FOURTH QUARTER 2019 GROUNDWATER MONITORING REPORT

Southside Facility #26463
8816 Fingerboard Road
Frederick, MD 21704
MDE Case No. 2006-0245-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: Mr. Michael Lindeman

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

Field Activities: Groundwater Gauging and Sampling

Monitoring Period: October 1, 2019 – December 31, 2019

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 December 17, 2019. 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 December 17, 2019. Depth to water measurements ranged from approximately 25.53 feet (MW-5) to 31.96 (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	250.9
MW-5	0.0
MW-9	330.3
W-14	261.0
TF-1R	247.9
TF-2R	293.4
TF-3R	207.0

Historic water gauging data are summarized in ***Table 1***. Gauging locations are depicted on ***Figure 2*** and a potentiometric surface map based on the December 17, 2019 gauging data is provided as ***Figure 3***. Groundwater flow direction was determined to be towards the north at a gradient of approximately 5.7%.

Groundwater Sampling: On December 17, 2019, 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 December 17, 2019, 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.

Groundwater Analytical Summary:

The results of the December 17, 2019, groundwater sampling event remained relatively consistent with the results of the previous sampling events. A summary of the results is present below.

- Concentrations of compounds of concern (COCs) were below laboratory detection limits (BDL) in wells MW-5;
- Concentrations of benzene were reported at 69.30 micrograms per liter (µg/L) in well MW-2 and at 6.10 µg/L in well MW-14;
- Concentrations of toluene were reported at 36.90 µg/L in well MW-2 and BDL in wells MW-5, MW-9, and MW-14;
- Concentrations of ethylbenzene were BDL in all wells sampled;
- Concentrations of total xylenes were reported at 19.80 µg/L in well MW-2 and BDL in wells MW-5, MW-9, and MW-14.
- Concentrations of methyl tert butyl ether (MTBE) were reported at 600 µg/L in well MW-2 and at 264 µg/L in well MW-14;
- Concentrations of tert butyl alcohol (TBA) were at a concentration of 624 µg/L in well MW-2 and at 25.5 µg/L in well MW-14;

- Concentrations of tert amyl methyl ether (TAME) were reported at 170 µg/L in well MW-2 and at 89.9 µg/L in well MW-14;
- Concentrations of ethyl tert butyl ether (ETBE) were BDL in all wells sampled;
- Concentrations of di-isopropyl ether (DIPE) were reported at 2,800 µg/L in well MW-2 and at 1,800 µg/L in well MW-14;
- Concentrations of naphthalene were BDL in all wells sampled;
- Concentrations of TPH GRO were reported at 5.98 milligrams per liter (mg/L) in well MW-2, at 0.136 mg/L in well MW-9, and at 3.27 mg/L in well MW-14;
- Concentrations of TPH DRO were reported at 4.83 mg/L in well MW-2 and at 0.246 mg/L in well MW-14; and
- Concentrations of each COC in the potable well sample (PW-1) were BDL, except for MTBE, which had a reported concentration of 1.27 µg/L.

A copy of the laboratory analytical report is included in ***Appendix A***; historic groundwater analytical data are summarized in ***Table 1***; a geographic distribution of the groundwater analytical data is provided as ***Figure 4***.

Conclusions:

Concentrations of COCs in the groundwater samples collected during the 4th Quarter 2019 remained consistent with previous sampling events. 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 BDL or just above laboratory detection limits. The analytical results of the sample collected from the onsite potable well (PW-1) are consistent with previous years reporting a concentration of MTBE less than 2 ug/l (***Table 2)***.

Future Site Activities:

EnviroTrac recommends monitoring and sampling of the monitoring well network during first quarter 2020 in accordance with High-Risk Groundwater Use Area (HRGUA) guidelines. 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:	Analytical Laboratory Report

EnviroTrac
Environmental Services

TABLES

TABLE 1

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

		Gauging Data					Analytical Data												
Sample ID	Date	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)	Naph-thalene (µg/L)	TPH GRO (mg/L)	TPH DRO (mg/L)
MW-2	04/01/2010	97.37	28.58	ND	ND	68.79	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	BRL	6.1	ND(25)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	NA	NA
	08/30/2010	97.37	30.97	ND	ND	66.40	ND(5)	ND(5)	ND(5)	ND(5)	BRL	530	ND(80)	11	ND(5)	8	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
	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
	06/04/2019	97.37	25.60	ND	ND	71.77	112	1.16	ND(1)	ND(3)	113.16	192	107	75.7	ND(1)	559	ND(5)	1.25	0.308
	08/22/2019	97.37	27.79	ND	ND	69.58	71.30	1.07	ND(1)	ND(3)	72.37	413	ND(5)	139	ND(1)	2000	ND(5)	1.97	0.272
	12/17/2019	97.37	29.52	ND	ND	67.85	69.30	36.90	ND(1)	19.80	126.0	600	624	170	ND(1)	2800	ND(5)	5.98	4.83
MW-5	04/01/2010	92.16	23.92	ND	ND	68.24	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	BRL	0.28	ND(25)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	NA	NA
	08/30/2010	92.16	26.09	ND	ND	66.07	ND(5)	ND(5)	ND(5)	ND(5)	BRL	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	NA	NA
	12/14/2010	92.16	27.34	ND	ND	64.82	ND(5)	ND(5)	ND(5)	ND(5)	BRL	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	NA	NA
	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(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(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(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(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	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)

TABLE 1

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

		Gauging Data					Analytical Data												
Sample ID	Date	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)	Naph-thalene (µg/L)	TPH GRO (mg/L)	TPH DRO (mg/L)
MW-9	04/01/2010	99.14	30.41	ND	ND	68.73	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	BRL	5.4	ND(25)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	NA	NA
	08/30/2010	99.14	32.70	ND	ND	66.44	ND(5)	ND(5)	ND(5)	ND(5)	BRL	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	NA	NA
	12/14/2010	99.14	33.82	ND	ND	65.32	ND(5)	ND(5)	ND(5)	ND(5)	BRL	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	NA	NA
	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)

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Groundwater Monitoring & Analytical Data
Southside Facility #26463
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		Gauging Data					Analytical Data												
Sample ID	Date	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)	Naph-thalene (µg/L)	TPH GRO (mg/L)	TPH DRO (mg/L)
MW-14	04/01/2010	97.11	29.42	ND	ND	67.69	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	BRL	267	ND(25)	5.7	ND(5.0)	5.0	ND(5.0)	NA	NA
	08/30/2010	97.11	31.69	ND	ND	65.42	ND(5)	ND(5)	ND(5)	ND(5)	BRL	1500	ND(80)	31	ND(5)	15	ND(5)	NA	NA
	12/14/2010	97.11	32.85	ND	ND	64.26	ND(10)	ND(10)	ND(10)	ND(10)	BRL	1500	ND(160)	33	ND(10)	14	ND(10)	NA	NA
	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(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(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(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	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
MDE Groundwater Cleanup Standard *							5	1,000	700	10,000	NA	20	NA	NA	NA	NA	0.17	0.047	0.047

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)

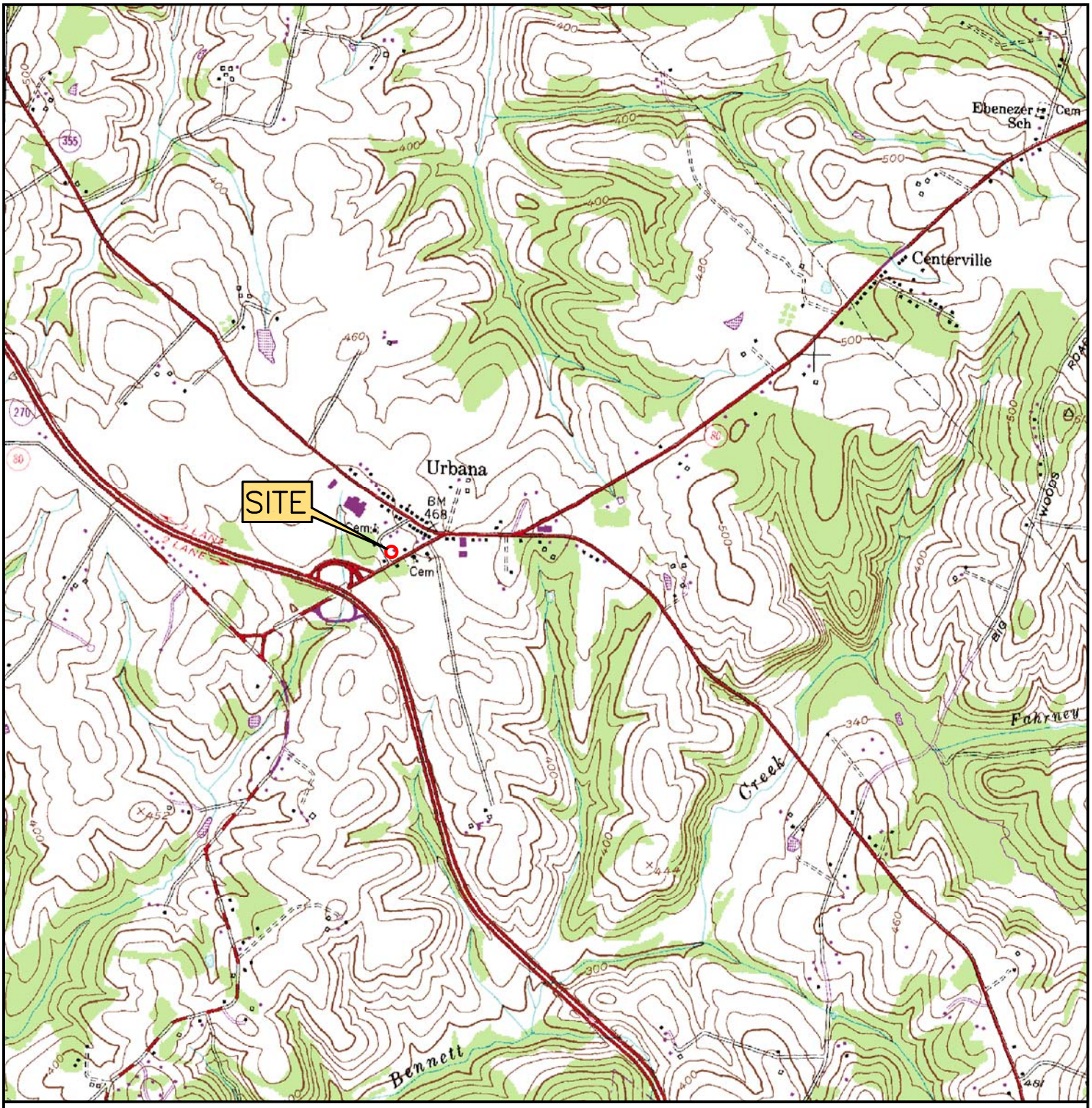
TABLE 2

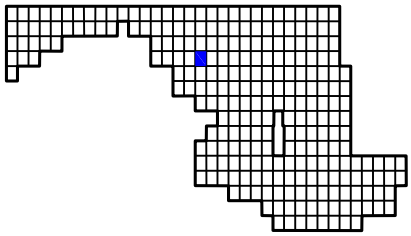
Potable Well (On-site) Analytical Data
Southside Facility #26463
8816 Fingerboard Road
Frederick, Maryland

