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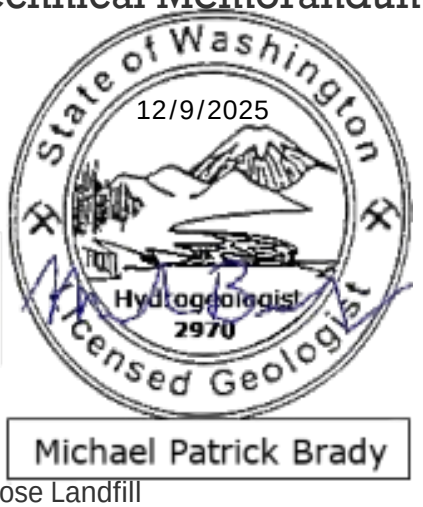
Technical Memorandum



DATE:	December 9, 2025
TO:	Luke Lemond, LHG, Washington State Department of Ecology
FROM:	Mike Brady, LHG
SUBJECT:	3Q 2025 MTCA Sampling - AO # DE21624
CC:	Ian Sutton, PE, DTG Recycling Steven Newchurch, REHS, Yakima Health District
PROJECT NUMBER:	553-8472-010
PROJECT NAME:	Rocky Top Environmental (Anderson) Limited Purpose Landfill

Introduction

This technical memorandum summarizes the third quarter 2025 results of Model Toxics Control Act (MTCA)-related groundwater sampling for the Agreed Order (AO) # DE21624 at the Rocky Top Environmental (formerly Anderson) Limited Purpose Landfill (LPL) located at 41 Rocky Top Road in Yakima, Washington (Facility) on behalf of DTG Recycling (DTG).

The Washington State Department of Ecology (Ecology) and Yakima Health District (YHD) have requested DTG sample Shallow Aquifer (SA) monitoring wells for chemicals of potential concern (COPCs) as part of the MTCA investigation. COPCs for the MTCA investigation include nitrate, total petroleum hydrocarbons (TPH), volatile organic compounds (VOCs), per- and polyfluoroalkyl substances (PFAS), semi-volatile organic compounds (SVOCs) and carcinogenic polycyclic aromatic hydrocarbons (cPAHs), dioxins and furans, and Environmental Protection Agency (EPA) priority pollutant metals. Washington Administrative Code (WAC) 173-350-500 monitoring for the LPL is being reported separately.

Figure 1 displays the overall location of the Facility and surrounding Group B and domestic drinking water wells. Figure 2 displays the details of the Facility.

Two new wells were drilled and constructed at the Facility (MW-1S and MW-11S) by July 2025 and were added to the MTCA monitoring program starting in the third quarter 2025 event (Parametrix 2025e). Figure 2 displays the approximate location of the two new wells. Tables 1 thru 6 (attached) summarize the MTCA groundwater data collected to date including the third quarter of 2025.

Third Quarter 2025 Sampling and Analysis

The third quarter 2025 MTCA groundwater monitoring was conducted in accordance with the Sampling and Analysis Plan (SAP) (Parametrix 2025b). Sampling of monitoring wells MW-1S, MW-2S, MW-3S, MW-4S, MW-5S, MW-6S, and MW-11S was completed on September 9 through 10, 2025. Field data sheets are included as Attachment A. A field duplicate sample (MW-13S) was collected at well MW-4S. Routine detection/assessment monitoring was completed concurrently and the results provided in a separate report (Parametrix 2025c).

The third quarter of 2025 sampling included analysis for nitrate, TPH, VOCs, PFAS, and EPA priority pollutant metals. Dioxins and furans, SVOCs, and cPAHs were discontinued from the MTCA monitoring program because there were no detected concentrations exceeding MTCA criteria in any of the wells

and were tested for again in well MW-3S along with wells MW-1S and MW-11S in the third quarter of 2025 in accordance with the RI Work Plan (Parametrix 2025d).

The samples were submitted to OnSite Environmental (OnSite) while some analyses were also subcontracted from OnSite to ALS Environmental and Anatek. The laboratory reports are included as Attachment B. Data validation technical memoranda were completed by Lisa Gilbert and Michael Brady, whom were not involved in the sampling effort. The data validation memoranda are included as Attachment C.

The findings are summarized in the attached Tables 1 through 6 that include the cumulative data collected since the MTCA Remedial Investigation (RI) began in the third quarter of 2024. Data from the third quarter event is presented in Tables 1, 2, and 6. Tables 3, 4, and 5 are from previous MTCA monitoring events. Attachment D includes the hazard index calculations for PFAS (bottom of Table 2).

Figure 3 displays the historical water levels across the LPL for the entire period of monitoring. Groundwater levels follow the seasonal pattern of precipitation. Figure 4 displays the gradient within the SA using data for monitoring wells measured during the 2025 third quarter event.

Exceedances of Water Quality Criteria

Applicable or Relevant and Appropriate Requirements (ARARs) have been established in the RI Work plan (Parametrix 2025d) as meeting the Maximum Contaminant Level (MCL) or MTCA Cleanup Levels (CULs). The following exceedances of the MCL or MTCA CULs for MTCA related COPCs were identified in the third quarter 2025 sampling event:

MW-1S

- Vinyl chloride was found above the MCL and MTCA Method B CUL at 0.030 micrograms per liter (µg/L).

MW-3S

- Nitrate was found above the MCL at 11.6 milligrams per liter (mg/L).
- Perfluorooctanoic acid (PFOA) was found above the MCL and MTCA CUL at 35 nanograms per liter (ng/L).
- The Hazardous Index and running annual Hazardous Index for PFAS mixtures were below the MCL of 1 (see Attachment D).

MW-4S

- Nitrate was found above the MCL at 66.3 mg/L.
- PFOA was found above the MCL and MTCA CUL at 5.9 ng/L.

MW-6S

- Nitrate was found above the MCL at 12.8 mg/L.

MW-3S, MW-4S, and MW-6S were observed to have apparent increases in several leachate indicator parameters during the second quarter 2025 event (Parametrix 2025c) but these were slightly lower this quarter.

Nitrate appears to have stabilized at all three wells (Table 1). It is unknown if this is related to seasonality or due to actions undertaken at the LPL related to the MTCA Agreed Order (additional cover over the fire area) or under the solid waste permit (removing waste from the temporary fill area). Both actions may be assisting with stabilization of the groundwater plume.

MW-1S was identified to have three VOCs: methyl ethyl ketone (MEK), acetone, and vinyl chloride. These VOCs were likely introduced by the drilling fluids and mudslayer used by the driller to recycle water during drilling (Parametrix 2025e). All three VOCs were not verified in the subsequent fourth quarter monitoring event (OnSite Environmental, 2025). TPH and VOCs do not appear to be COPCs related to the groundwater plume.

The results from the two new monitoring wells, MW-1S and MW-11S, indicate the contamination plume of COPCs has been delineated within the existing monitoring well network. Very low levels of PFAS compounds were detected below the MCL/current MTCA cleanup standard (Ecology 2024) and nitrates were not detected or below the MCL/ MTCA CUL.

Conclusions

PFOA continued to be detected in well MW-3S and MW-4S at concentrations above the MCL and MTCA CUL. Nitrate concentrations were found above the MCL in wells MW-3S, MW-4S, and MW-6S. TPH and priority pollutant metals continued to be non-detect or below applicable cleanup criteria.

Vinyl chloride was found above the MCL and MTCA CULs in MW-1S along with acetone and MEK. These were not confirmed in subsequent sampling and analysis (OnSite Environmental, 2025) and appear to be the result of leftover drilling fluids. Similar detections of TPH were identified in new wells in 2024 and subsequently were absent when the wells were fully developed (Parametrix 2025a).

The following changes will be implemented for future monitoring events in accordance with the RI Work Plan (Parametrix 2025d):

- EPA priority pollutant metals have not been confirmed and additional sampling is not necessary in accordance with the RI Work Plan.
- TPH and VOCs continued to be non-detect during the third quarter 2025 event, except for vinyl chloride, acetone, and MEK in MW-1S.The VOCs were not confirmed in the fourth quarter 2025 event. TPH and VOC parameters are recommended to be discontinued from routine and MTCA groundwater monitoring and have been historically not present in all monitoring wells.

Additional Notes

Newly constructed wells MW-1S and MW-11S were implemented into the monitoring program beginning third quarter 2025 and are expected to provide additional data to fill data gaps related to characterization of the groundwater plume at the Facility for the Limited RI. The two main COPCs found above CULs of PFAS and nitrate were found below the MCL/MTCA CULs in the new wells indicating the northernmost downgradient edge of the plume has been delineated and one of the goals of the RI work plan has been completed.

Figures

Tables

Attachments

References

Ecology. 2025. Cleanup Levels and Risk Calculations. Revised January 2025.

Ecology. 2024. Selection of Human Health Toxicity Criteria for PFAS Chemicals, letter dated June 7, 2024, available online at https://fortress.wa.gov/ecy/ezshare/tcp/CLARC/6-7-24_Ecy%20Memo_PFAS%20Tox.pdf

Onsite Environmental. 2025. Analytical Data for Project No. 553-8472-009. Laboratory Reference No. 2510-332 and 2510-333. November 5, 2025.

Parametrix. 2025a. Rocky Top Environmental Limited Purpose Landfill 2024 Annual Groundwater Monitoring Report. Prepared for DTG Recycling. March 2025.

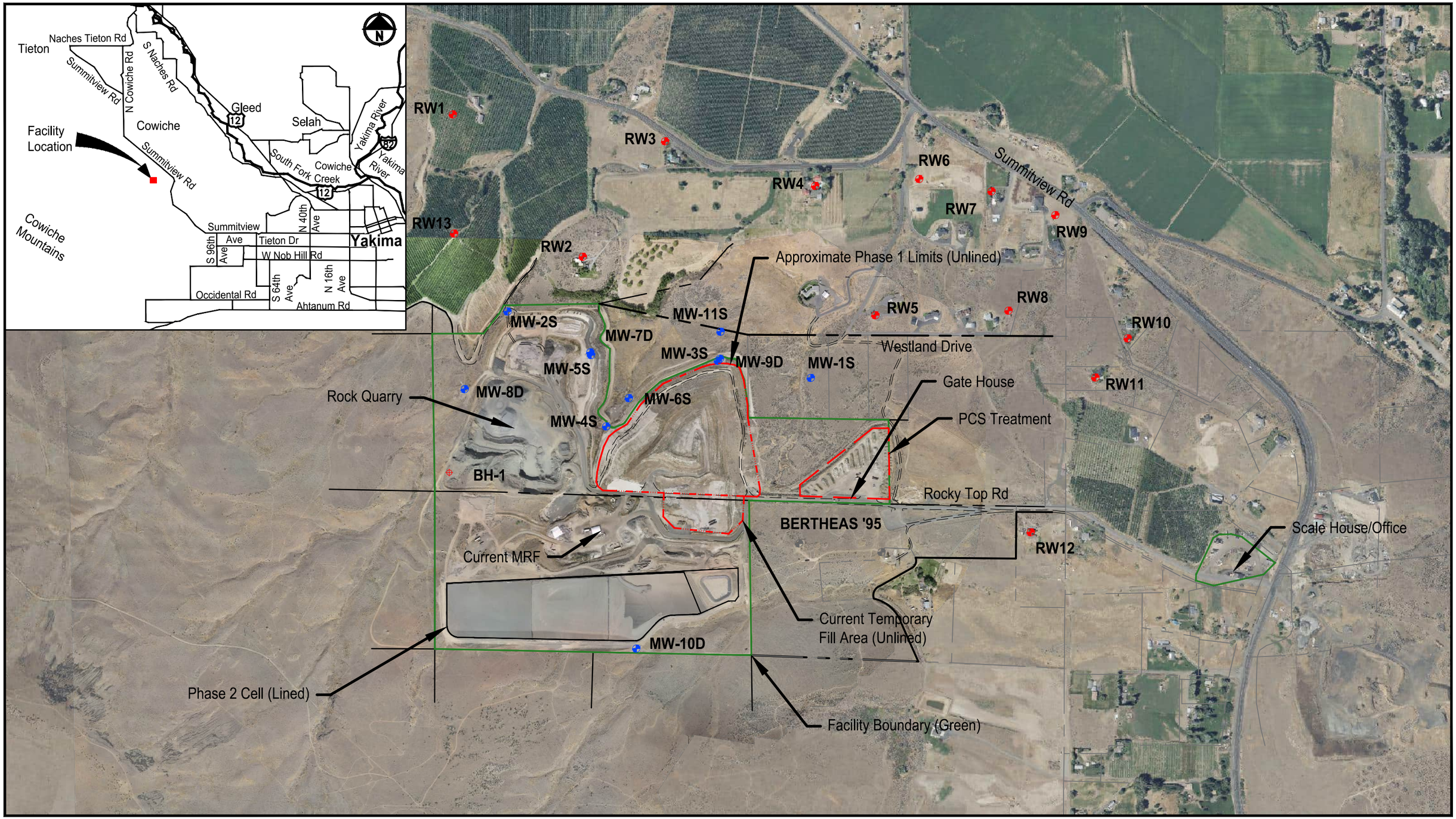
Parametrix. 2025b. Groundwater Sampling and Analysis Plan – MTCA Sampling for the DTG Rocky Top Environmental Limited Purpose Landfill, Yakima, Washington. January 2025.

Parametrix. 2025c. Rocky Top Environmental Limited Purpose Landfill 2025 Second Quarter Groundwater Monitoring Report. Prepared for DTG Recycling. August 2025.

Parametrix. 2025d. Limited Remedial Investigation Work Plan Rocky Top Environmental Limited Purpose Landfill. Prepared for DTG Recycling by Parametrix, Seattle, Washington. April 2025.

Parametrix 2025e. MW-1S and MW-11S Construction for Rocky Top Environmental Limited Purpose Landfill Technical Memorandum, prepared for DTG Recycling, in Progress

Figures



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DATE: November 19, 2025

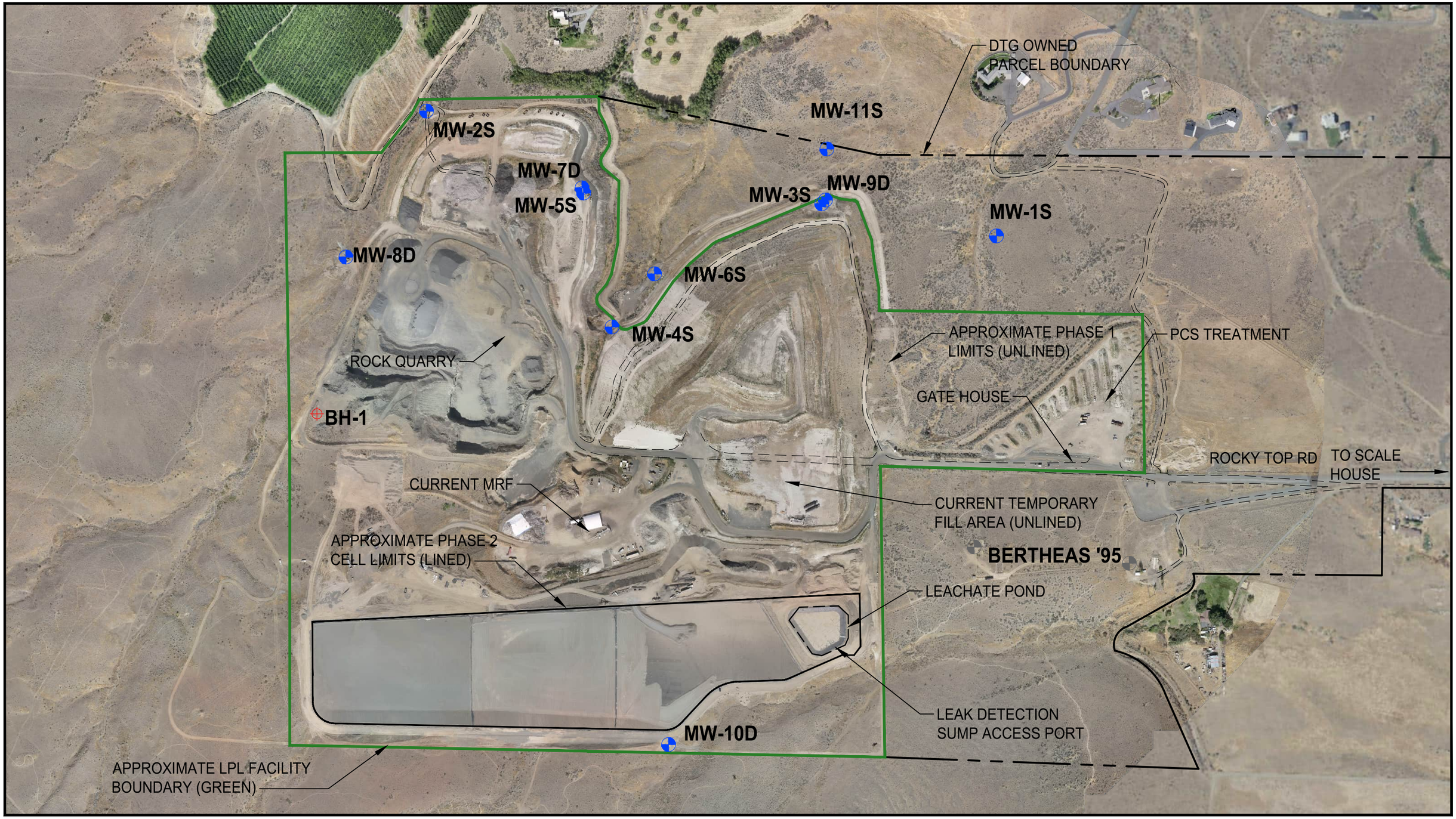
FILE: PS8472008–FIGURE 1 – VICINITY MAP

0 N 750

SCALE: 1"=750'

- Monitoring Well
- Borehole
- Domestic Well
- Decommissioned Well

Figure 1
Facility Vicinity Map
Rocky Top Environmental Limited Purpose Landfill



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DATE: November 19, 2025

FILE: PS8472008–FIGURE 1 – VICINITY MAP

N

0 400

1 INCH = 400 FT.

Monitoring Well

Borehole

Decommissioned Well

Figure 2
Well Location Map
Rocky Top Environmental Limited Purpose Landfill

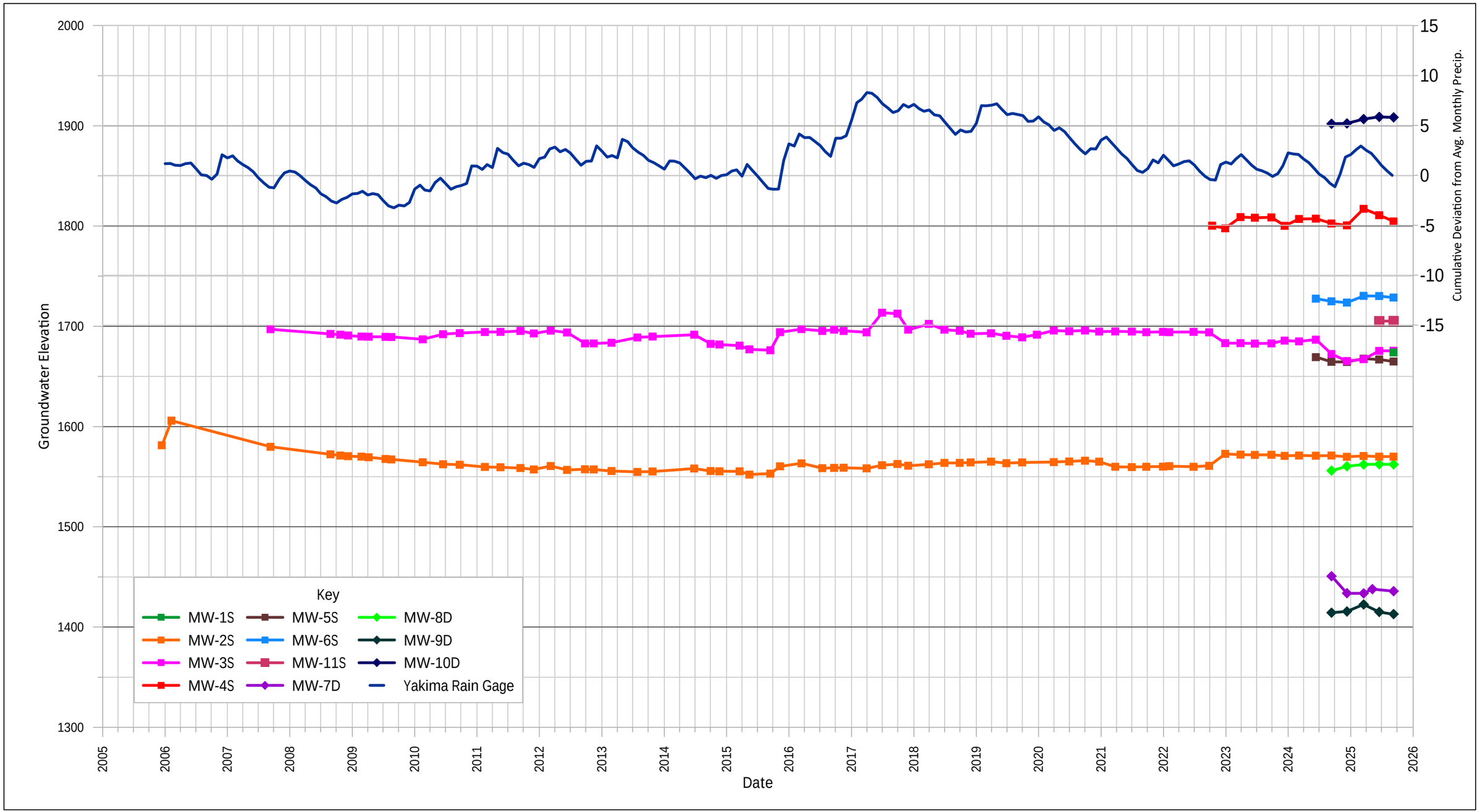

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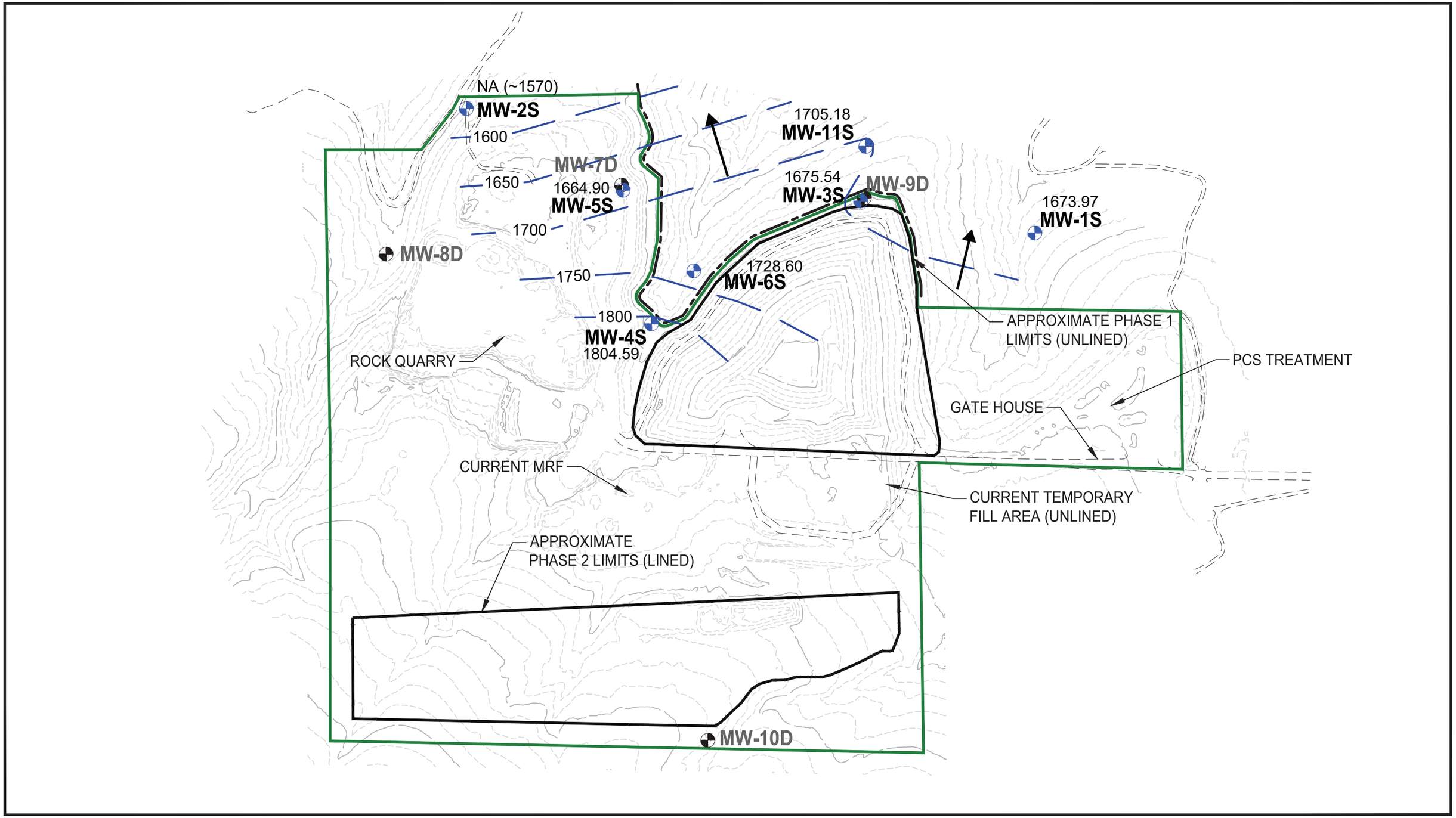
Figure 3
Water Level Summary
Rocky Top Environmental Limited Purpose Landfill



Parametrix DATE: November 14, 2025 FILE: 8472009-QUARTERLYRPT FIGURE 4-5 -Q3

0 N 400
1 INCH = 400 FT.

1817.19 Monitoring Well with Water Level Elevation in feet measured on September 9, 2025

Monitoring Well not used in contours

Approximate Groundwater flow direction

1700 Groundwater Elevation Contour (ft)

LPL Facility Boundary

Figure 4
Third Quarter 2025
Shallow Aquifer Potentiometric Surface
Rocky Top Environmental Limited Purpose Landfill

Tables

Table 1. Field Parameters, Nitrate, Petroleum Hydrocarbons, and Volatile Organic Compound Results, MTCA Limited Remedial Investigation, Rocky Top Environmental Limited Purpose Landfill

Analyte	Units	MCL	MTCA Method A	MTCA Method B Cancer	MTCA Method B Non-Cancer	MW-1S	MW-2S					MW-3S					
						9/10/2025	9/12/2024	12/11/2024	4/1/2025	6/17/2025	9/9/2025	9/12/2024	12/11/2024	3/31/2025	6/18/2025	MW-13S (Dup) 6/18/2025	9/10/2025
Field Data																	
pH						9.3 R	7.91	8.36 R	7.59	7.15	7.26 C	7.69	7.90 R	7.09	6.87	--	8.83 R
Conductivity	µmhos/cm	700 **				257.9 C	176.8	161.4	120	182.6	709.6 R	630	563	432	669	--	689 C
Temperature	C					15.4	14.2	13.0	13.73	14.9	16.6	14.4	13.6	13.69	14.7	--	15
Redox	mv					-74.1 C	-72.1	-186.0	192	192.2	181.6 C	-73.9	-185.4	172	247.6	--	-1.2 C
Dissolved Oxygen	mg/L					0.09	6.04	6.93	7.28	7.52	7.25	4.88	4.65	4.77	5.39	--	5.00
Turbidity	NTU					2.36	0.00	0.00	0.06	49.60	0.38	0.00	0.44	0.21	2.64	--	0.25
Inorganic Parameters																	
Nitrate	mg/L-N	10 *			26	<0.200	0.60	0.64	0.702	0.686	0.731	**11**	**12**	**11.3**	**12.0**	**12.1**	**11.6**
Total Petroleum Hydrocarbons																	
Gasoline Range Organics [a]	µg/L		1000			<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
TPHDx																	
Diesel Range Organics	µg/L					<200	<210	<210	<210	<210	<210	<210	<220	<200	<210	<210	<210
Lube Oil Range Organics	µg/L					<200	<210	<210	<210	<210	<210	<210	<220	<200	<210	<210	<210
Total TPHDx	µg/L		500			<200	<210	<210	<210	<210	<210	<210	<220	<200	<210	<210	<210
Volatile Organic Compounds																	
Chloromethane	µg/L					<1.0	<1.3	<1.0	<1.0	<1.0	<1.0	<1.3	<1.0	<1.0	<1.0	<1.0	<1.0
Vinyl Chloride	µg/L	2 *	0.2	0.029	24	0.030 FP	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Bromomethane	µg/L				11	<1.4	<1.0	<1.0	<1.0	<1.0	<1.4	<1.0	<1.0	<1.0	<1.0	<1.0	<1.4
Chloroethane	µg/L					<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
CFC-11, Trichlorofluoromethane	µg/L				2400	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1-Dichloroethene	µg/L	7 *			400	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Acetone	µg/L				7200	15 FP	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methyl Iodide	µg/L					<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Carbon Disulfide	µg/L				800	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Methylene Chloride	µg/L	5 *	5	5.8	48	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Acrylonitrile	µg/L			0.081	8	<1.0	<0.50	<0.50	<0.50	<1.0	<1.0	<0.50	<0.50	<0.50	<1.0	<1.0	<1.0
Trans-1,2-Dichloroethene	µg/L	100 *			160	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1-Dichloroethane	µg/L			7.7	1600	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl Acetate	µg/L				8000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	µg/L	70 *			16	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
2-Butanone	µg/L				4800	10 FP	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Bromochloromethane	µg/L					<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroform	µg/L	80 * THM		1.4	80	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1,1-Trichloroethane	µg/L	200 *	200		16000	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Carbon Tetrachloride	µg/L	5 *		0.63	32	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Benzene	µg/L	5 *	5	0.8	32	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	µg/L	5 *	5	0.48	48	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Trichloroethene	µg/L	5 *	5	0.54	4	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloropropane	µg/L	5 *		1.2	320	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Dibromomethane	µg/L					<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Dichlorobromomethane	µg/L	80 * THM		0.71	160	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
cis-1,3-Dichloropropene	µg/L			0.44	240	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
4-methyl-2-pentanone	µg/L				640	<2.7	<2.0	<2.0	<2.0	<2.0	<2.7	<2.0	<2.0	<2.0	<2.0	<2.0	<2.7
Toluene	µg/L	1000 *	1000		640	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trans-1,3-Dichloropropene	µg/L			0.44	240	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1,2-Trichloroethane	µg/L	5 *		0.77	32	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Tetrachloroethene	µg/L	5 *	5	21	48	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20

Table 1. Field Parameters, Nitrate, Petroleum Hydrocarbons, and Volatile Organic Compound Results, MTCA Limited Remedial Investigation, Rocky Top Environmental Limited Purpose Landfill

Analyte	Units	MCL	MTCA Method A	MTCA Method B Cancer	MTCA Method B Non-Cancer	MW-4S						MW-5S					
						9/11/2024	12/12/2024	4/1/2025	6/18/2025	9/10/2025	MW-13S (Dup) 9/10/2025	9/11/2024	MW-13S (Dup) 9/11/2024	12/11/2024	3/31/2025	6/17/2025	9/9/2025
Field Data																	
pH						7.76	8.12 R	7.13	6.72	8.12 R	--	8.49 R	--	8.46 R	7.87	7.49	7.72 C
Conductivity	µmhos/cm	700 **				**973**	**786**	**752**	**1207 C**	**1131 C**	--	356.6	--	362.3	525	403.2	709.9 R
Temperature	C					13.1	10.8	12.33	13.4	19.4	--	15.6	--	13.9	13.8	14.7	17.8
Redox	mv					-96.9	-181.2	187	288.6	-5.2 C	--	-149.7	--	-218.1	-187	-60.4	8.5 C
Dissolved Oxygen	mg/L					4.04	4.33	5.77	4.96	8.11	--	0.14	--	0.10	8.75	2.27	1.18
Turbidity	NTU					0.00	0.59	0.36	49.96	3.12	--	2.52	--	2.14	0.25	7.50	1.61
Inorganic Parameters																	
Nitrate	mg/L-N	10 *			26	**47**	**37**	**62.8**	**78.2**	**66.3**	**68.1**	<0.050	0.051	0.092	0.0800	<0.200	0.239
Total Petroleum Hydrocarbons																	
Gasoline Range Organics [a]	µg/L		1000			<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
TPHDx																	
Diesel Range Organics	µg/L					<210	<220	<210	<200	<250	<240	<220	<210	<210	<200	<210	<210
Lube Oil Range Organics	µg/L					<210	<220	<210	<200	<250	<240	<220	<210	<210	<200	<210	<210
Total TPHDx	µg/L		500			<210	<220	<210	<200	<250	<240	<220	<210	<210	<200	<210	<210
Volatile Organic Compounds																	
Chloromethane	µg/L					<1.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.3	<1.3	<1.0	<1.0	<1.0	<1.0
Vinyl Chloride	µg/L	2 *	0.2	0.029	24	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Bromomethane	µg/L				11	<1.0	<1.0	<1.0	<1.0	<1.4	<1.4	<1.0	<1.0	<1.0	<1.0	<1.0	<1.4
Chloroethane	µg/L					<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
CFC-11, Trichlorofluoromethane	µg/L				2400	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1-Dichloroethene	µg/L	7 *			400	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Acetone	µg/L				7200	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<6.7	<6.7	<5.0
Methyl Iodide	µg/L					<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.4	<1.4	<1.0
Carbon Disulfide	µg/L				800	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.26	<2.6	<0.20
Methylene Chloride	µg/L	5 *	5	5.8	48	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Acrylonitrile	µg/L			0.081	8	<0.50	<0.50	<0.50	<1.0	<1.0	<1.0	<0.50	<0.50	<0.50	<1.0	<1.0	<1.0
Trans-1,2-Dichloroethene	µg/L	100 *			160	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1-Dichloroethane	µg/L			7.7	1600	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl Acetate	µg/L				8000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	µg/L	70 *			16	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
2-Butanone	µg/L				4800	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Bromochloromethane	µg/L					<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroform	µg/L	80 * THM		1.4	80	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1,1-Trichloroethane	µg/L	200 *	200		16000	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Carbon Tetrachloride	µg/L	5 *		0.63	32	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Benzene	µg/L	5 *	5	0.8	32	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	µg/L	5 *	5	0.48	48	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Trichloroethene	µg/L	5 *	5	0.54	4	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloropropane	µg/L	5 *		1.2	320	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Dibromomethane	µg/L					<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Dichlorobromomethane	µg/L	80 * THM		0.71	160	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
cis-1,3-Dichloropropene	µg/L			0.44	240	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
4-methyl-2-pentanone	µg/L				640	<2.0	<2.0	<2.0	<2.0	<2.7	<2.7	<2.0	<2.0	<2.0	<2.0	<2.0	<2.7
Toluene	µg/L	1000 *	1000		640	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trans-1,3-Dichloropropene	µg/L			0.44	240	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1,2-Trichloroethane	µg/L	5 *		0.77	32	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Tetrachloroethene	µg/L	5 *	5	21	48	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20

