA	Water	NWTPH-Dx	449353
410-151795-14	D-09-W-231114	Total/NA	Water	NWTPH-Dx	449353
MB 410-447356/1-B	Method Blank	Total/NA	Water	NWTPH-Dx	449353
LCS 410-447356/2-B	Lab Control Sample	Total/NA	Water	NWTPH-Dx	449353
LCSD 410-447356/3-C	Lab Control Sample Dup	Total/NA	Water	NWTPH-Dx	449353

Analysis Batch: 450931

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-151795-2	MW-26-W-231114	Total/NA	Water	NWTPH-Dx	449353
410-151795-6	MW-31-W-231114	Total/NA	Water	NWTPH-Dx	449353

Eurofins Lancaster Laboratories Environment Testing, LLC

QC Association Summary

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151795-1

GC Semi VOA (Continued)

Analysis Batch: 450931 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-151795-7	MW-12-W-231114	Total/NA	Water	NWTPH-Dx	449353
410-151795-8	D-08-W-231114	Total/NA	Water	NWTPH-Dx	449353
MB 410-447356/1-B	Method Blank	Total/NA	Water	NWTPH-Dx	449353
LCS 410-447356/2-B	Lab Control Sample	Total/NA	Water	NWTPH-Dx	449353
LCSD 410-447356/3-C	Lab Control Sample Dup	Total/NA	Water	NWTPH-Dx	449353

Analysis Batch: 450932

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-151795-16	D-02A-W-231114	Total/NA	Water	NWTPH-Dx	449353
410-151795-25	D-25-W-231115	Total/NA	Water	NWTPH-Dx	449353
410-151795-27	MW-29-W-231115	Total/NA	Water	NWTPH-Dx	449353
410-151795-25 DU	D-25-W-231115	Total/NA	Water	NWTPH-Dx	449353
410-151795-27 DU	MW-29-W-231115	Total/NA	Water	NWTPH-Dx	449353

Prep Batch: 451387

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-151795-4	MW-11-W-231114	Total/NA	Water	3510C	
410-151795-5	D-19-W-231114	Total/NA	Water	3510C	
410-151795-13	MW-30-W-231114	Total/NA	Water	3510C	
410-151795-15	MW-24-W-231114	Total/NA	Water	3510C	
MB 410-451387/1-B	Method Blank	Total/NA	Water	3510C	
LCS 410-451387/2-B	Lab Control Sample	Total/NA	Water	3510C	
LCSD 410-451387/3-B	Lab Control Sample Dup	Total/NA	Water	3510C	

Cleanup Batch: 451524

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-151795-4	MW-11-W-231114	Total/NA	Water	3630C	451387
410-151795-5	D-19-W-231114	Total/NA	Water	3630C	451387
410-151795-13	MW-30-W-231114	Total/NA	Water	3630C	451387
410-151795-15	MW-24-W-231114	Total/NA	Water	3630C	451387
MB 410-451387/1-B	Method Blank	Total/NA	Water	3630C	451387
LCS 410-451387/2-B	Lab Control Sample	Total/NA	Water	3630C	451387
LCSD 410-451387/3-B	Lab Control Sample Dup	Total/NA	Water	3630C	451387

Analysis Batch: 451978

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-151795-4	MW-11-W-231114	Total/NA	Water	NWTPH-Dx	451524
410-151795-5	D-19-W-231114	Total/NA	Water	NWTPH-Dx	451524
410-151795-13	MW-30-W-231114	Total/NA	Water	NWTPH-Dx	451524
410-151795-15	MW-24-W-231114	Total/NA	Water	NWTPH-Dx	451524
MB 410-451387/1-B	Method Blank	Total/NA	Water	NWTPH-Dx	451524
LCS 410-451387/2-B	Lab Control Sample	Total/NA	Water	NWTPH-Dx	451524
LCSD 410-451387/3-B	Lab Control Sample Dup	Total/NA	Water	NWTPH-Dx	451524

Lab Chronicle

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151795-1

Client Sample ID: MW-10-W-231113

Lab Sample ID: 410-151795-1

Date Collected: 11/13/23 13:25

Matrix: Water

Date Received: 11/17/23 09:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D/UST		1	446440	UKAD	ELLE	11/22/23 19:35
Total/NA	Analysis	NWTPH-Gx		1	445460	SE8S	ELLE	11/20/23 17:11
Total/NA	Prep	3510C			446260	QKX3	ELLE	11/22/23 07:47
Total/NA	Cleanup	3630C			447811	USL7	ELLE	11/29/23 00:30
Total/NA	Analysis	NWTPH-Dx		1	448229	UHEW	ELLE	11/30/23 06:45
Total/NA	Prep	3510C			446264	QKX3	ELLE	11/22/23 07:54
Total/NA	Analysis	NWTPH-Dx		1	446556	IUSB	ELLE	11/22/23 23:47

Client Sample ID: MW-26-W-231114

Lab Sample ID: 410-151795-2

Date Collected: 11/14/23 09:35

Matrix: Water

Date Received: 11/17/23 09:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D/UST		1	446440	UKAD	ELLE	11/22/23 19:59
Total/NA	Analysis	NWTPH-Gx		1	445460	SE8S	ELLE	11/20/23 17:36
Total/NA	Prep	3510C			447356	QKX3	ELLE	11/28/23 08:04
Total/NA	Cleanup	3630C			449353	USL7	ELLE	12/02/23 01:00
Total/NA	Analysis	NWTPH-Dx		1	450931	KP5X	ELLE	12/06/23 21:27
Total/NA	Prep	3510C			447360	QKX3	ELLE	11/28/23 08:09
Total/NA	Analysis	NWTPH-Dx		1	447751	IUSB	ELLE	11/29/23 00:52

Client Sample ID: D-17-W-231114

Lab Sample ID: 410-151795-3

Date Collected: 11/14/23 10:45

Matrix: Water

Date Received: 11/17/23 09:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D/UST		1	446440	UKAD	ELLE	11/22/23 20:23
Total/NA	Analysis	NWTPH-Gx		1	445460	SE8S	ELLE	11/20/23 18:01
Total/NA	Prep	3510C			447360	QKX3	ELLE	11/28/23 08:09
Total/NA	Analysis	NWTPH-Dx		1	447751	IUSB	ELLE	11/29/23 01:15
Total/NA	Prep	3510C			447356	QKX3	ELLE	11/28/23 08:04
Total/NA	Cleanup	3630C			449353	USL7	ELLE	12/02/23 01:00
Total/NA	Analysis	NWTPH-Dx		1	449762	KP5X	ELLE	12/04/23 16:52

Client Sample ID: MW-11-W-231114

Lab Sample ID: 410-151795-4

Date Collected: 11/14/23 11:30

Matrix: Water

Date Received: 11/17/23 09:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D/UST		1	446440	UKAD	ELLE	11/22/23 20:47
Total/NA	Analysis	NWTPH-Gx		1	445460	SE8S	ELLE	11/20/23 18:27
Total/NA	Prep	3510C			447360	QKX3	ELLE	11/28/23 08:09
Total/NA	Analysis	NWTPH-Dx		1	447751	IUSB	ELLE	11/29/23 01:38

Lab Chronicle

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151795-1

Client Sample ID: MW-11-W-231114

Lab Sample ID: 410-151795-4

Date Collected: 11/14/23 11:30

Matrix: Water

Date Received: 11/17/23 09:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3510C			451387	QJZ6	ELLE	12/07/23 15:43
Total/NA	Cleanup	3630C			451524	USL7	ELLE	12/08/23 00:38
Total/NA	Analysis	NWTPH-Dx		1	451978	IUSB	ELLE	12/09/23 01:30

Client Sample ID: D-19-W-231114

Lab Sample ID: 410-151795-5

Date Collected: 11/14/23 13:00

Matrix: Water

Date Received: 11/17/23 09:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D/UST		1	446440	UKAD	ELLE	11/22/23 21:11
Total/NA	Analysis	NWTPH-Gx		1	445460	SE8S	ELLE	11/20/23 18:52
Total/NA	Prep	3510C			447360	QKX3	ELLE	11/28/23 08:09
Total/NA	Analysis	NWTPH-Dx		1	447751	IUSB	ELLE	11/29/23 02:01
Total/NA	Prep	3510C			451387	QJZ6	ELLE	12/07/23 15:43
Total/NA	Cleanup	3630C			451524	USL7	ELLE	12/08/23 00:38
Total/NA	Analysis	NWTPH-Dx		1	451978	IUSB	ELLE	12/09/23 01:53

Client Sample ID: MW-31-W-231114

Lab Sample ID: 410-151795-6

Date Collected: 11/14/23 13:50

Matrix: Water

Date Received: 11/17/23 09:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D/UST		1	446440	UKAD	ELLE	11/22/23 21:35
Total/NA	Analysis	NWTPH-Gx		5	445460	SE8S	ELLE	11/20/23 23:58
Total/NA	Prep	3510C			447356	QKX3	ELLE	11/28/23 08:04
Total/NA	Cleanup	3630C			449353	USL7	ELLE	12/02/23 01:00
Total/NA	Analysis	NWTPH-Dx		1	450931	KP5X	ELLE	12/06/23 22:59
Total/NA	Prep	3510C			447360	QKX3	ELLE	11/28/23 08:09
Total/NA	Analysis	NWTPH-Dx		1	447751	IUSB	ELLE	11/29/23 02:23

Client Sample ID: MW-12-W-231114

Lab Sample ID: 410-151795-7

Date Collected: 11/14/23 15:40

Matrix: Water

Date Received: 11/17/23 09:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D/UST		1	446440	UKAD	ELLE	11/22/23 21:58
Total/NA	Analysis	NWTPH-Gx		1	445905	SE8S	ELLE	11/21/23 19:34
Total/NA	Prep	3510C			447356	QKX3	ELLE	11/28/23 08:04
Total/NA	Cleanup	3630C			449353	USL7	ELLE	12/02/23 01:00
Total/NA	Analysis	NWTPH-Dx		1	450931	KP5X	ELLE	12/06/23 23:22
Total/NA	Prep	3510C			447360	QKX3	ELLE	11/28/23 08:09
Total/NA	Analysis	NWTPH-Dx		1	447751	IUSB	ELLE	11/29/23 02:46

Lab Chronicle

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151795-1

Client Sample ID: D-08-W-231114

Lab Sample ID: 410-151795-8

Date Collected: 11/14/23 16:35

Matrix: Water

Date Received: 11/17/23 09:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D/UST		1	446440	UKAD	ELLE	11/22/23 22:23
Total/NA	Analysis	NWTPH-Gx		1	445905	SE8S	ELLE	11/21/23 20:52
Total/NA	Prep	3510C			447356	QKX3	ELLE	11/28/23 08:04
Total/NA	Cleanup	3630C			449353	USL7	ELLE	12/02/23 01:00
Total/NA	Analysis	NWTPH-Dx		1	450931	KP5X	ELLE	12/06/23 23:45
Total/NA	Prep	3510C			447360	QKX3	ELLE	11/28/23 08:09
Total/NA	Analysis	NWTPH-Dx		1	447751	IUSB	ELLE	11/29/23 03:09

Client Sample ID: MW-38-W-231115

Lab Sample ID: 410-151795-9

Date Collected: 11/15/23 09:25

Matrix: Water

Date Received: 11/17/23 09:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D/UST		1	446766	UKAD	ELLE	11/26/23 15:06
Total/NA	Analysis	NWTPH-Gx		1	446883	SE8S	ELLE	11/27/23 14:50
Total/NA	Prep	3510C			448163	T9CY	ELLE	11/29/23 15:22
Total/NA	Analysis	NWTPH-Dx		1	448780	UHEW	ELLE	12/01/23 11:36

Client Sample ID: D-26-W-231115

Lab Sample ID: 410-151795-10

Date Collected: 11/15/23 10:25

Matrix: Water

Date Received: 11/17/23 09:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D/UST		1	446766	UKAD	ELLE	11/26/23 15:30
Total/NA	Analysis	NWTPH-Gx		1	446883	SE8S	ELLE	11/27/23 15:15
Total/NA	Prep	3510C			448167	T9CY	ELLE	11/29/23 15:27
Total/NA	Cleanup	3630C			449581	USL7	ELLE	12/04/23 01:15
Total/NA	Analysis	NWTPH-Dx		1	449747	KP5X	ELLE	12/04/23 16:06
Total/NA	Prep	3510C			448163	T9CY	ELLE	11/29/23 15:22
Total/NA	Analysis	NWTPH-Dx		1	448780	UHEW	ELLE	12/01/23 11:59

Client Sample ID: D-24-W-231115

Lab Sample ID: 410-151795-11

Date Collected: 11/15/23 12:00

Matrix: Water

Date Received: 11/17/23 09:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D/UST		1	446766	UKAD	ELLE	11/26/23 16:42
Total/NA	Analysis	NWTPH-Gx		1	446883	SE8S	ELLE	11/27/23 16:32
Total/NA	Prep	3510C			448167	T9CY	ELLE	11/29/23 15:27
Total/NA	Cleanup	3630C			449581	USL7	ELLE	12/04/23 01:15
Total/NA	Analysis	NWTPH-Dx		1	449747	KP5X	ELLE	12/04/23 17:15
Total/NA	Prep	3510C			448163	T9CY	ELLE	11/29/23 15:22
Total/NA	Analysis	NWTPH-Dx		1	448780	UHEW	ELLE	12/01/23 12:22

Lab Chronicle

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151795-1

Client Sample ID: D-18-W-231114

Lab Sample ID: 410-151795-12

Date Collected: 11/14/23 10:01

Matrix: Water

Date Received: 11/17/23 09:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D/UST		1	446766	UKAD	ELLE	11/26/23 17:06
Total/NA	Analysis	NWTPH-Gx		1	445905	SE8S	ELLE	11/21/23 21:18
Total/NA	Prep	3510C			447360	QKX3	ELLE	11/28/23 08:09
Total/NA	Analysis	NWTPH-Dx		1	447751	IUSB	ELLE	11/29/23 03:32
Total/NA	Prep	3510C			447356	QKX3	ELLE	11/28/23 08:04
Total/NA	Cleanup	3630C			449353	USL7	ELLE	12/02/23 01:00
Total/NA	Analysis	NWTPH-Dx		1	449762	KP5X	ELLE	12/04/23 19:33

Client Sample ID: MW-30-W-231114

Lab Sample ID: 410-151795-13

Date Collected: 11/14/23 11:01

Matrix: Water

Date Received: 11/17/23 09:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D/UST		1	446766	UKAD	ELLE	11/26/23 17:30
Total/NA	Analysis	NWTPH-Gx		1	445905	SE8S	ELLE	11/21/23 21:43
Total/NA	Prep	3510C			447360	QKX3	ELLE	11/28/23 08:09
Total/NA	Analysis	NWTPH-Dx		1	447751	IUSB	ELLE	11/29/23 03:54
Total/NA	Prep	3510C			451387	QJZ6	ELLE	12/07/23 15:43
Total/NA	Cleanup	3630C			451524	USL7	ELLE	12/08/23 00:38
Total/NA	Analysis	NWTPH-Dx		1	451978	IUSB	ELLE	12/09/23 02:39

Client Sample ID: D-09-W-231114

Lab Sample ID: 410-151795-14

Date Collected: 11/14/23 12:25

Matrix: Water

Date Received: 11/17/23 09:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D/UST		1	446766	UKAD	ELLE	11/26/23 17:54
Total/NA	Analysis	NWTPH-Gx		1	445905	SE8S	ELLE	11/21/23 22:09
Total/NA	Prep	3510C			447360	QKX3	ELLE	11/28/23 08:09
Total/NA	Analysis	NWTPH-Dx		1	447751	IUSB	ELLE	11/29/23 04:17
Total/NA	Prep	3510C			447356	QKX3	ELLE	11/28/23 08:04
Total/NA	Cleanup	3630C			449353	USL7	ELLE	12/02/23 01:00
Total/NA	Analysis	NWTPH-Dx		1	449762	KP5X	ELLE	12/04/23 20:19

Client Sample ID: MW-24-W-231114

Lab Sample ID: 410-151795-15

Date Collected: 11/14/23 14:03

Matrix: Water

Date Received: 11/17/23 09:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D/UST		1	446766	UKAD	ELLE	11/26/23 18:18
Total/NA	Analysis	NWTPH-Gx		1	445905	SE8S	ELLE	11/21/23 22:34
Total/NA	Prep	3510C			447360	QKX3	ELLE	11/28/23 08:09
Total/NA	Analysis	NWTPH-Dx		1	447751	IUSB	ELLE	11/29/23 05:02

Lab Chronicle

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151795-1

Client Sample ID: MW-24-W-231114

Lab Sample ID: 410-151795-15

Date Collected: 11/14/23 14:03

Matrix: Water

Date Received: 11/17/23 09:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3510C			451387	QJZ6	ELLE	12/07/23 15:43
Total/NA	Cleanup	3630C			451524	USL7	ELLE	12/08/23 00:38
Total/NA	Analysis	NWTPH-Dx		1	451978	IUSB	ELLE	12/09/23 03:25

Client Sample ID: D-02A-W-231114

Lab Sample ID: 410-151795-16

Date Collected: 11/14/23 15:21

Matrix: Water

Date Received: 11/17/23 09:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D/UST		1	446766	UKAD	ELLE	11/26/23 18:42
Total/NA	Analysis	NWTPH-Gx		1	445905	SE8S	ELLE	11/21/23 23:00
Total/NA	Prep	3510C			447360	QKX3	ELLE	11/28/23 08:09
Total/NA	Analysis	NWTPH-Dx		1	447751	IUSB	ELLE	11/29/23 05:25
Total/NA	Prep	3510C			447356	QKX3	ELLE	11/28/23 08:04
Total/NA	Cleanup	3630C			449353	USL7	ELLE	12/02/23 01:00
Total/NA	Analysis	NWTPH-Dx		1	450932	KP5X	ELLE	12/06/23 21:50

Client Sample ID: MW-23-W-231114

Lab Sample ID: 410-151795-17

Date Collected: 11/14/23 16:33

Matrix: Water

Date Received: 11/17/23 09:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D/UST		1	446766	UKAD	ELLE	11/26/23 19:06
Total/NA	Analysis	NWTPH-Gx		1	445905	SE8S	ELLE	11/21/23 23:26
Total/NA	Prep	3510C			447360	QKX3	ELLE	11/28/23 08:09
Total/NA	Analysis	NWTPH-Dx		1	447751	IUSB	ELLE	11/29/23 05:48

Client Sample ID: D-27-W-231115

Lab Sample ID: 410-151795-18

Date Collected: 11/15/23 09:17

Matrix: Water

Date Received: 11/17/23 09:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D/UST		1	446766	UKAD	ELLE	11/26/23 19:30
Total/NA	Analysis	NWTPH-Gx		1	446883	SE8S	ELLE	11/27/23 16:57
Total/NA	Prep	3510C			448167	T9CY	ELLE	11/29/23 15:27
Total/NA	Cleanup	3630C			449581	USL7	ELLE	12/04/23 01:15
Total/NA	Analysis	NWTPH-Dx		1	449747	KP5X	ELLE	12/04/23 17:38
Total/NA	Prep	3510C			448163	T9CY	ELLE	11/29/23 15:22
Total/NA	Analysis	NWTPH-Dx		1	448780	UHEW	ELLE	12/01/23 12:44

Lab Chronicle

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151795-1

Client Sample ID: MW-39-W-231115

Lab Sample ID: 410-151795-19

Date Collected: 11/15/23 10:12

Matrix: Water

Date Received: 11/17/23 09:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D/UST		1	446766	UKAD	ELLE	11/26/23 19:54
Total/NA	Analysis	NWTPH-Gx		1	446883	SE8S	ELLE	11/27/23 17:22
Total/NA	Prep	3510C			448167	T9CY	ELLE	11/29/23 15:27
Total/NA	Cleanup	3630C			449581	USL7	ELLE	12/04/23 01:15
Total/NA	Analysis	NWTPH-Dx		1	449747	KP5X	ELLE	12/04/23 18:01
Total/NA	Prep	3510C			448163	T9CY	ELLE	11/29/23 15:22
Total/NA	Analysis	NWTPH-Dx		1	448780	UHEW	ELLE	12/01/23 13:07

Client Sample ID: RMW-01-W-231115

Lab Sample ID: 410-151795-20

Date Collected: 11/15/23 11:41

Matrix: Water

Date Received: 11/17/23 09:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D/UST		1	446766	UKAD	ELLE	11/26/23 20:18
Total/NA	Analysis	NWTPH-Gx		1	446883	SE8S	ELLE	11/27/23 18:39
Total/NA	Prep	3510C			448167	T9CY	ELLE	11/29/23 15:27
Total/NA	Cleanup	3630C			449581	USL7	ELLE	12/04/23 01:15
Total/NA	Analysis	NWTPH-Dx		1	449747	KP5X	ELLE	12/04/23 18:24
Total/NA	Prep	3510C			448163	T9CY	ELLE	11/29/23 15:22
Total/NA	Analysis	NWTPH-Dx		1	448780	UHEW	ELLE	12/01/23 13:30

Client Sample ID: D-12-W-231115

Lab Sample ID: 410-151795-21

Date Collected: 11/15/23 12:43

Matrix: Water

Date Received: 11/17/23 09:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D/UST		1	446766	UKAD	ELLE	11/26/23 20:42
Total/NA	Analysis	NWTPH-Gx		1	446883	SE8S	ELLE	11/27/23 19:04
Total/NA	Prep	3510C			448167	T9CY	ELLE	11/29/23 15:27
Total/NA	Cleanup	3630C			449581	USL7	ELLE	12/04/23 01:15
Total/NA	Analysis	NWTPH-Dx		1	449747	KP5X	ELLE	12/04/23 18:47
Total/NA	Prep	3510C			448163	T9CY	ELLE	11/29/23 15:22
Total/NA	Analysis	NWTPH-Dx		1	448780	UHEW	ELLE	12/01/23 13:52

Client Sample ID: D-15-W-231115

Lab Sample ID: 410-151795-22

Date Collected: 11/15/23 13:58

Matrix: Water

Date Received: 11/17/23 09:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D/UST		1	446766	UKAD	ELLE	11/26/23 21:06
Total/NA	Analysis	NWTPH-Gx		1	446883	SE8S	ELLE	11/27/23 19:29
Total/NA	Prep	3510C			448167	T9CY	ELLE	11/29/23 15:27
Total/NA	Cleanup	3630C			449581	USL7	ELLE	12/04/23 01:15
Total/NA	Analysis	NWTPH-Dx		1	449747	KP5X	ELLE	12/04/23 19:10

Eurofins Lancaster Laboratories Environment Testing, LLC

Lab Chronicle

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151795-1

Client Sample ID: D-15-W-231115

Lab Sample ID: 410-151795-22

Date Collected: 11/15/23 13:58

Matrix: Water

Date Received: 11/17/23 09:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3510C			448163	T9CY	ELLE	11/29/23 15:22
Total/NA	Analysis	NWTPH-Dx		1	448780	UHEW	ELLE	12/01/23 14:15

Client Sample ID: MW-36-W-231115

Lab Sample ID: 410-151795-23

Date Collected: 11/15/23 12:55

Matrix: Water

Date Received: 11/17/23 09:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D/UST		1	446766	UKAD	ELLE	11/26/23 21:30
Total/NA	Analysis	NWTPH-Gx		1	446883	SE8S	ELLE	11/27/23 19:55
Total/NA	Prep	3510C			448163	T9CY	ELLE	11/29/23 15:22
Total/NA	Analysis	NWTPH-Dx		1	448780	UHEW	ELLE	12/01/23 14:38

Client Sample ID: MW-37-W-231115

Lab Sample ID: 410-151795-24

Date Collected: 11/15/23 13:55

Matrix: Water

Date Received: 11/17/23 09:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D/UST		1	446766	UKAD	ELLE	11/26/23 21:54
Total/NA	Analysis	NWTPH-Gx		1	446883	SE8S	ELLE	11/27/23 20:20
Total/NA	Prep	3510C			448167	T9CY	ELLE	11/29/23 15:27
Total/NA	Cleanup	3630C			449581	USL7	ELLE	12/04/23 01:15
Total/NA	Analysis	NWTPH-Dx		1	449747	KP5X	ELLE	12/04/23 19:56
Total/NA	Prep	3510C			448163	T9CY	ELLE	11/29/23 15:22
Total/NA	Analysis	NWTPH-Dx		1	448780	UHEW	ELLE	12/01/23 15:01

Client Sample ID: D-25-W-231115

Lab Sample ID: 410-151795-25

Date Collected: 11/15/23 14:50

Matrix: Water

Date Received: 11/17/23 09:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D/UST		1	446766	UKAD	ELLE	11/26/23 22:18
Total/NA	Analysis	NWTPH-Gx		1	446883	SE8S	ELLE	11/27/23 20:46
Total/NA	Prep	3510C			447360	QKX3	ELLE	11/28/23 08:09
Total/NA	Analysis	NWTPH-Dx		1	447751	IUSB	ELLE	11/29/23 06:11
Total/NA	Prep	3510C			447356	QKX3	ELLE	11/28/23 08:04
Total/NA	Cleanup	3630C			449353	USL7	ELLE	12/02/23 01:00
Total/NA	Analysis	NWTPH-Dx		1	450932	KP5X	ELLE	12/06/23 22:36

Client Sample ID: TB-1-T-231115

Lab Sample ID: 410-151795-26

Date Collected: 10/26/23 00:00

Matrix: Water

Date Received: 11/17/23 09:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D/UST		1	446440	UKAD	ELLE	11/22/23 15:59

Eurofins Lancaster Laboratories Environment Testing, LLC

Lab Chronicle

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151795-1

Client Sample ID: TB-1-T-231115

Lab Sample ID: 410-151795-26

Date Collected: 10/26/23 00:00

Matrix: Water

Date Received: 11/17/23 09:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	NWTPH-Gx		1	445458	SE8S	ELLE	11/20/23 16:44

Client Sample ID: MW-29-W-231115

Lab Sample ID: 410-151795-27

Date Collected: 11/15/23 14:58

Matrix: Water

Date Received: 11/17/23 09:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D/UST		1	446766	UKAD	ELLE	11/26/23 22:42
Total/NA	Analysis	NWTPH-Gx		1	446883	SE8S	ELLE	11/27/23 21:11
Total/NA	Prep	3510C			447360	QKX3	ELLE	11/28/23 08:09
Total/NA	Analysis	NWTPH-Dx		1	447751	IUSB	ELLE	11/29/23 06:56
Total/NA	Prep	3510C			447356	QKX3	ELLE	11/28/23 08:04
Total/NA	Cleanup	3630C			449353	USL7	ELLE	12/02/23 01:00
Total/NA	Analysis	NWTPH-Dx		1	450932	KP5X	ELLE	12/06/23 23:22

Client Sample ID: TB2-T-231115

Lab Sample ID: 410-151795-28

Date Collected: 10/26/23 00:00

Matrix: Water

Date Received: 11/17/23 09:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D/UST		1	446440	UKAD	ELLE	11/22/23 16:23
Total/NA	Analysis	NWTPH-Gx		1	445458	SE8S	ELLE	11/20/23 17:09

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151795-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Washington	State	C457	04-11-24

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Method Summary

Client: AECOM

Job ID: 410-151795-1

Project/Site: CEMREC Legacy Sites – Tacoma

Method	Method Description	Protocol	Laboratory
8260D/UST	Volatile Organic Compounds by GC/MS	SW846	ELLE
NWTPH-Gx	Northwest - Volatile Petroleum Products (GC)	NWTPH	ELLE
NWTPH-Dx	Northwest - Semi-Volatile Petroleum Products (GC)	NWTPH	ELLE
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	ELLE
3630C	Silica Gel Cleanup	SW846	ELLE
5030C	Purge and Trap	SW846	ELLE

Protocol References:

NWTPH = Northwest Total Petroleum Hydrocarbon

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Sample Summary

Client: AECOM

Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151795-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
410-151795-1	MW-10-W-231113	Water	11/13/23 13:25	11/17/23 09:57
410-151795-2	MW-26-W-231114	Water	11/14/23 09:35	11/17/23 09:57
410-151795-3	D-17-W-231114	Water	11/14/23 10:45	11/17/23 09:57
410-151795-4	MW-11-W-231114	Water	11/14/23 11:30	11/17/23 09:57
410-151795-5	D-19-W-231114	Water	11/14/23 13:00	11/17/23 09:57
410-151795-6	MW-31-W-231114	Water	11/14/23 13:50	11/17/23 09:57
410-151795-7	MW-12-W-231114	Water	11/14/23 15:40	11/17/23 09:57
410-151795-8	D-08-W-231114	Water	11/14/23 16:35	11/17/23 09:57
410-151795-9	MW-38-W-231115	Water	11/15/23 09:25	11/17/23 09:57
410-151795-10	D-26-W-231115	Water	11/15/23 10:25	11/17/23 09:57
410-151795-11	D-24-W-231115	Water	11/15/23 12:00	11/17/23 09:57
410-151795-12	D-18-W-231114	Water	11/14/23 10:01	11/17/23 09:57
410-151795-13	MW-30-W-231114	Water	11/14/23 11:01	11/17/23 09:57
410-151795-14	D-09-W-231114	Water	11/14/23 12:25	11/17/23 09:57
410-151795-15	MW-24-W-231114	Water	11/14/23 14:03	11/17/23 09:57
410-151795-16	D-02A-W-231114	Water	11/14/23 15:21	11/17/23 09:57
410-151795-17	MW-23-W-231114	Water	11/14/23 16:33	11/17/23 09:57
410-151795-18	D-27-W-231115	Water	11/15/23 09:17	11/17/23 09:57
410-151795-19	MW-39-W-231115	Water	11/15/23 10:12	11/17/23 09:57
410-151795-20	RMW-01-W-231115	Water	11/15/23 11:41	11/17/23 09:57
410-151795-21	D-12-W-231115	Water	11/15/23 12:43	11/17/23 09:57
410-151795-22	D-15-W-231115	Water	11/15/23 13:58	11/17/23 09:57
410-151795-23	MW-36-W-231115	Water	11/15/23 12:55	11/17/23 09:57
410-151795-24	MW-37-W-231115	Water	11/15/23 13:55	11/17/23 09:57
410-151795-25	D-25-W-231115	Water	11/15/23 14:50	11/17/23 09:57
410-151795-26	TB-1-T-231115	Water	10/26/23 00:00	11/17/23 09:57
410-151795-27	MW-29-W-231115	Water	11/15/23 14:58	11/17/23 09:57
410-151795-28	TB2-T-231115	Water	10/26/23 00:00	11/17/23 09:57

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Chain of Custody Record

eurofins
Environment Testing

Client: SC, LLC		Lab PM: Carter, Amek		Carrier Tracking No(s):		COC No: 410-101297-22634.5	
Client Contact: Mr. Bradley Wynne		Phone:		E-Mail: Loran.Carter@et.eurofinsus.com		State of Origin:	
Company: AECOM		PWSID:		Analysis Requested:		Job #:	
Address: 13355 Noel Road Suite 400		Due Date Requested:		Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No) NWTPH_Dx - NWTPH-Gx NWTPH_Gx - NWTPH-Gx 8250D_UST - BTEX/MTBE NWTPH_Dx - NWTPH-Dx		Preservation Codes: A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Y - Trizma Z - other (specify)	
City: Dallas		TAT Requested (days):					
State, Zip: TX, 75240		Compliance Project: ☐ Yes ☐ No					
Phone: 972-735-7068(Tel)		PO #: 152363					
Email: bradley.wynne@aecom.com		WO #: 60701804					
Project Name: CEMREC Legacy Sites - Tacoma		Project #: 41014252		Total Number of Containers		Special Instructions/Note:	
Site:		SSOW#:					
Sample Identification		Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/soil, BT=Tissue, A=Air)		
						Preservation Code:	
MW-10-W-231113		11/13/23	1325	G	W		8
MW-26-W-231114		11/14/23	0935	G	W		8
D-17-W-231114			1045				8
MW-11-W-231114			1130				8
D-19-W-231114			1300				8
MW-31-W-231114			1350				6
D MW-12-W-231114			1540				8
D-08-W-231114			1635				8
MW-38-W-231115		11/15/23	0925	G	W		8
D-26-W-231115			1025				24
D-24-W-231115			1200				8
Possible Hazard Identification						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological						☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months	
Deliverable Requested: I, II, III, IV, Other (specify)						Special Instructions/QC Requirements:	
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:	
Relinquished by:		Date/Time: 11/15/23 1640		Company: AECOM		Received by: Date/Time: 11/17/23 Company:	
Relinquished by:		Date/Time:		Company:		Received by: Date/Time: 11/17/23 Company:	
Relinquished by:		Date/Time:		Company:		Received by: Date/Time: 11/17/23 9:57 Company: CEM	
Custody Seals Intact: ☐ Yes ☐ No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: Raw 0-4 - 4.8			

Eurofins Lancaster Laboratories Environme

2425 New Holland Pike

Lancaster, PA 17601

Phone: 717-656-2300 Fax: 717-656-2681

Chain of Custody Record



Environmental Testing

Client Information		Sampler: SC, LC		Lab PM: Carter, Amek		Carrier Tracking No(s):		COC No: 410-101297-22634 6																	
Client Contact: Mr. Bradley Wynne		Phone:		E-Mail: Loran Carter@et.eurofinsus.com		State of Origin:		Page: 6 of 6 Page 2 of 3																	
Company: AECOM		PWSID:		Analysis Requested						Job #:															
Address: 13355 Noel Road Suite 400		Due Date Requested:		Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No) NWTPH_Dx - NWTPH-Gx NWTPH_Gx - NWTPH-Gx 8260D_UST - BTEX/MTBE NWTPH_Dx - NWTPH-Dx Total Number of containers						Preservation Codes: A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Y - Trizma Z - other (specify)						Other:									
City: Dallas		TAT Requested (days):																							
State, Zip: TX, 75240		Compliance Project: ☐ Yes ☐ No																							
Phone: 972-735-7068(Tel)		PO #: 152363																							
Email: bradley.wynne@aecom.com		WO #: 60701804																							
Project Name: CEMREC Legacy Sites - Tacoma		Project #: 41014252																							
Site:		SSOW#:																							
Sample Identification		Sample Date		Sample Time		Sample Type (C=comp, G=grab)		Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		NWTPH_Dx - NWTPH-Gx		NWTPH_Gx - NWTPH-Gx		8260D_UST - BTEX/MTBE		NWTPH_Dx - NWTPH-Dx		Total Number of containers		Special Instructions/Note:	
						Preservation Code:																			
D-18-W-231114		11/14/23		1001		G		W																	
MW-30-W-231114		↓		1101		G		W																	
D-09-W-231114				1225		G		W																	
MW-24-W-231114				1403		G		W																	
D-02A-W-231114				1521		G		W																	
MW-23-W-231114		↓		1633		G		W																	
D-27-W-231115		11/15/23		97		G		W																	
MW-39-W-231115		↓		1012		G		W																	
BMW-01-W-231115				1141		G		W																	
D-12-W-231115				1243		G		W																	
D-15-W-231115		↓		1358		G		W																	
Possible Hazard Identification										Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)															
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological										☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months															
Deliverable Requested: I, II, III, IV, Other (specify)										Special Instructions/QC Requirements:															
Empty Kit Relinquished by:				Date:				Time:				Method of Shipment:													
Relinquished by: [Signature]				Date/Time: 11/15/23 1640				Company: AECOM				Received by:				Date/Time:				Company:					
Relinquished by:				Date/Time:				Company:				Received by:				Date/Time:				Company:					
Relinquished by:				Date/Time:				Company:				Received by: [Signature]				Date/Time: 11/17/23 9:57				Company: [Signature]					
Custody Seals Intact: ☐ Yes ☐ No				Custody Seal No.:				Cooler Temperature(s) °C and Other Remarks: Raw 0.4 - 4.8																	

Login Sample Receipt Checklist

Client: AECOM

Job Number: 410-151795-1

Login Number: 151795

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

List Number: 1

Creator: Kanagy, Nicholas

Question	Answer	Comment
The cooler's custody seal is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable, where thermal pres is required ($\leq 6^{\circ}\text{C}$, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temp acceptable, where thermal pres is required ($\leq 6^{\circ}\text{C}$, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	True	
Sample custody seals are intact.	True	
VOA sample vials do not have headspace $> 6\text{mm}$ in diameter (none, if from WV)?	True	



ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Bradley Wynne
AECOM
13355 Noel Road
Suite 400
Dallas, Texas 75240

Generated 12/12/2023 12:53:35 AM

JOB DESCRIPTION

CEMREC Legacy Sites – Tacoma

JOB NUMBER

410-151876-1

Eurofins Lancaster Laboratories Environment Testing, LLC

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization



Generated
12/12/2023 12:53:35 AM

Authorized for release by
Amek Carter, Project Manager
Loran.Carter@et.eurofinsus.com
(717)556-7252

Compliance Statement

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- QC results that exceed the upper limits and are associated with non-detect samples are qualified but further narration is not required since the bias is high and does not change a non-detect result. Further narration is also not required with QC blank detection when the associated sample concentration is non-detect or more than ten times the level in the blank.
 - Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD is performed, unless otherwise specified in the method.
 - Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.
- Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Measurement uncertainty values, as applicable, are available upon request.

Test results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" and tested in the laboratory are not performed within 15 minutes of collection.

This report shall not be reproduced except in full, without the written approval of the laboratory.

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Definitions/Glossary

Client: AECOM

Job ID: 410-151876-1

Project/Site: CEMREC Legacy Sites – Tacoma

Qualifiers

GC/MS VOA

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

GC VOA

Qualifier	Qualifier Description
cn	Refer to Case Narrative for further detail
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
cn	Refer to Case Narrative for further detail
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151876-1

Job ID: 410-151876-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

Narrative

Job Narrative 410-151876-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method. Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 11/18/2023 10:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 0.3°C, 0.5°C and 1.9°C

GC/MS VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC VOA

Method NWTPH_Gx: The following volatiles samples were diluted due to foaming at the time of purging during the original sample analysis: DUP-1-WD-231116 (410-151876-17), DUP-2-WD-231117 (410-151876-18), MW-13-W-231117 (410-151876-19) and D-01-W-231117 (410-151876-20). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC Semi VOA

Method NWTPH_Dx: The CCV bracketing samples D-22-W-231116 (410-151876-1), MW-34-W-231116 (410-151876-2), MW-34-W-231116 (410-151876-2[MS]), MW-34-W-231116 (410-151876-2[MSD]), MW-21-W-231116 (410-151876-3), MW-32-W-231116 (410-151876-4), D-03A-W-231116 (410-151876-5), MW-14-W-231116 (410-151876-6), MW-25-W-231116 (410-151876-11), D-10-W-231116 (410-151876-12), D-7-W-231116 (410-151876-13), MW-22-W-231116 (410-151876-14), MW-18-W-231116 (410-151876-16), DUP-1-WD-231116 (410-151876-17), (LCS 410-448723/2-B), (MB 410-448723/1-B) and (410-151876-B-1-E DU) had a detection for o-terphenyl below the control limits. Only one vial of extract was provided, so reanalysis is not possible. Re-extraction would occur outside of the method hold time.

Method NWTPH_Dx: Samples D-06-W-231116 (410-151876-15) had a detection for the C24-C40 range due to silica gel contamination. Sample was re-extracted outside of the method hold time. Re-extract was non-detect for the C24-C40 range.

Method NWTPH_Dx: Surrogate recovery for the following samples were outside control limits (low): RB-1-R-231117 (410-151876-10), DUP-2-WD-231117 (410-151876-18) and D-01-W-231117 (410-151876-20). Re-extraction and/or re-analysis was performed outside of holding time with acceptable results.

Method NWTPH_Dx: Surrogate recovery for the following sample was outside control limits (low): MW-13-W-231117 (410-151876-19). Re-extraction and/or re-analysis was performed and surrogate recovery was outside control limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Detection Summary

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151876-1

Client Sample ID: D-22-W-231116

Lab Sample ID: 410-151876-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C7-C12 (1C)	72	J	250	43	ug/L	1		NWTPH-Gx	Total/NA
C12-C24	500		100	46	ug/L	1		NWTPH-Dx	Total/NA

Client Sample ID: MW-34-W-231116

Lab Sample ID: 410-151876-2

No Detections.

Client Sample ID: MW-21-W-231116

Lab Sample ID: 410-151876-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C12-C24	250		100	45	ug/L	1		NWTPH-Dx	Total/NA
C24-C40	340		250	100	ug/L	1		NWTPH-Dx	Total/NA

Client Sample ID: MW-32-W-231116

Lab Sample ID: 410-151876-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.1		1.0	0.30	ug/L	1		8260D/UST	Total/NA
Toluene	0.48	J	1.0	0.30	ug/L	1		8260D/UST	Total/NA
C7-C12 (1C)	1300		250	43	ug/L	1		NWTPH-Gx	Total/NA
C12-C24	4900		100	46	ug/L	1		NWTPH-Dx	Total/NA
C12-C24 with Silica Gel clean up	73	J cn	100	46	ug/L	1		NWTPH-Dx	Total/NA
C24-C40	220	J	260	100	ug/L	1		NWTPH-Dx	Total/NA

Client Sample ID: D-03A-W-231116

Lab Sample ID: 410-151876-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C7-C12 (1C)	49	J	250	43	ug/L	1		NWTPH-Gx	Total/NA
C12-C24	1100		100	46	ug/L	1		NWTPH-Dx	Total/NA
C24-C40	290		260	100	ug/L	1		NWTPH-Dx	Total/NA

Client Sample ID: MW-14-W-231116

Lab Sample ID: 410-151876-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C12-C24	170		100	46	ug/L	1		NWTPH-Dx	Total/NA

Client Sample ID: MW-19-W-231117

Lab Sample ID: 410-151876-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.68	J	1.0	0.30	ug/L	1		8260D/UST	Total/NA
Ethylbenzene	0.40	J	1.0	0.40	ug/L	1		8260D/UST	Total/NA
Toluene	0.43	J	1.0	0.30	ug/L	1		8260D/UST	Total/NA
Xylenes, Total	1.4	J	6.0	0.40	ug/L	1		8260D/UST	Total/NA
C7-C12 (1C)	970		250	43	ug/L	1		NWTPH-Gx	Total/NA
C12-C24	8600		200	92	ug/L	2		NWTPH-Dx	Total/NA
C12-C24 with Silica Gel clean up	81	J	100	46	ug/L	1		NWTPH-Dx	Total/NA
C24-C40	1500		510	200	ug/L	2		NWTPH-Dx	Total/NA

Client Sample ID: D-14-W-231117

Lab Sample ID: 410-151876-8

No Detections.