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)
	11/01/2007	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	BRL	2.1	ND(5.0)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)
	02/21/2008	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	BRL	2.4	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)
	09/04/2013	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)
	11/15/2013	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

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

FIGURES





TOPOGRAPHIC QUADRANGLE:
URBANA, MARYLAND

APPROX. ELEVATION: 467 FT.

north

0 2000

SCALE IN FEET

FIGURE #			
1	SOUTHSIDE FACILITY #26463 8816 FINGERBOARD ROAD FREDERICK, MARYLAND	SITE LOCATION MAP	
		DRAWN BY: B.S.	REVISION DATE: 6/20/2019

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

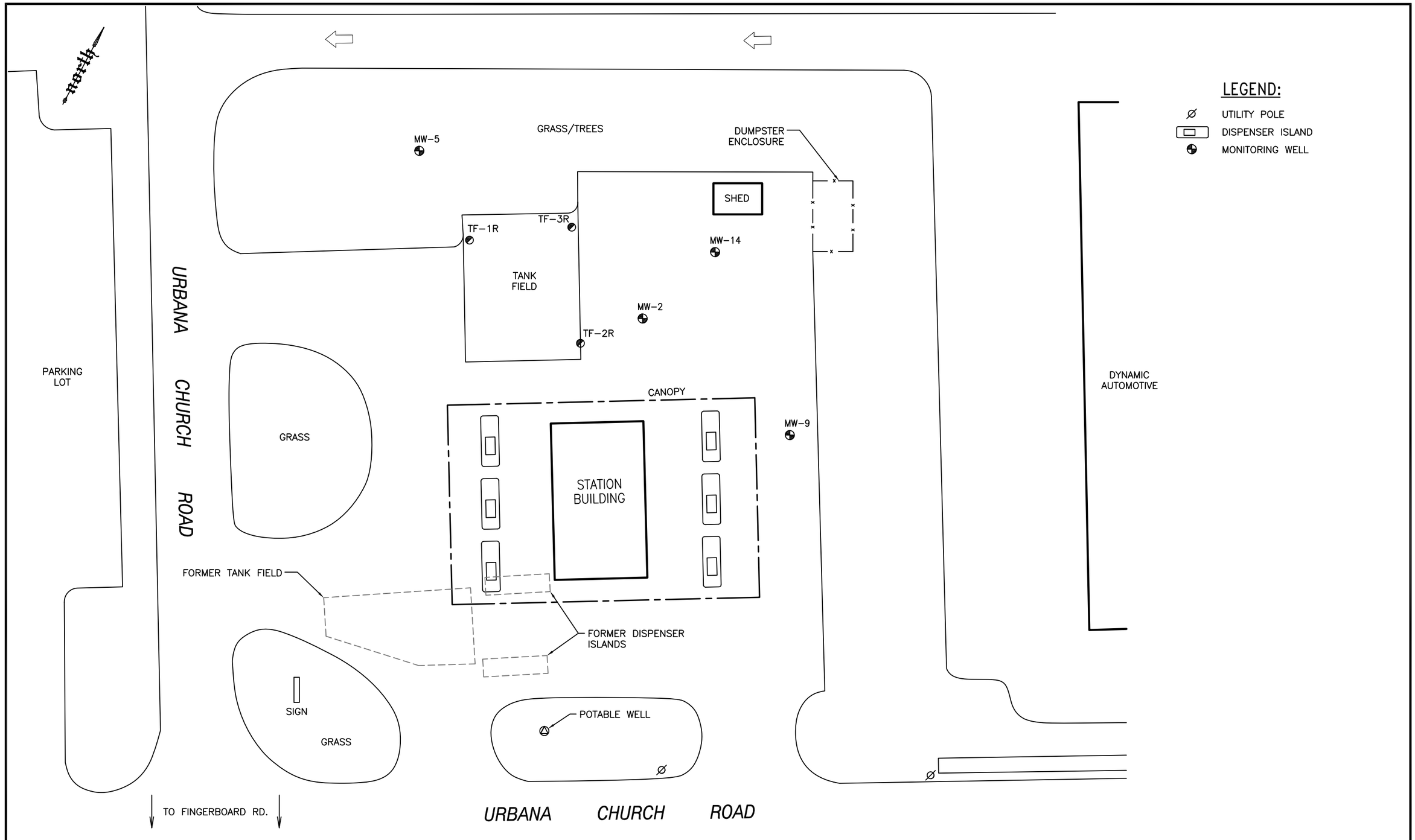


FIGURE #	SOUTHSIDE FACILITY #26463 8816 FINGERBOARD ROAD FREDERICK, MARYLAND	SITE PLAN	0 30 SCALE IN FEET	EnviroTrac ENVIRONMENTAL SERVICES 155 RIVERBEND DRIVE, SUITE A, CHARLOTTESVILLE, VA 22911 PHONE: (434)202-7808
2		DRAWN BY: B.S. / REVISION DATE: 7/8/2019		

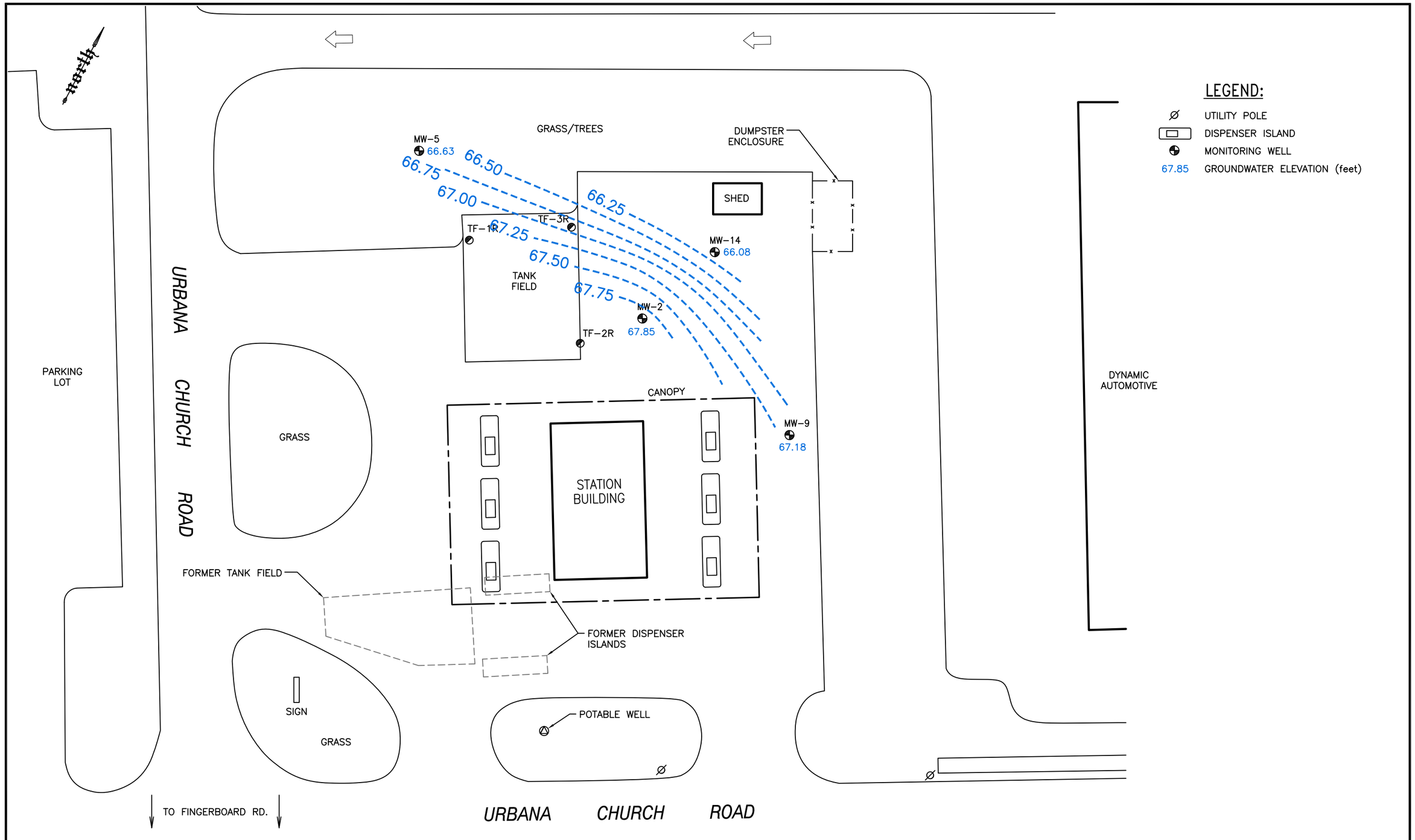
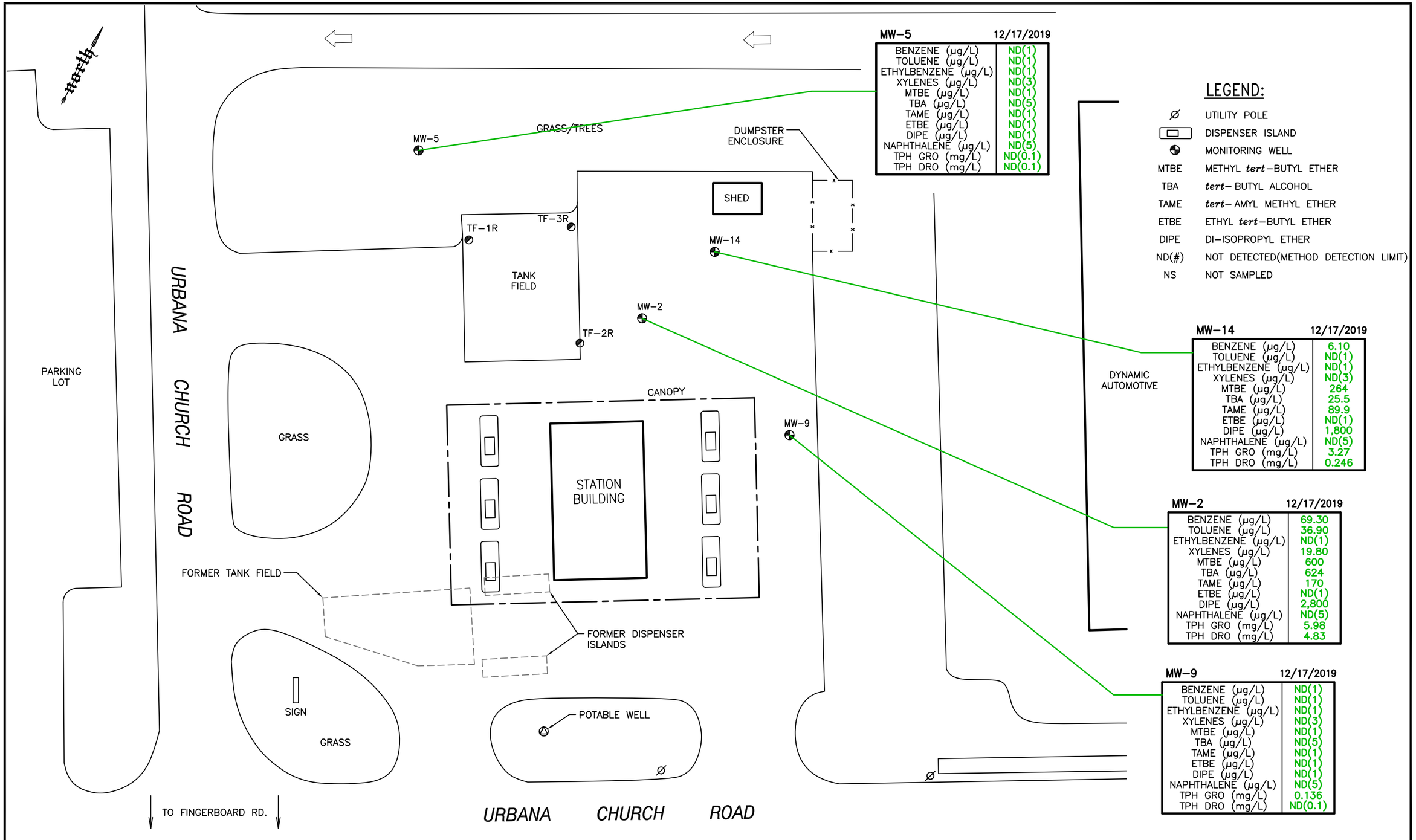


