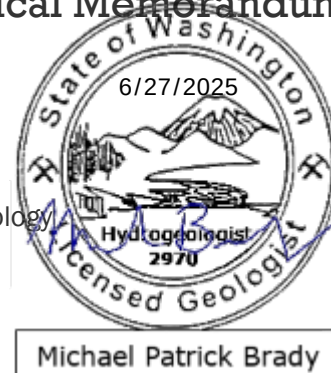


DATE: June 27, 2025
TO: Luke Lemond, LHG, Washington State Department of Ecology
FROM: Mike Brady, LHG
SUBJECT: 1Q 2025 MTCA Sampling - AO # DE21624
CC: Ian Sutton, PE ,DTG Recycling
Steven Newchurch, REHS, Yakima Health District
PROJECT NUMBER: 553-8472-010
PROJECT NAME: Rocky Top Environmental (Anderson) Limited Purpose Landfill



Introduction

This technical memorandum summarizes the first 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), semi-volatile organic compounds (SVOCs) and carcinogenic polycyclic aromatic hydrocarbons (cPAHs), per- and polyfluoroalkyl substances (PFAS), dioxins and furans, and Environmental Protection Agency (EPA) priority pollutant metals. 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.

First Quarter 2025 Sampling and Analysis

The first quarter 2025 MTCA groundwater monitoring was conducted in accordance with the Sampling and Analysis Plan (SAP) (Parametrix 2025a). Sampling of monitoring wells MW-2S, MW-3S, MW-4S, MW-5S, and MW-6S was completed on March 31 and April 1. Field data sheets are included as Attachment A. A field duplicate sample (MW-13S) was collected at well MW-6S. Routine detection/assessment monitoring was completed concurrently (Parametrix 2025b).

The first quarter 2025 sampling included analysis for nitrate, TPH, VOCs, PFAS, dioxins and furans, and priority pollutant metals. The samples were submitted to OnSite Environmental. Some analyses were also subcontracted to ALS Environmental, Anatek, and Enthalpy.

The laboratory report (which includes the WAC 173-351-500 results) is included as Attachment B. A data validation technical memorandum was completed by Chris Bourgeois, LG. Chris was not involved in the sampling effort. A copy of the data validation is 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.

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 first quarter event.

Exceedances of Water Quality Criteria

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

MW-3S

- Nitrate was found above the MCL at 11.3 milligrams per liter (mg/L)
- Perfluorooctanoic acid (PFOA) was found above the MCL and MTCA CUL at 15 nanograms per liter (ng/L). The Hazardous Index and running annual Hazardous Index for PFAS mixtures were below the MCL of 1 (see Appendix D)

MW-4S

- Nitrate was found above the MCL at 62.8 mg/L
- Conductivity was found above the secondary MCL of 700 mg/L; however, conductivity is not a formal COPC for the MTCA Limited RI

MW-6S

- Nitrate was found above the MCL at 11.6 mg/L

All three of these wells were also observed to have apparent increases in leachate indicator parameters during the first quarter 2025 event (Parametrix 2025b).

Conclusions

PFOA continued to be detected in well MW-3S at a concentration above the MCL and MTCA CUL, and nitrate concentrations were found above the MCL in wells MW-3S, MW-4S, and MW-6S. Additional monitoring wells have been or are being constructed downgradient of MW-3S. TPH, VOCs, SVOCs, dioxins and furans, and EPA priority pollutant metals continued to be non-detected or below applicable cleanup criteria.

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

- This was the third sampling event that included sampling for dioxins and furans. Dioxins and furans were initially detected in MW-4S during the third quarter 2024 sampling event where the total toxicity equivalency concentration (TEQ) of 2,3,7,8-Tetrachlorodibenzodioxin (TCDD) was above the MTCA CUL (Parametrix 2024d). No additional dioxin and furan sampling is necessary since the results from this event show these COPCs have been below applicable cleanup levels for two consecutive events and impacts from 2,3,7,8-TCDD were not confirmed.
- This was the first sampling event that included sampling for EPA priority pollutant metals and results were non-detect. One additional event will be completed that will include MW-3S and the two new monitoring wells (MW-1S and MW-11S). This sampling will likely occur in the

third quarter of 2025 after both new monitoring wells have been constructed and properly developed.

- SVOCs/cPAHs will be sampled in the second quarter 2025 event to confirm the results of the fourth quarter 2024 event, which were all non-detected.
- TPH and VOCs continued to be non-detected during the first quarter 2025 event. These parameters are currently also included in the WAC 173-350-500 monitoring program, and discontinuing these parameters will be recommended at the end of 2025.

Additional Notes

Well MW-11S was completed in June 2025 to a depth of 241 feet below ground. The Vantage Interbed was encountered at 234 feet below ground and the well was screened from 219 to 239 feet below ground within the SA similar to the other MTCA investigation wells. Well MW-1S is currently being drilled east of MW-3S and will be similarly constructed to monitor the SA. These wells are expected to provide additional data to fill data gaps related to characterization of the groundwater plume at the Facility for the Limited RI.

Figures

- 1 Facility Vicinity Map
- 2 Well Location Map
- 3 Water Level Summary
- 4 First Quarter 2025 Shallow Aquifer Potentiometric Surface

Tables

- 1 Field Parameters, Nitrate, Petroleum Hydrocarbons, and Volatile Organic Compounds
- 2 Per- and Poly-fluoroalkyl Substances (PFAS) Results
- 3 Dioxin and Furan Results
- 4 Semi-volatile Organic Compounds (SVOC) Results
- 5 Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) Results
- 6 EPA Priority Pollutant Metals Results

Attachments

- A First Quarter 2025 Field Data Sheets
- B Laboratory Analytical Reports
- C Data Validation Technical Memorandum
- D Hazard Index Calculations

References

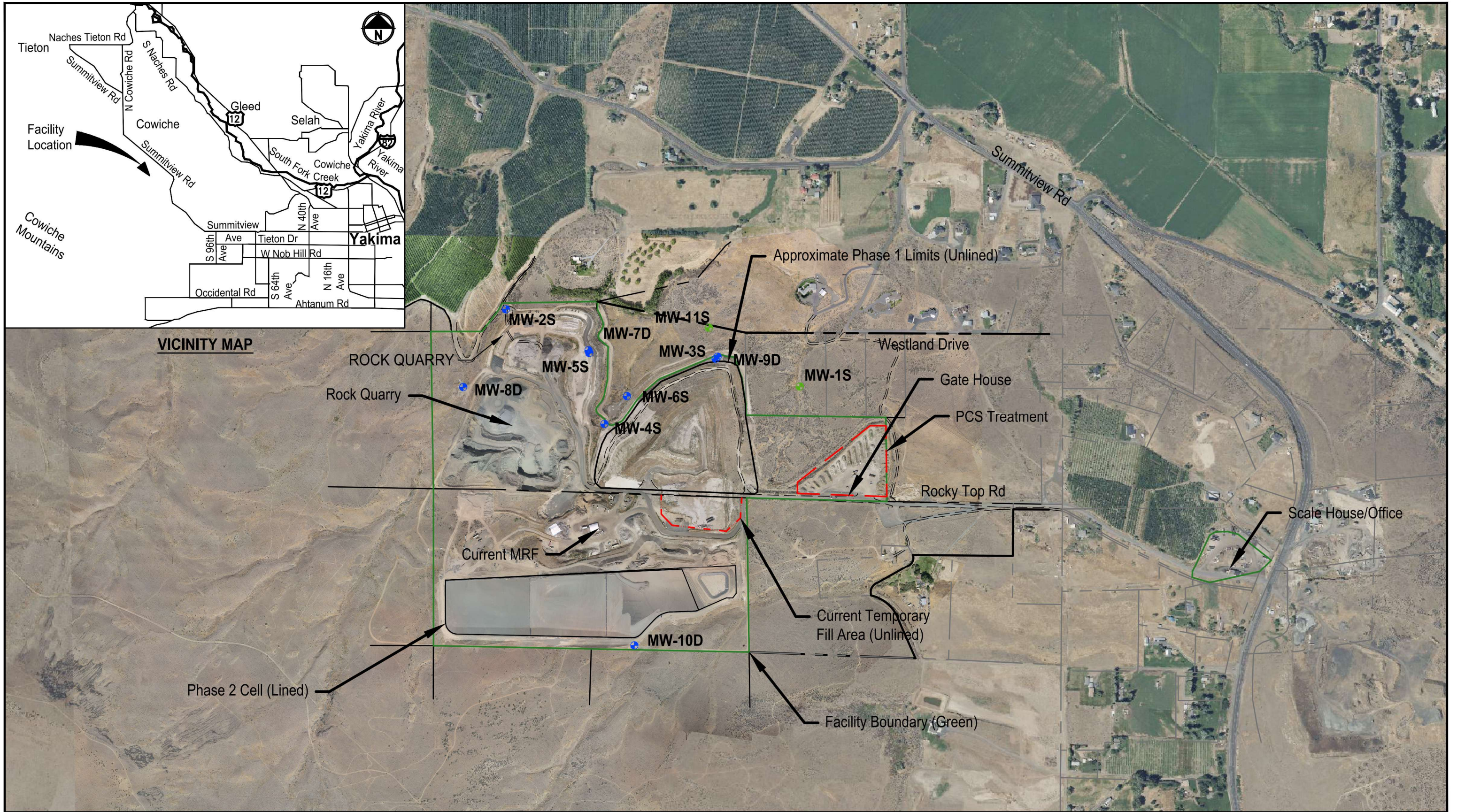
Ecology. 2025. Cleanup Levels and Risk Calculations. Revised January 2025.

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

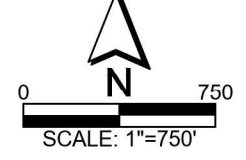
Parametrix. 2025b. 2025 First Quarter Groundwater Monitoring Report for the DTG Rocky Top Environmental Limited Purpose Landfill, Yakima, Washington. June, 2025.

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

Figures

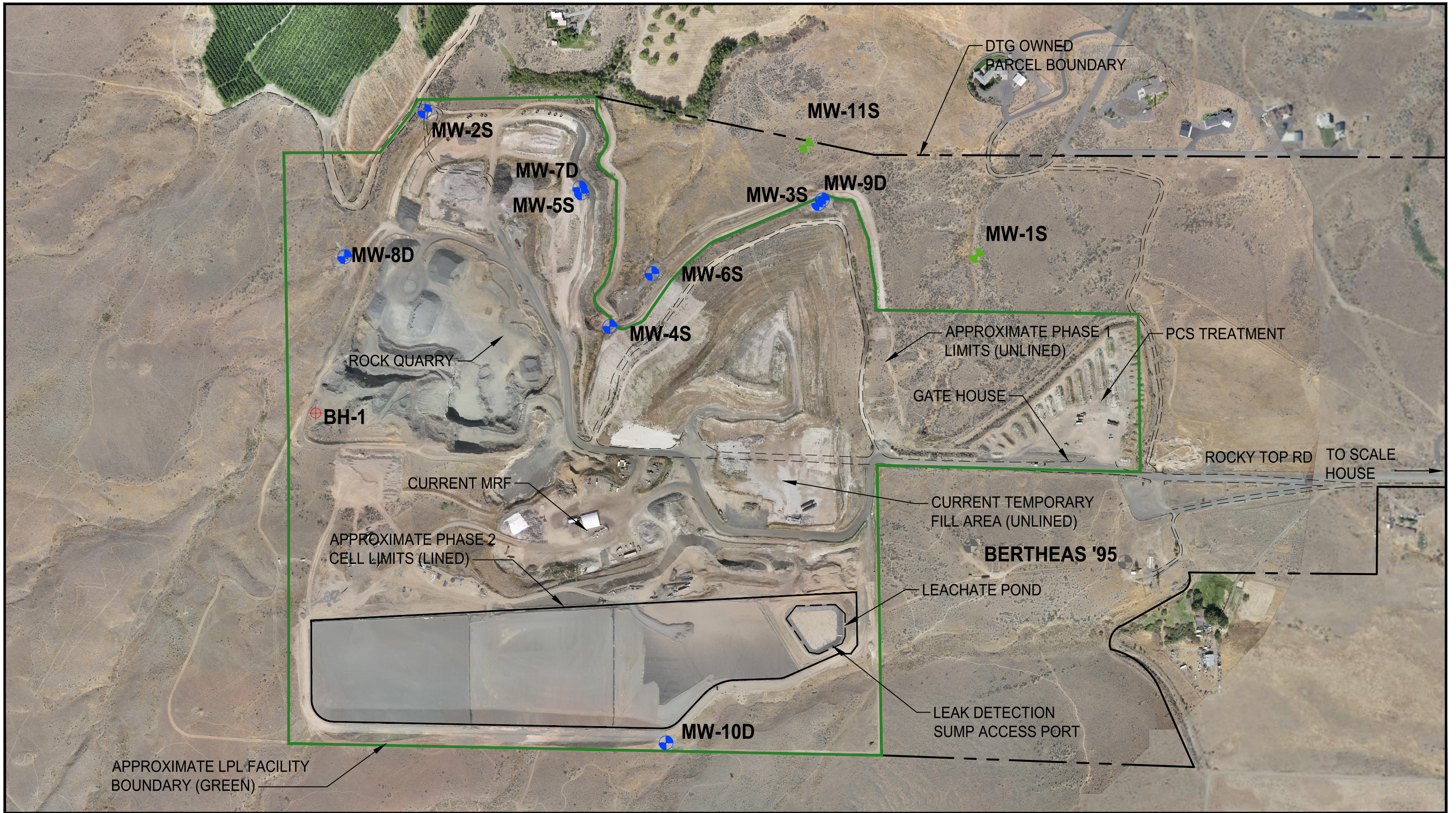


Parametrix DATE: March 7, 2025 FILE: PS8472008-FIGURE 1 - VICINITY MAP

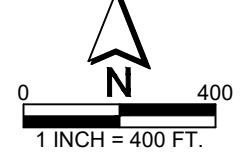


- Monitoring Well
- Proposed Monitoring Well

Figure 1
Facility Vicinity Map
Rocky Top Environmental Limited Purpose Landfill

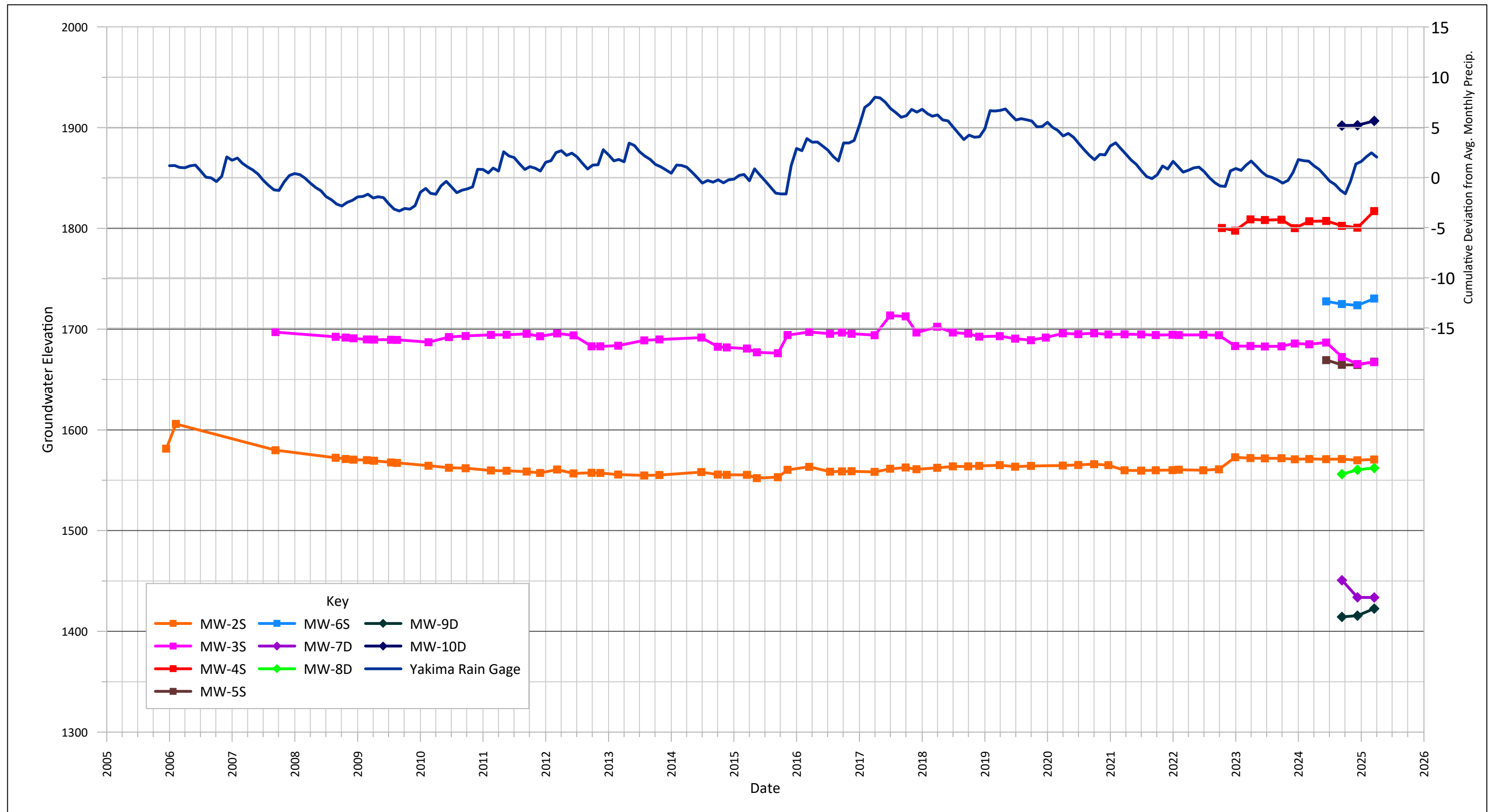


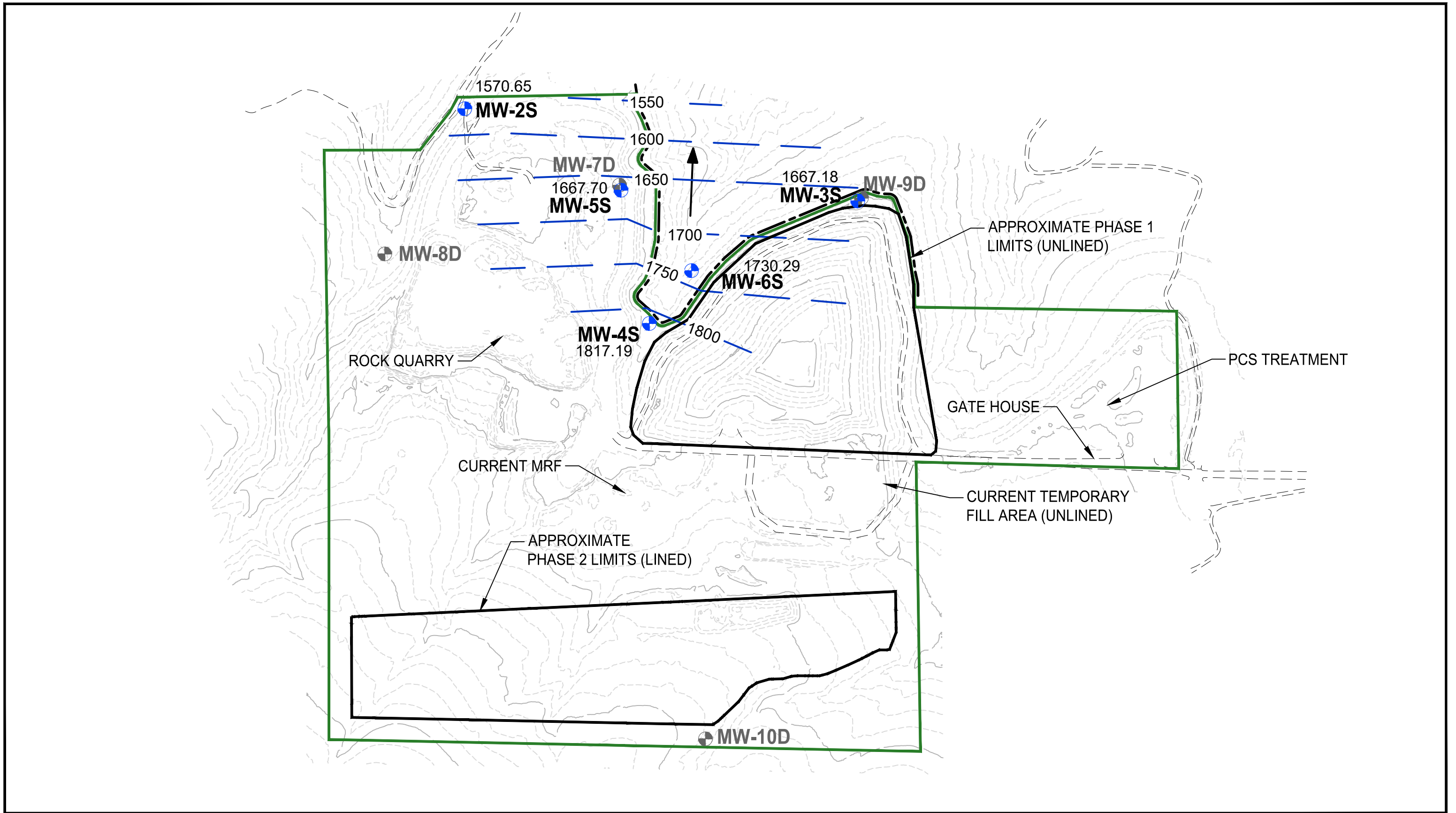
Parametrix DATE: June 17, 2025 FILE: PS8472008-FIGURE 1 - VICINITY MAP



- Monitoring Well
- Proposed Monitoring Well
- ⊕ Borehole
- ⊕ Decommissioned Well

Figure 2
Well Location Map
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 B Cancer	MTCA B Non-Cancer	MW-2S			MW-3S			MW-4S			MW-5S			
						9/12/2024	12/11/2024	4/1/2025	9/12/2024	12/11/2024	3/31/2025	9/11/2024	12/12/2024	4/1/2025	9/11/2024	MW-13S (Dup) 9/11/2024	12/11/2024	3/31/2025
Field Data																		
pH						7.91	8.36 R	7.59	7.69	7.90 R	7.09	7.76	8.12 R	7.13	8.49	--	8.46 R	7.87
Conductivity	µmhos/cm	700 **				176.8	161.4	120	630	563	432	973	786	752	356.6	--	362.3	525
Temperature	C					14.2	13.0	13.73	14.4	13.6	13.69	13.1	10.8	12.33	15.6	--	13.9	13.8
Redox	mv					-72.1	-186.0	192	-73.9	-185.4	172	-96.9	-181.2	187	-149.7	--	-218.1	-187
Dissolved Oxygen	mg/L					6.04	6.93	7.28	4.88	4.65	4.77	4.04	4.33	5.77	0.14	--	0.10	8.75
Turbidity	NTU					0.00	0.00	0.06	0.00	0.44	0.21	0.00	0.59	0.36	2.52	--	2.14	0.25
Inorganic Parameters																		
Nitrate	mg/L-N	10 *			26	0.60	0.64	0.702	11	12	11.3	47	37	62.8	<0.050	0.051	0.092	0.0800
Total Petroleum Hydrocarbons																		
Gasoline Range Organics ^a	µg/L	1000	800/1000			<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
TPHDx																		
Diesel Range Organics	mg/L					<0.21	<0.21	<0.21	<0.21	<0.22	<0.20	<0.21	<0.22	<0.21	<0.22	<0.21	<0.21	<0.20
Lube Oil Range Organics	mg/L					<0.21	<0.21	<0.21	<0.21	<0.22	<0.20	<0.21	<0.22	<0.21	<0.22	<0.21	<0.21	<0.20
Total TPHDx	mg/L	0.5	0.5			<0.21	<0.21		<0.21	<0.22		<0.21	<0.22		<0.22	<0.21	<0.21	
Volatile Organic Compounds																		
Chloromethane	µg/L					<1.3	<1.0	<1.0	<1.3	<1.0	<1.0	<1.3	<1.0	<1.0	<1.3	<1.3	<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	<0.020
Bromomethane	µg/L				11	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
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	<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	<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	<0.20
Acetone	µg/L				7200	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<6.7
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	<1.4
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	<0.26
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	<1.0
Acrylonitrile	µg/L			0.081	8	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<0.20
Dichlorobromomethane	µg/L	80 * THM				<0.20	<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	<0.20
4-methyl-2-pentanone	µg/L				640	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
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	<1.0
Trans-1,3-Dichloropropene	µg/L				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	<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	<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	<0.20
2-Hexanone	µg/L				8	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
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	<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	<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	<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	<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 B Cancer	MTCA B Non-Cancer	MW-6S					Trip Blank		
						9/11/2024	12/12/2024	MW-13S (Dup) 12/12/2024	4/1/2025	MW-13S (Dup) 4/1/2025	9/12/2024	12/11/2024	3/31/2025
Field Data													
pH						8.25	8.38 R	--	7.51	--	--	--	--
Conductivity	µmhos/cm	700 **				501	504	--	389	--	--	--	--
Temperature	C					13.3	11.5	--	12.36	--	--	--	--
Redox	mv					-104.2	-194.5	--	165	--	--	--	--
Dissolved Oxygen	mg/L					4.06	4.19	--	4.26	--	--	--	--
Turbidity	NTU					0.00	1.78	--	0.5	--	--	--	--
Inorganic Parameters													
Nitrate	mg/L-N	10 *			26	9.2	8.6	9.9	11.3	11.6	--	--	--
Total Petroleum Hydrocarbons													
Gasoline Range Organics ^a	µg/L	1000	800/1000			<100	<100	<100	<100	<100	<100	<100	<100
TPHDx													
Diesel Range Organics	mg/L					<0.20	<0.21	<0.22	<0.20	<0.21	--	--	--
Lube Oil Range Organics	mg/L					<0.20	<0.21	<0.22	<0.20	<0.21	--	--	--
Total TPHDx	mg/L	0.5	0.5			<0.20	<0.21	<0.22			--	--	--
Volatile Organic Compounds													
Chloromethane	µg/L					<1.3	<1.0	<1.3	<1.0	<1.0	<1.4	<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
Bromomethane	µg/L				11	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroethane	µg/L					<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
1,1-Dichloroethene	µg/L	7 *			400	<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	<6.7	<5.0	<5.0	<5.0	<5.0
Methyl Iodide	µg/L					<1.0	<1.0	<1.0	<1.4	<1.0	<1.0	<1.0	<1.0
Carbon Disulfide	µg/L				800	<0.20	<0.20	<0.20	<0.26	<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
Acrylonitrile	µg/L			0.081	8	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50
Trans-1,2-Dichloroethene	µg/L	100 *			160	<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
Vinyl Acetate	µg/L				8000	<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
2-Butanone	µg/L				4800	<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
Chloroform	µg/L	80 * THM		1.4	80	<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
Carbon Tetrachloride	µg/L	5 *		0.63	32	<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
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
Trichloroethene	µg/L	5 *	5	0.54	4	<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
Dibromomethane	µg/L					<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Dichlorobromomethane	µg/L	80 * THM				<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
4-methyl-2-pentanone	µg/L				640	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Toluene	µg/L	1000 *	1000		640	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trans-1,3-Dichloropropene	µg/L				160	<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
Tetrachloroethene	µg/L	5 *	5	21	48	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
2-Hexanone	µg/L				8	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Dibromochloromethane	µg/L	80 * THM		0.52	160	<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
Chlorobenzene	µg/L	100 *			160	<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

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 B Cancer	MTCA B Non-Cancer	MW-2S			MW-3S			MW-4S			MW-5S			
						9/12/2024	12/11/2024	4/1/2025	9/12/2024	12/11/2024	3/31/2025	9/11/2024	12/12/2024	4/1/2025	9/11/2024	MW-13S (Dup) 9/11/2024	12/11/2024	3/31/2025
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	<0.20
m, p-Xylene	µg/L				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	<0.40
o-Xylene	µg/L		1000		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	<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	<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	<1.0
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	<0.20
1,2,3-Trichloropropane	µg/L			0.00038	32	<0.20	<0.27	<0.20	<0.20	<0.27	<0.20	<0.20	<0.27	<0.20	<0.20	<0.20	<0.27	<0.20
trans-1,4-Dichloro-2-butene	µg/L					<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<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	<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	<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	<1.0
Naphthalene	µg/L	160	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	<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 anomalies

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 B Cancer	MTCA B Non-Cancer	MW-6S					Trip Blank		
						9/11/2024	12/12/2024	MW-13S (Dup) 12/12/2024	4/1/2025	MW-13S (Dup) 4/1/2025	9/12/2024	12/11/2024	3/31/2025
Ethylbenzene	µg/L	700 *	700		800	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
m, p-Xylene	µg/L				1600	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
o-Xylene	µg/L		1000		1600	<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
Bromoform	µg/L	80 * THM		5.5	160	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane	µg/L			0.22	160	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2,3-Trichloropropane	µg/L			0.00038	32	<0.20	<0.27	<0.20	<0.20	<0.20	<0.20	<0.27	<0.27
trans-1,4-Dichloro-2-butene	µg/L					<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50
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
1,2-Dichlorobenzene	µg/L	600 *			720	<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
Naphthalene	µg/L	160	160		160	<1.0	<1.0	<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 anomalies

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

Parameter	Units	Cleanup Level			MW-2S			MW-3S			MW-4S		
		MTCA B Non- Cancer	MTCA B Cancer	MCL	9/12/2024	12/11/2024	4/1/2025	9/12/2024	12/11/2024	3/31/2025	9/12/2024	12/12/2024	4/1/2025
Perfluoroalkyl Sulfonic Acids (PFSA _s)													
Perfluorobutane sulfonic acid (PFBS)	ng/L	4800			<4.5	<5.3	<4.4	13	8.1	9.6	4.8	<5.3	4.2 J
Perfluoropentane sulfonic acid (PFPeS)	ng/L				<4.5	<5.3	<4.4	<4.7	<5.4	1.8 J	<4.5	<5.3	<4.6
Perfluorohexane sulfonic acid (PFHxS)	ng/L	160		10	<4.5	<5.3	<4.4	6.7	<5.4	3.9 J	<4.5	<5.3	0.84 J
Perfluoroheptane sulfonic acid (PFHpS)	ng/L				<4.5	<5.3	<4.4	<4.7	<5.4	<4.3	<4.5	<5.3	<4.6
Perfluorooctane sulfonic acid (PFOS)	ng/L	1.6	2.2	4.0	<4.5	<5.3	<4.4	<4.7	<5.4	2.5 J	<4.5	<5.3	<4.6
Perfluorononane sulfonic acid (PFNS)	ng/L				<4.5	<5.3	<4.4	<4.7	<5.4	<4.3	<4.5	<5.3	<4.6
Perfluorodecane sulfonic acid (PFDS)	ng/L				<4.5	<5.3	<4.4	<4.7	<5.4	<4.3	<4.5	<5.3	<4.6
Perfluorododecane sulfonic acid (PFDoS)	ng/L				<4.5	<5.3	<4.4	<4.7	<5.4	<4.3	<4.5	<5.3	<4.6
Perfluoroalkyl Carboxylic Acids (PFCA _s)													
Perfluorobutanoic acid (PFBA)	ng/L	8000			<4.5	<5.3	<4.4	33	31	27	23	17	31
Perfluoropentanoic acid (PFPeA)	ng/L				<4.5	<5.3	<4.4	74	49	42	21	7.9	25
Perfluorohexanoic acid (PFHxA)	ng/L	8000			<4.5	<5.3	<4.4	43	34	25	8.6	<5.3	19
Perfluoroheptanoic acid (PFHpA)	ng/L				<4.5	<5.3	<4.4	25	17	13	<4.5	<5.3	9.0
Perfluorooctanoic acid (PFOA)	ng/L	0.48	0.003	4.0	<4.5	<5.3	<4.4	29	21	15	<4.5	<5.3	3.2 J
Perfluorononanoic acid (PFNA)	ng/L	40		10	<4.5	<5.3	<4.4	<4.7	<5.4	<4.3	<4.5	<5.3	<4.6
Perfluorodecanoic acid (PFDA)	ng/L				<4.5	<5.3	<4.4	<4.7	<5.4	<4.3	<4.5	<5.3	<4.6
Perfluoroundecanoic acid (PFUnDA)	ng/L				<4.5	<5.3	<4.4	<4.7	<5.4	<4.3	<4.5	<5.3	<4.6
Perfluorododecanoic acid (PFDOA)	ng/L				<4.5	<5.3	<4.4	<4.7	<5.4	<4.3	<4.5	<5.3	<4.6
Perfluorotridecanoic acid (PFT _r DA)	ng/L				<4.5	<5.3	<4.4	<4.7	<5.4	<4.3	<4.5	<5.3	<4.6
Perfluorotetradecanoic acid (PFTDA)	ng/L				<4.5	<5.3	<4.4	<4.7	<5.4	<4.3	<4.5	<5.3	<4.6
Perfluoroalkyl Sulfonamido Substances													
Perfluorooctane sulfonamide (PFOSAm)	ng/L				<4.5	<5.3	<4.4	<4.7	<5.4	<4.3	<4.5	<5.3	<4.6
N-Methylperfluorooctane sulfonamide (MeFOSA)	ng/L				<4.5	<5.3	<4.4	<4.7	<5.4	<4.3	<4.5	<5.3	<4.6
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	ng/L				<4.5	<5.3	<4.4	<4.7	<5.4	<4.3	<4.5	<5.3	<4.6
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	ng/L				<4.5	<5.3	<4.4	<4.7	<5.4	<4.3	<4.5	<5.3	<4.6
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	ng/L				<4.5	<5.3	<4.4	<4.7	<5.4	<4.3	<4.5	<5.3	<4.6
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	ng/L				<4.5	<5.3	<4.4	<4.7	<5.4	<4.3	<4.5	<5.3	<4.6
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	ng/L				<4.5	<5.3	<4.4	<4.7	<5.4	<4.3	<4.5	<5.3	<4.6
Fluorotelomer Sulfonic Acids (FTSA _s)													
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	ng/L				<4.5	<5.3	<4.4	<4.7	<5.4	<4.3	<4.5	<5.3	<4.6
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	ng/L				<4.5	<5.3	<4.4	<4.7	<5.4	<4.3	<4.5	<5.3	<4.6
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	ng/L				<4.5	<5.3	<4.4	<4.7	<5.4	<4.3	<4.5	<5.3	<4.6
Fluorotelomer Carboxylic Acids (FTCA _s)													
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	ng/L				<180	<210	<170	<190	<220	<170	<180	<210	<190
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	ng/L				<180	<210	<170	<190	<220	<170	<180	<210	<190
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	ng/L				<180	<210	<170	<190	<220	<170	<180	<210	<190
Perfluoroalkyl Ether Sulfonic Acids (PFESA _s)													
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	ng/L				<4.5	<5.3	<4.4	<4.7	<5.4	<4.3	<4.5	<5.3	<4.6
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF30NS)	ng/L				<4.5	<5.3	<4.4	<4.7	<5.4	<4.3	<4.5	<5.3	<4.6
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF30UdS)	ng/L				<4.5	<5.3	<4.4	<4.7	<5.4	<4.3	<4.5	<5.3	<4.6

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

Parameter	Units	Cleanup Level			MW-2S			MW-3S			MW-4S		
		MTCA B Non- Cancer	MTCA B Cancer	MCL	9/12/2024	12/11/2024	4/1/2025	9/12/2024	12/11/2024	3/31/2025	9/12/2024	12/12/2024	4/1/2025
Perfluoroalkyl Ether Carboxylic Acids (PFECAs)													
Perfluoro-3-methoxypropanoic acid (PFMPA)	ng/L				<4.5	<5.3	<4.4	<4.7	<5.4	<4.3	<4.5	<5.3	<4.6
Perfluoro-4-methoxybutanoic acid (PFMBA)	ng/L				<4.5	<5.3	<4.4	<4.7	<5.4	<4.3	<4.5	<5.3	<4.6
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	ng/L	24		10	<4.5	<5.3	<4.4	<4.7	<5.4	<4.3	<4.5	<5.3	<4.6
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ng/L				<4.5	<5.3	<4.4	<4.7	<5.4	<4.3	<4.5	<5.3	<4.6
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	ng/L				<4.5	<5.3	<4.4	<4.7	<5.4	<4.3	<4.5	<5.3	<4.6
MCL Hazard Index for Mixtures of HFPO-DA, PFBS, PFHxS, and PFNA					--	--	--	0.7	0.3	0.4	0.2	0.2	0.09
Running Annual Average Hazard Index	unitless			1	--			0.47			0.2		

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
- Does not meet MCL**
- J = Estimated value