Client Sample ID: FB-1-O-231117

Lab Sample ID: 410-151876-9

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Lancaster Laboratories Environment Testing, LLC

Detection Summary

Client: AECOM

Job ID: 410-151876-1

Project/Site: CEMREC Legacy Sites – Tacoma

Client Sample ID: RB-1-R-231117

Lab Sample ID: 410-151876-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C12-C24	59	J	100	46	ug/L	1		NWTPH-Dx	Total/NA

Client Sample ID: MW-25-W-231116

Lab Sample ID: 410-151876-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.4		1.0	0.30	ug/L	1		8260D/UST	Total/NA
Ethylbenzene	1.5		1.0	0.40	ug/L	1		8260D/UST	Total/NA
Toluene	0.46	J	1.0	0.30	ug/L	1		8260D/UST	Total/NA
C7-C12 (1C)	900		250	43	ug/L	1		NWTPH-Gx	Total/NA
C12-C24	150		100	46	ug/L	1		NWTPH-Dx	Total/NA

Client Sample ID: D-10-W-231116

Lab Sample ID: 410-151876-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C7-C12 (1C)	93	J	250	43	ug/L	1		NWTPH-Gx	Total/NA
C12-C24	1900		100	46	ug/L	1		NWTPH-Dx	Total/NA
C24-C40	190	J	260	100	ug/L	1		NWTPH-Dx	Total/NA

Client Sample ID: D-7-W-231116

Lab Sample ID: 410-151876-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C12-C24	420		100	47	ug/L	1		NWTPH-Dx	Total/NA
C24-C40	110	J	260	100	ug/L	1		NWTPH-Dx	Total/NA

Client Sample ID: MW-22-W-231116

Lab Sample ID: 410-151876-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C7-C12 (1C)	76	J	250	43	ug/L	1		NWTPH-Gx	Total/NA
C12-C24	4100		100	47	ug/L	1		NWTPH-Dx	Total/NA
C24-C40	1200		260	100	ug/L	1		NWTPH-Dx	Total/NA

Client Sample ID: D-06-W-231116

Lab Sample ID: 410-151876-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C7-C12 (1C)	250		250	43	ug/L	1		NWTPH-Gx	Total/NA
C12-C24	2600		100	47	ug/L	1		NWTPH-Dx	Total/NA
C12-C24 with Silica Gel clean up	54	J cn	100	47	ug/L	1		NWTPH-Dx	Total/NA
C24-C40	280		260	100	ug/L	1		NWTPH-Dx	Total/NA
C24-C40 with Silica Gel clean up	130	J cn	260	100	ug/L	1		NWTPH-Dx	Total/NA

Client Sample ID: MW-18-W-231116

Lab Sample ID: 410-151876-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C7-C12 (1C)	550		250	43	ug/L	1		NWTPH-Gx	Total/NA
C12-C24	1300		100	46	ug/L	1		NWTPH-Dx	Total/NA
C12-C24 with Silica Gel clean up	59	J cn	100	46	ug/L	1		NWTPH-Dx	Total/NA
C24-C40	240	J	260	100	ug/L	1		NWTPH-Dx	Total/NA

Client Sample ID: DUP-1-WD-231116

Lab Sample ID: 410-151876-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C7-C12 (1C)	660	J cn	2500	430	ug/L	10		NWTPH-Gx	Total/NA
C12-C24	3900		100	47	ug/L	1		NWTPH-Dx	Total/NA
C24-C40	1300		260	100	ug/L	1		NWTPH-Dx	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Lancaster Laboratories Environment Testing, LLC

Detection Summary

Client: AECOM

Job ID: 410-151876-1

Project/Site: CEMREC Legacy Sites – Tacoma

Client Sample ID: DUP-2-WD-231117

Lab Sample ID: 410-151876-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C12-C24	4500		100	47	ug/L	1		NWTPH-Dx	Total/NA
C24-C40	850		260	100	ug/L	1		NWTPH-Dx	Total/NA

Client Sample ID: MW-13-W-231117

Lab Sample ID: 410-151876-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C7-C12 (1C)	220	J cn	1300	220	ug/L	5		NWTPH-Gx	Total/NA
C12-C24	3900		100	46	ug/L	1		NWTPH-Dx	Total/NA
C24-C40	440		260	100	ug/L	1		NWTPH-Dx	Total/NA

Client Sample ID: D-01-W-231117

Lab Sample ID: 410-151876-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C12-C24	4300		100	47	ug/L	1		NWTPH-Dx	Total/NA
C12-C24 with Silica Gel clean up	52	J cn	100	47	ug/L	1		NWTPH-Dx	Total/NA
C24-C40	780		260	100	ug/L	1		NWTPH-Dx	Total/NA
C24-C40 with Silica Gel clean up	920	cn	260	100	ug/L	1		NWTPH-Dx	Total/NA

Client Sample ID: TB-4-T-231117

Lab Sample ID: 410-151876-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C7-C12 (1C)	49	J	250	43	ug/L	1		NWTPH-Gx	Total/NA

Client Sample ID: TB-3-T-231117

Lab Sample ID: 410-151876-22

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Lancaster Laboratories Environment Testing, LLC

Client Sample Results

Client: AECOM

Job ID: 410-151876-1

Project/Site: CEMREC Legacy Sites – Tacoma

Client Sample ID: D-22-W-231116

Lab Sample ID: 410-151876-1

Date Collected: 11/16/23 09:35

Matrix: Water

Date Received: 11/18/23 10:00

Method: SW846 8260D/UST - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.30	ug/L			11/29/23 18:15	1
Ethylbenzene	ND		1.0	0.40	ug/L			11/29/23 18:15	1
Methyl tertiary butyl ether	ND		1.0	0.20	ug/L			11/29/23 18:15	1
Toluene	ND		1.0	0.30	ug/L			11/29/23 18:15	1
Xylenes, Total	ND		6.0	0.40	ug/L			11/29/23 18:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		80 - 120		11/29/23 18:15	1
4-Bromofluorobenzene (Surr)	98		80 - 120		11/29/23 18:15	1
Dibromofluoromethane (Surr)	101		80 - 120		11/29/23 18:15	1
Toluene-d8 (Surr)	99		80 - 120		11/29/23 18:15	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	72	J	250	43	ug/L			11/28/23 15:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	103		50 - 150		11/28/23 15:00	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	500		100	46	ug/L		11/30/23 15:28	12/01/23 21:16	1
C12-C24 with Silica Gel clean up	ND	cn	100	46	ug/L		11/30/23 15:33	12/07/23 01:40	1
C24-C40	ND		260	100	ug/L		11/30/23 15:28	12/01/23 21:16	1
C24-C40 with Silica Gel clean up	ND	cn	260	100	ug/L		11/30/23 15:33	12/07/23 01:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-terphenyl (Surr)	83		50 - 150	11/30/23 15:28	12/01/23 21:16	1
o-terphenyl (Surr)	73	cn	50 - 150	11/30/23 15:33	12/07/23 01:40	1

Client Sample ID: MW-34-W-231116

Lab Sample ID: 410-151876-2

Date Collected: 11/16/23 10:36

Matrix: Water

Date Received: 11/18/23 10:00

Method: SW846 8260D/UST - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.30	ug/L			11/29/23 18:39	1
Ethylbenzene	ND		1.0	0.40	ug/L			11/29/23 18:39	1
Methyl tertiary butyl ether	ND		1.0	0.20	ug/L			11/29/23 18:39	1
Toluene	ND		1.0	0.30	ug/L			11/29/23 18:39	1
Xylenes, Total	ND		6.0	0.40	ug/L			11/29/23 18:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		80 - 120		11/29/23 18:39	1
4-Bromofluorobenzene (Surr)	97		80 - 120		11/29/23 18:39	1
Dibromofluoromethane (Surr)	101		80 - 120		11/29/23 18:39	1
Toluene-d8 (Surr)	99		80 - 120		11/29/23 18:39	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	ND		250	43	ug/L			11/28/23 15:26	1

Eurofins Lancaster Laboratories Environment Testing, LLC

Client Sample Results

Client: AECOM

Job ID: 410-151876-1

Project/Site: CEMREC Legacy Sites – Tacoma

Client Sample ID: MW-34-W-231116

Lab Sample ID: 410-151876-2

Date Collected: 11/16/23 10:36

Matrix: Water

Date Received: 11/18/23 10:00

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	99		50 - 150					11/28/23 15:26	1
Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	ND		100	46	ug/L		11/30/23 15:28	12/01/23 22:02	1
C12-C24 with Silica Gel clean up	ND	cn	100	46	ug/L		11/30/23 15:33	12/07/23 02:26	1
C24-C40	ND		250	100	ug/L		11/30/23 15:28	12/01/23 22:02	1
C24-C40 with Silica Gel clean up	ND	cn	250	100	ug/L		11/30/23 15:33	12/07/23 02:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o- terphenyl (Surr)	63		50 - 150				11/30/23 15:28	12/01/23 22:02	1
o- terphenyl (Surr)	56	cn	50 - 150				11/30/23 15:33	12/07/23 02:26	1

Client Sample ID: MW-21-W-231116

Lab Sample ID: 410-151876-3

Date Collected: 11/16/23 12:05

Matrix: Water

Date Received: 11/18/23 10:00

Method: SW846 8260D/UST - Volatile Organic Compounds by GC/MS									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.30	ug/L			11/29/23 19:50	1
Ethylbenzene	ND		1.0	0.40	ug/L			11/29/23 19:50	1
Methyl tertiary butyl ether	ND		1.0	0.20	ug/L			11/29/23 19:50	1
Toluene	ND		1.0	0.30	ug/L			11/29/23 19:50	1
Xylenes, Total	ND		6.0	0.40	ug/L			11/29/23 19:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		80 - 120					11/29/23 19:50	1
4-Bromofluorobenzene (Surr)	96		80 - 120					11/29/23 19:50	1
Dibromofluoromethane (Surr)	100		80 - 120					11/29/23 19:50	1
Toluene-d8 (Surr)	98		80 - 120					11/29/23 19:50	1
Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	ND		250	43	ug/L			11/28/23 16:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	97		50 - 150					11/28/23 16:42	1
Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	250		100	45	ug/L		11/30/23 15:28	12/01/23 23:11	1
C12-C24 with Silica Gel clean up	ND	cn	100	45	ug/L		11/30/23 15:33	12/07/23 03:35	1
C24-C40	340		250	100	ug/L		11/30/23 15:28	12/01/23 23:11	1
C24-C40 with Silica Gel clean up	ND	cn	250	100	ug/L		11/30/23 15:33	12/07/23 03:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o- terphenyl (Surr)	79		50 - 150				11/30/23 15:28	12/01/23 23:11	1
o- terphenyl (Surr)	61	cn	50 - 150				11/30/23 15:33	12/07/23 03:35	1

Client Sample Results

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151876-1

Client Sample ID: MW-32-W-231116

Lab Sample ID: 410-151876-4

Date Collected: 11/16/23 14:09

Matrix: Water

Date Received: 11/18/23 10:00

Method: SW846 8260D/UST - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.1		1.0	0.30	ug/L			11/29/23 20:14	1
Ethylbenzene	ND		1.0	0.40	ug/L			11/29/23 20:14	1
Methyl tertiary butyl ether	ND		1.0	0.20	ug/L			11/29/23 20:14	1
Toluene	0.48	J	1.0	0.30	ug/L			11/29/23 20:14	1
Xylenes, Total	ND		6.0	0.40	ug/L			11/29/23 20:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		80 - 120		11/29/23 20:14	1
4-Bromofluorobenzene (Surr)	98		80 - 120		11/29/23 20:14	1
Dibromofluoromethane (Surr)	101		80 - 120		11/29/23 20:14	1
Toluene-d8 (Surr)	99		80 - 120		11/29/23 20:14	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	1300		250	43	ug/L			11/28/23 17:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	101		50 - 150					11/28/23 17:08	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	4900		100	46	ug/L		11/30/23 15:28	12/01/23 23:34	1
C12-C24 with Silica Gel clean up	73	J cn	100	46	ug/L		11/30/23 15:33	12/07/23 03:58	1
C24-C40	220	J	260	100	ug/L		11/30/23 15:28	12/01/23 23:34	1
C24-C40 with Silica Gel clean up	ND	cn	260	100	ug/L		11/30/23 15:33	12/07/23 03:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o- terphenyl (Surr)	76		50 - 150				11/30/23 15:28	12/01/23 23:34	1
o- terphenyl (Surr)	68	cn	50 - 150				11/30/23 15:33	12/07/23 03:58	1

Client Sample ID: D-03A-W-231116

Lab Sample ID: 410-151876-5

Date Collected: 11/16/23 13:07

Matrix: Water

Date Received: 11/18/23 10:00

Method: SW846 8260D/UST - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.30	ug/L			11/29/23 20:38	1
Ethylbenzene	ND		1.0	0.40	ug/L			11/29/23 20:38	1
Methyl tertiary butyl ether	ND		1.0	0.20	ug/L			11/29/23 20:38	1
Toluene	ND		1.0	0.30	ug/L			11/29/23 20:38	1
Xylenes, Total	ND		6.0	0.40	ug/L			11/29/23 20:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		80 - 120		11/29/23 20:38	1
4-Bromofluorobenzene (Surr)	98		80 - 120		11/29/23 20:38	1
Dibromofluoromethane (Surr)	101		80 - 120		11/29/23 20:38	1
Toluene-d8 (Surr)	99		80 - 120		11/29/23 20:38	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	49	J	250	43	ug/L			11/28/23 17:33	1

Eurofins Lancaster Laboratories Environment Testing, LLC

Client Sample Results

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151876-1

Client Sample ID: D-03A-W-231116

Lab Sample ID: 410-151876-5

Date Collected: 11/16/23 13:07

Matrix: Water

Date Received: 11/18/23 10:00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	101		50 - 150		11/28/23 17:33	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	1100		100	46	ug/L		11/30/23 15:28	12/01/23 23:57	1
C12-C24 with Silica Gel clean up	ND	cn	100	46	ug/L		11/30/23 15:33	12/07/23 04:44	1
C24-C40	290		260	100	ug/L		11/30/23 15:28	12/01/23 23:57	1
C24-C40 with Silica Gel clean up	ND	cn	260	100	ug/L		11/30/23 15:33	12/07/23 04:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-terphenyl (Surr)	53		50 - 150	11/30/23 15:28	12/01/23 23:57	1
o-terphenyl (Surr)	57	cn	50 - 150	11/30/23 15:33	12/07/23 04:44	1

Client Sample ID: MW-14-W-231116

Lab Sample ID: 410-151876-6

Date Collected: 11/16/23 15:15

Matrix: Water

Date Received: 11/18/23 10:00

Method: SW846 8260D/UST - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.30	ug/L			11/29/23 21:01	1
Ethylbenzene	ND		1.0	0.40	ug/L			11/29/23 21:01	1
Methyl tertiary butyl ether	ND		1.0	0.20	ug/L			11/29/23 21:01	1
Toluene	ND		1.0	0.30	ug/L			11/29/23 21:01	1
Xylenes, Total	ND		6.0	0.40	ug/L			11/29/23 21:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		80 - 120		11/29/23 21:01	1
4-Bromofluorobenzene (Surr)	96		80 - 120		11/29/23 21:01	1
Dibromofluoromethane (Surr)	101		80 - 120		11/29/23 21:01	1
Toluene-d8 (Surr)	98		80 - 120		11/29/23 21:01	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	ND		250	43	ug/L			11/28/23 17:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	98		50 - 150		11/28/23 17:59	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	170		100	46	ug/L		11/30/23 15:28	12/02/23 00:20	1
C12-C24 with Silica Gel clean up	ND	cn	100	46	ug/L		11/30/23 15:33	12/07/23 05:07	1
C24-C40	ND		250	100	ug/L		11/30/23 15:28	12/02/23 00:20	1
C24-C40 with Silica Gel clean up	ND	cn	250	100	ug/L		11/30/23 15:33	12/07/23 05:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-terphenyl (Surr)	74		50 - 150	11/30/23 15:28	12/02/23 00:20	1
o-terphenyl (Surr)	62	cn	50 - 150	11/30/23 15:33	12/07/23 05:07	1

Client Sample Results

Client: AECOM

Job ID: 410-151876-1

Project/Site: CEMREC Legacy Sites – Tacoma

Client Sample ID: MW-19-W-231117

Lab Sample ID: 410-151876-7

Date Collected: 11/17/23 09:10

Matrix: Water

Date Received: 11/18/23 10:00

Method: SW846 8260D/UST - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.68	J	1.0	0.30	ug/L			11/29/23 21:25	1
Ethylbenzene	0.40	J	1.0	0.40	ug/L			11/29/23 21:25	1
Methyl tertiary butyl ether	ND		1.0	0.20	ug/L			11/29/23 21:25	1
Toluene	0.43	J	1.0	0.30	ug/L			11/29/23 21:25	1
Xylenes, Total	1.4	J	6.0	0.40	ug/L			11/29/23 21:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		80 - 120		11/29/23 21:25	1
4-Bromofluorobenzene (Surr)	100		80 - 120		11/29/23 21:25	1
Dibromofluoromethane (Surr)	101		80 - 120		11/29/23 21:25	1
Toluene-d8 (Surr)	99		80 - 120		11/29/23 21:25	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	970		250	43	ug/L			11/28/23 18:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	97		50 - 150					11/28/23 18:24	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	8600		200	92	ug/L		12/01/23 08:10	12/05/23 00:55	2
C12-C24 with Silica Gel clean up	81	J	100	46	ug/L		12/01/23 08:06	12/07/23 05:07	1
C24-C40	1500		510	200	ug/L		12/01/23 08:10	12/05/23 00:55	2
C24-C40 with Silica Gel clean up	ND		260	100	ug/L		12/01/23 08:06	12/07/23 05:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o- terphenyl (Surr)	66		50 - 150				12/01/23 08:10	12/05/23 00:55	2
o- terphenyl (Surr)	62		50 - 150				12/01/23 08:06	12/07/23 05:07	1

Client Sample ID: D-14-W-231117

Lab Sample ID: 410-151876-8

Date Collected: 11/17/23 10:15

Matrix: Water

Date Received: 11/18/23 10:00

Method: SW846 8260D/UST - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.30	ug/L			11/30/23 13:17	1
Ethylbenzene	ND		1.0	0.40	ug/L			11/30/23 13:17	1
Methyl tertiary butyl ether	ND		1.0	0.20	ug/L			11/30/23 13:17	1
Toluene	ND		1.0	0.30	ug/L			11/30/23 13:17	1
Xylenes, Total	ND		6.0	0.40	ug/L			11/30/23 13:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		80 - 120		11/30/23 13:17	1
4-Bromofluorobenzene (Surr)	98		80 - 120		11/30/23 13:17	1
Dibromofluoromethane (Surr)	100		80 - 120		11/30/23 13:17	1
Toluene-d8 (Surr)	95		80 - 120		11/30/23 13:17	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	ND		250	43	ug/L			11/28/23 18:50	1

Eurofins Lancaster Laboratories Environment Testing, LLC

Client Sample Results

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151876-1

Client Sample ID: D-14-W-231117

Lab Sample ID: 410-151876-8

Date Collected: 11/17/23 10:15

Matrix: Water

Date Received: 11/18/23 10:00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	99		50 - 150		11/28/23 18:50	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	ND		100	46	ug/L		12/01/23 08:10	12/02/23 00:20	1
C12-C24 with Silica Gel clean up	ND		100	46	ug/L		12/01/23 08:06	12/07/23 05:54	1
C24-C40	ND		260	100	ug/L		12/01/23 08:10	12/02/23 00:20	1
C24-C40 with Silica Gel clean up	ND		260	100	ug/L		12/01/23 08:06	12/07/23 05:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o- terphenyl (Surr)	72		50 - 150	12/01/23 08:10	12/02/23 00:20	1
o- terphenyl (Surr)	53		50 - 150	12/01/23 08:06	12/07/23 05:54	1

Client Sample ID: FB-1-O-231117

Lab Sample ID: 410-151876-9

Date Collected: 11/17/23 11:24

Matrix: Water

Date Received: 11/18/23 10:00

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	ND		250	43	ug/L			11/28/23 20:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	98		50 - 150		11/28/23 20:06	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	ND		100	45	ug/L		12/01/23 08:10	12/02/23 01:29	1
C12-C24 with Silica Gel clean up	ND		100	45	ug/L		12/01/23 08:06	12/07/23 06:40	1
C24-C40	ND		250	100	ug/L		12/01/23 08:10	12/02/23 01:29	1
C24-C40 with Silica Gel clean up	ND		250	100	ug/L		12/01/23 08:06	12/07/23 06:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o- terphenyl (Surr)	73		50 - 150	12/01/23 08:10	12/02/23 01:29	1
o- terphenyl (Surr)	62		50 - 150	12/01/23 08:06	12/07/23 06:40	1

Client Sample ID: RB-1-R-231117

Lab Sample ID: 410-151876-10

Date Collected: 11/17/23 11:34

Matrix: Water

Date Received: 11/18/23 10:00

Method: SW846 8260D/UST - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.30	ug/L			11/30/23 11:41	1
Ethylbenzene	ND		1.0	0.40	ug/L			11/30/23 11:41	1
Methyl tertiary butyl ether	ND		1.0	0.20	ug/L			11/30/23 11:41	1
Toluene	ND		1.0	0.30	ug/L			11/30/23 11:41	1
Xylenes, Total	ND		6.0	0.40	ug/L			11/30/23 11:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		80 - 120		11/30/23 11:41	1
4-Bromofluorobenzene (Surr)	99		80 - 120		11/30/23 11:41	1
Dibromofluoromethane (Surr)	98		80 - 120		11/30/23 11:41	1
Toluene-d8 (Surr)	97		80 - 120		11/30/23 11:41	1

Client Sample Results

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151876-1

Client Sample ID: RB-1-R-231117

Lab Sample ID: 410-151876-10

Date Collected: 11/17/23 11:34

Matrix: Water

Date Received: 11/18/23 10:00

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	ND		250	43	ug/L			11/28/23 20:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	98		50 - 150					11/28/23 20:31	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	59	J	100	46	ug/L		12/01/23 08:10	12/02/23 01:52	1
C12-C24 with Silica Gel clean up	ND	cn	100	46	ug/L		12/01/23 08:06	12/07/23 07:03	1
C24-C40	ND		260	100	ug/L		12/01/23 08:10	12/02/23 01:52	1
C24-C40 with Silica Gel clean up	ND	cn	260	100	ug/L		12/01/23 08:06	12/07/23 07:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o- terphenyl (Surr)	61		50 - 150				12/01/23 08:10	12/02/23 01:52	1
o- terphenyl (Surr)	44	S1- cn	50 - 150				12/01/23 08:06	12/07/23 07:03	1
o- terphenyl (Surr)	54		50 - 150				12/08/23 15:16	12/11/23 13:32	1

Client Sample ID: MW-25-W-231116

Lab Sample ID: 410-151876-11

Date Collected: 11/16/23 09:25

Matrix: Water

Date Received: 11/18/23 10:00

Method: SW846 8260D/UST - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.4		1.0	0.30	ug/L			11/29/23 21:49	1
Ethylbenzene	1.5		1.0	0.40	ug/L			11/29/23 21:49	1
Methyl tertiary butyl ether	ND		1.0	0.20	ug/L			11/29/23 21:49	1
Toluene	0.46	J	1.0	0.30	ug/L			11/29/23 21:49	1
Xylenes, Total	ND		6.0	0.40	ug/L			11/29/23 21:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		80 - 120					11/29/23 21:49	1
4-Bromofluorobenzene (Surr)	99		80 - 120					11/29/23 21:49	1
Dibromofluoromethane (Surr)	101		80 - 120					11/29/23 21:49	1
Toluene-d8 (Surr)	98		80 - 120					11/29/23 21:49	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	900		250	43	ug/L			11/28/23 20:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	97		50 - 150					11/28/23 20:57	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	150		100	46	ug/L		11/30/23 15:28	12/02/23 01:06	1
C12-C24 with Silica Gel clean up	ND	cn	100	46	ug/L		11/30/23 15:33	12/07/23 05:30	1
C24-C40	ND		250	100	ug/L		11/30/23 15:28	12/02/23 01:06	1
C24-C40 with Silica Gel clean up	ND	cn	250	100	ug/L		11/30/23 15:33	12/07/23 05:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o- terphenyl (Surr)	72		50 - 150				11/30/23 15:28	12/02/23 01:06	1
o- terphenyl (Surr)	65	cn	50 - 150				11/30/23 15:33	12/07/23 05:30	1

Eurofins Lancaster Laboratories Environment Testing, LLC

Client Sample Results

Client: AECOM

Job ID: 410-151876-1

Project/Site: CEMREC Legacy Sites – Tacoma

Client Sample ID: D-10-W-231116

Lab Sample ID: 410-151876-12

Date Collected: 11/16/23 10:25

Matrix: Water

Date Received: 11/18/23 10:00

Method: SW846 8260D/UST - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.30	ug/L			11/29/23 22:12	1
Ethylbenzene	ND		1.0	0.40	ug/L			11/29/23 22:12	1
Methyl tertiary butyl ether	ND		1.0	0.20	ug/L			11/29/23 22:12	1
Toluene	ND		1.0	0.30	ug/L			11/29/23 22:12	1
Xylenes, Total	ND		6.0	0.40	ug/L			11/29/23 22:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		80 - 120		11/29/23 22:12	1
4-Bromofluorobenzene (Surr)	98		80 - 120		11/29/23 22:12	1
Dibromofluoromethane (Surr)	101		80 - 120		11/29/23 22:12	1
Toluene-d8 (Surr)	98		80 - 120		11/29/23 22:12	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	93	J	250	43	ug/L			11/28/23 21:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	103		50 - 150		11/28/23 21:22	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	1900		100	46	ug/L		11/30/23 15:28	12/02/23 01:29	1
C12-C24 with Silica Gel clean up	ND	cn	100	46	ug/L		11/30/23 15:33	12/07/23 05:54	1
C24-C40	190	J	260	100	ug/L		11/30/23 15:28	12/02/23 01:29	1
C24-C40 with Silica Gel clean up	ND	cn	260	100	ug/L		11/30/23 15:33	12/07/23 05:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o- terphenyl (Surr)	62		50 - 150	11/30/23 15:28	12/02/23 01:29	1
o- terphenyl (Surr)	62	cn	50 - 150	11/30/23 15:33	12/07/23 05:54	1

Client Sample ID: D-7-W-231116

Lab Sample ID: 410-151876-13

Date Collected: 11/16/23 11:40

Matrix: Water

Date Received: 11/18/23 10:00

Method: SW846 8260D/UST - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.30	ug/L			11/29/23 22:36	1
Ethylbenzene	ND		1.0	0.40	ug/L			11/29/23 22:36	1
Methyl tertiary butyl ether	ND		1.0	0.20	ug/L			11/29/23 22:36	1
Toluene	ND		1.0	0.30	ug/L			11/29/23 22:36	1
Xylenes, Total	ND		6.0	0.40	ug/L			11/29/23 22:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		80 - 120		11/29/23 22:36	1
4-Bromofluorobenzene (Surr)	98		80 - 120		11/29/23 22:36	1
Dibromofluoromethane (Surr)	101		80 - 120		11/29/23 22:36	1
Toluene-d8 (Surr)	99		80 - 120		11/29/23 22:36	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	ND		250	43	ug/L			11/28/23 21:48	1

Eurofins Lancaster Laboratories Environment Testing, LLC

Client Sample Results

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151876-1

Client Sample ID: D-7-W-231116

Lab Sample ID: 410-151876-13

Date Collected: 11/16/23 11:40

Matrix: Water

Date Received: 11/18/23 10:00

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	98		50 - 150					11/28/23 21:48	1
Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	420		100	47	ug/L		11/30/23 15:28	12/02/23 01:52	1
C12-C24 with Silica Gel clean up	ND	cn	100	47	ug/L		11/30/23 15:33	12/07/23 06:17	1
C24-C40	110	J	260	100	ug/L		11/30/23 15:28	12/02/23 01:52	1
C24-C40 with Silica Gel clean up	ND	cn	260	100	ug/L		11/30/23 15:33	12/07/23 06:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o- terphenyl (Surr)	73		50 - 150				11/30/23 15:28	12/02/23 01:52	1
o- terphenyl (Surr)	65	cn	50 - 150				11/30/23 15:33	12/07/23 06:17	1

Client Sample ID: MW-22-W-231116

Lab Sample ID: 410-151876-14

Date Collected: 11/16/23 12:40

Matrix: Water

Date Received: 11/18/23 10:00

Method: SW846 8260D/UST - Volatile Organic Compounds by GC/MS									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.30	ug/L			11/29/23 23:00	1
Ethylbenzene	ND		1.0	0.40	ug/L			11/29/23 23:00	1
Methyl tertiary butyl ether	ND		1.0	0.20	ug/L			11/29/23 23:00	1
Toluene	ND		1.0	0.30	ug/L			11/29/23 23:00	1
Xylenes, Total	ND		6.0	0.40	ug/L			11/29/23 23:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		80 - 120					11/29/23 23:00	1
4-Bromofluorobenzene (Surr)	98		80 - 120					11/29/23 23:00	1
Dibromofluoromethane (Surr)	100		80 - 120					11/29/23 23:00	1
Toluene-d8 (Surr)	98		80 - 120					11/29/23 23:00	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	76	J	250	43	ug/L			11/28/23 22:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	100		50 - 150					11/28/23 22:13	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	4100		100	47	ug/L		11/30/23 15:28	12/02/23 03:01	1
C12-C24 with Silica Gel clean up	ND	cn	100	47	ug/L		11/30/23 15:33	12/07/23 06:40	1
C24-C40	1200		260	100	ug/L		11/30/23 15:28	12/02/23 03:01	1
C24-C40 with Silica Gel clean up	ND	cn	260	100	ug/L		11/30/23 15:33	12/07/23 06:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o- terphenyl (Surr)	56		50 - 150				11/30/23 15:28	12/02/23 03:01	1
o- terphenyl (Surr)	63	cn	50 - 150				11/30/23 15:33	12/07/23 06:40	1

Client Sample Results

Client: AECOM

Job ID: 410-151876-1

Project/Site: CEMREC Legacy Sites – Tacoma

Client Sample ID: D-06-W-231116

Lab Sample ID: 410-151876-15

Date Collected: 11/16/23 14:25

Matrix: Water

Date Received: 11/18/23 10:00

Method: SW846 8260D/UST - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.30	ug/L			11/29/23 23:23	1
Ethylbenzene	ND		1.0	0.40	ug/L			11/29/23 23:23	1
Methyl tertiary butyl ether	ND		1.0	0.20	ug/L			11/29/23 23:23	1
Toluene	ND		1.0	0.30	ug/L			11/29/23 23:23	1
Xylenes, Total	ND		6.0	0.40	ug/L			11/29/23 23:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		80 - 120		11/29/23 23:23	1
4-Bromofluorobenzene (Surr)	98		80 - 120		11/29/23 23:23	1
Dibromofluoromethane (Surr)	101		80 - 120		11/29/23 23:23	1
Toluene-d8 (Surr)	99		80 - 120		11/29/23 23:23	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	250		250	43	ug/L			11/28/23 22:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	96		50 - 150		11/28/23 22:39	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	2600		100	47	ug/L		11/30/23 15:28	12/02/23 02:15	1
C12-C24 with Silica Gel clean up	54	J cn	100	47	ug/L		11/30/23 15:33	12/07/23 07:03	1
C24-C40	280		260	100	ug/L		11/30/23 15:28	12/02/23 02:15	1
C24-C40 with Silica Gel clean up	130	J cn	260	100	ug/L		11/30/23 15:33	12/07/23 07:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-terphenyl (Surr)	75		50 - 150	11/30/23 15:28	12/02/23 02:15	1
o-terphenyl (Surr)	67	cn	50 - 150	11/30/23 15:33	12/07/23 07:03	1
o-terphenyl (Surr)	62		50 - 150	12/07/23 15:43	12/09/23 03:47	1
n-Decanoic Acid (Surr)	0.005		0 - 1	12/07/23 15:43	12/09/23 03:47	1

Client Sample ID: MW-18-W-231116

Lab Sample ID: 410-151876-16

Date Collected: 11/16/23 15:28

Matrix: Water

Date Received: 11/18/23 10:00

Method: SW846 8260D/UST - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.30	ug/L			11/29/23 23:47	1
Ethylbenzene	ND		1.0	0.40	ug/L			11/29/23 23:47	1
Methyl tertiary butyl ether	ND		1.0	0.20	ug/L			11/29/23 23:47	1
Toluene	ND		1.0	0.30	ug/L			11/29/23 23:47	1
Xylenes, Total	ND		6.0	0.40	ug/L			11/29/23 23:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		80 - 120		11/29/23 23:47	1
4-Bromofluorobenzene (Surr)	99		80 - 120		11/29/23 23:47	1
Dibromofluoromethane (Surr)	101		80 - 120		11/29/23 23:47	1
Toluene-d8 (Surr)	99		80 - 120		11/29/23 23:47	1

Client Sample Results

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151876-1

Client Sample ID: MW-18-W-231116

Lab Sample ID: 410-151876-16

Date Collected: 11/16/23 15:28

Matrix: Water

Date Received: 11/18/23 10:00

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	550		250	43	ug/L			11/28/23 23:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	96		50 - 150					11/28/23 23:04	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	1300		100	46	ug/L		11/30/23 15:28	12/02/23 02:38	1
C12-C24 with Silica Gel clean up	59	J cn	100	46	ug/L		11/30/23 15:33	12/07/23 07:26	1
C24-C40	240	J	260	100	ug/L		11/30/23 15:28	12/02/23 02:38	1
C24-C40 with Silica Gel clean up	ND	cn	260	100	ug/L		11/30/23 15:33	12/07/23 07:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o- terphenyl (Surr)	75		50 - 150				11/30/23 15:28	12/02/23 02:38	1
o- terphenyl (Surr)	66	cn	50 - 150				11/30/23 15:33	12/07/23 07:26	1

Client Sample ID: DUP-1-WD-231116

Lab Sample ID: 410-151876-17

Date Collected: 11/16/23 12:10

Matrix: Water

Date Received: 11/18/23 10:00

Method: SW846 8260D/UST - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.30	ug/L			11/30/23 00:11	1
Ethylbenzene	ND		1.0	0.40	ug/L			11/30/23 00:11	1
Methyl tertiary butyl ether	ND		1.0	0.20	ug/L			11/30/23 00:11	1
Toluene	ND		1.0	0.30	ug/L			11/30/23 00:11	1
Xylenes, Total	ND		6.0	0.40	ug/L			11/30/23 00:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		80 - 120					11/30/23 00:11	1
4-Bromofluorobenzene (Surr)	99		80 - 120					11/30/23 00:11	1
Dibromofluoromethane (Surr)	100		80 - 120					11/30/23 00:11	1
Toluene-d8 (Surr)	99		80 - 120					11/30/23 00:11	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	660	J cn	2500	430	ug/L			11/30/23 15:00	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	102	cn	50 - 150					11/30/23 15:00	10

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	3900		100	47	ug/L		11/30/23 15:28	12/02/23 03:24	1
C12-C24 with Silica Gel clean up	ND	cn	100	47	ug/L		11/30/23 15:33	12/07/23 07:49	1
C24-C40	1300		260	100	ug/L		11/30/23 15:28	12/02/23 03:24	1
C24-C40 with Silica Gel clean up	ND	cn	260	100	ug/L		11/30/23 15:33	12/07/23 07:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o- terphenyl (Surr)	53		50 - 150				11/30/23 15:28	12/02/23 03:24	1
o- terphenyl (Surr)	61	cn	50 - 150				11/30/23 15:33	12/07/23 07:49	1

Eurofins Lancaster Laboratories Environment Testing, LLC

Client Sample Results

Client: AECOM

Job ID: 410-151876-1

Project/Site: CEMREC Legacy Sites – Tacoma

Client Sample ID: DUP-2-WD-231117

Lab Sample ID: 410-151876-18

Date Collected: 11/17/23 09:30

Matrix: Water

Date Received: 11/18/23 10:00

Method: SW846 8260D/UST - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.30	ug/L			11/30/23 13:41	1
Ethylbenzene	ND		1.0	0.40	ug/L			11/30/23 13:41	1
Methyl tertiary butyl ether	ND		1.0	0.20	ug/L			11/30/23 13:41	1
Toluene	ND		1.0	0.30	ug/L			11/30/23 13:41	1
Xylenes, Total	ND		6.0	0.40	ug/L			11/30/23 13:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		80 - 120		11/30/23 13:41	1
4-Bromofluorobenzene (Surr)	97		80 - 120		11/30/23 13:41	1
Dibromofluoromethane (Surr)	97		80 - 120		11/30/23 13:41	1
Toluene-d8 (Surr)	96		80 - 120		11/30/23 13:41	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	ND	cn	2500	430	ug/L			11/30/23 15:26	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	104	cn	50 - 150		11/30/23 15:26	10

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	4500		100	47	ug/L		12/01/23 08:10	12/02/23 02:15	1
C12-C24 with Silica Gel clean up	ND	cn	100	47	ug/L		12/01/23 08:06	12/07/23 07:26	1
C24-C40	850		260	100	ug/L		12/01/23 08:10	12/02/23 02:15	1
C24-C40 with Silica Gel clean up	ND	cn	260	100	ug/L		12/01/23 08:06	12/07/23 07:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-terphenyl (Surr)	74		50 - 150	12/01/23 08:10	12/02/23 02:15	1
o-terphenyl (Surr)	49	S1- cn	50 - 150	12/01/23 08:06	12/07/23 07:26	1
o-terphenyl (Surr)	51		50 - 150	12/08/23 15:16	12/11/23 13:55	1

Client Sample ID: MW-13-W-231117

Lab Sample ID: 410-151876-19

Date Collected: 11/17/23 09:15

Matrix: Water

Date Received: 11/18/23 10:00

Method: SW846 8260D/UST - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.30	ug/L			11/30/23 14:05	1
Ethylbenzene	ND		1.0	0.40	ug/L			11/30/23 14:05	1
Methyl tertiary butyl ether	ND		1.0	0.20	ug/L			11/30/23 14:05	1
Toluene	ND		1.0	0.30	ug/L			11/30/23 14:05	1
Xylenes, Total	ND		6.0	0.40	ug/L			11/30/23 14:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		80 - 120		11/30/23 14:05	1
4-Bromofluorobenzene (Surr)	99		80 - 120		11/30/23 14:05	1
Dibromofluoromethane (Surr)	96		80 - 120		11/30/23 14:05	1
Toluene-d8 (Surr)	97		80 - 120		11/30/23 14:05	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	220	J cn	1300	220	ug/L			11/30/23 15:51	5

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Client Sample Results

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151876-1

Client Sample ID: MW-13-W-231117

Lab Sample ID: 410-151876-19

Date Collected: 11/17/23 09:15

Matrix: Water

Date Received: 11/18/23 10:00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	102	cn	50 - 150		11/30/23 15:51	5

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	3900		100	46	ug/L		12/01/23 08:10	12/02/23 02:38	1
C12-C24 with Silica Gel clean up	ND	cn	100	46	ug/L		12/01/23 08:06	12/07/23 07:49	1
C24-C40	440		260	100	ug/L		12/01/23 08:10	12/02/23 02:38	1
C24-C40 with Silica Gel clean up	ND	cn	260	100	ug/L		12/01/23 08:06	12/07/23 07:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-terphenyl (Surr)	61		50 - 150	12/01/23 08:10	12/02/23 02:38	1
o-terphenyl (Surr)	47	S1- cn	50 - 150	12/01/23 08:06	12/07/23 07:49	1
o-terphenyl (Surr)	41	S1-	50 - 150	12/08/23 15:16	12/11/23 14:18	1

Client Sample ID: D-01-W-231117

Lab Sample ID: 410-151876-20

Date Collected: 11/17/23 10:10

Matrix: Water

Date Received: 11/18/23 10:00

Method: SW846 8260D/UST - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.30	ug/L			11/30/23 14:29	1
Ethylbenzene	ND		1.0	0.40	ug/L			11/30/23 14:29	1
Methyl tertiary butyl ether	ND		1.0	0.20	ug/L			11/30/23 14:29	1
Toluene	ND		1.0	0.30	ug/L			11/30/23 14:29	1
Xylenes, Total	ND		6.0	0.40	ug/L			11/30/23 14:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		80 - 120		11/30/23 14:29	1
4-Bromofluorobenzene (Surr)	99		80 - 120		11/30/23 14:29	1
Dibromofluoromethane (Surr)	96		80 - 120		11/30/23 14:29	1
Toluene-d8 (Surr)	95		80 - 120		11/30/23 14:29	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	ND	cn	2500	430	ug/L			11/30/23 16:17	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	104	cn	50 - 150		11/30/23 16:17	10

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	4300		100	47	ug/L		12/01/23 08:10	12/02/23 03:01	1
C12-C24 with Silica Gel clean up	52	J cn	100	47	ug/L		12/01/23 08:06	12/07/23 08:12	1
C24-C40	780		260	100	ug/L		12/01/23 08:10	12/02/23 03:01	1
C24-C40 with Silica Gel clean up	920	cn	260	100	ug/L		12/01/23 08:06	12/07/23 08:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-terphenyl (Surr)	70		50 - 150	12/01/23 08:10	12/02/23 03:01	1
o-terphenyl (Surr)	35	S1- cn	50 - 150	12/01/23 08:06	12/07/23 08:12	1
o-terphenyl (Surr)	74		50 - 150	12/08/23 15:16	12/11/23 14:41	1

Client Sample Results

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151876-1

Client Sample ID: TB-4-T-231117

Lab Sample ID: 410-151876-21

Date Collected: 10/26/23 00:00

Matrix: Water

Date Received: 11/18/23 10:00

Method: SW846 8260D/UST - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.30	ug/L			11/22/23 16:47	1
Ethylbenzene	ND		1.0	0.40	ug/L			11/22/23 16:47	1
Methyl tertiary butyl ether	ND		1.0	0.20	ug/L			11/22/23 16:47	1
Toluene	ND		1.0	0.30	ug/L			11/22/23 16:47	1
Xylenes, Total	ND		6.0	0.40	ug/L			11/22/23 16:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		80 - 120		11/22/23 16:47	1
4-Bromofluorobenzene (Surr)	96		80 - 120		11/22/23 16:47	1
Dibromofluoromethane (Surr)	100		80 - 120		11/22/23 16:47	1
Toluene-d8 (Surr)	99		80 - 120		11/22/23 16:47	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	49	J	250	43	ug/L			11/21/23 14:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	102		50 - 150		11/21/23 14:52	1

Client Sample ID: TB-3-T-231117

Lab Sample ID: 410-151876-22

Date Collected: 10/26/23 00:00

Matrix: Water

Date Received: 11/18/23 10:00

Method: SW846 8260D/UST - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.30	ug/L			11/22/23 17:10	1
Ethylbenzene	ND		1.0	0.40	ug/L			11/22/23 17:10	1
Methyl tertiary butyl ether	ND		1.0	0.20	ug/L			11/22/23 17:10	1
Toluene	ND		1.0	0.30	ug/L			11/22/23 17:10	1
Xylenes, Total	ND		6.0	0.40	ug/L			11/22/23 17:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		80 - 120		11/22/23 17:10	1
4-Bromofluorobenzene (Surr)	97		80 - 120		11/22/23 17:10	1
Dibromofluoromethane (Surr)	98		80 - 120		11/22/23 17:10	1
Toluene-d8 (Surr)	99		80 - 120		11/22/23 17:10	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	ND		250	43	ug/L			11/21/23 15:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	101		50 - 150		11/21/23 15:17	1

Surrogate Summary

Client: AECOM

Job ID: 410-151876-1

Project/Site: CEMREC Legacy Sites – Tacoma

Method: 8260D/UST - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (80-120)	BFB (80-120)	DBFM (80-120)	TOL (80-120)
410-151876-1	D-22-W-231116	98	98	101	99
410-151876-2	MW-34-W-231116	99	97	101	99
410-151876-2 MS	MW-34-W-231116	101	100	101	99
410-151876-2 MSD	MW-34-W-231116	100	100	100	99
410-151876-3	MW-21-W-231116	99	96	100	98
410-151876-4	MW-32-W-231116	99	98	101	99
410-151876-5	D-03A-W-231116	99	98	101	99
410-151876-6	MW-14-W-231116	100	96	101	98
410-151876-7	MW-19-W-231117	99	100	101	99
410-151876-8	D-14-W-231117	92	98	100	95
410-151876-10	RB-1-R-231117	91	99	98	97
410-151876-11	MW-25-W-231116	98	99	101	98
410-151876-12	D-10-W-231116	99	98	101	98
410-151876-13	D-7-W-231116	100	98	101	99
410-151876-14	MW-22-W-231116	99	98	100	98
410-151876-15	D-06-W-231116	99	98	101	99
410-151876-16	MW-18-W-231116	100	99	101	99
410-151876-17	DUP-1-WD-231116	100	99	100	99
410-151876-18	DUP-2-WD-231117	92	97	97	96
410-151876-19	MW-13-W-231117	89	99	96	97
410-151876-20	D-01-W-231117	92	99	96	95
410-151876-21	TB-4-T-231117	93	96	100	99
410-151876-22	TB-3-T-231117	93	97	98	99
LCS 410-446440/4	Lab Control Sample	95	99	99	99
LCS 410-448049/4	Lab Control Sample	101	100	100	100
LCS 410-448445/4	Lab Control Sample	92	98	97	97
LCSD 410-446440/5	Lab Control Sample Dup	98	98	100	99
LCSD 410-448049/5	Lab Control Sample Dup	101	99	100	99
LCSD 410-448445/5	Lab Control Sample Dup	91	99	98	97
MB 410-446440/6	Method Blank	94	96	101	98
MB 410-448049/6	Method Blank	99	98	100	100
MB 410-448445/6	Method Blank	90	96	97	96

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		TFT-F1 (50-150)			
410-151876-1	D-22-W-231116	103			
410-151876-2	MW-34-W-231116	99			
410-151876-2 MS	MW-34-W-231116	89			
410-151876-2 MSD	MW-34-W-231116	90			
410-151876-3	MW-21-W-231116	97			