Table 1. Field Parameters, Nitrate, Petroleum Hydrocarbons, and Volatile Organic Compound Results, MTCA Limited Remedial Investigation, Rocky Top Environmental Limited Purpose Landfill

Analyte	Units	MCL	MTCA Method A	MTCA Method B Cancer	MTCA Method B Non-Cancer	MW-6S								MW-11S
						6/13/2024	9/11/2024	12/12/2024	MW-13S (Dup) 12/12/2024	4/1/2025	MW-13S (Dup) 4/1/2025	6/18/2025	9/10/2025	9/10/2025
Field Data														
pH						7.62	8.25 R	8.38 R	--	7.51	--	7.02	9.27 R	9.37 R
Conductivity	µmhos/cm	700 **				457	501	504	--	389	--	591	617 C	271 C
Temperature	C					16.0	13.3	11.5	--	12.36	--	13.2	14.1	14.4
Redox	mv					-132.9	-104.2	-194.5	--	165	--	272.7	-32.4 C	-17.0 C
Dissolved Oxygen	mg/L					7.13	4.06	4.19	--	4.26	--	4.38	3.97	0.44
Turbidity	NTU					0.00	0.00	1.78	--	0.5	--	2.51	0.33	4.91
Inorganic Parameters														
Nitrate	mg/L-N	10 *			26	6.7	9.2	8.6	9.9	**11.3**	**11.6**	**11.8**	**12.8**	0.551
Total Petroleum Hydrocarbons														
Gasoline Range Organics [a]	µg/L		1000			<100	<100	<100	<100	<100	<100	<100	<100	<100
TPHDx														
Diesel Range Organics	µg/L					<0.20	<200	<210	<0.22	<200	<210	<200	<240	<200
Lube Oil Range Organics	µg/L					<0.20	<200	<210	<0.22	<200	<210	<200	<240	<200
Total TPHDx	µg/L		500				<200	<210	<0.22	<200	<210	<200	<240	<200
Volatile Organic Compounds														
Chloromethane	µg/L					<1.0	<1.3	<1.0	<1.3	<1.0	<1.0	<1.0	<1.0	<1.0
Vinyl Chloride	µg/L	2 *	0.2	0.029	24	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Bromomethane	µg/L				11	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.4	<1.4
Chloroethane	µg/L					<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
CFC-11, Trichlorofluoromethane	µg/L				2400	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1-Dichloroethene	µg/L	7 *			400	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Acetone	µg/L				7200	<6.7	<5.0	<5.0	<5.0	<6.7	<5.0	<6.7	<5.0	<5.0
Methyl Iodide	µg/L					<1.4	<1.0	<1.0	<1.0	<1.4	<1.0	<1.4	<1.0	<1.0
Carbon Disulfide	µg/L				800	<0.26	<0.20	<0.20	<0.20	<0.26	<0.20	<2.6	<0.20	<0.20
Methylene Chloride	µg/L	5 *	5	5.8	48	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Acrylonitrile	µg/L			0.081	8	<1.0	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<1.0
Trans-1,2-Dichloroethene	µg/L	100 *			160	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1-Dichloroethane	µg/L			7.7	1600	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl Acetate	µg/L				8000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	µg/L	70 *			16	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
2-Butanone	µg/L				4800	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Bromochloromethane	µg/L					<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroform	µg/L	80 * THM		1.4	80	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1,1-Trichloroethane	µg/L	200 *	200		16000	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Carbon Tetrachloride	µg/L	5 *		0.63	32	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Benzene	µg/L	5 *	5	0.8	32	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	µg/L	5 *	5	0.48	48	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Trichloroethene	µg/L	5 *	5	0.54	4	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloropropane	µg/L	5 *		1.2	320	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Dibromomethane	µg/L					<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Dichlorobromomethane	µg/L	80 * THM		0.71	160	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
cis-1,3-Dichloropropene	µg/L			0.44	240	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
4-methyl-2-pentanone	µg/L				640	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.7	<2.7
Toluene	µg/L	1000 *	1000		640	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trans-1,3-Dichloropropene	µg/L			0.44	240	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1,2-Trichloroethane	µg/L	5 *		0.77	32	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Tetrachloroethene	µg/L	5 *	5	21	48	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20

Table 1. Field Parameters, Nitrate, Petroleum Hydrocarbons, and Volatile Organic Compound Results, MTCA Limited Remedial Investigation, Rocky Top Environmental Limited Purpose Landfill

Analyte	Units	MCL	MTCA Method A	MTCA Method B Cancer	MTCA Method B Non-Cancer	Trip Blank					
						6/13/2024	9/12/2024	12/11/2024	3/31/2025	6/17/2025	9/9/2025
Field Data											
pH						--	--	--	--	--	--
Conductivity	µmhos/cm	700 **				--	--	--	--	--	--
Temperature	C					--	--	--	--	--	--
Redox	mv					--	--	--	--	--	--
Dissolved Oxygen	mg/L					--	--	--	--	--	--
Turbidity	NTU					--	--	--	--	--	--
Inorganic Parameters											
Nitrate	mg/L-N	10 *			26	--	--	--	--	--	--
Total Petroleum Hydrocarbons											
Gasoline Range Organics [a]	µg/L		1000			<100	<100	<100	<100	<100	<100
TPHDx											
Diesel Range Organics	µg/L					--	--	--	--	--	--
Lube Oil Range Organics	µg/L					--	--	--	--	--	--
Total TPHDx	µg/L		500			--	--	--	--	--	--
Volatile Organic Compounds											
Chloromethane	µg/L					<1.0	<1.4	<1.0	<1.0	<1.0	<1.0
Vinyl Chloride	µg/L	2 *	0.2	0.029	24	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Bromomethane	µg/L				11	<1.0	<1.0	<1.0	<1.0	<1.0	<1.4
Chloroethane	µg/L					<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
CFC-11, Trichlorofluoromethane	µg/L				2400	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1-Dichloroethene	µg/L	7 *			400	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Acetone	µg/L				7200	<6.7	<5.0	<5.0	<5.0	<5.0	<5.0
Methyl Iodide	µg/L					<1.4	<1.0	<1.0	<1.0	<1.3	<1.0
Carbon Disulfide	µg/L				800	<0.26	<0.20	<0.20	<0.20	<0.20	<0.20
Methylene Chloride	µg/L	5 *	5	5.8	48	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Acrylonitrile	µg/L			0.081	8	<1.0	<0.50	<0.50	<0.50	<1.0	<1.0
Trans-1,2-Dichloroethene	µg/L	100 *			160	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1-Dichloroethane	µg/L			7.7	1600	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl Acetate	µg/L				8000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	µg/L	70 *			16	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
2-Butanone	µg/L				4800	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Bromochloromethane	µg/L					<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroform	µg/L	80 * THM		1.4	80	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1,1-Trichloroethane	µg/L	200 *	200		16000	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Carbon Tetrachloride	µg/L	5 *		0.63	32	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Benzene	µg/L	5 *	5	0.8	32	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	µg/L	5 *	5	0.48	48	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Trichloroethene	µg/L	5 *	5	0.54	4	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloropropane	µg/L	5 *		1.2	320	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Dibromomethane	µg/L					<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Dichlorobromomethane	µg/L	80 * THM		0.71	160	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
cis-1,3-Dichloropropene	µg/L			0.44	240	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
4-methyl-2-pentanone	µg/L				640	<2.0	<2.0	<2.0	<2.0	<2.0	<2.7
Toluene	µg/L	1000 *	1000		640	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trans-1,3-Dichloropropene	µg/L			0.44	240	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1,2-Trichloroethane	µg/L	5 *		0.77	32	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Tetrachloroethene	µg/L	5 *	5	21	48	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20

Table 1. Field Parameters, Nitrate, Petroleum Hydrocarbons, and Volatile Organic Compound Results, MTCA Limited Remedial Investigation, Rocky Top Environmental Limited Purpose Landfill

Analyte	Units	MCL	MTCA Method A	MTCA Method B Cancer	MTCA Method B Non-Cancer	MW-1S	MW-2S					MW-3S					
						9/10/2025	9/12/2024	12/11/2024	4/1/2025	6/17/2025	9/9/2025	9/12/2024	12/11/2024	3/31/2025	6/18/2025	MW-13S (Dup) 6/18/2025	9/10/2025
Volatile Organic Compounds (cont.)																	
2-Hexanone	µg/L				40	<2.6	<2.0	<2.0	<2.0	<2.0	<2.6	<2.0	<2.0	<2.0	<2.0	<2.0	<2.6
Dibromochloromethane	µg/L	80 * THM		0.52	160	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dibromoethane (EDB)	µg/L	0.05 *	0.01	0.022	72	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Chlorobenzene	µg/L	100 *			160	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1,1,2-Tetrachloroethane	µg/L			1.7	240	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Ethylbenzene	µg/L	700 *	700		800	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
m, p-Xylene	µg/L		1000		1600	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
o-Xylene	µg/L				1600	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Styrene	µg/L	100 *			1600	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Bromoform	µg/L	80 * THM		5.5	160	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane	µg/L			0.22	160	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2,3-Trichloropropane	µg/L			0.00038	32	<0.20	<0.20	<0.27	<0.20	<0.20	<0.20	<0.20	<0.27	<0.20	<0.20	<0.20	<0.20
trans-1,4-Dichloro-2-butene	µg/L					<1.0	<0.50	<0.50	<0.50	<1.0	<1.0	<0.50	<0.50	<0.50	<1.0	<1.0	<1.0
1,4-Dichlorobenzene	µg/L	75 *		8.1	560	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichlorobenzene	µg/L	600 *			720	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dibromo-3-chloropropane	µg/L	0.2 *		0.014	1.6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Naphthalene	µg/L		160		160	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

Table 1. Field Parameters, Nitrate, Petroleum Hydrocarbons, and Volatile Organic Compound Results, MTCA Limited Remedial Investigation, Rocky Top Environmental Limited Purpose Landfill

Analyte	Units	MCL	MTCA Method A	MTCA Method B Cancer	MTCA Method B Non-Cancer	MW-4S						MW-5S					
						9/11/2024	12/12/2024	4/1/2025	6/18/2025	9/10/2025	MW-13S (Dup) 9/10/2025	9/11/2024	MW-13S (Dup) 9/11/2024	12/11/2024	3/31/2025	6/17/2025	9/9/2025
Volatile Organic Compounds (cont.)																	
2-Hexanone	µg/L				40	<2.0	<2.0	<2.0	<2.0	<2.6	<2.6	<2.0	<2.0	<2.0	<2.0	<2.0	<2.6
Dibromochloromethane	µg/L	80 * THM		0.52	160	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dibromoethane (EDB)	µg/L	0.05 *	0.01	0.022	72	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Chlorobenzene	µg/L	100 *			160	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1,1,2-Tetrachloroethane	µg/L			1.7	240	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Ethylbenzene	µg/L	700 *	700		800	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
m, p-Xylene	µg/L		1000		1600	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
o-Xylene	µg/L				1600	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Styrene	µg/L	100 *			1600	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Bromoform	µg/L	80 * THM		5.5	160	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane	µg/L			0.22	160	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2,3-Trichloropropane	µg/L			0.00038	32	<0.20	<0.27	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.27	<0.20	<0.20	<0.20
trans-1,4-Dichloro-2-butene	µg/L					<0.50	<0.50	<0.50	<1.0	<1.0	<1.0	<0.50	<0.50	<0.50	<1.0	<1.0	<1.0
1,4-Dichlorobenzene	µg/L	75 *		8.1	560	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichlorobenzene	µg/L	600 *			720	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dibromo-3-chloropropane	µg/L	0.2 *		0.014	1.6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Naphthalene	µg/L		160		160	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

Table 1. Field Parameters, Nitrate, Petroleum Hydrocarbons, and Volatile Organic Compound Results, MTCA Limited Remedial Investigation, Rocky Top Environmental Limited Purpose Landfill

Analyte	Units	MCL	MTCA Method A	MTCA Method B Cancer	MTCA Method B Non-Cancer	MW-6S								MW-11S
						6/13/2024	9/11/2024	12/12/2024	MW-13S (Dup) 12/12/2024	4/1/2025	MW-13S (Dup) 4/1/2025	6/18/2025	9/10/2025	9/10/2025
Volatile Organic Compounds (cont.)														
2-Hexanone	µg/L				40	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.6	<2.6
Dibromochloromethane	µg/L	80 * THM		0.52	160	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dibromoethane (EDB)	µg/L	0.05 *	0.01	0.022	72	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Chlorobenzene	µg/L	100 *			160	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1,1,2-Tetrachloroethane	µg/L			1.7	240	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Ethylbenzene	µg/L	700 *	700		800	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
m, p-Xylene	µg/L		1000		1600	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
o-Xylene	µg/L				1600	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Styrene	µg/L	100 *			1600	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Bromoform	µg/L	80 * THM		5.5	160	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane	µg/L			0.22	160	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2,3-Trichloropropane	µg/L			0.00038	32	<0.20	<0.20	<0.27	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
trans-1,4-Dichloro-2-butene	µg/L					<1.0	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<1.0
1,4-Dichlorobenzene	µg/L	75 *		8.1	560	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichlorobenzene	µg/L	600 *			720	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dibromo-3-chloropropane	µg/L	0.2 *		0.014	1.6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Naphthalene	µg/L		160		160	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

Table 1. Field Parameters, Nitrate, Petroleum Hydrocarbons, and Volatile Organic Compound Results, MTCA Limited Remedial Investigation, Rocky Top Environmental Limited Purpose Landfill

Analyte	Units	MCL	MTCA Method A	MTCA Method B Cancer	MTCA Method B Non-Cancer	Trip Blank					
						6/13/2024	9/12/2024	12/11/2024	3/31/2025	6/17/2025	9/9/2025
Volatile Organic Compounds (cont.)						--	--	--			
2-Hexanone	µg/L				40	<2.0	<2.0	<2.0	<2.0	<2.0	<2.6
Dibromochloromethane	µg/L	80 * THM		0.52	160	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dibromoethane (EDB)	µg/L	0.05 *	0.01	0.022	72	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Chlorobenzene	µg/L	100 *			160	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1,1,2-Tetrachloroethane	µg/L			1.7	240	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Ethylbenzene	µg/L	700 *	700		800	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
m, p-Xylene	µg/L		1000		1600	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
o-Xylene	µg/L				1600	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Styrene	µg/L	100 *			1600	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Bromoform	µg/L	80 * THM		5.5	160	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane	µg/L			0.22	160	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2,3-Trichloropropane	µg/L			0.00038	32	<0.20	<0.20	<0.27	<0.27	<0.27	<0.20
trans-1,4-Dichloro-2-butene	µg/L					<1.0	<0.50	<0.50	<0.50	<1.0	<1.0
1,4-Dichlorobenzene	µg/L	75 *		8.1	560	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichlorobenzene	µg/L	600 *			720	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dibromo-3-chloropropane	µg/L	0.2 *		0.014	1.6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Naphthalene	µg/L		160		160	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

Notes:

MCL = Maximum Contaminant Level, State Drinking Water Regulations (WAC 246-290)
MTCA = Model Toxics Control Act (WAC 173-340)
[a] = Gasoline with no benzene present
* = Primary
** = Secondary
*** = Carcinogen
*THM = Primary MCL for the sum of all trihalomethanes
*XYL = Primary MCL for the sum of all xylenes
= Does not meet MCL or MTCA CUL
-- = Not analyzed
R = Rejected due to field meter calibration error
C = Estimated value due to meter calibration error
FP = Data appears to be a false positive due to residual from drilling fluids, not detected in subsequent monitoring

Table 2. Per- and Poly-fluoroalkyl Substances (PFAS) Results, MTCA Limited Remedial Investigation, Rocky Top Environmental Limited Purpose Landfill

Parameter	Units	Cleanup Level			MW-1S	MW-2S					MW-3S					
		MTCA B Non-Cancer	MTCA B Cancer	MCL	9/10/2025	9/12/2024	12/11/2024	4/1/2025	6/17/2025	9/9/2025	9/12/2024	12/11/2024	3/31/2025	6/18/2025	MS-13S (Dup) 6/18/2025	9/10/2025
Perfluoroalkyl Sulfonic Acids (PFSAs)																
Perfluorobutane sulfonic acid (PFBS)	ng/L	4800			<1.8	<4.5	<5.3	<4.4	<1.8	<1.9	13	8.1	9.6	12	12	11
Perfluoropentane sulfonic acid (PFPeS)	ng/L				<1.8	<4.5	<5.3	<4.4	<1.8	<1.9	<4.7	<5.4	1.8 J	3.2	2.8	2.8
Perfluorohexane sulfonic acid (PFHxS)	ng/L	0.0064		10	<1.8	<4.5	<5.3	<4.4	<1.8	<1.9	6.7	<5.4	3.9 J	7.6	7.2	6.5
Perfluoroheptane sulfonic acid (PFHpS)	ng/L				<1.8	<4.5	<5.3	<4.4	<1.8	<1.9	<4.7	<5.4	<4.3	<1.8	<1.8	<1.8
Perfluorooctane sulfonic acid (PFOS)	ng/L	1.6	2.2	4.0	<1.8	<4.5	<5.3	<4.4	<1.8	<1.9	<4.7	<5.4	2.5 J	**4.0**	3.3	3.8
Perfluorononane sulfonic acid (PFNS)	ng/L				<1.8	<4.5	<5.3	<4.4	<1.8	<1.9	<4.7	<5.4	<4.3	<1.8	<1.8	<1.8
Perfluorodecane sulfonic acid (PFDS)	ng/L				<1.8	<4.5	<5.3	<4.4	<1.8	<1.9	<4.7	<5.4	<4.3	<1.8	<1.8	<1.8
Perfluorododecane sulfonic acid (PFDoS)	ng/L				<1.8	<4.5	<5.3	<4.4	<1.8	<1.9	<4.7	<5.4	<4.3	<1.8	<1.8	<1.8
Perfluoroalkyl Carboxylic Acids (PFCAs)																
Perfluorobutanoic acid (PFBA)	ng/L	8000			<2.0	<4.5	<5.3	<4.4	<2.0	<2.0	33	31	27	84	78	87
Perfluoropentanoic acid (PFPeA)	ng/L				0.79 J	<4.5	<5.3	<4.4	<1.8	<1.9	74	49	42	87	82	79
Perfluorohexanoic acid (PFHxA)	ng/L	8000			0.65 J	<4.5	<5.3	<4.4	<1.8	<1.9	43	34	25	62	57	54
Perfluoroheptanoic acid (PFHpA)	ng/L				<1.8	<4.5	<5.3	<4.4	<1.8	<1.9	25	17	13	31	29	27
Perfluorooctanoic acid (PFOA)	ng/L	0.48	0.003	4.0	0.68 J	<4.5	<5.3	<4.4	<1.8	<1.9	**29**	**21**	**15**	**34**	**33**	**35**
Perfluorononanoic acid (PFNA)	ng/L	40		10	<1.8	<4.5	<5.3	<4.4	<1.8	<1.9	<4.7	<5.4	<4.3	0.65 J	0.64 J	1.1 J
Perfluorodecanoic acid (PFDA)	ng/L	0.032			<1.8	<4.5	<5.3	<4.4	<1.8	<1.9	<4.7	<5.4	<4.3	<1.8	<1.8	<1.8
Perfluoroundecanoic acid (PFUnDA)	ng/L				<1.8	<4.5	<5.3	<4.4	<1.8	<1.9	<4.7	<5.4	<4.3	<1.8	<1.8	<1.8
Perfluorododecanoic acid (PFDOA)	ng/L				<1.8	<4.5	<5.3	<4.4	<1.8	<1.9	<4.7	<5.4	<4.3	<1.8	<1.8	<1.8
Perfluorotridecanoic acid (PFTrDA)	ng/L				<1.8	<4.5	<5.3	<4.4	<1.8	<1.9	<4.7	<5.4	<4.3	<1.8	<1.8	<1.8
Perfluorotetradecanoic acid (PFTDA)	ng/L				<1.8	<4.5	<5.3	<4.4	<1.8	<1.9	<4.7	<5.4	<4.3	<1.8	<1.8	<1.8
Perfluoroalkyl Sulfonamido Substances																
Perfluorooctane sulfonamide (PFOSAm)	ng/L				0.85 J	<4.5	<5.3	<4.4	<1.8	0.83 J	<4.7	<5.4	<4.3	<1.8	<1.8	<1.8
N-Methylperfluorooctane sulfonamide (MeFOSA)	ng/L				<1.8	<4.5	<5.3	<4.4	<1.8	<1.9	<4.7	<5.4	<4.3	<1.8	<1.8	<1.8
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	ng/L				<1.8	<4.5	<5.3	<4.4	<1.8	<1.9	<4.7	<5.4	<4.3	<1.8	<1.8	<1.8
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	ng/L				<1.8	<4.5	<5.3	<4.4	<1.8	<1.9	<4.7	<5.4	<4.3	<1.8	<1.8	<1.8
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	ng/L				<1.8	<4.5	<5.3	<4.4	<1.8	<1.9	<4.7	<5.4	<4.3	<1.8	<1.8	<1.8
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	ng/L				<1.8	<4.5	<5.3	<4.4	<1.8	<1.9	<4.7	<5.4	<4.3	<1.8	<1.8	<1.8
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	ng/L				<1.8	<4.5	<5.3	<4.4	<1.8	<1.9	<4.7	<5.4	<4.3	<1.8	<1.8	<1.8
Fluorotelomer Sulfonic Acids (FTSAs)																
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	ng/L				<1.8	<4.5	<5.3	<4.4	<1.8	<1.9	<4.7	<5.4	<4.3	<1.8	<1.8	<1.8
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	ng/L	3200			<1.8	<4.5	<5.3	<4.4	<1.8	<1.9	<4.7	<5.4	<4.3	<1.8	<1.8	<1.8
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	ng/L				<1.8	<4.5	<5.3	<4.4	<1.8	<1.9	<4.7	<5.4	<4.3	<1.8	<1.8	<1.8
Fluorotelomer Carboxylic Acids (FTCAs)																
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	ng/L				<18	<180	<210	<170	<18	<19	<190	<220	<170	<18	<18	<18
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	ng/L				<18	<180	<210	<170	<18	<19	<190	<220	<170	<18	<18	<18
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	ng/L				<18	<180	<210	<170	<18	<19	<190	<220	<170	<18	<18	<18
Perfluoroalkyl Ether Sulfonic Acids (PFESAs)																
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	ng/L				<1.8	<4.5	<5.3	<4.4	<1.8	<1.9	<4.7	<5.4	<4.3	<1.8	<1.8	<1.8
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	ng/L				<1.8	<4.5	<5.3	<4.4	<1.8	<1.9	<4.7	<5.4	<4.3	<1.8	<1.8	<1.8
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	ng/L				<1.8	<4.5	<5.3	<4.4	<1.8	<1.9	<4.7	<5.4	<4.3	<1.8	<1.8	<1.8
Perfluoroalkyl Ether Carboxylic Acids (PFECAs)																
Perfluoro-3-methoxypropanoic acid (PFMPA)	ng/L				<1.8	<4.5	<5.3	<4.4	<1.8	<1.9	<4.7	<5.4	<4.3	<1.8	<1.8	<1.8
Perfluoro-4-methoxybutanoic acid (PFMBA)	ng/L				<1.8	<4.5	<5.3	<4.4	<1.8	<1.9	<4.7	<5.4	<4.3	<1.8	<1.8	<1.8
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	ng/L	24		10	<1.8	<4.5	<5.3	<4.4	<1.8	<1.9	<4.7	<5.4	<4.3	<1.8	<1.8	<1.8
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ng/L				<1.8	<4.5	<5.3	<4.4	<1.8	<1.9	<4.7	<5.4	<4.3	<1.8	<1.8	<1.8
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	ng/L				<1.8	<4.5	<5.3	<4.4	<1.8	<1.9	<4.7	<5.4	<4.3	<1.8	<1.8	<1.8
MCL Hazard Index for Mixtures of HFPO-DA, PFBS, PFHxS, and PFNA					--	--	--	--	--	--	0.7	0.3	0.4	0.8	--	0.8
Running Annual Average Hazard Index	unitless			1	--	--					0.60					

Table 2. Per- and Poly-fluoroalkyl Substances (PFAS) Results, MTCA Limited Remedial Investigation, Rocky Top Environmental Limited Purpose Landfill

Parameter	Units	Cleanup Level			MW-4S						MW-5S					
		MTCA B Non-Cancer	MTCA B Cancer	MCL	9/12/2024	12/12/2024	4/1/2025	6/18/2025	9/10/2025	MW-13S (Dup) 9/10/2025	9/12/2024	MW-13S (Dup) 9/12/2024	12/11/2024	3/31/2025	6/17/2025	9/9/2025
Perfluoroalkyl Sulfonic Acids (PFSAs)																
Perfluorobutane sulfonic acid (PFBS)	ng/L	4800			4.8	<5.3	4.2 J	5.4	5.6	5.4	<4.6	<4.9	<5.3	4.3	<2.1	<2.0
Perfluoropentane sulfonic acid (PFPeS)	ng/L				<4.5	<5.3	<4.6	<1.8	<2.1	<1.8	<4.6	<4.9	<5.3	<4.3	<2.1	<2.0
Perfluorohexane sulfonic acid (PFHxS)	ng/L	0.0064		10	<4.5	<5.3	0.84 J	0.69 J	0.84 J	0.71 J	<4.6	<4.9	<5.3	<4.3	<2.1	<2.0
Perfluoroheptane sulfonic acid (PFHpS)	ng/L				<4.5	<5.3	<4.6	<1.8	<2.1	<1.8	<4.6	<4.9	<5.3	<4.3	<2.1	<2.0
Perfluorooctane sulfonic acid (PFOS)	ng/L	1.6	2.2	4.0	<4.5	<5.3	<4.6	<1.8	<2.1	<1.8	<4.6	<4.9	<5.3	<4.3	<2.1	<2.0
Perfluorononane sulfonic acid (PFNS)	ng/L				<4.5	<5.3	<4.6	<1.8	<2.1	<1.8	<4.6	<4.9	<5.3	<4.3	<2.1	<2.0
Perfluorodecane sulfonic acid (PFDS)	ng/L				<4.5	<5.3	<4.6	<1.8	<2.1	<1.8	<4.6	<4.9	<5.3	<4.3	<2.1	<2.0
Perfluorododecane sulfonic acid (PFDoS)	ng/L				<4.5	<5.3	<4.6	<1.8	<2.1	<1.8	<4.6	<4.9	<5.3	<4.3	<2.1	<2.0
Perfluoroalkyl Carboxylic Acids (PFCAs)																
Perfluorobutanoic acid (PFBA)	ng/L	8000			23	17	31	39	39	39	<4.6	<4.9	<5.3	47	6	4.9
Perfluoropentanoic acid (PFPeA)	ng/L				21	7.9	25	42	42	41	<4.6	<4.9	<5.3	21	3.8	3.0
Perfluorohexanoic acid (PFHxA)	ng/L	8000			8.6	<5.3	19	32	29	28	<4.6	<4.9	<5.3	11	2.6	1.7 J
Perfluoroheptanoic acid (PFHpA)	ng/L				<4.5	<5.3	9.0	17	14	14	<4.6	<4.9	<5.3	1.2 J	<2.1	<2.0
Perfluorooctanoic acid (PFOA)	ng/L	0.48	0.003	4.0	<4.5	<5.3	3.2 J	**6.8**	**6.3**	**5.9**	<4.6	<4.9	<5.3	<4.3	<2.1	<2.0
Perfluorononanoic acid (PFNA)	ng/L	40		10	<4.5	<5.3	<4.6	<1.8	<2.1	<1.8	<4.6	<4.9	<5.3	<4.3	<2.1	<2.0
Perfluorodecanoic acid (PFDA)	ng/L	0.032			<4.5	<5.3	<4.6	<1.8	<2.1	<1.8	<4.6	<4.9	<5.3	<4.3	<2.1	<2.0
Perfluoroundecanoic acid (PFUnDA)	ng/L				<4.5	<5.3	<4.6	<1.8	<2.1	<1.8	<4.6	<4.9	<5.3	<4.3	<2.1	<2.0
Perfluorododecanoic acid (PFDOA)	ng/L				<4.5	<5.3	<4.6	<1.8	<2.1	<1.8	<4.6	<4.9	<5.3	<4.3	<2.1	<2.0
Perfluorotridecanoic acid (PFTrDA)	ng/L				<4.5	<5.3	<4.6	<1.8	<2.1	<1.8	<4.6	<4.9	<5.3	<4.3	<2.1	<2.0
Perfluorotetradecanoic acid (PFTDA)	ng/L				<4.5	<5.3	<4.6	<1.8	<2.1	<1.8	<4.6	<4.9	<5.3	<4.3	<2.1	<2.0
Perfluoroalkyl Sulfonamido Substances																
Perfluorooctane sulfonamide (PFOSAm)	ng/L				<4.5	<5.3	<4.6	<1.8	<2.1	<1.8	<4.6	<4.9	<5.3	<4.3	1.1 J	0.87 J
N-Methylperfluorooctane sulfonamide (MeFOSA)	ng/L				<4.5	<5.3	<4.6	<1.8	<2.1	<1.8	<4.6	<4.9	<5.3	<4.3	<2.1	<2.0
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	ng/L				<4.5	<5.3	<4.6	<1.8	<2.1	<1.8	<4.6	<4.9	<5.3	<4.3	<2.1	<2.0
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	ng/L				<4.5	<5.3	<4.6	<1.8	<2.1	<1.8	<4.6	<4.9	<5.3	<4.3	<2.1	<2.0
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	ng/L				<4.5	<5.3	<4.6	<1.8	<2.1	<1.8	<4.6	<4.9	<5.3	<4.3	<2.1	<2.0
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	ng/L				<4.5	<5.3	<4.6	<1.8	<2.1	<1.8	<4.6	<4.9	<5.3	<4.3	<2.1	<2.0
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	ng/L				<4.5	<5.3	<4.6	<1.8	<2.1	<1.8	<4.6	<4.9	<5.3	<4.3	<2.1	<2.0
Fluorotelomer Sulfonic Acids (FTSAs)																
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	ng/L				<4.5	<5.3	<4.6	<1.8	<2.1	<1.8	<4.6	<4.9	<5.3	<4.3	<2.1	<2.0
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	ng/L	3200			<4.5	<5.3	<4.6	<1.8	<2.1	<1.8	<4.6	<4.9	<5.3	<4.3	<2.1	<2.0
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	ng/L				<4.5	<5.3	<4.6	<1.8	<2.1	<1.8	<4.6	<4.9	<5.3	<4.3	<2.1	<2.0
Fluorotelomer Carboxylic Acids (FTCAs)																
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	ng/L				<180	<210	<190	<18	<21	<18	<190	<190	<210	<170	<21	<20
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	ng/L				<180	<210	<190	<18	<21	<18	<190	<190	<210	<170	<21	<20
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	ng/L				<180	<210	<190	<18	<21	<18	<190	<190	<210	<170	<21	<20
Perfluoroalkyl Ether Sulfonic Acids (PFESAs)																
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	ng/L				<4.5	<5.3	<4.6	<1.8	<2.1	<1.8	<4.6	<4.9	<5.3	<4.3	<2.1	<2.0
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	ng/L				<4.5	<5.3	<4.6	<1.8	<2.1	<1.8	<4.6	<4.9	<5.3	<4.3	<2.1	<2.0
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	ng/L				<4.5	<5.3	<4.6	<1.8	<2.1	<1.8	<4.6	<4.9	<5.3	<4.3	<2.1	<2.0
Perfluoroalkyl Ether Carboxylic Acids (PFECAs)																
Perfluoro-3-methoxypropanoic acid (PFMPA)	ng/L				<4.5	<5.3	<4.6	<1.8	<2.1	<1.8	<4.6	<4.9	<5.3	<4.3	<2.1	<2.0
Perfluoro-4-methoxybutanoic acid (PFMBA)	ng/L				<4.5	<5.3	<4.6	<1.8	<2.1	<1.8	<4.6	<4.9	<5.3	<4.3	<2.1	<2.0
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	ng/L	24		10	<4.5	<5.3	<4.6	<1.8	<2.1	<1.8	<4.6	<4.9	<5.3	<4.3	<2.1	<2.0
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ng/L				<4.5	<5.3	<4.6	<1.8	<2.1	<1.8	<4.6	<4.9	<5.3	<4.3	<2.1	<2.0
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	ng/L				<4.5	<5.3	<4.6	<1.8	<2.1	<1.8	<4.6	<4.9	<5.3	<4.3	<2.1	<2.0
MCL Hazard Index for Mixtures of HFPO-DA, PFBS, PFHxS, and PFNA					0.2	0.2	0.09	0.07	0.09	--	0.0	--	0.0	0.002	0.0	0.0
Running Annual Average Hazard Index	unitless			1	0.1						0.0					