FIGURE #	SOUTHSIDE FACILITY #26463 8816 FINGERBOARD ROAD FREDERICK, MARYLAND	POTENTIOMETRIC SURFACE MAP DECEMBER 17, 2019	0 30 SCALE IN FEET	EnviroTrac ENVIRONMENTAL SERVICES 155 RIVERBEND DRIVE, SUITE A, CHARLOTTESVILLE, VA 22911 PHONE: (434)202-7808
3		DRAWN BY: B.S. / REVISION DATE: 1/21/2020		



MW-5 12/17/2019

BENZENE (µg/L)	ND(1)
TOLUENE (µg/L)	ND(1)
ETHYLBENZENE (µg/L)	ND(1)
XYLENES (µg/L)	ND(3)
MTBE (µg/L)	ND(1)
TBA (µg/L)	ND(5)
TAME (µg/L)	ND(1)
ETBE (µg/L)	ND(1)
DIPE (µg/L)	ND(1)
NAPHTHALENE (µg/L)	ND(5)
TPH GRO (mg/L)	ND(0.1)
TPH DRO (mg/L)	ND(0.1)

LEGEND:

∅	UTILITY POLE
▭	DISPENSER ISLAND
⊕	MONITORING WELL
MTBE	METHYL *tert*-BUTYL ETHER
TBA	*tert*- BUTYL ALCOHOL
TAME	*tert*- AMYL METHYL ETHER
ETBE	ETHYL *tert*-BUTYL ETHER
DIPE	DI-ISOPROPYL ETHER
ND(#)	NOT DETECTED(METHOD DETECTION LIMIT)
NS	NOT SAMPLED

MW-14 12/17/2019

BENZENE (µg/L)	6.10
TOLUENE (µg/L)	ND(1)
ETHYLBENZENE (µg/L)	ND(1)
XYLENES (µg/L)	ND(3)
MTBE (µg/L)	264
TBA (µg/L)	25.5
TAME (µg/L)	89.9
ETBE (µg/L)	ND(1)
DIPE (µg/L)	1,800
NAPHTHALENE (µg/L)	ND(5)
TPH GRO (mg/L)	3.27
TPH DRO (mg/L)	0.246

MW-2 12/17/2019

BENZENE (µg/L)	69.30
TOLUENE (µg/L)	36.90
ETHYLBENZENE (µg/L)	ND(1)
XYLENES (µg/L)	19.80
MTBE (µg/L)	600
TBA (µg/L)	624
TAME (µg/L)	170
ETBE (µg/L)	ND(1)
DIPE (µg/L)	2,800
NAPHTHALENE (µg/L)	ND(5)
TPH GRO (mg/L)	5.98
TPH DRO (mg/L)	4.83

MW-9 12/17/2019

BENZENE (µg/L)	ND(1)
TOLUENE (µg/L)	ND(1)
ETHYLBENZENE (µg/L)	ND(1)
XYLENES (µg/L)	ND(3)
MTBE (µg/L)	ND(1)
TBA (µg/L)	ND(5)
TAME (µg/L)	ND(1)
ETBE (µg/L)	ND(1)
DIPE (µg/L)	ND(1)
NAPHTHALENE (µg/L)	ND(5)
TPH GRO (mg/L)	0.136
TPH DRO (mg/L)	ND(0.1)

FIGURE # 4

SOUTHSIDE FACILITY #26463
8816 FINGERBOARD ROAD
FREDERICK, MARYLAND

GROUNDWATER ANALYTICAL RESULTS MAP
DECEMBER 17, 2019

DRAWN BY: B.S.

REVISION DATE: 1/21/2020

0 30
SCALE IN FEET

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

APPENDIX A

LABORATORY ANALYTICAL REPORT

EnviroTrac
Environmental Services

ANALYTICAL REPORT

December 27, 2019

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

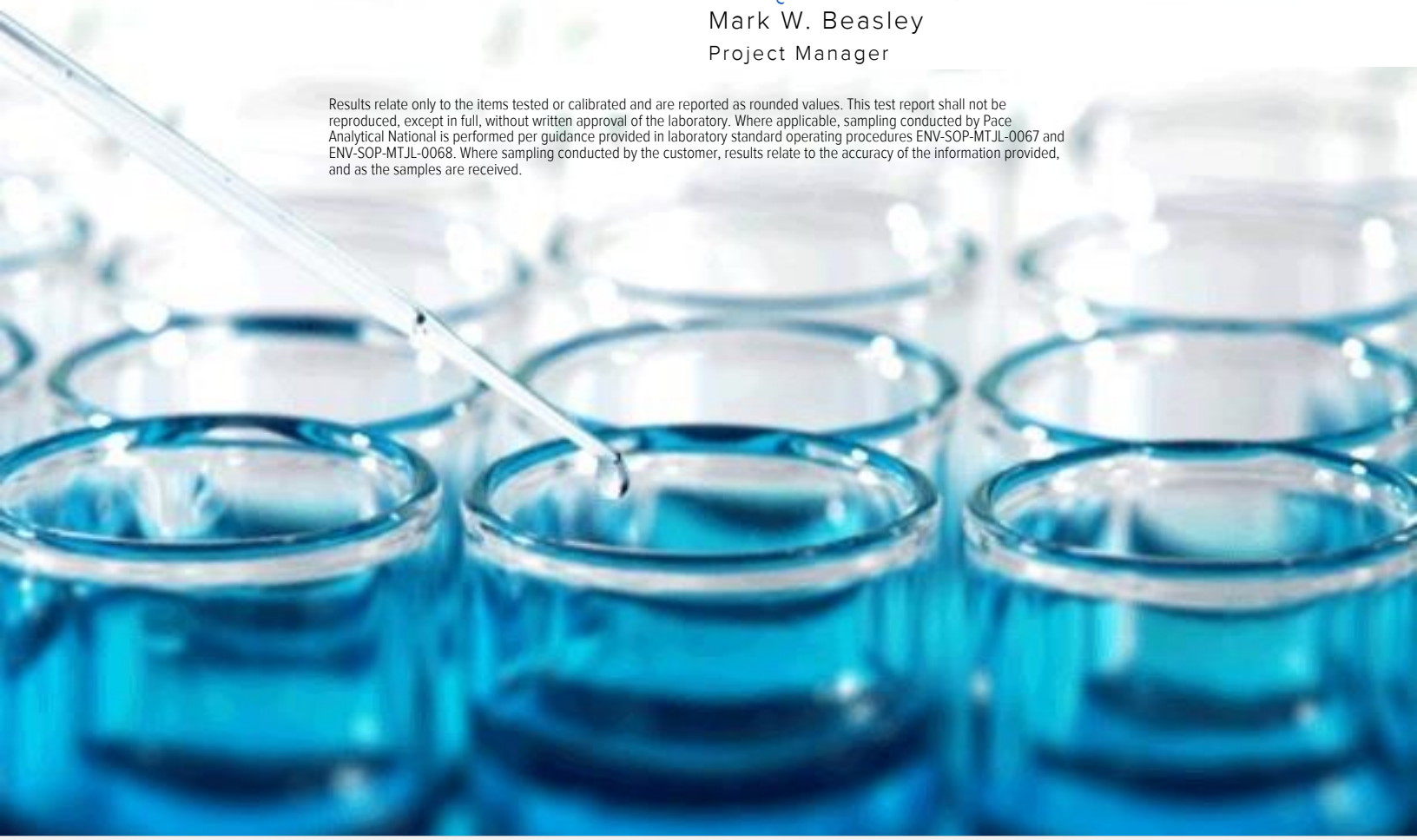
EnviroTrac Ltd. - Sunoco

Sample Delivery Group:	L1172207
Samples Received:	12/18/2019
Project Number:	07923998
Description:	Fingerboard Road
Site:	0792-3998
Report To:	Eric Shertzer 155 Riverbend Drive Suite A Charlottesville, VA 22911

Entire Report Reviewed By:

Mark W. Beasley
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.



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PW-1 L1172207-01 GW

Collected by	Collected date/time	Received date/time
Eli Connell	12/17/19 15:00	12/18/19 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 524.2	WG1401765	1	12/24/19 16:47	12/24/19 16:47	JAH	Mt. Juliet, TN

MW-2 L1172207-02 GW

Collected by	Collected date/time	Received date/time
Eli Connell	12/17/19 13:30	12/18/19 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1399177	5	12/19/19 01:03	12/19/19 01:03	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1399343	1	12/19/19 15:25	12/19/19 15:25	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1400186	25	12/20/19 16:40	12/20/19 16:40	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1400917	25	12/21/19 20:08	12/21/19 20:08	JCP	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG1399216	1	12/19/19 16:26	12/21/19 00:07	SHG	Mt. Juliet, TN

MW-5 L1172207-03 GW

Collected by	Collected date/time	Received date/time
Eli Connell	12/17/19 13:00	12/18/19 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1399177	1	12/18/19 23:51	12/18/19 23:51	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1399343	1	12/19/19 15:44	12/19/19 15:44	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1400186	1	12/20/19 17:00	12/20/19 17:00	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG1400876	1	12/21/19 20:30	12/22/19 21:16	JN	Mt. Juliet, TN

MW-9 L1172207-04 GW

Collected by	Collected date/time	Received date/time
Eli Connell	12/17/19 14:15	12/18/19 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1399177	1	12/19/19 00:15	12/19/19 00:15	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1399343	1	12/19/19 16:04	12/19/19 16:04	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1400186	1	12/20/19 17:21	12/20/19 17:21	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1400917	1	12/21/19 20:28	12/21/19 20:28	JCP	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG1400876	1	12/21/19 20:30	12/22/19 21:36	JN	Mt. Juliet, TN

MW-14 L1172207-05 GW

Collected by	Collected date/time	Received date/time
Eli Connell	12/17/19 14:45	12/18/19 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1399177	1	12/19/19 00:39	12/19/19 00:39	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1399343	1	12/19/19 16:23	12/19/19 16:23	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1400186	25	12/20/19 17:41	12/20/19 17:41	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1400917	25	12/21/19 20:47	12/21/19 20:47	JCP	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG1400876	1	12/21/19 20:30	12/22/19 21:57	JN	Mt. Juliet, TN

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

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.