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

Parameter	Units	Cleanup Level			MW-5S				MW-6S				
		MTCA B Non- Cancer	MTCA B Cancer	MCL	9/12/2024	MW-13S (Dup) 9/12/2024	12/11/2024	3/31/2025	9/12/2024	12/12/2024	MS-13S (Dup) 12/12/2024	4/1/2025	MS-13S (Dup) 4/1/2025
Perfluoroalkyl Sulfonic Acids (PFSAs)													
Perfluorobutane sulfonic acid (PFBS)	ng/L	4800			<4.6	<4.9	<5.3	4.3	6.6	5.1	<4.9	6.3	6.9
Perfluoropentane sulfonic acid (PFPeS)	ng/L				<4.6	<4.9	<5.3	<4.3	<4.3	<4.8	<4.9	1.1 J	1.0 J
Perfluorohexane sulfonic acid (PFHxS)	ng/L	160		10	<4.6	<4.9	<5.3	<4.3	<4.3	<4.8	<4.9	1.1 J	1.0 J
Perfluoroheptane sulfonic acid (PFHpS)	ng/L				<4.6	<4.9	<5.3	<4.3	<4.3	<4.8	<4.9	<4.7	<4.5
Perfluorooctane sulfonic acid (PFOS)	ng/L	1.6	2.2	4.0	<4.6	<4.9	<5.3	<4.3	<4.3	<4.8	<4.9	<4.7	<4.5
Perfluorononane sulfonic acid (PFNS)	ng/L				<4.6	<4.9	<5.3	<4.3	<4.3	<4.8	<4.9	<4.7	<4.5
Perfluorodecane sulfonic acid (PFDS)	ng/L				<4.6	<4.9	<5.3	<4.3	<4.3	<4.8	<4.9	<4.7	<4.5
Perfluorododecane sulfonic acid (PFDoS)	ng/L				<4.6	<4.9	<5.3	<4.3	<4.3	<4.8	<4.9	<4.7	<4.5
Perfluoroalkyl Carboxylic Acids (PFCAs)													
Perfluorobutanoic acid (PFBA)	ng/L	8000			<4.6	<4.9	<5.3	47	9.1	8.5	7.9	9.5	9.6
Perfluoropentanoic acid (PFPeA)	ng/L				<4.6	<4.9	<5.3	21	<4.3	5.5	5.4	8.1	7.9
Perfluorohexanoic acid (PFHxA)	ng/L	8000			<4.6	<4.9	<5.3	11	<4.3	<4.8	<4.9	4.7 J	4.9
Perfluoroheptanoic acid (PFHpA)	ng/L				<4.6	<4.9	<5.3	1.2 J	<4.3	<4.8	<4.9	<4.7	<4.5
Perfluorooctanoic acid (PFOA)	ng/L	0.48	0.003	4.0	<4.6	<4.9	<5.3	<4.3	<4.3	<4.8	<4.9	<4.7	<4.5
Perfluorononanoic acid (PFNA)	ng/L	40		10	<4.6	<4.9	<5.3	<4.3	<4.3	<4.8	<4.9	<4.7	<4.5
Perfluorodecanoic acid (PFDA)	ng/L				<4.6	<4.9	<5.3	<4.3	<4.3	<4.8	<4.9	<4.7	<4.5
Perfluoroundecanoic acid (PFUnDA)	ng/L				<4.6	<4.9	<5.3	<4.3	<4.3	<4.8	<4.9	<4.7	<4.5
Perfluorododecanoic acid (PFDOA)	ng/L				<4.6	<4.9	<5.3	<4.3	<4.3	<4.8	<4.9	<4.7	<4.5
Perfluorotridecanoic acid (PFTrDA)	ng/L				<4.6	<4.9	<5.3	<4.3	<4.3	<4.8	<4.9	<4.7	<4.5
Perfluorotetradecanoic acid (PFTDA)	ng/L				<4.6	<4.9	<5.3	<4.3	<4.3	<4.8	<4.9	<4.7	<4.5
Perfluoroalkyl Sulfonamido Substances													
Perfluorooctane sulfonamide (PFOSAm)	ng/L				<4.6	<4.9	<5.3	<4.3	<4.3	<4.8	<4.9	<4.7	<4.5
N-Methylperfluorooctane sulfonamide (MeFOSA)	ng/L				<4.6	<4.9	<5.3	<4.3	<4.3	<4.8	<4.9	<4.7	<4.5
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	ng/L				<4.6	<4.9	<5.3	<4.3	<4.3	<4.8	<4.9	<4.7	<4.5
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	ng/L				<4.6	<4.9	<5.3	<4.3	<4.3	<4.8	<4.9	<4.7	<4.5
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	ng/L				<4.6	<4.9	<5.3	<4.3	<4.3	<4.8	<4.9	<4.7	<4.5
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	ng/L				<4.6	<4.9	<5.3	<4.3	<4.3	<4.8	<4.9	<4.7	<4.5
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	ng/L				<4.6	<4.9	<5.3	<4.3	<4.3	<4.8	<4.9	<4.7	<4.5
Fluorotelomer Sulfonic Acids (FTSAs)													
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	ng/L				<4.6	<4.9	<5.3	<4.3	<4.3	<4.8	<4.9	<4.7	<4.5
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	ng/L				<4.6	<4.9	<5.3	<4.3	<4.3	<4.8	<4.9	<4.7	<4.5
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	ng/L				<4.6	<4.9	<5.3	<4.3	<4.3	<4.8	<4.9	<4.7	<4.5
Fluorotelomer Carboxylic Acids (FTCAs)													
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	ng/L				<190	<190	<210	<170	<170	<190	<200	<190	<180
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	ng/L				<190	<190	<210	<170	<170	<190	<200	<190	<180
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	ng/L				<190	<190	<210	<170	<170	<190	<200	<190	<180
Perfluoroalkyl Ether Sulfonic Acids (PFESAs)													
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	ng/L				<4.6	<4.9	<5.3	<4.3	<4.3	<4.8	<4.9	<4.7	<4.5
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF30NS)	ng/L				<4.6	<4.9	<5.3	<4.3	<4.3	<4.8	<4.9	<4.7	<4.5
11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF30UdS)	ng/L				<4.6	<4.9	<5.3	<4.3	<4.3	<4.8	<4.9	<4.7	<4.5

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

Parameter	Units	Cleanup Level			MW-5S				MW-6S				
		MTCA B Non- Cancer	MTCA B Cancer	MCL	9/12/2024	MW-13S (Dup) 9/12/2024	12/11/2024	3/31/2025	9/12/2024	12/12/2024	MS-13S (Dup) 12/12/2024	4/1/2025	MS-13S (Dup) 4/1/2025
Perfluoroalkyl Ether Carboxylic Acids (PFECAs)													
Perfluoro-3-methoxypropanoic acid (PFMPA)	ng/L				<4.6	<4.9	<5.3	<4.3	<4.3	<4.8	<4.9	<4.7	<4.5
Perfluoro-4-methoxybutanoic acid (PFMBA)	ng/L				<4.6	<4.9	<5.3	<4.3	<4.3	<4.8	<4.9	<4.7	<4.5
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	ng/L	24		10	<4.6	<4.9	<5.3	<4.3	<4.3	<4.8	<4.9	<4.7	<4.5
Nonafluoro-3,6-dioxahexanoic acid (NFDHA)	ng/L				<4.6	<4.9	<5.3	<4.3	<4.3	<4.8	<4.9	<4.7	<4.5
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	ng/L				<4.6	<4.9	<5.3	<4.3	<4.3	<4.8	<4.9	<4.7	<4.5
MCL Hazard Index for Mixtures of HFPO-DA, PFBS, PFHxS, and PFNA					--	--	--	--	0.2	0.2	--	0.1	--
Running Annual Average Hazard Index	unitless			1	--				0.2				

- 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 1)
 - MCL = Maximum contaminant level, compliance is currently established using the MCL compared to annual average
 - < = Not detected
 - = Not calculated
 - 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
Above = Above MTCA

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

Table 4. Semi-Volatile Organic Compounds, 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			12/11/2024	12/11/2024	12/12/2024	12/12/2024	12/12/2024	MW-13S (Dup) 12/12/2024
		MTCA B Cancer	Non-Cancer	MCL						
Dibenzofuran	µg/L	8			<0.98	<0.96	<1	<0.96	<1	<1
Diethylphthalate	µg/L	13000			<0.98	<0.96	<1	<0.96	<1	<1
Dimethylphthalate	µg/L				<4.9	<4.8	<5.2	<4.8	<5.1	<5.2
Di-n-butylphthalate	µg/L	1600			<4.9	<4.8	<5.2	<4.8	<5.1	<5.2
Di-n-octylphthalate	µg/L	160			<0.98	<0.96	<1	<0.96	<1	<1
Fluoranthene	µg/L	640			<0.098	<0.096	<0.1	<0.096	<0.1	<0.1
Fluorene	µg/L	320			<0.098	<0.096	<0.1	<0.096	<0.1	<0.1
Hexachlorobenzene	µg/L	0.027 A	6.4	1	<0.98	<0.96	<1	<0.96	<1	<1
Hexachlorobutadiene	µg/L	0.56 A	8		<0.98	<0.96	<1	<0.96	<1	<1
Hexachlorocyclopentadiene	µg/L		48	50	<4.9	<4.8	<5.2	<4.8	<5.1	<5.2
Hexachloroethane	µg/L	1.1	5.6		<0.98	<0.96	<1	<0.96	<1	<1
Isophorone	µg/L	92	3200		<0.98	<0.96	<1	<0.96	<1	<1
Naphthalene	µg/L	160			<0.098	<0.096	<0.1	<0.096	<0.1	<0.1
Nitrobenzene	µg/L	16			<0.98	<0.96	<1	<0.96	<1	<1
n-Nitrosodimethylamine	µg/L	0.00023 A	0.064 A		<0.98	<0.96	<1	<0.96	<1	<1
n-Nitroso-di-n-propylamine	µg/L	0.013 A			<0.98	<0.96	<1	<0.96	<1	<1
n-Nitrosodiphenylamine	µg/L	18			<0.98	<0.96	<1	<0.96	<1	<1
Pentachlorophenol	µg/L	0.22 A	80	0.042 A	<4.9	<4.8	<5.2	<4.8	<5.1	<5.2
Phenanthrene	µg/L				<0.098	<0.096	<0.1	<0.096	<0.1	<0.1
Phenol	µg/L	4800			<0.98	<0.96	<1	<0.96	<1	<1
Pyrene	µg/L	4800			<0.098	<0.096	<0.1	<0.096	<0.1	<0.1
Pyridine	µg/L	8			<0.98	<0.96	<1	<0.96	<1	<1

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																
Analyte	Units	Cleanup Level		TEF ¹	MW-2S		MW-3S		MW-4S		MW-5S		MW-6S			
		MTCA			12/11/2024		12/11/2024		12/12/2024		12/11/2024		12/12/2024		MW-13S (Dup) 12/12/2024	
		Method A	MCL		Result	TEQ	Result	TEQ	Result	TEQ	Result	TEQ	Result	TEQ	Result	TEQ
Benzo(a)anthracene	µg/L	0.1	0.2	0.1	<0.0098	<0.00098	<0.0096	<0.00096	<0.0100	<0.0010	<0.0096	<0.00096	<0.0100	<0.0010	<0.0100	<0.0010
Benzo(a)pyrene	µg/L	0.1		1	<0.0098	<0.0098	<0.0096	<0.00960	<0.0100	<0.0100	<0.0096	<0.00960	<0.0100	<0.0100	<0.0100	<0.0100
Benzo(b)fluoranthene	µg/L	0.1		0.1	<0.0098	<0.00098	<0.0096	<0.00096	<0.0100	<0.0010	<0.0096	<0.00096	<0.0100	<0.0010	<0.0100	<0.0010
Benzo(j,k)fluoranthene	µg/L	0.1		0.1	<0.0098	<0.00098	<0.0096	<0.00096	<0.0100	<0.0010	<0.0096	<0.00096	<0.0100	<0.0010	<0.0100	<0.0010
Chrysene	µg/L	0.1		0.01	<0.0098	<0.000098	<0.0096	<0.000096	<0.0100	<0.0001	<0.0096	<0.000096	<0.0100	<0.0001	<0.0100	<0.0001
Dibenzo(a,h)anthracene	µg/L	0.1		0.1	<0.0098	<0.00098	<0.0096	<0.00096	<0.0100	<0.0010	<0.0096	<0.00096	<0.0100	<0.0010	<0.0100	<0.0010
Indeno(1,2,3-cd)pyrene	µg/L	0.1		0.1	<0.0098	<0.00098	<0.0096	<0.00096	<0.0100	<0.0010	<0.0096	<0.00096	<0.0100	<0.0010	<0.0100	<0.0010
Total cPAH TEQ	µg/L	0.1			<0.0148		<0.0145		<0.0151		<0.0145		<0.0151		<0.0151	

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					MW-2S	MW-3S	MW-4S	MW-5S	MW-6S	
		MCL	MTCA Method A	MTCA B Cancer	MTCA B Non- Cancer	4/1/2025	3/31/2025	4/1/2025	3/31/2025	4/1/2025	MW-13S (Dup) 4/1/2025
Antimony, Total	mg/L	0.006	*		0.0064	<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	0.027	<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
Beryllium, Total	mg/L	0.004	*		0.032	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011
Beryllium, 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
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
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
Copper, Dissolved	mg/L					<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Lead, Total	mg/L			0.0015		<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
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
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
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
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
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
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

Fourth Quarter 2024
Field Data Sheets

Groundwater Sampling Field Data Sheet

Well #: **MW-2S**

300

Project Number: _____		Date: <u>4/1/25</u>	
Project Name: <u>Yakima LPL</u>		Company Name: <u>PMX</u>	
Project Address: <u>Rocky Top</u>		Sampled By: <u>K. Burke / S. Nguyen</u>	
Casing Diameter: 2" 4" 6" Other _____			
Initial Depth to Water (feet below TOC): <u>287.71</u>		Purge Rate Measurement Method: <u>Graduated cylinder</u>	
Top of Screen (feet bgs): <u>310</u>		Date Purged: <u>4/1/25</u>	
Bottom of Screen (feet bgs): <u>330</u>		Purge Time (from/to): <u>11:19 -</u>	
Reference Point (surveyor's notch, etc.): _____		Time Sampled: <u>1153</u>	

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	<u>287.71</u>							
<u>11:22</u>	<u>285.42</u>	<u>7.39</u>	<u>0.120</u>	<u>12.50</u>	<u>202</u>	<u>5.28</u>	<u>0.06</u>	<u>30/30</u>
<u>11:27</u>		<u>7.18</u>	<u>0.120</u>	<u>12.93</u>	<u>197</u>	<u>5.24</u>	<u>0.06</u>	<u>170 ps</u>
<u>11:32</u>		<u>7.41</u>	<u>0.120</u>	<u>13.34</u>	<u>188</u>	<u>7.06</u>	<u>0.06</u>	
<u>11:37</u>	<u>283.71</u>	<u>7.40</u>	<u>0.120</u>	<u>13.36</u>	<u>189</u>	<u>8.22</u>	<u>0.06</u>	
<u>11:42</u>		<u>7.56</u>	<u>0.120</u>	<u>13.64</u>	<u>197</u>	<u>7.16</u>	<u>0.06</u>	
<u>11:47</u>	<u>288.78</u>	<u>7.56</u>	<u>0.120</u>	<u>13.72</u>	<u>191</u>	<u>7.18</u>	<u>0.06</u>	
<u>11:52</u>		<u>7.59</u>	<u>0.120</u>	<u>13.73</u>	<u>192</u>	<u>7.28</u>	<u>0.06</u>	
<u>11:57</u>								
Stabilization Criteria		± 0.1	3%	3%	± 10 mv	10%, or 3 <0.5	10%, or 3<5.0	

Purge Equipment: <u>MPIDH</u>	Flow Rate: <u>350 ml/min</u>
Laboratory: _____	Date Sent to Lab: _____
Shipment Method: _____	Field QC Sample Number: _____

Remarks:

Signature: _____



Well #:MW-3S

Page 1 of 1



Groundwater Sampling Field Data Sheet

Well #: **MW-4S**

Project Number: _____		Date: <u>4-1-25</u>	
Project Name: <u>Yakima LPL</u>		Company Name: _____	
Project Address: <u>Rocky Top</u>		Sampled By: <u>K. Burke S. Nguyen</u>	
Casing Diameter: 2" _____ 4" _____ 6" _____ Other _____			
Initial Depth to Water (feet below TOC): <u>28.40</u>		Purge Rate Measurement Method: <u>Graduated cylinder</u>	
Top of Screen (feet bgs): <u>49.5</u>		Date Purged: <u>3 4-1-25</u>	
Bottom of Screen (feet bgs): <u>69.5</u>		Purge Time (from/to): <u>9:20-9:55</u>	
Reference Point (surveyor's notch, etc.): _____		Time Sampled: <u>9:55</u>	

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
<u>Initial</u>								
<u>0953</u>	<u>28.73</u>	<u>7.18</u>	<u>0.774</u>	<u>12.31</u>	<u>203</u>	<u>5.81</u>	<u>0.38</u>	<u>30/30</u>
<u>0938</u>	<u>28.67</u>	<u>7.17</u>	<u>0.770</u>	<u>12.32</u>	<u>197</u>	<u>4.61</u>	<u>0.37</u>	<u>70 psi</u>
<u>0943</u>	<u>28.67</u>	<u>7.14</u>	<u>0.760</u>	<u>12.38</u>	<u>191</u>	<u>5.16</u>	<u>0.37</u>	
<u>0948</u>	<u>28.67</u>	<u>7.14</u>	<u>0.757</u>	<u>12.39</u>	<u>191</u>	<u>5.12</u>	<u>0.37</u>	
<u>0953</u>	<u>28.72</u>	<u>7.13</u>	<u>0.752</u>	<u>12.33</u>	<u>187</u>	<u>5.77</u>	<u>0.36</u>	
Stabilization Criteria		± 0.1	3%	3%	± 10 mv	10%, or 3 <0.5	10%, or 3<5.0	

Purge Equipment: _____	Flow Rate: _____
Laboratory: _____	Date Sent to Lab: _____
Shipment Method: _____	Field QC Sample Number: _____

Remarks: Needs replacement lock on well

Signature: _____



Debris to Green
Recycling

Groundwater Sampling Field Data Sheet

Well #: MW-5S

Project Number: _____ Date: 3-31-25

Project Name: Yakima LPL Company Name: PMX

Project Address: Rocky Top Sampled By: Chris Bourgeois - Katie Burke

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

Initial Depth to Water (feet below TOC): 216.18 Purge Rate Measurement Method: 190 ml/min

Top of Screen (feet bgs): 222 Date Purged: 3-31-25

Bottom of Screen (feet bgs): 243 Purge Time (from/to): 11:30 -

Reference Point (surveyor's notch, etc.): _____ Time Sampled: _____

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							PPT	
11:50	216.19	7.40	0.432	13.70	-23	11.43	0.21	40/20 MP1+10
11:55	216.19	7.52	0.486	13.73	-95	10.91	0.23	128
12:00	216.20	7.72	0.514	13.72	-147	10.23	0.25	
12:05	216.30	7.79	0.523	13.72	-168	9.19	0.25	
12:10	216.20	7.85	0.527	13.72	-179	8.55	0.25	
12:15	216.2	7.88	0.527	13.74	-181	8.01	0.25	
12:20	216.	7.87	0.525	13.76	-187	8.75	0.25	
Stabilization Criteria		± 0.1	3%	3%	± 10 mv	10%, or 3 <0.5	10%, or 3<5.0	

Purge Equipment: MAFH Flow Rate: _____

Laboratory: _____ Date Sent to Lab: _____

Shipment Method: _____ Field QC Sample Number: _____

Remarks: _____

Signature: _____



Groundwater Sampling Field Data Sheet

Well #: **MW-6S**

Project Number: _____		Date: <u>4-1-25</u>	
Project Name: <u>Yakima LPL</u>		Company Name: _____	
Project Address: <u>Rocky Top</u>		Sampled By: <u>Burke & Nguyen</u>	
Casing Diameter: 2" _____ 4" _____ 6" _____ Other _____			
Initial Depth to Water (feet below TOC): <u>95.02</u>		Purge Rate Measurement Method: _____	
Top of Screen (feet bgs): <u>110</u>		Date Purged: _____	
Bottom of Screen (feet bgs): <u>130</u>		Purge Time (from/to): <u>1430 -</u>	
Reference Point (surveyor's notch, etc.): _____		Time Sampled: <u>1455</u>	

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
<u>Initial</u>	<u>95.02</u>							
<u>1435</u>	<u>95.61</u>	<u>7.71</u>	<u>0.393</u>	<u>12.14</u>	<u>175</u>	<u>4.98</u>	<u>1.2</u>	<u>10/20</u>
<u>1440</u>	<u>95.80</u>	<u>7.62</u>	<u>0.401</u>	<u>12.28</u>	<u>172</u>	<u>4.65</u>	<u>0.0</u>	
<u>1445</u>	<u>—</u>	<u>7.52</u>	<u>0.402</u>	<u>12.14</u>	<u>173</u>	<u>4.45</u>	<u>0.2</u>	
<u>1450</u>	<u>95.91</u>	<u>7.53</u>	<u>0.401</u>	<u>11.90</u>	<u>172</u>	<u>4.55</u>	<u>0.8</u>	<u>30/30</u>
<u>1455</u>	<u>96.31</u>	<u>7.51</u>	<u>0.389</u>	<u>12.36</u>	<u>165</u>	<u>4.26</u>	<u>0.5</u>	
Stabilization Criteria		± 0.1	3%	3%	± 10 mv	10%, or 3 <0.5	10%, or 3<5.0	

Purge Equipment: _____	Flow Rate: <u>380 ml/min</u>
Laboratory: _____	Date Sent to Lab: _____
Shipment Method: _____	Field QC Sample Number: <u>MW-13S @ 900</u>

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

Signature: _____



Groundwater Sampling Field Data Sheet

Well #: **MW-7D**

Project Number: _____		Date: <u>3/31/25</u>	
Project Name: <u>Yakima LPL</u>		Company Name: <u>Parametrix</u>	
Project Address: <u>Rocky Top</u>		Sampled By: <u>Nguyen</u>	
Casing Diameter: 2" _____ 4" _____ 6" _____ Other _____			
Initial Depth to Water (feet below TOC): <u>450.30'</u>		Purge Rate Measurement Method: _____	
Top of Screen (feet bgs): <u>475</u>		Date Purged: _____	
Bottom of Screen (feet bgs): <u>495</u>		Purge Time (from/to): <u>1125 - 1221</u>	
Reference Point (surveyor's notch, etc.): _____		Time Sampled: <u>1205</u>	

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	<u>450.30'</u>							
<u>1130</u>	<u>-</u>	<u>7.64</u>	<u>187.2</u>	<u>13.6</u>	<u>-91.1</u>	<u>8.68</u>	<u>-</u>	<u>40/35</u>
<u>1135</u>	<u>-</u>	<u>7.35</u>	<u>188.0</u>	<u>14.5</u>	<u>-102.2</u>	<u>3.73</u>	<u>1.17</u>	
<u>1140</u>	<u>-</u>	<u>7.55</u>	<u>187.7</u>	<u>14.9</u>	<u>-126.3</u>	<u>1.29</u>	<u>1.16</u>	
<u>1145</u>	<u>-</u>	<u>7.66</u>	<u>187.8</u>	<u>15.1</u>	<u>-150.3</u>	<u>0.48</u>	<u>1.32</u>	
<u>1150</u>	<u>-</u>	<u>7.66</u>	<u>187.8</u>	<u>15.1</u>	<u>-162.3</u>	<u>0.39</u>	<u>1.08</u>	
<u>1155</u>	<u>-</u>	<u>7.65</u>	<u>188.0</u>	<u>15.2</u>	<u>-175.5</u>	<u>0.29</u>	<u>0.93</u>	
<u>1200</u>	<u>-</u>	<u>7.63</u>	<u>187.8</u>	<u>15.2</u>	<u>-183.1</u>	<u>0.28</u>	<u>1.23</u>	
<u>1205</u>	<u>-</u>	<u>7.63</u>	<u>187.8</u>	<u>15.3</u>	<u>-182.7</u>	<u>0.19</u>	<u>0.89</u>	
Stabilization Criteria		± 0.1	3%	3%	± 10 mv	10%, or 3 <0.5	10%, or 3<5.0	

~240 PSI

Purge Equipment: _____	Flow Rate: <u>450 mL/min</u>
Laboratory: _____	Date Sent to Lab: _____
Shipment Method: _____	Field QC Sample Number: _____

Remarks:

Signature: _____

Groundwater Sampling Field Data Sheet

Well #: MW-8D

Project Number: _____		Date: <u>4/11/25</u>	
Project Name: <u>Yakima LPL</u>		Company Name: <u>pmx</u>	
Project Address: <u>Rocky Top</u>		Sampled By: <u>K. Burnett S. Nguyen</u>	
Casing Diameter: 2" _____ 4" _____ 6" _____ Other _____			
Initial Depth to Water (feet below TOC): <u>301.82</u>		Purge Rate Measurement Method: _____	
Top of Screen (feet bgs): <u>375</u>		Date Purged: <u>4/11/25</u>	
Bottom of Screen (feet bgs): <u>405</u>		Purge Time (from/to): <u>12:39 - 1324</u>	
Reference Point (surveyor's notch, etc.): _____		Time Sampled: <u>1324</u>	

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	<u>301.82</u>						<u>PP+</u>	
<u>1245</u>		<u>7.76</u>	<u>0.246</u>	<u>12.71</u>	<u>196</u>	<u>4.41</u>	<u>0.12</u>	<u>30/30 250 psi</u>
<u>1250</u>								
<u>1305</u>	<u>302.79</u>	<u>7.80</u>	<u>0.244</u>	<u>11.86</u>	<u>200</u>	<u>2.52</u>	<u>0.11</u>	<u>30/30 210 PSI</u>
<u>1310</u>	<u>302.94</u>	<u>7.88</u>	<u>0.244</u>	<u>11.98</u>	<u>164</u>	<u>1.09</u>	<u>0.11</u>	<u>260 psi</u>
<u>1315</u>	<u>303.54</u>	<u>7.82</u>	<u>0.245</u>	<u>12.24</u>	<u>148</u>	<u>0.25</u>	<u>0.12</u>	
<u>1320</u>	<u>303.71</u>	<u>7.92</u>	<u>0.245</u>	<u>12.34</u>	<u>132</u>	<u>0.00</u>	<u>0.12</u>	
<u>1325</u>	<u>303.85</u>	<u>7.92</u>	<u>0.245</u>	<u>12.29</u>	<u>130</u>	<u>0.00</u>	<u>0.12</u>	
Stabilization Criteria		± 0.1	3%	3%	± 10 mv	10%, or 3 <0.5	10%, or 3<5.0	

Purge Equipment: _____	Flow Rate: <u>340 ml/min</u>
Laboratory: <u>Anatek /</u>	Date Sent to Lab: _____
Shipment Method: _____	Field QC Sample Number: _____

Remarks:

Signature: _____

Groundwater Sampling Field Data Sheet

Well #: **MW-9D**

Project Number: _____		Date: <u>3/31/25</u>	
Project Name: <u>Yakima LPL</u>		Company Name: _____	
Project Address: <u>Rocky Top</u>		Sampled By: <u>Nguyen</u>	
Casing Diameter: 2" _____ 4" _____ 6" _____ Other _____			
Initial Depth to Water (feet below TOC): <u>424.90'</u>		Purge Rate Measurement Method: _____	
Top of Screen (feet bgs): <u>420</u>		Date Purged: _____	
Bottom of Screen (feet bgs): <u>440</u>		Purge Time (from/to): <u>1357 - 1500</u>	
Reference Point (surveyor's notch, etc.): _____		Time Sampled: <u>1425</u>	

TIME (2400 hr)	DEPTH TO WATER (ft)	pH (units)	Ec (µmhos/cm 25°C)	TEMP °C	Redox (mv)	Dissolved Oxygen mg/L	TURBIDITY (µmhos) NTU	PUMP SETTING
Initial	<u>424.90'</u>							
<u>1400</u>	<u>425.28'</u>	<u>7.38</u>	<u>453.1</u>	<u>12.5</u>	<u>-139.1</u>	<u>0.47</u>	<u>0.93</u>	<u>60/40</u> ~230PSI
<u>1405</u>	<u>—</u>	<u>7.32</u>	<u>456.7</u>	<u>12.5</u>	<u>-145.8</u>	<u>0.17</u>	<u>2.09</u>	
<u>1410</u>	<u>425.41</u>	<u>7.34</u>	<u>459.3</u>	<u>12.5</u>	<u>-155.0</u>	<u>0.14</u>	<u>1.22</u>	
<u>1415</u>	<u>—</u>	<u>7.32</u>	<u>458.9</u>	<u>12.4</u>	<u>-163.3</u>	<u>0.11</u>	<u>1.17</u>	
<u>1420</u>	<u>425.50</u>	<u>7.29</u>	<u>459.5</u>	<u>12.3</u>	<u>-168.9</u>	<u>0.09</u>	<u>0.97</u>	
<u>1425</u>	<u>425.61</u>	<u>7.28</u>	<u>460.4</u>	<u>12.0</u>	<u>-171.4</u>	<u>0.07</u>		
Stabilization Criteria		± 0.1	3%	3%	± 10 mv	10%, or 3 <0.5	10%, or 3<5.0	

Purge Equipment: _____	Flow Rate: <u>170 ml/min</u>
Laboratory: _____	Date Sent to Lab: _____
Shipment Method: _____	Field QC Sample Number: _____

Remarks: m: down through sampling switched to 60/60

Signature: _____



Groundwater Sampling Field Data Sheet

Well #: **MW-10D**

Project Number: _____		Date: <u>3/31/25</u>	
Project Name: <u>Yakima LPL</u>		Company Name: _____	
Project Address: <u>Rocky Top</u>		Sampled By: _____	
Casing Diameter: 2" 4" 6" Other _____			
Initial Depth to Water (feet below TOC): <u>82.15'</u>		Purge Rate Measurement Method: _____	
Top of Screen (feet bgs): <u>147</u>		Date Purged: _____	
Bottom of Screen (feet bgs) <u>167</u>		Purge Time (from/to): <u>1546 - 1641</u>	
Reference Point (surveyor's notch, etc.): _____		Time Sampled: <u>1625</u>	

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	—	—	—	—	—	—	—	—
1530	—	7.63	227.2	12.5	-97.9	8.33	—	—
1555	82.59	7.22	227.1	12.1	-103.8	3.62	2.52	—
1600	—	7.21	227.5	11.7	-109.1	2.97	1.94	—
1605	—	7.26	227.6	14.0	-104.1	3.94	2.14	—
1610	83.99	7.25	227.9	13.9	-105.0	4.51	1.44	—
1615	—	—	—	—	-106.2	4.43	1.27	—
1620	—	7.27	227.6	13.4	-107.6	4.48	—	—
1625	83.94	7.28	227.8	13.2	-108.9	4.49	0.99	—
Stabilization Criteria		± 0.1	3%	3%	± 10 mv	10%, or 3 <0.5	10%, or 3<5.0	

Purge Equipment: _____	Flow Rate: _____
Laboratory: _____	Date Sent to Lab: _____
Shipment Method: _____	Field QC Sample Number: _____

Remarks:

Signature: _____



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

Page 1 of 1

Environmental Inc. 14649 NE 95th Street • Redmond, WA 98052 Phone: (425) 883-3881 • www.onsite-env.com		Turnaround Request (in working days)		Laboratory Number: 04-035	
Company: Parametrix / DTG		☐ Same Day ☐ 1 Day		Number of Containers VOCs (8260D – WAC 173-351 Appendix I) Naphthalene, SIM-VC and 1,2-EDB NWTPH-Gx NWTPH-Dx Tot Priority Pollutant Metals +Fe, Mn, Mg Total Metals (Fe, Mn, Mg) Dis. Priority Pollutant Metals +Fe, Mn, Mg, Ca, K, Na Dissolved Metals (Fe, Mn, Mg, Ca, K, Na) chloride, sulfate TDS, Alkalinity, Bicarbonate Ammonia TOC PFAS Dioxins and Furans Nitrates (Anatek)	
Project Number: 553-8472-006		☐ 2 Days ☐ 3 Days			
Project Name: Rocky Top Environmental LPL		☒ Standard (7 Days) (TPH analysis 5 Days)			
Project Manager: Laura Lee		☐ (other)			
Sampled by: <i>Norman A Burke</i>					
Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	
1	MW-2S	4/1	153	W(H ₂ O)	18
2	MW-3S	3/31	1424		18
3	MW-4S	4/1	955		18
4	MW-5S / MW-5S MS/MSD	3/31	1223		26
5	MW-6S	4/1	1455		18
6	MW-13S	4/1	900		18
7	MW-7D	3/31	1205		18
8	MW-8D	4/1	1326		18
9	MW-9D	3/31	1425		18
10	MW-10D	3/31	1025		18
Signature: <i>[Signature]</i>		Company: Parametrix		Date: 4/2/25 Time: 1349	
Relinquished		Relinquished		Relinquished	
Received		Received		Received	
Relinquished		Relinquished		Relinquished	
Received		Received		Received	
Relinquished		Relinquished		Relinquished	
Received		Received		Received	
Reviewed/Date		Reviewed/Date		Chromatograms with final report ☐	

Attachment B

Laboratory Analytical Report



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

April 22, 2025

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

Re: Analytical Data for Project 553-8472-006
Laboratory Reference No. 2504-035

Dear Laura:

Enclosed are the analytical results and associated quality control data for samples submitted on April 2, 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,

A handwritten signature in black ink, appearing to read "DeB" followed by a stylized flourish.

David Baumeister
Project Manager

Enclosures



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

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: April 22, 2025
Samples Submitted: April 2, 2025
Laboratory Reference: 2504-035
Project: 553-8472-006

Case Narrative

Samples were collected on March 31, 2025 and April 1, 2025 and received by the laboratory on April 2, 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.

Volatiles EPA 8260D Analysis

The percent recovery for 1,2,3-Trichloropropane and 1,2-Dichlorobenzene is outside the control limits in the Matrix Spike Duplicate. The method allows for a percentage of the compounds to fall outside of the control limits due to the large number of analytes being spiked.

The RPD for Acetone and Methyl Isobutyl Ketone is outside the control limits for the Matrix Spike/Matrix Spike Duplicate. The percent recoveries on both spike blanks are within recovery limits. The method allows for a percentage of the compounds to fall outside of the control limits due to the large number of analytes being spiked.

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: April 22, 2025
 Samples Submitted: April 2, 2025
 Laboratory Reference: 2504-035
 Project: 553-8472-006

VOLATILE ORGANICS EPA 8260D/SIM
 page 1 of 2

Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-2S					
Laboratory ID:	04-035-01					
Chloromethane	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Vinyl Chloride (SIM)	ND	0.020	EPA 8260D/SIM	4-5-25	4-5-25	
Bromomethane	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Chloroethane	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Trichlorofluoromethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,1-Dichloroethene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Acetone	ND	5.0	EPA 8260D	4-5-25	4-5-25	
Iodomethane	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Carbon Disulfide	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Methylene Chloride	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Acrylonitrile	ND	0.50	EPA 8260D	4-5-25	4-5-25	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,1-Dichloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Vinyl Acetate	ND	1.0	EPA 8260D	4-5-25	4-5-25	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
2-Butanone	ND	5.0	EPA 8260D	4-5-25	4-5-25	
Bromochloromethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Chloroform	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Carbon Tetrachloride	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Benzene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2-Dichloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Trichloroethene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2-Dichloropropane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Dibromomethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Bromodichloromethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260D	4-5-25	4-5-25	
Toluene	ND	1.0	EPA 8260D	4-5-25	4-5-25	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Tetrachloroethene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
2-Hexanone	ND	2.0	EPA 8260D	4-5-25	4-5-25	



Date of Report: April 22, 2025
 Samples Submitted: April 2, 2025
 Laboratory Reference: 2504-035
 Project: 553-8472-006

VOLATILE ORGANICS EPA 8260D/SIM
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-2S					
Laboratory ID:	04-035-01					
Dibromochloromethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2-Dibromoethane (SIM)	ND	0.020	EPA 8260D/SIM	4-5-25	4-5-25	
Chlorobenzene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Ethylbenzene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
m,p-Xylene	ND	0.40	EPA 8260D	4-5-25	4-5-25	
o-Xylene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Styrene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Bromoform	ND	1.0	EPA 8260D	4-5-25	4-5-25	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
(trans) 1,4-Dichloro-2-butene	ND	0.50	EPA 8260D	4-5-25	4-5-25	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Naphthalene	ND	1.0	EPA 8260D	4-5-25	4-5-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>100</i>	<i>68-133</i>				
<i>Toluene-d8</i>	<i>98</i>	<i>79-123</i>				
<i>4-Bromofluorobenzene</i>	<i>97</i>	<i>78-117</i>				



Date of Report: April 22, 2025
 Samples Submitted: April 2, 2025
 Laboratory Reference: 2504-035
 Project: 553-8472-006

VOLATILE ORGANICS EPA 8260D/SIM
 page 1 of 2

Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-3S					
Laboratory ID:	04-035-02					
Chloromethane	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Vinyl Chloride (SIM)	ND	0.020	EPA 8260D/SIM	4-5-25	4-5-25	
Bromomethane	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Chloroethane	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Trichlorofluoromethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,1-Dichloroethene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Acetone	ND	5.0	EPA 8260D	4-5-25	4-5-25	
Iodomethane	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Carbon Disulfide	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Methylene Chloride	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Acrylonitrile	ND	0.50	EPA 8260D	4-5-25	4-5-25	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,1-Dichloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Vinyl Acetate	ND	1.0	EPA 8260D	4-5-25	4-5-25	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
2-Butanone	ND	5.0	EPA 8260D	4-5-25	4-5-25	
Bromochloromethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Chloroform	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Carbon Tetrachloride	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Benzene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2-Dichloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Trichloroethene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2-Dichloropropane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Dibromomethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Bromodichloromethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260D	4-5-25	4-5-25	
Toluene	ND	1.0	EPA 8260D	4-5-25	4-5-25	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Tetrachloroethene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
2-Hexanone	ND	2.0	EPA 8260D	4-5-25	4-5-25	



Date of Report: April 22, 2025
 Samples Submitted: April 2, 2025
 Laboratory Reference: 2504-035
 Project: 553-8472-006

VOLATILE ORGANICS EPA 8260D/SIM
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-3S					
Laboratory ID:	04-035-02					
Dibromochloromethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2-Dibromoethane (SIM)	ND	0.020	EPA 8260D/SIM	4-5-25	4-5-25	
Chlorobenzene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Ethylbenzene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
m,p-Xylene	ND	0.40	EPA 8260D	4-5-25	4-5-25	
o-Xylene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Styrene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Bromoform	ND	1.0	EPA 8260D	4-5-25	4-5-25	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
(trans) 1,4-Dichloro-2-butene	ND	0.50	EPA 8260D	4-5-25	4-5-25	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Naphthalene	ND	1.0	EPA 8260D	4-5-25	4-5-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>99</i>	<i>68-133</i>				
<i>Toluene-d8</i>	<i>100</i>	<i>79-123</i>				
<i>4-Bromofluorobenzene</i>	<i>99</i>	<i>78-117</i>				



Date of Report: April 22, 2025
 Samples Submitted: April 2, 2025
 Laboratory Reference: 2504-035
 Project: 553-8472-006

VOLATILE ORGANICS EPA 8260D/SIM
 page 1 of 2

Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-4S					
Laboratory ID:	04-035-03					
Chloromethane	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Vinyl Chloride (SIM)	ND	0.020	EPA 8260D/SIM	4-5-25	4-5-25	
Bromomethane	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Chloroethane	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Trichlorofluoromethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,1-Dichloroethene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Acetone	ND	5.0	EPA 8260D	4-5-25	4-5-25	
Iodomethane	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Carbon Disulfide	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Methylene Chloride	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Acrylonitrile	ND	0.50	EPA 8260D	4-5-25	4-5-25	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,1-Dichloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Vinyl Acetate	ND	1.0	EPA 8260D	4-5-25	4-5-25	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
2-Butanone	ND	5.0	EPA 8260D	4-5-25	4-5-25	
Bromochloromethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Chloroform	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Carbon Tetrachloride	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Benzene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2-Dichloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Trichloroethene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2-Dichloropropane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Dibromomethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Bromodichloromethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260D	4-5-25	4-5-25	
Toluene	ND	1.0	EPA 8260D	4-5-25	4-5-25	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Tetrachloroethene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
2-Hexanone	ND	2.0	EPA 8260D	4-5-25	4-5-25	



Date of Report: April 22, 2025
 Samples Submitted: April 2, 2025
 Laboratory Reference: 2504-035
 Project: 553-8472-006

VOLATILE ORGANICS EPA 8260D/SIM
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-4S					
Laboratory ID:	04-035-03					
Dibromochloromethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2-Dibromoethane (SIM)	ND	0.020	EPA 8260D/SIM	4-5-25	4-5-25	
Chlorobenzene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Ethylbenzene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
m,p-Xylene	ND	0.40	EPA 8260D	4-5-25	4-5-25	
o-Xylene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Styrene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Bromoform	ND	1.0	EPA 8260D	4-5-25	4-5-25	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
(trans) 1,4-Dichloro-2-butene	ND	0.50	EPA 8260D	4-5-25	4-5-25	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Naphthalene	ND	1.0	EPA 8260D	4-5-25	4-5-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>100</i>	<i>68-133</i>				
<i>Toluene-d8</i>	<i>99</i>	<i>79-123</i>				
<i>4-Bromofluorobenzene</i>	<i>98</i>	<i>78-117</i>				



Date of Report: April 22, 2025
 Samples Submitted: April 2, 2025
 Laboratory Reference: 2504-035
 Project: 553-8472-006