Table 2. Per- and Poly-fluoroalkyl Substances (PFAS) Results, MTCA Limited Remedial Investigation, Rocky Top Environmental Limited Purpose Landfill

Parameter	Units	Cleanup Level			MW-6S							MW-11S
		MTCA B Non-Cancer	MTCA B Cancer	MCL	9/12/2024	12/12/2024	MS-13S (Dup) 12/12/2024	4/1/2025	MS-13S (Dup) 4/1/2025	6/18/2025	9/10/2025	9/10/2025
Perfluoroalkyl Sulfonic Acids (PFSAs)												
Perfluorobutane sulfonic acid (PFBS)	ng/L	4800			6.6	5.1	<4.9	6.3	6.9	7.2	7.2	<1.9
Perfluoropentane sulfonic acid (PFPeS)	ng/L				<4.3	<4.8	<4.9	1.1 J	1.0 J	1.2 J	1.2 J	<1.9
Perfluorohexane sulfonic acid (PFHxS)	ng/L	0.0064		10	<4.3	<4.8	<4.9	1.1 J	1.0 J	1.0 J	0.81 J	<1.9
Perfluoroheptane sulfonic acid (PFHpS)	ng/L				<4.3	<4.8	<4.9	<4.7	<4.5	<1.8	<1.8	<1.9
Perfluorooctane sulfonic acid (PFOS)	ng/L	1.6	2.2	4.0	<4.3	<4.8	<4.9	<4.7	<4.5	<1.8	<1.8	<1.9
Perfluorononane sulfonic acid (PFNS)	ng/L				<4.3	<4.8	<4.9	<4.7	<4.5	<1.8	<1.8	<1.9
Perfluorodecane sulfonic acid (PFDS)	ng/L				<4.3	<4.8	<4.9	<4.7	<4.5	<1.8	<1.8	<1.9
Perfluorododecane sulfonic acid (PFDoS)	ng/L				<4.3	<4.8	<4.9	<4.7	<4.5	<1.8	<1.8	<1.9
Perfluoroalkyl Carboxylic Acids (PFCAs)												
Perfluorobutanoic acid (PFBA)	ng/L	8000			9.1	8.5	7.9	9.5	9.6	12	14	<2.0
Perfluoropentanoic acid (PFPeA)	ng/L				<4.3	5.5	5.4	8.1	7.9	12	15	<1.9
Perfluorohexanoic acid (PFHxA)	ng/L	8000			<4.3	<4.8	<4.9	4.7 J	4.9	8.3	11	<1.9
Perfluoroheptanoic acid (PFHpA)	ng/L				<4.3	<4.8	<4.9	<4.7	<4.5	0.90 J	1.3 J	<1.9
Perfluorooctanoic acid (PFOA)	ng/L	0.48	0.003	4.0	<4.3	<4.8	<4.9	<4.7	<4.5	<1.8	<1.8	<1.9
Perfluorononanoic acid (PFNA)	ng/L	40		10	<4.3	<4.8	<4.9	<4.7	<4.5	<1.8	<1.8	<1.9
Perfluorodecanoic acid (PFDA)	ng/L	0.032			<4.3	<4.8	<4.9	<4.7	<4.5	<1.8	<1.8	<1.9
Perfluoroundecanoic acid (PFUnDA)	ng/L				<4.3	<4.8	<4.9	<4.7	<4.5	<1.8	<1.8	<1.9
Perfluorododecanoic acid (PFDOA)	ng/L				<4.3	<4.8	<4.9	<4.7	<4.5	<1.8	<1.8	<1.9
Perfluorotridecanoic acid (PFTrDA)	ng/L				<4.3	<4.8	<4.9	<4.7	<4.5	<1.8	<1.8	<1.9
Perfluorotetradecanoic acid (PFTDA)	ng/L				<4.3	<4.8	<4.9	<4.7	<4.5	<1.8	<1.8	<1.9
Perfluoroalkyl Sulfonamido Substances												
Perfluorooctane sulfonamide (PFOSAm)	ng/L				<4.3	<4.8	<4.9	<4.7	<4.5	<1.8	<1.8	0.54 J
N-Methylperfluorooctane sulfonamide (MeFOSA)	ng/L				<4.3	<4.8	<4.9	<4.7	<4.5	<1.8	<1.8	<1.9
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	ng/L				<4.3	<4.8	<4.9	<4.7	<4.5	<1.8	<1.8	<1.9
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	ng/L				<4.3	<4.8	<4.9	<4.7	<4.5	<1.8	<1.8	<1.9
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	ng/L				<4.3	<4.8	<4.9	<4.7	<4.5	<1.8	<1.8	<1.9
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	ng/L				<4.3	<4.8	<4.9	<4.7	<4.5	<1.8	<1.8	<1.9
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	ng/L				<4.3	<4.8	<4.9	<4.7	<4.5	<1.8	<1.8	<1.9
Fluorotelomer Sulfonic Acids (FTSAs)												
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	ng/L				<4.3	<4.8	<4.9	<4.7	<4.5	<1.8	<1.8	<1.9
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	ng/L	3200			<4.3	<4.8	<4.9	<4.7	<4.5	<1.8	<1.8	<1.9
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	ng/L				<4.3	<4.8	<4.9	<4.7	<4.5	<1.8	<1.8	<1.9
Fluorotelomer Carboxylic Acids (FTCAs)												
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	ng/L				<170	<190	<200	<190	<180	<18	<18	<19
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	ng/L				<170	<190	<200	<190	<180	<18	<18	<19
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	ng/L				<170	<190	<200	<190	<180	<18	<18	<19
Perfluoroalkyl Ether Sulfonic Acids (PFESAs)												
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	ng/L				<4.3	<4.8	<4.9	<4.7	<4.5	<1.8	<1.8	<1.9
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	ng/L				<4.3	<4.8	<4.9	<4.7	<4.5	<1.8	<1.8	<1.9
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	ng/L				<4.3	<4.8	<4.9	<4.7	<4.5	<1.8	<1.8	<1.9
Perfluoroalkyl Ether Carboxylic Acids (PFECAs)												
Perfluoro-3-methoxypropanoic acid (PFMPA)	ng/L				<4.3	<4.8	<4.9	<4.7	<4.5	<1.8	<1.8	<1.9
Perfluoro-4-methoxybutanoic acid (PFMBA)	ng/L				<4.3	<4.8	<4.9	<4.7	<4.5	<1.8	<1.8	<1.9
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	ng/L	24		10	<4.3	<4.8	<4.9	<4.7	<4.5	<1.8	<1.8	<1.9
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ng/L				<4.3	<4.8	<4.9	<4.7	<4.5	<1.8	<1.8	<1.9
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	ng/L				<4.3	<4.8	<4.9	<4.7	<4.5	<1.8	<1.8	<1.9
MCL Hazard Index for Mixtures of HFPO-DA, PFBS, PFHxS, and PFNA					0.2	0.2	--	0.1	--	0.004	0.08	--
Running Annual Average Hazard Index	unitless			1	0.1							--

Notes:

CUL = Cleanup level

MTCA = Model Toxics Control Act (WAC 173-340), MCLs are currently being used rather than MTCA Method B CULs (Ecology, 2024, Selection of Human Health Toxicity for PFAS Chemicals)

MCL = Maximum contaminant level, compliance is currently established using the MCL compared to annual average

< = Not detected

-- = Not calculated

Bold = Does not meet MCL

J = Estimated value

Table 3. Dioxin and Furan Results, MTCA Limited Remedial Investigation, Rocky Top Environmental Limited Purpose Landfill

Parameter	Units	MTCA Method B Cancer CUL	MTCA Method B Non-Cancer CUL	TEF	MW-2S						MW-3S						MW-4S					
					9/12/2024	TEF	12/11/2024	TEF	4/1/2025	TEF	9/12/2024	TEF	12/11/2024	TEF	3/31/2025	TEF	9/12/2024	TEF	12/12/2024	TEF	4/1/2025	TEF
Dioxin Congeners																						
2,3,7,8-Tetrachloro dibenzo-p-dioxin	pg/L	0.34	5.60	1	<0.797	--	<1.46	--	<1.28	--	<1.92	--	<1.81	--	<1.17	--	<1.18	--	<2.64	--	<0.846	--
1,2,3,7,8-Pentachloro dibenzo-p-dioxin	pg/L			1	<0.959	--	<1.10	--	<1.69	--	<2.10	--	<1.05	--	<2.10	--	<2.00	--	<0.840	--	<1.44	--
1,2,3,4,7,8-Hexachloro dibenzo-p-dioxin	pg/L			0.1	<1.28	--	<2.11	--	<2.04	--	<1.72	--	<1.83	--	<2.33	--	<1.60	--	<1.86	--	<2.33	--
1,2,3,6,7,8-Hexachloro dibenzo-p-dioxin	pg/L			0.1	<1.30	--	<2.28	--	<2.19	--	<2.20	--	<1.91	--	<2.59	--	<1.93	--	<1.99	--	<2.60	--
1,2,3,7,8,9-Hexachloro dibenzo-p-dioxin	pg/L			0.1	<1.44	--	<2.40	--	<2.27	--	<2.55	--	<1.86	--	<2.40	--	<1.81	--	<2.01	--	<2.57	--
1,2,3,4,6,7,8-Heptachloro dibenzo-p-dioxin	pg/L			0.01	<1.90	--	<3.30	--	<4.10	--	3.83 J	0.0383 J	1.34 J	0.0134 J	<2.49	--	73.7	0.737	<2.17	--	<2.47	--
1,2,3,4,6,7,8,9-Octachloro dibenzo-p-dioxin	pg/L			0.0003	2.60	0.000780	<2.96	--	110	0.0330	21.7 J	0.00651 J	<10.2	--	<6.93	--	<4.11	--	<3.42	--	<12.7	--
Furan Congeners																						
2,3,7,8-Tetrachloro dibenzofuran	pg/L			0.1	<0.652	--	<0.801	--	<2.30	--	<1.31	--	<0.853	--	<0.619	--	<0.875	--	<0.704	--	<0.789	--
1,2,3,7,8-Pentachloro dibenzofuran	pg/L			0.03	<0.585	--	<0.750	--	<2.85	--	<1.27	--	<0.551	--	<1.42	--	<1.25	--	<0.652	--	<0.647	--
2,3,4,7,8-Pentachloro dibenzofuran	pg/L			0.3	<0.548	--	<0.660	--	<3.02	--	<1.25	--	<0.507	--	<0.709	--	<1.38	--	<0.504	--	<0.639	--
1,2,3,4,7,8-Hexachloro dibenzofuran	pg/L			0.1	<0.685	--	<0.819	--	<4.14	--	<1.36	--	<0.826	--	<0.502	--	1.59 J	0.159 J	<0.634	--	<0.515	--
1,2,3,6,7,8-Hexachloro dibenzofuran	pg/L			0.1	<0.736	--	<0.876	--	<2.16	--	<1.47	--	<0.882	--	<0.475	--	1.4 J	0.14 J	<0.691	--	<0.497	--
1,2,3,7,8,9-Hexachloro dibenzofuran	pg/L			0.1	<0.743	--	<1.30	--	<2.63	--	<1.59	--	<1.33	--	<0.565	--	1.94 J	0.194 J	<1.25	--	<0.575	--
2,3,4,6,7,8-Hexachloro dibenzofuran	pg/L			0.1	<1.05	--	<0.827	--	<2.78	--	<2.09	--	<0.965	--	<0.624	--	<1.58	--	<0.689	--	< 0.720	--
1,2,3,4,6,7,8-Heptachloro dibenzofuran	pg/L			0.01	<0.835	--	<1.01	--	1.79 J	0.0179	<1.59	--	<1.05	--	<0.279	--	17.7 J	0.177 J	<0.806	--	<0.763	--
1,2,3,4,7,8,9-Heptachloro dibenzofuran	pg/L			0.01	<1.33	--	<1.34	--	<1.57	--	<1.78	--	<1.39	--	<0.416	--	2.68 J	0.0268 J	<1.54	--	<0.942	--
1,2,3,4,6,7,8,9-Octachloro dibenzofuran	pg/L			0.0003	<1.83	--	<2.14	--	2.63 J	0.0008	4.02 J	0.001206 J	<2.73	--	<2.27	--	104 J	0.0312 J	<3.46	--	<1.98	--
Totals TEQ	pg/L	0.34	5.60			0.00078		0		0.0517		0.046016 J		0.0134 J		0		**1.465 J**		0		0

Notes:

CUL = Clean Up Level
MTCA = Model Toxics Control Act (WAC 173-340)
TEQ = Toxicity Equivalency Quotient
TEF = Toxic Equivalency Factor
J = Estimated value
< = Not Detected
-- = Not calculated
Bold = Above MTCA

Table 3. Dioxin and Furan Results, MTCA Limited Remedial Investigation, Rocky Top Environmental Limited Purpose Landfill

Parameter	Units	MTCA Method B Cancer CUL	MTCA Method B Non-Cancer CUL	TEF	MW-5S						MW-6S								
					9/12/2024	TEF	12/11/2024	TEF	3/31/2025	TEF	9/12/2024	TEF	MW-13S (Dup) 9/12/2024	12/12/2024	TEF	MW-13S (Dup) 12/12/2024	4/1/2025	TEF	MW-13S (Dup) 4/1/2025
Dioxin Congeners																			
2,3,7,8-Tetrachloro dibenzo-p-dioxin	pg/L	0.34	5.60	1	<1.57	--	<1.07	--	<1.88	--	<1.22	--	<0.895	<0.926	--	<2.50	<1.07	--	<1.24
1,2,3,7,8-Pentachloro dibenzo-p-dioxin	pg/L			1	<1.87	--	<1.01	--	<1.46	--	<1.91	--	<1.65	<1.05	--	<1.13	<1.71	--	<1.90
1,2,3,4,7,8-Hexachloro dibenzo-p-dioxin	pg/L			0.1	<2.07	--	<2.45	--	<3.20	--	<1.98	--	<2.08	<1.65	--	<2.05	<2.22	--	<1.40
1,2,3,6,7,8-Hexachloro dibenzo-p-dioxin	pg/L			0.1	<2.40	--	<2.75	--	<3.23	--	<1.99	--	<2.29	<1.76	--	<2.55	<2.40	--	<1.39
1,2,3,7,8,9-Hexachloro dibenzo-p-dioxin	pg/L			0.1	<2.42	--	<2.50	--	<3.51	--	<2.05	--	<2.37	<1.77	--	<2.42	<2.47	--	<1.48
1,2,3,4,6,7,8-Heptachloro dibenzo-p-dioxin	pg/L			0.01	<3.53	--	<1.71	--	<2.71	--	<2.23	--	<3.11	<1.71	--	<2.23	<3.31	--	<1.80
1,2,3,4,6,7,8,9-Octachloro dibenzo-p-dioxin	pg/L			0.0003	12.6 J	0.00378 J	<5.66	--	<5.94	--	13.4 J	0.00402 J	<6.67	<3.37	--	<4.03	<5.61	--	<4.25
Furan Congeners																			
2,3,7,8-Tetrachloro dibenzofuran	pg/L			0.1	<1.27	--	<0.840	--	<1.18	--	1.1	--	<0.683	<0.822	--	<0.715	<1.01	--	<0.653
1,2,3,7,8-Pentachloro dibenzofuran	pg/L			0.03	<1.42	--	<0.812	--	< 4.30	--	<1.25	--	<1.06	<0.776	--	<0.736	<0.805	--	<0.686
2,3,4,7,8-Pentachloro dibenzofuran	pg/L			0.3	<1.04	--	<0.612	--	<3.43	--	<1.19	--	<0.854	<0.705	--	<0.548	<0.791	--	<0.569
1,2,3,4,7,8-Hexachloro dibenzofuran	pg/L			0.1	<1.55	--	<0.805	--	<1.36	--	<1.26	--	<1.03	<0.819	--	<0.782	<0.725	--	<0.578
1,2,3,6,7,8-Hexachloro dibenzofuran	pg/L			0.1	<1.55	--	<0.892	--	<1.44	--	<1.28	--	<1.09	<0.867	--	<0.886	<0.703	--	<0.552
1,2,3,7,8,9-Hexachloro dibenzofuran	pg/L			0.1	<1.51	--	<1.30	--	<1.71	--	<1.38	--	<1.15	<1.35	--	<1.26	<0.867	--	<0.658
2,3,4,6,7,8-Hexachloro dibenzofuran	pg/L			0.1	<1.94	--	<0.882	--	<1.86	--	<1.66	--	<1.48	<0.907	--	<0.953	<1.05	--	<0.752
1,2,3,4,6,7,8-Heptachloro dibenzofuran	pg/L			0.01	<2.07	--	<0.836	--	<0.708	--	<1.53	--	<1.59	<1.22	--	<0.697	<0.712	--	<0.373
1,2,3,4,7,8,9-Heptachloro dibenzofuran	pg/L			0.01	<2.72	--	<1.25	--	<0.922	--	<2.11	--	<2.14	<1.60	--	<1.01	<0.886	--	<0.483
1,2,3,4,6,7,8,9-Octachloro dibenzofuran	pg/L			0.0003	<7.13	--	<2.67	--	<2.85	--	<3.02	--	<5.06	<2.65	--	<2.37	<2.49	--	<1.79
Totals TEQ	pg/L	0.34	5.60			0.00378 J		0		0		0.00402 J			0			0	

Notes:

CUL = Clean Up Level
MTCA = Model Toxics Control Act (WAC 173-340)
TEQ = Toxicity Equivalency Quotient
TEF = Toxic Equivalency Factor
J = Estimated value
< = Not Detected
-- = Not calculated
Bold = Above MTCA

Table 4. Semi-Volatile Organic Compounds (SVOC) Results, MTCA Limited Remedial Investigation, Rocky Top Environmental Limited Purpose Landfill

Analyte	Units	Cleanup Level			MW-2S		MW-3S			MW-4S		MW-5S		MW-6S		
		MTCA B Cancer	MTCA B Non-Cancer	MCL	12/11/2024	6/17/2025	12/11/2024	6/18/2025	MW-13S (Dup) 6/19/2025	12/12/2024	6/18/2025	12/12/2024	6/17/2025	12/12/2024	MW-13S (Dup) 12/12/2024	6/18/2025
(3+4)-Methylphenol (m,p-Cresol)	µg/L		1600 / 800		<0.98	<0.95	<0.96	<0.98	<0.95	<1	<0.95	<0.96	<0.97	<1	<1	<0.95
1,2,4-Trichlorobenzene	µg/L	1.5	80	70	<0.98	<0.95	<0.96	<0.98	<0.95	<1	<0.95	<0.96	<0.97	<1	<1	<0.95
1,2-Dichlorobenzene	µg/L		720	600	<0.98	<0.95	<0.96	<0.98	<0.95	<1	<0.95	<0.96	<0.97	<1	<1	<0.95
1,2-Dinitrobenzene	µg/L		1.6		<0.98	<0.95	<0.96	<0.98	<0.95	<1	<0.95	<0.96	<0.97	<1	<1	<0.95
1,2-Diphenylhydrazine	µg/L	0.11 A			<0.98	<0.95	<0.96	<0.98	<0.95	<1	<0.95	<0.96	<0.97	<1	<1	<0.95
1,3-Dichlorobenzene	µg/L				<0.98	<0.95	<0.96	<0.98	<0.95	<1	<0.95	<0.96	<0.97	<1	<1	<0.95
1,3-Dinitrobenzene	µg/L		1.6		<0.98	<0.95	<0.96	<0.98	<0.95	<1	<0.95	<0.96	<0.97	<1	<1	<0.95
1,4-Dichlorobenzene	µg/L	8.1	560	75	<0.98	<0.95	<0.96	<0.98	<0.95	<1	<0.95	<0.96	<0.97	<1	<1	<0.95
1,4-Dinitrobenzene	µg/L		1.6		<0.98	<0.95	<0.96	<0.98	<0.95	<1	<0.95	<0.96	<0.97	<1	<1	<0.95
1-Methylnaphthalene	µg/L	0.86	560		<0.098	<0.098	<0.096	<0.098	<0.098	<0.1	<0.098	<0.096	<0.098	<0.1	<0.1	<0.098
2,3,4,6-Tetrachlorophenol	µg/L		480		<0.98	<0.95	<0.96	<0.98	<0.95	<1	<0.95	<0.96	<0.97	<1	<1	<0.95
2,3,5,6-Tetrachlorophenol	µg/L				<0.98	<0.95	<0.96	<0.98	<0.95	<1	<0.95	<0.96	<0.97	<1	<1	<0.95
2,3-Dichloroaniline	µg/L				<0.98	<0.95	<0.96	<0.98	<0.95	<1	<0.95	<0.96	<0.97	<1	<1	<0.95
2,4,5-Trichlorophenol	µg/L		1600		<0.98	<0.95	<0.96	<0.98	<0.95	<1	<0.95	<0.96	<0.97	<1	<1	<0.95
2,4,6-Trichlorophenol	µg/L	8	16		<0.98	<0.95	<0.96	<0.98	<0.95	<1	<0.95	<0.96	<0.97	<1	<1	<0.95
2,4-Dichlorophenol	µg/L		48		<0.98	<0.95	<0.96	<0.98	<0.95	<1	<0.95	<0.96	<0.97	<1	<1	<0.95
2,4-Dimethylphenol	µg/L		320		<0.98	<0.95	<0.96	<0.98	<0.95	<1	<0.95	<0.96	<0.97	<1	<1	<0.95
2,4-Dinitrophenol	µg/L		32		<4.9	<4.8	<4.8	<4.9	<4.8	<5.2	<4.8	<4.8	<4.8	<5.1	<5.2	<4.8
2,4-Dinitrotoluene	µg/L	0.28 A	32		<0.98	<0.95	<0.96	<0.98	<0.95	<1	<0.95	<0.96	<0.97	<1	<1	<0.95
2,6-Dinitrotoluene	µg/L	0.058 A	4.8		<0.98	<0.95	<0.96	<0.98	<0.95	<1	<0.95	<0.96	<0.97	<1	<1	<0.95
2-Chloronaphthalene	µg/L		640		<0.98	<0.95	<0.96	<0.98	<0.95	<1	<0.95	<0.96	<0.97	<1	<1	<0.95
2-Chlorophenol	µg/L		40		<0.98	<0.95	<0.96	<0.98	<0.95	<1	<0.95	<0.96	<0.97	<1	<1	<0.95
2-Methylnaphthalene	µg/L		32		<0.098	<0.098	<0.096	<0.098	<0.098	<0.1	<0.098	<0.096	<0.098	<0.1	<0.1	<0.098
2-Methylphenol (o-Cresol)	µg/L		800		<0.98	<0.95	<0.96	<0.98	<0.95	<1	<0.95	<0.96	<0.97	<1	<1	<0.95
2-Nitroaniline	µg/L		160		<0.98	<0.95	<0.96	<0.98	<0.95	<1	<0.95	<0.96	<0.97	<1	<1	<0.95
2-Nitrophenol	µg/L				<0.98	<0.95	<0.96	<0.98	<0.95	<1	<0.95	<0.96	<0.97	<1	<1	<0.95
3,3-Dichlorobenzidine	µg/L	0.19 A			<0.98	<0.95	<0.96	<0.98	<0.95	<1	<0.95	<0.96	<0.97	<1	<1	<0.95
3-Nitroaniline	µg/L				<0.98	<0.95	<0.96	<0.98	<0.95	<1	<0.95	<0.96	<0.97	<1	<1	<0.95
4,6-Dinitro-2-methylphenol	µg/L		1.3 A		<4.9	<4.8	<4.8	<4.9	<4.8	<5.2	<4.8	<4.8	<4.8	<5.1	<5.2	<4.8
4-Bromophenyl-phenylether	µg/L				<0.98	<0.95	<0.96	<0.98	<0.95	<1	<0.95	<0.96	<0.97	<1	<1	<0.95
4-Chloro-3-methylphenol	µg/L		1600		<0.98	<0.95	<0.96	<0.98	<0.95	<1	<0.95	<0.96	<0.97	<1	<1	<0.95
4-Chloroaniline	µg/L				<0.98	<0.95	<0.96	<0.98	<0.95	<1	<0.95	<0.96	<0.97	<1	<1	<0.95
4-Chlorophenyl-phenylether	µg/L				<0.98	<0.95	<0.96	<0.98	<0.95	<1	<0.95	<0.96	<0.97	<1	<1	<0.95
4-Nitroaniline	µg/L	4.4	64		<0.98	<0.95	<0.96	<0.98	<0.95	<1	<0.95	<0.96	<0.97	<1	<1	<0.95
4-Nitrophenol	µg/L				<4.9	<4.8	<4.8	<4.9	<4.8	<5.2	<4.8	<4.8	<4.8	<5.1	<5.2	<4.8
Acenaphthene	µg/L		480		<0.098	<0.098	<0.096	<0.098	<0.098	<0.1	<0.098	<0.096	<0.098	<0.1	<0.1	<0.098
Acenaphthylene	µg/L				<0.098	<0.098	<0.096	<0.098	<0.098	<0.1	<0.098	<0.096	<0.098	<0.1	<0.1	<0.098
Aniline	µg/L	15	110		<4.9	<4.8	<4.8	<4.9	<4.8	<5.2	<4.8	<4.8	<4.8	<5.1	<5.2	<4.8
Anthracene	µg/L		2400		<0.098	<0.098	<0.096	<0.098	<0.098	<0.1	<0.098	<0.096	<0.098	<0.1	<0.1	<0.098
Benzyl alcohol	µg/L		1600		<0.98	<0.95	<0.96	<0.98	<0.95	<1	<0.95	<0.96	<0.97	<1	<1	<0.95
bis(2-Chloroethoxy)methane	µg/L		48		<0.98	<0.95	<0.96	<0.98	<0.95	<1	<0.95	<0.96	<0.97	<1	<1	<0.95
bis(2-Chloroethyl)ether	µg/L	0.04 A			<0.98	<0.95	<0.96	<0.98	<0.95	<1	<0.95	<0.96	<0.97	<1	<1	<0.95
bis(2-Chloroisopropyl)ether	µg/L				<0.98	<0.95	<0.96	<0.98	<0.95	<1	<0.95	<0.96	<0.97	<1	<1	<0.95
bis(2-Ethylhexyl)phthalate	µg/L	6.3	320	6	<0.98	<4.8	2.8	<4.9	<4.8	<1	<4.8	<0.96	<4.8	<1	<1	<4.8
bis-2-Ethylhexyladipate	µg/L	73	9600	400	<4.9	<4.8	<4.8	<4.9	<4.8	<5.2	<4.8	<4.8	<4.8	<5.1	<5.2	<4.8
Butylbenzylphthalate	µg/L	46	3200		<4.9	<4.8	<4.8	<4.9	<4.8	<5.2	<4.8	<4.8	<4.8	<5.1	<5.2	<4.8
Carbazole	µg/L				<0.98	<0.95	<0.96	<0.98	<0.95	<1	<0.95	<0.96	<0.97	<1	<1	<0.95
Dibenzofuran	µg/L		8		<0.98	<0.95	<0.96	<0.98	<0.95	<1	<0.95	<0.96	<0.97	<1	<1	<0.95
Diethylphthalate	µg/L		13000		<0.98	<4.8	<0.96	<4.9	<4.8	<1	<4.8	<0.96	<4.8	<1	<1	<4.8

Table 4. Semi-Volatile Organic Compounds (SVOC) Results, MTCA Limited Remedial Investigation, Rocky Top Environmental Limited Purpose Landfill

Analyte	Units	Cleanup Level			MW-2S		MW-3S			MW-4S		MW-5S		MW-6S		
		MTCA B Cancer	MTCA B Non-Cancer	MCL	12/11/2024	6/17/2025	12/11/2024	6/18/2025	MW-13S (Dup) 6/19/2025	12/12/2024	6/18/2025	12/12/2024	6/17/2025	12/12/2024	MW-13S (Dup) 12/12/2024	6/18/2025
Dimethylphthalate	µg/L				<4.9	<4.8	<4.8	<4.9	<4.8	<5.2	<4.8	<4.8	<4.8	<5.1	<5.2	<4.8
Di-n-butylphthalate	µg/L		1600		<4.9	<4.8	<4.8	<4.9	<4.8	<5.2	<4.8	<4.8	<4.8	<5.1	<5.2	<4.8
Di-n-octylphthalate	µg/L		160		<0.98	<4.8	<0.96	<4.9	<4.8	<1	<4.8	<0.96	<4.8	<1	<1	<4.8
Fluoranthene	µg/L		640		<0.098	<0.098	<0.096	<0.098	<0.098	<0.1	<0.098	<0.096	<0.098	<0.1	<0.1	<0.098
Fluorene	µg/L		320		<0.098	<0.098	<0.096	<0.098	<0.098	<0.1	<0.098	<0.096	<0.098	<0.1	<0.1	<0.098
Hexachlorobenzene	µg/L	0.027 A	6.4	1	<0.98	<0.95	<0.96	<0.98	<0.95	<1	<0.95	<0.96	<0.97	<1	<1	<0.95
Hexachlorobutadiene	µg/L	0.56 A	8		<0.98	<0.95	<0.96	<0.98	<0.95	<1	<0.95	<0.96	<0.97	<1	<1	<0.95
Hexachlorocyclopentadiene	µg/L		48	50	<4.9	<0.95	<4.8	<0.98	<0.95	<5.2	<0.95	<4.8	<0.97	<5.1	<5.2	<0.95
Hexachloroethane	µg/L	1.1	5.6		<0.98	<0.95	<0.96	<0.98	<0.95	<1	<0.95	<0.96	<0.97	<1	<1	<0.95
Isophorone	µg/L	92	3200		<0.98	<0.95	<0.96	<0.98	<0.95	<1	<0.95	<0.96	<0.97	<1	<1	<0.95
Naphthalene	µg/L	160	160		<0.098	<0.098	<0.096	<0.098	<0.098	<0.1	<0.098	<0.096	<0.098	<0.1	<0.1	<0.098
Nitrobenzene	µg/L		16		<0.98	<0.95	<0.96	<0.98	<0.95	<1	<0.95	<0.96	<0.97	<1	<1	<0.95
n-Nitrosodimethylamine	µg/L	0.00023 A	0.064 A		<0.98	<0.95	<0.96	<0.98	<0.95	<1	<0.95	<0.96	<0.97	<1	<1	<0.95
n-Nitroso-di-n-propylamine	µg/L	0.013 A			<0.98	<0.95	<0.96	<0.98	<0.95	<1	<0.95	<0.96	<0.97	<1	<1	<0.95
n-Nitrosodiphenylamine	µg/L		18		<0.98	<0.95	<0.96	<0.98	<0.95	<1	<0.95	<0.96	<0.97	<1	<1	<0.95
Pentachlorophenol	µg/L	0.22 A	80	0.042 A	<4.9	<4.8	<4.8	<4.9	<4.8	<5.2	<4.8	<4.8	<4.8	<5.1	<5.2	<4.8
Phenanthrene	µg/L				<0.098	<0.098	<0.096	<0.098	<0.098	<0.1	<0.098	<0.096	<0.098	<0.1	<0.1	<0.098
Phenol	µg/L		4800		<0.98	<0.95	<0.96	<0.98	<0.95	<1	<0.95	<0.96	<0.97	<1	<1	<0.95
Pyrene	µg/L		4800		<0.098	<0.098	<0.096	<0.098	<0.098	<0.1	<0.098	<0.096	<0.098	<0.1	<0.1	<0.098
Pyridine	µg/L		8		<0.98	<0.95	<0.96	<0.98	<0.95	<1	<0.95	<0.96	<0.97	<1	<1	<0.95

Notes:

A Reporting Limit (practical quantitation limite) is above the Cleanup Level
MTCA Model Toxics Control Act
MCL Maximum Contamination Limit
Cleanup levels as published in Cleanup Levels and Risk Calculations (Ecology, January 2025)

Table 5. Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) Results, MTCA Limited Remedial Investigation, Rocky Top Environmental Limited Purpose Landfill

		Cleanup Level			MW-2S				MW-3S						MW-4S			
					12/11/2024		6/17/2025		12/11/2024		6/18/2025		MW-13S (Dup) 6/19/2025		12/12/2024		6/18/2025	
Analyte	Units	MTCA Method A	MCL	TEF[1]	Result	TEQ	Result	TEQ	Result	TEQ	Result	TEQ	Result	TEQ	Result	TEQ	Result	TEQ
Benzo(a)anthracene	µg/L	0.1		0.1	<0.0098	0.00098	<0.0095	0.00095	<0.0096	0.00096	<0.0098	0.00098	<0.0095	0.00095	<0.0100	0.00100	<0.0095	0.00095
Benzo(a)pyrene	µg/L	0.1	0.2	1	<0.0098	0.00980	<0.0095	0.0095	<0.0096	0.00960	<0.0098	0.00980	<0.0095	0.00950	<0.0100	0.01000	<0.0095	0.00950
Benzo(b)fluoranthene	µg/L	0.1		0.1	<0.0098	0.00098	<0.0095	0.00095	<0.0096	0.00096	<0.0098	0.00098	<0.0095	0.00095	<0.0100	0.00100	<0.0095	0.00095
Benzo(j,k)fluoranthene	µg/L	0.1		0.1	<0.0098	0.00098	<0.0095	0.00095	<0.0096	0.00096	<0.0098	0.00098	<0.0095	0.00095	<0.0100	0.00100	<0.0095	0.00095
Chrysene	µg/L	0.1		0.01	<0.0098	0.000098	<0.0095	0.000095	<0.0096	0.000096	<0.0098	0.000098	<0.0095	0.000095	<0.0100	0.000100	<0.0095	0.000095
Dibenzo(a,h)anthracene	µg/L	0.1		0.1	<0.0098	0.00098	<0.0095	0.00095	<0.0096	0.00096	<0.0098	0.00098	<0.0095	0.00095	<0.0100	0.00100	<0.0095	0.00095
Indeno(1,2,3-cd)pyrene	µg/L	0.1		0.1	<0.0098	0.00098	<0.0095	0.00095	<0.0096	0.00096	<0.0098	0.00098	<0.0095	0.00095	<0.0100	0.00100	<0.0095	0.00095
Total cPAH TEQ	µg/L	0.1				0.0148		0.0143		0.0145		0.0148		0.0143		0.0151		0.0143