Mark W. Beasley
Project Manager

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	12/24/2019 16:47	WG1401765
Carbon tetrachloride	ND		0.500	1	12/24/2019 16:47	WG1401765
1,4-Dichlorobenzene	ND		0.500	1	12/24/2019 16:47	WG1401765
1,2-Dichloroethane	ND		0.500	1	12/24/2019 16:47	WG1401765
1,1-Dichloroethene	ND		0.500	1	12/24/2019 16:47	WG1401765
1,1,1-Trichloroethane	ND		0.500	1	12/24/2019 16:47	WG1401765
Trichloroethene	ND		0.500	1	12/24/2019 16:47	WG1401765
Vinyl chloride	ND		0.500	1	12/24/2019 16:47	WG1401765
1,2,4-Trichlorobenzene	ND		0.500	1	12/24/2019 16:47	WG1401765
cis-1,2-Dichloroethene	ND		0.500	1	12/24/2019 16:47	WG1401765
Xylenes, Total	ND		0.500	1	12/24/2019 16:47	WG1401765
Methylene chloride	ND		0.500	1	12/24/2019 16:47	WG1401765
1,2-Dichlorobenzene	ND		0.500	1	12/24/2019 16:47	WG1401765
trans-1,2-Dichloroethene	ND		0.500	1	12/24/2019 16:47	WG1401765
1,2-Dichloropropane	ND		0.500	1	12/24/2019 16:47	WG1401765
1,1,2-Trichloroethane	ND		0.500	1	12/24/2019 16:47	WG1401765
Tetrachloroethene	ND		0.500	1	12/24/2019 16:47	WG1401765
Chlorobenzene	ND		0.500	1	12/24/2019 16:47	WG1401765
Toluene	ND		1.00	1	12/24/2019 16:47	WG1401765
Ethylbenzene	ND		0.500	1	12/24/2019 16:47	WG1401765
Styrene	ND		0.500	1	12/24/2019 16:47	WG1401765
Bromobenzene	ND		0.500	1	12/24/2019 16:47	WG1401765
Bromodichloromethane	ND		0.500	1	12/24/2019 16:47	WG1401765
Bromoform	ND		0.500	1	12/24/2019 16:47	WG1401765
Bromomethane	ND		0.500	1	12/24/2019 16:47	WG1401765
Chlorodibromomethane	ND		0.500	1	12/24/2019 16:47	WG1401765
Chloroethane	ND		0.500	1	12/24/2019 16:47	WG1401765
Chloroform	ND		0.500	1	12/24/2019 16:47	WG1401765
Chloromethane	ND		0.500	1	12/24/2019 16:47	WG1401765
2-Chlorotoluene	ND		0.500	1	12/24/2019 16:47	WG1401765
4-Chlorotoluene	ND		0.500	1	12/24/2019 16:47	WG1401765
Dibromomethane	ND		0.500	1	12/24/2019 16:47	WG1401765
Methyl tert-butyl ether	1.27		0.500	1	12/24/2019 16:47	WG1401765
1,3-Dichlorobenzene	ND		0.500	1	12/24/2019 16:47	WG1401765
1,1-Dichloroethane	ND		0.500	1	12/24/2019 16:47	WG1401765
1,3-Dichloropropane	ND		0.500	1	12/24/2019 16:47	WG1401765
2,2-Dichloropropane	ND		0.500	1	12/24/2019 16:47	WG1401765
1,1-Dichloropropene	ND		0.500	1	12/24/2019 16:47	WG1401765
1,3-Dichloropropene	ND		0.500	1	12/24/2019 16:47	WG1401765
1,1,1,2-Tetrachloroethane	ND		0.500	1	12/24/2019 16:47	WG1401765
1,1,2,2-Tetrachloroethane	ND		0.500	1	12/24/2019 16:47	WG1401765
1,2,3-Trichloropropane	ND		0.500	1	12/24/2019 16:47	WG1401765
(S) 4-Bromofluorobenzene	*99.7*		*70.0-130*		*12/24/2019 16:47*	WG1401765
(S) 1,2-Dichlorobenzene-d4	*97.5*		*70.0-130*		*12/24/2019 16:47*	WG1401765

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	5980		500	5	12/19/2019 01:03	WG1399177
(S) a,a,a-Trifluorotoluene(FID)	*110*		*78.0-120*		*12/19/2019 01:03*	WG1399177

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND		50.0	1	12/19/2019 15:25	WG1399343
Benzene	69.3		1.00	1	12/19/2019 15:25	WG1399343
Bromobenzene	ND		1.00	1	12/19/2019 15:25	WG1399343
Bromochloromethane	ND		1.00	1	12/19/2019 15:25	WG1399343
Bromodichloromethane	ND		1.00	1	12/19/2019 15:25	WG1399343
Bromoform	ND		1.00	1	12/19/2019 15:25	WG1399343
Bromomethane	ND		5.00	1	12/19/2019 15:25	WG1399343
n-Butylbenzene	ND		1.00	1	12/19/2019 15:25	WG1399343
sec-Butylbenzene	ND		1.00	1	12/19/2019 15:25	WG1399343
tert-Butylbenzene	ND		1.00	1	12/19/2019 15:25	WG1399343
Carbon tetrachloride	ND		1.00	1	12/19/2019 15:25	WG1399343
Chlorobenzene	ND		1.00	1	12/19/2019 15:25	WG1399343
Chlorodibromomethane	ND		1.00	1	12/19/2019 15:25	WG1399343
Chloroethane	ND		5.00	1	12/19/2019 15:25	WG1399343
Chloroform	ND		5.00	1	12/19/2019 15:25	WG1399343
Chloromethane	ND		2.50	1	12/19/2019 15:25	WG1399343
2-Chlorotoluene	ND		1.00	1	12/19/2019 15:25	WG1399343
4-Chlorotoluene	ND		1.00	1	12/19/2019 15:25	WG1399343
1,2-Dibromo-3-Chloropropane	ND		5.00	1	12/19/2019 15:25	WG1399343
1,2-Dibromoethane	ND		1.00	1	12/19/2019 15:25	WG1399343
Dibromomethane	ND		1.00	1	12/19/2019 15:25	WG1399343
1,2-Dichlorobenzene	ND		1.00	1	12/19/2019 15:25	WG1399343
1,3-Dichlorobenzene	ND		1.00	1	12/19/2019 15:25	WG1399343
1,4-Dichlorobenzene	ND		1.00	1	12/19/2019 15:25	WG1399343
Dichlorodifluoromethane	ND		5.00	1	12/19/2019 15:25	WG1399343
1,1-Dichloroethane	ND		1.00	1	12/19/2019 15:25	WG1399343
1,2-Dichloroethane	ND		1.00	1	12/19/2019 15:25	WG1399343
1,1-Dichloroethene	ND		1.00	1	12/19/2019 15:25	WG1399343
cis-1,2-Dichloroethene	ND		1.00	1	12/19/2019 15:25	WG1399343
trans-1,2-Dichloroethene	ND		1.00	1	12/19/2019 15:25	WG1399343
1,2-Dichloropropane	ND		1.00	1	12/19/2019 15:25	WG1399343
1,3-Dichloropropane	ND		1.00	1	12/19/2019 15:25	WG1399343
1,1-Dichloropropene	ND		1.00	1	12/19/2019 15:25	WG1399343
cis-1,3-Dichloropropene	ND		1.00	1	12/19/2019 15:25	WG1399343
trans-1,3-Dichloropropene	ND		1.00	1	12/19/2019 15:25	WG1399343
2,2-Dichloropropane	ND		1.00	1	12/19/2019 15:25	WG1399343
Ethylbenzene	ND		1.00	1	12/19/2019 15:25	WG1399343
Hexachloro-1,3-butadiene	ND		1.00	1	12/19/2019 15:25	WG1399343
2-Hexanone	ND		250	25	12/20/2019 16:40	WG1400186
Isopropylbenzene	ND		1.00	1	12/19/2019 15:25	WG1399343
p-Isopropyltoluene	ND		1.00	1	12/19/2019 15:25	WG1399343
2-Butanone (MEK)	13.7		10.0	1	12/19/2019 15:25	WG1399343
Methylene Chloride	ND		5.00	1	12/19/2019 15:25	WG1399343
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	12/19/2019 15:25	WG1399343
Naphthalene	ND		5.00	1	12/19/2019 15:25	WG1399343
n-Propylbenzene	ND		1.00	1	12/19/2019 15:25	WG1399343
Styrene	ND		1.00	1	12/19/2019 15:25	WG1399343
1,1,1,2-Tetrachloroethane	ND		1.00	1	12/19/2019 15:25	WG1399343
1,1,2,2-Tetrachloroethane	ND		1.00	1	12/19/2019 15:25	WG1399343

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Tetrachloroethene	ND		1.00	1	12/19/2019 15:25	WG1399343
Toluene	36.9		1.00	1	12/19/2019 15:25	WG1399343
1,2,3-Trichlorobenzene	ND		1.00	1	12/19/2019 15:25	WG1399343
1,2,4-Trichlorobenzene	ND		1.00	1	12/19/2019 15:25	WG1399343
1,1,1-Trichloroethane	ND		1.00	1	12/19/2019 15:25	WG1399343
1,1,2-Trichloroethane	ND		1.00	1	12/19/2019 15:25	WG1399343
Trichloroethene	ND		1.00	1	12/19/2019 15:25	WG1399343
Trichlorofluoromethane	ND		5.00	1	12/19/2019 15:25	WG1399343
1,2,3-Trichloropropane	ND		2.50	1	12/19/2019 15:25	WG1399343
1,2,4-Trimethylbenzene	ND		1.00	1	12/19/2019 15:25	WG1399343
1,3,5-Trimethylbenzene	ND		1.00	1	12/19/2019 15:25	WG1399343
Vinyl acetate	ND		10.0	1	12/19/2019 15:25	WG1399343
Vinyl chloride	ND		1.00	1	12/19/2019 15:25	WG1399343
o-Xylene	14.3		1.00	1	12/19/2019 15:25	WG1399343
m&p-Xylene	5.47		2.00	1	12/19/2019 15:25	WG1399343
Xylenes, Total	19.8		3.00	1	12/19/2019 15:25	WG1399343
Di-isopropyl ether	2800		25.0	25	12/20/2019 16:40	WG1400186
Ethanol	ND		100	1	12/19/2019 15:25	WG1399343
Ethyl tert-butyl ether	ND		1.00	1	12/19/2019 15:25	WG1399343
Methyl tert-butyl ether	600		25.0	25	12/20/2019 16:40	WG1400186
tert-Amyl Methyl Ether	170		1.00	1	12/19/2019 15:25	WG1399343
tert-Butyl alcohol	624		5.00	1	12/19/2019 15:25	WG1399343
t-Amyl Alcohol	1440	J4	1250	25	12/21/2019 20:08	WG1400917
(S) Toluene-d8	*103*		*80.0-120*		*12/19/2019 15:25*	WG1399343
(S) Toluene-d8	*101*		*80.0-120*		*12/20/2019 16:40*	WG1400186
(S) Toluene-d8	*101*		*80.0-120*		*12/21/2019 20:08*	WG1400917
(S) 4-Bromofluorobenzene	*98.6*		*77.0-126*		*12/19/2019 15:25*	WG1399343
(S) 4-Bromofluorobenzene	*94.8*		*77.0-126*		*12/20/2019 16:40*	WG1400186
(S) 4-Bromofluorobenzene	*92.1*		*77.0-126*		*12/21/2019 20:08*	WG1400917
(S) 1,2-Dichloroethane-d4	*104*		*70.0-130*		*12/19/2019 15:25*	WG1399343
(S) 1,2-Dichloroethane-d4	*94.9*		*70.0-130*		*12/20/2019 16:40*	WG1400186
(S) 1,2-Dichloroethane-d4	*104*		*70.0-130*		*12/21/2019 20:08*	WG1400917