Eurofins Lancaster Laboratories Environment Testing, LLC

Surrogate Summary

Client: AECOM

Job ID: 410-151876-1

Project/Site: CEMREC Legacy Sites – Tacoma

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC) (Continued)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
Lab Sample ID	Client Sample ID	TFT-F1 (50-150)					
410-151876-4	MW-32-W-231116	101					
410-151876-5	D-03A-W-231116	101					
410-151876-6	MW-14-W-231116	98					
410-151876-7	MW-19-W-231117	97					
410-151876-8	D-14-W-231117	99					
410-151876-9	FB-1-O-231117	98					
410-151876-10	RB-1-R-231117	98					
410-151876-11	MW-25-W-231116	97					
410-151876-12	D-10-W-231116	103					
410-151876-13	D-7-W-231116	98					
410-151876-14	MW-22-W-231116	100					
410-151876-15	D-06-W-231116	96					
410-151876-16	MW-18-W-231116	96					
410-151876-17	DUP-1-WD-231116	102 cn					
410-151876-18	DUP-2-WD-231117	104 cn					
410-151876-19	MW-13-W-231117	102 cn					
410-151876-20	D-01-W-231117	104 cn					
410-151876-21	TB-4-T-231117	102					
410-151876-22	TB-3-T-231117	101					
LCS 410-445905/6	Lab Control Sample	92					
LCS 410-447337/6	Lab Control Sample	91					
LCS 410-448447/6	Lab Control Sample	93					
LCSD 410-445905/7	Lab Control Sample Dup	93					
LCSD 410-447337/7	Lab Control Sample Dup	91					
LCSD 410-448447/7	Lab Control Sample Dup	96					
MB 410-445905/5	Method Blank	102					
MB 410-447337/5	Method Blank	99					
MB 410-448447/5	Method Blank	102					
Surrogate Legend							
TFT-F = a,a,a-Trifluorotoluene (fid)							

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
Lab Sample ID	Client Sample ID	OTP (50-150)	NDA (0-1)				
410-151876-1	D-22-W-231116	83					
410-151876-1	D-22-W-231116	73 cn					
410-151876-1 DU	D-22-W-231116	74					
410-151876-1 DU	D-22-W-231116	62 cn					
410-151876-2	MW-34-W-231116	63					
410-151876-2	MW-34-W-231116	56 cn					
410-151876-2 MS	MW-34-W-231116	64					
410-151876-2 MS	MW-34-W-231116	68 cn					
410-151876-2 MSD	MW-34-W-231116	68					
410-151876-2 MSD	MW-34-W-231116	65 cn					
410-151876-3	MW-21-W-231116	79					
410-151876-3	MW-21-W-231116	61 cn					
410-151876-4	MW-32-W-231116	76					

Eurofins Lancaster Laboratories Environment Testing, LLC

Surrogate Summary

Client: AECOM

Job ID: 410-151876-1

Project/Site: CEMREC Legacy Sites – Tacoma

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) (Continued)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		OTP (50-150)	NDA (0-1)
410-151876-4	MW-32-W-231116	68 cn	
410-151876-5	D-03A-W-231116	53	
410-151876-5	D-03A-W-231116	57 cn	
410-151876-6	MW-14-W-231116	74	
410-151876-6	MW-14-W-231116	62 cn	
410-151876-7	MW-19-W-231117	66	
410-151876-7	MW-19-W-231117	62	
410-151876-7 DU	MW-19-W-231117	55	
410-151876-7 DU	MW-19-W-231117	55	
410-151876-8	D-14-W-231117	72	
410-151876-8	D-14-W-231117	53	
410-151876-8 DU	D-14-W-231117	76	
410-151876-8 DU	D-14-W-231117	56	
410-151876-9	FB-1-O-231117	73	
410-151876-9	FB-1-O-231117	62	
410-151876-10	RB-1-R-231117	61	
410-151876-10	RB-1-R-231117	44 S1- cn	
410-151876-10	RB-1-R-231117	54	
410-151876-11	MW-25-W-231116	72	
410-151876-11	MW-25-W-231116	65 cn	
410-151876-12	D-10-W-231116	62	
410-151876-12	D-10-W-231116	62 cn	
410-151876-13	D-7-W-231116	73	
410-151876-13	D-7-W-231116	65 cn	
410-151876-14	MW-22-W-231116	56	
410-151876-14	MW-22-W-231116	63 cn	
410-151876-15	D-06-W-231116	75	
410-151876-15	D-06-W-231116	67 cn	
410-151876-15	D-06-W-231116	62	0.005
410-151876-16	MW-18-W-231116	75	
410-151876-16	MW-18-W-231116	66 cn	
410-151876-17	DUP-1-WD-231116	53	
410-151876-17	DUP-1-WD-231116	61 cn	
410-151876-18	DUP-2-WD-231117	74	
410-151876-18	DUP-2-WD-231117	49 S1- cn	
410-151876-18	DUP-2-WD-231117	51	
410-151876-19	MW-13-W-231117	61	
410-151876-19	MW-13-W-231117	47 S1- cn	
410-151876-19	MW-13-W-231117	41 S1-	
410-151876-20	D-01-W-231117	70	
410-151876-20	D-01-W-231117	35 S1- cn	
410-151876-20	D-01-W-231117	74	
LCS 410-448722/2-A	Lab Control Sample	70	
LCS 410-448723/2-B	Lab Control Sample	70 cn	
LCS 410-448924/2-B	Lab Control Sample	62	
LCS 410-448928/2-A	Lab Control Sample	72	
LCS 410-451387/2-B	Lab Control Sample	65	
LCS 410-451914/2-B	Lab Control Sample	61	0.5
LCSD 410-448924/3-B	Lab Control Sample Dup	60	
LCSD 410-448928/3-A	Lab Control Sample Dup	77	

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Surrogate Summary

Client: AECOM

Job ID: 410-151876-1

Project/Site: CEMREC Legacy Sites – Tacoma

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) (Continued)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	OTP (50-150)	NDA (0-1)
LCSD 410-451387/3-B	Lab Control Sample Dup	55	
LCSD 410-451914/3-B	Lab Control Sample Dup	61	0.3
MB 410-448722/1-A	Method Blank	61	
MB 410-448723/1-B	Method Blank	64 cn	
MB 410-448924/1-B	Method Blank	56	
MB 410-448928/1-A	Method Blank	73	
MB 410-451387/1-B	Method Blank	53	
MB 410-451914/1-B	Method Blank	73	0.0005
Surrogate Legend			
OTP = o- terphenyl (Surr)			
NDA = n-Decanoic Acid (Surr)			

QC Sample Results

Client: AECOM

Job ID: 410-151876-1

Project/Site: CEMREC Legacy Sites – Tacoma

Method: 8260D/UST - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 410-446440/6

Matrix: Water

Analysis Batch: 446440

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.30	ug/L			11/22/23 14:24	1
Ethylbenzene	ND		1.0	0.40	ug/L			11/22/23 14:24	1
Methyl tertiary butyl ether	ND		1.0	0.20	ug/L			11/22/23 14:24	1
Toluene	ND		1.0	0.30	ug/L			11/22/23 14:24	1
Xylenes, Total	ND		6.0	0.40	ug/L			11/22/23 14:24	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		80 - 120		11/22/23 14:24	1
4-Bromofluorobenzene (Surr)	96		80 - 120		11/22/23 14:24	1
Dibromofluoromethane (Surr)	101		80 - 120		11/22/23 14:24	1
Toluene-d8 (Surr)	98		80 - 120		11/22/23 14:24	1

Lab Sample ID: LCS 410-446440/4

Matrix: Water

Analysis Batch: 446440

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	20.0	19.0		ug/L		95	80 - 120
Ethylbenzene	20.0	18.6		ug/L		93	80 - 120
Methyl tertiary butyl ether	20.0	19.9		ug/L		100	69 - 122
Toluene	20.0	18.9		ug/L		94	80 - 120
Xylenes, Total	60.0	57.5		ug/L		96	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	95		80 - 120
4-Bromofluorobenzene (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	99		80 - 120
Toluene-d8 (Surr)	99		80 - 120

Lab Sample ID: LCSD 410-446440/5

Matrix: Water

Analysis Batch: 446440

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	20.0	18.6		ug/L		93	80 - 120	2	30
Ethylbenzene	20.0	18.0		ug/L		90	80 - 120	3	30
Methyl tertiary butyl ether	20.0	18.7		ug/L		93	69 - 122	7	30
Toluene	20.0	18.4		ug/L		92	80 - 120	2	30
Xylenes, Total	60.0	55.9		ug/L		93	80 - 120	3	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	98		80 - 120
4-Bromofluorobenzene (Surr)	98		80 - 120
Dibromofluoromethane (Surr)	100		80 - 120
Toluene-d8 (Surr)	99		80 - 120

QC Sample Results

Client: AECOM

Job ID: 410-151876-1

Project/Site: CEMREC Legacy Sites – Tacoma

Method: 8260D/UST - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 410-448049/6

Matrix: Water

Analysis Batch: 448049

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.30	ug/L			11/29/23 15:24	1
Ethylbenzene	ND		1.0	0.40	ug/L			11/29/23 15:24	1
Methyl tertiary butyl ether	ND		1.0	0.20	ug/L			11/29/23 15:24	1
Toluene	ND		1.0	0.30	ug/L			11/29/23 15:24	1
Xylenes, Total	ND		6.0	0.40	ug/L			11/29/23 15:24	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		80 - 120		11/29/23 15:24	1
4-Bromofluorobenzene (Surr)	98		80 - 120		11/29/23 15:24	1
Dibromofluoromethane (Surr)	100		80 - 120		11/29/23 15:24	1
Toluene-d8 (Surr)	100		80 - 120		11/29/23 15:24	1

Lab Sample ID: LCS 410-448049/4

Matrix: Water

Analysis Batch: 448049

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	20.0	20.7		ug/L		104	80 - 120
Ethylbenzene	20.0	21.2		ug/L		106	80 - 120
Methyl tertiary butyl ether	20.0	21.5		ug/L		107	69 - 122
Toluene	20.0	20.7		ug/L		104	80 - 120
Xylenes, Total	60.0	64.2		ug/L		107	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	101		80 - 120
4-Bromofluorobenzene (Surr)	100		80 - 120
Dibromofluoromethane (Surr)	100		80 - 120
Toluene-d8 (Surr)	100		80 - 120

Lab Sample ID: LCSD 410-448049/5

Matrix: Water

Analysis Batch: 448049

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	20.0	20.5		ug/L		103	80 - 120	1	30
Ethylbenzene	20.0	20.7		ug/L		104	80 - 120	2	30
Methyl tertiary butyl ether	20.0	21.6		ug/L		108	69 - 122	1	30
Toluene	20.0	20.1		ug/L		101	80 - 120	3	30
Xylenes, Total	60.0	63.7		ug/L		106	80 - 120	1	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	101		80 - 120
4-Bromofluorobenzene (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	100		80 - 120
Toluene-d8 (Surr)	99		80 - 120

QC Sample Results

Client: AECOM

Job ID: 410-151876-1

Project/Site: CEMREC Legacy Sites – Tacoma

Method: 8260D/UST - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 410-151876-2 MS

Client Sample ID: MW-34-W-231116

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 448049

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	ND		20.0	22.5		ug/L		113	80 - 120
Ethylbenzene	ND		20.0	23.2		ug/L		116	80 - 120
Methyl tertiary butyl ether	ND		20.0	21.9		ug/L		110	69 - 122
Toluene	ND		20.0	22.5		ug/L		113	80 - 120
Xylenes, Total	ND		60.0	70.3		ug/L		117	80 - 120

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	101		80 - 120
4-Bromofluorobenzene (Surr)	100		80 - 120
Dibromofluoromethane (Surr)	101		80 - 120
Toluene-d8 (Surr)	99		80 - 120

Lab Sample ID: 410-151876-2 MSD

Client Sample ID: MW-34-W-231116

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 448049

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	ND		20.0	22.7		ug/L		114	80 - 120	1	30
Ethylbenzene	ND		20.0	23.2		ug/L		116	80 - 120	0	30
Methyl tertiary butyl ether	ND		20.0	22.1		ug/L		110	69 - 122	1	30
Toluene	ND		20.0	22.6		ug/L		113	80 - 120	0	30
Xylenes, Total	ND		60.0	70.5		ug/L		118	80 - 120	0	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	100		80 - 120
4-Bromofluorobenzene (Surr)	100		80 - 120
Dibromofluoromethane (Surr)	100		80 - 120
Toluene-d8 (Surr)	99		80 - 120

Lab Sample ID: MB 410-448445/6

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 448445

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.30	ug/L			11/30/23 11:17	1
Ethylbenzene	ND		1.0	0.40	ug/L			11/30/23 11:17	1
Methyl tertiary butyl ether	ND		1.0	0.20	ug/L			11/30/23 11:17	1
Toluene	ND		1.0	0.30	ug/L			11/30/23 11:17	1
Xylenes, Total	ND		6.0	0.40	ug/L			11/30/23 11:17	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		80 - 120		11/30/23 11:17	1
4-Bromofluorobenzene (Surr)	96		80 - 120		11/30/23 11:17	1
Dibromofluoromethane (Surr)	97		80 - 120		11/30/23 11:17	1
Toluene-d8 (Surr)	96		80 - 120		11/30/23 11:17	1

QC Sample Results

Client: AECOM

Job ID: 410-151876-1

Project/Site: CEMREC Legacy Sites – Tacoma

Method: 8260D/UST - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 410-448445/4

Matrix: Water

Analysis Batch: 448445

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	20.0	19.0		ug/L		95	80 - 120
Ethylbenzene	20.0	18.3		ug/L		91	80 - 120
Methyl tertiary butyl ether	20.0	19.1		ug/L		95	69 - 122
Toluene	20.0	18.3		ug/L		92	80 - 120
Xylenes, Total	60.0	55.0		ug/L		92	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	92		80 - 120
4-Bromofluorobenzene (Surr)	98		80 - 120
Dibromofluoromethane (Surr)	97		80 - 120
Toluene-d8 (Surr)	97		80 - 120

Lab Sample ID: LCSD 410-448445/5

Matrix: Water

Analysis Batch: 448445

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	20.0	18.7		ug/L		93	80 - 120	2	30
Ethylbenzene	20.0	17.9		ug/L		89	80 - 120	2	30
Methyl tertiary butyl ether	20.0	18.8		ug/L		94	69 - 122	1	30
Toluene	20.0	18.0		ug/L		90	80 - 120	2	30
Xylenes, Total	60.0	54.1		ug/L		90	80 - 120	2	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	91		80 - 120
4-Bromofluorobenzene (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	98		80 - 120
Toluene-d8 (Surr)	97		80 - 120

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Lab Sample ID: MB 410-445905/5

Matrix: Water

Analysis Batch: 445905

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	ND		250	43	ug/L			11/21/23 13:08	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	102		50 - 150		11/21/23 13:08	1

Lab Sample ID: LCS 410-445905/6

Matrix: Water

Analysis Batch: 445905

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
C7-C12 (1C)	1100	1080		ug/L		98	64 - 131

Eurofins Lancaster Laboratories Environment Testing, LLC

QC Sample Results

Client: AECOM

Job ID: 410-151876-1

Project/Site: CEMREC Legacy Sites – Tacoma

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: LCS 410-445905/6

Matrix: Water

Analysis Batch: 445905

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
a,a,a-Trifluorotoluene (fid) (1C)	92		50 - 150

Lab Sample ID: LCSD 410-445905/7

Matrix: Water

Analysis Batch: 445905

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C7-C12 (1C)	1100	1110		ug/L		101	64 - 131	3	30

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
a,a,a-Trifluorotoluene (fid) (1C)	93		50 - 150

Lab Sample ID: MB 410-447337/5

Matrix: Water

Analysis Batch: 447337

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	ND		250	43	ug/L			11/28/23 11:25	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	99		50 - 150		11/28/23 11:25	1

Lab Sample ID: LCS 410-447337/6

Matrix: Water

Analysis Batch: 447337

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
C7-C12 (1C)	1100	909		ug/L		83	64 - 131		

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
a,a,a-Trifluorotoluene (fid) (1C)	91		50 - 150

Lab Sample ID: LCSD 410-447337/7

Matrix: Water

Analysis Batch: 447337

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C7-C12 (1C)	1100	930		ug/L		85	64 - 131	2	30

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
a,a,a-Trifluorotoluene (fid) (1C)	91		50 - 150

QC Sample Results

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151876-1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: 410-151876-2 MS

Matrix: Water

Analysis Batch: 447337

Client Sample ID: MW-34-W-231116

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
C7-C12 (1C)	ND		1120	974		ug/L		87	80 - 120		
Surrogate	MS %Recovery	MS Qualifier	Limits								
a,a,a-Trifluorotoluene (fid) (1C)	89		50 - 150								

Lab Sample ID: 410-151876-2 MSD

Matrix: Water

Analysis Batch: 447337

Client Sample ID: MW-34-W-231116

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C7-C12 (1C)	ND		1120	981		ug/L		88	80 - 120	1	30
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
a,a,a-Trifluorotoluene (fid) (1C)	90		50 - 150								

Lab Sample ID: MB 410-448447/5

Matrix: Water

Analysis Batch: 448447

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	ND		250	43	ug/L			11/30/23 12:27	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	102		50 - 150					11/30/23 12:27	1

Lab Sample ID: LCS 410-448447/6

Matrix: Water

Analysis Batch: 448447

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
C7-C12 (1C)	1100	1090		ug/L		99	64 - 131		
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
a,a,a-Trifluorotoluene (fid) (1C)	93		50 - 150						

Lab Sample ID: LCSD 410-448447/7

Matrix: Water

Analysis Batch: 448447

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C7-C12 (1C)	1100	1140		ug/L		104	64 - 131	4	30
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
a,a,a-Trifluorotoluene (fid) (1C)	96		50 - 150						

QC Sample Results

Client: AECOM

Job ID: 410-151876-1

Project/Site: CEMREC Legacy Sites – Tacoma

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 410-448722/1-A

Matrix: Water

Analysis Batch: 449247

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 448722

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	ND		100	45	ug/L		11/30/23 15:28	12/01/23 20:07	1
C24-C40	ND		250	100	ug/L		11/30/23 15:28	12/01/23 20:07	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
o- terphenyl (Surr)	61		50 - 150				11/30/23 15:28	12/01/23 20:07	1

Lab Sample ID: LCS 410-448722/2-A

Matrix: Water

Analysis Batch: 449247

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 448722

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
C12-C24	600	239		ug/L		40	14 - 115
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
o- terphenyl (Surr)	70		50 - 150				

Lab Sample ID: 410-151876-2 MS

Matrix: Water

Analysis Batch: 449247

Client Sample ID: MW-34-W-231116

Prep Type: Total/NA

Prep Batch: 448722

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
C12-C24	ND		613	211		ug/L		34	30 - 115
Surrogate	MS %Recovery	MS Qualifier	Limits						
o- terphenyl (Surr)	64		50 - 150						

Lab Sample ID: 410-151876-2 MSD

Matrix: Water

Analysis Batch: 449247

Client Sample ID: MW-34-W-231116

Prep Type: Total/NA

Prep Batch: 448722

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C12-C24	ND		609	239		ug/L		39	30 - 115	12	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
o- terphenyl (Surr)	68		50 - 150								

Lab Sample ID: 410-151876-1 DU

Matrix: Water

Analysis Batch: 449247

Client Sample ID: D-22-W-231116

Prep Type: Total/NA

Prep Batch: 448722

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
C12-C24	500		424		ug/L		16	20
C24-C40	ND		ND		ug/L		NC	20
Surrogate	DU %Recovery	DU Qualifier	Limits					
o- terphenyl (Surr)	74		50 - 150					

QC Sample Results

Client: AECOM

Job ID: 410-151876-1

Project/Site: CEMREC Legacy Sites – Tacoma

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: MB 410-448723/1-B

Matrix: Water

Analysis Batch: 450931

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 448723

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24 with Silica Gel clean up	ND	cn	100	45	ug/L		11/30/23 15:33	12/07/23 00:31	1
C24-C40 with Silica Gel clean up	ND	cn	250	100	ug/L		11/30/23 15:33	12/07/23 00:31	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
o- terphenyl (Surr)	64	cn	50 - 150				11/30/23 15:33	12/07/23 00:31	1

Lab Sample ID: LCS 410-448723/2-B

Matrix: Water

Analysis Batch: 450931

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 448723

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
C12-C24 with Silica Gel clean up	600	228	cn	ug/L		38	14 - 115
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
o- terphenyl (Surr)	70	cn	50 - 150				

Lab Sample ID: 410-151876-2 MS

Matrix: Water

Analysis Batch: 450931

Client Sample ID: MW-34-W-231116

Prep Type: Total/NA

Prep Batch: 448723

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
C12-C24 with Silica Gel clean up	ND	cn	613	202	cn	ug/L		33	30 - 115
Surrogate	MS %Recovery	MS Qualifier	Limits						
o- terphenyl (Surr)	68	cn	50 - 150						

Lab Sample ID: 410-151876-2 MSD

Matrix: Water

Analysis Batch: 450931

Client Sample ID: MW-34-W-231116

Prep Type: Total/NA

Prep Batch: 448723

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C12-C24 with Silica Gel clean up	ND	cn	609	210	cn	ug/L		35	30 - 115	4	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
o- terphenyl (Surr)	65	cn	50 - 150								

Lab Sample ID: 410-151876-1 DU

Matrix: Water

Analysis Batch: 450931

Client Sample ID: D-22-W-231116

Prep Type: Total/NA

Prep Batch: 448723

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
C12-C24 with Silica Gel clean up	ND	cn	ND	cn	ug/L		NC	20
C24-C40 with Silica Gel clean up	ND	cn	ND	cn	ug/L		NC	20
Surrogate	DU %Recovery	DU Qualifier	Limits					
o- terphenyl (Surr)	62	cn	50 - 150					

QC Sample Results

Client: AECOM

Job ID: 410-151876-1

Project/Site: CEMREC Legacy Sites – Tacoma

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: MB 410-448924/1-B

Matrix: Water

Analysis Batch: 450932

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 448924

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24 with Silica Gel clean up	ND		100	45	ug/L		12/01/23 08:06	12/07/23 00:31	1
C24-C40 with Silica Gel clean up	ND		250	100	ug/L		12/01/23 08:06	12/07/23 00:31	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
o- terphenyl (Surr)	56		50 - 150				12/01/23 08:06	12/07/23 00:31	1

Lab Sample ID: LCS 410-448924/2-B

Matrix: Water

Analysis Batch: 450932

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 448924

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
C12-C24 with Silica Gel clean up	600	214		ug/L		36	14 - 115
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
o- terphenyl (Surr)	62		50 - 150				

Lab Sample ID: LCSD 410-448924/3-B

Matrix: Water

Analysis Batch: 450932

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 448924

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C12-C24 with Silica Gel clean up	600	214		ug/L		36	14 - 115	0	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
o- terphenyl (Surr)	60		50 - 150						

Lab Sample ID: 410-151876-7 DU

Matrix: Water

Analysis Batch: 450932

Client Sample ID: MW-19-W-231117

Prep Type: Total/NA

Prep Batch: 448924

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
C12-C24 with Silica Gel clean up	81	J	69.1	J	ug/L		15	20
C24-C40 with Silica Gel clean up	ND		ND		ug/L		NC	20
Surrogate	DU %Recovery	DU Qualifier	Limits					
o- terphenyl (Surr)	55		50 - 150					

Lab Sample ID: 410-151876-8 DU

Matrix: Water

Analysis Batch: 450932

Client Sample ID: D-14-W-231117

Prep Type: Total/NA

Prep Batch: 448924

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
C12-C24 with Silica Gel clean up	ND		ND		ug/L		NC	20
C24-C40 with Silica Gel clean up	ND		ND		ug/L		NC	20
Surrogate	DU %Recovery	DU Qualifier	Limits					
o- terphenyl (Surr)	56		50 - 150					

Eurofins Lancaster Laboratories Environment Testing, LLC

QC Sample Results

Client: AECOM

Job ID: 410-151876-1

Project/Site: CEMREC Legacy Sites – Tacoma

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 410-448928/1-A

Matrix: Water

Analysis Batch: 449243

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 448928

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	ND		100	45	ug/L		12/01/23 08:10	12/01/23 20:07	1
C24-C40	ND		250	100	ug/L		12/01/23 08:10	12/01/23 20:07	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
o- terphenyl (Surr)	73		50 - 150				12/01/23 08:10	12/01/23 20:07	1

Lab Sample ID: LCS 410-448928/2-A

Matrix: Water

Analysis Batch: 449243

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 448928

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
C12-C24	600	251		ug/L		42	14 - 115
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
o- terphenyl (Surr)	72		50 - 150				

Lab Sample ID: LCSD 410-448928/3-A

Matrix: Water

Analysis Batch: 449243

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 448928

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C12-C24	600	276		ug/L		46	14 - 115	9	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
o- terphenyl (Surr)	77		50 - 150						

Lab Sample ID: 410-151876-7 DU

Matrix: Water

Analysis Batch: 449747

Client Sample ID: MW-19-W-231117

Prep Type: Total/NA

Prep Batch: 448928

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
C12-C24	8600		8420		ug/L		2	20
C24-C40	1500		1560		ug/L		1	20
Surrogate	DU %Recovery	DU Qualifier	Limits					
o- terphenyl (Surr)	55		50 - 150					

Lab Sample ID: 410-151876-8 DU

Matrix: Water

Analysis Batch: 449243

Client Sample ID: D-14-W-231117

Prep Type: Total/NA

Prep Batch: 448928

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
C12-C24	ND		ND		ug/L		NC	20
C24-C40	ND		ND		ug/L		NC	20
Surrogate	DU %Recovery	DU Qualifier	Limits					
o- terphenyl (Surr)	76		50 - 150					

Eurofins Lancaster Laboratories Environment Testing, LLC

QC Sample Results

Client: AECOM

Job ID: 410-151876-1

Project/Site: CEMREC Legacy Sites – Tacoma

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 410-451387/1-B

Matrix: Water

Analysis Batch: 451978

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 451387

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24 with Silica Gel clean up	ND		100	45	ug/L		12/07/23 15:43	12/08/23 23:12	1
C24-C40 with Silica Gel clean up	ND		250	100	ug/L		12/07/23 15:43	12/08/23 23:12	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -terphenyl (Surr)	53		50 - 150				12/07/23 15:43	12/08/23 23:12	1

Lab Sample ID: LCS 410-451387/2-B

Matrix: Water

Analysis Batch: 451978

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 451387

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
C12-C24 with Silica Gel clean up	600	192		ug/L		32	14 - 115		
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
<i>o</i> -terphenyl (Surr)	65		50 - 150						

Lab Sample ID: LCSD 410-451387/3-B

Matrix: Water

Analysis Batch: 451978

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 451387

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C12-C24 with Silica Gel clean up	600	164		ug/L		27	14 - 115	16	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
<i>o</i> -terphenyl (Surr)	55		50 - 150						

Lab Sample ID: MB 410-451914/1-B

Matrix: Water

Analysis Batch: 452415

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 451914

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24 with Silica Gel clean up	ND		100	45	ug/L		12/08/23 15:16	12/11/23 12:24	1
C24-C40 with Silica Gel clean up	ND		250	100	ug/L		12/08/23 15:16	12/11/23 12:24	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -terphenyl (Surr)	73		50 - 150				12/08/23 15:16	12/11/23 12:24	1
<i>n</i> -Decanoic Acid (Surr)	0.0005		0 - 1				12/08/23 15:16	12/11/23 12:24	1

Lab Sample ID: LCS 410-451914/2-B

Matrix: Water

Analysis Batch: 452415

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 451914

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
C12-C24 with Silica Gel clean up	600	150		ug/L		25	14 - 115		
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
<i>o</i> -terphenyl (Surr)	61		50 - 150						

Eurofins Lancaster Laboratories Environment Testing, LLC

QC Sample Results

Client: AECOM

Job ID: 410-151876-1

Project/Site: CEMREC Legacy Sites – Tacoma

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: LCS 410-451914/2-B

Matrix: Water

Analysis Batch: 452415

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 451914

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
n-Decanoic Acid (Surr)	0.5		0 - 1

Lab Sample ID: LCSD 410-451914/3-B

Matrix: Water

Analysis Batch: 452415

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 451914

	Spike	LCSD	LCSD					%Rec	RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
C12-C24 with Silica Gel clean up	600	152		ug/L		25	14 - 115	2	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
o-terphenyl (Surr)	61		50 - 150
n-Decanoic Acid (Surr)	0.3		0 - 1

QC Association Summary

Client: AECOM

Job ID: 410-151876-1

Project/Site: CEMREC Legacy Sites – Tacoma

GC/MS VOA

Analysis Batch: 446440

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-151876-21	TB-4-T-231117	Total/NA	Water	8260D/UST	
410-151876-22	TB-3-T-231117	Total/NA	Water	8260D/UST	
MB 410-446440/6	Method Blank	Total/NA	Water	8260D/UST	
LCS 410-446440/4	Lab Control Sample	Total/NA	Water	8260D/UST	
LCSD 410-446440/5	Lab Control Sample Dup	Total/NA	Water	8260D/UST	

Analysis Batch: 448049

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-151876-1	D-22-W-231116	Total/NA	Water	8260D/UST	
410-151876-2	MW-34-W-231116	Total/NA	Water	8260D/UST	
410-151876-3	MW-21-W-231116	Total/NA	Water	8260D/UST	
410-151876-4	MW-32-W-231116	Total/NA	Water	8260D/UST	
410-151876-5	D-03A-W-231116	Total/NA	Water	8260D/UST	
410-151876-6	MW-14-W-231116	Total/NA	Water	8260D/UST	
410-151876-7	MW-19-W-231117	Total/NA	Water	8260D/UST	
410-151876-11	MW-25-W-231116	Total/NA	Water	8260D/UST	
410-151876-12	D-10-W-231116	Total/NA	Water	8260D/UST	
410-151876-13	D-7-W-231116	Total/NA	Water	8260D/UST	
410-151876-14	MW-22-W-231116	Total/NA	Water	8260D/UST	
410-151876-15	D-06-W-231116	Total/NA	Water	8260D/UST	
410-151876-16	MW-18-W-231116	Total/NA	Water	8260D/UST	
410-151876-17	DUP-1-WD-231116	Total/NA	Water	8260D/UST	
MB 410-448049/6	Method Blank	Total/NA	Water	8260D/UST	
LCS 410-448049/4	Lab Control Sample	Total/NA	Water	8260D/UST	
LCSD 410-448049/5	Lab Control Sample Dup	Total/NA	Water	8260D/UST	
410-151876-2 MS	MW-34-W-231116	Total/NA	Water	8260D/UST	
410-151876-2 MSD	MW-34-W-231116	Total/NA	Water	8260D/UST	

Analysis Batch: 448445

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-151876-8	D-14-W-231117	Total/NA	Water	8260D/UST	
410-151876-10	RB-1-R-231117	Total/NA	Water	8260D/UST	
410-151876-18	DUP-2-WD-231117	Total/NA	Water	8260D/UST	
410-151876-19	MW-13-W-231117	Total/NA	Water	8260D/UST	
410-151876-20	D-01-W-231117	Total/NA	Water	8260D/UST	
MB 410-448445/6	Method Blank	Total/NA	Water	8260D/UST	
LCS 410-448445/4	Lab Control Sample	Total/NA	Water	8260D/UST	
LCSD 410-448445/5	Lab Control Sample Dup	Total/NA	Water	8260D/UST	

GC VOA

Analysis Batch: 445905

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-151876-21	TB-4-T-231117	Total/NA	Water	NWTPH-Gx	
410-151876-22	TB-3-T-231117	Total/NA	Water	NWTPH-Gx	
MB 410-445905/5	Method Blank	Total/NA	Water	NWTPH-Gx	
LCS 410-445905/6	Lab Control Sample	Total/NA	Water	NWTPH-Gx	
LCSD 410-445905/7	Lab Control Sample Dup	Total/NA	Water	NWTPH-Gx	

QC Association Summary

Client: AECOM

Job ID: 410-151876-1

Project/Site: CEMREC Legacy Sites – Tacoma

GC VOA

Analysis Batch: 447337

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-151876-1	D-22-W-231116	Total/NA	Water	NWTPH-Gx	
410-151876-2	MW-34-W-231116	Total/NA	Water	NWTPH-Gx	
410-151876-3	MW-21-W-231116	Total/NA	Water	NWTPH-Gx	
410-151876-4	MW-32-W-231116	Total/NA	Water	NWTPH-Gx	
410-151876-5	D-03A-W-231116	Total/NA	Water	NWTPH-Gx	
410-151876-6	MW-14-W-231116	Total/NA	Water	NWTPH-Gx	
410-151876-7	MW-19-W-231117	Total/NA	Water	NWTPH-Gx	
410-151876-8	D-14-W-231117	Total/NA	Water	NWTPH-Gx	
410-151876-9	FB-1-O-231117	Total/NA	Water	NWTPH-Gx	
410-151876-10	RB-1-R-231117	Total/NA	Water	NWTPH-Gx	
410-151876-11	MW-25-W-231116	Total/NA	Water	NWTPH-Gx	
410-151876-12	D-10-W-231116	Total/NA	Water	NWTPH-Gx	
410-151876-13	D-7-W-231116	Total/NA	Water	NWTPH-Gx	
410-151876-14	MW-22-W-231116	Total/NA	Water	NWTPH-Gx	
410-151876-15	D-06-W-231116	Total/NA	Water	NWTPH-Gx	
410-151876-16	MW-18-W-231116	Total/NA	Water	NWTPH-Gx	
MB 410-447337/5	Method Blank	Total/NA	Water	NWTPH-Gx	
LCS 410-447337/6	Lab Control Sample	Total/NA	Water	NWTPH-Gx	
LCSD 410-447337/7	Lab Control Sample Dup	Total/NA	Water	NWTPH-Gx	
410-151876-2 MS	MW-34-W-231116	Total/NA	Water	NWTPH-Gx	
410-151876-2 MSD	MW-34-W-231116	Total/NA	Water	NWTPH-Gx	

Analysis Batch: 448447

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-151876-17	DUP-1-WD-231116	Total/NA	Water	NWTPH-Gx	
410-151876-18	DUP-2-WD-231117	Total/NA	Water	NWTPH-Gx	
410-151876-19	MW-13-W-231117	Total/NA	Water	NWTPH-Gx	
410-151876-20	D-01-W-231117	Total/NA	Water	NWTPH-Gx	
MB 410-448447/5	Method Blank	Total/NA	Water	NWTPH-Gx	
LCS 410-448447/6	Lab Control Sample	Total/NA	Water	NWTPH-Gx	
LCSD 410-448447/7	Lab Control Sample Dup	Total/NA	Water	NWTPH-Gx	

GC Semi VOA

Prep Batch: 448722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-151876-1	D-22-W-231116	Total/NA	Water	3510C	
410-151876-2	MW-34-W-231116	Total/NA	Water	3510C	
410-151876-3	MW-21-W-231116	Total/NA	Water	3510C	
410-151876-4	MW-32-W-231116	Total/NA	Water	3510C	
410-151876-5	D-03A-W-231116	Total/NA	Water	3510C	
410-151876-6	MW-14-W-231116	Total/NA	Water	3510C	
410-151876-11	MW-25-W-231116	Total/NA	Water	3510C	
410-151876-12	D-10-W-231116	Total/NA	Water	3510C	
410-151876-13	D-7-W-231116	Total/NA	Water	3510C	
410-151876-14	MW-22-W-231116	Total/NA	Water	3510C	
410-151876-15	D-06-W-231116	Total/NA	Water	3510C	
410-151876-16	MW-18-W-231116	Total/NA	Water	3510C	
410-151876-17	DUP-1-WD-231116	Total/NA	Water	3510C	
MB 410-448722/1-A	Method Blank	Total/NA	Water	3510C	
LCS 410-448722/2-A	Lab Control Sample	Total/NA	Water	3510C	

Eurofins Lancaster Laboratories Environment Testing, LLC

QC Association Summary

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151876-1

GC Semi VOA (Continued)

Prep Batch: 448722 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-151876-2 MS	MW-34-W-231116	Total/NA	Water	3510C	
410-151876-2 MSD	MW-34-W-231116	Total/NA	Water	3510C	
410-151876-1 DU	D-22-W-231116	Total/NA	Water	3510C	

Prep Batch: 448723

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-151876-1	D-22-W-231116	Total/NA	Water	3510C	
410-151876-2	MW-34-W-231116	Total/NA	Water	3510C	
410-151876-3	MW-21-W-231116	Total/NA	Water	3510C	
410-151876-4	MW-32-W-231116	Total/NA	Water	3510C	
410-151876-5	D-03A-W-231116	Total/NA	Water	3510C	
410-151876-6	MW-14-W-231116	Total/NA	Water	3510C	
410-151876-11	MW-25-W-231116	Total/NA	Water	3510C	
410-151876-12	D-10-W-231116	Total/NA	Water	3510C	
410-151876-13	D-7-W-231116	Total/NA	Water	3510C	
410-151876-14	MW-22-W-231116	Total/NA	Water	3510C	
410-151876-15	D-06-W-231116	Total/NA	Water	3510C	
410-151876-16	MW-18-W-231116	Total/NA	Water	3510C	
410-151876-17	DUP-1-WD-231116	Total/NA	Water	3510C	
MB 410-448723/1-B	Method Blank	Total/NA	Water	3510C	
LCS 410-448723/2-B	Lab Control Sample	Total/NA	Water	3510C	
410-151876-2 MS	MW-34-W-231116	Total/NA	Water	3510C	
410-151876-2 MSD	MW-34-W-231116	Total/NA	Water	3510C	
410-151876-1 DU	D-22-W-231116	Total/NA	Water	3510C	

Prep Batch: 448924

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-151876-7	MW-19-W-231117	Total/NA	Water	3510C	
410-151876-8	D-14-W-231117	Total/NA	Water	3510C	
410-151876-9	FB-1-O-231117	Total/NA	Water	3510C	
410-151876-10	RB-1-R-231117	Total/NA	Water	3510C	
410-151876-18	DUP-2-WD-231117	Total/NA	Water	3510C	
410-151876-19	MW-13-W-231117	Total/NA	Water	3510C	
410-151876-20	D-01-W-231117	Total/NA	Water	3510C	
MB 410-448924/1-B	Method Blank	Total/NA	Water	3510C	
LCS 410-448924/2-B	Lab Control Sample	Total/NA	Water	3510C	
LCSD 410-448924/3-B	Lab Control Sample Dup	Total/NA	Water	3510C	
410-151876-7 DU	MW-19-W-231117	Total/NA	Water	3510C	
410-151876-8 DU	D-14-W-231117	Total/NA	Water	3510C	

Prep Batch: 448928

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-151876-7	MW-19-W-231117	Total/NA	Water	3510C	
410-151876-8	D-14-W-231117	Total/NA	Water	3510C	
410-151876-9	FB-1-O-231117	Total/NA	Water	3510C	
410-151876-10	RB-1-R-231117	Total/NA	Water	3510C	
410-151876-18	DUP-2-WD-231117	Total/NA	Water	3510C	
410-151876-19	MW-13-W-231117	Total/NA	Water	3510C	
410-151876-20	D-01-W-231117	Total/NA	Water	3510C	
MB 410-448928/1-A	Method Blank	Total/NA	Water	3510C	
LCS 410-448928/2-A	Lab Control Sample	Total/NA	Water	3510C	

Eurofins Lancaster Laboratories Environment Testing, LLC

QC Association Summary

Client: AECOM

Job ID: 410-151876-1

Project/Site: CEMREC Legacy Sites – Tacoma

GC Semi VOA (Continued)

Prep Batch: 448928 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 410-448928/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
410-151876-7 DU	MW-19-W-231117	Total/NA	Water	3510C	
410-151876-8 DU	D-14-W-231117	Total/NA	Water	3510C	

Analysis Batch: 449243

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-151876-8	D-14-W-231117	Total/NA	Water	NWTPH-Dx	448928
410-151876-9	FB-1-O-231117	Total/NA	Water	NWTPH-Dx	448928
410-151876-10	RB-1-R-231117	Total/NA	Water	NWTPH-Dx	448928
410-151876-18	DUP-2-WD-231117	Total/NA	Water	NWTPH-Dx	448928
410-151876-19	MW-13-W-231117	Total/NA	Water	NWTPH-Dx	448928
410-151876-20	D-01-W-231117	Total/NA	Water	NWTPH-Dx	448928
MB 410-448928/1-A	Method Blank	Total/NA	Water	NWTPH-Dx	448928
LCS 410-448928/2-A	Lab Control Sample	Total/NA	Water	NWTPH-Dx	448928
LCSD 410-448928/3-A	Lab Control Sample Dup	Total/NA	Water	NWTPH-Dx	448928
410-151876-8 DU	D-14-W-231117	Total/NA	Water	NWTPH-Dx	448928

Analysis Batch: 449247

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-151876-1	D-22-W-231116	Total/NA	Water	NWTPH-Dx	448722
410-151876-2	MW-34-W-231116	Total/NA	Water	NWTPH-Dx	448722
410-151876-3	MW-21-W-231116	Total/NA	Water	NWTPH-Dx	448722
410-151876-4	MW-32-W-231116	Total/NA	Water	NWTPH-Dx	448722
410-151876-5	D-03A-W-231116	Total/NA	Water	NWTPH-Dx	448722
410-151876-6	MW-14-W-231116	Total/NA	Water	NWTPH-Dx	448722
410-151876-11	MW-25-W-231116	Total/NA	Water	NWTPH-Dx	448722
410-151876-12	D-10-W-231116	Total/NA	Water	NWTPH-Dx	448722
410-151876-13	D-7-W-231116	Total/NA	Water	NWTPH-Dx	448722
410-151876-14	MW-22-W-231116	Total/NA	Water	NWTPH-Dx	448722
410-151876-15	D-06-W-231116	Total/NA	Water	NWTPH-Dx	448722
410-151876-16	MW-18-W-231116	Total/NA	Water	NWTPH-Dx	448722
410-151876-17	DUP-1-WD-231116	Total/NA	Water	NWTPH-Dx	448722
MB 410-448722/1-A	Method Blank	Total/NA	Water	NWTPH-Dx	448722
LCS 410-448722/2-A	Lab Control Sample	Total/NA	Water	NWTPH-Dx	448722
410-151876-2 MS	MW-34-W-231116	Total/NA	Water	NWTPH-Dx	448722
410-151876-2 MSD	MW-34-W-231116	Total/NA	Water	NWTPH-Dx	448722
410-151876-1 DU	D-22-W-231116	Total/NA	Water	NWTPH-Dx	448722

Analysis Batch: 449747

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-151876-7	MW-19-W-231117	Total/NA	Water	NWTPH-Dx	448928
410-151876-7 DU	MW-19-W-231117	Total/NA	Water	NWTPH-Dx	448928

Cleanup Batch: 450001

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-151876-1	D-22-W-231116	Total/NA	Water	3630C	448723
410-151876-2	MW-34-W-231116	Total/NA	Water	3630C	448723
410-151876-3	MW-21-W-231116	Total/NA	Water	3630C	448723
410-151876-4	MW-32-W-231116	Total/NA	Water	3630C	448723
410-151876-5	D-03A-W-231116	Total/NA	Water	3630C	448723
410-151876-6	MW-14-W-231116	Total/NA	Water	3630C	448723

Eurofins Lancaster Laboratories Environment Testing, LLC

QC Association Summary

Client: AECOM

Job ID: 410-151876-1

Project/Site: CEMREC Legacy Sites – Tacoma

GC Semi VOA (Continued)

Cleanup Batch: 450001 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-151876-11	MW-25-W-231116	Total/NA	Water	3630C	448723
410-151876-12	D-10-W-231116	Total/NA	Water	3630C	448723
410-151876-13	D-7-W-231116	Total/NA	Water	3630C	448723
410-151876-14	MW-22-W-231116	Total/NA	Water	3630C	448723
410-151876-15	D-06-W-231116	Total/NA	Water	3630C	448723
410-151876-16	MW-18-W-231116	Total/NA	Water	3630C	448723
410-151876-17	DUP-1-WD-231116	Total/NA	Water	3630C	448723
MB 410-448723/1-B	Method Blank	Total/NA	Water	3630C	448723
LCS 410-448723/2-B	Lab Control Sample	Total/NA	Water	3630C	448723
410-151876-2 MS	MW-34-W-231116	Total/NA	Water	3630C	448723
410-151876-2 MSD	MW-34-W-231116	Total/NA	Water	3630C	448723
410-151876-1 DU	D-22-W-231116	Total/NA	Water	3630C	448723