Table 5. Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) Results, MTCA Limited Remedial Investigation, Rocky Top Environmental Limited Purpose Landfill

		Cleanup Level			MW-5S				MW-6S					
					12/11/2024		6/17/2025		12/12/2024		MW-13S (Dup) 12/12/2024		6/18/2025	
Analyte	Units	MTCA Method A	MCL	TEF[1]	Result	TEQ	Result	TEQ	Result	TEQ	Result	TEQ	Result	TEQ
Benzo(a)anthracene	µg/L	0.1		0.1	<0.0096	0.00096	<0.0097	0.00097	<0.0100	0.00100	<0.0100	0.00100	<0.0095	0.00095
Benzo(a)pyrene	µg/L	0.1	0.2	1	<0.0096	0.00960	<0.0097	0.00970	<0.0100	0.01000	<0.0100	0.01000	<0.0095	0.00950
Benzo(b)fluoranthene	µg/L	0.1		0.1	<0.0096	0.00096	<0.0097	0.00097	<0.0100	0.00100	<0.0100	0.00100	<0.0095	0.00095
Benzo(j,k)fluoranthene	µg/L	0.1		0.1	<0.0096	0.00096	<0.0097	0.00097	<0.0100	0.00100	<0.0100	0.00100	<0.0095	0.00095
Chrysene	µg/L	0.1		0.01	<0.0096	0.000096	<0.0097	0.000097	<0.0100	0.000100	<0.0100	0.000100	<0.0095	0.000095
Dibenzo(a,h)anthracene	µg/L	0.1		0.1	<0.0096	0.00096	<0.0097	0.00097	<0.0100	0.00100	<0.0100	0.00100	<0.0095	0.00095
Indeno(1,2,3-cd)pyrene	µg/L	0.1		0.1	<0.0096	0.00096	<0.0097	0.00097	<0.0100	0.00100	<0.0100	0.00100	<0.0095	0.00095
Total cPAH TEQ	µg/L	0.1				0.0145		0.0146		0.0151		0.0151		0.0143

Notes:

[1] TEF is unitless

TEF = Toxicity Equivalency Factor for cPAHs using MTCA Table 708-2 and Chapter 173-340-708 WAC

TEQ = Toxicity Equivalency Quotient Concentration for benzo(a)pyrene

MTCA Model Toxics Control Act

MCL Maximum Contamination Limit

Table 6. EPA Priority Pollutant Metals Results, MTCA Limited Remedial Investigation, Rocky Top Environmental Limited Purpose Landfill

Analyte	Units	MCL	MTCA Method A	MTCA Method B Cancer	MTCA Method B Non-Cancer	MW-1S	MW-2S	MW-3S		MW-4S		MW-5S	MW-6S		MW-11S
						9/10/2025	4/1/2025	3/31/2025	9/10/2025	4/1/2025	MW-13S (Dup) 9/10/2025	3/31/2025	4/1/2025	MW-13S (Dup) 4/1/2025	9/10/2025
Antimony, Total	mg/L	0.006 *			0.0064	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056
Antimony, Dissolved	mg/L					--	<0.0050	<0.0050	--	<0.0050	--	<0.0050	<0.0050	<0.0050	--
Arsenic, Total	mg/L	0.010 *	0.005			<0.0033	<0.0033	<0.0033	<0.0033	<0.0033	<0.0033	<0.0033	<0.0033	<0.0033	<0.0033
Arsenic, Dissolved	mg/L					--	<0.0030	<0.0030	--	<0.0030	--	<0.0030	<0.0030	<0.0030	--
Berylium, Total	mg/L	0.004 *			0.032	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011
Berylium, Dissolved	mg/L					--	<0.010	<0.010	--	<0.010	--	<0.010	<0.010	<0.010	--
Cadmium, Total	mg/L	0.005 *	0.005		0.008	<0.0044	<0.0044	<0.0044	<0.0044	<0.0044	<0.0044	<0.0044	<0.0044	<0.0044	<0.0044
Cadmium, Dissolved	mg/L					--	<0.0040	<0.0040	--	<0.0040	--	<0.0040	<0.0040	<0.0040	--
Chromium, Total	mg/L	0.1 *	0.05			<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011
Chromium, Dissolved	mg/L					--	<0.010	<0.010	--	<0.010	--	<0.010	<0.010	<0.010	
Copper, Total	mg/L	1.3			0.64	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011
Copper, Dissolved	mg/L					--	<0.010	<0.010	--	<0.010	--	<0.010	<0.010	<0.010	--
Lead, Total	mg/L		0.015			<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011
Lead, Dissolved	mg/L					--	<0.0010	<0.0010	--	<0.0010	--	<0.0010	<0.0010	<0.0010	--
Mercury, Total	mg/L	0.002 *	0.002			<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Mercury, Dissolved	mg/L					--	<0.00050	<0.00050	--	<0.00050	--	<0.00050	<0.00050	<0.00050	--
Nickel, Total	mg/L				0.32	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022
Nickel, Dissolved	mg/L					--	<0.020	<0.020	--	<0.020	--	<0.020	<0.020	<0.020	--
Selenium, Total	mg/L	0.05 *			0.08	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056
Selenium, Dissolved	mg/L					--	<0.0050	<0.0050	--	<0.0050	--	<0.0050	<0.0050	<0.0050	--
Silver, Total	mg/L	0.1 **			0.08	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011
Silver, Dissolved	mg/L					--	<0.010	<0.010	--	<0.010	--	<0.010	<0.010	<0.010	--
Thallium, Total	mg/L	0.002 *			0.00016	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056
Thallium, Dissolved	mg/L					--	<0.0050	<0.0050	--	<0.0050	--	<0.0050	<0.0050	<0.0050	--
Zinc, Total	mg/L	5.0 **			4.8	<0.028	<0.028	<0.028	<0.028	<0.028	<0.028	<0.028	<0.028	<0.028	<0.028
Zinc, Dissolved	mg/L					--	<0.025	<0.025	--	<0.025	--	<0.025	<0.025	<0.025	--

Notes:

MCL = Maximum Contaminant Level, State Drinking Water Regulations (WAC 246-290)

MTCA = Model Toxics Control Act (WAC 173-340)

[a] = Gasoline with no benzene present

* = Primary

** = Secondary

*** = Carcinogen

*THM = Primary MCL for the sum of all trihalomethanes

*XYL = Primary MCL for the sum of all xylenes

= Does not meet MCL or MTCA CUL

-- = Not analyzed

Attachment A

Third Quarter 2025
Field Data Sheets

DTG Debris to Green Recycling

Water Level Measurement Field Report

DATE 9/9/25	JOB NO.
PROJECT: Yakima LPL	COMPANY NAME: PMX
LOCATION: Rocky Top	
WEATHER Overcast	TEMP 65 ° at 0800 AM / ° at PM
PERSONNEL C. Bourgeois	

THE FOLLOWING WAS NOTED:

WELL NUMBER	Time	Depth to Water (ft below top of casing)	Measuring Point	Screen Interval (ft bgs)
MW-1S	0958	109.82	TOC	118-138
MW-2S			TOC	310-330
MW-3S	1064	170.38	TOC	188-198
MW-4S	0951	41'	TOC	49.5 – 69.5
MW-5S	842	218.98	TOC	222-243
MW-6S	0946	96.71	TOC	110-130
MW-11S			TOC	219-239
MW-7D	~~1488~~ 849	448.11	TOC	475-495
MW-8D	932	301.76	TOC	375-405
MW-9D	1011	434.65	TOC	420-440
MW-10D	1025	80.51	TOC	150-170

BH

2S - no reading - dry?

DTG Debris to Green Recycling

Groundwater Sampling Field Data Sheet

Well #: **MW-1S**

Project Number:		**Date:**	9/10/25
Project Name:	Yakima LPL	**Company Name:**	PMX
Project Address:	Rocky Top	**Sampled By:**	BH, WS

Casing Diameter: 2" _ 4" _ 6" _____ Other _____

Initial Depth to Water (feet):	102.97	**Purge Rate Measurement Method:**	YSI Probe
Depth of Well (feet):	133 feet	**Date Purged:**	9/10/25
Top of Screen (feet)	113 feet	**Purge Time (from/to):**	1415 – 1435
Reference Point (surveyor's notch, etc.):		**Time Sampled:**	1440

TIME (2400 hr)	DEPTH TO WATER (ft)	pH (units)	Ec (µmhos/cm 25°C)	TEMP °C	Redox (mv)	Dissolved Oxygen mg/L	TURBIDITY (visual)	PUMP SETTING	
Initia	_____								
1415	102.97	10.12	266	14.8	-29.7	1.75	6.83	90 PSI	30/20
1420	_____	9.54	265	14.9	-54.7	0.3	5.12	"	
1425	_____	9.36	262.7	15.1	-66.7	0.17	4.61	"	
1430	_____	9.25	265.8	14.7	-68.6	0.11	2.59	"	
1435	_____	9.30	257.9	15.4	-74.1	0.09	2.36	"	
1440	_____	_____	_____	_____	_____	_____	_____	_____	
1495	_____	_____	_____	_____	_____	_____	_____	_____	
_____	_____	_____	_____	_____	_____	_____	_____	_____	
Stabilization Criteria		±0.1	3%	3%	±10 mv	10%, or 3 <0.5	10%, or 3<5.0		

Purge Equipment:	YSI probe	**Flow Rate:**	475 mL/min
Laboratory:	On Site / Analytik	**Date Sent to Lab:**	A- 9/10, O- 9/11
Shipment Method	dropped off	**Field QC Sample Number:**	N/A

Remarks:

Signature:

Debris to Green Recycling

Groundwater Sampling Field Data Sheet

Well #: **MW-2S**

Project Number:		Date:	9/9/25
Project Name:	Yakima LPL	Company Name:	PMX
Project Address:	Rocky Top	Sampled By:	Chris Bourgeois

Casing Diameter: 2" _ 4" _ 6" _____ Other _____

Initial Depth to Water (feet below TOC):		Purge Rate Measurement Method:	YSI probe
Top of Screen (feet bgs):	310	Date Purged:	9/9/25
Bottom of Screen (feet bgs)	330	Purge Time (from/to):	1615 - 1630
Reference Point (surveyor's notch, etc.):		Time Sampled:	1635

TIME (2400 hr)	DEPTH TO WATER (ft)	pH (units)	Ec (µmhos/cm 25°C)	TEMP °C	Redox (mv)	Dissolved Oxygen mg/L	TURBIDITY (visual)	PUMP SETTING	
Initial									
1615		7.48	709.5	16.4	174.3	8.63	0.31	175PSI	30/30
1620		7.60	709.6	15.8	175.5	7.65	0.16	"	
1625		7.46	709.6	16.03	176.6	6.23	0.14	"	
1630		7.26	709.6	16.6	181.6	7.25	0.38	"	
1635									
1640									
1645									
1650									
Stabilization Criteria		+0.1	3%	3%	± 10 mv	10%, or 3 <0.5	10%, or 3<5.0		

Purge Equipment:	YSI Probe	Flow Rate:	230 mL/min
Laboratory:	OnSite / Anatek	Date Sent to Lab:	A - 9/9, O - 9/11
Shipment Method	dropped off	Field QC Sample Number:	N/A

Remarks:

Couldn't get water depth — meter went stale
Successfully sampled, so it must have gotten
stuck on something

Signature:

DTG Debris to Green Recycling

Groundwater Sampling Field Data Sheet

Well #:**MW-3S**

Project Number:		Date:	9/10/25
Project Name:	Yakima LPL	Company Name:	PMX
Project Address:	Rocky Top	Sampled By:	Chris Bourgeois

Casing Diameter: 2" _ 4" _ 6" _____ Other _____

Initial Depth to Water (feet below TOC):	170.1	Purge Rate Measurement Method:	YSI Probe
Top of Screen (feet bgs):	188	Date Purged:	9/10/25
Bottom of Screen (feet bgs):	198	Purge Time (from/to):	0930 – 1010
Reference Point (surveyor's notch, etc.):		Time Sampled:	1015

TIME (2400 hr)	DEPTH TO WATER (ft)	pH (units)	Ec (µmhos/cm 25°C)	TEMP °C	Redox (mv)	Dissolved Oxygen mg/L	TURBIDITY (visual)	PUMP SETTING
Initial								
0940		9.11	681	15.7	0.4	8.6	0.26	120 PSI 30V 15
0945		8.70	686	14.8	-2.1	6.15	0.45	
0950		8.61	696	15.0	-1.9	5.25	0.39	
1000		9.34	697	14.9	-1.3	4.95	0.50	
1005	170.85	BH 9.02	688	14.9	-1.7	5.05	0.29	
1010		8.83	689	15	-1.2	5.00	0.25	
Stabilization Criteria		± 0.1	3%	3%	± 10 mv	10%, or 3 <0.5	10%, or 3<5.0	

Purge Equipment:	YSI Probe	Flow Rate:	500 mL/min
Laboratory:	Analytical Onsite	Date Sent to Lab:	A- 9/10/25-9/11/25
Shipment Method	Dropped off	Field QC Sample Number:	N/A

Remarks:

Signature: Brad Mo

DTG Debris to Green Recycling

Groundwater Sampling Field Data Sheet

Well #:**MW-4S**

Project Number:	553-8472-009	Date:	9/10/25
Project Name:	Yakima LPL	Company Name:	PMX
Project Address:	Rocky Top	Sampled By:	Chris Bourgeois

Casing Diameter: 2" _ 4" _ 6" _____ Other _____

Initial Depth to Water (feet below TOC):	41.15	Purge Rate Measurement Method:	YSI Probe
Top of Screen (feet bgs):	49.5	Date Purged:	9/10/25
Bottom of Screen (feet bgs)	69.5	Purge Time (from/to):	1155 - 1210
Reference Point (surveyor's notch, etc.):		Time Sampled:	1215

TIME (2400 hr)	DEPTH TO WATER (ft)	pH (units)	Ec (µmhos/cm 25°C)	TEMP °C	Redox (mv)	Dissolved Oxygen mg/L	TURBIDITY (visual)	PUMP SETTING	
Initial									
1155	41.15	8.18	1121	20.0	-5.2	8.01	3.56	60 PSI	10/5
1200	41.31	8.15	1119	20.0	-6.4	8.04	3.56	60 PSI	30/20
1205		8.09	1124	19.7	-5.4	8.07	3.42	80 PSI	30/20
1210	41.39	8.12	1131	19.4	-5.2	8.11	3.12		
1215									
1220									
1225									
1230									
Stabilization Criteria		±0.1	3%	3%	±10 mv	10%, or 3 <0.5	10%, or 3<5.0		

Purge Equipment:	YSI Probe	Flow Rate:	410 mL/min
Laboratory:	Analtek / onsite	Date Sent to Lab:	9/10 / 9/11
Shipment Method	dropped off	Field QC Sample Number:	MW-135

Remarks:

Signature: Brad Hess

Debris to Green Recycling

Groundwater Sampling Field Data Sheet

Well #:**MW-5S**

Project Number:		**Date:**	9/9/25
Project Name:	Yakima LPL	**Company Name:**	PMX
Project Address:	Rocky Top	**Sampled By:**	Chris Bourgeois

Casing Diameter: 2" _ 4" _ 6" _____ Other _____

Initial Depth to Water (feet below TOC):	219.50	**Purge Rate Measurement Method:**	~~9~~ YSI Probe
Top of Screen (feet bgs):	222	**Date Purged:**	9/9/25
Bottom of Screen (feet bgs)	243	**Purge Time (from/to):**	1150 - 1220
Reference Point (surveyor's notch, etc.):		**Time Sampled:**	1225

TIME (2400 hr)	DEPTH TO WATER (ft)	pH (units)	Ec (µmhos/cm 25°C)	TEMP °C	Redox (mv)	Dissolved Oxygen mg/L	TURBIDITY (visual)	PUMP SETTING	
Initial									
1150	29.50	7.33	710.2	16.9	197.9	9.03		150PSI	40/20
1155		7.33	710.2	17.1	160.5	3.65			
1200		7.50	710.2	18.4	77.9	1.98	2.61		
1205		7.60	710.2	17.5	27.7	1.23	1.69		
1210		7.67	710.1	17.6	3.6	0.97	1.41		
1215		7.67	710.0	18.9	-0.5	0.96	1.54		
1220		7.72	709.9	17.8	8.5	1.18	1.61		
1225									
1230									
Stabilization Criteria		± 0.1	3%	3%	± 10 mv	10%, or 3 <0.5	10%, or 3<5.0		

Purge Equipment:	YSI Probe	**Flow Rate:**	330 mL/min
Laboratory:	Analytic / Onsite	**Date Sent to Lab:**	9/9 / 9/11
Shipment Method	dropped off	**Field QC Sample Number:**	N/A

Remarks:

Signature: _____

Debris to Green Recycling

Groundwater Sampling Field Data Sheet

Well #: **MW-6S**

Project Number:	553-8472-009	Date:	9/10/25
Project Name:	Yakima LPL	Company Name:	PMX
Project Address:	Rocky Top	Sampled By:	Chris Bourgeois

Casing Diameter: 2" _ 4" _ 6" _____ Other _____

Initial Depth to Water (feet below TOC):	96.66	Purge Rate Measurement Method:	YSI Probe
Top of Screen (feet bgs):	110	Date Purged:	9/10/25
Bottom of Screen (feet bgs)	130	Purge Time (from/to):	1305 - 1325
Reference Point (surveyor's notch, etc.):		Time Sampled:	1330

TIME (2400 hr)	DEPTH TO WATER (ft)	pH (units)	Ec (µmhos/cm 25°C)	TEMP °C	Redox (mv)	Dissolved Oxygen mg/L	TURBIDITY (visual)	PUMP SETTING	
Initial	_____								
1305	96.66	9.60	627	13.3	-21	2.25	0.62	110 PSI	40/20
1310	_____	9.59	658	13.3	-27.2	4.26	0.48	"	
1315	_____	9.33	651	13.3	-28.6	4.30	0.19	"	
1320	_____	9.29	633	13.4	-31.4	4.15	0.41	"	
1325	_____	9.27	617	14.1	-32.4	3.97	0.33	"	
1330	_____								
1335	_____								
1340	_____								
Stabilization Criteria		± 0.1	3%	3%	± 10 mv	10%, or 3 <0.5	10%, or 3<5.0		

Purge Equipment:	YSI Probe	Flow Rate:	425 mL/min
Laboratory:	Anatek / Onsite	Date Sent to Lab:	9/10 / 9/11
Shipment Method	dropped off	Field QC Sample Number:	N/A

Remarks: DUP MW-13S- _____ collected here at:

Signature: _____

DTG Debris to Green Recycling

Groundwater Sampling Field Data Sheet

Well #:**MW-11S**

Project Number:	533-8472-009	Date:	9/10/25
Project Name:	Yakima LPL	Company Name:	PMX
Project Address:	Rocky Top	Sampled By:	BH/WS

Casing Diameter: 2" _ 4" _ 6" _____ Other _____

Initial Depth to Water (feet):	110.10	Purge Rate Measurement Method:	YSI Probe
Depth of Well (feet):	239 feet	Date Purged:	9/10/25
Top of Screen (feet)	219 feet	Purge Time (from/to):	1100-1125
Reference Point (surveyor's notch, etc.):		Time Sampled:	1130

TIME (2400 hr)	DEPTH TO WATER (ft)	pH (units)	Ec (µmhos/cm 25°C)	TEMP °C	Redox (mv)	Dissolved Oxygen mg/L	TURBIDITY (visual)	PUMP SETTING	
Initial									
1100	~~110.10~~								
1105	110.10	10.06	268	15.4	-0.2	4.3	1.8	150PSI	30/20
1110		9.36	272	14.5	-8.5	1.66	9.69		
1115		9.36	271	14.5	-11.8	0.86	5.91		
1120		9.37	272	14.5	-15.2	0.61	4.80		
1125		9.37	271	14.4	-17	0.44	4.91		
1130									
1135									
Stabilization Criteria		± 0.1	3%	3%	± 10 mv	10%, or 3 <0.5	10%, or 3<5.0		

Purge Equipment:	YSI Probe	Flow Rate:	410 mL/min
Laboratory:	Anatek/OnSite	Date Sent to Lab:	9/10 / 9/11
Shipment Method	dropped off	Field QC Sample Number:	N/A

Remarks:

Signature: Brad Hito

DTG Debris to Green Recycling

Groundwater Sampling Field Data Sheet

Well #: **MW-7D**

Project Number:	353-8472-009	Date:	9/9/25
Project Name:	Yakima LPL	Company Name:	PMX
Project Address:	Rocky Top	Sampled By:	~~Chris Bourgeois~~ BH/WS

Casing Diameter: 2" _ 4" _ 6" _____ Other _____

Initial Depth to Water (feet below TOC):	448.02	Purge Rate Measurement Method:	YSI Probe
Top of Screen (feet bgs):	475	Date Purged:	9/9/25
Bottom of Screen (feet bgs)	495	Purge Time (from/to):	1345 - 1425
Reference Point (surveyor's notch, etc.):		Time Sampled:	1435

TIME (2400 hr)	DEPTH TO WATER (ft)	pH (units)	Ec (µmhos/cm 25°C)	TEMP °C	Redox (mv)	Dissolved Oxygen mg/L	TURBIDITY (visual)	PUMP SETTING
Initial								
1345	448.02	8.07	709.7	19.2	125.6	9.03	0.41	250PSI 40/35
1350		7.72	709.8	18.1	136.8	8.53	0.58	
1355		7.62	709.8	17.8	142.2	8.33	0.76	
1400		7.56	709.7	17.7	145.7	6.10	0.42	
1405		7.74	709.6	17.3	130.6	2.72	0.40	
1410		7.87	709.6	17.3	113.1	1.67	0.38	
1415		7.89	709.5	17.2	106	1.45	0.38	
1420	447.94	7.91	709.5	17.2	83	1.15	0.24	
1425		7.92	709.5	17.0	62.5	1.32	0.36	
Stabilization Criteria		± 0.1	3%	3%	± 10 mv	10%, or 3 <0.5	10%, or 3<5.0	

Purge Equipment:	YSI Probe	Flow Rate:	325 mL/min
Laboratory:	Analytic / Onsite	Date Sent to Lab:	9/9 / 9/11
Shipment Method	dropped off	Field QC Sample Number:	N/A

Remarks:

Signature:

DTG Debris to Green Recycling

Groundwater Sampling Field Data Sheet

Well #: **MW-8D**

Project Number:	553-8472-009	Date:	9/9/25
Project Name:	Yakima LPL	Company Name:	PMX
Project Address:	Rocky Top	Sampled By:	~~Chris Bourgeois~~ BH/WS

Casing Diameter: 2" _ 4" _ 6" _____ Other _____

Initial Depth to Water (feet below TOC):	301.89	Purge Rate Measurement Method:	~~YSI~~ YSI probe
Top of Screen (feet bgs):	375	Date Purged:	9/9/25
Bottom of Screen (feet bgs)	405	Purge Time (from/to):	1500 - 1535
Reference Point (surveyor's notch, etc.):		Time Sampled:	1540

TIME (2400 hr)	DEPTH TO WATER (ft)	pH (units)	Ec (µmhos/cm 25°C)	TEMP °C	Redox (mv)	Dissolved Oxygen mg/L	TURBIDITY (visual)	PUMP SETTING
Initial								
1500	301.89							
1505		8.08	710	18.7	148.9	5.65	0.61	230 PSI 30/30
1510		8.15	711	16.0	145.7	2.27	0.98	
1515	299.56	8.22	709.9	16.4	141.6	1.18	1.02	
1520		8.17	709.9	16.5	140.9	0.88	1.29	
1525		8.12	709.9	16.8	140.1	0.78		
1530		8.10	709.8	16.8	139.3	0.75	1.51	
1535								
1540								
Stabilization Criteria		±0.1	3%	3%	± 10 mv	10%, or 3 <0.5	10%, or 3<5.0	

Purge Equipment:	YSI probe	Flow Rate:	315mL/min
Laboratory:	Analytic / Onsite	Date Sent to Lab:	9/9 / 9/11
Shipment Method	dropped off	Field QC Sample Number:	N/A

Remarks:

Signature:

DTG Debris to Green Recycling

Groundwater Sampling Field Data Sheet

Well #: **MW-9D**

Project Number:	553-8472-009	Date:	9/10/25
Project Name:	Yakima LPL	Company Name:	PMX
Project Address:	Rocky Top	Sampled By:	~~Chris Bourgeois~~ BH, WS

Casing Diameter: 2" _ 4" _ 6" _____ Other _____

Initial Depth to Water (feet below TOC):	434.62	Purge Rate Measurement Method:	YSI Probe
Top of Screen (feet bgs):	420	Date Purged:	9/10/25
Bottom of Screen (feet bgs)	440	Purge Time (from/to):	0845-0855
Reference Point (surveyor's notch, etc.):		Time Sampled:	0900

TIME (2400 hr)	DEPTH TO WATER (ft)	pH (units)	Ec (µmhos/cm 25°C)	TEMP °C	Redox (mv)	Dissolved Oxygen mg/L	TURBIDITY (visual)	PUMP SETTING	
Initial	434.62								
0845	434.60	9.08	412.8	17.0	-20.7	4.55	0.61	240 RPM	60/40
0850	434.67	9.07	485.6	15.9	-28.6	4.56	0.61	"	
0855	434.70	9.01	486.6	15.5	-30.8	4.95	0.44	"	
Stabilization Criteria		±0.1	3%	3%	±10 mv	10%, or 3 <0.5	10%, or 3<5.0		

Purge Equipment:	YSI Probe	Flow Rate:	~300 mL/min
Laboratory:	Anatek/Onsite	Date Sent to Lab:	9/10/9/11
Shipment Method	dropped off	Field QC Sample Number:	N/A

Remarks:

Signature: Waverly S.

Debris to Green Recycling

Groundwater Sampling Field Data Sheet

Well #: **MW-10D**

Project Number:	553-8472-004	Date:	9/10/25
Project Name:	Yakima LPL	Company Name:	PMX
Project Address:	Rocky Top	Sampled By:	~~Chris Bourgeois~~ BH, WS

Casing Diameter: 2" _ 4" _ 6" _____ Other _____

Initial Depth to Water (feet below TOC):	80.41	Purge Rate Measurement Method:	YSI probe
Top of Screen (feet bgs):	147	Date Purged:	9/10/25
Bottom of Screen (feet bgs)	167	Purge Time (from/to):	1505 - 1525
Reference Point (surveyor's notch, etc.):		Time Sampled:	1525

TIME (2400 hr)	DEPTH TO WATER (ft)	pH (units)	Ec (µmhos/cm 25°C)	TEMP °C	Redox (mv)	Dissolved Oxygen mg/L	TURBIDITY (visual)	PUMP SETTING
Initial								
1505	80.41	8.52	249	19.5	-14.5	8.56	0.38	95 PSI 20/10
1510		8.53	245	18.1	-20.1	8.18	0.26	
1515		8.34	245	15.4	-24	3.25	1.17	
1520		7.97	245	18.6	-24	3.95	1.03	
1525		8.07	244.5	18.4	-24	4.04	0.41	
1530								
1535								
1540								
Stabilization Criteria		± 0.1	3%	3%	± 10 mv	10%, or 3 <0.5	10%, or 2<5.0	

Purge Equipment:	YSI Probe	Flow Rate:	475 mL/min
Laboratory:	Anatek / Onsite	Date Sent to Lab:	9/10 / 9/11
Shipment Method	dropped off	Field QC Sample Number:	N/A

Remarks:

Signature:

Attachment B

Laboratory Analytical Reports

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

September 22, 2025

Laura Lee
Parametrix, Inc.
719 2nd Avenue, Suite 200
Seattle, WA 98104

Re: Analytical Data for Project 553-8472-009
Laboratory Reference No. 2509-119b

Dear Laura:

Enclosed are the analytical results and associated quality control data for samples submitted on September 11, 2025.

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

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

Sincerely,

David Baumeister
Project Manager

Enclosures

Date of Report: September 22, 2025
Samples Submitted: September 11, 2025
Laboratory Reference: 2509-119b
Project: 553-8472-009

Case Narrative

Samples were collected on September 10, 2025 and received by the laboratory on September 11, 2025. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below. However the soil results for the QA/QC samples are reported on a wet-weight basis.

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

Date of Report: September 22, 2025
Samples Submitted: September 11, 2025
Laboratory Reference: 2509-119b
Project: 553-8472-009

TOTAL METALS
EPA 200.8/7470A

Matrix: Water
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-3S**					
Laboratory ID:	09-119-03					
Antimony	**ND**	0.0056	EPA 200.8	9-18-25	9-19-25	
Arsenic	**ND**	0.0033	EPA 200.8	9-18-25	9-19-25	
Beryllium	**ND**	0.011	EPA 200.8	9-18-25	9-19-25	
Cadmium	**ND**	0.0044	EPA 200.8	9-18-25	9-19-25	
Chromium	**ND**	0.011	EPA 200.8	9-18-25	9-19-25	
Copper	**ND**	0.011	EPA 200.8	9-18-25	9-19-25	
Lead	**ND**	0.0011	EPA 200.8	9-18-25	9-19-25	
Mercury	**ND**	0.00050	EPA 7470A	9-22-25	9-22-25	
Nickel	**ND**	0.022	EPA 200.8	9-18-25	9-19-25	
Selenium	**ND**	0.0056	EPA 200.8	9-18-25	9-19-25	
Silver	**ND**	0.011	EPA 200.8	9-18-25	9-19-25	
Thallium	**ND**	0.0056	EPA 200.8	9-18-25	9-19-25	
Zinc	**ND**	0.028	EPA 200.8	9-18-25	9-19-25	
Client ID:	**MW-11S**					
Laboratory ID:	09-119-07					
Antimony	**ND**	0.0056	EPA 200.8	9-18-25	9-19-25	
Arsenic	**ND**	0.0033	EPA 200.8	9-18-25	9-19-25	
Beryllium	**ND**	0.011	EPA 200.8	9-18-25	9-19-25	
Cadmium	**ND**	0.0044	EPA 200.8	9-18-25	9-19-25	
Chromium	**ND**	0.011	EPA 200.8	9-18-25	9-19-25	
Copper	**ND**	0.011	EPA 200.8	9-18-25	9-19-25	
Lead	**ND**	0.0011	EPA 200.8	9-18-25	9-19-25	
Mercury	**ND**	0.00050	EPA 7470A	9-22-25	9-22-25	
Nickel	**ND**	0.022	EPA 200.8	9-18-25	9-19-25	
Selenium	**ND**	0.0056	EPA 200.8	9-18-25	9-19-25	
Silver	**ND**	0.011	EPA 200.8	9-18-25	9-19-25	
Thallium	**ND**	0.0056	EPA 200.8	9-18-25	9-19-25	
Zinc	**ND**	0.028	EPA 200.8	9-18-25	9-19-25	

Date of Report: September 22, 2025
Samples Submitted: September 11, 2025
Laboratory Reference: 2509-119b
Project: 553-8472-009

TOTAL METALS
EPA 200.8/7470A

Matrix: Water
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-13S**					
Laboratory ID:	09-119-08					
Antimony	**ND**	0.0056	EPA 200.8	9-18-25	9-19-25	
Arsenic	**ND**	0.0033	EPA 200.8	9-18-25	9-19-25	
Beryllium	**ND**	0.011	EPA 200.8	9-18-25	9-19-25	
Cadmium	**ND**	0.0044	EPA 200.8	9-18-25	9-19-25	
Chromium	**ND**	0.011	EPA 200.8	9-18-25	9-19-25	
Copper	**ND**	0.011	EPA 200.8	9-18-25	9-19-25	
Lead	**ND**	0.0011	EPA 200.8	9-18-25	9-19-25	
Mercury	**ND**	0.00050	EPA 7470A	9-22-25	9-22-25	
Nickel	**ND**	0.022	EPA 200.8	9-18-25	9-19-25	
Selenium	**ND**	0.0056	EPA 200.8	9-18-25	9-19-25	
Silver	**ND**	0.011	EPA 200.8	9-18-25	9-19-25	
Thallium	**ND**	0.0056	EPA 200.8	9-18-25	9-19-25	
Zinc	**ND**	0.028	EPA 200.8	9-18-25	9-19-25	

Date of Report: September 22, 2025
Samples Submitted: September 11, 2025
Laboratory Reference: 2509-119b
Project: 553-8472-009

TOTAL METALS
EPA 200.8/7470A
QUALITY CONTROL

Matrix: Water
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0918WM2					
Antimony	**ND**	0.0056	EPA 200.8	9-18-25	9-19-25	
Arsenic	**ND**	0.0033	EPA 200.8	9-18-25	9-19-25	
Beryllium	**ND**	0.011	EPA 200.8	9-18-25	9-19-25	
Cadmium	**ND**	0.0044	EPA 200.8	9-18-25	9-19-25	
Chromium	**ND**	0.011	EPA 200.8	9-18-25	9-19-25	
Copper	**ND**	0.011	EPA 200.8	9-18-25	9-19-25	
Lead	**ND**	0.0011	EPA 200.8	9-18-25	9-19-25	
Nickel	**ND**	0.022	EPA 200.8	9-18-25	9-19-25	
Selenium	**ND**	0.0056	EPA 200.8	9-18-25	9-19-25	
Silver	**ND**	0.011	EPA 200.8	9-18-25	9-19-25	
Thallium	**ND**	0.0056	EPA 200.8	9-18-25	9-19-25	
Zinc	**ND**	0.028	EPA 200.8	9-18-25	9-19-25	
Laboratory ID:	MB0922W1					
Mercury	**ND**	0.00050	EPA 7470A	9-22-25	9-22-25	

Date of Report: September 22, 2025
Samples Submitted: September 11, 2025
Laboratory Reference: 2509-119b
Project: 553-8472-009

TOTAL METALS
EPA 200.8/7470A
QUALITY CONTROL

Matrix: Water
Units: mg/L (ppm)

Analyte	Result		Spike Level		Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE										
Laboratory ID:	09-119-03									
	ORIG	DUP								
Antimony	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Arsenic	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Beryllium	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Cadmium	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Chromium	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Copper	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Lead	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Nickel	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Selenium	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Silver	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Thallium	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Zinc	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Laboratory ID:	09-119-03									
Mercury	**ND**	**ND**	NA	NA		NA	NA	NA	20	
MATRIX SPIKES										
Laboratory ID:	09-119-03									
	MS	MSD	MS	MSD		MS	MSD			
Antimony	**0.118**	**0.121**	0.111	0.111	ND	**106**	**109**	75-125	3	20
Arsenic	**0.112**	**0.121**	0.111	0.111	ND	**101**	**109**	75-125	7	20
Beryllium	**0.121**	**0.128**	0.111	0.111	ND	**109**	**115**	75-125	5	20
Cadmium	**0.111**	**0.117**	0.111	0.111	ND	**100**	**105**	75-125	5	20
Chromium	**0.110**	**0.114**	0.111	0.111	ND	**99**	**103**	75-125	4	20
Copper	**0.102**	**0.107**	0.111	0.111	ND	**92**	**96**	75-125	5	20
Lead	**0.108**	**0.111**	0.111	0.111	ND	**97**	**100**	75-125	3	20
Nickel	**0.103**	**0.108**	0.111	0.111	ND	**93**	**97**	75-125	4	20
Selenium	**0.117**	**0.133**	0.111	0.111	ND	**106**	**120**	75-125	13	20
Silver	**0.101**	**0.105**	0.111	0.111	ND	**91**	**95**	75-125	4	20
Thallium	**0.108**	**0.113**	0.111	0.111	ND	**98**	**102**	75-125	4	20
Zinc	**0.113**	**0.119**	0.111	0.111	ND	**102**	**107**	75-125	5	20
Laboratory ID:	09-119-03									
Mercury	**0.0116**	**0.0117**	0.0125	0.0125	ND	**93**	**93**	75-125	0	20

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

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

M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1 - Sample extract treated with a sulfuric acid/silica gel cleanup procedure.