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	4830		100	1	12/21/2019 00:07	WG1399216
(S) o-Terphenyl	*60.0*		*31.0-160*		*12/21/2019 00:07*	WG1399216

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		100	1	12/18/2019 23:51	WG1399177
(S) a,a,a-Trifluorotoluene(FID)	*111*		*78.0-120*		*12/18/2019 23:51*	WG1399177

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND		50.0	1	12/19/2019 15:44	WG1399343
Benzene	ND		1.00	1	12/19/2019 15:44	WG1399343
Bromobenzene	ND		1.00	1	12/19/2019 15:44	WG1399343
Bromochloromethane	ND		1.00	1	12/19/2019 15:44	WG1399343
Bromodichloromethane	ND		1.00	1	12/19/2019 15:44	WG1399343
Bromoform	ND		1.00	1	12/19/2019 15:44	WG1399343
Bromomethane	ND		5.00	1	12/19/2019 15:44	WG1399343
n-Butylbenzene	ND		1.00	1	12/19/2019 15:44	WG1399343
sec-Butylbenzene	ND		1.00	1	12/19/2019 15:44	WG1399343
tert-Butylbenzene	ND		1.00	1	12/19/2019 15:44	WG1399343
Carbon tetrachloride	ND		1.00	1	12/19/2019 15:44	WG1399343
Chlorobenzene	ND		1.00	1	12/19/2019 15:44	WG1399343
Chlorodibromomethane	ND		1.00	1	12/19/2019 15:44	WG1399343
Chloroethane	ND		5.00	1	12/19/2019 15:44	WG1399343
Chloroform	ND		5.00	1	12/19/2019 15:44	WG1399343
Chloromethane	ND		2.50	1	12/19/2019 15:44	WG1399343
2-Chlorotoluene	ND		1.00	1	12/19/2019 15:44	WG1399343
4-Chlorotoluene	ND		1.00	1	12/19/2019 15:44	WG1399343
1,2-Dibromo-3-Chloropropane	ND		5.00	1	12/19/2019 15:44	WG1399343
1,2-Dibromoethane	ND		1.00	1	12/19/2019 15:44	WG1399343
Dibromomethane	ND		1.00	1	12/19/2019 15:44	WG1399343
1,2-Dichlorobenzene	ND		1.00	1	12/19/2019 15:44	WG1399343
1,3-Dichlorobenzene	ND		1.00	1	12/19/2019 15:44	WG1399343
1,4-Dichlorobenzene	ND		1.00	1	12/19/2019 15:44	WG1399343
Dichlorodifluoromethane	ND		5.00	1	12/19/2019 15:44	WG1399343
1,1-Dichloroethane	ND		1.00	1	12/19/2019 15:44	WG1399343
1,2-Dichloroethane	ND		1.00	1	12/19/2019 15:44	WG1399343
1,1-Dichloroethene	ND		1.00	1	12/19/2019 15:44	WG1399343
cis-1,2-Dichloroethene	ND		1.00	1	12/19/2019 15:44	WG1399343
trans-1,2-Dichloroethene	ND		1.00	1	12/19/2019 15:44	WG1399343
1,2-Dichloropropane	ND		1.00	1	12/19/2019 15:44	WG1399343
1,3-Dichloropropane	ND		1.00	1	12/19/2019 15:44	WG1399343
1,1-Dichloropropene	ND		1.00	1	12/19/2019 15:44	WG1399343
cis-1,3-Dichloropropene	ND		1.00	1	12/19/2019 15:44	WG1399343
trans-1,3-Dichloropropene	ND		1.00	1	12/19/2019 15:44	WG1399343
2,2-Dichloropropane	ND		1.00	1	12/19/2019 15:44	WG1399343
Ethylbenzene	ND		1.00	1	12/19/2019 15:44	WG1399343
Hexachloro-1,3-butadiene	ND		1.00	1	12/19/2019 15:44	WG1399343
2-Hexanone	ND		10.0	1	12/20/2019 17:00	WG1400186
Isopropylbenzene	ND		1.00	1	12/19/2019 15:44	WG1399343
p-Isopropyltoluene	ND		1.00	1	12/19/2019 15:44	WG1399343
2-Butanone (MEK)	ND		10.0	1	12/19/2019 15:44	WG1399343
Methylene Chloride	ND		5.00	1	12/19/2019 15:44	WG1399343
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	12/19/2019 15:44	WG1399343
Naphthalene	ND		5.00	1	12/19/2019 15:44	WG1399343
n-Propylbenzene	ND		1.00	1	12/19/2019 15:44	WG1399343
Styrene	ND		1.00	1	12/19/2019 15:44	WG1399343
1,1,1,2-Tetrachloroethane	ND		1.00	1	12/19/2019 15:44	WG1399343
1,1,2,2-Tetrachloroethane	ND		1.00	1	12/19/2019 15:44	WG1399343

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Tetrachloroethene	ND		1.00	1	12/19/2019 15:44	WG1399343
Toluene	ND		1.00	1	12/19/2019 15:44	WG1399343
1,2,3-Trichlorobenzene	ND		1.00	1	12/19/2019 15:44	WG1399343
1,2,4-Trichlorobenzene	ND		1.00	1	12/19/2019 15:44	WG1399343
1,1,1-Trichloroethane	ND		1.00	1	12/19/2019 15:44	WG1399343
1,1,2-Trichloroethane	ND		1.00	1	12/19/2019 15:44	WG1399343
Trichloroethene	ND		1.00	1	12/19/2019 15:44	WG1399343
Trichlorofluoromethane	ND		5.00	1	12/19/2019 15:44	WG1399343
1,2,3-Trichloropropane	ND		2.50	1	12/19/2019 15:44	WG1399343
1,2,4-Trimethylbenzene	ND		1.00	1	12/19/2019 15:44	WG1399343
1,3,5-Trimethylbenzene	ND		1.00	1	12/19/2019 15:44	WG1399343
Vinyl acetate	ND		10.0	1	12/19/2019 15:44	WG1399343
Vinyl chloride	ND		1.00	1	12/19/2019 15:44	WG1399343
o-Xylene	ND		1.00	1	12/19/2019 15:44	WG1399343
m&p-Xylene	ND		2.00	1	12/19/2019 15:44	WG1399343
Xylenes, Total	ND		3.00	1	12/19/2019 15:44	WG1399343
Di-isopropyl ether	ND		1.00	1	12/20/2019 17:00	WG1400186
Ethanol	ND		100	1	12/19/2019 15:44	WG1399343
Ethyl tert-butyl ether	ND		1.00	1	12/19/2019 15:44	WG1399343
Methyl tert-butyl ether	ND		1.00	1	12/19/2019 15:44	WG1399343
tert-Amyl Methyl Ether	ND		1.00	1	12/19/2019 15:44	WG1399343
tert-Butyl alcohol	ND		5.00	1	12/19/2019 15:44	WG1399343
t-Amyl Alcohol	ND	J4	50.0	1	12/20/2019 17:00	WG1400186
(S) Toluene-d8	*103*		*80.0-120*		*12/19/2019 15:44*	WG1399343
(S) Toluene-d8	*101*		*80.0-120*		*12/20/2019 17:00*	WG1400186
(S) 4-Bromofluorobenzene	*97.0*		*77.0-126*		*12/19/2019 15:44*	WG1399343
(S) 4-Bromofluorobenzene	*94.3*		*77.0-126*		*12/20/2019 17:00*	WG1400186
(S) 1,2-Dichloroethane-d4	*104*		*70.0-130*		*12/19/2019 15:44*	WG1399343
(S) 1,2-Dichloroethane-d4	*95.8*		*70.0-130*		*12/20/2019 17:00*	WG1400186

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	ND		100	1	12/22/2019 21:16	WG1400876
(S) o-Terphenyl	*90.0*		*31.0-160*		*12/22/2019 21:16*	WG1400876

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	136	B	100	1	12/19/2019 00:15	WG1399177
(S) a,a,a-Trifluorotoluene(FID)	*109*		*78.0-120*		*12/19/2019 00:15*	WG1399177

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND		50.0	1	12/19/2019 16:04	WG1399343
Benzene	ND		1.00	1	12/19/2019 16:04	WG1399343
Bromobenzene	ND		1.00	1	12/19/2019 16:04	WG1399343
Bromochloromethane	ND		1.00	1	12/19/2019 16:04	WG1399343
Bromodichloromethane	ND		1.00	1	12/19/2019 16:04	WG1399343
Bromoform	ND		1.00	1	12/19/2019 16:04	WG1399343
Bromomethane	ND		5.00	1	12/19/2019 16:04	WG1399343
n-Butylbenzene	ND		1.00	1	12/19/2019 16:04	WG1399343
sec-Butylbenzene	ND		1.00	1	12/19/2019 16:04	WG1399343
tert-Butylbenzene	ND		1.00	1	12/19/2019 16:04	WG1399343
Carbon tetrachloride	ND		1.00	1	12/19/2019 16:04	WG1399343
Chlorobenzene	ND		1.00	1	12/19/2019 16:04	WG1399343
Chlorodibromomethane	ND		1.00	1	12/19/2019 16:04	WG1399343
Chloroethane	ND		5.00	1	12/19/2019 16:04	WG1399343
Chloroform	ND		5.00	1	12/19/2019 16:04	WG1399343
Chloromethane	ND		2.50	1	12/19/2019 16:04	WG1399343
2-Chlorotoluene	ND		1.00	1	12/19/2019 16:04	WG1399343
4-Chlorotoluene	ND		1.00	1	12/19/2019 16:04	WG1399343
1,2-Dibromo-3-Chloropropane	ND		5.00	1	12/19/2019 16:04	WG1399343
1,2-Dibromoethane	ND		1.00	1	12/19/2019 16:04	WG1399343
Dibromomethane	ND		1.00	1	12/19/2019 16:04	WG1399343
1,2-Dichlorobenzene	ND		1.00	1	12/19/2019 16:04	WG1399343
1,3-Dichlorobenzene	ND		1.00	1	12/19/2019 16:04	WG1399343
1,4-Dichlorobenzene	ND		1.00	1	12/19/2019 16:04	WG1399343
Dichlorodifluoromethane	ND		5.00	1	12/19/2019 16:04	WG1399343
1,1-Dichloroethane	ND		1.00	1	12/19/2019 16:04	WG1399343
1,2-Dichloroethane	ND		1.00	1	12/19/2019 16:04	WG1399343
1,1-Dichloroethene	ND		1.00	1	12/19/2019 16:04	WG1399343
cis-1,2-Dichloroethene	ND		1.00	1	12/19/2019 16:04	WG1399343
trans-1,2-Dichloroethene	ND		1.00	1	12/19/2019 16:04	WG1399343
1,2-Dichloropropane	ND		1.00	1	12/19/2019 16:04	WG1399343
1,3-Dichloropropane	ND		1.00	1	12/19/2019 16:04	WG1399343
1,1-Dichloropropene	ND		1.00	1	12/19/2019 16:04	WG1399343
cis-1,3-Dichloropropene	ND		1.00	1	12/19/2019 16:04	WG1399343
trans-1,3-Dichloropropene	ND		1.00	1	12/19/2019 16:04	WG1399343
2,2-Dichloropropane	ND		1.00	1	12/19/2019 16:04	WG1399343
Ethylbenzene	ND		1.00	1	12/19/2019 16:04	WG1399343
Hexachloro-1,3-butadiene	ND		1.00	1	12/19/2019 16:04	WG1399343
2-Hexanone	ND		10.0	1	12/20/2019 17:21	WG1400186
Isopropylbenzene	ND		1.00	1	12/19/2019 16:04	WG1399343
p-Isopropyltoluene	ND		1.00	1	12/19/2019 16:04	WG1399343
2-Butanone (MEK)	ND		10.0	1	12/19/2019 16:04	WG1399343
Methylene Chloride	ND		5.00	1	12/19/2019 16:04	WG1399343
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	12/19/2019 16:04	WG1399343
Naphthalene	ND		5.00	1	12/19/2019 16:04	WG1399343
n-Propylbenzene	ND		1.00	1	12/19/2019 16:04	WG1399343
Styrene	ND		1.00	1	12/19/2019 16:04	WG1399343
1,1,1,2-Tetrachloroethane	ND		1.00	1	12/19/2019 16:04	WG1399343
1,1,2,2-Tetrachloroethane	ND		1.00	1	12/19/2019 16:04	WG1399343

