



2025 GROUNDWATER MONITORING REPORT MTCA 10 SITE

HF SINCLAIR PUGET SOUND REFINERY

FEBRUARY 2026

SUBMITTED BY:



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8505 South Texas Road
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1. INTRODUCTION

This report summarizes the groundwater monitoring and remedial activities completed during 2025 at the HF Sinclair Puget Sound Refining LLC MTCA 10 site. The MTCA 10 site is a surface impoundment (East Impounding Basin) located in the central portion of the HF Sinclair Puget Sound Refinery (HFSPSR), at the south end of the facility tank farm between “B” and “C” Streets. The site location is shown in Figure 1.

The 2025 remedial actions at the MTCA 10 site consisted of semi-annual collection and analysis of groundwater samples from the monitoring well network and the operation and maintenance of a fluid recovery system in two wells. The current MTCA 10 monitoring well network consists of 21 wells with depths ranging from 17 feet to 67 feet. Two of the 21 wells, MW-115 and MW-116, are part of a fluid recovery system that uses top-loading, pneumatic, down-well recovery pumps to remove light non-aqueous phase liquid (LNAPL, i.e., floating petroleum product) and contaminated groundwater from the MTCA 10 site.

Historical analytical results indicated that the groundwater in the vicinity of several of the monitoring well locations was not contaminated. The Washington State Department of Ecology (Ecology) approved a revised sampling schedule in 2012 and groundwater sample collection was reduced at the site to a network of seven wells (MW-54, MW-55, MW-56, MW-103, MW-104, MW-107, and MW-111).

2. SITE ACTIVITIES

Groundwater samples were collected at the MTCA 10 site in May and September of 2025. The groundwater monitoring well system was sampled for benzene, toluene, ethylbenzene, and total xylenes (BTEX constituents) and volatile (gasoline) range total petroleum hydrocarbons (TPH-Gx).

Depths-to-water at the site were near or greater than 30 feet below the ground surface (bgs). This is near or greater than the maximum depth that a peristaltic pump is capable of pulling water; therefore, groundwater samples were collected using disposable polyethylene (PE) bailers. Before collecting each sample, one to three well volumes of groundwater were purged from each well, depending on the well's initial volume and recovery time. Following well purging, samples were collected using a disposable PE bailer, and groundwater was transferred to sample containers provided by the analytical laboratory. The samples were stored in a cooler with ice and sent to Eurofins Seattle laboratory for analysis. A duplicate sample and an equipment blank sample were collected during each sampling event in 2025.

Depth-to-water measurements were collected from all wells prior to sampling using a water level indicator. LNAPL thickness and depth-to-water measurements were collected from wells MW-55 and MW-104 using an oil/water interface meter before sample collection due to historical LNAPL accumulations that have been present in those wells. Samples are not collected from wells with measurable LNAPL.

Data from the recovery pump flow meters are recorded during each sampling event. LNAPL thickness measurements, depth-to-water measurements, and groundwater samples are not collected from wells MW-115 and MW-116 due to the pumps obstructing access to the groundwater.

3. GROUNDWATER SAMPLING AND RESULTS

3.1 FIELD MEASUREMENTS

LNAPL was observed in wells MW-55 and MW-104 during the May and September sampling events. In well MW-55, 0.01 feet of LNAPL was measured in May, and 0.01 feet was measured in September. In well MW-104, 0.26 feet of LNAPL was measured in May, and 0.32 feet was measured in September. No other wells contained measurable amounts of LNAPL during either sampling event. Depth-to-water measurements and LNAPL thickness measurements collected in 2025 are presented in Tables 1 and 2.

The groundwater monitoring well locations, groundwater elevations at each measured well, and the groundwater elevation contours for the spring and fall sampling events are included as Figures 2 and 3, respectively.

Flow meter readings indicated the fluid recovery system removed approximately 9,387.1 gallons from MW-115 between December 2024 and May 2025 and removed 0.0 gallons between May 2025 and September 2025. In addition, meter readings indicated the fluid recovery system removed approximately 5,856.6 gallons from MW-116 between December 2024 and May 2025 and removed 2,981.5 gallons between May 2025 and September 2025. Flow meters will be visited within Quarter 1 2026 for maintenance to inspect the condition of the bladder pumps, tubing and valves, and remove potential biofilm buildup. Cumulatively, approximately 3,155,935.6 gallons have been extracted from the site since installation of the fluid recovery system in 1992. A graph of the cumulative quantity of liquids pumped from the site is included in Figure 4.

3.2 ANALYTICAL RESULTS

During the spring and fall 2025 sampling events, the samples collected from well MW-111 contained TPH-Gx at a concentration that exceeded the MTCA Method A groundwater cleanup level. BTEX were not detected in well MW-111 above the laboratory reporting limits. Samples collected from wells MW-56, MW-103, and MW-107 did not contain any detectable concentrations of BTEX constituents or TPH-Gx above laboratory reporting limits.

Wells MW-55 and MW-104 contained a measurable LNAPL layer during both 2025 monitoring events. Samples were not collected from those wells.

During both sampling events in 2025 (May and September), groundwater levels in well MW-54 were very low and no groundwater samples were able to be collected from this well in 2025.

The 2025 groundwater analytical data are summarized in Table 3. A complete table of historical groundwater analytical data is included in Table 4. The original May 2025 sample laboratory analytical data report and chain of custody forms are included in Appendix A. The original September 2025 sample laboratory analytical data report and chain of custody forms are included in Appendix B.

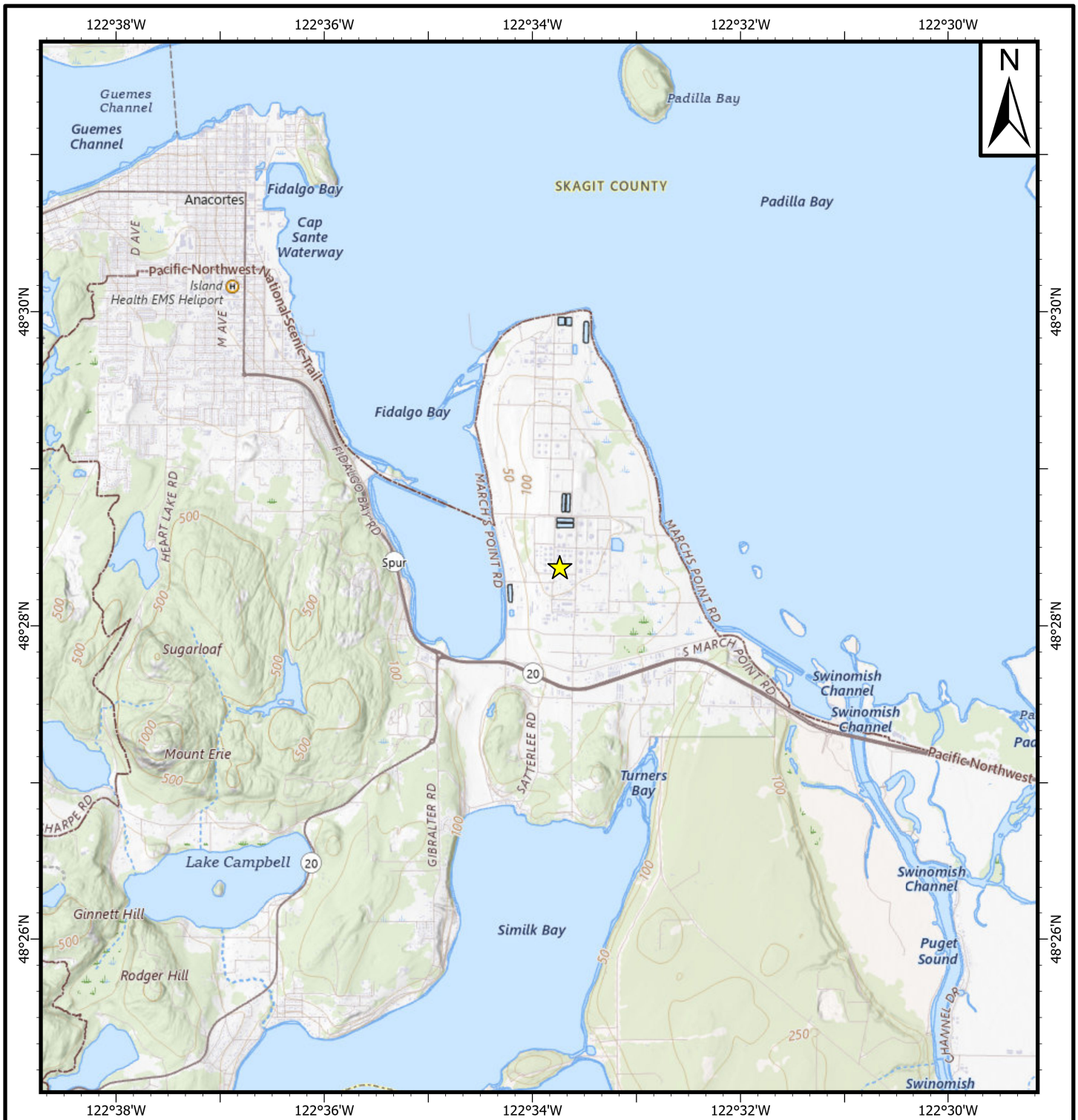
4. CONCLUSIONS

Annual groundwater sampling has been completed at the MTCA 10 Site for 2025. Depth-to-water readings, LNAPL thickness readings, and groundwater samples were collected from a network of seven groundwater monitoring wells in spring and fall of 2025. Groundwater samples were collected from wells MW-56, MW-103, MW-107, and MW-111. Only well MW-111 contained detectable concentrations of gasoline range TPH that exceeded the MTCA Method A cleanup levels. No other wells contained any detectable concentrations of contaminants.

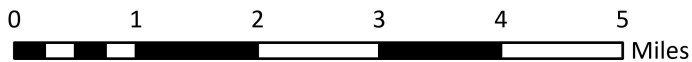
One well (MW-54) did not contain enough water to collect a sample during either event. Two wells (MW-55 and MW-104) were both found to have measurable LNAPL layers present on the groundwater surface during each sampling event. No samples were collected from those wells.

LNAPL continues to be observed on the groundwater surface in monitoring wells MW-55 and MW-104. The fluid recovery system at wells MW-115 and MW-116 continues to remove LNAPL and contaminated groundwater from the MTCA 10 site. Approximately 3,155,936 gallons of fluid have been removed from the site since installation of the fluid recovery system in 1992.

The extent of the contaminated groundwater plume has been delineated, and the groundwater monitoring well system will continue to be sampled on a semi-annual schedule in 2026.



