



REVISED GROUNDWATER MONITORING REPORT

Fourth Quarter 2023

July 18, 2024

Facility No: Temple Distributing
Carson Oil

Address: 808 South Columbus Ave, Goldendale,
Washington

Arcadis Contact Person / Phone No.:

Eric Epple / 206-578-5812

Arcadis Project No.:

30079744

Primary Agency/Regulatory ID No.:

Washington State Department of Ecology
Central Office, Toxics Cleanup Program
Mary Monahan / Enforcement Order No. DE 14134

Revisions:

On June 14, 2024, Washington State Department of Ecology (Ecology) provided a comment letter via email to Chevron Environmental Management Company (CEMC) with comments on the previously submitted Fourth Quarter 2023 Groundwater Monitoring Report and First Quarter 2023 Groundwater Monitoring Report (Ecology 2024). In that June 2024 comment letter, Ecology indicated that groundwater total petroleum hydrocarbon in the diesel range (TPH-DRO) and heavy oil range (TPH-HRO) results from laboratory analytical method NWTPH-Dx must be summed when comparing to the Model Toxics Control Act (MTCA) Method A Cleanup Level (CUL) of 500 micrograms per liter ($\mu\text{g}/\text{L}$). This Revised Fourth Quarter 2023 Groundwater Monitoring Report (Report) has been updated and resubmitted per Ecology's request.

WORK CONDUCTED THIS PERIOD [Fourth Quarter 2023]:

1. Installed replacement wells MW-3A through MW-5A, and new well MW-10 from October 17 through October 19, 2023.
2. Conducted quarterly groundwater monitoring and sampling on December 18 and 19, 2023.
3. Submitted the *Progress Report – Fourth Quarter 2023* to Washington Department of Ecology (Ecology) on January 19, 2024.
4. Submitted the Draft Interim Action Completion Report to Ecology on January 26, 2024.
5. Prepared the *Groundwater Monitoring Status Report, Fourth Quarter 2023*.

WORK PROPOSED NEXT PERIOD [First Quarter 2024]:

1. Continue quarterly groundwater monitoring during the first quarter of 2024.
2. Prepare the *Progress Report – First Quarter 2024*.

Current Phase of Project:	<u>Interim Action and Groundwater Monitoring</u>	
Frequency of Monitoring / Sampling:	Quarterly (4Q23)	
Is Light Non-Aqueous Phase Liquid (LNAPL) Present On-site:	None	
Cumulative LNAPL Recovered to Date:	None	(gallons)
Approximate Depth to Groundwater:	4.17 (MW-10) to 5.17 (MW-9)	(feet below top of casing)
Approximate Groundwater Elevation:	1,635.50 (MW-5A) to 1,637.19 (MW-9)	(feet above NAVD 88)
Groundwater Flow Direction	North	
Groundwater Gradient	0.012	(feet per foot)
Current Remediation Techniques:	None	
Permits for Discharge:	Not Applicable	
Summary of Unusual Activity:	Monitoring well MW-7 was observed to be dry. Wells MW-1 and MW-8 are inaccessible due to access agreement restrictions. Well MW-2 was not found during the sampling event.	

DISCUSSION

Arcadis U.S. Inc (Arcadis) directed Blaine Tech Services on behalf of Chevron Environmental Management Company (Chevron), Temple Distributing, Temple Family Credit Shelter Trust, and Temple Family Survivor Trust to conduct groundwater monitoring activities on December 18 and 19, 2023. The groundwater monitoring program includes gauging and sampling monitoring wells MW-1, MW-2, MW-3A through MW-5A, and MW-6 through MW-10. The groundwater monitoring event was completed as scoped with the following deviations:

- During the fourth quarter 2023 field event, monitoring wells MW-1 and MW-8 were not gauged or sampled due to access restrictions. Arcadis has acquired necessary access agreement signatures from the neighboring property owner and do not anticipate any future access limitations for sampling events relative to gauging or sampling monitoring wells MW-1 and MW-8.
- Well MW-2 was not sampled or gauged due to the well being buried during the sampling event. MW-2 has since been uncovered and made accessible for future sampling events.
- Well MW-7 was observed to be dry and not sampled.

LNAPL was not observed in any site monitoring wells during the sampling event. Historical and current groundwater gauging results are presented on Table 1. A Site location map and a Site plan are presented on Figures 1 and 2, respectively.

The calculated groundwater flow direction is to the north with a hydraulic gradient of 0.012 feet/foot for the December 2023 groundwater monitoring event, which is comparable to previous events. A groundwater elevation contour map, including a rose diagram of historical flow direction, is presented on Figure 3.

Wells were sampled using low-flow methodology using a peristaltic pump and dedicated disposable tubing prior to collection of the samples. Field parameters including pH, temperature, electrical conductivity, turbidity, dissolved oxygen, and oxidation reduction potential were collected during the purging process with a multiparameter water quality meter and flow-through cell. Field parameters were allowed to stabilize prior to collecting samples. The groundwater monitoring field data sheets are included as Attachment A.

Following field parameter stabilization, samples were collected in pre-preserved laboratory-provided bottles and placed in a cooler with ice. Groundwater samples were submitted to Pace Analytical, located in Mount Juliet, Tennessee, an Ecology-accredited laboratory, under standard chain-of-custody protocols. Groundwater samples were analyzed for the following:

- Total petroleum hydrocarbons as gasoline range organics (TPH-GRO) by Northwest Method NWTPH-Gx;
- TPH-DRO and TPH-HRO by Method NWTPH-Dx without Silica Gel Treatment (SGT);
- Benzene, toluene, ethylbenzene, and total xylenes (collectively BTEX) by United States Environmental Protection Agency (USEPA) Method 8260D;
- 1,2-Dibromoethane/ethylene dibromide (EDB) by USEPA Method 8011;
- Polycyclic aromatic hydrocarbons (PAHs) by USEPA Method 8270E-SIM;
- Total lead by USEPA Method 6010D.

RESULTS

Groundwater analytical results for samples collected from monitoring wells for the current sampling event were greater than the MTCA Method A CULs for the following analytes: Monitoring well MW-3A, MW-4A, MW-5A and MW-6 results for the summed TPH-DRO and TPH-HRO concentration exceeded the MTCA Method A CUL of 500 µg/L with summed concentrations of 988, 1,562, 2,030, and 1,313 µg/L, respectively. However, individual concentrations provided by the laboratory for individual TPH-DRO and TPH-HRO did not exceed the MTCA Method A CUL of 500 µg/L with the exception of MW-3A (TPH-DRO), MW-4A (TPH-DRO), MW-5A (TPH-DRO and TPH-HRO) and MW-6 (TPH-HRO).

Analytical results from wells MW-9 and MW-10 were either less than the MTCA Method A CULs or were not detected at concentrations greater than the respective laboratory reporting limits.

One field duplicate sample was collected MW-10. The duplicate sample, like the associated parent sample, was analyzed for BTEX, EDB, PAHs, TPH-GRO, TPH-DRO, TPH-HRO, and total lead. The parent and duplicate sample results were comparable and met the data quality objectives in the project

sampling and analysis plan (Arcadis 2023). Analytical data are considered acceptable for their intended purposes.

Historical and current groundwater analytical results for TPH, BTEX, fuel additives, and lead are presented in Table 1. Historical and current groundwater analytical results for PAHs is presented in Table 2.

Groundwater analytical results for wells sampled on December 18 and 19, 2023, are presented on Figure 4. Groundwater total petroleum hydrocarbon (TPH-GRO, TPH-DRO, TPH-HRO, and TPH-DRO combined with TPH-HRO) concentrations and groundwater elevations versus time plots are presented on Figures 5 through 9. The laboratory analytical report and chain-of-custody documentation are included as Attachment B.

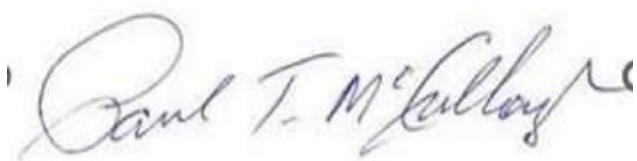
LIMITATIONS

This report was prepared in accordance with the scope of work outlined in Arcadis' contract with Chevron Environmental Management Company (CEMC) and with generally accepted professional engineering and environmental consulting practices existing at the time this report was prepared and applicable to the location of the site. It was prepared for the exclusive use of CEMC, Temple Distributing, Temple Family Credit Shelter Trust, and Temple Family Survivor Trust for the express purpose stated above. Any re-use of this report for a different purpose or by others not identified above shall be at the user's sole risk without liability to Arcadis. To the extent that this report is based on information provided to Arcadis by third parties, Arcadis may have made efforts to verify this third-party information, but Arcadis cannot guarantee the completeness or accuracy of this information. The opinions expressed and data collected are based on the conditions of the site existing at the time of the field investigation. No other warranties expressed or implied are made by Arcadis.



Date: July 18, 2024

Eric Epple
Project Manager



Date: July 18, 2024

Paul McCullough
Professional Engineer



ATTACHMENTS:

- Table 1 Groundwater Gauging Data and TPH, BTEX, Fuel Additive, and Lead Analytical Results
Table 2 Groundwater Gauging Data and PAH Analytical Results
- Figure 1 Site Location Map
Figure 2 Site Plan
Figure 3 Groundwater Elevation Contour Map, December 18 and 19, 2023
Figure 4 Groundwater Analytical Map, December 18 and 19, 2023
Figure 5 Groundwater Concentration and Elevation vs. Time Plots MW-2
Figure 6 Groundwater Concentration and Elevation vs. Time Plots MW-3 / MW-3A
Figure 7 Groundwater Concentration and Elevation vs. Time Plots MW-4 / MW-4A
Figure 8 Groundwater Concentration and Elevation vs. Time Plots MW-5 / MW-5A
Figure 9 Groundwater Concentration and Elevation vs. Time Plots MW-6
- Attachment A Field Data Sheets
Attachment B Laboratory Reports and Chain-of-Custody Documentation

REFERENCES:

- Arcadis. 2023. Final Interim Action Work Plan. Temple Distributing Carson Oil Site. 808 South Columbus Avenue. Goldendale, Washington. May 9.
- Ecology. 2024. RE: Comments on the Temple Distributing Groundwater Monitoring Report, First Quarter 2024. June 14.

TABLES

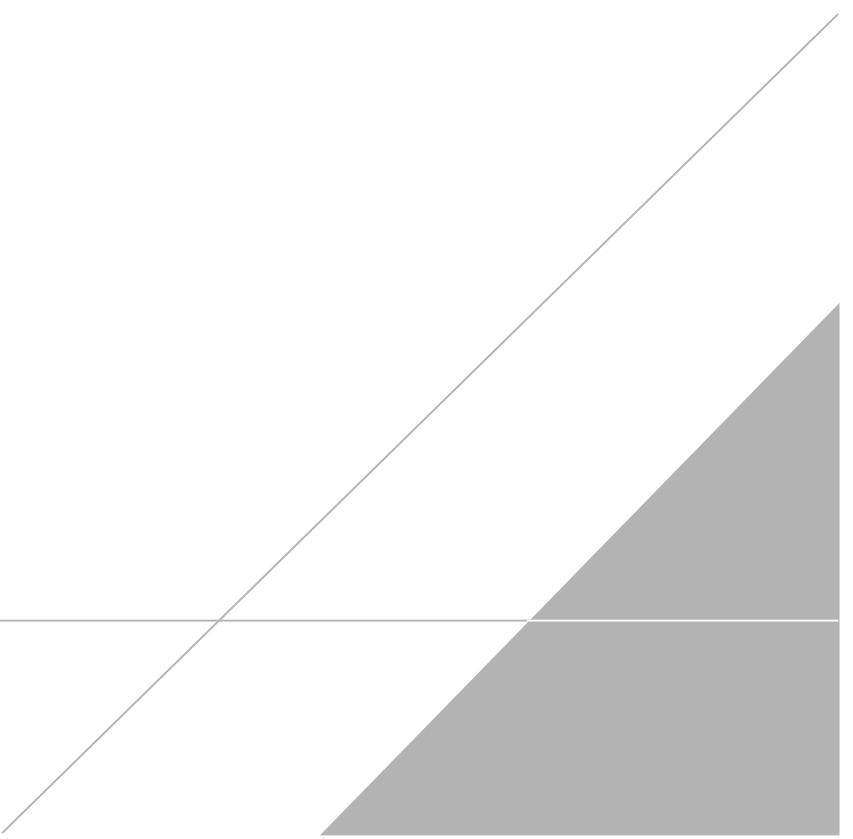


Table 1
Groundwater Gauging Data and TPH, BTEX, Fuel Additives, and Lead Analytical Results
Temple Distributing Carson Oil Site
808 South Columbus Avenue
Goldendale, Washington