X2 - Sample extract treated with a silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in methods 8260 & 8270, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Y1 - Negative effects of the matrix from this sample on the instrument caused values for this analyte in the bracketing continuing calibration verification standard (CCVs) to be outside of 20% acceptance criteria. Because of this, quantitation limits and sample concentrations should be considered estimates.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

Chain of Custody

OnSite Environmental Inc.
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: Parametrix
Project Number: 553-8472-009
Project Name: Rocky Top Environmental LPL
Project Manager: Laura Lee, Mike Brady
Sampled by:

Turnaround Request (in working days)

(Check One)

- ☐ Same Day ☐ 1 Day
- ☐ 2 Days ☐ 3 Days
- ☒ Standard (7 Days) (TPH analysis 5 Days)
- ☐ _____ (other)

Laboratory Number: 09-119

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	Alkalinity, Bicarbonate, TDS	Chloride, Sulfate	Ammonia	TOC	Dissolved Metals (Fe, Mn, Mg, Ca, K, Na)	Total Metals (Fe, Mn, Mg)	PP Metals-Total	% Moisture
1	MW-1S	9/10/25	1440	Water	6	X	X	X	X	X	X		
2	MW-2S	9/9/25	1635	Water	6	X	X	X	X	X	X		
3	MW-3S	9/10/25	1015	Water	12/8	X	X	X	X	X	X	X	
4	MW-4S	9/10/25	1215	Water	6	X	X	X	X	X	X		
5	MW-5S	9/9/25	1225	Water	6	X	X	X	X	X	X		
6	MW-6S	9/10/25	1330	Water	6	X	X	X	X	X	X		
7	MW-11S	9/10/25	1130	Water	6	X	X	X	X	X	X	X	
8	MW-13S	9/10/25	0800	Water	6	X	X	X	X	X	X	X	
9	MW-7D	9/9/25	1435	Water	6	X	X	X	X	X	X		
10	MW-8D	9/9/25	1540	Water	6	X	X	X	X	X	X		

	Signature	Company	Date	Time
Relinquished	[signature]	Parametrix	9/11/25	11:05
Received	Gordan Prell	OSE	9/11/25	1105
Relinquished				
Received				
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

Additional MS/MSD volumes taken @ MW-3S for Alk/Bicarb, TDS, Chloride, Sulfate

Chromatograms with final report ☐

Chain of Custody

OnSite Environmental Inc.
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Laboratory Number: 09-119

Company: Parametrix
Project Number: 553-8472-009
Project Name: Rocky Top Environmental LPL
Project Manager: Laura Lee, Mike Brady
Sampled by:

Turnaround Request (in working days)

(Check One)

- ☐ Same Day
- ☐ 1 Day
- ☐ 2 Days
- ☐ 3 Days
- ☒ Standard (7 Days) (TPH analysis 5 Days)
- ☐ _____ (other)

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	Alkalinity, Bicarbonate, TDS	Chloride, Sulfate	Ammonia	TOC	Dissolved Metals (Fe, Mn, Mg, Ca, K, Na)	Total Metals (Fe, Mn, Mg)	% Moisture
11	MW-9D	9/10/25	0900	Water	6	X	X	X	X	X	X	
12	MW-10D	9/10/25	1525	Water	6	X	X	X	X	X	X	
						X						

	Signature	Company	Date	Time
Relinquished	[signature]	Parametrix	9/11/25	11:05
Received				
Relinquished				
Received				
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

Additional MS/MSD volumes taken @ MW-3S

Chromatograms with final report ☐

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

October 23, 2025

Laura Lee
Parametrix, Inc.
719 2nd Avenue, Suite 200
Seattle, WA 98104

Re: Analytical Data for Project 553-8472-009
Laboratory Reference No. 2509-119C

Dear Laura:

Enclosed are the analytical results and associated quality control data for samples submitted on September 11, 2025.

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

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

Sincerely,

David Baumeister
Project Manager

Enclosures

Date of Report: October 23, 2025
Samples Submitted: September 11, 2025
Laboratory Reference: 2509-119C
Project: 553-8472-009

Case Narrative

Samples were collected on September 10, 2025 and received by the laboratory on September 11, 2025. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below. However the soil results for the QA/QC samples are reported on a wet-weight basis.

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

Total Metals EPA 200.8/7470A Analysis

The client requested the analysis of sample MW-1S after the holding time for Mercury had expired.

Any other QA/QC issues associated with this extraction and analysis will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.

Date of Report: October 23, 2025
Samples Submitted: September 11, 2025
Laboratory Reference: 2509-119C
Project: 553-8472-009

TOTAL METALS
EPA 200.8/7470A

Matrix: Water
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-1S**					
Laboratory ID:	09-119-01					
Antimony	**ND**	0.0056	EPA 200.8	10-22-25	10-22-25	
Arsenic	**ND**	0.0033	EPA 200.8	10-22-25	10-22-25	
Beryllium	**ND**	0.011	EPA 200.8	10-22-25	10-22-25	
Cadmium	**ND**	0.0044	EPA 200.8	10-22-25	10-22-25	
Chromium	**ND**	0.011	EPA 200.8	10-22-25	10-22-25	
Copper	**ND**	0.011	EPA 200.8	10-22-25	10-22-25	
Lead	**ND**	0.0011	EPA 200.8	10-22-25	10-22-25	
Mercury	**ND**	0.00050	EPA 7470A	10-23-25	10-23-25	
Nickel	**ND**	0.022	EPA 200.8	10-22-25	10-22-25	
Selenium	**ND**	0.0056	EPA 200.8	10-22-25	10-22-25	
Silver	**ND**	0.011	EPA 200.8	10-22-25	10-22-25	
Thallium	**ND**	0.0056	EPA 200.8	10-22-25	10-22-25	
Zinc	**ND**	0.028	EPA 200.8	10-22-25	10-22-25	

Date of Report: October 23, 2025
Samples Submitted: September 11, 2025
Laboratory Reference: 2509-119C
Project: 553-8472-009

TOTAL METALS
EPA 200.8/7470A
QUALITY CONTROL

Matrix: Water
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1022WM2					
Antimony	**ND**	0.0056	EPA 200.8	10-22-25	10-22-25	
Arsenic	**ND**	0.0033	EPA 200.8	10-22-25	10-22-25	
Beryllium	**ND**	0.011	EPA 200.8	10-22-25	10-22-25	
Cadmium	**ND**	0.0044	EPA 200.8	10-22-25	10-22-25	
Chromium	**ND**	0.011	EPA 200.8	10-22-25	10-22-25	
Copper	**ND**	0.011	EPA 200.8	10-22-25	10-22-25	
Lead	**ND**	0.0011	EPA 200.8	10-22-25	10-22-25	
Nickel	**ND**	0.022	EPA 200.8	10-22-25	10-22-25	
Selenium	**ND**	0.0056	EPA 200.8	10-22-25	10-22-25	
Silver	**ND**	0.011	EPA 200.8	10-22-25	10-22-25	
Thallium	**ND**	0.0056	EPA 200.8	10-22-25	10-22-25	
Zinc	**ND**	0.028	EPA 200.8	10-22-25	10-22-25	
Laboratory ID:	MB1023W1					
Mercury	**ND**	0.00050	EPA 7470A	10-23-25	10-23-25	

Date of Report: October 23, 2025
Samples Submitted: September 11, 2025
Laboratory Reference: 2509-119C
Project: 553-8472-009

TOTAL METALS
EPA 200.8/7470A
QUALITY CONTROL

Matrix: Water
Units: mg/L (ppm)

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	09-119-01										
	ORIG	DUP									
Antimony	**ND**	**ND**	NA	NA		NA		NA	NA	20	
Arsenic	**ND**	**ND**	NA	NA		NA		NA	NA	20	
Beryllium	**ND**	**ND**	NA	NA		NA		NA	NA	20	
Cadmium	**ND**	**ND**	NA	NA		NA		NA	NA	20	
Chromium	**ND**	**ND**	NA	NA		NA		NA	NA	20	
Copper	**ND**	**ND**	NA	NA		NA		NA	NA	20	
Lead	**ND**	**ND**	NA	NA		NA		NA	NA	20	
Nickel	**ND**	**ND**	NA	NA		NA		NA	NA	20	
Selenium	**ND**	**ND**	NA	NA		NA		NA	NA	20	
Silver	**ND**	**ND**	NA	NA		NA		NA	NA	20	
Thallium	**ND**	**ND**	NA	NA		NA		NA	NA	20	
Zinc	**ND**	**ND**	NA	NA		NA		NA	NA	20	
Laboratory ID:	09-209-09										
Mercury	**ND**	**ND**	NA	NA		NA		NA	NA	20	
MATRIX SPIKES											
Laboratory ID:	09-119-01										
	MS	MSD	MS	MSD		MS	MSD				
Antimony	**0.109**	**0.115**	0.111	0.111	ND	**99**	**104**	75-125	5	20	
Arsenic	**0.110**	**0.114**	0.111	0.111	ND	**99**	**103**	75-125	3	20	
Beryllium	**0.109**	**0.113**	0.111	0.111	ND	**98**	**102**	75-125	4	20	
Cadmium	**0.109**	**0.114**	0.111	0.111	ND	**98**	**103**	75-125	4	20	
Chromium	**0.109**	**0.112**	0.111	0.111	ND	**98**	**101**	75-125	3	20	
Copper	**0.108**	**0.111**	0.111	0.111	ND	**97**	**100**	75-125	3	20	
Lead	**0.109**	**0.111**	0.111	0.111	ND	**98**	**100**	75-125	2	20	
Nickel	**0.107**	**0.111**	0.111	0.111	ND	**96**	**100**	75-125	3	20	
Selenium	**0.116**	**0.118**	0.111	0.111	ND	**104**	**107**	75-125	3	20	
Silver	**0.107**	**0.110**	0.111	0.111	ND	**96**	**99**	75-125	3	20	
Thallium	**0.110**	**0.113**	0.111	0.111	ND	**99**	**102**	75-125	3	20	
Zinc	**0.113**	**0.118**	0.111	0.111	ND	**102**	**106**	75-125	4	20	
Laboratory ID:	10-209-09										
Mercury	**0.0124**	**0.0123**	0.0125	0.0125	ND	**99**	**98**	75-125	1	20	

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

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

M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1 - Sample extract treated with a sulfuric acid/silica gel cleanup procedure.

X2 - Sample extract treated with a silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in methods 8260 & 8270, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Y1 - Negative effects of the matrix from this sample on the instrument caused values for this analyte in the bracketing continuing calibration verification standard (CCVs) to be outside of 20% acceptance criteria. Because of this, quantitation limits and sample concentrations should be considered estimates.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

Chain of Custody

OnSite Environmental Inc.
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: Parametrix
Project Number: 553-8472-009
Project Name: Rocky Top Environmental LPL
Project Manager: Laura Lee, Mike Brady
Sampled by:

Turnaround Request (in working days)

(Check One)

- ☐ Same Day
- ☐ 1 Day
- ☐ 2 Days
- ☐ 3 Days
- ☒ Standard (7 Days) (TPH analysis 5 Days)
- ☐ _____ (other)

Laboratory Number: 09-119

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	Alkalinity, Bicarbonate, TDS	Chloride, Sulfate	Ammonia	TOC	Dissolved Metals (Fe, Mn, Mg, Ca, K, Na)	Total Metals (Fe, Mn, Mg)	PP Metals-Total	% Moisture
1	MW-1S	9/10/25	1440	Water	6	X	X	X	X	X	X	(X)	
2	MW-2S	9/9/25	1635	Water	6	X	X	X	X	X	X		
3	MW-3S	9/10/25	1015	Water	12/8	X	X	X	X	X	X	X	
4	MW-4S	9/10/25	1215	Water	6	X	X	X	X	X	X		
5	MW-5S	9/9/25	1225	Water	6	X	X	X	X	X	X		
6	MW-6S	9/10/25	1330	Water	6	X	X	X	X	X	X		
7	MW-11S	9/10/25	1130	Water	6	X	X	X	X	X	X	X	
8	MW-13S	9/10/25	0800	Water	6	X	X	X	X	X	X	X	
9	MW-7D	9/9/25	1435	Water	6	X	X	X	X	X	X		
10	MW-8D	9/9/25	1540	Water	6	X	X	X	X	X	X		

	Signature	Company	Date	Time
Relinquished	[signature]	Parametrix	9/11/25	11:05
Received	Jordan Prell	OSE	9/11/25	1105
Relinquished				
Received				
Relinquished				
Received				

Reviewed/Date

Reviewed/Date

Comments/Special Instructions

Additional MS/MSD volumes taken @ MW-3S for Alk/Bicarb, TDS, Chloride, Sulfate

(X) Added 10/21/25. DB

Chromatograms with final report ☐

Chain of Custody

OnSite Environmental Inc.
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: Parametrix
Project Number: 553-8472-009
Project Name: Rocky Top Environmental LPL
Project Manager: Laura Lee, Mike Brady
Sampled by:

Turnaround Request (in working days)

(Check One)

- ☐ Same Day ☐ 1 Day
- ☐ 2 Days ☐ 3 Days
- ☒ Standard (7 Days) (TPH analysis 5 Days)
- ☐ _____ (other)

Laboratory Number: 09-119

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	Alkalinity, Bicarbonate, TDS	Chloride, Sulfate	Ammonia	TOC	Dissolved Metals (Fe, Mn, Mg, Ca, K, Na)	Total Metals (Fe, Mn, Mg)															% Moisture
11	MW-9D	9/10/25	0900	Water	6	X	X	X	X	X	X															
12	MW-10D	9/10/25	1525	Water	6	X	X	X	X	X	X															
						X																				

	Signature	Company	Date	Time
Relinquished	[signature]	Parametrix	9/11/25	11:05
Received				
Relinquished				
Received				
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

Additional MS/MSD volumes taken @ MW-3S

Chromatograms with final report ☐

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

October 1, 2025

Laura Lee
Parametrix, Inc.
719 2nd Avenue, Suite 200
Seattle, WA 98104

Re: Analytical Data for Project 553-8472-010
Laboratory Reference No. 2509-121

Dear Laura:

Enclosed are the analytical results and associated quality control data for samples submitted on September 11, 2025.

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

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

Sincerely,

David Baumeister
Project Manager

Enclosures

September 30, 2025 Service Request No:K2509142

David Baumeister
Onsite Environmental Incorporated
14648 Northeast 95th Street
Redmond, WA 98052

Laboratory Results for: PFAS

Dear David,

Enclosed are the results of the sample(s) submitted to our laboratory September 16, 2025
For your reference, these analyses have been assigned our service request number **K2509142.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
PHONE +1 360 577 7222 | FAX +1 360 636 1068
ALS Group USA, Corp.
dba ALS Environmental

Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Onsite Environmental Incorporated
Project: PFAS
Sample Matrix: Water

Service Request: K2509142
Date Received: 09/16/2025

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Eight water samples were received for analysis at ALS Environmental on 09/16/2025. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

General Chemistry:

No significant anomalies were noted with this analysis.

Organic LC:

No significant anomalies were noted with this analysis.

Approved by _____ Date 09/30/2025

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: MW-3S	Lab ID: K2509142-003					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Perfluorobutane sulfonic acid (PFBS)	11		0.84	1.8	ng/L	Draft EPA Method 1633
Perfluorobutanoic acid (PFBA)	87		1.3	2.0	ng/L	Draft EPA Method 1633
Perfluoroheptanoic acid (PFHpA)	27		0.50	1.8	ng/L	Draft EPA Method 1633
Perfluorohexane sulfonic acid (PFHxS)	6.5		0.53	1.8	ng/L	Draft EPA Method 1633
Perfluorohexanoic acid (PFHxA)	54		0.50	1.8	ng/L	Draft EPA Method 1633
Perfluorononanoic acid (PFNA)	1.1	J	0.50	1.8	ng/L	Draft EPA Method 1633
Perfluorooctane sulfonic acid (PFOS)	3.8		0.50	1.8	ng/L	Draft EPA Method 1633
Perfluorooctanoic acid (PFOA)	35		0.50	1.8	ng/L	Draft EPA Method 1633
Perfluoropentane sulfonic acid (PFPeS)	2.8		0.50	1.8	ng/L	Draft EPA Method 1633
Perfluoropentanoic acid (PFPeA)	79		0.50	1.8	ng/L	Draft EPA Method 1633

CLIENT ID: MW-4S	Lab ID: K2509142-004					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Perfluorobutane sulfonic acid (PFBS)	5.6		0.87	2.1	ng/L	Draft EPA Method 1633
Perfluorobutanoic acid (PFBA)	39		1.4	2.1	ng/L	Draft EPA Method 1633
Perfluoroheptanoic acid (PFHpA)	14		0.53	2.1	ng/L	Draft EPA Method 1633
Perfluorohexane sulfonic acid (PFHxS)	0.84	J	0.56	2.1	ng/L	Draft EPA Method 1633
Perfluorohexanoic acid (PFHxA)	29		0.53	2.1	ng/L	Draft EPA Method 1633
Perfluorooctanoic acid (PFOA)	6.3		0.53	2.1	ng/L	Draft EPA Method 1633
Perfluoropentanoic acid (PFPeA)	42		0.53	2.1	ng/L	Draft EPA Method 1633

CLIENT ID: MW-6S	Lab ID: K2509142-006					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Perfluorobutane sulfonic acid (PFBS)	7.2		0.84	1.8	ng/L	Draft EPA Method 1633
Perfluorobutanoic acid (PFBA)	14		1.3	2.0	ng/L	Draft EPA Method 1633
Perfluoroheptanoic acid (PFHpA)	1.3	J	0.50	1.8	ng/L	Draft EPA Method 1633
Perfluorohexane sulfonic acid (PFHxS)	0.81	J	0.53	1.8	ng/L	Draft EPA Method 1633
Perfluorohexanoic acid (PFHxA)	11		0.50	1.8	ng/L	Draft EPA Method 1633
Perfluoropentane sulfonic acid (PFPeS)	1.2	J	0.50	1.8	ng/L	Draft EPA Method 1633

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: MW-6S	Lab ID: K2509142-006					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Perfluoropentanoic acid (PFPeA)	15		0.50	1.8	ng/L	Draft EPA Method 1633

CLIENT ID: MW-13S	Lab ID: K2509142-008					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Perfluorobutane sulfonic acid (PFBS)	5.4		0.84	1.8	ng/L	Draft EPA Method 1633
Perfluorobutanoic acid (PFBA)	39		1.3	2.0	ng/L	Draft EPA Method 1633
Perfluoroheptanoic acid (PFHpA)	14		0.50	1.8	ng/L	Draft EPA Method 1633
Perfluorohexane sulfonic acid (PFHxS)	0.71	J	0.53	1.8	ng/L	Draft EPA Method 1633
Perfluorohexanoic acid (PFHxA)	28		0.50	1.8	ng/L	Draft EPA Method 1633
Perfluorooctanoic acid (PFOA)	5.9		0.50	1.8	ng/L	Draft EPA Method 1633
Perfluoropentanoic acid (PFPeA)	41		0.50	1.8	ng/L	Draft EPA Method 1633

CLIENT ID: MW-5S	Lab ID: K2509142-005					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Perfluorobutanoic acid (PFBA)	4.9		1.3	2.0	ng/L	Draft EPA Method 1633
Perfluorohexanoic acid (PFHxA)	1.7	J	0.50	2.0	ng/L	Draft EPA Method 1633
Perfluorooctane sulfonamide (PFOSAm)	0.87	J	0.50	2.0	ng/L	Draft EPA Method 1633
Perfluoropentanoic acid (PFPeA)	3.0		0.50	2.0	ng/L	Draft EPA Method 1633

CLIENT ID: MW-1S	Lab ID: K2509142-001					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Perfluorohexanoic acid (PFHxA)	0.65	J	0.50	1.8	ng/L	Draft EPA Method 1633
Perfluorooctane sulfonamide (PFOSAm)	0.85	J	0.50	1.8	ng/L	Draft EPA Method 1633
Perfluorooctanoic acid (PFOA)	0.68	J	0.50	1.8	ng/L	Draft EPA Method 1633
Perfluoropentanoic acid (PFPeA)	0.79	J	0.50	1.8	ng/L	Draft EPA Method 1633

CLIENT ID: MW-2S	Lab ID: K2509142-002					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Perfluorooctane sulfonamide (PFOSAm)	0.83	J	0.50	1.9	ng/L	Draft EPA Method 1633

CLIENT ID: MW-11S	Lab ID: K2509142-007					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Perfluorooctane sulfonamide (PFOSAm)	0.54	J	0.50	1.9	ng/L	Draft EPA Method 1633

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: MW-11S	Lab ID: K2509142-007

Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Onsite Environmental Incorporated **Service Request:**K2509142
Project: PFAS/553-8572-010

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2509142-001	MW-1S	9/10/2025	1440
K2509142-002	MW-2S	9/9/2025	1635
K2509142-003	MW-3S	9/10/2025	1015
K2509142-004	MW-4S	9/10/2025	1215
K2509142-005	MW-5S	9/9/2025	1225
K2509142-006	MW-6S	9/10/2025	1330
K2509142-007	MW-11S	9/10/2025	1130
K2509142-008	MW-13S	9/10/2025	0800

OnSite Environmental Inc.

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

K2509142 5

Onsite Environmental Incorporated
PFAS

Laboratory Reference #: 09-121

Laboratory: ALS Environmental

Turnaround Request

Project Manager: David Baumeister

Attention: Mark Harris

1 Day 2 Day 3 Day

email: dbaumeister@onsite-env.com

1317 South 13th Avenue, Kelso, WA 98626

Standard

Project Number: 553-8572-010

Phone Number: (360) 577-7222

Other:

Project Name:

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	# of Cont.	Requested Analyses
	MW-1S	9/10/25	14:40	W	1	PFAS EPA 1633
	MW-2S	9/9/25	16:35	W	1	PFAS EPA 1633
	MW-3S	9/10/25	10:15	W	2	PFAS EPA 1633 - MS/MSD
	MW-4S	9/10/25	12:15	W	1	PFAS EPA 1633
	MW-5S	9/9/25	12:25	W	1	PFAS EPA 1633
	MW-6S	9/10/25	13:30	W	1	PFAS EPA 1633
	MW-11S	9/10/25	11:30	W	1	PFAS EPA 1633
	MW-13S	9/10/25	8:00	W	1	PFAS EPA 1633

Signature	Company	Date	Time	Comments/Special Instructions
Relinquished by:	UPS	9/15/25	1600	
Received by:				
Relinquished by:	UPS			
Received by:	ALS	9/16/25	0910	
Relinquished by:				
Received by:				

EIM

PLEASE RETURN BLUE ICE

PM MH

Cooler Receipt and Preservation Form

Client: OnSite Service Request K25 09142

Received: 9/16/25 Opened: 9/16/25 By: KM Unloaded: 9/16/25 By: KM

1. Samples were received via? *USPS* *Fed Ex* *(UPS)* *DHL* *PDX* *Courier* *Hand Delivered*
2. Samples were received in: (circle) *(Cooler)* *Box* *Envelope* *Other* ______ *NA*
3. Were custody seals on coolers? NA Y (N) If yes, how many and where? ______

   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID (NA)	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number NA	Filed
—	5.9	IR02				1Z684E1W0191491627	

4. Was a Temperature Blank present in cooler? NA Y (N) If yes, notate the temperature in the appropriate column below:

   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
5. Were samples received within the method specified temperature ranges? NA (Y) N

   If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. (NA) Y N

   If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*
6. Packing material: *Inserts* *(Baggies)* *(Bubble Wrap)* *(Gel Packs)* *Wet Ice* *Dry Ice* *Sleeves* ______
7. Were custody papers properly filled out (ink, signed, etc.)? NA (Y) N
8. Were samples received in good condition (unbroken) NA (Y) N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA (Y) N
10. Did all sample labels and tags agree with custody papers? NA (Y) N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA (Y) N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* (NA) Y N
13. Were VOA vials received without headspace? *Indicate in the table below.* (NA) Y N
14. Was C12/Res negative? (NA) Y N
15. Were samples received within method specified time limit? If not, notate the error below and notify the PM. (NA) Y N
16. Were 100mL sterile microbiology bottles filled exactly to the 100mL mark? (NA) Y N Underfilled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions: ______

Miscellaneous Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value over the calibration range.
J	The result is an estimated value between the MDL and the MRL.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water-	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client: Onsite Environmental Incorporated **Service Request:** K2509142
Project: PFAS/553-8572-010

Sample Name: MW-1S **Date Collected:** 09/10/25
Lab Code: K2509142-001 **Date Received:** 09/16/25
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
1633	ADAVISON	LILLIANSMITH
1633	ADAVISON	PESCORRIDO

Sample Name: MW-2S **Date Collected:** 09/9/25
Lab Code: K2509142-002 **Date Received:** 09/16/25
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
1633	ADAVISON	PSALYARDS
1633	ADAVISON	PESCORRIDO

Sample Name: MW-3S **Date Collected:** 09/10/25
Lab Code: K2509142-003 **Date Received:** 09/16/25
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
1633	ADAVISON	PSALYARDS
1633	ADAVISON	PESCORRIDO

Sample Name: MW-4S **Date Collected:** 09/10/25
Lab Code: K2509142-004 **Date Received:** 09/16/25
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
1633	ADAVISON	PESCORRIDO
1633	ADAVISON	PSALYARDS

Client: Onsite Environmental Incorporated **Service Request:** K2509142
Project: PFAS/553-8572-010

Sample Name: MW-5S **Date Collected:** 09/9/25
Lab Code: K2509142-005 **Date Received:** 09/16/25
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
1633	ADAVISON	PSALYARDS
1633	ADAVISON	PESCORRIDO

Sample Name: MW-6S **Date Collected:** 09/10/25
Lab Code: K2509142-006 **Date Received:** 09/16/25
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
1633	ADAVISON	PESCORRIDO
1633	ADAVISON	PSALYARDS

Sample Name: MW-11S **Date Collected:** 09/10/25
Lab Code: K2509142-007 **Date Received:** 09/16/25
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
1633	ADAVISON	PESCORRIDO
1633	ADAVISON	PSALYARDS

Sample Name: MW-13S **Date Collected:** 09/10/25
Lab Code: K2509142-008 **Date Received:** 09/16/25
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
1633	ADAVISON	PSALYARDS
1633	ADAVISON	PESCORRIDO

Sample Results

ALS Environmental—Kelso Laboratory
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Organic Compounds by HPLC/MS/MS

ALS Environmental—Kelso Laboratory
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Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Analytical Report

Client:	Onsite Environmental Incorporated	**Service Request:**	K2509142
Project:	PFAS/553-8572-010	**Date Collected:**	09/10/25 14:40
Sample Matrix:	Water	**Date Received:**	09/16/25 09:10
Sample Name:	MW-1S	**Units:**	ng/L
Lab Code:	K2509142-001	**Basis:**	NA

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Perfluoroalkyl Sulfonic Acids (PFSAs)								
Perfluorobutane sulfonic acid (PFBS)	ND U	1.8	0.89	0.84	1	09/26/25 10:35	9/23/25	
Perfluoropentane sulfonic acid (PFPeS)	ND U	1.8	0.94	0.50	1	09/26/25 10:35	9/23/25	
Perfluorohexane sulfonic acid (PFHxS)	ND U	1.8	0.91	0.53	1	09/26/25 10:35	9/23/25	
Perfluoroheptane sulfonic acid (PFHpS)	ND U	1.8	0.95	0.50	1	09/26/25 10:35	9/23/25	
Perfluorooctane sulfonic acid (PFOS)	ND U	1.8	0.93	0.50	1	09/26/25 10:35	9/23/25	
Perfluorononane sulfonic acid (PFNS)	ND U	1.8	0.96	0.50	1	09/26/25 10:35	9/23/25	
Perfluorodecane sulfonic acid (PFDS)	ND U	1.8	0.97	0.50	1	09/26/25 10:35	9/23/25	
Perfluorododecane sulfonic acid (PFDoS)	ND U	1.8	0.97	0.50	1	09/26/25 10:35	9/23/25	
Perfluoroalkyl Carboxylic Acids (PFCAs)								
Perfluorobutanoic acid (PFBA)	ND U	2.0	2.0	1.3	1	09/26/25 10:35	9/23/25	
Perfluoropentanoic acid (PFPeA)	**0.79 J**	1.8	1.0	0.50	1	09/26/25 10:35	9/23/25	
Perfluorohexanoic acid (PFHxA)	**0.65 J**	1.8	1.0	0.50	1	09/26/25 10:35	9/23/25	
Perfluoroheptanoic acid (PFHpA)	ND U	1.8	1.0	0.50	1	09/26/25 10:35	9/23/25	
Perfluorooctanoic acid (PFOA)	**0.68 J**	1.8	1.0	0.50	1	09/26/25 10:35	9/23/25	
Perfluorononanoic acid (PFNA)	ND U	1.8	1.0	0.50	1	09/26/25 10:35	9/23/25	
Perfluorodecanoic acid (PFDA)	ND U	1.8	1.0	0.75	1	09/26/25 10:35	9/23/25	
Perfluoroundecanoic acid (PFUnDA)	ND U	1.8	1.0	0.50	1	09/26/25 10:35	9/23/25	
Perfluorododecanoic acid (PFDOA)	ND U	1.8	1.0	0.50	1	09/26/25 10:35	9/23/25	
Perfluorotridecanoic acid (PFTrDA)	ND U	1.8	1.0	0.70	1	09/26/25 10:35	9/23/25	
Perfluorotetradecanoic acid (PFTDA)	ND U	1.8	1.0	0.50	1	09/26/25 10:35	9/23/25	
Perfluoroalkyl Sulfonamido Substances								
Perfluorooctane sulfonamide (PFOSAm)	**0.85 J**	1.8	1.0	0.50	1	09/26/25 10:35	9/23/25	
N-Methylperfluorooctane sulfonamide (MeFOSA)	ND U	1.8	1.0	0.50	1	09/26/25 10:35	9/23/25	
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	ND U	1.8	1.0	0.50	1	09/26/25 10:35	9/23/25	
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	ND U	1.8	1.0	0.53	1	09/26/25 10:35	9/23/25	
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	ND U	1.8	1.0	0.54	1	09/26/25 10:35	9/23/25	
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	ND U	1.8	1.0	0.50	1	09/26/25 10:35	9/23/25	
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	ND U	1.8	1.0	0.61	1	09/26/25 10:35	9/23/25	

Analytical Report

Client:	Onsite Environmental Incorporated	**Service Request:**	K2509142
Project:	PFAS/553-8572-010	**Date Collected:**	09/10/25 14:40
Sample Matrix:	Water	**Date Received:**	09/16/25 09:10
Sample Name:	MW-1S	**Units:**	ng/L
Lab Code:	K2509142-001	**Basis:**	NA

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Fluorotelomer Sulfonic Acids (FTSAs)								
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	ND U	1.8	0.94	0.50	1	09/26/25 10:35	9/23/25	
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND U	1.8	1.4	0.50	1	09/26/25 10:35	9/23/25	
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND U	1.8	0.96	0.50	1	09/26/25 10:35	9/23/25	
Fluorotelomer Carboxylic Acids (FTCAs)								
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	ND U	18	10	4.2	1	09/26/25 10:35	9/23/25	
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	ND U	18	10	8.2	1	09/26/25 10:35	9/23/25	
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	ND U	18	10	7.0	1	09/26/25 10:35	9/23/25	
Perfluoroalkyl Ether Sulfonic Acids (PFESAs)								
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	ND U	1.8	0.89	0.50	1	09/26/25 10:35	9/23/25	
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	ND U	1.8	0.93	0.50	1	09/26/25 10:35	9/23/25	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	ND U	1.8	0.94	0.50	1	09/26/25 10:35	9/23/25	
Perfluoroalkyl Ether Carboxylic Acids (PFECAs)								
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND U	1.8	1.0	0.50	1	09/26/25 10:35	9/23/25	
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND U	1.8	1.0	0.50	1	09/26/25 10:35	9/23/25	
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	ND U	1.8	1.0	0.50	1	09/26/25 10:35	9/23/25	
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND U	1.8	1.0	0.50	1	09/26/25 10:35	9/23/25	
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	ND U	1.8	0.95	0.50	1	09/26/25 10:35	9/23/25	