Scale: 1:100,000



Locator Map



★ HF Sinclair Puget Sound Refinery
8505 S Texas Road
Anacortes, WA 98221

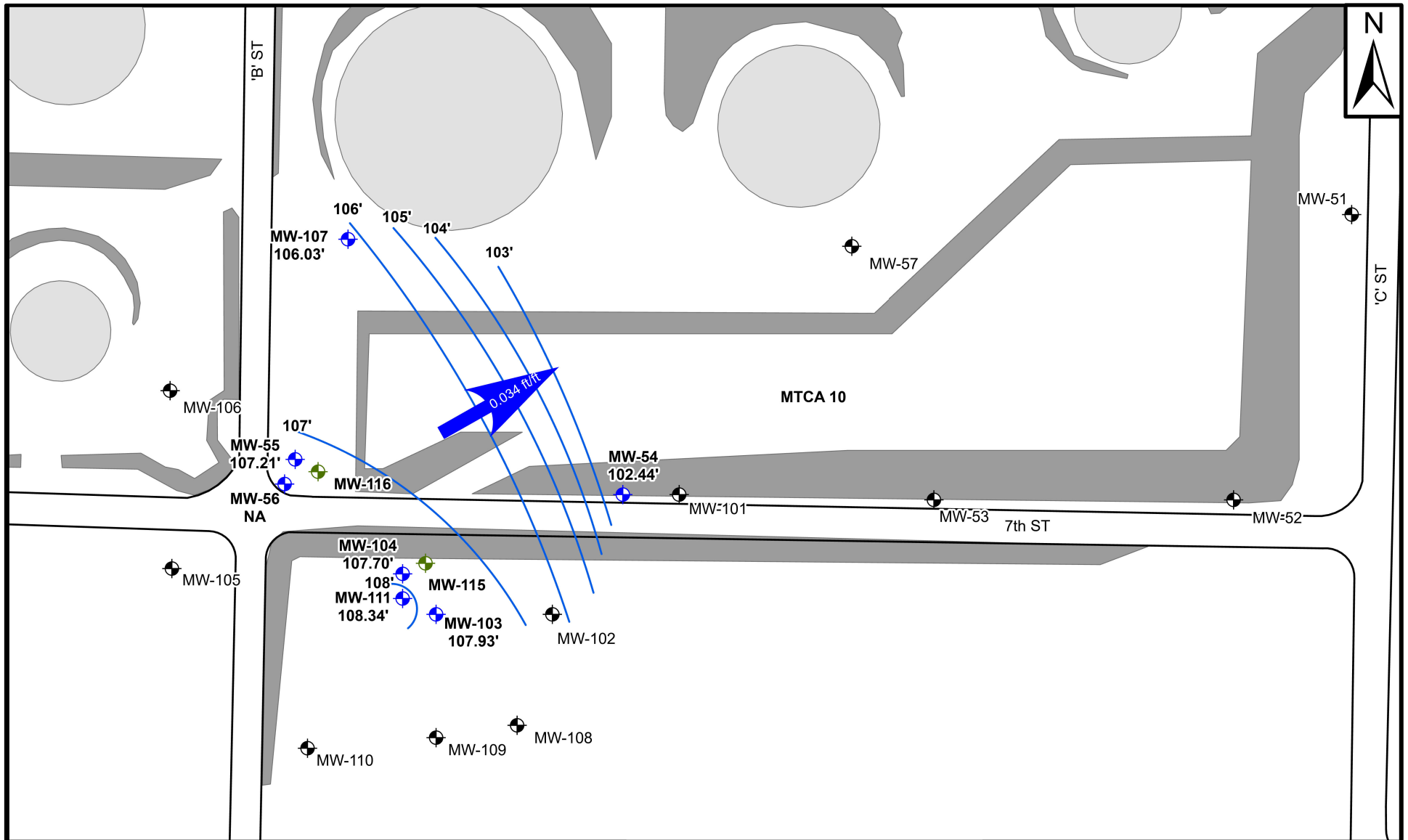
DATE:
2/23/2026

PROJECT:
004531-0057.00



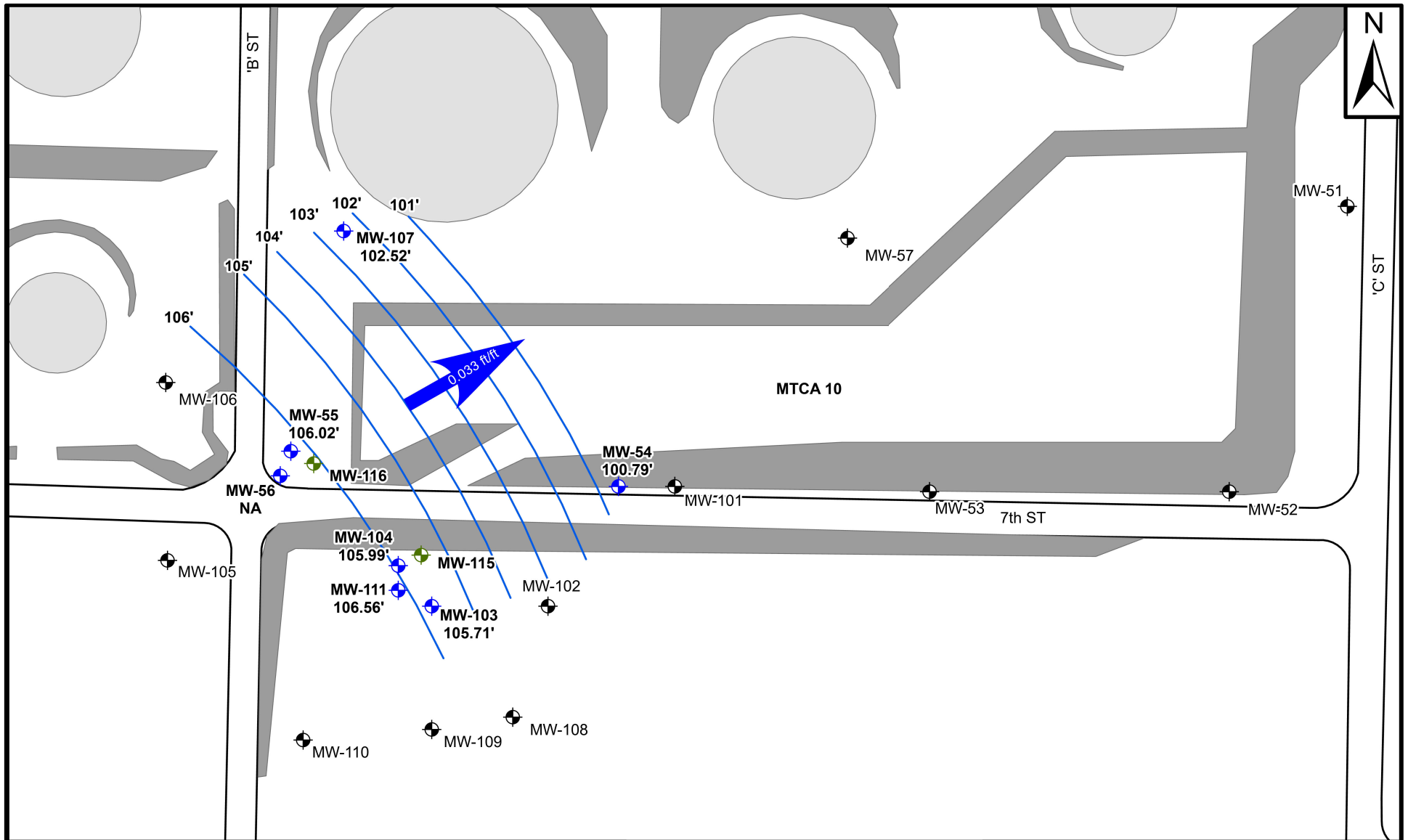
Figure 1
Site Location Map

HFSPSR - MTCA 10 Site
8505 S. Texas Road
Anacortes, WA 98221



 Groundwater Flow Direction and Gradient (ft/ft) 102.44' Groundwater Elevation (ft)  103' Groundwater Contours (ft) Monitoring Wells  Currently Sampled  Monitoring Well  Recovery Well	All data are approximate and should be used for relative location reference only. 050100200  Feet 1 inch = 100 feet			Figure 2 Groundwater Elevation Contours (5/12/2025)
	PROJECT:	DATE:		HFSPSR - MTCA 10 Site 8505 S. Texas Road Anacortes, WA 98221
	004531-0057.00	2/23/2026		

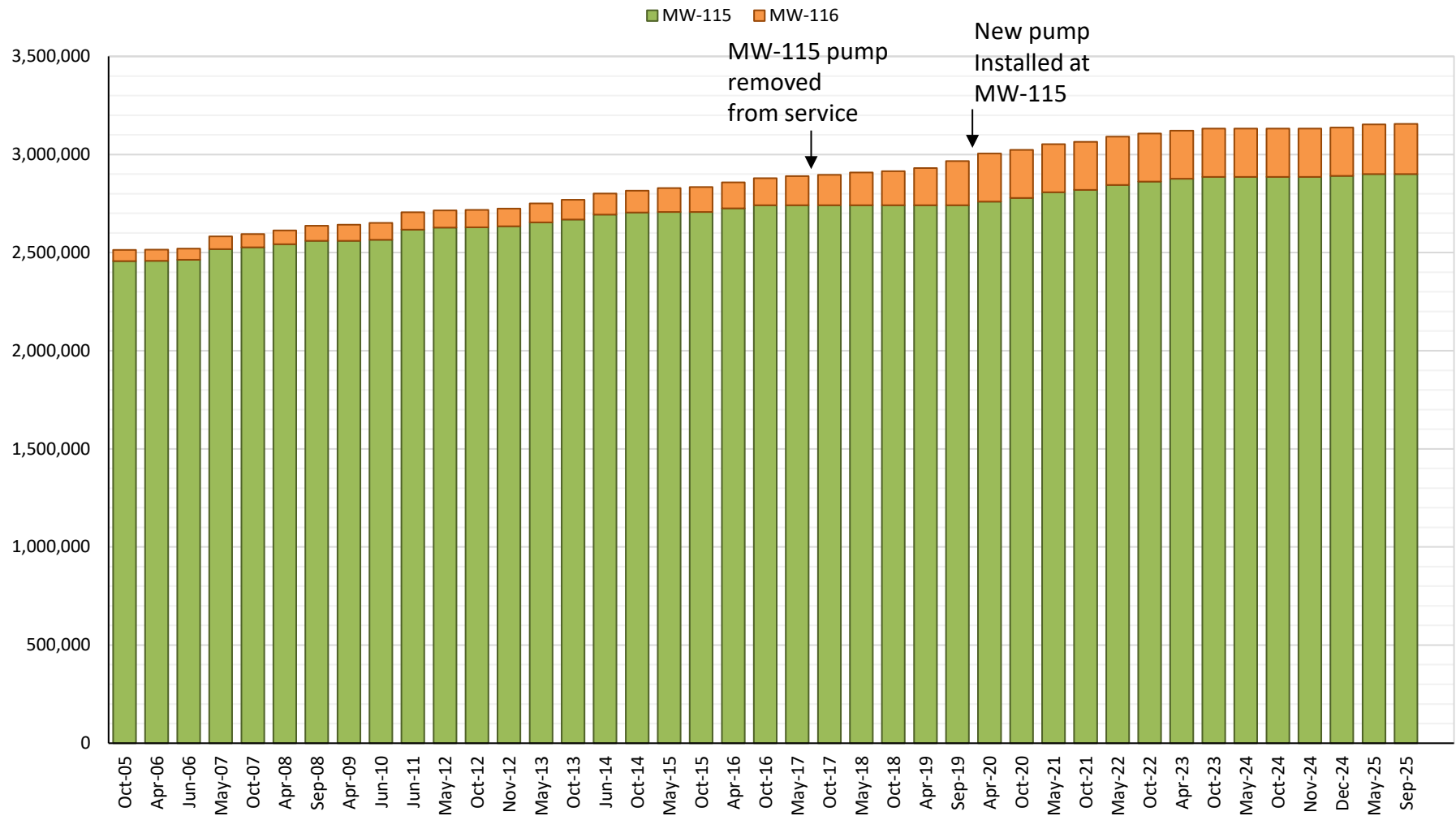
All data are approximate and should be used for relative location reference only. Well MW-56 not included in groundwater contour estimation. Coordinates based on NAD 1983 UTM Zone 10N.



← Groundwater Flow Direction and Gradient (ft/ft) 100.79' Groundwater Elevation (ft) — 101' Groundwater Contours (ft) Monitoring Wells - Currently Sampled - Monitoring Well - Recovery Well	All data are approximate and should be used for relative location reference only.		Figure 3 Groundwater Elevation Contours (9/29/2025)	
	0 50 100 200 Feet 1 inch = 100 feet		PROJECT: 004531-0057.00 DATE: 2/23/2026 HF Sinclair Puget Sound Refinery 8505 South Texas Road Anacortes, WA 98221	

All data are approximate and should be used for relative location reference only. Well MW-56 not included in groundwater contour estimation. Coordinates based on NAD 1983 UTM Zone 10N.

Total Fluids Recovered: 1992-2025 (Cumulative Gallons)



Note: This stacked column chart shows the cumulative quantity of fluids recovered from both wells since the fluid recovery system began operating in 1992.

Prepared for:



Prepared by:



MTCA 10 Fluids Recovery

MTCA 10

02/23/2026

Figure 4

Table 1
MTCA 10 Groundwater Elevation Data
Monday, May 12, 2025
HF Sinclair Puget Sound Refining LLC - Anacortes, WA

Well No.	Depth to Water	Depth to Product	PVC Mark Elevation	Water Surface Elevation	Apparent Product Thickness	Total Well Depth	Well Diameter	Water Vol. in Well	Purge Volume
Units:	(ft.)	(ft.)	(ft.)	(ft.)	(ft.)	(ft.)	(ft.)	(gal.)	(gal.)
MW-54	26.64	--	129.08	102.44	--	30.13	0.17	0.57	1.70
MW-55	25.03	25.02	132.24	107.21	0.01	30.60	0.17	0.90	2.71
MW-56	27.66	--	132.45	104.79	--	45.08	0.17	2.82	8.46
MW-103	11.64	--	119.57	107.93	--	25.48	0.17	2.24	6.72
MW-104	12.46	12.20	120.16	107.70	0.26	17.68	0.17	0.85	2.54
MW-107	28.31	--	134.34	106.03	--	34.93	0.17	1.07	3.22
MW-111	11.23	--	119.57	108.34	--	16.95	0.17	0.93	2.78
MW-115*	NS	NS	120.20	NA	NA	22.20	0.50	NA	NA
MW-116*	NS	NS	133.75	NA	NA	33.00	0.50	NA	NA

NS indicates well was Not Sampled

NA indicates Not Applicable

-- indicates the absence of free product

* Well access is obstructed by product recovery pump in well

Table 2
MTCA 10 Groundwater Elevation Data
Monday, September 29, 2025
HF Sinclair Puget Sound Refining LLC - Anacortes, WA

