



**THIRD QUARTER 2022 GROUNDWATER MONITORING  
REPORT**

**Southside Facility #26463  
8816 Fingerboard Road  
Frederick, MD 21704  
MDE Case No. 2019-0473-FR**

*Prepared For:*

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# GROUNDWATER MONITORING REPORT

**Site Name:** Southside Facility #26463

**Site Address:** 8816 Fingerboard Road  
Frederick, MD 21704  
*(Figure 1)*

**Client Information:** Sunoco, LP/Evergreen Resources Group, LLC  
2 Righter Parkway, Suite 120  
Wilmington, DE 19803

**Client Contact:** Susan Shirer

**Regulatory Contacts:** Mr. Nick Psenicnik – Maryland Department of the Environment

**Field Activities:** Groundwater Gauging and Sampling

**Monitoring Period:** July 1, 2022 – September 30, 2022

**Gauging Activities:** Monitoring wells MW-2, MW-5, MW-9, MW-14, and tank field wells TF-1R, TF-2R, and TF-3R were gauged on September 9, 2022. Wells were gauged using an electronic interface probe capable of measuring Light Non-Aqueous Phase Liquids (LNAPL) to 0.01 foot. LNAPL was not detected in the monitoring well network on September 9, 2022. Depth to water measurements ranged from approximately 27.29 feet (MW-5) to 33.78 feet (MW-9) below the top of the well casing. Prior to gauging the wells, the headspace of the well was screened using a photoionization detector (PID) immediately after removing the well cap. PID readings are presented below.

Well ID	PID Reading (ppm)
MW-2	95.8
MW-5	0.0
MW-9	113.9
MW-14	162.3
TF-1R	5.1
TF-2R	1.0
TF-3R	0.1

Historic water gauging data are summarized in **Table 1**. Gauging locations are depicted on **Figure 2** and a potentiometric surface map based on the September 9, 2022, gauging data is provided as **Figure 3**. Groundwater flow direction was determined to be towards the northeast at a gradient of approximately 3.8%.

**Groundwater Sampling:**

On September 9, 2022, monitoring wells MW-2, MW-5, MW-9, and MW-14 were purged of approximately three well volumes of groundwater using an electric purge pump and then sampled using dedicated polyethylene tubing. Groundwater samples were then transferred into laboratory supplied containers, and immediately placed on ice.

To minimize the potential for cross contamination during sample collection, all reusable equipment was decontaminated prior to use. Decontamination procedures consisted of using distilled water and Liquinox soap solution wash, a distilled water rinse, a final distilled water rinse, and air drying.

Monitoring well samples were shipped under standard chain of custody procedures to Pace Analytical Services, National Center for Testing and Analysis (Pace) in Mount Juliet, Tennessee for analysis of volatile organic compounds (VOCs) fuel oxygenates and naphthalene in accordance with EPA Method 8260, and total petroleum hydrocarbons (TPH) gasoline range organics (GRO) and diesel range organics (DRO) in accordance with EPA Method 8015.

On September 9, 2022, EnviroTrac also collected a potable water sample from the onsite drinking water supply well designated as PW-1. The sample was transferred into laboratory supplied containers, and immediately placed on ice. The potable water sample was shipped to Pace for analysis of VOCs fuel oxygenates in accordance with EPA Method 524.2 and VOCs fuel oxygenates and naphthalene in accordance with EPA Method 8260.

**Groundwater  
Analytical Summary:**

The results of the September 9, 2022, groundwater sampling event indicated a general decrease in contaminant concentrations when compared to historical 2020 and 2021 data. A summary of the results is present below.

- Concentrations of compounds of concern (COCs) were below laboratory detection limits (BDL) in well MW-5;
- Concentrations of benzene, toluene, ethylbenzene, total xylenes, ethyl tert-butyl ether (ETBE), and naphthalene were BDL in each well sampled;
- Well MW-2 reported concentrations of methyl tert-butyl ether (MTBE) at 33.2 micrograms per liter ( $\mu\text{g/L}$ ), tert-Amyl Methyl Ether (TAME) at 2.59  $\mu\text{g/L}$ , di-isopropyl ether (DIPE) at 34.7  $\mu\text{g/L}$ , TPH GRO at 0.134 milligrams per liter (mg/L), and TPH DRO at 0.123 mg/L;
- Well MW-9 reported concentrations of TPH DRO at 0.196 mg/L;
- Well MW-14 reported concentrations of MTBE at 16.9  $\mu\text{g/L}$ , and DIPE at 36.8  $\mu\text{g/L}$ ; and,
- The potable well, PW-1, was BDL for all COCs.

Graphical analysis of select COC concentrations is presented in **Appendix A**. A copy of the laboratory analytical report is included in **Appendix B**; historic groundwater analytical data and potable well sampling data are summarized in **Tables 1 & 2**, respectively; a geographic distribution of the groundwater analytical data is provided as **Figure 4**.

**Conclusions:**

Concentrations of COCs in the groundwater samples collected during the 3<sup>rd</sup> Quarter 2022 remained relatively consistent in comparison to 2022 second quarter sampling data. Samples collected from monitoring wells directly downgradient of the tank field (MW-2 and MW-14) exhibited the highest dissolved petroleum impact, while concentrations of COCs in the up- to cross-gradient wells (MW-5 and MW-9) were mostly BDL. The analytical results of the sample collected from the onsite potable well (PW-1) remained consistent with 2020 and 2021 results (**Table 2**).

Data from wells MW-2 and MW-14 were evaluated using GSI Mann-Kendall Analysis to evaluate contaminant trends. These trends, including the data from the 3<sup>rd</sup> Quarter of 2022, are available in **Appendix A**. Trend analysis indicates the following:

- Concentrations of Benzene are decreasing in MW-2 and MW-14;
- Concentrations of MTBE are decreasing in MW-2 and probably decreasing in MW-14.;
- Concentrations of TBA are probably decreasing in MW-2 and decreasing in MW-14;
- Concentrations of TAME are decreasing in MW-2 and MW-14;
- Concentrations of DIPE are decreasing in MW-2 and probably decreasing in MW-14.;
- Concentrations of TPH GRO are decreasing in MW-2 and MW-14; and
- Concentrations of TPH DRO are decreasing in MW-2 and stable in MW-14.

**Future Site Activities:**

Based on the results of the Mann-Kendall Trend Analysis, EnviroTrac recommends one more quarterly sample in the 4<sup>th</sup> quarter and bi-annual sampling in 2023. Following the sampling event, a quarterly groundwater monitoring and sampling report will be prepared and submitted to MDE that includes a dissolved hydrocarbon trend analysis for evaluation of continued sampling frequency.

**Attachments:**

Table 1:	Monitoring Well Gauging Data and Historical Groundwater Analytical Summary
Table 2:	Potable Well Historical Analytical Summary
Figure 1:	Site Location Map
Figure 2:	Site Plan
Figure 3:	Potentiometric Surface Map
Figure 4:	Groundwater Analytical Results Map
Appendix A:	Mann-Kendall Trend Analysis
Appendix B:	Analytical Laboratory Report

## TABLES

TABLE 1  
Groundwater Monitoring Analytical Data  
Southside Facility #26463  
8816 Fingerboard Road  
Frederick, Maryland

Sample ID	Date	Gauging Data					Analytical Data													
		Top of Casing Elevation	Depth to Water (feet)	Depth to Hydro-carbon (feet)	Hydro-carbon Thickness (feet)	Corrected GW Elevation (feet)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	ETBE (µg/L)	DIPE (µg/L)	Naphthalene (µg/L)	TPH GRO (mg/L)	TPH DRO (mg/L)	
MW-2	03/02/2011	97.37	32.19	ND	ND	65.18	ND(5)	ND(5)	ND(5)	ND(5)	BRL	76	110	ND(5)	ND(5)	6	ND(5)	NA	NA	
	06/02/2011	97.37	29.47	ND	ND	67.90	ND(5)	ND(5)	ND(5)	ND(5)	BRL	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	NA	NA	
	09/07/2011	97.37	30.97	ND	ND	66.40	ND(5)	ND(5)	ND(5)	ND(5)	BRL	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	NA	NA	
	11/09/2011	97.37	29.46	ND	ND	67.91	ND(5)	ND(5)	ND(5)	ND(5)	BRL	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	NA	NA	
	02/29/2012	97.37	29.42	ND	ND	67.95	ND(5)	ND(5)	ND(5)	ND(5)	BRL	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	NA	NA	
	05/24/2012	97.37	30.92	ND	ND	66.45	ND(5)	ND(5)	ND(5)	ND(5)	BRL	15	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	NA	NA	
	08/16/2012	97.37	31.42	ND	ND	65.95	ND(5)	ND(5)	ND(5)	ND(5)	BRL	9	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	NA	NA	
	11/28/2012	97.37	31.78	ND	ND	65.59	ND(5)	ND(5)	ND(5)	ND(5)	BRL	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	NA	NA	
	02/26/2013	97.37	30.75	ND	ND	66.62	ND(5)	ND(5)	ND(5)	ND(5)	BRL	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	NA	NA	
	05/17/2013	97.37	30.44	ND	ND	66.93	ND(5)	ND(5)	ND(5)	ND(5)	BRL	9	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	NA	NA	
	09/04/2013	97.37	31.19	ND	ND	66.18	ND(5)	ND(5)	ND(5)	ND(5)	BRL	53	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	NA	NA	
	11/15/2013	97.37	31.32	ND	ND	66.05	ND(5)	ND(5)	ND(5)	ND(5)	BRL	8	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	NA	NA	
	02/21/2014	97.37	29.22	ND	ND	68.15	ND(5)	ND(5)	ND(5)	ND(5)	BRL	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	NA	NA	
	05/15/2014	97.37	27.78	ND	ND	69.59	ND(1)	ND(1)	ND(1)	ND(1)	BRL	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	ND(5)	NA	NA	
	06/30/2015	97.37	28.02	ND	ND	69.35	ND(1)	ND(1)	ND(1)	ND(1)	BRL	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	ND(5)	NA	NA	
	08/01/2016	97.37	30.06	ND	ND	67.31	ND(1)	ND(1)	ND(1)	ND(1)	BRL	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	ND(5)	NA	NA	
	08/15/2017	97.37	32.11	ND	ND	65.26	ND(1)	ND(1)	ND(1)	ND(1)	BRL	2	ND(20)	ND(1)	ND(1)	39	ND(5)	NA	NA	
	10/30/2018	97.37	26.55	ND	ND	70.82	370	24	ND(1)	15	409	120	ND(25)	75	ND(1)	760	ND(10)	NA	NA	
	01/29/2019	97.37	25.27	ND	ND	72.10	500	4	ND(1)	6	510	140	370	100	ND(1)	620	ND(10)	NA	NA	
	03/14/2019	97.37	25.42	ND	ND	71.95	210	1	ND(1)	ND(5)	211	110	320	64	ND(1)	390	ND(10)	NA	NA	
11/05/2020	97.37	30.96	ND	ND	66.41	ND(5)	ND(5)	ND(5)	ND(15)	BRL	271	883	51	ND(5)	1040	ND(25)	2.90	0.519		
03/01/2021	97.37	28.65	ND	ND	68.72	ND(1)	ND(1)	ND(1)	ND(3)	BRL	2.17	12.0	ND(1)	ND(1)	26.8	ND(5)	0.182	0.179		
05/19/2021	97.37	29.79	ND	ND	67.58	ND(1)	ND(1)	ND(1)	ND(3)	BRL	47.6	9.49	6.58	ND(1)	114	ND(5)	0.251	0.156		
08/11/2021	97.37	30.77	ND	ND	66.60	ND(1)	ND(1)	ND(1)	ND(3)	BRL	32.0	47.7	3.98	ND(1)	151	ND(5)	0.274	0.647		
12/09/2021	97.37	31.26	ND	ND	66.11	ND(1)	ND(1)	ND(1)	ND(3)	BRL	43.7	ND(5)	7.07	ND(1)	153	ND(5)	0.258	0.247		

TABLE 1  
Groundwater Monitoring Analytical Data  
Southside Facility #26463  
8816 Fingerboard Road  
Frederick, Maryland

Sample ID	Date	Gauging Data					Analytical Data													
		Top of Casing Elevation	Depth to Water (feet)	Depth to Hydro-carbon (feet)	Hydro-carbon Thickness (feet)	Corrected GW Elevation (feet)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	ETBE (µg/L)	DIPE (µg/L)	Naphthalene (µg/L)	TPH GRO (mg/L)	TPH DRO (mg/L)	
MW-2 Cont.	03/11/2022	97.37	31.86	ND	ND	65.51	ND(1)	ND(1)	ND(1)	ND(3)	BRL	57.6	ND(5)	4.85	ND(1)	102	ND(5)	0.169	0.238	
	05/12/2022	97.37	31.02	ND	ND	66.35	ND(1)	ND(1)	ND(1)	ND(3)	BRL	41.3	8.73	2.91	ND(1)	61.3	ND(5)	0.480	0.123	
	09/09/2022	97.37	31.78	ND	ND	65.59	ND(1)	ND(1)	ND(1)	ND(3)	BRL	33.2	ND(5)	2.59	ND(1)	34.7	ND(5)	0.134	0.123	
MW-5	03/02/2011	92.16	28.76	ND	ND	63.40	ND(5)	ND(5)	ND(5)	ND(5)	BRL	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	NA	NA	
	06/02/2011	92.16	24.80	ND	ND	67.36	ND(5)	ND(5)	ND(5)	ND(5)	BRL	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	NA	NA	
	09/07/2011	92.16	26.43	ND	ND	65.73	ND(5)	ND(5)	ND(5)	ND(5)	BRL	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	NA	NA	
	11/09/2011	92.16	25.08	ND	ND	67.08	ND(5)	ND(5)	ND(5)	ND(5)	BRL	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	NA	NA	
	02/29/2012	92.16	24.82	ND	ND	67.34	ND(5)	ND(5)	ND(5)	ND(5)	BRL	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	NA	NA	
	05/24/2012	92.16	26.04	ND	ND	66.12	ND(5)	ND(5)	ND(5)	ND(5)	BRL	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	NA	NA	
	08/16/2012	92.16	26.65	ND	ND	65.51	ND(5)	ND(5)	ND(5)	ND(5)	BRL	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	NA	NA	
	11/28/2012	92.16	27.16	ND	ND	65.00	ND(5)	ND(5)	ND(5)	ND(5)	BRL	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	NA	NA	
	02/26/2013	92.16	26.18	ND	ND	65.98	ND(5)	ND(5)	ND(5)	ND(5)	BRL	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	NA	NA	
	05/17/2013	92.16	25.89	ND	ND	66.27	ND(5)	ND(5)	ND(5)	ND(5)	BRL	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	NA	NA	
	09/04/2013	92.16	26.28	ND	ND	65.88	ND(5)	ND(5)	ND(5)	ND(5)	BRL	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	NA	NA	
	11/15/2013	92.16	26.82	ND	ND	65.34	ND(5)	ND(5)	ND(5)	ND(5)	BRL	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	NA	NA	
	02/21/2014	92.16	24.68	ND	ND	67.48	ND(5)	ND(5)	ND(5)	ND(5)	BRL	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	NA	NA	
	05/15/2014	92.16	22.91	ND	ND	69.25	ND(1)	ND(1)	ND(1)	ND(1)	BRL	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	NA	NA
	06/30/2015	92.16	23.16	ND	ND	69.00	ND(1)	ND(1)	ND(1)	ND(1)	BRL	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	NA	NA
	08/01/2016	92.16	25.28	ND	ND	66.88	ND(1)	ND(1)	ND(1)	ND(1)	BRL	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	NA	NA
	08/15/2017	92.16	27.52	ND	ND	64.64	ND(1)	ND(1)	ND(1)	ND(1)	BRL	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	NA	NA
	10/30/2018	92.16	22.05	ND	ND	70.11	ND(1)	ND(1)	ND(1)	ND(5)	BRL	ND(1)	ND(25)	ND(1)	ND(1)	ND(1)	ND(10)	NA	NA	
	01/29/2019	92.16	20.25	ND	ND	71.91	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA
	03/14/2019	92.16	20.39	ND	ND	71.77	ND(1)	ND(1)	ND(1)	ND(5)	BRL	ND(1)	ND(25)	ND(1)	ND(1)	ND(1)	ND(10)	NA	NA	
	06/04/2019	92.16	20.60	ND	ND	71.56	ND(1)	ND(1)	ND(1)	ND(3)	BRL	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(5)	ND(0.1)	ND(0.1)	
	08/22/2019	92.16	22.95	ND	ND	69.21	ND(1)	ND(1)	ND(1)	ND(3)	BRL	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(5)	ND(0.1)	ND(0.1)	
	12/17/2019	92.16	25.53	ND	ND	66.63	ND(1)	ND(1)	ND(1)	ND(3)	BRL	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(5)	ND(0.1)	ND(0.1)	
	03/09/2020	92.16	25.20	ND	ND	66.96	ND(1)	ND(1)	ND(1)	ND(3)	BRL	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(5)	ND(0.1)	ND(0.1)	
	06/04/2020	92.16	25.10	ND	ND	67.06	ND(1)	ND(1)	ND(1)	ND(3)	BRL	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(5)	ND(0.1)	ND(0.25)	
	08/20/2020	92.16	25.14	ND	ND	67.02	ND(1)	ND(1)	ND(1)	ND(3)	BRL	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(5)	ND(0.1)	ND(0.1)	
11/05/2020	92.16	26.23	ND	ND	65.93	ND(1)	ND(1)	ND(1)	ND(3)	BRL	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(5)	ND(0.1)	ND(0.1)		
03/01/2021	92.16	24.91	ND	ND	67.25	ND(1)	ND(1)	ND(1)	ND(3)	BRL	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(5)	ND(0.1)	ND(0.1)		
05/19/2021	92.16	25.09	ND	ND	67.07	ND(1)	ND(1)	ND(1)	ND(3)	BRL	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(5)	ND(0.1)	ND(0.1)		
08/11/2021	92.16	26.02	ND	ND	66.14	ND(1)	ND(1)	ND(1)	ND(3)	BRL	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(5)	ND(0.1)	0.124		

TABLE 1  
Groundwater Monitoring Analytical Data  
Southside Facility #26463  
8816 Fingerboard Road  
Frederick, Maryland