VOLATILE ORGANICS EPA 8260D/SIM
 page 1 of 2

Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-5S					
Laboratory ID:	04-035-04					
Chloromethane	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Vinyl Chloride (SIM)	ND	0.020	EPA 8260D/SIM	4-5-25	4-5-25	
Bromomethane	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Chloroethane	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Trichlorofluoromethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,1-Dichloroethene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Acetone	ND	5.0	EPA 8260D	4-5-25	4-5-25	
Iodomethane	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Carbon Disulfide	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Methylene Chloride	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Acrylonitrile	ND	0.50	EPA 8260D	4-5-25	4-5-25	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,1-Dichloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Vinyl Acetate	ND	1.0	EPA 8260D	4-5-25	4-5-25	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
2-Butanone	ND	5.0	EPA 8260D	4-5-25	4-5-25	
Bromochloromethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Chloroform	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Carbon Tetrachloride	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Benzene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2-Dichloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Trichloroethene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2-Dichloropropane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Dibromomethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Bromodichloromethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260D	4-5-25	4-5-25	
Toluene	ND	1.0	EPA 8260D	4-5-25	4-5-25	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Tetrachloroethene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
2-Hexanone	ND	2.0	EPA 8260D	4-5-25	4-5-25	



Date of Report: April 22, 2025
 Samples Submitted: April 2, 2025
 Laboratory Reference: 2504-035
 Project: 553-8472-006

VOLATILE ORGANICS EPA 8260D/SIM
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-5S					
Laboratory ID:	04-035-04					
Dibromochloromethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2-Dibromoethane (SIM)	ND	0.020	EPA 8260D/SIM	4-5-25	4-5-25	
Chlorobenzene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Ethylbenzene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
m,p-Xylene	ND	0.40	EPA 8260D	4-5-25	4-5-25	
o-Xylene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Styrene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Bromoform	ND	1.0	EPA 8260D	4-5-25	4-5-25	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
(trans) 1,4-Dichloro-2-butene	ND	0.50	EPA 8260D	4-5-25	4-5-25	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Naphthalene	ND	1.0	EPA 8260D	4-5-25	4-5-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>101</i>	<i>68-133</i>				
<i>Toluene-d8</i>	<i>98</i>	<i>79-123</i>				
<i>4-Bromofluorobenzene</i>	<i>98</i>	<i>78-117</i>				



Date of Report: April 22, 2025
 Samples Submitted: April 2, 2025
 Laboratory Reference: 2504-035
 Project: 553-8472-006

VOLATILE ORGANICS EPA 8260D/SIM
 page 1 of 2

Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-6S					
Laboratory ID:	04-035-05					
Chloromethane	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Vinyl Chloride (SIM)	ND	0.020	EPA 8260D/SIM	4-5-25	4-5-25	
Bromomethane	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Chloroethane	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Trichlorofluoromethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,1-Dichloroethene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Acetone	ND	5.0	EPA 8260D	4-5-25	4-5-25	
Iodomethane	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Carbon Disulfide	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Methylene Chloride	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Acrylonitrile	ND	0.50	EPA 8260D	4-5-25	4-5-25	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,1-Dichloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Vinyl Acetate	ND	1.0	EPA 8260D	4-5-25	4-5-25	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
2-Butanone	ND	5.0	EPA 8260D	4-5-25	4-5-25	
Bromochloromethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Chloroform	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Carbon Tetrachloride	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Benzene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2-Dichloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Trichloroethene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2-Dichloropropane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Dibromomethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Bromodichloromethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260D	4-5-25	4-5-25	
Toluene	ND	1.0	EPA 8260D	4-5-25	4-5-25	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Tetrachloroethene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
2-Hexanone	ND	2.0	EPA 8260D	4-5-25	4-5-25	



Date of Report: April 22, 2025
 Samples Submitted: April 2, 2025
 Laboratory Reference: 2504-035
 Project: 553-8472-006

VOLATILE ORGANICS EPA 8260D/SIM
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-6S					
Laboratory ID:	04-035-05					
Dibromochloromethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2-Dibromoethane (SIM)	ND	0.020	EPA 8260D/SIM	4-5-25	4-5-25	
Chlorobenzene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Ethylbenzene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
m,p-Xylene	ND	0.40	EPA 8260D	4-5-25	4-5-25	
o-Xylene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Styrene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Bromoform	ND	1.0	EPA 8260D	4-5-25	4-5-25	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
(trans) 1,4-Dichloro-2-butene	ND	0.50	EPA 8260D	4-5-25	4-5-25	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Naphthalene	ND	1.0	EPA 8260D	4-5-25	4-5-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>101</i>	<i>68-133</i>				
<i>Toluene-d8</i>	<i>101</i>	<i>79-123</i>				
<i>4-Bromofluorobenzene</i>	<i>97</i>	<i>78-117</i>				



Date of Report: April 22, 2025
 Samples Submitted: April 2, 2025
 Laboratory Reference: 2504-035
 Project: 553-8472-006

VOLATILE ORGANICS EPA 8260D/SIM
 page 1 of 2

Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-13S					
Laboratory ID:	04-035-06					
Chloromethane	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Vinyl Chloride (SIM)	ND	0.020	EPA 8260D/SIM	4-5-25	4-5-25	
Bromomethane	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Chloroethane	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Trichlorofluoromethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,1-Dichloroethene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Acetone	ND	5.0	EPA 8260D	4-5-25	4-5-25	
Iodomethane	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Carbon Disulfide	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Methylene Chloride	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Acrylonitrile	ND	0.50	EPA 8260D	4-5-25	4-5-25	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,1-Dichloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Vinyl Acetate	ND	1.0	EPA 8260D	4-5-25	4-5-25	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
2-Butanone	ND	5.0	EPA 8260D	4-5-25	4-5-25	
Bromochloromethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Chloroform	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Carbon Tetrachloride	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Benzene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2-Dichloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Trichloroethene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2-Dichloropropane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Dibromomethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Bromodichloromethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260D	4-5-25	4-5-25	
Toluene	ND	1.0	EPA 8260D	4-5-25	4-5-25	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Tetrachloroethene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
2-Hexanone	ND	2.0	EPA 8260D	4-5-25	4-5-25	



Date of Report: April 22, 2025
 Samples Submitted: April 2, 2025
 Laboratory Reference: 2504-035
 Project: 553-8472-006

VOLATILE ORGANICS EPA 8260D/SIM
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-13S					
Laboratory ID:	04-035-06					
Dibromochloromethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2-Dibromoethane (SIM)	ND	0.020	EPA 8260D/SIM	4-5-25	4-5-25	
Chlorobenzene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Ethylbenzene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
m,p-Xylene	ND	0.40	EPA 8260D	4-5-25	4-5-25	
o-Xylene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Styrene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Bromoform	ND	1.0	EPA 8260D	4-5-25	4-5-25	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
(trans) 1,4-Dichloro-2-butene	ND	0.50	EPA 8260D	4-5-25	4-5-25	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Naphthalene	ND	1.0	EPA 8260D	4-5-25	4-5-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>100</i>	<i>68-133</i>				
<i>Toluene-d8</i>	<i>99</i>	<i>79-123</i>				
<i>4-Bromofluorobenzene</i>	<i>97</i>	<i>78-117</i>				



Date of Report: April 22, 2025
 Samples Submitted: April 2, 2025
 Laboratory Reference: 2504-035
 Project: 553-8472-006

VOLATILE ORGANICS EPA 8260D/SIM
 page 1 of 2

Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-7D					
Laboratory ID:	04-035-07					
Chloromethane	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Vinyl Chloride (SIM)	ND	0.020	EPA 8260D/SIM	4-5-25	4-5-25	
Bromomethane	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Chloroethane	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Trichlorofluoromethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,1-Dichloroethene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Acetone	ND	5.0	EPA 8260D	4-5-25	4-5-25	
Iodomethane	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Carbon Disulfide	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Methylene Chloride	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Acrylonitrile	ND	0.50	EPA 8260D	4-5-25	4-5-25	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,1-Dichloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Vinyl Acetate	ND	1.0	EPA 8260D	4-5-25	4-5-25	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
2-Butanone	ND	5.0	EPA 8260D	4-5-25	4-5-25	
Bromochloromethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Chloroform	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Carbon Tetrachloride	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Benzene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2-Dichloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Trichloroethene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2-Dichloropropane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Dibromomethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Bromodichloromethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260D	4-5-25	4-5-25	
Toluene	ND	1.0	EPA 8260D	4-5-25	4-5-25	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Tetrachloroethene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
2-Hexanone	ND	2.0	EPA 8260D	4-5-25	4-5-25	



Date of Report: April 22, 2025
 Samples Submitted: April 2, 2025
 Laboratory Reference: 2504-035
 Project: 553-8472-006

VOLATILE ORGANICS EPA 8260D/SIM
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-7D					
Laboratory ID:	04-035-07					
Dibromochloromethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2-Dibromoethane (SIM)	ND	0.020	EPA 8260D/SIM	4-5-25	4-5-25	
Chlorobenzene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Ethylbenzene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
m,p-Xylene	ND	0.40	EPA 8260D	4-5-25	4-5-25	
o-Xylene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Styrene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Bromoform	ND	1.0	EPA 8260D	4-5-25	4-5-25	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
(trans) 1,4-Dichloro-2-butene	ND	0.50	EPA 8260D	4-5-25	4-5-25	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Naphthalene	ND	1.0	EPA 8260D	4-5-25	4-5-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	99	68-133				
<i>Toluene-d8</i>	99	79-123				
<i>4-Bromofluorobenzene</i>	99	78-117				



Date of Report: April 22, 2025
 Samples Submitted: April 2, 2025
 Laboratory Reference: 2504-035
 Project: 553-8472-006

VOLATILE ORGANICS EPA 8260D/SIM
 page 1 of 2

Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-8D					
Laboratory ID:	04-035-08					
Chloromethane	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Vinyl Chloride (SIM)	ND	0.020	EPA 8260D/SIM	4-5-25	4-5-25	
Bromomethane	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Chloroethane	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Trichlorofluoromethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,1-Dichloroethene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Acetone	ND	5.0	EPA 8260D	4-5-25	4-5-25	
Iodomethane	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Carbon Disulfide	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Methylene Chloride	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Acrylonitrile	ND	0.50	EPA 8260D	4-5-25	4-5-25	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,1-Dichloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Vinyl Acetate	ND	1.0	EPA 8260D	4-5-25	4-5-25	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
2-Butanone	ND	5.0	EPA 8260D	4-5-25	4-5-25	
Bromochloromethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Chloroform	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Carbon Tetrachloride	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Benzene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2-Dichloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Trichloroethene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2-Dichloropropane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Dibromomethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Bromodichloromethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260D	4-5-25	4-5-25	
Toluene	ND	1.0	EPA 8260D	4-5-25	4-5-25	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Tetrachloroethene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
2-Hexanone	ND	2.0	EPA 8260D	4-5-25	4-5-25	



Date of Report: April 22, 2025
 Samples Submitted: April 2, 2025
 Laboratory Reference: 2504-035
 Project: 553-8472-006

VOLATILE ORGANICS EPA 8260D/SIM
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-8D					
Laboratory ID:	04-035-08					
Dibromochloromethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2-Dibromoethane (SIM)	ND	0.020	EPA 8260D/SIM	4-5-25	4-5-25	
Chlorobenzene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Ethylbenzene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
m,p-Xylene	ND	0.40	EPA 8260D	4-5-25	4-5-25	
o-Xylene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Styrene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Bromoform	ND	1.0	EPA 8260D	4-5-25	4-5-25	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
(trans) 1,4-Dichloro-2-butene	ND	0.50	EPA 8260D	4-5-25	4-5-25	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Naphthalene	ND	1.0	EPA 8260D	4-5-25	4-5-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	99	68-133				
<i>Toluene-d8</i>	99	79-123				
<i>4-Bromofluorobenzene</i>	98	78-117				



Date of Report: April 22, 2025
 Samples Submitted: April 2, 2025
 Laboratory Reference: 2504-035
 Project: 553-8472-006

VOLATILE ORGANICS EPA 8260D/SIM
 page 1 of 2

Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-9D					
Laboratory ID:	04-035-09					
Chloromethane	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Vinyl Chloride (SIM)	ND	0.020	EPA 8260D/SIM	4-5-25	4-5-25	
Bromomethane	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Chloroethane	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Trichlorofluoromethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,1-Dichloroethene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Acetone	ND	5.0	EPA 8260D	4-5-25	4-5-25	
Iodomethane	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Carbon Disulfide	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Methylene Chloride	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Acrylonitrile	ND	0.50	EPA 8260D	4-5-25	4-5-25	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,1-Dichloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Vinyl Acetate	ND	1.0	EPA 8260D	4-5-25	4-5-25	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
2-Butanone	ND	5.0	EPA 8260D	4-5-25	4-5-25	
Bromochloromethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Chloroform	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Carbon Tetrachloride	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Benzene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2-Dichloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Trichloroethene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2-Dichloropropane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Dibromomethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Bromodichloromethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260D	4-5-25	4-5-25	
Toluene	ND	1.0	EPA 8260D	4-5-25	4-5-25	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Tetrachloroethene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
2-Hexanone	ND	2.0	EPA 8260D	4-5-25	4-5-25	



Date of Report: April 22, 2025
 Samples Submitted: April 2, 2025
 Laboratory Reference: 2504-035
 Project: 553-8472-006

VOLATILE ORGANICS EPA 8260D/SIM
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-9D					
Laboratory ID:	04-035-09					
Dibromochloromethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2-Dibromoethane (SIM)	ND	0.020	EPA 8260D/SIM	4-5-25	4-5-25	
Chlorobenzene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Ethylbenzene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
m,p-Xylene	ND	0.40	EPA 8260D	4-5-25	4-5-25	
o-Xylene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Styrene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Bromoform	ND	1.0	EPA 8260D	4-5-25	4-5-25	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
(trans) 1,4-Dichloro-2-butene	ND	0.50	EPA 8260D	4-5-25	4-5-25	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Naphthalene	ND	1.0	EPA 8260D	4-5-25	4-5-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>100</i>	<i>68-133</i>				
<i>Toluene-d8</i>	<i>98</i>	<i>79-123</i>				
<i>4-Bromofluorobenzene</i>	<i>98</i>	<i>78-117</i>				



Date of Report: April 22, 2025
 Samples Submitted: April 2, 2025
 Laboratory Reference: 2504-035
 Project: 553-8472-006

VOLATILE ORGANICS EPA 8260D/SIM
 page 1 of 2

Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-10D					
Laboratory ID:	04-035-10					
Chloromethane	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Vinyl Chloride (SIM)	ND	0.020	EPA 8260D/SIM	4-5-25	4-5-25	
Bromomethane	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Chloroethane	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Trichlorofluoromethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,1-Dichloroethene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Acetone	ND	5.0	EPA 8260D	4-5-25	4-5-25	
Iodomethane	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Carbon Disulfide	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Methylene Chloride	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Acrylonitrile	ND	0.50	EPA 8260D	4-5-25	4-5-25	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,1-Dichloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Vinyl Acetate	ND	1.0	EPA 8260D	4-5-25	4-5-25	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
2-Butanone	ND	5.0	EPA 8260D	4-5-25	4-5-25	
Bromochloromethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Chloroform	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Carbon Tetrachloride	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Benzene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2-Dichloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Trichloroethene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2-Dichloropropane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Dibromomethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Bromodichloromethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260D	4-5-25	4-5-25	
Toluene	ND	1.0	EPA 8260D	4-5-25	4-5-25	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Tetrachloroethene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
2-Hexanone	ND	2.0	EPA 8260D	4-5-25	4-5-25	



Date of Report: April 22, 2025
 Samples Submitted: April 2, 2025
 Laboratory Reference: 2504-035
 Project: 553-8472-006

VOLATILE ORGANICS EPA 8260D/SIM
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-10D					
Laboratory ID:	04-035-10					
Dibromochloromethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2-Dibromoethane (SIM)	ND	0.020	EPA 8260D/SIM	4-5-25	4-5-25	
Chlorobenzene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Ethylbenzene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
m,p-Xylene	ND	0.40	EPA 8260D	4-5-25	4-5-25	
o-Xylene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Styrene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Bromoform	ND	1.0	EPA 8260D	4-5-25	4-5-25	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
(trans) 1,4-Dichloro-2-butene	ND	0.50	EPA 8260D	4-5-25	4-5-25	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Naphthalene	ND	1.0	EPA 8260D	4-5-25	4-5-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>101</i>	<i>68-133</i>				
<i>Toluene-d8</i>	<i>99</i>	<i>79-123</i>				
<i>4-Bromofluorobenzene</i>	<i>100</i>	<i>78-117</i>				



Date of Report: April 22, 2025
 Samples Submitted: April 2, 2025
 Laboratory Reference: 2504-035
 Project: 553-8472-006

VOLATILE ORGANICS EPA 8260D/SIM
 page 1 of 2

Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	Trip Blank					
Laboratory ID:	04-035-11					
Chloromethane	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Vinyl Chloride (SIM)	ND	0.020	EPA 8260D/SIM	4-5-25	4-5-25	
Bromomethane	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Chloroethane	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Trichlorofluoromethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,1-Dichloroethene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Acetone	ND	5.0	EPA 8260D	4-5-25	4-5-25	
Iodomethane	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Carbon Disulfide	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Methylene Chloride	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Acrylonitrile	ND	0.50	EPA 8260D	4-5-25	4-5-25	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,1-Dichloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Vinyl Acetate	ND	1.0	EPA 8260D	4-5-25	4-5-25	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
2-Butanone	ND	5.0	EPA 8260D	4-5-25	4-5-25	
Bromochloromethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Chloroform	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Carbon Tetrachloride	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Benzene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2-Dichloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Trichloroethene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2-Dichloropropane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Dibromomethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Bromodichloromethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260D	4-5-25	4-5-25	
Toluene	ND	1.0	EPA 8260D	4-5-25	4-5-25	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Tetrachloroethene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
2-Hexanone	ND	2.0	EPA 8260D	4-5-25	4-5-25	



Date of Report: April 22, 2025
 Samples Submitted: April 2, 2025
 Laboratory Reference: 2504-035
 Project: 553-8472-006

VOLATILE ORGANICS EPA 8260D/SIM
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	Trip Blank					
Laboratory ID:	04-035-11					
Dibromochloromethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2-Dibromoethane (SIM)	ND	0.020	EPA 8260D/SIM	4-5-25	4-5-25	
Chlorobenzene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Ethylbenzene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
m,p-Xylene	ND	0.40	EPA 8260D	4-5-25	4-5-25	
o-Xylene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Styrene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Bromoform	ND	1.0	EPA 8260D	4-5-25	4-5-25	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
(trans) 1,4-Dichloro-2-butene	ND	0.50	EPA 8260D	4-5-25	4-5-25	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Naphthalene	ND	1.0	EPA 8260D	4-5-25	4-5-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>100</i>	<i>68-133</i>				
<i>Toluene-d8</i>	<i>98</i>	<i>79-123</i>				
<i>4-Bromofluorobenzene</i>	<i>97</i>	<i>78-117</i>				



Date of Report: April 22, 2025
 Samples Submitted: April 2, 2025
 Laboratory Reference: 2504-035
 Project: 553-8472-006

**VOLATILE ORGANICS EPA 8260D/SIM
 QUALITY CONTROL**

page 1 of 2

Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0405W2					
Chloromethane	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Vinyl Chloride (SIM)	ND	0.020	EPA 8260D/SIM	4-5-25	4-5-25	
Bromomethane	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Chloroethane	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Trichlorofluoromethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,1-Dichloroethene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Acetone	ND	5.0	EPA 8260D	4-5-25	4-5-25	
Iodomethane	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Carbon Disulfide	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Methylene Chloride	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Acrylonitrile	ND	0.50	EPA 8260D	4-5-25	4-5-25	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,1-Dichloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Vinyl Acetate	ND	1.0	EPA 8260D	4-5-25	4-5-25	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
2-Butanone	ND	5.0	EPA 8260D	4-5-25	4-5-25	
Bromochloromethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Chloroform	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Carbon Tetrachloride	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Benzene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2-Dichloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Trichloroethene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2-Dichloropropane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Dibromomethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Bromodichloromethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260D	4-5-25	4-5-25	
Toluene	ND	1.0	EPA 8260D	4-5-25	4-5-25	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Tetrachloroethene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
2-Hexanone	ND	2.0	EPA 8260D	4-5-25	4-5-25	



Date of Report: April 22, 2025
 Samples Submitted: April 2, 2025
 Laboratory Reference: 2504-035
 Project: 553-8472-006

**VOLATILE ORGANICS EPA 8260D/SIM
 QUALITY CONTROL**

page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0405W2					
Dibromochloromethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2-Dibromoethane (SIM)	ND	0.020	EPA 8260D/SIM	4-5-25	4-5-25	
Chlorobenzene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Ethylbenzene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
m,p-Xylene	ND	0.40	EPA 8260D	4-5-25	4-5-25	
o-Xylene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Styrene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
Bromoform	ND	1.0	EPA 8260D	4-5-25	4-5-25	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	4-5-25	4-5-25	
(trans) 1,4-Dichloro-2-butene	ND	0.50	EPA 8260D	4-5-25	4-5-25	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	4-5-25	4-5-25	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	4-5-25	4-5-25	
Naphthalene	ND	1.0	EPA 8260D	4-5-25	4-5-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>98</i>	<i>68-133</i>				
<i>Toluene-d8</i>	<i>100</i>	<i>79-123</i>				
<i>4-Bromofluorobenzene</i>	<i>98</i>	<i>78-117</i>				



Date of Report: April 22, 2025
 Samples Submitted: April 2, 2025
 Laboratory Reference: 2504-035
 Project: 553-8472-006

VOLATILE ORGANICS EPA 8260D/SIM
QUALITY CONTROL
 page 1 of 2

Matrix: Water
 Units: ug/L

					Source	Percent		Recovery		RPD	
Analyte	Result		Spike Level		Result	Recovery		Limits	RPD	Limit	Flags
MATRIX SPIKES											
Laboratory ID:	04-035-04										
	MS	MSD	MS	MSD		MS	MSD				
Chloromethane	9.03	9.79	10.0	10.0	ND	90	98	36-162	8	19	
Vinyl Chloride	8.56	9.21	10.0	10.0	ND	86	92	62-121	7	15	
Bromomethane	9.13	9.86	10.0	10.0	ND	91	99	48-166	8	22	
Chloroethane	9.21	9.91	10.0	10.0	ND	92	99	62-129	7	14	
Trichlorofluoromethane	8.70	9.36	10.0	10.0	ND	87	94	77-120	7	16	
1,1-Dichloroethene	9.37	10.1	10.0	10.0	ND	94	101	76-119	7	15	
Acetone	10.0	12.0	10.0	10.0	ND	100	120	56-132	18	17	W
Iodomethane	9.04	9.32	10.0	10.0	ND	90	93	54-121	3	21	
Carbon Disulfide	8.59	8.63	10.0	10.0	ND	86	86	47-123	0	16	
Methylene Chloride	8.86	10.0	10.0	10.0	ND	89	100	74-114	12	16	
(trans) 1,2-Dichloroethene	9.74	10.6	10.0	10.0	ND	97	106	79-120	8	16	
1,1-Dichloroethane	9.57	10.5	10.0	10.0	ND	96	105	77-122	9	15	
Vinyl Acetate	8.63	10.0	10.0	10.0	ND	86	100	54-123	15	17	
(cis) 1,2-Dichloroethene	9.88	10.8	10.0	10.0	ND	99	108	81-128	9	16	
2-Butanone	9.16	10.3	10.0	10.0	ND	92	103	57-142	12	15	
Bromochloromethane	10.1	11.0	10.0	10.0	ND	101	110	80-129	9	17	
Chloroform	9.65	10.8	10.0	10.0	ND	97	108	75-126	11	16	
1,1,1-Trichloroethane	9.59	10.4	10.0	10.0	ND	96	104	74-126	8	17	
Carbon Tetrachloride	9.71	10.5	10.0	10.0	ND	97	105	70-128	8	18	
Benzene	9.53	10.5	10.0	10.0	ND	95	105	76-122	10	16	
1,2-Dichloroethane	9.72	10.9	10.0	10.0	ND	97	109	70-126	11	17	
Trichloroethene	10.4	11.5	10.0	10.0	ND	104	115	80-130	10	12	
1,2-Dichloropropane	10.0	11.1	10.0	10.0	ND	100	111	79-121	10	17	
Dibromomethane	10.1	11.6	10.0	10.0	ND	101	116	81-122	14	16	
Bromodichloromethane	10.7	12.0	10.0	10.0	ND	107	120	82-127	11	17	
(cis) 1,3-Dichloropropene	10.6	11.8	10.0	10.0	ND	106	118	81-128	11	17	
Methyl Isobutyl Ketone	9.72	11.2	10.0	10.0	ND	97	112	62-130	14	14	W
Toluene	10.0	11.0	10.0	10.0	ND	100	110	75-124	10	19	
(trans) 1,3-Dichloropropene	11.0	12.2	10.0	10.0	ND	110	122	71-124	10	18	
1,1,2-Trichloroethane	10.9	12.2	10.0	10.0	ND	109	122	76-126	11	16	
Tetrachloroethene	10.9	11.9	10.0	10.0	ND	109	119	84-126	9	19	
2-Hexanone	9.86	11.0	10.0	10.0	ND	99	110	41-156	11	23	
Dibromochloromethane	11.6	12.7	10.0	10.0	ND	116	127	74-131	9	18	



Date of Report: April 22, 2025
 Samples Submitted: April 2, 2025
 Laboratory Reference: 2504-035
 Project: 553-8472-006

**VOLATILE ORGANICS EPA 8260D/SIM
 QUALITY CONTROL**

page 2 of 2

Analyte	Result		Spike Level		Source	Percent		Recovery		RPD	
					Result	Recovery		Limits	RPD	Limit	Flags
MATRIX SPIKES											
Laboratory ID:	04-035-04										
	MS	MSD	MS	MSD		MS	MSD				
1,2-Dibromoethane	10.7	12.1	10.0	10.0	ND	107	121	74-131	12	16	
Chlorobenzene	10.8	11.9	10.0	10.0	ND	108	119	84-121	10	16	
1,1,1,2-Tetrachloroethane	11.1	12.2	10.0	10.0	ND	111	122	82-125	9	17	
Ethylbenzene	10.9	11.9	10.0	10.0	ND	109	119	85-125	9	17	
m,p-Xylene	21.7	23.8	20.0	20.0	ND	109	119	84-124	9	17	
o-Xylene	11.0	12.1	10.0	10.0	ND	110	121	84-126	10	17	
Styrene	11.2	12.3	10.0	10.0	ND	112	123	83-131	9	19	
Bromoform	10.5	11.9	10.0	10.0	ND	105	119	67-137	13	18	
1,1,2,2-Tetrachloroethane	10.8	12.3	10.0	10.0	ND	108	123	56-143	13	15	
1,2,3-Trichloropropane	11.4	12.7	10.0	10.0	ND	114	127	61-125	11	15	V
1,4-Dichlorobenzene	11.1	12.5	10.0	10.0	ND	111	125	80-126	12	15	
1,2-Dichlorobenzene	11.6	12.9	10.0	10.0	ND	116	129	79-127	11	16	V
1,2-Dibromo-3-chloropropane	12.3	12.8	10.0	10.0	ND	123	128	54-143	4	19	
Naphthalene	10.3	11.8	10.0	10.0	ND	103	118	48-143	14	17	
Surrogate:											
Dibromofluoromethane						98	100	68-133			
Toluene-d8						100	101	79-123			
4-Bromofluorobenzene						100	100	78-117			



Date of Report: April 22, 2025
 Samples Submitted: April 2, 2025
 Laboratory Reference: 2504-035
 Project: 553-8472-006

GASOLINE RANGE ORGANICS
NWTPH-Gx

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-2S					
Laboratory ID:	04-035-01					
Gasoline	ND	100	NWTPH-Gx	4-4-25	4-4-25	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	86	61-122				
Client ID:	MW-3S					
Laboratory ID:	04-035-02					
Gasoline	ND	100	NWTPH-Gx	4-4-25	4-4-25	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	86	61-122				
Client ID:	MW-4S					
Laboratory ID:	04-035-03					
Gasoline	ND	100	NWTPH-Gx	4-4-25	4-4-25	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	88	61-122				
Client ID:	MW-5S					
Laboratory ID:	04-035-04					
Gasoline	ND	100	NWTPH-Gx	4-4-25	4-4-25	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	83	61-122				
Client ID:	MW-6S					
Laboratory ID:	04-035-05					
Gasoline	ND	100	NWTPH-Gx	4-4-25	4-4-25	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	85	61-122				
Client ID:	MW-13S					
Laboratory ID:	04-035-06					
Gasoline	ND	100	NWTPH-Gx	4-4-25	4-4-25	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	87	61-122				



Date of Report: April 22, 2025
 Samples Submitted: April 2, 2025
 Laboratory Reference: 2504-035
 Project: 553-8472-006

**GASOLINE RANGE ORGANICS
 NWTPH-Gx
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0404W1					
Gasoline	ND	100	NWTPH-Gx	4-4-25	4-4-25	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	80	61-122				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-035-04							
	ORIG	DUP						
Gasoline	ND	ND	NA	NA	NA	NA	NA	30
Surrogate:								
Fluorobenzene				83	78	61-122		

MATRIX SPIKES

Laboratory ID:	04-035-04									
	MS	MSD	MS	MSD		MS	MSD			
o-Xylene	5230	5250	5000	5000	ND	105	105	75-125	0	15
Surrogate:										
Fluorobenzene						94	91	61-122		



Date of Report: April 22, 2025
 Samples Submitted: April 2, 2025
 Laboratory Reference: 2504-035
 Project: 553-8472-006

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

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-2S					
Laboratory ID:	04-035-01					
Diesel Range Organics	ND	0.21	NWTPH-Dx	4-7-25	4-7-25	
Lube Oil Range Organics	ND	0.21	NWTPH-Dx	4-7-25	4-7-25	
Surrogate:	Percent Recovery	Control Limits				
<i>o</i> -Terphenyl	98	50-150				

Client ID:	MW-3S					
Laboratory ID:	04-035-02					
Diesel Range Organics	ND	0.20	NWTPH-Dx	4-7-25	4-7-25	
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	4-7-25	4-7-25	
Surrogate:	Percent Recovery	Control Limits				
<i>o</i> -Terphenyl	104	50-150				

Client ID:	MW-4S					
Laboratory ID:	04-035-03					
Diesel Range Organics	ND	0.21	NWTPH-Dx	4-7-25	4-7-25	
Lube Oil Range Organics	ND	0.21	NWTPH-Dx	4-7-25	4-7-25	
Surrogate:	Percent Recovery	Control Limits				
<i>o</i> -Terphenyl	96	50-150				

Client ID:	MW-5S					
Laboratory ID:	04-035-04					
Diesel Range Organics	ND	0.20	NWTPH-Dx	4-7-25	4-7-25	
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	4-7-25	4-7-25	
Surrogate:	Percent Recovery	Control Limits				
<i>o</i> -Terphenyl	91	50-150				

Client ID:	MW-6S					
Laboratory ID:	04-035-05					
Diesel Range Organics	ND	0.20	NWTPH-Dx	4-7-25	4-7-25	
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	4-7-25	4-7-25	
Surrogate:	Percent Recovery	Control Limits				
<i>o</i> -Terphenyl	107	50-150				

Client ID:	MW-13S					
Laboratory ID:	04-035-06					
Diesel Range Organics	ND	0.21	NWTPH-Dx	4-7-25	4-7-25	
Lube Oil Range Organics	ND	0.21	NWTPH-Dx	4-7-25	4-7-25	
Surrogate:	Percent Recovery	Control Limits				
<i>o</i> -Terphenyl	96	50-150				



Date of Report: April 22, 2025
 Samples Submitted: April 2, 2025
 Laboratory Reference: 2504-035
 Project: 553-8472-006

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

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0407W1					
Diesel Range Organics	ND	0.16	NWTPH-Dx	4-7-25	4-7-25 13:02	
Lube Oil Range Organics	ND	0.16	NWTPH-Dx	4-7-25	4-7-25 13:02	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	94	50-150				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-035-04							
	ORIG	DUP						
Diesel Range	ND	ND	NA	NA	NA	NA	40	
Lube Oil Range	ND	ND	NA	NA	NA	NA	40	
Surrogate:								
o-Terphenyl				91	92	50-150		



Date of Report: April 22, 2025
 Samples Submitted: April 2, 2025
 Laboratory Reference: 2504-035
 Project: 553-8472-006

TOTAL METALS
EPA 200.8/6010D/7470A

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:		MW-2S				
Laboratory ID:		04-035-01				
Antimony	ND	0.0056	EPA 200.8	4-8-25	4-8-25	
Arsenic	ND	0.0033	EPA 200.8	4-8-25	4-8-25	
Beryllium	ND	0.011	EPA 200.8	4-8-25	4-8-25	
Cadmium	ND	0.0044	EPA 200.8	4-8-25	4-8-25	
Chromium	ND	0.011	EPA 200.8	4-8-25	4-8-25	
Copper	ND	0.011	EPA 200.8	4-8-25	4-8-25	
Iron	ND	0.056	EPA 6010D	4-8-25	4-10-25	
Lead	ND	0.0011	EPA 200.8	4-8-25	4-8-25	
Magnesium	8.9	1.1	EPA 6010D	4-8-25	4-10-25	
Manganese	ND	0.011	EPA 6010D	4-8-25	4-10-25	
Mercury	ND	0.00050	EPA 7470A	4-8-25	4-8-25	
Nickel	ND	0.022	EPA 200.8	4-8-25	4-8-25	
Selenium	ND	0.0056	EPA 200.8	4-8-25	4-8-25	
Silver	ND	0.011	EPA 200.8	4-8-25	4-8-25	
Thallium	ND	0.0056	EPA 200.8	4-8-25	4-8-25	
Zinc	ND	0.028	EPA 200.8	4-8-25	4-8-25	

Client ID:		MW-3S				
Laboratory ID:		04-035-02				
Antimony	ND	0.0056	EPA 200.8	4-8-25	4-8-25	
Arsenic	ND	0.0033	EPA 200.8	4-8-25	4-8-25	
Beryllium	ND	0.011	EPA 200.8	4-8-25	4-8-25	
Cadmium	ND	0.0044	EPA 200.8	4-8-25	4-8-25	
Chromium	ND	0.011	EPA 200.8	4-8-25	4-8-25	
Copper	ND	0.011	EPA 200.8	4-8-25	4-8-25	
Iron	ND	0.056	EPA 6010D	4-8-25	4-10-25	
Lead	ND	0.0011	EPA 200.8	4-8-25	4-8-25	
Magnesium	34	1.1	EPA 6010D	4-8-25	4-10-25	
Manganese	ND	0.011	EPA 6010D	4-8-25	4-10-25	
Mercury	ND	0.00050	EPA 7470A	4-8-25	4-8-25	
Nickel	ND	0.022	EPA 200.8	4-8-25	4-8-25	
Selenium	ND	0.0056	EPA 200.8	4-8-25	4-8-25	
Silver	ND	0.011	EPA 200.8	4-8-25	4-8-25	
Thallium	ND	0.0056	EPA 200.8	4-8-25	4-8-25	
Zinc	ND	0.028	EPA 200.8	4-8-25	4-8-25	



Date of Report: April 22, 2025
 Samples Submitted: April 2, 2025
 Laboratory Reference: 2504-035
 Project: 553-8472-006

TOTAL METALS
EPA 200.8/6010D/7470A

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:		MW-4S				
Laboratory ID:		04-035-03				
Antimony	ND	0.0056	EPA 200.8	4-8-25	4-8-25	
Arsenic	ND	0.0033	EPA 200.8	4-8-25	4-8-25	
Beryllium	ND	0.011	EPA 200.8	4-8-25	4-8-25	
Cadmium	ND	0.0044	EPA 200.8	4-8-25	4-8-25	
Chromium	ND	0.011	EPA 200.8	4-8-25	4-8-25	
Copper	ND	0.011	EPA 200.8	4-8-25	4-8-25	
Iron	0.057	0.056	EPA 6010D	4-8-25	4-10-25	
Lead	ND	0.0011	EPA 200.8	4-8-25	4-8-25	
Magnesium	70	11	EPA 6010D	4-8-25	4-10-25	
Manganese	ND	0.011	EPA 6010D	4-8-25	4-10-25	
Mercury	ND	0.00050	EPA 7470A	4-8-25	4-8-25	
Nickel	ND	0.022	EPA 200.8	4-8-25	4-8-25	
Selenium	ND	0.0056	EPA 200.8	4-8-25	4-8-25	
Silver	ND	0.011	EPA 200.8	4-8-25	4-8-25	
Thallium	ND	0.0056	EPA 200.8	4-8-25	4-8-25	
Zinc	ND	0.028	EPA 200.8	4-8-25	4-8-25	

Client ID:		MW-5S				
Laboratory ID:		04-035-04				
Antimony	ND	0.0056	EPA 200.8	4-8-25	4-8-25	
Arsenic	ND	0.0033	EPA 200.8	4-8-25	4-8-25	
Beryllium	ND	0.011	EPA 200.8	4-8-25	4-8-25	
Cadmium	ND	0.0044	EPA 200.8	4-8-25	4-8-25	
Chromium	ND	0.011	EPA 200.8	4-8-25	4-8-25	
Copper	ND	0.011	EPA 200.8	4-8-25	4-8-25	
Iron	0.87	0.056	EPA 6010D	4-8-25	4-10-25	
Lead	ND	0.0011	EPA 200.8	4-8-25	4-8-25	
Magnesium	24	1.1	EPA 6010D	4-8-25	4-10-25	
Manganese	0.14	0.011	EPA 6010D	4-8-25	4-10-25	
Mercury	ND	0.00050	EPA 7470A	4-8-25	4-8-25	
Nickel	ND	0.022	EPA 200.8	4-8-25	4-8-25	
Selenium	ND	0.0056	EPA 200.8	4-8-25	4-8-25	
Silver	ND	0.011	EPA 200.8	4-8-25	4-8-25	
Thallium	ND	0.0056	EPA 200.8	4-8-25	4-8-25	
Zinc	ND	0.028	EPA 200.8	4-8-25	4-8-25	



Date of Report: April 22, 2025
 Samples Submitted: April 2, 2025
 Laboratory Reference: 2504-035
 Project: 553-8472-006

TOTAL METALS
EPA 200.8/6010D/7470A

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:		MW-6S				
Laboratory ID:		04-035-05				
Antimony	ND	0.0056	EPA 200.8	4-8-25	4-8-25	
Arsenic	ND	0.0033	EPA 200.8	4-8-25	4-8-25	
Beryllium	ND	0.011	EPA 200.8	4-8-25	4-8-25	
Cadmium	ND	0.0044	EPA 200.8	4-8-25	4-8-25	
Chromium	ND	0.011	EPA 200.8	4-8-25	4-8-25	
Copper	ND	0.011	EPA 200.8	4-8-25	4-8-25	
Iron	ND	0.056	EPA 6010D	4-8-25	4-11-25	
Lead	ND	0.0011	EPA 200.8	4-8-25	4-8-25	
Magnesium	29	1.1	EPA 6010D	4-8-25	4-11-25	
Manganese	0.018	0.011	EPA 6010D	4-8-25	4-11-25	
Mercury	ND	0.00050	EPA 7470A	4-8-25	4-8-25	
Nickel	ND	0.022	EPA 200.8	4-8-25	4-8-25	
Selenium	ND	0.0056	EPA 200.8	4-8-25	4-8-25	
Silver	ND	0.011	EPA 200.8	4-8-25	4-8-25	
Thallium	ND	0.0056	EPA 200.8	4-8-25	4-8-25	
Zinc	ND	0.028	EPA 200.8	4-8-25	4-8-25	