Well No.	Depth to Water	Depth to Product	PVC Mark Elevation	Water Surface Elevation	Apparent Product Thickness	Total Well Depth	Well Diameter	Water Vol. in Well	Purge Volume
Units:	(ft.)	(ft.)	(ft.)	(ft.)	(ft.)	(ft.)	(ft.)	(gal.)	(gal.)
MW-54	28.29	--	129.08	100.79	--	30.13	0.17	0.30	0.89
MW-55	26.22	26.21	132.24	106.02	0.01	30.60	0.17	0.71	2.13
MW-56	30.05	--	132.45	102.40	--	45.08	0.17	2.43	7.30
MW-103	13.86	--	119.57	105.71	--	25.48	0.17	1.88	5.64
MW-104	14.17	13.85	120.16	105.99	0.32	17.68	0.17	0.57	1.70
MW-107	31.82	--	134.34	102.52	--	34.93	0.17	0.50	1.51
MW-111	13.01	--	119.57	106.56	--	16.95	0.17	0.64	1.91
MW-115*	NS	NS	120.20	NA	NA	22.20	0.50	NA	NA
MW-116*	NS	NS	133.75	NA	NA	33.00	0.50	NA	NA

NS indicates well was Not Sampled

NA indicates Not Applicable

-- indicates the absence of free product

* Well access is obstructed by product recovery pump in well

Table 3
MTCA 10 Groundwater Analytical Data Results
HF Sinclair Puget Sound Refining LLC - Anacortes, WA

Well ID / Date	Benzene	Toluene	Ethylbenzene	Xylenes	Volatile Range	Comments
	8260C	8260C	8260C	8260C	NWTPH-Gx	
	Units:	(ug/L)	(ug/L)	(ug/L)	(ug/L)	
	MTCA Method A Cleanup Level:	5	1,000	700	1,000	
MW-54						
05/12/25	NS	NS	NS	NS	NS	Well was dry
09/29/25	NS	NS	NS	NS	NS	Well was dry
MW-55						
05/12/25	NS	NS	NS	NS	NS	Free Product
09/29/25	NS	NS	NS	NS	NS	Free Product
MW-56						
05/12/25	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<2.0)	ND(<150)	
09/29/25	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<2.0)	ND(<150)	
09/29/2025 (dup.)	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<2.0)	ND(<150)	
MW-103						
05/12/25	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<2.0)	ND (<150)	
09/29/25	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<2.0)	ND(<150)	
MW-104						
05/12/25	NS	NS	NS	NS	NS	Free Product
09/29/25	NS	NS	NS	NS	NS	Free Product
MW-107						
05/12/25	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<2.0)	ND(<150)	
09/29/25	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<2.0)	ND(<150)	
MW-111						
05/12/25	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<2.0)	2,700	
5/12/2025 (dup.)	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<2.0)	2,700	(labeled ALL4-DUP-1)
09/29/25	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<2.0)	6,200 ^(b)	
Equipment Blank						
05/12/25	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<2.0)	ND(<150)	(labeled ALL4-FEB-1)

Table 3
MTCA 10 Groundwater Analytical Data Results
HF Sinclair Puget Sound Refining LLC - Anacortes, WA

Well ID / Date	Benzene	Toluene	Ethylbenzene	Xylenes	Volatile Range	Comments
	8260C	8260C	8260C	8260C	NWTPH-Gx	
	Units:	(ug/L)	(ug/L)	(ug/L)	(ug/L)	
	MTCA Method A Cleanup Level:	5	1,000	700	1,000	
Equipment Blank (cont.)						
09/29/25	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<2.0)	ND(<150)	(labeled ALL4-FEB-1)

BOLD indicates that the concentration in the sample exceeds MTCA Method A groundwater cleanup levels. These cleanup levels are provided for purposes of comparison only, and do not represent target cleanup levels at the site.

ND indicates analyte was Not Detected at level above reporting limit shown in parentheses

NS indicates well was Not Sampled

^(a) Cleanup level is dependent on detection of benzene

^(b) Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD) Relative Percent Difference (RPD) exceeded control limits

Note: Wells containing free product were presumed to be contaminated and were not sampled

Table 4
Historical MTCA 10 Groundwater Analytical Data Results Table - 2009 to 2025
HF Sinclair Puget Sound Refining LLC - Anacortes, WA

Well ID / Date	Benzene	Toluene	Ethylbenzene	Xylenes	Volatile Range	Comments
	8260C	8260C	8260C	8260C	NWTPH-Gx	
Units:	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	
MTCA Method A Cleanup Level:	5	1,000	700	1,000	800/1,000 ^(a)	
MW-54						
05/05/09	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<1.0)	ND (<50)	
11/10/09	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<50)	
05/18/10	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<1.0)	ND (<50)	
11/18/10	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<50)	
05/12/11 ^(b)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<1.0)	ND (<50)	
10/18/11 ^(b)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<1.0)	ND (<50)	
05/11/12	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<1.0)	ND (<50)	
11/05/12	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<2.0)	ND (<50)	
05/02/13	ND (<0.5)	0.59	ND (<0.5)	ND (<1.0)	ND (<50)	
10/08/13	NS	NS	NS	NS	NS	Well was dry
06/03/14	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<1.0)	ND (<50)	
10/16/14	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<1.0)	ND (<50)	
05/13/15	ND (<2.0)	ND (<2.0)	ND (<3.0)	ND (<3.0)	ND (<50)	
10/14/15	NS	NS	NS	NS	NS	Well was dry
04/26/16	0.23	1.1	ND(<0.20)	1.2	94	
10/11/16	ND(<2.0)	ND(<2.0)	ND<3.0)	ND(<3.0)	ND(50)	
05/03/17	NS	NS	NS	NS	NS	Well was dry
10/09/17	ND(<2.0)	ND(<2.0)	ND(<3.0)	ND(<5.0)	ND(<250)	
05/09/18	ND(<3.0)	ND(<2.0)	ND(<3.0)	ND(<5.0)	ND(<250)	
10/15/18	ND(<3.0)	ND(<2.0)	ND(<3.0)	ND(<5.0)	ND(<250)	
04/09/19	ND(<3.0)	ND(<2.0)	ND(<3.0)	ND (<3.0)	ND(<250)	
09/23/19	ND(<3.0)	ND(<2.0)	ND(<3.0)	ND (<3.0)	ND(<250)	
04/28/20	ND(<3.0)	ND(<2.0)	ND(<3.0)	ND (<3.0)	ND(<250)	

Table 4
Historical MTCA 10 Groundwater Analytical Data Results Table - 2009 to 2025
HF Sinclair Puget Sound Refining LLC - Anacortes, WA

Well ID / Date	Benzene	Toluene	Ethylbenzene	Xylenes	Volatile Range	Comments
	8260C	8260C	8260C	8260C	NWTPH-Gx	
Units:	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	
MTCA Method A Cleanup Level:	5	1,000	700	1,000	800/1,000 ^(a)	
MW-54 (cont.)						
10/07/20	ND(<3.0)	ND(<2.0)	ND(<3.0)	ND (<3.0)	ND(<250)	
10/07/20 (dup.)	ND(<3.0)	ND(<2.0)	ND(<3.0)	ND (<3.0)	ND(<250)	(labeled WES-DUP-1)
05/18/21	NS	NS	NS	NS	NS	Well was dry
10/12/21	NS	NS	NS	NS	NS	Well was dry
05/16/22	NS	NS	NS	NS	NS	Well was dry
10/25/22	NS	NS	NS	NS	NS	Well was dry
04/17/23	NS	NS	NS	NS	NS	Well was dry
10/09/23	NS	NS	NS	NS	NS	Well was dry
05/07/24	NS	NS	NS	NS	NS	Well was dry
10/15/24	NS	NS	NS	NS	NS	Well was dry
05/12/25	NS	NS	NS	NS	NS	Well was dry
09/29/25	NS	NS	NS	NS	NS	Well was dry
MW-55						
05/05/09	NS	NS	NS	NS	NS	Free Product
11/10/09	NS	NS	NS	NS	NS	Free Product
05/18/10	NS	NS	NS	NS	NS	Free Product
10/21/10	NS	NS	NS	NS	NS	No free product noted
05/12/11	NS	NS	NS	NS	NS	No free product noted
10/18/11 ^(b)	420	82	130	1,400	9,300	No free product noted
05/08/12	NS	NS	NS	NS	NS	Free Product
11/05/12	NS	NS	NS	NS	NS	Free Product
05/02/13	NS	NS	NS	NS	NS	Free Product
10/08/13	NS	NS	NS	NS	NS	Free Product

Table 4
Historical MTCA 10 Groundwater Analytical Data Results Table - 2009 to 2025
HF Sinclair Puget Sound Refining LLC - Anacortes, WA

Well ID / Date	Benzene	Toluene	Ethylbenzene	Xylenes	Volatile Range	Comments
	8260C	8260C	8260C	8260C	NWTPH-Gx	
Units:	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	
MTCA Method A Cleanup Level:	5	1,000	700	1,000	800/1,000 ^(a)	
MW-55 (cont.)						
06/02/14	NS	NS	NS	NS	NS	Free Product
10/16/14	NS	NS	NS	NS	NS	Free Product
05/13/15	NS	NS	NS	NS	NS	Free Product
10/14/15	NS	NS	NS	NS	NS	Free Product
04/26/16	NS	NS	NS	NS	NS	Free Product
10/11/16	NS	NS	NS	NS	NS	Free Product
05/03/17	NS	NS	NS	NS	NS	Free Product
10/09/17	NS	NS	NS	NS	NS	Free Product
05/09/18	NS	NS	NS	NS	NS	Free Product
10/15/18	NS	NS	NS	NS	NS	Free Product
04/09/19	NS	NS	NS	NS	NS	Free Product
09/23/19	NS	NS	NS	NS	NS	Free Product
04/28/20	NS	NS	NS	NS	NS	Free Product
10/07/20	NS	NS	NS	NS	NS	Free Product
05/18/21	NS	NS	NS	NS	NS	Free Product
10/12/21	NS	NS	NS	NS	NS	Free Product
05/16/22	NS	NS	NS	NS	NS	Free Product
10/25/22	NS	NS	NS	NS	NS	Free Product
04/17/23	NS	NS	NS	NS	NS	Free Product
10/09/23	NS	NS	NS	NS	NS	Free Product
05/07/24	NS	NS	NS	NS	NS	Free Product
10/15/24	NS	NS	NS	NS	NS	Free Product
05/12/25	NS	NS	NS	NS	NS	Free Product

Table 4
Historical MTCA 10 Groundwater Analytical Data Results Table - 2009 to 2025
HF Sinclair Puget Sound Refining LLC - Anacortes, WA

Well ID / Date	Benzene	Toluene	Ethylbenzene	Xylenes	Volatile Range	Comments
	8260C	8260C	8260C	8260C	NWTPH-Gx	
Units:	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	
MTCA Method A Cleanup Level:	5	1,000	700	1,000	800/1,000 ^(a)	
MW-55 (cont.)						
09/29/25	NS	NS	NS	NS	NS	Free Product
MW-56						
05/05/09	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<1.0)	ND (<50)	
11/10/09	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<50)	
05/18/10	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<1.0)	ND (<50)	
11/19/10 ^(b)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<50)	
05/12/11 ^(b)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<1.0)	ND (<50)	
10/17/11	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<1.0)	ND (<50)	
05/08/12 ^(b)	1.6	ND (<0.5)	ND (<0.5)	ND (<1.0)	ND (<50)	
11/05/12	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<2.0)	ND (<50)	
11/05/12 (dup.)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<2.0)	ND (<50)	(labeled MW-100)
05/02/13	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<1.0)	ND (<50)	
05/02/13 (dup.)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<1.0)	ND (<50)	(labeled MW-100)
10/08/13	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<1.0)	ND (<50)	
10/08/13 (dup.)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<1.0)	ND (<50)	(labeled MW-100)
06/02/14	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<1.0)	ND (<50)	
10/16/14	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<1.0)	ND (<50)	
10/16/14 (dup.)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<1.0)	ND (<50)	(labeled MW-100)
05/13/15	ND (<2.0)	ND (<2.0)	ND (<3.0)	ND (<3.0)	ND (<50)	
10/14/15	ND (<2.0)	ND (<2.0)	ND (<3.0)	ND (<3.0)	ND (<50)	
04/26/16	ND(<0.2)	ND(<0.2)	ND(<0.2)	ND(<0.5)	ND (<50)	
10/11/16	ND(<2.0)	ND(<2.0)	ND(<3.0)	ND(<3.0)	ND (<50)	
10/11/16 (dup.)	ND(<2.0)	ND(<2.0)	ND(<3.0)	ND(<3.0)	ND (<50)	(labeled WES-1)

Table 4
Historical MTCA 10 Groundwater Analytical Data Results Table - 2009 to 2025
HF Sinclair Puget Sound Refining LLC - Anacortes, WA

