

MEMO

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 Project no. **1088190/1940103462** **Kevin Schneider - Ramboll**
 Client **RACER Trust**

To **Nicole Sanabria and Christina Hebert**
 From **Clifford Yantz**
 Copy to **Kevin Schneider**

Prepared by **Kevin Schneider**
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Vapor Intrusion Sampling –Supplemental Evaluation Sampling Event - December 2022

Date April 13, 2023

Ramboll Americas Engineering Solutions (Ramboll), on behalf of the Revitalizing Auto Communities Environmental Response Trust (RACER Trust) is providing this technical memorandum to summarize the results of the vapor probe and groundwater sampling collected on December 20, 2022, in relation to the RACER Trust Coldwater Road Facility (Site) located in Flint, Michigan (**Figure 1**). Note that soil gas and soil vapor are used interchangeably in this report.

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The sampling was performed to confirm the conclusions made in the Vapor Intrusion Evaluation Summary Report submitted to Michigan Department of Environment, Great Lakes, and Energy (EGLE) on September 12, 2022. The vapor intrusion (VI) evaluation was initially a response to EGLE's *Comments on Per- and Polyfluorinated Substances Sampling Event Letter* - Dated October 12, 2017, and follow up letters from EGLE:

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- *Vapor Intrusion Sampling Event and Work Plan email* – Dated August 13, 2019.
- *Site-Specific Volatilization to Indoor Air Criteria Letter* – Dated October 22, 2020.
- *Review: Vapor Intrusion Technical Memo Letter* – Dated December 23, 2020.
- *Review: 2nd Quarter Vapor Intrusion Sampling Results Letter* – Dated July 29, 2021.

1 Sampling & Analysis

Sample collection activities were completed on December 20, 2022, and December 21, 2022 in accordance with the EGLE approved scope of work in the Ramboll response letter. This was the first recommended sampling event from the Vapor Intrusion Evaluation Summary Report that included collecting soil gas samples from all the vapor probes and groundwater samples from monitoring wells OBG MW-5, OBG MW-6, OBG MW-7, OBG MW-8, OBG MW-11, and OBG MW-14.

Soil gas grab samples were attempted from vapor probes VP-1S, VP-1D, VP-2S, VP-2D, VP-3S, VP-3M, VP-3D, VP-5S, VP-5M, VP-5D, VP-6S, VP-6M, and VP-6D. See **Figure 2** for soil gas probe locations.

Successful soil gas grab samples were collected from vapor probes VP-1S, VP-2D, VP-3S, VP-3M, VP-5S, VP-5M, VP-5D, VP-6S, VP-6M, and VP-6D.

Groundwater samples were collected and analyzed for volatile organic compounds (VOCs) in lieu of vapor samples when groundwater was encountered in any of the soil gas probes. Groundwater samples were collected at vapor probes VP-1D, and VP-2S. Groundwater was encountered at VP-3D while attempting to collect the vapor sample, but there was not a sufficient volume purged to submit a groundwater sample for analysis.

While attempting to collect a soil gas grab sample from VP-6D, the first grab sample attempt stalled due to interference from groundwater and no sample was collected. As recommended in the work plan, a second soil gas sample was attempted using a flow controller calibrated to a lower flow rate of 8-hour sample time or 2 milliliters per minute flow rate. A sample was collected from the 8-hour sample attempt even though the pressure only dropped 10 pounds per square inch (PSI) over the eight hours.

1.1 Sample Procedure

Prior to the collection of each soil vapor sample, the sample tubing was purged of ambient air. A minimum of three volumes of air within the sample probe and tubing were purged prior to sample collection. In addition, helium tracer gas screening was used during sampling of the soil vapor probes to evaluate the adequacy of the sampling technique and identify potential short-circuiting from the ground surface during sample collection.

An Ion Science GasCheck-G gas leak detector was used to screen the extracted vapor stream for helium prior to and after sample collection. No olfactory observations were recognized during the sampling. Short-circuiting was observed during the initial screening at VP-3S, and VP-3M, which are located within the same road box, and at VP-5S, and VP-5M, which are also located within the same road box. Prior to sampling hydrated granular bentonite was packed around the interior and exterior of the well protector to seal the soil vapor probes. No short-circuiting was observed during the final screening at these locations and short-circuiting was not observed during initial or final screening at any of the other locations. See **Appendix A** for Soil Vapor (Bottle Vac®) Sample Collection Field Forms.

The soil gas samples were collected in Bottle Vacs® and transported to the laboratory under appropriate chain-of-custody (COC) protocols. The soil gas samples were submitted to Merit Laboratories in East Lansing, Michigan a National Environmental Laboratory Accreditation Conference (NELAC)-certified laboratory for analysis by USEPA Method TO-15. For quality control purposes, a field duplicate sample (DUP-122022) was collected from the VP-1S vapor probe location.

Duplicate samples were collected from VP-3S, VP-5M, and VP-5D and sent to ALS Environmental Laboratory (ALS) in Simi Valley, California to verify previous detections of isopropyl alcohol were not somehow associated with laboratory cross-contamination or otherwise related to the laboratory performing the analysis.

The groundwater samples were collected using low-flow groundwater sampling techniques in accordance with USEPA, *Low-Flow (Minimal Drawdown) Ground-Water Sampling Procedures* (EPA/540/S-95/504) and the USEPA Region 1 (July 30, 1996, Revision 4) *Low Stress (Low-Flow) Purging and Sampling Procedure for the Collection of Ground Water Samples from Monitoring Wells*.

The low-flow groundwater sampling was performed using high-density polyethylene sample tubing lowered approximately to the midpoint of the well screen and connected to a peristaltic pump for purging. The tubing was then attached to a flow-through cell attached to a physical parameter measurement instrument capable of measuring temperature, conductivity, pH, dissolved oxygen (DO), and oxidation-reduction potential (ORP). Turbidity was also measured with a turbidity meter. The measurements of water quality (*i.e.*, physical parameters) were recorded on a groundwater sampling log. Groundwater sampling logs are included as **Appendix B**.

Once stabilized, the flow-through cell was disconnected, and samples were collected directly into laboratory supplied containers. The samples were delivered under routine chain-of-custody protocols to Merit Laboratories and analyzed for VOCs using EPA Method 8260 and for isopropyl alcohol by EPA Method 8015D (SW846) for nonhalogenated organic compounds. The isopropyl alcohol samples were analyzed by Eurofins Michigan through a subcontract with Merit Laboratories.

1.2 Analytical Results

The soil gas analytical results for the samples collected at the Coldwater Road Landfill facility are presented in **Table 1**, the groundwater from vapor probes analytical results are presented in **Table 2**, and the groundwater from monitoring wells analytical results are presented in **Table 3**. **Figure 3** shows the sample locations with analytical results. The complete analytical laboratory report is contained in **Appendix C**.

The analytical results were compared to the Site site-specific volatilization to indoor air criteria (SSVIAC) under Part 201 or site-specific screening levels (SSTLs) under Part 201 of the Natural Resources and Environmental Protection Act, 1994 PA 451 as amended (NREPA) calculated and provided by EGLE in an October 22, 2020 email.

The detected soil gas concentrations were compared to the appropriate soil gas criteria for the Site based on the foundation type of residences adjacent to where soil vapor probes are located.

During this sampling event there were no detections in the soil gas samples above the most conservative EGLE Residential SSVIAC – Table 1 (crawl space with a dirt floor).

The relative percent difference (RPD) for the duplicate sample results for VP-1S and Dup-122022 (VP-1S) were within acceptable limits, except for isopropyl alcohol which had an RPD of 22%. Both the sample (isopropyl alcohol at 120 ng/l) and duplicate sample (isopropyl alcohol at 150 ng/l) should be considered as estimated (J).