Client ID:		MW-13S				
Laboratory ID:		04-035-06				
Antimony	ND	0.0056	EPA 200.8	4-8-25	4-8-25	
Arsenic	ND	0.0033	EPA 200.8	4-8-25	4-8-25	
Beryllium	ND	0.011	EPA 200.8	4-8-25	4-8-25	
Cadmium	ND	0.0044	EPA 200.8	4-8-25	4-8-25	
Chromium	ND	0.011	EPA 200.8	4-8-25	4-8-25	
Copper	ND	0.011	EPA 200.8	4-8-25	4-8-25	
Iron	ND	0.056	EPA 6010D	4-8-25	4-10-25	
Lead	ND	0.0011	EPA 200.8	4-8-25	4-8-25	
Magnesium	30	1.1	EPA 6010D	4-8-25	4-10-25	
Manganese	0.020	0.011	EPA 6010D	4-8-25	4-10-25	
Mercury	ND	0.00050	EPA 7470A	4-8-25	4-8-25	
Nickel	ND	0.022	EPA 200.8	4-8-25	4-8-25	
Selenium	ND	0.0056	EPA 200.8	4-8-25	4-8-25	
Silver	ND	0.011	EPA 200.8	4-8-25	4-8-25	
Thallium	ND	0.0056	EPA 200.8	4-8-25	4-8-25	
Zinc	ND	0.028	EPA 200.8	4-8-25	4-8-25	



Date of Report: April 22, 2025
 Samples Submitted: April 2, 2025
 Laboratory Reference: 2504-035
 Project: 553-8472-006

**TOTAL METALS
 EPA 6010D**

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: MW-7D						
Laboratory ID: 04-035-07						
Iron	0.22	0.056	EPA 6010D	4-8-25	4-10-25	
Magnesium	10	1.1	EPA 6010D	4-8-25	4-10-25	
Manganese	0.033	0.011	EPA 6010D	4-8-25	4-10-25	

Client ID: MW-8D						
Laboratory ID: 04-035-08						
Iron	0.20	0.056	EPA 6010D	4-8-25	4-10-25	
Magnesium	18	1.1	EPA 6010D	4-8-25	4-10-25	
Manganese	0.013	0.011	EPA 6010D	4-8-25	4-10-25	

Client ID: MW-9D						
Laboratory ID: 04-035-09						
Iron	0.88	0.056	EPA 6010D	4-8-25	4-10-25	
Magnesium	18	1.1	EPA 6010D	4-8-25	4-10-25	
Manganese	0.34	0.011	EPA 6010D	4-8-25	4-10-25	

Client ID: MW-10D						
Laboratory ID: 04-035-10						
Iron	ND	0.056	EPA 6010D	4-8-25	4-10-25	
Magnesium	11	1.1	EPA 6010D	4-8-25	4-10-25	
Manganese	ND	0.011	EPA 6010D	4-8-25	4-10-25	



Date of Report: April 22, 2025
 Samples Submitted: April 2, 2025
 Laboratory Reference: 2504-035
 Project: 553-8472-006

**TOTAL METALS
 EPA 200.8/6010D/7470A
 QUALITY CONTROL**

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0408WM1					
Antimony	ND	0.0022	EPA 200.8	4-8-25	4-8-25	
Arsenic	ND	0.0013	EPA 200.8	4-8-25	4-8-25	
Beryllium	ND	0.0044	EPA 200.8	4-8-25	4-8-25	
Cadmium	ND	0.0018	EPA 200.8	4-8-25	4-8-25	
Chromium	ND	0.0044	EPA 200.8	4-8-25	4-8-25	
Copper	ND	0.0044	EPA 200.8	4-8-25	4-8-25	
Lead	ND	0.00044	EPA 200.8	4-8-25	4-8-25	
Nickel	ND	0.0089	EPA 200.8	4-8-25	4-8-25	
Selenium	ND	0.0022	EPA 200.8	4-8-25	4-8-25	
Silver	ND	0.0044	EPA 200.8	4-8-25	4-8-25	
Thallium	ND	0.0022	EPA 200.8	4-8-25	4-8-25	
Zinc	ND	0.011	EPA 200.8	4-8-25	4-8-25	
Laboratory ID:	MB0408WM1					
Iron	ND	0.056	EPA 6010D	4-8-25	4-10-25	
Magnesium	ND	1.1	EPA 6010D	4-8-25	4-10-25	
Manganese	ND	0.011	EPA 6010D	4-8-25	4-10-25	
Laboratory ID:	MB0408W1					
Mercury	ND	0.00050	EPA 7470A	4-8-25	4-8-25	



Date of Report: April 22, 2025
 Samples Submitted: April 2, 2025
 Laboratory Reference: 2504-035
 Project: 553-8472-006

TOTAL METALS
EPA 200.8/6010D/7470A
QUALITY CONTROL

Analyte	Result		Spike Level		Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE										
Laboratory ID:	04-035-04									
	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: 04-035-04

Iron	0.866	0.855	NA	NA		NA	NA	1	20	
Magnesium	24.1	24.0	NA	NA		NA	NA	1	20	
Manganese	0.143	0.144	NA	NA		NA	NA	1	20	

Laboratory ID: 04-035-04

Mercury	ND	ND	NA	NA		NA	NA	NA	20	
---------	----	----	----	----	--	----	----	----	----	--

MATRIX SPIKES

Laboratory ID: 04-035-04

	MS	MSD	MS	MSD		MS	MSD			
Antimony	0.229	0.213	0.222	0.222	ND	103	96	75-125	7	20
Arsenic	0.234	0.212	0.222	0.222	ND	105	96	75-125	10	20
Beryllium	0.223	0.210	0.222	0.222	ND	100	95	75-125	6	20
Cadmium	0.223	0.205	0.222	0.222	ND	100	92	75-125	8	20
Chromium	0.218	0.202	0.222	0.222	ND	98	91	75-125	8	20
Copper	0.215	0.197	0.222	0.222	ND	97	89	75-125	9	20
Lead	0.217	0.201	0.222	0.222	ND	98	91	75-125	8	20
Nickel	0.217	0.201	0.222	0.222	ND	98	91	75-125	8	20
Selenium	0.246	0.215	0.222	0.222	ND	111	97	75-125	13	20
Silver	0.207	0.195	0.222	0.222	ND	93	88	75-125	6	20
Thallium	0.218	0.203	0.222	0.222	ND	98	92	75-125	7	20
Zinc	0.234	0.210	0.222	0.222	ND	106	95	75-125	11	20

Laboratory ID: 04-035-04

Iron	23.3	24.0	22.2	22.2	0.866	101	104	75-125	3	20
Magnesium	44.1	44.7	22.2	22.2	24.1	90	93	75-125	1	20
Manganese	0.362	0.368	0.222	0.222	0.143	99	101	75-125	2	20

Laboratory ID: 04-035-04

Mercury	0.00618	0.00608	0.00625	0.00625	ND	99	97	75-125	2	20
---------	---------	---------	---------	---------	----	----	----	--------	---	----



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

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: April 22, 2025
 Samples Submitted: April 2, 2025
 Laboratory Reference: 2504-035
 Project: 553-8472-006

DISSOLVED METALS
EPA 200.8/6010D/7470A

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-2S					
Laboratory ID:	04-035-01					
Antimony	ND	0.0050	EPA 200.8		4-8-25	
Arsenic	ND	0.0030	EPA 200.8		4-8-25	
Beryllium	ND	0.010	EPA 200.8		4-8-25	
Cadmium	ND	0.0040	EPA 200.8		4-8-25	
Calcium	14	1.1	EPA 6010D		4-9-25	
Chromium	ND	0.010	EPA 200.8		4-8-25	
Copper	ND	0.010	EPA 200.8		4-8-25	
Iron	ND	0.056	EPA 6010D		4-9-25	
Lead	ND	0.0010	EPA 200.8		4-8-25	
Magnesium	9.3	1.1	EPA 6010D		4-9-25	
Manganese	ND	0.011	EPA 6010D		4-9-25	
Mercury	ND	0.00050	EPA 7470A		4-8-25	
Nickel	ND	0.020	EPA 200.8		4-8-25	
Potassium	2.6	1.1	EPA 6010D		4-9-25	
Selenium	ND	0.0050	EPA 200.8		4-8-25	
Silver	ND	0.010	EPA 200.8		4-8-25	
Sodium	10	1.1	EPA 6010D		4-9-25	
Thallium	ND	0.0050	EPA 200.8		4-8-25	
Zinc	ND	0.025	EPA 200.8		4-8-25	



Date of Report: April 22, 2025
 Samples Submitted: April 2, 2025
 Laboratory Reference: 2504-035
 Project: 553-8472-006

DISSOLVED METALS
EPA 200.8/6010D/7470A

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-3S					
Laboratory ID:	04-035-02					
Antimony	ND	0.0050	EPA 200.8		4-8-25	
Arsenic	ND	0.0030	EPA 200.8		4-8-25	
Beryllium	ND	0.010	EPA 200.8		4-8-25	
Cadmium	ND	0.0040	EPA 200.8		4-8-25	
Calcium	52	1.1	EPA 6010D		4-9-25	
Chromium	ND	0.010	EPA 200.8		4-8-25	
Copper	ND	0.010	EPA 200.8		4-8-25	
Iron	ND	0.056	EPA 6010D		4-9-25	
Lead	ND	0.0010	EPA 200.8		4-8-25	
Magnesium	36	1.1	EPA 6010D		4-9-25	
Manganese	ND	0.011	EPA 6010D		4-9-25	
Mercury	ND	0.00050	EPA 7470A		4-8-25	
Nickel	ND	0.020	EPA 200.8		4-8-25	
Potassium	4.2	1.1	EPA 6010D		4-9-25	
Selenium	ND	0.0050	EPA 200.8		4-8-25	
Silver	ND	0.010	EPA 200.8		4-8-25	
Sodium	21	1.1	EPA 6010D		4-9-25	
Thallium	ND	0.0050	EPA 200.8		4-8-25	
Zinc	ND	0.025	EPA 200.8		4-8-25	



Date of Report: April 22, 2025
 Samples Submitted: April 2, 2025
 Laboratory Reference: 2504-035
 Project: 553-8472-006

DISSOLVED METALS
EPA 200.8/6010D/7470A

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-4S					
Laboratory ID:	04-035-03					
Antimony	ND	0.0050	EPA 200.8		4-8-25	
Arsenic	ND	0.0030	EPA 200.8		4-8-25	
Beryllium	ND	0.010	EPA 200.8		4-8-25	
Cadmium	ND	0.0040	EPA 200.8		4-8-25	
Calcium	100	10	EPA 6010D		4-9-25	
Chromium	ND	0.010	EPA 200.8		4-8-25	
Copper	ND	0.010	EPA 200.8		4-8-25	
Iron	ND	0.056	EPA 6010D		4-9-25	
Lead	ND	0.0010	EPA 200.8		4-8-25	
Magnesium	72	10	EPA 6010D		4-9-25	
Manganese	ND	0.011	EPA 6010D		4-9-25	
Mercury	ND	0.00050	EPA 7470A		4-8-25	
Nickel	ND	0.020	EPA 200.8		4-8-25	
Potassium	6.3	1.1	EPA 6010D		4-9-25	
Selenium	ND	0.0050	EPA 200.8		4-8-25	
Silver	ND	0.010	EPA 200.8		4-8-25	
Sodium	25	1.1	EPA 6010D		4-9-25	
Thallium	ND	0.0050	EPA 200.8		4-8-25	
Zinc	ND	0.025	EPA 200.8		4-8-25	



Date of Report: April 22, 2025
 Samples Submitted: April 2, 2025
 Laboratory Reference: 2504-035
 Project: 553-8472-006

DISSOLVED METALS
EPA 200.8/6010D/7470A

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-5S					
Laboratory ID:	04-035-04					
Antimony	ND	0.0050	EPA 200.8		4-8-25	
Arsenic	ND	0.0030	EPA 200.8		4-8-25	
Beryllium	ND	0.010	EPA 200.8		4-8-25	
Cadmium	ND	0.0040	EPA 200.8		4-8-25	
Calcium	35	1.1	EPA 6010D		4-9-25	
Chromium	ND	0.010	EPA 200.8		4-8-25	
Copper	ND	0.010	EPA 200.8		4-8-25	
Iron	0.37	0.056	EPA 6010D		4-9-25	
Lead	ND	0.0010	EPA 200.8		4-8-25	
Magnesium	23	1.1	EPA 6010D		4-9-25	
Manganese	0.096	0.011	EPA 6010D		4-9-25	
Mercury	ND	0.00050	EPA 7470A		4-8-25	
Nickel	ND	0.020	EPA 200.8		4-8-25	
Potassium	3.1	1.1	EPA 6010D		4-9-25	
Selenium	ND	0.0050	EPA 200.8		4-8-25	
Silver	ND	0.010	EPA 200.8		4-8-25	
Sodium	19	1.1	EPA 6010D		4-9-25	
Thallium	ND	0.0050	EPA 200.8		4-8-25	
Zinc	ND	0.025	EPA 200.8		4-8-25	



Date of Report: April 22, 2025
 Samples Submitted: April 2, 2025
 Laboratory Reference: 2504-035
 Project: 553-8472-006

DISSOLVED METALS
EPA 200.8/6010D/7470A

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-6S					
Laboratory ID:	04-035-05					
Antimony	ND	0.0050	EPA 200.8		4-8-25	
Arsenic	ND	0.0030	EPA 200.8		4-8-25	
Beryllium	ND	0.010	EPA 200.8		4-8-25	
Cadmium	ND	0.0040	EPA 200.8		4-8-25	
Calcium	48	1.1	EPA 6010D		4-9-25	
Chromium	ND	0.010	EPA 200.8		4-8-25	
Copper	ND	0.010	EPA 200.8		4-8-25	
Iron	ND	0.056	EPA 6010D		4-9-25	
Lead	ND	0.0010	EPA 200.8		4-8-25	
Magnesium	32	1.1	EPA 6010D		4-9-25	
Manganese	ND	0.011	EPA 6010D		4-9-25	
Mercury	ND	0.00050	EPA 7470A		4-8-25	
Nickel	ND	0.020	EPA 200.8		4-8-25	
Potassium	3.9	1.1	EPA 6010D		4-9-25	
Selenium	ND	0.0050	EPA 200.8		4-8-25	
Silver	ND	0.010	EPA 200.8		4-8-25	
Sodium	18	1.1	EPA 6010D		4-9-25	
Thallium	ND	0.0050	EPA 200.8		4-8-25	
Zinc	ND	0.025	EPA 200.8		4-8-25	



Date of Report: April 22, 2025
 Samples Submitted: April 2, 2025
 Laboratory Reference: 2504-035
 Project: 553-8472-006

DISSOLVED METALS
EPA 200.8/6010D/7470A

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-13S					
Laboratory ID:	04-035-06					
Antimony	ND	0.0050	EPA 200.8		4-8-25	
Arsenic	ND	0.0030	EPA 200.8		4-8-25	
Beryllium	ND	0.010	EPA 200.8		4-8-25	
Cadmium	ND	0.0040	EPA 200.8		4-8-25	
Calcium	48	1.1	EPA 6010D		4-9-25	
Chromium	ND	0.010	EPA 200.8		4-8-25	
Copper	ND	0.010	EPA 200.8		4-8-25	
Iron	ND	0.056	EPA 6010D		4-9-25	
Lead	ND	0.0010	EPA 200.8		4-8-25	
Magnesium	32	1.1	EPA 6010D		4-9-25	
Manganese	ND	0.011	EPA 6010D		4-9-25	
Mercury	ND	0.00050	EPA 7470A		4-8-25	
Nickel	ND	0.020	EPA 200.8		4-8-25	
Potassium	4.2	1.1	EPA 6010D		4-9-25	
Selenium	ND	0.0050	EPA 200.8		4-8-25	
Silver	ND	0.010	EPA 200.8		4-8-25	
Sodium	18	1.1	EPA 6010D		4-9-25	
Thallium	ND	0.0050	EPA 200.8		4-8-25	
Zinc	ND	0.025	EPA 200.8		4-8-25	

Client ID: MW-7D
Laboratory ID: 04-035-07

Calcium	15	1.1	EPA 6010D		4-9-25	
Iron	0.21	0.056	EPA 6010D		4-9-25	
Magnesium	11	1.1	EPA 6010D		4-9-25	
Manganese	0.033	0.011	EPA 6010D		4-9-25	
Potassium	2.3	1.1	EPA 6010D		4-9-25	
Sodium	12	1.1	EPA 6010D		4-9-25	



Date of Report: April 22, 2025
 Samples Submitted: April 2, 2025
 Laboratory Reference: 2504-035
 Project: 553-8472-006

**DISSOLVED METALS
 EPA 6010D**

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: MW-8D						
Laboratory ID: 04-035-08						
Calcium	28	1.1	EPA 6010D		4-9-25	
Iron	ND	0.056	EPA 6010D		4-9-25	
Magnesium	19	1.1	EPA 6010D		4-9-25	
Manganese	ND	0.011	EPA 6010D		4-9-25	
Potassium	2.7	1.1	EPA 6010D		4-9-25	
Sodium	21	1.1	EPA 6010D		4-9-25	

Client ID: MW-9D						
Laboratory ID: 04-035-09						
Calcium	31	1.1	EPA 6010D		4-9-25	
Iron	0.69	0.056	EPA 6010D		4-9-25	
Magnesium	19	1.1	EPA 6010D		4-9-25	
Manganese	0.32	0.011	EPA 6010D		4-9-25	
Potassium	1.8	1.1	EPA 6010D		4-9-25	
Sodium	26	1.1	EPA 6010D		4-9-25	

Client ID: MW-10D						
Laboratory ID: 04-035-10						
Calcium	20	1.1	EPA 6010D		4-9-25	
Iron	ND	0.056	EPA 6010D		4-9-25	
Magnesium	12	1.1	EPA 6010D		4-9-25	
Manganese	ND	0.011	EPA 6010D		4-9-25	
Potassium	2.2	1.1	EPA 6010D		4-9-25	
Sodium	15	1.1	EPA 6010D		4-9-25	



Date of Report: April 22, 2025
 Samples Submitted: April 2, 2025
 Laboratory Reference: 2504-035
 Project: 553-8472-006

**DISSOLVED METALS
 EPA 200.8/6010D/7470A
 QUALITY CONTROL**

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0408D1					
Antimony	ND	0.0050	EPA 200.8		4-8-25	
Arsenic	ND	0.0030	EPA 200.8		4-8-25	
Beryllium	ND	0.010	EPA 200.8		4-8-25	
Cadmium	ND	0.0040	EPA 200.8		4-8-25	
Chromium	ND	0.010	EPA 200.8		4-8-25	
Copper	ND	0.010	EPA 200.8		4-8-25	
Lead	ND	0.0010	EPA 200.8		4-8-25	
Nickel	ND	0.020	EPA 200.8		4-8-25	
Selenium	ND	0.0050	EPA 200.8		4-8-25	
Silver	ND	0.010	EPA 200.8		4-8-25	
Thallium	ND	0.0050	EPA 200.8		4-8-25	
Zinc	ND	0.025	EPA 200.8		4-8-25	
Laboratory ID:	MB0409D1					
Calcium	ND	1.1	EPA 6010D		4-9-25	
Iron	ND	0.056	EPA 6010D		4-9-25	
Magnesium	ND	1.1	EPA 6010D		4-9-25	
Manganese	ND	0.011	EPA 6010D		4-9-25	
Potassium	ND	1.1	EPA 6010D		4-9-25	
Sodium	ND	1.1	EPA 6010D		4-9-25	
Laboratory ID:	MB0408D1					
Mercury	ND	0.00050	EPA 7470A		4-8-25	



Date of Report: April 22, 2025
 Samples Submitted: April 2, 2025
 Laboratory Reference: 2504-035
 Project: 553-8472-006

DISSOLVED METALS
EPA 200.8/6010D/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:	04-035-04							
	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: 04-035-04								
Calcium	34.5	34.7	NA	NA	NA	NA	1	20
Iron	0.370	0.368	NA	NA	NA	NA	0	20
Magnesium	22.9	23.2	NA	NA	NA	NA	1	20
Manganese	0.0957	0.0963	NA	NA	NA	NA	1	20
Potassium	3.11	3.07	NA	NA	NA	NA	1	20
Sodium	19.3	19.3	NA	NA	NA	NA	0	20
Laboratory ID: 04-035-04								
Mercury	ND	ND	NA	NA	NA	NA	NA	20



Date of Report: April 22, 2025
 Samples Submitted: April 2, 2025
 Laboratory Reference: 2504-035
 Project: 553-8472-006

**DISSOLVED METALS
 EPA 200.8/6010D/7470A
 QUALITY CONTROL**

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
MATRIX SPIKES								
Laboratory ID:	04-035-04							
	MS	MSD	MS	MSD	MS	MSD		
Antimony	0.0855	0.0854	0.0800	0.0800	ND	107	107	75-125 0 20
Arsenic	0.0849	0.0850	0.0800	0.0800	ND	106	106	75-125 0 20
Beryllium	0.0824	0.0813	0.0800	0.0800	ND	103	102	75-125 1 20
Cadmium	0.0826	0.0837	0.0800	0.0800	ND	103	105	75-125 1 20
Chromium	0.0723	0.0723	0.0800	0.0800	ND	90	90	75-125 0 20
Copper	0.0709	0.0725	0.0800	0.0800	ND	89	91	75-125 2 20
Lead	0.0806	0.0817	0.0800	0.0800	ND	101	102	75-125 1 20
Nickel	0.0698	0.0711	0.0800	0.0800	ND	87	89	75-125 2 20
Selenium	0.187	0.195	0.200	0.200	ND	93	98	75-125 4 20
Silver	0.0651	0.0655	0.0800	0.0800	ND	81	82	75-125 1 20
Thallium	0.0798	0.0810	0.0800	0.0800	ND	100	101	75-125 1 20
Zinc	0.0915	0.0935	0.0800	0.0800	ND	114	117	75-125 2 20
04-035-04								
Laboratory ID:	04-035-04							
Calcium	57.4	57.1	22.2	22.2	34.5	103	102	75-125 1 20
Iron	25.2	25.4	22.2	22.2	0.370	112	113	75-125 1 20
Magnesium	45.2	45.5	22.2	22.2	22.9	100	102	75-125 1 20
Manganese	0.704	0.711	0.556	0.556	0.0957	109	111	75-125 1 20
Potassium	29.1	29.3	22.2	22.2	3.11	117	118	75-125 1 20
Sodium	43.0	43.1	22.2	22.2	19.3	107	107	75-125 0 20
04-035-04								
Laboratory ID:	04-035-04							
Mercury	0.00595	0.00600	0.00625	0.00625	ND	95	96	75-125 1 20



Date of Report: April 22, 2025
 Samples Submitted: April 2, 2025
 Laboratory Reference: 2504-035
 Project: 553-8472-006

CHLORIDE
SM 4500-Cl E

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-2S					
Laboratory ID:	04-035-01					
Chloride	2.7	2.0	SM 4500-Cl E	4-4-25	4-4-25	

Client ID:	MW-3S					
Laboratory ID:	04-035-02					
Chloride	68	2.0	SM 4500-Cl E	4-4-25	4-4-25	

Client ID:	MW-4S					
Laboratory ID:	04-035-03					
Chloride	49	2.0	SM 4500-Cl E	4-4-25	4-4-25	

Client ID:	MW-5S					
Laboratory ID:	04-035-04					
Chloride	26	2.0	SM 4500-Cl E	4-4-25	4-4-25	

Client ID:	MW-6S					
Laboratory ID:	04-035-05					
Chloride	62	2.0	SM 4500-Cl E	4-4-25	4-4-25	

Client ID:	MW-13S					
Laboratory ID:	04-035-06					
Chloride	64	2.0	SM 4500-Cl E	4-4-25	4-4-25	

Client ID:	MW-7D					
Laboratory ID:	04-035-07					
Chloride	3.7	2.0	SM 4500-Cl E	4-4-25	4-4-25	

Client ID:	MW-8D					
Laboratory ID:	04-035-08					
Chloride	16	2.0	SM 4500-Cl E	4-4-25	4-4-25	

Client ID:	MW-9D					
Laboratory ID:	04-035-09					
Chloride	41	2.0	SM 4500-Cl E	4-4-25	4-4-25	



Date of Report: April 22, 2025
Samples Submitted: April 2, 2025
Laboratory Reference: 2504-035
Project: 553-8472-006

CHLORIDE
SM 4500-Cl E

Matrix: Water
Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-10D					
Laboratory ID:	04-035-10					
Chloride	3.7	2.0	SM 4500-Cl E	4-4-25	4-4-25	



Date of Report: April 22, 2025
 Samples Submitted: April 2, 2025
 Laboratory Reference: 2504-035
 Project: 553-8472-006

**CHLORIDE
 SM 4500-Cl E
 QUALITY CONTROL**

Matrix: Water

Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0404W1					
Chloride	ND	2.0	SM 4500-Cl E	4-4-25	4-4-25	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-035-04							
	ORIG	DUP						
Chloride	25.6	26.0	NA	NA	NA	NA	2	21

MATRIX SPIKES

Laboratory ID:	04-035-04									
	MS	MSD	MS	MSD	MS	MSD				
Chloride	73.4	75.2	50.0	50.0	25.6	96	99	81-115	2	20

SPIKE BLANK

Laboratory ID:	SB0404W1									
	SB		SB		SB					
Chloride	48.2		50.0		NA	96		77-115	NA	NA



Date of Report: April 22, 2025
 Samples Submitted: April 2, 2025
 Laboratory Reference: 2504-035
 Project: 553-8472-006

SULFATE
ASTM D516-11

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-2S					
Laboratory ID:	04-035-01					
Sulfate	ND	5.0	ASTM D516-11	4-10-25	4-10-25	

Client ID:	MW-3S					
Laboratory ID:	04-035-02					
Sulfate	75	25	ASTM D516-11	4-10-25	4-10-25	

Client ID:	MW-4S					
Laboratory ID:	04-035-03					
Sulfate	100	50	ASTM D516-11	4-10-25	4-10-25	

Client ID:	MW-5S					
Laboratory ID:	04-035-04					
Sulfate	79	20	ASTM D516-11	4-10-25	4-10-25	

Client ID:	MW-6S					
Laboratory ID:	04-035-05					
Sulfate	51	20	ASTM D516-11	4-10-25	4-10-25	

Client ID:	MW-13S					
Laboratory ID:	04-035-06					
Sulfate	54	20	ASTM D516-11	4-10-25	4-10-25	

Client ID:	MW-7D					
Laboratory ID:	04-035-07					
Sulfate	ND	5.0	ASTM D516-11	4-10-25	4-10-25	

Client ID:	MW-8D					
Laboratory ID:	04-035-08					
Sulfate	57	20	ASTM D516-11	4-10-25	4-10-25	

Client ID:	MW-9D					
Laboratory ID:	04-035-09					
Sulfate	49	20	ASTM D516-11	4-10-25	4-10-25	



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

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: April 22, 2025
Samples Submitted: April 2, 2025
Laboratory Reference: 2504-035
Project: 553-8472-006

SULFATE
ASTM D516-11

Matrix: Water

Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-10D					
Laboratory ID:	04-035-10					
Sulfate	11	5.0	ASTM D516-11	4-10-25	4-10-25	



Date of Report: April 22, 2025
 Samples Submitted: April 2, 2025
 Laboratory Reference: 2504-035
 Project: 553-8472-006

**SULFATE
 ASTM D516-11
 QUALITY CONTROL**

Matrix: Water

Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0410W1					
Sulfate	ND	5.0	ASTM D516-11	4-10-25	4-10-25	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-035-04							
	ORIG	DUP						
Sulfate	78.8	80.4	NA	NA	NA	NA	2	11

MATRIX SPIKES

Laboratory ID:	04-035-04									
	MS	MSD	MS	MSD		MS	MSD			
Sulfate	185	179	100.0	100.0	78.8	106	100	69-134	3	20

SPIKE BLANK

Laboratory ID:	SB0410W1									
	SB		SB			SB				
Sulfate	9.59		10.0		NA	96		81-106	NA	NA



Date of Report: April 22, 2025
 Samples Submitted: April 2, 2025
 Laboratory Reference: 2504-035
 Project: 553-8472-006

**TOTAL DISSOLVED SOLIDS
 SM 2540C**

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-2S					
Laboratory ID:	04-035-01					
Total Dissolved Solids	160	13	SM 2540C	4-4-25	4-4-25	

Client ID:	MW-3S					
Laboratory ID:	04-035-02					
Total Dissolved Solids	420	13	SM 2540C	4-4-25	4-4-25	

Client ID:	MW-4S					
Laboratory ID:	04-035-03					
Total Dissolved Solids	710	13	SM 2540C	4-4-25	4-4-25	

Client ID:	MW-5S					
Laboratory ID:	04-035-04					
Total Dissolved Solids	330	13	SM 2540C	4-4-25	4-4-25	

Client ID:	MW-6S					
Laboratory ID:	04-035-05					
Total Dissolved Solids	390	13	SM 2540C	4-4-25	4-4-25	

Client ID:	MW-13S					
Laboratory ID:	04-035-06					
Total Dissolved Solids	430	13	SM 2540C	4-4-25	4-4-25	

Client ID:	MW-7D					
Laboratory ID:	04-035-07					
Total Dissolved Solids	160	13	SM 2540C	4-4-25	4-4-25	

Client ID:	MW-8D					
Laboratory ID:	04-035-08					
Total Dissolved Solids	260	13	SM 2540C	4-4-25	4-4-25	

Client ID:	MW-9D					
Laboratory ID:	04-035-09					
Total Dissolved Solids	290	13	SM 2540C	4-4-25	4-4-25	



Date of Report: April 22, 2025
Samples Submitted: April 2, 2025
Laboratory Reference: 2504-035
Project: 553-8472-006

TOTAL DISSOLVED SOLIDS
SM 2540C

Matrix: Water

Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-10D					
Laboratory ID:	04-035-10					
Total Dissolved Solids	180	13	SM 2540C	4-4-25	4-4-25	



Date of Report: April 22, 2025
 Samples Submitted: April 2, 2025
 Laboratory Reference: 2504-035
 Project: 553-8472-006

**TOTAL DISSOLVED SOLIDS
 SM 2540C
 QUALITY CONTROL**

Matrix: Water

Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0404W1					
Total Dissolved Solids	ND	13	SM 2540C	4-4-25	4-4-25	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-035-04							
	ORIG	DUP						
Total Dissolved Solids	331	323	NA	NA	NA	NA	2	29

SPIKE BLANK

Laboratory ID:	SB0404W1							
	SB	SB		SB				
Total Dissolved Solids	431	500	NA	86	76-120	NA	NA	



Date of Report: April 22, 2025
 Samples Submitted: April 2, 2025
 Laboratory Reference: 2504-035
 Project: 553-8472-006

**TOTAL ALKALINITY
 SM 2320B**

Matrix: Water
 Units: mg CaCO₃/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-2S					
Laboratory ID:	04-035-01					
Total Alkalinity	78	2.0	SM 2320B	4-8-25	4-8-25	

Client ID:	MW-3S					
Laboratory ID:	04-035-02					
Total Alkalinity	94	2.0	SM 2320B	4-8-25	4-8-25	

Client ID:	MW-4S					
Laboratory ID:	04-035-03					
Total Alkalinity	160	2.0	SM 2320B	4-8-25	4-8-25	

Client ID:	MW-5S					
Laboratory ID:	04-035-04					
Total Alkalinity	100	2.0	SM 2320B	4-8-25	4-8-25	

Client ID:	MW-6S					
Laboratory ID:	04-035-05					
Total Alkalinity	86	2.0	SM 2320B	4-8-25	4-8-25	

Client ID:	MW-13S					
Laboratory ID:	04-035-06					
Total Alkalinity	86	2.0	SM 2320B	4-8-25	4-8-25	

Client ID:	MW-7D					
Laboratory ID:	04-035-07					
Total Alkalinity	94	2.0	SM 2320B	4-8-25	4-8-25	

Client ID:	MW-8D					
Laboratory ID:	04-035-08					
Total Alkalinity	92	2.0	SM 2320B	4-8-25	4-8-25	

Client ID:	MW-9D					
Laboratory ID:	04-035-09					
Total Alkalinity	100	2.0	SM 2320B	4-8-25	4-8-25	



Date of Report: April 22, 2025
Samples Submitted: April 2, 2025
Laboratory Reference: 2504-035
Project: 553-8472-006

TOTAL ALKALINITY
SM 2320B

Matrix: Water
Units: mg CaCO₃/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-10D					
Laboratory ID:	04-035-10					
Total Alkalinity	94	2.0	SM 2320B	4-8-25	4-8-25	



Date of Report: April 22, 2025
 Samples Submitted: April 2, 2025
 Laboratory Reference: 2504-035
 Project: 553-8472-006

**TOTAL ALKALINITY
 SM 2320B
 QUALITY CONTROL**

Matrix: Water
 Units: mg CaCO₃/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0408W1					
Total Alkalinity	ND	2.0	SM 2320B	4-8-25	4-8-25	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-035-04							
	ORIG	DUP						
Total Alkalinity	104	102	NA	NA	NA	NA	2	10

MATRIX SPIKES

Laboratory ID:	04-035-04									
	MS	MSD	MS	MSD		MS	MSD			
Total Alkalinity	184	184	100	100	104	80	80	80-120	0	20

SPIKE BLANK

Laboratory ID:	SB0408W1									
	SB		SB			SB				
Total Alkalinity	94.0		100		NA	94		82-101	NA	NA



Date of Report: April 22, 2025
 Samples Submitted: April 2, 2025
 Laboratory Reference: 2504-035
 Project: 553-8472-006

**BICARBONATE
SM 2320B**

Matrix: Water
 Units: mg CaCO₃/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-2S					
Laboratory ID:	04-035-01					
Bicarbonate	78	2.0	SM 2320B	4-10-25	4-10-25	

Client ID:	MW-3S					
Laboratory ID:	04-035-02					
Bicarbonate	94	2.0	SM 2320B	4-10-25	4-10-25	

Client ID:	MW-4S					
Laboratory ID:	04-035-03					
Bicarbonate	160	2.0	SM 2320B	4-10-25	4-10-25	

Client ID:	MW-5S					
Laboratory ID:	04-035-04					
Bicarbonate	100	2.0	SM 2320B	4-10-25	4-10-25	

Client ID:	MW-6S					
Laboratory ID:	04-035-05					
Bicarbonate	86	2.0	SM 2320B	4-10-25	4-10-25	

Client ID:	MW-13S					
Laboratory ID:	04-035-06					
Bicarbonate	86	2.0	SM 2320B	4-10-25	4-10-25	

Client ID:	MW-7D					
Laboratory ID:	04-035-07					
Bicarbonate	94	2.0	SM 2320B	4-10-25	4-10-25	

Client ID:	MW-8D					
Laboratory ID:	04-035-08					
Bicarbonate	92	2.0	SM 2320B	4-10-25	4-10-25	

Client ID:	MW-9D					
Laboratory ID:	04-035-09					
Bicarbonate	100	2.0	SM 2320B	4-10-25	4-10-25	



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

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: April 22, 2025
Samples Submitted: April 2, 2025
Laboratory Reference: 2504-035
Project: 553-8472-006

**BICARBONATE
SM 2320B**

Matrix: Water
Units: mg CaCO₃/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-10D					
Laboratory ID:	04-035-10					
Bicarbonate	94	2.0	SM 2320B	4-10-25	4-10-25	



Date of Report: April 22, 2025
 Samples Submitted: April 2, 2025
 Laboratory Reference: 2504-035
 Project: 553-8472-006

**BICARBONATE
 SM 2320B
 QUALITY CONTROL**

Matrix: Water
 Units: mg CaCO₃/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0408W1					
Bicarbonate	ND	2.0	SM 2320B	4-10-25	4-10-25	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-035-04							
	ORIG	DUP						
Bicarbonate	104	102	NA	NA	NA	NA	2	10

MATRIX SPIKES

Laboratory ID:	04-035-04									
	MS	MSD	MS	MSD		MS	MSD			
Bicarbonate	184	184	100	100	104	80	80	80-120	0	20

SPIKE BLANK

Laboratory ID:	SB0408W1									
	SB		SB			SB				
Bicarbonate	94.0		100		NA	94		82-101	NA	NA



Date of Report: April 22, 2025
 Samples Submitted: April 2, 2025
 Laboratory Reference: 2504-035
 Project: 553-8472-006

AMMONIA (as Nitrogen)
SM 4500-NH₃ D

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-2S					
Laboratory ID:	04-035-01					
Ammonia	ND	0.053	SM 4500-NH3 D	4-11-25	4-11-25	

Client ID:	MW-3S					
Laboratory ID:	04-035-02					
Ammonia	ND	0.053	SM 4500-NH3 D	4-11-25	4-11-25	

Client ID:	MW-4S					
Laboratory ID:	04-035-03					
Ammonia	ND	0.053	SM 4500-NH3 D	4-11-25	4-11-25	

Client ID:	MW-5S					
Laboratory ID:	04-035-04					
Ammonia	ND	0.053	SM 4500-NH3 D	4-11-25	4-11-25	

Client ID:	MW-6S					
Laboratory ID:	04-035-05					
Ammonia	ND	0.053	SM 4500-NH3 D	4-11-25	4-11-25	

Client ID:	MW-13S					
Laboratory ID:	04-035-06					
Ammonia	ND	0.053	SM 4500-NH3 D	4-11-25	4-11-25	

Client ID:	MW-7D					
Laboratory ID:	04-035-07					
Ammonia	ND	0.053	SM 4500-NH3 D	4-11-25	4-11-25	

Client ID:	MW-8D					
Laboratory ID:	04-035-08					
Ammonia	ND	0.053	SM 4500-NH3 D	4-11-25	4-11-25	

Client ID:	MW-9D					
Laboratory ID:	04-035-09					
Ammonia	ND	0.053	SM 4500-NH3 D	4-11-25	4-11-25	



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

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: April 22, 2025
Samples Submitted: April 2, 2025
Laboratory Reference: 2504-035
Project: 553-8472-006

AMMONIA (as Nitrogen)
SM 4500-NH₃ D

Matrix: Water
Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-10D					
Laboratory ID:	04-035-10					
Ammonia	ND	0.053	SM 4500-NH3 D	4-11-25	4-11-25	



Date of Report: April 22, 2025
 Samples Submitted: April 2, 2025
 Laboratory Reference: 2504-035
 Project: 553-8472-006

AMMONIA (as Nitrogen)
SM 4500-NH₃ D
QUALITY CONTROL

Matrix: Water

Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0411W1					
Ammonia	ND	0.053	SM 4500-NH ₃ D	4-11-25	4-11-25	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-035-04							
	ORIG	DUP						
Ammonia	ND	ND	NA	NA	NA	NA	15	

MATRIX SPIKE

Laboratory ID:	04-035-04							
	MS	MS		MS				
Ammonia	5.18	5.00	ND	104	75-111	NA	NA	

MATRIX SPIKES

Laboratory ID:	04-035-04									
	MS	MSD	MS	MSD		MS	MSD			
Ammonia	5.18	5.23	5.00	5.00	ND	104	105	75-111	1	20

SPIKE BLANK

Laboratory ID:	SB0411W1									
	SB	SB		SB						
Ammonia	4.93	5.00	NA	99	81-110	NA	NA			



Date of Report: April 22, 2025
 Samples Submitted: April 2, 2025
 Laboratory Reference: 2504-035
 Project: 553-8472-006

**TOTAL ORGANIC CARBON
 SM 5310B**

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-2S					
Laboratory ID:	04-035-01					
Total Organic Carbon	ND	1.0	SM 5310B	4-9-25	4-9-25	

Client ID:	MW-3S					
Laboratory ID:	04-035-02					
Total Organic Carbon	3.0	1.0	SM 5310B	4-9-25	4-9-25	

Client ID:	MW-4S					
Laboratory ID:	04-035-03					
Total Organic Carbon	5.0	1.0	SM 5310B	4-9-25	4-9-25	

Client ID:	MW-5S					
Laboratory ID:	04-035-04					
Total Organic Carbon	ND	1.0	SM 5310B	4-9-25	4-9-25	

Client ID:	MW-6S					
Laboratory ID:	04-035-05					
Total Organic Carbon	3.0	1.0	SM 5310B	4-9-25	4-9-25	

Client ID:	MW-13S					
Laboratory ID:	04-035-06					
Total Organic Carbon	3.1	1.0	SM 5310B	4-9-25	4-9-25	

Client ID:	MW-7D					
Laboratory ID:	04-035-07					
Total Organic Carbon	ND	1.0	SM 5310B	4-9-25	4-9-25	

Client ID:	MW-8D					
Laboratory ID:	04-035-08					
Total Organic Carbon	ND	1.0	SM 5310B	4-9-25	4-9-25	

Client ID:	MW-9D					
Laboratory ID:	04-035-09					
Total Organic Carbon	3.1	1.0	SM 5310B	4-9-25	4-9-25	



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

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: April 22, 2025
Samples Submitted: April 2, 2025
Laboratory Reference: 2504-035
Project: 553-8472-006

**TOTAL ORGANIC CARBON
SM 5310B**

Matrix: Water

Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-10D					
Laboratory ID:	04-035-10					
Total Organic Carbon	ND	1.0	SM 5310B	4-9-25	4-9-25	



Date of Report: April 22, 2025
 Samples Submitted: April 2, 2025
 Laboratory Reference: 2504-035
 Project: 553-8472-006

**TOTAL ORGANIC CARBON
 SM 5310B
 QUALITY CONTROL**

Matrix: Water

Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0409W1					
Total Organic Carbon	ND	1.0	SM 5310B	4-9-25	4-9-25	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-035-04							
	ORIG	DUP						
Total Organic Carbon	ND	ND	NA	NA	NA	NA	11	

MATRIX SPIKES

Laboratory ID:	04-035-04									
	MS	MSD	MS	MSD	MS	MSD				
Total Organic Carbon	11.2	10.8	10.0	10.0	ND	112	108	85-120	4	20

SPIKE BLANK

Laboratory ID:	SB0409W1									
	SB		SB		SB					
Total Organic Carbon	9.99		10.0		NA	100		79-120	NA	NA





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





April 17, 2025

Service Request No:K2503482

Nichelle Biffin
Onsite Environmental Incorporated
14648 Northeast 95th Street
Redmond, WA 98052

Laboratory Results for: PFAS-1633

Dear Nichelle,

Enclosed are the results of the sample(s) submitted to our laboratory April 04, 2025
For your reference, these analyses have been assigned our service request number **K2503482**.