Sample Location	Date	TOC (feet)	DTW (feet bgs)	Total Depth (feet bgs)	Water Column (feet)	LNAPL	GWE (feet)	TPH-GRO	TPH-DRO	TPH-HRO	TPH-DRO+HRO	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	EDB	EDC	Total Lead	Comments					
DPW-2	4/8/2015	--	--	--	--	--	--	530	<120 J	<270	<270	<2.00	0.87 J	<0.200 J	0.76 J	<2.00	<0.01 J+	<2.00	<2.00	3.1		Grab sample			
DPW-2 DUP	4/8/2015	--	--	--	--	--	--	510	130 Y J	<260	260 Y J	<2.00	3.2 J	0.300 J	1.91 J	<2.00	<0.01 J+	<2.00	<2.00	2.8		Grab sample			
MW-1	4/20/2012	1,644.50	6.33	9.00	2.67	--	1,638.17	<100	--	--	--	5.38	9.05	<1.00	<3.00	<1.00	<0.023	<1.00	<1.00	--					
MW-1	4/18/2018	1,644.50	7.70	9.00	1.30	--	1,636.80	<50	<47	<100	<100	<0.500	<0.500	<0.500	<0.500	<0.0096	<0.500	<6.0							
MW-1	4/6/2021	1,644.50	6.96	7.24	0.28	--	1,637.54	<31.6	--	--	--	<0.090	<0.280	<0.140	<0.170	<0.100	--	<0.080	--						
MW-1	08/18/2021	1,644.50	DRY			--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		Not sampled - well dry			
MW-1	02/23/2022	1,644.50	7.17	7.73	0.56	--	1,637.33	--	--	--	--	--	--	--	--	--	--	--	--	--		Not enough water to sample			
MW-1	06/16/2022	1,644.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		Unable to Locate			
MW-1	09/02/2022	1,644.50	7.38	7.83	0.45	--	1,637.12	--	--	--	--	<1.00	<1.00	<1.00	<3.00	--	<0.0200	--	--	--					
MW-1	12/01/2022	1,644.50	DRY	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		Not sampled - well dry			
MW-1	12/18/2023	1645.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		Not sampled - due to access limitations			
MW-2	4/20/2012	1,641.38	5.60	8.50	2.90	--	1,635.78	8,910	--	--	--	1,250	1,800	72.8	773	<1.00	<0.023	<1.00	--						
MW-2	4/30/2012	1,641.38	--	8.50	--	--	14,500	--	--	--	--	829	1,490	104	1,039	<1.00	<0.023	<1.00	--				Resample of MW-2		
MW-2	4/19/2018	1,641.38	4.10	8.50	4.40	--	1,637.28	51	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.0094	<0.500	--							
MW-2	4/6/2021	1,641.38	5.03	7.07	2.04	--	1,636.35	296	--	--	--	<0.090	<0.270	<0.140	<0.170	<0.100	--	<0.080	--						
MW-2	08/18/2021	1,641.38	5.65	7.18	1.53	--	1,635.73	--	272	369	641	--	--	--	--	--	--	--	--						
MW-2	02/23/2022	1,641.38	5.01	7.04	2.03	--	1,636.37	<31.6	475	736	1,211	<1.00	<0.278	<0.137	<0.174	--	<0.00557	--	5.98 J						
MW-2	06/16/2022	1,641.38	5.01	7.02	2.01	--	1,636.37	<31.6	243	459	702	<1.00	<0.278	<0.137	<0.174	--	<0.00557	--	<2.99						
MW-2	09/02/2022	1,641.38	5.49	7.19	1.70	--	1,635.89	--	--	--	--	0.157 J	<1.00	<1.00	<3.00	--	--	--	--						
MW-2	12/01/2022	1,641.38	5.81	7.18	1.37	--	1,635.57	<100	319	406	725	<1.00	<1.00	<1.00	<3.00	<1.00	<0.0218	<1.00	<6.00						
MW-2	12/18/2023	1641.38	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		Unable to locate			
MW-3	4/20/2012	1,642.02	2.73	8.50	5.77	--	1,639.29	5,080	--	--	--	4.0	6.41	27.0	9.37	<1.00	<0.023	<1.00	--						
MW-3	4/30/2012	1,642.02	--	8.50	--	--	6,180	--	--	--	--	0.60	ND	7.75	6.08	<1.00	<0.023	<1.00	--				Resample of MW-3		
MW-3	4/18/2018	1,642.02	3.65	8.50	4.85	--	1,638.37	3,500	--	250	<110	305	<0.500	0.60	7.0	<0.500	<0.500	<0.0094	<0.500	<6.00					
MW-3	4/6/2021	1,642.02	5.03	7.98	2.95	--	1,636.99	2,480	--	824	189 J	1,013 J	<0.09	<0.28	2.14	<0.17	<0.100	<0.005	<0.080	<2.99					
BD-1	4/6/2021	--	--	--	--	--	2,550	--	804	186 J	990	<0.09	<0.28	2.05	<0.17	<0.100	<0.005	<0.080	<2.99						
MW-3	08/18/2021	1,642.02	6.95	7.93	0.98	--	1,635.07	1,620	--	629	134 J	763 J	<1.00	<1.00	<1.00	<3.00	<1.00	<0.0200	<1.00	--					
BD-1	08/18/2021	--	--	--	--	--	--	--	--	1,330	610	126 J	<1.00	<1.00	0.222 J	<3.00	<1.00	<0.0200	<1.00	--					
MW-3	02/23/2022	1,642.02	5.10	7.93	2.83	--	1,636.92	1,900	--	1,360	368	1,728	<0.0941	<0.278	1.55	<0.174	--	<0.00568	--	<2.99					
MW-3 DUP	02/23/2022	--	--	--	--	--	--	2,230	1,550	670	2,220	<0.0941	<0.278	2.98	<0.174	--	<0.00547	--	<2.99						
MW-3	06/16/2022	1,642.02	4.97	7.92	2.95	--	1,637.05	1,320	--	947	439	1,386	<0.0941	<0.278	1.08	<0.174	--	<0.00547	--	<2.99					
MW-3 DUP	06/16/2022	--	--	--	--	--	--	--	--	1,380	931	312	<0.0941	<0.278	1.22	<0.174	--	<0.00547	--	<2.99					
MW-3	09/02/2022	1,642.02	5.81	7.97	2.16	--	1,636.21	1,460	--	1,090	412	1,502	<1.00	<1.00	1.17	<3.00	--	<0.0204	--	<6.00					
MW-3 DUP	09/02/2022	--	--	--	--	--	--	--	--	1,480	937	307	<1.00	<1.00	1.04	<3.00	--	<0.0208	--	<6.00					
MW-3	12/01/2022	1,642.02	5.90	7.96	2.06	--	1,636.12	1,100	--	1,210	298	1,508	<1.00	<1.00	1.86	<3.00	<1.00	<0.0208	<1.00	<6.00					
MW-3 DUP	12/01/2022	--	--	--	--	--	--	--	--	1,820	1,150	258	<1.00	<1.00	1.75	<3.00	<1.00	<0.0212	<1.00	<6.00					
MW-3A	12/18/2023	1641.54	4.91	10.04	5.13	--	1,636.63	<100	501	487 J	988 J	<1.00	0.567 J	0.158 J	1.04 J	<1.00	0.266 J	--	<0.0204	--	5.34 J				
MW-4	4/20/2012	1,641.93	2.26	8.00	5.74	--	1,639.67	6,000	--	--	--	<0.300	<1.00	<1.00	<3.00	<1.00	<0.023	<1.00	<0.023	<1.00	--				
MW-4	4/19/2018	1,641.93	2.90	8.00	5.10	--	1,639.03	120	--	470	160	630	<0.500	4.0	<0.500	<0.500	<0.500	<0.0095	<0.500	<6.00					
MW-4	4/6/2021	1,641.93	4.67	8.14	3.47	--	1,637.26	<31.6	--	--	--	<0.09	<0.28	<0.14	<0.17	<0.100	<0.005	<0.08	--						
MW-4	08/18/2021	1,641.93	5.66	7.13	1.47	--	1,636.27	151 B	940	844	1,784	<1.00	<1.00	<1.00	<3.00	<1.00	<0.0236	<0.00536	--	<2.99					
MW-4	02/23/2022	1,641.93	4.74	8.17	3.43	--	1,637.19	<31.6	507	1,000	1,507	<0.0941	<0.278	<0.137	<0.174	--	<0.00536	--	<2.99						
MW-4	06/16/2022	1,641.93	4.38	8.17	3.79	--	1,637.55	<31.6	831	1,040	1,871	<0.0941	<0.278	<0.137	<0.174	--	<0.00547	--	<2.99						
MW-4	09/02/2022	1,641.93	5.54	8.18	2.64	--	1,636.39	--	--	--	--	<1.00	<1.00	<1.00	<3.00	--	<0.0224	--	--						
MW-4	12/01/2022	1,641.93	4.99	8.19	3.20	--	1,636.94	<100	--	--	--	<1.00	<1.00	<1.00	<3.00	<1.00	<0.0214	<1.00	<1.00	--					
MW-4A	12/18/2023	1641.93	5.01	8.41	3.40	--	1,636.92	<100	1,140	422	1,562	<1.00	0.301 J	<1.00	0.266 J	--	<0.0204	--	3.68 J						
MW-5	4/18/2018	1,641.44	4.59	6.50	1.91	--	1,636.85	490	--	250	<100	300	<0.500	<0.500	<0.500	<0.500	<0.0094	<0.500	<6.0						
MW-5	4/6/2021	1,641.44	5.05	6.14	1.09	--	1,636.39	249	--	1,210	534	1,744	<0.09	<0.28	<0.14	<0.17	<0.100	<0.005	<0.08	<2.99					
MW-5	08/18/2021	1,641.44	5.90	6.23	0.33	--	1,635.54	--	287 B	2,220	1,200	<1.00	<1.00	<1.00	<3.00										

Table 1
Groundwater Gauging Data and TPH, BTEX, Fuel Additives, and Lead Analytical Results
Temple Distributing Carson Oil Site
808 South Columbus Avenue
Goldendale, Washington

Sample Location	Date	TOC (feet)	DTW (feet bgs)	Total Depth (feet bgs)	Water Column (feet)	LNAPL	GWE (feet)	TPH-GRO	TPH-DRO	TPH-HRO	TPH-DRO+HRO	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE	EDB	EDC	Total Lead	Comments
MTCA Method A CULs																				
MW-7	06/15/2022	--	DRY	7.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not sampled - well dry
MW-7	09/02/2022	--	4.67	4.76	0.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Could not be sampled due to Potential blockage in well
MW-7	12/01/2022	--	DRY	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not sampled - well dry
MW-7	12/18/2023	1641.21	DRY	4.81	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not sampled- well is dry
MW-8	4/18/2018	1,641.18	2.34	5.00	2.66	--	1,638.84	<50	<49	<110	<110	<0.500	<0.500	<0.500	<0.500	<0.500	<0.0094	<0.500	<6.00	Not sampled - well dry
MW-8	4/6/2021	1,641.18	DRY	4.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not sampled - well dry
MW-8	08/18/2021	1,641.18	DRY	4.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not sampled - well dry
MW-8	02/23/2022	1,641.18	DRY	4.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not sampled - well dry
MW-8	06/15/2022	1,641.18	DRY	4.98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not sampled - well dry
MW-8	09/02/2022	1,641.18	DRY	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not sampled - well dry
MW-8	12/01/2022	1,641.18	DRY	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not sampled - well dry
MW-8	12/18/2023	1642.18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not sampled - due to access limitations
MW-9	4/18/2018	1,642.88	3.01	7.00	3.99	--	1,639.87	<50	<47	<100	<100	<0.500	<0.500	<0.500	<0.500	<0.500	<0.0094	<0.500	<6.00	Not sampled - well dry
MW-9	4/6/2021	1,642.88	5.25	6.61	1.36	--	1,637.63	<31.6	<66.7	234 J	267 J	<0.09	<0.28	<0.14	<0.17	<0.100	<0.005	<0.08	<2.99	Not sampled - well dry
MW-9	08/18/2021	1,642.88	6.25	6.75	0.50	--	1,636.63	221 B	156 J	232 J	388 J	--	--	--	--	--	<1.00	--	--	Not sampled - well dry
MW-9	02/23/2022	1,642.88	5.26	6.67	1.41	--	1,637.62	<31.6	107 J	248 J	355 J	<0.0941	<0.278	<0.137	<0.174	--	<0.00547	--	<2.99	Not sampled - well dry
MW-9	06/16/2022	1,642.88	5.31	6.25	0.94	--	1,637.57	<31.6	157 J	233 J	390 J	<0.0941	<0.278	<0.137	<0.174	--	<0.00536	--	<2.99	Not sampled - well dry
MW-9	09/02/2022	1,642.88	6.09	6.78	0.69	--	1,636.79	<100	117 J	246 J	363 J	<1.00	<1.00	<1.00	<3.00	--	<0.0204	--	<6.00	Not sampled - well dry
MW-9	12/01/2022	1,642.88	5.86	6.70	0.84	--	1,637.02	<100	157 J	187 J	344 J	<1.00	<1.00	<1.00	<3.00	<1.00	<0.0214	<1.00	<6.00	Not sampled - well dry
MW-9	12/18/2023	1642.36	5.17	6.75	1.58	--	1,637.19	<100	<200	<250	<250	<1.00	<1.00	<1.00	0.333 J	--	<0.0204	--	<6.00	Not sampled - well dry
MW-10	12/18/2023	1641.28	4.17	7.29	3.12	--	1637.11	<100	81.4 J	<250	206 J	<1.00	<1.00	<1.00	0.327 J	--	<0.0212	--	3.62 J	Not sampled - well dry
MW-10 DUP	12/18/2023	--	--	--	--	--	--	<100	108 J	112 J	220 J	<1.00	<1.00	<1.00	0.342 J	--	<0.0208	--	5.46 J	Not sampled - well dry
TB	09/02/2022	--	--	--	--	--	--	<100	--	--	--	<1.00	<1.00	<1.00	<3.00	--	--	--	--	Not sampled - well dry
TB	12/01/2022	--	--	--	--	--	--	<100	--	--	--	<1.00	<1.00	<1.00	<3.00	<1.00	<0.0218	<1.00	--	Not sampled - well dry
TB-1	12/19/2023	--	--	--	--	--	--	<100	--	--	--	<1.00	<1.00	<1.00	<3.00	--	--	--	--	Not sampled - well dry

Table 1
Groundwater Gauging Data and TPH, BTEX, Fuel Additives, and Lead Analytical Results
Temple Distributing Carson Oil Site
808 South Columbus Avenue
Goldendale, Washington



Notes:

1. 800/1,000 = TPH-GRO MTCA Method A CUL with benzene present is 800 µg/L and without is 1,000 µg/L.
2. Analytical results are presented in µg/L.
3. Historical analytical methods for the site may vary. Refer to historical site reports referenced below for specific analytical methods prior to 2022.
- 4. BOLD and highlighted values are greater than their respective MTCA Method A CUL.**
- 5. BOLD** values are non-detect and less than the laboratory reporting limit, but the reporting limit is greater than the MTCA Method A CUL
6. TPH-DRO + TPH-HRO summed value includes qualifiers either individual result; half the reporting limit value is used in the sum if an individual result was non-detectable; highest reporting limit for individual results was used for the summed value if individual results were non-detectable.

Acronyms and Abbreviations:

-- = not analyzed
µg/L = microgram per liter
bgs = below ground surface
BTEX = benzene, toluene, ethylbenzene, and total xylenes
CUL = cleanup level
DTW = depth to water in feet below TOC
DUP = blind duplicate sample results
EDB = 1,2-dibromoethane
EDC = 1,2-dichloroethane
GWE = groundwater elevation
MTBE = methyl tertiary butyl ether
MTCA = Model Toxics Control Act
ND = analyte not detected
TB = Trip Blank
TOC = top of casing
TPH = total petroleum hydrocarbons
TPH-DRO = total petroleum hydrocarbons as diesel-range organics
TPH-GRO = total petroleum hydrocarbons as gasoline-range organics
TPH-HRO = total petroleum hydrocarbons as heavy-oil range organics
TPH-DRO + TPH-HRO = total petroleum hydrocarbons as a sum of diesel-range and heavy-oil range organics results
USEPA = United States Environmental Protection Agency

Qualifiers:

U = Not detected at the reporting limit (or MDL where applicable)
< = Not detected at or greater than the laboratory method detection limit.
J = The identification of the analyte is acceptable; the reported value is an estimate.
J+ = Reported result was flagged "J" because it is an estimated value with a high bias.
Y = The chromatograph response resembles a typical fuel pattern.
B = The compound has been found in the sample as well as its associated blank. Its presence in the sample may be a suspect

Current Analytical Methods:

2022 - Current Analytes analyzed by USEPA Method 8260D:
 BTEX
 EDB analyzed by USEPA Method 8011
 TPH-GRO analyzed by NWTPH-Gx
 Analytes analyzed by NWTPH-Dx without silica gel cleanup
 TPH-DRO
 TPH-HO
 Dissolved lead analyzed by USEPA 6010D

References:

Leidos, Inc. 2018 Draft Remedial Investigation/ Feasibility Study Former Temple Distributing Site. 808 South Columbus Ave., Goldendale, Washington. April 12.
TerraGraphics Environmental Engineering, Inc. 2015. Final 2015 Supplemental Environmental Site Assessment Report Columbus Square, Goldendale, Washington. December 18.

Table 2
Groundwater Gauging Data and PAH Analytical Results
Temple Distributing Carson Oil Site
808 South Columbus Avenue
Goldendale, Washington

Sample Location	Date	TOC (feet)	DTW (feet bgs)	Total Depth (feet bgs)	Water Column (feet)	GWE (feet)	MTCA Method A CULs		Aacenaphthene	Aacenaphthylene	Anthracene	Benz[a]anthracene	Benz[e]pyrene	Benz[ghi]fluoranthene	Benz[ghi]perylene	Benz[a]fluoranthene	Chrysene	Dibenz[a,h]anthracene	Fluoranthene	Indeno[1,2,3-cd]pyrene	Naphthalene	Phenanthrene	Pyrene	Total cPAHs	Comments
							NA	NA																	
DPW-2	4/8/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Grab sample
DPW-2 DUP	4/8/2015	1,644.50	7.70	9.00	1.30	1,636.80	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0300	<0.0300	<0.100	<0.0151	--	Grab sample	
MW-1	4/18/2018	1,644.50	7.70	9.00	1.30	1,636.80	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0300	<0.0300	<0.100	<0.0151	--	
MW-1	4/6/2021	1,644.50	6.96	7.24	0.28	1,637.54	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Insufficient water
MW-1	08/18/2021	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	02/23/2022	--	7.17	7.73	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Well is dry
MW-1	06/16/2022	--	DRY	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	09/02/2022	--	7.38	7.83	0.45	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	12/01/2022	1,644.50	DRY	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not sampled - due to access agreement issue
MW-1	12/18/2023	1,645.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	4/20/2012	1,641.38	5.03	8.50	3.47	1,636.35	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	4/30/2012	1,641.38	--	8.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Resample of MW-2
MW-2	4/19/2018	1,641.38	4.10	8.50	4.40	1,637.28	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	4/6/2021	1,641.38	5.03	7.07	2.04	1,636.35	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Insufficient water
MW-2	08/18/2021	1,641.38	5.65	7.18	1.53	1,635.73	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	02/23/2022	1,641.38	5.01	7.04	2.03	1,636.37	--	--	--	<0.0203	<0.0184	<0.0168	--	<0.0202	<0.0179	<0.0160	--	<0.0158	<0.0917	--	--	<0.130	--		
MW-2	06/16/2022	1,641.38	5.01	7.02	2.01	1,636.37	--	--	<0.0203	<0.0184	<0.0168	--	<0.0202	<0.0179	<0.0160	--	<0.0158	<0.0917	--	--	<0.130	--			
MW-2	09/02/2022	1,641.38	5.49	7.19	1.70	1,635.89	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	12/01/2022	1,641.38	5.81	7.18	1.37	1,635.57	--	--	--	<0.0500	<0.0500	--	<0.0500	<0.0500	<0.0500	<0.0500	--	<0.0500	<0.250	--	--	--	--	--	Unable to locate
MW-2	12/18/2022	1,642.38	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	4/20/2012	1,642.02	5.03	8.50	3.47	1,636.99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	4/30/2012	1,642.02	--	8.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Resample of MW-3
MW-3	4/18/2018	1,642.02	3.65	8.50	4.85	1,638.37	0.3	0.1	0.04	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0300	<0.100	<0.0151	--			
MW-3	4/6/2021	1,642.02	5.03	7.98	2.95	1,636.99	--	--	--	<0.0200	<0.0200	<0.017	--	<0.0200	<0.0200	<0.016	--	<0.016	3.63	--	--	--	--		
BD-1	4/6/2021	--	--	--	--	--	--	--	<0.0200	<0.0200	<0.017	--	<0.0200	<0.0200	<0.016	--	<0.016	3.13	--	--	--	--			
MW-3	08/18/2021	1,642.02	6.95	7.93	0.98	1,635.07	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-3	02/23/2021	1,642.02	5.10	7.93	2.83	1,636.92	--	--	<0.0203	<0.0184	<0.0168	--	<0.0202	<0.0179	<0.0160	--	<0.0158	3.28	--	<0.130	--				
BD-1	02/23/2022	--	--	--	--	--	--	--	<0.0203	<0.0184	<0.0168	--	<0.0202	<0.0179	<0.0160	--	<0.0158	3.75	--	<0.130	--				
MW-3	06/16/2022	1,642.02	4.97	7.92	2.95	--	--	--	<0.0203	<0.0184	<0.0168	--	<0.0202	<0.0179	<0.0160	--	<0.0158	1.7	--	<0.130	--				
MW-3 DUP	06/16/2022	1,642.02	--	--	--	--	--	--	<0.0203	<0.0184	<0.0168	--	<0.0202	<0.0179	<0.0160	--	<0.0158	2.2	--	<0.130	--				
MW-3	09/02/2022	1,642.02	5.81	7.97	2.16	1,636.21	--	--	--	<0.0500	<0.0500	<0.0500	--	<0.0500	<0.0500	<0.0500	--	<0.0500	3.03	--	--	--			
MW-3 DUP	09/02/2022	--	--	--	--	--	--	--	<0.0500	<0.0500	<0.0500	--	<0.0500	<0.0500	<0.0500	--	<0.0500	3.28	--	--	--				
MW-3	12/01/2022	1,642.02	5.90	7.96	2.06	1,636.12	--	--	--	<0.0500	<0.0500	<0.0500	--	<0.0500	<0.0500	<0.0500	--	<0.0500	4.37	--	--	--			
MW-3 DUP	12/01/2022	--	--	--	--	--	--	--	<0.0500	<0.0500	<0.0500	--	<0.0500	<0.0500	<0.0500	--	<0.0500	4.96	--	--	--				
MW-3A	12/18/2023	1,641.54	4.91	10.04	5.13	1,636.63	--	--	--	<0.0500	<0.0500	<0.0500	--	<0.0500	<0.0500	<0.0500	--	<0.0500	<0.250	--	--	--			
MW-4	4/20/2012	1,641.93	2.26	8.00	5.74	1,639.67	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-4	4/19/2018	1,641.93	2.90	8.00	5.10	1,639.03	<0.01	<0.01	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0300	<0.100	<0.0151	--				
MW-4	4/6/2021	1,641.93	4.67	8.14	3.47	1,637.26	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Insufficient water	
MW-4	08/18/2021	1,641.93	5.66	7.13	1.47	1,636.27	--	--	--	<0.0203	<0.0184	<0.0168	--	<0.0202	<0.0179	<0.0160	--	<0.0158	<0.0917	--	--	<0.130			
MW-4	02/23/2022	1,641.93	4.74	8.17	3.43	1,637.19	--	--	--	<0.0203	<0.0184	<0.0168	--	<0.0202	<0.0179	<0.0160	--	<0.0158	<0.0917	--	--	<0.130			
MW-4	06/16/2022	1,641.93	4.38	8.17	3.79	1,637.55	--	--	--	<0.0203	<0.0184	<0.0168	--	<0.0202	<0.0179	<0.0160	--	<0.0158	<0.0917	--	--	<0.130			
MW-4	09/02/2022	1,641.93	5.54	8.18	2.64	1,636.39	--	--	--	<0.0500	<0.0500	<0.0500	--	<0.0500	<0.0500	<0.0500	--	<0.0500	<0.0500	--	--	--	--		
MW-4	12/01/2022	1,641.93	4.99	8.19	3.20	1,636.94	--	--	--	<0.0500	<0.0500	<0.0500	--	<0.0500	<0.0500	<0.0500	--	<0.0500	<0.250	--	--	--	--		
MW-4A	12/18/2023	1,641.93	5.01	8.41	3.40	1,636.92	--	--	--	<0.0500	<0.0500	<0.0500	--	<0.0500	<0.0500	<0.0500	--	<0.0500	0.124 J	--	--	--	--		
MW-5	4/18/2018	1,641.44	4.66	6.50	1.84	1,636.78	0.09	<0.01	0.02	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	0.300	<0.0100	<0.0300	<0.0300	0.050	<0.100	<0.0151	
MW-5	4/6/2021	1,641.44	5.05	6.14	1.09	1,636.39	--	--	--	<0.0200	<0.0200	<0.017	--	<0.0200	<0.0200	<0.016	--	<0.016	0.322	--	--	--	<0.35		
MW-5	08/18/2021	1,641.44	5.90	6.23	0.33	1,635.54	--	--	--	<0.0203	<0.0184	<0.0168	--	<0.0202	<0.0179	<0.0160	--	<0.0158	0.248 J	--	--	--	<0.130		
MW-5	02/23/2022	1,641.44	5.08	6.17	1.09	1,636.36	--	--	--	<0.0203															