The comparison between the duplicate samples (VP-3S, VP-5M, and VP-5D) collected and analyzed by ALS compared to the samples analyzed by Merit, showed that there were more low-level detections in the samples analyzed by ALS due to a lower detection limit and that isopropyl alcohol was detected at a slightly greater concentration, yet was still below the SSVIAC. The analysis of samples by a secondary laboratory did not indicate that the detections of isopropyl alcohol are related to the laboratory performing the analysis. Isopropyl alcohol is a common ingredient of hand sanitizers and similar sanitizing products and therefore sample containers could still have been exposed to it during their transportation to the site, at the site, and then to the laboratory. However, it is noted that Ramboll did not use hand sanitizer during sampling.

From the two groundwater samples collected at vapor probes VP-1D and VP-2S no VOCs were detected above the laboratory reporting limit.

From the six groundwater samples collected from the monitoring wells, no VOCs were detected above the laboratory reporting limit except at monitoring well OBG MW-5. At OBG MW-5, 1,1-dichloroethane was detected at a concentration of 1 µg/l which is equal to the target detection limit (TDL) of 1 µg/l, cis-1,2-dichloroethene was detected at a concentration of 3 µg/l which is greater than the TDL of 1 µg/l, and vinyl chloride was detected at a concentration of 3 µg/l which is greater than the TDL of 1 µg/l. The TDL was used in accordance with Section 20120a(10) of the NREPA that when the TDL for a hazardous substance is greater than the developed health-based SSVIAC, the TDL is used to evaluate the risk posed from the pathway. OBG MW-5 is located east of the former wastewater treatment system and interior to OBG MW-6 and OBG MW-8 which are closer to the property boundary and have consistently been non-detect for VOCs. Therefore, the detections above the TDL in OBG MW-5 present no apparent off-site risk. Also, the VOC detections above criteria in OBG MW-5 are different from the constituents of concern for the vapor sampling.

Isopropyl alcohol was not detected in any of the monitoring well groundwater samples collected during this sampling event.

2 Summary

During this sampling event VOC concentrations were generally comparable to past results for the soil gas samples that were able to be collected. Notable decreases in isopropyl alcohol concentrations were observed at VP-3S, VP-5M, VP-5D to below SSVIAC.

The groundwater VOC and isopropyl alcohol results from flooded vapor probes and monitoring wells continue to not identify detections above the laboratory reporting limits.

Sampling results continue to indicate little to no potential for risk to adjacent properties from Site related soil vapor.

The next sampling event to monitor for isopropyl alcohol detections above the SSVIAC in vapor probes VP-3S, VP-5M, and VP-5D was conducted on April 3, 2023. This event included an ambient air sample, collected within the sample vehicle as a check for cross-contamination due to hand sanitizer and alcohol wipes typically stored in the vehicle during past sampling events.

No groundwater samples were collected from the monitoring wells during the April 3, 2023 sampling event.

If you have any questions regarding this technical memorandum, please contact Cliff Yantz at (313) 333-0211.

Very truly yours,

RAMBOLL AMERICAS ENGINEERING SOLUTIONS, INC.



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Enclosures:

Tables

Table 1 – Vapor Intrusion Analytical Results

Table 2 – Groundwater from Vapor Probes Analytical Results

Table 3 – Groundwater from Monitoring Wells Analytical Results

Figures

Figure 1 – Site Location Map

Figure 2 – Sample Location Map

Figure 3 – Sample Location Map with Analytical Results

Appendices

Appendix A – Soil Vapor (Bottle Vac®) Sample Collection Field Forms

Appendix B – Groundwater Sample Collection Field Forms

Appendix C – Analytical Laboratory Results

TABLES

TABLE 1
RACER Trust - Coldwater Road
Vapor Intrusion Sampling
Soil Gas Results December 2017 through December 2022
Compared to SSVIAC Table 1 (crawlpace with a dirt floor)