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Tetrachloroethene	ND		1.00	1	12/19/2019 16:04	WG1399343
Toluene	ND		1.00	1	12/19/2019 16:04	WG1399343
1,2,3-Trichlorobenzene	ND		1.00	1	12/19/2019 16:04	WG1399343
1,2,4-Trichlorobenzene	ND		1.00	1	12/19/2019 16:04	WG1399343
1,1,1-Trichloroethane	ND		1.00	1	12/19/2019 16:04	WG1399343
1,1,2-Trichloroethane	ND		1.00	1	12/19/2019 16:04	WG1399343
Trichloroethene	ND		1.00	1	12/19/2019 16:04	WG1399343
Trichlorofluoromethane	ND		5.00	1	12/19/2019 16:04	WG1399343
1,2,3-Trichloropropane	ND		2.50	1	12/19/2019 16:04	WG1399343
1,2,4-Trimethylbenzene	ND		1.00	1	12/19/2019 16:04	WG1399343
1,3,5-Trimethylbenzene	ND		1.00	1	12/19/2019 16:04	WG1399343
Vinyl acetate	ND		10.0	1	12/19/2019 16:04	WG1399343
Vinyl chloride	ND		1.00	1	12/19/2019 16:04	WG1399343
o-Xylene	ND		1.00	1	12/19/2019 16:04	WG1399343
m&p-Xylene	ND		2.00	1	12/19/2019 16:04	WG1399343
Xylenes, Total	ND		3.00	1	12/19/2019 16:04	WG1399343
Di-isopropyl ether	ND		1.00	1	12/20/2019 17:21	WG1400186
Ethanol	ND		100	1	12/19/2019 16:04	WG1399343
Ethyl tert-butyl ether	ND		1.00	1	12/19/2019 16:04	WG1399343
Methyl tert-butyl ether	ND		1.00	1	12/19/2019 16:04	WG1399343
tert-Amyl Methyl Ether	ND		1.00	1	12/19/2019 16:04	WG1399343
tert-Butyl alcohol	ND		5.00	1	12/19/2019 16:04	WG1399343
t-Amyl Alcohol	ND	J4	50.0	1	12/21/2019 20:28	WG1400917
(S) Toluene-d8	*102*		*80.0-120*		*12/19/2019 16:04*	WG1399343
(S) Toluene-d8	*102*		*80.0-120*		*12/20/2019 17:21*	WG1400186
(S) Toluene-d8	*102*		*80.0-120*		*12/21/2019 20:28*	WG1400917
(S) 4-Bromofluorobenzene	*94.3*		*77.0-126*		*12/19/2019 16:04*	WG1399343
(S) 4-Bromofluorobenzene	*94.0*		*77.0-126*		*12/20/2019 17:21*	WG1400186
(S) 4-Bromofluorobenzene	*95.9*		*77.0-126*		*12/21/2019 20:28*	WG1400917
(S) 1,2-Dichloroethane-d4	*104*		*70.0-130*		*12/19/2019 16:04*	WG1399343
(S) 1,2-Dichloroethane-d4	*94.4*		*70.0-130*		*12/20/2019 17:21*	WG1400186
(S) 1,2-Dichloroethane-d4	*105*		*70.0-130*		*12/21/2019 20:28*	WG1400917

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	ND		100	1	12/22/2019 21:36	WG1400876
(S) o-Terphenyl	*91.5*		*31.0-160*		*12/22/2019 21:36*	WG1400876

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	3270		100	1	12/19/2019 00:39	WG1399177
(S) a,a,a-Trifluorotoluene(FID)	*99.6*		*78.0-120*		*12/19/2019 00:39*	WG1399177

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND		50.0	1	12/19/2019 16:23	WG1399343
Benzene	6.10		1.00	1	12/19/2019 16:23	WG1399343
Bromobenzene	ND		1.00	1	12/19/2019 16:23	WG1399343
Bromochloromethane	ND		1.00	1	12/19/2019 16:23	WG1399343
Bromodichloromethane	ND		1.00	1	12/19/2019 16:23	WG1399343
Bromoform	ND		1.00	1	12/19/2019 16:23	WG1399343
Bromomethane	ND		5.00	1	12/19/2019 16:23	WG1399343
n-Butylbenzene	ND		1.00	1	12/19/2019 16:23	WG1399343
sec-Butylbenzene	ND		1.00	1	12/19/2019 16:23	WG1399343
tert-Butylbenzene	ND		1.00	1	12/19/2019 16:23	WG1399343
Carbon tetrachloride	ND		1.00	1	12/19/2019 16:23	WG1399343
Chlorobenzene	ND		1.00	1	12/19/2019 16:23	WG1399343
Chlorodibromomethane	ND		1.00	1	12/19/2019 16:23	WG1399343
Chloroethane	ND		5.00	1	12/19/2019 16:23	WG1399343
Chloroform	ND		5.00	1	12/19/2019 16:23	WG1399343
Chloromethane	ND		2.50	1	12/19/2019 16:23	WG1399343
2-Chlorotoluene	ND		1.00	1	12/19/2019 16:23	WG1399343
4-Chlorotoluene	ND		1.00	1	12/19/2019 16:23	WG1399343
1,2-Dibromo-3-Chloropropane	ND		5.00	1	12/19/2019 16:23	WG1399343
1,2-Dibromoethane	ND		1.00	1	12/19/2019 16:23	WG1399343
Dibromomethane	ND		1.00	1	12/19/2019 16:23	WG1399343
1,2-Dichlorobenzene	ND		1.00	1	12/19/2019 16:23	WG1399343
1,3-Dichlorobenzene	ND		1.00	1	12/19/2019 16:23	WG1399343
1,4-Dichlorobenzene	ND		1.00	1	12/19/2019 16:23	WG1399343
Dichlorodifluoromethane	ND		5.00	1	12/19/2019 16:23	WG1399343
1,1-Dichloroethane	ND		1.00	1	12/19/2019 16:23	WG1399343
1,2-Dichloroethane	ND		1.00	1	12/19/2019 16:23	WG1399343
1,1-Dichloroethene	ND		1.00	1	12/19/2019 16:23	WG1399343
cis-1,2-Dichloroethene	ND		1.00	1	12/19/2019 16:23	WG1399343
trans-1,2-Dichloroethene	ND		1.00	1	12/19/2019 16:23	WG1399343
1,2-Dichloropropane	ND		1.00	1	12/19/2019 16:23	WG1399343
1,3-Dichloropropane	ND		1.00	1	12/19/2019 16:23	WG1399343
1,1-Dichloropropene	ND		1.00	1	12/19/2019 16:23	WG1399343
cis-1,3-Dichloropropene	ND		1.00	1	12/19/2019 16:23	WG1399343
trans-1,3-Dichloropropene	ND		1.00	1	12/19/2019 16:23	WG1399343
2,2-Dichloropropane	ND		1.00	1	12/19/2019 16:23	WG1399343
Ethylbenzene	ND		1.00	1	12/19/2019 16:23	WG1399343
Hexachloro-1,3-butadiene	ND		1.00	1	12/19/2019 16:23	WG1399343
2-Hexanone	ND		250	25	12/20/2019 17:41	WG1400186
Isopropylbenzene	ND		1.00	1	12/19/2019 16:23	WG1399343
p-Isopropyltoluene	ND		1.00	1	12/19/2019 16:23	WG1399343
2-Butanone (MEK)	ND		10.0	1	12/19/2019 16:23	WG1399343
Methylene Chloride	ND		5.00	1	12/19/2019 16:23	WG1399343
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	12/19/2019 16:23	WG1399343
Naphthalene	ND		5.00	1	12/19/2019 16:23	WG1399343
n-Propylbenzene	ND		1.00	1	12/19/2019 16:23	WG1399343
Styrene	ND		1.00	1	12/19/2019 16:23	WG1399343
1,1,1,2-Tetrachloroethane	ND		1.00	1	12/19/2019 16:23	WG1399343
1,1,2,2-Tetrachloroethane	ND		1.00	1	12/19/2019 16:23	WG1399343