Client:	Onsite Environmental Incorporated	**Service Request:**	K2509142
Project:	PFAS/553-8572-010	**Date Collected:**	09/10/25 14:40
Sample Matrix:	Water	**Date Received:**	09/16/25 09:10
Sample Name:	MW-1S	**Units:**	ng/L
Lab Code:	K2509142-001	**Basis:**	NA

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
13C3-PFBS	81	40 - 135	09/26/25 10:35	
13C3-PFHxS	77	40 - 130	09/26/25 10:35	
13C8-PFOS	72	40 - 130	09/26/25 10:35	
13C4-PFBA	78	5 - 130	09/26/25 10:35	
13C5-PFPeA	81	40 - 130	09/26/25 10:35	
13C5-PFHxA	80	40 - 130	09/26/25 10:35	
13C4-PFHpA	77	40 - 130	09/26/25 10:35	
13C8-PFOA	80	40 - 130	09/26/25 10:35	
13C9-PFNA	78	40 - 130	09/26/25 10:35	
13C6-PFDA	71	40 - 130	09/26/25 10:35	
13C7-PFUnDA	60	30 - 130	09/26/25 10:35	
13C2-PFDoDA	47	10 - 130	09/26/25 10:35	
13C2-PFTeDA	36	10 - 130	09/26/25 10:35	
13C8-FOSA	71	40 - 130	09/26/25 10:35	
D3-MeFOSA	64	10 - 130	09/26/25 10:35	
D5-EtFOSA	61	10 - 130	09/26/25 10:35	
D7-MeFOSE	57	10 - 130	09/26/25 10:35	
D9-EtFOSE	63	10 - 130	09/26/25 10:35	
D3-MeFOSAA	73	40 - 170	09/26/25 10:35	
D5-EtFOSAA	69	25 - 135	09/26/25 10:35	
13C2-4:2 FTS	99	40 - 200	09/26/25 10:35	
13C2-6:2 FTS	85	40 - 200	09/26/25 10:35	
13C2-8:2 FTS	80	40 - 300	09/26/25 10:35	
13C3-HFPO-DA	85	40 - 130	09/26/25 10:35	

Client:	Onsite Environmental Incorporated	**Service Request:**	K2509142
Project:	PFAS/553-8572-010	**Date Collected:**	09/09/25 16:35
Sample Matrix:	Water	**Date Received:**	09/16/25 09:10
Sample Name:	MW-2S	**Units:**	ng/L
Lab Code:	K2509142-002	**Basis:**	NA

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Perfluoroalkyl Sulfonic Acids (PFSAs)								
Perfluorobutane sulfonic acid (PFBS)	ND U	1.9	0.89	0.84	1	09/26/25 03:21	9/23/25	
Perfluoropentane sulfonic acid (PFPeS)	ND U	1.9	0.94	0.50	1	09/26/25 03:21	9/23/25	
Perfluorohexane sulfonic acid (PFHxS)	ND U	1.9	0.91	0.53	1	09/26/25 03:21	9/23/25	
Perfluoroheptane sulfonic acid (PFHpS)	ND U	1.9	0.95	0.50	1	09/26/25 03:21	9/23/25	
Perfluorooctane sulfonic acid (PFOS)	ND U	1.9	0.93	0.50	1	09/26/25 03:21	9/23/25	
Perfluorononane sulfonic acid (PFNS)	ND U	1.9	0.96	0.50	1	09/26/25 03:21	9/23/25	
Perfluorodecane sulfonic acid (PFDS)	ND U	1.9	0.97	0.50	1	09/26/25 03:21	9/23/25	
Perfluorododecane sulfonic acid (PFDoS)	ND U	1.9	0.97	0.50	1	09/26/25 03:21	9/23/25	
Perfluoroalkyl Carboxylic Acids (PFCAs)								
Perfluorobutanoic acid (PFBA)	ND U	2.0	2.0	1.3	1	09/26/25 03:21	9/23/25	
Perfluoropentanoic acid (PFPeA)	ND U	1.9	1.0	0.50	1	09/26/25 03:21	9/23/25	
Perfluorohexanoic acid (PFHxA)	ND U	1.9	1.0	0.50	1	09/26/25 03:21	9/23/25	
Perfluoroheptanoic acid (PFHpA)	ND U	1.9	1.0	0.50	1	09/26/25 03:21	9/23/25	
Perfluorooctanoic acid (PFOA)	ND U	1.9	1.0	0.50	1	09/26/25 03:21	9/23/25	
Perfluorononanoic acid (PFNA)	ND U	1.9	1.0	0.50	1	09/26/25 03:21	9/23/25	
Perfluorodecanoic acid (PFDA)	ND U	1.9	1.0	0.75	1	09/26/25 03:21	9/23/25	
Perfluoroundecanoic acid (PFUnDA)	ND U	1.9	1.0	0.50	1	09/26/25 03:21	9/23/25	
Perfluorododecanoic acid (PFDOA)	ND U	1.9	1.0	0.50	1	09/26/25 03:21	9/23/25	
Perfluorotridecanoic acid (PFTrDA)	ND U	1.9	1.0	0.70	1	09/26/25 03:21	9/23/25	
Perfluorotetradecanoic acid (PFTDA)	ND U	1.9	1.0	0.50	1	09/26/25 03:21	9/23/25	
Perfluoroalkyl Sulfonamido Substances								
Perfluorooctane sulfonamide (PFOSAm)	**0.83 J**	1.9	1.0	0.50	1	09/26/25 03:21	9/23/25	
N-Methylperfluorooctane sulfonamide (MeFOSA)	ND U	1.9	1.0	0.50	1	09/26/25 03:21	9/23/25	
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	ND U	1.9	1.0	0.50	1	09/26/25 03:21	9/23/25	
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	ND U	1.9	1.0	0.53	1	09/26/25 03:21	9/23/25	
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	ND U	1.9	1.0	0.54	1	09/26/25 03:21	9/23/25	
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	ND U	1.9	1.0	0.50	1	09/26/25 03:21	9/23/25	
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	ND U	1.9	1.0	0.61	1	09/26/25 03:21	9/23/25	

Analytical Report

Client:	Onsite Environmental Incorporated	**Service Request:**	K2509142
Project:	PFAS/553-8572-010	**Date Collected:**	09/09/25 16:35
Sample Matrix:	Water	**Date Received:**	09/16/25 09:10
Sample Name:	MW-2S	**Units:**	ng/L
Lab Code:	K2509142-002	**Basis:**	NA

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Fluorotelomer Sulfonic Acids (FTSAs)								
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	ND U	1.9	0.94	0.50	1	09/26/25 03:21	9/23/25	
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND U	1.9	1.4	0.50	1	09/26/25 03:21	9/23/25	
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND U	1.9	0.96	0.50	1	09/26/25 03:21	9/23/25	
Fluorotelomer Carboxylic Acids (FTCAs)								
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	ND U	19	10	4.2	1	09/26/25 03:21	9/23/25	
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	ND U	19	10	8.2	1	09/26/25 03:21	9/23/25	
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	ND U	19	10	7.0	1	09/26/25 03:21	9/23/25	
Perfluoroalkyl Ether Sulfonic Acids (PFESAs)								
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	ND U	1.9	0.89	0.50	1	09/26/25 03:21	9/23/25	
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	ND U	1.9	0.93	0.50	1	09/26/25 03:21	9/23/25	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	ND U	1.9	0.94	0.50	1	09/26/25 03:21	9/23/25	
Perfluoroalkyl Ether Carboxylic Acids (PFECAs)								
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND U	1.9	1.0	0.50	1	09/26/25 03:21	9/23/25	
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND U	1.9	1.0	0.50	1	09/26/25 03:21	9/23/25	
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	ND U	1.9	1.0	0.50	1	09/26/25 03:21	9/23/25	
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND U	1.9	1.0	0.50	1	09/26/25 03:21	9/23/25	
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	ND U	1.9	0.95	0.50	1	09/26/25 03:21	9/23/25	

Client:	Onsite Environmental Incorporated	**Service Request:**	K2509142
Project:	PFAS/553-8572-010	**Date Collected:**	09/09/25 16:35
Sample Matrix:	Water	**Date Received:**	09/16/25 09:10
Sample Name:	MW-2S	**Units:**	ng/L
Lab Code:	K2509142-002	**Basis:**	NA

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
13C3-PFBS	81	40 - 135	09/26/25 03:21	
13C3-PFHxS	74	40 - 130	09/26/25 03:21	
13C8-PFOS	71	40 - 130	09/26/25 03:21	
13C4-PFBA	79	5 - 130	09/26/25 03:21	
13C5-PFPeA	81	40 - 130	09/26/25 03:21	
13C5-PFHxA	78	40 - 130	09/26/25 03:21	
13C4-PFHpA	76	40 - 130	09/26/25 03:21	
13C8-PFOA	76	40 - 130	09/26/25 03:21	
13C9-PFNA	74	40 - 130	09/26/25 03:21	
13C6-PFDA	71	40 - 130	09/26/25 03:21	
13C7-PFUnDA	67	30 - 130	09/26/25 03:21	
13C2-PFDoDA	59	10 - 130	09/26/25 03:21	
13C2-PFTeDA	55	10 - 130	09/26/25 03:21	
13C8-FOSA	68	40 - 130	09/26/25 03:21	
D3-MeFOSA	64	10 - 130	09/26/25 03:21	
D5-EtFOSA	64	10 - 130	09/26/25 03:21	
D7-MeFOSE	68	10 - 130	09/26/25 03:21	
D9-EtFOSE	68	10 - 130	09/26/25 03:21	
D3-MeFOSAA	69	40 - 170	09/26/25 03:21	
D5-EtFOSAA	67	25 - 135	09/26/25 03:21	
13C2-4:2 FTS	84	40 - 200	09/26/25 03:21	
13C2-6:2 FTS	83	40 - 200	09/26/25 03:21	
13C2-8:2 FTS	78	40 - 300	09/26/25 03:21	
13C3-HFPO-DA	83	40 - 130	09/26/25 03:21	

Analytical Report

Client:	Onsite Environmental Incorporated	**Service Request:**	K2509142
Project:	PFAS/553-8572-010	**Date Collected:**	09/10/25 10:15
Sample Matrix:	Water	**Date Received:**	09/16/25 09:10
Sample Name:	MW-3S	**Units:**	ng/L
Lab Code:	K2509142-003	**Basis:**	NA

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Perfluoroalkyl Sulfonic Acids (PFSAs)								
Perfluorobutane sulfonic acid (PFBS)	**11**	1.8	0.89	0.84	1	09/26/25 03:38	9/23/25	
Perfluoropentane sulfonic acid (PFPeS)	**2.8**	1.8	0.94	0.50	1	09/26/25 03:38	9/23/25	
Perfluorohexane sulfonic acid (PFHxS)	**6.5**	1.8	0.91	0.53	1	09/26/25 03:38	9/23/25	
Perfluoroheptane sulfonic acid (PFHpS)	ND U	1.8	0.95	0.50	1	09/26/25 03:38	9/23/25	
Perfluorooctane sulfonic acid (PFOS)	**3.8**	1.8	0.93	0.50	1	09/26/25 03:38	9/23/25	
Perfluorononane sulfonic acid (PFNS)	ND U	1.8	0.96	0.50	1	09/26/25 03:38	9/23/25	
Perfluorodecane sulfonic acid (PFDS)	ND U	1.8	0.97	0.50	1	09/26/25 03:38	9/23/25	
Perfluorododecane sulfonic acid (PFDoS)	ND U	1.8	0.97	0.50	1	09/26/25 03:38	9/23/25	
Perfluoroalkyl Carboxylic Acids (PFCAs)								
Perfluorobutanoic acid (PFBA)	**87**	2.0	2.0	1.3	1	09/26/25 03:38	9/23/25	
Perfluoropentanoic acid (PFPeA)	**79**	1.8	1.0	0.50	1	09/26/25 03:38	9/23/25	
Perfluorohexanoic acid (PFHxA)	**54**	1.8	1.0	0.50	1	09/26/25 03:38	9/23/25	
Perfluoroheptanoic acid (PFHpA)	**27**	1.8	1.0	0.50	1	09/26/25 03:38	9/23/25	
Perfluorooctanoic acid (PFOA)	**35**	1.8	1.0	0.50	1	09/26/25 03:38	9/23/25	
Perfluorononanoic acid (PFNA)	**1.1 J**	1.8	1.0	0.50	1	09/26/25 03:38	9/23/25	
Perfluorodecanoic acid (PFDA)	ND U	1.8	1.0	0.75	1	09/26/25 03:38	9/23/25	
Perfluoroundecanoic acid (PFUnDA)	ND U	1.8	1.0	0.50	1	09/26/25 03:38	9/23/25	
Perfluorododecanoic acid (PFDOA)	ND U	1.8	1.0	0.50	1	09/26/25 03:38	9/23/25	
Perfluorotridecanoic acid (PFTrDA)	ND U	1.8	1.0	0.70	1	09/26/25 03:38	9/23/25	
Perfluorotetradecanoic acid (PFTDA)	ND U	1.8	1.0	0.50	1	09/26/25 03:38	9/23/25	
Perfluoroalkyl Sulfonamido Substances								
Perfluorooctane sulfonamide (PFOSAm)	ND U	1.8	1.0	0.50	1	09/26/25 03:38	9/23/25	
N-Methylperfluorooctane sulfonamide (MeFOSA)	ND U	1.8	1.0	0.50	1	09/26/25 03:38	9/23/25	
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	ND U	1.8	1.0	0.50	1	09/26/25 03:38	9/23/25	
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	ND U	1.8	1.0	0.53	1	09/26/25 03:38	9/23/25	
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	ND U	1.8	1.0	0.54	1	09/26/25 03:38	9/23/25	
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	ND U	1.8	1.0	0.50	1	09/26/25 03:38	9/23/25	
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	ND U	1.8	1.0	0.61	1	09/26/25 03:38	9/23/25	

Analytical Report

Client:	Onsite Environmental Incorporated	**Service Request:**	K2509142
Project:	PFAS/553-8572-010	**Date Collected:**	09/10/25 10:15
Sample Matrix:	Water	**Date Received:**	09/16/25 09:10
Sample Name:	MW-3S	**Units:**	ng/L
Lab Code:	K2509142-003	**Basis:**	NA

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Fluorotelomer Sulfonic Acids (FTSAs)								
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	ND U	1.8	0.94	0.50	1	09/26/25 03:38	9/23/25	
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND U	1.8	1.4	0.50	1	09/26/25 03:38	9/23/25	
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND U	1.8	0.96	0.50	1	09/26/25 03:38	9/23/25	
Fluorotelomer Carboxylic Acids (FTCAs)								
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	ND U	18	10	4.2	1	09/26/25 03:38	9/23/25	
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	ND U	18	10	8.2	1	09/26/25 03:38	9/23/25	
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	ND U	18	10	7.0	1	09/26/25 03:38	9/23/25	
Perfluoroalkyl Ether Sulfonic Acids (PFESAs)								
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	ND U	1.8	0.89	0.50	1	09/26/25 03:38	9/23/25	
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	ND U	1.8	0.93	0.50	1	09/26/25 03:38	9/23/25	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	ND U	1.8	0.94	0.50	1	09/26/25 03:38	9/23/25	
Perfluoroalkyl Ether Carboxylic Acids (PFECAs)								
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND U	1.8	1.0	0.50	1	09/26/25 03:38	9/23/25	
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND U	1.8	1.0	0.50	1	09/26/25 03:38	9/23/25	
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	ND U	1.8	1.0	0.50	1	09/26/25 03:38	9/23/25	
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND U	1.8	1.0	0.50	1	09/26/25 03:38	9/23/25	
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	ND U	1.8	0.95	0.50	1	09/26/25 03:38	9/23/25	

Client:	Onsite Environmental Incorporated	**Service Request:**	K2509142
Project:	PFAS/553-8572-010	**Date Collected:**	09/10/25 10:15
Sample Matrix:	Water	**Date Received:**	09/16/25 09:10
Sample Name:	MW-3S	**Units:**	ng/L
Lab Code:	K2509142-003	**Basis:**	NA

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
13C3-PFBS	77	40 - 135	09/26/25 03:38	
13C3-PFHxS	71	40 - 130	09/26/25 03:38	
13C8-PFOS	68	40 - 130	09/26/25 03:38	
13C4-PFBA	73	5 - 130	09/26/25 03:38	
13C5-PFPeA	72	40 - 130	09/26/25 03:38	
13C5-PFHxA	73	40 - 130	09/26/25 03:38	
13C4-PFHpA	71	40 - 130	09/26/25 03:38	
13C8-PFOA	71	40 - 130	09/26/25 03:38	
13C9-PFNA	71	40 - 130	09/26/25 03:38	
13C6-PFDA	69	40 - 130	09/26/25 03:38	
13C7-PFUnDA	65	30 - 130	09/26/25 03:38	
13C2-PFDoDA	56	10 - 130	09/26/25 03:38	
13C2-PFTeDA	55	10 - 130	09/26/25 03:38	
13C8-FOSA	65	40 - 130	09/26/25 03:38	
D3-MeFOSA	60	10 - 130	09/26/25 03:38	
D5-EtFOSA	61	10 - 130	09/26/25 03:38	
D7-MeFOSE	65	10 - 130	09/26/25 03:38	
D9-EtFOSE	65	10 - 130	09/26/25 03:38	
D3-MeFOSAA	65	40 - 170	09/26/25 03:38	
D5-EtFOSAA	64	25 - 135	09/26/25 03:38	
13C2-4:2 FTS	75	40 - 200	09/26/25 03:38	
13C2-6:2 FTS	79	40 - 200	09/26/25 03:38	
13C2-8:2 FTS	81	40 - 300	09/26/25 03:38	
13C3-HFPO-DA	81	40 - 130	09/26/25 03:38	

Client:	Onsite Environmental Incorporated	**Service Request:**	K2509142
Project:	PFAS/553-8572-010	**Date Collected:**	09/10/25 12:15
Sample Matrix:	Water	**Date Received:**	09/16/25 09:10
Sample Name:	MW-4S	**Units:**	ng/L
Lab Code:	K2509142-004	**Basis:**	NA

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Perfluoroalkyl Sulfonic Acids (PFSAs)								
Perfluorobutane sulfonic acid (PFBS)	**5.6**	2.1	0.93	0.87	1	09/26/25 04:10	9/23/25	
Perfluoropentane sulfonic acid (PFPeS)	ND U	2.1	0.98	0.53	1	09/26/25 04:10	9/23/25	
Perfluorohexane sulfonic acid (PFHxS)	**0.84 J**	2.1	0.95	0.56	1	09/26/25 04:10	9/23/25	
Perfluoroheptane sulfonic acid (PFHpS)	ND U	2.1	0.99	0.53	1	09/26/25 04:10	9/23/25	
Perfluorooctane sulfonic acid (PFOS)	ND U	2.1	0.97	0.53	1	09/26/25 04:10	9/23/25	
Perfluorononane sulfonic acid (PFNS)	ND U	2.1	1.0	0.53	1	09/26/25 04:10	9/23/25	
Perfluorodecane sulfonic acid (PFDS)	ND U	2.1	1.0	0.53	1	09/26/25 04:10	9/23/25	
Perfluorododecane sulfonic acid (PFDoS)	ND U	2.1	1.0	0.53	1	09/26/25 04:10	9/23/25	
Perfluoroalkyl Carboxylic Acids (PFCAs)								
Perfluorobutanoic acid (PFBA)	**39**	2.1	2.1	1.4	1	09/26/25 04:10	9/23/25	
Perfluoropentanoic acid (PFPeA)	**42**	2.1	1.0	0.53	1	09/26/25 04:10	9/23/25	
Perfluorohexanoic acid (PFHxA)	**29**	2.1	1.0	0.53	1	09/26/25 04:10	9/23/25	
Perfluoroheptanoic acid (PFHpA)	**14**	2.1	1.0	0.53	1	09/26/25 04:10	9/23/25	
Perfluorooctanoic acid (PFOA)	**6.3**	2.1	1.0	0.53	1	09/26/25 04:10	9/23/25	
Perfluorononanoic acid (PFNA)	ND U	2.1	1.0	0.53	1	09/26/25 04:10	9/23/25	
Perfluorodecanoic acid (PFDA)	ND U	2.1	1.0	0.79	1	09/26/25 04:10	9/23/25	
Perfluoroundecanoic acid (PFUnDA)	ND U	2.1	1.0	0.53	1	09/26/25 04:10	9/23/25	
Perfluorododecanoic acid (PFDOA)	ND U	2.1	1.0	0.53	1	09/26/25 04:10	9/23/25	
Perfluorotridecanoic acid (PFTrDA)	ND U	2.1	1.0	0.74	1	09/26/25 04:10	9/23/25	
Perfluorotetradecanoic acid (PFTDA)	ND U	2.1	1.0	0.53	1	09/26/25 04:10	9/23/25	
Perfluoroalkyl Sulfonamido Substances								
Perfluorooctane sulfonamide (PFOSAm)	ND U	2.1	1.0	0.53	1	09/26/25 04:10	9/23/25	
N-Methylperfluorooctane sulfonamide (MeFOSA)	ND U	2.1	1.0	0.53	1	09/26/25 04:10	9/23/25	
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	ND U	2.1	1.0	0.53	1	09/26/25 04:10	9/23/25	
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	ND U	2.1	1.0	0.56	1	09/26/25 04:10	9/23/25	
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	ND U	2.1	1.0	0.57	1	09/26/25 04:10	9/23/25	
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	ND U	2.1	1.0	0.53	1	09/26/25 04:10	9/23/25	
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	ND U	2.1	1.0	0.64	1	09/26/25 04:10	9/23/25	

Analytical Report

Client:	Onsite Environmental Incorporated	**Service Request:**	K2509142
Project:	PFAS/553-8572-010	**Date Collected:**	09/10/25 12:15
Sample Matrix:	Water	**Date Received:**	09/16/25 09:10
Sample Name:	MW-4S	**Units:**	ng/L
Lab Code:	K2509142-004	**Basis:**	NA

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Fluorotelomer Sulfonic Acids (FTSAs)								
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	ND U	2.1	0.98	0.53	1	09/26/25 04:10	9/23/25	
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND U	2.1	1.5	0.53	1	09/26/25 04:10	9/23/25	
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND U	2.1	1.0	0.53	1	09/26/25 04:10	9/23/25	
Fluorotelomer Carboxylic Acids (FTCAs)								
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	ND U	21	10	4.4	1	09/26/25 04:10	9/23/25	
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	ND U	21	10	8.6	1	09/26/25 04:10	9/23/25	
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	ND U	21	10	7.4	1	09/26/25 04:10	9/23/25	
Perfluoroalkyl Ether Sulfonic Acids (PFESAs)								
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	ND U	2.1	0.93	0.53	1	09/26/25 04:10	9/23/25	
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	ND U	2.1	0.97	0.53	1	09/26/25 04:10	9/23/25	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	ND U	2.1	0.98	0.53	1	09/26/25 04:10	9/23/25	
Perfluoroalkyl Ether Carboxylic Acids (PFECAs)								
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND U	2.1	1.0	0.53	1	09/26/25 04:10	9/23/25	
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND U	2.1	1.0	0.53	1	09/26/25 04:10	9/23/25	
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	ND U	2.1	1.0	0.53	1	09/26/25 04:10	9/23/25	
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND U	2.1	1.0	0.53	1	09/26/25 04:10	9/23/25	
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	ND U	2.1	0.99	0.53	1	09/26/25 04:10	9/23/25	

Analytical Report

Client:	Onsite Environmental Incorporated	**Service Request:**	K2509142
Project:	PFAS/553-8572-010	**Date Collected:**	09/10/25 12:15
Sample Matrix:	Water	**Date Received:**	09/16/25 09:10
Sample Name:	MW-4S	**Units:**	ng/L
Lab Code:	K2509142-004	**Basis:**	NA

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
13C3-PFBS	84	40 - 135	09/26/25 04:10	
13C3-PFHxS	74	40 - 130	09/26/25 04:10	
13C8-PFOS	67	40 - 130	09/26/25 04:10	
13C4-PFBA	75	5 - 130	09/26/25 04:10	
13C5-PFPeA	75	40 - 130	09/26/25 04:10	
13C5-PFHxA	75	40 - 130	09/26/25 04:10	
13C4-PFHpA	72	40 - 130	09/26/25 04:10	
13C8-PFOA	74	40 - 130	09/26/25 04:10	
13C9-PFNA	72	40 - 130	09/26/25 04:10	
13C6-PFDA	68	40 - 130	09/26/25 04:10	
13C7-PFUnDA	63	30 - 130	09/26/25 04:10	
13C2-PFDoDA	56	10 - 130	09/26/25 04:10	
13C2-PFTeDA	52	10 - 130	09/26/25 04:10	
13C8-FOSA	64	40 - 130	09/26/25 04:10	
D3-MeFOSA	60	10 - 130	09/26/25 04:10	
D5-EtFOSA	60	10 - 130	09/26/25 04:10	
D7-MeFOSE	62	10 - 130	09/26/25 04:10	
D9-EtFOSE	62	10 - 130	09/26/25 04:10	
D3-MeFOSAA	66	40 - 170	09/26/25 04:10	
D5-EtFOSAA	61	25 - 135	09/26/25 04:10	
13C2-4:2 FTS	83	40 - 200	09/26/25 04:10	
13C2-6:2 FTS	84	40 - 200	09/26/25 04:10	
13C2-8:2 FTS	81	40 - 300	09/26/25 04:10	
13C3-HFPO-DA	83	40 - 130	09/26/25 04:10	

Analytical Report

Client:	Onsite Environmental Incorporated	**Service Request:**	K2509142
Project:	PFAS/553-8572-010	**Date Collected:**	09/09/25 12:25
Sample Matrix:	Water	**Date Received:**	09/16/25 09:10
Sample Name:	MW-5S	**Units:**	ng/L
Lab Code:	K2509142-005	**Basis:**	NA

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Perfluoroalkyl Sulfonic Acids (PFSAs)								
Perfluorobutane sulfonic acid (PFBS)	ND U	2.0	0.89	0.84	1	09/26/25 04:26	9/23/25	
Perfluoropentane sulfonic acid (PFPeS)	ND U	2.0	0.94	0.50	1	09/26/25 04:26	9/23/25	
Perfluorohexane sulfonic acid (PFHxS)	ND U	2.0	0.91	0.53	1	09/26/25 04:26	9/23/25	
Perfluoroheptane sulfonic acid (PFHpS)	ND U	2.0	0.95	0.50	1	09/26/25 04:26	9/23/25	
Perfluorooctane sulfonic acid (PFOS)	ND U	2.0	0.93	0.50	1	09/26/25 04:26	9/23/25	
Perfluorononane sulfonic acid (PFNS)	ND U	2.0	0.96	0.50	1	09/26/25 04:26	9/23/25	
Perfluorodecane sulfonic acid (PFDS)	ND U	2.0	0.97	0.50	1	09/26/25 04:26	9/23/25	
Perfluorododecane sulfonic acid (PFDoS)	ND U	2.0	0.97	0.50	1	09/26/25 04:26	9/23/25	
Perfluoroalkyl Carboxylic Acids (PFCAs)								
Perfluorobutanoic acid (PFBA)	**4.9**	2.0	2.0	1.3	1	09/26/25 04:26	9/23/25	
Perfluoropentanoic acid (PFPeA)	**3.0**	2.0	1.0	0.50	1	09/26/25 04:26	9/23/25	
Perfluorohexanoic acid (PFHxA)	**1.7 J**	2.0	1.0	0.50	1	09/26/25 04:26	9/23/25	
Perfluoroheptanoic acid (PFHpA)	ND U	2.0	1.0	0.50	1	09/26/25 04:26	9/23/25	
Perfluorooctanoic acid (PFOA)	ND U	2.0	1.0	0.50	1	09/26/25 04:26	9/23/25	
Perfluorononanoic acid (PFNA)	ND U	2.0	1.0	0.50	1	09/26/25 04:26	9/23/25	
Perfluorodecanoic acid (PFDA)	ND U	2.0	1.0	0.75	1	09/26/25 04:26	9/23/25	
Perfluoroundecanoic acid (PFUnDA)	ND U	2.0	1.0	0.50	1	09/26/25 04:26	9/23/25	
Perfluorododecanoic acid (PFDOA)	ND U	2.0	1.0	0.50	1	09/26/25 04:26	9/23/25	
Perfluorotridecanoic acid (PFTrDA)	ND U	2.0	1.0	0.70	1	09/26/25 04:26	9/23/25	
Perfluorotetradecanoic acid (PFTDA)	ND U	2.0	1.0	0.50	1	09/26/25 04:26	9/23/25	
Perfluoroalkyl Sulfonamido Substances								
Perfluorooctane sulfonamide (PFOSAm)	**0.87 J**	2.0	1.0	0.50	1	09/26/25 04:26	9/23/25	
N-Methylperfluorooctane sulfonamide (MeFOSA)	ND U	2.0	1.0	0.50	1	09/26/25 04:26	9/23/25	
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	ND U	2.0	1.0	0.50	1	09/26/25 04:26	9/23/25	
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	ND U	2.0	1.0	0.53	1	09/26/25 04:26	9/23/25	
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	ND U	2.0	1.0	0.54	1	09/26/25 04:26	9/23/25	
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	ND U	2.0	1.0	0.50	1	09/26/25 04:26	9/23/25	
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	ND U	2.0	1.0	0.61	1	09/26/25 04:26	9/23/25	

Analytical Report

Client:	Onsite Environmental Incorporated	**Service Request:**	K2509142
Project:	PFAS/553-8572-010	**Date Collected:**	09/09/25 12:25
Sample Matrix:	Water	**Date Received:**	09/16/25 09:10
Sample Name:	MW-5S	**Units:**	ng/L
Lab Code:	K2509142-005	**Basis:**	NA

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Fluorotelomer Sulfonic Acids (FTSAs)								
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	ND U	2.0	0.94	0.50	1	09/26/25 04:26	9/23/25	
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND U	2.0	1.4	0.50	1	09/26/25 04:26	9/23/25	
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND U	2.0	0.96	0.50	1	09/26/25 04:26	9/23/25	
Fluorotelomer Carboxylic Acids (FTCAs)								
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	ND U	20	10	4.2	1	09/26/25 04:26	9/23/25	
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	ND U	20	10	8.2	1	09/26/25 04:26	9/23/25	
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	ND U	20	10	7.0	1	09/26/25 04:26	9/23/25	
Perfluoroalkyl Ether Sulfonic Acids (PFESAs)								
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	ND U	2.0	0.89	0.50	1	09/26/25 04:26	9/23/25	
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	ND U	2.0	0.93	0.50	1	09/26/25 04:26	9/23/25	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	ND U	2.0	0.94	0.50	1	09/26/25 04:26	9/23/25	
Perfluoroalkyl Ether Carboxylic Acids (PFECAs)								
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND U	2.0	1.0	0.50	1	09/26/25 04:26	9/23/25	
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND U	2.0	1.0	0.50	1	09/26/25 04:26	9/23/25	
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	ND U	2.0	1.0	0.50	1	09/26/25 04:26	9/23/25	
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND U	2.0	1.0	0.50	1	09/26/25 04:26	9/23/25	
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	ND U	2.0	0.95	0.50	1	09/26/25 04:26	9/23/25	

Client:	Onsite Environmental Incorporated	**Service Request:**	K2509142
Project:	PFAS/553-8572-010	**Date Collected:**	09/09/25 12:25
Sample Matrix:	Water	**Date Received:**	09/16/25 09:10
Sample Name:	MW-5S	**Units:**	ng/L
Lab Code:	K2509142-005	**Basis:**	NA

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
13C3-PFBS	83	40 - 135	09/26/25 04:26	
13C3-PFHxS	77	40 - 130	09/26/25 04:26	
13C8-PFOS	73	40 - 130	09/26/25 04:26	
13C4-PFBA	77	5 - 130	09/26/25 04:26	
13C5-PFPeA	81	40 - 130	09/26/25 04:26	
13C5-PFHxA	80	40 - 130	09/26/25 04:26	
13C4-PFHpA	76	40 - 130	09/26/25 04:26	
13C8-PFOA	77	40 - 130	09/26/25 04:26	
13C9-PFNA	74	40 - 130	09/26/25 04:26	
13C6-PFDA	72	40 - 130	09/26/25 04:26	
13C7-PFUnDA	65	30 - 130	09/26/25 04:26	
13C2-PFDoDA	56	10 - 130	09/26/25 04:26	
13C2-PFTeDA	52	10 - 130	09/26/25 04:26	
13C8-FOSA	67	40 - 130	09/26/25 04:26	
D3-MeFOSA	64	10 - 130	09/26/25 04:26	
D5-EtFOSA	62	10 - 130	09/26/25 04:26	
D7-MeFOSE	60	10 - 130	09/26/25 04:26	
D9-EtFOSE	61	10 - 130	09/26/25 04:26	
D3-MeFOSAA	66	40 - 170	09/26/25 04:26	
D5-EtFOSAA	64	25 - 135	09/26/25 04:26	
13C2-4:2 FTS	90	40 - 200	09/26/25 04:26	
13C2-6:2 FTS	93	40 - 200	09/26/25 04:26	
13C2-8:2 FTS	89	40 - 300	09/26/25 04:26	
13C3-HFPO-DA	86	40 - 130	09/26/25 04:26	