Cleanup Batch: 450018

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-151876-7	MW-19-W-231117	Total/NA	Water	3630C	448924
410-151876-8	D-14-W-231117	Total/NA	Water	3630C	448924
410-151876-9	FB-1-O-231117	Total/NA	Water	3630C	448924
410-151876-10	RB-1-R-231117	Total/NA	Water	3630C	448924
410-151876-18	DUP-2-WD-231117	Total/NA	Water	3630C	448924
410-151876-19	MW-13-W-231117	Total/NA	Water	3630C	448924
410-151876-20	D-01-W-231117	Total/NA	Water	3630C	448924
MB 410-448924/1-B	Method Blank	Total/NA	Water	3630C	448924
LCS 410-448924/2-B	Lab Control Sample	Total/NA	Water	3630C	448924
LCS 410-448924/3-B	Lab Control Sample Dup	Total/NA	Water	3630C	448924
410-151876-7 DU	MW-19-W-231117	Total/NA	Water	3630C	448924
410-151876-8 DU	D-14-W-231117	Total/NA	Water	3630C	448924

Analysis Batch: 450931

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-151876-1	D-22-W-231116	Total/NA	Water	NWTPH-Dx	450001
410-151876-2	MW-34-W-231116	Total/NA	Water	NWTPH-Dx	450001
410-151876-3	MW-21-W-231116	Total/NA	Water	NWTPH-Dx	450001
410-151876-4	MW-32-W-231116	Total/NA	Water	NWTPH-Dx	450001
410-151876-5	D-03A-W-231116	Total/NA	Water	NWTPH-Dx	450001
410-151876-6	MW-14-W-231116	Total/NA	Water	NWTPH-Dx	450001
410-151876-11	MW-25-W-231116	Total/NA	Water	NWTPH-Dx	450001
410-151876-12	D-10-W-231116	Total/NA	Water	NWTPH-Dx	450001
410-151876-13	D-7-W-231116	Total/NA	Water	NWTPH-Dx	450001
410-151876-14	MW-22-W-231116	Total/NA	Water	NWTPH-Dx	450001
410-151876-15	D-06-W-231116	Total/NA	Water	NWTPH-Dx	450001
410-151876-16	MW-18-W-231116	Total/NA	Water	NWTPH-Dx	450001
410-151876-17	DUP-1-WD-231116	Total/NA	Water	NWTPH-Dx	450001
MB 410-448723/1-B	Method Blank	Total/NA	Water	NWTPH-Dx	450001
LCS 410-448723/2-B	Lab Control Sample	Total/NA	Water	NWTPH-Dx	450001
410-151876-2 MS	MW-34-W-231116	Total/NA	Water	NWTPH-Dx	450001
410-151876-2 MSD	MW-34-W-231116	Total/NA	Water	NWTPH-Dx	450001
410-151876-1 DU	D-22-W-231116	Total/NA	Water	NWTPH-Dx	450001

QC Association Summary

Client: AECOM

Job ID: 410-151876-1

Project/Site: CEMREC Legacy Sites – Tacoma

GC Semi VOA

Analysis Batch: 450932

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-151876-7	MW-19-W-231117	Total/NA	Water	NWTPH-Dx	450018
410-151876-8	D-14-W-231117	Total/NA	Water	NWTPH-Dx	450018
410-151876-9	FB-1-O-231117	Total/NA	Water	NWTPH-Dx	450018
410-151876-10	RB-1-R-231117	Total/NA	Water	NWTPH-Dx	450018
410-151876-18	DUP-2-WD-231117	Total/NA	Water	NWTPH-Dx	450018
410-151876-19	MW-13-W-231117	Total/NA	Water	NWTPH-Dx	450018
410-151876-20	D-01-W-231117	Total/NA	Water	NWTPH-Dx	450018
MB 410-448924/1-B	Method Blank	Total/NA	Water	NWTPH-Dx	450018
LCS 410-448924/2-B	Lab Control Sample	Total/NA	Water	NWTPH-Dx	450018
LCSD 410-448924/3-B	Lab Control Sample Dup	Total/NA	Water	NWTPH-Dx	450018
410-151876-7 DU	MW-19-W-231117	Total/NA	Water	NWTPH-Dx	450018
410-151876-8 DU	D-14-W-231117	Total/NA	Water	NWTPH-Dx	450018

Prep Batch: 451387

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-151876-15	D-06-W-231116	Total/NA	Water	3510C	
MB 410-451387/1-B	Method Blank	Total/NA	Water	3510C	
LCS 410-451387/2-B	Lab Control Sample	Total/NA	Water	3510C	
LCSD 410-451387/3-B	Lab Control Sample Dup	Total/NA	Water	3510C	

Cleanup Batch: 451524

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-151876-15	D-06-W-231116	Total/NA	Water	3630C	451387
MB 410-451387/1-B	Method Blank	Total/NA	Water	3630C	451387
LCS 410-451387/2-B	Lab Control Sample	Total/NA	Water	3630C	451387
LCSD 410-451387/3-B	Lab Control Sample Dup	Total/NA	Water	3630C	451387

Prep Batch: 451914

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-151876-10	RB-1-R-231117	Total/NA	Water	3510C	
410-151876-18	DUP-2-WD-231117	Total/NA	Water	3510C	
410-151876-19	MW-13-W-231117	Total/NA	Water	3510C	
410-151876-20	D-01-W-231117	Total/NA	Water	3510C	
MB 410-451914/1-B	Method Blank	Total/NA	Water	3510C	
LCS 410-451914/2-B	Lab Control Sample	Total/NA	Water	3510C	
LCSD 410-451914/3-B	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 451978

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-151876-15	D-06-W-231116	Total/NA	Water	NWTPH-Dx	451524
MB 410-451387/1-B	Method Blank	Total/NA	Water	NWTPH-Dx	451524
LCS 410-451387/2-B	Lab Control Sample	Total/NA	Water	NWTPH-Dx	451524
LCSD 410-451387/3-B	Lab Control Sample Dup	Total/NA	Water	NWTPH-Dx	451524

Cleanup Batch: 452225

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-151876-10	RB-1-R-231117	Total/NA	Water	3630C	451914
410-151876-18	DUP-2-WD-231117	Total/NA	Water	3630C	451914
410-151876-19	MW-13-W-231117	Total/NA	Water	3630C	451914
410-151876-20	D-01-W-231117	Total/NA	Water	3630C	451914
MB 410-451914/1-B	Method Blank	Total/NA	Water	3630C	451914

Eurofins Lancaster Laboratories Environment Testing, LLC

QC Association Summary

Client: AECOM

Job ID: 410-151876-1

Project/Site: CEMREC Legacy Sites – Tacoma

GC Semi VOA (Continued)

Cleanup Batch: 452225 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 410-451914/2-B	Lab Control Sample	Total/NA	Water	3630C	451914
LCSD 410-451914/3-B	Lab Control Sample Dup	Total/NA	Water	3630C	451914

Analysis Batch: 452415

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-151876-10	RB-1-R-231117	Total/NA	Water	NWTPH-Dx	452225
410-151876-18	DUP-2-WD-231117	Total/NA	Water	NWTPH-Dx	452225
410-151876-19	MW-13-W-231117	Total/NA	Water	NWTPH-Dx	452225
410-151876-20	D-01-W-231117	Total/NA	Water	NWTPH-Dx	452225
MB 410-451914/1-B	Method Blank	Total/NA	Water	NWTPH-Dx	452225
LCS 410-451914/2-B	Lab Control Sample	Total/NA	Water	NWTPH-Dx	452225
LCSD 410-451914/3-B	Lab Control Sample Dup	Total/NA	Water	NWTPH-Dx	452225

Lab Chronicle

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151876-1

Client Sample ID: D-22-W-231116

Lab Sample ID: 410-151876-1

Date Collected: 11/16/23 09:35

Matrix: Water

Date Received: 11/18/23 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D/UST		1	448049	UKAD	ELLE	11/29/23 18:15
Total/NA	Analysis	NWTPH-Gx		1	447337	SE8S	ELLE	11/28/23 15:00
Total/NA	Prep	3510C			448723	T9CY	ELLE	11/30/23 15:33
Total/NA	Cleanup	3630C			450001	K2IL	ELLE	12/04/23 19:30
Total/NA	Analysis	NWTPH-Dx		1	450931	KP5X	ELLE	12/07/23 01:40
Total/NA	Prep	3510C			448722	T9CY	ELLE	11/30/23 15:28
Total/NA	Analysis	NWTPH-Dx		1	449247	UHEW	ELLE	12/01/23 21:16

Client Sample ID: MW-34-W-231116

Lab Sample ID: 410-151876-2

Date Collected: 11/16/23 10:36

Matrix: Water

Date Received: 11/18/23 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D/UST		1	448049	UKAD	ELLE	11/29/23 18:39
Total/NA	Analysis	NWTPH-Gx		1	447337	SE8S	ELLE	11/28/23 15:26
Total/NA	Prep	3510C			448723	T9CY	ELLE	11/30/23 15:33
Total/NA	Cleanup	3630C			450001	K2IL	ELLE	12/04/23 19:30
Total/NA	Analysis	NWTPH-Dx		1	450931	KP5X	ELLE	12/07/23 02:26
Total/NA	Prep	3510C			448722	T9CY	ELLE	11/30/23 15:28
Total/NA	Analysis	NWTPH-Dx		1	449247	UHEW	ELLE	12/01/23 22:02

Client Sample ID: MW-21-W-231116

Lab Sample ID: 410-151876-3

Date Collected: 11/16/23 12:05

Matrix: Water

Date Received: 11/18/23 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D/UST		1	448049	UKAD	ELLE	11/29/23 19:50
Total/NA	Analysis	NWTPH-Gx		1	447337	SE8S	ELLE	11/28/23 16:42
Total/NA	Prep	3510C			448723	T9CY	ELLE	11/30/23 15:33
Total/NA	Cleanup	3630C			450001	K2IL	ELLE	12/04/23 19:30
Total/NA	Analysis	NWTPH-Dx		1	450931	KP5X	ELLE	12/07/23 03:35
Total/NA	Prep	3510C			448722	T9CY	ELLE	11/30/23 15:28
Total/NA	Analysis	NWTPH-Dx		1	449247	UHEW	ELLE	12/01/23 23:11

Client Sample ID: MW-32-W-231116

Lab Sample ID: 410-151876-4

Date Collected: 11/16/23 14:09

Matrix: Water

Date Received: 11/18/23 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D/UST		1	448049	UKAD	ELLE	11/29/23 20:14
Total/NA	Analysis	NWTPH-Gx		1	447337	SE8S	ELLE	11/28/23 17:08
Total/NA	Prep	3510C			448723	T9CY	ELLE	11/30/23 15:33
Total/NA	Cleanup	3630C			450001	K2IL	ELLE	12/04/23 19:30
Total/NA	Analysis	NWTPH-Dx		1	450931	KP5X	ELLE	12/07/23 03:58

Lab Chronicle

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151876-1

Client Sample ID: MW-32-W-231116

Lab Sample ID: 410-151876-4

Date Collected: 11/16/23 14:09

Matrix: Water

Date Received: 11/18/23 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3510C			448722	T9CY	ELLE	11/30/23 15:28
Total/NA	Analysis	NWTPH-Dx		1	449247	UHEW	ELLE	12/01/23 23:34

Client Sample ID: D-03A-W-231116

Lab Sample ID: 410-151876-5

Date Collected: 11/16/23 13:07

Matrix: Water

Date Received: 11/18/23 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D/UST		1	448049	UKAD	ELLE	11/29/23 20:38
Total/NA	Analysis	NWTPH-Gx		1	447337	SE8S	ELLE	11/28/23 17:33
Total/NA	Prep	3510C			448723	T9CY	ELLE	11/30/23 15:33
Total/NA	Cleanup	3630C			450001	K2IL	ELLE	12/04/23 19:30
Total/NA	Analysis	NWTPH-Dx		1	450931	KP5X	ELLE	12/07/23 04:44
Total/NA	Prep	3510C			448722	T9CY	ELLE	11/30/23 15:28
Total/NA	Analysis	NWTPH-Dx		1	449247	UHEW	ELLE	12/01/23 23:57

Client Sample ID: MW-14-W-231116

Lab Sample ID: 410-151876-6

Date Collected: 11/16/23 15:15

Matrix: Water

Date Received: 11/18/23 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D/UST		1	448049	UKAD	ELLE	11/29/23 21:01
Total/NA	Analysis	NWTPH-Gx		1	447337	SE8S	ELLE	11/28/23 17:59
Total/NA	Prep	3510C			448723	T9CY	ELLE	11/30/23 15:33
Total/NA	Cleanup	3630C			450001	K2IL	ELLE	12/04/23 19:30
Total/NA	Analysis	NWTPH-Dx		1	450931	KP5X	ELLE	12/07/23 05:07
Total/NA	Prep	3510C			448722	T9CY	ELLE	11/30/23 15:28
Total/NA	Analysis	NWTPH-Dx		1	449247	UHEW	ELLE	12/02/23 00:20

Client Sample ID: MW-19-W-231117

Lab Sample ID: 410-151876-7

Date Collected: 11/17/23 09:10

Matrix: Water

Date Received: 11/18/23 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D/UST		1	448049	UKAD	ELLE	11/29/23 21:25
Total/NA	Analysis	NWTPH-Gx		1	447337	SE8S	ELLE	11/28/23 18:24
Total/NA	Prep	3510C			448928	QKX3	ELLE	12/01/23 08:10
Total/NA	Analysis	NWTPH-Dx		2	449747	KP5X	ELLE	12/05/23 00:55
Total/NA	Prep	3510C			448924	QKX3	ELLE	12/01/23 08:06
Total/NA	Cleanup	3630C			450018	USL7	ELLE	12/05/23 01:00
Total/NA	Analysis	NWTPH-Dx		1	450932	KP5X	ELLE	12/07/23 05:07

Lab Chronicle

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151876-1

Client Sample ID: D-14-W-231117

Lab Sample ID: 410-151876-8

Date Collected: 11/17/23 10:15

Matrix: Water

Date Received: 11/18/23 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D/UST		1	448445	UKAD	ELLE	11/30/23 13:17
Total/NA	Analysis	NWTPH-Gx		1	447337	SE8S	ELLE	11/28/23 18:50
Total/NA	Prep	3510C			448928	QKX3	ELLE	12/01/23 08:10
Total/NA	Analysis	NWTPH-Dx		1	449243	UHEW	ELLE	12/02/23 00:20
Total/NA	Prep	3510C			448924	QKX3	ELLE	12/01/23 08:06
Total/NA	Cleanup	3630C			450018	USL7	ELLE	12/05/23 01:00
Total/NA	Analysis	NWTPH-Dx		1	450932	KP5X	ELLE	12/07/23 05:54

Client Sample ID: FB-1-O-231117

Lab Sample ID: 410-151876-9

Date Collected: 11/17/23 11:24

Matrix: Water

Date Received: 11/18/23 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	NWTPH-Gx		1	447337	SE8S	ELLE	11/28/23 20:06
Total/NA	Prep	3510C			448928	QKX3	ELLE	12/01/23 08:10
Total/NA	Analysis	NWTPH-Dx		1	449243	UHEW	ELLE	12/02/23 01:29
Total/NA	Prep	3510C			448924	QKX3	ELLE	12/01/23 08:06
Total/NA	Cleanup	3630C			450018	USL7	ELLE	12/05/23 01:00
Total/NA	Analysis	NWTPH-Dx		1	450932	KP5X	ELLE	12/07/23 06:40

Client Sample ID: RB-1-R-231117

Lab Sample ID: 410-151876-10

Date Collected: 11/17/23 11:34

Matrix: Water

Date Received: 11/18/23 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D/UST		1	448445	UKAD	ELLE	11/30/23 11:41
Total/NA	Analysis	NWTPH-Gx		1	447337	SE8S	ELLE	11/28/23 20:31
Total/NA	Prep	3510C			448928	QKX3	ELLE	12/01/23 08:10
Total/NA	Analysis	NWTPH-Dx		1	449243	UHEW	ELLE	12/02/23 01:52
Total/NA	Prep	3510C			448924	QKX3	ELLE	12/01/23 08:06
Total/NA	Cleanup	3630C			450018	USL7	ELLE	12/05/23 01:00
Total/NA	Analysis	NWTPH-Dx		1	450932	KP5X	ELLE	12/07/23 07:03
Total/NA	Prep	3510C			451914	QJZ6	ELLE	12/08/23 15:16
Total/NA	Cleanup	3630C			452225	USL7	ELLE	12/11/23 04:40
Total/NA	Analysis	NWTPH-Dx		1	452415	IUSB	ELLE	12/11/23 13:32

Client Sample ID: MW-25-W-231116

Lab Sample ID: 410-151876-11

Date Collected: 11/16/23 09:25

Matrix: Water

Date Received: 11/18/23 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D/UST		1	448049	UKAD	ELLE	11/29/23 21:49
Total/NA	Analysis	NWTPH-Gx		1	447337	SE8S	ELLE	11/28/23 20:57

Lab Chronicle

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151876-1

Client Sample ID: MW-25-W-231116

Lab Sample ID: 410-151876-11

Date Collected: 11/16/23 09:25

Matrix: Water

Date Received: 11/18/23 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3510C			448723	T9CY	ELLE	11/30/23 15:33
Total/NA	Cleanup	3630C			450001	K2IL	ELLE	12/04/23 19:30
Total/NA	Analysis	NWTPH-Dx		1	450931	KP5X	ELLE	12/07/23 05:30
Total/NA	Prep	3510C			448722	T9CY	ELLE	11/30/23 15:28
Total/NA	Analysis	NWTPH-Dx		1	449247	UHEW	ELLE	12/02/23 01:06

Client Sample ID: D-10-W-231116

Lab Sample ID: 410-151876-12

Date Collected: 11/16/23 10:25

Matrix: Water

Date Received: 11/18/23 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D/UST		1	448049	UKAD	ELLE	11/29/23 22:12
Total/NA	Analysis	NWTPH-Gx		1	447337	SE8S	ELLE	11/28/23 21:22
Total/NA	Prep	3510C			448723	T9CY	ELLE	11/30/23 15:33
Total/NA	Cleanup	3630C			450001	K2IL	ELLE	12/04/23 19:30
Total/NA	Analysis	NWTPH-Dx		1	450931	KP5X	ELLE	12/07/23 05:54
Total/NA	Prep	3510C			448722	T9CY	ELLE	11/30/23 15:28
Total/NA	Analysis	NWTPH-Dx		1	449247	UHEW	ELLE	12/02/23 01:29

Client Sample ID: D-7-W-231116

Lab Sample ID: 410-151876-13

Date Collected: 11/16/23 11:40

Matrix: Water

Date Received: 11/18/23 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D/UST		1	448049	UKAD	ELLE	11/29/23 22:36
Total/NA	Analysis	NWTPH-Gx		1	447337	SE8S	ELLE	11/28/23 21:48
Total/NA	Prep	3510C			448723	T9CY	ELLE	11/30/23 15:33
Total/NA	Cleanup	3630C			450001	K2IL	ELLE	12/04/23 19:30
Total/NA	Analysis	NWTPH-Dx		1	450931	KP5X	ELLE	12/07/23 06:17
Total/NA	Prep	3510C			448722	T9CY	ELLE	11/30/23 15:28
Total/NA	Analysis	NWTPH-Dx		1	449247	UHEW	ELLE	12/02/23 01:52

Client Sample ID: MW-22-W-231116

Lab Sample ID: 410-151876-14

Date Collected: 11/16/23 12:40

Matrix: Water

Date Received: 11/18/23 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D/UST		1	448049	UKAD	ELLE	11/29/23 23:00
Total/NA	Analysis	NWTPH-Gx		1	447337	SE8S	ELLE	11/28/23 22:13
Total/NA	Prep	3510C			448723	T9CY	ELLE	11/30/23 15:33
Total/NA	Cleanup	3630C			450001	K2IL	ELLE	12/04/23 19:30
Total/NA	Analysis	NWTPH-Dx		1	450931	KP5X	ELLE	12/07/23 06:40
Total/NA	Prep	3510C			448722	T9CY	ELLE	11/30/23 15:28
Total/NA	Analysis	NWTPH-Dx		1	449247	UHEW	ELLE	12/02/23 03:01

Lab Chronicle

Client: AECOM

Job ID: 410-151876-1

Project/Site: CEMREC Legacy Sites – Tacoma

Client Sample ID: D-06-W-231116

Lab Sample ID: 410-151876-15

Date Collected: 11/16/23 14:25

Matrix: Water

Date Received: 11/18/23 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D/UST		1	448049	UKAD	ELLE	11/29/23 23:23
Total/NA	Analysis	NWTPH-Gx		1	447337	SE8S	ELLE	11/28/23 22:39
Total/NA	Prep	3510C			448723	T9CY	ELLE	11/30/23 15:33
Total/NA	Cleanup	3630C			450001	K2IL	ELLE	12/04/23 19:30
Total/NA	Analysis	NWTPH-Dx		1	450931	KP5X	ELLE	12/07/23 07:03
Total/NA	Prep	3510C			448722	T9CY	ELLE	11/30/23 15:28
Total/NA	Analysis	NWTPH-Dx		1	449247	UHEW	ELLE	12/02/23 02:15
Total/NA	Prep	3510C			451387	QJZ6	ELLE	12/07/23 15:43
Total/NA	Cleanup	3630C			451524	USL7	ELLE	12/08/23 00:38
Total/NA	Analysis	NWTPH-Dx		1	451978	IUSB	ELLE	12/09/23 03:47

Client Sample ID: MW-18-W-231116

Lab Sample ID: 410-151876-16

Date Collected: 11/16/23 15:28

Matrix: Water

Date Received: 11/18/23 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D/UST		1	448049	UKAD	ELLE	11/29/23 23:47
Total/NA	Analysis	NWTPH-Gx		1	447337	SE8S	ELLE	11/28/23 23:04
Total/NA	Prep	3510C			448723	T9CY	ELLE	11/30/23 15:33
Total/NA	Cleanup	3630C			450001	K2IL	ELLE	12/04/23 19:30
Total/NA	Analysis	NWTPH-Dx		1	450931	KP5X	ELLE	12/07/23 07:26
Total/NA	Prep	3510C			448722	T9CY	ELLE	11/30/23 15:28
Total/NA	Analysis	NWTPH-Dx		1	449247	UHEW	ELLE	12/02/23 02:38

Client Sample ID: DUP-1-WD-231116

Lab Sample ID: 410-151876-17

Date Collected: 11/16/23 12:10

Matrix: Water

Date Received: 11/18/23 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D/UST		1	448049	UKAD	ELLE	11/30/23 00:11
Total/NA	Analysis	NWTPH-Gx		10	448447	SE8S	ELLE	11/30/23 15:00
Total/NA	Prep	3510C			448723	T9CY	ELLE	11/30/23 15:33
Total/NA	Cleanup	3630C			450001	K2IL	ELLE	12/04/23 19:30
Total/NA	Analysis	NWTPH-Dx		1	450931	KP5X	ELLE	12/07/23 07:49
Total/NA	Prep	3510C			448722	T9CY	ELLE	11/30/23 15:28
Total/NA	Analysis	NWTPH-Dx		1	449247	UHEW	ELLE	12/02/23 03:24

Client Sample ID: DUP-2-WD-231117

Lab Sample ID: 410-151876-18

Date Collected: 11/17/23 09:30

Matrix: Water

Date Received: 11/18/23 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D/UST		1	448445	UKAD	ELLE	11/30/23 13:41
Total/NA	Analysis	NWTPH-Gx		10	448447	SE8S	ELLE	11/30/23 15:26

Eurofins Lancaster Laboratories Environment Testing, LLC

Lab Chronicle

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151876-1

Client Sample ID: DUP-2-WD-231117

Lab Sample ID: 410-151876-18

Date Collected: 11/17/23 09:30

Matrix: Water

Date Received: 11/18/23 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3510C			448928	QKX3	ELLE	12/01/23 08:10
Total/NA	Analysis	NWTPH-Dx		1	449243	UHEW	ELLE	12/02/23 02:15
Total/NA	Prep	3510C			448924	QKX3	ELLE	12/01/23 08:06
Total/NA	Cleanup	3630C			450018	USL7	ELLE	12/05/23 01:00
Total/NA	Analysis	NWTPH-Dx		1	450932	KP5X	ELLE	12/07/23 07:26
Total/NA	Prep	3510C			451914	QJZ6	ELLE	12/08/23 15:16
Total/NA	Cleanup	3630C			452225	USL7	ELLE	12/11/23 04:40
Total/NA	Analysis	NWTPH-Dx		1	452415	IUSB	ELLE	12/11/23 13:55

Client Sample ID: MW-13-W-231117

Lab Sample ID: 410-151876-19

Date Collected: 11/17/23 09:15

Matrix: Water

Date Received: 11/18/23 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D/UST		1	448445	UKAD	ELLE	11/30/23 14:05
Total/NA	Analysis	NWTPH-Gx		5	448447	SE8S	ELLE	11/30/23 15:51
Total/NA	Prep	3510C			448928	QKX3	ELLE	12/01/23 08:10
Total/NA	Analysis	NWTPH-Dx		1	449243	UHEW	ELLE	12/02/23 02:38
Total/NA	Prep	3510C			448924	QKX3	ELLE	12/01/23 08:06
Total/NA	Cleanup	3630C			450018	USL7	ELLE	12/05/23 01:00
Total/NA	Analysis	NWTPH-Dx		1	450932	KP5X	ELLE	12/07/23 07:49
Total/NA	Prep	3510C			451914	QJZ6	ELLE	12/08/23 15:16
Total/NA	Cleanup	3630C			452225	USL7	ELLE	12/11/23 04:40
Total/NA	Analysis	NWTPH-Dx		1	452415	IUSB	ELLE	12/11/23 14:18

Client Sample ID: D-01-W-231117

Lab Sample ID: 410-151876-20

Date Collected: 11/17/23 10:10

Matrix: Water

Date Received: 11/18/23 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D/UST		1	448445	UKAD	ELLE	11/30/23 14:29
Total/NA	Analysis	NWTPH-Gx		10	448447	SE8S	ELLE	11/30/23 16:17
Total/NA	Prep	3510C			448928	QKX3	ELLE	12/01/23 08:10
Total/NA	Analysis	NWTPH-Dx		1	449243	UHEW	ELLE	12/02/23 03:01
Total/NA	Prep	3510C			448924	QKX3	ELLE	12/01/23 08:06
Total/NA	Cleanup	3630C			450018	USL7	ELLE	12/05/23 01:00
Total/NA	Analysis	NWTPH-Dx		1	450932	KP5X	ELLE	12/07/23 08:12
Total/NA	Prep	3510C			451914	QJZ6	ELLE	12/08/23 15:16
Total/NA	Cleanup	3630C			452225	USL7	ELLE	12/11/23 04:40
Total/NA	Analysis	NWTPH-Dx		1	452415	IUSB	ELLE	12/11/23 14:41

Lab Chronicle

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151876-1

Client Sample ID: TB-4-T-231117

Lab Sample ID: 410-151876-21

Date Collected: 10/26/23 00:00

Matrix: Water

Date Received: 11/18/23 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D/UST		1	446440	UKAD	ELLE	11/22/23 16:47
Total/NA	Analysis	NWTPH-Gx		1	445905	SE8S	ELLE	11/21/23 14:52

Client Sample ID: TB-3-T-231117

Lab Sample ID: 410-151876-22

Date Collected: 10/26/23 00:00

Matrix: Water

Date Received: 11/18/23 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D/UST		1	446440	UKAD	ELLE	11/22/23 17:10
Total/NA	Analysis	NWTPH-Gx		1	445905	SE8S	ELLE	11/21/23 15:17

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: AECOM
Project/Site: CEMREC Legacy Sites – Tacoma

Job ID: 410-151876-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Washington	State	C457	04-11-24

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Method Summary

Client: AECOM

Job ID: 410-151876-1

Project/Site: CEMREC Legacy Sites – Tacoma

Method	Method Description	Protocol	Laboratory
8260D/UST	Volatile Organic Compounds by GC/MS	SW846	ELLE
NWTPH-Gx	Northwest - Volatile Petroleum Products (GC)	NWTPH	ELLE
NWTPH-Dx	Northwest - Semi-Volatile Petroleum Products (GC)	NWTPH	ELLE
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	ELLE
3630C	Silica Gel Cleanup	SW846	ELLE
5030C	Purge and Trap	SW846	ELLE

Protocol References:

NWTPH = Northwest Total Petroleum Hydrocarbon

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Sample Summary

Client: AECOM

Job ID: 410-151876-1

Project/Site: CEMREC Legacy Sites – Tacoma

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
410-151876-1	D-22-W-231116	Water	11/16/23 09:35	11/18/23 10:00
410-151876-2	MW-34-W-231116	Water	11/16/23 10:36	11/18/23 10:00
410-151876-3	MW-21-W-231116	Water	11/16/23 12:05	11/18/23 10:00
410-151876-4	MW-32-W-231116	Water	11/16/23 14:09	11/18/23 10:00
410-151876-5	D-03A-W-231116	Water	11/16/23 13:07	11/18/23 10:00
410-151876-6	MW-14-W-231116	Water	11/16/23 15:15	11/18/23 10:00
410-151876-7	MW-19-W-231117	Water	11/17/23 09:10	11/18/23 10:00
410-151876-8	D-14-W-231117	Water	11/17/23 10:15	11/18/23 10:00
410-151876-9	FB-1-O-231117	Water	11/17/23 11:24	11/18/23 10:00
410-151876-10	RB-1-R-231117	Water	11/17/23 11:34	11/18/23 10:00
410-151876-11	MW-25-W-231116	Water	11/16/23 09:25	11/18/23 10:00
410-151876-12	D-10-W-231116	Water	11/16/23 10:25	11/18/23 10:00
410-151876-13	D-7-W-231116	Water	11/16/23 11:40	11/18/23 10:00
410-151876-14	MW-22-W-231116	Water	11/16/23 12:40	11/18/23 10:00
410-151876-15	D-06-W-231116	Water	11/16/23 14:25	11/18/23 10:00
410-151876-16	MW-18-W-231116	Water	11/16/23 15:28	11/18/23 10:00
410-151876-17	DUP-1-WD-231116	Water	11/16/23 12:10	11/18/23 10:00
410-151876-18	DUP-2-WD-231117	Water	11/17/23 09:30	11/18/23 10:00
410-151876-19	MW-13-W-231117	Water	11/17/23 09:15	11/18/23 10:00
410-151876-20	D-01-W-231117	Water	11/17/23 10:10	11/18/23 10:00
410-151876-21	TB-4-T-231117	Water	10/26/23 00:00	11/18/23 10:00
410-151876-22	TB-3-T-231117	Water	10/26/23 00:00	11/18/23 10:00

Eurofins

2425 New Hol
Lancaster, P
Phone 717-61



Chain of Custody Record

eurofins

Environment Testing

Client Info: Client Contact: Mr. Bradley Wynne Company: AECOM Address: 13355 Noel Road Suite 400 City: Dallas State, Zip: TX, 75240 Phone: 972-735-7068(Tel) Email: bradley.wynne@aecom.com Project Name: CEMREC Legacy Sites - Tacoma Site:		410-151876 Chain of Custody		Lab PM: Carter, Amek E-Mail: Loran.Carter@et.eurofinsus.com	Carrier Tracking No(s):	COC No: 410-101297-22634.3 Page: 8 of 10 of 3
Due Date Requested:		TAT Requested (days):		Analysis Requested		
Compliance Project: ☐ Yes ☐ No		PO #: 152363		Preservation Codes:		
WO #: 60701804		Project #: 41014252		A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Y - Trizma Z - other (specify)		
SSOW#:		Field Filtered Sample (Yes or No)		Total Number of containers		
Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oli, BT=biological, A=air)	Perform MS/MSD (Yes or No)	Special Instructions/Note:
					NWTPH_Dx - NWTPH-Gx NWTPH_Gx - NWTPH-Gx BTEX/MTBE NWTPH_Dx - NWTPH-Dx	
AW-29-W-231115	11/15/23	1138	G	W	Y	
D-22-W-231116	11/16/23	935	G	W		
MW-34-W-231116		1030	G	W	Y	
MW-21-W-231116		1305	G	W		
MW-32-W-231116		1409	G	W		
D-03A-W-231116		1307	G	W		
MW-14-W-231116		1515	G	W		
MW-19-W-231117	11/17/23	910	G	W		
D-14-W-231117		1015	G	W		
FB-1-F-231117		1124				5 Field Blank
RB-1-R-231117		1134				8 Rinsak Blank
Possible Hazard Identification ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological				Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months		
Deliverable Requested: I, II, III, IV, Other (specify)				Special Instructions/QC Requirements:		
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:
Relinquished by: <i>[Signature]</i>		Date/Time: 11/17/23 1210		Company: AECOM		Received by: <i>[Signature]</i>
Relinquished by:		Date/Time:		Company:		Received by:
Relinquished by:		Date/Time:		Company:		Received by: <i>[Signature]</i>
Custody Seals Intact: ☐ Yes ☐ No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 1.9/1.9 0.3/0.3		

Eurofins Lancaster Laboratories Environme

2425 New Holland Pike

Lancaster, PA 17601

Phone 717-656-2300 Fax: 717-656-2681

Chain of Custody Record



Environment Testing

Client Information		Sampler: <u>SC, LC</u>		Lab PM: Carter, Amek		Carrier Tracking No(s):		COC No: 410-101297-22634.2																																				
Client Contact: Mr. Bradley Wynne		Phone:		E-Mail: Loran.Carter@et.eurofinsus.com		State of Origin:		Page: <u>2 of 3</u>																																				
Company: AECOM		PWSID:		Analysis Requested																																								
Address: 13355 Noel Road Suite 400		Due Date Requested:		<table border="1"> <tr> <th>Field Filtered Sample (Yes or No)</th> <th>Perform MS/MSD (Yes or No)</th> <th>NWTPH_Dx - NWTPH-Gx</th> <th>NWTPH_Gx - NWTPH-Gx</th> <th>8260D_UST - BTEX/MTBE</th> <th>NWTPH_Dx - NWTPH-Dx</th> <th>Total Number of Containers</th> </tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>						Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	NWTPH_Dx - NWTPH-Gx	NWTPH_Gx - NWTPH-Gx	8260D_UST - BTEX/MTBE	NWTPH_Dx - NWTPH-Dx	Total Number of Containers																												
Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	NWTPH_Dx - NWTPH-Gx	NWTPH_Gx - NWTPH-Gx							8260D_UST - BTEX/MTBE	NWTPH_Dx - NWTPH-Dx	Total Number of Containers																																
City: Dallas		TAT Requested (days):																																										
State, Zip: TX, 75240		Compliance Project: ☐ Yes ☐ No																																										
Phone: 972-735-7068(Tel)		PO #: 152363																																										
Email: bradley.wynne@aecom.com		WO #: 60701804		Preservation Codes: A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Y - Trizma Z - other (specify)																																								
Project Name: CEMREC Legacy Sites - Tacoma		Project #: 41014252																																										
Site:		SSOW#:																																										
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/soil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		NWTPH_Dx - NWTPH-Gx		NWTPH_Gx - NWTPH-Gx		8260D_UST - BTEX/MTBE		NWTPH_Dx - NWTPH-Dx		Total Number of Containers		Special Instructions/Note:																								
				Preservation Code:																																								
MW-25-W-231116		11/16/23	0925	G	W																																							
D-10-W-231116			1025																																									
D-07-W-231116			1140																																									
MW-22-W-231116			1240																																									
D-06-W-231116			1425																																									
MW-18-W-231116			1528																																									
DVP-1-WD-231116		11/16/23	1210	G	W																																							
DVP-2-WD-231117		11/17/23	0930	G	W																																							
MW-13-W-231117		11/17/23	0915	G	W																																							
D-01-W-231117		11/17/23	1010	G	W																																							
Possible Hazard Identification		☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological				Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months																																						
Deliverable Requested: I, II, III, IV, Other (specify)						Special Instructions/QC Requirements:																																						
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:																																						
Relinquished by: <u>ASCOM</u>		Date/Time: 11/17/23 1210		Company: ASCOM		Received by:		Date/Time:		Company:																																		
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:																																		
Relinquished by:		Date/Time:		Company:		Received by: <u>EUET</u>		Date/Time: 11/18/23 100		Company:																																		
Custody Seals Intact: ☐ Yes ☐ No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: <u>1.9/1.9 0.3/0.3</u>																																								

Eurofins Environmental Testing
America

12/12/2023

Login Sample Receipt Checklist

Client: AECOM

Job Number: 410-151876-1

Login Number: 151876

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

List Number: 1

Creator: McCaskey, Jonathan

Question	Answer	Comment
The cooler's custody seal is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable, where thermal pres is required ($\leq 6^{\circ}\text{C}$, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temp acceptable, where thermal pres is required ($\leq 6^{\circ}\text{C}$, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	True	
Sample custody seals are intact.	True	
VOA sample vials do not have headspace $> 6\text{mm}$ in diameter (none, if from WV)?	False	Headspace greater than 6mm in diameter in some but not all containers

Appendix C

Summary Data Quality Review

Memorandum

To	Brad Wynne, Project Manager	Info	FINAL
Subject	Summary Data Quality Review Chevron Environmental Management Company (CEMC) Legacy Sites – Tacoma Terminal 2023 4 th Quarter Groundwater Sampling		
From	Christina Wheeler, Chemist Lucy Panteleeff, Chemist		
Date	February 12, 2024		

The summary data quality review of 44 groundwater samples, 4 trip blanks, 1 rinsate blank, and 1 field blank collected between November 13th and November 17th, 2023, has been completed. The samples were analyzed at Eurofins Lancaster Laboratories Environmental (ELLE) located in Lancaster, Pennsylvania, for selected volatile organic compounds (VOCs; benzene, ethylbenzene, toluene, methyl tertiary butyl ether [MTBE], and total xylenes) by EPA Method 8260D; total petroleum hydrocarbons (TPHs) by Washington State Department of Ecology Methods NWTPH-Gx (gasoline-range TPH, carbon range C7-C12) and NWTPH-Dx (diesel-range and oil-range TPHs, carbon ranges C12-C24 and C24-C40, respectively). The laboratory reported both non-silica gel treated, and silica gel treated (SGT) results for all samples except MW-38-W-231115, MW-23-W-231114, and MW-36-W-231115. Diesel-range and oil-range TPHs were not detected in MW-38-W-231115, MW-23-W-231114, and MW-36-W-231115; therefore, SGT results were not necessary. The laboratory provided summary reports containing sample results and associated quality assurance (QA) and quality control (QC) data for all samples. For this report, the sample identifications (IDs) do not include the sample matrix and date suffixes (e.g. W-231113), unless required for clarity. The following samples are associated with ELLE laboratory groups 410-151795-1 and 410-151876-1:

Sample ID	Laboratory Group	Laboratory ID	Analyses
MW-10-W-231113	410-151795-1	410-151795-1	VOCs, TPHs
MW-26-W-231114		410-151795-2	VOCs, TPHs
D-17-W-231114		410-151795-3	VOCs, TPHs
MW-11-W-231114		410-151795-4	VOCs, TPHs
D-19-W-231114		410-151795-5	VOCs, TPHs
MW-31-W-231114		410-151795-6	VOCs, TPHs
MW-12-W-231114		410-151795-7	VOCs, TPHs
D-08-W-231114		410-151795-8	VOCs, TPHs
MW-38-W-231115		410-151795-9	VOCs, TPHs
D-26-W-231115		410-151795-10	VOCs, TPHs
D-24-W-231115		410-151795-11	VOCs, TPHs
D-18-W-231114		410-151795-12	VOCs, TPHs
MW-30-W-231114		410-151795-13	VOCs, TPHs
D-09-W-231114		410-151795-14	VOCs, TPHs
MW-24-W-231114		410-151795-15	VOCs, TPHs
D-02A-W-231114		410-151795-16	VOCs, TPHs
MW-23-W-231114		410-151795-17	VOCs, TPHs
D-27-W-231115		410-151795-18	VOCs, TPHs
MW-39-W-231115		410-151795-19	VOCs, TPHs
RMW-01-W-231115		410-151795-20	VOCs, TPHs



Summary Data Quality Review
CEMREC Legacy Sites – Tacoma
2023 4th Quarter Groundwater Sampling
ELLE Laboratory Groups: 410-151795-1 and 410-151876-1

Sample ID	Laboratory Group	Laboratory ID	Analyses
D-12-W-231115	410-151795-1	410-151795-21	VOCs, TPHs
D-15-W-231115		410-151795-22	VOCs, TPHs
MW-36-W-231115		410-151795-23	VOCs, TPHs
MW-37-W-231115		410-151795-24	VOCs, TPHs
D-25-W-231115		410-151795-25	VOCs, TPHs
TB-1-T-231115 (trip blank)		410-151795-26	VOCs, Gasoline-range TPH
MW-29-W-231115		410-151795-27	VOCs, TPHs
TB2-T-231115 (trip blank)		410-151795-28	VOCs, Gasoline-range TPH
D-22-W-231116	410-151876-1	410-151876-1	VOCs, TPHs
MW-34-W-231116		410-151876-2	VOCs, TPHs
MW-21-W-231116		410-151876-3	VOCs, TPHs
MW-32-W-231116		410-151876-4	VOCs, TPHs
D-03A-W-231116		410-151876-5	VOCs, TPHs
MW-14-W-231116		410-151876-6	VOCs, TPHs
MW-19-W-231117		410-151876-7	VOCs, TPHs
D-14-W-231117		410-151876-8	VOCs, TPHs
FB-1-O-231117 (field blank)		410-151876-9	TPHs
RB-1-R-231117 (rinsate blank)		410-151876-10	VOCs, TPHs
MW-25-W-231116		410-151876-11	VOCs, TPHs
D-10-W-231116		410-151876-12	VOCs, TPHs
D-7-W-231116		410-151876-13	VOCs, TPHs
MW-22-W-231116		410-151876-14	VOCs, TPHs
D-06-W-231116		410-151876-15	VOCs, TPHs
MW-18-W-231116		410-151876-16	VOCs, TPHs
DUP-1-WD-231116 (Field duplicate of MW-22-W-231116)		410-151876-17	VOCs, TPHs
DUP-2-WD-231117 (Field duplicate of D-01-W-231117)		410-151876-18	VOCs, TPHs
MW-13-W-231117		410-151876-19	VOCs, TPHs
D-01-W-231117		410-151876-20	VOCs, TPHs
TB-4-T-231117 (trip blank)		410-151876-21	VOCs, Gasoline-range TPH
TB-3-T-231117 (trip blank)		410-151876-22	VOCs, Gasoline-range TPH

Data were evaluated based on validation criteria established in the *National Functional Guidelines for Organic Superfund Methods Data Review*, November 2020, as applied to the reported methodology.

The following data components were reviewed during the limited data validation procedure for compliance with method-specific or laboratory control charted criteria where appropriate: chain of custody forms, holding times, method/trip/instrument blanks, surrogate recoveries, matrix spike/matrix spike duplicate recoveries, laboratory and field duplicate results, laboratory control sample/laboratory control sample duplicate recoveries, reporting limits, and electronic data deliverables.

A summary of qualifiers that may be assigned to results in these laboratory groups is included in Table 1. Qualifiers that may be assigned to results include:

Summary Data Quality Review

CEMREC Legacy Sites – Tacoma

2023 4th Quarter Groundwater Sampling

ELLE Laboratory Groups: 410-151795-1 and 410-151876-1

- U - The analyte was analyzed for but was not detected above the reported sample quantitation limit.
- J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R - The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.
- DNR - Do Not Report. Another result is available that is more reliable or appropriate.

Multiple results in samples reported in these laboratory groups were flagged “cn” by the laboratory to indicate QC outliers associated with the results that are discussed in the case narrative. The ELLE laboratory information management system has been programmed to add the “cn” flag to all results in a batch or otherwise associated with QC outliers, regardless of whether the results were impacted by the QC outliers. All QC parameters indicated above were reviewed for all samples, where applicable, and data validation qualifiers were assigned when required.

Sample Receipt

Upon receipt by the laboratory, the cooler temperatures were recorded, and the sample container information was compared to the associated chain-of-custody (COC). Sample coolers were received at temperatures within the EPA-recommended limits of greater than 0°C and less than 6°C. The laboratory noted that several volatile organic analysis (VOA) vials contained headspace greater than 6 millimeters. Samples were not analyzed from VOA vials with headspace; therefore, no qualification was necessary.

Organic Analyses

Samples were analyzed for VOCs and TPHs by the methods identified in the introduction of this report.

1. Holding Times – Acceptable except as noted below:

VOCs by EPA Method 8260D and NWPTH-Gx – The trip blanks have sample dates of October 26, 2023, as this is the date the trip blanks were prepared by the laboratory, placed in the sample cooler, and shipped with the sample containers. Data were not qualified based on this holding time exceedance.

NWPTH-Dx-SGT – MW-11, D-19, MW-30, and MW-24 were re-extracted outside the method-recommended holding time of 14 days. The results for diesel-range TPH-SGT and oil-range TPH-SGT in MW-11, D-19, MW-30, and MW-24 were qualified as estimated and flagged ‘UJ’ based on this holding time exceedance.