Table 2
Groundwater Gauging Data and PAH Analytical Results
Temple Distributing Carson Oil Site
808 South Columbus Avenue
Goldendale, Washington

Sample Location	Date	TOC (feet)	DTW (feet bgs)	Total Depth (feet bgs)	Water Column (feet)	GWE (feet)	MTCA Method A CULs		Aceanaphthalene	Aceanaphthylene	Anthracene	Benz[a]anthracene	Benz[e]pyrene	Benz[ghi]fluoranthene	Benz[ghi]perylene	Benz[k]fluoranthene	Chrysene	Dibenz[a,h]anthracene	Fluorene	Indeno[1,2,3-cd]pyrene	Naphthalene	Phenanthrene	Pyrone	Total cPAHs	Comments
							NA	NA	NA	NA	NA	NA	0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.1
MW-6	12/19/2023	1,640.51	4.82	5.51	0.69	1,635.69	--	--	--	--	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.250	--	--	--	--
MW-7	4/18/2018	--	DRY	5.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not Sampled - Well Dry
MW-7	4/6/2021	--	DRY	7.24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not Sampled - Well Dry
MW-7	08/18/2021	--	DRY	7.24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not Sampled - Well Dry
MW-7	02/23/2022	--	DRY	7.24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not Sampled - Well Dry
MW-7	06/16/2022	--	DRY	7.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Could not sample, Potential blockage in well
MW-7	09/02/2022	--	4.67	4.76	0.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not sampled - well is dry
MW-7	12/01/2022	--	DRY	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	12/02/2022	--	DRY	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	12/18/2023	1,641.21	DRY	4.81	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not sampled - well is dry
MW-8	4/18/2018	1,641.18	2.34	5.00	2.66	1,638.84	<0.01	<0.01	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0300	<0.0300	<0.100	<0.0151	--	
MW-8	4/6/2021	--	DRY	4.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not Sampled - Well Dry
MW-8	08/18/2021	--	DRY	4.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not Sampled - Well Dry
MW-8	02/23/2022	--	DRY	4.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not Sampled - Well Dry
MW-8	06/16/2022	--	DRY	4.98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not Sampled - Well Dry
MW-8	09/02/2022	--	DRY	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not sampled - well dry
MW-8	12/01/2022	--	DRY	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not sampled - due to access agreement issue
MW-8	12/18/2023	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	4/18/2018	1,642.88	3.01	7.00	3.99	1,639.87	<0.0100	<0.01	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0400	<0.0400	<0.100	<0.0151	--	
MW-9	4/6/2021	1,642.88	5.25	6.61	1.36	1,637.63	--	--	--	<0.0200	<0.0200	<0.017	--	<0.0200	<0.0200	<0.016	--	--	<0.016	<0.0900	--	--	<0.129	--	
MW-9	08/18/2021	1,642.88	6.25	6.75	0.50	1,636.63	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	02/23/2022	1,642.88	5.26	6.67	1.41	1,637.62	--	--	--	<0.0203	<0.0184	<0.0168	--	<0.0202	<0.0179	<0.0160	--	--	<0.0158	<0.0917	--	--	<0.130	--	
MW-9	06/16/2022	1,642.88	5.31	6.25	0.94	1,637.57	--	--	--	<0.0203	<0.0184	<0.0168	--	<0.0202	<0.0179	<0.0160	--	--	<0.0158	<0.0917	--	--	<0.130	--	
MW-9	09/02/2022	1,642.88	6.09	6.78	0.69	1,636.79	--	--	--	<0.0500	<0.0500	<0.0500	--	<0.0500	<0.0500	<0.0500	--	--	<0.0500	<0.250	--	--	<0.130	--	
MW-9	12/01/2022	1,642.88	5.86	6.7	0.84	1,637.02	--	--	--	<0.0500	<0.0500	<0.0500	--	<0.0500	<0.0500	<0.0500	--	--	<0.0500	<0.250	--	--	<0.130	--	
MW-9	12/18/2023	1,642.36	5.17	6.75	1.58	1,637.19	--	--	--	<0.0500	<0.0500	<0.0500	--	<0.0500	<0.0500	<0.0500	--	--	<0.0500	<0.250	--	--	<0.130	--	
MW-10	12/18/2023	1,641.28	4.17	7.29	3.12	1,637.11	--	--	--	<0.0500	<0.0500	<0.0500	--	<0.0500	<0.0500	<0.0500	--	--	<0.0500	<0.250	--	--	<0.130	--	
MW-10 DUP	12/18/2023	--	--	--	--	--	--	--	--	<0.0500	<0.0500	<0.0500	--	<0.0500	<0.0500	<0.0500	--	--	<0.0500	<0.250	--	--	<0.130	--	
TB	09/02/2022	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
TB	12/01/2022	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
TB-1	12/19/2023	--	--	--	--	--	--	--	--	<0.0500	<0.0500	<0.0500	--	<0.0500	<0.0500	<0.0500	--	--	<0.0500	--	--	--	--	--	

Table 2
Groundwater Gauging Data and PAH Analytical Results
Temple Distributing Carson Oil Site
808 South Columbus Avenue
Goldendale, Washington

Notes:

1. Analytical results are presented in µg/L.
2. Historical analytical methods for the site may vary. Refer to historical site reports referenced below for specific analytical methods prior to 2021.
- 3. BOLD and highlighted** values are greater than their respective MTCA Method A CUL.
4. Total cPAHs derived according to MTCA Cleanup Regulation Table 740-1 [d].

Acronyms and Abbreviations:

-- = not analyzed
µg/L = microgram per liter
bgs = below ground surface
cPAH = carcinogenic polycyclic aromatic hydrocarbons
CUL = cleanup level
DTW = depth to water in feet below TOC
DUP = blind duplicate sample results
GWE = groundwater elevation
MTCA = Model Toxics Control Act
NA = no applicable MTCA Method A CUL
TOC = top of casing
USEPA = United States Environmental Protection Agency

Qualifier:

< = Not detected at or above the reporting limit (or method detection limit where applicable)
J = The identification of the analyte is acceptable; the reported value is an estimate

Analytical Methods:

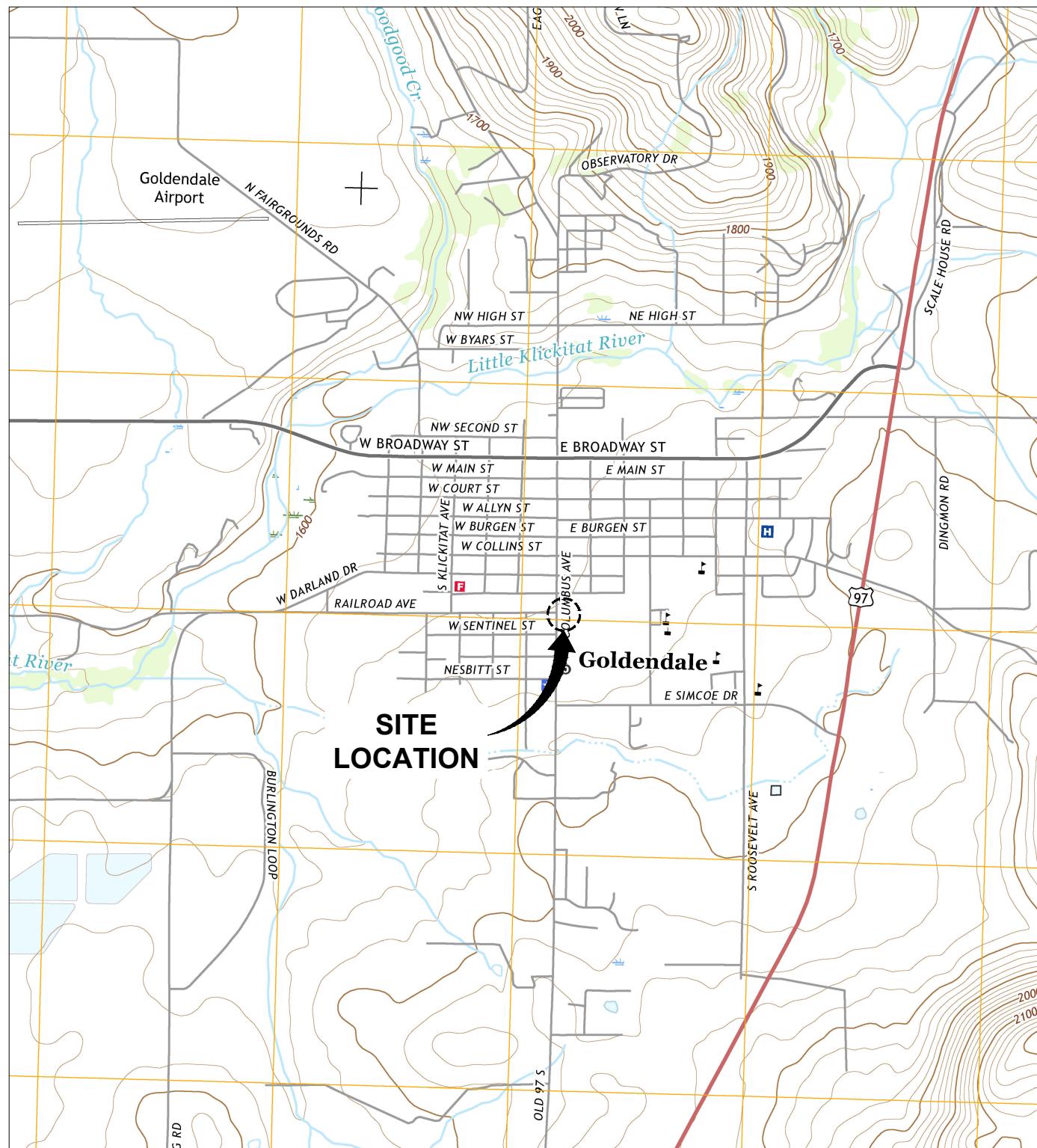
Year	Analyte and Analytical Method
2021 - Current	cPAHs analyzed by USEPA Method 8270E-SIM

References:

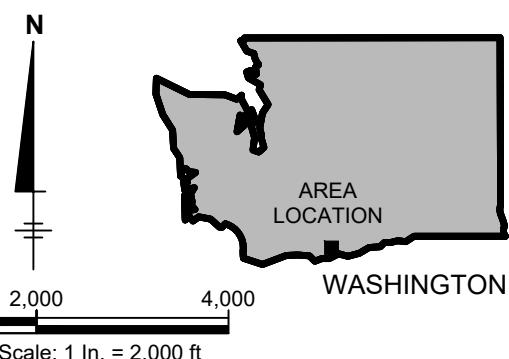
Leidos, Inc. 2018. Draft Remedial Investigation/ Feasibility Study Former Temple Distributing Site. 808 South Columbus Ave., Goldendale, Washington. April 12.
TerraGraphics Environmental Engineering, Inc. 2015. Final 2015 Supplemental Environmental Site Assessment Report Columbus Square, Goldendale, Washington. December 18.