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-1633
Sample Matrix: Water

Service Request: K2503482
Date Received: 04/04/2025

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:

Six water samples were received for analysis at ALS Environmental on 04/04/2025. 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.

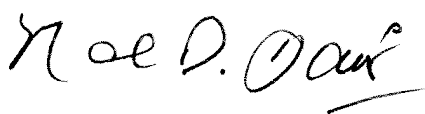
Organic LC:

Method 1633, 04/10/2025: The upper control criterion was exceeded for one or more analytes in several Continuing Calibration Verifications (CCVs). The field samples analyzed in this sequence did not contain the analyte in question. Since the apparent problem indicated a potential high bias, the data quality was not affected. No further corrective action was required.

The control criteria were exceeded for one or more isotopes in several Continuing Calibration Verifications (CCVs). The recovery of the associated native analyte was within control criteria, which indicated the analysis was in control, or were biased high, as noted above. No further corrective action was appropriate.

Method 1633, 04/10/2025: Manual integration of one or more chromatographic peaks in multiple samples was required to correct the integration performed by the automated data processing program. The manual integration was performed in accordance with ALS policy, which is consistent with the National Environmental Laboratory Accreditation Program (NELAP), Department of Defense (DOD), and other certifying agencies. Refer to the raw data for the compounds impacted by the manual integration.

Method 1633, 04/10/2025: The results reported for n-Methylperfluorooctane sulfonamide (MeFOSA) in Low Level Lab Control Sample (LCS_LL) KQ2505161-07 may contain a bias. The ion ratio criteria were not met. The failing ratio may indicate a bias to the results in the associated samples. The analyte in question was not detected in the associated field samples. The data quality was not significantly affected. The LCS_LL results were flagged with "I" to indicate the issue.

Approved by 

Date 04/17/2025

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: K2503482-002
-------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Perfluorobutane sulfonic acid (PFBS)	9.6		0.43	4.3	ng/L	Draft EPA Method 1633
Perfluorobutanoic acid (PFBA)	27		0.86	4.3	ng/L	Draft EPA Method 1633
Perfluoroheptanoic acid (PFHpA)	13		0.71	4.3	ng/L	Draft EPA Method 1633
Perfluorohexane sulfonic acid (PFHxS)	3.9	J	0.82	4.3	ng/L	Draft EPA Method 1633
Perfluorohexanoic acid (PFHxA)	25		0.63	4.3	ng/L	Draft EPA Method 1633
Perfluorooctane sulfonic acid (PFOS)	2.5	J	0.83	4.3	ng/L	Draft EPA Method 1633
Perfluorooctanoic acid (PFOA)	15		0.87	4.3	ng/L	Draft EPA Method 1633
Perfluoropentane sulfonic acid (PFPeS)	1.8	J	0.89	4.3	ng/L	Draft EPA Method 1633
Perfluoropentanoic acid (PFPeA)	42		0.64	4.3	ng/L	Draft EPA Method 1633

CLIENT ID: MW-4S	Lab ID: K2503482-003
-------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Perfluorobutane sulfonic acid (PFBS)	4.2	J	0.43	4.6	ng/L	Draft EPA Method 1633
Perfluorobutanoic acid (PFBA)	31		0.86	4.6	ng/L	Draft EPA Method 1633
Perfluoroheptanoic acid (PFHpA)	9.0		0.71	4.6	ng/L	Draft EPA Method 1633
Perfluorohexane sulfonic acid (PFHxS)	0.84	J	0.82	4.6	ng/L	Draft EPA Method 1633
Perfluorohexanoic acid (PFHxA)	19		0.63	4.6	ng/L	Draft EPA Method 1633
Perfluorooctanoic acid (PFOA)	3.2	J	0.87	4.6	ng/L	Draft EPA Method 1633
Perfluoropentanoic acid (PFPeA)	25		0.64	4.6	ng/L	Draft EPA Method 1633

CLIENT ID: MW-5S	Lab ID: K2503482-004
-------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Perfluorobutane sulfonic acid (PFBS)	4.3		0.43	4.3	ng/L	Draft EPA Method 1633
Perfluorobutanoic acid (PFBA)	47		0.86	4.3	ng/L	Draft EPA Method 1633
Perfluoroheptanoic acid (PFHpA)	1.2	J	0.71	4.3	ng/L	Draft EPA Method 1633
Perfluorohexanoic acid (PFHxA)	11		0.63	4.3	ng/L	Draft EPA Method 1633
Perfluoropentanoic acid (PFPeA)	21		0.64	4.3	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: K2503482-005			
Analyte	Results	Flag	MDL	MRL	Units	Method
Perfluorobutane sulfonic acid (PFBS)	6.3		0.43	4.7	ng/L	Draft EPA Method 1633
Perfluorobutanoic acid (PFBA)	9.5		0.86	4.7	ng/L	Draft EPA Method 1633
Perfluorohexane sulfonic acid (PFHxS)	1.1	J	0.82	4.7	ng/L	Draft EPA Method 1633
Perfluorohexanoic acid (PFHxA)	4.7	J	0.63	4.7	ng/L	Draft EPA Method 1633
Perfluoropentane sulfonic acid (PFPeS)	1.1	J	0.89	4.7	ng/L	Draft EPA Method 1633
Perfluoropentanoic acid (PFPeA)	8.1		0.64	4.7	ng/L	Draft EPA Method 1633

CLIENT ID: MW-13S			Lab ID: K2503482-006			
Analyte	Results	Flag	MDL	MRL	Units	Method
Perfluorobutane sulfonic acid (PFBS)	6.9		0.43	4.5	ng/L	Draft EPA Method 1633
Perfluorobutanoic acid (PFBA)	9.6		0.86	4.5	ng/L	Draft EPA Method 1633
Perfluorohexane sulfonic acid (PFHxS)	1.0	J	0.82	4.5	ng/L	Draft EPA Method 1633
Perfluorohexanoic acid (PFHxA)	4.9		0.63	4.5	ng/L	Draft EPA Method 1633
Perfluoropentane sulfonic acid (PFPeS)	1.0	J	0.89	4.5	ng/L	Draft EPA Method 1633
Perfluoropentanoic acid (PFPeA)	7.9		0.64	4.5	ng/L	Draft EPA Method 1633



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
Project: PFAS-1633/553-8472-006

Service Request:K2503482

SAMPLE CROSS-REFERENCE

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
K2503482-001	MW-2S	4/1/2025	1153
K2503482-002	MW-3S	3/31/2025	1424
K2503482-003	MW-4S	4/1/2025	0955
K2503482-004	MW-5S	3/31/2025	1223
K2503482-005	MW-6S	4/1/2025	1455
K2503482-006	MW-13S	4/1/2025	0900

K2503482



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

Laboratory: ALS Environmental

Attention: Mark Harris

1317 South 13th Avenue, Kelso, WA 98626

Phone Number: (360) 577-7222

Turnaround Request

1 Day 2 Day 3 Day

Standard

Other: _____

Laboratory Reference #: 04-035

Project Manager: David Baumeister

email: dbaumeister@onsite-env.com

Project Number: 553-8472-006

Project Name: _____

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	# of Cont.	Requested Analyses
	MW-2S	4/1/25	11:53	W	3	PFAS
	MW-3S	3/31/25	14:24	W	3	PFAS
	MW-4S	4/1/25	9:55	W	3	PFAS
	MW-5S	3/31/25	12:23	W	3	PFAS
	MW-6S	4/1/25	14:55	W	3	PFAS
	MW-13S	4/1/25	9:00	W	3	PFAS

Signature	Company	Date	Time	Comments/Special Instructions
Relinquished by: <i>Nicholas Sklar</i>	<i>OSE</i>	<i>4/6/25</i>	<i>1500</i>	
Received by: <i>Mark Harris</i>	<i>ALS</i>	<i>4/14/25</i>	<i>0910</i>	
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Cooler Receipt and Preservation Form

PM MH

Client On Site Service Request K25 03482
 Received: 4/4/25 Opened: 4/4/25 By: MM Unloaded: 4/4/25 By: MM

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
	<u>1.7</u>	<u>IR000</u>				<u>12684E1W159806</u> <u>8276</u>	

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

If no, take the temperature of a representative sample bottle contained within the cooler; note 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, note the cooler # below and notify the PM.

If applicable, tissue samples were received: Frozen Partially Thawed Thawed

6. Packing material: Inserts Baggies Bubble Wrap Gel Packs Wet Ice Dry Ice Sleeves Paper

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, note 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.pjllabs.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/bsdwlabservice.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/analyte 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.

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

Client: Onsite Environmental Incorporated
Project: PFAS-1633/553-8472-006

Service Request: K2503482

Sample Name: MW-2S
Lab Code: K2503482-001
Sample Matrix: Water

Date Collected: 04/1/25
Date Received: 04/4/25

Analysis Method
1633
1633

Extracted/Digested By
LILLIANSMITH
ASERVICE

Analyzed By
PSALYARDS
PSALYARDS

Sample Name: MW-3S
Lab Code: K2503482-002
Sample Matrix: Water

Date Collected: 03/31/25
Date Received: 04/4/25

Analysis Method
1633
1633

Extracted/Digested By
ASERVICE
LILLIANSMITH

Analyzed By
PSALYARDS
PSALYARDS

Sample Name: MW-3S
Lab Code: K2503482-002.R01
Sample Matrix: Water

Date Collected: 03/31/25
Date Received: 04/4/25

Analysis Method
1633

Extracted/Digested By
LILLIANSMITH

Analyzed By
PSALYARDS

Sample Name: MW-4S
Lab Code: K2503482-003
Sample Matrix: Water

Date Collected: 04/1/25
Date Received: 04/4/25

Analysis Method
1633
1633
SM 2540 D Modified

Extracted/Digested By
ASERVICE
LILLIANSMITH

Analyzed By
PSALYARDS
PSALYARDS
AWILSON

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

Client: Onsite Environmental Incorporated
Project: PFAS-1633/553-8472-006

Service Request: K2503482

Sample Name: MW-5S
Lab Code: K2503482-004
Sample Matrix: Water

Date Collected: 03/31/25
Date Received: 04/4/25

Analysis Method
1633
1633
SM 2540 D Modified

Extracted/Digested By
ASERVICE
LILLIANSMITH

Analyzed By
PSALYARDS
PSALYARDS
AWILSON

Sample Name: MW-6S
Lab Code: K2503482-005
Sample Matrix: Water

Date Collected: 04/1/25
Date Received: 04/4/25

Analysis Method
1633
1633

Extracted/Digested By
LILLIANSMITH
ASERVICE

Analyzed By
PSALYARDS
PSALYARDS

Sample Name: MW-13S
Lab Code: K2503482-006
Sample Matrix: Water

Date Collected: 04/1/25
Date Received: 04/4/25

Analysis Method
1633
1633
SM 2540 D Modified

Extracted/Digested By
ASERVICE
LILLIANSMITH

Analyzed By
PSALYARDS
PSALYARDS
AWILSON



Sample Results

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

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Onsite Environmental Incorporated
Project: PFAS-1633/553-8472-006
Sample Matrix: Water

Service Request: K2503482
Date Collected: 04/01/25 11:53
Date Received: 04/04/25 09:10

Sample Name: MW-2S
Lab Code: K2503482-001

Units: ng/L
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 (PFASs)								
Perfluorobutane sulfonic acid (PFBS)	ND U	4.4	1.8	0.43	1	04/10/25 20:44	4/8/25	
Perfluoropentane sulfonic acid (PFPeS)	ND U	4.4	1.9	0.89	1	04/10/25 20:44	4/8/25	*
Perfluorohexane sulfonic acid (PFHxS)	ND U	4.4	1.8	0.82	1	04/10/25 20:44	4/8/25	*
Perfluoroheptane sulfonic acid (PFHpS)	ND U	4.4	1.9	0.69	1	04/10/25 20:44	4/8/25	
Perfluorooctane sulfonic acid (PFOS)	ND U	4.4	1.9	0.83	1	04/10/25 20:44	4/8/25	
Perfluorononane sulfonic acid (PFNS)	ND U	4.4	1.9	0.33	1	04/10/25 20:44	4/8/25	
Perfluorodecane sulfonic acid (PFDS)	ND U	4.4	1.9	0.67	1	04/10/25 20:44	4/8/25	
Perfluorododecane sulfonic acid (PFDoS)	ND U	4.4	1.9	0.56	1	04/10/25 20:44	4/8/25	*
Perfluoroalkyl Carboxylic Acids (PFCAs)								
Perfluorobutanoic acid (PFBA)	ND U	4.4	2.0	0.86	1	04/10/25 20:44	4/8/25	
Perfluoropentanoic acid (PFPeA)	ND U	4.4	2.0	0.64	1	04/10/25 20:44	4/8/25	
Perfluorohexanoic acid (PFHxA)	ND U	4.4	2.0	0.63	1	04/10/25 20:44	4/8/25	
Perfluoroheptanoic acid (PFHpA)	ND U	4.4	2.0	0.71	1	04/10/25 20:44	4/8/25	
Perfluorooctanoic acid (PFOA)	ND U	4.4	2.0	0.87	1	04/10/25 20:44	4/8/25	
Perfluorononanoic acid (PFNA)	ND U	4.4	2.0	0.75	1	04/10/25 20:44	4/8/25	
Perfluorodecanoic acid (PFDA)	ND U	4.4	2.0	0.60	1	04/10/25 20:44	4/8/25	
Perfluoroundecanoic acid (PFUnDA)	ND U	4.4	2.0	0.82	1	04/10/25 20:44	4/8/25	
Perfluorododecanoic acid (PFDOA)	ND U	4.4	2.0	0.61	1	04/10/25 20:44	4/8/25	
Perfluorotridecanoic acid (PFTrDA)	ND U	4.4	2.0	0.46	1	04/10/25 20:44	4/8/25	*
Perfluorotetradecanoic acid (PFTDA)	ND U	4.4	3.0	1.3	1	04/10/25 20:44	4/8/25	*
Perfluoroalkyl Sulfonamido Substances								
Perfluorooctane sulfonamide (PFOSAm)	ND U	4.4	2.0	0.72	1	04/10/25 20:44	4/8/25	
N-Methylperfluorooctane sulfonamide (MeFOSA)	ND U	4.4	3.0	1.2	1	04/10/25 20:44	4/8/25	
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	ND U	4.4	2.0	0.85	1	04/10/25 20:44	4/8/25	
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	ND U	4.4	2.0	0.82	1	04/10/25 20:44	4/8/25	
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	ND U	4.4	2.0	0.92	1	04/10/25 20:44	4/8/25	
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	ND U	4.4	2.0	0.91	1	04/10/25 20:44	4/8/25	
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	ND U	4.4	2.0	0.95	1	04/10/25 20:44	4/8/25	*

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Onsite Environmental Incorporated
Project: PFAS-1633/553-8472-006
Sample Matrix: Water

Service Request: K2503482
Date Collected: 04/01/25 11:53
Date Received: 04/04/25 09:10

Sample Name: MW-2S
Lab Code: K2503482-001

Units: ng/L
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	4.4	1.9	0.42	1	04/10/25 20:44	4/8/25	
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND U	4.4	2.9	1.3	1	04/10/25 20:44	4/8/25	
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND U	4.4	1.9	0.86	1	04/10/25 20:44	4/8/25	
Fluorotelomer Carboxylic Acids (FTCAs)								
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	ND U	170	20	6.8	1	04/10/25 20:44	4/8/25	
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	ND U	170	20	4.2	1	04/10/25 20:44	4/8/25	
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	ND U	170	20	6.0	1	04/10/25 20:44	4/8/25	
Perfluoroalkyl Ether Sulfonic Acids (PFESAs)								
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	ND U	4.4	1.8	0.43	1	04/10/25 20:44	4/8/25	
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	ND U	4.4	1.9	0.45	1	04/10/25 20:44	4/8/25	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	ND U	4.4	1.9	0.39	1	04/10/25 20:44	4/8/25	
Perfluoroalkyl Ether Carboxylic Acids (PFECAs)								
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND U	4.4	2.0	0.41	1	04/10/25 20:44	4/8/25	
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND U	4.4	2.0	0.54	1	04/10/25 20:44	4/8/25	
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	ND U	4.4	2.0	0.41	1	04/10/25 20:44	4/8/25	
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND U	4.4	2.0	0.58	1	04/10/25 20:44	4/8/25	
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	ND U	4.4	1.9	0.36	1	04/10/25 20:44	4/8/25	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Onsite Environmental Incorporated
Project: PFAS-1633/553-8472-006
Sample Matrix: Water

Service Request: K2503482
Date Collected: 04/01/25 11:53
Date Received: 04/04/25 09:10

Sample Name: MW-2S
Lab Code: K2503482-001

Units: ng/L
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	105	40 - 135	04/10/25 20:44	
13C3-PFHxS	82	40 - 130	04/10/25 20:44	
13C8-PFOS	85	40 - 130	04/10/25 20:44	
13C4-PFBA	100	5 - 130	04/10/25 20:44	
13C5-PFPeA	110	40 - 130	04/10/25 20:44	
13C5-PFHxA	99	40 - 130	04/10/25 20:44	
13C4-PFHpA	96	40 - 130	04/10/25 20:44	
13C8-PFOA	93	40 - 130	04/10/25 20:44	
13C9-PFNA	96	40 - 130	04/10/25 20:44	
13C6-PFDA	94	40 - 130	04/10/25 20:44	
13C7-PFUnDA	129	30 - 130	04/10/25 20:44	
13C2-PFDoDA	85	10 - 130	04/10/25 20:44	
13C2-PFTeDA	52	10 - 130	04/10/25 20:44	
13C8-FOSA	65	40 - 130	04/10/25 20:44	
D3-MeFOSA	90	10 - 130	04/10/25 20:44	
D5-EtFOSA	66	10 - 130	04/10/25 20:44	
D7-MeFOSE	64	10 - 130	04/10/25 20:44	
D9-EtFOSE	61	10 - 130	04/10/25 20:44	
D3-MeFOSAA	71	40 - 170	04/10/25 20:44	
D5-EtFOSAA	73	25 - 135	04/10/25 20:44	
13C2-4:2 FTS	136	40 - 200	04/10/25 20:44	
13C2-6:2 FTS	93	40 - 200	04/10/25 20:44	
13C2-8:2 FTS	104	40 - 300	04/10/25 20:44	
13C3-HFPO-DA	87	40 - 130	04/10/25 20:44	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Onsite Environmental Incorporated
Project: PFAS-1633/553-8472-006
Sample Matrix: Water

Service Request: K2503482
Date Collected: 03/31/25 14:24
Date Received: 04/04/25 09:10

Sample Name: MW-3S
Lab Code: K2503482-002

Units: ng/L
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 (PFSA)s								
Perfluorobutane sulfonic acid (PFBS)	9.6	4.3	1.8	0.43	1	04/10/25 21:07	4/8/25	
Perfluoropentane sulfonic acid (PFPeS)	1.8 J	4.3	1.9	0.89	1	04/16/25 06:57	4/8/25	
Perfluorohexane sulfonic acid (PFHxS)	3.9 J	4.3	1.8	0.82	1	04/16/25 06:57	4/8/25	
Perfluoroheptane sulfonic acid (PFHpS)	ND U	4.3	1.9	0.69	1	04/10/25 21:07	4/8/25	
Perfluorooctane sulfonic acid (PFOS)	2.5 J	4.3	1.9	0.83	1	04/10/25 21:07	4/8/25	
Perfluorononane sulfonic acid (PFNS)	ND U	4.3	1.9	0.33	1	04/10/25 21:07	4/8/25	
Perfluorodecane sulfonic acid (PFDS)	ND U	4.3	1.9	0.67	1	04/10/25 21:07	4/8/25	
Perfluorododecane sulfonic acid (PFDoS)	ND U	4.3	1.9	0.56	1	04/10/25 21:07	4/8/25	*
Perfluoroalkyl Carboxylic Acids (PFCAs)								
Perfluorobutanoic acid (PFBA)	27	4.3	2.0	0.86	1	04/10/25 21:07	4/8/25	
Perfluoropentanoic acid (PFPeA)	42	4.3	2.0	0.64	1	04/10/25 21:07	4/8/25	
Perfluorohexanoic acid (PFHxA)	25	4.3	2.0	0.63	1	04/10/25 21:07	4/8/25	
Perfluoroheptanoic acid (PFHpA)	13	4.3	2.0	0.71	1	04/10/25 21:07	4/8/25	
Perfluorooctanoic acid (PFOA)	15	4.3	2.0	0.87	1	04/10/25 21:07	4/8/25	
Perfluorononanoic acid (PFNA)	ND U	4.3	2.0	0.75	1	04/10/25 21:07	4/8/25	
Perfluorodecanoic acid (PFDA)	ND U	4.3	2.0	0.60	1	04/10/25 21:07	4/8/25	
Perfluoroundecanoic acid (PFUnDA)	ND U	4.3	2.0	0.82	1	04/10/25 21:07	4/8/25	
Perfluorododecanoic acid (PFDOA)	ND U	4.3	2.0	0.61	1	04/10/25 21:07	4/8/25	
Perfluorotridecanoic acid (PFTTrDA)	ND U	4.3	2.0	0.46	1	04/10/25 21:07	4/8/25	*
Perfluorotetradecanoic acid (PFTDA)	ND U	4.3	3.0	1.3	1	04/10/25 21:07	4/8/25	*
Perfluoroalkyl Sulfonamido Substances								
Perfluorooctane sulfonamide (PFOSAm)	ND U	4.3	2.0	0.72	1	04/10/25 21:07	4/8/25	
N-Methylperfluorooctane sulfonamide (MeFOSA)	ND U	4.3	3.0	1.2	1	04/10/25 21:07	4/8/25	
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	ND U	4.3	2.0	0.85	1	04/10/25 21:07	4/8/25	
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	ND U	4.3	2.0	0.82	1	04/10/25 21:07	4/8/25	
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	ND U	4.3	2.0	0.92	1	04/10/25 21:07	4/8/25	
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	ND U	4.3	2.0	0.91	1	04/10/25 21:07	4/8/25	
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	ND U	4.3	2.0	0.95	1	04/10/25 21:07	4/8/25	*

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Onsite Environmental Incorporated
Project: PFAS-1633/553-8472-006
Sample Matrix: Water

Service Request: K2503482
Date Collected: 03/31/25 14:24
Date Received: 04/04/25 09:10

Sample Name: MW-3S
Lab Code: K2503482-002

Units: ng/L
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	4.3	1.9	0.42	1	04/10/25 21:07	4/8/25	
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND U	4.3	2.9	1.3	1	04/10/25 21:07	4/8/25	
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND U	4.3	1.9	0.86	1	04/10/25 21:07	4/8/25	
Fluorotelomer Carboxylic Acids (FTCAs)								
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	ND U	170	20	6.8	1	04/10/25 21:07	4/8/25	
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	ND U	170	20	4.2	1	04/10/25 21:07	4/8/25	
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	ND U	170	20	6.0	1	04/10/25 21:07	4/8/25	
Perfluoroalkyl Ether Sulfonic Acids (PFESAs)								
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	ND U	4.3	1.8	0.43	1	04/10/25 21:07	4/8/25	
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	ND U	4.3	1.9	0.45	1	04/10/25 21:07	4/8/25	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	ND U	4.3	1.9	0.39	1	04/10/25 21:07	4/8/25	
Perfluoroalkyl Ether Carboxylic Acids (PFECAs)								
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND U	4.3	2.0	0.41	1	04/10/25 21:07	4/8/25	
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND U	4.3	2.0	0.54	1	04/10/25 21:07	4/8/25	
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	ND U	4.3	2.0	0.41	1	04/10/25 21:07	4/8/25	
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND U	4.3	2.0	0.58	1	04/10/25 21:07	4/8/25	
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	ND U	4.3	1.9	0.36	1	04/10/25 21:07	4/8/25	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Onsite Environmental Incorporated
Project: PFAS-1633/553-8472-006
Sample Matrix: Water

Service Request: K2503482
Date Collected: 03/31/25 14:24
Date Received: 04/04/25 09:10

Sample Name: MW-3S
Lab Code: K2503482-002

Units: ng/L
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	108	40 - 135	04/10/25 21:07	
13C3-PFHxS	130	40 - 130	04/16/25 06:57	
13C8-PFOS	82	40 - 130	04/10/25 21:07	
13C4-PFBA	97	5 - 130	04/10/25 21:07	
13C5-PFPeA	112	40 - 130	04/10/25 21:07	
13C5-PFHxA	111	40 - 130	04/10/25 21:07	
13C4-PFHpA	101	40 - 130	04/10/25 21:07	
13C8-PFOA	84	40 - 130	04/10/25 21:07	
13C9-PFNA	95	40 - 130	04/10/25 21:07	
13C6-PFDA	97	40 - 130	04/10/25 21:07	
13C7-PFUnDA	116	30 - 130	04/10/25 21:07	
13C2-PFDoDA	72	10 - 130	04/10/25 21:07	
13C2-PFTeDA	45	10 - 130	04/10/25 21:07	
13C8-FOSA	73	40 - 130	04/10/25 21:07	
D3-MeFOSA	84	10 - 130	04/10/25 21:07	
D5-EtFOSA	68	10 - 130	04/10/25 21:07	
D7-MeFOSE	68	10 - 130	04/10/25 21:07	
D9-EtFOSE	66	10 - 130	04/10/25 21:07	
D3-MeFOSAA	67	40 - 170	04/10/25 21:07	
D5-EtFOSAA	78	25 - 135	04/10/25 21:07	
13C2-4:2 FTS	133	40 - 200	04/10/25 21:07	
13C2-6:2 FTS	95	40 - 200	04/10/25 21:07	
13C2-8:2 FTS	85	40 - 300	04/10/25 21:07	
13C3-HFPO-DA	90	40 - 130	04/10/25 21:07	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Onsite Environmental Incorporated
Project: PFAS-1633/553-8472-006
Sample Matrix: Water

Service Request: K2503482
Date Collected: 04/01/25 09:55
Date Received: 04/04/25 09:10

Sample Name: MW-4S
Lab Code: K2503482-003

Units: ng/L
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 (PFASs)								
Perfluorobutane sulfonic acid (PFBS)	4.2 J	4.6	1.8	0.43	1	04/10/25 21:31	4/8/25	
Perfluoropentane sulfonic acid (PFPeS)	ND U	4.6	1.9	0.89	1	04/10/25 21:31	4/8/25	*
Perfluorohexane sulfonic acid (PFHxS)	0.84 J	4.6	1.8	0.82	1	04/10/25 21:31	4/8/25	*
Perfluoroheptane sulfonic acid (PFHpS)	ND U	4.6	1.9	0.69	1	04/10/25 21:31	4/8/25	
Perfluorooctane sulfonic acid (PFOS)	ND U	4.6	1.9	0.83	1	04/10/25 21:31	4/8/25	
Perfluorononane sulfonic acid (PFNS)	ND U	4.6	1.9	0.33	1	04/10/25 21:31	4/8/25	
Perfluorodecane sulfonic acid (PFDS)	ND U	4.6	1.9	0.67	1	04/10/25 21:31	4/8/25	
Perfluorododecane sulfonic acid (PFDoS)	ND U	4.6	1.9	0.56	1	04/10/25 21:31	4/8/25	*
Perfluoroalkyl Carboxylic Acids (PFCAs)								
Perfluorobutanoic acid (PFBA)	31	4.6	2.0	0.86	1	04/10/25 21:31	4/8/25	
Perfluoropentanoic acid (PFPeA)	25	4.6	2.0	0.64	1	04/10/25 21:31	4/8/25	
Perfluorohexanoic acid (PFHxA)	19	4.6	2.0	0.63	1	04/10/25 21:31	4/8/25	
Perfluoroheptanoic acid (PFHpA)	9.0	4.6	2.0	0.71	1	04/10/25 21:31	4/8/25	
Perfluorooctanoic acid (PFOA)	3.2 J	4.6	2.0	0.87	1	04/10/25 21:31	4/8/25	
Perfluorononanoic acid (PFNA)	ND U	4.6	2.0	0.75	1	04/10/25 21:31	4/8/25	
Perfluorodecanoic acid (PFDA)	ND U	4.6	2.0	0.60	1	04/10/25 21:31	4/8/25	
Perfluoroundecanoic acid (PFUnDA)	ND U	4.6	2.0	0.82	1	04/10/25 21:31	4/8/25	
Perfluorododecanoic acid (PFDOA)	ND U	4.6	2.0	0.61	1	04/10/25 21:31	4/8/25	
Perfluorotridecanoic acid (PFTrDA)	ND U	4.6	2.0	0.46	1	04/10/25 21:31	4/8/25	*
Perfluorotetradecanoic acid (PFTDA)	ND U	4.6	3.0	1.3	1	04/10/25 21:31	4/8/25	*
Perfluoroalkyl Sulfonamido Substances								
Perfluorooctane sulfonamide (PFOSAm)	ND U	4.6	2.0	0.72	1	04/10/25 21:31	4/8/25	
N-Methylperfluorooctane sulfonamide (MeFOSA)	ND U	4.6	3.0	1.2	1	04/10/25 21:31	4/8/25	
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	ND U	4.6	2.0	0.85	1	04/10/25 21:31	4/8/25	
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	ND U	4.6	2.0	0.82	1	04/10/25 21:31	4/8/25	
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	ND U	4.6	2.0	0.92	1	04/10/25 21:31	4/8/25	
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	ND U	4.6	2.0	0.91	1	04/10/25 21:31	4/8/25	
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	ND U	4.6	2.0	0.95	1	04/10/25 21:31	4/8/25	*

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Onsite Environmental Incorporated
Project: PFAS-1633/553-8472-006
Sample Matrix: Water

Service Request: K2503482
Date Collected: 04/01/25 09:55
Date Received: 04/04/25 09:10

Sample Name: MW-4S
Lab Code: K2503482-003

Units: ng/L
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	4.6	1.9	0.42	1	04/10/25 21:31	4/8/25	
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND U	4.6	2.9	1.3	1	04/10/25 21:31	4/8/25	
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND U	4.6	1.9	0.86	1	04/10/25 21:31	4/8/25	
Fluorotelomer Carboxylic Acids (FTCAs)								
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	ND U	190	20	6.8	1	04/10/25 21:31	4/8/25	
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	ND U	190	20	4.2	1	04/10/25 21:31	4/8/25	
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	ND U	190	20	6.0	1	04/10/25 21:31	4/8/25	
Perfluoroalkyl Ether Sulfonic Acids (PFESAs)								
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	ND U	4.6	1.8	0.43	1	04/10/25 21:31	4/8/25	
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	ND U	4.6	1.9	0.45	1	04/10/25 21:31	4/8/25	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	ND U	4.6	1.9	0.39	1	04/10/25 21:31	4/8/25	
Perfluoroalkyl Ether Carboxylic Acids (PFECAs)								
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND U	4.6	2.0	0.41	1	04/10/25 21:31	4/8/25	
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND U	4.6	2.0	0.54	1	04/10/25 21:31	4/8/25	
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	ND U	4.6	2.0	0.41	1	04/10/25 21:31	4/8/25	
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND U	4.6	2.0	0.58	1	04/10/25 21:31	4/8/25	
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	ND U	4.6	1.9	0.36	1	04/10/25 21:31	4/8/25	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Onsite Environmental Incorporated
Project: PFAS-1633/553-8472-006
Sample Matrix: Water

Service Request: K2503482
Date Collected: 04/01/25 09:55
Date Received: 04/04/25 09:10

Sample Name: MW-4S
Lab Code: K2503482-003

Units: ng/L
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	101	40 - 135	04/10/25 21:31	
13C3-PFHxS	82	40 - 130	04/10/25 21:31	
13C8-PFOS	73	40 - 130	04/10/25 21:31	
13C4-PFBA	98	5 - 130	04/10/25 21:31	
13C5-PFPeA	97	40 - 130	04/10/25 21:31	
13C5-PFHxA	101	40 - 130	04/10/25 21:31	
13C4-PFHpA	86	40 - 130	04/10/25 21:31	
13C8-PFOA	91	40 - 130	04/10/25 21:31	
13C9-PFNA	96	40 - 130	04/10/25 21:31	
13C6-PFDA	102	40 - 130	04/10/25 21:31	
13C7-PFUnDA	108	30 - 130	04/10/25 21:31	
13C2-PFDoDA	71	10 - 130	04/10/25 21:31	
13C2-PFTeDA	46	10 - 130	04/10/25 21:31	
13C8-FOSA	65	40 - 130	04/10/25 21:31	
D3-MeFOSA	78	10 - 130	04/10/25 21:31	
D5-EtFOSA	62	10 - 130	04/10/25 21:31	
D7-MeFOSE	62	10 - 130	04/10/25 21:31	
D9-EtFOSE	59	10 - 130	04/10/25 21:31	
D3-MeFOSAA	65	40 - 170	04/10/25 21:31	
D5-EtFOSAA	67	25 - 135	04/10/25 21:31	
13C2-4:2 FTS	121	40 - 200	04/10/25 21:31	
13C2-6:2 FTS	96	40 - 200	04/10/25 21:31	
13C2-8:2 FTS	84	40 - 300	04/10/25 21:31	
13C3-HFPO-DA	86	40 - 130	04/10/25 21:31	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Onsite Environmental Incorporated
Project: PFAS-1633/553-8472-006
Sample Matrix: Water

Service Request: K2503482
Date Collected: 03/31/25 12:23
Date Received: 04/04/25 09:10

Sample Name: MW-5S
Lab Code: K2503482-004

Units: ng/L
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 (PFASs)								
Perfluorobutane sulfonic acid (PFBS)	4.3	4.3	1.8	0.43	1	04/10/25 21:55	4/8/25	
Perfluoropentane sulfonic acid (PFPeS)	ND U	4.3	1.9	0.89	1	04/10/25 21:55	4/8/25	*
Perfluorohexane sulfonic acid (PFHxS)	ND U	4.3	1.8	0.82	1	04/10/25 21:55	4/8/25	*
Perfluoroheptane sulfonic acid (PFHpS)	ND U	4.3	1.9	0.69	1	04/10/25 21:55	4/8/25	
Perfluorooctane sulfonic acid (PFOS)	ND U	4.3	1.9	0.83	1	04/10/25 21:55	4/8/25	
Perfluorononane sulfonic acid (PFNS)	ND U	4.3	1.9	0.33	1	04/10/25 21:55	4/8/25	
Perfluorodecane sulfonic acid (PFDS)	ND U	4.3	1.9	0.67	1	04/10/25 21:55	4/8/25	
Perfluorododecane sulfonic acid (PFDoS)	ND U	4.3	1.9	0.56	1	04/10/25 21:55	4/8/25	*
Perfluoroalkyl Carboxylic Acids (PFCAs)								
Perfluorobutanoic acid (PFBA)	47	4.3	2.0	0.86	1	04/10/25 21:55	4/8/25	
Perfluoropentanoic acid (PFPeA)	21	4.3	2.0	0.64	1	04/10/25 21:55	4/8/25	
Perfluorohexanoic acid (PFHxA)	11	4.3	2.0	0.63	1	04/10/25 21:55	4/8/25	
Perfluoroheptanoic acid (PFHpA)	1.2 J	4.3	2.0	0.71	1	04/10/25 21:55	4/8/25	
Perfluorooctanoic acid (PFOA)	ND U	4.3	2.0	0.87	1	04/10/25 21:55	4/8/25	
Perfluorononanoic acid (PFNA)	ND U	4.3	2.0	0.75	1	04/10/25 21:55	4/8/25	
Perfluorodecanoic acid (PFDA)	ND U	4.3	2.0	0.60	1	04/10/25 21:55	4/8/25	
Perfluoroundecanoic acid (PFUnDA)	ND U	4.3	2.0	0.82	1	04/10/25 21:55	4/8/25	
Perfluorododecanoic acid (PFDOA)	ND U	4.3	2.0	0.61	1	04/10/25 21:55	4/8/25	
Perfluorotridecanoic acid (PFTTrDA)	ND U	4.3	2.0	0.46	1	04/10/25 21:55	4/8/25	*
Perfluorotetradecanoic acid (PFTDA)	ND U	4.3	3.0	1.3	1	04/10/25 21:55	4/8/25	*
Perfluoroalkyl Sulfonamido Substances								
Perfluorooctane sulfonamide (PFOSAm)	ND U	4.3	2.0	0.72	1	04/10/25 21:55	4/8/25	
N-Methylperfluorooctane sulfonamide (MeFOSA)	ND U	4.3	3.0	1.2	1	04/10/25 21:55	4/8/25	
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	ND U	4.3	2.0	0.85	1	04/10/25 21:55	4/8/25	
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	ND U	4.3	2.0	0.82	1	04/10/25 21:55	4/8/25	
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	ND U	4.3	2.0	0.92	1	04/10/25 21:55	4/8/25	
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	ND U	4.3	2.0	0.91	1	04/10/25 21:55	4/8/25	
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	ND U	4.3	2.0	0.95	1	04/10/25 21:55	4/8/25	*