Sample ID	Date	Gauging Data					Analytical Data													
		Top of Casing Elevation	Depth to Water (feet)	Depth to Hydro-carbon (feet)	Hydro-carbon Thickness (feet)	Corrected GW Elevation (feet)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	ETBE (µg/L)	DIPE (µg/L)	Naphthalene (µg/L)	TPH GRO (mg/L)	TPH DRO (mg/L)	
MW-5 Cont.	12/09/2021	92.16	26.55	ND	ND	65.61	ND(1)	ND(1)	ND(1)	ND(3)	BRL	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(5)	ND(0.1)	ND(0.1)	
	03/11/2022	92.16	27.23	ND	ND	64.93	ND(1)	ND(1)	ND(1)	ND(3)	BRL	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(5)	ND(0.1)	ND(0.1)	
	05/12/2022	92.16	26.58	ND	ND	65.58	ND(1)	ND(1)	ND(1)	ND(3)	BRL	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(5)	ND(0.1)	ND(0.1)	
	09/09/2022	92.16	27.29	ND	ND	64.87	ND(1)	ND(1)	ND(1)	ND(3)	BRL	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(5)	ND(0.1)	ND(0.1)	
MW-9	03/02/2011	99.14	34.24	ND	ND	64.90	ND(5)	ND(5)	ND(5)	ND(5)	BRL	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	NA	NA	
	06/02/2011	99.14	31.39	ND	ND	67.75	ND(5)	ND(5)	ND(5)	ND(5)	BRL	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	NA	NA	
	09/07/2011	99.14	32.97	ND	ND	66.17	ND(5)	ND(5)	ND(5)	ND(5)	BRL	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	NA	NA	
	05/24/2012	99.14	32.75	ND	ND	66.39	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	08/16/2012	99.14	33.23	ND	ND	65.91	ND(5)	ND(5)	ND(5)	ND(5)	BRL	5	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	NA	NA	
	11/28/2012	99.14	33.45	ND	ND	65.69	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	02/26/2013	99.14	32.41	ND	ND	66.73	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	05/17/2013	99.14	32.13	ND	ND	67.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	09/04/2013	99.14	32.75	ND	ND	66.39	ND(5)	ND(5)	ND(5)	ND(5)	BRL	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	NA	NA	
	05/15/2014	99.14	29.65	ND	ND	69.49	ND(1)	ND(1)	ND(1)	ND(1)	BRL	2	ND(20)	ND(1)	ND(1)	ND(1)	ND(5)	NA	NA	
	06/30/2015	99.14	29.90	ND	ND	69.24	ND(1)	ND(1)	ND(1)	ND(1)	BRL	3	ND(20)	ND(1)	ND(1)	ND(1)	ND(5)	NA	NA	
	08/01/2016	99.14	31.81	ND	ND	67.33	ND(1)	ND(1)	ND(1)	ND(1)	BRL	1	ND(20)	ND(1)	ND(1)	ND(1)	ND(5)	NA	NA	
	08/15/2017	99.14	33.94	ND	ND	65.20	ND(1)	ND(1)	ND(1)	ND(1)	BRL	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	ND(5)	NA	NA	
	10/30/2018	99.14	27.75	ND	ND	71.39	160	32	ND(1)	14	206	31	ND(25)	14	ND(1)	150	ND(10)	NA	NA	
	01/29/2019	99.14	27.04	ND	ND	72.10	ND(1)	ND(1)	ND(1)	ND(5)	BRL	ND(1)	ND(25)	ND(1)	ND(1)	ND(1)	ND(10)	NA	NA	
	03/14/2019	99.14	27.21	ND	ND	71.93	ND(1)	ND(1)	ND(1)	ND(5)	BRL	ND(1)	ND(25)	ND(1)	ND(1)	ND(1)	ND(10)	NA	NA	
	06/04/2019	99.14	27.38	ND	ND	71.76	ND(1)	ND(1)	ND(1)	ND(3)	BRL	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(5)	ND(0.1)	ND(0.1)	
	08/22/2019	99.14	29.63	ND	ND	69.51	ND(1)	ND(1)	ND(1)	ND(3)	BRL	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(5)	ND(0.1)	ND(0.1)	
	12/17/2019	99.14	31.96	ND	ND	67.18	ND(1)	ND(1)	ND(1)	ND(3)	BRL	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(5)	0.136	ND(0.1)	
	03/09/2020	99.14	31.95	ND	ND	67.19	ND(1)	ND(1)	ND(1)	ND(3)	BRL	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(5)	0.138	ND(0.1)	
	06/04/2020	99.14	31.89	ND	ND	67.25	ND(1)	ND(1)	ND(1)	ND(3)	BRL	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(5)	ND(0.1)	ND(0.25)	
	08/20/2020	99.14	31.89	ND	ND	67.25	ND(1)	ND(1)	ND(1)	ND(3)	BRL	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(5)	ND(0.1)	ND(0.1)	
	11/05/2020	99.14	32.87	ND	ND	66.27	ND(1)	ND(1)	ND(1)	ND(3)	BRL	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(5)	ND(0.1)	ND(0.1)	
03/01/2021	99.14	31.59	ND	ND	67.55	ND(1)	ND(1)	ND(1)	ND(3)	BRL	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(5)	ND(0.1)	ND(0.1)		
05/19/2021	99.14	31.72	ND	ND	67.42	ND(1)	ND(1)	ND(1)	ND(3)	BRL	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(5)	ND(0.1)	ND(0.1)		
08/11/2021	99.14	32.81	ND	ND	66.33	ND(1)	ND(1)	ND(1)	ND(3)	BRL	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(5)	ND(0.1)	0.128		
12/09/2021	99.14	33.13	ND	ND	66.01	ND(1)	ND(1)	ND(1)	ND(3)	BRL	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(5)	ND(0.1)	ND(0.1)		

TABLE 1  
Groundwater Monitoring Analytical Data  
Southside Facility #26463  
8816 Fingerboard Road  
Frederick, Maryland

Sample ID	Date	Gauging Data					Analytical Data													
		Top of Casing Elevation	Depth to Water (feet)	Depth to Hydro-carbon (feet)	Hydro-carbon Thickness (feet)	Corrected GW Elevation (feet)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	ETBE (µg/L)	DIPE (µg/L)	Naphthalene (µg/L)	TPH GRO (mg/L)	TPH DRO (mg/L)	
MW-9 Cont.	03/11/2022	99.14	33.79	ND	ND	65.35	ND(1)	ND(1)	ND(1)	ND(3)	BRL	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(5)	ND(0.1)	0.128	
	05/12/2022	99.14	33.11	ND	ND	66.03	ND(1)	ND(1)	ND(1)	ND(3)	BRL	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(5)	ND(0.1)	0.107	
	09/09/2022	99.14	33.78	ND	ND	65.36	ND(1)	ND(1)	ND(1)	ND(3)	BRL	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(5)	ND(0.1)	0.196	
MW-14	03/02/2011	97.11	33.26	ND	ND	63.85	ND(5)	ND(5)	ND(5)	ND(5)	BRL	500	ND(80)	12	ND(5)	ND(5)	ND(5)	NA	NA	
	06/02/2011	97.11	30.36	ND	ND	66.75	ND(5)	ND(5)	ND(5)	ND(5)	BRL	96	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	NA	NA	
	09/07/2011	97.11	32.10	ND	ND	65.01	ND(5)	ND(5)	ND(5)	ND(5)	BRL	410	ND(80)	9	ND(5)	5	ND(5)	NA	NA	
	11/09/2011	97.11	30.63	ND	ND	66.48	ND(5)	ND(5)	ND(5)	ND(5)	BRL	65	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	NA	NA	
	02/29/2012	97.11	30.50	ND	ND	66.61	ND(5)	ND(5)	ND(5)	ND(5)	BRL	23	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	NA	NA	
	05/24/2012	97.11	31.81	ND	ND	65.30	ND(5)	ND(5)	ND(5)	ND(5)	BRL	18	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	NA	NA	
	08/16/2012	97.11	32.27	ND	ND	64.84	ND(5)	ND(5)	ND(5)	ND(5)	BRL	19	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	NA	NA	
	11/28/2012	97.11	32.61	ND	ND	64.50	ND(5)	ND(5)	ND(5)	ND(5)	BRL	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	NA	NA	
	02/26/2013	97.11	31.64	ND	ND	65.47	ND(5)	ND(5)	ND(5)	ND(5)	BRL	130	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	NA	NA	
	05/17/2013	97.11	31.33	ND	ND	65.78	ND(5)	ND(5)	ND(5)	ND(5)	BRL	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	NA	NA	
	09/04/2013	97.11	32.14	ND	ND	64.97	ND(5)	ND(5)	ND(5)	ND(5)	BRL	48	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	NA	NA	
	11/15/2013	97.11	32.22	ND	ND	64.89	ND(5)	ND(5)	ND(5)	ND(5)	BRL	34	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	NA	NA	
	02/21/2014	97.11	30.36	ND	ND	66.75	ND(5)	ND(5)	ND(5)	ND(5)	BRL	13	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	NA	NA	
	05/15/2014	97.11	29.68	ND	ND	67.43	ND(1)	ND(1)	ND(1)	ND(1)	BRL	2	ND(20)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	NA	NA
	06/30/2015	97.11	29.89	ND	ND	67.22	ND(1)	ND(1)	ND(1)	ND(1)	BRL	3	ND(20)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	NA	NA
	08/01/2016	97.11	30.92	ND	ND	66.19	ND(1)	ND(1)	ND(1)	ND(1)	BRL	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	NA	NA
	08/15/2017	97.11	33.03	ND	ND	64.08	ND(1)	ND(1)	ND(1)	ND(1)	BRL	6	ND(20)	ND(1)	ND(1)	2	ND(5)	NA	NA	
	10/30/2018	97.11	28.68	ND	ND	68.43	ND(1)	ND(1)	ND(1)	ND(5)	BRL	ND(1)	ND(25)	ND(1)	ND(1)	ND(1)	ND(10)	NA	NA	
	01/29/2019	97.11	26.04	ND	ND	71.07	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA
	03/14/2019	97.11	26.23	ND	ND	70.88	210	8	ND(1)	ND(5)	218	68	73	34	ND(1)	280	ND(10)	NA	NA	
	06/04/2019	97.11	26.41	ND	ND	70.70	125	ND(1)	ND(1)	ND(3)	125	67.5	54.1	26.1	ND(1)	275	ND(5)	0.763	0.103	
	08/22/2019	97.11	28.66	ND	ND	68.45	25.1	ND(1)	ND(1)	ND(3)	25.1	160	81.2	53.1	ND(1)	895	ND(5)	1.24	0.135	
	12/17/2019	97.11	31.03	ND	ND	66.08	6.10	ND(1)	ND(1)	ND(3)	6.10	264	25.5	89.9	ND(1)	1800	ND(5)	3.27	0.246	
03/09/2020	97.11	30.96	ND	ND	66.15	ND(25)	ND(25)	ND(25)	ND(25)	BRL	257	936	71.6	ND(25)	1420	ND(125)	1.25	0.377		
06/04/2020	97.11	30.86	ND	ND	66.25	6.54	ND(5)	ND(5)	ND(15)	6.54	191	420	48.4	ND(5)	1000	ND(25)	1.53	0.525		
08/20/2020	97.11	30.91	ND	ND	66.20	8.04	ND(5)	ND(5)	ND(15)	8.04	162	ND(25)	43.9	ND(5)	938	ND(25)	1.17	0.302		
11/05/2020	97.11	31.90	ND	ND	65.21	ND(5)	ND(5)	ND(5)	ND(15)	BRL	133	66.1	32	ND(5)	607	ND(25)	1.3	0.189		

TABLE 1  
Groundwater Monitoring Analytical Data  
Southside Facility #26463  
8816 Fingerboard Road  
Frederick, Maryland

Sample ID	Date	Gauging Data					Analytical Data												
		Top of Casing Elevation	Depth to Water (feet)	Depth to Hydro-carbon (feet)	Hydro-carbon Thickness (feet)	Corrected GW Elevation (feet)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	ETBE (µg/L)	DIPE (µg/L)	Naphthalene (µg/L)	TPH GRO (mg/L)	TPH DRO (mg/L)
MW-14 Cont.	03/01/2021	97.11	30.55	ND	ND	66.56	ND(5)	ND(5)	ND(5)	ND(15)	BRL	74.6	28.9	16.7	ND(5)	340	ND(25)	0.621	0.359
	05/19/2021	97.11	30.70	ND	ND	66.41	ND(5)	ND(5)	ND(5)	ND(15)	BRL	73.5	ND(25)	16.2	ND(5)	338	ND(25)	0.493	0.269
	08/11/2021	97.11	31.66	ND	ND	65.45	ND(5)	ND(5)	ND(5)	ND(15)	BRL	46.1	ND(25)	10.6	ND(5)	205	ND(25)	0.359	0.261
	12/09/2021	97.11	32.16	ND	ND	64.95	ND(5)	ND(5)	ND(5)	ND(15)	BRL	61.9	ND(25)	6.77	ND(5)	128	ND(25)	0.219	0.196
	03/11/2022	97.11	32.81	ND	ND	64.30	ND(5)	ND(5)	ND(5)	ND(15)	BRL	38.7	ND(25)	8.77	ND(5)	171	ND(25)	0.241	0.146
	05/12/2022	97.11	32.16	ND	ND	64.95	ND(5)	ND(5)	ND(5)	ND(15)	BRL	45.7	ND(25)	7.50	ND(5)	143	ND(25)	0.605	0.215
	09/09/2022	97.11	32.74	ND	ND	64.37	ND(5)	ND(5)	ND(5)	ND(15)	BRL	16.9	ND(25)	ND(5)	ND(5)	36.8	ND(25)	ND(0.1)	ND(0.1)

**Notes:**

µg/L - micrograms per liter (µg/L)

BRL - Below laboratory reporting limits

BTEX - Benzene, toluene, ethylbenzene, and total xylenes

DIPE - Di-Isopropyl Ether

ETBE - Ethyl Tertiary Butyl Ether

J - Indicates an estimated value

MTBE - Methyl Tert Butyl Ether

NA - Not analyzed

ND(5.0) - Not detected at or above the laboratory reporting limit, laboratory reporting limit included.

NS - Not sampled

TAME - Tertiary Amyl Methyl Ether

TBA - Tertiary Butyl Alcohol

\* MDE standards referenced from the State of Maryland Department of the Environment Cleanup Standards for Soil and Groundwater dated October 2018, Interim Final Guidance (Update No. 3)

TABLE 2  
 Potable Well (On-site) Analytical Data  
 Southside Facility #26463  
 8816 Fingerboard Road  
 Frederick, Maryland

Sample ID	Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl- benzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	* MTBE (µg/L)	* TBA (µg/L)	* TAME (µg/L)	* ETBE (µg/L)	* DIPE (µg/L)	* Naph- thalene (µg/L)
PW-1	03/06/2006	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	BRL	0.67	ND(5.0)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)
	06/05/2006	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	BRL	0.63	ND(5.0)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)
	09/13/2006	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	BRL	0.85	ND(5.0)	NA	NA	NA	ND(0.50)
	12/13/2006	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	BRL	1.9	ND(5.0)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)
	02/02/2007	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	BRL	0.89	ND(5.0)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)
	08/17/2007	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	BRL	1.5	ND(5.0)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)
	05/13/2008	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	BRL	2.9	ND(5.0)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)
	09/03/2008	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	BRL	3.8	ND(5.0)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)
	11/24/2008	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	BRL	3.2	ND(5.0)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)
	02/23/2009	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	BRL	3.0	ND(5.0)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)
	05/29/2009	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	BRL	3.3	ND(5.0)	ND(0.50)	ND(0.50)	0.17 J	ND(0.50)
	07/20/2009	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	BRL	4.3	ND(5.0)	ND(0.50)	ND(0.50)	0.20 J	ND(0.50)
	09/17/2009	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	BRL	2.0	NA	NA	NA	NA	ND(0.50)
	10/29/2009	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	BRL	2.1	ND(5.0)	ND(0.50)	ND(0.50)	0.23 J	ND(0.50)
	01/27/2010	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	BRL	1.7	ND(5.0)	ND(0.50)	ND(0.50)	0.19 J	ND(0.50)
	04/01/2010	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	BRL	1.7	ND(5.0)	ND(0.50)	ND(0.50)	0.20 J	ND(0.50)
	08/30/2010	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	BRL	3.1	ND(25)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	12/09/2010	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	BRL	1	ND(25)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	01/11/2011	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	BRL	1.2	ND(25)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	06/02/2011	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	BRL	1.1	ND(25)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	09/07/2011	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	BRL	ND(1.0)	ND(25)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	11/09/2011	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	BRL	0.7	ND(25)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	02/29/2012	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	BRL	0.7	ND(25)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	05/29/2012	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	BRL	ND(1.0)	ND(25)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	08/17/2012	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	BRL	ND(1.0)	ND(25)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	11/28/2012	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	BRL	0.5	ND(25)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
02/26/2013	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	BRL	0.6	ND(25)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	
05/17/2013	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	BRL	1.1	ND(25)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	

TABLE 2  
 Potable Well (On-site) Analytical Data  
 Southside Facility #26463  
 8816 Fingerboard Road  
 Frederick, Maryland

Sample ID	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	* MTBE (µg/L)	* TBA (µg/L)	* TAME (µg/L)	* ETBE (µg/L)	* DIPE (µg/L)	* Naphthalene (µg/L)
PW-1 Cont.	11/15/2013	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	BRL	1.7	ND(25)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	02/21/2014	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	BRL	ND(1.0)	ND(25)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	05/15/2014	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	BRL	ND(1.0)	ND(25)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	06/30/2015	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	BRL	2.1	ND(25)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	08/01/2016	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	BRL	ND(1.0)	ND(25)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	08/15/2017	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	BRL	ND(1.0)	ND(25)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	10/31/2018	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	BRL	ND(0.5)	ND(25)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	03/14/2019	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	BRL	ND(0.5)	ND(25)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	06/04/2019	ND(0.5)	ND(1)	ND(0.5)	ND(0.5)	BRL	ND(0.5)	NA	NA	NA	NA	NA
	08/22/2019	ND(0.5)	ND(1)	ND(0.5)	ND(0.5)	BRL	ND(0.5)	NA	NA	NA	NA	NA
	12/17/2019	ND(0.5)	ND(1)	ND(0.5)	ND(0.5)	BRL	1.27	NA	NA	NA	NA	NA
	03/09/2020	ND(0.5)	ND(1)	ND(0.5)	ND(0.5)	BRL	1.07	NA	NA	NA	NA	NA
	06/04/2020	ND(0.5)	ND(1)	ND(0.5)	ND(0.5)	BRL	0.794	NA	NA	NA	NA	NA
	08/20/2020	ND(0.5)	ND(1)	ND(0.5)	ND(0.5)	BRL	0.716	NA	NA	NA	NA	NA
	11/05/2020	ND(0.5)	ND(1)	ND(0.5)	ND(0.5)	BRL	ND(0.5)	ND(5.0)	NA	NA	NA	NA
	03/01/2021	ND(0.5)	ND(1)	ND(0.5)	ND(0.5)	BRL	1.55	ND(5.0)	ND(1)	ND(1)	ND(1)	NA
	05/19/2021	ND(0.5)	ND(1)	ND(0.5)	ND(0.5)	BRL	ND(1)	ND(5.0)	ND(1)	ND(1)	ND(1)	NA
	08/11/2021	ND(0.5)	ND(1)	ND(0.5)	ND(0.5)	BRL	ND(1)	ND(5.0)	ND(1)	ND(1)	ND(1)	NA
	12/09/2021	ND(0.5)	ND(1)	ND(0.5)	ND(0.5)	BRL	ND(0.5)	ND(5.0)	ND(1)	ND(1)	ND(1)	ND(5.0)
	03/11/2022	ND(0.5)	ND(1)	ND(0.5)	ND(0.5)	BRL	ND(0.5)	ND(5.0)	ND(1)	ND(1)	ND(1)	ND(5.0)
05/12/2022	ND(1)	ND(1)	ND(1)	ND(3)	BRL	ND(1)	ND(5.0)	ND(1)	ND(1)	ND(1)	ND(5.0)	
09/09/2022	ND(0.5)	ND(1)	ND(0.5)	ND(0.5)	BRL	ND(0.5)	ND(5.0)	ND(1)	ND(1)	ND(1)	ND(5.0)	

**Notes:**

µg/L - micrograms per liter (µg/L)