FIGURES



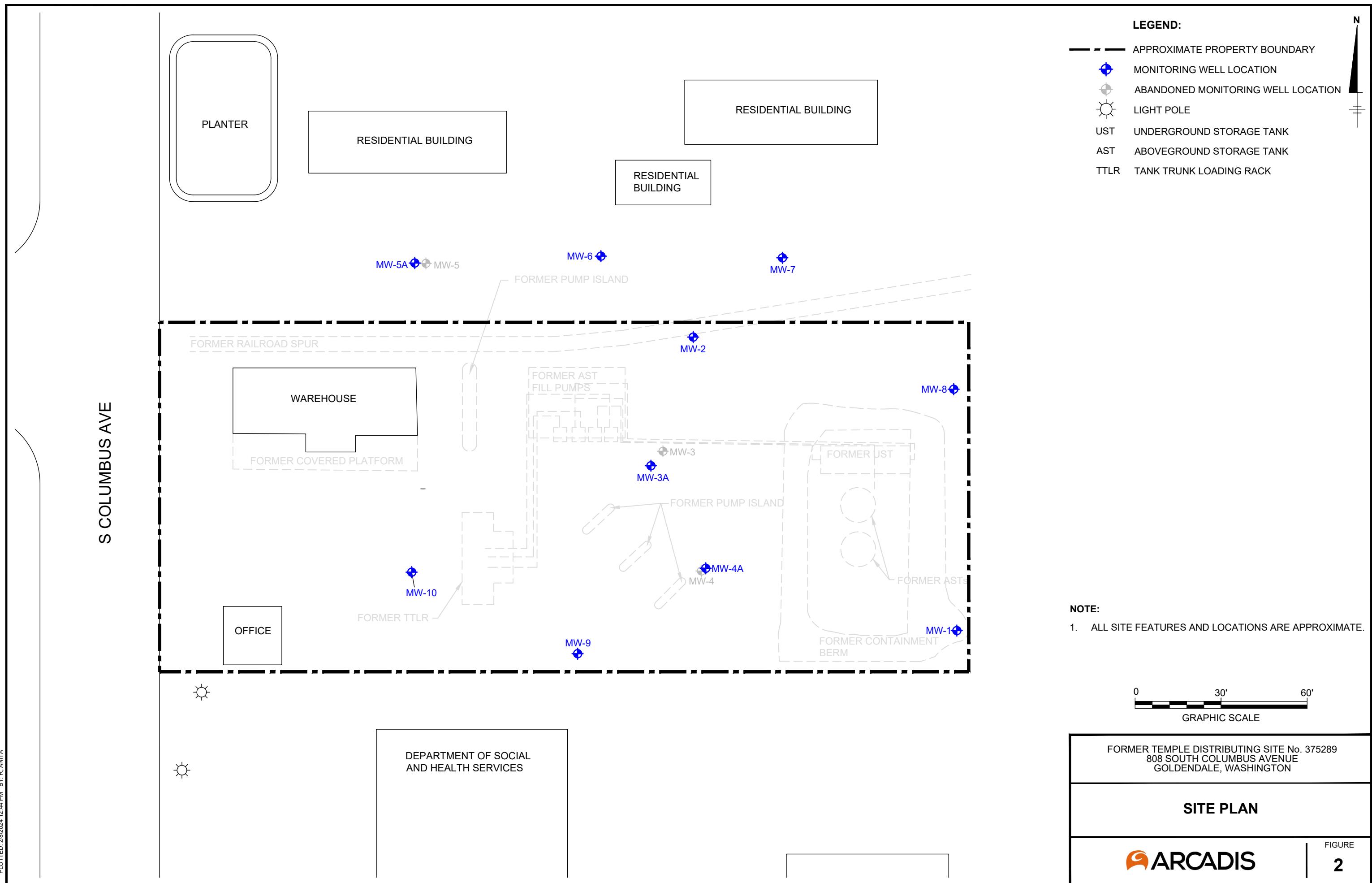


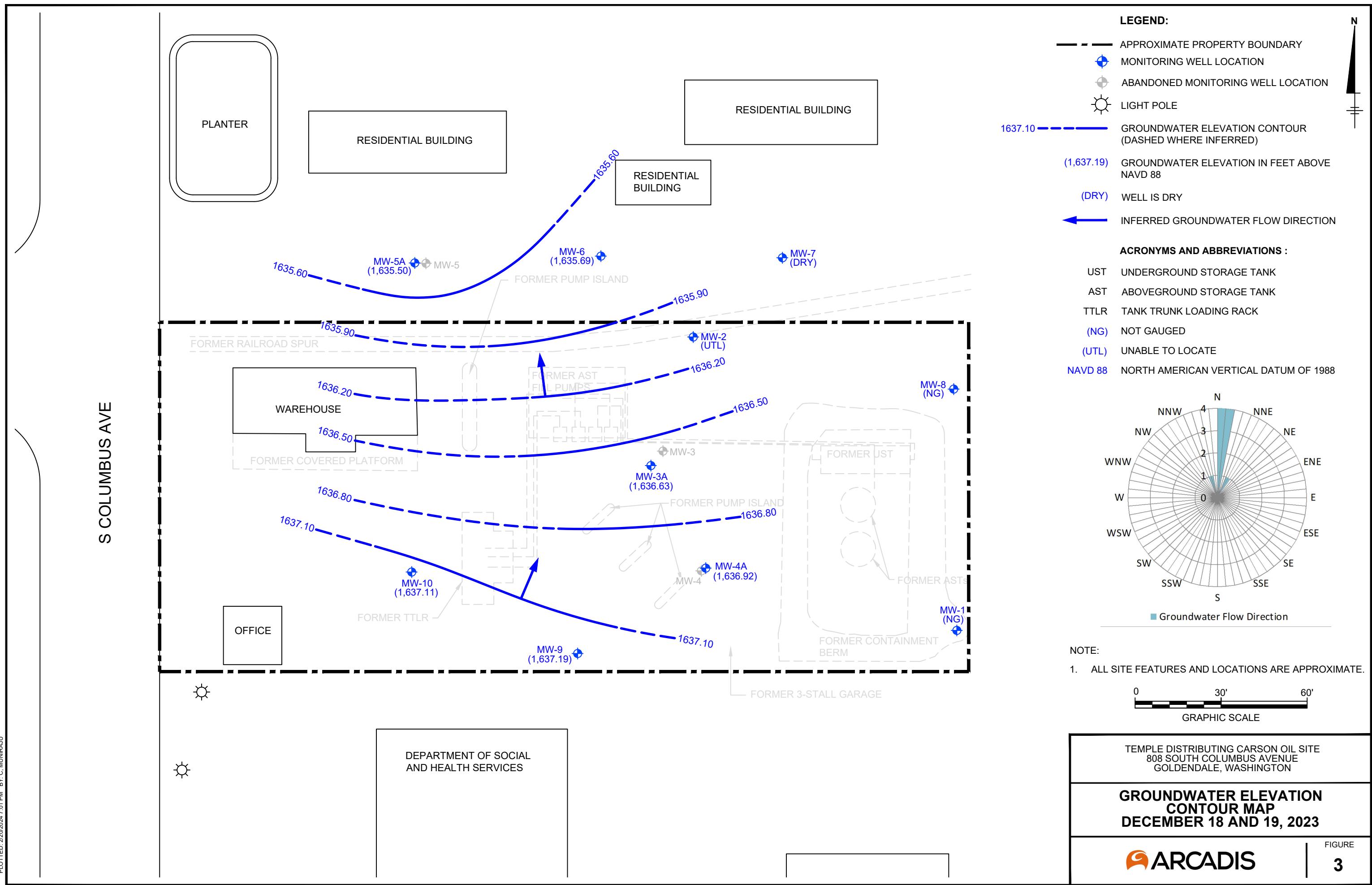
SOURCE: BASEMAP USGS 7.5. MIN. TOPO. QUAD., GOLDDALE, WASHINGTON 2017.

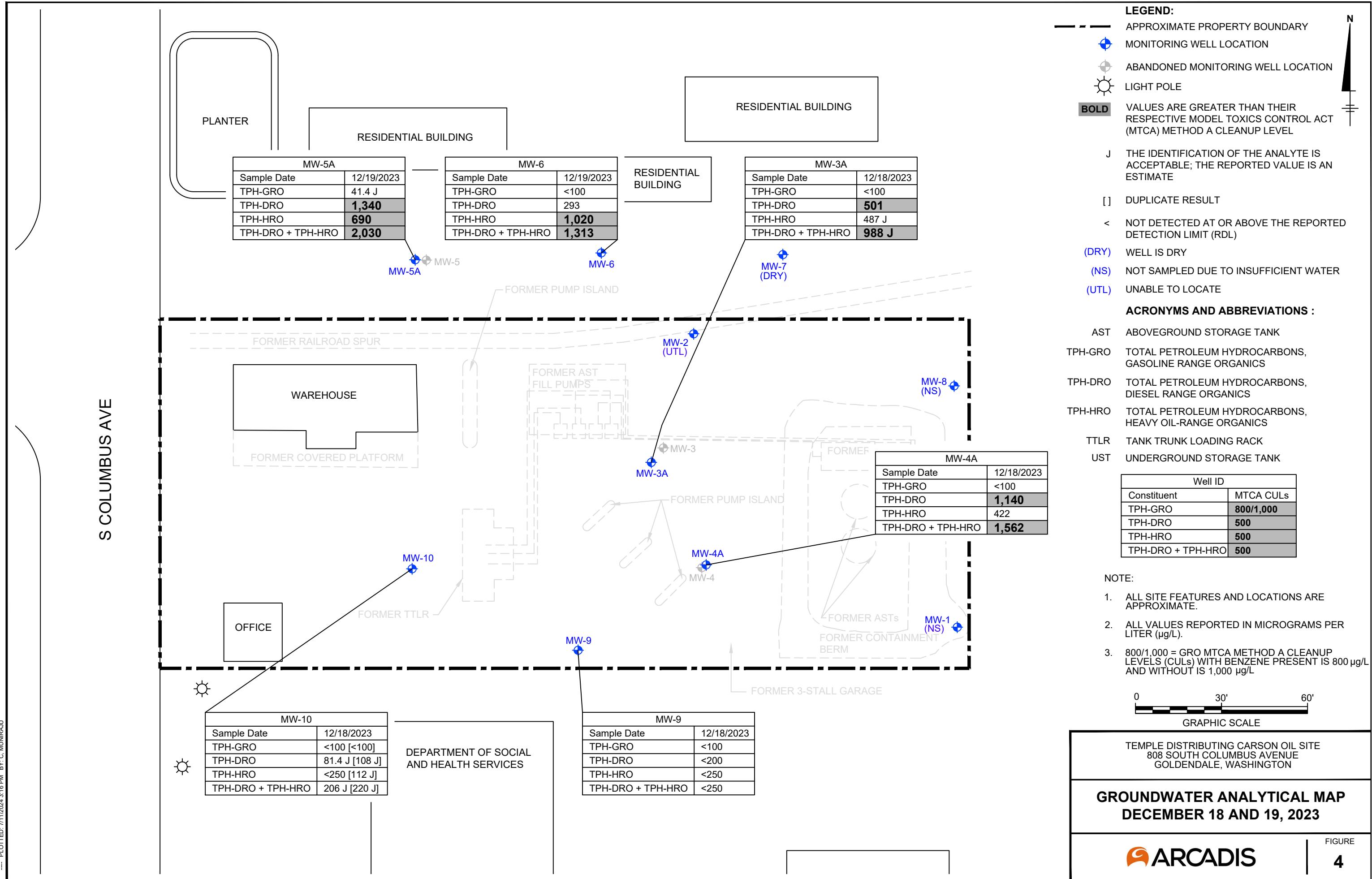


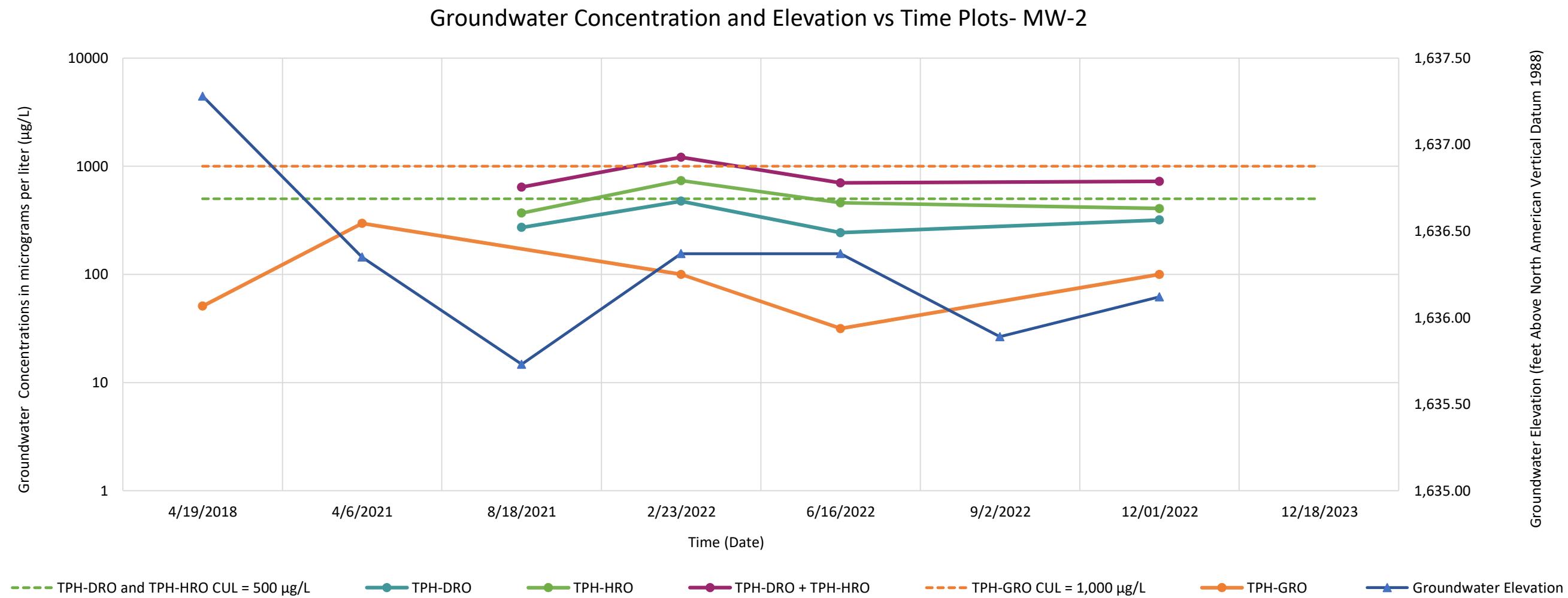
TEMPLE DISTRIBUTING CARSON OIL SITE
808 SOUTH COLUMBUS AVENUE
GOLDDALE, WASHINGTON

SITE LOCATION MAP







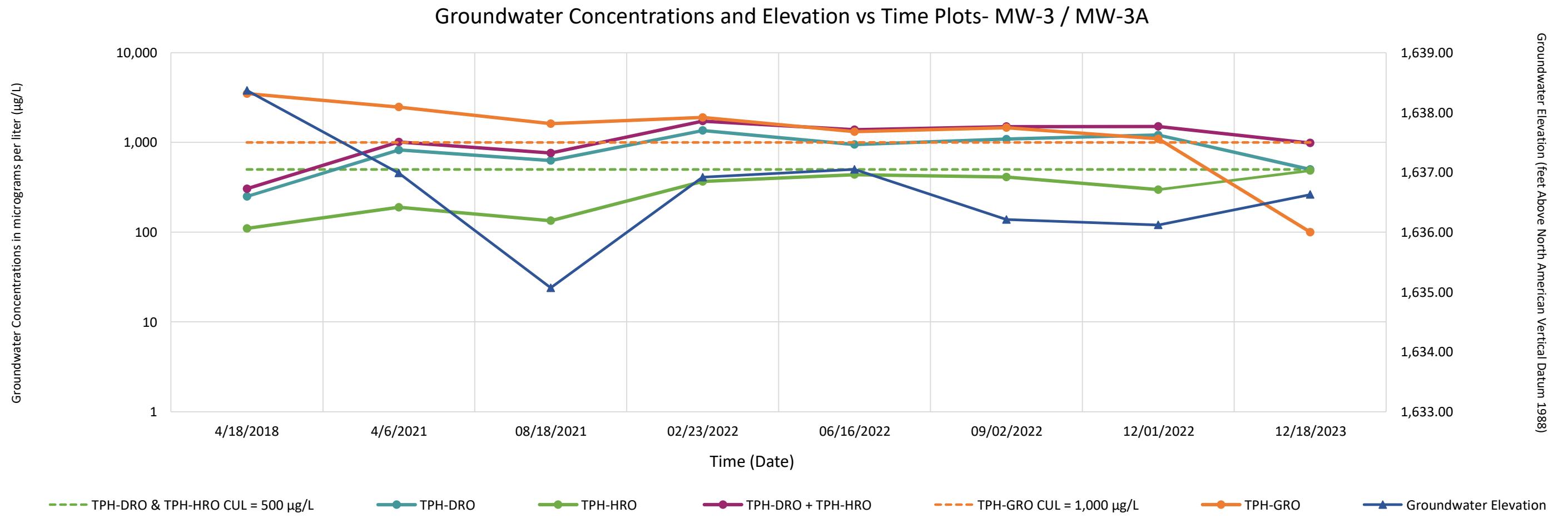


Notes:

CUL = MTCA Method A Cleanup Level

**GROUNDWATER MONITORING REPORT
FOURTH QUARTER 2023**

**GROUNDWATER CONCENTRATION AND
ELEVATION VERSUS TIME PLOTS,
MONITORING WELL MW-2**



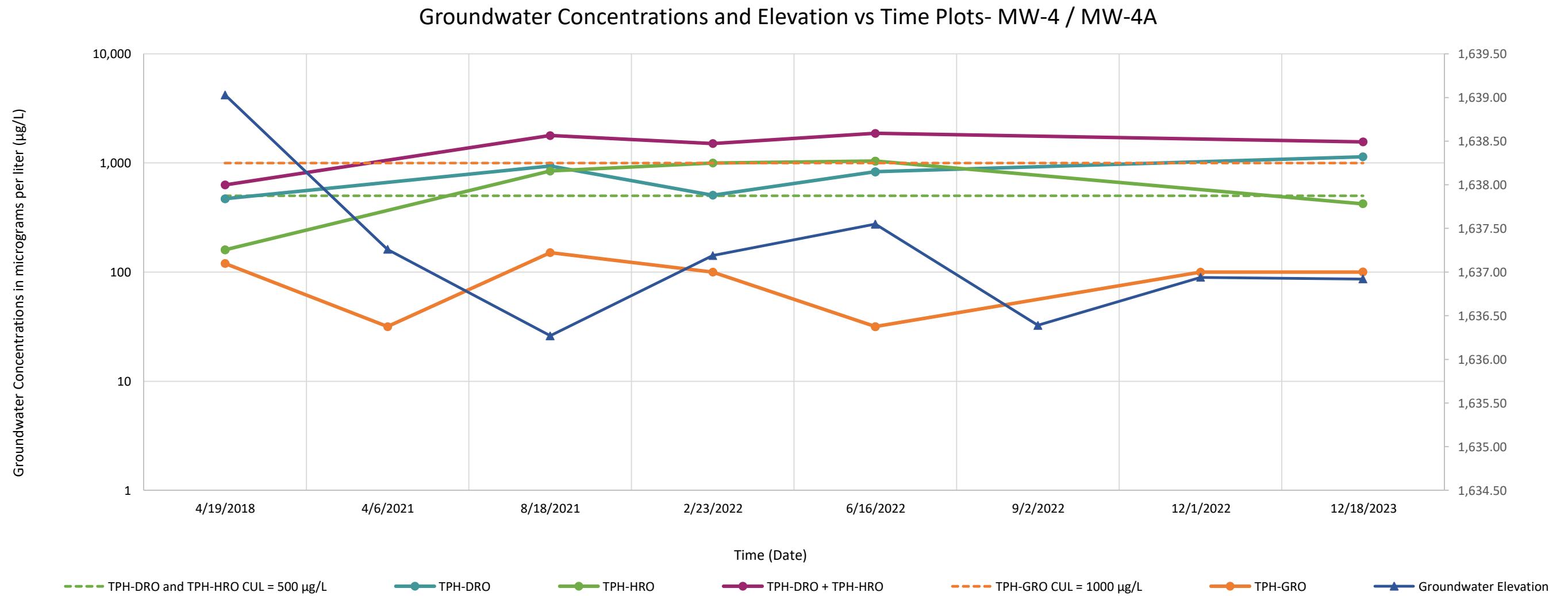
Notes:

CUL = MTCA Method A Cleanup Level

MW-3 was abandoned in support of the completed Interim Action. This well was reinstated as MW-3A in fourth quarter 2023.