Well ID / Date	Benzene	Toluene	Ethylbenzene	Xylenes	Volatile Range	Comments
	8260C	8260C	8260C	8260C	NWTPH-Gx	
Units:	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	
MTCA Method A Cleanup Level:	5	1,000	700	1,000	800/1,000 ^(a)	
MW-56 (cont.)						
05/03/17	ND(<2.0)	ND(<2.0)	ND(<3.0)	ND(<3.0)	ND (<50)	
10/09/17	ND(<2.0)	ND(<2.0)	ND(<3.0)	ND(<5.0)	ND(<250)	
05/09/18	ND(<3.0)	ND(<2.0)	ND(<3.0)	ND(<5.0)	ND(<250)	
10/15/18	ND(<3.0)	ND(<2.0)	ND(<3.0)	ND(<5.0)	ND(<250)	
04/09/19	ND(<3.0)	ND(<2.0)	ND(<3.0)	ND (<3.0)	ND(<250)	
09/24/19	ND(<3.0)	ND(<2.0)	ND(<3.0)	ND (<3.0)	ND(<250)	
04/28/20	ND(<3.0)	ND(<2.0)	ND(<3.0)	ND (<3.0)	ND(<250)	
10/07/20	ND(<3.0)	ND(<2.0)	ND(<3.0)	ND (<3.0)	ND(<250)	
05/18/21	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<2.0)	ND(<250)	
10/12/21	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<2.0)	ND(<250)	
05/16/22	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<5.0)	ND(<250)	
10/25/22	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<2.0)	ND(<50)	
04/17/23	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<2.0)	ND(<50)	
10/09/23	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<2.0)	ND (<100)	
05/07/24	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<2.0)	ND(<150)	
05/07/24 (dup.)	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<2.0)	ND(<150)	(labeled MTCA 10-DUP-1)
10/15/24	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<2.0)	ND(<150)	
05/12/25	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<2.0)	ND(<150)	
09/29/25	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<2.0)	ND(<150)	
09/29/2025 (dup.)	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<2.0)	ND(<150)	(labeled ALL4-DUP-1)
MW-103						
05/05/09	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<1.0)	ND (<50)	
11/10/09	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<50)	

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Historical MTCA 10 Groundwater Analytical Data Results Table - 2009 to 2025
HF Sinclair Puget Sound Refining LLC - Anacortes, WA

Well ID / Date	Benzene	Toluene	Ethylbenzene	Xylenes	Volatile Range	Comments
	8260C	8260C	8260C	8260C	NWTPH-Gx	
Units:	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	
MTCA Method A Cleanup Level:	5	1,000	700	1,000	800/1,000 ^(a)	
MW-103 (cont.)						
05/18/10	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<1.0)	ND (<50)	
11/22/10 ^(b)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<50)	
05/13/11 ^(b)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<1.0)	110	
10/18/11 ^(b)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<50)	
05/08/12 ^(b)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<50)	
11/05/12	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<2.0)	ND (<50)	
05/02/13	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<1.0)	ND (<50)	
10/08/13	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<1.0)	82	
06/02/14	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<1.0)	140	
10/16/14	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<1.0)	ND(<50)	
05/13/15	ND (<2.0)	ND (<2.0)	ND (<3.0)	ND (<3.0)	180	
10/14/15	ND (<2.0)	ND (<2.0)	ND (<3.0)	ND (<3.0)	370	
10/14/15 (re-analysis)	NA	NA	NA	NA	88	
04/26/16	ND(<0.2)	0.54	ND(<0.2)	ND(<0.5)	69	
04/26/16 (dup.)	ND(<0.2)	ND(<0.2)	ND(<0.2)	ND(<0.5)	120	
04/26/16 (dup.) (re-analysis)	NA	NA	NA	NA	67	
10/11/16	ND(<2.0)	ND(<2.0)	ND(<3.0)	ND(<3.0)	ND(<50)	
05/03/17	ND(<2.0)	ND(<2.0)	ND(<3.0)	ND(<3.0)	ND(<50)	
10/09/17	ND(<2.0)	ND(<2.0)	ND(<3.0)	ND(<5.0)	ND(<250)	
05/09/18	ND(<3.0)	ND(<2.0)	ND(<3.0)	ND(<5.0)	ND(<250)	
5/9/2018 (dup)	ND(<3.0)	ND(<2.0)	ND(<3.0)	ND(<5.0)	ND(<250)	(labeled WES-DUP-1)
10/15/18	ND(<3.0)	ND(<2.0)	ND(<3.0)	ND(<5.0)	ND(<250)	
04/09/19	ND(<3.0)	ND(<2.0)	ND(<3.0)	ND(<5.0)	ND(<250)	

Table 4
Historical MTCA 10 Groundwater Analytical Data Results Table - 2009 to 2025
HF Sinclair Puget Sound Refining LLC - Anacortes, WA

Well ID / Date	Benzene	Toluene	Ethylbenzene	Xylenes	Volatile Range	Comments
	8260C	8260C	8260C	8260C	NWTPH-Gx	
Units:	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	
MTCA Method A Cleanup Level:	5	1,000	700	1,000	800/1,000 ^(a)	
MW-103 (cont.)						
09/23/19	ND(<3.0)	ND(<3.0)	ND(<3.0)	ND(<3.0)	ND(<3.0)	
9/23/2019 (dup.)	ND(<3.0)	ND(<3.0)	ND(<3.0)	ND(<3.0)	ND(<3.0)	(labeled WES-DUP-1)
04/29/20	ND(<3.0)	ND(<2.0)	ND(<3.0)	ND(<5.0)	ND(<250)	
10/08/20	ND(<3.0)	ND(<2.0)	ND(<3.0)	ND(<5.0)	ND(<250)	
05/18/21	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<2.0)	ND(<250)	
10/12/21	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<2.0)	ND(<250)	
10/12/21 (dup.)	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<2.0)	ND(<250)	(labeled WES-DUP-1)
05/16/22	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<5.0)	ND(<250)	
05/16/22 (dup.)	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<5.0)	ND(<250)	(labeled WES-DUP-1)
10/25/22	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<2.0)	ND(<50)	
10/25/2022 (dup.)	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<2.0)	ND(<50)	(labeled WES-DUP-1)
04/17/23	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<2.0)	ND(<50)	
04/17/23 (dup.)	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<2.0)	ND(<50)	(labeled WES-DUP-1)
10/09/23	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<2.0)	ND (<100)	
10/09/2023 (dup.)	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<2.0)	ND (<100)	(labeled WES-DUP-1)
05/07/24	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<2.0)	ND (<150)	
10/15/24	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<2.0)	ND (<150)	
10/15/24 (dup.)	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<2.0)	ND (<150)	(labeled ALL4-DUP-1)
05/12/25	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<2.0)	ND (<150)	
09/29/25	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<2.0)	ND(<150)	
MW-104						
05/05/09	NS	NS	NS	NS	NS	Free Product
11/10/09	NS	NS	NS	NS	NS	Free Product

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Well ID / Date	Benzene	Toluene	Ethylbenzene	Xylenes	Volatile Range	Comments
	8260C	8260C	8260C	8260C	NWTPH-Gx	
Units:	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	
MTCA Method A Cleanup Level:	5	1,000	700	1,000	800/1,000 ^(a)	
MW-104 (cont.)						
05/18/10	NS	NS	NS	NS	NS	Free Product
10/21/10	NS	NS	NS	NS	NS	Free Product
05/12/11	NS	NS	NS	NS	NS	Free Product
10/13/11	NS	NS	NS	NS	NS	Free Product
05/08/12	NS	NS	NS	NS	NS	Free Product
11/05/12	NS	NS	NS	NS	NS	Free Product
05/02/13	NS	NS	NS	NS	NS	Free Product
10/08/13	NS	NS	NS	NS	NS	Free Product
06/02/14	NS	NS	NS	NS	NS	Free Product
10/16/14	NS	NS	NS	NS	NS	Free Product
05/13/15	NS	NS	NS	NS	NS	Free Product
10/14/15	NS	NS	NS	NS	NS	Free Product
04/26/16	NS	NS	NS	NS	NS	Free Product
10/11/16	NS	NS	NS	NS	NS	Free Product
05/03/17	NS	NS	NS	NS	NS	Free Product
10/09/17	NS	NS	NS	NS	NS	Free Product
05/09/18	NS	NS	NS	NS	NS	Free Product
10/15/18	NS	NS	NS	NS	NS	Free Product
04/09/19	NS	NS	NS	NS	NS	Free Product
09/23/19	NS	NS	NS	NS	NS	Free Product
04/28/20	NS	NS	NS	NS	NS	Free Product
10/07/20	NS	NS	NS	NS	NS	Free Product
05/18/21	NS	NS	NS	NS	NS	Free Product

Table 4
Historical MTCA 10 Groundwater Analytical Data Results Table - 2009 to 2025
HF Sinclair Puget Sound Refining LLC - Anacortes, WA

Well ID / Date	Benzene	Toluene	Ethylbenzene	Xylenes	Volatile Range	Comments
	8260C	8260C	8260C	8260C	NWTPH-Gx	
Units:	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	
MTCA Method A Cleanup Level:	5	1,000	700	1,000	800/1,000 ^(a)	
MW-104 (cont.)						
10/12/21	NS	NS	NS	NS	NS	Free Product
05/16/22	NS	NS	NS	NS	NS	Free Product
10/25/22	NS	NS	NS	NS	NS	Free Product
04/17/23	NS	NS	NS	NS	NS	Free Product
10/09/23	NS	NS	NS	NS	NS	Free Product
05/07/24	NS	NS	NS	NS	NS	Free Product
10/15/24	NS	NS	NS	NS	NS	Free Product
05/12/25	NS	NS	NS	NS	NS	Free Product
09/29/25	NS	NS	NS	NS	NS	Free Product
MW-107						
05/05/09	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<1.0)	ND (<50)	
11/10/09	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<50)	
05/18/10	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<1.0)	ND (<50)	
11/18/10	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<50)	
05/13/11 ^(b)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<1.0)	ND (<50)	
05/13/11 (dup.)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<1.0)	ND (<50)	(labeled MW-100)
10/17/11	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<1.0)	ND (<50)	
05/08/12 ^(b)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<1.0)	ND (<50)	
11/05/12	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<2.0)	ND (<50)	
05/02/13	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<1.0)	ND (<50)	
10/08/13	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<1.0)	ND (<50)	
06/02/14	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<1.0)	ND (<50)	
10/16/14	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<1.0)	ND (<50)	

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Historical MTCA 10 Groundwater Analytical Data Results Table - 2009 to 2025
HF Sinclair Puget Sound Refining LLC - Anacortes, WA

Well ID / Date	Benzene	Toluene	Ethylbenzene	Xylenes	Volatile Range	Comments
	8260C	8260C	8260C	8260C	NWTPH-Gx	
Units:	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	
MTCA Method A Cleanup Level:	5	1,000	700	1,000	800/1,000 ^(a)	
MW-107 (cont.)						
05/13/15	ND (<2.0)	ND (<2.0)	ND (<3.0)	ND (<3.0)	ND (<50)	
10/15/15	ND (<2.0)	ND (<2.0)	ND (<3.0)	ND (<3.0)	72	
10/15/15 (re-analysis)	NA	NA	NA	NA	ND(<50)	
04/26/16	0.52	0.84	ND(<0.2)	ND(<0.5)	ND(<50)	
10/11/16	ND(<2.0)	ND(<2.0)	ND(<3.0)	ND(<3.0)	ND(<50)	
05/03/17	ND(<2.0)	ND(<2.0)	ND(<3.0)	ND(<3.0)	ND(<50)	
10/09/17	ND(<2.0)	ND(<2.0)	ND(<3.0)	ND(<5.0)	ND(<250)	
05/09/18	ND(<3.0)	ND(<2.0)	ND(<3.0)	ND(<5.0)	ND(<250)	
10/15/18	ND(<3.0)	ND(<2.0)	ND(<3.0)	ND(<5.0)	ND(<250)	
04/09/19	ND(<3.0)	ND(<2.0)	ND(<3.0)	ND (<3.0)	ND(<250)	
09/24/19	ND(<3.0)	ND(<2.0)	ND(<3.0)	ND (<3.0)	ND(<250)	
04/28/20	ND(<3.0)	ND(<2.0)	ND(<3.0)	ND (<3.0)	ND(<250)	
4/28/20 (dup.)	ND(<3.0)	ND(<2.0)	ND(<3.0)	ND (<3.0)	ND(<250)	(labeled WES-DUP-1)
10/08/20	ND(<3.0)	ND(<2.0)	ND(<3.0)	ND (<3.0)	ND(<250)	
05/18/21	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<2.0)	ND(<250)	
5/18/21 (dup.)	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<2.0)	ND(<250)	(labeled WES-DUP-1)
10/12/21	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<2.0)	ND(<250)	
05/16/22	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<5.0)	ND(<250)	
10/25/22	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<2.0)	ND(<50)	
04/17/23	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<2.0)	ND(<50)	
10/09/23	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<2.0)	ND(<100)	
05/07/24	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<2.0)	ND(<150)	
10/16/24	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<2.0)	ND(<150)	