BRL - Below laboratory reporting limits

BTEX - Benzene, toluene, ethylbenzene, and total xylenes

DIPE - Di-Isopropyl Ether

ETBE - Ethyl Tertiary Butyl Ether

TBA - Tertiary Butyl Alcohol

\* Samples analyzed by Method 8260 beginning on 03/01/2021

J - Indicates an estimated value

MTBE - Methyl Tert Butyl Ether

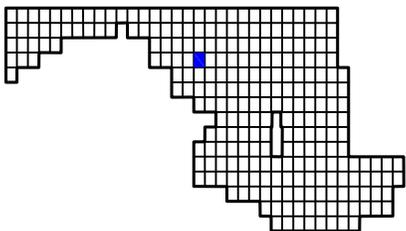
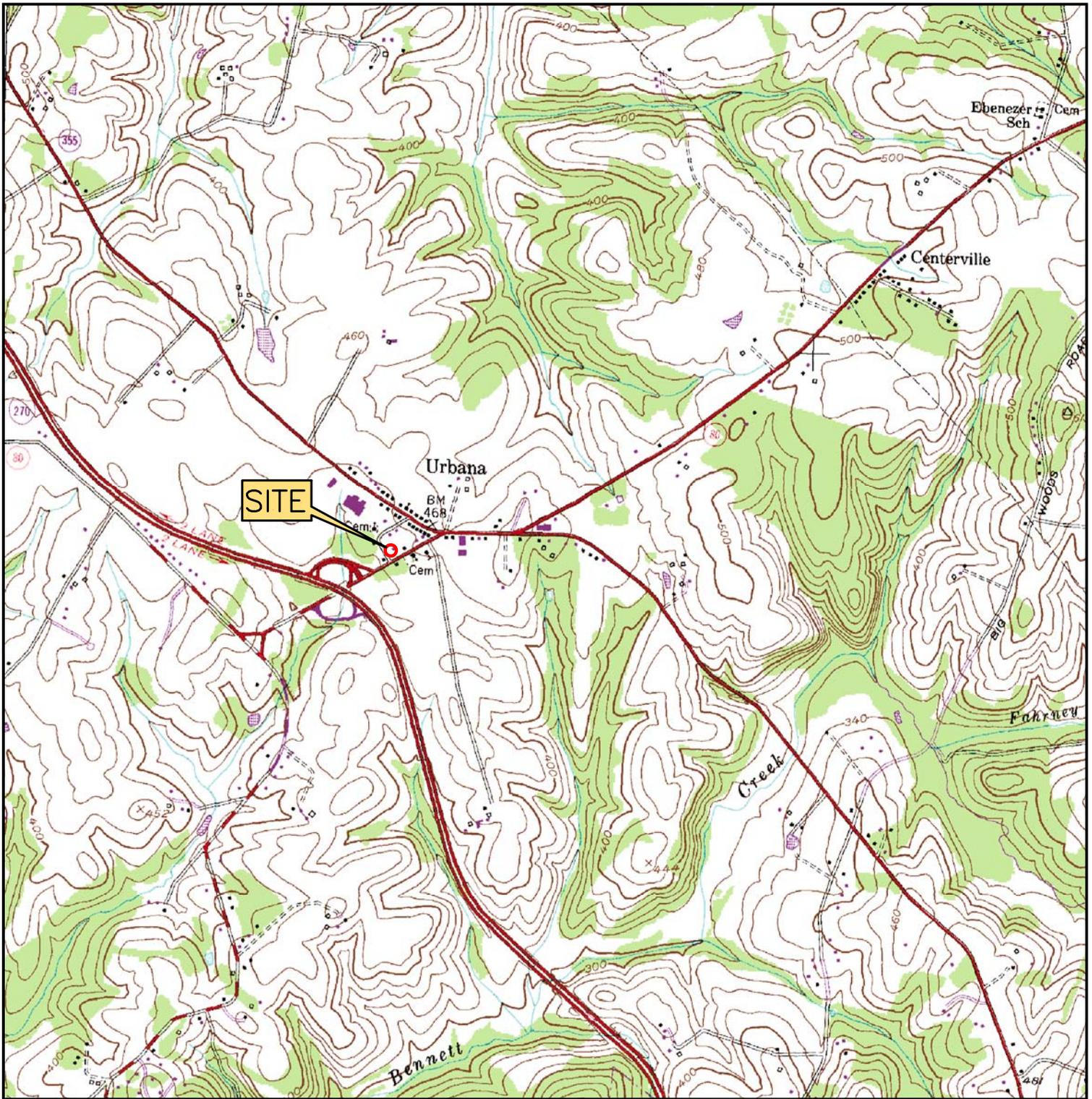
NA - Not analyzed

NS - Not sampled

TAME - Tertiary Amyl Methyl Ether

ND(5.0) - Not detected at or above the reporting limit

## FIGURES



TOPOGRAPHIC QUADRANGLE:  
 URBANA, MARYLAND  
 APPROX. ELEVATION: 467 FT.



0 2000  
 SCALE IN FEET

FIGURE # 1	SOUTHSIDE FACILITY #26463 8816 FINGERBOARD ROAD FREDERICK, MARYLAND	SITE LOCATION MAP		 155 RIVERBEND DRIVE, SUITE A, CHARLOTTESVILLE, VA 22911 PHONE: (434)202-7808
		DRAWN BY: B.S.	REVISION DATE: 6/20/2019	

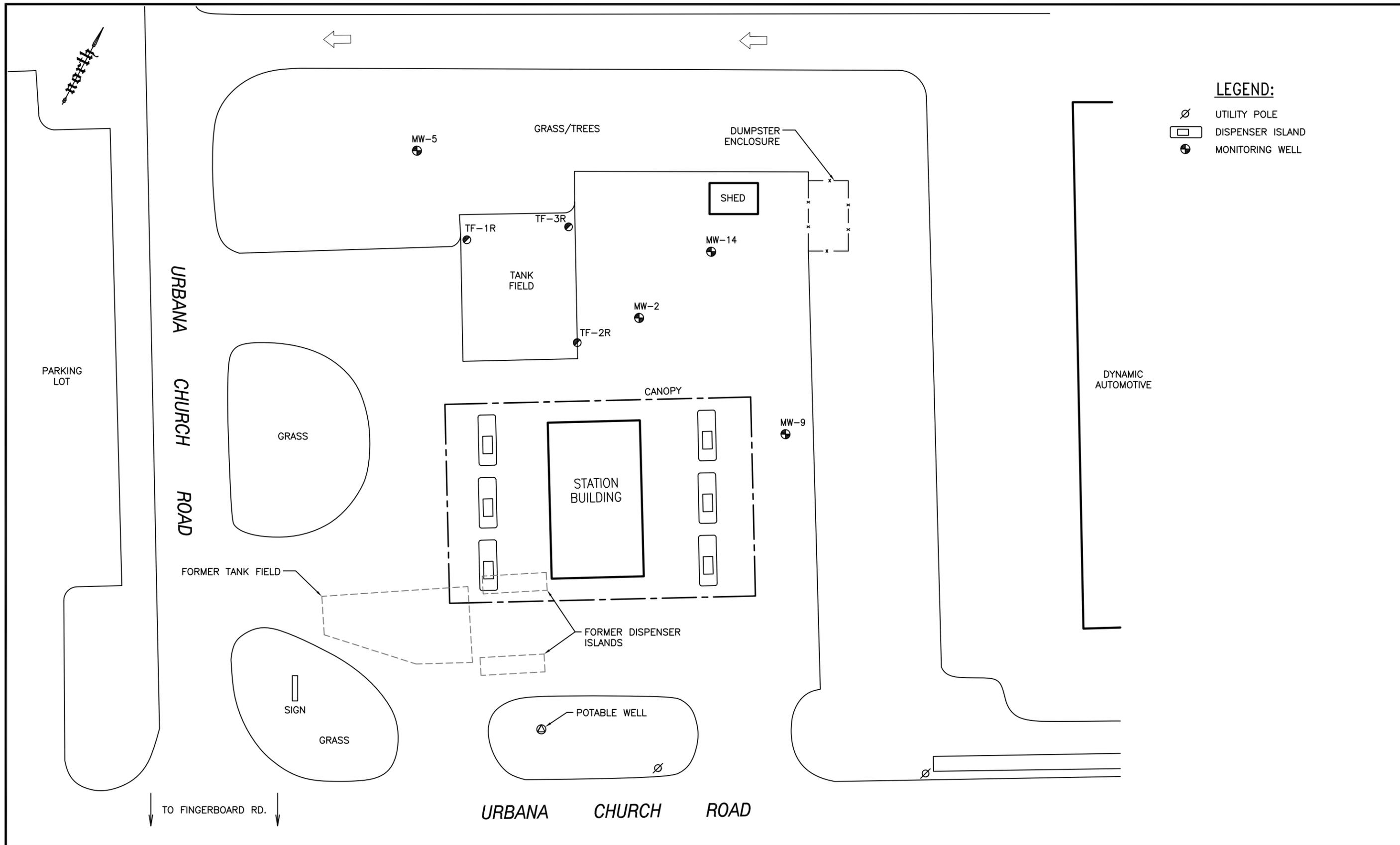


FIGURE # 2	SOUTHSIDE FACILITY #26463 8816 FINGERBOARD ROAD FREDERICK, MARYLAND	SITE PLAN		0 30 SCALE IN FEET	 ENVIRONMENTAL SERVICES 155 RIVERBEND DRIVE, SUITE A, CHARLOTTESVILLE, VA 22911 PHONE: (434)202-7808
		DRAWN BY: B.S.	REVISION DATE: 7/8/2019		

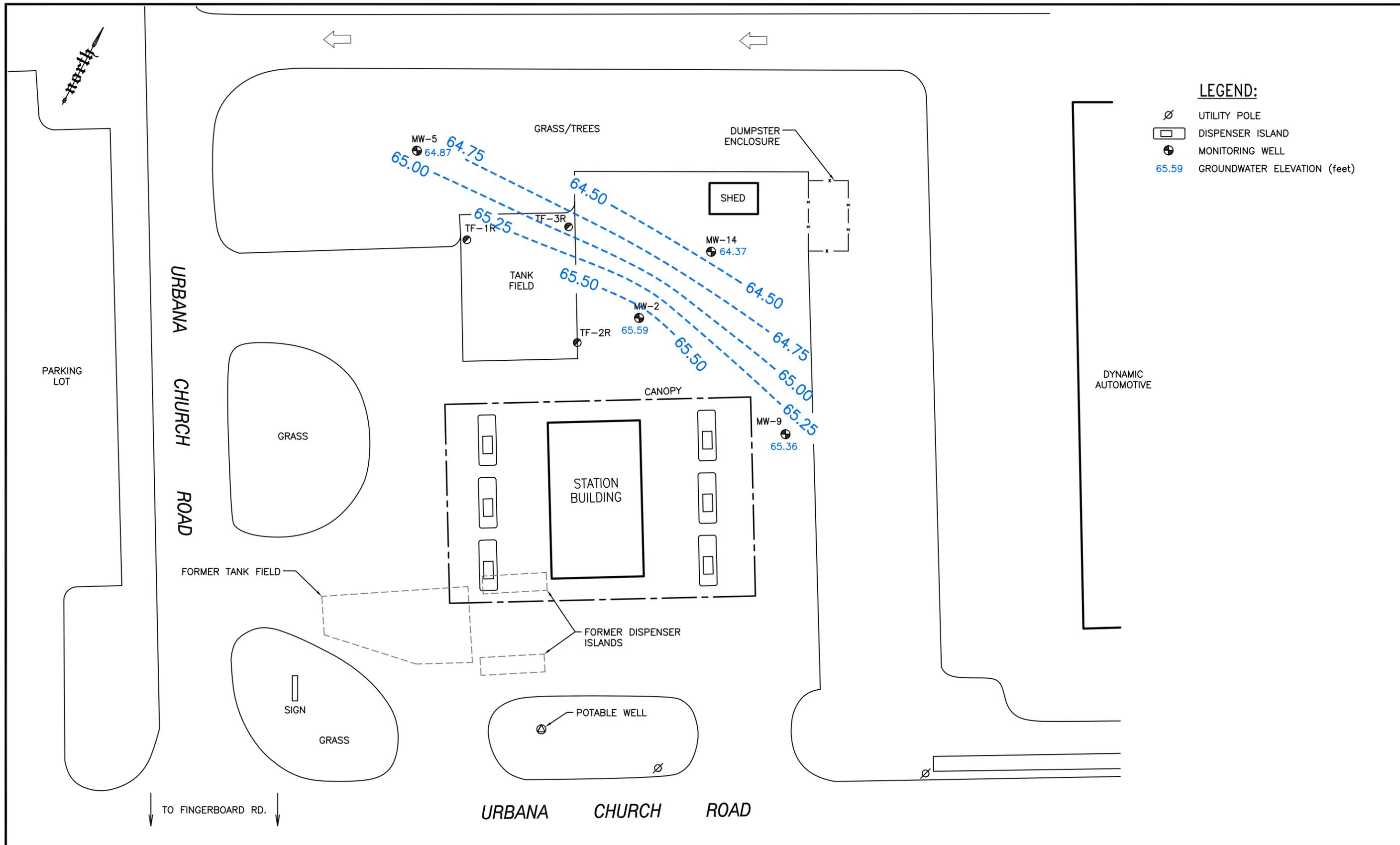


FIGURE #  
3

SOUTHSIDE FACILITY #26463  
8816 FINGERBOARD ROAD  
FREDERICK, MARYLAND

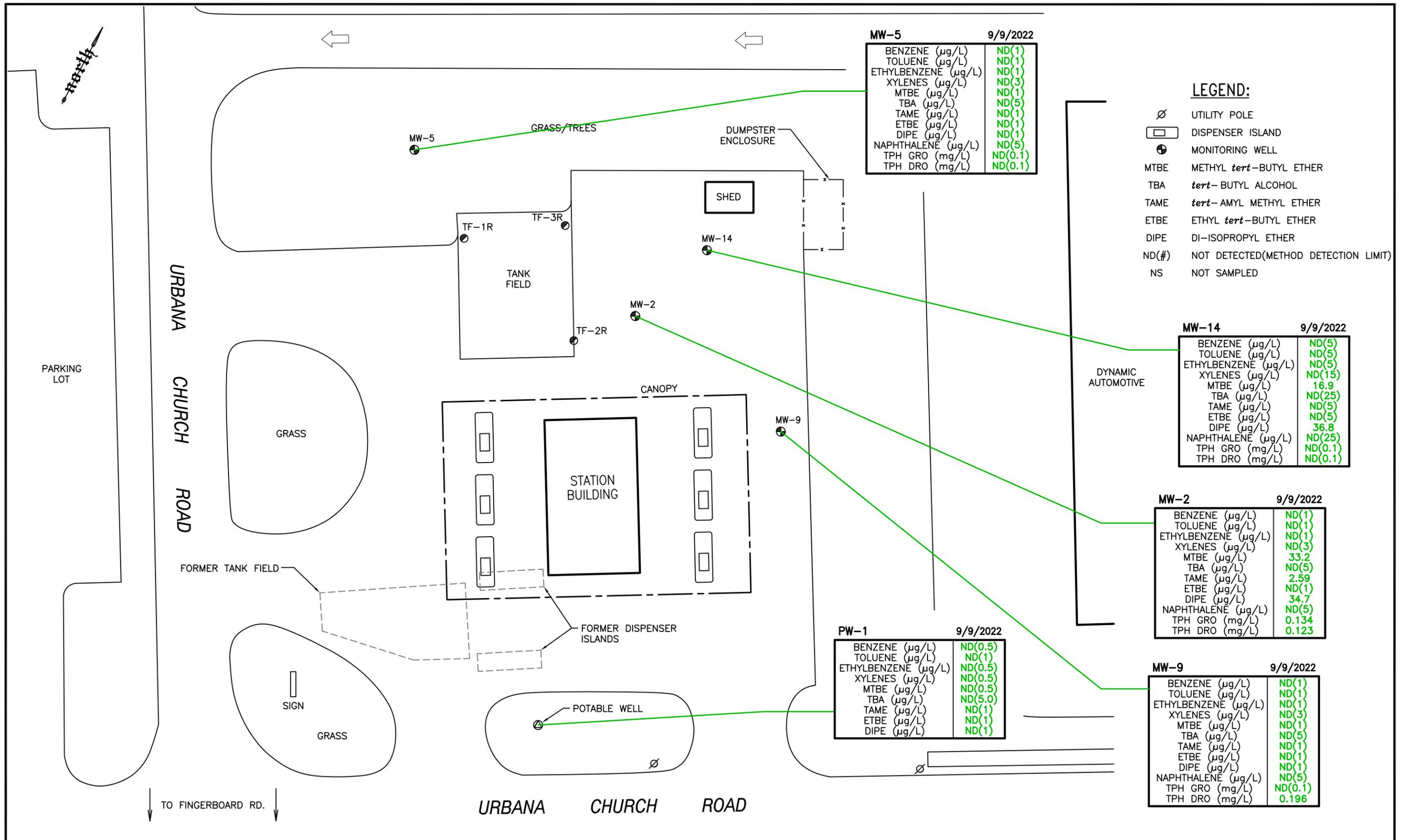
POTENTIOMETRIC SURFACE MAP  
SEPTEMBER 9, 2022

DRAWN BY: B.S.

REVISION DATE: 10/5/2022



**EnviroTrac**  
ENVIRONMENTAL SERVICES  
155 RIVERBEND DRIVE, SUITE A, CHARLOTTESVILLE, VA 22911  
PHONE: (434)202-7808



**APPENDIX A**  
**MANN-KENDALL TREND**  
**ANALYSIS**

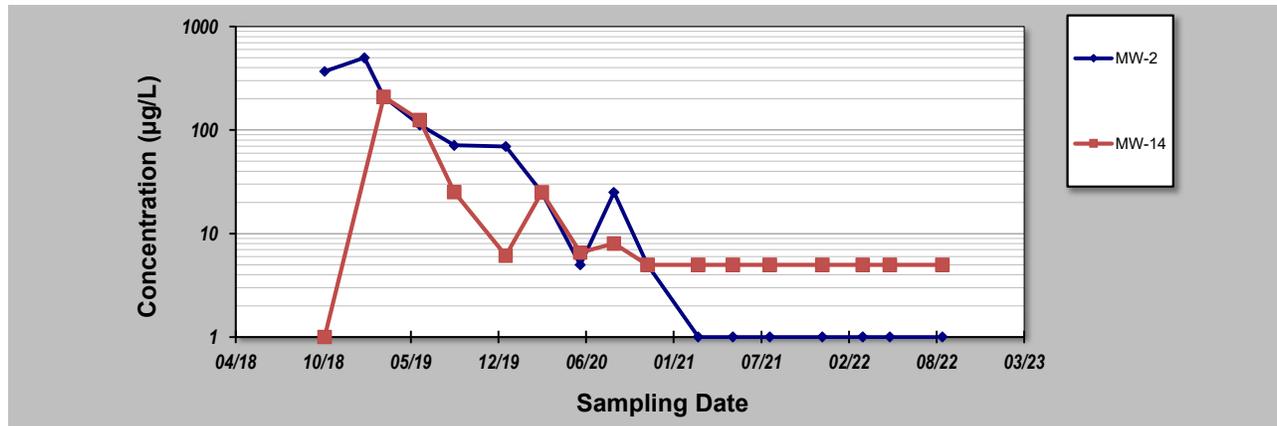
# GSI MANN-KENDALL TOOLKIT for Constituent Trend Analysis

Evaluation Date: **4-Oct-22** Job ID: **South Side Facility #2643**  
 Facility Name: **South Side Facility #2643** Constituent: **Benzene**  
 Conducted By: **D. Shertzler** Concentration Units: **µg/L**

Sampling Point ID: **MW-2** **MW-14**

Sampling Event	Sampling Date	BENZENE CONCENTRATION (µg/L)					
		MW-2	MW-14				
1	10/30/2018	370	1				
2	1/29/2019	500					
3	3/14/2019	210	210				
4	6/4/2019	112	125				
5	8/22/2019	71.3	25.1				
6	12/17/2019	69.3	6.1				
7	3/9/2020	25	25				
8	6/4/2020	5	6.54				
9	8/20/2020	25	8.04				
10	11/5/2020	5	5				
11	3/1/2021	1	5				
12	5/19/2021	1	5				
13	8/11/2021	1	5				
14	12/9/2021	1	5				
15	3/11/2022	1	5				
16	5/12/2022	1	5				
17	9/9/2022	1	5				
18							
19							
20							

Coefficient of Variation:	1.77	2.04				
Mann-Kendall Statistic (S):	-109	-54				
Confidence Factor:	>99.9%	99.2%				
Concentration Trend:	Decreasing	Decreasing				



**Notes:**

- At least four independent sampling events per well are required for calculating the trend. Methodology is valid for 4 to 40 samples.
- Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
- Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.