**GROUNDWATER MONITORING REPORT
FOURTH QUARTER 2023**

**GROUNDWATER CONCENTRATION AND
ELEVATION VERSUS TIME PLOTS,
MONITORING WELL MW-3/ MW-3A**



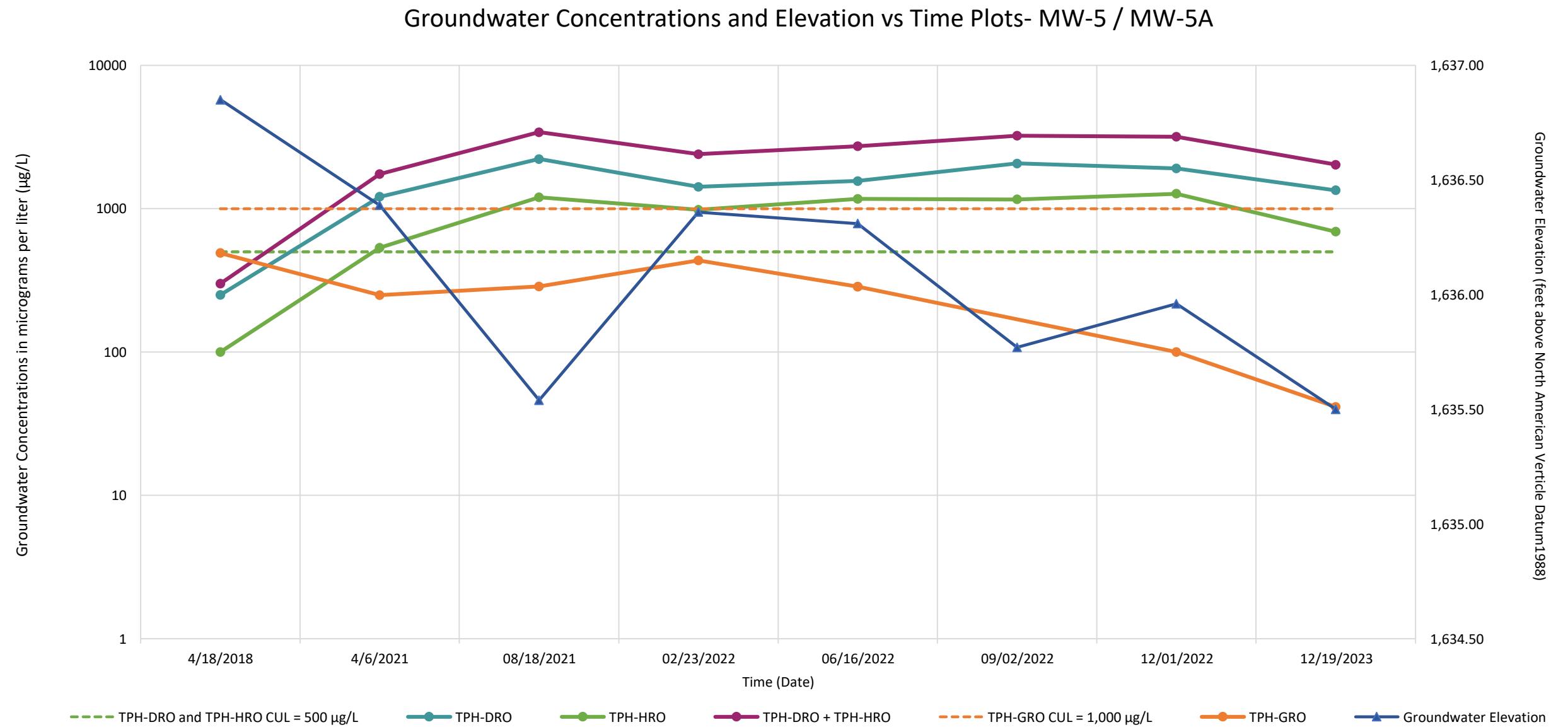
Notes:

CUL = MTCA Method A Cleanup Level

MW-4 was abandoned in support of the completed Interim Action. This well was reinstated as MW-4A in fourth quarter 2023

**GROUNDWATER MONITORING REPORT
FOURTH QUARTER 2023**

**GROUNDWATER CONCENTRATION AND
ELEVATION VERSUS TIME PLOTS,
MONITORING WELL MW-4/ MW-4A**



Notes:

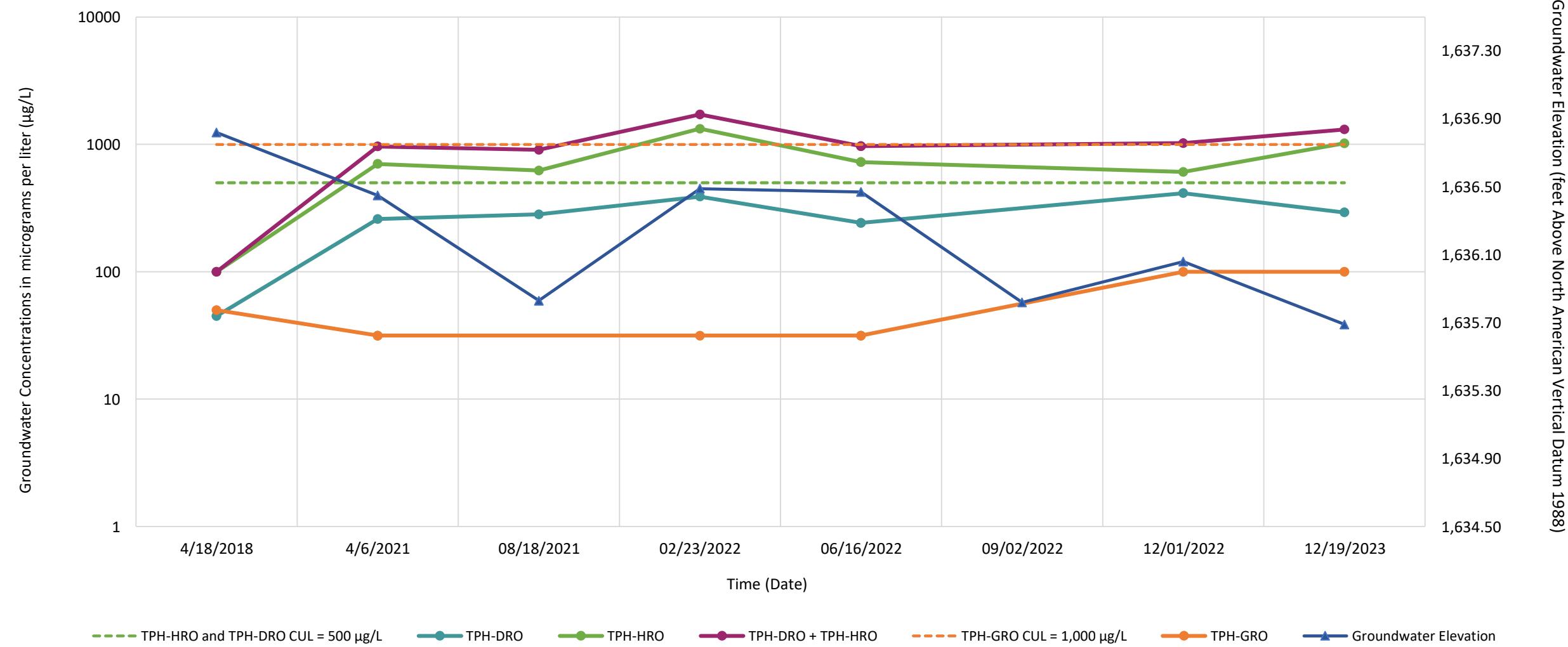
CUL = MTCA Method A Cleanup Level

MW-5 was abandoned in support of the completed Interim Action. This well was reinstated as MW-5A in fourth quarter 2023

**GROUNDWATER MONITORING REPORT
FOURTH QUARTER 2023**

**GROUNDWATER CONCENTRATION AND
ELEVATION VERSUS TIME PLOTS,
MONITORING WELL MW-5/ MW-5A**

Groundwater Concentrations and Elevation vs Time Plots- MW-6



Notes:

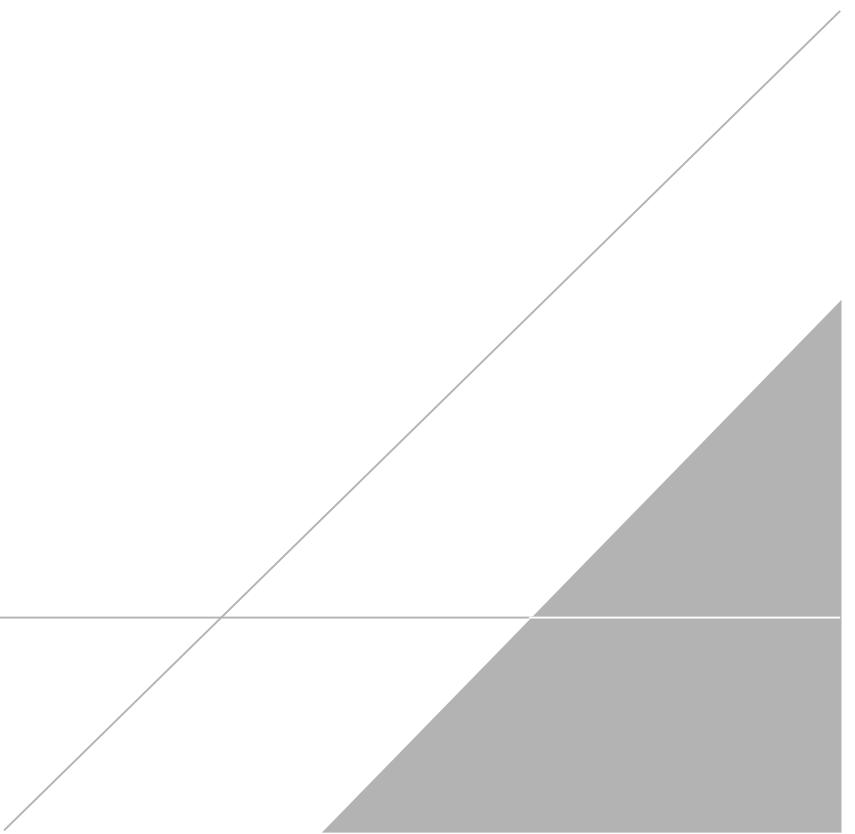
CUL = MTCA Method A Cleanup Level

**GROUNDWATER MONITORING REPORT
FOURTH QUARTER 2023**

**GROUNDWATER CONCENTRATION AND
ELEVATION VERSUS TIME PLOTS,
MONITORING WELL MW-6**

ATTACHMENT A

Field Data Sheets





Groundwater Gauging Log

Project Number	30079744							
Client:	Chevron							
Site ID:	375289							
Site Location:	Goldendale, Washington							
Measuring Point:	Top of Casing							
Date(s):	12/18/2023							
Sampler(s):	Aimee Rike							
Gauging Equipment:	Water Level Meter							
Well ID	Date	Gauging Time	Static Water Level (ft bmp)	Depth to Product (ft bmp)	Total Depth (ft bmp)	PID Reading (ppm)	LNAPL Removed (gal)	Comments
MW-3A	12/18/2023	12:11	4.91	ND	8.18	--	--	--
MW-4A	12/18/2023	12:21	5.01	ND	8.41	--	--	--
MW-5A	12/18/2023	12:03	4.91	ND	10.04	--	--	--
MW-6	12/18/2023	12:05	4.82	ND	5.51	--	--	--
MW-7	12/18/2023	12:08	Dry	ND	4.81	--	--	--
MW-9	12/18/2023	12:18	5.17	ND	6.75	--	--	--
MW-10	12/18/2023	12:15	4.17	ND	7.29	--	--	--

ft-bmp = feet below measuring point

ND = Not Detected

PID = Photoionization Detector Reading

ppm = parts per million

-- = Not Recorded

Project Number	30079744	Well ID	MW-3A	Date		12/18/2023				
Site Location	Goldendale, Washington	Site ID	375289	Weather (°F)	Cloudy	Sampled by	Aimee Rike			
Measuring Point Description	Top of Casing	Screen Depth Interval (ft-bmp)	2 to 7	Casing Diameter (in.)	2	Well Casing Material				
Static Water Level (ft-bmp)	4.91	Total Depth (ft-bmp)	8.18	Water Column (ft)	3.27	Gallons in Well	0.53			
Water Quality Meter Make/Model	Hanna HI 98129	Purge Method	Low-Flow	Collection Type		Grab				
Sample Time	16:03	Well Volumes Purged	0.75	Sample ID	MW-3A-W-20231218	Purge Equipment	Peristaltic			
Purge Start	15:45	Gallons Purged	0.40	Duplicate ID	--	Sample Equipment	Peristaltic			
Purge End	16:01	Total Purge Time (h:m)	0:16							
Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
15:48	100	5.04	7.63	0.791	34.0	4.15	5.88	158.4	--	--
15:51	100	5.08	7.59	0.789	29.0	4.01	5.94	156.1	--	--
15:54	100	5.11	7.48	0.786	26.0	3.92	6.19	157.2	--	--
15:57	100	5.1	7.44	0.786	27.0	3.88	6.06	160.9	--	--
16:00	100	5.13	7.46	0.786	26.0	3.85	6.14	160.1	Clear	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
 gallons per foot 1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID:	MW-3A-W-20231218	Sample Time:	16:03	Sample Depth (ft-bmp) (e.g. pump intake):	6.5
Analytes and Methods:	See Chain-of-Custody.			Depth to Water at Time of Sampling	5.13

ft-bmp = feet below measuring point
 in. = inches
 ft = feet
 mL/min = milliliters per minute

mS/cm = millisiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter
 PVC = Polyvinyl Chloride

mV = millivolts
 °F = degrees Fahrenheit
 °C = degrees Celsius
 -- = Not Recorded

Project Number	30079744	Well ID	MW-4A	Date		12/18/2023				
Site Location	Goldendale, Washington	Site ID	375289	Weather (°F)	Cloudy	Sampled by	Aimee Rike			
Measuring Point Description	Top of Casing	Screen Depth Interval (ft-bmp)	2 to 7	Casing Diameter (in.)	2	Well Casing Material				
Static Water Level (ft-bmp)	5.01	Total Depth (ft-bmp)	8.41	Water Column (ft)	3.4	Gallons in Well	0.55			
Water Quality Meter Make/Model	Hanna HI 98129	Purge Method	Low-Flow	Collection Type		Grab				
Sample Time	15:29	Well Volumes Purged	0.72	Sample ID	MW-4A-W-20231218	Purge Equipment	Peristaltic			
Purge Start	15:11	Gallons Purged	0.40	Duplicate ID	--	Sample Equipment	Peristaltic			
Purge End	15:28	Total Purge Time (h:m)	0:17							
Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
15:14	100	4.81	7.21	0.790	16.0	4.58	7.01	170.3	--	--
15:17	100	4.94	7.14	0.782	15.0	3.49	7.17	167.8	--	--
15:20	100	5	7.12	0.786	12.0	2.82	7.23	166.8	--	--
15:23	100	5.03	7.11	0.787	11.0	2.79	7.31	164.4	--	--
15:26	100	5.07	7.11	0.787	11.0	2.78	7.27	163.1	Clear	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
 gallons per foot 1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID:	MW-4A-W-20231218	Sample Time:	15:29	Sample Depth (ft-bmp) (e.g. pump intake):	7
Analytes and Methods:	See Chain-of-Custody.			Depth to Water at Time of Sampling	5.07

ft-bmp = feet below measuring point
 in. = inches
 ft = feet
 mL/min = milliliters per minute

mS/cm = millisiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter
 PVC = Polyvinyl Chloride

mV = millivolts
 °F = degrees Fahrenheit
 °C = degrees Celsius
 -- = Not Recorded

Project Number	30079744	Well ID	MW-5A	Date		12/19/2023				
Site Location	Goldendale, Washington	Site ID	375289	Weather (°F)	Cloudy	Sampled by	Aimee Rike			
Measuring Point Description	Top of Casing	Screen Depth Interval (ft-bmp)	2 to 7	Casing Diameter (in.)	2	Well Casing Material				
Static Water Level (ft-bmp)	4.91	Total Depth (ft-bmp)	10.04	Water Column (ft)	5.13	Gallons in Well	0.83			
Water Quality Meter Make/Model	Hanna HI 98129	Purge Method	Low-Flow	Collection Type		Grab				
Sample Time	10:43	Well Volumes Purged	0.48	Sample ID	MW-5A-W-20230219	Purge Equipment	Peristaltic			
Purge Start	10:25	Gallons Purged	0.40	Duplicate ID	--	Sample Equipment	Peristaltic			
Purge End	10:41	Total Purge Time (h:m)	0:16							
Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
10:28	100	5.01	7.49	0.719	18.0	2.58	10.51	100.9	--	--
10:31	100	5.03	7.45	0.716	16.0	2.49	10.24	102.1	--	--
10:34	100	5.07	7.30	0.716	13.0	2.37	10.73	104	--	--
10:37	100	5.09	7.31	0.716	13.0	2.36	10.69	105.1	--	--
10:40	100	5.11	7.30	0.715	12.0	2.33	10.80	106.4	Clear	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
 gallons per foot 1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID:	MW-5A-W-20230219	Sample Time:	10:43	Sample Depth (ft-bmp) (e.g. pump intake):	7.5
Analytes and Methods:	See Chain-of-Custody.			Depth to Water at Time of Sampling	5.11

ft-bmp = feet below measuring point
 in. = inches
 ft = feet
 mL/min = milliliters per minute

mS/cm = millisiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter
 PVC = Polyvinyl Chloride

mV = millivolts
 °F = degrees Fahrenheit
 °C = degrees Celsius
 -- = Not Recorded

Project Number	30079744	Well ID	MW-6	Date		12/19/2023				
Site Location	Goldendale, Washington	Site ID	375289	Weather (°F)	Raining	Sampled by	Aimee Rike			
Measuring Point Description	Top of Casing	Screen Depth Interval (ft-bmp)	-- to --	Casing Diameter (in.)	2	Well Casing Material				
Static Water Level (ft-bmp)	4.82	Total Depth (ft-bmp)	5.51	Water Column (ft)	0.69	Gallons in Well	0.11			
Water Quality Meter Make/Model	Hanna HI 98129	Purge Method	Low-Flow	Collection Type		Grab				
Sample Time	09:41	Well Volumes Purged	1.44	Sample ID	MW-6-W-20231219	Purge Equipment	Peristaltic			
Purge Start	09:32	Gallons Purged	0.16	Duplicate ID	--	Sample Equipment	Peristaltic			
Purge End	09:39	Total Purge Time (h:m)	0:7							
Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
09:35	100	4.97	7.81	323	26.0	5.16	10.03	57.9	--	--
09:38	100	5.03	7.78	324	22.0	4.94	10.17	60.4	--	--

Comments: Well began to dewater after 2 parameters. Purging stopped and took sample due to the well dewatering.