2. Blanks – Acceptable except as noted below:

NWPTH-Gx – Gasoline-range TPH (49 ug/L) was detected in TB-4 at a concentration between the method detection limit (MDL) and the reporting limit. Gasoline-range TPH was detected in D-22, D-03-A, D-10, MW-22, DUP-1, and MW-13 at concentrations between the MDLs and the reporting limits; therefore, the results for gasoline-range TPH in these samples were qualified as not detected

Summary Data Quality Review
CEMREC Legacy Sites – Tacoma
2023 4th Quarter Groundwater Sampling
ELLE Laboratory Groups: 410-151795-1 and 410-151876-1

and flagged 'U' at the reporting limit based on this trip blank detection. The result for gasoline-range TPH in D-06 was one to two times the reporting limit; therefore, the result for gasoline-range TPH in D-06 was qualified as estimated and flagged 'J' based on this trip blank detection.

NWPTH-Dx – Diesel-range TPH and/or oil-range TPH were detected in the following method blanks.

Batch	Analyte	Detection (ug/L)	Flagged 'U' at the RL	Flagged 'U' at the Result
410-446264	Diesel-range TPH	45.2 J	None	None
410-447356 (re-analysis)	Diesel-range TPH-SGT	80.5 J	MW-26, D-25	None
	Oil-range TPH-SGT	337	None	MW-26
410-448167	Oil-range TPH-SGT	359	None	D-26

J – result between the MDL and RL

RL – reporting limit

Results were qualified as shown in the table above. In addition, the laboratory noted that the results for oil-range TPH-SGT in several samples were higher than for the untreated oil-range TPH results due to laboratory contamination; therefore, the results for oil-range SGT TPH in D-24 and RWM-01 were qualified 'U' at the result based on this laboratory contamination. All other results associated with this laboratory contamination were flagged for method blank contamination as shown above or due to surrogate outliers as described in Section 3.

Diesel-range TPH (59 ug/L) was detected in the rinsate blank at a concentration between the MDL and the reporting limit. Diesel-range TPH was detected in MW-31 and MW-37 at concentrations between the MDLs and the reporting limits; therefore, the results for diesel-range TPH in these samples were qualified as not detected and flagged 'U' at the reporting limits based on this rinsate blank detection. Diesel-range TPH was detected in D-17, D-26, MW-14, and MW-25 at concentrations one to two times the reporting limits. The results for diesel-range TPH in these samples were qualified as estimated and flagged 'J' based on this rinsate blank detection.

3. Surrogates – Acceptable except as noted below:

NWPTH-Dx – The percent recoveries for o-terphenyl were below the control limits of 50-150%.

Sample	Surrogate	Recovery
MW-10 (SGT)	o-Terphenyl	49%
MW-31	o-Terphenyl	34%
MW-31 (SGT)	o-Terphenyl	31%
MB (batch 410-446260)	o-Terphenyl	46%
LCS (batch 410-446260)	o-Terphenyl	47%
RB-1 (SGT)	o-Terphenyl	44%
DUP-2 (SGT)	o-Terphenyl	49%
MW-13 (SGT)	o-Terphenyl	47%
D-01 (SGT)	o-Terphenyl	35%

MB – method blank

LCS – laboratory control sample

Data are not qualified based on surrogate recoveries in quality control samples (MB and LCS). The result for diesel-range TPH in MW-31 was qualified based on rinsate blank contamination as

Summary Data Quality Review
CEMREC Legacy Sites – Tacoma
2023 4th Quarter Groundwater Sampling
ELLE Laboratory Groups: 410-151795-1 and 410-151876-1

described in Section 2; therefore, no further qualification was necessary. The results for oil-range TPH in MW-31 and diesel-range TPH-SGT and oil-range TPH-SGT in MW-10, MW-31, RB-1, DUP-2, and MW-13 were qualified as estimated and flagged 'J' or 'UJ' based on these surrogate recoveries.

4. Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) – Acceptable except as noted below:

NWPTH-Dx – The following relative percent differences (RPDs) exceeded the control limits of 20% in the following LCS/LCSDs:

Batch	Analyte	LCS	LCSD	RPD
410-447356 (re-analysis)	Diesel-range TPH	ok	ok	37%
410-447360	Diesel-range TPH	ok	ok	27%

ok - acceptable

The percent recoveries for the LCS and LCSD were acceptable; therefore, data were not qualified based on these LCS/LCSD RPDs.

5. Matrix Spike/Matrix Spike Duplicate (MS/MSD) – Acceptable

VOCs by EPA 8260D – MS/MSDs were performed using D-26 and MW-34. Results were acceptable.

NWPTH-Gx – MS/MSDs were performed using D-26 and MW-34. Results were acceptable.

NWPTH-Dx – MS/MSDs were performed using D-26 and MW-34. Results were acceptable except as noted below:

Sample ID	Analyte	MS	MSD	Control Limits
D-26	Diesel-range TPH	23%	21%	30-115%
D-26	Diesel-range TPH-SGT	28%	26%	30-115%

The result for diesel-range TPH in D-26 was qualified based on rinsate blank results as described in Section 2; therefore, no further qualification was necessary. The result for diesel-range TPH-SGT in D-26 was qualified as estimated and flagged 'UJ' based on these MS/MSD recoveries.

6. Laboratory Duplicate (applicable to NWPTH-Dx analysis only) – Acceptable

NWPTH-Dx – Laboratory duplicates were performed using MW-10, D-25, MW-29, MW-19, MW-14, and D-22. Results were comparable.

NWPTH-Dx-SGT – Laboratory duplicates were performed using D-25, MW-29, MW-19, MW-14; and D-22. Results were comparable.

7. Field Duplicates – Acceptable

General – Field duplicates were submitted for MW-22 and D-01 and identified as DUP-1 and DUP-2, respectively. An RPD limit of 30% was used to evaluate results greater than five times the reporting limit. Results were comparable.

8. Reporting Limits – Acceptable except as noted below:

General – One or more results in multiple samples were flagged 'J' by the laboratory to indicate the reported concentrations were above the MDLs but below the laboratory reporting limits. Laboratory



Summary Data Quality Review
CEMREC Legacy Sites – Tacoma
2023 4th Quarter Groundwater Sampling
ELLE Laboratory Groups: 410-151795-1 and 410-151876-1

'J'-flagged results are considered estimated. As the results are between the MDLs and the reporting limits, there are greater levels of uncertainty associated with the numerical results.

NWPTH-Gx – MW-31, DUP-1, DUP-2, MW-13, and D-01 were diluted due to foaming at the time of the initial sample analysis. Reporting limits are elevated due to dilution.

9. Other Items of Note:
The laboratory inadvertently reported NWTPH-Dx results in the electronic data deliverable (EDD) that were not reported in the final report. These results were flagged 'DNR' for "Do Not Report" in the database to clarify the reported results.

Overall Assessment of Data

The data reported in these laboratory groups, as qualified, are usable for meeting project objectives. The completeness for Eurofins Lancaster laboratory groups 410-151795-1 and 410-151876-1 is 100%.

Summary Data Quality Review
CEMREC Legacy Sites - Tacoma
2023 4th Quarter Groundwater Sampling
Eurofins Lancaster Laboratory Groups: 410-151795-1 and 410-151876-1

Table 1 - Summary of Qualified Data

Sample ID	Laboratory ID	Method	Analyte	Laboratory Result	Units	Final Result	Reason Code
MW-10-W-231113	410-151795-1	NWTPH-DX	DRO C12-C24 SGT	46 U	ug/L	46 UJ	SU2
MW-10-W-231113	410-151795-1	NWTPH-DX	HRO C24-C40 SGT	100 U	ug/L	100 UJ	SU2
MW-26-W-231114	410-151795-2	NWTPH-DX	DRO C12-C24 SGT	90 J	ug/L	100 U	BL4
MW-26-W-231114	410-151795-2	NWTPH-DX	HRO C24-C40 SGT	330	ug/L	330 U	BL4
D-17-W-231114	410-151795-3	NWTPH-DX	Diesel C12-C24	180	ug/L	180 J	BL1
MW-11-W-231114	410-151795-4	NWTPH-DX	DRO C12-C24 SGT	46 U	ug/L	46 UJ	SC3
MW-11-W-231114	410-151795-4	NWTPH-DX	HRO C24-C40 SGT	100 U	ug/L	100 UJ	SC3
D-19-W-231114	410-151795-5	NWTPH-DX	DRO C12-C24 SGT	46 U	ug/L	46 UJ	SC3
D-19-W-231114	410-151795-5	NWTPH-DX	HRO C24-C40 SGT	100 U	ug/L	100 UJ	SC3
MW-31-W-231114	410-151795-6	NWTPH-DX	Diesel C12-C24	71 J	ug/L	100 U	BL1
MW-31-W-231114	410-151795-6	NWTPH-DX	PHRO C24-C40	100 U	ug/L	100 UJ	SU2
MW-31-W-231114	410-151795-6	NWTPH-DX	DRO C12-C24 SGT	46	ug/L	46 UJ	SU2
MW-31-W-231114	410-151795-6	NWTPH-DX	HRO C24-C40 SGT	100 U	ug/L	100 UJ	SU2
D-26-W-231115	410-151795-10	NWTPH-DX	Diesel C12-C24	170	ug/L	170 J	BL1
D-26-W-231115	410-151795-10	NWTPH-DX	DRO C12-C24 SGT	46 U	ug/L	46 UJ	MD2
D-26-W-231115	410-151795-10	NWTPH-DX	HRO C24-C40 SGT	250	ug/L	250 U	BL4
D-24-W-231115	410-151795-11	NWTPH-DX	HRO C24-C40 SGT	400	ug/L	400 U	BL4
MW-30-W-231114	410-151795-13	NWTPH-DX	DRO C12-C24 SGT	46 U	ug/L	46 UJ	SC3
MW-30-W-231114	410-151795-13	NWTPH-DX	HRO C24-C40 SGT	100 U	ug/L	100 UJ	SC3
MW-24-W-231114	410-151795-15	NWTPH-DX	DRO C12-C24 SGT	46 U	ug/L	46 UJ	SC3
MW-24-W-231114	410-151795-15	NWTPH-DX	HRO C24-C40 SGT	100 U	ug/L	100 UJ	SC3
RMW-01-W-231115	410-151795-20	NWTPH-DX	HRO C24-C40 SGT	1000	ug/L	1000 U	BL4
MW-37-W-231115	410-151795-24	NWTPH-DX	Diesel C12-C24	73 J	ug/L	100 U	BL1
D-25-W-231115	410-151795-25	NWTPH-DX	DRO C12-C24 SGT	64 J	ug/L	64 U	BL4
D-22-W-231116	410-151876-1	NWTPH-GX	C7-C12 Petroleum Hydrocarbons	72 J	ug/L	250 U	BL3
D-03A-W-231116	410-151876-5	NWTPH-GX	C7-C12 Petroleum Hydrocarbons	49 J	ug/L	250 U	BL3
MW-14-W-231116	410-151876-6	NWTPH-DX	Diesel C12-C24	170	ug/L	170 J	BL1
RB-1-R-231117	410-151876-10	NWTPH-DX	DRO C12-C24 SGT	46 U	ug/L	46 UJ	SU2
RB-1-R-231117	410-151876-10	NWTPH-DX	HRO C24-C40 SGT	100 U	ug/L	100 UJ	SU2
MW-25-W-231116	410-151876-11	NWTPH-DX	Diesel C12-C24	150	ug/L	150 J	BL1
D-10-W-231116	410-151876-12	NWTPH-GX	C7-C12 Petroleum Hydrocarbons	93 J	ug/L	250 U	BL3
MW-22-W-231116	410-151876-14	NWTPH-GX	C7-C12 Petroleum Hydrocarbons	76 J	ug/L	250 U	BL3
D-06-W-231116	410-151876-15	NWTPH-GX	C7-C12 Petroleum Hydrocarbons	250	ug/L	250 J	BL3
DUP-1-WD-231116	410-151876-17	NWTPH-GX	C7-C12 Petroleum Hydrocarbons	660 J	ug/L	2500 U	BL3
DUP-2-WD-231117	410-151876-18	NWTPH-DX	DRO C12-C24 SGT	47 U	ug/L	47 UJ	SU2
DUP-2-WD-231117	410-151876-18	NWTPH-DX	HRO C24-C40 SGT	100 U	ug/L	100 UJ	SU2
MW-13-W-231117	410-151876-19	NWTPH-DX	DRO C12-C24 SGT	46 U	ug/L	46 UJ	SU2
MW-13-W-231117	410-151876-19	NWTPH-DX	HRO C24-C40 SGT	100 U	ug/L	100 UJ	SU2
MW-13-W-231117	410-151876-19	NWTPH-GX	C7-C12 Petroleum Hydrocarbons	220 J	ug/L	1300 U	BL3
D-01-W-231117	410-151876-20	NWTPH-DX	DRO C12-C24 SGT	52 J	ug/L	52 J	SU2
D-01-W-231117	410-151876-20	NWTPH-DX	HRO C24-C40 SGT	920	ug/L	920 J	SU2

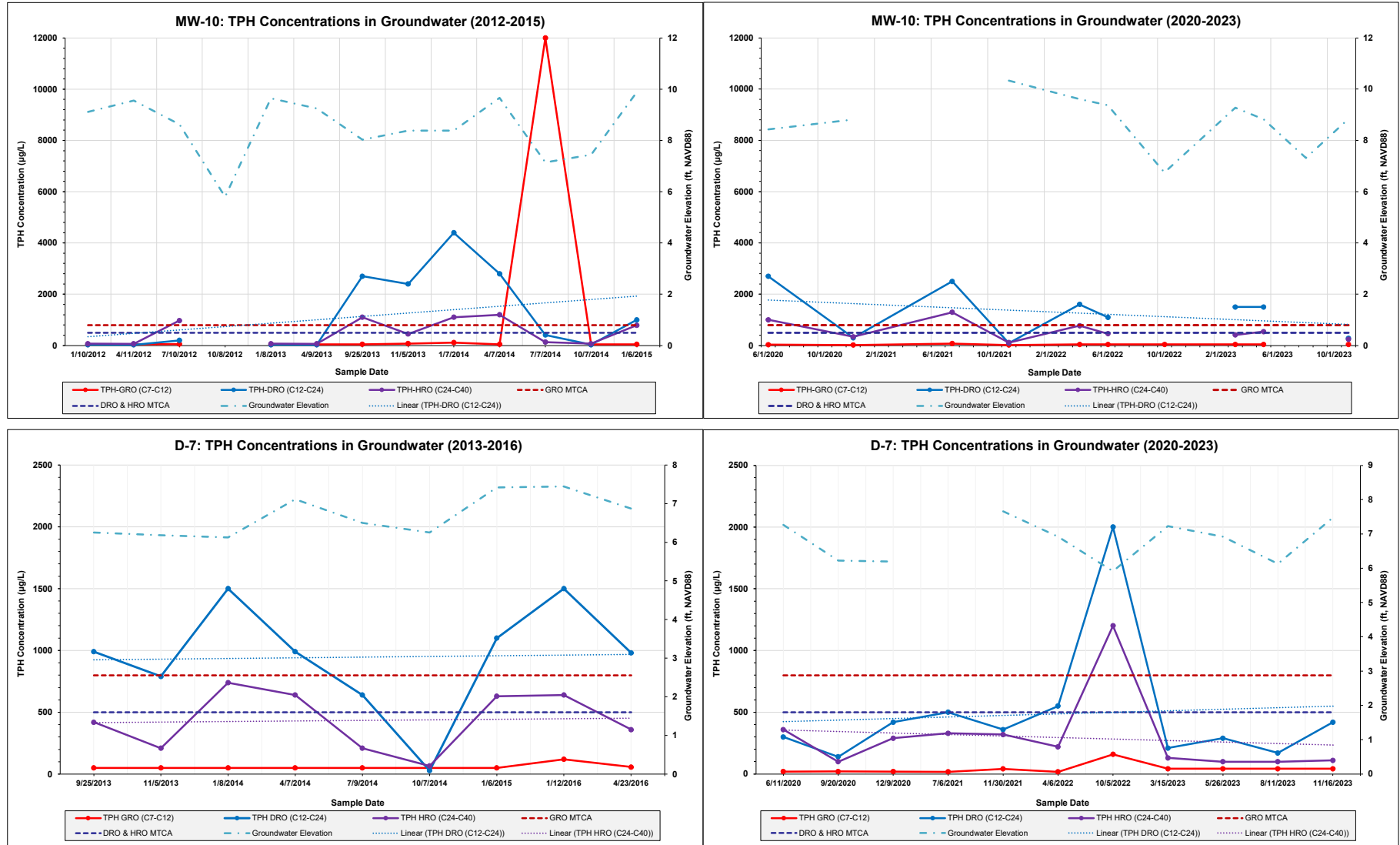
Notes:

- BL1 - Result less than some multiple of that found in field, trip, or rinsate blank.
BL4 - Result less than some multiple of that found in method blank.
J - estimated value
MD2 - Matrix spike recovery criteria less than the lower control limit.
SC1 - Analysis holding time exceeded.
SC3 - Extraction holding time exceeded.
SGT - silica gel treated
SU2 - Surrogate recovery below lower acceptance limit.
U - analyte was not detected above the quantitation limit shown
ug/L - microgram per liter
UJ - analyte was not detected above the quantitation limit shown; the quantitation limit is an estimated value.

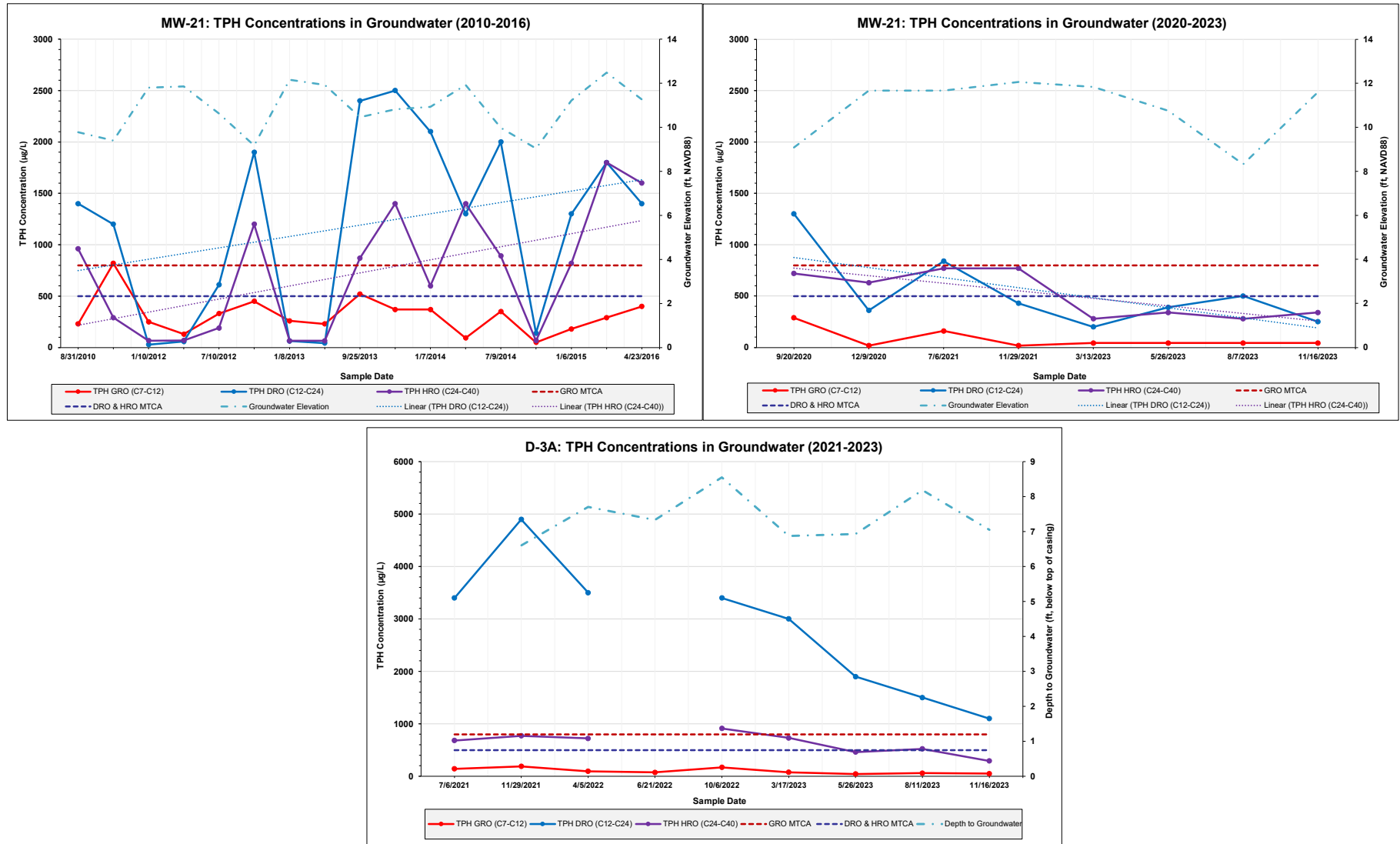
Appendix D

Trend Graph

Groundwater Concentration Trend Graphs
Chevron Tacoma Former Bulk Terminal
 2010 to 2023



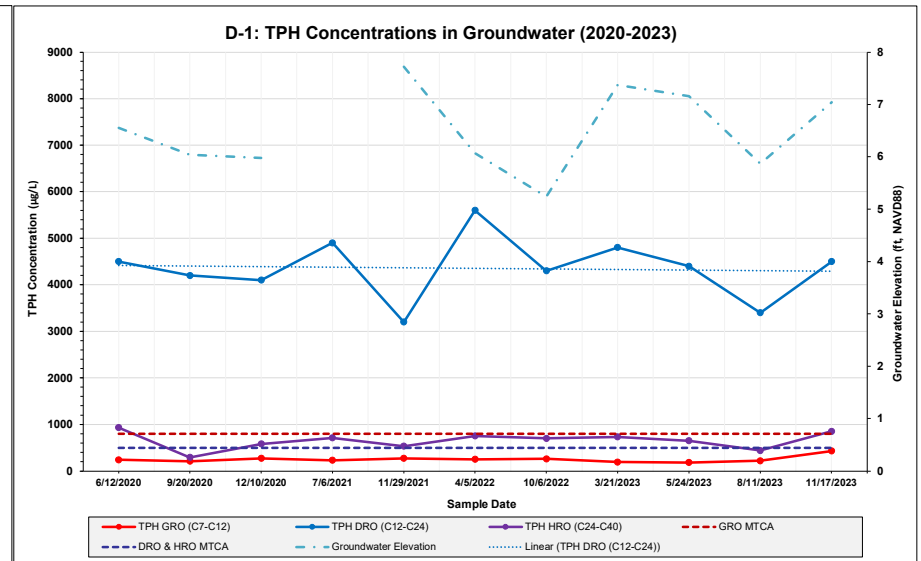
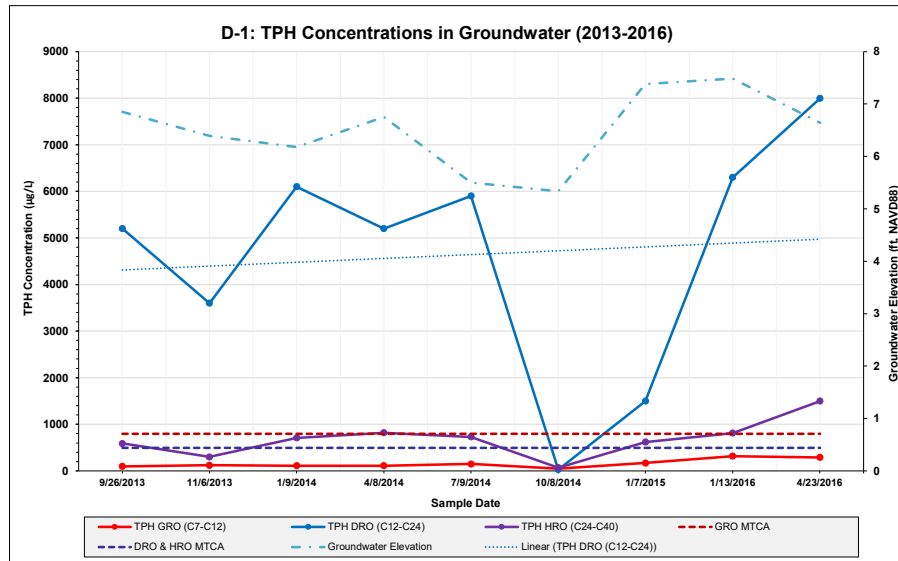
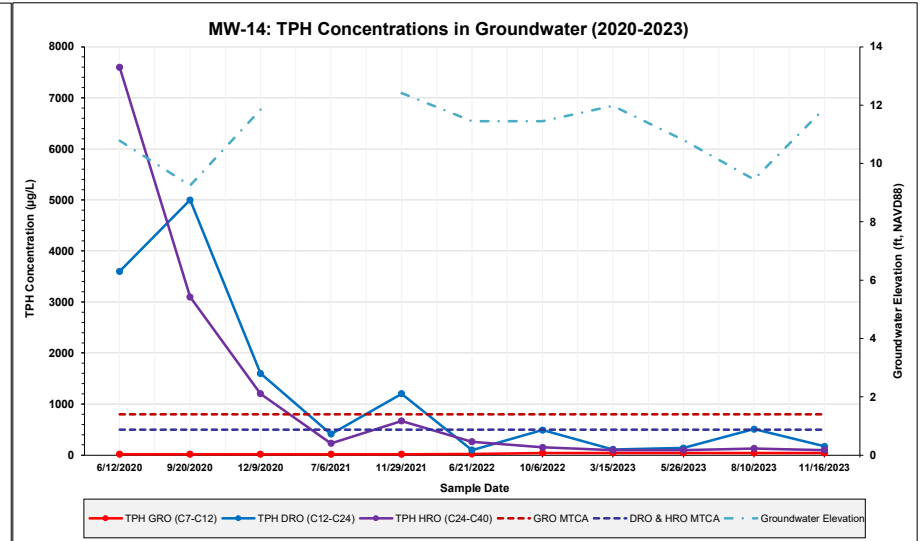
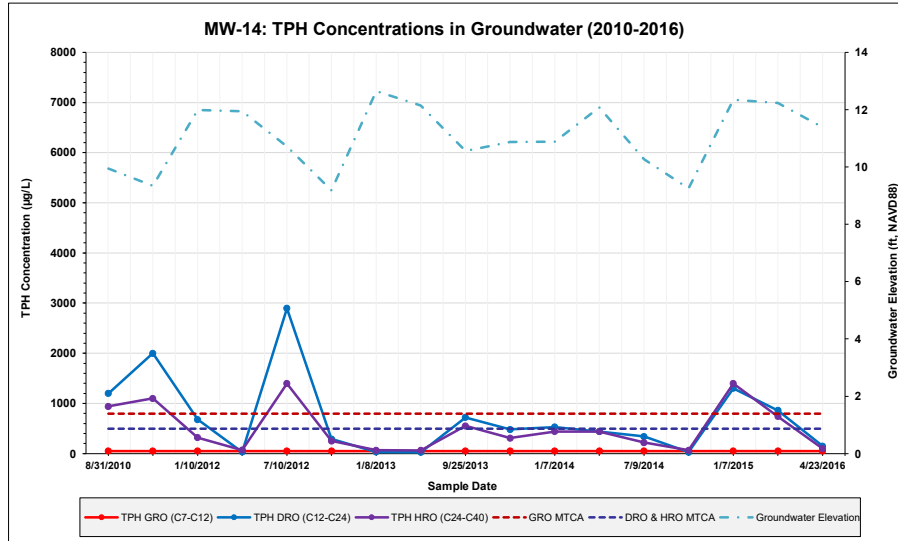
Groundwater Concentration Trend Graphs
Chevron Tacoma Former Bulk Terminal
 2010 to 2023



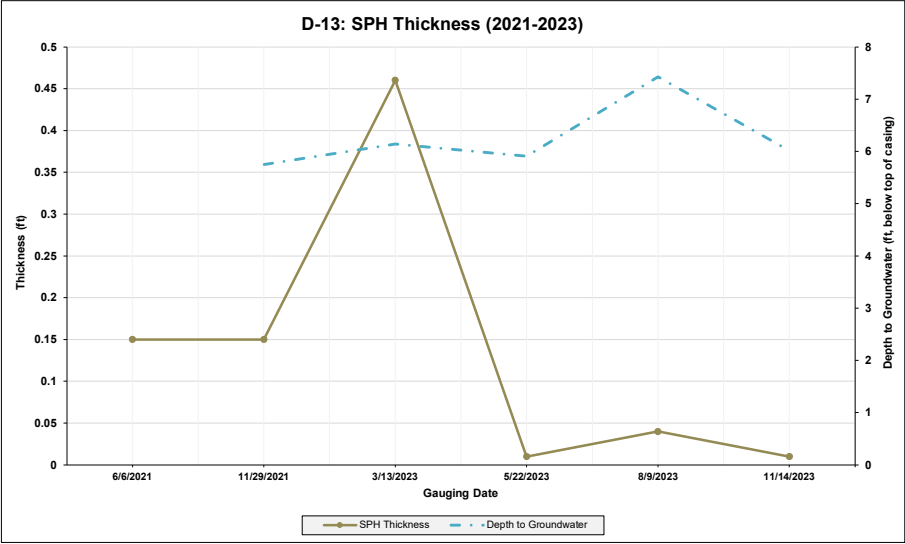
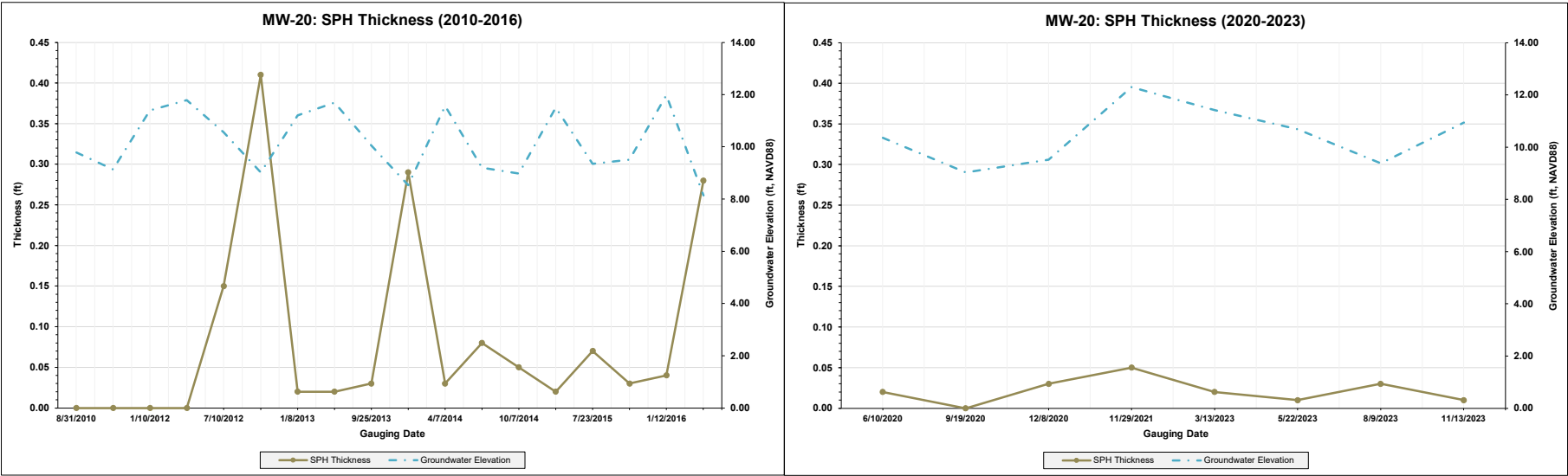
Groundwater Concentration Trend Graphs
Chevron Tacoma Former Bulk Terminal
 2010 to 2023



Groundwater Concentration Trend Graphs
Chevron Tacoma Former Bulk Terminal
 2010 to 2023



Groundwater Concentration Trend Graphs
Chevron Tacoma Former Bulk Terminal
2010 to 2023



Appendix E

Previous Groundwater Data 1992-2022

**Previous Groundwater
Data - 1992-2022**

Table 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
Former Standard Oil Bulk Terminal/Chevron Facility No. 1001348
1656 East J Street
Tacoma, Washington

Well ID/ Date	Purge Method	TOC ¹ (ft)	DTW (ft)	SPHT (ft)	GWE ² (ft)	TPH-GRO (µg/L)	TPH-DRO w/Silica Gel (µg/L)	TPH-DRO w/out Silica (µg/L)	TPH-HRO w/Silica Gel (µg/L)	TPH-HRO w/out Silica (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	PAHs (µg/L)
MW-10																
09/23/92		99.71	6.35	--	93.36	--	--	--	--	--	--	--	--	--	--	--
01/11/93		99.71	4.15	--	95.56	--	--	--	--	--	--	--	--	--	--	--
06/04/93		99.71	4.18	--	95.53	ND	--	--	--	--	ND	ND	ND	ND	--	--
12/15/93		99.71	4.55	--	95.16	ND	1,100	--	--	--	ND	ND	ND	ND	--	0.058
06/03/94		99.71	--	--	--	--	--	--	--	--	--	--	--	--	--	--
11/01/94		99.71	--	--	--	--	--	--	--	--	--	--	--	--	--	--
02/09/95		99.71	2.89	--	96.82	69	6,400	--	590	--	ND	ND	ND	ND	--	ND
05/02/95		99.71	3.93	--	95.78	ND	2,700	--	940	--	ND	ND	ND	ND	--	ND
08/02/95		99.71	5.27	--	94.44	190	32,000	--	4,700	--	ND	ND	ND	ND	--	ND
12/05/95		99.71	2.84	--	96.87	72	14,000	--	2,800	--	ND	ND	ND	ND	--	ND
03/18/96		99.71	3.65	--	96.06	ND	1,900	--	ND	--	ND	ND	ND	ND	--	ND
06/26/96		99.71	4.82	--	94.89	--	1,540	--	ND	--	--	--	--	--	--	--
09/09/96		99.71	5.55	--	94.16	--	2,260	--	840	--	--	--	--	--	--	--
12/30/96		99.71	1.90	--	97.81	--	885	--	ND	--	--	--	--	--	--	--
03/07/97		99.71	2.55	--	97.16	--	3,360	--	ND	--	--	--	--	--	--	ND
06/09/97		99.71	2.85	--	96.86	--	ND	--	ND	--	--	--	--	--	--	ND
09/04/97		99.71	3.57	--	96.14	--	281	--	ND	--	--	--	--	--	--	ND
12/17/97		99.71	3.22	--	96.49	--	933	--	ND	--	--	--	--	--	--	--
06/01/98		99.71	4.71	--	95.00	--	1,250	--	ND	--	--	--	--	--	--	--
11/01/98		99.71	6.83	0.00	92.88	--	1,120	--	790	--	--	--	--	--	--	--
05/30/99		99.71	4.19	0.00	95.52	--	1,370	--	ND	--	--	--	--	--	--	--
06/11-12/00		99.71	INACCESSIBLE		--	--	--	--	--	--	--	--	--	--	--	--
09/25/00		99.71	6.89	0.00	92.82	--	6,080	--	ND	--	--	--	--	--	--	--
04/04/02	NP	99.71	4.41	0.00	95.30	--	4,100	--	1,500	--	--	--	--	--	--	--
04/28/03	NP	99.71	4.06	0.00	95.65	--	4,400	--	2,300	--	--	--	--	--	--	--
04/15/04	NP	99.71	4.95	0.00	94.76	--	40,000	--	23,000	--	--	--	--	--	--	--
04/29/05	NP	99.71	4.47	0.00	95.24	--	3,500	--	2,200	--	--	--	--	--	--	--
04/27/06	NP	99.71	4.81	0.00	94.90	--	5,800	--	1,500	--	--	--	--	--	--	--
12/09/08	LFP	99.45	4.85	0.00	94.60	ND	710	--	250	--	ND	ND	ND	ND	ND	--
08/31/10		99.45	6.27	0.00	93.18	<50	--	--	--	--	<0.5	<0.5	<0.5	<0.5	ND	--
10/07/11		99.45	6.30	0.00	93.15	INSUFFICIENT WATER FOR SAMPLE		--	--	--	--	--	--	--	--	--
01/10/12		99.45	4.35	0.00	95.10	<50	<30	--	<69	--	<0.5	<0.5	<0.5	<1.5	--	--
04/11/12		99.45	3.90	0.00	95.55	<50	<28	--	<66	--	<0.5	<0.5	<0.5	<1.5	--	--
07/10/12		99.45	4.84	0.00	94.61	55	200	--	970	--	<0.5	<0.5	<0.5	<1.5	--	--
10/08/12		99.45	7.66	0.00	91.79	INSUFFICIENT WATER FOR SAMPLE		--	--	--	--	--	--	--	--	--
01/08/13		99.45	3.82	0.00	95.63	<50	<29	--	<67	--	<0.5	<0.5	<0.5	<1.5	--	--
04/09/13		99.45	4.21	0.00	95.24	<50	<28	--	<66	--	<0.5	<0.5	<0.5	<1.5	--	--
09/25-26/13		99.45	5.43	0.00	94.02	<50	--	2,700	--	1,100	<0.5	<0.5	<0.5	<1.5	--	--
11/05-06/13		99.45	5.08	0.00	94.37	74	--	2,400	--	450	<0.5	<0.5	<0.5	<1.5	--	--
01/07-09/14		99.45	5.08	0.00	94.37	110	--	4,400	--	1,100	<0.5	<0.5	<0.5	<1.5	--	--

Table 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
Former Standard Oil Bulk Terminal/Chevron Facility No. 1001348
1656 East J Street
Tacoma, Washington

Well ID/ Date	Purge Method	TOC ¹ (ft)	DTW (ft)	SPHT (ft)	GWE ² (ft)	TPH-GRO (µg/L)	TPH-DRO w/Silica Gel (µg/L)	TPH-DRO w/out Silica (µg/L)	TPH-HRO w/Silica Gel (µg/L)	TPH-HRO w/out Silica (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	PAHs (µg/L)
MW-10 cont.																
04/07/08/14		99.45	3.80	0.00	95.65	<50	<29	2,800	<67	1,200	<0.5	<0.5	<0.5	<1.5	--	--
07/07/09/14		99.45	6.32	0.00	93.13	12,000	300	410	110	130	16	280	150	1,600	--	--
10/07/08/14		99.45	6.02	0.00	93.43	<50	<29	<29	<67	<67	<0.5	<0.5	<0.5	<1.5	--	--
01/06/07/15		99.45	3.56	0.00	95.89	<50	<28	1,000	<66	790	<0.5	<0.5	<0.5	<1.5	<2.5	--
04/06/08/15		99.45	4.33	0.00	95.12	60	<29	2,400	<67	700	<0.5	<0.5	<0.5	<1.5	--	--
07/23/15		99.45	UNABLE TO ACCESS				--	--	--	--	--	--	--	--	--	--
10/19/20/15		99.45	UNABLE TO ACCESS				--	--	--	--	--	--	--	--	--	--
01/12-13/16		99.45	UNABLE TO ACCESS				--	--	--	--	--	--	--	--	--	--
04/23/16		99.45	UNABLE TO ACCESS				--	--	--	--	--	--	--	--	--	--
06/10-12/20		99.45	5.03	0.00	94.42	30	--	2,700	--	1,000	<1.0	<1.0	<1.0	<3.0	--	--
09/19/20		99.45	7.07	0.00	92.38	--	--	--	--	--	--	--	--	--	--	--
12/09/20		99.45	4.65	0.00	94.80	<19	<45	300	<100	340	<0.2	<0.2	<0.4	<1.4	--	--
07/07/21		99.45	--	0.00	99.45	78	--	2,500	--	1,300	<0.3	<0.2	<0.4	<0.4	--	--
11/30/21		99.45	3.13	0.00	96.32	19	--	93	--	120	<0.3	<0.2	<0.4	<0.4	<0.2	--
04/05/22		99.45	3.85	0.00	95.60	39	--	1,600	--	770	<0.3	<0.2	<0.4	<0.4	<0.2	--
06/20/22		99.45	4.09	0.00	95.36	39	--	1,100	--	460	<0.3	<0.2	<0.4	<0.4	--	--
10/05/22		99.45	6.71	0.00	92.74	<43	INSUFFICIENT WATER FOR SAMPLE				<0.3	<0.3	<0.4	<1.4	--	--
MW-11																
06/04/93		101.33	4.68	--	96.65	ND	11,000	--	--	--	ND	ND	ND	ND	--	--
12/15/93		101.33	--	--	--	--	--	--	--	--	--	--	--	--	--	--
06/04/94		101.33	5.34	--	95.99	230	--	--	--	--	ND	ND	ND	0.7	--	3.6
11/01/94		101.33	5.85	--	95.48	--	--	--	--	--	--	--	--	--	--	--
02/09/95		101.33	3.97	--	97.36	58	2,800	--	420	--	ND	ND	ND	0.6	--	ND
05/02/95		101.33	4.59	--	96.74	ND	8,600	--	1,600	--	ND	ND	ND	ND	--	ND
08/02/95		101.33	5.44	--	95.89	--	--	--	--	--	--	--	--	--	--	--
12/05/95		101.33	3.80	--	97.53	ND	290	--	930	--	ND	ND	ND	ND	--	ND
03/18/96		101.33	4.50	--	96.83	61	2,000	--	ND	--	1.0	ND	ND	1.9	--	ND
06/26/96		101.33	4.90	--	96.43	--	4,320	--	1,360	--	--	--	--	--	--	--
09/09/96		101.33	5.65	--	95.68	--	--	--	--	--	--	--	--	--	--	--
12/30/96		101.33	2.60	--	98.73	--	370	--	ND	--	--	--	--	--	--	--
03/07/97		101.33	3.92	--	97.41	--	1,100	--	ND	--	--	--	--	--	--	ND
06/09/97		101.33	3.80	--	97.53	--	3,090	--	1,090	--	--	--	--	--	--	ND
09/04/97		101.33	5.84	--	95.49	--	--	--	--	--	--	--	--	--	--	--
12/17/97		101.33	4.51	--	96.82	--	1,830	--	ND	--	--	--	--	--	--	--
06/01/98		101.33	5.44	--	95.89	--	1,360	--	ND	--	--	--	--	--	--	--
11/01/98		101.33	5.87	0.00	95.46	--	1,060	--	1,870	--	--	--	--	--	--	--
05/30/99		101.33	5.31	0.00	96.02	--	21,700	--	ND	--	--	--	--	--	--	--
06/11-12/00		101.33	INACCESSIBLE				--	--	--	--	--	--	--	--	--	--
09/25/00		101.33	5.85	0.00	95.48	--	5,350	--	4,410	--	--	--	--	--	--	--
01/26/01		101.33	5.38	0.00	95.95	--	ND	--	ND	--	--	--	--	--	--	--
01/09/02		101.33	4.24	0.00	97.09	--	<250	--	<500	--	--	--	--	--	--	--
04/04/02	NP	101.33	4.94	0.00	96.39	--	9,900	--	2,300	--	--	--	--	--	--	--
04/28/03	NP	101.33	4.89	0.00	96.44	--	12,000	--	1,900	--	--	--	--	--	--	--
04/15/04	NP	101.33	5.39	0.00	95.94	--	2,700	--	710	--	--	--	--	--	--	--
04/29/05	NP	101.33	5.18	0.00	96.15	--	2,600	--	1,900	--	--	--	--	--	--	--
04/27/06	NP	101.33	5.33	0.00	96.00	--	2,000	--	<510	--	--	--	--	--	--	--
12/10/08	NP	101.00	5.60	0.00	95.40	ND	--	--	--	--	ND	ND	ND	ND	ND	--