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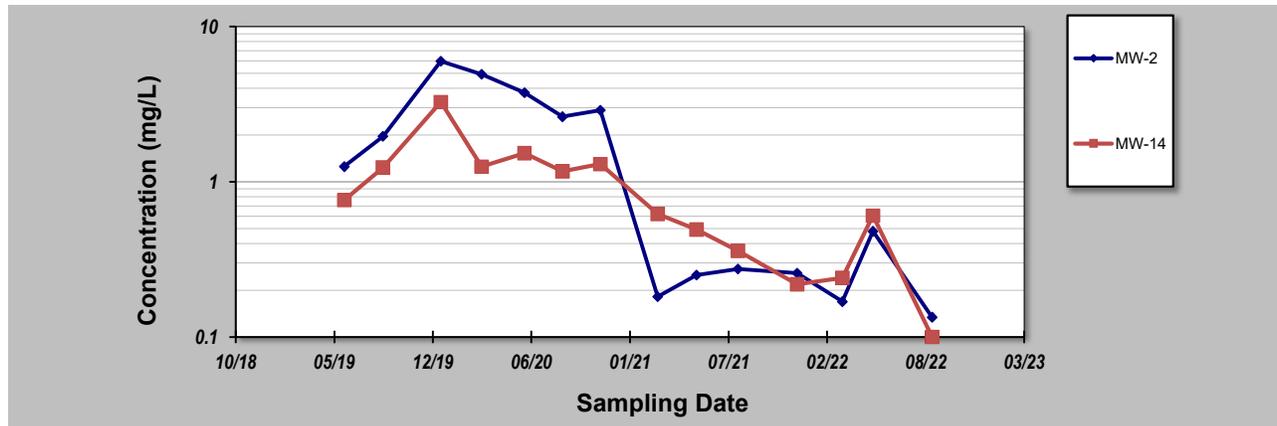
# GSI MANN-KENDALL TOOLKIT for Constituent Trend Analysis

Evaluation Date: **4-Oct-22** Job ID: **South Side Facility #2643**  
 Facility Name: **South Side Facility #2643** Constituent: **TPH GRO**  
 Conducted By: **D. Shertz** Concentration Units: **mg/L**

Sampling Point ID: **MW-2** **MW-14**

Sampling Event	Sampling Date	TPH GRO CONCENTRATION (mg/L)					
		MW-2	MW-14				
1	6/4/2019	1.25	0.763				
2	8/22/2019	1.97	1.24				
3	12/17/2019	5.98	3.27				
4	3/9/2020	4.93	1.25				
5	6/4/2020	3.76	1.53				
6	8/20/2020	2.63	1.17				
7	11/5/2020	2.9	1.3				
8	3/1/2021	0.182	0.621				
9	5/19/2021	0.251	0.493				
10	8/11/2021	0.274	0.359				
11	12/9/2021	0.258	0.219				
12	3/11/2022	0.169	0.241				
13	5/12/2022	0.480	0.605				
14	9/9/2022	0.134	0.1				
15							
16							
17							
18							
19							
20							

Coefficient of Variation:	1.09	0.87				
Mann-Kendall Statistic (S):	-47	-55				
Confidence Factor:	99.5%	99.9%				
Concentration Trend:	Decreasing	Decreasing				



**Notes:**

- At least four independent sampling events per well are required for calculating the trend. Methodology is valid for 4 to 40 samples.
- Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
- Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.

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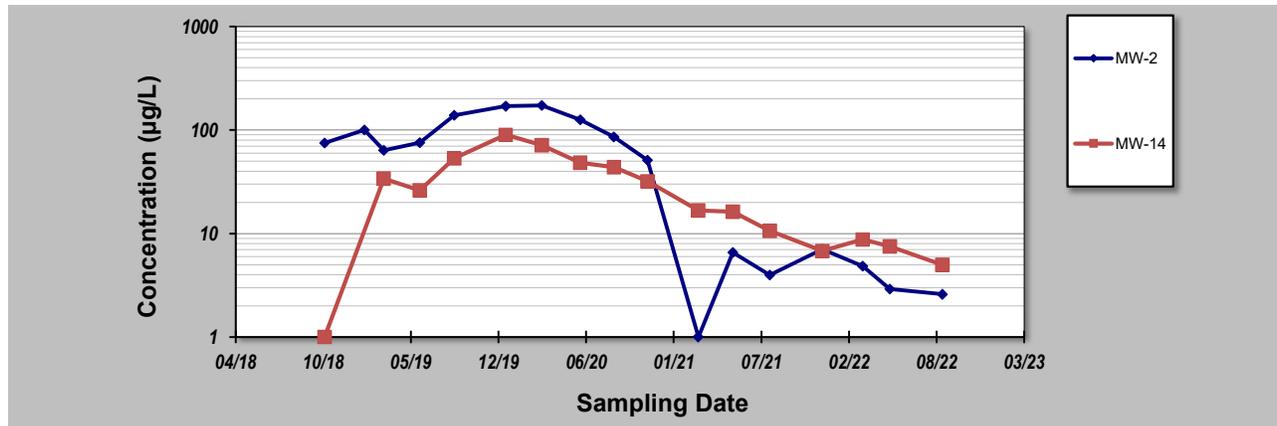
# GSI MANN-KENDALL TOOLKIT for Constituent Trend Analysis

Evaluation Date: **4-Oct-22** Job ID: **South Side Facility #2643**  
 Facility Name: **South Side Facility #2643** Constituent: **TAME**  
 Conducted By: **D. Shertzler** Concentration Units: **µg/L**

Sampling Point ID: **MW-2** **MW-14**

Sampling Event	Sampling Date	TAME CONCENTRATION (µg/L)					
		MW-2	MW-14				
1	10/30/2018	75	1				
2	1/29/2019	100					
3	3/14/2019	64	34				
4	6/4/2019	75.7	26.1				
5	8/22/2019	139	53.1				
6	12/17/2019	170	89.9				
7	3/9/2020	173	71.6				
8	6/4/2020	126	48.4				
9	8/20/2020	86.1	43.9				
10	11/5/2020	51	32				
11	3/1/2021	1	16.7				
12	5/19/2021	6.58	16.2				
13	8/11/2021	3.98	10.6				
14	12/9/2021	7.07	6.77				
15	3/11/2022	4.85	8.77				
16	5/12/2022	2.91	7.5				
17	9/9/2022	2.59	5				
18							
19							
20							

Coefficient of Variation:	0.96	0.88				
Mann-Kendall Statistic (S):	-68	-60				
Confidence Factor:	99.8%	99.7%				
Concentration Trend:	Decreasing	Decreasing				



**Notes:**

- At least four independent sampling events per well are required for calculating the trend. Methodology is valid for 4 to 40 samples.
- Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
- Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.

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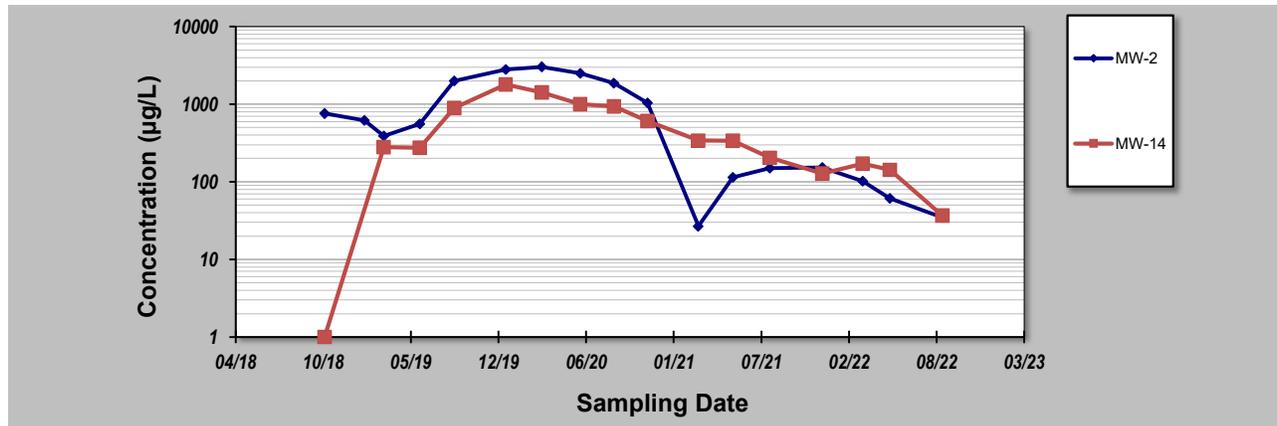
# GSI MANN-KENDALL TOOLKIT for Constituent Trend Analysis

Evaluation Date: **4-Oct-22** Job ID: **South Side Facility #2643**  
 Facility Name: **South Side Facility #2643** Constituent: **DIPE**  
 Conducted By: **D. Shertzler** Concentration Units: **µg/L**

Sampling Point ID: **MW-2** **MW-14**

Sampling Event	Sampling Date	DIPE CONCENTRATION (µg/L)	
1	10/30/2018	760	1
2	1/29/2019	620	
3	3/14/2019	390	280
4	6/4/2019	559	275
5	8/22/2019	2000	895
6	12/17/2019	2800	1800
7	3/9/2020	3030	1420
8	6/4/2020	2510	1000
9	8/20/2020	1880	938
10	11/5/2020	1040	607
11	3/1/2021	26.8	340
12	5/19/2021	114	338
13	8/11/2021	151	205
14	12/9/2021	153	128
15	3/11/2022	102	171
16	5/12/2022	61.3	143
17	9/9/2022	34.7	36.8
18			
19			
20			

Coefficient of Variation:	1.11	0.99
Mann-Kendall Statistic (S):	-60	-46
Confidence Factor:	99.3%	97.9%
Concentration Trend:	Decreasing	Decreasing



**Notes:**

- At least four independent sampling events per well are required for calculating the trend. Methodology is valid for 4 to 40 samples.
- Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
- Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.

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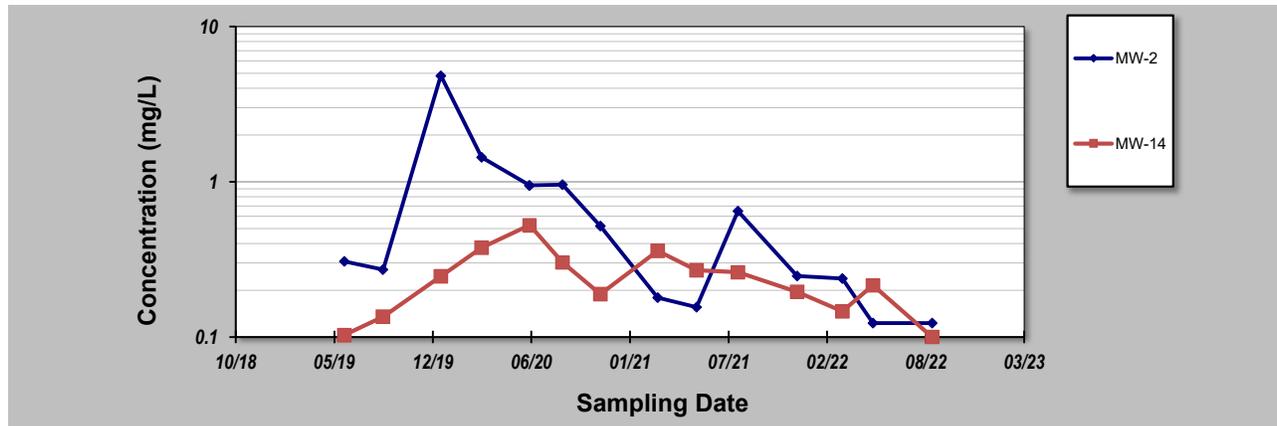
# GSI MANN-KENDALL TOOLKIT for Constituent Trend Analysis

Evaluation Date: **4-Oct-22** Job ID: **South Side Facility #2643**  
 Facility Name: **South Side Facility #2643** Constituent: **TPH DRO**  
 Conducted By: **D. Shertzer** Concentration Units: **mg/L**

Sampling Point ID: **MW-2** **MW-14**

Sampling Event	Sampling Date	TPH DRO CONCENTRATION (mg/L)	
		MW-2	MW-14
1	6/4/2019	0.308	0.103
2	8/22/2019	0.272	0.135
3	12/17/2019	4.83	0.246
4	3/9/2020	1.44	0.377
5	6/14/2020	0.947	0.525
6	8/20/2020	0.957	0.302
7	11/5/2020	0.519	0.189
8	3/1/2021	0.179	0.359
9	5/19/2021	0.156	0.269
10	8/11/2021	0.647	0.261
11	12/9/2021	0.247	0.196
12	3/11/2022	0.238	0.146
13	5/12/2022	0.123	0.215
14	9/9/2022	0.123	0.1
15			
16			
17			
18			
19			
20			

Coefficient of Variation:	1.57	0.48
Mann-Kendall Statistic (S):	-50	-15
Confidence Factor:	99.8%	77.5%
Concentration Trend:	Decreasing	Stable



**Notes:**

- At least four independent sampling events per well are required for calculating the trend. Methodology is valid for 4 to 40 samples.
- Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
- Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.

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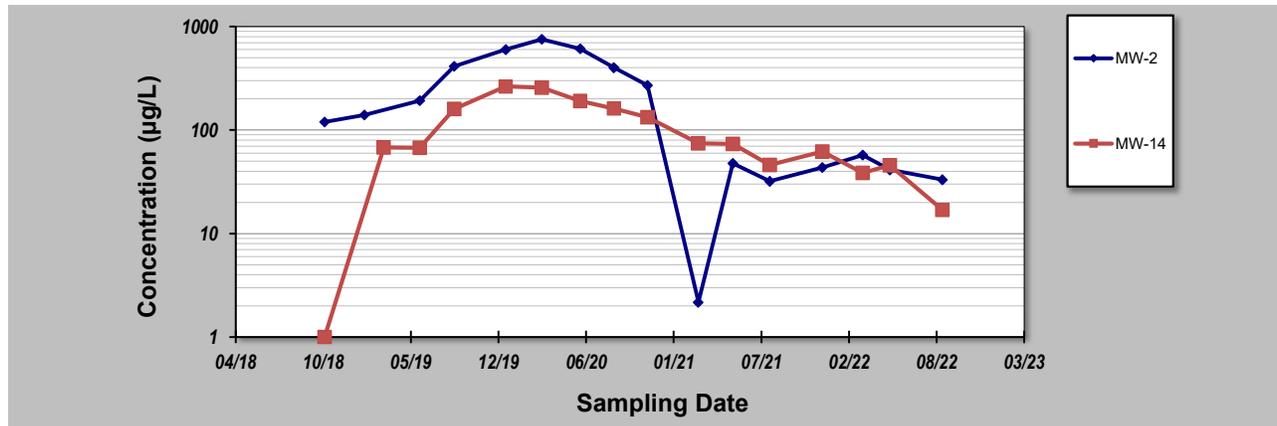
# GSI MANN-KENDALL TOOLKIT for Constituent Trend Analysis

Evaluation Date: <b>1-Oct-22</b>	Job ID: <b>South Side Facility #2643</b>
Facility Name: <b>South Side Facility #2643</b>	Constituent: <b>MTBE</b>
Conducted By: <b>D. Shertzler</b>	Concentration Units: <b>µg/L</b>

Sampling Point ID:	<b>MW-2</b>	<b>MW-14</b>	
--------------------	-------------	--------------	--

Sampling Event	Sampling Date	MTBE CONCENTRATION (µg/L)	
		MW-2	MW-14
1	10/30/2018	120	1
2	1/29/2019	140	
3	3/14/2019	110	68
4	6/4/2019	192	67.5
5	8/22/2019	413	160
6	12/17/2019	600	264
7	3/9/2020	754	257
8	6/4/2020	612	191
9	8/20/2020	401	162
10	11/5/2020	271	133
11	3/1/2021	2.17	74.6
12	5/19/2021	47.6	73.5
13	8/11/2021	32	46.1
14	12/9/2021	43.7	61.9
15	3/11/2022	57.6	38.7
16	5/12/2022	41.3	45.7
17	9/9/2022	33.2	16.9
18			
19			
20			

Coefficient of Variation:	1.05	0.78
Mann-Kendall Statistic (S):	-56	-46
Confidence Factor:	99.4%	97.9%
Concentration Trend:	Decreasing	Decreasing



**Notes:**

- At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
- Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
- Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.

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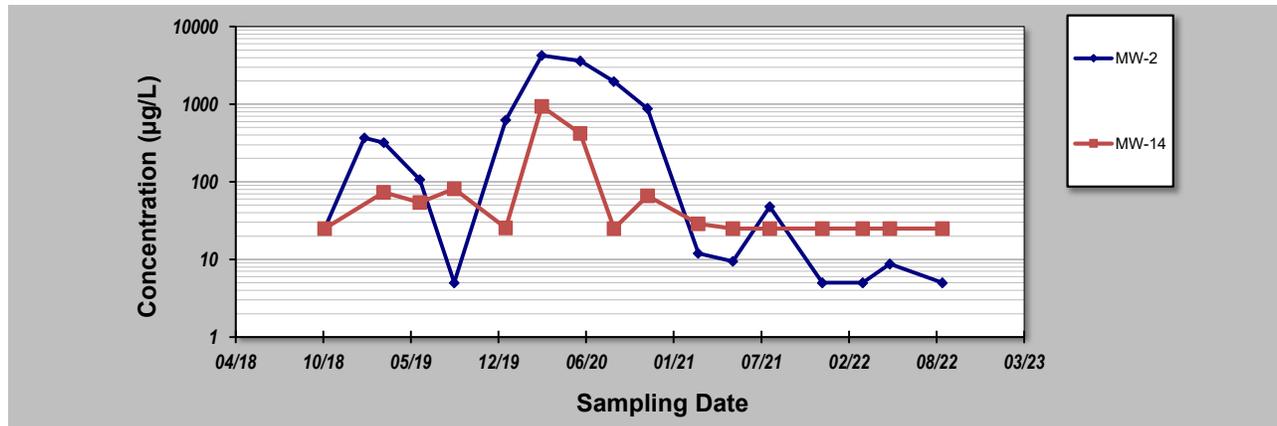
# GSI MANN-KENDALL TOOLKIT for Constituent Trend Analysis

Evaluation Date: <b>4-Oct-22</b>	Job ID: <b>South Side Facility #2643</b>
Facility Name: <b>South Side Facility #2643</b>	Constituent: <b>TBA</b>
Conducted By: <b>D. Shertzler</b>	Concentration Units: <b>µg/L</b>

Sampling Point ID:	<b>MW-2</b>	<b>MW-14</b>	
--------------------	-------------	--------------	--

Sampling Event	Sampling Date	TBA CONCENTRATION (µg/L)			
		MW-2	MW-14		
1	10/30/2018	25	25		
2	1/29/2019	370			
3	3/14/2019	320	73		
4	6/4/2019	107	54.1		
5	8/22/2019	5	81.2		
6	12/17/2019	624	25.5		
7	3/9/2020	4230	936		
8	6/4/2020	3600	420		
9	8/20/2020	1970	25		
10	11/5/2020	883	66.1		
11	3/1/2021	12	28.9		
12	5/19/2021	9.49	25		
13	8/11/2021	47.7	25		
14	12/9/2021	5	25		
15	3/11/2022	5	25		
16	5/12/2022	8.73	25		
17	9/9/2022	5	25		
18					
19					
20					

Coefficient of Variation:	1.82	2.03	
Mann-Kendall Statistic (S):	-48	-46	
Confidence Factor:	97.4%	97.9%	
Concentration Trend:	Decreasing	Decreasing	



**Notes:**

1. At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
2. Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
3. Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.