Table 4
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Well ID / Date	Benzene	Toluene	Ethylbenzene	Xylenes	Volatile Range	Comments
	8260C	8260C	8260C	8260C	NWTPH-Gx	
Units:	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	
MTCA Method A Cleanup Level:	5	1,000	700	1,000	800/1,000 ^(a)	
MW-107 (cont.)						
05/12/25	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<2.0)	ND(<150)	
09/29/25	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<2.0)	ND(<150)	
MW-111						
05/05/09	NS	NS	NS	NS	NS	Free Product
11/10/09	NS	NS	NS	NS	NS	Free Product
05/18/10	NS	NS	NS	NS	NS	Free Product
10/21/10	NS	NS	NS	NS	NS	Free Product
05/12/11	NS	NS	NS	NS	NS	No free product noted
10/18/11 ^(b)	33	ND (<0.5)	2.8	1.2	2,000	No free product noted
05/08/12 ^(b)	23	ND (<0.5)	1.8	6.7	2,500	No free product noted
05/08/12 ^(b) (dup.)	22	ND (<0.5)	1.9	7.2	2,600	(labeled MW-100)
11/05/12	NS	NS	NS	NS	NS	Free Product
05/02/13	10	ND (<0.5)	1.1	ND (<1.0)	3,600	No free product noted
10/08/13	7	ND (<0.5)	ND (<0.5)	ND (<1.0)	6,900	Trace of free product
06/02/14	15	ND (<0.5)	ND (<0.5)	1.9	2,900	No free product noted
06/02/14 (dup.)	17	ND (<0.5)	ND (<0.5)	2.6	2,600	(labeled MW-100)
10/16/14	9	ND (<0.5)	ND (<0.5)	ND (<1.0)	3,000	Trace of free product
05/13/15	13	ND (<2.0)	ND (<3.0)	ND (<3.0)	3,300	
05/13/15 (dup.)	13	ND (<2.0)	ND (<3.0)	ND (<3.0)	3,400	(labeled MW-100)
10/14/15	4.0	ND (<2.0)	ND (<3.0)	ND (<3.0)	3,200	
10/14/15 (dup.)	4.1	ND (<2.0)	ND (<3.0)	ND (<3.0)	3,400	(labeled MW-100)
04/26/16	6.5	0.4	0.3	ND(<0.5)	1,900	
10/11/16	NS	NS	NS	NS	NS	Free Product

Table 4
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Well ID / Date	Benzene	Toluene	Ethylbenzene	Xylenes	Volatile Range	Comments
	8260C	8260C	8260C	8260C	NWTPH-Gx	
Units:	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	
MTCA Method A Cleanup Level:	5	1,000	700	1,000	800/1,000 ^(a)	
MW-111 (cont.)						
05/03/17	7.8	ND (<2.0)	ND (<3.0)	ND (<3.0)	4,100	
05/03/17 (dup.)	8.3	ND (<2.0)	ND (<3.0)	ND (<3.0)	4,700	(labeled WES-DUP-1)
10/09/17	2.5	ND(<2.0)	ND(<3.0)	ND(<5.0)	1,700	
10/09/17 (dup)	2.2	ND(<2.0)	ND(<3.0)	ND(<5.0)	1,800	(labeled WES-DUP-1)
05/09/18	13.0	ND(<2.0)	5.6	6.3	410	
10/15/18	ND(<3.0)	ND (<2.0)	ND (<3.0)	ND (<3.0)	1,500	
10/15/2018 (dup.)	ND(<3.0)	ND (<2.0)	ND (<3.0)	ND (<3.0)	1,500	(labeled WES-DUP-1)
04/09/19	ND(<3.0)	ND(<2.0)	ND(<3.0)	ND(<3.0)	3,500	
4/9/2019 (dup.)	ND(<3.0)	ND(<2.0)	ND(<3.0)	ND(<3.0)	2,600	(labeled WES-DUP-1)
09/23/19	ND(<3.0)	ND(<2.0)	ND(<3.0)	ND(<3.0)	2,200	
04/29/20	ND(<3.0)	ND(<2.0)	ND(<3.0)	ND(<3.0)	5,000	
10/08/20	ND(<3.0)	ND(<2.0)	ND(<3.0)	ND(<3.0)	4,900	
05/18/21	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<2.0)	3,500	Trace of free product
10/12/21	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<2.0)	3,300	
05/16/22	ND (<1.0)	ND(<1.0)	ND(<1.0)	ND(<5.0)	2,400	Trace of free product
10/25/22	ND (<1.0)	ND(<1.0)	2.5	ND(<2.0)	5,600	Free Product
04/17/23	ND (<1.0)	ND(<1.0)	3.5	ND(<2.0)	6,300	
10/09/23	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND(<2.0)	3,800	Trace of free product
05/07/24	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND(<2.0)	2,200	Trace of free product
10/15/24	1.1	ND (<1.0)	1.6	ND(<2.0)	4,000	
05/12/25	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<2.0)	2,700	
5/12/2025 (dup.)	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<2.0)	2,700	(labeled ALL4-DUP-1)
09/29/25	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<2.0)	6,200 ^(c)	

Table 4
Historical MTCA 10 Groundwater Analytical Data Results Table - 2009 to 2025
HF Sinclair Puget Sound Refining LLC - Anacortes, WA

Well ID / Date	Benzene	Toluene	Ethylbenzene	Xylenes	Volatile Range	Comments
	8260C	8260C	8260C	8260C	NWTPH-Gx	
Units:	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	
MTCA Method A Cleanup Level:	5	1,000	700	1,000	800/1,000 ^(a)	
Equipment Blank						
05/05/09	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<1.0)	ND (<50)	
11/10/09	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<50)	
05/18/10	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<1.0)	ND (<50)	
11/19/10	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<50)	(labeled MWES-02)
05/13/11	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<1.0)	ND (<50)	(labeled MW-99)
10/18/11	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<1.0)	ND (<50)	(labeled MW-99)
05/08/12	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<1.0)	ND (<50)	(labeled MW-99)
11/05/12	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<2.0)	ND (<50)	(labeled MW-99)
05/02/13	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<1.0)	ND (<50)	(labeled MW-99)
10/08/13	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<1.0)	ND (<50)	(labeled MW-110)
06/02/14	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<1.0)	ND (<50)	(labeled MW-110)
10/16/14	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<1.0)	ND (<50)	(labeled MW-110)
05/13/15	ND (<2.0)	ND (<2.0)	ND (<3.0)	ND (<3.0)	ND (<50)	(labeled MW-110)
10/14/15	ND (<2.0)	ND (<2.0)	ND (<3.0)	ND (<3.0)	93	(labeled MW-110)
10/14/15 (re-analysis)	NA	NA	NA	NA	ND(<50)	
04/26/16	ND(<0.2)	0.29	ND(<0.2)	ND(<0.5)	ND (<50)	(labeled WES-2)
10/11/16	ND(<2.0)	ND(<2.0)	ND(<3.0)	ND(<3.0)	ND(<50)	(labeled WES-2)
05/03/17	ND(<2.0)	ND(<2.0)	ND(<3.0)	ND(<3.0)	ND(<50)	(labeled WES-FB-1)
10/09/17	ND(<2.0)	ND(<2.0)	ND(<3.0)	ND(<5.0)	ND(<250)	(labeled WES-FB-1)
05/09/18	ND(<3.0)	ND(<2.0)	ND(<3.0)	ND(<5.0)	ND(<250)	(labeled WES-FEB-1)
10/15/18	ND(<3.0)	ND(<2.0)	ND(<3.0)	ND(<5.0)	ND(<250)	(labeled WES-FEB-1)
04/09/19	ND(<3.0)	ND(<2.0)	ND(<3.0)	ND (<3.0)	ND(<250)	(labeled WES-FEB-1)

Table 4
Historical MTCA 10 Groundwater Analytical Data Results Table - 2009 to 2025
HF Sinclair Puget Sound Refining LLC - Anacortes, WA

Well ID / Date	Benzene	Toluene	Ethylbenzene	Xylenes	Volatile Range	Comments
	8260C	8260C	8260C	8260C	NWTPH-Gx	
Units:	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	
MTCA Method A Cleanup Level:	5	1,000	700	1,000	800/1,000 ^(a)	
Equipment Blank (cont.)						
09/24/19	ND(<3.0)	ND(<2.0)	ND(<3.0)	ND (<3.0)	ND(<250)	(labeled WES-FEB-1)
04/28/20	ND(<3.0)	ND(<2.0)	ND(<3.0)	ND (<3.0)	ND(<250)	(labeled WES-FEB-1)
10/07/20	ND(<3.0)	ND(<2.0)	ND(<3.0)	ND (<3.0)	ND(<250)	(labeled WES-FEB-1)
05/18/21	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<2.0)	ND(<250)	(labeled WES-FEB-1)
10/12/21	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<2.0)	ND(<250)	(labeled WES-FEB-1)
05/16/22	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<5.0)	ND(<250)	(labeled WES-FEB-1)
10/25/22	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<2.0)	ND(<50)	(labeled WES-FEB-1)
04/17/23	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<2.0)	ND(<50)	(labeled WES-FEB-1)
10/09/23	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<2.0)	ND(<100)	(labeled WES-FEB-1)
05/07/24	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<2.0)	ND(<150)	(labeled MTCA 10-FEB-1)
10/15/24	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<2.0)	ND(<150)	(labeled ALL4-FEB-1)
05/12/25	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<2.0)	ND(<150)	(labeled ALL4-FEB-1)
09/29/25	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<2.0)	ND(<150)	(labeled ALL4-FEB-1)

BOLD indicates that the concentration in the sample exceeds MTCA Method A groundwater cleanup levels. These cleanup levels are provided for purposes of comparison only, and do not represent target cleanup levels at the site.

ND indicates analyte was Not Detected at level above reporting limit shown in parentheses

NS indicates well was Not Sampled

^(a) Cleanup level is dependent on detection of benzene

^(b) Sampling event conducted via low-flow method

^(c) Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD) Relative Percent Difference (RPD) exceeded control limits

Note: Wells containing free product were presumed to be contaminated and were not sampled

**APPENDIX A -
MAY 2025 LABORATORY DATA REPORT**

ANALYTICAL REPORT

PREPARED FOR

Attn: Eric Libolt
ALL4, Inc.
228 East Champion Street #101
Bellingham, Washington 98225

Generated 5/20/2025 3:15:24 PM

JOB DESCRIPTION

All 4 LLC-HF Sinclair Puget Sound Refini

JOB NUMBER

580-150550-1

Eurofins Seattle

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.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northwest, LLC Project Manager.

Authorization



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Authorized for release by
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(253)922-2310

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Case Narrative

Client: ALL4, Inc.
Project: All 4 LLC-HF Sinclair Puget Sound Refini

Job ID: 580-150550-1

Job ID: 580-150550-1

Eurofins Seattle

Job Narrative 580-150550-1

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 and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided 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 5/15/2025 9:30 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.2°C.

Gasoline Range Organics

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

GC/MS VOA

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

Eurofins Seattle

Definitions/Glossary

Client: ALL4, Inc.

Job ID: 580-150550-1

Project/Site: All 4 LLC-HF Sinclair Puget Sound Refini

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	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

Client Sample Results

Client: ALL4, Inc.
Project/Site: All 4 LLC-HF Sinclair Puget Sound Refini

Job ID: 580-150550-1

Client Sample ID: MW-56

Lab Sample ID: 580-150550-1

Date Collected: 05/12/25 16:15

Matrix: Water

Date Received: 05/15/25 09:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			05/18/25 00:03	1
Toluene	ND		1.0		ug/L			05/18/25 00:03	1
Ethylbenzene	ND		1.0		ug/L			05/18/25 00:03	1
m-Xylene & p-Xylene	ND		2.0		ug/L			05/18/25 00:03	1
o-Xylene	ND		1.0		ug/L			05/18/25 00:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	102		80 - 120		05/18/25 00:03	1
4-Bromofluorobenzene (Surr)	96		80 - 120		05/18/25 00:03	1
Dibromofluoromethane (Surr)	100		80 - 120		05/18/25 00:03	1
1,2-Dichloroethane-d4 (Surr)	106		80 - 120		05/18/25 00:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		0.15		mg/L			05/18/25 00:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		77 - 123		05/18/25 00:03	1

Client Sample Results

Client: ALL4, Inc.
Project/Site: All 4 LLC-HF Sinclair Puget Sound Refini

Job ID: 580-150550-1

Client Sample ID: MW-103

Lab Sample ID: 580-150550-2

Date Collected: 05/12/25 14:30

Matrix: Water

Date Received: 05/15/25 09:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			05/17/25 06:34	1
Toluene	ND		1.0		ug/L			05/17/25 06:34	1
Ethylbenzene	ND		1.0		ug/L			05/17/25 06:34	1
m-Xylene & p-Xylene	ND		2.0		ug/L			05/17/25 06:34	1
o-Xylene	ND		1.0		ug/L			05/17/25 06:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		80 - 120		05/17/25 06:34	1
4-Bromofluorobenzene (Surr)	102		80 - 120		05/17/25 06:34	1
Dibromofluoromethane (Surr)	101		80 - 120		05/17/25 06:34	1
1,2-Dichloroethane-d4 (Surr)	104		80 - 120		05/17/25 06:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		0.15		mg/L			05/17/25 06:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		77 - 123		05/17/25 06:34	1