Well Casing Volume Conversion

Well diameter (in.) = $1 = 0.04$ $1.5 = 0.09$ $2.5 = 0.26$ $3.5 = 0.50$ $6 = 1.47$
 gallons per foot $1.25 = 0.06$ $2 = 0.16$ $3 = 0.37$ $4 = 0.65$

Sample Information

Sample ID:	MW-6-W-20231219	Sample Time:	09:41	Sample Depth (ft-bmp) (e.g. pump intake):	5.25
Analytes and Methods:	See Chain-of-Custody.			Depth to Water at Time of Sampling	5.03

ft-bmp = feet below measuring point
 in. = inches
 ft = feet
 mL/min = milliliters per minute

mS/cm = millSiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter
 PVC = Polyvinyl Chloride

mV = millivolts
 °F = degrees Fahrenheit
 °C = degrees Celsius
 -- = Not Recorded

Project Number	30079744	Well ID	MW-9	Date		12/18/2023				
Site Location	Goldendale, Washington	Site ID	375289	Weather (°F)	Raining	Sampled by	Aimee Rike			
Measuring Point Description	Top of Casing	Screen Depth Interval (ft-bmp)	-- to --	Casing Diameter (in.)	2	Well Casing Material				
Static Water Level (ft-bmp)	5.17	Total Depth (ft-bmp)	6.75	Water Column (ft)	1.58	Gallons in Well	0.26			
Water Quality Meter Make/Model	Hanna HI 98129	Purge Method	Low-Flow	Collection Type		Grab				
Sample Time	14:37	Well Volumes Purged	1.52	Sample ID	MW-9-W-20231218	Purge Equipment	Peristaltic			
Purge Start	14:19	Gallons Purged	0.40	Duplicate ID	--	Sample Equipment	Peristaltic			
Purge End	14:35	Total Purge Time (h:m)	0:16							
Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
14:22	100	5.2	7.49	238	14.0	4.40	6.58	147.9	--	--
14:25	100	5.23	7.45	238	12.0	4.43	6.69	149.1	--	--
14:28	100	5.29	7.36	237	10.0	4.46	6.76	152.3	--	--
14:31	100	5.32	7.31	238	11.0	4.42	6.82	153.2	--	--
14:34	100	5.35	7.30	238	10.0	4.40	6.89	155.1	Clear	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = $1 = 0.04$ $1.5 = 0.09$ $2.5 = 0.26$ $3.5 = 0.50$ $6 = 1.47$
 gallons per foot $1.25 = 0.06$ $2 = 0.16$ $3 = 0.37$ $4 = 0.65$

Sample Information

Sample ID:	MW-9-W-20231218	Sample Time:	14:37	Sample Depth (ft-bmp) (e.g. pump intake):	6
Analytes and Methods:	See Chain-of-Custody.			Depth to Water at Time of Sampling	5.35

ft-bmp = feet below measuring point
 in. = inches
 ft = feet
 mL/min = milliliters per minute

mS/cm = millisiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter
 PVC = Polyvinyl Chloride

mV = millivolts
 °F = degrees Fahrenheit
 °C = degrees Celsius
 -- = Not Recorded

Project Number	30079744	Well ID	MW-10	Date	12/18/2023					
Site Location	Goldendale, Washington	Site ID	375289	Weather (°F)	Cloudy	Sampled by	Aimee Rike			
Measuring Point Description	Top of Casing	Screen Depth Interval (ft-bmp)	2 to 7	Casing Diameter (in.)	2	Well Casing Material				
Static Water Level (ft-bmp)	4.17	Total Depth (ft-bmp)	7.29	Water Column (ft)	3.12	Gallons in Well	0.51			
Water Quality Meter Make/Model	Hanna HI 98129	Purge Method	Low-Flow	Collection Type		Grab				
Sample Time	13:33	Well Volumes Purged	0.78	Sample ID	MW-10-W- 20231218	Purge Equipment	Peristaltic			
Purge Start	13:15	Gallons Purged	0.40	Duplicate ID	--	Sample Equipment	Peristaltic			
Purge End	13:32	Total Purge Time (h:m)	0:17							
Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
13:18	100	4.27	7.59	0.722	13.0	3.89	7.84	111.5	--	--
13:21	100	4.31	7.53	0.729	10.0	3.66	8.10	115.5	--	--
13:24	100	4.41	7.33	0.738	8.0	3.31	8.17	127.4	--	--
13:27	100	4.52	7.31	0.737	8.0	3.28	8.24	130.1	--	--
13:30	100	4.63	7.29	0.737	8.0	3.27	8.29	133.7	Clear	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = $1 = 0.04$ $1.5 = 0.09$ $2.5 = 0.26$ $3.5 = 0.50$ $6 = 1.47$
 gallons per foot $1.25 = 0.06$ $2 = 0.16$ $3 = 0.37$ $4 = 0.65$

Sample Information

Sample ID:	MW-10-W-20231218	Sample Time:	13:33	Sample Depth (ft-bmp) (e.g. pump intake):	5.5
Analytes and Methods:	See Chain-of-Custody.			Depth to Water at Time of Sampling	4.63

ft-bmp = feet below measuring point
 in. = inches
 ft = feet
 mL/min = milliliters per minute

mS/cm = millisiemens per centimeter
 NTU = Nephelometric Turbidity Unit
 mg/L = milligrams per liter
 PVC = Polyvinyl Chloride

mV = millivolts
 °F = degrees Fahrenheit
 °C = degrees Celsius
 -- = Not Recorded

ATTACHMENT B

Laboratory Report and Chain-of-Custody Documentation





ANALYTICAL REPORT

January 08, 2024

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Arcadis - Chevron - WA

Sample Delivery Group: L1690664
Samples Received: 12/21/2023
Project Number: 30079744 19.45
Description: 375289
Site: 808 S COLUMBUS AVE
Report To:
Eric Epple
1420 5th Ave
Unit 2400
Seattle, WA 98101

Entire Report Reviewed By:

Brian Ford
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

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SAMPLE SUMMARY

			Collected by Aimee Rike	Collected date/time 12/18/23 16:03	Received date/time 12/21/23 10:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2195515	1	12/27/23 16:45	12/27/23 22:38	DJS	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2198692	1	12/31/23 03:40	12/31/23 03:40	NCD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2195356	1	12/24/23 10:59	12/24/23 10:59	DYW	Mt. Juliet, TN
EDB / DBCP by Method 8011	WG2194935	1	12/23/23 06:54	12/26/23 22:06	HMH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2196969	2	12/28/23 08:05	12/29/23 08:44	DMG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG2193586	1	12/22/23 14:43	12/23/23 05:30	JDJ	Mt. Juliet, TN
			Collected by Aimee Rike	Collected date/time 12/18/23 15:29	Received date/time 12/21/23 10:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2195515	1	12/27/23 16:45	12/27/23 22:47	DJS	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2198002	1	12/29/23 22:08	12/29/23 22:08	NCD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2195356	1	12/24/23 11:21	12/24/23 11:21	DYW	Mt. Juliet, TN
EDB / DBCP by Method 8011	WG2194935	1.02	12/23/23 06:54	12/26/23 22:18	HMH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2196969	1	12/28/23 08:05	01/02/24 13:25	TJD	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2196969	1	12/28/23 08:05	12/29/23 09:04	DMG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG2193586	1	12/22/23 14:43	12/23/23 05:48	JDJ	Mt. Juliet, TN
			Collected by Aimee Rike	Collected date/time 12/19/23 10:43	Received date/time 12/21/23 10:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2195515	1	12/27/23 16:45	12/27/23 22:50	DJS	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2198007	1	12/30/23 18:06	12/30/23 18:06	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2195356	1	12/24/23 11:42	12/24/23 11:42	DYW	Mt. Juliet, TN
EDB / DBCP by Method 8011	WG2194935	1.11	12/23/23 06:54	12/26/23 22:30	HMH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2196969	1	12/28/23 08:05	01/02/24 13:44	TJD	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2196969	1	12/28/23 08:05	12/29/23 09:24	DMG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG2194463	1	12/22/23 10:49	12/23/23 04:51	JDJ	Mt. Juliet, TN
			Collected by Aimee Rike	Collected date/time 12/19/23 09:41	Received date/time 12/21/23 10:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2195515	1	12/27/23 16:45	12/27/23 22:52	DJS	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2198007	1	12/30/23 18:28	12/30/23 18:28	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2195356	1	12/24/23 12:04	12/24/23 12:04	DYW	Mt. Juliet, TN
EDB / DBCP by Method 8011	WG2194935	1.08	12/23/23 06:54	12/26/23 22:42	HMH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2196969	1	12/28/23 08:05	01/02/24 14:04	TJD	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2196969	1	12/28/23 08:05	12/29/23 09:45	DMG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG2194463	1	12/22/23 10:49	12/23/23 05:11	JDJ	Mt. Juliet, TN
			Collected by Aimee Rike	Collected date/time 12/18/23 14:37	Received date/time 12/21/23 10:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2195515	1	12/27/23 16:45	12/27/23 22:55	DJS	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2198002	1	12/29/23 22:30	12/29/23 22:30	NCD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2195356	1	12/24/23 12:26	12/24/23 12:26	DYW	Mt. Juliet, TN
EDB / DBCP by Method 8011	WG2194935	1.02	12/23/23 06:54	12/26/23 22:54	HMH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2194899	1	12/22/23 17:14	12/23/23 12:54	TGB	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

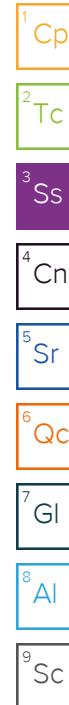
7 Gl

8 Al

9 Sc

SAMPLE SUMMARY

			Collected by Aimee Rike	Collected date/time 12/18/23 14:37	Received date/time 12/21/23 10:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG2193586	1	12/22/23 14:43	12/23/23 06:06	JDJ	Mt. Juliet, TN
MW-10-W-20231218 L1690664-06 GW			Collected by Aimee Rike	Collected date/time 12/18/23 13:33	Received date/time 12/21/23 10:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2195515	1	12/27/23 16:45	12/27/23 22:58	DJS	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2198002	1	12/29/23 22:52	12/29/23 22:52	NCD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2195456	1	12/24/23 12:14	12/24/23 12:14	JAH	Mt. Juliet, TN
EDB / DBCP by Method 8011	WG2194935	1.06	12/23/23 06:54	12/26/23 23:06	HMH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2194899	1	12/22/23 17:14	12/23/23 13:15	TGB	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG2193586	1	12/22/23 14:43	12/23/23 06:24	JDJ	Mt. Juliet, TN
DUP-1-20231218 L1690664-07 GW			Collected by Aimee Rike	Collected date/time 12/18/23 12:00	Received date/time 12/21/23 10:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2195515	1	12/27/23 16:45	12/27/23 23:01	DJS	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2198002	1	12/29/23 23:13	12/29/23 23:13	NCD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2195456	1	12/24/23 12:33	12/24/23 12:33	JAH	Mt. Juliet, TN
EDB / DBCP by Method 8011	WG2194935	1.04	12/23/23 06:54	12/26/23 23:17	HMH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2194899	1	12/22/23 17:14	12/23/23 13:35	TGB	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG2194463	1	12/22/23 10:49	12/23/23 05:30	JDJ	Mt. Juliet, TN
TB-1-20231219 L1690664-08 GW			Collected by Aimee Rike	Collected date/time 12/19/23 09:00	Received date/time 12/21/23 10:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2198007	1	12/30/23 07:13	12/30/23 07:13	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2195456	1	12/24/23 11:00	12/24/23 11:00	JAH	Mt. Juliet, TN



CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Brian Ford
Project Manager

- ¹ Cp
- ² Tc
- ³ Ss
- ⁴ Cn
- ⁵ Sr
- ⁶ Qc
- ⁷ GI
- ⁸ AI
- ⁹ Sc

Metals (ICP) by Method 6010D

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Lead	5.34	J	2.99	6.00	1	12/27/2023 22:38	WG2195515

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Gasoline Range Organics-NWTPH	U		31.6	100	1	12/31/2023 03:40	WG2198692
(S) a,a,a-Trifluorotoluene(FID)	98.2			78.0-120		12/31/2023 03:40	WG2198692

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

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.0941	1.00	1	12/24/2023 10:59	WG2195356
Toluene	0.567	J	0.278	1.00	1	12/24/2023 10:59	WG2195356
Ethylbenzene	0.158	J	0.137	1.00	1	12/24/2023 10:59	WG2195356
Total Xylenes	1.04	J	0.174	3.00	1	12/24/2023 10:59	WG2195356
(S) Toluene-d8	104			80.0-120		12/24/2023 10:59	WG2195356
(S) 4-Bromofluorobenzene	77.1			77.0-126		12/24/2023 10:59	WG2195356
(S) 1,2-Dichloroethane-d4	95.4			70.0-130		12/24/2023 10:59	WG2195356

⁹ Sc

EDB / DBCP by Method 8011

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Ethylene Dibromide	U		0.00536	0.0200	1	12/26/2023 22:06	WG2194935

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Diesel Range Organics (DRO)	501		133	400	2	12/29/2023 08:44	WG2196969
Residual Range Organics (RRO)	487	J	167	500	2	12/29/2023 08:44	WG2196969
(S) o-Terphenyl	162	J1		52.0-156		12/29/2023 08:44	WG2196969

Sample Narrative:

L1690664-01 WG2196969: Duplicate Analysis performed due to QC failure. Reporting most compliant data.

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Benzo(a)anthracene	U		0.0203	0.0500	1	12/23/2023 05:30	WG2193586
Benzo(a)pyrene	U		0.0184	0.0500	1	12/23/2023 05:30	WG2193586
Benzo(b)fluoranthene	U		0.0168	0.0500	1	12/23/2023 05:30	WG2193586
Benzo(k)fluoranthene	U		0.0202	0.0500	1	12/23/2023 05:30	WG2193586
Chrysene	U		0.0179	0.0500	1	12/23/2023 05:30	WG2193586
Dibenz(a,h)anthracene	U		0.0160	0.0500	1	12/23/2023 05:30	WG2193586
Indeno(1,2,3-cd)pyrene	U		0.0158	0.0500	1	12/23/2023 05:30	WG2193586
Naphthalene	U		0.0917	0.250	1	12/23/2023 05:30	WG2193586
1-Methylnaphthalene	U		0.0687	0.250	1	12/23/2023 05:30	WG2193586
2-Methylnaphthalene	U		0.0674	0.250	1	12/23/2023 05:30	WG2193586
(S) Nitrobenzene-d5	97.4			31.0-160		12/23/2023 05:30	WG2193586
(S) 2-Fluorobiphenyl	108			48.0-148		12/23/2023 05:30	WG2193586
(S) p-Terphenyl-d14	104			37.0-146		12/23/2023 05:30	WG2193586

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Metals (ICP) by Method 6010D

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Lead	3.68	J	2.99	6.00	1	12/27/2023 22:47	WG2195515

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Gasoline Range Organics-NWTPH	U		31.6	100	1	12/29/2023 22:08	WG2198002
(S) a,a,a-Trifluorotoluene(FID)	98.8			78.0-120		12/29/2023 22:08	WG2198002

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

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.0941	1.00	1	12/24/2023 11:21	WG2195356
Toluene	0.301	J	0.278	1.00	1	12/24/2023 11:21	WG2195356
Ethylbenzene	U		0.137	1.00	1	12/24/2023 11:21	WG2195356
Total Xylenes	0.266	J	0.174	3.00	1	12/24/2023 11:21	WG2195356
(S) Toluene-d8	105			80.0-120		12/24/2023 11:21	WG2195356
(S) 4-Bromofluorobenzene	76.4	J2		77.0-126		12/24/2023 11:21	WG2195356
(S) 1,2-Dichloroethane-d4	92.7			70.0-130		12/24/2023 11:21	WG2195356

⁹ Sc

EDB / DBCP by Method 8011

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Ethylene Dibromide	U		0.00547	0.0204	1.02	12/26/2023 22:18	WG2194935

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Diesel Range Organics (DRO)	1140		66.7	200	1	12/29/2023 09:04	WG2196969
Residual Range Organics (RRO)	422		83.3	250	1	01/02/2024 13:25	WG2196969
(S) o-Terphenyl	77.9			52.0-156		12/29/2023 09:04	WG2196969
(S) o-Terphenyl	74.2			52.0-156		01/02/2024 13:25	WG2196969

Sample Narrative:

L1690664-02 WG2196969: Sample resembles laboratory standard for Hydraulic Fluid.