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Onsite Environmental Incorporated
Project: PFAS-1633/553-8472-006
Sample Matrix: Water

Service Request: K2503482
Date Collected: 03/31/25 12:23
Date Received: 04/04/25 09:10

Sample Name: MW-5S
Lab Code: K2503482-004

Units: ng/L
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	4.3	1.9	0.42	1	04/10/25 21:55	4/8/25	
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND U	4.3	2.9	1.3	1	04/10/25 21:55	4/8/25	
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND U	4.3	1.9	0.86	1	04/10/25 21:55	4/8/25	
Fluorotelomer Carboxylic Acids (FTCAs)								
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	ND U	170	20	6.8	1	04/10/25 21:55	4/8/25	
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	ND U	170	20	4.2	1	04/10/25 21:55	4/8/25	
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	ND U	170	20	6.0	1	04/10/25 21:55	4/8/25	
Perfluoroalkyl Ether Sulfonic Acids (PFESAs)								
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	ND U	4.3	1.8	0.43	1	04/10/25 21:55	4/8/25	
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	ND U	4.3	1.9	0.45	1	04/10/25 21:55	4/8/25	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	ND U	4.3	1.9	0.39	1	04/10/25 21:55	4/8/25	
Perfluoroalkyl Ether Carboxylic Acids (PFECAs)								
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND U	4.3	2.0	0.41	1	04/10/25 21:55	4/8/25	
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND U	4.3	2.0	0.54	1	04/10/25 21:55	4/8/25	
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	ND U	4.3	2.0	0.41	1	04/10/25 21:55	4/8/25	
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND U	4.3	2.0	0.58	1	04/10/25 21:55	4/8/25	
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	ND U	4.3	1.9	0.36	1	04/10/25 21:55	4/8/25	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Onsite Environmental Incorporated
Project: PFAS-1633/553-8472-006
Sample Matrix: Water

Service Request: K2503482
Date Collected: 03/31/25 12:23
Date Received: 04/04/25 09:10

Sample Name: MW-5S
Lab Code: K2503482-004

Units: ng/L
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	112	40 - 135	04/10/25 21:55	
13C3-PFHxS	84	40 - 130	04/10/25 21:55	
13C8-PFOS	76	40 - 130	04/10/25 21:55	
13C4-PFBA	97	5 - 130	04/10/25 21:55	
13C5-PFPeA	104	40 - 130	04/10/25 21:55	
13C5-PFHxA	102	40 - 130	04/10/25 21:55	
13C4-PFHpA	97	40 - 130	04/10/25 21:55	
13C8-PFOA	82	40 - 130	04/10/25 21:55	
13C9-PFNA	93	40 - 130	04/10/25 21:55	
13C6-PFDA	91	40 - 130	04/10/25 21:55	
13C7-PFUnDA	126	30 - 130	04/10/25 21:55	
13C2-PFDoDA	75	10 - 130	04/10/25 21:55	
13C2-PFTeDA	46	10 - 130	04/10/25 21:55	
13C8-FOSA	69	40 - 130	04/10/25 21:55	
D3-MeFOSA	83	10 - 130	04/10/25 21:55	
D5-EtFOSA	67	10 - 130	04/10/25 21:55	
D7-MeFOSE	63	10 - 130	04/10/25 21:55	
D9-EtFOSE	62	10 - 130	04/10/25 21:55	
D3-MeFOSAA	63	40 - 170	04/10/25 21:55	
D5-EtFOSAA	75	25 - 135	04/10/25 21:55	
13C2-4:2 FTS	123	40 - 200	04/10/25 21:55	
13C2-6:2 FTS	106	40 - 200	04/10/25 21:55	
13C2-8:2 FTS	88	40 - 300	04/10/25 21:55	
13C3-HFPO-DA	88	40 - 130	04/10/25 21:55	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Onsite Environmental Incorporated
Project: PFAS-1633/553-8472-006
Sample Matrix: Water

Service Request: K2503482
Date Collected: 04/01/25 14:55
Date Received: 04/04/25 09:10

Sample Name: MW-6S
Lab Code: K2503482-005

Units: ng/L
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 (PFASs)								
Perfluorobutane sulfonic acid (PFBS)	6.3	4.7	1.8	0.43	1	04/10/25 22:18	4/8/25	
Perfluoropentane sulfonic acid (PFPeS)	1.1 J	4.7	1.9	0.89	1	04/10/25 22:18	4/8/25	*
Perfluorohexane sulfonic acid (PFHxS)	1.1 J	4.7	1.8	0.82	1	04/10/25 22:18	4/8/25	*
Perfluoroheptane sulfonic acid (PFHpS)	ND U	4.7	1.9	0.69	1	04/10/25 22:18	4/8/25	
Perfluorooctane sulfonic acid (PFOS)	ND U	4.7	1.9	0.83	1	04/10/25 22:18	4/8/25	
Perfluorononane sulfonic acid (PFNS)	ND U	4.7	1.9	0.33	1	04/10/25 22:18	4/8/25	
Perfluorodecane sulfonic acid (PFDS)	ND U	4.7	1.9	0.67	1	04/10/25 22:18	4/8/25	
Perfluorododecane sulfonic acid (PFDoS)	ND U	4.7	1.9	0.56	1	04/10/25 22:18	4/8/25	*
Perfluoroalkyl Carboxylic Acids (PFCAs)								
Perfluorobutanoic acid (PFBA)	9.5	4.7	2.0	0.86	1	04/10/25 22:18	4/8/25	
Perfluoropentanoic acid (PFPeA)	8.1	4.7	2.0	0.64	1	04/10/25 22:18	4/8/25	
Perfluorohexanoic acid (PFHxA)	4.7 J	4.7	2.0	0.63	1	04/10/25 22:18	4/8/25	
Perfluoroheptanoic acid (PFHpA)	ND U	4.7	2.0	0.71	1	04/10/25 22:18	4/8/25	
Perfluorooctanoic acid (PFOA)	ND U	4.7	2.0	0.87	1	04/10/25 22:18	4/8/25	
Perfluorononanoic acid (PFNA)	ND U	4.7	2.0	0.75	1	04/10/25 22:18	4/8/25	
Perfluorodecanoic acid (PFDA)	ND U	4.7	2.0	0.60	1	04/10/25 22:18	4/8/25	
Perfluoroundecanoic acid (PFUnDA)	ND U	4.7	2.0	0.82	1	04/10/25 22:18	4/8/25	
Perfluorododecanoic acid (PFDOA)	ND U	4.7	2.0	0.61	1	04/10/25 22:18	4/8/25	
Perfluorotridecanoic acid (PFTTrDA)	ND U	4.7	2.0	0.46	1	04/10/25 22:18	4/8/25	*
Perfluorotetradecanoic acid (PFTDA)	ND U	4.7	3.0	1.3	1	04/10/25 22:18	4/8/25	*
Perfluoroalkyl Sulfonamido Substances								
Perfluorooctane sulfonamide (PFOSAm)	ND U	4.7	2.0	0.72	1	04/10/25 22:18	4/8/25	
N-Methylperfluorooctane sulfonamide (MeFOSA)	ND U	4.7	3.0	1.2	1	04/10/25 22:18	4/8/25	
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	ND U	4.7	2.0	0.85	1	04/10/25 22:18	4/8/25	
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	ND U	4.7	2.0	0.82	1	04/10/25 22:18	4/8/25	
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	ND U	4.7	2.0	0.92	1	04/10/25 22:18	4/8/25	
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	ND U	4.7	2.0	0.91	1	04/10/25 22:18	4/8/25	
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	ND U	4.7	2.0	0.95	1	04/10/25 22:18	4/8/25	*

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Onsite Environmental Incorporated
Project: PFAS-1633/553-8472-006
Sample Matrix: Water

Service Request: K2503482
Date Collected: 04/01/25 14:55
Date Received: 04/04/25 09:10

Sample Name: MW-6S
Lab Code: K2503482-005

Units: ng/L
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	4.7	1.9	0.42	1	04/10/25 22:18	4/8/25	
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND U	4.7	2.9	1.3	1	04/10/25 22:18	4/8/25	
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND U	4.7	1.9	0.86	1	04/10/25 22:18	4/8/25	
Fluorotelomer Carboxylic Acids (FTCAs)								
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	ND U	190	20	6.8	1	04/10/25 22:18	4/8/25	
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	ND U	190	20	4.2	1	04/10/25 22:18	4/8/25	
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	ND U	190	20	6.0	1	04/10/25 22:18	4/8/25	
Perfluoroalkyl Ether Sulfonic Acids (PFESAs)								
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	ND U	4.7	1.8	0.43	1	04/10/25 22:18	4/8/25	
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	ND U	4.7	1.9	0.45	1	04/10/25 22:18	4/8/25	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	ND U	4.7	1.9	0.39	1	04/10/25 22:18	4/8/25	
Perfluoroalkyl Ether Carboxylic Acids (PFECAs)								
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND U	4.7	2.0	0.41	1	04/10/25 22:18	4/8/25	
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND U	4.7	2.0	0.54	1	04/10/25 22:18	4/8/25	
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	ND U	4.7	2.0	0.41	1	04/10/25 22:18	4/8/25	
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND U	4.7	2.0	0.58	1	04/10/25 22:18	4/8/25	
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	ND U	4.7	1.9	0.36	1	04/10/25 22:18	4/8/25	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Onsite Environmental Incorporated
Project: PFAS-1633/553-8472-006
Sample Matrix: Water

Service Request: K2503482
Date Collected: 04/01/25 14:55
Date Received: 04/04/25 09:10

Sample Name: MW-6S
Lab Code: K2503482-005

Units: ng/L
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	105	40 - 135	04/10/25 22:18	
13C3-PFHxS	76	40 - 130	04/10/25 22:18	
13C8-PFOS	89	40 - 130	04/10/25 22:18	
13C4-PFBA	99	5 - 130	04/10/25 22:18	
13C5-PFPeA	111	40 - 130	04/10/25 22:18	
13C5-PFHxA	105	40 - 130	04/10/25 22:18	
13C4-PFHpA	99	40 - 130	04/10/25 22:18	
13C8-PFOA	80	40 - 130	04/10/25 22:18	
13C9-PFNA	94	40 - 130	04/10/25 22:18	
13C6-PFDA	98	40 - 130	04/10/25 22:18	
13C7-PFUnDA	125	30 - 130	04/10/25 22:18	
13C2-PFDoDA	77	10 - 130	04/10/25 22:18	
13C2-PFTeDA	48	10 - 130	04/10/25 22:18	
13C8-FOSA	66	40 - 130	04/10/25 22:18	
D3-MeFOSA	85	10 - 130	04/10/25 22:18	
D5-EtFOSA	63	10 - 130	04/10/25 22:18	
D7-MeFOSE	64	10 - 130	04/10/25 22:18	
D9-EtFOSE	60	10 - 130	04/10/25 22:18	
D3-MeFOSAA	70	40 - 170	04/10/25 22:18	
D5-EtFOSAA	74	25 - 135	04/10/25 22:18	
13C2-4:2 FTS	119	40 - 200	04/10/25 22:18	
13C2-6:2 FTS	85	40 - 200	04/10/25 22:18	
13C2-8:2 FTS	89	40 - 300	04/10/25 22:18	
13C3-HFPO-DA	93	40 - 130	04/10/25 22:18	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Onsite Environmental Incorporated
Project: PFAS-1633/553-8472-006
Sample Matrix: Water

Service Request: K2503482
Date Collected: 04/01/25 09:00
Date Received: 04/04/25 09:10

Sample Name: MW-13S
Lab Code: K2503482-006

Units: ng/L
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 (PFASs)								
Perfluorobutane sulfonic acid (PFBS)	6.9	4.5	1.8	0.43	1	04/10/25 22:42	4/8/25	
Perfluoropentane sulfonic acid (PFPeS)	1.0 J	4.5	1.9	0.89	1	04/10/25 22:42	4/8/25	*
Perfluorohexane sulfonic acid (PFHxS)	1.0 J	4.5	1.8	0.82	1	04/10/25 22:42	4/8/25	*
Perfluoroheptane sulfonic acid (PFHpS)	ND U	4.5	1.9	0.69	1	04/10/25 22:42	4/8/25	
Perfluorooctane sulfonic acid (PFOS)	ND U	4.5	1.9	0.83	1	04/10/25 22:42	4/8/25	
Perfluorononane sulfonic acid (PFNS)	ND U	4.5	1.9	0.33	1	04/10/25 22:42	4/8/25	
Perfluorodecane sulfonic acid (PFDS)	ND U	4.5	1.9	0.67	1	04/10/25 22:42	4/8/25	
Perfluorododecane sulfonic acid (PFDoS)	ND U	4.5	1.9	0.56	1	04/10/25 22:42	4/8/25	*
Perfluoroalkyl Carboxylic Acids (PFCAs)								
Perfluorobutanoic acid (PFBA)	9.6	4.5	2.0	0.86	1	04/10/25 22:42	4/8/25	
Perfluoropentanoic acid (PFPeA)	7.9	4.5	2.0	0.64	1	04/10/25 22:42	4/8/25	
Perfluorohexanoic acid (PFHxA)	4.9	4.5	2.0	0.63	1	04/10/25 22:42	4/8/25	
Perfluoroheptanoic acid (PFHpA)	ND U	4.5	2.0	0.71	1	04/10/25 22:42	4/8/25	
Perfluorooctanoic acid (PFOA)	ND U	4.5	2.0	0.87	1	04/10/25 22:42	4/8/25	
Perfluorononanoic acid (PFNA)	ND U	4.5	2.0	0.75	1	04/10/25 22:42	4/8/25	
Perfluorodecanoic acid (PFDA)	ND U	4.5	2.0	0.60	1	04/10/25 22:42	4/8/25	
Perfluoroundecanoic acid (PFUnDA)	ND U	4.5	2.0	0.82	1	04/10/25 22:42	4/8/25	
Perfluorododecanoic acid (PFDOA)	ND U	4.5	2.0	0.61	1	04/10/25 22:42	4/8/25	
Perfluorotridecanoic acid (PFTrDA)	ND U	4.5	2.0	0.46	1	04/10/25 22:42	4/8/25	*
Perfluorotetradecanoic acid (PFTDA)	ND U	4.5	3.0	1.3	1	04/10/25 22:42	4/8/25	*
Perfluoroalkyl Sulfonamido Substances								
Perfluorooctane sulfonamide (PFOSAm)	ND U	4.5	2.0	0.72	1	04/10/25 22:42	4/8/25	
N-Methylperfluorooctane sulfonamide (MeFOSA)	ND U	4.5	3.0	1.2	1	04/10/25 22:42	4/8/25	
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	ND U	4.5	2.0	0.85	1	04/10/25 22:42	4/8/25	
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	ND U	4.5	2.0	0.82	1	04/10/25 22:42	4/8/25	
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	ND U	4.5	2.0	0.92	1	04/10/25 22:42	4/8/25	
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	ND U	4.5	2.0	0.91	1	04/10/25 22:42	4/8/25	
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	ND U	4.5	2.0	0.95	1	04/10/25 22:42	4/8/25	*

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Onsite Environmental Incorporated
Project: PFAS-1633/553-8472-006
Sample Matrix: Water

Service Request: K2503482
Date Collected: 04/01/25 09:00
Date Received: 04/04/25 09:10

Sample Name: MW-13S
Lab Code: K2503482-006

Units: ng/L
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	4.5	1.9	0.42	1	04/10/25 22:42	4/8/25	
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND U	4.5	2.9	1.3	1	04/10/25 22:42	4/8/25	
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND U	4.5	1.9	0.86	1	04/10/25 22:42	4/8/25	
Fluorotelomer Carboxylic Acids (FTCAs)								
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	ND U	180	20	6.8	1	04/10/25 22:42	4/8/25	
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	ND U	180	20	4.2	1	04/10/25 22:42	4/8/25	
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	ND U	180	20	6.0	1	04/10/25 22:42	4/8/25	
Perfluoroalkyl Ether Sulfonic Acids (PFESAs)								
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	ND U	4.5	1.8	0.43	1	04/10/25 22:42	4/8/25	
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	ND U	4.5	1.9	0.45	1	04/10/25 22:42	4/8/25	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	ND U	4.5	1.9	0.39	1	04/10/25 22:42	4/8/25	
Perfluoroalkyl Ether Carboxylic Acids (PFECAs)								
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND U	4.5	2.0	0.41	1	04/10/25 22:42	4/8/25	
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND U	4.5	2.0	0.54	1	04/10/25 22:42	4/8/25	
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	ND U	4.5	2.0	0.41	1	04/10/25 22:42	4/8/25	
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND U	4.5	2.0	0.58	1	04/10/25 22:42	4/8/25	
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	ND U	4.5	1.9	0.36	1	04/10/25 22:42	4/8/25	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Onsite Environmental Incorporated
Project: PFAS-1633/553-8472-006
Sample Matrix: Water

Service Request: K2503482
Date Collected: 04/01/25 09:00
Date Received: 04/04/25 09:10

Sample Name: MW-13S
Lab Code: K2503482-006

Units: ng/L
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	86	40 - 135	04/10/25 22:42	
13C3-PFHxS	72	40 - 130	04/10/25 22:42	
13C8-PFOS	78	40 - 130	04/10/25 22:42	
13C4-PFBA	95	5 - 130	04/10/25 22:42	
13C5-PFPeA	96	40 - 130	04/10/25 22:42	
13C5-PFHxA	99	40 - 130	04/10/25 22:42	
13C4-PFHpA	88	40 - 130	04/10/25 22:42	
13C8-PFOA	83	40 - 130	04/10/25 22:42	
13C9-PFNA	87	40 - 130	04/10/25 22:42	
13C6-PFDA	95	40 - 130	04/10/25 22:42	
13C7-PFUnDA	114	30 - 130	04/10/25 22:42	
13C2-PFDoDA	71	10 - 130	04/10/25 22:42	
13C2-PFTeDA	40	10 - 130	04/10/25 22:42	
13C8-FOSA	67	40 - 130	04/10/25 22:42	
D3-MeFOSA	84	10 - 130	04/10/25 22:42	
D5-EtFOSA	64	10 - 130	04/10/25 22:42	
D7-MeFOSE	61	10 - 130	04/10/25 22:42	
D9-EtFOSE	57	10 - 130	04/10/25 22:42	
D3-MeFOSAA	64	40 - 170	04/10/25 22:42	
D5-EtFOSAA	68	25 - 135	04/10/25 22:42	
13C2-4:2 FTS	101	40 - 200	04/10/25 22:42	
13C2-6:2 FTS	96	40 - 200	04/10/25 22:42	
13C2-8:2 FTS	84	40 - 300	04/10/25 22:42	
13C3-HFPO-DA	85	40 - 130	04/10/25 22:42	



General Chemistry

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

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Onsite Environmental Incorporated
Project: PFAS-1633/553-8472-006
Sample Matrix: Water
Sample Name: MW-4S
Lab Code: K2503482-003

Service Request: K2503482
Date Collected: 04/01/25 09:55
Date Received: 04/04/25 09:10
Basis: NA

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
Solids, Total Suspended (TSS)	SM 2540 D Modified	ND U	mg/L	100	-	-	1	04/04/25 17:42	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Onsite Environmental Incorporated
Project: PFAS-1633/553-8472-006
Sample Matrix: Water
Sample Name: MW-5S
Lab Code: K2503482-004

Service Request: K2503482
Date Collected: 03/31/25 12:23
Date Received: 04/04/25 09:10
Basis: NA

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
Solids, Total Suspended (TSS)	SM 2540 D Modified	ND U	mg/L	100	-	-	1	04/04/25 17:42	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Onsite Environmental Incorporated
Project: PFAS-1633/553-8472-006
Sample Matrix: Water
Sample Name: MW-13S
Lab Code: K2503482-006

Service Request: K2503482
Date Collected: 04/01/25 09:00
Date Received: 04/04/25 09:10
Basis: NA

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
Solids, Total Suspended (TSS)	SM 2540 D Modified	ND U	mg/L	100	-	-	1	04/04/25 17:42	



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

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Onsite Environmental Incorporated
Project: PFAS-1633/553-8472-006
Sample Matrix: Water

Service Request: K2503482

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-2S	MW-3S	MW-4S
		K2503482-001	K2503482-002	K2503482-003
13C3-PFBS	40-135	105	108	101
13C3-PFHxS	40-130	82	130	82
13C8-PFOS	40-130	85	82	73
13C4-PFBA	5-130	100	97	98
13C5-PFPeA	40-130	110	112	97
13C5-PFHxA	40-130	99	111	101
13C4-PFHpA	40-130	96	101	86
13C8-PFOA	40-130	93	84	91
13C9-PFNA	40-130	96	95	96
13C6-PFDA	40-130	94	97	102
13C7-PFUnDA	30-130	129	116	108
13C2-PFDoDA	10-130	85	72	71
13C2-PFTeDA	10-130	52	45	46
13C8-FOSA	40-130	65	73	65
D3-MeFOSA	10-130	90	84	78
D5-EtFOSA	10-130	66	68	62
D7-MeFOSE	10-130	64	68	62
D9-EtFOSE	10-130	61	66	59
D3-MeFOSAA	40-170	71	67	65
D5-EtFOSAA	25-135	73	78	67
13C2-4:2 FTS	40-200	136	133	121
13C2-6:2 FTS	40-200	93	95	96
13C2-8:2 FTS	40-300	104	85	84
13C3-HFPO-DA	40-130	87	90	86

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

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

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Onsite Environmental Incorporated
Project: PFAS-1633/553-8472-006
Sample Matrix: Water

Service Request: K2503482

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-5S	MW-6S	MW-13S
		K2503482-004	K2503482-005	K2503482-006
13C3-PFBS	40-135	112	105	86
13C3-PFHxS	40-130	84	76	72
13C8-PFOS	40-130	76	89	78
13C4-PFBA	5-130	97	99	95
13C5-PFPeA	40-130	104	111	96
13C5-PFHxA	40-130	102	105	99
13C4-PFHpA	40-130	97	99	88
13C8-PFOA	40-130	82	80	83
13C9-PFNA	40-130	93	94	87
13C6-PFDA	40-130	91	98	95
13C7-PFUnDA	30-130	126	125	114
13C2-PFDoDA	10-130	75	77	71
13C2-PFTeDA	10-130	46	48	40
13C8-FOSA	40-130	69	66	67
D3-MeFOSA	10-130	83	85	84
D5-EtFOSA	10-130	67	63	64
D7-MeFOSE	10-130	63	64	61
D9-EtFOSE	10-130	62	60	57
D3-MeFOSAA	40-170	63	70	64
D5-EtFOSAA	25-135	75	74	68
13C2-4:2 FTS	40-200	123	119	101
13C2-6:2 FTS	40-200	106	85	96
13C2-8:2 FTS	40-300	88	89	84
13C3-HFPO-DA	40-130	88	93	85

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

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

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Onsite Environmental Incorporated
Project: PFAS-1633/553-8472-006
Sample Matrix: Water

Service Request: K2503482

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	Lab Control Sample	Duplicate Lab Control Sample
		KQ2505631-04	KQ2505631-05	KQ2505631-06
13C3-PFBS	40-135	126	124	102
13C3-PFHxS	40-130	108	96	92
13C8-PFOS	40-130	100	94	91
13C4-PFBA	5-130	100	100	95
13C5-PFPeA	40-130	97	91	94
13C5-PFHxA	40-130	96	90	87
13C4-PFHpA	40-130	98	95	101
13C8-PFOA	40-130	104	98	93
13C9-PFNA	40-130	104	100	93
13C6-PFDA	40-130	105	108	90
13C7-PFUnDA	30-130	122	123	94
13C2-PFDoDA	10-130	103	104	75
13C2-PFTeDA	10-130	93	89	65
13C8-FOSA	40-130	77	79	61
D3-MeFOSA	10-130	85	87	66
D5-EtFOSA	10-130	80	83	64
D7-MeFOSE	10-130	76	77	62
D9-EtFOSE	10-130	82	85	65
D3-MeFOSAA	40-170	100	97	78
D5-EtFOSAA	25-135	85	86	66
13C2-4:2 FTS	40-200	121	120	107
13C2-6:2 FTS	40-200	74	90	70
13C2-8:2 FTS	40-300	108	109	101
13C3-HFPO-DA	40-130	84	82	88

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

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

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Onsite Environmental Incorporated
Project: PFAS-1633/553-8472-006
Sample Matrix: Water

Service Request: K2503482

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	Low Level Lab Control
		Sample KQ2505631-07
13C3-PFBS	40-135	119
13C3-PFHxS	40-130	99
13C8-PFOS	40-130	93
13C4-PFBA	5-130	99
13C5-PFPeA	40-130	103
13C5-PFHxA	40-130	90
13C4-PFHpA	40-130	108
13C8-PFOA	40-130	99
13C9-PFNA	40-130	104
13C6-PFDA	40-130	115
13C7-PFUnDA	30-130	113
13C2-PFDoDA	10-130	90
13C2-PFTeDA	10-130	75
13C8-FOSA	40-130	67
D3-MeFOSA	10-130	69
D5-EtFOSA	10-130	68
D7-MeFOSE	10-130	69
D9-EtFOSE	10-130	72
D3-MeFOSAA	40-170	90
D5-EtFOSAA	25-135	76
13C2-4:2 FTS	40-200	111
13C2-6:2 FTS	40-200	80
13C2-8:2 FTS	40-300	121
13C3-HFPO-DA	40-130	90

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

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

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Onsite Environmental Incorporated
Project: PFAS-1633/553-8472-006
Sample Matrix: Water

Service Request: K2503482
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: KQ2505631-04

Units: ng/L
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 (PFASs)								
Perfluorobutane sulfonic acid (PFBS)	ND U	5.0	1.8	0.43	1	04/09/25 23:01	4/8/25	
Perfluoropentane sulfonic acid (PFPeS)	ND U	5.0	1.9	0.89	1	04/09/25 23:01	4/8/25	
Perfluorohexane sulfonic acid (PFHxS)	ND U	5.0	1.8	0.82	1	04/09/25 23:01	4/8/25	
Perfluoroheptane sulfonic acid (PFHpS)	ND U	5.0	1.9	0.69	1	04/09/25 23:01	4/8/25	
Perfluorooctane sulfonic acid (PFOS)	ND U	5.0	1.9	0.83	1	04/09/25 23:01	4/8/25	
Perfluorononane sulfonic acid (PFNS)	ND U	5.0	1.9	0.33	1	04/09/25 23:01	4/8/25	
Perfluorodecane sulfonic acid (PFDS)	ND U	5.0	1.9	0.67	1	04/09/25 23:01	4/8/25	
Perfluorododecane sulfonic acid (PFDoS)	ND U	5.0	1.9	0.56	1	04/09/25 23:01	4/8/25	
Perfluoroalkyl Carboxylic Acids (PFCAs)								
Perfluorobutanoic acid (PFBA)	ND U	5.0	2.0	0.86	1	04/09/25 23:01	4/8/25	
Perfluoropentanoic acid (PFPeA)	ND U	5.0	2.0	0.64	1	04/09/25 23:01	4/8/25	
Perfluorohexanoic acid (PFHxA)	ND U	5.0	2.0	0.63	1	04/09/25 23:01	4/8/25	
Perfluoroheptanoic acid (PFHpA)	ND U	5.0	2.0	0.71	1	04/09/25 23:01	4/8/25	
Perfluorooctanoic acid (PFOA)	ND U	5.0	2.0	0.87	1	04/09/25 23:01	4/8/25	
Perfluorononanoic acid (PFNA)	ND U	5.0	2.0	0.75	1	04/09/25 23:01	4/8/25	
Perfluorodecanoic acid (PFDA)	ND U	5.0	2.0	0.60	1	04/09/25 23:01	4/8/25	
Perfluoroundecanoic acid (PFUnDA)	ND U	5.0	2.0	0.82	1	04/09/25 23:01	4/8/25	
Perfluorododecanoic acid (PFDOA)	ND U	5.0	2.0	0.61	1	04/09/25 23:01	4/8/25	
Perfluorotridecanoic acid (PFTrDA)	ND U	5.0	2.0	0.46	1	04/09/25 23:01	4/8/25	
Perfluorotetradecanoic acid (PFTDA)	ND U	5.0	3.0	1.3	1	04/09/25 23:01	4/8/25	
Perfluoroalkyl Sulfonamido Substances								
Perfluorooctane sulfonamide (PFOSAm)	ND U	5.0	2.0	0.72	1	04/09/25 23:01	4/8/25	
N-Methylperfluorooctane sulfonamide (MeFOSA)	ND U	5.0	3.0	1.2	1	04/09/25 23:01	4/8/25	
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	ND U	5.0	2.0	0.85	1	04/09/25 23:01	4/8/25	
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	ND U	5.0	2.0	0.82	1	04/09/25 23:01	4/8/25	
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	ND U	5.0	2.0	0.92	1	04/09/25 23:01	4/8/25	
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	ND U	5.0	2.0	0.91	1	04/09/25 23:01	4/8/25	
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	ND U	5.0	2.0	0.95	1	04/09/25 23:01	4/8/25	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Onsite Environmental Incorporated
Project: PFAS-1633/553-8472-006
Sample Matrix: Water

Service Request: K2503482
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: KQ2505631-04

Units: ng/L
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	5.0	1.9	0.42	1	04/09/25 23:01	4/8/25	
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND U	5.0	2.9	1.3	1	04/09/25 23:01	4/8/25	
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND U	5.0	1.9	0.86	1	04/09/25 23:01	4/8/25	
Fluorotelomer Carboxylic Acids (FTCAs)								
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	ND U	200	20	6.8	1	04/09/25 23:01	4/8/25	
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	ND U	200	20	4.2	1	04/09/25 23:01	4/8/25	
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	ND U	200	20	6.0	1	04/09/25 23:01	4/8/25	
Perfluoroalkyl Ether Sulfonic Acids (PFESAs)								
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	ND U	5.0	1.8	0.43	1	04/09/25 23:01	4/8/25	
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	ND U	5.0	1.9	0.45	1	04/09/25 23:01	4/8/25	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	ND U	5.0	1.9	0.39	1	04/09/25 23:01	4/8/25	
Perfluoroalkyl Ether Carboxylic Acids (PFECAs)								
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND U	5.0	2.0	0.41	1	04/09/25 23:01	4/8/25	
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND U	5.0	2.0	0.54	1	04/09/25 23:01	4/8/25	
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	ND U	5.0	2.0	0.41	1	04/09/25 23:01	4/8/25	
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND U	5.0	2.0	0.58	1	04/09/25 23:01	4/8/25	
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	ND U	5.0	1.9	0.36	1	04/09/25 23:01	4/8/25	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Onsite Environmental Incorporated
Project: PFAS-1633/553-8472-006
Sample Matrix: Water

Service Request: K2503482
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: KQ2505631-04

Units: ng/L
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	126	40 - 135	04/09/25 23:01	
13C3-PFHxS	108	40 - 130	04/09/25 23:01	
13C8-PFOS	100	40 - 130	04/09/25 23:01	
13C4-PFBA	100	5 - 130	04/09/25 23:01	
13C5-PFPeA	97	40 - 130	04/09/25 23:01	
13C5-PFHxA	96	40 - 130	04/09/25 23:01	
13C4-PFHpA	98	40 - 130	04/09/25 23:01	
13C8-PFOA	104	40 - 130	04/09/25 23:01	
13C9-PFNA	104	40 - 130	04/09/25 23:01	
13C6-PFDA	105	40 - 130	04/09/25 23:01	
13C7-PFUnDA	122	30 - 130	04/09/25 23:01	
13C2-PFDoDA	103	10 - 130	04/09/25 23:01	
13C2-PFTeDA	93	10 - 130	04/09/25 23:01	
13C8-FOSA	77	40 - 130	04/09/25 23:01	
D3-MeFOSA	85	10 - 130	04/09/25 23:01	
D5-EtFOSA	80	10 - 130	04/09/25 23:01	
D7-MeFOSE	76	10 - 130	04/09/25 23:01	
D9-EtFOSE	82	10 - 130	04/09/25 23:01	
D3-MeFOSAA	100	40 - 170	04/09/25 23:01	
D5-EtFOSAA	85	25 - 135	04/09/25 23:01	
13C2-4:2 FTS	121	40 - 200	04/09/25 23:01	
13C2-6:2 FTS	74	40 - 200	04/09/25 23:01	
13C2-8:2 FTS	108	40 - 300	04/09/25 23:01	
13C3-HFPO-DA	84	40 - 130	04/09/25 23:01	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Onsite Environmental Incorporated
Project: PFAS-1633/553-8472-006
Sample Matrix: Water

Service Request: K2503482
Date Analyzed: 04/09/25
Date Extracted: 04/08/25

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
Prep Method: Method

Units: ng/L
Basis: NA
Analysis Lot: 875598

Low Level Lab Control Sample

KQ2505631-07

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	8.95	9.43	95	55-160
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	11.5	9.60	119	60-150
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	9.64	9.37	103	70-145
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	9.88	9.51	104	65-155
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	320	300	107	50-145
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	351	300	117	70-135
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	255	300	85	65-130
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	10.4	9.45	110	65-145
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	10.9	9.33	116	70-155
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	8.63	10.0	86	70-140
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	7.79	10.0	78	65-145
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	9.99	10.0	100	70-145
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	8.01	10.0	80	70-135
N-Methylperfluorooctane sulfonamide (MeFOSA)	7.51 I	10.0	75	60-150
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	8.30	10.0	83	50-140
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	8.99	10.0	90	70-145
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	10.0	10.0	100	50-150
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEESA)	9.49	8.90	107	70-140
Perfluoro-3-methoxypropanoic acid (PFMPA)	9.67	10.0	97	55-140
Perfluoro-4-methoxybutanoic acid (PFMBA)	11.3	10.0	113	60-150
Perfluorobutane sulfonic acid (PFBS)	8.05	8.87	91	60-145
Perfluorobutanoic acid (PFBA)	8.14	10.0	81	70-140
Perfluorodecane sulfonic acid (PFDS)	8.35	9.65	87	60-145
Perfluorodecanoic acid (PFDA)	9.80	10.0	98	70-140
Perfluorododecane sulfonic acid (PFDoS)	5.66	9.70	58	50-145
Perfluorododecanoic acid (PFDOA)	10.1	10.0	101	70-140
Perfluoroheptane sulfonic acid (PFHpS)	8.50	9.53	89	70-150
Perfluoroheptanoic acid (PFHpA)	8.31	10.0	83	70-150
Perfluorohexane sulfonic acid (PFHxS)	8.56	9.14	94	65-145
Perfluorohexanoic acid (PFHxA)	9.37	10.0	94	70-145
Perfluorononane sulfonic acid (PFNS)	9.09	9.62	94	65-145

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Onsite Environmental Incorporated
Project: PFAS-1633/553-8472-006
Sample Matrix: Water

Service Request: K2503482
Date Analyzed: 04/09/25
Date Extracted: 04/08/25

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
Prep Method: Method

Units: ng/L
Basis: NA
Analysis Lot: 875598

Low Level Lab Control Sample

KQ2505631-07

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Perfluorononanoic acid (PFNA)	10.3	10.0	103	70-150
Perfluorooctane sulfonamide (PFOSAm)	9.55	10.0	96	70-145
Perfluorooctane sulfonic acid (PFOS)	7.96	9.28	86	55-150
Perfluorooctanoic acid (PFOA)	7.91	10.0	79	70-150
Perfluoropentane sulfonic acid (PFPeS)	9.47	9.41	101	65-140
Perfluoropentanoic acid (PFPeA)	7.57	10.0	76	65-135
Perfluorotetradecanoic acid (PFTDA)	10.0	10.0	100	60-140
Perfluorotridecanoic acid (PFTrDA)	10.5	10.0	105	65-140
Perfluoroundecanoic acid (PFUnDA)	7.72	10.0	77	70-145

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Onsite Environmental Incorporated
Project: PFAS-1633/553-8472-006
Sample Matrix: Water

Service Request: K2503482
Date Analyzed: 04/09/25 - 04/10/25
Date Extracted: 04/08/25

Duplicate 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
Prep Method: Method

Units: ng/L
Basis: NA
Analysis Lot: 875598

Analyte Name	Lab Control Sample KQ2505631-05			Duplicate Lab Control Sample KQ2505631-06					
	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	18.1	18.9	96	16.6	18.9	88	55-160	9	30
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	23.1	19.2	120	23.8	19.2	124	60-150	3	30
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	17.1	18.7	91	17.1	18.7	91	70-145	<1	30
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	20.3	19.0	107	20.6	19.0	108	65-155	1	30
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	388	400	97	424	400	106	50-145	9	30
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	425	400	106	460	400	115	70-135	8	30
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	325	400	81	376	400	94	65-130	15	30
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	20.5	18.9	108	19.0	18.9	101	65-145	7	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	22.4	18.7	120	21.4	18.7	115	70-155	4	30
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	15.0	20.0	75	15.5	20.0	77	70-140	3	30
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	16.2	20.0	81	16.8	20.0	84	65-145	4	30
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	24.2	20.0	121	23.6	20.0	118	70-145	3	30
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	16.4	20.0	82	16.9	20.0	84	70-135	3	30
N-Methylperfluorooctane sulfonamide (MeFOSA)	17.0	20.0	85	17.6	20.0	88	60-150	4	30
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	17.4	20.0	87	16.6	20.0	83	50-140	5	30
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	18.3	20.0	92	18.1	20.0	91	70-145	1	30
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	18.3	20.0	91	20.7	20.0	103	50-150	12	30
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEESA)	16.4	17.8	92	18.7	17.8	105	70-140	13	30
Perfluoro-3-methoxypropanoic acid (PFMPA)	21.1	20.0	105	19.2	20.0	96	55-140	9	30
Perfluoro-4-methoxybutanoic acid (PFMBA)	24.3	20.0	122	22.3	20.0	111	60-150	9	30
Perfluorobutane sulfonic acid (PFBS)	16.5	17.7	93	16.2	17.7	91	60-145	2	30

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Onsite Environmental Incorporated
Project: PFAS-1633/553-8472-006
Sample Matrix: Water

Service Request: K2503482
Date Analyzed: 04/09/25 - 04/10/25
Date Extracted: 04/08/25

Duplicate 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
Prep Method: Method

Units: ng/L
Basis: NA
Analysis Lot: 875598

Analyte Name	Lab Control Sample KQ2505631-05			Duplicate Lab Control Sample KQ2505631-06					
	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Perfluorobutanoic acid (PFBA)	18.2	20.0	91	18.2	20.0	91	70-140	<1	30
Perfluorodecane sulfonic acid (PFDS)	18.0	19.3	93	15.6	19.3	81	60-145	14	30
Perfluorodecanoic acid (PFDA)	21.2	20.0	106	20.5	20.0	103	70-140	3	30
Perfluorododecane sulfonic acid (PFDoS)	12.7	19.4	65	10.2	19.4	53	50-145	21	30
Perfluorododecanoic acid (PFDOA)	19.6	20.0	98	20.5	20.0	102	70-140	4	30
Perfluoroheptane sulfonic acid (PFHpS)	19.1	19.1	100	15.9	19.1	83	70-150	19	30
Perfluoroheptanoic acid (PFHpA)	17.7	20.0	89	17.2	20.0	86	70-150	3	30
Perfluorohexane sulfonic acid (PFHxS)	20.8	18.3	114	15.5	18.3	85	65-145	29	30
Perfluorohexanoic acid (PFHxA)	19.2	20.0	96	19.4	20.0	97	70-145	<1	30
Perfluorononane sulfonic acid (PFNS)	19.1	19.2	99	17.1	19.2	89	65-145	11	30
Perfluorononanoic acid (PFNA)	21.4	20.0	107	20.8	20.0	104	70-150	3	30
Perfluorooctane sulfonamide (PFOSAm)	20.1	20.0	100	20.6	20.0	103	70-145	3	30
Perfluorooctane sulfonic acid (PFOS)	18.1	18.6	98	16.4	18.6	88	55-150	10	30
Perfluorooctanoic acid (PFOA)	17.4	20.0	87	15.9	20.0	79	70-150	9	30
Perfluoropentane sulfonic acid (PFPeS)	19.2	18.8	102	17.1	18.8	91	65-140	11	30
Perfluoropentanoic acid (PFPeA)	16.2	20.0	81	16.0	20.0	80	65-135	1	30
Perfluorotetradecanoic acid (PFTDA)	20.1	20.0	101	20.0	20.0	100	60-140	<1	30
Perfluorotridecanoic acid (PFTrDA)	22.5	20.0	113	21.9	20.0	110	65-140	3	30
Perfluoroundecanoic acid (PFUnDA)	15.7	20.0	79	15.9	20.0	80	70-145	2	30



General Chemistry

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

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Onsite Environmental Incorporated
Project: PFAS-1633/553-8472-006
Sample Matrix: Water
Sample Name: Method Blank
Lab Code: K2503482-MB1

Service Request: K2503482
Date Collected: NA
Date Received: NA
Basis: NA

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
Solids, Total Suspended (TSS)	SM 2540 D Modified	ND U	mg/L	100	-	-	1	04/04/25 17:42	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Onsite Environmental Incorporated
Project: PFAS-1633/553-8472-006
Sample Matrix: Water
Sample Name: Method Blank
Lab Code: K2503482-MB2

Service Request: K2503482
Date Collected: NA
Date Received: NA
Basis: NA

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
Solids, Total Suspended (TSS)	SM 2540 D Modified	ND U	mg/L	100	-	-	1	04/04/25 17:42	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Onsite Environmental Incorporated
Project: PFAS-1633/553-8472-006
Sample Matrix: Water

Service Request: K2503482
Date Analyzed: 04/04/25
Date Extracted: NA

Lab Control Sample Summary
Solids, Total Suspended (TSS)

Analysis Method: SM 2540 D Modified
Prep Method: None

Units: mg/L
Basis: NA
Analysis Lot: 875015

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K2503482-LCS	440	430	102	85-115



Analytical Results Report For:

OnSite Environmental, Inc.