Client Sample Results

Client: ALL4, Inc.
Project/Site: All 4 LLC-HF Sinclair Puget Sound Refini

Job ID: 580-150550-1

Client Sample ID: MW-107

Lab Sample ID: 580-150550-3

Date Collected: 05/12/25 16:15

Matrix: Water

Date Received: 05/15/25 09:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			05/17/25 06:57	1
Toluene	ND		1.0		ug/L			05/17/25 06:57	1
Ethylbenzene	ND		1.0		ug/L			05/17/25 06:57	1
m-Xylene & p-Xylene	ND		2.0		ug/L			05/17/25 06:57	1
o-Xylene	ND		1.0		ug/L			05/17/25 06:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		80 - 120		05/17/25 06:57	1
4-Bromofluorobenzene (Surr)	102		80 - 120		05/17/25 06:57	1
Dibromofluoromethane (Surr)	103		80 - 120		05/17/25 06:57	1
1,2-Dichloroethane-d4 (Surr)	107		80 - 120		05/17/25 06:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		0.15		mg/L			05/17/25 06:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		77 - 123		05/17/25 06:57	1

Client Sample Results

Client: ALL4, Inc.
Project/Site: All 4 LLC-HF Sinclair Puget Sound Refini

Job ID: 580-150550-1

Client Sample ID: MW-111

Lab Sample ID: 580-150550-4

Date Collected: 05/12/25 15:15

Matrix: Water

Date Received: 05/15/25 09:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			05/17/25 07:21	1
Toluene	ND		1.0		ug/L			05/17/25 07:21	1
Ethylbenzene	ND		1.0		ug/L			05/17/25 07:21	1
m-Xylene & p-Xylene	ND		2.0		ug/L			05/17/25 07:21	1
o-Xylene	ND		1.0		ug/L			05/17/25 07:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		80 - 120		05/17/25 07:21	1
4-Bromofluorobenzene (Surr)	103		80 - 120		05/17/25 07:21	1
Dibromofluoromethane (Surr)	100		80 - 120		05/17/25 07:21	1
1,2-Dichloroethane-d4 (Surr)	103		80 - 120		05/17/25 07:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	2.7		0.15		mg/L			05/17/25 07:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		77 - 123		05/17/25 07:21	1

Client Sample Results

Client: ALL4, Inc.
Project/Site: All 4 LLC-HF Sinclair Puget Sound Refini

Job ID: 580-150550-1

Client Sample ID: ALL4-FEB-1

Lab Sample ID: 580-150550-5

Date Collected: 05/12/25 14:00

Matrix: Water

Date Received: 05/15/25 09:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			05/17/25 07:45	1
Toluene	ND		1.0		ug/L			05/17/25 07:45	1
Ethylbenzene	ND		1.0		ug/L			05/17/25 07:45	1
m-Xylene & p-Xylene	ND		2.0		ug/L			05/17/25 07:45	1
o-Xylene	ND		1.0		ug/L			05/17/25 07:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		80 - 120		05/17/25 07:45	1
4-Bromofluorobenzene (Surr)	102		80 - 120		05/17/25 07:45	1
Dibromofluoromethane (Surr)	100		80 - 120		05/17/25 07:45	1
1,2-Dichloroethane-d4 (Surr)	102		80 - 120		05/17/25 07:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		0.15		mg/L			05/17/25 07:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		77 - 123		05/17/25 07:45	1

Client Sample Results

Client: ALL4, Inc.
Project/Site: All 4 LLC-HF Sinclair Puget Sound Refini

Job ID: 580-150550-1

Client Sample ID: ALL4-DUP-1

Lab Sample ID: 580-150550-6

Date Collected: 05/12/25 08:00

Matrix: Water

Date Received: 05/15/25 09:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			05/17/25 08:08	1
Toluene	ND		1.0		ug/L			05/17/25 08:08	1
Ethylbenzene	ND		1.0		ug/L			05/17/25 08:08	1
m-Xylene & p-Xylene	ND		2.0		ug/L			05/17/25 08:08	1
o-Xylene	ND		1.0		ug/L			05/17/25 08:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		80 - 120		05/17/25 08:08	1
4-Bromofluorobenzene (Surr)	102		80 - 120		05/17/25 08:08	1
Dibromofluoromethane (Surr)	99		80 - 120		05/17/25 08:08	1
1,2-Dichloroethane-d4 (Surr)	102		80 - 120		05/17/25 08:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	2.7		0.15		mg/L			05/17/25 08:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		77 - 123		05/17/25 08:08	1

Client Sample Results

Client: ALL4, Inc.
Project/Site: All 4 LLC-HF Sinclair Puget Sound Refini

Job ID: 580-150550-1

Client Sample ID: Trip Blanks

Date Collected: 05/12/25 00:00

Date Received: 05/15/25 09:30

Lab Sample ID: 580-150550-7

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			05/17/25 05:46	1
Toluene	ND		1.0		ug/L			05/17/25 05:46	1
Ethylbenzene	ND		1.0		ug/L			05/17/25 05:46	1
m-Xylene & p-Xylene	ND		2.0		ug/L			05/17/25 05:46	1
o-Xylene	ND		1.0		ug/L			05/17/25 05:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		80 - 120		05/17/25 05:46	1
4-Bromofluorobenzene (Surr)	100		80 - 120		05/17/25 05:46	1
Dibromofluoromethane (Surr)	100		80 - 120		05/17/25 05:46	1
1,2-Dichloroethane-d4 (Surr)	103		80 - 120		05/17/25 05:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		0.15		mg/L			05/17/25 05:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		77 - 123		05/17/25 05:46	1

QC Sample Results

Client: ALL4, Inc.
Project/Site: All 4 LLC-HF Sinclair Puget Sound Refini

Job ID: 580-150550-1

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

Lab Sample ID: MB 580-492808/10

Matrix: Water

Analysis Batch: 492808

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		ug/L			05/17/25 05:23	1
Toluene	ND		1.0		ug/L			05/17/25 05:23	1
Ethylbenzene	ND		1.0		ug/L			05/17/25 05:23	1
m-Xylene & p-Xylene	ND		2.0		ug/L			05/17/25 05:23	1
o-Xylene	ND		1.0		ug/L			05/17/25 05:23	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		80 - 120		05/17/25 05:23	1
4-Bromofluorobenzene (Surr)	102		80 - 120		05/17/25 05:23	1
Dibromofluoromethane (Surr)	100		80 - 120		05/17/25 05:23	1
1,2-Dichloroethane-d4 (Surr)	103		80 - 120		05/17/25 05:23	1

Lab Sample ID: LCS 580-492808/5

Matrix: Water

Analysis Batch: 492808

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	10.0	9.55		ug/L		95	80 - 122
Toluene	10.0	9.31		ug/L		93	80 - 120
Ethylbenzene	10.0	9.67		ug/L		97	80 - 120
m-Xylene & p-Xylene	10.0	9.66		ug/L		97	80 - 120
o-Xylene	10.0	9.92		ug/L		99	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	100		80 - 120
4-Bromofluorobenzene (Surr)	101		80 - 120
Dibromofluoromethane (Surr)	99		80 - 120
1,2-Dichloroethane-d4 (Surr)	101		80 - 120

Lab Sample ID: LCSD 580-492808/6

Matrix: Water

Analysis Batch: 492808

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	10.0	9.84		ug/L		98	80 - 122	3	14
Toluene	10.0	9.26		ug/L		93	80 - 120	1	13
Ethylbenzene	10.0	9.78		ug/L		98	80 - 120	1	14
m-Xylene & p-Xylene	10.0	9.56		ug/L		96	80 - 120	1	14
o-Xylene	10.0	10.1		ug/L		101	80 - 120	2	16

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Toluene-d8 (Surr)	99		80 - 120
4-Bromofluorobenzene (Surr)	101		80 - 120
Dibromofluoromethane (Surr)	101		80 - 120
1,2-Dichloroethane-d4 (Surr)	101		80 - 120

Eurofins Seattle

QC Sample Results

Client: ALL4, Inc.
Project/Site: All 4 LLC-HF Sinclair Puget Sound Refini

Job ID: 580-150550-1

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

Lab Sample ID: MB 580-492821/10

Matrix: Water

Analysis Batch: 492821

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		ug/L			05/17/25 21:43	1
Toluene	ND		1.0		ug/L			05/17/25 21:43	1
Ethylbenzene	ND		1.0		ug/L			05/17/25 21:43	1
m-Xylene & p-Xylene	ND		2.0		ug/L			05/17/25 21:43	1
o-Xylene	ND		1.0		ug/L			05/17/25 21:43	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	104		80 - 120		05/17/25 21:43	1
4-Bromofluorobenzene (Surr)	99		80 - 120		05/17/25 21:43	1
Dibromofluoromethane (Surr)	100		80 - 120		05/17/25 21:43	1
1,2-Dichloroethane-d4 (Surr)	104		80 - 120		05/17/25 21:43	1

Lab Sample ID: LCS 580-492821/5

Matrix: Water

Analysis Batch: 492821

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	5.00	5.28		ug/L		106	80 - 122
Toluene	5.00	5.20		ug/L		104	80 - 120
Ethylbenzene	5.00	5.35		ug/L		107	80 - 120
m-Xylene & p-Xylene	5.00	5.39		ug/L		108	80 - 120
o-Xylene	5.00	5.25		ug/L		105	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	103		80 - 120
4-Bromofluorobenzene (Surr)	100		80 - 120
Dibromofluoromethane (Surr)	100		80 - 120
1,2-Dichloroethane-d4 (Surr)	103		80 - 120

Lab Sample ID: LCSD 580-492821/6

Matrix: Water

Analysis Batch: 492821

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	5.00	5.18		ug/L		104	80 - 122	2	14
Toluene	5.00	5.11		ug/L		102	80 - 120	2	13
Ethylbenzene	5.00	5.24		ug/L		105	80 - 120	2	14
m-Xylene & p-Xylene	5.00	5.17		ug/L		103	80 - 120	4	14
o-Xylene	5.00	5.18		ug/L		104	80 - 120	1	16

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Toluene-d8 (Surr)	103		80 - 120
4-Bromofluorobenzene (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	101		80 - 120
1,2-Dichloroethane-d4 (Surr)	103		80 - 120

Eurofins Seattle

QC Sample Results

Client: ALL4, Inc.
Project/Site: All 4 LLC-HF Sinclair Puget Sound Refini

Job ID: 580-150550-1

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

Lab Sample ID: MB 580-492804/10

Matrix: Water

Analysis Batch: 492804

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		0.15		mg/L			05/17/25 05:23	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		77 - 123					05/17/25 05:23	1

Lab Sample ID: LCS 580-492804/7

Matrix: Water

Analysis Batch: 492804

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline	1.00	0.967		mg/L		97	55 - 148
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	100		77 - 123				

Lab Sample ID: LCSD 580-492804/8

Matrix: Water

Analysis Batch: 492804

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Gasoline	1.00	0.971		mg/L		97	55 - 148	0	10
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
4-Bromofluorobenzene (Surr)	101		77 - 123						

Lab Sample ID: MB 580-492816/10

Matrix: Water

Analysis Batch: 492816

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		0.15		mg/L			05/17/25 21:43	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		77 - 123					05/17/25 21:43	1

Lab Sample ID: LCS 580-492816/7

Matrix: Water

Analysis Batch: 492816

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline	1.00	1.01		mg/L		101	55 - 148
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	98		77 - 123				

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QC Sample Results

Client: ALL4, Inc.
Project/Site: All 4 LLC-HF Sinclair Puget Sound Refini

Job ID: 580-150550-1

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

Lab Sample ID: LCSD 580-492816/8

Matrix: Water

Analysis Batch: 492816

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
Gasoline	1.00	1.01		mg/L		101	55 - 148	0	10
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
4-Bromofluorobenzene (Surr)	98		77 - 123						

Lab Chronicle

Client: ALL4, Inc.
Project/Site: All 4 LLC-HF Sinclair Puget Sound Refini

Job ID: 580-150550-1

Client Sample ID: MW-56

Date Collected: 05/12/25 16:15

Date Received: 05/15/25 09:30

Lab Sample ID: 580-150550-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	492821	JBT	EET SEA	05/18/25 00:03
Total/NA	Analysis	NWTPH-Gx		1	492816	JBT	EET SEA	05/18/25 00:03

Client Sample ID: MW-103

Date Collected: 05/12/25 14:30

Date Received: 05/15/25 09:30

Lab Sample ID: 580-150550-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	492808	JBT	EET SEA	05/17/25 06:34
Total/NA	Analysis	NWTPH-Gx		1	492804	JBT	EET SEA	05/17/25 06:34

Client Sample ID: MW-107

Date Collected: 05/12/25 16:15

Date Received: 05/15/25 09:30

Lab Sample ID: 580-150550-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	492808	JBT	EET SEA	05/17/25 06:57
Total/NA	Analysis	NWTPH-Gx		1	492804	JBT	EET SEA	05/17/25 06:57

Client Sample ID: MW-111

Date Collected: 05/12/25 15:15

Date Received: 05/15/25 09:30

Lab Sample ID: 580-150550-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	492808	JBT	EET SEA	05/17/25 07:21
Total/NA	Analysis	NWTPH-Gx		1	492804	JBT	EET SEA	05/17/25 07:21

Client Sample ID: ALL4-FEB-1

Date Collected: 05/12/25 14:00

Date Received: 05/15/25 09:30

Lab Sample ID: 580-150550-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	492808	JBT	EET SEA	05/17/25 07:45
Total/NA	Analysis	NWTPH-Gx		1	492804	JBT	EET SEA	05/17/25 07:45

Client Sample ID: ALL4-DUP-1

Date Collected: 05/12/25 08:00

Date Received: 05/15/25 09:30

Lab Sample ID: 580-150550-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	492808	JBT	EET SEA	05/17/25 08:08
Total/NA	Analysis	NWTPH-Gx		1	492804	JBT	EET SEA	05/17/25 08:08

Eurofins Seattle

Lab Chronicle

Client: ALL4, Inc.
Project/Site: All 4 LLC-HF Sinclair Puget Sound Refini

Job ID: 580-150550-1

Client Sample ID: Trip Blanks
Date Collected: 05/12/25 00:00
Date Received: 05/15/25 09:30

Lab Sample ID: 580-150550-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	492808	JBT	EET SEA	05/17/25 05:46
Total/NA	Analysis	NWTPH-Gx		1	492804	JBT	EET SEA	05/17/25 05:46

Laboratory References:
EET SEA = Eurofins Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: ALL4, Inc.
Project/Site: All 4 LLC-HF Sinclair Puget Sound Refini

Job ID: 580-150550-1

Laboratory: Eurofins Seattle

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

Authority	Program	Identification Number	Expiration Date
Washington	State	C788-24	07-13-25

1
2
3
4
5
6
7
8
9
10
11

Sample Summary

Client: ALL4, Inc.