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Benzo(a)anthracene	U		0.0203	0.0500	1	12/23/2023 05:48	WG2193586
Benzo(a)pyrene	U		0.0184	0.0500	1	12/23/2023 05:48	WG2193586
Benzo(b)fluoranthene	U		0.0168	0.0500	1	12/23/2023 05:48	WG2193586
Benzo(k)fluoranthene	U		0.0202	0.0500	1	12/23/2023 05:48	WG2193586
Chrysene	U		0.0179	0.0500	1	12/23/2023 05:48	WG2193586
Dibenz(a,h)anthracene	U		0.0160	0.0500	1	12/23/2023 05:48	WG2193586
Indeno(1,2,3-cd)pyrene	U		0.0158	0.0500	1	12/23/2023 05:48	WG2193586
Naphthalene	0.124	J	0.0917	0.250	1	12/23/2023 05:48	WG2193586
1-Methylnaphthalene	U		0.0687	0.250	1	12/23/2023 05:48	WG2193586
2-Methylnaphthalene	U		0.0674	0.250	1	12/23/2023 05:48	WG2193586
(S) Nitrobenzene-d5	107			31.0-160		12/23/2023 05:48	WG2193586
(S) 2-Fluorobiphenyl	119			48.0-148		12/23/2023 05:48	WG2193586
(S) p-Terphenyl-d14	116			37.0-146		12/23/2023 05:48	WG2193586

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Metals (ICP) by Method 6010D

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Lead	U		2.99	6.00	1	12/27/2023 22:50	WG2195515

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Gasoline Range Organics-NWTPH	41.4	J	31.6	100	1	12/30/2023 18:06	WG2198007
(S) a,a,a-Trifluorotoluene(FID)	99.2			78.0-120		12/30/2023 18:06	WG2198007

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

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.0941	1.00	1	12/24/2023 11:42	WG2195356
Toluene	U		0.278	1.00	1	12/24/2023 11:42	WG2195356
Ethylbenzene	U		0.137	1.00	1	12/24/2023 11:42	WG2195356
Total Xylenes	0.419	J	0.174	3.00	1	12/24/2023 11:42	WG2195356
(S) Toluene-d8	115			80.0-120		12/24/2023 11:42	WG2195356
(S) 4-Bromofluorobenzene	81.3			77.0-126		12/24/2023 11:42	WG2195356
(S) 1,2-Dichloroethane-d4	95.8			70.0-130		12/24/2023 11:42	WG2195356

⁹ Sc

EDB / DBCP by Method 8011

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Ethylene Dibromide	U		0.00595	0.0222	1.11	12/26/2023 22:30	WG2194935

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Diesel Range Organics (DRO)	1340		66.7	200	1	12/29/2023 09:24	WG2196969
Residual Range Organics (RRO)	690		83.3	250	1	01/02/2024 13:44	WG2196969
(S) o-Terphenyl	76.3			52.0-156		01/02/2024 13:44	WG2196969
(S) o-Terphenyl	60.0			52.0-156		12/29/2023 09:24	WG2196969

Sample Narrative:

L1690664-03 WG2196969: Sample resembles laboratory standard for Hydraulic Fluid.

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Benzo(a)anthracene	U		0.0203	0.0500	1	12/23/2023 04:51	WG2194463
Benzo(a)pyrene	U		0.0184	0.0500	1	12/23/2023 04:51	WG2194463
Benzo(b)fluoranthene	U		0.0168	0.0500	1	12/23/2023 04:51	WG2194463
Benzo(k)fluoranthene	U		0.0202	0.0500	1	12/23/2023 04:51	WG2194463
Chrysene	U		0.0179	0.0500	1	12/23/2023 04:51	WG2194463
Dibenz(a,h)anthracene	U		0.0160	0.0500	1	12/23/2023 04:51	WG2194463
Indeno(1,2,3-cd)pyrene	U		0.0158	0.0500	1	12/23/2023 04:51	WG2194463
Naphthalene	0.0947	J	0.0917	0.250	1	12/23/2023 04:51	WG2194463
1-Methylnaphthalene	U		0.0687	0.250	1	12/23/2023 04:51	WG2194463
2-Methylnaphthalene	U		0.0674	0.250	1	12/23/2023 04:51	WG2194463
(S) Nitrobenzene-d5	109			31.0-160		12/23/2023 04:51	WG2194463
(S) 2-Fluorobiphenyl	113			48.0-148		12/23/2023 04:51	WG2194463
(S) p-Terphenyl-d14	90.5			37.0-146		12/23/2023 04:51	WG2194463

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Metals (ICP) by Method 6010D

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Lead	7.21		2.99	6.00	1	12/27/2023 22:52	WG2195515

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Gasoline Range Organics-NWTPH	U		31.6	100	1	12/30/2023 18:28	WG2198007
(S) a,a,a-Trifluorotoluene(FID)	98.4			78.0-120		12/30/2023 18:28	WG2198007

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

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.0941	1.00	1	12/24/2023 12:04	WG2195356
Toluene	0.668	J	0.278	1.00	1	12/24/2023 12:04	WG2195356
Ethylbenzene	0.209	J	0.137	1.00	1	12/24/2023 12:04	WG2195356
Total Xylenes	1.07	J	0.174	3.00	1	12/24/2023 12:04	WG2195356
(S) Toluene-d8	105			80.0-120		12/24/2023 12:04	WG2195356
(S) 4-Bromofluorobenzene	80.3			77.0-126		12/24/2023 12:04	WG2195356
(S) 1,2-Dichloroethane-d4	94.4			70.0-130		12/24/2023 12:04	WG2195356

⁶ Qc⁷ GI⁸ Al⁹ Sc

EDB / DBCP by Method 8011

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Ethylene Dibromide	U		0.00579	0.0216	1.08	12/26/2023 22:42	WG2194935

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Diesel Range Organics (DRO)	293		66.7	200	1	12/29/2023 09:45	WG2196969
Residual Range Organics (RRO)	1020		83.3	250	1	01/02/2024 14:04	WG2196969
(S) o-Terphenyl	90.5			52.0-156		12/29/2023 09:45	WG2196969
(S) o-Terphenyl	59.5			52.0-156		01/02/2024 14:04	WG2196969

Sample Narrative:

L1690664-04 WG2196969: Sample resembles laboratory standard for Motor Oil.

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Benzo(a)anthracene	U		0.0203	0.0500	1	12/23/2023 05:11	WG2194463
Benzo(a)pyrene	U		0.0184	0.0500	1	12/23/2023 05:11	WG2194463
Benzo(b)fluoranthene	U		0.0168	0.0500	1	12/23/2023 05:11	WG2194463
Benzo(k)fluoranthene	U		0.0202	0.0500	1	12/23/2023 05:11	WG2194463
Chrysene	U		0.0179	0.0500	1	12/23/2023 05:11	WG2194463
Dibenz(a,h)anthracene	U		0.0160	0.0500	1	12/23/2023 05:11	WG2194463
Indeno(1,2,3-cd)pyrene	U		0.0158	0.0500	1	12/23/2023 05:11	WG2194463
Naphthalene	U		0.0917	0.250	1	12/23/2023 05:11	WG2194463
1-Methylnaphthalene	U		0.0687	0.250	1	12/23/2023 05:11	WG2194463
2-Methylnaphthalene	U		0.0674	0.250	1	12/23/2023 05:11	WG2194463
(S) Nitrobenzene-d5	95.8			31.0-160		12/23/2023 05:11	WG2194463
(S) 2-Fluorobiphenyl	105			48.0-148		12/23/2023 05:11	WG2194463
(S) p-Terphenyl-d14	85.3			37.0-146		12/23/2023 05:11	WG2194463

Metals (ICP) by Method 6010D

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Lead	U		2.99	6.00	1	12/27/2023 22:55	WG2195515

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Gasoline Range Organics-NWTPH	U		31.6	100	1	12/29/2023 22:30	WG2198002
(S)-a,a,a-Trifluorotoluene(FID)	97.5			78.0-120		12/29/2023 22:30	WG2198002

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

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.0941	1.00	1	12/24/2023 12:26	WG2195356
Toluene	U		0.278	1.00	1	12/24/2023 12:26	WG2195356
Ethylbenzene	U		0.137	1.00	1	12/24/2023 12:26	WG2195356
Total Xylenes	0.333	J	0.174	3.00	1	12/24/2023 12:26	WG2195356
(S)-Toluene-d8	104			80.0-120		12/24/2023 12:26	WG2195356
(S)-4-Bromofluorobenzene	76.9	J2		77.0-126		12/24/2023 12:26	WG2195356
(S)-1,2-Dichloroethane-d4	95.3			70.0-130		12/24/2023 12:26	WG2195356

EDB / DBCP by Method 8011

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Ethylene Dibromide	U		0.00547	0.0204	1.02	12/26/2023 22:54	WG2194935

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Diesel Range Organics (DRO)	U		66.7	200	1	12/23/2023 12:54	WG2194899
Residual Range Organics (RRO)	U		83.3	250	1	12/23/2023 12:54	WG2194899
(S)-o-Terphenyl	66.3			52.0-156		12/23/2023 12:54	WG2194899

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Benzo(a)anthracene	U		0.0203	0.0500	1	12/23/2023 06:06	WG2193586
Benzo(a)pyrene	U		0.0184	0.0500	1	12/23/2023 06:06	WG2193586
Benzo(b)fluoranthene	U		0.0168	0.0500	1	12/23/2023 06:06	WG2193586
Benzo(k)fluoranthene	U		0.0202	0.0500	1	12/23/2023 06:06	WG2193586
Chrysene	U		0.0179	0.0500	1	12/23/2023 06:06	WG2193586
Dibenz(a,h)anthracene	U		0.0160	0.0500	1	12/23/2023 06:06	WG2193586
Indeno(1,2,3-cd)pyrene	U		0.0158	0.0500	1	12/23/2023 06:06	WG2193586
Naphthalene	U		0.0917	0.250	1	12/23/2023 06:06	WG2193586
1-Methylnaphthalene	U		0.0687	0.250	1	12/23/2023 06:06	WG2193586
2-Methylnaphthalene	U		0.0674	0.250	1	12/23/2023 06:06	WG2193586
(S)-Nitrobenzene-d5	109			31.0-160		12/23/2023 06:06	WG2193586
(S)-2-Fluorobiphenyl	122			48.0-148		12/23/2023 06:06	WG2193586
(S)-p-Terphenyl-d14	119			37.0-146		12/23/2023 06:06	WG2193586

Metals (ICP) by Method 6010D

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Lead	3.62	J	2.99	6.00	1	12/27/2023 22:58	WG2195515

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Gasoline Range Organics-NWTPH	U		31.6	100	1	12/29/2023 22:52	WG2198002
(S) a,a,a-Trifluorotoluene(FID)	98.7			78.0-120		12/29/2023 22:52	WG2198002

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

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.0941	1.00	1	12/24/2023 12:14	WG2195456
Toluene	U		0.278	1.00	1	12/24/2023 12:14	WG2195456
Ethylbenzene	U		0.137	1.00	1	12/24/2023 12:14	WG2195456
Total Xylenes	0.327	J	0.174	3.00	1	12/24/2023 12:14	WG2195456
(S) Toluene-d8	108			80.0-120		12/24/2023 12:14	WG2195456
(S) 4-Bromofluorobenzene	97.3			77.0-126		12/24/2023 12:14	WG2195456
(S) 1,2-Dichloroethane-d4	93.8			70.0-130		12/24/2023 12:14	WG2195456

EDB / DBCP by Method 8011

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Ethylene Dibromide	U		0.00568	0.0212	1.06	12/26/2023 23:06	WG2194935

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Diesel Range Organics (DRO)	81.4	J	66.7	200	1	12/23/2023 13:15	WG2194899
Residual Range Organics (RRO)	U		83.3	250	1	12/23/2023 13:15	WG2194899
(S) o-Terphenyl	68.4			52.0-156		12/23/2023 13:15	WG2194899

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Benzo(a)anthracene	U		0.0203	0.0500	1	12/23/2023 06:24	WG2193586
Benzo(a)pyrene	U		0.0184	0.0500	1	12/23/2023 06:24	WG2193586
Benzo(b)fluoranthene	U		0.0168	0.0500	1	12/23/2023 06:24	WG2193586
Benzo(k)fluoranthene	U		0.0202	0.0500	1	12/23/2023 06:24	WG2193586
Chrysene	U		0.0179	0.0500	1	12/23/2023 06:24	WG2193586
Dibenz(a,h)anthracene	U		0.0160	0.0500	1	12/23/2023 06:24	WG2193586
Indeno(1,2,3-cd)pyrene	U		0.0158	0.0500	1	12/23/2023 06:24	WG2193586
Naphthalene	U		0.0917	0.250	1	12/23/2023 06:24	WG2193586
1-Methylnaphthalene	U		0.0687	0.250	1	12/23/2023 06:24	WG2193586
2-Methylnaphthalene	U		0.0674	0.250	1	12/23/2023 06:24	WG2193586
(S) Nitrobenzene-d5	104			31.0-160		12/23/2023 06:24	WG2193586
(S) 2-Fluorobiphenyl	114			48.0-148		12/23/2023 06:24	WG2193586
(S) p-Terphenyl-d14	112			37.0-146		12/23/2023 06:24	WG2193586

Metals (ICP) by Method 6010D

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Lead	5.46	J	2.99	6.00	1	12/27/2023 23:01	WG2195515

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Gasoline Range Organics-NWTPH	U		31.6	100	1	12/29/2023 23:13	WG2198002
(S) a,a,a-Trifluorotoluene(FID)	98.9			78.0-120		12/29/2023 23:13	WG2198002

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

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.0941	1.00	1	12/24/2023 12:33	WG2195456
Toluene	U		0.278	1.00	1	12/24/2023 12:33	WG2195456
Ethylbenzene	U		0.137	1.00	1	12/24/2023 12:33	WG2195456
Total Xylenes	0.342	J	0.174	3.00	1	12/24/2023 12:33	WG2195456
(S) Toluene-d8	107			80.0-120		12/24/2023 12:33	WG2195456
(S) 4-Bromofluorobenzene	99.6			77.0-126		12/24/2023 12:33	WG2195456
(S) 1,2-Dichloroethane-d4	89.9			70.0-130		12/24/2023 12:33	WG2195456

EDB / DBCP by Method 8011

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Ethylene Dibromide	U		0.00557	0.0208	1.04	12/26/2023 23:17	WG2194935

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Diesel Range Organics (DRO)	108	J	66.7	200	1	12/23/2023 13:35	WG2194899
Residual Range Organics (RRO)	112	J	83.3	250	1	12/23/2023 13:35	WG2194899
(S) o-Terphenyl	72.1			52.0-156		12/23/2023 13:35	WG2194899

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Benzo(a)anthracene	U		0.0203	0.0500	1	12/23/2023 05:30	WG2194463
Benzo(a)pyrene	U		0.0184	0.0500	1	12/23/2023 05:30	WG2194463
Benzo(b)fluoranthene	U		0.0168	0.0500	1	12/23/2023 05:30	WG2194463
Benzo(k)fluoranthene	U		0.0202	0.0500	1	12/23/2023 05:30	WG2194463
Chrysene	U		0.0179	0.0500	1	12/23/2023 05:30	WG2194463
Dibenz(a,h)anthracene	U		0.0160	0.0500	1	12/23/2023 05:30	WG2194463
Indeno(1,2,3-cd)pyrene	U		0.0158	0.0500	1	12/23/2023 05:30	WG2194463
Naphthalene	U		0.0917	0.250	1	12/23/2023 05:30	WG2194463
1-Methylnaphthalene	U		0.0687	0.250	1	12/23/2023 05:30	WG2194463
2-Methylnaphthalene	U		0.0674	0.250	1	12/23/2023 05:30	WG2194463
(S) Nitrobenzene-d5	98.4			31.0-160		12/23/2023 05:30	WG2194463
(S) 2-Fluorobiphenyl	108			48.0-148		12/23/2023 05:30	WG2194463
(S) p-Terphenyl-d14	96.3			37.0-146		12/23/2023 05:30	WG2194463

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	12/30/2023 07:13	WG2198007
(S) <i>a,a,a</i> -Trifluorotoluene(FID)	99.0			78.0-120		12/30/2023 07:13	WG2198007

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	U		0.0941	1.00	1	12/24/2023 11:00	WG2195456
Toluene	U		0.278	1.00	1	12/24/2023 11:00	WG2195456
Ethylbenzene	U		0.137	1.00	1	12/24/2023 11:00	WG2195456
Total Xylenes	U		0.174	3.00	1	12/24/2023 11:00	WG2195456
(S) Toluene-d8	109			80.0-120		12/24/2023 11:00	WG2195456
(S) 4-Bromofluorobenzene	100			77.0-126		12/24/2023 11:00	WG2195456
(S) 1,2-Dichloroethane-d4	104			70.0-130		12/24/2023 11:00	WG2195456

QUALITY CONTROL SUMMARY

[L1690664-01,02,03,04,05,06,07](#)

Method Blank (MB)