Project:

Parametrix DTG Yakima

Anatek Work Order:

YFD0004

Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - email moscow@anateklabs.com
504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - email spokane@anateklabs.com

Client: OnSite Environmental, Inc.
Address: 14648 NE. 95th St.
Redmond, WA 98052
Attn: David Baumeister

Work Order: YFD0004
Project: Parametrix DTG Yakima
Reported: 4/4/2025 11:34

Analytical Results Report

Sample Location: MW-3S
Lab/Sample Number: YFD0004-01 **Collect Date:** 03/31/25 14:24
Date Received: 04/01/25 08:15 **Collected By:** Sally Nguyen
Matrix: Water

Analyte	Result	Units	PQL	Analyzed	Analyst	Method	Qualifier
Inorganics							
Nitrate/N	11.3	mg/L	0.200	4/2/25 8:48	DRA	Hach 10206	

Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - email moscow@anateklabs.com
504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - email spokane@anateklabs.com

Sample Location: MW-5S
Lab/Sample Number: YFD0004-02 Collect Date: 03/31/25 12:23
Date Received: 04/01/25 08:15 Collected By: Sally Nguyen
Matrix: Water

Analyte	Result	Units	PQL	Analyzed	Analyst	Method	Qualifier
Inorganics							
Nitrate/N	0.0800	mg/L	0.200	4/2/25 8:48	DRA	Hach 10206	

Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - email moscow@anateklabs.com
504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - email spokane@anateklabs.com

Sample Location: MW-7D
Lab/Sample Number: YFD0004-04 Collect Date: 03/31/25 12:05
Date Received: 04/01/25 08:15 Collected By: Sally Nguyen
Matrix: Water

Analyte	Result	Units	PQL	Analyzed	Analyst	Method	Qualifier
Inorganics							
Nitrate/N	0.0410	mg/L	0.200	4/2/25 8:48	DRA	Hach 10206	

Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - email moscow@anateklabs.com
504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - email spokane@anateklabs.com

Sample Location: MW-9D
Lab/Sample Number: YFD0004-05 Collect Date: 03/31/25 14:25
Date Received: 04/01/25 08:15 Collected By: Sally Nguyen
Matrix: Water

Analyte	Result	Units	PQL	Analyzed	Analyst	Method	Qualifier
Inorganics							
Nitrate/N	0.0770	mg/L	0.200	4/2/25 8:48	DRA	Hach 10206	

Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - email moscow@anateklabs.com
504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - email spokane@anateklabs.com

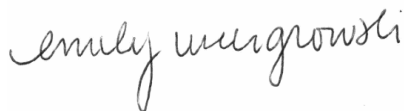
Sample Location: MW-10D
Lab/Sample Number: YFD0004-06 Collect Date: 03/31/25 16:25
Date Received: 04/01/25 08:15 Collected By: Sally Nguyen
Matrix: Water

Analyte	Result	Units	PQL	Analyzed	Analyst	Method	Qualifier
Inorganics							
Nitrate/N	1.51	mg/L	0.200	4/2/25 8:48	DRA	Hach 10206	

Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - email moscow@anateklabs.com
504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - email spokane@anateklabs.com

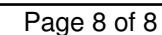
Authorized Signature,



Emily Wengrowski for Kathleen Sattler, Lab Manager

PQL	Practical Quantitation Limit
ND	Not Detected
MCL	EPA's Maximum Contaminant Level
Dry	Sample results reported on a dry weight basis
*	Not a state-certified analyte

This report shall not be reproduced except in full, without the written approval of the laboratory
The results reported related only to the samples indicated.





Analytical Results Report For:

OnSite Environmental, Inc.

Project:

Parametrix DTG Yakima

Anatek Work Order:

YFD0072

Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - email moscow@anateklabs.com
504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - email spokane@anateklabs.com

Client: OnSite Environmental, Inc.
Address: 14648 NE. 95th St.
Redmond, WA 98052
Attn: David Baumeister

Work Order: YFD0072
Project: Parametrix DTG Yakima
Reported: 4/4/2025 11:37

Analytical Results Report

Sample Location: MW-2S
Lab/Sample Number: YFD0072-01 **Collect Date:** 04/01/25 11:53
Date Received: 04/02/25 09:32 **Collected By:** Nguyen/Burke
Matrix: Water

Analyte	Result	Units	PQL	Analyzed	Analyst	Method	Qualifier
Inorganics							
Nitrate/N	0.702	mg/L	0.200	4/2/25 16:29	DRA	Hach 10206	

Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - email moscow@anateklabs.com
504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - email spokane@anateklabs.com

Sample Location: MW-4S
Lab/Sample Number: YFD0072-02 Collect Date: 04/01/25 09:55
Date Received: 04/02/25 09:32 Collected By: Nguyen/Burke
Matrix: Water

Analyte	Result	Units	PQL	Analyzed	Analyst	Method	Qualifier
Inorganics							
Nitrate/N	62.8	mg/L	2.00	4/2/25 16:48	DRA	Hach 10206	

Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - email moscow@anateklabs.com
504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - email spokane@anateklabs.com

Sample Location: MW-6S
Lab/Sample Number: YFD0072-03 Collect Date: 04/01/25 14:55
Date Received: 04/02/25 09:32 Collected By: Nguyen/Burke
Matrix: Water

Analyte	Result	Units	PQL	Analyzed	Analyst	Method	Qualifier
Inorganics							
Nitrate/N	11.3	mg/L	0.200	4/2/25 16:29	DRA	Hach 10206	

Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - email moscow@anateklabs.com
504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - email spokane@anateklabs.com

Sample Location: MW-13S
Lab/Sample Number: YFD0072-04 Collect Date: 04/01/25 09:00
Date Received: 04/02/25 09:32 Collected By: Nguyen/Burke
Matrix: Water

Analyte	Result	Units	PQL	Analyzed	Analyst	Method	Qualifier
Inorganics							
Nitrate/N	11.6	mg/L	0.200	4/2/25 16:29	DRA	Hach 10206	

Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - email moscow@anateklabs.com
504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - email spokane@anateklabs.com

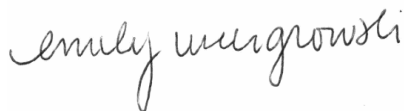
Sample Location: MW-8D
Lab/Sample Number: YFD0072-05 Collect Date: 04/01/25 13:26
Date Received: 04/02/25 09:32 Collected By: Nguyen/Burke
Matrix: Water

Analyte	Result	Units	PQL	Analyzed	Analyst	Method	Qualifier
Inorganics							
Nitrate/N	1.78	mg/L	0.200	4/2/25 16:29	DRA	Hach 10206	

Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - email moscow@anateklabs.com
504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - email spokane@anateklabs.com

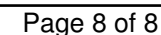
Authorized Signature,



Emily Wengrowski for Kathleen Sattler, Lab Manager

PQL	Practical Quantitation Limit
ND	Not Detected
MCL	EPA's Maximum Contaminant Level
Dry	Sample results reported on a dry weight basis
*	Not a state-certified analyte

This report shall not be reproduced except in full, without the written approval of the laboratory
The results reported related only to the samples indicated.





April 21, 2025

**Enthalpy Analytical - El Dorado Hills
Work Order No. 2504028**

Mr. David Baumeister
OnSite Environmental Inc.
14648 NE 95th Street
Redmond, WA 98052

Dear Mr. Baumeister,

Enclosed are the results for the sample set received at Enthalpy Analytical - EDH on April 04, 2025 under your Project Name '553-8472-006'.

Enthalpy Analytical - EDH is committed to serving you effectively. If you require additional information, please contact me at 916-673-1520 or by email at kathy.zipp@enthalpy.com.

Thank you for choosing Enthalpy Analytical - EDH as part of your analytical support team.

Sincerely,

A handwritten signature in blue ink that reads 'Kathy Zipp'.

Kathy Zipp
Project Manager

Enthalpy Analytical -EDH certifies that the report herein meets all the requirements set forth by NELAP for those applicable test methods. Results relate only to the samples as received by the laboratory. This report should not be reproduced except in full without the written approval of Enthalpy Analytical -EDH.

Enthalpy Analytical - EDH Work Order No. 2504028

Case Narrative

Sample Condition on Receipt:

Six water samples were received and stored securely in accordance with Enthalpy Analytical - EDH standard operating procedures and EPA methodology. The samples were received in good condition and within the method temperature requirements.

Analytical Notes:

EPA Method 1613B

The samples were extracted and analyzed for tetra-through-octa chlorinated dioxins and furans by EPA Method 1613B using a ZB-DIOXIN GC column.

Holding Times

The samples were extracted and analyzed within the method hold times.

Quality Control

The Initial Calibration and Continuing Calibration Verifications met the method acceptance criteria.

A Method Blank and Ongoing Precision and Recovery (OPR) sample were extracted and analyzed with the preparation batch. No analytes were detected above the sample quantitation limit in the Method Blank. The OPR recoveries were within the method acceptance criteria.

Labeled standard recoveries for all QC and field samples were within method acceptance criteria.

TABLE OF CONTENTS

Case Narrative.....	1
Table of Contents.....	3
Sample Inventory.....	4
Analytical Results.....	5
Qualifiers.....	14
Certifications.....	15
Sample Receipt.....	16

Sample Inventory Report

Sample ID	Client Sample ID	Sampled	Received	Components/Containers
2504028-01	MW-2S	01-Apr-25 11:53	04-Apr-25 07:55	Amber Glass NM Bottle, 1L Amber Glass NM Bottle, 1L
2504028-02	MW-3S	31-Mar-25 14:24	04-Apr-25 07:55	Amber Glass NM Bottle, 1L Amber Glass NM Bottle, 1L
2504028-03	MW-4S	01-Apr-25 09:55	04-Apr-25 07:55	Amber Glass NM Bottle, 1L Amber Glass NM Bottle, 1L
2504028-04	MW-5S	31-Mar-25 12:23	04-Apr-25 07:55	Amber Glass NM Bottle, 1L Amber Glass NM Bottle, 1L
2504028-05	MW-6S	01-Apr-25 14:55	04-Apr-25 07:55	Amber Glass NM Bottle, 1L Amber Glass NM Bottle, 1L
2504028-06	MW-13S	01-Apr-25 09:00	04-Apr-25 07:55	Amber Glass NM Bottle, 1L Amber Glass NM Bottle, 1L

ANALYTICAL RESULTS

Sample ID: Method Blank
EPA Method 1613B

Client Data			Laboratory Data		
Name:	OnSite Environmental Inc.		Lab Sample:	B25D112-BLK1	
Project:	553-8472-006		QC Batch:	B25D112	Date Extracted: 09-Apr-25
Matrix:	Aqueous		Sample Size:	1.00 L	Column: ZB-DIOXIN

Analyte	Conc. (pg/L)	EDL	EMPC	Qualifiers	Analyzed	Dilution
2,3,7,8-TCDD	ND	1.26			15-Apr-25 12:43	1
1,2,3,7,8-PeCDD	ND	1.03			15-Apr-25 12:43	1
1,2,3,4,7,8-HxCDD	ND	1.86			15-Apr-25 12:43	1
1,2,3,6,7,8-HxCDD	ND	2.12			15-Apr-25 12:43	1
1,2,3,7,8,9-HxCDD	ND	1.88			15-Apr-25 12:43	1
1,2,3,4,6,7,8-HpCDD	ND	4.84			15-Apr-25 12:43	1
OCDD	ND	3.37			15-Apr-25 12:43	1
2,3,7,8-TCDF	ND	0.902			15-Apr-25 12:43	1
1,2,3,7,8-PeCDF	ND	0.758			15-Apr-25 12:43	1
2,3,4,7,8-PeCDF	ND	0.775			15-Apr-25 12:43	1
1,2,3,4,7,8-HxCDF	ND	0.750			15-Apr-25 12:43	1
1,2,3,6,7,8-HxCDF	ND	0.767			15-Apr-25 12:43	1
2,3,4,6,7,8-HxCDF	ND	0.749			15-Apr-25 12:43	1
1,2,3,7,8,9-HxCDF	ND	1.02			15-Apr-25 12:43	1
1,2,3,4,6,7,8-HpCDF	ND	0.862			15-Apr-25 12:43	1
1,2,3,4,7,8,9-HpCDF	ND	1.08			15-Apr-25 12:43	1
OCDF	ND	1.77			15-Apr-25 12:43	1

Toxic Equivalent

TEQMinWHO2005Dioxin	0.00
---------------------	------

Totals

Total TCDD	ND	1.26
Total PeCDD	ND	1.03
Total HxCDD	ND	2.12
Total HpCDD	ND	4.84
Total TCDF	ND	0.902
Total PeCDF	ND	0.775
Total HxCDF	ND	1.02
Total HpCDF	ND	1.08

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Analyzed	Dilution
13C-2,3,7,8-TCDD	IS	73.8	25 - 164		15-Apr-25 12:43	1
13C-1,2,3,7,8-PeCDD	IS	76.9	25 - 181		15-Apr-25 12:43	1
13C-1,2,3,4,7,8-HxCDD	IS	71.6	32 - 141		15-Apr-25 12:43	1
13C-1,2,3,6,7,8-HxCDD	IS	69.5	28 - 130		15-Apr-25 12:43	1
13C-1,2,3,7,8,9-HxCDD	IS	71.3	32 - 141		15-Apr-25 12:43	1
13C-1,2,3,4,6,7,8-HpCDD	IS	68.6	23 - 140		15-Apr-25 12:43	1
13C-OCDD	IS	57.1	17 - 157		15-Apr-25 12:43	1
13C-2,3,7,8-TCDF	IS	79.8	24 - 169		15-Apr-25 12:43	1
13C-1,2,3,7,8-PeCDF	IS	81.0	24 - 185		15-Apr-25 12:43	1
13C-2,3,4,7,8-PeCDF	IS	80.6	21 - 178		15-Apr-25 12:43	1
13C-1,2,3,4,7,8-HxCDF	IS	71.6	26 - 152		15-Apr-25 12:43	1
13C-1,2,3,6,7,8-HxCDF	IS	71.8	26 - 123		15-Apr-25 12:43	1
13C-2,3,4,6,7,8-HxCDF	IS	71.7	28 - 136		15-Apr-25 12:43	1
13C-1,2,3,7,8,9-HxCDF	IS	71.6	29 - 147		15-Apr-25 12:43	1
13C-1,2,3,4,6,7,8-HpCDF	IS	74.6	28 - 143		15-Apr-25 12:43	1
13C-1,2,3,4,7,8,9-HpCDF	IS	79.2	26 - 138		15-Apr-25 12:43	1
13C-OCDF	IS	65.7	17 - 157		15-Apr-25 12:43	1
37Cl-2,3,7,8-TCDD	CRS	97.1	35 - 197		15-Apr-25 12:43	1

EDL - Sample specific estimated detection limit

EMPC - Estimated maximum possible concentration

Sample ID: OPR
EPA Method 1613B
Client Data

Name: OnSite Environmental Inc.
Project: 553-8472-006
Matrix: Aqueous

Laboratory Data

Lab Sample: B25D112-BS1
QC Batch: B25D112
Sample Size: 1.00 L
Date Extracted: 09-Apr-25 16:39
Column: ZB-DIOXIN

Analyte	Amt Found (pg/L)	Spike Amt	% Recovery	Limits	Qualifiers	Analyzed	Dilution
2,3,7,8-TCDD	207	200	103	67 - 158		15-Apr-25 11:12	1
1,2,3,7,8-PeCDD	1050	1000	105	70 - 142		15-Apr-25 11:12	1
1,2,3,4,7,8-HxCDD	1080	1000	108	70 - 164		15-Apr-25 11:12	1
1,2,3,6,7,8-HxCDD	1060	1000	106	76 - 134		15-Apr-25 11:12	1
1,2,3,7,8,9-HxCDD	1050	1000	105	64 - 162		15-Apr-25 11:12	1
1,2,3,4,6,7,8-HpCDD	1070	1000	107	70 - 140		15-Apr-25 11:12	1
OCDD	2100	2000	105	78 - 144		15-Apr-25 11:12	1
2,3,7,8-TCDF	217	200	109	75 - 158		15-Apr-25 11:12	1
1,2,3,7,8-PeCDF	1090	1000	109	80 - 134		15-Apr-25 11:12	1
2,3,4,7,8-PeCDF	1090	1000	109	68 - 160		15-Apr-25 11:12	1
1,2,3,4,7,8-HxCDF	1080	1000	108	72 - 134		15-Apr-25 11:12	1
1,2,3,6,7,8-HxCDF	1070	1000	107	84 - 130		15-Apr-25 11:12	1
2,3,4,6,7,8-HxCDF	1100	1000	110	70 - 156		15-Apr-25 11:12	1
1,2,3,7,8,9-HxCDF	1050	1000	105	78 - 130		15-Apr-25 11:12	1
1,2,3,4,6,7,8-HpCDF	1050	1000	105	82 - 122		15-Apr-25 11:12	1
1,2,3,4,7,8,9-HpCDF	1000	1000	100	78 - 138		15-Apr-25 11:12	1
OCDF	2200	2000	110	63 - 170		15-Apr-25 11:12	1
Labeled Standards	Type		% Recovery	Limits	Qualifiers	Analyzed	Dilution
13C-2,3,7,8-TCDD	IS		81.8	20 - 175		15-Apr-25 11:12	1
13C-1,2,3,7,8-PeCDD	IS		79.6	21 - 227		15-Apr-25 11:12	1
13C-1,2,3,4,7,8-HxCDD	IS		68.6	21 - 193		15-Apr-25 11:12	1
13C-1,2,3,6,7,8-HxCDD	IS		71.4	25 - 163		15-Apr-25 11:12	1
13C-1,2,3,7,8,9-HxCDD	IS		68.3	21 - 193		15-Apr-25 11:12	1
13C-1,2,3,4,6,7,8-HpCDD	IS		63.3	26 - 166		15-Apr-25 11:12	1
13C-OCDD	IS		54.3	13 - 199		15-Apr-25 11:12	1
13C-2,3,7,8-TCDF	IS		79.2	22 - 152		15-Apr-25 11:12	1
13C-1,2,3,7,8-PeCDF	IS		78.4	21 - 192		15-Apr-25 11:12	1
13C-2,3,4,7,8-PeCDF	IS		82.7	13 - 328		15-Apr-25 11:12	1
13C-1,2,3,4,7,8-HxCDF	IS		70.8	19 - 202		15-Apr-25 11:12	1
13C-1,2,3,6,7,8-HxCDF	IS		71.4	21 - 159		15-Apr-25 11:12	1
13C-2,3,4,6,7,8-HxCDF	IS		69.4	22 - 176		15-Apr-25 11:12	1
13C-1,2,3,7,8,9-HxCDF	IS		72.3	17 - 205		15-Apr-25 11:12	1
13C-1,2,3,4,6,7,8-HpCDF	IS		66.7	21 - 158		15-Apr-25 11:12	1
13C-1,2,3,4,7,8,9-HpCDF	IS		71.9	20 - 186		15-Apr-25 11:12	1
13C-OCDF	IS		58.3	13 - 199		15-Apr-25 11:12	1
37Cl-2,3,7,8-TCDD	CRS		95.8	31 - 191		15-Apr-25 11:12	1

Sample ID: MW-2S
EPA Method 1613B
Client Data

Name: OnSite Environmental Inc.
 Project: 553-8472-006
 Matrix: Water
 Date Collected: 01-Apr-25 11:53

Laboratory Data

Lab Sample: 2504028-01 Date Received: 04-Apr-25 07:55
 QC Batch: B25D112 Date Extracted: 09-Apr-25
 Sample Size: 1.04 L Column: ZB-DIOXIN

Analyte	Conc. (pg/L)	EDL	EMPC	Qualifiers	Analyzed	Dilution
2,3,7,8-TCDD	ND	1.28			16-Apr-25 03:12	1
1,2,3,7,8-PeCDD	ND	1.69			16-Apr-25 03:12	1
1,2,3,4,7,8-HxCDD	ND	2.04			16-Apr-25 03:12	1
1,2,3,6,7,8-HxCDD	ND	2.19			16-Apr-25 03:12	1
1,2,3,7,8,9-HxCDD	ND	2.27			16-Apr-25 03:12	1
1,2,3,4,6,7,8-HpCDD	ND		4.10		16-Apr-25 03:12	1
OCDD	110				16-Apr-25 03:12	1
2,3,7,8-TCDF	ND		2.30		16-Apr-25 03:12	1
1,2,3,7,8-PeCDF	ND		2.85		16-Apr-25 03:12	1
2,3,4,7,8-PeCDF	ND		3.02		16-Apr-25 03:12	1
1,2,3,4,7,8-HxCDF	ND		4.14		16-Apr-25 03:12	1
1,2,3,6,7,8-HxCDF	ND	2.16			16-Apr-25 03:12	1
2,3,4,6,7,8-HxCDF	ND	2.63			16-Apr-25 03:12	1
1,2,3,7,8,9-HxCDF	ND	2.78			16-Apr-25 03:12	1
1,2,3,4,6,7,8-HpCDF	1.79			J	16-Apr-25 03:12	1
1,2,3,4,7,8,9-HpCDF	ND	1.57			16-Apr-25 03:12	1
OCDF	2.63			J	16-Apr-25 03:12	1

Toxic Equivalent

TEQMinWHO2005Dioxin 0.0517

Totals

Total TCDD	ND	1.28				
Total PeCDD	ND	1.69				
Total HxCDD	ND	2.27				
Total HpCDD	ND		6.23			
Total TCDF	ND		2.30			
Total PeCDF	ND		7.52			
Total HxCDF	ND		4.14			
Total HpCDF	1.79		3.49	J		

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Analyzed	Dilution
13C-2,3,7,8-TCDD	IS	70.9	25 - 164		16-Apr-25 03:12	1
13C-1,2,3,7,8-PeCDD	IS	68.9	25 - 181		16-Apr-25 03:12	1
13C-1,2,3,4,7,8-HxCDD	IS	59.2	32 - 141		16-Apr-25 03:12	1
13C-1,2,3,6,7,8-HxCDD	IS	59.1	28 - 130		16-Apr-25 03:12	1
13C-1,2,3,7,8,9-HxCDD	IS	56.2	32 - 141		16-Apr-25 03:12	1
13C-1,2,3,4,6,7,8-HpCDD	IS	52.1	23 - 140		16-Apr-25 03:12	1
13C-OCDD	IS	38.1	17 - 157		16-Apr-25 03:12	1
13C-2,3,7,8-TCDF	IS	71.1	24 - 169		16-Apr-25 03:12	1
13C-1,2,3,7,8-PeCDF	IS	65.1	24 - 185		16-Apr-25 03:12	1
13C-2,3,4,7,8-PeCDF	IS	70.9	21 - 178		16-Apr-25 03:12	1
13C-1,2,3,4,7,8-HxCDF	IS	57.4	26 - 152		16-Apr-25 03:12	1
13C-1,2,3,6,7,8-HxCDF	IS	58.1	26 - 123		16-Apr-25 03:12	1
13C-2,3,4,6,7,8-HxCDF	IS	57.7	28 - 136		16-Apr-25 03:12	1
13C-1,2,3,7,8,9-HxCDF	IS	60.4	29 - 147		16-Apr-25 03:12	1
13C-1,2,3,4,6,7,8-HpCDF	IS	55.2	28 - 143		16-Apr-25 03:12	1
13C-1,2,3,4,7,8,9-HpCDF	IS	57.4	26 - 138		16-Apr-25 03:12	1
13C-OCDF	IS	42.8	17 - 157		16-Apr-25 03:12	1
37Cl-2,3,7,8-TCDD	CRS	86.5	35 - 197		16-Apr-25 03:12	1

EDL - Sample specific estimated detection limit

EMPC - Estimated maximum possible concentration

Sample ID: MW-3S
EPA Method 1613B
Client Data

Name: OnSite Environmental Inc.
 Project: 553-8472-006
 Matrix: Water
 Date Collected: 31-Mar-25 14:24

Laboratory Data

Lab Sample: 2504028-02 Date Received: 04-Apr-25 07:55
 QC Batch: B25D112 Date Extracted: 09-Apr-25
 Sample Size: 1.04 L Column: ZB-DIOXIN

Analyte	Conc. (pg/L)	EDL	EMPC	Qualifiers	Analyzed	Dilution
2,3,7,8-TCDD	ND	1.17			16-Apr-25 03:57	1
1,2,3,7,8-PeCDD	ND	2.10			16-Apr-25 03:57	1
1,2,3,4,7,8-HxCDD	ND	2.33			16-Apr-25 03:57	1
1,2,3,6,7,8-HxCDD	ND	2.59			16-Apr-25 03:57	1
1,2,3,7,8,9-HxCDD	ND	2.40			16-Apr-25 03:57	1
1,2,3,4,6,7,8-HpCDD	ND	2.49			16-Apr-25 03:57	1
OCDD	ND	6.93			16-Apr-25 03:57	1
2,3,7,8-TCDF	ND	0.619			16-Apr-25 03:57	1
1,2,3,7,8-PeCDF	ND	1.42			16-Apr-25 03:57	1
2,3,4,7,8-PeCDF	ND	0.709			16-Apr-25 03:57	1
1,2,3,4,7,8-HxCDF	ND	0.502			16-Apr-25 03:57	1
1,2,3,6,7,8-HxCDF	ND	0.475			16-Apr-25 03:57	1
2,3,4,6,7,8-HxCDF	ND	0.565			16-Apr-25 03:57	1
1,2,3,7,8,9-HxCDF	ND	0.624			16-Apr-25 03:57	1
1,2,3,4,6,7,8-HpCDF	ND	0.279			16-Apr-25 03:57	1
1,2,3,4,7,8,9-HpCDF	ND	0.416			16-Apr-25 03:57	1
OCDF	ND	2.27			16-Apr-25 03:57	1

Toxic Equivalent

TEQMinWHO2005Dioxin 0.00

Totals

Total TCDD	ND	1.17
Total PeCDD	ND	2.10
Total HxCDD	ND	2.59
Total HpCDD	ND	2.49
Total TCDF	ND	0.619
Total PeCDF	ND	1.42
Total HxCDF	ND	0.624
Total HpCDF	ND	0.416

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Analyzed	Dilution
13C-2,3,7,8-TCDD	IS	85.2	25 - 164		16-Apr-25 03:57	1
13C-1,2,3,7,8-PeCDD	IS	84.1	25 - 181		16-Apr-25 03:57	1
13C-1,2,3,4,7,8-HxCDD	IS	73.4	32 - 141		16-Apr-25 03:57	1
13C-1,2,3,6,7,8-HxCDD	IS	72.7	28 - 130		16-Apr-25 03:57	1
13C-1,2,3,7,8,9-HxCDD	IS	70.0	32 - 141		16-Apr-25 03:57	1
13C-1,2,3,4,6,7,8-HpCDD	IS	71.4	23 - 140		16-Apr-25 03:57	1
13C-OCDD	IS	61.3	17 - 157		16-Apr-25 03:57	1
13C-2,3,7,8-TCDF	IS	80.5	24 - 169		16-Apr-25 03:57	1
13C-1,2,3,7,8-PeCDF	IS	51.9	24 - 185		16-Apr-25 03:57	1
13C-2,3,4,7,8-PeCDF	IS	83.6	21 - 178		16-Apr-25 03:57	1
13C-1,2,3,4,7,8-HxCDF	IS	71.9	26 - 152		16-Apr-25 03:57	1
13C-1,2,3,6,7,8-HxCDF	IS	71.4	26 - 123		16-Apr-25 03:57	1
13C-2,3,4,6,7,8-HxCDF	IS	71.4	28 - 136		16-Apr-25 03:57	1
13C-1,2,3,7,8,9-HxCDF	IS	72.1	29 - 147		16-Apr-25 03:57	1
13C-1,2,3,4,6,7,8-HpCDF	IS	71.6	28 - 143		16-Apr-25 03:57	1
13C-1,2,3,4,7,8,9-HpCDF	IS	75.5	26 - 138		16-Apr-25 03:57	1
13C-OCDF	IS	66.5	17 - 157		16-Apr-25 03:57	1
37Cl-2,3,7,8-TCDD	CRS	111	35 - 197		16-Apr-25 03:57	1

EDL - Sample specific estimated detection limit

EMPC - Estimated maximum possible concentration

Sample ID: MW-4S
EPA Method 1613B
Client Data

Name: OnSite Environmental Inc.
 Project: 553-8472-006
 Matrix: Water
 Date Collected: 01-Apr-25 09:55

Laboratory Data

Lab Sample: 2504028-03 Date Received: 04-Apr-25 07:55
 QC Batch: B25D112 Date Extracted: 09-Apr-25
 Sample Size: 1.04 L Column: ZB-DIOXIN

Analyte	Conc. (pg/L)	EDL	EMPC	Qualifiers	Analyzed	Dilution
2,3,7,8-TCDD	ND	0.846			16-Apr-25 04:42	1
1,2,3,7,8-PeCDD	ND	1.44			16-Apr-25 04:42	1
1,2,3,4,7,8-HxCDD	ND	2.33			16-Apr-25 04:42	1
1,2,3,6,7,8-HxCDD	ND	2.60			16-Apr-25 04:42	1
1,2,3,7,8,9-HxCDD	ND	2.57			16-Apr-25 04:42	1
1,2,3,4,6,7,8-HpCDD	ND	2.47			16-Apr-25 04:42	1
OCDD	ND	12.7			16-Apr-25 04:42	1
2,3,7,8-TCDF	ND	0.789			16-Apr-25 04:42	1
1,2,3,7,8-PeCDF	ND	0.647			16-Apr-25 04:42	1
2,3,4,7,8-PeCDF	ND	0.639			16-Apr-25 04:42	1
1,2,3,4,7,8-HxCDF	ND	0.515			16-Apr-25 04:42	1
1,2,3,6,7,8-HxCDF	ND	0.497			16-Apr-25 04:42	1
2,3,4,6,7,8-HxCDF	ND	0.575			16-Apr-25 04:42	1
1,2,3,7,8,9-HxCDF	ND	0.720			16-Apr-25 04:42	1
1,2,3,4,6,7,8-HpCDF	ND	0.763			16-Apr-25 04:42	1
1,2,3,4,7,8,9-HpCDF	ND	0.942			16-Apr-25 04:42	1
OCDF	ND	1.98			16-Apr-25 04:42	1

Toxic Equivalent

TEQMinWHO2005Dioxin 0.00

Totals

Total TCDD	ND	0.846
Total PeCDD	ND	1.44
Total HxCDD	ND	2.60
Total HpCDD	ND	2.47
Total TCDF	ND	0.789
Total PeCDF	ND	0.647
Total HxCDF	ND	0.720
Total HpCDF	ND	0.942

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Analyzed	Dilution
13C-2,3,7,8-TCDD	IS	62.7	25 - 164		16-Apr-25 04:42	1
13C-1,2,3,7,8-PeCDD	IS	54.8	25 - 181		16-Apr-25 04:42	1
13C-1,2,3,4,7,8-HxCDD	IS	57.0	32 - 141		16-Apr-25 04:42	1
13C-1,2,3,6,7,8-HxCDD	IS	57.3	28 - 130		16-Apr-25 04:42	1
13C-1,2,3,7,8,9-HxCDD	IS	53.7	32 - 141		16-Apr-25 04:42	1
13C-1,2,3,4,6,7,8-HpCDD	IS	50.1	23 - 140		16-Apr-25 04:42	1
13C-OCDD	IS	37.5	17 - 157		16-Apr-25 04:42	1
13C-2,3,7,8-TCDF	IS	65.9	24 - 169		16-Apr-25 04:42	1
13C-1,2,3,7,8-PeCDF	IS	66.2	24 - 185		16-Apr-25 04:42	1
13C-2,3,4,7,8-PeCDF	IS	61.7	21 - 178		16-Apr-25 04:42	1
13C-1,2,3,4,7,8-HxCDF	IS	57.8	26 - 152		16-Apr-25 04:42	1
13C-1,2,3,6,7,8-HxCDF	IS	56.6	26 - 123		16-Apr-25 04:42	1
13C-2,3,4,6,7,8-HxCDF	IS	56.6	28 - 136		16-Apr-25 04:42	1
13C-1,2,3,7,8,9-HxCDF	IS	58.7	29 - 147		16-Apr-25 04:42	1
13C-1,2,3,4,6,7,8-HpCDF	IS	50.0	28 - 143		16-Apr-25 04:42	1
13C-1,2,3,4,7,8,9-HpCDF	IS	57.7	26 - 138		16-Apr-25 04:42	1
13C-OCDF	IS	40.0	17 - 157		16-Apr-25 04:42	1
37Cl-2,3,7,8-TCDD	CRS	85.7	35 - 197		16-Apr-25 04:42	1

EDL - Sample specific estimated detection limit

EMPC - Estimated maximum possible concentration

Sample ID: MW-5S
EPA Method 1613B
Client Data

Name: OnSite Environmental Inc.
 Project: 553-8472-006
 Matrix: Water
 Date Collected: 31-Mar-25 12:23

Laboratory Data

Lab Sample: 2504028-04 Date Received: 04-Apr-25 07:55
 QC Batch: B25D112 Date Extracted: 09-Apr-25
 Sample Size: 1.05 L Column: ZB-DIOXIN

Analyte	Conc. (pg/L)	EDL	EMPC	Qualifiers	Analyzed	Dilution
2,3,7,8-TCDD	ND	1.88			16-Apr-25 05:27	1
1,2,3,7,8-PeCDD	ND	1.46			16-Apr-25 05:27	1
1,2,3,4,7,8-HxCDD	ND	3.20			16-Apr-25 05:27	1
1,2,3,6,7,8-HxCDD	ND	3.23			16-Apr-25 05:27	1
1,2,3,7,8,9-HxCDD	ND	3.51			16-Apr-25 05:27	1
1,2,3,4,6,7,8-HpCDD	ND	2.71			16-Apr-25 05:27	1
OCDD	ND	5.94			16-Apr-25 05:27	1
2,3,7,8-TCDF	ND	1.18			16-Apr-25 05:27	1
1,2,3,7,8-PeCDF	ND	4.30			16-Apr-25 05:27	1
2,3,4,7,8-PeCDF	ND	3.43			16-Apr-25 05:27	1
1,2,3,4,7,8-HxCDF	ND	1.36			16-Apr-25 05:27	1
1,2,3,6,7,8-HxCDF	ND	1.44			16-Apr-25 05:27	1
2,3,4,6,7,8-HxCDF	ND	1.72			16-Apr-25 05:27	1
1,2,3,7,8,9-HxCDF	ND	1.86			16-Apr-25 05:27	1
1,2,3,4,6,7,8-HpCDF	ND	0.708			16-Apr-25 05:27	1
1,2,3,4,7,8,9-HpCDF	ND	0.922			16-Apr-25 05:27	1
OCDF	ND	2.85			16-Apr-25 05:27	1

Toxic Equivalent

TEQMinWHO2005Dioxin 0.00

Totals

Total TCDD	ND	1.88	
Total PeCDD	ND	1.46	
Total HxCDD	ND	3.51	
Total HpCDD	ND	2.71	
Total TCDF	ND	1.18	
Total PeCDF	ND		6.88
Total HxCDF	ND	1.86	
Total HpCDF	ND	0.922	

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Analyzed	Dilution
13C-2,3,7,8-TCDD	IS	65.1	25 - 164		16-Apr-25 05:27	1
13C-1,2,3,7,8-PeCDD	IS	60.0	25 - 181		16-Apr-25 05:27	1
13C-1,2,3,4,7,8-HxCDD	IS	52.1	32 - 141		16-Apr-25 05:27	1
13C-1,2,3,6,7,8-HxCDD	IS	49.6	28 - 130		16-Apr-25 05:27	1
13C-1,2,3,7,8,9-HxCDD	IS	48.5	32 - 141		16-Apr-25 05:27	1
13C-1,2,3,4,6,7,8-HpCDD	IS	42.5	23 - 140		16-Apr-25 05:27	1
13C-OCDD	IS	32.9	17 - 157		16-Apr-25 05:27	1
13C-2,3,7,8-TCDF	IS	63.3	24 - 169		16-Apr-25 05:27	1
13C-1,2,3,7,8-PeCDF	IS	60.6	24 - 185		16-Apr-25 05:27	1
13C-2,3,4,7,8-PeCDF	IS	63.7	21 - 178		16-Apr-25 05:27	1
13C-1,2,3,4,7,8-HxCDF	IS	50.7	26 - 152		16-Apr-25 05:27	1
13C-1,2,3,6,7,8-HxCDF	IS	48.7	26 - 123		16-Apr-25 05:27	1
13C-2,3,4,6,7,8-HxCDF	IS	48.8	28 - 136		16-Apr-25 05:27	1
13C-1,2,3,7,8,9-HxCDF	IS	52.3	29 - 147		16-Apr-25 05:27	1
13C-1,2,3,4,6,7,8-HpCDF	IS	44.1	28 - 143		16-Apr-25 05:27	1
13C-1,2,3,4,7,8,9-HpCDF	IS	49.3	26 - 138		16-Apr-25 05:27	1
13C-OCDF	IS	34.5	17 - 157		16-Apr-25 05:27	1
37Cl-2,3,7,8-TCDD	CRS	97.4	35 - 197		16-Apr-25 05:27	1