Compound	Sample ID: Units:	EGLE Site-Specific Residential Volatilization to Indoor Air Criteria (SSVIAC) - Table 1 (crawlspce with a dirt floor) µg/m³	VP-1S µg/m³	VP-1S µg/m³	VP-1S (DUP-1) µg/m³	VP-1S µg/³	VP-1S µg/m³	VP-1S (VP-DUP-1) µg/m³	VP-1S µg/m³	VP-1S µg/m³	VP-1S (DUP-052721) µg/m³	VP-1S µg/m³	VP-1S µg/m³	VP-1S µg/m³	VP-1S µg/m³
Sample Date:		12/8/2017	6/29/2018	6/29/2018	10/25/2018	11/19/2019	11/19/2019	2/22/2021	5/27/2021	5/27/2021	8/26/2021	12/8/2021	12/20/2022	12/20/2022	
Acetone	NC	<48	48	<48		<48	<48		95	95	<48		<48	<48	
1,3-Butadiene	NC	<4.4	<4.4	<4.4		<4.4	<4.4		<22	<22	<44		<44	<44	
Benzene	3.3 ca	<6.4	9.6	<6.4		<6.4	<6.4		<6.4	<6.4	<6.4		<6.4	<6.4	
Bromodichloromethane	NC	<13	<13	<13		<13	<13		<13	<13	<13		<13	<13	
Bromoform	NC	<21	<21	<21		<21	<21		<21	<21	<21		<21	<21	
Bromomethane	NC	<7.8	<7.8	<7.8		<7.8	<7.8		<7.8	<7.8	<7.8		<7.8	<7.8	
Vinyl bromide	NC	<8.7	<8.7	<8.7		<8.7	<8.7		<8.7	<8.7	<8.7		<8.7	<8.7	
Benzyl chloride	NC	<10	<10	<10		<10	<10		<10	<10	<10		<10	<10	
Carbon Disulfide	NC	<16	37	22		<16	<16		<16	<16	<16		<62	<62	
Chlorobenzene	NC	<9.2	<9.2	<9.2		<9.2	<9.2		<9.2	<9.2	<9.2		<9.2	<9.2	
Chloroethane	NC	<5.3	<5.3	<5.3		<5.3	<5.3		<53	<53	<53		<53	<53	
Chloroform	NC	<9.8	<9.8	<9.8		<9.8	<9.8		<9.8	<9.8	<9.8		<9.8	<9.8	
Chloromethane	NC	<4.1	<4.1	<4.1		<4.1	<4.1		<41	<41	<41		<41	<41	
3-Chloropropene	NC	<6.3	<6.3	<6.3		<6.3	<6.3		<6.3	<6.3	<63		<63	<63	
2-Chlorotoluene	NC	<10	<10	<10		<10	<10		<10	<10	<10		<10	<10	
Carbon tetrachloride	NC	<13	<13	<13		<13	<13		<13	<13	<13		<13	<13	
Cumene	NC	--	--	--		--	--		--	--	--		--	--	
Cyclohexane	6,300 nc	<6.9	14	10		<6.9	<6.9		<6.9	<6.9	<6.9		<6.9	<6.9	
1,1-Dichloroethane	16 ca	<8.1	<8.1	<8.1		<8.1	<8.1		<8.1	<8.1	<8.1		<8.1	<8.1	
1,1-Dichloroethene	210 nc	<7.9	<7.9	<7.9		<7.9	<7.9		<7.9	<7.9	<7.9		<7.9	<7.9	
1,2-Dichloro-1,1,2,2-tetrafluoroethane	NR	--	--	--		--	--		--	--	--		--	--	
1,2-Dibromoethane	NC	<15	<15	<15		<15	<15		<15	<15	<15		<15	<15	
1,2-Dichloroethane	0.98 ca	85	<8.1	<8.1		<8.1	<8.1		<8.1	<8.1	<8.1		<8.1	<8.1	
1,2-Dichloropropane	4.2 nc	<9.2	<9.2	<9.2		<9.2	<9.2		<9.2	<9.2	<9.2		<9.2	<9.2	
1,4-Dioxane	5.1 ca	<90	<90	<90		<90	<90		<90	<90	<90		<90	<90	
Dichlorodifluoromethane	340 nc	<9.9	<9.9	<9.9		<9.9	<9.9		<9.9	<9.9	<9.9		<9.9	<9.9	
Dibromochloromethane	43 (MM) mut	<17	<17	<17		<17	<17		<17	<17	<17		<17	<17	
trans-1,2-Dichloroethene	83	<7.9	<7.9	<7.9		<7.9	<7.9		<7.9	<7.9	<7.9		<7.9	<7.9	
cis-1,2-Dichloroethene	8.3 nc	<7.9	<7.9	<7.9		<7.9	<7.9		<7.9	<7.9	<7.9		<7.9	<7.9	
cis-1,3-Dichloropropene	6.4 (J) ca	<9.1	<9.1	<9.1		<9.1	<9.1		<9.1	<9.1	<9.1		<9.1	<9.1	
1,3-Dichlorobenzene	3.1 nc	<12	<12	<12		<12	<12		<12	<12	<12		<12	<12	
1,2-Dichlorobenzene	310 nc	<12	<12	<12		<12	<12		<12	<12	<12		<12	<12	
1,4-Dichlorobenzene	6.5 ca	<12	<12	<12		<12	<12		<12	<12	<12		<12	<12	
trans-1,3-Dichloropropene	NC	<9.1	<9.1	<9.1		<9.1	<9.1		<9.1	<9.1	<9.1		<9.1	<9.1	
Ethanol	19,000 (EE) st	<64 X	<57 X	<47		<47	<47		140	150	75		<47	<47	
Ethylbenzene	10 ca	<8.7	13	<8.7		<8.7	<8.7		<8.7	<8.7	<8.7		<8.7	<8.7	
Ethyl Acetate	73 nc	<36	<36	<36		<36	<36		<72	<72	<72		<72	<72	
4-Ethyltoluene	NC	<9.8	<9.8	<9.8		<9.8	<9.8		<9.8	<9.8	<9.8		<9.8	<9.8	
Freon 113	NC	<15	<15	<15		<15	<15		<15	<15	<15		<15	<15	
Freon 114	NC	<14	<14	<14		<14	<14		<14	<14	<14		<14	<14	
Heptane	3,700 nc	<8.2	25	<8.2		<8.2	<8.2		<8.2	<8.2	<8.2		<8.2	<8.2	
Hexachlorobutadiene	1.2 ca	<21	<21	<21		<21	<21		<21	<21	<21		<21	<21	
Hexane	730 nc	56	74	49		11	7.0		<7.0	<7.0	<7.0		<7.0	<7.0	
2-Hexanone	31 nc	<20	<20	<20		<20	<20		<20	<20	<20		<20	<20	
Isopropyl Alcohol	210 nc	370	<49	<49		<49	<49		<49	<49	120		120	150	
Methylene Chloride	NC	<17	<17	<17		<17	<17		<17	<17	<17		<17	<17	
2-Butanone (MEK)	5,000 (DD) dev	<29	<29	<29		<29	<29		<59	<59	<59		<59	<59	
4-Methyl-2-pentanone (MIBK)	3,000 (DD) dev	<20	<20	<20		<20	<20		<20	<20	<20		<20	<20	
tert-Methyl butyl ether (MTBE)	98 ca	<7.2	<7.2	<7.2		<7.2	<7.2		<7.2	<7.2	<7.2		<7.2	<7.2	
Methyl methacrylate	NC	<8.2	<8.2	<8.2		<8.2	<8.2		<8.2	<8.2	<8.2		<8.2	<8.2	
Naphthalene	0.75 ca	<10	<10	<10		<10	<10		<10	<10	<10		<10	<10	
Propylene	NC	618	<262 X	<186 X		<6.9 X	<6.9 X		<170	<170	<170		<170	<170	
Styrene	45 ca	<8.5	<8.5	<8.5		<8.5	<8.5		<8.5	<8.5	<8.5		<8.5	<8.5	
1,1,1-Trichloroethane	5,000 (EE) st	<11	<11	<11		<11	<11		<11	<11	<11		<11	<11	
1,1,2,2-Tetrachloroethane	0.44 ca	<14	<14	<14		<14	<14		<14	<14	<14		<14	<14	
1,1,2-Trichloroethane	0.21 nc	<11	<11	<11		<11	<11		<11	<11	<11		<11	<11	
1,1,2-Trichlorotrifluoroethane	NC	--	--	--		--	--		--	--	--		--	--	
1,2,4-Trichlorobenzene	2.1 nc	<37	<37	<37		<37	<37		<37	<37	<37		<37	<37	
1,2,4-Trimethylbenzene	63 (JT) nc	<9.8	25	15		<9.8	<9.8		<9.8	<9.8	15		<9.8	<9.8	
1,3,5-Trimethylbenzene	63 (JT) nc	<9.8	<9.8	<9.8		<9.8	<9.8		<9.8	<9.8	<9.8		<9.8	<9.8	
2,2,4-Trimethylpentane	3,700 nc	9.3	47	28		<9.3	<9.3		<9.3	<9.3	<9.3		<9.3	<9.3	
Tert-butyl Alcohol	NC	<30	<30	<30		<30	<30		<30	<30	<30		<61	<61	
Tetrachloroethene	41 (EE) st	27	<14	<14		<14	<14		<14	<14	<14		<14	<14	
Tetrahydrofuran	2,100 nc	<5.9	27	18		8.8	8.8		38	35	27		12	12	
Toluene	5,200 nc	34	57	41		11	11		7.5	7.5	15		11	11	
Trichloroethene	2.0 (DD) dev	<11	43	91		<11	<11		<11	<11	<11		<11	<11	
Trichlorofluoromethane	460 nc	<11	<11	<11		<11	<11		<11	<11	<11		<11	<11	
Vinyl chloride	1.6 (MM) mut	<5.1	<5.1	<5.1		<5.1	<5.1		<5.1	<5.1	<5.1		<5.1	<5.1	
Vinyl acetate	NC	<7.0	<7.0	<7.0		<7.0	<7.0		<7.0	<7.0	<7.0		<7.0	<7.0	
p,m-Xylene	NC	<17	39	22		<17	<17		<17	<17	<17		<17	<17	
o-Xylene	NC	<8.7	17	8.7		<8.7	<8.7		<8.7	<8.7	<8.7		<8.7	<8.7	
Total Xylene	230 (J)	<26	56	30		<26	<26		<26	<26	<26		<26	<26	

Groundwater Interference. Groundwater Sample Collected. See Table 2.

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Not Sampled.

TABLE 1
RACER Trust - Coldwater Road
Vapor Intrusion Sampling
Soil Gas Results December 2017 through December 2022
Compared to SSVIAC Table 1 (crawlspce with a dirt floor)