Job ID: 580-150550-1

Project/Site: All 4 LLC-HF Sinclair Puget Sound Refini

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-150550-1	MW-56	Water	05/12/25 16:15	05/15/25 09:30
580-150550-2	MW-103	Water	05/12/25 14:30	05/15/25 09:30
580-150550-3	MW-107	Water	05/12/25 16:15	05/15/25 09:30
580-150550-4	MW-111	Water	05/12/25 15:15	05/15/25 09:30
580-150550-5	ALL4-FEB-1	Water	05/12/25 14:00	05/15/25 09:30
580-150550-6	ALL4-DUP-1	Water	05/12/25 08:00	05/15/25 09:30
580-150550-7	Trip Blanks	Water	05/12/25 00:00	05/15/25 09:30

Eurofins Seattle

5755 8th Street East
Tacoma, WA 98424
Phone (253) 922-2310

Chain of Custody Record



Client Information		Sampler:	Lab PM:	Center Tracking No(s):	COC No:
Client Contact: Jim Schneider		Phone: 360-752-9571	E-Mail: Laura.Schick@Eurofins.com	FedEx State of Origin: WA	Page: Page 1 of 1
Company:		PWSID:	Job #:		
HF Sinclair Puget Sound Refining LLC		Due Date Requested:	Analysis Requested		
Address: 8505 S Texas Road		TAT Requested (days): Standard	Preservation Codes:		
City: Anacortes		Compliance Project: A Yes A No	M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecalhydrate U - Acetone V - MCAA W - PH 4-5		
State, Zip: WA, 98221		PO #:	State		
Phone: (360) 293-0800		WO #:	Acid		
Email: jim.schneider@hfsinclair.com		Project #:	W - PH 4-5		
Project Name: HFS GW Monitoring-C		SSOW#:	580-150550 COC		
Site: Washington		Sample Date	Sample Time	Sample Type (G=grab, C=comp, B=blank, A=lab)	Matrix (Water, Soil, Sludge, Benthic, Air)
Sample Identification		5/12/25	10:15	G	Water
MMW-56				No	X
MMW-103			14:30	G	Water
MMW-107			10:15	G	Water
MMW-111			15:15	G	Water
MICA 10-FEB-1			14:00	G	Water
MICA 10-DUP-1			8:00	G	Water
Trip Blanks			1ab	G	Water
Possible Hazard Identification		Field Filtered Sample (Yes or No)			
Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological ☐		NWTPH-Gx			
Deliverable Requested: I, II, III, IV, Other (specify)		BTEX (8260D)			
Empty Kit Relinquished by:		Date:	Time:	Method of Shipment:	
Relinquished by:		Date/Time:	Company:	Received by:	
Relinquished by:		Date/Time:	Company:	Received by:	
Relinquished by:		Date/Time:	Company:	Received by:	
Custody Seal Intact:		Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:		

Therm. ID: 1413011
Cooler Desc: 1B
Packing: Bubble
Cust. Seal: Yes/No
Blue Ice/Wet, Dry, None
FedEx: PO
UPS:
Lab Cour:
Other:

Please send results to HFSR
(jim.schneider@hfsinclair.com) and ALL4
(ellobot@all4inc.com, agempler@all4inc.com)

580-150550 Chain of Custody

Eurofins Seattle
5755 8th Street East
Tacoma, WA 98424
Phone (253) 922-2310

Chain of Custody Record



Client Information		Sampler: Lab PH: Laura Schick		Carrier Tracking No(s): FedEx		COC No:	
Client Contact: Jim Schneider		Phone: 360-752-9571		State of Origin: WA		Page: 1 of 1	
Company: HF Sinclair Puget Sound Refining LLC		PWSID:		Analysis Requested		Job #:	
Address: 8505 S Texas Road		Due Date Requested:		Analysis Requested		Preservation Codes:	
City: Anacortes		TAT Requested (days): Standard		Analysis Requested		M - Hexane N - None O - AshNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5	
State Zip: WA, 98221		Compliance Project: Δ Yes Δ No		Analysis Requested		State of Origin: WA	
Phone: (360) 293-0800		PO #: Bill to ALL4		Analysis Requested		Analysis Requested	
Email: jim.schneider@hfsinclair.com		WO #: 004531-0033		Analysis Requested		Analysis Requested	
Project Name: HFS GW Monitoring-C		Project #: 004531-0033		Analysis Requested		Analysis Requested	
Site: Washington		SSOW#:		Analysis Requested		Analysis Requested	
Sample Identification		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)	
MW-56		5/12/25		10:15		G Water	
MW-103		14:30		14:30		G Water	
MW-107		16:15		16:15		G Water	
MW-111		15:15		15:15		G Water	
MW-104 FEB-1		14:00		14:00		G Water	
MW-104 FEB-2		8:00		8:00		G Water	
Trip Blanks		lab		lab		G Water	
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:		Special Instructions/QC Requirements:		Special Instructions/QC Requirements:	
Empty Kit Relinquished by:		Date/Time:		Date/Time:		Date/Time:	
Relinquished by:		Date/Time:		Date/Time:		Date/Time:	
Relinquished by:		Date/Time:		Date/Time:		Date/Time:	
Relinquished by:		Date/Time:		Date/Time:		Date/Time:	
Custody/Seals Intact:		Custody/Seal No.:		Custody/Seal No.:		Custody/Seal No.:	

Therm. ID: IR15 Cor: 1.3 ° Unc: 1.3 °
Cooler Desc: 1B
Packing: Bub UPS: PO
Cust. Seal: Yes No Lab Cour:
Blue Ice (Wet, Dry, None) Other:

Login Sample Receipt Checklist

Client: ALL4, Inc.

Job Number: 580-150550-1

Login Number: 150550

List Source: Eurofins Seattle

List Number: 1

Creator: Groves, Elizabeth

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	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	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

**APPENDIX B -
SEPTEMBER 2025 LABORATORY DATA REPORT**

ANALYTICAL REPORT

PREPARED FOR

Attn: Eric Libolt
ALL4, Inc.
228 East Champion Street #101
Bellingham, Washington 98225

Generated 10/8/2025 1:17:30 PM

JOB DESCRIPTION

HFS Pug - 0033 - 2025 GW Mon-C
Washington

JOB NUMBER

580-154611-1

Eurofins Seattle

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.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northwest, LLC Project Manager.

Authorization



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10/8/2025 1:17:30 PM

Authorized for release by
Meagann Russell, Project Management Assistant I
Meagann.Russell@et.eurofinsus.com
(253)922-2310



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Case Narrative

Client: ALL4, Inc.
Project: HFS Pug - 0033 - 2025 GW Mon-C

Job ID: 580-154611-1

Job ID: 580-154611-1

Eurofins Seattle

Job Narrative 580-154611-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt

The samples were received on 10/2/2025 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 2 coolers at receipt time were -1.6°C and -0.7°C.

Gasoline Range Organics

Method NWTPH_Gx_MS: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for analytical batch 580-505461 recovered outside control limits for the following analytes: Gasoline.

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

GC/MS VOA

Method 8260D: 1,2-Dichloroethane-d4 (Surr) recovery for the following sample was outside control limits: MW-111 (580-154611-4). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8260D: Dibromofluoromethane (Surr) recovery for the following samples were outside the upper control limit: MW-56 (580-154611-1), MW-103 (580-154611-2), MW-107 (580-154611-3), ALL4-FEB-1 (580-154611-5), ALL4-DUP-1 (580-154611-6) and Trip Blank (580-154611-7). This sample did not contain any chemically associated target analytes above the RL; therefore, re-extraction and/or re-analysis was not performed.

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

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Definitions/Glossary

Client: ALL4, Inc.
Project/Site: HFS Pug - 0033 - 2025 GW Mon-C

Job ID: 580-154611-1
SDG: Washington

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	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

Client Sample Results

Client: ALL4, Inc.
Project/Site: HFS Pug - 0033 - 2025 GW Mon-C

Job ID: 580-154611-1
SDG: Washington

Client Sample ID: MW-56

Lab Sample ID: 580-154611-1

Date Collected: 09/29/25 15:10

Matrix: Water

Date Received: 10/02/25 10:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			10/03/25 20:40	1
Toluene	ND		1.0		ug/L			10/03/25 20:40	1
Ethylbenzene	ND		1.0		ug/L			10/03/25 20:40	1
m-Xylene & p-Xylene	ND		2.0		ug/L			10/03/25 20:40	1
o-Xylene	ND		1.0		ug/L			10/03/25 20:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	95		80 - 120		10/03/25 20:40	1
4-Bromofluorobenzene (Surr)	103		80 - 120		10/03/25 20:40	1
Dibromofluoromethane (Surr)	122	S1+	80 - 120		10/03/25 20:40	1
1,2-Dichloroethane-d4 (Surr)	100		80 - 120		10/03/25 20:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		0.15		mg/L			10/03/25 20:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		77 - 123		10/03/25 20:40	1

Client Sample Results

Client: ALL4, Inc.
Project/Site: HFS Pug - 0033 - 2025 GW Mon-C

Job ID: 580-154611-1
SDG: Washington

Client Sample ID: MW-103

Lab Sample ID: 580-154611-2

Date Collected: 09/30/25 09:50

Matrix: Water

Date Received: 10/02/25 10:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			10/03/25 21:03	1
Toluene	ND		1.0		ug/L			10/03/25 21:03	1
Ethylbenzene	ND		1.0		ug/L			10/03/25 21:03	1
m-Xylene & p-Xylene	ND		2.0		ug/L			10/03/25 21:03	1
o-Xylene	ND		1.0		ug/L			10/03/25 21:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	96		80 - 120		10/03/25 21:03	1
4-Bromofluorobenzene (Surr)	100		80 - 120		10/03/25 21:03	1
Dibromofluoromethane (Surr)	121	S1+	80 - 120		10/03/25 21:03	1
1,2-Dichloroethane-d4 (Surr)	99		80 - 120		10/03/25 21:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		0.15		mg/L			10/03/25 21:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		77 - 123		10/03/25 21:03	1

Client Sample Results

Client: ALL4, Inc.
Project/Site: HFS Pug - 0033 - 2025 GW Mon-C

Job ID: 580-154611-1
SDG: Washington

Client Sample ID: MW-107

Lab Sample ID: 580-154611-3

Date Collected: 09/29/25 15:00

Matrix: Water

Date Received: 10/02/25 10:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			10/03/25 21:26	1
Toluene	ND		1.0		ug/L			10/03/25 21:26	1
Ethylbenzene	ND		1.0		ug/L			10/03/25 21:26	1
m-Xylene & p-Xylene	ND		2.0		ug/L			10/03/25 21:26	1
o-Xylene	ND		1.0		ug/L			10/03/25 21:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		80 - 120		10/03/25 21:26	1
4-Bromofluorobenzene (Surr)	103		80 - 120		10/03/25 21:26	1
Dibromofluoromethane (Surr)	121	S1+	80 - 120		10/03/25 21:26	1
1,2-Dichloroethane-d4 (Surr)	103		80 - 120		10/03/25 21:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		0.15		mg/L			10/03/25 21:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		77 - 123		10/03/25 21:26	1