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Tetrachloroethene	ND		1.00	1	12/19/2019 16:23	WG1399343
Toluene	ND		1.00	1	12/19/2019 16:23	WG1399343
1,2,3-Trichlorobenzene	ND		1.00	1	12/19/2019 16:23	WG1399343
1,2,4-Trichlorobenzene	ND		1.00	1	12/19/2019 16:23	WG1399343
1,1,1-Trichloroethane	ND		1.00	1	12/19/2019 16:23	WG1399343
1,1,2-Trichloroethane	ND		1.00	1	12/19/2019 16:23	WG1399343
Trichloroethene	ND		1.00	1	12/19/2019 16:23	WG1399343
Trichlorofluoromethane	ND		5.00	1	12/19/2019 16:23	WG1399343
1,2,3-Trichloropropane	ND		2.50	1	12/19/2019 16:23	WG1399343
1,2,4-Trimethylbenzene	ND		1.00	1	12/19/2019 16:23	WG1399343
1,3,5-Trimethylbenzene	ND		1.00	1	12/19/2019 16:23	WG1399343
Vinyl acetate	ND		10.0	1	12/19/2019 16:23	WG1399343
Vinyl chloride	ND		1.00	1	12/19/2019 16:23	WG1399343
o-Xylene	ND		1.00	1	12/19/2019 16:23	WG1399343
m&p-Xylene	ND		2.00	1	12/19/2019 16:23	WG1399343
Xylenes, Total	ND		3.00	1	12/19/2019 16:23	WG1399343
Di-isopropyl ether	1800		25.0	25	12/20/2019 17:41	WG1400186
Ethanol	ND		100	1	12/19/2019 16:23	WG1399343
Ethyl tert-butyl ether	ND		1.00	1	12/19/2019 16:23	WG1399343
Methyl tert-butyl ether	264		25.0	25	12/20/2019 17:41	WG1400186
tert-Amyl Methyl Ether	89.9		1.00	1	12/19/2019 16:23	WG1399343
tert-Butyl alcohol	25.5		5.00	1	12/19/2019 16:23	WG1399343
t-Amyl Alcohol	ND	J4	1250	25	12/21/2019 20:47	WG1400917
(S) Toluene-d8	*105*		*80.0-120*		*12/19/2019 16:23*	WG1399343
(S) Toluene-d8	*101*		*80.0-120*		*12/20/2019 17:41*	WG1400186
(S) Toluene-d8	*102*		*80.0-120*		*12/21/2019 20:47*	WG1400917
(S) 4-Bromofluorobenzene	*94.9*		*77.0-126*		*12/19/2019 16:23*	WG1399343
(S) 4-Bromofluorobenzene	*94.1*		*77.0-126*		*12/20/2019 17:41*	WG1400186
(S) 4-Bromofluorobenzene	*96.4*		*77.0-126*		*12/21/2019 20:47*	WG1400917
(S) 1,2-Dichloroethane-d4	*105*		*70.0-130*		*12/19/2019 16:23*	WG1399343
(S) 1,2-Dichloroethane-d4	*94.9*		*70.0-130*		*12/20/2019 17:41*	WG1400186
(S) 1,2-Dichloroethane-d4	*104*		*70.0-130*		*12/21/2019 20:47*	WG1400917

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	246		100	1	12/22/2019 21:57	WG1400876
(S) o-Terphenyl	*90.0*		*31.0-160*		*12/22/2019 21:57*	WG1400876

Method Blank (MB)

(MB) R3485333-2 12/18/19 23:20

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
TPH (GC/FID) Low Fraction	32.4	J	31.4	100
(S) a,a,a-Trifluorotoluene(FID)	*111*			*78.0-120*

Laboratory Control Sample (LCS)

(LCS) R3485333-1 12/18/19 20:38

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5500	5370	97.6	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			*99.8*	*78.0-120*	

Method Blank (MB)

(MB) R3485710-2 12/24/19 12:31

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	0.500
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
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
1,1,2,2-Tetrachloroethane	U		0.0790	0.500

Method Blank (MB)

(MB) R3485710-2 12/24/19 12:31

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
1,2,3-Trichloropropane	U		0.0720	0.500
Methyl tert-butyl ether	U		0.0530	0.500
(S) 4-Bromofluorobenzene	*96.0*			*70.0-130*
(S) 1,2-Dichlorobenzene-d4	*92.3*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3485710-1 12/24/19 11:40

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	5.00	5.41	108	70.0-130	
Carbon tetrachloride	5.00	4.92	98.4	70.0-130	
1,4-Dichlorobenzene	5.00	5.22	104	70.0-130	
1,2-Dichloroethane	5.00	5.08	102	70.0-130	
1,1-Dichloroethene	5.00	5.11	102	70.0-130	
1,1,1-Trichloroethane	5.00	5.25	105	70.0-130	
Trichloroethene	5.00	5.35	107	70.0-130	
Vinyl chloride	5.00	5.21	104	70.0-130	
1,2,4-Trichlorobenzene	5.00	5.40	108	70.0-130	
cis-1,2-Dichloroethene	5.00	5.33	107	70.0-130	
Xylenes, Total	15.0	16.8	112	70.0-130	
Methylene chloride	5.00	5.10	102	70.0-130	
1,2-Dichlorobenzene	5.00	5.15	103	70.0-130	
trans-1,2-Dichloroethene	5.00	5.50	110	70.0-130	
1,2-Dichloropropane	5.00	5.15	103	70.0-130	
1,1,2-Trichloroethane	5.00	5.06	101	70.0-130	
Tetrachloroethene	5.00	5.19	104	70.0-130	
Chlorobenzene	5.00	5.52	110	70.0-130	
Toluene	5.00	5.44	109	70.0-130	
Ethylbenzene	5.00	5.67	113	70.0-130	
Styrene	5.00	5.74	115	70.0-130	
Bromobenzene	5.00	5.41	108	70.0-130	
Bromodichloromethane	5.00	5.21	104	70.0-130	
Bromoform	5.00	4.86	97.2	70.0-130	
Bromomethane	5.00	6.00	120	70.0-130	
Chlorodibromomethane	5.00	5.19	104	70.0-130	
Chloroethane	5.00	5.18	104	70.0-130	
Chloroform	5.00	5.15	103	70.0-130	
Chloromethane	5.00	4.65	93.0	70.0-130	

Laboratory Control Sample (LCS)

(LCS) R3485710-1 12/24/19 11:40

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
2-Chlorotoluene	5.00	5.41	108	70.0-130	
4-Chlorotoluene	5.00	5.40	108	70.0-130	
Dibromomethane	5.00	5.25	105	70.0-130	
1,3-Dichlorobenzene	5.00	5.44	109	70.0-130	
1,1-Dichloroethane	5.00	5.41	108	70.0-130	
1,3-Dichloropropane	5.00	5.23	105	70.0-130	
2,2-Dichloropropane	5.00	5.23	105	70.0-130	
1,1-Dichloropropene	5.00	5.27	105	70.0-130	
1,3-Dichloropropene	10.0	10.6	106	70.0-130	
1,1,1,2-Tetrachloroethane	5.00	5.15	103	70.0-130	
1,1,2,2-Tetrachloroethane	5.00	5.24	105	70.0-130	
1,2,3-Trichloropropane	5.00	5.12	102	70.0-130	
Methyl tert-butyl ether	5.00	5.43	109	70.0-130	
(S) 4-Bromofluorobenzene			*100*	*70.0-130*	
(S) 1,2-Dichlorobenzene-d4			*104*	*70.0-130*	

Method Blank (MB)

(MB) R3484451-2 12/19/19 08:38

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		10.0	50.0
Benzene	U		0.331	1.00
Bromobenzene	U		0.352	1.00
Bromodichloromethane	U		0.380	1.00
Bromochloromethane	U		0.520	1.00
Bromoform	U		0.469	1.00
Bromomethane	U		0.866	5.00
n-Butylbenzene	U		0.361	1.00
sec-Butylbenzene	U		0.365	1.00
tert-Butylbenzene	U		0.399	1.00
Carbon tetrachloride	U		0.379	1.00
Chlorobenzene	U		0.348	1.00
Chlorodibromomethane	U		0.327	1.00
Chloroethane	U		0.453	5.00
Chloroform	U		0.324	5.00
Chloromethane	U		0.276	2.50
2-Chlorotoluene	U		0.375	1.00
4-Chlorotoluene	U		0.351	1.00
1,2-Dibromo-3-Chloropropane	U		1.33	5.00
1,2-Dibromoethane	U		0.381	1.00
Dibromomethane	U		0.346	1.00
1,2-Dichlorobenzene	U		0.349	1.00
1,3-Dichlorobenzene	U		0.220	1.00
1,4-Dichlorobenzene	U		0.274	1.00
Dichlorodifluoromethane	U		0.551	5.00
1,1-Dichloroethane	U		0.259	1.00
1,2-Dichloroethane	U		0.361	1.00
1,1-Dichloroethene	U		0.398	1.00
cis-1,2-Dichloroethene	U		0.260	1.00
trans-1,2-Dichloroethene	U		0.396	1.00
1,2-Dichloropropane	U		0.306	1.00
1,1-Dichloropropene	U		0.352	1.00
1,3-Dichloropropane	U		0.366	1.00
cis-1,3-Dichloropropene	U		0.418	1.00
trans-1,3-Dichloropropene	U		0.419	1.00
2,2-Dichloropropane	U		0.321	1.00
Ethylbenzene	U		0.384	1.00
Ethanol	U		42.0	100
Hexachloro-1,3-butadiene	U		0.256	1.00
Isopropylbenzene	U		0.326	1.00

Method Blank (MB)

(MB) R3484451-2 12/19/19 08:38

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
p-Isopropyltoluene	U		0.350	1.00
2-Butanone (MEK)	U		3.93	10.0
Methylene Chloride	U		1.00	5.00
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0
Methyl tert-butyl ether	U		0.367	1.00
Naphthalene	U		1.00	5.00
n-Propylbenzene	U		0.349	1.00
Styrene	U		0.307	1.00
1,1,1,2-Tetrachloroethane	U		0.385	1.00
1,1,2,2-Tetrachloroethane	U		0.130	1.00
Tetrachloroethene	U		0.372	1.00
Toluene	U		0.412	1.00
1,2,3-Trichlorobenzene	U		0.230	1.00
1,2,4-Trichlorobenzene	U		0.355	1.00
1,1,1-Trichloroethane	U		0.319	1.00
1,1,2-Trichloroethane	U		0.383	1.00
Trichloroethene	U		0.398	1.00
Trichlorofluoromethane	U		1.20	5.00
1,2,3-Trichloropropane	U		0.807	2.50
1,2,4-Trimethylbenzene	U		0.373	1.00
1,3,5-Trimethylbenzene	U		0.387	1.00
Vinyl acetate	U		1.63	10.0
Vinyl chloride	U		0.259	1.00
Xylenes, Total	U		1.06	3.00
o-Xylene	U		0.341	1.00
m&p-Xylene	U		0.719	2.00
tert-Amyl Methyl Ether	U		0.260	1.00
Ethyl tert-butyl ether	U		0.270	1.00
tert-Butyl alcohol	U		2.40	5.00
(S) Toluene-d8	*105*			*80.0-120*
(S) 4-Bromofluorobenzene	*98.3*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*99.9*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3484451-1 12/19/19 07:57