Compound	Sample ID: Units:	EGLE Site-Specific Residential Volatilization to Indoor Air Criteria (SSVIAC) - Table 1 (crawlspce with a dirt floor) μg/m ³	VP-1D μg/m ³	VP-1D μg/m ³	VP-1D μg/m ³	VP-1D μg/m ³	VP-1D μg/m ³	VP-1D μg/m ³	VP-1D μg/m ³	VP-1D μg/m ³	VP-1D μg/m ³
	Sample Date:		12/8/2017	6/29/2018	10/25/2018	11/19/2019	2/22/2021	5/27/2021	8/26/2021	12/8/2021	12/20/2022
Acetone		NC	95								
1,3-Butadiene		NC	<4.4								
Benzene		3.3 ca	13								
Bromodichloromethane		NC	<13								
Bromoform		NC	<21								
Bromomethane		NC	<7.8								
Vinyl bromide		NC	<8.7								
Benzyl chloride		NC	<10								
Carbon Disulfide		NC	<16								
Chlorobenzene		NC	<9.2								
Chloroethane		NC	<5.3								
Chloroform		NC	<9.8								
Chloromethane		NC	<4.1								
3-Chloropropene		NC	<6.3								
2-Chlorotoluene		NC	<10								
Carbon tetrachloride		NC	<13								
Cumene		NC	--								
Cyclohexane		6,300 nc	17								
1,1-Dichloroethane		16 ca	<8.1								
1,1-Dichloroethene		210 nc	<7.9								
1,2-Dichloro-1,1,2,2-tetrafluoroethane		NR	--								
1,2-Dibromoethane		NC	<15								
1,2-Dichloroethane		0.98 ca	130								
1,2-Dichloropropane		4.2 nc	<9.2								
1,4-Dioxane		5.1 ca	<90								
Dichlorodifluoromethane		340 nc	<9.9								
Dibromochloromethane		43 (MM) mut	<17								
trans-1,2-Dichloroethene		83	<7.9								
cis-1,2-Dichloroethene		8.3 nc	<7.9								
cis-1,3-Dichloropropene		6.4 (J) ca	<9.1								
1,3-Dichlorobenzene		3.1 nc	<12								
1,2-Dichlorobenzene		310 nc	<12								
1,4-Dichlorobenzene		6.5 ca	<12								
trans-1,3-Dichloropropene		NC	<9.1								
Ethanol		19,000 (EE) st	<130 X								
Ethylbenzene		10 ca	<8.7								
Ethyl Acetate		73 nc	<36								
4-Ethyltoluene		NC	<9.8								
Freon 113		NC	<15								
Freon 114		NC	<14								
Heptane		3,700 nc	12								
Hexachlorobutadiene		1.2 ca	<21								
Hexane		730 nc	130								
2-Hexanone		31 nc	<20								
Isopropyl Alcohol		210 nc	590								
Methylene Chloride		NC	<17								
2-Butanone (MEK)		5,000 (DD) dev	<29								
4-Methyl-2-pentanone (MIBK)		3,000 (DD) dev	<20								
tert-Methyl butyl ether (MTBE)		98 ca	<7.2								
Methyl methacrylate		NC	<8.2								
Naphthalene		0.75 ca	<10								
Propylene		NC	303								
Styrene		45 ca	<8.5								
1,1,1-Trichloroethane		5,000 (EE) st	<11								
1,1,2,2-Tetrachloroethane		0.44 ca	<14								
1,1,2-Trichloroethane		0.21 nc	<11								
1,1,2-Trichlorotrifluoroethane		NC	--								
1,2,4-Trichlorobenzene		2.1 nc	<37								
1,2,4-Trimethylbenzene		63 (JT) nc	<9.8								
1,3,5-Trimethylbenzene		63 (JT) nc	<9.8								
2,2,4-Trimethylpentane		3,700 nc	37								
Tert-butyl Alcohol		NC	<30								
Tetrachloroethene		41 (EE) st	<14								
Tetrahydrofuran		2,100 nc	<5.9								
Toluene		5,200 nc	57								
Trichloroethene		2.0 (DD) dev	<11								
Trichlorofluoromethane		460 nc	<11								
Vinyl chloride		1.6 (MM) mut	<5.1								
Vinyl acetate		NC	<7.0								
p,m-Xylene		NC	22								
o-Xylene		NC	<8.7								
Total Xylene		230 (J)	<26								

Notes on Page 19.

TABLE 1
RACER Trust - Coldwater Road
Vapor Intrusion Sampling
Soil Gas Results December 2017 through December 2022
Compared to SSVIAC Table 1 (crawl space with a dirt floor)

Compound	Sample ID: Units:	EGLE Site-Specific Residential Volatilization to Indoor Air Criteria (SSVIAC) - Table 1 (crawl space with a dirt floor) µg/m ³	VP-3S µg/m ³	VP-3S µg/m ³	VP-3S µg/m ³	VP-3S µg/m ³	VP-3S (DUP-1) µg/m ³	VP-3S µg/m ³	VP-3S µg/m ³	VP-3S µg/m ³	VP-3S µg/m ³	VP-3S µg/m ³	VP-3S µg/m ³
Sample Date:			6/29/2018	10/25/2018	11/19/2019	2/22/2021	2/22/2021	5/27/2021	8/26/2021	12/8/2021	12/21/2022	12/21/2022	
Acetone	NC		48		<48	<48	<48		<48	<48	<48	<18	
1,3-Butadiene	NC		<4.4		<4.4	<4.4	<4.4		<4.4	<4.4	<4.4	<1.8	
Benzene	3.3 ca		16		<6.4	<6.4	<6.4		<6.4	<6.4	<6.4	<1.7	
Bromodichloromethane	NC		<13		<13	<13	<13		<13	<13	<13	<1.8	
Bromoform	NC		<21		<21	<21	<21		<21	<21	<21	<1.8	
Bromomethane	NC		<7.8		<7.8	<7.8	<7.8		<7.8	<7.8	<7.8	<1.7	
Vinyl bromide	NC		<8.7		<8.7	<8.7	<8.7		<8.7	<8.7	<8.7	--	
Benzyl chloride	NC		<10		<10	<10	<10		<10	<10	<10	<6.8	
Carbon Disulfide	NC		56		<16	<16	<16		<16	<16	<62	<3.7	
Chlorobenzene	NC		<9.2		<9.2	<9.2	<9.2		<9.2	<9.2	<9.2	<1.8	
Chloroethane	NC		<5.3		<5.3	<5.3	<5.3		<5.3	<5.3	<5.3	<1.7	
Chloroform	NC		15		<9.8	<9.8	<9.8		<9.8	<9.8	<9.8	<1.8	
Chloromethane	NC		<4.1		<4.1	<4.1	<4.1		<4.1	<4.1	<4.1	<1.7	
3-Chloropropene	NC		<6.3		<6.3	<6.3	<6.3		<6.3	<6.3	<6.3	--	
2-Chlorotoluene	NC		<10		<10	<10	<10		<10	<10	<10	--	
Carbon tetrachloride	NC		<13		<13	<13	<13		<13	<13	<13	<1.7	
Cumene	NC		--		--	--	--		--	--	--	<1.8	
Cyclohexane	6,300 nc		<6.9		<6.9	<6.9	<6.9		<6.9	<6.9	<6.9	<3.7	
1,1-Dichloroethane	15 ca		<8.1		<8.1	<8.1	<8.1		<8.1	<8.1	<8.1	<1.8	
1,1-Dichloroethene	210 nc		<7.9		<7.9	<7.9	<7.9		<7.9	<7.9	<7.9	<1.8	
1,2-Dichloro-1,1,2,2-tetrafluoroethane	NR		--		--	--	--		--	--	--	<1.8	
1,2-Dibromoethane	NC		<15		<15	<15	<15		<15	<15	<15	<1.8	
1,2-Dichloroethane	0.98 ca		<8.1		<8.1	<8.1	<8.1		<8.1	<8.1	<8.1	<1.8	
1,2-Dichloropropane	4.2 nc		<9.2		<9.2	<9.2	<9.2		<9.2	<9.2	<9.2	<1.7	
1,4-Dioxane	5.1 ca		<90		<90	<90	<90		<90	<90	<90	<1.8	
Dichlorodifluoromethane	340 nc		<9.9		<9.9	<9.9	<9.9		<9.9	<9.9	<9.9	2.2	
Dibromochloromethane	43 (MM) mut		<17		<17	<17	<17		<17	<17	<17	<1.8	
trans-1,2-Dichloroethene	83		<7.9		<7.9	<7.9	<7.9		<7.9	<7.9	<7.9	<1.8	
cis-1,2-Dichloroethene	8.3 nc		<7.9		<7.9	<7.9	<7.9		<7.9	<7.9	<7.9	<1.8	
cis-1,3-Dichloropropene	6.4 (J) ca		<9.1		<9.1	<9.1	<9.1		<9.1	<9.1	<9.1	<1.7	
1,3-Dichlorobenzene	3.1 nc		<12		<12	<12	<12		<12	<12	<12	<1.8	
1,2-Dichlorobenzene	310 nc		<12		<12	<12	<12		<12	<12	<12	<1.8	
1,4-Dichlorobenzene	6.5 ca		<12		<12	<12	<12		<12	<12	<12	<1.8	
trans-1,3-Dichloropropene	NC		<9.1		<9.1	<9.1	<9.1		<9.1	<9.1	<9.1	<1.7	
Ethanol	19,000 (EE) st		<47		<47	<230	<230		130	196	<47	--	
Ethylbenzene	10 ca		<8.7		<8.7	<8.7	<8.7		<8.7	<8.7	<8.7	<1.8	
Ethyl Acetate	73 nc		<36		<36	<36	<36		<72	<72	<72	<7.1	
4-Ethyltoluene	NC		<9.8		<9.8	<9.8	<9.8		<9.8	<9.8	<9.8	<1.8	
Freon 113	NC		<15		<15	<15	<15		<15	<15	<15	--	
Freon 114	NC		<14		<14	<14	<14		<14	<14	<14	--	
Heptane	3,700 nc		16		<8.2	<8.2	<8.2		<8.2	<8.2	<8.2	<1.8	
Hexachlorobutadiene	1.2 ca		<21		<21	<21	<21		<21	<21	<21	<1.8	
Hexane	730 nc		25		<7.0	<7.0	<7.0		11	<7.0	<7.0	1.9	
2-Hexanone	31 nc		<20		<20	<20	<20		<20	<20	<20	<3.7	
Isopropyl Alcohol	210 nc		<49		<49	<49	<49		250	3,270	49	91	
Methylene Chloride	NC		<17		<17	<17	<17		<17	<17	<17	<1.8	
2-Butanone (MEK)	5,000 (DD) dev		<29		<29	<59	<59		<59	<59	<59	5.3	
4-Methyl-2-pentanone (MIBK)	3,000 (DD) dev		<20		<20	<20	<20		<20	<20	<20	<3.7	
tert-Methyl butyl ether (MTBE)	98 ca		<7.2		<7.2	<7.2	<7.2		<7.2	<7.2	<7.2	<1.8	
Methyl methacrylate	NC		<8.2		<8.2	<8.2	<8.2		<8.2	<8.2	<8.2	--	
Naphthalene	0.75 ca		<10		<10	<10	<10		<10	<10	<10	<1.8	
Propylene	NC		<21 X		<3.4	<170	<170		<170	<170	<170	<1.8	
Styrene	45 ca		<8.5		<8.5	<8.5	<8.5		<8.5	<8.5	<8.5	<1.7	
1,1,1-Trichloroethane	5,000 (EE) st		<11		<11	<11	<11		<11	<11	<11	<1.8	
1,1,2,2-Tetrachloroethane	0.44 ca		<14		<14	<14	<14		<14	<14	<14	<1.8	
1,1,2-Trichloroethane	0.21 nc		<11		<11	<11	<11		<11	<11	<11	<1.8	
1,1,2-Trichlorotrifluoroethane	NC		--		--	--	--		--	--	--	<1.8	
1,2,4-Trichlorobenzene	2.1 nc		<37		<37	<37	<37		<37	<37	<37	<3.7	
1,2,4-Trimethylbenzene	63 (JT) nc		15		<9.8	<9.8	<9.8		15	<9.8	<9.8	<1.8	
1,3,5-Trimethylbenzene	63 (JT) nc		<9.8		<9.8	<9.8	<9.8		<9.8	<9.8	<9.8	<1.8	
2,2,4-Trimethylpentane	3,700 nc		14		<9.3	<9.3	<9.3		9.3	<9.3	<9.3	--	
Tert-butyl Alcohol	NC		<30		<30	<30	<30		<30	<30	<61	--	
Tetrachloroethene	41 (EE) st		<14		<14	<14	<14		<14	<14	<14	<1.8	
Tetrahydrofuran	2,100 nc		15		8.8	12	12		24	<5.9	<5.9	7.1	
Toluene	5,200 nc		49		11	<7.5	<7.5		26	<7.5	<7.5	11	
Trichloroethene	2.0 (DD) dev		<11		<11	<11	<11		<11	<11	<11	<1.8	
Trichlorofluoromethane	460 nc		<11		<11	<11	<11		<11	<11	<11	<1.8	
Vinyl chloride	1.6 (MM) mut		<5.1		<5.1	<5.1	<5.1		<5.1	<5.1	<5.1	<1.8	
Vinyl acetate	NC		<7.0		<7.0	<7.0	<7.0		<7.0	<7.0	<7.0	--	
p,m-Xylene	NC		30		<17	<17	<17		17	<17	<17	4.5	
o-Xylene	NC		13		<8.7	<8.7	<8.7		<8.7	<8.7	<8.7	<1.8	
Total Xylene	230 (J)		43		<26	<26	<26		<26	<26	<26	--	