Client Sample Results

Client: ALL4, Inc.
Project/Site: HFS Pug - 0033 - 2025 GW Mon-C

Job ID: 580-154611-1
SDG: Washington

Client Sample ID: MW-111

Lab Sample ID: 580-154611-4

Date Collected: 09/30/25 09:30

Matrix: Water

Date Received: 10/02/25 10:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			10/03/25 21:48	1
Toluene	ND		1.0		ug/L			10/03/25 21:48	1
Ethylbenzene	ND		1.0		ug/L			10/03/25 21:48	1
m-Xylene & p-Xylene	ND		2.0		ug/L			10/03/25 21:48	1
o-Xylene	ND		1.0		ug/L			10/03/25 21:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	107		80 - 120		10/03/25 21:48	1
4-Bromofluorobenzene (Surr)	98		80 - 120		10/03/25 21:48	1
Dibromofluoromethane (Surr)	98		80 - 120		10/03/25 21:48	1
1,2-Dichloroethane-d4 (Surr)	77	S1-	80 - 120		10/03/25 21:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	6.2	*1	0.15		mg/L			10/06/25 20:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		77 - 123		10/06/25 20:39	1

Client Sample Results

Client: ALL4, Inc.
Project/Site: HFS Pug - 0033 - 2025 GW Mon-C

Job ID: 580-154611-1
SDG: Washington

Client Sample ID: ALL4-FEB-1

Lab Sample ID: 580-154611-5

Date Collected: 09/29/25 14:15

Matrix: Water

Date Received: 10/02/25 10:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			10/03/25 22:11	1
Toluene	ND		1.0		ug/L			10/03/25 22:11	1
Ethylbenzene	ND		1.0		ug/L			10/03/25 22:11	1
m-Xylene & p-Xylene	ND		2.0		ug/L			10/03/25 22:11	1
o-Xylene	ND		1.0		ug/L			10/03/25 22:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	101		80 - 120		10/03/25 22:11	1
4-Bromofluorobenzene (Surr)	109		80 - 120		10/03/25 22:11	1
Dibromofluoromethane (Surr)	124	S1+	80 - 120		10/03/25 22:11	1
1,2-Dichloroethane-d4 (Surr)	93		80 - 120		10/03/25 22:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		0.15		mg/L			10/03/25 22:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		77 - 123		10/03/25 22:11	1

Client Sample Results

Client: ALL4, Inc.
Project/Site: HFS Pug - 0033 - 2025 GW Mon-C

Job ID: 580-154611-1
SDG: Washington

Client Sample ID: ALL4-DUP-1

Lab Sample ID: 580-154611-6

Date Collected: 09/29/25 13:45

Matrix: Water

Date Received: 10/02/25 10:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			10/03/25 22:33	1
Toluene	ND		1.0		ug/L			10/03/25 22:33	1
Ethylbenzene	ND		1.0		ug/L			10/03/25 22:33	1
m-Xylene & p-Xylene	ND		2.0		ug/L			10/03/25 22:33	1
o-Xylene	ND		1.0		ug/L			10/03/25 22:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		80 - 120		10/03/25 22:33	1
4-Bromofluorobenzene (Surr)	106		80 - 120		10/03/25 22:33	1
Dibromofluoromethane (Surr)	120		80 - 120		10/03/25 22:33	1
1,2-Dichloroethane-d4 (Surr)	93		80 - 120		10/03/25 22:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		0.15		mg/L			10/03/25 22:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		77 - 123		10/03/25 22:33	1

Client Sample Results

Client: ALL4, Inc.
Project/Site: HFS Pug - 0033 - 2025 GW Mon-C

Job ID: 580-154611-1
SDG: Washington

Client Sample ID: Trip Blank

Lab Sample ID: 580-154611-7

Date Collected: 09/29/25 13:00

Matrix: Water

Date Received: 10/02/25 10:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			10/03/25 22:56	1
Toluene	ND		1.0		ug/L			10/03/25 22:56	1
Ethylbenzene	ND		1.0		ug/L			10/03/25 22:56	1
m-Xylene & p-Xylene	ND		2.0		ug/L			10/03/25 22:56	1
o-Xylene	ND		1.0		ug/L			10/03/25 22:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		80 - 120		10/03/25 22:56	1
4-Bromofluorobenzene (Surr)	108		80 - 120		10/03/25 22:56	1
Dibromofluoromethane (Surr)	121	S1+	80 - 120		10/03/25 22:56	1
1,2-Dichloroethane-d4 (Surr)	93		80 - 120		10/03/25 22:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		0.15		mg/L			10/03/25 22:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		77 - 123		10/03/25 22:56	1

QC Sample Results

Client: ALL4, Inc.
Project/Site: HFS Pug - 0033 - 2025 GW Mon-C

Job ID: 580-154611-1
SDG: Washington

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

Lab Sample ID: MB 580-505311/15

Matrix: Water

Analysis Batch: 505311

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		ug/L			10/03/25 19:33	1
Toluene	ND		1.0		ug/L			10/03/25 19:33	1
Ethylbenzene	ND		1.0		ug/L			10/03/25 19:33	1
m-Xylene & p-Xylene	ND		2.0		ug/L			10/03/25 19:33	1
o-Xylene	ND		1.0		ug/L			10/03/25 19:33	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	96		80 - 120		10/03/25 19:33	1
4-Bromofluorobenzene (Surr)	103		80 - 120		10/03/25 19:33	1
Dibromofluoromethane (Surr)	120		80 - 120		10/03/25 19:33	1
1,2-Dichloroethane-d4 (Surr)	95		80 - 120		10/03/25 19:33	1

Lab Sample ID: LCS 580-505311/12

Matrix: Water

Analysis Batch: 505311

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	5.00	5.37		ug/L		107	80 - 122
Toluene	5.00	4.46		ug/L		89	80 - 120
Ethylbenzene	5.00	4.74		ug/L		95	80 - 120
m-Xylene & p-Xylene	5.00	4.78		ug/L		96	80 - 120
o-Xylene	5.00	4.96		ug/L		99	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	98		80 - 120
4-Bromofluorobenzene (Surr)	98		80 - 120
Dibromofluoromethane (Surr)	116		80 - 120
1,2-Dichloroethane-d4 (Surr)	98		80 - 120

Lab Sample ID: LCSD 580-505311/13

Matrix: Water

Analysis Batch: 505311

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	5.00	5.03		ug/L		101	80 - 122	6	14
Toluene	5.00	4.21		ug/L		84	80 - 120	6	13
Ethylbenzene	5.00	4.51		ug/L		90	80 - 120	5	14
m-Xylene & p-Xylene	5.00	4.49		ug/L		90	80 - 120	6	14
o-Xylene	5.00	4.67		ug/L		93	80 - 120	6	16

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Toluene-d8 (Surr)	98		80 - 120
4-Bromofluorobenzene (Surr)	98		80 - 120
Dibromofluoromethane (Surr)	117		80 - 120
1,2-Dichloroethane-d4 (Surr)	100		80 - 120

Eurofins Seattle

QC Sample Results

Client: ALL4, Inc.
Project/Site: HFS Pug - 0033 - 2025 GW Mon-C

Job ID: 580-154611-1
SDG: Washington

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

Lab Sample ID: MB 580-505307/15

Matrix: Water

Analysis Batch: 505307

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		0.15		mg/L			10/03/25 19:33	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		77 - 123					10/03/25 19:33	1

Lab Sample ID: LCS 580-505307/7

Matrix: Water

Analysis Batch: 505307

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Gasoline	1.00	1.11		mg/L		111	55 - 148	
Surrogate	LCS %Recovery	LCS Qualifier	Limits					
4-Bromofluorobenzene (Surr)	93		77 - 123					

Lab Sample ID: LCSD 580-505307/8

Matrix: Water

Analysis Batch: 505307

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
Gasoline	1.00	1.10		mg/L		110	55 - 148	1	10
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
4-Bromofluorobenzene (Surr)	94		77 - 123						

Lab Sample ID: MB 580-505461/10

Matrix: Water

Analysis Batch: 505461

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		0.15		mg/L			10/06/25 19:31	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		77 - 123					10/06/25 19:31	1

Lab Sample ID: LCS 580-505461/7

Matrix: Water

Analysis Batch: 505461

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Gasoline	1.00	1.12		mg/L		112	55 - 148	
Surrogate	LCS %Recovery	LCS Qualifier	Limits					
4-Bromofluorobenzene (Surr)	105		77 - 123					

Eurofins Seattle

QC Sample Results

Client: ALL4, Inc.
Project/Site: HFS Pug - 0033 - 2025 GW Mon-C

Job ID: 580-154611-1
SDG: Washington

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

Lab Sample ID: LCSD 580-505461/8
Matrix: Water
Analysis Batch: 505461

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
Gasoline	1.00	1.01	*1	mg/L		101	55 - 148	11	10
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
4-Bromofluorobenzene (Surr)	105		77 - 123						

Lab Chronicle

Client: ALL4, Inc.
Project/Site: HFS Pug - 0033 - 2025 GW Mon-C

Job ID: 580-154611-1
SDG: Washington

Client Sample ID: MW-56

Lab Sample ID: 580-154611-1

Date Collected: 09/29/25 15:10

Matrix: Water

Date Received: 10/02/25 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	505311	JBT	EET SEA	10/03/25 20:40
Total/NA	Analysis	NWTPH-Gx		1	505307	JBT	EET SEA	10/03/25 20:40

Client Sample ID: MW-103

Lab Sample ID: 580-154611-2

Date Collected: 09/30/25 09:50

Matrix: Water

Date Received: 10/02/25 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	505311	JBT	EET SEA	10/03/25 21:03
Total/NA	Analysis	NWTPH-Gx		1	505307	JBT	EET SEA	10/03/25 21:03

Client Sample ID: MW-107

Lab Sample ID: 580-154611-3

Date Collected: 09/29/25 15:00

Matrix: Water

Date Received: 10/02/25 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	505311	JBT	EET SEA	10/03/25 21:26
Total/NA	Analysis	NWTPH-Gx		1	505307	JBT	EET SEA	10/03/25 21:26

Client Sample ID: MW-111

Lab Sample ID: 580-154611-4

Date Collected: 09/30/25 09:30

Matrix: Water

Date Received: 10/02/25 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	505311	JBT	EET SEA	10/03/25 21:48
Total/NA	Analysis	NWTPH-Gx		1	505461	K1K	EET SEA	10/06/25 20:39

Client Sample ID: ALL4-FEB-1

Lab Sample ID: 580-154611-5

Date Collected: 09/29/25 14:15

Matrix: Water

Date Received: 10/02/25 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	505311	JBT	EET SEA	10/03/25 22:11
Total/NA	Analysis	NWTPH-Gx		1	505307	JBT	EET SEA	10/03/25 22:11

Client Sample ID: ALL4-DUP-1

Lab Sample ID: 580-154611-6

Date Collected: 09/29/25 13:45

Matrix: Water

Date Received: 10/02/25 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	505311	JBT	EET SEA	10/03/25 22:33
Total/NA	Analysis	NWTPH-Gx		1	505307	JBT	EET SEA	10/03/25 22:33

Lab Chronicle

Client: ALL4, Inc.
Project/Site: HFS Pug - 0033 - 2025 GW Mon-C

Job ID: 580-154611-1
SDG: Washington

Client Sample ID: Trip Blank
Date Collected: 09/29/25 13:00
Date Received: 10/02/25 10:00

Lab Sample ID: 580-154611-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	505311	JBT	EET SEA	10/03/25 22:56
Total/NA	Analysis	NWTPH-Gx		1	505307	JBT	EET SEA	10/03/25 22:56

Laboratory References:
EET SEA = Eurofins Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: ALL4, Inc.
Project/Site: HFS Pug - 0033 - 2025 GW Mon-C

Job ID: 580-154611-1
SDG: Washington

Laboratory: Eurofins Seattle

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

Authority	Program	Identification Number	Expiration Date
Washington	State	C788	07-13-26

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Sample Summary

Client: ALL4, Inc.
Project/Site: HFS Pug - 0033 - 2025 GW Mon-C

Job ID: 580-154611-1
SDG: Washington

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
580-154611-1	MW-56	Water	09/29/25 15:10	10/02/25 10:00	Washington
580-154611-2	MW-103	Water	09/30/25 09:50	10/02/25 10:00	Washington
580-154611-3	MW-107	Water	09/29/25 15:00	10/02/25 10:00	Washington
580-154611-4	MW-111	Water	09/30/25 09:30	10/02/25 10:00	Washington
580-154611-5	ALL4-FEB-1	Water	09/29/25 14:15	10/02/25 10:00	Washington
580-154611-6	ALL4-DUP-1	Water	09/29/25 13:45	10/02/25 10:00	Washington
580-154611-7	Trip Blank	Water	09/29/25 13:00	10/02/25 10:00	Washington

5755 8th Street East
Tacoma, WA 98424
Phone (253) 922-2310

eurofins
Environment Testing
America

10/8/2025

Login Sample Receipt Checklist

Client: ALL4, Inc.

Job Number: 580-154611-1

SDG Number: Washington

Login Number: 154611

List Number: 1

Creator: Groves, Elizabeth

List Source: Eurofins Seattle

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	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	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	