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Tacoma, Washington

Well ID/ Date	Purge Method	TOC ¹ (ft)	DTW (ft)	SPHT (ft)	GWE ² (ft)	TPH-GRO (µg/L)	TPH-DRO w/Silica Gel (µg/L)	TPH-DRO w/out Silica (µg/L)	TPH-HRO w/Silica Gel (µg/L)	TPH-HRO w/out Silica (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	PAHs (µg/L)
MW-11 cont.																
08/31/10		101.00	5.75	0.00	95.25	<50	--	--	--	--	<0.5	<0.5	<0.5	<0.5	ND	--
10/07/11		101.00	7.20	0.00	93.80	Drv	--	--	--	--	--	--	--	--	--	--
01/09/12		101.00	5.18	0.00	95.82	<50	<34	--	<79	--	<0.5	<0.5	<0.5	<1.5	--	--
04/09/12		101.00	6.80	0.00	94.20	Drv	--	--	--	--	--	--	--	--	--	--
07/09/12		101.00	5.66	0.00	95.34	<50	<30	--	<69	--	<0.5	<0.5	<0.5	<1.5	--	--
10/08/12		101.00	6.88	0.00	94.12	INSUFFICIENT WATER FOR SAMPLE										--
01/07/13		101.00	3.38	0.00	97.62	510	53	--	<67	--	1.4	<2.0	0.9	4.5	--	--
04/08/13		101.00	6.76	0.00	94.24	INSUFFICIENT WATER FOR SAMPLE										--
9/25-26/13		101.00	6.83	0.00	94.17	INSUFFICIENT WATER FOR SAMPLE										--
11/05-06/13		101.00	6.51	0.00	94.49	INSUFFICIENT WATER FOR SAMPLE										--
01/07-09/14		101.00	6.78	0.00	94.22	INSUFFICIENT WATER FOR SAMPLE										--
04/07-08/14		101.00	4.57	0.00	96.43	<50	<28	400	<66	360	<0.5	<0.5	<0.5	<1.5	--	--
07/07-09/14		101.00	6.48	0.00	94.52	INSUFFICIENT WATER FOR SAMPLE										--
10/07-08/14		101.00	5.97	0.00	95.03	<50	<29	<68	<68	<68	<0.5	<0.5	<0.5	<1.5	--	--
01/06-07/15		101.00	4.38	0.00	96.62	<50	<28	3,400	<66	700	<0.5	<0.5	<0.5	<1.5	<2.5	--
04/06-08/15		101.00	5.06	0.00	95.94	<50	<28	3,000	<66	580	<0.5	<0.5	<0.5	<1.5	--	--
07/23/15		101.00	UNABLE TO ATTEMPT			--	--	--	--	--	--	--	--	--	--	--
10/19-20/15		101.00	UNABLE TO ATTEMPT			--	--	--	--	--	--	--	--	--	--	--
01/12-13/16		101.00	UNABLE TO ATTEMPT			--	--	--	--	--	--	--	--	--	--	--
04/23/16		101.00	UNABLE TO ATTEMPT			--	--	--	--	--	--	--	--	--	--	--
06/10-12/20		101.00	5.71	0.00	95.29	37	--	3,100	--	1,300	<1.0	<1.0	<1.0	<3.0	--	--
09/19/20		101.00	6.75	0.00	94.25											
12/08/20		101.00	6.15	0.00	94.85	INSUFFICIENT WATER FOR SAMPLE										
07/07/21		101.00	--	0.00	101.00	<19	--	240	--	590	<0.3	<0.2	<0.4	<0.4	--	--
11/30/21		101.00	4.30	0.00	96.70	23	--	340	--	190	<0.3	<0.2	<0.4	<0.4	<0.2	--
MW-12																
09/23/92		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
01/11/93		101.13	4.88	--	96.25	--	--	--	--	--	--	--	--	--	--	--
06/04/93		101.13	4.40	--	96.73	360	9,200	--	--	--	120	1.2	0.6	2.1	--	0.12 - 0.54
12/15/93		101.13	5.21	--	95.92	670	6,400	--	--	--	400	2.9	0.9	5.8	--	0.067 - 14
06/04/94		101.13	5.21	--	95.92	840	8,100	--	1,500	--	240	3.3	ND	2.8	--	13
11/01/94		101.13	5.31	--	95.82	810	5,700	--	1,400	--	160	1.7	0.7	4.5	--	0.12 - 28
02/09/95		101.13	3.68	--	97.45	87	3,700	--	680	--	7.1	ND	ND	ND	--	ND
05/02/95		101.13	4.17	--	96.96	490	16,000	--	1,800	--	16	0.58	ND	1.9	--	ND
08/02/95		101.13	5.28	--	95.85	270	12,000	--	2,300	--	10	0.83	ND	ND	--	ND
12/05/95		101.13	2.91	--	98.22	ND	420	--	1,100	--	ND	ND	ND	ND	--	ND
03/18/96		101.13	4.00	--	97.13	430	5,400	--	ND	--	1.5	1.2	0.95	4.7	--	ND
06/26/96		101.13	4.62	--	96.51	--	12,600	--	2,920	--	--	--	--	--	--	--
09/09/96		101.13	5.95	--	95.18	--	9,680	--	1,470	--	--	--	--	--	--	--
12/30/96		101.13	1.90	--	99.23	--	429	--	ND	--	--	--	--	--	--	--
03/07/97		101.13	3.03	--	98.10	105	18,900	--	1,330	--	1.85	ND	ND	ND	--	ND
06/09/97		101.13	4.23	--	96.90	--	9,070	--	1,250	--	--	--	--	--	--	ND
09/04/97		101.13	5.78	--	95.35	--	14,000	--	1,500	--	--	--	--	--	--	ND - 2.06
12/17/97		101.13	3.84	--	97.29	--	4,500	--	ND	--	--	--	--	--	--	--

Table 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
Former Standard Oil Bulk Terminal/Chevron Facility No. 1001348
1656 East J Street
Tacoma, Washington

Well ID/ Date	Purge Method	TOC ¹ (ft)	DTW (ft)	SPHT (ft)	GWE ² (ft)	TPH-GRO (µg/L)	TPH-DRO w/Silica Gel (µg/L)	TPH-DRO w/out Silica (µg/L)	TPH-HRO w/Silica Gel (µg/L)	TPH-HRO w/out Silica (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	PAHs (µg/L)
MW-12 cont.																
06/01/98		101.13	5.00	--	96.13	--	7,050	--	ND	--	--	--	--	--	--	--
11/01/98		101.13	5.44	0.00	95.69	--	6,300	--	ND	--	--	--	--	--	--	--
05/30/99		101.13	4.97	0.00	96.16	--	22,200	--	ND	--	--	--	--	--	--	--
06/11-12/00		101.13	INACCESSIBLE		--	--	--	--	--	--	--	--	--	--	--	--
09/25/00		101.13	6.57	0.00	94.56	--	12,000	--	ND	--	--	--	--	--	--	--
01/26/01		101.13	5.05	0.00	96.08	--	ND	--	ND	--	--	--	--	--	--	--
01/09/02		101.13	3.46	0.00	97.67	--	310	--	<500	--	--	--	--	--	--	--
04/04/02	NP	101.13	4.48	0.00	96.65	--	12,000	--	1,700	--	--	--	--	--	--	--
04/28/03	NP	101.13	4.41	0.00	96.72	--	22,000	--	3,200	--	--	--	--	--	--	--
04/15/04	NP	101.13	5.00	0.00	96.13	--	19,000	--	3,100	--	--	--	--	--	--	--
04/29/05	NP	101.13	4.39	0.00	96.74	--	17,000	--	3,200	--	--	--	--	--	--	--
04/27/06	NP	101.13	4.88	0.00	96.25	--	4,900	--	1,300	--	--	--	--	--	--	--
12/09/08	LFP	101.04	5.19	0.00	95.85	150	2,200	--	250	--	ND	ND	ND	ND	ND	--
08/31/10		101.04	5.86	0.00	95.18	530	2,600	--	<360	--	<0.5	<0.5	<0.5	<0.5	ND	--
10/07/11		101.04	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--	--	--	--
01/09/12		101.04	4.55	0.00	96.49	300	49	--	71	--	<2.0	<2.0	<0.5	1.5	--	--
04/11/12		101.04	4.05	0.00	96.99	130	<29	--	<69	--	<0.5	<0.5	<0.5	<5.0	--	--
07/09/12		101.04	5.36	0.00	95.68	490	670	--	1,000	--	1.4	<2.0	1.11	<6.0	--	--
10/09/12		101.04	6.54	0.00	94.50	670	32	--	<69	--	1.3	1.1	1.2	3.5	--	--
01/07/13		101.04	3.88	0.00	97.16	<50	<29	--	<67	--	<0.5	<0.5	<0.5	<1.5	--	--
04/09/13		101.04	4.09	0.00	96.95	260	<28	--	<66	--	<0.5	<0.5	<0.5	<5.0	--	--
09/25-26/13		101.04	5.58	0.00	95.46	420	--	6,800	--	870	0.6	<2.0	0.6	1.7	--	--
11/05-06/13		101.04	5.27	0.00	95.77	220	--	4,300	--	380	<0.5	<0.5	<0.5	<1.5	--	--
01/07-09/14		101.04	5.62	0.00	95.42	260	--	8,900	--	1,900	<0.5	<0.5	<0.5	1.9	--	--
04/07-08/14		101.04	3.77	0.00	97.27	<50	<28	3,000	<66	1,100	<0.5	<0.5	<0.5	<1.5	--	--
07/07-09/14		101.04	4.88	0.00	96.16	37,000	810	1,200	140	200	55	910	420	3,800	--	--
10/07-08/14		101.04	6.02	0.00	95.02	<50	<29	110	<67	<67	<0.5	<0.5	<0.5	<1.5	--	--
01/06-07/15		101.04	3.63	0.00	97.41	140	<28	6,900	<66	1,600	<0.5	<0.5	<0.5	<1.5	<2.5	--
04/06-08/15		101.04	4.57	0.00	96.47	220	32	11,000	<66	1,100	<0.5	<0.5	<0.5	<1.5	--	--
07/23/15		101.04	UNABLE TO ATTEMPT		--	--	--	--	--	--	--	--	--	--	--	--
10/19-20/15		101.04	UNABLE TO ATTEMPT		--	--	--	--	--	--	--	--	--	--	--	--
01/12-13/16		101.04	UNABLE TO ATTEMPT		--	--	--	--	--	--	--	--	--	--	--	--
04/23/16		101.04	UNABLE TO ATTEMPT		--	--	--	--	--	--	--	--	--	--	--	--
06/10-12/20		101.04	5.37	0.00	95.67	280	--	14,000	--	3,700	<1.0	<1.0	<1.0	<3.0	--	--
09/19/20		101.04	6.44	0.00	94.60											
12/08/20		101.04	5.10	0.00	95.94	56	<47	2,100	<100	1,000	<0.2	<0.2	<0.4	<1.4	--	--
07/07/21		101.04		0.00	101.04	220	--	13,000	--	3,900	<0.3	<0.2	<0.4	<0.4	--	--
11/30/21		101.04	3.51	0.00	97.53	23	--	4,000	--	1,700	<0.3	<0.2	<0.4	<0.4	<0.2	--
MW-13																
09/23/92		102.54	5.23	--	97.31	870	8,200	--	--	--	87	4.0	4.0	6.0	--	--
01/11/93		102.54	6.26	--	96.28	--	--	--	--	--	--	--	--	--	--	--
06/04/93		102.54	5.95	--	96.59	ND	330	--	--	--	ND	ND	ND	ND	--	0.087
12/15/93		102.54	7.04	--	95.50	1,000	27,000	--	--	--	35	2.4	5.9	8.7	--	0.58 - 2.7
06/03/94		102.54	6.74	--	95.80	680	27,000	--	ND	--	8.5	1.1	2.0	1.6	--	1.5

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Former Standard Oil Bulk Terminal/Chevron Facility No. 1001348
1656 East J Street
Tacoma, Washington

Well ID/ Date	Purge Method	TOC ¹ (ft)	DTW (ft)	SPHT (ft)	GWE ² (ft)	TPH-GRO (µg/L)	TPH-DRO w/Silica Gel (µg/L)	TPH-DRO w/out Silica (µg/L)	TPH-HRO w/Silica Gel (µg/L)	TPH-HRO w/out Silica (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	PAHs (µg/L)
MW-13 cont.																
11/01/94		102.54	7.69	--	94.85	1,500	20,000	--	ND	--	38	3.2	8.7	9.2	--	0.15 - 7.8
02/09/95		102.54	4.83	--	97.71	130	4,400	--	1,400	--	2.0	ND	0.7	ND	--	ND
05/02/95		102.54	5.82	--	96.72	410	14,000	--	2,200	--	3.0	ND	2.1	ND	--	ND
08/02/95		102.54	7.25	--	95.29	750	31,000	--	2,400	--	18	2.5	13	3.0	--	ND
12/05/95		102.54	4.14	--	98.40	ND	6,700	--	4,800	--	ND	ND	ND	ND	--	ND
03/18/96		102.54	5.16	--	97.38	140	10,000	--	2,500	--	ND	ND	ND	ND	2.6	ND
06/26/96		102.54	6.48	--	96.06	--	8,110	--	2,640	--	--	--	--	--	--	--
09/09/96		102.54	7.70	--	94.84	--	35,800	--	2,810	--	--	--	--	--	--	--
12/30/96		102.54	3.12	--	99.42	--	--	--	--	--	--	--	--	--	--	--
03/07/97		102.54	4.16	--	98.38	--	960	--	ND	--	--	--	--	--	--	ND
06/09/97		102.54	5.70	--	96.84	--	1,620	--	1,050	--	--	--	--	--	--	ND
09/04/97		102.54	7.59	--	94.95	--	15,800	--	1,550	--	--	--	--	--	--	ND
12/17/97		102.54	5.43	--	97.11	--	11,100	--	1,630	--	--	--	--	--	--	--
06/01/98		102.54	6.48	--	96.06	--	1,490	--	ND	--	--	--	--	--	--	--
11/01/98		102.54	7.77	0.00	94.77	--	9,580	--	933	--	--	--	--	--	--	--
05/30/99		102.54	6.34	0.00	96.20	--	12,800	--	ND	--	--	--	--	--	--	--
06/11-12/00		102.54	6.88	0.00	95.66	--	--	--	--	--	--	--	--	--	--	--
04/04/02	NP	102.54	5.52	0.00	97.02	--	980	--	<750	--	--	--	--	--	--	--
04/28/03	NP	102.54	5.45	0.00	97.09	--	3,200	--	440	--	--	--	--	--	--	--
04/15/04	NP	102.54	6.15	0.00	96.39	--	2,100	--	460	--	--	--	--	--	--	--
04/29/05	NP	102.54	5.55	0.00	96.99	--	4,400	--	1,500	--	--	--	--	--	--	--
04/27/06	NP	102.54	5.99	0.00	96.55	--	1,800	--	280	--	--	--	--	--	--	--
12/09/08	LFP	102.57	6.23	0.00	96.34	200	4,000	--	520	--	ND	ND	ND	ND	ND	--
08/31/10		102.57	7.44	0.00	95.13	<50	2,500	--	<360	--	<0.5	<0.5	<0.5	<0.5	--	--
10/07/11		102.57	8.00	0.00	94.57	190	42	--	<69	--	<0.5	<0.5	<0.5	1.8	--	--
01/10/12		102.57	5.95	0.00	96.62	<50	66	--	<66	--	<0.5	<0.5	<0.5	<1.5	--	--
04/10/12		102.57	5.45	0.00	97.12	<50	89	--	<67	--	<0.5	<0.5	<0.5	<1.5	--	--
07/10/12		102.57	6.87	0.00	95.70	280	2,100	--	150	--	0.6	<0.5	<0.5	2.0	--	--
10/10/12		102.57	8.10	0.00	94.47	360	280	--	<66	--	1.1	0.7	<0.5	1.7	--	--
01/09/13		102.57	4.57	0.00	98.00	<50	510	--	<67	--	<0.5	<0.5	<0.5	<1.5	--	--
04/09/13		102.57	5.54	0.00	97.03	<50	83	--	<67	--	<0.5	<0.5	<0.5	<1.5	--	--
09/25-26/13		102.57	7.57	0.00	95.00	370	--	4,000	--	460	0.9	<2.0	0.7	1.5	--	--
11/05-06/13		102.57	6.84	0.00	95.73	120	--	3,100	--	620	<0.5	<0.5	<0.5	<1.5	--	--
01/07-09/14		102.57	6.94	0.00	95.63	400	--	4,000	--	630	0.5	<0.5	<0.5	1.8	--	--
04/07-08/14		102.57	5.39	0.00	97.18	<50	83	600	<68	430	<0.5	<0.5	<0.5	<1.5	--	--
07/07-09/14		102.57	7.51	0.00	95.06	140	400	2,500	<67	420	<0.5	<0.5	<0.5	<1.5	--	--
10/07-08/14		102.57	8.03	0.00	94.54	<50	35	54	<69	<69	<0.5	<0.5	<0.5	<1.5	--	--
01/06-07/15		102.57	5.00	0.00	97.57	300	1,300	2,700	<66	820	<0.5	<0.5	0.7	<1.5	<2.5	--
04/06-08/15		102.57	5.99	0.00	96.58	<50	55	420	<66	80	<0.5	<0.5	0.7	<1.5	--	--
07/23/15		102.57	7.80	0.00	94.77	400	1,100	3,100	<100	650	<0.5	<0.5	0.6	1.7	--	--

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Well ID/ Date	Purge Method	TOC ¹ (ft)	DTW (ft)	SPHT (ft)	GWE ² (ft)	TPH-GRO (µg/L)	TPH-DRO w/Silica Gel (µg/L)	TPH-DRO w/out Silica (µg/L)	TPH-HRO w/Silica Gel (µg/L)	TPH-HRO w/out Silica (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	PAHs (µg/L)
MW-13 cont.																
10/19/2015		102.57	7.73	0.00	94.84	230	150	5,800	<100	720	<0.2	<0.2	0.4	0.8	--	--
01/12/13/16		102.57	5.07	0.00	97.50	100	740	2,200	<100	650	<0.2	<0.2	<0.2	<0.2	--	--
04/23/16		102.57	6.11	0.00	96.46	<50	62	530	<100	140	<0.2	<0.2	<0.2	<0.2	--	--
06/10-12/20		102.57	6.98	0.00	95.59	460	--	3,600	--	690	<1.0	0.30	<1.0	<3.0	--	--
09/19/20		102.57	8.05	0.00	94.52	--	--	--	--	--	--	--	--	--	--	--
12/10/20		102.57	6.50	0.00	96.07	390	2,300	5,200	<100	340	<0.2	<0.2	<0.4	<1.4	--	--
07/06/21		102.57	--	0.00	102.57	510	--	6,500	--	570	<0.3	<0.4	<0.2	<0.4	--	--
11/29/21		102.57	4.67	0.00	97.90	110	--	4,800	--	360	<0.3	<0.4	<0.2	<0.4	<0.2	--
04/05/22		102.57	5.70	0.00	96.87	28	--	460	--	120	<0.3	<0.4	<0.2	<0.4	<0.2	--
06/22/22		102.57	6.13	0.00	96.44	170	--	220	--	<100	<0.3	<0.4	<0.2	<0.4	--	--
10/06/22		102.57	7.96	0.00	94.61	400	--	15,000	--	570	<0.3	<0.3	<0.4	<1.4	--	--
MW-14																
09/23/92		102.25	5.26	--	96.99	1,100	9,800	--	--	--	200	11	3.0	7.0	--	--
01/11/93		102.25	5.25	--	97.00	--	--	--	--	--	--	--	--	--	--	--
06/04/93		102.25	4.90	--	97.35	ND	9,700	--	--	--	2.2	ND	ND	ND	--	--
12/15/93		102.25	6.18	--	96.07	470	9,500	--	--	--	72	0.6	1.9	4.2	--	0.48 - 1.0
06/03/94		102.25	5.71	--	96.54	830	4,300	--	980	--	29	1.0	1.3	0.7	--	ND
11/01/94		102.25	6.76	--	95.49	ND	5,400	--	1,700	--	3.8	ND	ND	0.5	--	0.11
02/09/95		102.25	3.85	--	98.40	ND	1,700	--	1,100	--	ND	ND	ND	ND	--	ND
05/02/95		102.25	4.74	--	97.51	ND	4,200	--	2,200	--	0.65	0.58	ND	ND	--	ND
08/02/95		102.25	6.64	--	95.61	140	21,000	--	4,800	--	17	1.8	1.6	ND	--	ND
12/05/95		102.25	3.16	--	99.09	ND	9,300	--	3,900	--	3.0	ND	ND	ND	--	ND
03/18/96		102.25	4.20	--	98.05	230	11,000	--	2,900	--	8.9	ND	ND	6.9	--	ND
06/26/96		102.25	5.75	--	96.50	--	39,300	--	4,600	--	--	--	--	--	--	--
09/09/96		102.25	7.00	--	95.25	--	58,200	--	4,450	--	--	--	--	--	--	--
12/30/96		102.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/07/97		102.25	2.96	--	99.29	98	9,230	--	1,310	--	0.545	ND	ND	ND	--	ND
06/09/97		102.25	4.75	--	97.50	--	10,000	--	2,240	--	--	--	--	--	--	ND
09/04/97		102.25	6.74	--	95.51	--	42,700	--	ND	--	--	--	--	--	--	ND - 1.90
12/17/97		102.25	3.90	--	98.35	--	4,860	--	1,710	--	--	--	--	--	--	--
06/01/98		102.25	5.58	--	96.67	--	2,270	--	ND	--	--	--	--	--	--	--
11/01/98		102.25	7.30	0.00	94.95	--	8,620	--	2,030	--	--	--	--	--	--	--
05/30/99		102.25	5.37	0.00	96.88	--	15,700	--	1,590	--	--	--	--	--	--	--
06/11-12/00		102.25	5.81	0.00	96.44	--	--	--	--	--	--	--	--	--	--	--
04/04/02	NP	102.25	4.69	0.00	97.56	--	1,100	--	<750	--	--	--	--	--	--	--
04/28/03	NP	102.25	4.52	0.00	97.73	--	820	--	470	--	--	--	--	--	--	--
04/15/04	NP	102.25	5.29	0.00	96.96	--	4,400	--	2,800	--	--	--	--	--	--	--
04/29/05	NP	102.25	4.50	0.00	97.75	--	740	--	580	--	--	--	--	--	--	--
04/27/06	NP	102.25	4.99	0.00	97.26	--	400	--	140	--	--	--	--	--	--	--
12/10/08	LFP	102.30	5.26	0.00	97.04	ND	520	--	210	--	ND	ND	ND	ND	ND	--
08/31/10		102.30	7.69	0.00	94.61	<50	1,200	--	940	--	<0.5	<0.5	<0.5	<0.5	--	--
10/07/11		102.30	8.30	0.00	94.00	<50	2,000	--	1,100	--	<0.5	<0.5	<0.5	<1.5	--	--
01/10/12		102.30	5.65	0.00	96.65	<50	680	--	320	--	<0.5	<0.5	<0.5	<1.5	--	--
04/10/12		102.30	5.70	0.00	96.60	<50	<30	--	<70	--	<0.5	<0.5	<0.5	<1.5	--	--
07/10/12		102.30	6.93	0.00	95.37	<50	2,900	--	1,400	--	<0.5	<0.5	<0.5	<1.5	--	--
10/09/12		102.30	8.45	0.00	93.85	<50	290	--	250	--	<0.5	<0.5	<0.5	<1.5	--	--
01/08/13		102.30	4.99	0.00	97.31	<50	30	--	<67	--	<0.5	<0.5	<0.5	<1.5	--	--

Table 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
Former Standard Oil Bulk Terminal/Chevron Facility No. 1001348
1656 East J Street
Tacoma, Washington

Well ID/ Date	Purge Method	TOC ¹ (ft)	DTW (ft)	SPHT (ft)	GWE ² (ft)	TPH-GRO (µg/L)	TPH-DRO w/Silica Gel (µg/L)	TPH-DRO w/out Silica (µg/L)	TPH-HRO w/Silica Gel (µg/L)	TPH-HRO w/out Silica (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	PAHs (µg/L)
MW-14 cont.																
04/09/13		102.30	5.50	0.00	96.80	<50	<28	--	<66	--	<0.5	<0.5	<0.5	<1.5	--	--
09/25-26/13		102.30	7.08	0.00	95.22	<51	--	720	--	550	<0.5	<0.5	<0.5	<1.6	--	--
11/05-06/13		102.30	6.77	0.00	95.53	<50	--	480	--	310	<0.5	<0.5	<0.5	<1.5	--	--
01/07-09/14		102.30	6.76	0.00	95.54	<50	--	530	--	440	<0.5	<0.5	<0.5	<1.5	--	--
04/07-08/14		102.30	5.56	0.00	96.74	<50	62	440	<67	440	<0.5	<0.5	<0.5	<1.5	--	--
07/07-09/14		102.30	7.37	0.00	94.93	<50	<28	340	<66	220	<0.5	<0.5	<0.5	<1.5	--	--
10/07-08/14		102.30	8.39	0.00	93.91	<50	<29	<29	<68	<68	<0.5	<0.5	<0.5	<1.5	--	--
01/06-07/15		102.30	5.30	0.00	97.00	<50	510	1,300	400	1,400	<0.5	<0.5	<0.5	<1.5	<2.5	--
04/06-08/15		102.30	6.04	0.00	96.26	<50	<28	200	<66	220	<0.5	<0.5	<0.5	<1.5	--	--
07/23/15		102.30	8.07	0.00	94.23	<50	110	920	<100	500	<0.5	<0.5	<0.5	<1.5	--	--
10/19-20/15		102.30	9.77	0.00	92.53	<50	<46	2,600	<100	960	<0.2	<0.2	<0.2	<0.2	--	--
01/12-13/16		102.30	5.41	0.00	96.89	<50	140	860	<100	740	<0.2	<0.2	<0.2	<0.2	--	--
04/23/16		102.30	6.26	0.00	96.04	<50	<46	150	<100	<100	<0.2	<0.2	<0.2	<0.2	--	--
06/10-12/20		102.30	6.86	0.00	95.44	<260	--	3,600	--	7,600	<1.0	<1.0	<1.0	<3.0	--	--
09/19/20		102.30	8.39	0.00	93.91											
12/08/20		102.30	5.80	0.00	96.50	<19	850	1,600	580	1,200	<0.2	<0.2	<0.4	<1.4	--	--
07/06/21		102.30		0.00	102.30	<19	--	410	--	230	<0.2	<0.4	<0.2	<0.4	--	--
11/29/21		102.30	5.22	0.00	97.08	<19	--	1,200	--	670	<0.3	<0.2	<0.4	<0.4	<0.2	--
06/21/22		102.30	6.19	0.00	96.11	<22	--	79	--	<250	<0.3	<0.2	<0.4	<0.4	--	--
10/06/22		102.30	6.19	0.00	96.11	<43	--	490	--	150	<0.3	<0.3	<0.4	<1.4	--	--
MW-18																
08/31/10		104.12	9.27	0.00	94.85	320	2,700	--	<370	--	5	<0.5	<0.5	<0.5	--	--
10/07/11		104.12	8.10	0.00	96.02	100	<30	--	<69	--	<0.5	<0.5	<0.5	<1.5	--	--
01/10/12		104.12	8.00	0.00	96.12	540	120	--	<67	--	<2.0	0.8	0.9	2.9	--	--
04/11/12		104.12	7.55	0.00	96.57	340	<30	--	<69	--	<2.0	<0.5	0.5	3.3	--	--
07/10/12		104.12	8.83	0.00	95.29	760	520	--	160	--	1.6	0.9	1.2	<6.0	--	--
10/10/12		104.12	9.85	0.00	94.27	410	51	--	<66	--	1.2	0.6	0.7	2.5	--	--
01/09/13		104.12	7.20	0.00	96.92	610	160	--	<68	--	1.6	<2.0	1.0	5.4	--	--
04/09/13		104.12	7.77	0.00	96.35	310	68	--	<66	--	<0.5	0.6	0.8	2.6	--	--
09/25-26/13		104.12	9.24	0.00	94.88	600	--	4,300	--	760	1.6	<2.0	1.2	3.7	--	--
11/05-06/13		104.12	5.88	0.00	98.24	1,000	--	3,700	--	650	1.9	1.3	1.6	<8.0	--	--
01/07-09/14		104.12	8.60	0.00	95.52	940	--	6,300	--	1,100	2.2	1.2	1.4	6.8	--	--
04/07-08/14		104.12	7.50	0.00	96.62	620	110	2,400	<67	510	<2.0	0.7	0.9	<5.0	--	--
07/07-09/14		104.12	8.93	0.00	95.19	4,500	72	98	<68	<68	2.2	52	40	460	--	--
10/07-08/14		104.12	8.08	0.00	96.04	<50	<29	<29	<68	<68	<0.5	<0.5	<0.5	<1.5	--	--
01/06-07/15		104.12	7.17	0.00	96.95	620	43	3,300	<66	630	<2.0	<2.0	1.4	<6.0	<2.5	--
04/06-08/15		104.12	8.08	0.00	96.04	540	150	3,500	<66	810	<0.9	<0.6	1.0	<5.0	--	--
07/23/15		104.12	9.69	0.00	94.43	INSUFFICIENT WATER FOR SAMPLE										
10/19-20/15		104.12	DRY	--	--	INSUFFICIENT WATER FOR SAMPLE										
01/12-13/16		104.12	7.15	0.00	96.97	510	85	4,800	<100	650	<0.2	0.3	<0.5	1.1	--	--
04/23/16		104.12	9.39	0.00	94.73	INSUFFICIENT WATER FOR SAMPLE										
06/10-12/20		104.12	9.23	0.00	94.89	INSUFFICIENT WATER FOR SAMPLE										
09/19/20		104.12	DRY	--	--	INSUFFICIENT WATER FOR SAMPLE										
12/08/20		104.12	9.17	0.00	94.95	INSUFFICIENT WATER FOR SAMPLE										
07/06/21		104.12		0.00	104.12						<0.3				--	--
11/29/21		104.12	6.73	0.00	97.39	26	--	510	--	230	<0.3	<0.2	<0.4	<0.4	<0.2	--
04/05/22		104.12	7.79	0.00	96.33	1,000	--	5,500	--	530	<0.3	<0.2	<0.4	<0.4	<0.2	--
06/22/22		104.12	8.18	0.00	95.94	950	--	790	--	<100	<0.3	<0.2	<0.4	<0.4	<0.2	--
10/06/22		104.12	DRY	--	--	INSUFFICIENT WATER FOR SAMPLE										
MW-19																
08/31/10		101.41	6.07	0.00	95.34	2,900	8,800	--	<1,700	--	1	3	11	9	--	--
10/07/11		101.41	6.65	0.00	94.76	2,300	440	--	<69	--	9.8	4.2	6.5	12	--	--
01/10/12		101.41	4.70	0.00	96.71	3,100	470	--	<67	--	9.1	3.5	9.1	12	--	--

Table 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
Former Standard Oil Bulk Terminal/Chevron Facility No. 1001348
1656 East J Street
Tacoma, Washington

Well ID/ Date	Purge Method	TOC ¹ (ft)	DTW (ft)	SPHT (ft)	GWE ² (ft)	TPH-GRO (µg/L)	TPH-DRO w/Silica Gel (µg/L)	TPH-DRO w/out Silica (µg/L)	TPH-HRO w/Silica Gel (µg/L)	TPH-HRO w/out Silica (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	PAHs (µg/L)
MW-19 cont.																
04/11/12		101.41	4.15	0.00	97.26	1,200	540	--	<68	--	1.3	1.4	3.6	5.9	--	--
07/10/12		101.41	5.53	0.00	95.88	2,900	2,900	--	350	--	3.1	4.3	9.7	18	--	--
10/10/12		101.41	6.74	0.00	94.67	1,600	150	--	<66	--	<6.0	3.3	5.7	8.5	--	--
01/09/13		101.41	3.36	0.00	98.05	110	89	--	<67	--	<0.5	<2.0	<0.5	1.6	--	--
04/09/13		101.41	4.33	0.00	97.08	1,500	400	--	<66	--	2.1	2.1	3.9	<7.0	--	--
09/25-26/13		101.41	5.98	0.00	95.43	2,000	--	21,000	--	1,700	2.5	2.5	5.2	<11	--	--
11/05-06/13		101.41	5.47	0.00	95.94	2,400	--	12,000	--	1,300	3.2	2.8	8.1	<14	--	--
01/07-09/14		101.41	5.57	0.00	95.84	2,400	--	11,000	--	<670	3.8	3.2	6.6	14	--	--
04/07-08/14		101.41	4.08	0.00	97.33	1,000	290	22,000	<67	1,900	0.8	0.6	1.7	<5.0	--	--
07/07-09/14		101.41	5.63	0.00	95.78	1,900	39	42	<68	<68	0.5	13	13	170	--	--
10/07-08/14		101.41	7.96	0.00	93.45	<50	<29	<29	<68	<68	<0.5	<0.5	<0.5	<1.5	--	--
01/06-07/15		101.41	3.76	0.00	97.65	1,500	7,400	10,000	<1,700	<3,300	<4.0	1.9	3.6	<9.0	<9.0	--
04/06-08/15		101.41	4.18	0.00	97.23	990	500	16,000	<66	3,100	1.5	1.3	2.4	5.6	--	--
07/23/15		101.41	6.38	0.00	95.03	2,400	370	12,000	<100	<1,000	3.5	3.3	3.5	9.5	--	--
10/19-20/15		101.41	6.32	0.00	95.09	3,000	250	27,000	<100	2,000	3.5	2.7	3.5	7.0	--	--
01/12-13/16		101.41	3.76	0.00	97.65	870	1,900	14,000	270	2,700	0.7	0.6	1.0	2.4	--	--
04/23/16		101.41	4.77	0.00	96.64	1,700	5,000	51,000	650	<5,200	1.7	0.9	1.6	#####	--	--
06/10-12/20		101.41	5.65	0.00	95.76	1,100	--	29,000	--	13,000	0.2	#####	#####	#####	--	--
09/19/20		101.41	6.68	0.00	94.73	--	--	--	--	--	--	--	--	--	--	--
12/08/20		101.41	5.60	0.00	95.81	1,900	1,900	45,000	420	1,200	0.4	#####	1.0	#####	--	--
07/07/21		101.41	--	0.00	101.41	500	--	5,300	--	1,800	<0.3	<0.	<0.4	<0.	--	--
11/29/21		101.41	2.49	0.00	98.92	80	--	18,000	--	1,900	<0.3	<0.	<0.4	<0.	<0.	--
MW-20																
08/31/10		100.99	5.31	0.00	95.68	1,700	7,600	--	2,300	--	59	6	11	6	--	--
10/07/11		100.99	5.95	0.00	95.04	2,700	1,500	--	430	--	14	4.2	5.2	4.2	--	--
01/10/12		100.99	3.70	0.00	97.29	3,700	980	--	<67	--	130	7.2	19	16	--	--
04/11/12		100.99	3.30	0.00	97.69	2,400	990	--	<67	--	88	6.5	15	23	--	--
07/10/12		100.99	4.66	0.15	96.45	NOT SAMPLED DUE TO THE PRESENCE OF SPH				--	--	--	--	--	--	--
10/08/12		100.99	6.43	0.41	94.89	NOT SAMPLED DUE TO THE PRESENCE OF SPH				--	--	--	--	--	--	--
01/08/13		100.99	3.90	0.02	97.11	NOT SAMPLED DUE TO THE PRESENCE OF SPH				--	--	--	--	--	--	--
04/08/13		100.99	3.42	0.02	97.59	NOT SAMPLED DUE TO THE PRESENCE OF SPH				--	--	--	--	--	--	--
09/25-26/13		100.99	5.07	0.03	95.94	NOT SAMPLED DUE TO THE PRESENCE OF SPH				--	--	--	--	--	--	--
11/05-06/13		100.99	6.81	0.29	94.41	NOT SAMPLED DUE TO THE PRESENCE OF SPH				--	--	--	--	--	--	--
01/07-09/14		100.99	UNABLE TO GAUGE DEPTH DUE TO PRODUCT				--	--	--	--	--	--	--	--	--	--
04/07-08/14		100.99	3.55	0.03	97.46	NOT SAMPLED DUE TO THE PRESENCE OF SPH				--	--	--	--	--	--	--
07/07-09/14		100.99	5.96	0.08	95.09	NOT SAMPLED DUE TO THE PRESENCE OF SPH				--	--	--	--	--	--	--
10/07-08/14		100.99	6.16	0.05	94.87	NOT SAMPLED DUE TO THE PRESENCE OF SPH				--	--	--	--	--	--	--
01/06-07/15		100.99	3.61	0.02	97.40	NOT SAMPLED DUE TO THE PRESENCE OF SPH				--	--	--	--	--	--	--
04/06-08/15		100.99	UNABLE TO GAUGE DEPTH DUE TO PRODUCT				--	--	--	--	--	--	--	--	--	--
07/23/15		100.99	5.80	0.07	95.25	NOT SAMPLED DUE TO THE PRESENCE OF SPH				--	--	--	--	--	--	--
10/19-20/15		100.99	5.61	0.03	95.40	NOT SAMPLED DUE TO THE PRESENCE OF SPH				--	--	--	--	--	--	--
01/12-13/16		100.09	3.14	0.04	96.98	NOT SAMPLED DUE TO THE PRESENCE OF SPH				--	--	--	--	--	--	--
04/23/16		100.09	7.19	0.28	93.12	NOT SAMPLED DUE TO THE PRESENCE OF SPH				--	--	--	--	--	--	--
06/10-12/20		100.09	4.75	0.02	95.36	NOT SAMPLED DUE TO THE PRESENCE OF SPH				--	--	--	--	--	--	--
09/19/20		100.09	6.05	0.00	94.04					--	--	--	--	--	--	--
12/08/20		100.09	5.60	0.03	94.51	NOT SAMPLED DUE TO THE PRESENCE OF SPH				--	--	--	--	--	--	--
07/06/21		100.09	--	--	--	NOT SAMPLED DUE TO THE PRESENCE OF SPH				--	--	--	--	--	--	--
11/29/21		100.09	2.83	0.05	97.30	NOT SAMPLED DUE TO THE PRESENCE OF SPH				--	--	--	--	--	--	--

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1656 East J Street
Tacoma, Washington

Well ID/ Date	Purge Method	TOC ¹ (ft)	DTW (ft)	SPHT (ft)	GWE ² (ft)	TPH-GRO (µg/L)	TPH-DRO w/Silica Gel (µg/L)	TPH-DRO w/out Silica (µg/L)	TPH-HRO w/Silica Gel (µg/L)	TPH-HRO w/out Silica (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	PAHs (µg/L)
MW-21																
08/31/10		100.60	4.93	0.00	95.67	230	1,400	--	960	--	<0.5	<0.5	<0.5	<0.5	--	--
10/07/11		100.60	5.30	0.00	95.30	820	1,200	--	290	--	<0.5	<0.5	1.2	5.9	--	--
01/10/12		100.60	2.90	0.00	97.70	250	<29	--	<67	--	<0.5	<0.5	<0.5	1.9	--	--
04/10/12		100.60	2.85	0.00	97.75	130	58	--	<68	--	<0.5	<0.5	<0.5	<1.5	--	--
07/10/12		100.60	4.07	0.00	96.53	330	610	--	190	--	0.8	<0.5	0.6	<6.0	--	--
10/10/12		100.60	5.53	0.00	95.07	450	1,900	--	1,200	--	0.9	0.7	1	4.1	--	--
01/08/13		100.60	2.54	0.00	98.06	260	63	--	<66	--	0.6	0.5	<0.5	4.1	--	--
04/09/13		100.60	2.78	0.00	97.82	230	43	--	<66	--	<0.5	<0.5	<0.5	2.8	--	--
09/25-26/13		100.60	4.24	0.00	96.36	520	--	2,400	--	870	<2.5	0.6	0.70	4.6	--	--
11/05-06/13		100.60	3.89	0.00	96.71	370	--	2,500	--	1,400	<0.5	<0.5	<0.5	<4.0	--	--
01/07-09/14		100.60	3.77	0.00	96.83	370	--	2,100	--	600	<2.0	<0.5	0.6	4.0	--	--
04/07-08/14		100.60	2.78	0.00	97.82	93	32	1,300	<67	1,400	<0.5	<0.5	<0.5	<1.5	--	--
07/07-09/14		100.60	4.72	0.00	95.88	350	540	2,000	<68	890	<2.0	<0.5	0.6	<5.0	--	--
10/07-08/14		100.60	5.66	0.00	94.94	<50	110	140	<67	<67	<0.5	<0.5	<0.5	<1.5	--	--
01/06-07/15		100.60	3.48	0.00	97.12	180	48	1,300	<66	820	<0.5	<0.5	<0.5	<3.0	<2.5	--
04/06-08/15		100.60	3.19	0.00	97.41	130	49	1,300	<67	730	<0.5	<0.5	<0.5	<1.5	--	--
07/23/15		100.60	5.24	0.00	95.36	700	150	1,600	<100	1,300	<0.5	<0.8	1.1	3.4	--	--
10/19-20/15		100.60	4.83	0.00	95.77	630	150	2,400	<100	990	<0.2	<0.2	0.9	2.3	--	--
01/12-13/16		100.60	2.21	0.00	98.39	290	<45	1,800	<100	1,800	<0.2	<0.2	<0.4	1.3	--	--
04/23/16		100.60	3.44	0.00	97.16	400	72	1,400	<100	1,600	<0.2	0.3	0.5	1.2	--	--
06/10-12/20		100.60	3.97	0.00	96.63	27	--	760	--	1,200	<1.0	<1.0	<1.0	<3.0	--	--
09/19/20		100.60	5.62	0.00	94.98											
12/08/20		100.60	3.03	0.00	97.57	19	<46	360	<100	630	<0.2	<0.2	<0.4	<1.4	--	--
07/06/21		100.60	3.03	0.00	97.57	160	--	840	--	770	<0.3	<0.4	<0.2	<0.4	--	--
11/29/21		100.60	2.64	0.00	97.96	<19	--	430	--	770	<0.3	<0.2	<0.4	<0.4	<0.2	--
MW-22																
08/31/10		100.62	6.21	0.00	94.41	81	2,300	--	1,100	--	<0.5	<0.5	<0.5	<0.5	--	--
10/07/11		100.62	6.55	0.00	94.07	300	950	--	440	--	0.7	<0.5	<0.5	2.8	--	--
01/09/12		100.62	5.42	0.00	95.20	590	14,000	--	6,500	--	<2.0	<0.5	<0.5	1.9	--	--
04/10/12		100.62	4.90	0.00	95.72	56	65	--	<67	--	<0.5	<0.5	<0.5	<1.5	--	--
07/10/12		100.62	5.74	0.00	94.88	520	6,700	--	2,400	--	0.6	<0.5	0.6	3.5	--	--
10/09/12		100.62	6.63	0.00	93.99	280	4,900	--	2,600	--	0.5	0.6	0.6	2.7	--	--
01/08/13		100.62	4.90	0.00	95.72	70	220	--	150	--	<0.5	<0.5	<0.5	<1.5	--	--
04/09/13		100.62	5.13	0.00	95.49	52	<28	--	<66	--	<0.5	<0.5	<0.5	<1.5	--	--
09/25-26/13		100.62	6.12	0.00	94.50	350	--	3,300	--	1,200	0.7	0.7	0.70	3.3	--	--
11/05-06/13		100.62	5.73	0.00	94.89	360	--	3,500	--	1,800	0.7	<1.0	0.6	2.9	--	--
01/07-09/14		100.62	5.87	0.00	94.75	390	--	3,200	--	930	<2.0	0.6	0.7	3.9	--	--
04/07-08/14		100.62	4.88	0.00	95.74	150	52	2,800	<66	2,100	<0.5	<0.5	<0.5	<1.5	--	--
07/07-09/14		100.62	5.90	0.00	94.72	370	790	3,800	260	1,800	<2.0	0.6	0.6	3.5	--	--
10/07-08/14		100.62	6.73	0.00	93.89	<50	34	47	<68	<68	<0.5	<0.5	<0.5	<1.5	--	--
01/06-07/15		100.62	4.75	0.00	95.87	120	36	2,800	<68	1,100	<0.5	<0.5	<0.5	<1.7	<2.5	--
04/06-08/15		100.62	5.24	0.00	95.38	130	73	3,000	<66	840	<0.6	<0.5	<0.5	<1.5	--	--
07/23/15		100.62	6.38	0.00	94.24	420	3,800	5,800	1,600	2,700	0.5	<0.5	0.6	3.2	--	--

Table 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
Former Standard Oil Bulk Terminal/Chevron Facility No. 1001348
1656 East J Street
Tacoma, Washington