Groundwater Interference, Groundwater Sample Collected. See Table 2.

Notes on Page 19.

TABLE 1
RACER Trust - Coldwater Road
Vapor Intrusion Sampling
Soil Gas Results December 2017 through December 2022
Compared to SSVIAC Table 1 (crawlpace with a dirt floor)

Compound	Sample ID: Units:	EGLE Site-Specific Residential Volatilization to Indoor Air Criteria (SSVIAC) - Table 1 (crawlpace with a dirt floor) µg/m ³	VP-3M µg/m ³	VP-3M µg/m ³	VP-3M µg/m ³	VP-3M µg/m ³	VP-3M µg/m ³	VP-3M µg/m ³	VP-3M µg/m ³	VP-3M µg/m ³
Sample Date:			6/29/2018	10/25/2018	11/19/2019	2/22/2021	5/27/2021	8/26/2021	12/8/2021	12/21/2022
Acetone		NC								<48
1,3-Butadiene		NC								<44
Benzene		3.3 ca								<6.4
Bromodichloromethane		NC								<13
Bromoform		NC								<21
Bromomethane		NC								<7.8
Vinyl bromide		NC								<8.7
Benzyl chloride		NC								<10
Carbon Disulfide		NC								<62
Chlorobenzene		NC								<9.2
Chloroethane		NC								<53
Chloroform		NC								<9.8
Chloromethane		NC								<41
3-Chloropropene		NC								<63
2-Chlorotoluene		NC								<10
Carbon tetrachloride		NC								<13
Cumene		NC								-
Cyclohexane		6,300 nc								<6.9
1,1-Dichloroethane		16 ca								<8.1
1,1-Dichloroethene		210 nc								<7.9
1,2-Dichloro-1,1,2,2-tetrafluoroethane		NR								-
1,2-Dibromoethane		NC								<15
1,2-Dichloroethane		0.98 ca								<8.1
1,2-Dichloropropane		4.2 nc								<9.2
1,4-Dioxane		5.1 ca								<90
Dichlorodifluoromethane		340 nc								<9.9
Dibromochloromethane		43 (MM) mut								<17
trans-1,2-Dichloroethene		83								<7.9
cis-1,2-Dichloroethene		8.3 nc								<7.9
cis-1,3-Dichloropropene		6.4 (J) ca								<9.1
1,3-Dichlorobenzene		3.1 nc								<12
1,2-Dichlorobenzene		310 nc								<12
1,4-Dichlorobenzene		6.5 ca								<12
trans-1,3-Dichloropropene		NC								<9.1
Ethanol		19,000 (EE) st								<47
Ethylbenzene		10 ca								<8.7
Ethyl Acetate		73 nc								<72
4-Ethyltoluene		NC								<9.8
Freon 113		NC								<15
Freon 114		NC								<14
Heptane		3,700 nc								<8.2
Hexachlorobutadiene		1.2 ca								<21
Hexane		730 nc								<7.0
2-Hexanone		31 nc								<20
Isopropyl Alcohol		210 nc								120
Methylene Chloride		NC								<17
2-Butanone (MEK)		5,000 (DD) dev								<59
4-Methyl-2-pentanone (MIBK)		3,000 (DD) dev								<20
tert-Methyl butyl ether (MTBE)		98 ca								<7.2
Methyl methacrylate		NC								<8.2
Naphthalene		0.75 ca								<10
Propylene		NC								<170
Styrene		45 ca								<8.5
1,1,1-Trichloroethane		5,000 (EE) st								<11
1,1,2,2-Tetrachloroethane		0.44 ca								<14
1,1,2-Trichloroethane		0.21 nc								<11
1,1,2-Trichlorotrifluoroethane		NC								-
1,2,4-Trichlorobenzene		2.1 nc								<37
1,2,4-Trimethylbenzene		63 (JT) nc								<9.8
1,3,5-Trimethylbenzene		63 (JT) nc								<9.8
2,2,4-Trimethylpentane		3,700 nc								<9.3
Tert-butyl Alcohol		NC								<61
Tetrachloroethene		41 (EE) st								<14
Tetrahydrofuran		2,100 nc								<5.9
Toluene		5,200 nc								7.5
Trichloroethene		2.0 (DD) dev								<11
Trichlorofluoromethane		460 nc								<11
Vinyl chloride		1.6 (MM) mut								<5.1
Vinyl acetate		NC								<70
p,m-Xylene		NC								<17
o-Xylene		NC								<8.7
Total Xylene		230 (J)								<26

Notes on Page 19.