Analytical Report

Client:	Onsite Environmental Incorporated	**Service Request:**	K2509142
Project:	PFAS/553-8572-010	**Date Collected:**	09/10/25 13:30
Sample Matrix:	Water	**Date Received:**	09/16/25 09:10
Sample Name:	MW-6S	**Units:**	ng/L
Lab Code:	K2509142-006	**Basis:**	NA

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Perfluoroalkyl Sulfonic Acids (PFSAs)								
Perfluorobutane sulfonic acid (PFBS)	**7.2**	1.8	0.89	0.84	1	09/26/25 04:42	9/23/25	
Perfluoropentane sulfonic acid (PFPeS)	**1.2 J**	1.8	0.94	0.50	1	09/26/25 04:42	9/23/25	
Perfluorohexane sulfonic acid (PFHxS)	**0.81 J**	1.8	0.91	0.53	1	09/26/25 04:42	9/23/25	
Perfluoroheptane sulfonic acid (PFHpS)	ND U	1.8	0.95	0.50	1	09/26/25 04:42	9/23/25	
Perfluorooctane sulfonic acid (PFOS)	ND U	1.8	0.93	0.50	1	09/26/25 04:42	9/23/25	
Perfluorononane sulfonic acid (PFNS)	ND U	1.8	0.96	0.50	1	09/26/25 04:42	9/23/25	
Perfluorodecane sulfonic acid (PFDS)	ND U	1.8	0.97	0.50	1	09/26/25 04:42	9/23/25	
Perfluorododecane sulfonic acid (PFDoS)	ND U	1.8	0.97	0.50	1	09/26/25 04:42	9/23/25	
Perfluoroalkyl Carboxylic Acids (PFCAs)								
Perfluorobutanoic acid (PFBA)	**14**	2.0	2.0	1.3	1	09/26/25 04:42	9/23/25	
Perfluoropentanoic acid (PFPeA)	**15**	1.8	1.0	0.50	1	09/26/25 04:42	9/23/25	
Perfluorohexanoic acid (PFHxA)	**11**	1.8	1.0	0.50	1	09/26/25 04:42	9/23/25	
Perfluoroheptanoic acid (PFHpA)	**1.3 J**	1.8	1.0	0.50	1	09/26/25 04:42	9/23/25	
Perfluorooctanoic acid (PFOA)	ND U	1.8	1.0	0.50	1	09/26/25 04:42	9/23/25	
Perfluorononanoic acid (PFNA)	ND U	1.8	1.0	0.50	1	09/26/25 04:42	9/23/25	
Perfluorodecanoic acid (PFDA)	ND U	1.8	1.0	0.75	1	09/26/25 04:42	9/23/25	
Perfluoroundecanoic acid (PFUnDA)	ND U	1.8	1.0	0.50	1	09/26/25 04:42	9/23/25	
Perfluorododecanoic acid (PFDOA)	ND U	1.8	1.0	0.50	1	09/26/25 04:42	9/23/25	
Perfluorotridecanoic acid (PFTrDA)	ND U	1.8	1.0	0.70	1	09/26/25 04:42	9/23/25	
Perfluorotetradecanoic acid (PFTDA)	ND U	1.8	1.0	0.50	1	09/26/25 04:42	9/23/25	
Perfluoroalkyl Sulfonamido Substances								
Perfluorooctane sulfonamide (PFOSAm)	ND U	1.8	1.0	0.50	1	09/26/25 04:42	9/23/25	
N-Methylperfluorooctane sulfonamide (MeFOSA)	ND U	1.8	1.0	0.50	1	09/26/25 04:42	9/23/25	
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	ND U	1.8	1.0	0.50	1	09/26/25 04:42	9/23/25	
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	ND U	1.8	1.0	0.53	1	09/26/25 04:42	9/23/25	
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	ND U	1.8	1.0	0.54	1	09/26/25 04:42	9/23/25	
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	ND U	1.8	1.0	0.50	1	09/26/25 04:42	9/23/25	
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	ND U	1.8	1.0	0.61	1	09/26/25 04:42	9/23/25	

Analytical Report

Client:	Onsite Environmental Incorporated	**Service Request:**	K2509142
Project:	PFAS/553-8572-010	**Date Collected:**	09/10/25 13:30
Sample Matrix:	Water	**Date Received:**	09/16/25 09:10
Sample Name:	MW-6S	**Units:**	ng/L
Lab Code:	K2509142-006	**Basis:**	NA

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Fluorotelomer Sulfonic Acids (FTSAs)								
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	ND U	1.8	0.94	0.50	1	09/26/25 04:42	9/23/25	
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND U	1.8	1.4	0.50	1	09/26/25 04:42	9/23/25	
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND U	1.8	0.96	0.50	1	09/26/25 04:42	9/23/25	
Fluorotelomer Carboxylic Acids (FTCAs)								
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	ND U	18	10	4.2	1	09/26/25 04:42	9/23/25	
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	ND U	18	10	8.2	1	09/26/25 04:42	9/23/25	
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	ND U	18	10	7.0	1	09/26/25 04:42	9/23/25	
Perfluoroalkyl Ether Sulfonic Acids (PFESAs)								
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	ND U	1.8	0.89	0.50	1	09/26/25 04:42	9/23/25	
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	ND U	1.8	0.93	0.50	1	09/26/25 04:42	9/23/25	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	ND U	1.8	0.94	0.50	1	09/26/25 04:42	9/23/25	
Perfluoroalkyl Ether Carboxylic Acids (PFECAs)								
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND U	1.8	1.0	0.50	1	09/26/25 04:42	9/23/25	
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND U	1.8	1.0	0.50	1	09/26/25 04:42	9/23/25	
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	ND U	1.8	1.0	0.50	1	09/26/25 04:42	9/23/25	
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND U	1.8	1.0	0.50	1	09/26/25 04:42	9/23/25	
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	ND U	1.8	0.95	0.50	1	09/26/25 04:42	9/23/25	

Client:	Onsite Environmental Incorporated	**Service Request:**	K2509142
Project:	PFAS/553-8572-010	**Date Collected:**	09/10/25 13:30
Sample Matrix:	Water	**Date Received:**	09/16/25 09:10
Sample Name:	MW-6S	**Units:**	ng/L
Lab Code:	K2509142-006	**Basis:**	NA

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
13C3-PFBS	83	40 - 135	09/26/25 04:42	
13C3-PFHxS	78	40 - 130	09/26/25 04:42	
13C8-PFOS	74	40 - 130	09/26/25 04:42	
13C4-PFBA	77	5 - 130	09/26/25 04:42	
13C5-PFPeA	80	40 - 130	09/26/25 04:42	
13C5-PFHxA	79	40 - 130	09/26/25 04:42	
13C4-PFHpA	76	40 - 130	09/26/25 04:42	
13C8-PFOA	77	40 - 130	09/26/25 04:42	
13C9-PFNA	76	40 - 130	09/26/25 04:42	
13C6-PFDA	74	40 - 130	09/26/25 04:42	
13C7-PFUnDA	67	30 - 130	09/26/25 04:42	
13C2-PFDoDA	60	10 - 130	09/26/25 04:42	
13C2-PFTeDA	58	10 - 130	09/26/25 04:42	
13C8-FOSA	71	40 - 130	09/26/25 04:42	
D3-MeFOSA	63	10 - 130	09/26/25 04:42	
D5-EtFOSA	62	10 - 130	09/26/25 04:42	
D7-MeFOSE	65	10 - 130	09/26/25 04:42	
D9-EtFOSE	66	10 - 130	09/26/25 04:42	
D3-MeFOSAA	72	40 - 170	09/26/25 04:42	
D5-EtFOSAA	68	25 - 135	09/26/25 04:42	
13C2-4:2 FTS	81	40 - 200	09/26/25 04:42	
13C2-6:2 FTS	88	40 - 200	09/26/25 04:42	
13C2-8:2 FTS	89	40 - 300	09/26/25 04:42	
13C3-HFPO-DA	87	40 - 130	09/26/25 04:42	

Client:	Onsite Environmental Incorporated	**Service Request:**	K2509142
Project:	PFAS/553-8572-010	**Date Collected:**	09/10/25 11:30
Sample Matrix:	Water	**Date Received:**	09/16/25 09:10
Sample Name:	MW-11S	**Units:**	ng/L
Lab Code:	K2509142-007	**Basis:**	NA

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Perfluoroalkyl Sulfonic Acids (PFSAs)								
Perfluorobutane sulfonic acid (PFBS)	ND U	1.9	0.89	0.84	1	09/26/25 04:58	9/23/25	
Perfluoropentane sulfonic acid (PFPeS)	ND U	1.9	0.94	0.50	1	09/26/25 04:58	9/23/25	
Perfluorohexane sulfonic acid (PFHxS)	ND U	1.9	0.91	0.53	1	09/26/25 04:58	9/23/25	
Perfluoroheptane sulfonic acid (PFHpS)	ND U	1.9	0.95	0.50	1	09/26/25 04:58	9/23/25	
Perfluorooctane sulfonic acid (PFOS)	ND U	1.9	0.93	0.50	1	09/26/25 04:58	9/23/25	
Perfluorononane sulfonic acid (PFNS)	ND U	1.9	0.96	0.50	1	09/26/25 04:58	9/23/25	
Perfluorodecane sulfonic acid (PFDS)	ND U	1.9	0.97	0.50	1	09/26/25 04:58	9/23/25	
Perfluorododecane sulfonic acid (PFDoS)	ND U	1.9	0.97	0.50	1	09/26/25 04:58	9/23/25	
Perfluoroalkyl Carboxylic Acids (PFCAs)								
Perfluorobutanoic acid (PFBA)	ND U	2.0	2.0	1.3	1	09/26/25 04:58	9/23/25	
Perfluoropentanoic acid (PFPeA)	ND U	1.9	1.0	0.50	1	09/26/25 04:58	9/23/25	
Perfluorohexanoic acid (PFHxA)	ND U	1.9	1.0	0.50	1	09/26/25 04:58	9/23/25	
Perfluoroheptanoic acid (PFHpA)	ND U	1.9	1.0	0.50	1	09/26/25 04:58	9/23/25	
Perfluorooctanoic acid (PFOA)	ND U	1.9	1.0	0.50	1	09/26/25 04:58	9/23/25	
Perfluorononanoic acid (PFNA)	ND U	1.9	1.0	0.50	1	09/26/25 04:58	9/23/25	
Perfluorodecanoic acid (PFDA)	ND U	1.9	1.0	0.75	1	09/26/25 04:58	9/23/25	
Perfluoroundecanoic acid (PFUnDA)	ND U	1.9	1.0	0.50	1	09/26/25 04:58	9/23/25	
Perfluorododecanoic acid (PFDOA)	ND U	1.9	1.0	0.50	1	09/26/25 04:58	9/23/25	
Perfluorotridecanoic acid (PFTrDA)	ND U	1.9	1.0	0.70	1	09/26/25 04:58	9/23/25	
Perfluorotetradecanoic acid (PFTDA)	ND U	1.9	1.0	0.50	1	09/26/25 04:58	9/23/25	
Perfluoroalkyl Sulfonamido Substances								
Perfluorooctane sulfonamide (PFOSAm)	**0.54 J**	1.9	1.0	0.50	1	09/26/25 04:58	9/23/25	
N-Methylperfluorooctane sulfonamide (MeFOSA)	ND U	1.9	1.0	0.50	1	09/26/25 04:58	9/23/25	
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	ND U	1.9	1.0	0.50	1	09/26/25 04:58	9/23/25	
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	ND U	1.9	1.0	0.53	1	09/26/25 04:58	9/23/25	
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	ND U	1.9	1.0	0.54	1	09/26/25 04:58	9/23/25	
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	ND U	1.9	1.0	0.50	1	09/26/25 04:58	9/23/25	
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	ND U	1.9	1.0	0.61	1	09/26/25 04:58	9/23/25	

Client:	Onsite Environmental Incorporated	**Service Request:**	K2509142
Project:	PFAS/553-8572-010	**Date Collected:**	09/10/25 11:30
Sample Matrix:	Water	**Date Received:**	09/16/25 09:10
Sample Name:	MW-11S	**Units:**	ng/L
Lab Code:	K2509142-007	**Basis:**	NA

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Fluorotelomer Sulfonic Acids (FTSAs)								
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	ND U	1.9	0.94	0.50	1	09/26/25 04:58	9/23/25	
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND U	1.9	1.4	0.50	1	09/26/25 04:58	9/23/25	
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND U	1.9	0.96	0.50	1	09/26/25 04:58	9/23/25	
Fluorotelomer Carboxylic Acids (FTCAs)								
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	ND U	19	10	4.2	1	09/26/25 04:58	9/23/25	
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	ND U	19	10	8.2	1	09/26/25 04:58	9/23/25	
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	ND U	19	10	7.0	1	09/26/25 04:58	9/23/25	
Perfluoroalkyl Ether Sulfonic Acids (PFESAs)								
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	ND U	1.9	0.89	0.50	1	09/26/25 04:58	9/23/25	
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	ND U	1.9	0.93	0.50	1	09/26/25 04:58	9/23/25	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	ND U	1.9	0.94	0.50	1	09/26/25 04:58	9/23/25	
Perfluoroalkyl Ether Carboxylic Acids (PFECAs)								
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND U	1.9	1.0	0.50	1	09/26/25 04:58	9/23/25	
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND U	1.9	1.0	0.50	1	09/26/25 04:58	9/23/25	
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	ND U	1.9	1.0	0.50	1	09/26/25 04:58	9/23/25	
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND U	1.9	1.0	0.50	1	09/26/25 04:58	9/23/25	
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	ND U	1.9	0.95	0.50	1	09/26/25 04:58	9/23/25	

Analytical Report

Client:	Onsite Environmental Incorporated	**Service Request:**	K2509142
Project:	PFAS/553-8572-010	**Date Collected:**	09/10/25 11:30
Sample Matrix:	Water	**Date Received:**	09/16/25 09:10
Sample Name:	MW-11S	**Units:**	ng/L
Lab Code:	K2509142-007	**Basis:**	NA

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
13C3-PFBS	83	40 - 135	09/26/25 04:58	
13C3-PFHxS	77	40 - 130	09/26/25 04:58	
13C8-PFOS	69	40 - 130	09/26/25 04:58	
13C4-PFBA	76	5 - 130	09/26/25 04:58	
13C5-PFPeA	82	40 - 130	09/26/25 04:58	
13C5-PFHxA	80	40 - 130	09/26/25 04:58	
13C4-PFHpA	75	40 - 130	09/26/25 04:58	
13C8-PFOA	76	40 - 130	09/26/25 04:58	
13C9-PFNA	75	40 - 130	09/26/25 04:58	
13C6-PFDA	70	40 - 130	09/26/25 04:58	
13C7-PFUnDA	62	30 - 130	09/26/25 04:58	
13C2-PFDoDA	53	10 - 130	09/26/25 04:58	
13C2-PFTeDA	49	10 - 130	09/26/25 04:58	
13C8-FOSA	67	40 - 130	09/26/25 04:58	
D3-MeFOSA	63	10 - 130	09/26/25 04:58	
D5-EtFOSA	60	10 - 130	09/26/25 04:58	
D7-MeFOSE	59	10 - 130	09/26/25 04:58	
D9-EtFOSE	58	10 - 130	09/26/25 04:58	
D3-MeFOSAA	64	40 - 170	09/26/25 04:58	
D5-EtFOSAA	60	25 - 135	09/26/25 04:58	
13C2-4:2 FTS	89	40 - 200	09/26/25 04:58	
13C2-6:2 FTS	93	40 - 200	09/26/25 04:58	
13C2-8:2 FTS	87	40 - 300	09/26/25 04:58	
13C3-HFPO-DA	86	40 - 130	09/26/25 04:58	

Client:	Onsite Environmental Incorporated	**Service Request:**	K2509142
Project:	PFAS/553-8572-010	**Date Collected:**	09/10/25 08:00
Sample Matrix:	Water	**Date Received:**	09/16/25 09:10
Sample Name:	MW-13S	**Units:**	ng/L
Lab Code:	K2509142-008	**Basis:**	NA

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Perfluoroalkyl Sulfonic Acids (PFSAs)								
Perfluorobutane sulfonic acid (PFBS)	**5.4**	1.8	0.89	0.84	1	09/26/25 05:14	9/23/25	
Perfluoropentane sulfonic acid (PFPeS)	ND U	1.8	0.94	0.50	1	09/26/25 05:14	9/23/25	
Perfluorohexane sulfonic acid (PFHxS)	**0.71 J**	1.8	0.91	0.53	1	09/26/25 05:14	9/23/25	
Perfluoroheptane sulfonic acid (PFHpS)	ND U	1.8	0.95	0.50	1	09/26/25 05:14	9/23/25	
Perfluorooctane sulfonic acid (PFOS)	ND U	1.8	0.93	0.50	1	09/26/25 05:14	9/23/25	
Perfluorononane sulfonic acid (PFNS)	ND U	1.8	0.96	0.50	1	09/26/25 05:14	9/23/25	
Perfluorodecane sulfonic acid (PFDS)	ND U	1.8	0.97	0.50	1	09/26/25 05:14	9/23/25	
Perfluorododecane sulfonic acid (PFDoS)	ND U	1.8	0.97	0.50	1	09/26/25 05:14	9/23/25	
Perfluoroalkyl Carboxylic Acids (PFCAs)								
Perfluorobutanoic acid (PFBA)	**39**	2.0	2.0	1.3	1	09/26/25 05:14	9/23/25	
Perfluoropentanoic acid (PFPeA)	**41**	1.8	1.0	0.50	1	09/26/25 05:14	9/23/25	
Perfluorohexanoic acid (PFHxA)	**28**	1.8	1.0	0.50	1	09/26/25 05:14	9/23/25	
Perfluoroheptanoic acid (PFHpA)	**14**	1.8	1.0	0.50	1	09/26/25 05:14	9/23/25	
Perfluorooctanoic acid (PFOA)	**5.9**	1.8	1.0	0.50	1	09/26/25 05:14	9/23/25	
Perfluorononanoic acid (PFNA)	ND U	1.8	1.0	0.50	1	09/26/25 05:14	9/23/25	
Perfluorodecanoic acid (PFDA)	ND U	1.8	1.0	0.75	1	09/26/25 05:14	9/23/25	
Perfluoroundecanoic acid (PFUnDA)	ND U	1.8	1.0	0.50	1	09/26/25 05:14	9/23/25	
Perfluorododecanoic acid (PFDOA)	ND U	1.8	1.0	0.50	1	09/26/25 05:14	9/23/25	
Perfluorotridecanoic acid (PFTrDA)	ND U	1.8	1.0	0.70	1	09/26/25 05:14	9/23/25	
Perfluorotetradecanoic acid (PFTDA)	ND U	1.8	1.0	0.50	1	09/26/25 05:14	9/23/25	
Perfluoroalkyl Sulfonamido Substances								
Perfluorooctane sulfonamide (PFOSAm)	ND U	1.8	1.0	0.50	1	09/26/25 05:14	9/23/25	
N-Methylperfluorooctane sulfonamide (MeFOSA)	ND U	1.8	1.0	0.50	1	09/26/25 05:14	9/23/25	
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	ND U	1.8	1.0	0.50	1	09/26/25 05:14	9/23/25	
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	ND U	1.8	1.0	0.53	1	09/26/25 05:14	9/23/25	
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	ND U	1.8	1.0	0.54	1	09/26/25 05:14	9/23/25	
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	ND U	1.8	1.0	0.50	1	09/26/25 05:14	9/23/25	
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	ND U	1.8	1.0	0.61	1	09/26/25 05:14	9/23/25	

Analytical Report

Client:	Onsite Environmental Incorporated	**Service Request:**	K2509142
Project:	PFAS/553-8572-010	**Date Collected:**	09/10/25 08:00
Sample Matrix:	Water	**Date Received:**	09/16/25 09:10
Sample Name:	MW-13S	**Units:**	ng/L
Lab Code:	K2509142-008	**Basis:**	NA

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Fluorotelomer Sulfonic Acids (FTSAs)								
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	ND U	1.8	0.94	0.50	1	09/26/25 05:14	9/23/25	
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND U	1.8	1.4	0.50	1	09/26/25 05:14	9/23/25	
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND U	1.8	0.96	0.50	1	09/26/25 05:14	9/23/25	
Fluorotelomer Carboxylic Acids (FTCAs)								
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	ND U	18	10	4.2	1	09/26/25 05:14	9/23/25	
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	ND U	18	10	8.2	1	09/26/25 05:14	9/23/25	
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	ND U	18	10	7.0	1	09/26/25 05:14	9/23/25	
Perfluoroalkyl Ether Sulfonic Acids (PFESAs)								
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	ND U	1.8	0.89	0.50	1	09/26/25 05:14	9/23/25	
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	ND U	1.8	0.93	0.50	1	09/26/25 05:14	9/23/25	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	ND U	1.8	0.94	0.50	1	09/26/25 05:14	9/23/25	
Perfluoroalkyl Ether Carboxylic Acids (PFECAs)								
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND U	1.8	1.0	0.50	1	09/26/25 05:14	9/23/25	
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND U	1.8	1.0	0.50	1	09/26/25 05:14	9/23/25	
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	ND U	1.8	1.0	0.50	1	09/26/25 05:14	9/23/25	
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND U	1.8	1.0	0.50	1	09/26/25 05:14	9/23/25	
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	ND U	1.8	0.95	0.50	1	09/26/25 05:14	9/23/25	

Analytical Report

Client:	Onsite Environmental Incorporated	**Service Request:**	K2509142
Project:	PFAS/553-8572-010	**Date Collected:**	09/10/25 08:00
Sample Matrix:	Water	**Date Received:**	09/16/25 09:10
Sample Name:	MW-13S	**Units:**	ng/L
Lab Code:	K2509142-008	**Basis:**	NA

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
13C3-PFBS	81	40 - 135	09/26/25 05:14	
13C3-PFHxS	74	40 - 130	09/26/25 05:14	
13C8-PFOS	68	40 - 130	09/26/25 05:14	
13C4-PFBA	74	5 - 130	09/26/25 05:14	
13C5-PFPeA	78	40 - 130	09/26/25 05:14	
13C5-PFHxA	78	40 - 130	09/26/25 05:14	
13C4-PFHpA	75	40 - 130	09/26/25 05:14	
13C8-PFOA	72	40 - 130	09/26/25 05:14	
13C9-PFNA	74	40 - 130	09/26/25 05:14	
13C6-PFDA	70	40 - 130	09/26/25 05:14	
13C7-PFUnDA	64	30 - 130	09/26/25 05:14	
13C2-PFDoDA	58	10 - 130	09/26/25 05:14	
13C2-PFTeDA	56	10 - 130	09/26/25 05:14	
13C8-FOSA	67	40 - 130	09/26/25 05:14	
D3-MeFOSA	62	10 - 130	09/26/25 05:14	
D5-EtFOSA	60	10 - 130	09/26/25 05:14	
D7-MeFOSE	64	10 - 130	09/26/25 05:14	
D9-EtFOSE	64	10 - 130	09/26/25 05:14	
D3-MeFOSAA	67	40 - 170	09/26/25 05:14	
D5-EtFOSAA	62	25 - 135	09/26/25 05:14	
13C2-4:2 FTS	77	40 - 200	09/26/25 05:14	
13C2-6:2 FTS	79	40 - 200	09/26/25 05:14	
13C2-8:2 FTS	78	40 - 300	09/26/25 05:14	
13C3-HFPO-DA	86	40 - 130	09/26/25 05:14	

QC Summary Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Organic Compounds by HPLC/MS/MS

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Onsite Environmental Incorporated **Service Request:** K2509142
Project: PFAS/553-8572-010
Sample Matrix: Water

SURROGATE RECOVERY SUMMARY

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Extraction Method: Method

Surrogate	Control Limits	MW-1S K2509142-001	MW-2S K2509142-002	MW-3S K2509142-003
13C3-PFBS	40-135	81	81	77
13C3-PFHxS	40-130	77	74	71
13C8-PFOS	40-130	72	71	68
13C4-PFBA	5-130	78	79	73
13C5-PFPeA	40-130	81	81	72
13C5-PFHxA	40-130	80	78	73
13C4-PFHpA	40-130	77	76	71
13C8-PFOA	40-130	80	76	71
13C9-PFNA	40-130	78	74	71
13C6-PFDA	40-130	71	71	69
13C7-PFUnDA	30-130	60	67	65
13C2-PFDoDA	10-130	47	59	56
13C2-PFTeDA	10-130	36	55	55
13C8-FOSA	40-130	71	68	65
D3-MeFOSA	10-130	64	64	60
D5-EtFOSA	10-130	61	64	61
D7-MeFOSE	10-130	57	68	65
D9-EtFOSE	10-130	63	68	65
D3-MeFOSAA	40-170	73	69	65
D5-EtFOSAA	25-135	69	67	64
13C2-4:2 FTS	40-200	99	84	75
13C2-6:2 FTS	40-200	85	83	79
13C2-8:2 FTS	40-300	80	78	81
13C3-HFPO-DA	40-130	85	83	81

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with an pound (#) indicate the control criteria is not acceptable.

Client: Onsite Environmental Incorporated **Service Request:** K2509142
Project: PFAS/553-8572-010
Sample Matrix: Water

SURROGATE RECOVERY SUMMARY

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Extraction Method: Method

Surrogate	Control Limits	MW-4S K2509142-004	MW-5S K2509142-005	MW-6S K2509142-006
13C3-PFBS	40-135	84	83	83
13C3-PFHxS	40-130	74	77	78
13C8-PFOS	40-130	67	73	74
13C4-PFBA	5-130	75	77	77
13C5-PFPeA	40-130	75	81	80
13C5-PFHxA	40-130	75	80	79
13C4-PFHpA	40-130	72	76	76
13C8-PFOA	40-130	74	77	77
13C9-PFNA	40-130	72	74	76
13C6-PFDA	40-130	68	72	74
13C7-PFUnDA	30-130	63	65	67
13C2-PFDoDA	10-130	56	56	60
13C2-PFTeDA	10-130	52	52	58
13C8-FOSA	40-130	64	67	71
D3-MeFOSA	10-130	60	64	63
D5-EtFOSA	10-130	60	62	62
D7-MeFOSE	10-130	62	60	65
D9-EtFOSE	10-130	62	61	66
D3-MeFOSAA	40-170	66	66	72
D5-EtFOSAA	25-135	61	64	68
13C2-4:2 FTS	40-200	83	90	81
13C2-6:2 FTS	40-200	84	93	88
13C2-8:2 FTS	40-300	81	89	89
13C3-HFPO-DA	40-130	83	86	87

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with an pound (#) indicate the control criteria is not acceptable.

Client: Onsite Environmental Incorporated **Service Request:** K2509142
Project: PFAS/553-8572-010
Sample Matrix: Water

SURROGATE RECOVERY SUMMARY

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Extraction Method: Method

Surrogate	Control Limits	MW-11S K2509142-007	MW-13S K2509142-008	MW-3S KQ2516901-01
13C3-PFBS	40-135	83	81	82
13C3-PFHxS	40-130	77	74	74
13C8-PFOS	40-130	69	68	71
13C4-PFBA	5-130	76	74	77
13C5-PFPeA	40-130	82	78	76
13C5-PFHxA	40-130	80	78	78
13C4-PFHpA	40-130	75	75	75
13C8-PFOA	40-130	76	72	77
13C9-PFNA	40-130	75	74	75
13C6-PFDA	40-130	70	70	72
13C7-PFUnDA	30-130	62	64	67
13C2-PFDoDA	10-130	53	58	60
13C2-PFTeDA	10-130	49	56	55
13C8-FOSA	40-130	67	67	67
D3-MeFOSA	10-130	63	62	64
D5-EtFOSA	10-130	60	60	63
D7-MeFOSE	10-130	59	64	68
D9-EtFOSE	10-130	58	64	67
D3-MeFOSAA	40-170	64	67	69
D5-EtFOSAA	25-135	60	62	65
13C2-4:2 FTS	40-200	89	77	79
13C2-6:2 FTS	40-200	93	79	86
13C2-8:2 FTS	40-300	87	78	86
13C3-HFPO-DA	40-130	86	86	86

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with an pound (#) indicate the control criteria is not acceptable.

Client: Onsite Environmental Incorporated **Service Request:** K2509142
Project: PFAS/553-8572-010
Sample Matrix: Water

SURROGATE RECOVERY SUMMARY

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Extraction Method: Method

Surrogate	Control Limits	Method Blank KQ2516901-04	Lab Control Sample KQ2516901-02	Low Level Lab Control Sample KQ2516901-03
13C3-PFBS	40-135	77	83	87
13C3-PFHxS	40-130	73	78	80
13C8-PFOS	40-130	70	77	79
13C4-PFBA	5-130	76	83	84
13C5-PFPeA	40-130	77	85	85
13C5-PFHxA	40-130	75	83	83
13C4-PFHpA	40-130	72	81	80
13C8-PFOA	40-130	72	79	80
13C9-PFNA	40-130	73	80	79
13C6-PFDA	40-130	71	78	80
13C7-PFUnDA	30-130	69	76	73
13C2-PFDoDA	10-130	62	67	63
13C2-PFTeDA	10-130	62	63	59
13C8-FOSA	40-130	75	66	67
D3-MeFOSA	10-130	66	64	63
D5-EtFOSA	10-130	54	62	63
D7-MeFOSE	10-130	99	77	80
D9-EtFOSE	10-130	94	81	84
D3-MeFOSAA	40-170	76	76	81
D5-EtFOSAA	25-135	78	72	76
13C2-4:2 FTS	40-200	88	96	101
13C2-6:2 FTS	40-200	91	97	103
13C2-8:2 FTS	40-300	88	93	96
13C3-HFPO-DA	40-130	79	89	89

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with an pound (#) indicate the control criteria is not acceptable.