**DISCLAIMER:** The GSI Mann-Kendall Toolkit is available "as is". Considerable care has been exercised in preparing this software product; however, no party, including without limitation GSI Environmental Inc., makes any representation or warranty regarding the accuracy, correctness, or completeness of the information contained herein, and no such party shall be liable for any direct, indirect, consequential, incidental or other damages resulting from the use of this product or the information contained herein. Information in this publication is subject to change without notice. GSI Environmental Inc., disclaims any responsibility or obligation to update the information contained herein.

**APPENDIX B**  
**LABORATORY ANALYTICAL**  
**REPORT**

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
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- 9 Sc

## EnviroTrac Ltd. - Sunoco

Sample Delivery Group: L1534573  
Samples Received: 09/10/2022  
Project Number: 07923998  
Description: 07923998

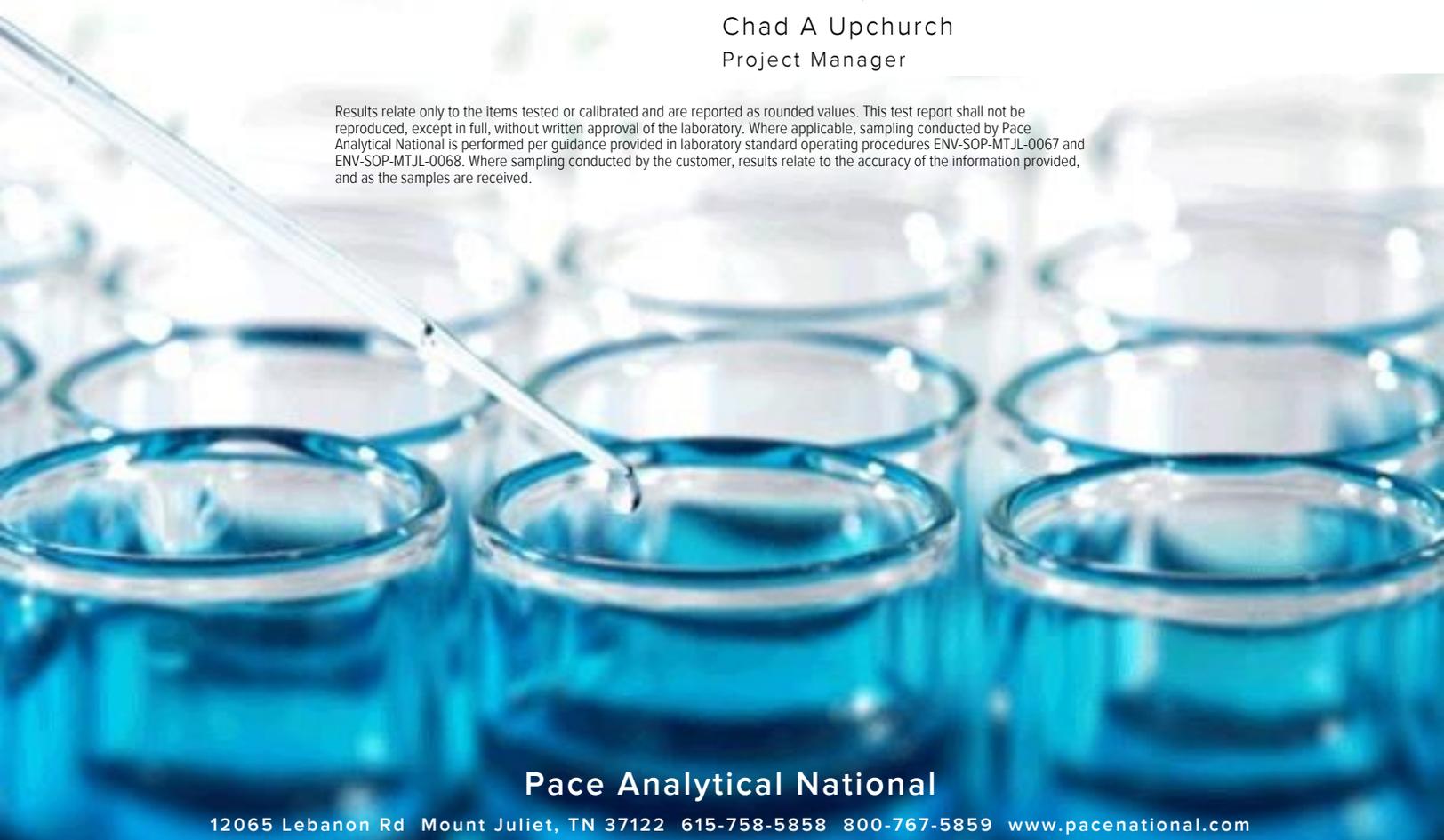
Report To: Eric Shertzer  
155 Riverbend Drive  
Suite A  
Charlottesville, VA 22911

Entire Report Reviewed By:



Chad A Upchurch  
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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<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

# SAMPLE SUMMARY

## PW-1 L1534573-01 GW

Collected by: D. Shertzer  
 Collected date/time: 09/09/22 11:35  
 Received date/time: 09/10/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 524.2	WG1924943	1	09/12/22 19:07	09/12/22 19:07	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1926498	1	09/14/22 22:05	09/14/22 22:05	ADM	Mt. Juliet, TN

## MW-2 L1534573-02 GW

Collected by: D. Shertzer  
 Collected date/time: 09/09/22 10:15  
 Received date/time: 09/10/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1925841	1	09/14/22 04:40	09/14/22 04:40	BAM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1926498	1	09/14/22 22:24	09/14/22 22:24	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG1926757	1	09/16/22 08:58	09/17/22 03:10	MWS	Mt. Juliet, TN

## MW-14 L1534573-03 GW

Collected by: D. Shertzer  
 Collected date/time: 09/09/22 10:45  
 Received date/time: 09/10/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1927716	1	09/16/22 18:15	09/16/22 18:15	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1926498	5	09/15/22 01:36	09/15/22 01:36	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG1926757	1	09/16/22 08:58	09/17/22 03:33	MWS	Mt. Juliet, TN

## MW-9 L1534573-04 GW

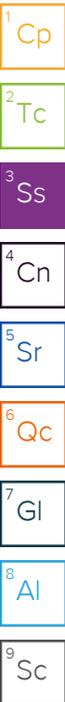
Collected by: D. Shertzer  
 Collected date/time: 09/09/22 11:20  
 Received date/time: 09/10/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1925841	1	09/14/22 05:02	09/14/22 05:02	BAM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1926498	1	09/14/22 22:43	09/14/22 22:43	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG1926757	1	09/16/22 08:58	09/17/22 03:56	MWS	Mt. Juliet, TN

## MW-5 L1534573-05 GW

Collected by: D. Shertzer  
 Collected date/time: 09/09/22 09:30  
 Received date/time: 09/10/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1926252	1	09/15/22 06:38	09/15/22 06:38	BAM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1926498	1	09/14/22 23:02	09/14/22 23:02	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG1926760	1	09/16/22 09:01	09/17/22 03:32	MWS	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.



Chad A Upchurch  
Project Manager

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

## Volatile Organic Compounds (GC/MS) by Method 524.2/8260B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.500	1	09/12/2022 19:07	<a href="#">WG1924943</a>
Acetone	ND	<u>J3</u>	50.0	1	09/14/2022 22:05	<a href="#">WG1926498</a>
Carbon tetrachloride	ND		0.500	1	09/12/2022 19:07	<a href="#">WG1924943</a>
1,4-Dichlorobenzene	ND		0.500	1	09/12/2022 19:07	<a href="#">WG1924943</a>
1,2-Dichloroethane	ND		0.500	1	09/12/2022 19:07	<a href="#">WG1924943</a>
Acrylonitrile	ND	<u>J3</u>	10.0	1	09/14/2022 22:05	<a href="#">WG1926498</a>
1,1-Dichloroethene	ND		0.500	1	09/12/2022 19:07	<a href="#">WG1924943</a>
Benzene	ND		1.00	1	09/14/2022 22:05	<a href="#">WG1926498</a>
1,1,1-Trichloroethane	ND		0.500	1	09/12/2022 19:07	<a href="#">WG1924943</a>
Bromobenzene	ND		1.00	1	09/14/2022 22:05	<a href="#">WG1926498</a>
Bromochloromethane	ND		1.00	1	09/14/2022 22:05	<a href="#">WG1926498</a>
Bromodichloromethane	ND		1.00	1	09/14/2022 22:05	<a href="#">WG1926498</a>
Trichloroethene	ND		0.500	1	09/12/2022 19:07	<a href="#">WG1924943</a>
Bromoform	ND		1.00	1	09/14/2022 22:05	<a href="#">WG1926498</a>
Vinyl chloride	ND		0.500	1	09/12/2022 19:07	<a href="#">WG1924943</a>
1,2,4-Trichlorobenzene	ND		0.500	1	09/12/2022 19:07	<a href="#">WG1924943</a>
Bromomethane	ND		5.00	1	09/14/2022 22:05	<a href="#">WG1926498</a>
cis-1,2-Dichloroethene	ND		0.500	1	09/12/2022 19:07	<a href="#">WG1924943</a>
n-Butylbenzene	ND		1.00	1	09/14/2022 22:05	<a href="#">WG1926498</a>
sec-Butylbenzene	ND		1.00	1	09/14/2022 22:05	<a href="#">WG1926498</a>
Xylenes, Total	ND		0.500	1	09/12/2022 19:07	<a href="#">WG1924943</a>
Methylene chloride	ND		0.500	1	09/12/2022 19:07	<a href="#">WG1924943</a>
tert-Butylbenzene	ND		1.00	1	09/14/2022 22:05	<a href="#">WG1926498</a>
1,2-Dichlorobenzene	ND		0.500	1	09/12/2022 19:07	<a href="#">WG1924943</a>
Carbon tetrachloride	ND		1.00	1	09/14/2022 22:05	<a href="#">WG1926498</a>
Carbon disulfide	ND		1.00	1	09/14/2022 22:05	<a href="#">WG1926498</a>
Chlorobenzene	ND		1.00	1	09/14/2022 22:05	<a href="#">WG1926498</a>
trans-1,2-Dichloroethene	ND		0.500	1	09/12/2022 19:07	<a href="#">WG1924943</a>
1,2-Dichloropropane	ND		0.500	1	09/12/2022 19:07	<a href="#">WG1924943</a>
Chlorodibromomethane	ND		1.00	1	09/14/2022 22:05	<a href="#">WG1926498</a>
1,1,2-Trichloroethane	ND		0.500	1	09/12/2022 19:07	<a href="#">WG1924943</a>
Chloroethane	ND		5.00	1	09/14/2022 22:05	<a href="#">WG1926498</a>
Tetrachloroethene	ND		0.500	1	09/12/2022 19:07	<a href="#">WG1924943</a>
Chlorobenzene	ND		0.500	1	09/12/2022 19:07	<a href="#">WG1924943</a>
Chloroform	ND		5.00	1	09/14/2022 22:05	<a href="#">WG1926498</a>
Chloromethane	ND		2.50	1	09/14/2022 22:05	<a href="#">WG1926498</a>
Toluene	ND		1.00	1	09/12/2022 19:07	<a href="#">WG1924943</a>
Ethylbenzene	ND		0.500	1	09/12/2022 19:07	<a href="#">WG1924943</a>
Styrene	ND		0.500	1	09/12/2022 19:07	<a href="#">WG1924943</a>
1,2-Dibromo-3-Chloropropane	ND		5.00	1	09/14/2022 22:05	<a href="#">WG1926498</a>
Bromobenzene	ND		0.500	1	09/12/2022 19:07	<a href="#">WG1924943</a>
1,2-Dibromoethane	ND		1.00	1	09/14/2022 22:05	<a href="#">WG1926498</a>
Bromodichloromethane	ND		0.500	1	09/12/2022 19:07	<a href="#">WG1924943</a>
Bromoform	ND		0.500	1	09/12/2022 19:07	<a href="#">WG1924943</a>
Dibromomethane	ND		1.00	1	09/14/2022 22:05	<a href="#">WG1926498</a>
1,2-Dichlorobenzene	ND		1.00	1	09/14/2022 22:05	<a href="#">WG1926498</a>
Bromomethane	ND		1.00	1	09/12/2022 19:07	<a href="#">WG1924943</a>
1,3-Dichlorobenzene	ND		1.00	1	09/14/2022 22:05	<a href="#">WG1926498</a>
Chlorodibromomethane	ND		0.500	1	09/12/2022 19:07	<a href="#">WG1924943</a>
1,4-Dichlorobenzene	ND		1.00	1	09/14/2022 22:05	<a href="#">WG1926498</a>
Chloroethane	ND		0.500	1	09/12/2022 19:07	<a href="#">WG1924943</a>
trans-1,4-Dichloro-2-butene	ND		2.50	1	09/14/2022 22:05	<a href="#">WG1926498</a>
Chloroform	ND		0.500	1	09/12/2022 19:07	<a href="#">WG1924943</a>
Dichlorodifluoromethane	ND		5.00	1	09/14/2022 22:05	<a href="#">WG1926498</a>
1,1-Dichloroethane	ND		1.00	1	09/14/2022 22:05	<a href="#">WG1926498</a>
Chloromethane	ND		0.500	1	09/12/2022 19:07	<a href="#">WG1924943</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

## Volatile Organic Compounds (GC/MS) by Method 524.2/8260B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	ND		1.00	1	09/14/2022 22:05	<a href="#">WG1926498</a>
2-Chlorotoluene	ND		0.500	1	09/12/2022 19:07	<a href="#">WG1924943</a>
1,1-Dichloroethene	ND		1.00	1	09/14/2022 22:05	<a href="#">WG1926498</a>
4-Chlorotoluene	ND		0.500	1	09/12/2022 19:07	<a href="#">WG1924943</a>
cis-1,2-Dichloroethene	ND		1.00	1	09/14/2022 22:05	<a href="#">WG1926498</a>
Dibromomethane	ND		0.500	1	09/12/2022 19:07	<a href="#">WG1924943</a>
Methyl tert-butyl ether	ND		0.500	1	09/12/2022 19:07	<a href="#">WG1924943</a>
trans-1,2-Dichloroethene	ND		1.00	1	09/14/2022 22:05	<a href="#">WG1926498</a>
1,2-Dichloropropane	ND		1.00	1	09/14/2022 22:05	<a href="#">WG1926498</a>
1,3-Dichlorobenzene	ND		0.500	1	09/12/2022 19:07	<a href="#">WG1924943</a>
1,1-Dichloroethane	ND		0.500	1	09/12/2022 19:07	<a href="#">WG1924943</a>
1,3-Dichloropropane	ND		0.500	1	09/12/2022 19:07	<a href="#">WG1924943</a>
2,2-Dichloropropane	ND		0.500	1	09/12/2022 19:07	<a href="#">WG1924943</a>
cis-1,3-Dichloropropene	ND		1.00	1	09/14/2022 22:05	<a href="#">WG1926498</a>
1,1-Dichloropropene	ND		0.500	1	09/12/2022 19:07	<a href="#">WG1924943</a>
trans-1,3-Dichloropropene	ND		1.00	1	09/14/2022 22:05	<a href="#">WG1926498</a>
1,3-Dichloropropene	ND		0.500	1	09/12/2022 19:07	<a href="#">WG1924943</a>
1,1,1,2-Tetrachloroethane	ND		0.500	1	09/12/2022 19:07	<a href="#">WG1924943</a>
1,1,2,2-Tetrachloroethane	ND		0.500	1	09/12/2022 19:07	<a href="#">WG1924943</a>
Ethylbenzene	ND		1.00	1	09/14/2022 22:05	<a href="#">WG1926498</a>
1,2,3-Trichloropropane	ND		0.500	1	09/12/2022 19:07	<a href="#">WG1924943</a>
Hexachloro-1,3-butadiene	ND		1.00	1	09/14/2022 22:05	<a href="#">WG1926498</a>
Di-isopropyl ether	ND		1.00	1	09/12/2022 19:07	<a href="#">WG1924943</a>
tert-Butyl alcohol	ND		5.00	1	09/12/2022 19:07	<a href="#">WG1924943</a>
2-Hexanone	ND		10.0	1	09/14/2022 22:05	<a href="#">WG1926498</a>
2-Butanone (MEK)	ND		10.0	1	09/14/2022 22:05	<a href="#">WG1926498</a>
Iodomethane	ND		10.0	1	09/14/2022 22:05	<a href="#">WG1926498</a>
Methylene Chloride	ND		5.00	1	09/14/2022 22:05	<a href="#">WG1926498</a>
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	09/14/2022 22:05	<a href="#">WG1926498</a>
Naphthalene	ND		5.00	1	09/14/2022 22:05	<a href="#">WG1926498</a>
n-Propylbenzene	ND		1.00	1	09/14/2022 22:05	<a href="#">WG1926498</a>
Styrene	ND		1.00	1	09/14/2022 22:05	<a href="#">WG1926498</a>
1,1,1,2-Tetrachloroethane	ND		1.00	1	09/14/2022 22:05	<a href="#">WG1926498</a>
1,1,2,2-Tetrachloroethane	ND		1.00	1	09/14/2022 22:05	<a href="#">WG1926498</a>
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	09/14/2022 22:05	<a href="#">WG1926498</a>
Tetrachloroethene	ND		1.00	1	09/14/2022 22:05	<a href="#">WG1926498</a>
Toluene	ND		1.00	1	09/14/2022 22:05	<a href="#">WG1926498</a>
1,2,4-Trichlorobenzene	ND		1.00	1	09/14/2022 22:05	<a href="#">WG1926498</a>
1,1,1-Trichloroethane	ND		1.00	1	09/14/2022 22:05	<a href="#">WG1926498</a>
1,1,2-Trichloroethane	ND		1.00	1	09/14/2022 22:05	<a href="#">WG1926498</a>
Trichloroethene	ND		1.00	1	09/14/2022 22:05	<a href="#">WG1926498</a>
Trichlorofluoromethane	ND		5.00	1	09/14/2022 22:05	<a href="#">WG1926498</a>
1,2,3-Trichloropropane	ND		2.50	1	09/14/2022 22:05	<a href="#">WG1926498</a>
1,2,4-Trimethylbenzene	ND		1.00	1	09/14/2022 22:05	<a href="#">WG1926498</a>
1,3,5-Trimethylbenzene	ND		1.00	1	09/14/2022 22:05	<a href="#">WG1926498</a>
Vinyl acetate	ND		10.0	1	09/14/2022 22:05	<a href="#">WG1926498</a>
Vinyl chloride	ND		1.00	1	09/14/2022 22:05	<a href="#">WG1926498</a>
Xylenes, Total	ND		3.00	1	09/14/2022 22:05	<a href="#">WG1926498</a>
Di-isopropyl ether	ND		1.00	1	09/14/2022 22:05	<a href="#">WG1926498</a>
Ethanol	ND	<u>J3</u>	100	1	09/14/2022 22:05	<a href="#">WG1926498</a>
Ethyl tert-butyl ether	ND		1.00	1	09/14/2022 22:05	<a href="#">WG1926498</a>
Methyl tert-butyl ether	ND		1.00	1	09/14/2022 22:05	<a href="#">WG1926498</a>
tert-Butyl alcohol	ND	<u>J3</u>	5.00	1	09/14/2022 22:05	<a href="#">WG1926498</a>
tert-Amyl Methyl Ether	ND		1.00	1	09/14/2022 22:05	<a href="#">WG1926498</a>
(S) 4-Bromofluorobenzene	87.9		70.0-130		09/12/2022 19:07	<a href="#">WG1924943</a>
(S) 1,2-Dichlorobenzene-d4	82.9		70.0-130		09/12/2022 19:07	<a href="#">WG1924943</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (GC/MS) by Method 524.2/8260B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
(S) Toluene-d8	116		80.0-120		09/14/2022 22:05	<a href="#">WG1926498</a>
(S) 4-Bromofluorobenzene	105		77.0-126		09/14/2022 22:05	<a href="#">WG1926498</a>
(S) 1,2-Dichloroethane-d4	107		70.0-130		09/14/2022 22:05	<a href="#">WG1926498</a>