Well ID/ Date	Purge Method	TOC ¹ (ft)	DTW (ft)	SPHT (ft)	GWE ² (ft)	TPH-GRO (µg/L)	TPH-DRO w/Silica Gel (µg/L)	TPH-DRO w/out Silica (µg/L)	TPH-HRO w/Silica Gel (µg/L)	TPH-HRO w/out Silica (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	PAHs (µg/L)
MW-22 cont.																
10/19/20/15		100.62	6.41	0.00	94.21	550	9,300	22,000	4,200	12,000	<0.2	0.9	0.8	3.7	--	--
01/12-13/16		100.62	4.75	0.00	95.87	450	210	3,000	<100	2,300	<0.4	0.2	<0.6	1.8	--	--
04/23/16		100.62	5.26	0.00	95.36	490	1,200	1,100	410	390	<2.0	0.6	0.6	2.8	--	--
06/10-12/20		100.62	5.85	0.00	94.77	330	--	15,000	--	8,500	<1.0	<1.0	<1.0	<3.0	--	--
09/19/20		100.62	7.25	0.00	93.37	--	--	--	--	--	--	--	--	--	--	--
12/08/20		100.62	5.61	0.00	95.01	310	1,500	3,600	760	2,200	<0.2	<0.2	<0.4	<1.4	--	--
07/06/21		100.62	--	0.00	100.62	950	--	2,800	--	1,500	<0.30	0.28	<0.4	0.78	--	--
11/30/21		100.62	4.65	0.00	95.97	320	--	1,800	--	1,400	<0.3	<0.2	<0.4	<0.4	<0.2	--
04/06/22		100.62	5.03	0.00	95.59	380	--	2,600	--	1,700	<0.3	0.25	<0.4	<0.4	<0.2	--
06/22/22		100.62	5.28	0.00	95.34	360	--	2,300	--	910	<0.3	0.28	<0.4	0.75	--	--
10/05/22		100.62	6.55	0.00	94.07	500	--	10,000	--	5,300	<0.3	<0.3	<0.4	<1.4	--	--
MW-23																
02/21/19		--	--	--	--	--	--	65	--	<110	<0.2	<0.2	<0.4	<1	--	--
06/10-12/20		--	6.67	0.00	--	<250	--	<100	--	<260	<1.0	<1.0	<1.0	<3.0	--	--
09/19/20		--	7.36	0.00	--	--	--	--	--	--	--	--	--	--	--	--
12/08/20		--	6.67	0.00	--	<19	72	64	160	<100	<0.2	<0.2	<0.4	<1.4	--	--
07/06/21		--	--	0.00	--	<19	--	<46	--	<100	<0.3	<0.2	<0.4	<0.4	--	--
11/30/21		--	5.28	0.00	--	<19	--	<48	--	<110	<0.3	<0.2	<0.4	<0.4	--	--
04/06/22		--	6.03	0.00	--	<19	--	<46	--	<100	<0.3	<0.2	<0.4	<0.4	--	--
06/20/22		--	5.93	0.00	--	<22	--	<46	--	<100	<0.3	<0.2	<0.4	<0.4	--	--
10/05/22		--	7.27	0.00	--	<43	--	<46	--	<100	<0.3	<0.3	<0.4	<1.4	--	--
MW-24																
02/21/19		--	5.65	0.00	--	<250	--	1,600	--	350	<0.2	<0.2	<0.4	<1	<1	ND
06/10-12/20		--	6.34	0.00	--	<250	--	1,000	--	900	<1.0	<1.0	<1.0	<3.0	--	--
09/19/20		--	7.05	0.00	--	--	--	--	--	--	--	--	--	--	--	--
12/08/20		--	6.89	0.00	--	<19	<46	210	<100	<100	<0.2	<0.2	<0.4	<1.4	--	--
07/07/21		--	6.89	0.00	--	<19	--	270	--	200	<0.3	<0.2	<0.4	<0.4	--	--
12/01/21		--	5.09	0.00	--	38	--	3,500	--	930	<0.3	<0.2	<0.4	<0.4	<0.2	--
04/05/22		--	5.12	0.00	--	34	--	1,100	--	350	<0.3	<0.2	<0.4	<0.4	<0.2	--
06/20/22		--	5.43	0.00	--	29	--	1,300	--	300	<0.3	<0.2	<0.4	<0.4	--	--
10/06/22		--	UNABLE TO ACCESS				--	--	--	--	--	--	--	--	--	--
MW-25																
02/21/19		--	--	--	--	--	--	73	--	<110	0.4	<0.2	<0.4	<1	--	--
12/08/20		--	4.51	0.00	--	1,200	270	490	1,600	2,900	1.1	0.33	0.87	<1.4	--	--
07/08/21		--	--	0.00	--	1,700	--	180	--	190	2.9	0.86	2.5	<0.4	--	--
12/01/21		--	3.33	0.00	--	400	--	98	--	<100	0.56	<0.2	0.52	<0.4	<0.2	--
04/06/22		--	3.66	0.00	--	940	--	190	--	<110	1.7	0.47	1.2	<0.4	<0.2	--
06/21/22		--	4.04	0.00	--	1,500	--	350	--	140	1.7	0.67	2.2	<0.4	--	--
10/05/22		--	5.66	0.00	--	1,400	--	320	--	110	1.3	0.54	1.9	<1.4	--	--
MW-26																
02/21/19		--	3.40	0.00	--	<250	--	430	--	160	<0.2	<0.2	<0.4	<1	<1	ND
06/10-12/20		--	4.33	0.00	--	44	--	3,600	--	1,400	<1.0	<1.0	<1.0	<3.0	--	--
09/19/20		--	5.25	0.00	--	--	--	--	--	--	--	--	--	--	--	--
12/09/20		--	4.08	0.00	--	20	<46	510	<100	310	<0.2	<0.2	<0.4	<1.4	--	--
07/07/21		--	--	0.00	--	93	--	4,000	--	1,800	<0.3	<0.2	<0.4	<0.4	--	--
11/30/21		--	2.79	0.00	--	29	--	610	--	340	<0.3	<0.2	<0.4	<0.4	<0.2	--
04/05/22		--	3.35	0.00	--	26	--	1,500	--	360	<0.3	<0.2	<0.4	<0.4	<0.2	--
06/20/22		--	3.58	0.00	--	32	--	1,800	--	450	<0.3	<0.2	<0.4	<0.4	<0.2	--
10/05/22		--	5.38	0.00	--	<43	--	1,200	--	520	<0.3	<0.3	<0.4	<1.4	--	--
MW-29																
02/21/19		--	5.15	0.00	--	--	--	7,200	--	590	<0.2	<0.2	<0.4	<1	--	--
06/10-12/20		--	6.52	0.00	--	810	--	22,000	--	2,100	<1.0	<1.0	<1.0	<3.0	--	--
09/19/20		--	7.15	0.00	--	--	--	--	--	--	--	--	--	--	--	--
12/08/20		--	6.18	0.00	--	200	52	870	<100	180	<0.4	<0.4	<0.8	<2.8	--	--
07/08/21		--	--	0.00	--	1,500	--	8,800	--	1,100	<0.6	0.51	<0.8	<0.8	--	--
12/01/21		--	5.00	0.00	--	33	--	140	--	<100	<0.6	<0.4	<0.8	<0.8	<0.4	--
04/06/22		--	5.78	0.00	--	390	--	8,100	--	620	<6	<4	<8	<8	<4	--
06/22/22		--	5.98	0.00	--	640	--	<47	--	<110	<0.6	<0.4	<0.8	<0.8	--	--
10/06/22		--	7.09	0.00	--	1,000	--	6,900	--	710	<0.3	<0.3	<0.4	<1.4	--	--
MW-30																
02/21/19		--	4.57	0.00	--	--	--	8,500	--	2,400	<0.2	<0.2	<0.4	<1	--	--
06/10-12/20		--	5.45	0.00	--	200	--	6,800	--	2,000	<1.0	<1.0	<1.0	<3.0	--	--
09/19/20		--	6.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--
12/08/20		--	5.41	0.00	--	180	1,300	7,900	1,900	4,600	<0.2	<0.2	<0.4	<1.4	--	--
07/07/21		--	--	0.00	--	200	--	7,000	--	2,100	<0.3	<0.2	<0.4	<0.4	--	--
12/01/21		--	4.11	0.00	--	31	--	2,300	--	1,300	<0.3	<0.2	<0.4	<0.4	<0.2	--
04/05/22		--	4.59	0.00	--	65	--	8,400	--	2,500	<0.3	<0.2	<0.4	<0.4	<0.2	--
06/20/22		--	4.65	0.00	--	30	--	5,600	--	2,100	<0.3	<0.2	<0.4	<0.4	--	--
10/05/22		--	6.06	0.00	--	120	--	5,100	--	2,300	<0.3	<0.3	<0.4	<1.4	--	--

Table 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
Former Standard Oil Bulk Terminal/Chevron Facility No. 1001348
1656 East J Street
Tacoma, Washington

Well ID/ Date	Purge Method	TOC ¹ (ft)	DTW (ft)	SPHT (ft)	GWE ² (ft)	TPH-GRO (µg/L)	TPH-DRO w/Silica Gel (µg/L)	TPH-DRO w/out Silica (µg/L)	TPH-HRO w/Silica Gel (µg/L)	TPH-HRO w/out Silica (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	PAHs (µg/L)
MW-31																
02/21/19		--	5.99	0.00	--	260	--	22,000	--	170	<0.2	<0.2	<0.4	<1	--	--
06/10-12/20		--	6.48	0.00	--	34	--	640	--	510	<1.0	<1.0	<1.0	<3.0	--	--
09/19/20		--	7.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--
12/08/20		--	6.72	0.00	--	24	<47	510	<100	<100	<0.2	<0.2	<0.4	<1.4	--	--
07/07/21		--	--	0.00	--	<19	--	140	--	130	<0.3	0.39	<0.4	<0.4	--	--
12/01/21		--	5.64	0.00	--	<19	--	190	--	<100	<0.3	<0.2	<0.4	<0.4	<0.2	--
04/05/22		--	6.24	0.00	--	<19	--	190	--	<100	<0.3	<0.2	<0.4	<0.4	<0.2	--
06/20/22		--	5.95	0.00	--	<22	--	230	--	<100	<0.3	<0.2	<0.4	<0.4	--	--
10/05/22		--	7.12	0.00	--	<43	--	140	--	480	<0.3	<0.3	<0.4	<1.4	--	--
MW-32																
06/10-12/20		--	3.15	0.00	--	2,400	--	6,000	--	790	0.93	0.35	0.20	<3.0	--	--
09/19/20		--	4.50	0.00	--	--	--	--	--	--	--	--	--	--	--	--
12/08/20		--	2.94	0.00	--	2,000	1,800	3,500	<100	240	0.94	0.41	<0.4	<1.4	--	--
07/06/21		--	--	0.00	--	1,300	--	860	--	280	<0.3	<0.4	<0.2	<0.4	--	--
11/29/21		--	1.99	0.00	--	450	--	700	--	170	<0.3	<0.2	<0.4	<0.4	--	--
04/05/22		--	1.77	0.00	--	160	--	97	--	<100	<0.3	<0.2	<0.4	<0.4	<0.2	--
06/21/22		--	2.32	0.00	--	400	--	<46	--	<100	<0.3	<0.2	<0.4	<0.4	--	--
10/06/22		--	4.43	0.00	--	780	--	1,600	--	180	<0.3	<0.3	<0.4	<1.4	--	--
MW-34																
03/04/21		--	--	0.00	--	<19	--	<46	--	<100	--	--	--	--	--	--
07/09/21		--	--	0.00	--	<19	--	<47	--	<100	<0.3	<0.2	<0.4	<0.4	--	--
11/30/21		--	6.96	0.00	--	<19	--	<45	--	<100	<0.3	<0.2	<0.4	<0.4	<0.2	--
04/07/22		--	7.73	0.00	--	<19	--	<46	--	<100	<0.3	<0.2	<0.4	<0.4	<0.2	--
06/21/22		--	7.65	0.00	--	<22	--	<46	--	<100	<0.3	<0.2	<0.4	<0.4	--	--
10/05/22		--	8.80	0.00	--	<43	--	<46	--	<100	<0.3	<0.3	<0.4	<1.4	--	--
MW-36																
01/10/21		--	--	0.00	--	<19	--	67	--	<100	<0.2	<0.2	<0.4	<1.4	<0.2	--
07/08/21		--	--	0.00	--	<19	--	<47	--	<100	<0.3	<0.2	<0.4	<0.4	--	--
12/01/21		--	5.64	0.00	--	<19	--	100	--	<110	<0.3	<0.2	<0.4	<0.4	<0.2	--
04/06/22		--	6.24	0.00	--	<19	--	<46	--	<100	<0.3	<0.2	<0.4	<0.4	<0.2	--
06/21/22		--	5.98	0.00	--	<22	--	<46	--	<100	<0.3	<0.2	<0.4	<0.4	--	--
10/05/22		--	DRY	--	--	INSUFFICIENT WATER FOR SAMPLE				--	--	--	--	--	--	--
MW-37																
01/10/21		--	--	0.00	--	28	--	320	--	720	<0.2	<0.2	<0.4	<1.4	<0.2	--
07/08/21		--	--	0.00	--	<19	--	67	--	<100	<0.3	<0.2	<0.4	<0.4	--	--
12/01/21		--	6.55	0.00	--	28	--	190	--	390	<0.3	<0.2	<0.4	<0.4	<0.2	--
04/06/22		--	7.29	0.00	--	<19	--	1,400	--	4,900	<0.3	<0.2	<0.4	<0.4	<0.2	--
06/21/22		--	6.95	0.00	--	<22	--	100	--	110	<0.3	<0.2	<0.4	<0.4	--	--
10/05/22		--	8.21	0.00	--	<43	--	560	--	2,300	<0.3	<0.3	<0.4	<1.4	--	--
MW-38																
01/10/21		--	--	0.00	--	<19	--	200	--	580	<0.2	<0.2	<0.4	<1.4	<0.2	--
07/08/21		--	--	0.00	--	<19	--	56	--	<110	<0.3	<0.2	<0.4	<0.4	--	--
12/01/21		--	7.09	0.00	--	<19	--	<46	--	<100	<0.3	<0.2	<0.4	<0.4	<0.2	--
04/06/22		--	7.74	0.00	--	<19	--	260	--	650	<0.3	<0.2	<0.4	<0.4	<0.2	--
06/21/22		--	7.55	0.00	--	<22	--	--	--	--	<0.3	<0.2	<0.4	<0.4	--	--
10/05/22		--	8.95	0.00	--	<43	--	57	--	<110	<0.3	<0.3	<0.4	<1.4	--	--
MW-39																
03/04/21		--	--	0.00	--	140	--	2,200	--	2,600	--	--	--	--	--	--
07/08/21		--	--	0.00	--	170	--	4,400	--	1,200	<0.3	<0.2	<0.4	<0.4	--	--
12/01/21		--	4.80	0.00	--	97	--	2,700	--	310	<0.3	<0.2	<0.4	<0.4	<0.2	--
04/07/22		--	5.34	0.00	--	65	--	370	--	<100	<0.3	<0.2	<0.4	<0.4	<0.2	--
06/22/22		--	5.62	0.00	--	58	--	<47	--	<100	<0.3	<0.2	<0.4	<0.4	--	--
10/05/22		--	6.80	0.00	--	200	--	10,000	--	2,400	<0.3	<0.3	<0.4	<1.4	--	--
D-1																
09/23/92		101.96	8.74	--	93.22	180	2,100	--	--	--	ND	ND	ND	ND	--	--
01/11/93		101.96	9.50	--	92.46	--	--	--	--	--	--	--	--	--	--	--
06/04/93		101.96	9.75	--	92.21	100	22,000	--	--	--	0.6	ND	ND	ND	--	--
12/15/93		101.96	9.28	--	92.68	150	2,400	--	--	--	ND	ND	ND	ND	1.0	0.14
06/03/94		101.96	10.53	--	91.43	290	2,600	--	ND	--	ND	ND	ND	ND	--	0.14
11/01/94		101.96	10.15	--	91.81	170	2,800	--	ND	--	ND	ND	ND	ND	0.9	0.1 - 0.2
02/09/95		101.96	8.82	--	93.14	170	2,800	--	420	--	ND	ND	ND	ND	--	ND - 5.0
05/02/95		101.96	9.87	--	92.09	110	6,000	--	ND	--	ND	ND	ND	ND	--	ND
08/02/95		101.96	10.43	--	91.53	ND	4,800	--	900	--	ND	ND	ND	ND	--	ND
12/05/95		101.96	8.30	--	93.66	58	4,200	--	950	--	ND	ND	ND	ND	--	ND
03/18/96		101.96	10.30	--	91.66	91	3,600	--	ND	--	ND	ND	ND	2.1	--	ND
06/26/96		101.96	10.95	--	91.01	--	4,430	--	896	--	--	--	--	--	--	--
09/09/96		101.96	11.27	--	90.69	--	3,910	--	ND	--	--	--	--	--	--	--

Table 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
Former Standard Oil Bulk Terminal/Chevron Facility No. 1001348
1656 East J Street
Tacoma, Washington

Well ID/ Date	Purge Method	TOC ¹ (ft)	DTW (ft)	SPHT (ft)	GWE ² (ft)	TPH-GRO (µg/L)	TPH-DRO w/Silica Gel (µg/L)	TPH-HRO w/out Silica (µg/L)	TPH-HRO w/Silica Gel (µg/L)	TPH-HRO w/out Silica (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	PAHs (µg/L)
D-1 cont.																
12/30/96		101.96	7.25	--	94.71	--	3,400	--	ND	--	--	--	--	--	--	--
03/07/97		101.96	9.26	--	92.70	--	5,010	--	ND	--	--	--	--	--	--	ND
06/09/97		101.96	9.50	--	92.46	--	4,530	--	ND	--	--	--	--	--	--	ND
09/04/97		101.96	10.20	--	91.76	--	3,730	--	ND	--	--	--	--	--	--	ND - 0.114
12/17/97		101.96	8.14	--	93.82	--	3,190	--	ND	--	--	--	--	--	--	--
06/01/98		101.96	9.76	--	92.20	--	3,120	--	ND	--	--	--	--	--	--	--
11/01/98		101.96	11.06	0.00	90.90	--	1,770	--	ND	--	--	--	--	--	--	--
05/30/99		101.96	10.43	0.00	91.53	--	4,480	--	ND	--	--	--	--	--	--	--
06/11-12/00		101.96	9.97	0.00	91.99	--	--	--	--	--	--	--	--	--	--	--
04/04/02	NP	101.96	9.62	0.00	92.34	--	6,200	--	<1,100	--	--	--	--	--	--	--
04/28/03	NP	101.96	9.62	0.00	92.34	--	6,700	--	520	--	--	--	--	--	--	--
04/15/04	NP	101.96	9.78	0.00	92.18	--	6,500	--	400	--	--	--	--	--	--	--
04/29/05	NP	101.96	9.41	0.00	92.55	--	6,200	--	1,200	--	--	--	--	--	--	--
04/27/06	NP	101.96	10.42	0.00	91.54	--	5,000	--	<1,000	--	--	--	--	--	--	--
12/09/08	LFP	101.99	9.50	0.00	92.49	460	3,400	--	<690	--	ND	ND	ND	ND	ND	--
08/31/10		103.22	12.03	0.00	91.19	200	3,200	--	<360	--	<0.5	<0.5	<0.5	<0.5	--	--
10/07/11		103.22	11.85	0.00	91.37	680	250	--	<68	--	<5.0	0.9	1.3	4	--	--
01/10/12		103.22	10.85	0.00	92.37	160	240	--	<73	--	<0.5	<0.5	<0.5	<0.5	--	--
04/10/12		103.22	9.90	0.00	93.32	110	<30	--	<70	--	<0.5	<0.5	<0.5	<1.5	--	--
07/10/12		103.22	10.93	0.00	92.29	160	<31	--	<73	--	<0.5	<0.5	<0.5	1.6	--	--
10/10/12		103.22	12.43	0.00	90.79	140	<29	--	<67	--	<0.5	<0.5	<0.5	<1.5	--	--
01/09/13		103.22	9.92	0.00	93.30	50	<29	--	<67	--	<0.5	<0.5	<0.5	<1.5	--	--
04/09/13		103.22	10.80	0.00	92.42	99	<28	--	<66	--	<0.5	<0.5	<0.5	<1.5	--	--
09/25-26/13		103.22	10.48	0.00	92.74	99	--	5,200	--	590	<0.5	<0.5	<0.5	<1.5	--	--
11/05-06/13		103.22	10.94	0.00	92.28	120	--	3,600	--	300	<0.5	<0.5	<0.5	<1.5	--	--
01/07-09/14		103.22	11.15	0.00	92.07	110	--	6,100	--	710	<0.5	<0.5	<0.5	<1.5	--	--
04/07-08/14		103.22	10.58	0.00	92.64	110	<29	5,200	<67	820	<0.5	<0.5	<0.5	<1.5	--	--
07/07-09/14		103.22	11.82	0.00	91.39	150	<28	5,900	<66	730	<0.5	<0.5	<0.5	1.6	--	--
10/07-08/14		103.22	11.99	0.00	91.23	<50	<29	<29	<69	<69	<0.5	<0.5	<0.5	<1.5	--	--
01/06-07/15		103.22	9.95	0.00	93.27	170	540	1,500	<66	620	<0.5	<0.5	<0.5	<1.5	<2.5	--
04/06-08/15		103.22	10.44	0.00	92.78	95	<28	5,400	<66	340	<0.5	<0.5	<0.5	<1.5	--	--
07/23/15		103.22	11.64	0.00	91.58	220	61	7,000	<100	570	<0.5	<0.5	<0.5	<1.5	--	--
10/19-20/15		103.22	10.88	0.00	92.34	290	<46	6,100	<100	660	0.4	<0.2	<0.2	0.4	--	--
01/12-13/16		103.22	9.84	0.00	93.38	320	<46	6,300	<100	810	<0.2	<0.2	<0.4	1.4	--	--
04/23/16		103.22	10.69	0.00	92.53	290	<46	8,000	<100	1,500	<0.2	<0.2	0.3	1.6	--	--
06/10-12/20		103.22	10.78	0.00	92.44	240	--	4,500	--	930	<0.2	<0.2	<0.2	<0.8	--	--
09/19-21/20		103.22	11.29	0.00	91.93											
12/10/20		103.22	11.35	0.00	91.87	270	48	4,100	<100	580	<0.4	<0.4	<0.8	<2.8	--	--
07/06/21		103.22		0.00	103.22	230	--	4,900	--	710	<1.5	<2.0	<1.0	<2.0	--	--
11/29/21		103.22	9.61	0.00	93.61	270	--	3,200	--	530	<0.3	<0.2	<0.4	<0.4	<0.2	--
04/05/22		103.22	11.26	0.00	91.96	250	--	5,600	--	750	<0.3	<0.2	<0.4	<0.4	<0.2	--
06/22/22		103.22	10.91	0.00	92.31	240	--	<46	--	<100	<0.3	<0.2	<0.4	<0.4	--	--
10/06/22		103.22	12.09	0.00	91.13	260	--	4,300	--	700	<0.3	<0.3	<0.4	<1.4	--	--
D-2A																
09/23/92		100.80	--	--	--	25	690	--	--	--	11	ND	ND	ND	--	--
01/11/93		100.80	8.20	--	92.60	--	--	--	--	--	--	--	--	--	--	--
06/04/93		100.80	8.55	--	92.25	ND	ND	--	--	--	ND	ND	ND	ND	--	--

Table 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
Former Standard Oil Bulk Terminal/Chevron Facility No. 1001348
1656 East J Street
Tacoma, Washington

Well ID/ Date	Purge Method	TOC ¹ (ft)	DTW (ft)	SPHT (ft)	GWE ² (ft)	TPH-GRO (µg/L)	TPH-DRO w/Silica Gel (µg/L)	TPH-DRO w/out Silica (µg/L)	TPH-HRO w/Silica Gel (µg/L)	TPH-HRO w/out Silica (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	PAHs (µg/L)
D-2A cont.																
12/15/93		100.80	7.89	--	92.91	ND	660	--	--	--	ND	ND	ND	ND	--	ND
06/04/94		100.80	9.33	--	91.47	ND	760	--	ND	--	ND	ND	ND	ND	--	ND
11/01/94		100.80	8.67	--	92.13	ND	860	--	ND	--	ND	ND	ND	ND	0.8	ND
02/09/95		100.80	7.63	--	93.17	60	590	--	ND	--	ND	ND	ND	ND	--	ND
05/02/95		100.80	8.58	--	92.22	ND	1,700	--	ND	--	ND	ND	ND	ND	--	ND
08/02/95		100.80	9.27	--	91.53	ND	1,600	--	ND	--	ND	ND	ND	ND	--	ND
12/05/95		100.80	7.20	--	93.60	ND	2,300	--	1,100	--	ND	ND	ND	ND	--	ND
03/18/96		100.80	8.96	--	91.84	ND	820	--	ND	--	ND	ND	ND	ND	--	ND
06/26/96		100.80	9.55	--	91.25	--	2,230	--	ND	--	--	--	--	--	--	--
09/09/96		100.80	9.80	--	91.00	--	1,900	--	ND	--	--	--	--	--	--	--
12/30/96		100.80	6.00	--	94.80	--	2,390	--	ND	--	--	--	--	--	--	--
03/07/97		100.80	7.85	--	92.95	--	2,280	--	ND	--	--	--	--	--	--	ND
06/09/97		100.80	8.25	--	92.55	--	2,200	--	ND	--	--	--	--	--	--	ND
09/04/97		100.80	9.17	--	91.63	--	1,930	--	ND	--	--	--	--	--	--	ND
12/17/97		100.80	6.99	--	93.81	--	1,100	--	ND	--	--	--	--	--	--	--
06/01/98		100.80	8.52	--	92.28	--	1,200	--	ND	--	--	--	--	--	--	--
11/01/98		100.80	9.64	0.00	91.16	--	592	--	ND	--	--	--	--	--	--	--
05/30/99		100.80	9.10	0.00	91.70	--	1,380	--	ND	--	--	--	--	--	--	--
06/11-12/00		100.80	9.08	0.00	91.72	--	--	--	--	--	--	--	--	--	--	--
04/04/02	NP	100.80	8.24	0.00	92.56	--	2,200	--	<750	--	--	--	--	--	--	--
04/28/03	NP	100.80	8.16	0.00	92.64	--	2,700	--	610	--	--	--	--	--	--	--
04/15/04	NP	100.80	8.60	0.00	92.20	--	2,400	--	350	--	--	--	--	--	--	--
04/29/05	NP	100.80	8.00	0.00	92.80	--	2,400	--	870	--	--	--	--	--	--	--
04/27/06	NP	100.80	8.89	0.00	91.91	--	1,700	--	<500	--	--	--	--	--	--	--
12/09/08	LFP	100.78	8.75	0.00	92.03	ND	1,000	--	190	--	ND	ND	ND	ND	ND	--
08/31/10		100.78	9.37	0.00	91.41	<50	2,100	--	810	--	<0.5	<0.5	<0.5	<0.5	--	--
10/07/11		100.78	UNABLE TO LOCATE			--	--	--	--	--	--	--	--	--	--	--
01/09/12		100.78	8.10	0.00	92.68	<50	45	--	150	--	<0.5	<0.5	<0.5	<1.5	--	--
04/11/12		100.78	7.35	0.00	93.43	<50	<30	--	<70	--	<0.5	<0.5	<0.5	<1.5	--	--
07/09/12		100.78	9.30	0.00	91.48	<50	<31	--	<73	--	<0.5	<0.5	<0.5	<1.5	--	--
10/09/12		100.78	9.59	0.00	91.19	<50	63	--	320	--	<0.5	<0.5	<0.5	<1.5	--	--
01/07/13		100.78	7.80	0.00	92.98	<50	<29	--	<67	--	<0.5	<0.5	<0.5	<1.5	--	--
04/09/13		100.78	8.40	0.00	92.38	<50	<29	--	<67	--	<0.5	<0.5	<0.5	<1.5	--	--
09/25-26/13		100.78	8.84	0.00	91.94	<50	--	3,700	--	1,000	<0.5	<0.5	<0.5	<1.5	--	--
11/05-06/13		100.78	8.50	0.00	92.28	<50	--	2,800	--	740	<0.5	<0.5	<0.5	<1.5	--	--
01/07-09/14		100.78	8.70	0.00	92.08	<50	--	3,100	--	620	<0.5	<0.5	<0.5	<1.5	--	--
04/07-08/14		100.78	7.89	0.00	92.89	<50	<29	3,000	<67	1,300	<0.5	<0.5	<0.5	<1.5	--	--
07/07-09/14		100.78	8.99	0.00	91.79	39,000	3,500	5,200	500	640	140	1,400	490	4,200	--	--
10/07-08/14		100.78	8.13	0.00	92.65	<50	<29	240	<67	<67	<0.5	<0.5	<0.5	<1.5	--	--
01/06-07/15		100.78	7.43	0.00	93.35	<50	<28	2,800	<66	870	<0.5	<0.5	<0.5	<1.5	<2.5	--

Table 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
Former Standard Oil Bulk Terminal/Chevron Facility No. 1001348
1656 East J Street
Tacoma, Washington

Well ID/ Date	Purge Method	TOC ¹ (ft)	DTW (ft)	SPHT (ft)	GWE ² (ft)	TPH-GRO (µg/L)	TPH-DRO w/Silica Gel (µg/L)	TPH-DRO w/out Silica (µg/L)	TPH-HRO w/Silica Gel (µg/L)	TPH-HRO w/out Silica (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	PAHs (µg/L)
D-2A cont.																
04/06/08/15		100.78	7.97	0.00	92.81	<50	<28	2,800	<66	560	<0.5	<0.5	<0.5	<1.5	--	--
07/23/15		100.78	UNABLE TO ATTEMPT			--	--	--	102	--	--	--	--	--	--	--
10/19/20/15		100.78	UNABLE TO ATTEMPT			--	--	--	--	--	--	--	--	--	--	--
01/12/13/16		100.78	UNABLE TO ATTEMPT			--	--	--	--	--	--	--	--	--	--	--
04/23/16		100.78	UNABLE TO ATTEMPT			--	--	--	--	--	--	--	--	--	--	--
06/10-12/20		100.78	8.10	0.00	92.68	55	--	1,700	--	880	<1.0	<1.0	<1.0	<3.0	--	--
09/19-21/20		100.78	8.60	0.00	92.18											
12/08/20		100.78	8.76	0.00	92.02	50	<45	1,400	<100	680	<0.2	<0.2	<0.4	<1.4	--	--
07/07/21		100.78		0.00	100.78	82	--	2,100	--	1,000	<0.3	<0.2	<0.4	<0.4	--	--
11/30/21		100.78	7.42	0.00	93.36	50	--	1,300	--	650	<0.3	<0.2	<0.4	<0.4	<0.2	--
D-3																
09/23/92		101.04	8.00	--	93.04	75	1,200	--	--	--	ND	ND	ND	ND	--	--
01/11/93		101.04	8.40	--	92.64	--	--	--	--	--	--	--	--	--	--	--
06/04/93		101.04	8.58	--	92.46	ND	780	--	--	--	ND	ND	ND	ND	--	--
12/15/93		101.04	8.19	--	92.85	ND	1,900	--	--	--	ND	ND	ND	ND	--	ND
06/03/94		101.04	9.41	--	91.63	ND	1,700	--	ND	--	ND	ND	ND	ND	--	ND
11/01/94		101.04	8.86	--	92.18	ND	1,400	--	ND	--	ND	ND	ND	ND	--	ND
02/09/95		101.04	7.77	--	93.27	100	1,600	--	270	--	ND	ND	ND	ND	--	ND
05/02/95		101.04	8.57	--	92.47	57	5,100	--	940	--	ND	ND	ND	ND	--	ND
08/02/95		101.04	9.44	--	91.60	ND	4,100	--	810	--	ND	ND	ND	ND	--	ND
12/05/95		101.04	7.20	--	93.84	ND	4,400	--	930	--	ND	ND	ND	ND	--	ND
03/18/96		101.04	9.14	--	91.90	85	1,500	--	ND	--	ND	0.79	ND	2.2	--	ND
06/26/96		101.04	9.75	--	91.29	--	4,120	--	ND	--	--	--	--	--	--	--
09/09/96		101.04	10.00	--	91.04	--	3,850	--	ND	--	--	--	--	--	--	--
12/30/96		101.04	6.35	--	94.69	--	3,120	--	ND	--	--	--	--	--	--	--
03/07/97		101.04	8.10	--	92.94	--	2,760	--	ND	--	--	--	--	--	--	ND
06/09/97		101.04	8.10	--	92.94	--	2,680	--	ND	--	--	--	--	--	--	ND
09/04/97		101.04	9.08	--	91.96	--	4,080	--	ND	--	--	--	--	--	--	ND - 0.178
12/17/97		101.04	7.29	--	93.75	--	3,300	--	ND	--	--	--	--	--	--	--
06/01/98		101.04	8.68	--	92.36	--	3,160	--	1,530	--	--	--	--	--	--	--
11/01/98		101.04	9.88	0.00	91.16	--	1,630	--	ND	--	--	--	--	--	--	--
05/30/99		101.04	9.29	0.00	91.75	--	3,870	--	ND	--	--	--	--	--	--	--
06/11-12/00		101.04	8.97	0.00	92.07	--	--	--	--	--	--	--	--	--	--	--
04/04/02	NP	101.04	8.45	0.00	92.59	--	3,500	--	<750	--	--	--	--	--	--	--
04/28/03	NP	101.04	8.28	0.00	92.76	--	2,800	--	530	--	--	--	--	--	--	--
04/15/04	NP	101.04	8.76	0.00	92.28	--	3,200	--	420	--	--	--	--	--	--	--
04/29/05	NP	101.04	8.25	0.00	92.79	--	2,800	--	860	--	--	--	--	--	--	--
04/27/06	NP	101.04	9.11	0.00	91.93	--	2,900	--	<510	--	--	--	--	--	--	--
12/10/08	LFP	101.04	8.91	0.00	92.13	--	2,900	--	<510	--	--	--	--	--	--	--
08/31/10		102.22	10.88	0.00	91.34	140	2,600	--	<360	--	<0.5	<0.5	<0.5	<0.5	--	--
08/31/10 (D)		102.22	10.88	0.00	91.34	130	2,500	--	<360	--	<0.5	<0.5	<0.5	<0.5	--	--
10/07/11		102.22	10.55	0.00	91.67	75	<30	--	<69	--	<0.5	<0.5	<0.5	<1.5	--	--
01/10/12		102.22	9.70	0.00	92.52	84	<30	--	<70	--	<0.5	<0.5	<0.5	<1.5	--	--
04/10/12		102.22	8.80	0.00	93.42	82	<30	--	<70	--	<0.5	<0.5	<0.5	<1.5	--	--

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Former Standard Oil Bulk Terminal/Chevron Facility No. 1001348
1656 East J Street
Tacoma, Washington

Well ID/ Date	Purge Method	TOC ¹ (ft)	DTW (ft)	SPHT (ft)	GWE ² (ft)	TPH-GRO (µg/L)	TPH-DRO w/Silica Gel (µg/L)	TPH-DRO w/out Silica (µg/L)	TPH-HRO w/Silica Gel (µg/L)	TPH-HRO w/out Silica (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	PAHs (µg/L)
D-3 cont.																
07/10/12		102.22	9.97	0.00	92.25	120	<30	--	<71	--	<0.5	<0.5	<0.5	<1.5	--	--
10/09/12		102.22	10.86	0.00	91.36	67	<29	--	<67	--	<0.5	<0.5	<0.5	<2.0	--	--
01/08/13		102.22	8.90	0.00	93.32	<50	<29	--	<67	--	<0.5	<0.5	<0.5	<1.5	--	--
04/09/13		102.22	5.34	0.00	96.88	77	<28	--	<66	--	<0.5	<0.5	<0.5	<5.0	--	--
09/25-26/13		102.22	10.48	0.00	91.74	<50	--	3,000	--	350	<0.5	<0.5	<0.5	<1.5	--	--
11/05-06/13		102.22	9.96	0.00	92.26	52	--	3,400	--	430	<0.5	<0.5	<0.5	<1.5	--	--
01/07-09/14		102.22	10.17	0.00	92.05	<50	--	4,400	--	860	<0.5	<0.5	<0.5	<1.5	--	--
04/07-08/14		102.22	9.26	0.00	92.96	100	<29	4,900	<67	990	<0.5	<0.5	<0.5	<1.5	--	--
07/07-09/14		102.22	10.22	0.00	92.00	110	<28	4,000	<66	930	<0.5	<0.5	<0.5	<1.5	--	--
10/07-08/14		102.22	10.13	0.00	92.09	<50	<29	<29	<68	<68	<0.5	<0.5	<0.5	<1.5	--	--
01/06-07/15		102.22	8.88	0.00	93.34	<50	<28	4,000	<66	890	<0.5	<0.5	<0.5	<1.5	<2.5	--
04/06-08/15		102.22	9.37	0.00	92.85	110	<29	3,500	<67	450	<0.5	<0.5	<0.5	<1.5	--	--
07/23/15		102.22	10.48	0.00	91.74	91	<46	6,000	<100	620	<0.5	<0.5	<0.5	<1.5	--	--
10/19-20/15		102.22	10.02	0.00	92.20	200	<45	3,700	<100	1,100	<0.2	0.2	<0.2	0.5	--	--
01/12-13/16		102.22	8.76	0.00	93.46	280	<46	4,300	<100	1,000	<0.2	<0.2	<0.2	1.1	--	--
04/23/16		102.22	9.40	0.00	92.82	190	<46	4,300	<100	880	<0.2	<0.2	<0.2	0.7	--	--
D-3A																
07/06/21				0.00	0.00	140	--	3,400	--	680	<0.3	<0.2	<0.4	<0.4	--	--
11/29/21			6.61	0.00	--	190	--	4,900	--	770	<0.3	<0.2	<0.4	<0.4	<0.2	--
04/05/22			7.70	0.00	--	93	--	3,500	--	720	<0.3	<0.2	<0.4	<0.4	<0.2	--
06/21/22			7.33	0.00	--	73	--	<110	--	<270	<0.3	<0.2	<0.4	<0.4	--	--
10/06/22			8.55	0.00	--	170	--	3,400	--	910	<0.3	<0.3	<0.4	<1.4	--	--
D-6																
08/31/10		104.20	12.71	0.00	91.49	110	2,000	--	<360	--	<0.5	<0.5	<0.5	<0.5	--	--
10/07/11		104.20	12.17	0.00	92.03	140	1,100	--	82	--	<0.5	<0.5	<0.5	<1.5	--	--
01/10/12		104.20	11.25	0.00	92.95	160	32	--	<67	--	<0.5	<0.5	<0.5	<1.5	--	--
04/11/12		104.20	10.50	0.00	93.70	81	32	--	<72	--	<0.5	<0.5	<0.5	<1.5	--	--
07/10/12		104.20	12.06	0.00	92.14	130	<31	--	<71	--	<0.5	<0.5	<0.5	1.9	--	--
10/10/12		104.20	13.05	0.00	91.15	140	34	--	<66	--	0.9	<0.5	0.6	<1.5	--	--
01/09/13		104.20	13.45	0.00	90.75	100	<29	--	<67	--	<0.5	<0.5	<0.5	1.7	--	--
04/09/13		104.20	14.21	0.00	89.99	140	<29	--	<67	--	0.7	<0.5	<0.5	1.6	--	--
09/25-26/13		104.20	12.20	0.00	92.00	170	--	5,000	--	450	<0.5	<0.5	<0.5	<1.5	--	--
11/05-06/13		104.20	11.74	0.00	92.46	250	--	4,000	--	350	<0.5	<0.5	0.7	<5.0	--	--
01/07-09/14		104.20	15.45	0.00	88.75	180	--	6,900	--	1,100	<2.0	<0.5	<0.5	1.8	--	--
04/07-08/14		104.20	12.52	0.00	91.68	150	<29	5,300	<69	1,100	<0.5	<0.5	<0.5	<1.5	--	--
07/07-09/14		104.20	16.88	0.00	87.32	8,900	160	150	<66	<66	7.6	160	100	940	--	--
10/07-08/14		104.20	12.93	0.00	91.27	<50	53	84	<68	<68	<0.5	<0.5	<0.5	<1.5	--	--
01/06-07/15		104.20	10.98	0.00	93.22	200	39	3,500	<67	870	<0.7	<0.5	0.6	<2.8	<2.5	--
04/06-08/15		104.20	10.39	0.00	93.81	160	<28	3,400	500	<66	<0.5	<0.5	<0.5	<1.5	--	--
07/23/15		104.20	14.81	0.00	89.39	300	47	4,800	<100	670	0.6	0.6	0.6	<3.0	--	--
10/19-20/15		104.20	11.80	0.00	92.40	270	<46	3,700	<100	930	<0.2	0.5	0.5	1.2	--	--
01/12-13/16		104.20	10.36	0.00	93.84	290	<46	3,600	750	<100	<0.2	<0.2	<0.4	<1.5	--	--
04/23/16		104.20	11.51	0.00	92.69	350	100	5,700	<100	410	<0.3	0.2	<0.2	1.6	--	--
06/10-12/20		104.20	12.16	0.00	92.04	380	--	8,200	--	1,200	<1.0	0.22	<1.0	<3.0	--	--
09/19-21/20		104.20	12.05	0.00	92.15											

Table 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
Former Standard Oil Bulk Terminal/Chevron Facility No. 1001348
1656 East J Street
Tacoma, Washington