QA/QC Report

Client:	Onsite Environmental Incorporated	**Service Request:**	K2509142
Project	PFAS/553-8572-010	**Date Collected:**	09/10/25
Sample Matrix:	Water	**Date Received:**	09/16/25
		Date Analyzed:	09/26/25 - 09/27/25

Replicate Sample Summary

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Sample Name:	MW-3S	**Units:**	ng/L
Lab Code:	K2509142-003	**Basis:**	NA

Analyte Name	Analysis Method	LOQ	LOD	MDL	Sample Result	Duplicate Sample KQ251690 1-01 Result	Average	RPD	RPD Limit
Perfluorobutane sulfonic acid (PFBS)	Draft EPA Method 1633	1.8	0.89	0.84	11	12	11.4	4	30
Perfluoropentane sulfonic acid (PFPeS)	Draft EPA Method 1633	1.8	0.94	0.50	2.8	3.0	2.90	9	30
Perfluorohexane sulfonic acid (PFHxS)	Draft EPA Method 1633	1.8	0.91	0.53	6.5	6.9	6.71	7	30
Perfluoroheptane sulfonic acid (PFHpS)	Draft EPA Method 1633	1.8	0.95	0.50	ND U	ND U	NC	NC	30
Perfluorooctane sulfonic acid (PFOS)	Draft EPA Method 1633	1.8	0.93	0.50	3.8	3.9	3.86	1	30
Perfluorononane sulfonic acid (PFNS)	Draft EPA Method 1633	1.8	0.96	0.50	ND U	ND U	NC	NC	30
Perfluorodecane sulfonic acid (PFDS)	Draft EPA Method 1633	1.8	0.97	0.50	ND U	ND U	NC	NC	30
Perfluorododecane sulfonic acid (PFDoS)	Draft EPA Method 1633	1.8	0.97	0.50	ND U	ND U	NC	NC	30
Perfluorobutanoic acid (PFBA)	Draft EPA Method 1633	2.0	2.0	1.3	87	88	87.6	<1	30
Perfluoropentanoic acid (PFPeA)	Draft EPA Method 1633	1.8	1.0	0.50	79	79	79.3	<1	30
Perfluorohexanoic acid (PFHxA)	Draft EPA Method 1633	1.8	1.0	0.50	54	54	53.8	<1	30
Perfluoroheptanoic acid (PFHpA)	Draft EPA Method 1633	1.8	1.0	0.50	27	27	26.7	<1	30
Perfluorooctanoic acid (PFOA)	Draft EPA Method 1633	1.8	1.0	0.50	35	34	34.4	3	30
Perfluorononanoic acid (PFNA)	Draft EPA Method 1633	1.8	1.0	0.50	1.1 J	1.1 J	1.06	<1	30
Perfluorodecanoic acid (PFDA)	Draft EPA Method 1633	1.8	1.0	0.75	ND U	ND U	NC	NC	30
Perfluoroundecanoic acid (PFUnDA)	Draft EPA Method 1633	1.8	1.0	0.50	ND U	ND U	NC	NC	30
Perfluorododecanoic acid (PFDOA)	Draft EPA Method 1633	1.8	1.0	0.50	ND U	ND U	NC	NC	30
Perfluorotridecanoic acid (PFTrDA)	Draft EPA Method 1633	1.8	1.0	0.70	ND U	ND U	NC	NC	30
Perfluorotetradecanoic acid (PFTDA)	Draft EPA Method 1633	1.8	1.0	0.50	ND U	ND U	NC	NC	30
Perfluorooctane sulfonamide (PFOSAm)	Draft EPA Method 1633	1.8	1.0	0.50	ND U	ND U	NC	NC	30
N-Methylperfluorooctane sulfonamide (MeFOSA)	Draft EPA Method 1633	1.8	1.0	0.50	ND U	ND U	NC	NC	30
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	Draft EPA Method 1633	1.8	1.0	0.50	ND U	ND U	NC	NC	30
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	Draft EPA Method 1633	1.8	1.0	0.53	ND U	ND U	NC	NC	30
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	Draft EPA Method 1633	1.8	1.0	0.54	ND U	ND U	NC	NC	30
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	Draft EPA Method 1633	1.8	1.0	0.50	ND U	ND U	NC	NC	30
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	Draft EPA Method 1633	1.8	1.0	0.61	ND U	ND U	NC	NC	30
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	Draft EPA Method 1633	1.8	0.94	0.50	ND U	ND U	NC	NC	30
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	Draft EPA Method 1633	1.8	1.4	0.50	ND U	ND U	NC	NC	30
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	Draft EPA Method 1633	1.8	0.96	0.50	ND U	ND U	NC	NC	30
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	Draft EPA Method 1633	18	10	4.2	ND U	ND U	NC	NC	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Onsite Environmental Incorporated	**Service Request:**	K2509142
Project	PFAS/553-8572-010	**Date Collected:**	09/10/25
Sample Matrix:	Water	**Date Received:**	09/16/25
		Date Analyzed:	09/26/25 - 09/27/25

Replicate Sample Summary

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Sample Name:	MW-3S	**Units:**	ng/L
Lab Code:	K2509142-003	**Basis:**	NA

Analyte Name	Analysis Method	LOQ	LOD	MDL	Sample Result	Duplicate Sample KQ2516901-01 Result	Average	RPD	RPD Limit
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	Draft EPA Method 1633	18	10	8.2	ND U	ND U	NC	NC	30
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	Draft EPA Method 1633	18	10	7.0	ND U	ND U	NC	NC	30
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	Draft EPA Method 1633	1.8	0.89	0.50	ND U	ND U	NC	NC	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	Draft EPA Method 1633	1.8	0.93	0.50	ND U	ND U	NC	NC	30
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	Draft EPA Method 1633	1.8	0.94	0.50	ND U	ND U	NC	NC	30
Perfluoro-3-methoxypropanoic acid (PFMPA)	Draft EPA Method 1633	1.8	1.0	0.50	ND U	ND U	NC	NC	30
Perfluoro-4-methoxybutanoic acid (PFMBA)	Draft EPA Method 1633	1.8	1.0	0.50	ND U	ND U	NC	NC	30
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	Draft EPA Method 1633	1.8	1.0	0.50	ND U	ND U	NC	NC	30
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	Draft EPA Method 1633	1.8	1.0	0.50	ND U	ND U	NC	NC	30
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	Draft EPA Method 1633	1.8	0.95	0.50	ND U	ND U	NC	NC	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Onsite Environmental Incorporated	**Service Request:**	K2509142
Project:	PFAS/553-8572-010	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ng/L
Lab Code:	KQ2516901-04	**Basis:**	NA

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Perfluoroalkyl Sulfonic Acids (PFSAs)								
Perfluorobutane sulfonic acid (PFBS)	ND U	2.0	0.89	0.84	1	09/25/25 23:52	9/23/25	
Perfluoropentane sulfonic acid (PFPeS)	ND U	2.0	0.94	0.50	1	09/25/25 23:52	9/23/25	
Perfluorohexane sulfonic acid (PFHxS)	ND U	2.0	0.91	0.53	1	09/25/25 23:52	9/23/25	
Perfluoroheptane sulfonic acid (PFHpS)	ND U	2.0	0.95	0.50	1	09/25/25 23:52	9/23/25	
Perfluorooctane sulfonic acid (PFOS)	ND U	2.0	0.93	0.50	1	09/25/25 23:52	9/23/25	
Perfluorononane sulfonic acid (PFNS)	ND U	2.0	0.96	0.50	1	09/25/25 23:52	9/23/25	
Perfluorodecane sulfonic acid (PFDS)	ND U	2.0	0.97	0.50	1	09/25/25 23:52	9/23/25	
Perfluorododecane sulfonic acid (PFDoS)	ND U	2.0	0.97	0.50	1	09/25/25 23:52	9/23/25	
Perfluoroalkyl Carboxylic Acids (PFCAs)								
Perfluorobutanoic acid (PFBA)	ND U	2.0	2.0	1.3	1	09/25/25 23:52	9/23/25	
Perfluoropentanoic acid (PFPeA)	ND U	2.0	1.0	0.50	1	09/25/25 23:52	9/23/25	
Perfluorohexanoic acid (PFHxA)	ND U	2.0	1.0	0.50	1	09/25/25 23:52	9/23/25	
Perfluoroheptanoic acid (PFHpA)	ND U	2.0	1.0	0.50	1	09/25/25 23:52	9/23/25	
Perfluorooctanoic acid (PFOA)	ND U	2.0	1.0	0.50	1	09/25/25 23:52	9/23/25	
Perfluorononanoic acid (PFNA)	ND U	2.0	1.0	0.50	1	09/25/25 23:52	9/23/25	
Perfluorodecanoic acid (PFDA)	ND U	2.0	1.0	0.75	1	09/25/25 23:52	9/23/25	
Perfluoroundecanoic acid (PFUnDA)	ND U	2.0	1.0	0.50	1	09/25/25 23:52	9/23/25	
Perfluorododecanoic acid (PFDOA)	ND U	2.0	1.0	0.50	1	09/25/25 23:52	9/23/25	
Perfluorotridecanoic acid (PFTrDA)	ND U	2.0	1.0	0.70	1	09/25/25 23:52	9/23/25	
Perfluorotetradecanoic acid (PFTDA)	ND U	2.0	1.0	0.50	1	09/25/25 23:52	9/23/25	
Perfluoroalkyl Sulfonamido Substances								
Perfluorooctane sulfonamide (PFOSAm)	ND U	2.0	1.0	0.50	1	09/25/25 23:52	9/23/25	
N-Methylperfluorooctane sulfonamide (MeFOSA)	ND U	2.0	1.0	0.50	1	09/25/25 23:52	9/23/25	
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	ND U	2.0	1.0	0.50	1	09/25/25 23:52	9/23/25	
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	ND U	2.0	1.0	0.53	1	09/25/25 23:52	9/23/25	
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	ND U	2.0	1.0	0.54	1	09/25/25 23:52	9/23/25	
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	ND U	2.0	1.0	0.50	1	09/25/25 23:52	9/23/25	
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	ND U	2.0	1.0	0.61	1	09/25/25 23:52	9/23/25	

Analytical Report

Client:	Onsite Environmental Incorporated	**Service Request:**	K2509142
Project:	PFAS/553-8572-010	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ng/L
Lab Code:	KQ2516901-04	**Basis:**	NA

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Fluorotelomer Sulfonic Acids (FTSAs)								
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	ND U	2.0	0.94	0.50	1	09/25/25 23:52	9/23/25	
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND U	2.0	1.4	0.50	1	09/25/25 23:52	9/23/25	
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND U	2.0	0.96	0.50	1	09/25/25 23:52	9/23/25	
Fluorotelomer Carboxylic Acids (FTCAs)								
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	ND U	20	10	4.2	1	09/25/25 23:52	9/23/25	
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	ND U	20	10	8.2	1	09/25/25 23:52	9/23/25	
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	ND U	20	10	7.0	1	09/25/25 23:52	9/23/25	
Perfluoroalkyl Ether Sulfonic Acids (PFESAs)								
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	ND U	2.0	0.89	0.50	1	09/25/25 23:52	9/23/25	
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	ND U	2.0	0.93	0.50	1	09/25/25 23:52	9/23/25	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	ND U	2.0	0.94	0.50	1	09/25/25 23:52	9/23/25	
Perfluoroalkyl Ether Carboxylic Acids (PFECAs)								
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND U	2.0	1.0	0.50	1	09/25/25 23:52	9/23/25	
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND U	2.0	1.0	0.50	1	09/25/25 23:52	9/23/25	
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	ND U	2.0	1.0	0.50	1	09/25/25 23:52	9/23/25	
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND U	2.0	1.0	0.50	1	09/25/25 23:52	9/23/25	
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	ND U	2.0	0.95	0.50	1	09/25/25 23:52	9/23/25	

Client:	Onsite Environmental Incorporated	**Service Request:**	K2509142
Project:	PFAS/553-8572-010	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ng/L
Lab Code:	KQ2516901-04	**Basis:**	NA

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
13C3-PFBS	77	40 - 135	09/25/25 23:52	
13C3-PFHxS	73	40 - 130	09/25/25 23:52	
13C8-PFOS	70	40 - 130	09/25/25 23:52	
13C4-PFBA	76	5 - 130	09/25/25 23:52	
13C5-PFPeA	77	40 - 130	09/25/25 23:52	
13C5-PFHxA	75	40 - 130	09/25/25 23:52	
13C4-PFHpA	72	40 - 130	09/25/25 23:52	
13C8-PFOA	72	40 - 130	09/25/25 23:52	
13C9-PFNA	73	40 - 130	09/25/25 23:52	
13C6-PFDA	71	40 - 130	09/25/25 23:52	
13C7-PFUnDA	69	30 - 130	09/25/25 23:52	
13C2-PFDoDA	62	10 - 130	09/25/25 23:52	
13C2-PFTeDA	62	10 - 130	09/25/25 23:52	
13C8-FOSA	75	40 - 130	09/25/25 23:52	
D3-MeFOSA	66	10 - 130	09/25/25 23:52	
D5-EtFOSA	54	10 - 130	09/25/25 23:52	
D7-MeFOSE	99	10 - 130	09/25/25 23:52	
D9-EtFOSE	94	10 - 130	09/25/25 23:52	
D3-MeFOSAA	76	40 - 170	09/25/25 23:52	
D5-EtFOSAA	78	25 - 135	09/25/25 23:52	
13C2-4:2 FTS	88	40 - 200	09/25/25 23:52	
13C2-6:2 FTS	91	40 - 200	09/25/25 23:52	
13C2-8:2 FTS	88	40 - 300	09/25/25 23:52	
13C3-HFPO-DA	79	40 - 130	09/25/25 23:52	

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QA/QC Report

Client:	Onsite Environmental Incorporated	**Service Request:**	K2509142
Project:	PFAS/553-8572-010	**Date Analyzed:**	09/26/25
Sample Matrix:	Water	**Date Extracted:**	09/23/25

Lab Control Sample Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method:	Draft EPA Method 1633	**Units:**	ng/L
Prep Method:	Method	**Basis:**	NA
		Analysis Lot:	894910

Lab Control Sample
KQ2516901-02

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	15.0	18.9	79	55-160
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	22.3	19.2	116	60-150
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	21.3	18.7	114	70-145
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	22.0	19.0	116	65-155
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	219	200	109	50-145
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	252	200	126	70-135
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	235	200	118	65-130
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	19.7	18.9	104	65-145
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	17.3	18.7	93	70-155
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	23.0	20.0	115	70-140
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	25.1	20.0	125	65-145
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	24.2	20.0	121	70-145
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	21.2	20.0	106	70-135
N-Methylperfluorooctane sulfonamide (MeFOSA)	21.4	20.0	107	60-150
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	23.5	20.0	118	50-140
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	21.0	20.0	105	70-145
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	22.0	20.0	110	50-150
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	19.4	17.8	109	70-140
Perfluoro-3-methoxypropanoic acid (PFMPA)	20.0	20.0	100	55-140
Perfluoro-4-methoxybutanoic acid (PFMBA)	21.3	20.0	107	60-150
Perfluorobutane sulfonic acid (PFBS)	20.6	17.7	116	60-145
Perfluorobutanoic acid (PFBA)	22.6	20.0	113	70-140
Perfluorodecane sulfonic acid (PFDS)	18.9	19.3	98	60-145
Perfluorodecanoic acid (PFDA)	23.6	20.0	118	70-140
Perfluorododecane sulfonic acid (PFDoS)	16.8	19.4	87	50-145
Perfluorododecanoic acid (PFDOA)	23.1	20.0	115	70-140
Perfluoroheptane sulfonic acid (PFHpS)	23.4	19.1	123	70-150
Perfluoroheptanoic acid (PFHpA)	22.7	20.0	113	70-150
Perfluorohexane sulfonic acid (PFHxS)	21.0	18.3	115	65-145
Perfluorohexanoic acid (PFHxA)	22.5	20.0	112	70-145
Perfluorononane sulfonic acid (PFNS)	20.6	19.2	107	65-145

Client:	Onsite Environmental Incorporated	**Service Request:**	K2509142
Project:	PFAS/553-8572-010	**Date Analyzed:**	09/26/25
Sample Matrix:	Water	**Date Extracted:**	09/23/25

Lab Control Sample Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method:	Draft EPA Method 1633	**Units:**	ng/L
Prep Method:	Method	**Basis:**	NA
		Analysis Lot:	894910

Lab Control Sample
KQ2516901-02

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Perfluorononanoic acid (PFNA)	22.7	20.0	114	70-150
Perfluorooctane sulfonamide (PFOSAm)	24.1	20.0	121	70-145
Perfluorooctane sulfonic acid (PFOS)	21.3	18.6	115	55-150
Perfluorooctanoic acid (PFOA)	23.1	20.0	115	70-150
Perfluoropentane sulfonic acid (PFPeS)	22.3	18.8	118	65-140
Perfluoropentanoic acid (PFPeA)	23.0	20.0	115	65-135
Perfluorotetradecanoic acid (PFTDA)	21.9	20.0	110	60-140
Perfluorotridecanoic acid (PFTrDA)	23.0	20.0	115	65-140
Perfluoroundecanoic acid (PFUnDA)	22.7	20.0	114	70-145

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	Onsite Environmental Incorporated	**Service Request:**	K2509142
Project:	PFAS/553-8572-010	**Date Analyzed:**	09/26/25
Sample Matrix:	Water	**Date Extracted:**	09/23/25

Lab Control Sample Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method:	Draft EPA Method 1633	**Units:**	ng/L
Prep Method:	Method	**Basis:**	NA
		Analysis Lot:	894910

Low Level Lab Control Sample
KQ2516901-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	2.32	3.77	62	55-160
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	4.26	3.84	111	60-150
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	4.16	3.75	111	70-145
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	3.86	3.80	101	65-155
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	39.5	40.0	99	50-145
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	47.3	40.0	118	70-135
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	46.1	40.0	115	65-130
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	3.50	3.78	93	65-145
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	2.78	3.73	74	70-155
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	4.16	4.00	104	70-140
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	4.72	4.00	118	65-145
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	4.72	4.00	118	70-145
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	4.08	4.00	102	70-135
N-Methylperfluorooctane sulfonamide (MeFOSA)	3.98	4.00	100	60-150
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	4.52	4.00	113	50-140
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	4.04	4.00	101	70-145
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.10	4.00	103	50-150
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	3.52	3.56	99	70-140
Perfluoro-3-methoxypropanoic acid (PFMPA)	3.60	4.00	90	55-140
Perfluoro-4-methoxybutanoic acid (PFMBA)	3.86	4.00	97	60-150
Perfluorobutane sulfonic acid (PFBS)	3.68	3.55	104	60-145
Perfluorobutanoic acid (PFBA)	4.16	4.00	104	70-140
Perfluorodecane sulfonic acid (PFDS)	3.20	3.86	83	60-145
Perfluorodecanoic acid (PFDA)	4.10	4.00	103	70-140
Perfluorododecane sulfonic acid (PFDoS)	2.82	3.88	73	50-145
Perfluorododecanoic acid (PFDOA)	4.08	4.00	102	70-140
Perfluoroheptane sulfonic acid (PFHpS)	4.42	3.81	116	70-150
Perfluoroheptanoic acid (PFHpA)	4.16	4.00	104	70-150
Perfluorohexane sulfonic acid (PFHxS)	3.80	3.66	104	65-145
Perfluorohexanoic acid (PFHxA)	4.14	4.00	104	70-145
Perfluorononane sulfonic acid (PFNS)	3.56	3.85	93	65-145

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	Onsite Environmental Incorporated	**Service Request:**	K2509142
Project:	PFAS/553-8572-010	**Date Analyzed:**	09/26/25
Sample Matrix:	Water	**Date Extracted:**	09/23/25

Lab Control Sample Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method:	Draft EPA Method 1633	**Units:**	ng/L
Prep Method:	Method	**Basis:**	NA
		Analysis Lot:	894910

Low Level Lab Control Sample
KQ2516901-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Perfluorononanoic acid (PFNA)	4.14	4.00	104	70-150
Perfluorooctane sulfonamide (PFOSAm)	4.48	4.00	112	70-145
Perfluorooctane sulfonic acid (PFOS)	3.88	3.71	105	55-150
Perfluorooctanoic acid (PFOA)	4.20	4.00	105	70-150
Perfluoropentane sulfonic acid (PFPeS)	4.18	3.76	111	65-140
Perfluoropentanoic acid (PFPeA)	4.18	4.00	105	65-135
Perfluorotetradecanoic acid (PFTDA)	3.90	4.00	98	60-140
Perfluorotridecanoic acid (PFTrDA)	4.02	4.00	101	65-140
Perfluoroundecanoic acid (PFUnDA)	4.02	4.00	101	70-145

Chain of Custody

Page 1 of 1

OnSite Environmental Inc.
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: Parametrix
Project Number: 553-8472-010
Project Name: Rocky Top Environmental LPL
Project Manager: Laura Lee, Mike Brady
Sampled by:

Turnaround Request (in working days)

(Check One)

- ☐ Same Day
- ☐ 1 Day
- ☐ 2 Days
- ☐ 3 Days
- ☒ Standard (7 Days) (TPH analysis 5 Days)
- ☐ _____ (other)

Laboratory Number: 09-121

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	PFAS (EPA 1633)	EPA Priority Pollutant Metals	% Moisture
1	MW-1S	9/10/25	1440	Water	3	X		
2	MW-2S	9/9/25	1635	Water	3	X		
3	MW-3S	9/10/25	1015	Water	3	X	X	
4	MW-4S	9/10/25	1215	Water	3	X		
5	MW-5S	9/9/25	1225	Water	3	X		
6	MW-6S	9/10/25	1330	Water	3	X		
7	MW-11S	9/10/25	1130	Water	3	X	X	
8	MW-13S	9/10/25	0800	Wter	3	X	X	

	Signature	Company	Date	Time
Relinquished	[signature]	Parametrix	9/11/25	11:05
Received	[signature]	OSE	9/11/25	1105
Relinquished				
Received				
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

Chromatograms with final report ☐

Attachment C

Data Validation Memorandum

Parametrix
let's create tomorrow, together

Memorandum

DATE: November 6, 2025
TO: Project File
FROM: Lisa Gilbert
SUBJECT: Third Quarter 2025 MTCA Data Quality Evaluation
PROJECT NUMBER: 553-8472-010
PROJECT NAME: DTG Yakima Limited Purpose Landfill

A data quality evaluation was conducted for the Third Quarter 2025 MTCA sampling event at the DTG Yakima Limited Purpose Landfill (LPL). Samples were collected on September 9 and 10, 2025, by Parametrix under contract to DTG. The samples were analyzed by OnSite Environmental and ALS Environmental under the following work orders:

- Work Order 2509-119b MW-3S, MW-11s, MW-13S. (MW-4S DUP) Analytes: Total Priority Pollutant metals.
- Work Order 2509-119c MW-1S. Analytes: Total Priority Pollutant metals.
- Work Order 2509-121: MW-1S, MW-2S, MW-3S, MW-4S, MW-5S, MW-6S, MW-11S, MW-13S (MW-4S DUP). Analytes: Per- and polyfluoroalkyl substances (PFAS) subcontracted to ALS Environmental under Work Order K2509142.

The data were evaluated in accordance with EPA guidance (EPA 2020a, 2020b, and 2009) at a Stage 2A level. Sample MW-13S is a field duplicate of MW-4S.

Field Narrative

Groundwater sampling field data sheets were provided by Parametrix.

Laboratory Case Narrative

Samples collected on September 9 and 10, 2025 were received by OnSite Environmental on September 11, 2025 and by Anatek on September 16, 2025. The samples were received at Anatek at a temperature of 5.9 degrees C. They were maintained at the laboratory in accordance with method requirements.

Work Order 2509-119b and -119c

Total Metals by EPA Method 200.8/7470A

The sample(s) were prepared and analyzed within the recommended holding times.

The method blank(s) were clean at the reporting limits.

The laboratory duplicate RPDs were within control limits.

The matrix spike and matrix spike duplicate RPDs were within control limits.

Work Order 2509-121

PFAS by EPA Method 1633 (Subcontracted to ALS Environmental)

The sample(s) were prepared and analyzed within the recommended holding times.

The surrogate percent recoveries were within control limits.

The laboratory replicate RPDs were within control limits.

The method blank(s) were clean at the reporting limits.

The lab control sample percent recoveries were within control limits.

Field Duplicate Evaluation

Relative Percent Differences (RPDs) were calculated for the PFAS results of sample MW-4S and duplicate MW-13S. Field Duplicate RPD calculations are included in Attachment A.

The duplicate percent RPDs were within control limits for all analytes.

Data Qualification

No data were qualified.

References

EPA (U.S. Environmental Protection Agency). 2002. Guidance on Environmental Data Verification and Data Validation. EPA QA/G-8. EPA240R-02/004.

EPA. 2020a. National Functional Guidelines for Inorganic Superfund Data Review. EPA 540R- 2017-001. November.

EPA. 2020b. National Functional Guidelines for Organic Superfund Data Review. EPA 542-R-20-006. November.

Attachment A

Third Quarter MTCA 2025 Field Duplicate Relative Percent Difference Calculations

DTG Yakima LPL Field Duplicate Relative Percent Difference Calculations

553-8472-010

Third Quarter 2025 (B)

Sample Dates: September 9 and 10, 2025

Sample analyses:

ALS Environmental K2509142 (PFAS): MW-1S, MW-2S, MW-3S, MW-4S, MW-5S, MW-6S, MW-11S, MW-13S (MW-4S Dup)

DUP MW-13S collected at MW-4S

Completed by: Lisa Gilbert 10/16/2025

Groundwater	sample	duplicate	avg	diff	RPD	=/<25%?	RL	w/in RL?
units = ng/L	MW-4S	MW-13S						
Perfluorobutane sulfonic acid (PFBS)	5.6	5.4	5.5	0.2	3.6	y	2.1/1.8	
Perfluoropentane sulfonic acid (PFPeS)	2.1 U	1.8 U	1.95	0.3	15.4	y	2.1/1.8	
Perfluorohexane sulfonic acid (PFHxS)	0.84 J	0.71 J	0.78	0.13	16.8	y	2.1/1.8	
Perfluoroheptane sulfonic acid (PFHpS)	2.1 U	1.8 U	1.95	0.3	15.4	y	2.1/1.8	
Perfluorooctane sulfonic acid (PFOS)	2.1 U	1.8 U	1.95	0.3	15.4	y	2.1/1.8	
Perfluorononane sulfonic acid (PFNS)	2.1 U	1.8 U	1.95	0.3	15.4	y	2.1/1.8	
Perfluorodecane sulfonic acid (PFDS)	2.1 U	1.8 U	1.95	0.3	15.4	y	2.1/1.8	
Perfluorododecane sulfonic acid (PFDoS)	2.1 U	1.8 U	1.95	0.3	15.4	y	2.1/1.8	
Perfluorobutanoic acid (PFBA)	39	39	39.0	0	0.0	y	2.1/1.8	
Perfluoropentanoic acid (PFPeA)	42	41	41.5	1	2.4	y	2.1/1.8	
Perfluorohexanoic acid (PFHxA)	29	28	28.5	1	3.5	y	2.1/1.8	
Perfluoroheptanoic acid (PFHpA)	14	14	14	0	0.0	y	2.1/1.8	
Perfluorooctanoic acid (PFOA)	6.3	5.9	6.1	0.4	6.6	y	2.1/1.8	
Perfluorononanoic acid (PFNA)	2.1 U	1.8 U	1.95	0.3	15.4	y	2.1/1.8	
Perfluorodecanoic acid (PFDA)	2.1 U	1.8 U	1.95	0.3	15.4	y	2.1/1.8	
Perfluoroundecanoic acid (PFUnDA)	2.1 U	1.8 U	1.95	0.3	15.4	y	2.1/1.8	
Perfluorododecanoic acid (PFDOA)	2.1 U	1.8 U	1.95	0.3	15.4	y	2.1/1.8	
Perfluorotridecanoic acid (PFTrDA)	2.1 U	1.8 U	1.95	0.3	15.4	y	2.1/1.8	
Perfluorotetradecanoic acid (PFTDA)	2.1 U	1.8 U	1.95	0.3	15.4	y	2.1/1.8	
Perfluorooctane sulfonamide (PFOSAm)	2.1 U	1.8 U	1.95	0.3	15.4	y	2.1/1.8	
N-Methylperfluorooctane sulfonamide (MeFOSA)	2.1 U	1.8 U	1.95	0.3	15.4	y	2.1/1.8	
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	2.1 U	1.8 U	1.95	0.3	15.4	y	2.1/1.8	
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	2.1 U	1.8 U	1.95	0.3	15.4	y	2.1/1.8	
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	2.1 U	1.8 U	1.95	0.3	15.4	y	2.1/1.8	
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	2.1 U	1.8 U	1.95	0.3	15.4	y	2.1/1.8	
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	2.1 U	1.8 U	1.95	0.3	15.4	y	2.1/1.8	
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	2.1 U	1.8 U	1.95	0.3	15.4	y	2.1/1.8	
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	2.1 U	1.8 U	1.95	0.3	15.4	y	2.1/1.8	
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	2.1 U	1.8 U	1.95	0.3	15.4	y	2.1/1.8	
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	21 U	18 U	20	3	15.4	y	21/18	
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	21 U	18 U	20	3	15.4	y	21/18	
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	21 U	18 U	20	3	15.4	y	21/18	
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	2.1 U	1.8 U	1.95	0.3	15.4	y	2.1/1.8	
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	2.1 U	1.8 U	1.95	0.3	15.4	y	2.1/1.8	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	2.1 U	1.8 U	1.95	0.3	15.4	y	2.1/1.8	
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.1 U	1.8 U	1.95	0.3	15.4	y	2.1/1.8	
Perfluoro-4-methoxybutanoic acid (PFMBA)	2.1 U	1.8 U	1.95	0.3	15.4	y	2.1/1.8	
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	2.1 U	1.8 U	1.95	0.3	15.4	y	2.1/1.8	
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	2.1 U	1.8 U	1.95	0.3	15.4	y	2.1/1.8	
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	2.1 U	1.8 U	1.95	0.3	15.4	y	2.1/1.8	

Comments: No additional flags other than laboratory qualifiers

Attachment D

Hazard Index Calculations

PFAS Hazard Index MCL Calculation Tool

Enter Site Information

Date:	Third Quarter 2025
Site Name:	Rocky Top Environmental LPL
Sample Name:	MW-3S

Data Input

PFAS Chemical	PFAS Concentration at Water Source[1] (ppt or ng/L)	Composition Ratio of the PFAS Mixture (percent)	Health-Based Water Concentration (HBWC) (ppt or ng/L)		Hazard Index[2] (HI) (Eq. 1)	Percent Contribution to the Hazard Index
HFPO-DA	0	0.0%	10	a	0.00E+00	0.0%
PFBS	11	59.1%	2,000	b	5.50E-03	0.7%
PFHxS	6.5	34.9%	10	a	6.50E-01	84.9%
PFNA	1.1	5.9%	10	a	1.10E-01	14.4%
Totals	**19**	**100.0%**	---		**0.8**	**100.0%**

Notes:

a - HBWCs for PFHxS, PFNA, and HFPO-DA are also individually applied as MCLGs and MCLs.

b - EPA derived a HBWC of 2,000 ng/L for PFBS but did not establish an MCLG or MCL. Although PFBS is not regulated individually (i.e., with an individual MCL), it must be included in the hazard index MCL calculation for the PFAS mixture (i.e., sum of HQs for HFPO-DA, PFBS, PFHxS, and PFNA).

[1] This calculator applies to any current or potential future source of drinking water including groundwater and surface water sources. For the HI evaluation, each sample analyses should include results for all four PFAS chemicals (i.e., HFPO-DA, PFBS, PFHxS, and PFNA).

[2] It's recommeded to consult with a toxicologist within Ecology's TCP Policy and Technical Support Unit for assistance in developing PFAS cleanup levels for mixtures that exceed an HI MCL of 1 (360-407-7170).

Acronyms

HBWC = Health-Based Water Concentration.
HI = Hazard index
HQ = Hazard quotient
MCL = Maximum contaminant level
MCLG = Maximum contaminant level goal
MDL = Method detection limit
MTCA = Model Toxics Control Act
NPDWR = National Primary Drinking Water Regulation
ng/L = Nanogram per liter; same as ppt
PFAS = per- and polyfluoroalkyl substances
ppt = part per trillion; same as ng/L
PQL = Practical quantitation limit

Remark:

Equation 1

$$\text{Hazard Index} = \left(\frac{PFHxS_{ppt}}{10\ ppt}\right) + \left(\frac{PFNA_{ppt}}{10\ ppt}\right) + \left(\frac{HFPO-DA_{ppt}}{10\ ppt}\right) + \left(\frac{PFBS_{ppt}}{2{,}000\ ppt}\right)$$

Note: Each individual fraction is called a Hazard Quotient or HQ.

PFAS Hazard Index MCL Calculation Tool

Enter Site Information

Date:	Third Quarter 2025
Site Name:	Rocky Top Environmental LPL
Sample Name:	MW-4S

Data Input

PFAS Chemical	PFAS Concentration at Water Source[1] (ppt or ng/L)	Composition Ratio of the PFAS Mixture (percent)	Health-Based Water Concentration (HBWC) (ppt or ng/L)		Hazard Index[2] (HI) (Eq. 1)	Percent Contribution to the Hazard Index
HFPO-DA	0	0.0%	10	a	0.00E+00	0.0%
PFBS	5.6	87.0%	2,000	b	2.80E-03	3.2%
PFHxS	0.84	13.0%	10	a	8.40E-02	96.8%
PFNA	0	0.0%	10	a	0.00E+00	0.0%
Totals	**6**	**100.0%**	**---**		**0.09**	**100.0%**

Notes:

a - HBWCs for PFHxS, PFNA, and HFPO-DA are also individually applied as MCLGs and MCLs.

b - EPA derived a HBWC of 2,000 ng/L for PFBS but did not establish an MCLG or MCL. Although PFBS is not regulated individually (i.e., with an individual MCL), it must be included in the hazard index MCL calculation for the PFAS mixture (i.e., sum of HQs for HFPO-DA, PFBS, PFHxS, and PFNA).

[1] This calculator applies to any current or potential future source of drinking water including groundwater and surface water sources. For the HI evaluation, each sample analyses should include results for all four PFAS chemicals (i.e., HFPO-DA, PFBS, PFHxS, and PFNA).

[2] It's recommeded to consult with a toxicologist within Ecology's TCP Policy and Technical Support Unit for assistence in developing PFAS cleanup levels for mixtures that exceed an HI MCL of 1 (360-407-7170).

Acronyms

HBWC = Health-Based Water Concentration.
HI = Hazard index
HQ = Hazard quotient
MCL = Maximum contaminant level
MCLG = Maximum contaminant level goal
MDL = Method detection limit
MTCA = Model Toxics Control Act
NPDWR = National Primary Drinking Water Regulation
ng/L = Nanogram per liter; same as ppt
PFAS = per- and polyfluoroalkyl substances
ppt = part per trillion; same as ng/L
PQL = Practical quantitation limit

Remark:

Equation 1

$$\text{Hazard Index} = \left(\frac{PFHxS_{ppt}}{10\ ppt}\right) + \left(\frac{PFNA_{ppt}}{10\ ppt}\right) + \left(\frac{HFPO-DA_{ppt}}{10\ ppt}\right) + \left(\frac{PFBS_{ppt}}{2{,}000\ ppt}\right)$$

Note: Each individual fraction is called a Hazard Quotient or HQ.

PFAS Hazard Index MCL Calculation Tool

Enter Site Information

Date:	Third Quarter 2025
Site Name:	Rocky Top Environmental LPL
Sample Name:	MW-6S

Data Input

PFAS Chemical	PFAS Concentration at Water Source[1] (ppt or ng/L)	Composition Ratio of the PFAS Mixture (percent)	Health-Based Water Concentration (HBWC) (ppt or ng/L)		Hazard Index[2] (HI) (Eq. 1)	Percent Contribution to the Hazard Index
HFPO-DA	0	0.0%	10	a	0.00E+00	0.0%
PFBS	7.2	89.9%	2,000	b	3.60E-03	4.3%
PFHxS	0.81	10.1%	10	a	8.10E-02	95.7%
PFNA	0	0.0%	10	a	0.00E+00	0.0%
Totals	**8**	**100.0%**	**---**		**0.08**	**100.0%**

Notes:

a - HBWCs for PFHxS, PFNA, and HFPO-DA are also individually applied as MCLGs and MCLs.

b - EPA derived a HBWC of 2,000 ng/L for PFBS but did not establish an MCLG or MCL. Although PFBS is not regulated individually (i.e., with an individual MCL), it must be included in the hazard index MCL calculation for the PFAS mixture (i.e., sum of HQs for HFPO-DA, PFBS, PFHxS, and PFNA).

[1] This calculator applies to any current or potential future source of drinking water including groundwater and surface water sources. For the HI evaluation, each sample analyses should include results for all four PFAS chemicals (i.e., HFPO-DA, PFBS, PFHxS, and PFNA).

[2] It's recommeded to consult with a toxicologist within Ecology's TCP Policy and Technical Support Unit for assistance in developing PFAS cleanup levels for mixtures that exceed an HI MCL of 1 (360-407-7170).

Acronyms

HBWC = Health-Based Water Concentration.
HI = Hazard index
HQ = Hazard quotient
MCL = Maximum contaminant level
MCLG = Maximum contaminant level goal
MDL = Method detection limit
MTCA = Model Toxics Control Act
NPDWR = National Primary Drinking Water Regulation
ng/L = Nanogram per liter; same as ppt
PFAS = per- and polyfluoroalkyl substances
ppt = part per trillion; same as ng/L
PQL = Practical quantitation limit

Remark:

Equation 1

$$\text{Hazard Index} = \left(\frac{PFHxS_{ppt}}{10\ ppt}\right) + \left(\frac{PFNA_{ppt}}{10\ ppt}\right) + \left(\frac{HFPO-DA_{ppt}}{10\ ppt}\right) + \left(\frac{PFBS_{ppt}}{2{,}000\ ppt}\right)$$

Note: Each individual fraction is called a Hazard Quotient or HQ.