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

## Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
TPH (GC/FID) Low Fraction	134	<u>B</u>	100	1	09/14/2022 04:40	<a href="#">WG1925841</a>
(S) a, a, a-Trifluorotoluene(FID)	96.1		78.0-120		09/14/2022 04:40	<a href="#">WG1925841</a>

## Volatile Organic Compounds (GC/MS) by Method 524.2/8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND	<u>J3</u>	50.0	1	09/14/2022 22:24	<a href="#">WG1926498</a>
Acrylonitrile	ND	<u>J3</u>	10.0	1	09/14/2022 22:24	<a href="#">WG1926498</a>
Benzene	ND		1.00	1	09/14/2022 22:24	<a href="#">WG1926498</a>
Bromobenzene	ND		1.00	1	09/14/2022 22:24	<a href="#">WG1926498</a>
Bromochloromethane	ND		1.00	1	09/14/2022 22:24	<a href="#">WG1926498</a>
Bromodichloromethane	ND		1.00	1	09/14/2022 22:24	<a href="#">WG1926498</a>
Bromoform	ND		1.00	1	09/14/2022 22:24	<a href="#">WG1926498</a>
Bromomethane	ND		5.00	1	09/14/2022 22:24	<a href="#">WG1926498</a>
n-Butylbenzene	ND		1.00	1	09/14/2022 22:24	<a href="#">WG1926498</a>
sec-Butylbenzene	ND		1.00	1	09/14/2022 22:24	<a href="#">WG1926498</a>
tert-Butylbenzene	ND		1.00	1	09/14/2022 22:24	<a href="#">WG1926498</a>
Carbon tetrachloride	ND		1.00	1	09/14/2022 22:24	<a href="#">WG1926498</a>
Carbon disulfide	ND		1.00	1	09/14/2022 22:24	<a href="#">WG1926498</a>
Chlorobenzene	ND		1.00	1	09/14/2022 22:24	<a href="#">WG1926498</a>
Chlorodibromomethane	ND		1.00	1	09/14/2022 22:24	<a href="#">WG1926498</a>
Chloroethane	ND		5.00	1	09/14/2022 22:24	<a href="#">WG1926498</a>
Chloroform	ND		5.00	1	09/14/2022 22:24	<a href="#">WG1926498</a>
Chloromethane	ND		2.50	1	09/14/2022 22:24	<a href="#">WG1926498</a>
1,2-Dibromo-3-Chloropropane	ND		5.00	1	09/14/2022 22:24	<a href="#">WG1926498</a>
1,2-Dibromoethane	ND		1.00	1	09/14/2022 22:24	<a href="#">WG1926498</a>
Dibromomethane	ND		1.00	1	09/14/2022 22:24	<a href="#">WG1926498</a>
1,2-Dichlorobenzene	ND		1.00	1	09/14/2022 22:24	<a href="#">WG1926498</a>
1,3-Dichlorobenzene	ND		1.00	1	09/14/2022 22:24	<a href="#">WG1926498</a>
1,4-Dichlorobenzene	ND		1.00	1	09/14/2022 22:24	<a href="#">WG1926498</a>
trans-1,4-Dichloro-2-butene	ND		2.50	1	09/14/2022 22:24	<a href="#">WG1926498</a>
Dichlorodifluoromethane	ND		5.00	1	09/14/2022 22:24	<a href="#">WG1926498</a>
1,1-Dichloroethane	ND		1.00	1	09/14/2022 22:24	<a href="#">WG1926498</a>
1,2-Dichloroethane	ND		1.00	1	09/14/2022 22:24	<a href="#">WG1926498</a>
1,1-Dichloroethene	ND		1.00	1	09/14/2022 22:24	<a href="#">WG1926498</a>
cis-1,2-Dichloroethene	ND		1.00	1	09/14/2022 22:24	<a href="#">WG1926498</a>
trans-1,2-Dichloroethene	ND		1.00	1	09/14/2022 22:24	<a href="#">WG1926498</a>
1,2-Dichloropropane	ND		1.00	1	09/14/2022 22:24	<a href="#">WG1926498</a>
cis-1,3-Dichloropropene	ND		1.00	1	09/14/2022 22:24	<a href="#">WG1926498</a>
trans-1,3-Dichloropropene	ND		1.00	1	09/14/2022 22:24	<a href="#">WG1926498</a>
Ethylbenzene	ND		1.00	1	09/14/2022 22:24	<a href="#">WG1926498</a>
Hexachloro-1,3-butadiene	ND		1.00	1	09/14/2022 22:24	<a href="#">WG1926498</a>
2-Hexanone	ND		10.0	1	09/14/2022 22:24	<a href="#">WG1926498</a>
2-Butanone (MEK)	ND		10.0	1	09/14/2022 22:24	<a href="#">WG1926498</a>
Iodomethane	ND		10.0	1	09/14/2022 22:24	<a href="#">WG1926498</a>
Methylene Chloride	ND		5.00	1	09/14/2022 22:24	<a href="#">WG1926498</a>
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	09/14/2022 22:24	<a href="#">WG1926498</a>
Naphthalene	ND		5.00	1	09/14/2022 22:24	<a href="#">WG1926498</a>
n-Propylbenzene	ND		1.00	1	09/14/2022 22:24	<a href="#">WG1926498</a>
Styrene	ND		1.00	1	09/14/2022 22:24	<a href="#">WG1926498</a>
1,1,1,2-Tetrachloroethane	ND		1.00	1	09/14/2022 22:24	<a href="#">WG1926498</a>
1,1,2,2-Tetrachloroethane	ND		1.00	1	09/14/2022 22:24	<a href="#">WG1926498</a>
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	09/14/2022 22:24	<a href="#">WG1926498</a>
Tetrachloroethene	ND		1.00	1	09/14/2022 22:24	<a href="#">WG1926498</a>
Toluene	ND		1.00	1	09/14/2022 22:24	<a href="#">WG1926498</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

## Volatile Organic Compounds (GC/MS) by Method 524.2/8260B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	ND		1.00	1	09/14/2022 22:24	<a href="#">WG1926498</a>
1,1,1-Trichloroethane	ND		1.00	1	09/14/2022 22:24	<a href="#">WG1926498</a>
1,1,2-Trichloroethane	ND		1.00	1	09/14/2022 22:24	<a href="#">WG1926498</a>
Trichloroethene	ND		1.00	1	09/14/2022 22:24	<a href="#">WG1926498</a>
Trichlorofluoromethane	ND		5.00	1	09/14/2022 22:24	<a href="#">WG1926498</a>
1,2,3-Trichloropropane	ND		2.50	1	09/14/2022 22:24	<a href="#">WG1926498</a>
1,2,4-Trimethylbenzene	ND		1.00	1	09/14/2022 22:24	<a href="#">WG1926498</a>
1,3,5-Trimethylbenzene	ND		1.00	1	09/14/2022 22:24	<a href="#">WG1926498</a>
Vinyl acetate	ND		10.0	1	09/14/2022 22:24	<a href="#">WG1926498</a>
Vinyl chloride	ND		1.00	1	09/14/2022 22:24	<a href="#">WG1926498</a>
Xylenes, Total	ND		3.00	1	09/14/2022 22:24	<a href="#">WG1926498</a>
Di-isopropyl ether	34.7		1.00	1	09/14/2022 22:24	<a href="#">WG1926498</a>
Ethanol	ND	<u>J3</u>	100	1	09/14/2022 22:24	<a href="#">WG1926498</a>
Ethyl tert-butyl ether	ND		1.00	1	09/14/2022 22:24	<a href="#">WG1926498</a>
Methyl tert-butyl ether	33.2		1.00	1	09/14/2022 22:24	<a href="#">WG1926498</a>
tert-Butyl alcohol	ND	<u>J3</u>	5.00	1	09/14/2022 22:24	<a href="#">WG1926498</a>
tert-Amyl Methyl Ether	2.59		1.00	1	09/14/2022 22:24	<a href="#">WG1926498</a>
(S) Toluene-d8	114		80.0-120		09/14/2022 22:24	<a href="#">WG1926498</a>
(S) 4-Bromofluorobenzene	105		77.0-126		09/14/2022 22:24	<a href="#">WG1926498</a>
(S) 1,2-Dichloroethane-d4	106		70.0-130		09/14/2022 22:24	<a href="#">WG1926498</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

## Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	123		100	1	09/17/2022 03:10	<a href="#">WG1926757</a>
(S) o-Terphenyl	99.5		31.0-160		09/17/2022 03:10	<a href="#">WG1926757</a>

## Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
TPH (GC/FID) Low Fraction	ND		100	1	09/16/2022 18:15	<a href="#">WG1927716</a>
(S) a, a, a-Trifluorotoluene(FID)	94.2		78.0-120		09/16/2022 18:15	<a href="#">WG1927716</a>

## Volatile Organic Compounds (GC/MS) by Method 524.2/8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND	<a href="#">J3</a>	250	5	09/15/2022 01:36	<a href="#">WG1926498</a>
Acrylonitrile	ND	<a href="#">J3</a>	50.0	5	09/15/2022 01:36	<a href="#">WG1926498</a>
Benzene	ND		5.00	5	09/15/2022 01:36	<a href="#">WG1926498</a>
Bromobenzene	ND		5.00	5	09/15/2022 01:36	<a href="#">WG1926498</a>
Bromochloromethane	ND		5.00	5	09/15/2022 01:36	<a href="#">WG1926498</a>
Bromodichloromethane	ND		5.00	5	09/15/2022 01:36	<a href="#">WG1926498</a>
Bromoform	ND		5.00	5	09/15/2022 01:36	<a href="#">WG1926498</a>
Bromomethane	ND		25.0	5	09/15/2022 01:36	<a href="#">WG1926498</a>
n-Butylbenzene	ND		5.00	5	09/15/2022 01:36	<a href="#">WG1926498</a>
sec-Butylbenzene	ND		5.00	5	09/15/2022 01:36	<a href="#">WG1926498</a>
tert-Butylbenzene	ND		5.00	5	09/15/2022 01:36	<a href="#">WG1926498</a>
Carbon tetrachloride	ND		5.00	5	09/15/2022 01:36	<a href="#">WG1926498</a>
Carbon disulfide	ND		5.00	5	09/15/2022 01:36	<a href="#">WG1926498</a>
Chlorobenzene	ND		5.00	5	09/15/2022 01:36	<a href="#">WG1926498</a>
Chlorodibromomethane	ND		5.00	5	09/15/2022 01:36	<a href="#">WG1926498</a>
Chloroethane	ND		25.0	5	09/15/2022 01:36	<a href="#">WG1926498</a>
Chloroform	ND		25.0	5	09/15/2022 01:36	<a href="#">WG1926498</a>
Chloromethane	ND		12.5	5	09/15/2022 01:36	<a href="#">WG1926498</a>
1,2-Dibromo-3-Chloropropane	ND		25.0	5	09/15/2022 01:36	<a href="#">WG1926498</a>
1,2-Dibromoethane	ND		5.00	5	09/15/2022 01:36	<a href="#">WG1926498</a>
Dibromomethane	ND		5.00	5	09/15/2022 01:36	<a href="#">WG1926498</a>
1,2-Dichlorobenzene	ND		5.00	5	09/15/2022 01:36	<a href="#">WG1926498</a>
1,3-Dichlorobenzene	ND		5.00	5	09/15/2022 01:36	<a href="#">WG1926498</a>
1,4-Dichlorobenzene	ND		5.00	5	09/15/2022 01:36	<a href="#">WG1926498</a>
trans-1,4-Dichloro-2-butene	ND		12.5	5	09/15/2022 01:36	<a href="#">WG1926498</a>
Dichlorodifluoromethane	ND		25.0	5	09/15/2022 01:36	<a href="#">WG1926498</a>
1,1-Dichloroethane	ND		5.00	5	09/15/2022 01:36	<a href="#">WG1926498</a>
1,2-Dichloroethane	ND		5.00	5	09/15/2022 01:36	<a href="#">WG1926498</a>
1,1-Dichloroethene	ND		5.00	5	09/15/2022 01:36	<a href="#">WG1926498</a>
cis-1,2-Dichloroethene	ND		5.00	5	09/15/2022 01:36	<a href="#">WG1926498</a>
trans-1,2-Dichloroethene	ND		5.00	5	09/15/2022 01:36	<a href="#">WG1926498</a>
1,2-Dichloropropane	ND		5.00	5	09/15/2022 01:36	<a href="#">WG1926498</a>
cis-1,3-Dichloropropene	ND		5.00	5	09/15/2022 01:36	<a href="#">WG1926498</a>
trans-1,3-Dichloropropene	ND		5.00	5	09/15/2022 01:36	<a href="#">WG1926498</a>
Ethylbenzene	ND		5.00	5	09/15/2022 01:36	<a href="#">WG1926498</a>
Hexachloro-1,3-butadiene	ND		5.00	5	09/15/2022 01:36	<a href="#">WG1926498</a>
2-Hexanone	ND		50.0	5	09/15/2022 01:36	<a href="#">WG1926498</a>
2-Butanone (MEK)	ND		50.0	5	09/15/2022 01:36	<a href="#">WG1926498</a>
Iodomethane	ND		50.0	5	09/15/2022 01:36	<a href="#">WG1926498</a>
Methylene Chloride	ND		25.0	5	09/15/2022 01:36	<a href="#">WG1926498</a>
4-Methyl-2-pentanone (MIBK)	ND		50.0	5	09/15/2022 01:36	<a href="#">WG1926498</a>
Naphthalene	ND		25.0	5	09/15/2022 01:36	<a href="#">WG1926498</a>
n-Propylbenzene	ND		5.00	5	09/15/2022 01:36	<a href="#">WG1926498</a>
Styrene	ND		5.00	5	09/15/2022 01:36	<a href="#">WG1926498</a>
1,1,1,2-Tetrachloroethane	ND		5.00	5	09/15/2022 01:36	<a href="#">WG1926498</a>
1,1,2,2-Tetrachloroethane	ND		5.00	5	09/15/2022 01:36	<a href="#">WG1926498</a>
1,1,2-Trichlorotrifluoroethane	ND		5.00	5	09/15/2022 01:36	<a href="#">WG1926498</a>
Tetrachloroethene	ND		5.00	5	09/15/2022 01:36	<a href="#">WG1926498</a>
Toluene	ND		5.00	5	09/15/2022 01:36	<a href="#">WG1926498</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

## Volatile Organic Compounds (GC/MS) by Method 524.2/8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	ND		5.00	5	09/15/2022 01:36	<a href="#">WG1926498</a>
1,1,1-Trichloroethane	ND		5.00	5	09/15/2022 01:36	<a href="#">WG1926498</a>
1,1,2-Trichloroethane	ND		5.00	5	09/15/2022 01:36	<a href="#">WG1926498</a>
Trichloroethene	ND		5.00	5	09/15/2022 01:36	<a href="#">WG1926498</a>
Trichlorofluoromethane	ND		25.0	5	09/15/2022 01:36	<a href="#">WG1926498</a>
1,2,3-Trichloropropane	ND		12.5	5	09/15/2022 01:36	<a href="#">WG1926498</a>
1,2,4-Trimethylbenzene	ND		5.00	5	09/15/2022 01:36	<a href="#">WG1926498</a>
1,3,5-Trimethylbenzene	ND		5.00	5	09/15/2022 01:36	<a href="#">WG1926498</a>
Vinyl acetate	ND		50.0	5	09/15/2022 01:36	<a href="#">WG1926498</a>
Vinyl chloride	ND		5.00	5	09/15/2022 01:36	<a href="#">WG1926498</a>
Xylenes, Total	ND		15.0	5	09/15/2022 01:36	<a href="#">WG1926498</a>
Di-isopropyl ether	36.8		5.00	5	09/15/2022 01:36	<a href="#">WG1926498</a>
Ethanol	ND	<u>J3</u>	500	5	09/15/2022 01:36	<a href="#">WG1926498</a>
Ethyl tert-butyl ether	ND		5.00	5	09/15/2022 01:36	<a href="#">WG1926498</a>
Methyl tert-butyl ether	16.9		5.00	5	09/15/2022 01:36	<a href="#">WG1926498</a>
tert-Butyl alcohol	ND	<u>J3</u>	25.0	5	09/15/2022 01:36	<a href="#">WG1926498</a>
tert-Amyl Methyl Ether	ND		5.00	5	09/15/2022 01:36	<a href="#">WG1926498</a>
(S) Toluene-d8	116		80.0-120		09/15/2022 01:36	<a href="#">WG1926498</a>
(S) 4-Bromofluorobenzene	105		77.0-126		09/15/2022 01:36	<a href="#">WG1926498</a>
(S) 1,2-Dichloroethane-d4	106		70.0-130		09/15/2022 01:36	<a href="#">WG1926498</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

## Sample Narrative:

L1534573-03 WG1926498: Lowest possible dilution due to sample foaming.

## Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		100	1	09/17/2022 03:33	<a href="#">WG1926757</a>
(S) o-Terphenyl	98.4		31.0-160		09/17/2022 03:33	<a href="#">WG1926757</a>

## Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
TPH (GC/FID) Low Fraction	ND		100	1	09/14/2022 05:02	<a href="#">WG1925841</a>
(S) a, a, a-Trifluorotoluene(FID)	96.9		78.0-120		09/14/2022 05:02	<a href="#">WG1925841</a>

## Volatile Organic Compounds (GC/MS) by Method 524.2/8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND	<a href="#">J3</a>	50.0	1	09/14/2022 22:43	<a href="#">WG1926498</a>
Acrylonitrile	ND	<a href="#">J3</a>	10.0	1	09/14/2022 22:43	<a href="#">WG1926498</a>
Benzene	ND		1.00	1	09/14/2022 22:43	<a href="#">WG1926498</a>
Bromobenzene	ND		1.00	1	09/14/2022 22:43	<a href="#">WG1926498</a>
Bromochloromethane	ND		1.00	1	09/14/2022 22:43	<a href="#">WG1926498</a>
Bromodichloromethane	ND		1.00	1	09/14/2022 22:43	<a href="#">WG1926498</a>
Bromoform	ND		1.00	1	09/14/2022 22:43	<a href="#">WG1926498</a>
Bromomethane	ND		5.00	1	09/14/2022 22:43	<a href="#">WG1926498</a>
n-Butylbenzene	ND		1.00	1	09/14/2022 22:43	<a href="#">WG1926498</a>
sec-Butylbenzene	ND		1.00	1	09/14/2022 22:43	<a href="#">WG1926498</a>
tert-Butylbenzene	ND		1.00	1	09/14/2022 22:43	<a href="#">WG1926498</a>
Carbon tetrachloride	ND		1.00	1	09/14/2022 22:43	<a href="#">WG1926498</a>
Carbon disulfide	ND		1.00	1	09/14/2022 22:43	<a href="#">WG1926498</a>
Chlorobenzene	ND		1.00	1	09/14/2022 22:43	<a href="#">WG1926498</a>
Chlorodibromomethane	ND		1.00	1	09/14/2022 22:43	<a href="#">WG1926498</a>
Chloroethane	ND		5.00	1	09/14/2022 22:43	<a href="#">WG1926498</a>
Chloroform	ND		5.00	1	09/14/2022 22:43	<a href="#">WG1926498</a>
Chloromethane	ND		2.50	1	09/14/2022 22:43	<a href="#">WG1926498</a>
1,2-Dibromo-3-Chloropropane	ND		5.00	1	09/14/2022 22:43	<a href="#">WG1926498</a>
1,2-Dibromoethane	ND		1.00	1	09/14/2022 22:43	<a href="#">WG1926498</a>
Dibromomethane	ND		1.00	1	09/14/2022 22:43	<a href="#">WG1926498</a>
1,2-Dichlorobenzene	ND		1.00	1	09/14/2022 22:43	<a href="#">WG1926498</a>
1,3-Dichlorobenzene	ND		1.00	1	09/14/2022 22:43	<a href="#">WG1926498</a>
1,4-Dichlorobenzene	ND		1.00	1	09/14/2022 22:43	<a href="#">WG1926498</a>
trans-1,4-Dichloro-2-butene	ND		2.50	1	09/14/2022 22:43	<a href="#">WG1926498</a>
Dichlorodifluoromethane	ND		5.00	1	09/14/2022 22:43	<a href="#">WG1926498</a>
1,1-Dichloroethane	ND		1.00	1	09/14/2022 22:43	<a href="#">WG1926498</a>
1,2-Dichloroethane	ND		1.00	1	09/14/2022 22:43	<a href="#">WG1926498</a>
1,1-Dichloroethene	ND		1.00	1	09/14/2022 22:43	<a href="#">WG1926498</a>
cis-1,2-Dichloroethene	ND		1.00	1	09/14/2022 22:43	<a href="#">WG1926498</a>
trans-1,2-Dichloroethene	ND		1.00	1	09/14/2022 22:43	<a href="#">WG1926498</a>
1,2-Dichloropropane	ND		1.00	1	09/14/2022 22:43	<a href="#">WG1926498</a>
cis-1,3-Dichloropropene	ND		1.00	1	09/14/2022 22:43	<a href="#">WG1926498</a>
trans-1,3-Dichloropropene	ND		1.00	1	09/14/2022 22:43	<a href="#">WG1926498</a>
Ethylbenzene	ND		1.00	1	09/14/2022 22:43	<a href="#">WG1926498</a>
Hexachloro-1,3-butadiene	ND		1.00	1	09/14/2022 22:43	<a href="#">WG1926498</a>
2-Hexanone	ND		10.0	1	09/14/2022 22:43	<a href="#">WG1926498</a>
2-Butanone (MEK)	ND		10.0	1	09/14/2022 22:43	<a href="#">WG1926498</a>
Iodomethane	ND		10.0	1	09/14/2022 22:43	<a href="#">WG1926498</a>
Methylene Chloride	ND		5.00	1	09/14/2022 22:43	<a href="#">WG1926498</a>
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	09/14/2022 22:43	<a href="#">WG1926498</a>
Naphthalene	ND		5.00	1	09/14/2022 22:43	<a href="#">WG1926498</a>
n-Propylbenzene	ND		1.00	1	09/14/2022 22:43	<a href="#">WG1926498</a>
Styrene	ND		1.00	1	09/14/2022 22:43	<a href="#">WG1926498</a>
1,1,1,2-Tetrachloroethane	ND		1.00	1	09/14/2022 22:43	<a href="#">WG1926498</a>
1,1,2,2-Tetrachloroethane	ND		1.00	1	09/14/2022 22:43	<a href="#">WG1926498</a>
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	09/14/2022 22:43	<a href="#">WG1926498</a>
Tetrachloroethene	ND		1.00	1	09/14/2022 22:43	<a href="#">WG1926498</a>
Toluene	ND		1.00	1	09/14/2022 22:43	<a href="#">WG1926498</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

## Volatile Organic Compounds (GC/MS) by Method 524.2/8260B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	ND		1.00	1	09/14/2022 22:43	<a href="#">WG1926498</a>
1,1,1-Trichloroethane	ND		1.00	1	09/14/2022 22:43	<a href="#">WG1926498</a>
1,1,2-Trichloroethane	ND		1.00	1	09/14/2022 22:43	<a href="#">WG1926498</a>
Trichloroethene	ND		1.00	1	09/14/2022 22:43	<a href="#">WG1926498</a>
Trichlorofluoromethane	ND		5.00	1	09/14/2022 22:43	<a href="#">WG1926498</a>
1,2,3-Trichloropropane	ND		2.50	1	09/14/2022 22:43	<a href="#">WG1926498</a>
1,2,4-Trimethylbenzene	ND		1.00	1	09/14/2022 22:43	<a href="#">WG1926498</a>
1,3,5-Trimethylbenzene	ND		1.00	1	09/14/2022 22:43	<a href="#">WG1926498</a>
Vinyl acetate	ND		10.0	1	09/14/2022 22:43	<a href="#">WG1926498</a>
Vinyl chloride	ND		1.00	1	09/14/2022 22:43	<a href="#">WG1926498</a>
Xylenes, Total	ND		3.00	1	09/14/2022 22:43	<a href="#">WG1926498</a>
Di-isopropyl ether	ND		1.00	1	09/14/2022 22:43	<a href="#">WG1926498</a>
Ethanol	ND	<u>J3</u>	100	1	09/14/2022 22:43	<a href="#">WG1926498</a>
Ethyl tert-butyl ether	ND		1.00	1	09/14/2022 22:43	<a href="#">WG1926498</a>
Methyl tert-butyl ether	ND		1.00	1	09/14/2022 22:43	<a href="#">WG1926498</a>
tert-Butyl alcohol	ND	<u>J3</u>	5.00	1	09/14/2022 22:43	<a href="#">WG1926498</a>
tert-Amyl Methyl Ether	ND		1.00	1	09/14/2022 22:43	<a href="#">WG1926498</a>
(S) Toluene-d8	114		80.0-120		09/14/2022 22:43	<a href="#">WG1926498</a>
(S) 4-Bromofluorobenzene	101		77.0-126		09/14/2022 22:43	<a href="#">WG1926498</a>
(S) 1,2-Dichloroethane-d4	108		70.0-130		09/14/2022 22:43	<a href="#">WG1926498</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

## Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	196		100	1	09/17/2022 03:56	<a href="#">WG1926757</a>
(S) o-Terphenyl	97.4		31.0-160		09/17/2022 03:56	<a href="#">WG1926757</a>

## Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
TPH (GC/FID) Low Fraction	ND		100	1	09/15/2022 06:38	<a href="#">WG1926252</a>
(S) a, a, a-Trifluorotoluene(FID)	91.8		78.0-120		09/15/2022 06:38	<a href="#">WG1926252</a>

## Volatile Organic Compounds (GC/MS) by Method 524.2/8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND	<a href="#">J3</a>	50.0	1	09/14/2022 23:02	<a href="#">WG1926498</a>
Acrylonitrile	ND	<a href="#">J3</a>	10.0	1	09/14/2022 23:02	<a href="#">WG1926498</a>
Benzene	ND		1.00	1	09/14/2022 23:02	<a href="#">WG1926498</a>
Bromobenzene	ND		1.00	1	09/14/2022 23:02	<a href="#">WG1926498</a>
Bromochloromethane	ND		1.00	1	09/14/2022 23:02	<a href="#">WG1926498</a>
Bromodichloromethane	ND		1.00	1	09/14/2022 23:02	<a href="#">WG1926498</a>
Bromoform	ND		1.00	1	09/14/2022 23:02	<a href="#">WG1926498</a>
Bromomethane	ND		5.00	1	09/14/2022 23:02	<a href="#">WG1926498</a>
n-Butylbenzene	ND		1.00	1	09/14/2022 23:02	<a href="#">WG1926498</a>
sec-Butylbenzene	ND		1.00	1	09/14/2022 23:02	<a href="#">WG1926498</a>
tert-Butylbenzene	ND		1.00	1	09/14/2022 23:02	<a href="#">WG1926498</a>
Carbon tetrachloride	ND		1.00	1	09/14/2022 23:02	<a href="#">WG1926498</a>
Carbon disulfide	ND		1.00	1	09/14/2022 23:02	<a href="#">WG1926498</a>
Chlorobenzene	ND		1.00	1	09/14/2022 23:02	<a href="#">WG1926498</a>
Chlorodibromomethane	ND		1.00	1	09/14/2022 23:02	<a href="#">WG1926498</a>
Chloroethane	ND		5.00	1	09/14/2022 23:02	<a href="#">WG1926498</a>
Chloroform	ND		5.00	1	09/14/2022 23:02	<a href="#">WG1926498</a>
Chloromethane	ND		2.50	1	09/14/2022 23:02	<a href="#">WG1926498</a>
1,2-Dibromo-3-Chloropropane	ND		5.00	1	09/14/2022 23:02	<a href="#">WG1926498</a>
1,2-Dibromoethane	ND		1.00	1	09/14/2022 23:02	<a href="#">WG1926498</a>
Dibromomethane	ND		1.00	1	09/14/2022 23:02	<a href="#">WG1926498</a>
1,2-Dichlorobenzene	ND		1.00	1	09/14/2022 23:02	<a href="#">WG1926498</a>
1,3-Dichlorobenzene	ND		1.00	1	09/14/2022 23:02	<a href="#">WG1926498</a>
1,4-Dichlorobenzene	ND		1.00	1	09/14/2022 23:02	<a href="#">WG1926498</a>
trans-1,4-Dichloro-2-butene	ND		2.50	1	09/14/2022 23:02	<a href="#">WG1926498</a>
Dichlorodifluoromethane	ND		5.00	1	09/14/2022 23:02	<a href="#">WG1926498</a>
1,1-Dichloroethane	ND		1.00	1	09/14/2022 23:02	<a href="#">WG1926498</a>
1,2-Dichloroethane	ND		1.00	1	09/14/2022 23:02	<a href="#">WG1926498</a>
1,1-Dichloroethene	ND		1.00	1	09/14/2022 23:02	<a href="#">WG1926498</a>
cis-1,2-Dichloroethene	ND		1.00	1	09/14/2022 23:02	<a href="#">WG1926498</a>
trans-1,2-Dichloroethene	ND		1.00	1	09/14/2022 23:02	<a href="#">WG1926498</a>
1,2-Dichloropropane	ND		1.00	1	09/14/2022 23:02	<a href="#">WG1926498</a>
cis-1,3-Dichloropropene	ND		1.00	1	09/14/2022 23:02	<a href="#">WG1926498</a>
trans-1,3-Dichloropropene	ND		1.00	1	09/14/2022 23:02	<a href="#">WG1926498</a>
Ethylbenzene	ND		1.00	1	09/14/2022 23:02	<a href="#">WG1926498</a>
Hexachloro-1,3-butadiene	ND		1.00	1	09/14/2022 23:02	<a href="#">WG1926498</a>
2-Hexanone	ND		10.0	1	09/14/2022 23:02	<a href="#">WG1926498</a>
2-Butanone (MEK)	ND		10.0	1	09/14/2022 23:02	<a href="#">WG1926498</a>
Iodomethane	ND		10.0	1	09/14/2022 23:02	<a href="#">WG1926498</a>
Methylene Chloride	ND		5.00	1	09/14/2022 23:02	<a href="#">WG1926498</a>
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	09/14/2022 23:02	<a href="#">WG1926498</a>
Naphthalene	ND		5.00	1	09/14/2022 23:02	<a href="#">WG1926498</a>
n-Propylbenzene	ND		1.00	1	09/14/2022 23:02	<a href="#">WG1926498</a>
Styrene	ND		1.00	1	09/14/2022 23:02	<a href="#">WG1926498</a>
1,1,1,2-Tetrachloroethane	ND		1.00	1	09/14/2022 23:02	<a href="#">WG1926498</a>
1,1,2,2-Tetrachloroethane	ND		1.00	1	09/14/2022 23:02	<a href="#">WG1926498</a>
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	09/14/2022 23:02	<a href="#">WG1926498</a>
Tetrachloroethene	ND		1.00	1	09/14/2022 23:02	<a href="#">WG1926498</a>
Toluene	ND		1.00	1	09/14/2022 23:02	<a href="#">WG1926498</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

## Volatile Organic Compounds (GC/MS) by Method 524.2/8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
1,2,4-Trichlorobenzene	ND		1.00	1	09/14/2022 23:02	<a href="#">WG1926498</a>
1,1,1-Trichloroethane	ND		1.00	1	09/14/2022 23:02	<a href="#">WG1926498</a>
1,1,2-Trichloroethane	ND		1.00	1	09/14/2022 23:02	<a href="#">WG1926498</a>
Trichloroethene	ND		1.00	1	09/14/2022 23:02	<a href="#">WG1926498</a>
Trichlorofluoromethane	ND		5.00	1	09/14/2022 23:02	<a href="#">WG1926498</a>
1,2,3-Trichloropropane	ND		2.50	1	09/14/2022 23:02	<a href="#">WG1926498</a>
1,2,4-Trimethylbenzene	ND		1.00	1	09/14/2022 23:02	<a href="#">WG1926498</a>
1,3,5-Trimethylbenzene	ND		1.00	1	09/14/2022 23:02	<a href="#">WG1926498</a>
Vinyl acetate	ND		10.0	1	09/14/2022 23:02	<a href="#">WG1926498</a>
Vinyl chloride	ND		1.00	1	09/14/2022 23:02	<a href="#">WG1926498</a>
Xylenes, Total	ND		3.00	1	09/14/2022 23:02	<a href="#">WG1926498</a>
Di-isopropyl ether	ND		1.00	1	09/14/2022 23:02	<a href="#">WG1926498</a>
Ethanol	ND	J3	100	1	09/14/2022 23:02	<a href="#">WG1926498</a>
Ethyl tert-butyl ether	ND		1.00	1	09/14/2022 23:02	<a href="#">WG1926498</a>
Methyl tert-butyl ether	ND		1.00	1	09/14/2022 23:02	<a href="#">WG1926498</a>
tert-Butyl alcohol	ND	J3	5.00	1	09/14/2022 23:02	<a href="#">WG1926498</a>
tert-Amyl Methyl Ether	ND		1.00	1	09/14/2022 23:02	<a href="#">WG1926498</a>
(S) Toluene-d8	115		80.0-120		09/14/2022 23:02	<a href="#">WG1926498</a>
(S) 4-Bromofluorobenzene	102		77.0-126		09/14/2022 23:02	<a href="#">WG1926498</a>
(S) 1,2-Dichloroethane-d4	109		70.0-130		09/14/2022 23:02	<a href="#">WG1926498</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

## Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
TPH (GC/FID) High Fraction	ND		100	1	09/17/2022 03:32	<a href="#">WG1926760</a>
(S) o-Terphenyl	73.2		31.0-160		09/17/2022 03:32	<a href="#">WG1926760</a>

Method Blank (MB)

(MB) R3838182-2 09/14/22 04:18

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
TPH (GC/FID) Low Fraction	58.5	<u>J</u>	31.4	100
(S) a,a,a-Trifluorotoluene(FID)	98.2			78.0-120

Laboratory Control Sample (LCS)

(LCS) R3838182-1 09/14/22 03:25

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
TPH (GC/FID) Low Fraction	5500	5480	99.6	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			93.8	78.0-120	

L1534190-23 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1534190-23 09/14/22 06:52 • (MS) R3838182-3 09/14/22 11:59 • (MSD) R3838182-4 09/14/22 12:21

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
TPH (GC/FID) Low Fraction	5500	ND	2030	2910	36.9	52.9	1	10.0-160		<u>J3</u>	35.6	22
(S) a,a,a-Trifluorotoluene(FID)					94.9	94.8		78.0-120				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3838239-3 09/15/22 05:33

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
TPH (GC/FID) Low Fraction	U		31.4	100
<sup>(S)</sup> a,a,a-Trifluorotoluene(FID)	91.5			78.0-120

Laboratory Control Sample (LCS)

(LCS) R3838239-2 09/15/22 04:22

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5500	5050	91.8	72.0-127	
<sup>(S)</sup> a,a,a-Trifluorotoluene(FID)			97.5	78.0-120	

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

Method Blank (MB)

(MB) R3838799-2 09/16/22 16:53

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
TPH (GC/FID) Low Fraction	U		31.4	100
<sup>(S)</sup> a,a,a-Trifluorotoluene(FID)	95.9			78.0-120

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

(LCS) R3838799-1 09/16/22 16:09 • (LCSD) R3838799-3 09/16/22 17:15

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 %
TPH (GC/FID) Low Fraction	5500	4860	4590	88.4	83.5	72.0-127			5.71	20
<sup>(S)</sup> a,a,a-Trifluorotoluene(FID)				89.2	85.2	78.0-120				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3836684-2 09/12/22 16:06

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.0490	0.500
Carbon tetrachloride	U		0.0660	0.500
1,4-Dichlorobenzene	U		0.0310	0.500
1,2-Dichloroethane	U		0.0498	0.500
1,1-Dichloroethene	U		0.0540	0.500
1,1,1-Trichloroethane	U		0.0490	0.500
Trichloroethene	U		0.0440	0.500
Vinyl chloride	U		0.0260	0.500
1,2,4-Trichlorobenzene	U		0.0530	0.500
cis-1,2-Dichloroethene	U		0.0640	0.500
Xylenes, Total	U		0.167	0.500
Methylene chloride	U		0.0608	0.500
1,2-Dichlorobenzene	U		0.0410	0.500
trans-1,2-Dichloroethene	U		0.100	0.500
1,2-Dichloropropane	U		0.0270	0.500
1,1,2-Trichloroethane	U		0.0701	0.500
Tetrachloroethene	U		0.0790	0.500
Chlorobenzene	U		0.0370	0.500
Toluene	U		0.412	1.00
Ethylbenzene	U		0.0440	0.500
Styrene	U		0.0360	0.500
Bromobenzene	U		0.0490	0.500
Bromodichloromethane	U		0.0810	0.500
Bromoform	U		0.0800	0.500
Bromomethane	U		0.0790	1.00
Chlorodibromomethane	U		0.0930	0.500
Chloroethane	U		0.190	0.500
Chloroform	U		0.0800	0.500
Chloromethane	U		0.0290	0.500
2-Chlorotoluene	U		0.0480	0.500
4-Chlorotoluene	U		0.0550	0.500
Dibromomethane	U		0.0700	0.500
Methyl tert-butyl ether	U		0.0530	0.500
1,3-Dichlorobenzene	U		0.0360	0.500
1,1-Dichloroethane	U		0.0240	0.500
1,3-Dichloropropane	U		0.0230	0.500
2,2-Dichloropropane	U		0.0680	0.500
1,1-Dichloropropene	U		0.0450	0.500
1,3-Dichloropropene	U		0.320	0.500
1,1,1,2-Tetrachloroethane	U		0.0700	0.500

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Method Blank (MB)

(MB) R3836684-2 09/12/22 16:06

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
1,1,2,2-Tetrachloroethane	U		0.0790	0.500
1,2,3-Trichloropropane	U		0.0720	0.500
Di-isopropyl ether	U		0.105	1.00
tert-Butyl alcohol	U		4.06	5.00
(S) 4-Bromofluorobenzene	80.2			70.0-130
(S) 1,2-Dichlorobenzene-d4	78.1			70.0-130

Laboratory Control Sample (LCS)