TABLE 1
RACER Trust - Coldwater Road
Vapor Intrusion Sampling
Soil Gas Results December 2017 through December 2022
Compared to SSVIAC Table 1 (crawlspce with a dirt floor)

Compound	Sample ID: Units:	EGLE Site-Specific Residential Volatilization to Indoor Air Criteria (SSVIAC) - Table 1 (crawlspce with a dirt floor) µg/m ³	VP-3D µg/m ³	VP-3D µg/m ³	VP-3D µg/m ³	VP-3D µg/m ³	VP-3D µg/m ³	VP-3D µg/m ³	VP-3D µg/m ³	VP-3D µg/m ³
Sample Date:			6/29/2018	10/25/2018	11/19/2019	2/22/2021	5/27/2021	8/26/2021	12/8/2021	12/21/2022
Acetone		NC	570							
1,3-Butadiene		NC	<4.4							
Benzene		3.3 ca	16							
Bromodichloromethane		NC	<13							
Bromoform		NC	<21							
Bromomethane		NC	<7.8							
Vinyl bromide		NC	<8.7							
Benzyl chloride		NC	<10							
Carbon Disulfide		NC	40							
Chlorobenzene		NC	<9.2							
Chloroethane		NC	<5.3							
Chloroform		NC	<9.8							
Chloromethane		NC	<4.1							
3-Chloropropene		NC	<6.3							
2-Chlorotoluene		NC	<10							
Carbon tetrachloride		NC	<13							
Cumene		NC	--							
Cyclohexane		6,300 nc	6.9							
1,1-Dichloroethane		16 ca	<8.1							
1,1-Dichloroethene		210 nc	<7.9							
1,2-Dichloro-1,1,2,2-tetrafluoroethane		NR	--							
1,2-Dibromoethane		NC	<15							
1,2-Dichloroethane		0.98 ca	<8.1							
1,2-Dichloropropane		4.2 nc	<9.2							
1,4-Dioxane		5.1 ca	<90							
Dichlorodifluoromethane		340 nc	<9.9							
Dibromochloromethane		43 (MM) mut	<17							
trans-1,2-Dichloroethene		83	<7.9							
cis-1,2-Dichloroethene		8.3 nc	<7.9							
cis-1,3-Dichloropropene		6.4 (J) ca	<9.1							
1,3-Dichlorobenzene		3.1 nc	<12							
1,2-Dichlorobenzene		310 nc	<12							
1,4-Dichlorobenzene		6.5 ca	<12							
trans-1,3-Dichloropropene		NC	<9.1							
Ethanol		19,000 (EE) st	2,116 E							
Ethylbenzene		10 ca	130							
Ethyl Acetate		73 nc	<36							
4-Ethyltoluene		NC	<9.8							
Freon 113		NC	<15							
Freon 114		NC	<14							
Heptane		3,700 nc	25							
Hexachlorobutadiene		1.2 ca	<21							
Hexane		730 nc	63							
2-Hexanone		31 nc	<20							
Isopropyl Alcohol		210 nc	170							
Methylene Chloride		NC	<17							
2-Butanone (MEK)		5,000 (DD) dev	59							
4-Methyl-2-pentanone (MIBK)		3,000 (DD) dev	<20							
tert-Methyl butyl ether (MTBE)		98 ca	<7.2							
Methyl methacrylate		NC	<8.2							
Naphthalene		0.75 ca	<10							
Propylene		NC	1,800 E							
Styrene		45 ca	<8.5							
1,1,1-Trichloroethane		5,000 (EE) st	<11							
1,1,2,2-Tetrachloroethane		0.44 ca	<14							
1,1,2-Trichloroethane		0.21 nc	<11							
1,1,2-Trichlorotrifluoroethane		NC	--							
1,2,4-Trichlorobenzene		2.1 nc	<37							
1,2,4-Trimethylbenzene		63 (JT) nc	<20 X							
1,3,5-Trimethylbenzene		63 (JT) nc	<9.8							
2,2,4-Trimethylpentane		3,700 nc	28							
Tert-butyl Alcohol		NC	120							
Tetrachloroethene		41 (EE) st	<14							
Tetrahydrofuran		2,100 nc	8.8							
Toluene		5,200 nc	60							
Trichloroethene		2.0 (DD) dev	<11							
Trichlorofluoromethane		460 nc	<11							
Vinyl chloride		1.6 (MM) mut	<5.1							
Vinyl acetate		NC	<7.0							
p,m-Xylene		NC	380							
o-Xylene		NC	96							
Total Xylene		230 (J)	480							

Notes on Page 19.

TABLE 1
RACER Trust - Coldwater Road
Vapor Intrusion Sampling
Soil Gas Results December 2017 through December 2022
Compared to SSVIAC Table 1 (crawl space with a dirt floor)

Compound	Sample ID: Units:	EGLE Site-Specific Residential Volatilization to Indoor Air Criteria (SSVIAC) - Table 1 (crawl space with a dirt floor) µg/m ³	VP-4S µg/m ³	VP-4S µg/m ³	VP-4S µg/m ³	VP-4S µg/m ³	VP-4S µg/m ³	VP-4S µg/m ³
	Sample Date:		10/25/2018	11/19/2019	2/22/2021	5/27/2021	8/26/2021	12/8/2021
Acetone		NC	Groundwater Interference. No Vapor or Groundwater Sample Collected	Groundwater Interference. Groundwater Sample Collected. See Table 2.	Probe Destroyed. No Vapor or Groundwater Sample Collected.	Probe Destroyed. No Vapor or Groundwater Sample Collected.	Probe Destroyed. No Vapor or Groundwater Sample Collected.	Probe Destroyed. No Vapor or Groundwater Sample Collected.
1,3-Butadiene		NC						
Benzene		3.3 ca						
Bromodichloromethane		NC						
Bromoform		NC						
Bromomethane		NC						
Vinyl bromide		NC						
Benzyl chloride		NC						
Carbon Disulfide		NC						
Chlorobenzene		NC						
Chloroethane		NC						
Chloroform		NC						
Chloromethane		NC						
3-Chloropropene		NC						
2-Chlorotoluene		NC						
Carbon tetrachloride		NC						
Cumene		NC						
Cyclohexane		6,300 nc						
1,1-Dichloroethane		16 ca						
1,1-Dichloroethene		210 nc						
1,2-Dichloro-1,1,2,2-tetrafluoroethane		NR						
1,2-Dibromoethane		NC						
1,2-Dichloroethane		0.98 ca						
1,2-Dichloropropane		4.2 nc						
1,4-Dioxane		5.1 ca						
Dichlorodifluoromethane		340 nc						
Dibromochloromethane		43 (MM) mut						
trans-1,2-Dichloroethene		83						
cis-1,2-Dichloroethene		8.3 nc						
cis-1,3-Dichloropropene		6.4 (J) ca						
1,3-Dichlorobenzene		3.1 nc						
1,2-Dichlorobenzene		310 nc						
1,4-Dichlorobenzene		6.5 ca						
trans-1,3-Dichloropropene		NC						
Ethanol		19,000 (EE) st						
Ethylbenzene		10 ca						
Ethyl Acetate		73 nc						
4-Ethyltoluene		NC						
Freon 113		NC						
Freon 114		NC						
Heptane		3,700 nc						
Hexachlorobutadiene		1.2 ca						
Hexane		730 nc						
2-Hexanone		31 nc						
Isopropyl Alcohol		210 nc						
Methylene Chloride		NC						
2-Butanone (MEK)		5,000 (DD) dev						
4-Methyl-2-pentanone (MIBK)		3,000 (DD) dev						
tert-Methyl butyl ether (MTBE)		98 ca						
Methyl methacrylate		NC						
Naphthalene		0.75 ca						
Propylene		NC						
Styrene		45 ca						
1,1,1-Trichloroethane		5,000 (EE) st						
1,1,2,2-Tetrachloroethane		0.44 ca						
1,1,2-Trichloroethane		0.21 nc						
1,1,2-Trichlorotrifluoroethane		NC						
1,2,4-Trichlorobenzene		2.1 nc						
1,2,4-Trimethylbenzene		63 (JT) nc						
1,3,5-Trimethylbenzene		63 (JT) nc						
2,2,4-Trimethylpentane		3,700 nc						
Tert-butyl Alcohol		NC						
Tetrachloroethene		41 (EE) st						
Tetrahydrofuran		2,100 nc						
Toluene		5,200 nc						
Trichloroethene		2.0 (DD) dev						
Trichlorofluoromethane		460 nc						
Vinyl chloride		1.6 (MM) mut						
Vinyl acetate		NC						
p,m-Xylene		NC						
o-Xylene		NC						
Total Xylene		230 (J)						