Well ID/ Date	Purge Method	TOC ¹ (ft)	DTW (ft)	SPHT (ft)	GWE ² (ft)	TPH-GRO (µg/L)	TPH-DRO w/Silica Gel (µg/L)	TPH-DRO w/out Silica (µg/L)	TPH-HRO w/Silica Gel (µg/L)	TPH-HRO w/out Silica (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	PAHs (µg/L)
D-6 cont.																
12/10/20		104.20	12.30	0.00	91.90	320	<46	5,200	<100	580	<0.2	<0.2	<0.4	<1.4	--	--
07/06/21		104.20		0.00	104.20	420	--	5,700	--	780	<0.3	0.20	<0.4	<0.4	--	--
11/29/21		104.20	10.29	0.00	93.91	350	--	4,000	--	590	<0.3	<0.2	<0.4	<0.4	<0.2	--
04/05/22		104.20	12.09	0.00	92.11	350	--	4,500	--	380	<0.3	<0.2	<0.4	<0.4	<0.2	--
06/22/22		104.20	11.70	0.00	92.50	310	--	49	--	<100	<0.3	<0.2	<0.4	<0.4	--	--
10/06/22		104.20	12.86	0.00	91.34	410	--	4,100	--	500	<0.3	<0.3	<0.4	<1.4	--	--
D-7																
08/31/10		100.38	8.86	0.00	91.52	<50	1,600	--	<690	--	<0.5	<0.5	<0.5	<0.5	--	--
10/07/11		100.38	8.50	0.00	91.88	<50	<30	--	<69	--	<0.5	<0.5	<0.5	<1.5	--	--
01/09/12		100.38	7.80	0.00	92.58	<50	<30	--	<70	--	<0.5	<0.5	<0.5	<1.5	--	--
04/10/12		100.38	7.00	0.00	93.38	<50	38	--	<69	--	<0.5	<0.5	<0.5	<1.5	--	--
07/10/12		100.38	7.94	0.00	92.44	<50	<30	--	<70	--	<0.5	<0.5	<0.5	<1.5	--	--
10/09/12		100.38	8.58	0.00	91.80	<50	<29	--	<68	--	<0.5	<0.5	<0.5	<1.5	--	--
01/08/13		100.38	7.28	0.00	93.10	<50	<28	--	<66	--	<0.5	<0.5	<0.5	<1.5	--	--
04/09/13		100.38	7.67	0.00	92.71	<50	<29	--	<67	--	<0.5	<0.5	<0.5	<1.5	--	--
09/25-26/13		100.38	8.22	0.00	92.16	<50	--	990	--	420	<0.5	<0.5	<0.5	<1.5	--	--
11/05-06/13		100.38	8.29	0.00	92.09	<50	--	790	--	210	<0.5	<0.5	<0.5	<1.5	--	--
01/07-09/14		100.38	8.34	0.00	92.04	<50	--	1,500	--	740	<0.5	<0.5	<0.5	<1.5	--	--
04/07-08/14		100.38	7.36	0.00	93.02	<50	<29	990	<67	640	<0.5	<0.5	<0.5	<1.5	--	--
07/07-09/14		100.38	7.97	0.00	92.41	<50	<28	640	<66	210	<0.5	<0.5	<0.5	<1.5	--	--
10/07-08/14		100.38	8.22	0.00	92.16	<50	<29	<29	<67	<67	<0.5	<0.5	<0.5	<1.5	--	--
01/06-07/15		100.38	7.05	0.00	93.33	<50	<29	1,100	<67	630	<0.5	<0.5	<0.5	<1.5	<2.5	--
04/06-08/15		100.38	7.69	0.00	92.69	<50	<28	580	210	<66	<0.5	<0.5	<0.5	<1.5	--	--
07/23/15		100.38	8.46	0.00	91.92	<50	<46	660	<100	460	<0.5	<0.5	<0.5	<1.5	--	--
10/19-20/15		100.38	8.24	0.00	92.14	<50	<47	970	<100	610	<0.2	<0.2	<0.2	0.2	--	--
01/12-13/16		100.38	7.02	0.00	93.36	120	<45	1,500	<100	640	<0.2	<0.2	<0.2	0.4	--	--
04/23/16		100.38	7.60	0.00	92.78	57	<46	980	<100	360	<0.2	<0.2	<0.2	0.3	--	--
06/10-12/20		100.38	7.21	0.00	93.17	20	--	300	--	360	<1.0	<1.0	<1.0	<3.0	--	--
09/19/20		100.38	8.25	0.00	92.13											
12/08/20		100.38	8.28	0.00	92.10	20	<46	420	<100	290	<0.4	<0.4	<0.8	<2.8	--	--
07/06/21		100.38		0.00	100.38	19	--	500	--	330	<0.6	3.0	<0.8	<0.8	--	--
11/30/21		100.38	6.81	0.00	93.57	42	--	360	--	320	<0.3	<0.2	<0.4	<0.4	<0.2	--
04/06/22		100.38	7.55	0.00	92.83	<19	--	550	--	220	<0.3	<0.2	<0.4	<0.4	<0.2	--
06/22/22		100.38	7.57	0.00	92.81	<22	--	<46	--	<100	<0.3	<0.2	<0.4	<0.4	--	--
10/05/22		100.38	8.55	0.00	91.83	160	--	2,000	--	1,200	<0.3	<0.3	<0.4	<1.4	--	--
D-8																
02/21/19		--	--	--	--	--	--	3,800	--	400	<0.2	<0.2	<0.4	<1	--	--
06/10-12/20		--	7.13	0.00	--	86	--	4,300	--	850	<1.0	<1.0	<1.0	<3.0	--	--
09/19/20		--	7.42	0.00	--	--	--	--	--	--	--	--	--	--	--	--
12/08/20		--	8.13	0.00	--	81	<46	2,500	<100	340	<0.2	<0.2	<0.4	<1.4	--	--
07/08/21		--		0.00	--	100	--	2,900	--	730	<0.3	<0.2	<0.4	<0.4	--	--
11/30/21		--	6.50	0.00	--	110	--	4,500	--	600	<0.3	<0.2	<0.4	<0.4	<0.2	--
04/06/22		--	7.35	0.00	--	120	--	3,100	--	410	<0.3	<0.2	<0.4	<0.4	<0.2	--
06/20/22		--	7.65	0.00	--	47	--	2,700	--	530	<0.3	<0.2	<0.4	<0.4	--	--
10/05/22		--	7.39	0.00	--	86	--	2,300	--	330	<0.3	0.36	<0.4	<1.4	--	--
D-9																
02/21/19		--	5.75	0.00	--	<250	--	2,700	--	880	<0.2	<0.2	<0.4	<1	<1	ND
06/10-12/20		--	6.23	0.00	--	53	--	1,500	--	780	<1.0	<1.0	<1.0	<3.0	--	--
09/19/20		--	6.75	0.00	--	--	--	--	--	--	--	--	--	--	--	--
12/08/20		--	6.68	0.00	--	<19	<46	1,600	<100	860	<0.4	<0.4	<0.8	<2.8	--	--
07/07/21		--		0.00	--	51	--	3,600	--	2,100	<0.6	0.54	<0.8	<0.8	--	--
12/01/21		--	5.52	0.00	--	<19	--	1,600	--	1,100	<0.3	<0.2	<0.4	<0.4	<0.2	--
04/05/22		--	5.98	0.00	--	26	--	1,800	--	830	<0.3	<0.2	<0.4	<0.4	<0.2	--
06/20/22		--	5.83	0.00	--	25	--	2,700	--	990	<0.3	<0.2	<0.4	<0.4	--	--
10/06/22		--	UNABLE TO ACCESS				--	--	--	--	--	--	--	--	--	--

Table 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
Former Standard Oil Bulk Terminal/Chevron Facility No. 1001348
1656 East J Street
Tacoma, Washington

Well ID/ Date	Purge Method	TOC ¹ (ft)	DTW (ft)	SPHT (ft)	GWE ² (ft)	TPH-GRO (µg/L)	TPH-DRO w/Silica Gel (µg/L)	TPH-DRO w/out Silica (µg/L)	TPH-HRO w/Silica Gel (µg/L)	TPH-HRO w/out Silica (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	PAHs (µg/L)
D-10																
02/21/19		--	--	--	--	--	--	1,600	--	240	<0.2	<0.2	<0.4	<1	--	--
06/10-12/20		--	7.40	0.00	--	130	--	2,700	--	640	<1.0	<1.0	<1.0	<3.0	--	--
09/19/20		--	7.78	0.00	--	--	--	--	--	--	--	--	--	--	--	--
12/08/20		--	8.30	0.00	--	<19	<46	99	<100	<100	<0.2	<0.2	<0.4	<1.4	--	--
07/06/21		--	UNABLE TO ACCESS													
11/30/21		--	7.36	0.00	--	<19	--	<46	--	<100	<0.3	<0.2	<0.4	<0.4	<0.2	--
04/06/22		--	7.94	0.00	--	23	--	260	--	<100	<0.3	<0.2	<0.4	<0.4	<0.2	--
06/21/22		--	7.73	0.00	--	<22	--	<48	--	<110	<0.3	<0.2	<0.4	<0.4	--	--
10/05/22		--	8.94	0.00	--	<43	--	74	--	<100	<0.3	<0.3	<0.4	<1.4	--	PAHs
D-12																
02/21/19		--	7.57	0.00	--	--	--	520	--	330	<0.2	<0.2	<0.4	<1	--	--
06/10-12/20		--	8.21	0.00	--	<250	--	540	--	530	<1.0	<1.0	<1.0	<3.0	--	--
09/19/20		--	8.75	0.00	--	--	--	--	--	--	--	--	--	--	--	--
12/08/20		--	8.97	0.00	--	<19	<46	360	<100	210	<0.2	<0.2	<0.4	<1.4	--	--
07/08/21		--	--	0.00	--	<19	--	330	--	440	<0.3	<0.2	<0.4	<0.4	--	--
11/30/21		--	UNABLE TO ACCESS													
04/07/22		--	8.06	0.00	--	<19	--	420	--	260	<6.0	<4.0	<8.0	<8.0	<4.0	--
06/22/22		--	8.40	0.00	--	<22	--	<47	--	<100	<0.6	<0.4	<0.8	<0.8	--	--
10/06/22		--	8.40	0.00	--	<43	--	380	--	140	<0.3	<0.3	<0.4	<1.4	--	--
D-13																
11/29/21		--	5.75	0.00	--	NOT SAMPLED DUE TO THE PRESENCE OF SPH				--	--	--	--	--	--	--
D-14																
12/10/20		--	11.25	--	--	<19	<46	130	<100	<100	<0.2	<0.2	<0.4	<1.4	--	--
07/06/21		--	--	--	--	31	--	350	--	170	<0.3	<0.4	<0.2	<0.4	--	--
11/29/21		--	8.28	--	--	29	--	240	--	<100	<0.3	<0.2	<0.4	<0.4	<0.2	--
04/05/22		--	7.78	--	--	22	--	230	--	<100	<0.3	<0.2	<0.4	<0.4	<0.2	--
06/22/22		--	8.73	--	--	<22	--	<47	--	<100	<0.3	<0.2	<0.4	<0.4	--	--
10/06/22		--	9.89	--	--	<43	--	210	--	<110	<0.3	<0.3	<0.4	<1.4	--	--
D-15																
02/21/19		--	--	--	--	--	--	4,500	--	380	<0.2	<0.2	<0.4	<1	--	--
06/10-12/20		--	8.19	0.00	--	66	--	1,900	--	800	<1.0	<1.0	<1.0	<3.0	--	--
09/19/20		--	8.63	0.00	--	--	--	--	--	--	--	--	--	--	--	--
12/08/20		--	8.89	0.00	--	69	<46	1,700	<100	510	<0.2	<0.2	<0.4	<1.4	--	--
07/08/21		--	--	0.00	--	51	--	1,100	--	640	<0.3	<0.2	<0.4	<0.4	--	--
12/01/21		--	7.16	0.00	--	37	--	1,400	--	460	<0.3	<0.2	<0.4	<0.4	<0.2	--
04/06/22		--	8.79	0.00	--	81	--	1,800	--	380	<6	<4	<8	<8	<4	--
06/22/22		--	8.54	0.00	--	31	--	<47	--	<100	<0.3	<0.2	<0.4	<0.4	--	--
10/06/22		--	9.50	0.00	--	57	--	1,400	--	340	<0.3	<0.3	<0.4	<1.4	--	--
D-17																
02/21/19		--	5.41	0.00	--	<250	--	180	--	130	<0.2	<0.2	<0.4	<1	<1	ND
06/10-12/20		--	6.00	0.00	--	<250	--	470	--	560	<1.0	<1.0	<1.0	<3.0	--	--
09/19/20		--	6.68	0.00	--	--	--	--	--	--	--	--	--	--	--	--
12/09/20		--	6.29	0.00	--	<19	<100	230	<100	150	<0.2	<0.2	<0.4	<1.4	--	--
07/07/21		--	--	0.00	--	<19	--	140	--	120	<0.3	<0.2	<0.4	<0.4	--	--
11/30/21		--	5.00	0.00	--	21	--	320	--	200	<0.3	<0.2	<0.4	<0.4	<0.2	--
04/05/22		--	5.75	0.00	--	<19	--	320	--	120	<0.3	<0.2	<0.4	<0.4	<0.2	--
06/20/22		--	5.53	0.00	--	<22	--	250	--	100	<0.3	<0.2	<0.4	<0.4	--	--
10/05/22		--	6.91	0.00	--	<43	--	330	--	150	<0.3	<0.3	<0.4	<1.4	--	--

Table 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
Former Standard Oil Bulk Terminal/Chevron Facility No. 1001348
1656 East J Street
Tacoma, Washington

Well ID/ Date	Purge Method	TOC ¹ (ft)	DTW (ft)	SPHT (ft)	GWE ² (ft)	TPH-GRO (µg/L)	TPH-DRO w/Silica Gel (µg/L)	TPH-DRO w/out Silica (µg/L)	TPH-HRO w/Silica Gel (µg/L)	TPH-HRO w/out Silica (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	PAHs (µg/L)
D-18																
02/21/19	--	--	5.98	0.00	--	--	--	910	--	350	<0.2	<0.2	<0.4	<1	--	--
06/10-12/20	--	--	6.58	0.00	--	42	--	1,300	--	810	<1.0	<1.0	<1.0	<3.0	--	--
09/19/20	--	--	7.22	0.00	--	--	--	--	--	--	--	--	--	--	--	--
12/09/20	--	--	7.00	0.00	--	<19	<45	1,500	<100	690	<0.2	<0.2	<0.4	<1.4	--	--
07/07/21	--	--	--	0.00	--	47	--	2,200	--	1,600	<0.3	<0.2	<0.4	<0.4	--	--
12/01/21	--	--	5.85	0.00	--	22	--	1,300	--	790	<0.3	<0.2	<0.4	<0.4	<0.2	--
04/05/22	--	--	6.33	0.00	--	39	--	1,900	--	700	<0.3	<0.2	<0.4	<0.4	<0.2	--
06/20/22	--	--	6.13	0.00	--	22	--	2,500	--	770	<0.3	<0.2	<0.4	<0.4	--	--
10/05/22	--	--	7.53	0.00	--	<43	--	520	--	290	<0.3	<0.3	<0.4	<1.4	--	--
D-19																
02/21/19	--	--	6.08	0.00	--	<250	--	570	--	190	<0.2	<0.2	<0.4	<1	<1	ND
06/10-12/20	--	--	6.58	0.00	--	<250	--	530	--	450	<1.0	<1.0	<1.0	<3.0	--	--
09/19/20	--	--	7.10	0.00	--	--	--	--	--	--	--	--	--	--	--	--
12/09/20	--	--	7.10	0.00	--	<19	<45	110	<100	<100	<0.2	<0.2	<0.4	<1.4	--	--
07/07/21	--	--	--	0.00	--	<19	--	52	--	<100	<0.3	<0.2	<0.4	<0.4	--	--
12/01/21	--	--	5.96	0.00	--	<19	--	140	--	<100	<0.3	<0.2	<0.4	<0.4	<0.2	--
04/05/22	--	--	6.36	0.00	--	<19	--	79	--	<100	<0.3	<0.2	<0.4	<0.4	<0.2	--
06/20/22	--	--	6.28	0.00	--	<22	--	120	--	<100	<0.3	0.22	<0.4	<0.4	<0.2	--
10/05/22	--	--	7.55	0.00	--	<43	--	110	--	<100	<0.3	<0.3	<0.4	<1.4	--	--
D-22																
03/04/21	--	--	--	0.00	--	33	--	100	--	<100	--	--	--	--	--	--
07/06/21	--	--	--	UNABLE TO ACCESS												
11/30/21	--	--	--	UNABLE TO ACCESS												
04/06/22	--	--	8.80	0.00	--	44	--	91	--	<100	<0.3	<0.2	<0.4	<0.4	<0.2	--
06/21/22	--	--	9.94	0.00	--	<22	--	700	--	<100	<0.3	<0.2	<0.4	<0.4	<0.2	--
10/05/22	--	--	8.73	0.00	--	<43	--	220	--	<100	<0.3	<0.3	<0.4	<1.4	--	--
D-24																
01/10/21	--	--	--	0.00	--	<19	--	200	--	<100	<0.2	0.25	<0.4	<1.4	<0.2	--
07/08/21	--	--	--	0.00	--	20	--	<46	--	<100	<0.3	<0.2	<0.4	<0.4	--	--
12/01/21	--	--	6.38	0.00	--	<19	--	73	--	<110	<0.3	<0.2	<0.4	<0.4	<0.2	--
04/06/22	--	--	6.96	0.00	--	<19	--	<45	--	<100	<0.3	<0.2	<0.4	<0.4	<0.2	--
06/21/22	--	--	6.85	0.00	--	<22	--	<47	--	<100	<0.3	<0.2	<0.4	<0.4	--	--
10/05/22	--	--	7.86	0.00	--	<43	--	<47	--	<100	<0.3	<0.3	<0.4	<1.4	--	--
D-25																
01/10/21	--	--	--	0.00	--	<19	--	65	--	<100	<0.2	<0.2	<0.4	<1.4	<0.2	--
07/08/21	--	--	--	0.00	--	37	--	1,700	--	880	<0.3	<0.2	<0.4	<0.4	--	--
12/01/21	--	--	7.34	0.00	--	21	--	520	--	170	<0.3	<0.2	<0.4	<0.4	<0.2	--
04/06/22	--	--	8.98	0.00	--	<19	--	990	--	260	<0.3	<0.2	<0.4	<0.4	<0.2	--
06/21/22	--	--	7.82	0.00	--	<22	--	890	--	250	<0.3	<0.3	<0.4	<1.4	--	--
10/05/22	--	--	8.89	0.00	--	<43	--	2,200	--	690	<0.3	<0.3	<0.4	<1.4	--	--
D-26																
01/10/21	--	--	--	0.00	--	21	--	580	--	590	<0.2	0.24	<0.4	<1.4	<0.2	--
07/08/21	--	--	--	0.00	--	<19	--	300	--	300	<0.3	<0.2	<0.4	<0.4	--	--
12/01/21	--	--	7.80	0.00	--	26	--	480	--	250	<0.3	<0.2	<0.4	<0.4	<0.2	--
04/06/22	--	--	8.37	0.00	--	21	--	630	--	210	<0.3	<0.2	<0.4	<0.4	<0.2	--
06/21/22	--	--	8.22	0.00	--	<22	--	440	--	200	<0.3	<0.2	<0.4	<0.4	--	--
10/05/22	--	--	9.32	0.00	--	<43	--	270	--	160	<0.3	<0.3	<0.4	<1.4	--	--
D-27																
03/04/21	--	--	--	0.00	--	110	--	790	--	400	--	--	--	--	--	--
07/08/21	--	--	--	0.00	--	32	--	900	--	740	<0.3	<0.2	<0.4	<0.4	--	--
12/01/21	--	--	7.50	0.00	--	53	--	1,300	--	430	<0.3	<0.2	<0.4	<0.4	<0.2	--
04/07/22	--	--	8.20	0.00	--	71	--	1,390	--	340	<0.3	<0.2	<0.4	<0.4	<0.2	--
06/22/22	--	--	8.18	0.00	--	27	--	<46	--	<110	<0.3	<0.2	<0.4	<0.4	--	--
10/05/22	--	--	9.25	0.00	--	43	--	1,400	--	440	<0.3	<0.3	<0.4	<1.4	--	--
RMW-1																
07/10/14	LFP	--	5.70	--	--	730	74	--	<69	--	1	1	<0.5	1	--	--
12/08/20	--	--	5.20	--	--	200	<45	2,400	<100	450	<0.2	<0.2	<0.4	<1.4	--	--
07/08/21	--	--	--	--	--	690	--	6,400	--	1,000	<0.3	<0.2	<0.4	<0.4	--	--
11/30/21	--	--	--	UNABLE TO ACCESS												
04/07/22	--	--	4.39	--	--	98	--	1,700	--	760	<6.0	<4.0	<8.0	<8.0	<4.0	--
06/22/22	--	--	4.72	--	--	180	--	<46	--	<100	<0.3	<0.2	<0.4	<0.4	--	--
10/05/22	--	--	6.30	--	--	470	--	3,400	--	450	<0.3	<0.3	<0.4	<1.4	--	--

Table 1
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Former Standard Oil Bulk Terminal/Chevron Facility No. 1001348
1656 East J Street
Tacoma, Washington

Well ID/ Date	Purge Method	TOC ¹ (ft)	DTW (ft)	SPHT (ft)	GWE ² (ft)	TPH-GRO (µg/L)	TPH-DRO w/Silica Gel (µg/L)	TPH-DRO w/out Silica (µg/L)	TPH-HRO w/Silica Gel (µg/L)	TPH-HRO w/out Silica (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	PAHs (µg/L)
No Longer Monitored/Sampled																
MW-6																
06/04/93		101.41	5.73	--	95.68	500	9,900	--	--	--	8.5	ND	0.7	0.9	--	--
12/15/93		101.41	6.11	--	95.30	ND	400	--	--	--	ND	ND	ND	ND	--	ND
06/03/94		101.41	6.39	--	95.02	ND	--	--	--	--	ND	ND	ND	ND	--	--
11/01/94		101.41	6.93	--	94.48	1,200	--	--	--	--	ND	ND	ND	1.2	--	--
02/09/95		101.41	4.82	--	96.59	ND	1,200	--	270	--	ND	ND	ND	ND	--	ND
05/02/95		101.41	5.67	--	95.74	ND	3,000	--	1,500	--	ND	ND	ND	ND	--	ND
08/02/95		101.41	6.70	--	94.71	--	--	--	--	--	--	--	--	--	--	--
12/05/95		101.41	4.53	--	96.88	58	4,300	--	2,000	--	0.72	ND	ND	ND	--	ND
03/18/96		101.41	5.20	--	96.21	ND	360	--	ND	--	ND	ND	ND	ND	--	--
MW-6 cont.																
06/26/96		101.41	6.23	--	95.18	--	5,090	--	1,230	--	--	--	--	--	--	--
09/09/96		101.41	6.71	--	94.70	--	--	--	--	--	--	--	--	--	--	--
12/30/96		101.41	3.35	--	98.06	--	9,470	--	999	--	--	--	--	--	--	--
03/07/97		101.41	4.65	--	96.76	ND	2,430	--	ND	--	ND	ND	ND	ND	--	ND
06/09/97		101.41	5.47	--	95.94	--	301	--	ND	--	--	--	--	--	--	ND
09/04/97 ⁴		101.41	6.94	--	94.47	--	--	--	--	--	--	--	--	--	--	--
12/17/97		101.41	4.92	--	96.49	--	ND	--	ND	--	--	--	--	--	--	--
06/01/98		101.41	6.09	--	95.32	--	1,510	--	ND	--	--	--	--	--	--	--
11/01/98		101.41	7.12	0.00	94.29	--	551	--	ND	--	--	--	--	--	--	--
05/30/99		101.41	6.08	0.00	95.33	--	1,060	--	ND	--	--	--	--	--	--	--
06/11-12/00		101.41	UNABLE TO LOCATE			--	--	--	--	--	--	--	--	--	--	--
09/25/00		101.41	UNABLE TO LOCATE			--	--	--	--	--	--	--	--	--	--	--
01/26/01		101.41	UNABLE TO LOCATE			--	--	--	--	--	--	--	--	--	--	--
01/09/02		101.41	UNABLE TO LOCATE			--	--	--	--	--	--	--	--	--	--	--
04/10-11/12		101.41	UNABLE TO LOCATE			--	--	--	--	--	--	--	--	--	--	--
NOT MONITORED/SAMPLED																
MW-8																
09/23/92		101.32	6.14	--	95.18	500	7,100	--	--	--	1,700	7.0	4.0	12	--	--
01/11/93		101.32	5.26	--	96.06	--	--	--	--	--	--	--	--	--	--	--
06/04/93		101.32	4.88	--	96.44	3,400	810,000	--	--	--	21	ND	ND	7.6	--	13 - 600
12/15/93		101.32	4.82	--	96.50	400	--	--	--	--	ND	ND	ND	0.6	--	--
06/04/94		101.32	5.18	--	96.14	1,300	--	--	--	--	13	1.3	1.0	2.5	--	--
11/01/94		101.32	6.19	--	95.13	5,800	--	--	--	--	46	4.6	35	300	--	--
02/09/95		101.32	3.92	0.02	97.42	--	--	--	--	--	--	--	--	--	--	--
05/02/95		101.32	--	--	--	--	--	--	--	--	--	--	--	--	--	--
08/02/95		101.32	6.50	--	94.82	--	--	--	--	--	--	--	--	--	--	--
12/05/95		101.32	3.30	--	98.02	19,000	290,000	--	19,000	--	ND	ND	ND	ND	--	7.2 - 210
03/18/96		101.32	--	--	--	--	--	--	--	--	--	--	--	--	--	--
06/26/96		101.32	5.15	Sheen	96.17	--	--	--	--	--	--	--	--	--	--	--
09/09/96		101.32	6.25	--	95.07	--	--	--	--	--	--	--	--	--	--	--
12/30/96		101.32	2.15	--	99.17	138	2,160	--	1,800	--	ND	ND	ND	ND	--	--
03/07/97		101.32	2.90	--	98.42	ND	1,020	--	1,800	--	ND	ND	ND	ND	--	0.119 - 0.738
09/04/97		101.32	5.96	--	95.36	INSUFFICIENT WATER TO SAMPLE										
DESTROYED	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
Former Standard Oil Bulk Terminal/Chevron Facility No. 1001348
1656 East J Street
Tacoma, Washington

Well ID/ Date	Purge Method	TOC ¹ (ft)	DTW (ft)	SPHT (ft)	GWE ² (ft)	TPH-GRO (µg/L)	TPH-DRO w/Silica Gel (µg/L)	TPH-DRO w/out Silica (µg/L)	TPH-HRO w/Silica Gel (µg/L)	TPH-HRO w/out Silica (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	PAHs (µg/L)
MW-9																
09/23/92		99.62	6.15	--	93.47	93	960	--	--	--	ND	ND	ND	0.5	--	--
09/23/92 (D)		99.62	--	--	--	99	790	--	--	--	ND	ND	ND	0.5	--	--
01/11/93		99.62	4.90	--	94.72	--	--	--	--	--	--	--	--	--	--	--
06/04/93		99.62	5.10	--	94.52	360	11,000	--	--	--	ND	ND	ND	0.6	--	0.17 - 0.95
12/15/93		99.62	5.20	--	94.42	ND	760	--	--	--	ND	ND	ND	ND	--	0.22 - 0.64
06/04/94		99.62	5.68	--	93.94	730	16,000	--	ND	--	ND	ND	ND	2.2	--	1.7
11/01/94		99.62	5.66	--	93.96	ND	1,000	--	ND	--	ND	ND	ND	ND	--	0.057 - 0.67
02/09/95		99.62	4.35	--	95.27	250	11,000	--	1,800	--	ND	ND	ND	ND	--	ND
05/02/95		99.62	4.90	--	94.72	270	24,000	--	2,800	--	ND	ND	ND	1.0	--	ND
08/02/95		99.62	5.35	--	94.27	400	36,000	--	6,800	--	ND	0.67	ND	1.6	--	ND
12/05/95		99.62	4.00	--	95.62	ND	2,700	--	2,800	--	ND	0.73	0.7	4.0	--	ND
03/18/96		99.62	4.80	--	94.82	ND	3,300	--	1,400	--	ND	ND	ND	ND	--	ND
06/26/96		99.62	4.89	--	94.73	--	19,700	--	3,940	--	--	--	--	--	--	--
MW-9 cont.																
09/09/96		99.62	5.60	--	94.02	--	9,110	--	1,650	--	--	--	--	--	--	--
12/30/96		99.62	3.17	--	96.45	--	2,690	--	1,310	--	--	--	--	--	--	--
03/07/97		99.62	4.30	--	95.32	62	9,440	--	2,030	--	ND	ND	ND	ND	--	0.126
06/09/97		99.62	4.56	--	95.06	--	16,300	--	3,160	--	--	--	--	--	--	ND
09/04/97		99.62	5.50	--	94.12	--	21,700	--	ND	--	--	--	--	--	--	ND - 1.47
06/01/98		99.62	5.20	--	94.42	--	19,500	--	ND	--	--	--	--	--	--	--
11/01/98		99.62	5.84	0.00	93.78	--	2,280	--	ND	--	--	--	--	--	--	--
05/30/99		99.62	5.13	0.00	94.49	--	27,800	--	ND	--	--	--	--	--	--	--
06/11-12/00		99.62	INACCESSIBLE			--	--	--	--	--	--	--	--	--	--	--
09/25/00		99.62	5.91	0.01	93.71	--	2,650	--	3,060	--	--	--	--	--	--	--
01/26/01		99.62	4.98	0.00	94.64	--	ND	--	ND	--	--	--	--	--	--	--
01/09/02		99.62	3.34	0.00	96.28	--	346	--	<500	--	--	--	--	--	--	--
04/04/02	NP	99.62	4.69	0.00	94.93	--	5,700	--	1,600	--	--	--	--	--	--	--
04/28/03	NP	99.62	4.59	0.00	95.03	--	11,000	--	2,100	--	--	--	--	--	--	--
04/15/04		99.62	INACCESSIBLE - WELL FILLED WITH BENTONITE				--	--	--	--	--	--	--	--	--	--
04/29/05		99.62	INACCESSIBLE - WELL FILLED WITH BENTONITE				--	--	--	--	--	--	--	--	--	--
04/27/06		99.62	INACCESSIBLE - WELL FILLED WITH BENTONITE				--	--	--	--	--	--	--	--	--	--

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Well ID/ Date	Purge Method	TOC ¹ (ft)	DTW (ft)	SPHT (ft)	GWE ² (ft)	TPH-GRO (µg/L)	TPH-DRO w/Silica Gel (µg/L)	TPH-DRO w/out Silica (µg/L)	TPH-HRO w/Silica Gel (µg/L)	TPH-HRO w/out Silica (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	PAHs (µg/L)
MW-15																
09/23/92		99.24	4.14	--	95.10	3,700	8,300	--	--	--	36	7.0	14	23	--	--
09/23/92 (D)		99.24	--	--	--	3,400	12,000	--	--	--	23	7.0	12	23	--	--
01/11/93		99.24	2.17	--	97.07	--	--	--	--	--	--	--	--	--	--	--
06/04/93		99.24	1.86	--	97.38	1,300	17,000	--	--	--	3.0	1.2	1.5	5.1	--	--
12/15/93		99.24	2.75	--	96.49	1,900	19,000	--	--	--	10	2.5	2.9	17	--	0.55 - 3.8
06/03/94		99.24	2.63	--	96.61	1,800	11,000	--	ND	--	2.1	3.4	4.7	9.2	--	ND
11/01/94		99.24	3.25	--	95.99	1,900	15,000	--	ND	--	15	2.8	4.2	12	--	0.67 - 4.3
02/09/95		99.24	0.95	--	98.29	210	7,000	--	1,400	--	ND	ND	ND	0.8	--	ND
05/02/95		99.24	1.60	--	97.64	160	13,000	--	2,400	--	ND	ND	ND	ND	--	ND
08/02/95		99.24	3.43	--	95.81	1,100	17,000	--	4,000	--	7.7	1.3	4.2	1.5	--	ND
12/05/95		99.24	0.20	--	99.04	ND	1,500	--	1,500	--	ND	ND	ND	ND	--	0
03/18/96		99.24	1.12	--	98.12	170	4,700	--	1,700	--	1.1	0.88	ND	2.3	--	ND
06/26/96		99.24	2.51	--	96.73	--	5,880	--	3,150	--	--	--	--	--	--	--
09/09/96		99.24	3.70	--	95.54	--	7,290	--	4,700	--	--	--	--	--	--	--
12/30/96		99.24	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/07/97		99.24	0.00	--	99.24	ND	6,000	--	2,030	--	ND	ND	ND	ND	--	ND
06/09/97		99.24	1.60	--	97.64	--	3,280	--	1,690	--	--	--	--	--	--	ND
09/04/97		99.24	3.28	--	95.96	--	6,980	--	3,260	--	--	--	--	--	--	ND
12/17/97		99.24	0.25	--	98.99	--	6,230	--	2,080	--	--	--	--	--	--	--
06/01/98		99.24	2.28	--	96.96	--	7,260	--	976	--	--	--	--	--	--	--
11/01/98		99.24	4.14	0.00	95.10	--	9,540	--	ND	--	--	--	--	--	--	--
05/30/99		99.24	2.20	0.00	97.04	--	6,610	--	3,930	--	--	--	--	--	--	--
DESTROYED	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-17																
09/23/92		99.64	4.58	--	95.06	5,100	5,300	--	--	--	36	7.0	32	300	--	--
01/11/93		99.64	2.80	--	96.84	--	--	--	--	--	--	--	--	--	--	--
06/04/93		99.64	2.36	--	97.28	2,300	24,000	--	--	--	9.0	1.4	16	61	--	0.18 - 33
12/15/93		99.64	3.31	--	96.33	20,000	45,000	--	--	--	19	6.2	17	110	--	0.73 - 34
06/04/94		99.64	3.18	--	96.46	990	31,000	--	ND	--	9.0	1.1	1.9	8.7	--	0.33 - 28
11/01/94		99.64	3.76	--	95.88	2,100	42,000	--	4,600	--	16	1.6	2.6	14	--	0.83 - 23
02/09/95		99.64	1.43	--	98.21	610	18,000	--	1,700	--	ND	1.0	1.3	3.6	--	ND
05/02/95		99.64	1.97	--	97.67	890	38,000	--	6,000	--	1.8	ND	0.95	3.3	--	ND
08/02/95		99.64	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/05/95		99.64	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/18/96		99.64	--	--	--	--	--	--	--	--	--	--	--	--	--	--
06/26/96		99.64	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ABANDONED	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
Former Standard Oil Bulk Terminal/Chevron Facility No. 1001348
1656 East J Street
Tacoma, Washington

Well ID/ Date	Purge Method	TOC ¹ (ft)	DTW (ft)	SPHT (ft)	GWE ² (ft)	TPH-GRO (µg/L)	TPH-DRO w/Silica Gel (µg/L)	TPH-DRO w/out Silica (µg/L)	TPH-HRO w/Silica Gel (µg/L)	TPH-HRO w/out Silica (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	PAHs (µg/L)
D-4																
09/23/92		98.76	7.33	--	91.43	ND	420	--	--	--	ND	ND	ND	ND	--	--
01/11/93		98.76	6.00	--	92.76	--	--	--	--	--	--	--	--	--	--	--
06/04/93		98.76	5.71	--	93.05	ND	ND	--	--	--	ND	ND	ND	ND	--	--
12/15/93		98.76	5.75	--	93.01	ND	330	--	--	--	ND	0.5	ND	ND	--	ND
06/04/94		98.76	6.93	--	91.83	ND	ND	--	ND	--	ND	ND	ND	ND	--	ND
11/01/94		98.76	6.29	--	92.47	ND	360	--	ND	--	ND	ND	ND	ND	--	ND
02/09/95		98.76	5.43	--	93.33	ND	200	--	300	--	ND	ND	ND	ND	--	ND
05/02/95		98.76	6.13	--	92.63	ND	390	--	1,000	--	ND	ND	ND	ND	--	ND
08/02/95		98.76	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/05/95		98.76	--	--	--	--	--	--	--	--	--	--	--	--	--	--
D-4 cont.																
03/18/96		98.76	6.46	--	92.30	ND	ND	--	ND	--	ND	ND	ND	ND	--	ND
06/26/96		98.76	7.10	--	91.66	--	592	--	ND	--	--	--	--	--	--	--
09/09/96		98.76	7.35	--	91.41	--	939	--	943	--	--	--	--	--	--	--
12/30/96		98.76	7.40	--	91.36	--	311	--	ND	--	--	--	--	--	--	--
03/07/97		98.76	5.55	--	93.21	--	264	--	ND	--	--	--	--	--	--	ND
06/09/97		98.76	5.65	--	93.11	--	ND	--	ND	--	--	--	--	--	--	ND
09/04/97		98.76	6.67	--	92.09	--	550	--	ND	--	--	--	--	--	--	ND
12/17/97		98.76	UNABLE TO LOCATE			--	--	--	--	--	--	--	--	--	--	--
06/01/98		98.76	6.34	--	92.42	--	371	--	ND	--	--	--	--	--	--	--
11/01/98		98.76	7.31	0.00	91.45	--	276	--	ND	--	--	--	--	--	--	--
05/30/99		98.76	6.54	0.00	92.22	--	429	--	ND	--	--	--	--	--	--	--
06/11-12/00		98.76	INACCESSIBLE - PAVED OVER			--	--	--	--	--	--	--	--	--	--	--
NOT MONITORED/SAMPLED		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
D-5A																
09/23/92		--	--	--	--	100	860	--	--	--	0.7	ND	0.3	0.9	--	--
01/11/93		100.53	7.92	--	92.61	--	--	--	--	--	--	--	--	--	--	--
06/04/93		100.53	8.00	--	92.53	ND	270	--	--	--	ND	ND	ND	ND	--	--
12/15/93		100.53	7.61	--	92.92	ND	590	--	--	--	ND	ND	ND	ND	--	ND
06/04/94		100.53	8.91	--	91.62	ND	960	--	ND	--	ND	ND	ND	ND	--	ND
11/01/94		100.53	8.33	--	92.20	ND	1,100	--	ND	--	ND	ND	ND	0.6	--	ND
02/09/95		100.53	7.30	--	93.23	ND	610	--	210	--	ND	ND	ND	ND	--	ND
05/02/95		100.53	8.08	--	92.45	ND	2,500	--	ND	--	ND	ND	ND	ND	--	ND
08/02/95		100.53	8.95	--	91.58	ND	2,800	--	1,000	--	ND	ND	ND	ND	--	ND
12/05/95		100.53	6.72	--	93.81	ND	6,700	--	2,300	--	ND	ND	ND	ND	--	ND
03/18/96		100.53	8.62	--	91.91	--	--	--	--	--	--	--	--	--	--	--
ABANDONED	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
Former Standard Oil Bulk Terminal/Chevron Facility No. 1001348
1656 East J Street
Tacoma, Washington

Well ID/ Date	Purge Method	TOC ¹ (ft)	DTW (ft)	SPHT (ft)	GWE ² (ft)	TPH-GRO (µg/L)	TPH-DRO w/Silica Gel (µg/L)	TPH-DRO w/out Silica (µg/L)	TPH-HRO w/Silica Gel (µg/L)	TPH-HRO w/out Silica (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	PAHs (µg/L)
TRIP BLANK																
06/01/98		--	--	--	--	--	ND	--	ND	--	--	--	--	--	--	--
11/01/98		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
05/30/99		--	--	--	--	--	ND	--	ND	--	--	--	--	--	--	--
06/11-12/00		--	--	--	--	ND	--	--	--	--	ND	ND	ND	ND	--	--
09/25/00		--	--	--	--	ND	--	--	--	--	ND	ND	ND	ND	--	--
01/26/01		--	--	--	--	ND	--	--	--	--	ND	ND	ND	ND	ND	--
01/09/02		--	--	--	--	<50.0	--	--	--	--	<0.500	<0.500	<0.500	<1.00	--	--
04/04/02		--	--	--	--	<50	--	--	--	--	<0.50	<0.50	<0.50	<1.5	--	--
04/28/03		--	--	--	--	<50	--	--	--	--	<0.5	<0.5	<0.5	<1.5	--	--
04/15/04		--	--	--	--	<50	--	--	--	--	<0.5	<0.5	<0.5	<1.5	--	--
04/29/05		--	--	--	--	<50	--	--	--	--	--	--	--	--	--	--
04/27/06		--	--	--	--	<48	--	--	--	--	<0.5	<0.5	<0.5	1.5	--	--
12/09/08		--	--	--	--	<50	--	--	--	--	<0.50	<0.50	<0.50	<1.5	<0.50	--
12/10/08		--	--	--	--	<50	--	--	--	--	<0.50	<0.50	<0.50	<1.5	<0.50	--
12/07/11		--	--	--	--	<50	--	--	--	--	<0.50	<0.50	<0.50	<1.5	--	--
01/09/12		--	--	--	--	<50	--	--	--	--	<0.5	<0.5	<0.5	<1.5	--	--
04/10-11/12		--	--	--	--	<50	--	--	--	--	<0.5	<0.5	<0.5	<1.5	--	--
07/10/12		--	--	--	--	<50	--	--	--	--	<0.5	<0.5	<0.5	<1.5	--	--
10/09/12		--	--	--	--	<50	--	--	--	--	<0.5	<0.5	<0.5	<1.5	--	--
01/08/13		--	--	--	--	<50	--	--	--	--	<0.5	<0.5	<0.5	<1.5	--	--
04/09/13		--	--	--	--	<50	--	--	--	--	<0.5	<0.5	<0.5	<1.5	--	--
09/25-26/13		--	--	--	--	<50	--	--	--	--	<0.5	<0.5	<0.5	<1.5	--	--
11/05-06/13		--	--	--	--	<50	--	--	--	--	<0.5	<0.5	<0.5	<1.5	--	--
01/07-09/14		--	--	--	--	<50	--	--	--	--	<0.5	<0.5	<0.5	<1.5	--	--
04/07-08/14		--	--	--	--	<50	--	--	--	--	<0.5	<0.5	<0.5	<1.5	--	--
07/07-09/14		--	--	--	--	<50	--	--	--	--	<0.5	<0.5	<0.5	<1.5	--	--
10/06-07/14		--	--	--	--	<50	--	--	--	--	<0.5	<0.5	<0.5	<1.5	--	--
01/06-07/15		--	--	--	--	<50	--	--	--	--	<0.5	<0.5	<0.5	<1.5	<2.5	--
04/06-08/15		--	--	--	--	<50	--	--	--	--	<0.5	<0.5	<0.5	<1.5	--	--
07/23/15		--	--	--	--	<50	--	--	--	--	<0.5	<0.5	<0.5	<1.5	--	--
10/19-20/15		--	--	--	--	<50	--	--	--	--	<0.2	<0.2	<0.2	<0.2	--	--
01/12-13/16		--	--	--	--	<50	--	--	--	--	<0.2	<0.2	<0.2	<0.2	--	--
04/23/16		--	--	--	--	<50	--	--	--	--	<0.2	<0.2	<0.2	<0.2	--	--
06/10-12/20		--	--	--	--	<250	--	--	--	--	<1.0	<1.0	<1.0	<3.0	--	--
12/08/20		--	--	--	--	<19	--	--	--	--	<0.2	<0.2	<0.4	<1.4	--	--
01/09/21		--	--	--	--	<19	--	--	--	--	<0.2	<0.2	<0.4	<1.4	--	--
07/09/21		--	--	--	--	<19	--	--	--	--	<0.2	<0.2	<0.4	<1.4	--	--
12/29/21		--	--	--	--	<19	--	--	--	--	<0.2	<0.2	<0.4	<0.4	--	--
04/06/22		--	--	--	--	<19	--	--	--	--	<0.3	<0.2	<0.4	<0.4	<0.2	--
06/22/22		--	--	--	--	29	--	--	--	--	<0.3	<0.2	<0.4	<0.4	<0.2	--
10/06/22		--	--	--	--	29	--	--	--	--	<0.3	<0.2	<0.4	<0.4	<0.2	--
Standard Laboratory Reporting Limits:						50	250	500	500	500	0.5	0.5	0.5	1.5	--	0.10 - 5.0
MTCA Method A Cleanup Levels:						800/1,000	500				5.0	1,000	700	1,000	20	1.0
Current Method: ³						NWTPH-Gx	NWTPH-Dx + Extended				USEPA 8021					USEPA 8310

Explanations:

BTEX = Benzene, toluene, ethylbenzene, and total xylenes
(D) = Duplicate
DTW = Depth to Water
(ft) = Feet
GWE = Groundwater Elevation
LFP = Low Flow Purge
MTBE = Methyl tertiary butyl ether

MTCA = Model Toxics Control Act
ND = Not Detected
NP = No Purge
SPHT = Separate-Phase Hydrocarbon Thickness
TOC = Top of Casing
PAHs = Polynuclear Aromatic Hydrocarbons
TPH = Total Petroleum Hydrocarbons

TPH-DRO = TPH as Diesel-Range Organics
TPH-GRO = TPH as Gasoline-Range Organics
TPH-HRO = TPH as Heavy Oil-Range Organics
USEPA = United States Environmental Protection Agency
µg/L = Micrograms per liter
-- = Not Measured/Not Analyzed

Notes:

- TOC elevations referenced in feet relative to an arbitrary datum.
 - When SPH is present, GWE has been corrected using the following formula: GWE = [(TOC - DTW) * (SPHT x 0.80)].
 - Laboratory analytical methods for historical data may not be consistent with list of current analytical methods. When necessary, consult original laboratory reports to verify methods used.
- Analytical results in bold font indicate concentrations exceed MTCA Method A cleanup levels.
Consult original laboratory analysis reports for analytical methods prior to 2009.
Silica-gel analysis suspended June 2013- February 2014.

Appendix F

Waste Manifests

NON-HAZARDOUS WASTE MANIFEST

Please print or type

(Form designed for use on ellipse (12 pitch) typewriter)

D12305894289

NON-HAZARDOUS
WASTE MANIFEST

1. Generator's US EPA ID No.

NONEREQUIRED

Manifest
Document No.

NH94289

2. Page 1
of 13. Generator's Name and Mailing Address
Chevron EMC - Chevron 1001348
1648 E J St
Tacoma WA 98421

4. Generator's Phone () 9281842-3872

5. Transporter 1 Company Name

Clean Harbors Environmental Services, Inc.

7. Transporter 2 Company Name

9. Designated Facility Name and Site Address
Clean Harbors Grassy Mountain LLC
3 Miles East 7 Miles North of Knolls
Grantsville, UT 84029

6. US EPA ID Number

MAD039322250

8. US EPA ID Number

10. US EPA ID Number

UTD991301748

Site Address:

SAME

A. State Transporter's ID

B. Transporter 1 Phone

(781) 792-5000

C. State Transporter's ID

D. Transporter 2 Phone

E. State Facility's ID

F. Facility's Phone

(435) 884-8900

11. WASTE DESCRIPTION

a. NON DOT REGULATED MATERIAL, (PURGE, GROUNDWATER
CONTAMINATED WITH VOCs, NON-HAZARDOUS)

Containers

No.

Type

13.
Total
Quantity14.
Unit
Wt./Vol.

02

DM

0600

P

b. non regulated material, (purge, groundwater
contaminated with vocs, non-hazardous)

03

DF

0980

P

G. Additional Descriptions for Materials Listed Above

11a. CH1331019-SC

11b. CH1331019-SC

6x55 2x55
3x55

H. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

EMERGENCY PHONE #: (800) 483-3718

GENERATOR: Chevron EMC - Chevron
100134816. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects
in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name

Stephen T. Schott OBO Chevron EMC

Signature

Date

Month Day Year
11 13 23

Printed/Typed Name

Stephen T. Schott

Signature

Date

Month Day Year
11 13 23

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name

Signature

Date

Month Day Year

AECOM

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