(LCS) R3836684-1 09/12/22 14:59

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	5.00	4.77	95.4	70.0-130	
Carbon tetrachloride	5.00	4.43	88.6	70.0-130	
1,4-Dichlorobenzene	5.00	4.66	93.2	70.0-130	
1,2-Dichloroethane	5.00	4.59	91.8	70.0-130	
1,1-Dichloroethene	5.00	4.63	92.6	70.0-130	
1,1,1-Trichloroethane	5.00	4.53	90.6	70.0-130	
Trichloroethene	5.00	4.97	99.4	70.0-130	
Vinyl chloride	5.00	4.18	83.6	70.0-130	
1,2,4-Trichlorobenzene	5.00	4.64	92.8	70.0-130	
cis-1,2-Dichloroethene	5.00	4.85	97.0	70.0-130	
Xylenes, Total	15.0	13.7	91.3	70.0-130	
Methylene chloride	5.00	4.94	98.8	70.0-130	
1,2-Dichlorobenzene	5.00	4.58	91.6	70.0-130	
trans-1,2-Dichloroethene	5.00	4.81	96.2	70.0-130	
1,2-Dichloropropane	5.00	4.70	94.0	70.0-130	
1,1,2-Trichloroethane	5.00	4.71	94.2	70.0-130	
Tetrachloroethene	5.00	4.67	93.4	70.0-130	
Chlorobenzene	5.00	4.90	98.0	70.0-130	
Toluene	5.00	4.94	98.8	70.0-130	
Ethylbenzene	5.00	4.93	98.6	70.0-130	
Styrene	5.00	4.83	96.6	70.0-130	
Bromobenzene	5.00	4.71	94.2	70.0-130	
Bromodichloromethane	5.00	4.61	92.2	70.0-130	
Bromoform	5.00	4.59	91.8	70.0-130	
Bromomethane	5.00	4.56	91.2	70.0-130	
Chlorodibromomethane	5.00	4.50	90.0	70.0-130	
Chloroethane	5.00	4.45	89.0	70.0-130	

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Laboratory Control Sample (LCS)

(LCS) R3836684-1 09/12/22 14:59

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Chloroform	5.00	4.70	94.0	70.0-130	
Chloromethane	5.00	5.17	103	70.0-130	
2-Chlorotoluene	5.00	4.92	98.4	70.0-130	
4-Chlorotoluene	5.00	4.92	98.4	70.0-130	
Dibromomethane	5.00	4.83	96.6	70.0-130	
Methyl tert-butyl ether	5.00	4.78	95.6	70.0-130	
1,3-Dichlorobenzene	5.00	4.68	93.6	70.0-130	
1,1-Dichloroethane	5.00	4.67	93.4	70.0-130	
1,3-Dichloropropane	5.00	4.69	93.8	70.0-130	
2,2-Dichloropropane	5.00	4.91	98.2	70.0-130	
1,1-Dichloropropene	5.00	4.65	93.0	70.0-130	
1,3-Dichloropropene	10.0	9.72	97.2	70.0-130	
1,1,1,2-Tetrachloroethane	5.00	4.55	91.0	70.0-130	
1,1,2,2-Tetrachloroethane	5.00	4.60	92.0	70.0-130	
1,2,3-Trichloropropane	5.00	4.33	86.6	70.0-130	
Di-isopropyl ether	5.00	4.71	94.2	70.0-130	
tert-Butyl alcohol	25.0	21.3	85.2	70.0-130	
<i>(S) 4-Bromofluorobenzene</i>			97.6	70.0-130	
<i>(S) 1,2-Dichlorobenzene-d4</i>			90.9	70.0-130	

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

Method Blank (MB)

(MB) R3837378-3 09/14/22 20:36

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		11.3	50.0
Acrylonitrile	U		0.671	10.0
Benzene	U		0.0941	1.00
Bromobenzene	U		0.118	1.00
Bromochloromethane	U		0.128	1.00
Bromodichloromethane	U		0.136	1.00
Bromoform	U		0.129	1.00
Bromomethane	U		0.605	5.00
n-Butylbenzene	U		0.157	1.00
sec-Butylbenzene	U		0.125	1.00
tert-Butylbenzene	U		0.127	1.00
Carbon tetrachloride	U		0.128	1.00
Carbon disulfide	U		0.0962	1.00
Chlorobenzene	U		0.116	1.00
Chlorodibromomethane	U		0.140	1.00
Chloroethane	U		0.192	5.00
Chloroform	0.130	U	0.111	5.00
Chloromethane	U		0.960	2.50
1,2-Dibromo-3-Chloropropane	U		0.276	5.00
1,2-Dibromoethane	U		0.126	1.00
Dibromomethane	U		0.122	1.00
1,2-Dichlorobenzene	U		0.107	1.00
1,3-Dichlorobenzene	U		0.110	1.00
1,4-Dichlorobenzene	U		0.120	1.00
trans-1,4-Dichloro-2-butene	U		0.467	2.50
Dichlorodifluoromethane	U		0.374	5.00
1,1-Dichloroethane	U		0.100	1.00
1,2-Dichloroethane	U		0.0819	1.00
1,1-Dichloroethene	U		0.188	1.00
cis-1,2-Dichloroethene	U		0.126	1.00
trans-1,2-Dichloroethene	U		0.149	1.00
1,2-Dichloropropane	U		0.149	1.00
cis-1,3-Dichloropropene	U		0.111	1.00
trans-1,3-Dichloropropene	U		0.118	1.00
Ethylbenzene	U		0.137	1.00
Hexachloro-1,3-butadiene	U		0.337	1.00
2-Hexanone	U		0.787	10.0
2-Butanone (MEK)	U		1.19	10.0
Iodomethane	U		6.00	10.0
Methylene Chloride	U		0.430	5.00

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

Method Blank (MB)

(MB) R3837378-3 09/14/22 20:36

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0
Naphthalene	U		1.00	5.00
n-Propylbenzene	U		0.0993	1.00
Styrene	U		0.118	1.00
1,1,1,2-Tetrachloroethane	U		0.147	1.00
1,1,2,2-Tetrachloroethane	U		0.133	1.00
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00
Tetrachloroethene	U		0.300	1.00
Toluene	U		0.278	1.00
1,2,4-Trichlorobenzene	U		0.481	1.00
1,1,1-Trichloroethane	U		0.149	1.00
1,1,2-Trichloroethane	U		0.158	1.00
Trichloroethene	U		0.190	1.00
Trichlorofluoromethane	U		0.160	5.00
1,2,3-Trichloropropane	U		0.237	2.50
1,2,4-Trimethylbenzene	U		0.322	1.00
1,3,5-Trimethylbenzene	U		0.104	1.00
Vinyl acetate	U		0.692	10.0
Vinyl chloride	U		0.234	1.00
Xylenes, Total	U		0.174	3.00
Di-isopropyl ether	U		0.105	1.00
Ethanol	U		42.0	100
Ethyl tert-butyl ether	U		0.101	1.00
Methyl tert-butyl ether	U		0.101	1.00
tert-Butyl alcohol	U		4.06	5.00
tert-Amyl Methyl Ether	U		0.195	1.00
(S) Toluene-d8	115			80.0-120
(S) 4-Bromofluorobenzene	105			77.0-126
(S) 1,2-Dichloroethane-d4	106			70.0-130

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

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

(LCS) R3837378-1 09/14/22 19:39 • (LCSD) R3837378-2 09/14/22 19:58

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Acetone	25.0	26.2	18.4	105	73.6	19.0-160		J3	35.0	27
Acrylonitrile	25.0	24.2	19.5	96.8	78.0	55.0-149		J3	21.5	20
Benzene	5.00	4.75	4.46	95.0	89.2	70.0-123			6.30	20
Bromobenzene	5.00	4.85	4.67	97.0	93.4	73.0-121			3.78	20

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

(LCS) R3837378-1 09/14/22 19:39 • (LCSD) R3837378-2 09/14/22 19:58

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 %
Bromochloromethane	5.00	4.85	4.47	97.0	89.4	76.0-122			8.15	20
Bromodichloromethane	5.00	4.47	4.30	89.4	86.0	75.0-120			3.88	20
Bromoform	5.00	3.74	3.85	74.8	77.0	68.0-132			2.90	20
Bromomethane	5.00	4.67	4.37	93.4	87.4	10.0-160			6.64	25
n-Butylbenzene	5.00	4.51	4.47	90.2	89.4	73.0-125			0.891	20
sec-Butylbenzene	5.00	4.80	4.73	96.0	94.6	75.0-125			1.47	20
tert-Butylbenzene	5.00	4.88	4.71	97.6	94.2	76.0-124			3.55	20
Carbon tetrachloride	5.00	4.17	3.96	83.4	79.2	68.0-126			5.17	20
Carbon disulfide	5.00	3.80	3.54	76.0	70.8	61.0-128			7.08	20
Chlorobenzene	5.00	4.71	4.56	94.2	91.2	80.0-121			3.24	20
Chlorodibromomethane	5.00	4.17	4.07	83.4	81.4	77.0-125			2.43	20
Chloroethane	5.00	5.64	5.13	113	103	47.0-150			9.47	20
Chloroform	5.00	4.86	4.60	97.2	92.0	73.0-120			5.50	20
Chloromethane	5.00	4.42	3.89	88.4	77.8	41.0-142			12.8	20
1,2-Dibromo-3-Chloropropane	5.00	4.26	4.06	85.2	81.2	58.0-134			4.81	20
1,2-Dibromoethane	5.00	4.62	4.53	92.4	90.6	80.0-122			1.97	20
Dibromomethane	5.00	4.66	4.52	93.2	90.4	80.0-120			3.05	20
1,2-Dichlorobenzene	5.00	4.63	4.48	92.6	89.6	79.0-121			3.29	20
1,3-Dichlorobenzene	5.00	4.68	4.49	93.6	89.8	79.0-120			4.14	20
1,4-Dichlorobenzene	5.00	4.75	4.62	95.0	92.4	79.0-120			2.77	20
trans-1,4-Dichloro-2-butene	5.00	3.27	3.57	65.4	71.4	33.0-144			8.77	20
Dichlorodifluoromethane	5.00	3.61	3.17	72.2	63.4	51.0-149			13.0	20
1,1-Dichloroethane	5.00	4.86	4.56	97.2	91.2	70.0-126			6.37	20
1,2-Dichloroethane	5.00	4.56	4.32	91.2	86.4	70.0-128			5.41	20
1,1-Dichloroethene	5.00	4.69	4.27	93.8	85.4	71.0-124			9.37	20
cis-1,2-Dichloroethene	5.00	4.85	4.59	97.0	91.8	73.0-120			5.51	20
trans-1,2-Dichloroethene	5.00	4.86	4.35	97.2	87.0	73.0-120			11.1	20
1,2-Dichloropropane	5.00	4.86	4.54	97.2	90.8	77.0-125			6.81	20
cis-1,3-Dichloropropene	5.00	4.09	4.02	81.8	80.4	80.0-123			1.73	20
trans-1,3-Dichloropropene	5.00	4.03	3.98	80.6	79.6	78.0-124			1.25	20
Ethylbenzene	5.00	4.81	4.54	96.2	90.8	79.0-123			5.78	20
Hexachloro-1,3-butadiene	5.00	4.00	4.30	80.0	86.0	54.0-138			7.23	20
2-Hexanone	25.0	25.0	24.2	100	96.8	67.0-149			3.25	20
2-Butanone (MEK)	25.0	23.4	21.1	93.6	84.4	44.0-160			10.3	20
Iodomethane	25.0	23.1	21.2	92.4	84.8	33.0-147			8.58	26
Methylene Chloride	5.00	4.90	4.54	98.0	90.8	67.0-120			7.63	20
4-Methyl-2-pentanone (MIBK)	25.0	25.0	23.6	100	94.4	68.0-142			5.76	20
Naphthalene	5.00	3.79	4.00	75.8	80.0	54.0-135			5.39	20
n-Propylbenzene	5.00	4.85	4.57	97.0	91.4	77.0-124			5.94	20
Styrene	5.00	4.50	4.41	90.0	88.2	73.0-130			2.02	20

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

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

(LCS) R3837378-1 09/14/22 19:39 • (LCSD) R3837378-2 09/14/22 19:58

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 %
1,1,1,2-Tetrachloroethane	5.00	4.38	4.28	87.6	85.6	75.0-125			2.31	20
1,1,2,2-Tetrachloroethane	5.00	4.64	4.56	92.8	91.2	65.0-130			1.74	20
1,1,2-Trichlorotrifluoroethane	5.00	4.69	4.11	93.8	82.2	69.0-132			13.2	20
Tetrachloroethene	5.00	5.13	4.73	103	94.6	72.0-132			8.11	20
Toluene	5.00	4.61	4.48	92.2	89.6	79.0-120			2.86	20
1,2,4-Trichlorobenzene	5.00	3.88	4.36	77.6	87.2	57.0-137			11.7	20
1,1,1-Trichloroethane	5.00	4.69	4.30	93.8	86.0	73.0-124			8.68	20
1,1,2-Trichloroethane	5.00	4.83	4.70	96.6	94.0	80.0-120			2.73	20
Trichloroethene	5.00	4.74	4.45	94.8	89.0	78.0-124			6.31	20
Trichlorofluoromethane	5.00	4.68	4.16	93.6	83.2	59.0-147			11.8	20
1,2,3-Trichloropropane	5.00	4.85	4.59	97.0	91.8	73.0-130			5.51	20
1,2,4-Trimethylbenzene	5.00	4.81	4.64	96.2	92.8	76.0-121			3.60	20
1,3,5-Trimethylbenzene	5.00	4.68	4.41	93.6	88.2	76.0-122			5.94	20
Vinyl acetate	25.0	22.5	22.4	90.0	89.6	11.0-160			0.445	20
Vinyl chloride	5.00	4.56	4.06	91.2	81.2	67.0-131			11.6	20
Xylenes, Total	15.0	14.4	14.0	96.0	93.3	79.0-123			2.82	20
Di-isopropyl ether	5.00	4.80	4.59	96.0	91.8	58.0-138			4.47	20
ethanol	250	256	143	102	57.2	10.0-160		J3	56.6	30
Ethyl tert-butyl ether	5.00	4.97	4.75	99.4	95.0	63.0-138			4.53	20
Methyl tert-butyl ether	5.00	4.90	4.63	98.0	92.6	68.0-125			5.67	20
tert-Butyl alcohol	25.0	27.3	16.7	109	66.8	27.0-160		J3	48.2	30
tert-Amyl Methyl Ether	5.00	4.93	4.62	98.6	92.4	66.0-125			6.49	20
(S) Toluene-d8				112	112	80.0-120				
(S) 4-Bromofluorobenzene				103	105	77.0-126				
(S) 1,2-Dichloroethane-d4				110	107	70.0-130				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3838346-1 09/16/22 21:00

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
TPH (GC/FID) High Fraction	U		24.7	100
<i>(S) o-Terphenyl</i>	96.5			31.0-160

Laboratory Control Sample (LCS)

(LCS) R3838346-2 09/16/22 21:23

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
TPH (GC/FID) High Fraction	1500	1390	92.7	50.0-150	
<i>(S) o-Terphenyl</i>			111	31.0-160	

L1534190-23 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1534190-23 09/19/22 09:35 • (MS) R3838735-1 09/19/22 10:01 • (MSD) R3838735-2 09/19/22 10:28

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
TPH (GC/FID) High Fraction	1430	1040	2310	2490	88.8	101	1	50.0-150			7.50	20
<i>(S) o-Terphenyl</i>					91.1	91.6		31.0-160				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3838333-1 09/16/22 15:36

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
TPH (GC/FID) High Fraction	U		24.7	100
<i>(S) o-Terphenyl</i>	82.0			31.0-160

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

(LCS) R3838333-2 09/16/22 16:03 • (LCSD) R3838333-3 09/16/22 16:29

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
TPH (GC/FID) High Fraction	1500	1290	1230	86.0	82.0	50.0-150			4.76	20
<i>(S) o-Terphenyl</i>				96.5	88.5	31.0-160				

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

# GLOSSARY OF TERMS

## Guide to Reading and Understanding Your Laboratory Report

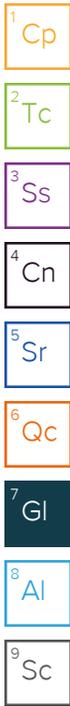
The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

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.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(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.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
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.
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
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.



# 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 <sup>1</sup>	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina <sup>1</sup>	DW21704
Georgia	NELAP	North Carolina <sup>3</sup>	41
Georgia <sup>1</sup>	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 <sup>1,6</sup>	KY90010	South Carolina	84004002
Kentucky <sup>2</sup>	16	South Dakota	n/a
Louisiana	AI30792	Tennessee <sup>1,4</sup>	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas <sup>5</sup>	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 <sup>5</sup>	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

<sup>1</sup> Drinking Water <sup>2</sup> Underground Storage Tanks <sup>3</sup> Aquatic Toxicity <sup>4</sup> Chemical/Microbiological <sup>5</sup> Mold <sup>6</sup> 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.

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

Company Name/Address:  
**EnviroTrac - Charlottesville, VA**  
 155 Riverbend Drive Suite A  
 Charlottesville, VA 22911

Billing Information:  
**Eric Shertzer**  
 155 Riverbend Drive Suite A  
 Charlottesville, VA 22911

Analysis / Container / Preservative			

Chain of Custody Page 1 of 1



**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>

Report to:  
**Eric Shertzer**

Email To: [erics@envirotrac.com](mailto:erics@envirotrac.com)

Project Description:  
**07923998**

City/State  
 Collected:

Please Circle:  
 PT MT CT ET

Phone: **434-202-7808**

Client Project #  
**07923998**

Lab Project #  
**ENVTRACCVA-07923998**

Collected by (print):  
*D. Shertzer*

Site/Facility ID #

P.O. #

Collected by (signature):  
*[Signature]*

**Rush?** (Lab MUST Be Notified)  
 \_\_\_ Same Day \_\_\_ Five Day  
 \_\_\_ Next Day \_\_\_ 5 Day (Rad Only)  
 \_\_\_ Two Day \_\_\_ 10 Day (Rad Only)  
 \_\_\_ Three Day

Quote #

Immediately Packed on Ice N \_\_\_ Y

Date Results Needed

No. of Cntrs

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	DROLVI 40ml/Amb-HCl-BT	GRO 40ml/Amb HCl	V524GW 40ml/Amb-AscAcid+HCl	V82600XY 40ml/Amb-HCl
<del>PW-1</del>		GW				3			X	
PW-1	Grab	GW		9/9/22	1135	3			X	X
MW-2		GW			1015	7	X	X	X	
MW-14		GW			1045	7	X	X	X	
MW-9		GW			1120	7	X	X	X	
MW-5		GW			930	7	X	X	X	

SDG # **L1534573**  
**E078**  
 Acctnum: **ENVTRACCVA**  
 Template: **T214177**  
 Prelogin: **P942676**  
 PM: **3564 - Chad A Upchurch**  
 PB: **BF 8/9/22**  
 Shipped Via: **FedEX Ground**

\* Matrix:  
 SS - Soil AIR - Air F - Filter  
 GW - Groundwater B - Bioassay  
 WW - WasteWater  
 DW - Drinking Water  
 OT - Other

Remarks: **PW-1 = report V524GW and V82600XY separately**

pH \_\_\_\_\_ Temp \_\_\_\_\_  
 Flow \_\_\_\_\_ Other \_\_\_\_\_

Sample Receipt Checklist	
COC Seal Present/Intact:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
COC Signed/Accurate:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Bottles arrive intact:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Correct bottles used:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Sufficient volume sent:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
If Applicable	
VOA Zero Headpace:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Preservation Correct/Checked:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
RAD Screen <0.5 mR/hr:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N

Samples returned via:  
 \_\_\_ UPS \_\_\_ FedEx \_\_\_ Courier

Tracking #

Relinquished by: (Signature)  
*[Signature]*

Date:  
**9/9/2022**

Time:  
**1500**

Received by: (Signature)

Trip Blank Received: Yes  No  
 HCL / MeOH  
 TBR

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Temp: **MSA 7 °C**  
**58.10 = 5.8**  
 Bottles Received: **34**

If preservation required by Login: Date/Time

Relinquished by: (Signature)

Date:

Time:

Received for Lab by: (Signature)  
*[Signature]*

Date: **9/10/22**  
 Time: **900**

Hold: Condition: NCF /