Notes on Page 19.

TABLE 1
RACER Trust - Coldwater Road
Vapor Intrusion Sampling
Soil Gas Results December 2017 through December 2022
Compared to SSVIAC Table 1 (crawl space with a dirt floor)

Compound	Sample ID: Units:	EGLE Site-Specific Residential Volatilization to Indoor Air Criteria (SSVIAC) - Table 1 (crawl space with a dirt floor) µg/m ³	VP-4M µg/m ³	VP-4M µg/m ³	VP-4M µg/m ³	VP-4M µg/m ³	VP-4M µg/m ³	VP-4M µg/m ³
Sample Date:			10/25/2018	11/19/2019	2/22/2021	5/27/2021	8/26/2021	12/8/2021
Acetone		NC	Groundwater Interference. No Vapor or Groundwater Sample Collected	Groundwater Interference. Groundwater Sample Collected. See Table 2.	Probe Destroyed. No Vapor or Groundwater Sample Collected.	Probe Destroyed. No Vapor or Groundwater Sample Collected.	Probe Destroyed. No Vapor or Groundwater Sample Collected.	Probe Destroyed. No Vapor or Groundwater Sample Collected.
1,3-Butadiene		NC						
Benzene		3.3 ca						
Bromodichloromethane		NC						
Bromoform		NC						
Bromomethane		NC						
Vinyl bromide		NC						
Benzyl chloride		NC						
Carbon Disulfide		NC						
Chlorobenzene		NC						
Chloroethane		NC						
Chloroform		NC						
Chloromethane		NC						
3-Chloropropene		NC						
2-Chlorotoluene		NC						
Carbon tetrachloride		NC						
Cumene		NC						
Cyclohexane		6,300 nc						
1,1-Dichloroethane		16 ca						
1,1-Dichloroethene		210 nc						
1,2-Dichloro-1,1,2,2-tetrafluoroethane		NR						
1,2-Dibromoethane		NC						
1,2-Dichloroethane		0.98 ca						
1,2-Dichloropropane		4.2 nc						
1,4-Dioxane		5.1 ca						
Dichlorodifluoromethane		340 nc						
Dibromochloromethane		43 (MM) mut						
trans-1,2-Dichloroethene		83						
cis-1,2-Dichloroethene		8.3 nc						
cis-1,3-Dichloropropene		6.4 (J) ca						
1,3-Dichlorobenzene		3.1 nc						
1,2-Dichlorobenzene		310 nc						
1,4-Dichlorobenzene		6.5 ca						
trans-1,3-Dichloropropene		NC						
Ethanol		19,000 (EE) st						
Ethylbenzene		10 ca						
Ethyl Acetate		73 nc						
4-Ethyltoluene		NC						
Freon 113		NC						
Freon 114		NC						
Heptane		3,700 nc						
Hexachlorobutadiene		1.2 ca						
Hexane		730 nc						
2-Hexanone		31 nc						
Isopropyl Alcohol		210 nc						
Methylene Chloride		NC						
2-Butanone (MEK)		5,000 (DD) dev						
4-Methyl-2-pentanone (MIBK)		3,000 (DD) dev						
tert-Methyl butyl ether (MTBE)		98 ca						
Methyl methacrylate		NC						
Naphthalene		0.75 ca						
Propylene		NC						
Styrene		45 ca						
1,1,1-Trichloroethane		5,000 (EE) st						
1,1,2,2-Tetrachloroethane		0.44 ca						
1,1,2-Trichloroethane		0.21 nc						
1,1,2-Trichlorotrifluoroethane		NC						
1,2,4-Trichlorobenzene		2.1 nc						
1,2,4-Trimethylbenzene		63 (JT) nc						
1,3,5-Trimethylbenzene		63 (JT) nc						
2,2,4-Trimethylpentane		3,700 nc						
Tert-butyl Alcohol		NC						
Tetrachloroethene		41 (EE) st						
Tetrahydrofuran		2,100 nc						
Toluene		5,200 nc						
Trichloroethene		2.0 (DD) dev						
Trichlorofluoromethane		460 nc						
Vinyl chloride		1.6 (MM) mut						
Vinyl acetate		NC						
p,m-Xylene		NC						
o-Xylene		NC						
Total Xylene		230 (J)						

Notes on Page 19.

TABLE 1
RACER Trust - Coldwater Road
Vapor Intrusion Sampling
Soil Gas Results December 2017 through December 2022
Compared to SSVIAC Table 1 (crawl space with a dirt floor)

Compound	Sample ID: Units:	EGLE Site-Specific Residential Volatilization to Indoor Air Criteria (SSVIAC) - Table 1 (crawl space with a dirt floor) µg/m ³	VP-4D µg/m ³	VP-4D µg/m ³	VP-4D µg/m ³	VP-4D µg/m ³	VP-4D µg/m ³	VP-4D µg/m ³
Sample Date:			10/25/2018	11/19/2019	2/22/2021	5/27/2021	8/26/2021	12/8/2021
Acetone		NC	Groundwater Interference. No Vapor or Groundwater Sample Collected	Groundwater Interference. Groundwater Sample Collected. See Table 2.	Probe Destroyed. No Vapor or Groundwater Sample Collected.	Probe Destroyed. No Vapor or Groundwater Sample Collected.	Probe Destroyed. No Vapor or Groundwater Sample Collected.	Probe Destroyed. No Vapor or Groundwater Sample Collected.
1,3-Butadiene		NC						
Benzene		3.3 ca						
Bromodichloromethane		NC						
Bromoform		NC						
Bromomethane		NC						
Vinyl bromide		NC						
Benzyl chloride		NC						
Carbon Disulfide		NC						
Chlorobenzene		NC						
Chloroethane		NC						
Chloroform		NC						
Chloromethane		NC						
3-Chloropropene		NC						
2-Chlorotoluene		NC						
Carbon tetrachloride		NC						
Cumene		NC						
Cyclohexane		6,300 nc						
1,1-Dichloroethane		16 ca						
1,1-Dichloroethene		210 nc						
1,2-Dichloro-1,1,2,2-tetrafluoroethane		NR						
1,2-Dibromoethane		NC						
1,2-Dichloroethane		0.98 ca						
1,2-Dichloropropane		4.2 nc						
1,4-Dioxane		5.1 ca						
Dichlorodifluoromethane		340 nc						
Dibromochloromethane		43 (MM) mut						
trans-1,2-Dichloroethene		83						
cis-1,2-Dichloroethene		8.3 nc						
cis-1,3-Dichloropropene		6.4 (J) ca						
1,3-Dichlorobenzene		3.1 nc						
1,2-Dichlorobenzene		310 nc						
1,4-Dichlorobenzene		6.5 ca						
trans-1,3-Dichloropropene		NC						
Ethanol		19,000 (EE) st						
Ethylbenzene		10 ca						
Ethyl Acetate		73 nc						
4-Ethyltoluene		NC						
Freon 113		NC						
Freon 114		NC						
Heptane		3,700 nc						
Hexachlorobutadiene		1.2 ca						
Hexane		730 nc						
2-Hexanone		31 nc						
Isopropyl Alcohol		210 nc						
Methylene Chloride		NC						
2-Butanone (MEK)		5,000 (DD) dev						
4-Methyl-2-pentanone (MIBK)		3,000 (DD) dev						
tert-Methyl butyl ether (MTBE)		98 ca						
Methyl methacrylate		NC						
Naphthalene		0.75 ca						
Propylene		NC						
Styrene		45 ca						
1,1,1-Trichloroethane		5,000 (EE) st						
1,1,2,2-Tetrachloroethane		0.44 ca						
1,1,2-Trichloroethane		0.21 nc						
1,1,2-Trichlorotrifluoroethane		NC						
1,2,4-Trichlorobenzene		2.1 nc						
1,2,4-Trimethylbenzene		63 (JT) nc						
1,3,5-Trimethylbenzene		63 (JT) nc						
2,2,4-Trimethylpentane		3,700 nc						
Tert-butyl Alcohol		NC						
Tetrachloroethene		41 (EE) st						
Tetrahydrofuran		2,100 nc						
Toluene		5,200 nc						
Trichloroethene		2.0 (DD) dev						
Trichlorofluoromethane		460 nc						
Vinyl chloride		1.6 (MM) mut						
Vinyl acetate		NC						
p,m-Xylene		NC						
o-Xylene		NC						
Total Xylene		230 (J)						