EDL - Sample specific estimated detection limit

EMPC - Estimated maximum possible concentration

Sample ID: MW-6S
EPA Method 1613B
Client Data

Name: OnSite Environmental Inc.
 Project: 553-8472-006
 Matrix: Water
 Date Collected: 01-Apr-25 14:55

Laboratory Data

Lab Sample: 2504028-05 Date Received: 04-Apr-25 07:55
 QC Batch: B25D112 Date Extracted: 09-Apr-25
 Sample Size: 1.03 L Column: ZB-DIOXIN

Analyte	Conc. (pg/L)	EDL	EMPC	Qualifiers	Analyzed	Dilution
2,3,7,8-TCDD	ND	1.07			18-Apr-25 01:30	1
1,2,3,7,8-PeCDD	ND	1.71			18-Apr-25 01:30	1
1,2,3,4,7,8-HxCDD	ND	2.22			18-Apr-25 01:30	1
1,2,3,6,7,8-HxCDD	ND	2.40			18-Apr-25 01:30	1
1,2,3,7,8,9-HxCDD	ND	2.47			18-Apr-25 01:30	1
1,2,3,4,6,7,8-HpCDD	ND	3.31			18-Apr-25 01:30	1
OCDD	ND	5.61			18-Apr-25 01:30	1
2,3,7,8-TCDF	ND	1.01			18-Apr-25 01:30	1
1,2,3,7,8-PeCDF	ND	0.805			18-Apr-25 01:30	1
2,3,4,7,8-PeCDF	ND	0.791			18-Apr-25 01:30	1
1,2,3,4,7,8-HxCDF	ND	0.725			18-Apr-25 01:30	1
1,2,3,6,7,8-HxCDF	ND	0.703			18-Apr-25 01:30	1
2,3,4,6,7,8-HxCDF	ND	0.867			18-Apr-25 01:30	1
1,2,3,7,8,9-HxCDF	ND	1.05			18-Apr-25 01:30	1
1,2,3,4,6,7,8-HpCDF	ND	0.712			18-Apr-25 01:30	1
1,2,3,4,7,8,9-HpCDF	ND	0.886			18-Apr-25 01:30	1
OCDF	ND	2.49			18-Apr-25 01:30	1

Toxic Equivalent

TEQMinWHO2005Dioxin 0.00

Totals

Total TCDD	ND	1.07
Total PeCDD	ND	1.71
Total HxCDD	ND	2.47
Total HpCDD	ND	3.31
Total TCDF	ND	1.01
Total PeCDF	ND	0.805
Total HxCDF	ND	1.05
Total HpCDF	ND	0.886

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Analyzed	Dilution
13C-2,3,7,8-TCDD	IS	68.0	25 - 164		18-Apr-25 01:30	1
13C-1,2,3,7,8-PeCDD	IS	64.0	25 - 181		18-Apr-25 01:30	1
13C-1,2,3,4,7,8-HxCDD	IS	56.5	32 - 141		18-Apr-25 01:30	1
13C-1,2,3,6,7,8-HxCDD	IS	55.1	28 - 130		18-Apr-25 01:30	1
13C-1,2,3,7,8,9-HxCDD	IS	49.8	32 - 141		18-Apr-25 01:30	1
13C-1,2,3,4,6,7,8-HpCDD	IS	46.3	23 - 140		18-Apr-25 01:30	1
13C-OCDD	IS	38.2	17 - 157		18-Apr-25 01:30	1
13C-2,3,7,8-TCDF	IS	68.6	24 - 169		18-Apr-25 01:30	1
13C-1,2,3,7,8-PeCDF	IS	64.6	24 - 185		18-Apr-25 01:30	1
13C-2,3,4,7,8-PeCDF	IS	66.0	21 - 178		18-Apr-25 01:30	1
13C-1,2,3,4,7,8-HxCDF	IS	56.9	26 - 152		18-Apr-25 01:30	1
13C-1,2,3,6,7,8-HxCDF	IS	57.6	26 - 123		18-Apr-25 01:30	1
13C-2,3,4,6,7,8-HxCDF	IS	54.3	28 - 136		18-Apr-25 01:30	1
13C-1,2,3,7,8,9-HxCDF	IS	55.9	29 - 147		18-Apr-25 01:30	1
13C-1,2,3,4,6,7,8-HpCDF	IS	49.7	28 - 143		18-Apr-25 01:30	1
13C-1,2,3,4,7,8,9-HpCDF	IS	56.5	26 - 138		18-Apr-25 01:30	1
13C-OCDF	IS	41.7	17 - 157		18-Apr-25 01:30	1
37Cl-2,3,7,8-TCDD	CRS	88.9	35 - 197		18-Apr-25 01:30	1

EDL - Sample specific estimated detection limit

EMPC - Estimated maximum possible concentration

Sample ID: MW-13S
EPA Method 1613B
Client Data

Name: OnSite Environmental Inc.
 Project: 553-8472-006
 Matrix: Water
 Date Collected: 01-Apr-25 09:00

Laboratory Data

Lab Sample: 2504028-06 Date Received: 04-Apr-25 07:55
 QC Batch: B25D112 Date Extracted: 09-Apr-25
 Sample Size: 1.01 L Column: ZB-DIOXIN

Analyte	Conc. (pg/L)	EDL	EMPC	Qualifiers	Analyzed	Dilution
2,3,7,8-TCDD	ND	1.24			16-Apr-25 06:58	1
1,2,3,7,8-PeCDD	ND	1.90			16-Apr-25 06:58	1
1,2,3,4,7,8-HxCDD	ND	1.40			16-Apr-25 06:58	1
1,2,3,6,7,8-HxCDD	ND	1.39			16-Apr-25 06:58	1
1,2,3,7,8,9-HxCDD	ND	1.48			16-Apr-25 06:58	1
1,2,3,4,6,7,8-HpCDD	ND	1.80			16-Apr-25 06:58	1
OCDD	ND	4.25			16-Apr-25 06:58	1
2,3,7,8-TCDF	ND	0.653			16-Apr-25 06:58	1
1,2,3,7,8-PeCDF	ND	0.686			16-Apr-25 06:58	1
2,3,4,7,8-PeCDF	ND	0.569			16-Apr-25 06:58	1
1,2,3,4,7,8-HxCDF	ND	0.578			16-Apr-25 06:58	1
1,2,3,6,7,8-HxCDF	ND	0.552			16-Apr-25 06:58	1
2,3,4,6,7,8-HxCDF	ND	0.658			16-Apr-25 06:58	1
1,2,3,7,8,9-HxCDF	ND	0.752			16-Apr-25 06:58	1
1,2,3,4,6,7,8-HpCDF	ND	0.373			16-Apr-25 06:58	1
1,2,3,4,7,8,9-HpCDF	ND	0.483			16-Apr-25 06:58	1
OCDF	ND	1.79			16-Apr-25 06:58	1

Toxic Equivalent

TEQMinWHO2005Dioxin 0.00

Totals

Total TCDD	ND	1.24
Total PeCDD	ND	1.90
Total HxCDD	ND	1.48
Total HpCDD	ND	1.80
Total TCDF	ND	0.653
Total PeCDF	ND	0.686
Total HxCDF	ND	0.752
Total HpCDF	ND	0.483

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Analyzed	Dilution
13C-2,3,7,8-TCDD	IS	73.8	25 - 164		16-Apr-25 06:58	1
13C-1,2,3,7,8-PeCDD	IS	74.0	25 - 181		16-Apr-25 06:58	1
13C-1,2,3,4,7,8-HxCDD	IS	66.4	32 - 141		16-Apr-25 06:58	1
13C-1,2,3,6,7,8-HxCDD	IS	66.5	28 - 130		16-Apr-25 06:58	1
13C-1,2,3,7,8,9-HxCDD	IS	64.4	32 - 141		16-Apr-25 06:58	1
13C-1,2,3,4,6,7,8-HpCDD	IS	63.7	23 - 140		16-Apr-25 06:58	1
13C-OCDD	IS	53.5	17 - 157		16-Apr-25 06:58	1
13C-2,3,7,8-TCDF	IS	74.2	24 - 169		16-Apr-25 06:58	1
13C-1,2,3,7,8-PeCDF	IS	72.6	24 - 185		16-Apr-25 06:58	1
13C-2,3,4,7,8-PeCDF	IS	73.5	21 - 178		16-Apr-25 06:58	1
13C-1,2,3,4,7,8-HxCDF	IS	65.8	26 - 152		16-Apr-25 06:58	1
13C-1,2,3,6,7,8-HxCDF	IS	65.6	26 - 123		16-Apr-25 06:58	1
13C-2,3,4,6,7,8-HxCDF	IS	61.4	28 - 136		16-Apr-25 06:58	1
13C-1,2,3,7,8,9-HxCDF	IS	66.7	29 - 147		16-Apr-25 06:58	1
13C-1,2,3,4,6,7,8-HpCDF	IS	64.2	28 - 143		16-Apr-25 06:58	1
13C-1,2,3,4,7,8,9-HpCDF	IS	66.1	26 - 138		16-Apr-25 06:58	1
13C-OCDF	IS	55.6	17 - 157		16-Apr-25 06:58	1
37Cl-2,3,7,8-TCDD	CRS	88.2	35 - 197		16-Apr-25 06:58	1

EDL - Sample specific estimated detection limit

EMPC - Estimated maximum possible concentration

DATA QUALIFIERS & ABBREVIATIONS

B	This compound was also detected in the method blank
Conc.	Concentration
CRS	Cleanup Recovery Standard
D	Dilution
DL	Detection Limit
E	The associated compound concentration exceeded the calibration range of the instrument
EDL	Estimated Detection Limit
EMPC	Estimated Maximum Possible Concentration
H	Recovery and/or RPD was outside laboratory acceptance limits
I	Chemical Interference
IS	Internal Standard
J	The amount detected is below the Reporting Limit/LOQ
LOD	Limit of Detection
LOQ	Limit of Quantitation
MDL	Method Detection Limit
NA	Not applicable
ND	Not Detected
OPR	Ongoing Precision and Recovery sample
P	The reported concentration may include contribution from chlorinated diphenyl ether(s).
Q	The ion transition ratio is outside of the acceptance criteria.
RL	Reporting Limit
RL	For 537.1, the reported RLs are the MRLs.
TEQ	Toxic Equivalency, sum of the toxic equivalency factors (TEF) multiplied by the sample concentrations.
TEQMax	TEQ calculation that uses the detection limit as the concentration for non-detects
TEQMin	TEQ calculation that uses zero as the concentration for non-detects
TEQRisk	TEQ calculation that uses ½ the detection limit as the concentration for non-detects
U	Not Detected (specific projects only)
*	See Cover Letter

Unless otherwise noted, solid sample results are reported in dry weight. Tissue samples are reported in wet weight.

Enthalpy Analytical - EDH Certifications

Accrediting Authority	Certificate Number
Alaska Department of Environmental Conservation	17-013
Arkansas Department of Environmental Quality	21-023-0
California Department of Health – ELAP	2892
DoD ELAP - A2LA Accredited - ISO/IEC 17025	3091.01
Florida Department of Health	E87777
Hawaii Department of Health	N/A
Louisiana Department of Environmental Quality	01977
Maine Department of Health	2020018
Michigan Department of Environmental Quality	9932
Minnesota Department of Health	2211390
Nevada Division of Environmental Protection	CA00413
New Hampshire Environmental Accreditation Program	207721
New Jersey Department of Environmental Protection	CA003
New York Department of Health	11411
Ohio Environmental Protection Agency	87778
Oregon Laboratory Accreditation Program	4042-021
Texas Commission on Environmental Quality	T104704189-22-13
Vermont Department of Health	VT-4042
Virginia Department of General Services	11276
Washington Department of Ecology	C584
Wisconsin Department of Natural Resources	998036160

Current certificates and lists of licensed parameters can be found at Enthalpy.com/Resources/Accreditations.



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

Laboratory: Enthalpy Analytical - El Dorado Hills

Attention: Jennifer Miller

Address: 1104 Windfield Way, El Dorado Hills, CA 95762

Phone Number: (916) 673-1520

Turnaround Request

1 Day 2 Day 3 Day

Standard

Other: _____

2504028 5.9'C

Laboratory Reference #: 04-035

Project Manager: David Baumeister

email: dbaumeister@onsite-env.com

Project Number: 553-8472-006

Project Name: _____

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	# of Cont.	Requested Analyses
	MW-2S	4/1/25	11:53	W	2	Dioxins/Furans
	MW-3S	3/31/25	14:24	W	2	Dioxins/Furans
	MW-4S	4/1/25	9:55	W	2	Dioxins/Furans
	MW-5S	3/31/25	12:23	W	2	Dioxins/Furans
	MW-6S	4/1/25	14:55	W	2	Dioxins/Furans
	MW-13S	4/1/25	9:00	W	2	Dioxins/Furans
Signature		Company		Date	Time	Comments/Special Instructions
Relinquished by:						
Received by: <i>Kay. Anta</i>		<i>Enthalpy EDH</i>		<i>04/04/25</i>	<i>07:55</i>	
Relinquished by:						
Received by:						
Relinquished by:						
Received by:						

CoC/Label Reconciliation Report WO# 2504028

LabNumber	CoC Sample ID	SampleAlias	Sample Date/Time	Container	BaseMatrix	Sample Comments
2504028-01	A MW-2S	☒	01-Apr-25 11:53	☒	Amber Glass NM Bottle, 1L	Aqueous
2504028-01	B MW-2S	☒	01-Apr-25 11:53	☒	Amber Glass NM Bottle, 1L	Aqueous
2504028-02	A MW-3S	☒	31-Mar-25 14:24	☒	Amber Glass NM Bottle, 1L	Aqueous
2504028-02	B MW-3S	☒	31-Mar-25 14:24	☒	Amber Glass NM Bottle, 1L	Aqueous
2504028-03	A MW-4S	☒	01-Apr-25 09:55	☒	Amber Glass NM Bottle, 1L	Aqueous
2504028-03	B MW-4S	☒	01-Apr-25 09:55	☒	Amber Glass NM Bottle, 1L	Aqueous
2504028-04	A MW-5S	☒	31-Mar-25 12:23	☒	Amber Glass NM Bottle, 1L	Aqueous
2504028-04	B MW-5S	☒	31-Mar-25 12:23	☒	Amber Glass NM Bottle, 1L	Aqueous
2504028-05	A MW-6S	☒	01-Apr-25 14:55	☒	Amber Glass NM Bottle, 1L	Aqueous
2504028-05	B MW-6S	☒	01-Apr-25 14:55	☒	Amber Glass NM Bottle, 1L	Aqueous
2504028-06	A MW-13S	☒	01-Apr-25 09:00	☒	Amber Glass NM Bottle, 1L	Aqueous
2504028-06	B MW-13S	☒	01-Apr-25 09:00	☒	Amber Glass NM Bottle, 1L	Aqueous

Checkmarks indicate that information on the COC reconciled with the sample label.

Any discrepancies are noted in the following columns.

CONDITION	Yes	No	NA
Sample Container Intact?	☒	☐	☐
Sample Container(s) Custody Seals Intact?	☐	☐	☒
Custody Seals On Cooler Intact?	☐	☐	☒
Adequate Sample Volume?	☒	☐	☐
Container Type Appropriate for Analysis(es)?	☒	☐	☐

Comments:

Ⓐ underlined part of sample date missing

Preservation Documented: Na2S2O3 Trizma NH4CH3CO2 None Other

Verified by/Date:

XAO 04/04/25
ja 04/04/25

Chain of Custody

Company: **Parametrix / DTG**

Project Number: **553-8472-006**

Project Name: **Rocky Top Environmental LPL**

Project Manager: **Laura Lee**

Sampled by: *Nygen & Burke*

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: 04-035

Lab ID		Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	VOCs (8260D - WAC 173-351 Appendix I)	Naphthalene, SIM-VC and 1,2-EDB	NWTPH-Gx	NWTPH-Dx	Tot Priority Pollutant Metals +Fe, Mn, Mg	Total Metals (Fe, Mn, Mg)	Dis. Priority Pollutant Metals +Fe, Mn, Mg, Ca, K, Na	Dissolved Metals (Fe, Mn, Mg, Ca, K, Na)	chloride, sulfate	TDS, Alkalinity, Bicarbonate	Ammonia	TOC	PFAS	Dioxins and Furans	Nitrates (Anatek) - 5	% Moisture	
1	MW-2S		4/1	153	W(H ₂ O)	18	X	X	X	X		X		X	X	X	X	X	X	X			
2	MW-3S		3/31	1424		18	X	X	X	X		X		X	X	X	X	X	X	X			
3	MW-4S		4/1	955		18	X	X	X	X		X		X	X	X	X	X	X	X			
4	MW-5S / MW-5S MS/MSD		3/31	1223		26	X	X	X	X		X		X	X	X	X	X	X	X			
5	MW-6S		4/1	1455		18	X	X	X	X		X		X	X	X	X	X	X	X			
6	MW-13S		4/1	900		18	X	X	X	X		X		X	X	X	X	X	X	X			
7	MW-7D		3/31	1205		9 ⁸ ₁₀	X				X		X	X	X	X	X				X		
8	MW-8D		4/1	1326		9 ⁸ ₁₀	X				X		X	X	X	X	X				X		
9	MW-9D		3/31	1425		9 ⁸ ₁₀	X				X		X	X	X	X	X				X		
10	MW-10D		3/31	1025		9 ⁸ ₁₀	X				X		X	X	X	X	X				X		
11	Trip Blank		4/1			12	X																

Relinquished	Signature	Company	Date	Time	Comments/Special Instructions
Received	<i>[Signature]</i>	Parametrix	4/2/25	1349	
Relinquished		OSE	4/2/25	1349	
Received					
Relinquished					
Received					
Reviewed/Date		Reviewed/Date			

Attachment C

Data Validation Memorandum

DATE: June 6, 2025
TO: Project File
FROM: Chris Bourgeois
SUBJECT: First Quarter 2025 (B) Data Quality Evaluation
CC: Lisa Gilbert
PROJECT NUMBER: 553-8472-009
PROJECT NAME: DTG Yakima Limited Purpose Landfill

A data quality evaluation was conducted for the First Quarter 2025 (B) sampling event at the DTG Yakima Limited Purpose Landfill (LPL). Samples were collected on March 25, and on March 31 and April 1, 2025 during a subsequent mobilization by Parametrix under contract to DTG. Samples were submitted to OnSite Environmental and Anatek Labs, which performed Nitrate analyses under subcontract to OnSite. A subset of the samples collected on March 31 and April 1 were additionally analyzed for dioxins and furans by Entropy Analytical and PFAS by ALS Environmental, both under subcontract to OnSite. The results were reported under two separate OnSite work orders:

- Work Order 2503-357: (Leachate, collected March 25, 2025)
 - Anatek Work Order YFC0620 (Nitrates by Hach 10206)
- Work Order 2504-035: (MW-2S, MW-3S, MW-4S, MW-5S, MS-6S, MW-7D, MW-8D, MW-9D, MW-10D, MW-13S, trip blank, collected March 31 and April 1, 2025)
 - Anatek Work Order YFD0004 (Nitrates by Hach 10206)
 - Anatek Work Order YFD0072 (Nitrates by Hach 10206)
 - Enthalpy Work Order 2504028 (Dioxins and Furans by EPA Method 1613B)
 - ALS Environmental Service Request K2503482 (PFAS by Draft EPA Method 1633)

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-6S. Extra sample volume was collected from well MW-5S for matrix spike/matrix spike duplicate (MS/MSD) QC analyses.

Field Narrative

Groundwater sampling field data sheets were provided by Parametrix.

Laboratory Case Narrative

Samples collected on March 25, 2025 were received by the laboratories (OnSite and Anatek) on March 26, 2025. Samples collected on March 31 and April 1, 2025 were received by Anatek on April 1, 2025 and OnSite on April 2, 2025. All samples were maintained at a temperature of 2 to 6 degrees Celsius by the laboratories.



Work Order 2503-357

Volatiles - EPA Method 8260D/SIM.

The surrogate percent recoveries were within control limits.

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

The spike blank and spike blank duplicate recoveries and relative percent differences (RPDs) were within control limits, except for percent recovery of Dibromochloromethane in the spike blank duplicate (low; 67, outside the 81-131 limit), and the associated Dibromochloromethane spike blank/spike blank duplicate RPD (45%; above the 15% limit). The lab flagged the spike blank and spike blank duplicate analysis for Dibromochloromethane "I,L" to reflect the recovery and RPD results outside of control limits. The method allows for a percentage of the compounds to fall outside of the control limits due to the large number of analytes being spiked, therefore no data were qualified.

The MS recoveries and relative percent differences (RPDs) were within control limits.

Total Metals (EPA Method 6010D).

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

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

The duplicate RPDs were within control limits.

The MS recoveries and relative percent differences (RPDs) were within advisory control limits.

Wet Chemistry

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

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

The duplicate RPDs were within control limits.

The MS (if required) and spike blank recoveries and RPDs were within control limits.

Nitrates - Hach 10206

The laboratory did not note any problems with quality control.

Work Order 2504-035

Volatiles - EPA Method 8260D/SIM.

No VOCs were detected in the trip blank.

The surrogate percent recoveries were within control limits.

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

The trip blanks were clean at the reporting limits.

The spike blank recoveries and relative percent differences (RPDs) were within control limits.



The MS and spike blank recoveries and RPDs were within control limits, except for the MS/MSD RPD for Acetone and Methyl Isobutyl Ketone (18, above 17 limit; and 14, equal to 14 limit, respectively) and the MSD percent recovery for 1,2,3-Trichloropropane and 1,2-Dichlorobenzene (high; 127, outside limit of 61-125; and high; 129, outside limit of 79-127, respectively). The lab flagged the MS/MSD RPD exceedances "W" and the MSD percent recovery exceedances as "V", citing matrix effects for the exceedances. None of the flagged analytes were detected in the associated samples, therefore no data were qualified.

Total Petroleum Hydrocarbons (NWTPH-Gx and Dx)

The surrogate percent recoveries were within control limits.

The MS and MSD (if required) recoveries and RPDs were within control limits.

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

The duplicate RPDs were within control limits.

Total and Dissolved Metals (EPA Method 200.8/6010D/7470A).

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

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

The duplicate RPDs were within control limits.

The MS recoveries and relative percent differences (RPDs) were within advisory control limits.

Wet Chemistry

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

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

The MS (if required) and spike blank recoveries and RPDs were within control limits.

PFAS (Draft EPA Method 1633)

The surrogate percent recoveries were within control limits.

The spike blank and spike blank duplicate recoveries and relative percent differences (RPDs) were within control limits.

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

Several analytes were detected at concentrations above the MDL but below the MRL, and were therefore J-flagged as estimated values by the laboratory. J-flagged detections include:

- Perfluorohexane sulfonic acid (PFHxS): MW-3S; MW-4S; MW-6S; MW-13S (MW-6S DUP)
- Perfluorooctane sulfonic acid (PFOS): MW-3S
- Perfluoropentane sulfonic acid (PFPeS): MW-3S; MW-6S; MW-13S (MW-6S DUP)
- Perfluorobutane sulfonic acid (PFBS): MW-4S
- Perfluorohexane sulfonic acid (PFHxS): MW-3S; MW-4S; MW-6S; MW-13S (MW-6S DUP)



- Perfluorooctanoic acid (PFOA): MW-4S
- Perfluoroheptanoic acid (PFHpA): MW-5S
- Perfluorohexanoic acid (PFHxA): MW-6S

The upper control criterion was exceeded for one or more analytes in several Continuing Calibration Verifications (CCVs). The field samples analyzed in this sequence did not contain the analyte in question. Since the apparent problem indicated a potential high bias, the data quality was not affected. No further corrective action was required and no sample data were qualified.

The control criteria were exceeded for one or more isotopes in several Continuing Calibration Verifications (CCVs). The recovery of the associated native analyte was within control criteria, which indicated the analysis was in control, or were biased high, as noted above. No further corrective action was appropriate and no sample data were qualified.

Manual integration of one or more chromatographic peaks in multiple samples was required to correct the integration performed by the automated data processing program. The manual integration was performed in accordance with ALS policy, which is consistent with the National Environmental Laboratory Accreditation Program (NELAP), Department of Defense (DOD), and other certifying agencies. No sample data were qualified.

The results reported for n-Methylperfluorooctane sulfonamide (MeFOSA) in Low Level Lab Control Sample (LCS_LL) KQ2505161-07 may contain a bias. The ion ratio criteria were not met. The failing ratio may indicate a bias to the results in the associated samples. The analyte in question was not detected in the associated field samples. The data quality was not significantly affected. The LCS_LL results were flagged with "I" to indicate the issue. No sample data were qualified.

Total Suspended Solids (SM 2540D)

The spike blank recovery was within control limits.

Nitrates (Hach 10206)

The laboratory did not note any problems with quality control (both Anatek work orders).

Dioxins/Furans EPA Method 1613B

The samples were extracted and analyzed within the method hold times.

The Initial Calibration and Continuing Calibration Verifications met the method acceptance criteria.

A Method Blank and Ongoing Precision and Recovery (OPR) sample were extracted and analyzed with the preparation batch. No analytes were detected above the sample quantitation limit in the Method Blank. The OPR recoveries were within the method acceptance criteria.

Labeled standard recoveries for all QC and field samples were within method acceptance criteria.

Several analytes were detected at concentrations above the MDL but below the MRL, and were therefore J-flagged as estimated values by the laboratory. J-flagged detections include 1,2,3,4,6,7,8-HpCDF, OCDF, and Total HpCDF in sample MW-2S.

Field Duplicate Evaluation

Relative Percent Differences (RPDs) were calculated for the results of sample MW-6S and duplicate MW-13S. Field Duplicate Relative Percent Difference Calculations are included in Attachment A.



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

Data Qualification

Several analytes were detected at concentrations above the MDL but below the MRL, and were therefore J-flagged as estimated values by the laboratory. J-flagged detections include:

- Perfluorohexane sulfonic acid (PFHxS): MW-3S; MW-4S; MW-6S; MW-13S (MW-6S DUP)
- Perfluorooctane sulfonic acid (PFOS): MW-3S
- Perfluoropentane sulfonic acid (PFPeS): MW-3S; MW-6S; MW-13S (MW-6S DUP)
- Perfluorobutane sulfonic acid (PFBS): MW-4S
- Perfluorohexane sulfonic acid (PFHxS): MW-3S; MW-4S; MW-6S; MW-13S (MW-6S DUP)
- Perfluorooctanoic acid (PFOA): MW-4S
- Perfluoroheptanoic acid (PFHpA): MW-5S
- Perfluorohexanoic acid (PFHxA): MW-6S
- 1,2,3,4,6,7,8-HpCDF: MW-2S
- HpCDF: MW-2S
- Total HpCDF: MW-2S



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

First Quarter 2025 (B) Field
Duplicate Relative Percent
Difference Calculations

Rocky Top Environmental LPL Field Duplicate Relative Percent Difference Calculations
553-8472-009

First Quarter (B) 2025

Sample Dates:3/31/2025, 4/1/2025 (Leachate Sample collected 3/25/2025 under OnSite Environmental work order 2503-357)

Sample numbers:On-Site Environmental 2504-035: MW-2S, MW-3S, MW-4S, MW-5S, MW-6S, MW-7D, MW-8D, MW-9D, MW-10D, MW-13S (MW-6S DUP), Trip Blank
Enthalpy Analytical 2504028: MW-2S, MW-3S, MW-4S, MW-5S, MW-6S, MW-13S (MW-6S DUP)
ALS Environmental K2503482: MW-2S, MW-3S, MW-4S, MW-5S, MW-6S, MW-13S MW-13S (MW-6S DUP)
Anatek Labs YFD0004: MW-3S, MW-5S, MW-7D, MW-9D, MW-10D, MW-13S (MW-6S DUP)
Anatek Labs YFD0072: MW-2S, MW-4S, MW-6S, MW-8D, MW-13S (MW-6S DUP)

DUP MW-13S collected at MW-6S

Completed by: Chris Bourgeois5/6/2025

Groundwater	sample	duplicate	avg	diff	RPD	=/<30%?	PQL/LOQ	¹ _{w/in} PQL/LOQ?
units = mg/L	MW-6S	MW-13S						
Antimony, Total	<0.0056	<0.0056	n/a	n/a	n/a		0.006	y
Arsenic, Total	<0.0033	<0.0033	n/a	n/a	n/a		0.0033	y
Beryllium, Total	<0.011	<0.011	n/a	n/a	n/a		0.011	y
Cadmium, Total	<0.0044	<0.0044	n/a	n/a	n/a		0.0044	y
Chromium, Total	<0.011	<0.011	n/a	n/a	n/a		0.011	y
Copper, Total	<0.011	<0.011	n/a	n/a	n/a		0.011	y
Iron, Total	<0.056	<0.056	n/a	n/a	n/a		0.056	y
Lead, Total	<0.0011	<0.056	n/a	n/a	n/a		0.0011	y
Magnesium, Total	29	30	29.50	-1	3.4	y	1.1	
Manganese, Total	0.018	0.020	0.02	-0.002	10.5	y	0.011	
Mercury, Total	<0.00050	<0.00050	n/a	n/a	n/a		0.0005	y
Nickel, Total	<0.022	<0.022	n/a	n/a	n/a		0.022	y
Selenium, Total	<0.0056	<0.0056	n/a	n/a	n/a		0.0056	y
Silver, Total	<0.011	<0.011	n/a	n/a	n/a		0.011	y
Thallium, Total	<0.0056	<0.0056	n/a	n/a	n/a		0.0056	y
Zinc, Total	<0.028	<0.028	n/a	n/a	n/a		0.028	y
Antimony, Dissolved	<0.0050	<0.0050	n/a	n/a	n/a		0.0050	y
Arsenic, Dissolved	<0.0030	<0.0030	n/a	n/a	n/a		0.0030	y
Beryllium, Dissolved	<0.010	<0.010	n/a	n/a	n/a		0.010	y
Cadmium, Dissolved	<0.0040	<0.0040	n/a	n/a	n/a		0.0040	y
Calcium, Dissolved	48	48	48.00	0	0.0	y	1.1	
Chromium, Dissolved	<0.010	<0.010	n/a	n/a	n/a		0.010	y
Copper, Dissolved	<0.010	<0.010	n/a	n/a	n/a		0.010	y
Iron, Dissolved	<0.056	<0.056	n/a	n/a	n/a		0.056	y
Lead, Dissolved	<0.0010	<0.0010	n/a	n/a	n/a		0.0010	
Magnesium, Dissolved	32	32	32.00	0	0.0	y	1.1	
Manganese, Dissolved	<0.011	<0.011	n/a	n/a	n/a		0.011	y
Mercury, Dissolved	<0.00050	<0.00050	n/a	n/a	n/a		0.00050	y
Nickel, Dissolved	<0.020	<0.020	n/a	n/a	n/a		0.020	y
Potassium, Dissolved	3.9	4.2	4.05	-0.3	7.4	y	1.1	
Selenium, Dissolved	<0.0050	<0.0050	n/a	n/a	n/a		0.0050	y
Silver, Dissolved	<0.010	<0.010	n/a	n/a	n/a		0.010	y
Sodium, Dissolved	18	18	18.00	0	0.0	y	1.1	
Thallium, Dissolved	<0.0050	<0.0050	n/a	n/a	n/a		0.0050	y
Zinc, Dissolved	<0.025	<0.025	n/a	n/a	n/a		0.025	y
Nitrate	11.3	11.6	11.45	-0.3	2.6	y	0.200	
Chloride	62	64	63.00	-2	3.2	y	2.0	
Sulfate	51	54	52.50	-3	5.7	y	20	
TDS	390	430	410.00	-40	9.8	y	13	
Alkalinity	86	86	86.00	0	0.0	y	2.0	
Bicarbonate	86	86	86.00	0	0.0	y	2.0	
Ammonia	<0.053	<0.053	n/a	n/a	n/a		0.053	y
TOC	3.0	3.1	3.05	-0.1	3.3	y	1.0	
TPH-Gasoline (ug/L)	<100	<100	n/a	n/a	n/a		100	y
TPH-Diesel	<0.20	<0.21	n/a	n/a	n/a		0.20/0.21	y
TPH-Oil	<0.20	<0.21	n/a	n/a	n/a		0.20/0.21	y
VOCs	None detected							
units = ng/L								
Perfluorobutane sulfonic acid (PFBS)	6.3	6.9	6.6	-0.6	9.1	y	4.7/4.5	
Perfluoropentane sulfonic acid (PFPeS)	1.1	1.0	1.05	0.1	9.5	y	4.7/4.5	
Perfluorohexane sulfonic acid (PFHxS)	1.1	1.0	1.05	0.1	9.5	y	4.7/4.5	
Perfluoroheptane sulfonic acid (PFHpS)	<4.7	<4.5	n/a	n/a	n/a		4.7/4.5	y
Perfluorooctane sulfonic acid (PFOS)	<4.7	<4.5	n/a	n/a	n/a		4.7/4.5	y
Perfluorononane sulfonic acid (PFNS)	<4.7	<4.5	n/a	n/a	n/a		4.7/4.5	y
Perfluorodecane sulfonic acid (PFDS)	<4.7	<4.5	n/a	n/a	n/a		4.7/4.5	y
Perfluorododecane sulfonic acid (PFDoS)	<4.7	<4.5	n/a	n/a	n/a		4.7/4.5	y
Perfluorobutanoic acid (PFBA)	9.5	9.6	9.6	-0.1	1.0	y	4.7/4.5	
Perfluoropentanoic acid (PFPeA)	8.1	7.9	8.0	0.2	2.5	y	4.7/4.5	
Perfluoroheptanoic acid (PFHxA)	4.7	4.9	4.80	-0.2	4.2	y	4.7/4.5	
Perfluoroheptanoic acid (PFHpA)	<4.7	<4.5	n/a	n/a	n/a		4.7/4.5	y
Perfluorooctanoic acid (PFOA)	<4.7	<4.5	n/a	n/a	n/a		4.7/4.5	y
Perfluorononanoic acid (PFNA)	<4.7	<4.5	n/a	n/a	n/a		4.7/4.5	y
Perfluorodecanoic acid (PFDA)	<4.7	<4.5	n/a	n/a	n/a		4.7/4.5	y
Perfluoroundecanoic acid (PFUnDA)	<4.7	<4.5	n/a	n/a	n/a		4.7/4.5	y
Perfluorododecanoic acid (PFDOA)	<4.7	<4.5	n/a	n/a	n/a		4.7/4.5	y
Perfluorotridecanoic acid (PFTnDA)	<4.7	<4.5	n/a	n/a	n/a		4.7/4.5	y
Perfluorotetradecanoic acid (PFTDA)	<4.7	<4.5	n/a	n/a	n/a		4.7/4.5	y
Perfluorooctane sulfonamide (PFOSAm)	<4.7	<4.5	n/a	n/a	n/a		4.7/4.5	y
N-Methylperfluorooctane sulfonamide (MeFOSA)	<4.7	<4.5	n/a	n/a	n/a		4.7/4.5	y
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	<4.7	<4.5	n/a	n/a	n/a		4.7/4.5	y
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	<4.7	<4.5	n/a	n/a	n/a		4.7/4.5	y
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	<4.7	<4.5	n/a	n/a	n/a		4.7/4.5	y
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	<4.7	<4.5	n/a	n/a	n/a		4.7/4.5	y
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	<4.7	<4.5	n/a	n/a	n/a		4.7/4.5	y
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	<4.7	<4.5	n/a	n/a	n/a		4.7/4.5	y
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	<4.7	<4.5	n/a	n/a	n/a		4.7/4.5	y
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	<4.7	<4.5	n/a	n/a	n/a		4.7/4.5	y
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	<190	<180	n/a	n/a	n/a		190/180	y
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	<190	<180	n/a	n/a	n/a		190/180	y
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	<190	<180	n/a	n/a	n/a		190/180	y
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEESA)	<4.7	<4.5	n/a	n/a	n/a		4.7/4.5	y
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	<4.7	<4.5	n/a	n/a	n/a		4.7/4.5	y
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	<4.7	<4.5	n/a	n/a	n/a		4.7/4.5	y
Perfluoro-3-methoxypropanoic acid (PFMPA)	<4.7	<4.5	n/a	n/a	n/a		4.7/4.5	y
Perfluoro-4-methoxybutanoic acid (PFMBA)	<4.7	<4.5	n/a	n/a	n/a		4.7/4.5	y
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	<4.7	<4.5	n/a	n/a	n/a		4.7/4.5	y
Nonafluoro-3,6-dioxahexanoic acid (NFDHA)	<4.7	<4.5	n/a	n/a	n/a		4.7/4.5	y
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	<4.7	<4.5	n/a	n/a	n/a		4.7/4.5	y
Dioxins and Furans	None detected							

Comments:

No data qualified.

Notes

¹ = Secondary comparison. When a RPD calculation is not available or is above limits, a reporting limit comparison is done.

RPD = Relative percent difference

LOQ = Limit of Quantitation

PQL= Practical Quantitation Limit, referred to as Limit of Quantitation (LOQ) in ALS analytical report

n/a = Not applicable

Attachment D

Hazard Index Calculations

PFAS Hazard Index MCL Calculation Tool

Enter Site Information

Date:	First 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	9.6	71.1%	2,000 b	4.80E-03	1.2%
PFHxS	3.9	28.9%	10 a	3.90E-01	98.8%
PFNA	0	0.0%	10 a	0.00E+00	0.0%
Totals	14	100.0%	---	0.4	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 recommended 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

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

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

PFAS Hazard Index MCL Calculation Tool

Enter Site Information

Date:	First 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	4.2	83.3%	2,000 b	2.10E-03	2.4%
PFHxS	0.84	16.7%	10 a	8.40E-02	97.6%
PFNA	0	0.0%	10 a	0.00E+00	0.0%
Totals	5	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 recommended 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

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

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

PFAS Hazard Index MCL Calculation Tool

Enter Site Information

Date:	First 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	6.3	85.1%	2,000 b	3.15E-03	2.8%
PFHxS	1.1	14.9%	10 a	1.10E-01	97.2%
PFNA	0	0.0%	10 a	0.00E+00	0.0%
Totals	7	100.0%	---	0.1	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 recommended 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

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

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

PFAS Hazard Index MCL Calculation Tool

Enter Site Information

Date:	First 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	6.9	87.3%	2,000 b	3.45E-03	3.3%
PFHxS	1	12.7%	10 a	1.00E-01	96.7%
PFNA	0	0.0%	10 a	0.00E+00	0.0%
Totals	8	100.0%	---	0.1	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 recommended 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

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

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