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	25.0	14.3	57.2	19.0-160	
Benzene	5.00	4.99	99.8	70.0-123	
Bromobenzene	5.00	4.84	96.8	73.0-121	
Bromodichloromethane	5.00	4.57	91.4	75.0-120	
Bromochloromethane	5.00	4.95	99.0	76.0-122	
Bromoform	5.00	4.10	82.0	68.0-132	
Bromomethane	5.00	2.43	48.6	10.0-160	
n-Butylbenzene	5.00	5.29	106	73.0-125	
sec-Butylbenzene	5.00	5.23	105	75.0-125	
tert-Butylbenzene	5.00	5.11	102	76.0-124	
Carbon tetrachloride	5.00	4.91	98.2	68.0-126	
Chlorobenzene	5.00	5.21	104	80.0-121	
Chlorodibromomethane	5.00	4.57	91.4	77.0-125	
Chloroethane	5.00	4.26	85.2	47.0-150	
Chloroform	5.00	4.91	98.2	73.0-120	
Chloromethane	5.00	5.37	107	41.0-142	
2-Chlorotoluene	5.00	5.04	101	76.0-123	
4-Chlorotoluene	5.00	4.86	97.2	75.0-122	
1,2-Dibromo-3-Chloropropane	5.00	2.95	59.0	58.0-134	
1,2-Dibromoethane	5.00	4.98	99.6	80.0-122	
Dibromomethane	5.00	5.19	104	80.0-120	
1,2-Dichlorobenzene	5.00	5.46	109	79.0-121	
1,3-Dichlorobenzene	5.00	5.32	106	79.0-120	
1,4-Dichlorobenzene	5.00	5.36	107	79.0-120	
Dichlorodifluoromethane	5.00	6.33	127	51.0-149	
1,1-Dichloroethane	5.00	5.09	102	70.0-126	
1,2-Dichloroethane	5.00	5.04	101	70.0-128	
1,1-Dichloroethene	5.00	5.08	102	71.0-124	
cis-1,2-Dichloroethene	5.00	5.07	101	73.0-120	
trans-1,2-Dichloroethene	5.00	5.32	106	73.0-120	
1,2-Dichloropropane	5.00	5.06	101	77.0-125	
1,1-Dichloropropene	5.00	5.27	105	74.0-126	
1,3-Dichloropropane	5.00	5.43	109	80.0-120	
cis-1,3-Dichloropropene	5.00	4.79	95.8	80.0-123	
trans-1,3-Dichloropropene	5.00	4.93	98.6	78.0-124	
2,2-Dichloropropane	5.00	5.48	110	58.0-130	
Ethylbenzene	5.00	5.22	104	79.0-123	
Hexachloro-1,3-butadiene	5.00	5.68	114	54.0-138	
Isopropylbenzene	5.00	5.09	102	76.0-127	
p-Isopropyltoluene	5.00	5.24	105	76.0-125	

Laboratory Control Sample (LCS)

(LCS) R3484451-1 12/19/19 07:57

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
2-Butanone (MEK)	25.0	13.4	53.6	44.0-160	
Methylene Chloride	5.00	5.14	103	67.0-120	
4-Methyl-2-pentanone (MIBK)	25.0	18.7	74.8	68.0-142	
Methyl tert-butyl ether	5.00	5.09	102	68.0-125	
Naphthalene	5.00	5.20	104	54.0-135	
n-Propylbenzene	5.00	4.91	98.2	77.0-124	
Styrene	5.00	4.93	98.6	73.0-130	
1,1,1,2-Tetrachloroethane	5.00	4.57	91.4	75.0-125	
1,1,2,2-Tetrachloroethane	5.00	4.92	98.4	65.0-130	
Tetrachloroethene	5.00	5.77	115	72.0-132	
Toluene	5.00	5.10	102	79.0-120	
1,2,3-Trichlorobenzene	5.00	6.78	136	50.0-138	
1,2,4-Trichlorobenzene	5.00	5.71	114	57.0-137	
1,1,1-Trichloroethane	5.00	4.87	97.4	73.0-124	
1,1,2-Trichloroethane	5.00	5.25	105	80.0-120	
Trichloroethene	5.00	5.02	100	78.0-124	
Trichlorofluoromethane	5.00	4.97	99.4	59.0-147	
1,2,3-Trichloropropane	5.00	4.31	86.2	73.0-130	
1,2,4-Trimethylbenzene	5.00	5.12	102	76.0-121	
1,3,5-Trimethylbenzene	5.00	4.89	97.8	76.0-122	
Vinyl acetate	25.0	36.3	145	11.0-160	
Vinyl chloride	5.00	4.16	83.2	67.0-131	
Xylenes, Total	15.0	15.2	101	79.0-123	
o-Xylene	5.00	5.22	104	80.0-122	
m&p-Xylene	10.0	10.0	100	80.0-122	
tert-Butyl alcohol	25.0	8.81	35.2	27.0-160	
Ethanol	250	143	57.2	10.0-160	
tert-Amyl Methyl Ether	5.00	4.96	99.2	66.0-125	
Ethyl tert-butyl ether	5.00	5.15	103	63.0-138	
(S) Toluene-d8			*101*	*80.0-120*	
(S) 4-Bromofluorobenzene			*99.1*	*77.0-126*	
(S) 1,2-Dichloroethane-d4			*103*	*70.0-130*	

Method Blank (MB)

(MB) R3484828-3 12/20/19 11:17

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Di-isopropyl ether	U		0.320	1.00
2-Hexanone	U		3.82	10.0
Methyl tert-butyl ether	U		0.367	1.00
t-Amyl Alcohol	U		4.90	50.0
(S) Toluene-d8	*100*			*80.0-120*
(S) 4-Bromofluorobenzene	*92.9*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*98.7*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3484828-2 12/20/19 09:41

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
t-Amyl Alcohol	25.0	45.7	183	50.0-160	J4
Di-isopropyl ether	5.00	5.62	112	58.0-138	
2-Hexanone	25.0	29.1	116	67.0-149	
Methyl tert-butyl ether	5.00	5.03	101	68.0-125	
(S) Toluene-d8			*99.7*	*80.0-120*	
(S) 4-Bromofluorobenzene			*96.2*	*77.0-126*	
(S) 1,2-Dichloroethane-d4			*100*	*70.0-130*	

Method Blank (MB)

(MB) R3485394-2 12/21/19 18:41

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
t-Amyl Alcohol	U		4.90	50.0
(S) Toluene-d8	*102*			*80.0-120*
(S) 4-Bromofluorobenzene	*96.6*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3485394-1 12/21/19 18:02

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
t-Amyl Alcohol	25.0	5.83	23.3	50.0-160	J4
(S) Toluene-d8			*99.4*	*80.0-120*	
(S) 4-Bromofluorobenzene			*95.4*	*77.0-126*	
(S) 1,2-Dichloroethane-d4			*108*	*70.0-130*	

Method Blank (MB)

(MB) R3484528-1 12/20/19 01:28

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
TPH (GC/FID) High Fraction	U		24.7	100
(S) o-Terphenyl	*83.5*			*31.0-160*

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

(LCS) R3484528-2 12/20/19 01:54 • (LCSD) R3484528-3 12/20/19 02:20

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) High Fraction	1500	1500	1530	100	102	50.0-150			1.98	20
(S) o-Terphenyl				*98.0*	*87.0*	*31.0-160*				

Method Blank (MB)

(MB) R3485062-1 12/22/19 11:30

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
TPH (GC/FID) High Fraction	U		24.7	100
(S) o-Terphenyl	*79.5*			*31.0-160*

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

(LCS) R3485062-2 12/22/19 11:50 • (LCSD) R3485062-3 12/22/19 12:10

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) High Fraction	1500	1410	1360	94.0	90.7	50.0-150			3.61	20
(S) o-Terphenyl				*111*	*108*	*31.0-160*				

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

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.
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.
J4	The associated batch QC was outside the established quality control range for accuracy.

ACCREDITATIONS & LOCATIONS

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* 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 National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

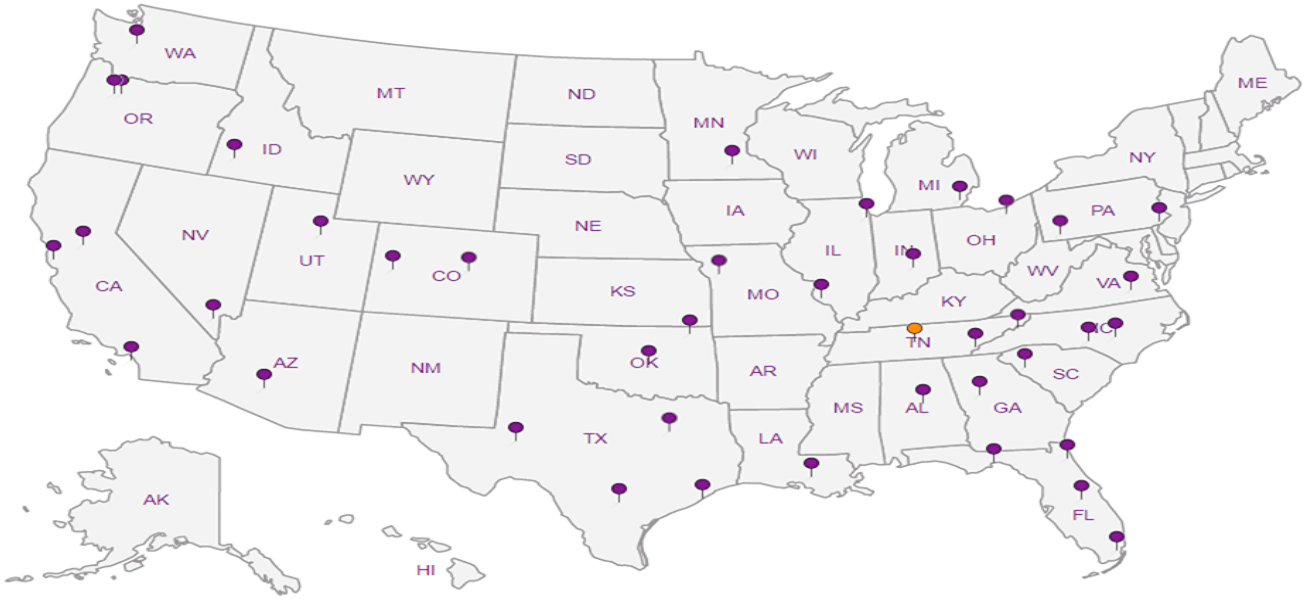
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

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

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



EnviroTrac Ltd. - Sunoco
155 Riverbend Drive
Suite A
Charlottesville, VA 22911

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

Report to: Eric Shertzer
Email To: erics@envirotrac.com

Project Description: Fingerboard Road
City/State Collected:
Please Circle: PT MT CT ET

Phone: 434-202-7808
Fax:
Client Project # 07923998
Lab Project # SUNENVTRAC-07923998

Collected by (print): Eli Connell
Site/Facility ID # 0792-3998
P.O. #

Collected by (signature):
Immediately Packed on Ice N ____ Y ✓
Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day
Date Results Needed
Quote #

Pres Chk

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	DROLVI 40mlAmb-HCl-BT	GRO 40mlAmb HCl	V524GW 40mlAmb-AscAcid+HCl	V8260OXY 40mlAmb-HCl	Remarks	Sample # (lab only)
PW-1	G	GW		12/17	1500	3			X			-01
MW-2	↓	GW		↓	1330	7	X	X		X		-02
MW-5	↓	GW		↓	1300	7	X	X		X		-03
MW-9	↓	GW		↓	1415	7	X	X		X		-04
MW-14	↓	GW		↓	1445	7	X	X		X		-05

Chain of Custody Page 1 of 1

Pace Analytical®
National Center for Testing & Innovation
12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

SDG # L1172207
M085
Acctnum: SUNENVTRAC
Template: T158814
Prelogin: P740010
PM: 823 - Olivia Studebaker
PB: 11-7-19
Shipped Via: FedEX Ground

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

Remarks:
pH _____ Temp _____
Flow _____ Other _____

Samples returned via: __ UPS __ FedEx __ Courier _____
Tracking # 1329 2019 6611

Sample Receipt Checklist
COC Seal Present/Intact: ✓ NP __Y __N
COC Signed/Accurate: ✓Y __N
Bottles arrive intact: ✓Y __N
Correct bottles used: ✓Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: ✓Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: ✓Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR
	12/17			
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C 1.0+.2=1.2 Bottles Received: 31
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) TS	Date: 12-18-19 Time: 10:00

If preservation required by Login: Date/Time
Hold:
Condition: NCF / OK