(MB) R4017383-1 12/27/23 22:12

Analyte	MB Result ug/l	<u>MB Qualifier</u>	MB MDL ug/l	MB RDL ug/l
Lead	U		2.99	6.00

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Laboratory Control Sample (LCS)

(LCS) R4017383-2 12/27/23 22:15

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Lead	1000	950	95.0	80.0-120	

L1690186-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1690186-06 12/27/23 22:18 • (MS) R4017383-4 12/27/23 22:23 • (MSD) R4017383-5 12/27/23 22:26

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Lead	1000	U	933	874	93.3	87.4	1	75.0-125			6.50	20

WG2198002

Volatile Organic Compounds (GC) by Method NWTPHGX

QUALITY CONTROL SUMMARY

[L1690664-02,05,06,07](#)

Method Blank (MB)

(MB) R4019493-2 12/29/23 21:46

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	U		31.6	100
(S) a,a,a-Trifluorotoluene(FID)	99.7			78.0-120

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Laboratory Control Sample (LCS)

(LCS) R4019493-1 12/29/23 20:52

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5500	5880	107	70.0-124	
(S) a,a,a-Trifluorotoluene(FID)		104		78.0-120	

WG2198007

Volatile Organic Compounds (GC) by Method NWTPHGX

QUALITY CONTROL SUMMARY

[L1690664-03,04,08](#)

Method Blank (MB)

(MB) R4018522-2 12/30/23 06:51

Analyte	MB Result ug/l	<u>MB Qualifier</u>	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	U		31.6	100
(S) a,a,a-Trifluorotoluene(FID)	98.2			78.0-120

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Laboratory Control Sample (LCS)

(LCS) R4018522-1 12/30/23 06:08

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Gasoline Range Organics-NWTPH	5500	5700	104	70.0-124	
(S) a,a,a-Trifluorotoluene(FID)		102		78.0-120	

L1692334-15 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1692334-15 12/30/23 15:11 • (MS) R4018522-3 12/30/23 16:16 • (MSD) R4018522-4 12/30/23 16:38

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Gasoline Range Organics-NWTPH	5500	U	2660	2260	48.4	41.1	1	10.0-155			16.3	21
(S) a,a,a-Trifluorotoluene(FID)				93.5		91.7		78.0-120				

WG2198692

Volatile Organic Compounds (GC) by Method NWTPHGX

QUALITY CONTROL SUMMARY

[L1690664-01](#)

Method Blank (MB)

(MB) R4019910-2 12/30/23 21:01

Analyte	MB Result ug/l	<u>MB Qualifier</u>	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	U		31.6	100
(S) a,a,a-Trifluorotoluene(FID)	98.6			78.0-120

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Laboratory Control Sample (LCS)

(LCS) R4019910-1 12/30/23 20:17

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Gasoline Range Organics-NWTPH	5500	5440	98.9	70.0-124	
(S) a,a,a-Trifluorotoluene(FID)		100		78.0-120	

QUALITY CONTROL SUMMARY

[L1690664-01,02,03,04,05](#)

Method Blank (MB)

(MB) R4018350-3 12/24/23 09:10

Analyte	MB Result ug/l	<u>MB Qualifier</u>	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.0941	1.00
Toluene	U		0.278	1.00
Ethylbenzene	U		0.137	1.00
Total Xylenes	U		0.174	3.00
(S) Toluene-d8	108		80.0-120	
(S) 4-Bromofluorobenzene	82.0		77.0-126	
(S) 1,2-Dichloroethane-d4	92.8		70.0-130	

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4018350-1 12/24/23 08:04 • (LCSD) R4018350-2 12/24/23 08:26

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Benzene	5.00	4.30	4.49	86.0	89.8	70.0-123			4.32	20
Toluene	5.00	5.12	5.03	102	101	79.0-120			1.77	20
Ethylbenzene	5.00	4.58	4.57	91.6	91.4	79.0-123			0.219	20
Total Xylenes	15.0	13.1	13.3	87.3	88.7	79.0-123			1.52	20
(S) Toluene-d8				107	105	80.0-120				
(S) 4-Bromofluorobenzene				87.9	85.8	77.0-126				
(S) 1,2-Dichloroethane-d4				87.8	86.2	70.0-130				

⁷Gl⁸Al⁹Sc

WG2195456

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

QUALITY CONTROL SUMMARY

[L1690664-06,07,08](#)

Method Blank (MB)

(MB) R4018777-3 12/24/23 08:56

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.0941	1.00
Toluene	U		0.278	1.00
Ethylbenzene	U		0.137	1.00
Total Xylenes	U		0.174	3.00
(S) Toluene-d8	107		80.0-120	
(S) 4-Bromofluorobenzene	96.8		77.0-126	
(S) 1,2-Dichloroethane-d4	91.8		70.0-130	

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4018777-1 12/24/23 08:00 • (LCSD) R4018777-2 12/24/23 08:18

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	5.00	4.56	4.72	91.2	94.4	70.0-123			3.45	20
Toluene	5.00	4.46	4.27	89.2	85.4	79.0-120			4.35	20
Ethylbenzene	5.00	4.20	4.50	84.0	90.0	79.0-123			6.90	20
Total Xylenes	15.0	12.9	12.7	86.0	84.7	79.0-123			1.56	20
(S) Toluene-d8			102	103	80.0-120					
(S) 4-Bromofluorobenzene			98.7	99.3	77.0-126					
(S) 1,2-Dichloroethane-d4			91.5	92.8	70.0-130					

⁷Gl⁸Al⁹Sc

QUALITY CONTROL SUMMARY

[L1690664-01,02,03,04,05,06,07](#)

Method Blank (MB)

(MB) R4017231-1 12/26/23 19:56

Analyte	MB Result ug/l	<u>MB Qualifier</u>	MB MDL ug/l	MB RDL ug/l
Ethylene Dibromide	U		0.00541	0.0202

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

L1690246-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1690246-02 12/26/23 20:43 • (DUP) R4017231-3 12/26/23 20:31

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	<u>DUP Qualifier</u>	DUP RPD Limits
Ethylene Dibromide	U	U	1	0.000		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4017231-4 12/26/23 21:07 • (LCSD) R4017231-5 12/26/23 23:41

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD	RPD Limits
Ethylene Dibromide	0.253	0.219	0.223	86.6	89.2	60.0-140			1.81	20

⁷Gl⁸Al⁹Sc

L1690246-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1690246-01 12/26/23 20:19 • (MS) R4017231-2 12/26/23 20:08

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits	<u>MS Qualifier</u>
Ethylene Dibromide	0.103	U	0.106	103	1.03	64.0-159	

WG2194899

QUALITY CONTROL SUMMARY

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

[L1690664-05,06,07](#)

Method Blank (MB)

(MB) R4016878-1 12/23/23 11:13

Analyte	MB Result ug/l	<u>MB Qualifier</u>	MB MDL ug/l	MB RDL ug/l
Diesel Range Organics (DRO)	U		66.7	200
Residual Range Organics (RRO)	U		83.3	250
(S) o-Terphenyl	69.0			52.0-156

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4016878-2 12/23/23 11:33 • (LCSD) R4016878-3 12/23/23 11:53

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Diesel Range Organics (DRO)	1500	1200	1230	80.0	82.0	50.0-150			2.47	20
(S) o-Terphenyl			69.5	70.5		52.0-156				

WG2196969

QUALITY CONTROL SUMMARY

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

[L1690664-01,02,03,04](#)

Method Blank (MB)

(MB) R4018355-1 12/29/23 00:13

Analyte	MB Result ug/l	<u>MB Qualifier</u>	MB MDL ug/l	MB RDL ug/l
Diesel Range Organics (DRO)	U		66.7	200
Residual Range Organics (RRO)	U		83.3	250
(S) o-Terphenyl	92.5			52.0-156

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4018355-2 12/29/23 00:33 • (LCSD) R4018355-3 12/29/23 00:53

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Diesel Range Organics (DRO)	1500	1160	1160	77.3	77.3	50.0-150			0.000	20
(S) o-Terphenyl			97.0	92.0		52.0-156				

QUALITY CONTROL SUMMARY

[L1690664-01,02,05,06](#)

Method Blank (MB)

(MB) R4017978-3 12/23/23 01:03

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l	¹ Cp
Benzo(a)anthracene	U		0.0203	0.0500	
Benzo(a)pyrene	U		0.0184	0.0500	
Benzo(b)fluoranthene	U		0.0168	0.0500	
Benzo(k)fluoranthene	U		0.0202	0.0500	
Chrysene	U		0.0179	0.0500	
Dibenz(a,h)anthracene	U		0.0160	0.0500	
Indeno(1,2,3-cd)pyrene	U		0.0158	0.0500	
Naphthalene	U		0.0917	0.250	
1-Methylnaphthalene	U		0.0687	0.250	
2-Methylnaphthalene	U		0.0674	0.250	
(S) Nitrobenzene-d5	90.5			31.0-160	
(S) 2-Fluorobiphenyl	99.5			48.0-148	
(S) p-Terphenyl-d14	99.0			37.0-146	

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4017978-1 12/23/23 00:27 • (LCSD) R4017978-2 12/23/23 00:45

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzo(a)anthracene	2.00	2.43	2.24	122	112	61.0-140			8.14	20
Benzo(a)pyrene	2.00	2.37	2.21	118	111	60.0-143			6.99	20
Benzo(b)fluoranthene	2.00	2.34	2.11	117	105	58.0-141			10.3	20
Benzo(k)fluoranthene	2.00	2.30	2.18	115	109	58.0-148			5.36	20
Chrysene	2.00	2.47	2.32	123	116	64.0-144			6.26	20
Dibenz(a,h)anthracene	2.00	2.18	2.03	109	102	52.0-155			7.13	20
Indeno(1,2,3-cd)pyrene	2.00	2.35	2.18	117	109	54.0-153			7.51	20
Naphthalene	2.00	2.52	2.31	126	115	61.0-137			8.70	20
1-Methylnaphthalene	2.00	2.45	2.29	122	115	66.0-142			6.75	20
2-Methylnaphthalene	2.00	2.33	2.17	117	108	62.0-136			7.11	20
(S) Nitrobenzene-d5				107	97.5	31.0-160				
(S) 2-Fluorobiphenyl					115	108	48.0-148			
(S) p-Terphenyl-d14				109	99.5	37.0-146				

Method Blank (MB)

(MB) R4018047-3 12/23/23 00:57

Analyte	MB Result ug/l	<u>MB Qualifier</u>	MB MDL ug/l	MB RDL ug/l	¹ Cp
Benzo(a)anthracene	U		0.0203	0.0500	
Benzo(a)pyrene	U		0.0184	0.0500	
Benzo(b)fluoranthene	U		0.0168	0.0500	
Benzo(k)fluoranthene	U		0.0202	0.0500	
Chrysene	U		0.0179	0.0500	
Dibenz(a,h)anthracene	U		0.0160	0.0500	
Indeno(1,2,3-cd)pyrene	U		0.0158	0.0500	
Naphthalene	U		0.0917	0.250	
1-Methylnaphthalene	U		0.0687	0.250	
2-Methylnaphthalene	U		0.0674	0.250	
(S) Nitrobenzene-d5	108			31.0-160	
(S) 2-Fluorobiphenyl	118			48.0-148	
(S) p-Terphenyl-d14	104			37.0-146	

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4018047-1 12/23/23 00:18 • (LCSD) R4018047-2 12/23/23 00:37

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Benzo(a)anthracene	2.00	2.33	2.37	117	118	61.0-140			1.70	20
Benzo(a)pyrene	2.00	1.87	1.94	93.5	97.0	60.0-143			3.67	20
Benzo(b)fluoranthene	2.00	1.83	1.96	91.5	98.0	58.0-141			6.86	20
Benzo(k)fluoranthene	2.00	1.79	1.81	89.5	90.5	58.0-148			1.11	20
Chrysene	2.00	2.32	2.39	116	119	64.0-144			2.97	20
Dibenz(a,h)anthracene	2.00	1.86	1.91	93.0	95.5	52.0-155			2.65	20
Indeno(1,2,3-cd)pyrene	2.00	2.01	2.12	100	106	54.0-153			5.33	20
Naphthalene	2.00	2.07	2.14	104	107	61.0-137			3.33	20
1-Methylnaphthalene	2.00	2.17	2.21	108	111	66.0-142			1.83	20
2-Methylnaphthalene	2.00	2.07	2.12	104	106	62.0-136			2.39	20
(S) Nitrobenzene-d5				100	100	31.0-160				
(S) 2-Fluorobiphenyl				107	110	48.0-148				
(S) p-Terphenyl-d14			91.5	94.0	37.0-146					

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.	¹ Cp
RDL	Reported Detection Limit.	² Tc
Rec.	Recovery.	³ Ss
RPD	Relative Percent Difference.	⁴ Cn
SDG	Sample Delivery Group.	⁵ Sr
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.	⁶ Qc
U	Not detected at the Reporting Limit (or MDL where applicable).	⁷ Gl
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.	⁸ Al
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.	⁹ Sc
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.	
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.	
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.	
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.	
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.	
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.	
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.	
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.	
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.	
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.	

Qualifier Description

J	The identification of the analyte is acceptable; the reported value is an estimate.
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.
J2	Surrogate recovery limits have been exceeded; values are outside lower control limits.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey—NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio—VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Company Name/Address: Arcadis - Chevron - WA 1420 5th Ave Unit 2400 Seattle, WA 98101				Billing Information: Attn: Accounts Payable 630 Plaza Dr., Ste. 600 Highlands Ranch, CO 80129				Pres Chk	Analysis / Container / Preservative							Chain of Custody	Page <u>1</u> of <u>1</u>		
Report to: Eric Epple				Email To: eric.epple@arcadis.com;environmentDM-												Pace [®] PEOPLE ADVANCING SCIENCE			
Project Description: 375289		City/State Collected:			Please Circle: PT MT CT ET										MT JULIET, TN 12065 Lebanon Rd Mount Juliet, TN 37122 Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubs/pas-standard-terms.pdf				
Phone: 206-325-5254		Client Project # 30079744 19.45			Lab Project # CHEVARCWA-375289										SDG # 1690664 A210				
Collected by (print): <i>Aimee Rice</i>		Site/Facility ID # 808 S COLUMBUS AVE			P.O. #										Acctnum: CHEVARCWA Template: T243769 Prelogin: P1044182 PM: 110 - Brian Ford PB:				
Collected by (signature): <i>Anne</i>		Rush? (Lab MUST Be Notified) <input type="checkbox"/> Same Day <input type="checkbox"/> Five Day <input type="checkbox"/> Next Day <input type="checkbox"/> 5 Day (Rad Only) <input type="checkbox"/> Two Day <input type="checkbox"/> 10 Day (Rad Only) <input type="checkbox"/> Three Day			Quote #			Date Results Needed							Shipped Via: Remarks <input type="checkbox"/> Sample # (lab only)				
Immediately Packed on Ice N <input type="checkbox"/> Y <input type="checkbox"/>																			
Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	BTEX	EDB	NWTPHDX	NWTPHX	SVOCs	Total Lead	cPAHs/Naph						
MW-3A-W-20231218	G	GW	-	12/18/23	1003	14	X	X	X	X	X	X	X				-01		
MW-4A-W-20231218	G	GW	-	12/18/23	1529	14	X	X	X	X	X	X	X				-02		
MW-5A-W-20231219	G	GW	-	12/19/23	1043	14	X	X	X	X	X	X	X				-03		
MW-6A-W-20231219	G	GW	-	12/19/23	0941	14	X	X	X	X	X	X	X				-04		
MW-9-W-20231218	G	GW	-	12/18/23	1437	14	X	X	X	X	X	X	X				-05		
MW-10-W-20231218	G	GW	-	12/18/23	1333	14	X	X	X	X	X	X	X				-06		
DUP-1-20231218	G	GW	-	12/18/23	1200	14	X	X	X	X	X	X	X				-07		
TB-1-20231219	G	GW	-	12/19/23	0900	3	X										-08		
		GW																	
		GW																	
* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater DW - Drinking Water OT - Other _____		Remarks: _____													pH _____	Temp _____	Sample Receipt Checklist COC Seal Present/Intact: <input checked="" type="checkbox"/> NP <input type="checkbox"/> N COC Signed/Accurate: <input checked="" type="checkbox"/> <input type="checkbox"/> Bottles arrive intact: <input checked="" type="checkbox"/> <input type="checkbox"/> Correct bottles used: <input checked="" type="checkbox"/> <input type="checkbox"/> Sufficient volume sent: <input checked="" type="checkbox"/> <input type="checkbox"/> <i>If Applicable</i> VOA Zero Headspace: <input type="checkbox"/> <input checked="" type="checkbox"/> N Preservation Correct/Checked: <input checked="" type="checkbox"/> <input type="checkbox"/> RAD Screen <0.5 mR/hr: <input checked="" type="checkbox"/> <input type="checkbox"/>		
		Samples returned via: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Courier				Tracking #			7074 8781 9506										
Relinquished by : (Signature) <i>Anne</i>		Date: 12/19/23	Time:	Received by: (Signature) <i>Shipped via fedex</i>			Trip Blank Received: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No HCl / MeOH TBR			Temp: 0.048 °C Bottles Received: 1.370 ² .3			If preservation required by Login: Date/Time						
Relinquished by : (Signature)		Date:	Time:	Received by: (Signature)															
Relinquished by : (Signature)		Date:	Time:	Received for lab by: (Signature) <i>Fat woy</i>			Date: 12-21-23 Time: 10:00			Hold:			Condition: NCF <input checked="" type="checkbox"/> OK						