Notes on Page 19.

TABLE 1
RACER Trust - Coldwater Road
Vapor Intrusion Sampling
Soil Gas Results December 2017 through December 2022
Compared to SSVIAC Table 1 (crawl space with a dirt floor)

Compound	Sample ID: Units:	EGLE Site-Specific Residential Volatilization to Indoor Air Criteria (SSVIAC) - Table 1 (crawl space with a dirt floor) µg/m ³	VP-5S µg/m ³	VP-5S (DUP-1) µg/m ³	VP-5S µg/m ³	VP-5S µg/m ³	VP-5S µg/m ³	VP-5S µg/m ³	VP-5S µg/m ³	VP-5S µg/m ³
Sample Date:			10/25/2018	10/25/2018	11/18/2019	2/22/2021	5/27/2021	8/26/2021	12/8/2021	12/21/2022
Acetone	NC	NC	<48	<48	71	<48			<48	<48
1,3-Butadiene	NC	NC	<4.4	<4.4	<4.4	<4.4			<4.4	<4.4
Benzene	3.3 ca	NC	<6.4	<6.4	<6.4	<6.4			<6.4	<6.4
Bromodichloromethane	NC	NC	<13	<13	<13	<13			<13	<13
Bromoform	NC	NC	<21	<21	<21	<21			<21	<21
Bromomethane	NC	NC	<7.8	<7.8	<7.8	<7.8			<7.8	<7.8
Vinyl bromide	NC	NC	<8.7	<8.7	<8.7	<8.7			<8.7	<8.7
Benzyl chloride	NC	NC	<10	<10	<10	<10			<10	<10
Carbon Disulfide	NC	75	78	<16	<16	<16			<16	<62
Chlorobenzene	NC	NC	<9.2	<9.2	<9.2	<9.2			<9.2	<9.2
Chloroethane	NC	NC	<5.3	<5.3	<5.3	<5.3			<5.3	<5.3
Chloroform	NC	NC	<9.8	<9.8	<9.8	<9.8			<9.8	<9.8
Chloromethane	NC	NC	<4.1	<4.1	<4.1	<4.1			<4.1	<4.1
3-Chloropropene	NC	NC	<6.3	<6.3	<6.3	<6.3			<6.3	<6.3
2-Chlorotoluene	NC	NC	<10	<10	<10	<10			<10	<10
Carbon tetrachloride	NC	NC	<13	<13	<13	<13			<13	<13
Cumene	NC	NC	--	--	--	--			--	--
Cyclohexane	6,300 nc	NC	<6.9	<6.9	<6.9	<6.9			<6.9	<6.9
1,1-Dichloroethane	16 ca	NC	<8.1	<8.1	<8.1	<8.1			<8.1	<8.1
1,1-Dichloroethene	210 nc	NC	<7.9	<7.9	<7.9	<7.9			<7.9	<7.9
1,2-Dichloro-1,1,2,2-tetrafluoroethane	NR	NC	--	--	--	--			--	--
1,2-Dibromoethane	NC	NC	<15	<15	<15	<15			<15	<15
1,2-Dichloroethane	0.98 ca	NC	<8.1	<8.1	<8.1	<8.1			<8.1	<8.1
1,2-Dichloropropane	4.2 nc	NC	<9.2	<9.2	<9.2	<9.2			<9.2	<9.2
1,4-Dioxane	5.1 ca	NC	<90	<90	<90	<90			<90	<90
Dichlorodifluoromethane	340 nc	NC	<9.9	<9.9	<9.9	<9.9			<9.9	<9.9
Dibromochloromethane	43 (MM) mut	NC	<17	<17	<17	<17			<17	<17
trans-1,2-Dichloroethene	83	NC	<7.9	<7.9	<7.9	<7.9			<7.9	<7.9
cis-1,2-Dichloroethene	8.3 nc	NC	<7.9	<7.9	<7.9	<7.9			<7.9	<7.9
cis-1,3-Dichloropropene	6.4 (J) ca	NC	<9.1	<9.1	<9.1	<9.1			<9.1	<9.1
1,3-Dichlorobenzene	3.1 nc	NC	<12	<12	<12	<12			<12	<12
1,2-Dichlorobenzene	310 nc	NC	<12	<12	<12	<12			<12	<12
1,4-Dichlorobenzene	6.5 ca	NC	<12	<12	<12	<12			<12	<12
trans-1,3-Dichloropropene	NC	NC	<9.1	<9.1	<9.1	<9.1			<9.1	<9.1
Ethanol	19,000 (EE) st	NC	<47	<47	89	<230			<47	<47
Ethylbenzene	10 ca	NC	<8.7	<8.7	<8.7	<8.7			<8.7	<8.7
Ethyl Acetate	73 nc	NC	<36	<36	<36	<36			<72	<72
4-Ethyltoluene	NC	NC	<9.8	<9.8	<9.8	<9.8			<9.8	<9.8
Freon 113	NC	NC	<15	<15	<15	<15			<15	<15
Freon 114	NC	NC	<14	<14	<14	<14			<14	<14
Heptane	3,700 nc	NC	<8.2	<8.2	<8.2	<8.2			<8.2	<8.2
Hexachlorobutadiene	1.2 ca	NC	<21	<21	<21	<21			<21	<21
Hexane	730 nc	7.0	7.0	<7.0	<7.0	<7.0			<7.0	<7.0
2-Hexanone	31 nc	NC	<20	<20	<20	<20			<20	<20
Isopropyl Alcohol	210 nc	NC	<49	<49	<49	<49			74	120
Methylene Chloride	NC	NC	<17	<17	<17	<17			<17	<17
2-Butanone (MEK)	5,000 (DD) dev	NC	<29	<29	<29	<29			<59	<59
4-Methyl-2-pentanone (MIBK)	3,000 (DD) dev	NC	<20	<20	<20	<20			<20	<20
tert-Methyl butyl ether (MTBE)	98 ca	NC	<7.2	<7.2	<7.2	<7.2			<7.2	<7.2
Methyl methacrylate	NC	NC	<8.2	<8.2	<8.2	<8.2			<8.2	<8.2
Naphthalene	0.75 ca	NC	<10	<10	<10	<10			<10	<10
Propylene	NC	NC	<8.6 X	<6.9 X	<91 X	<170			<170	<170
Styrene	45 ca	NC	<8.5	<8.5	<8.5	<8.5			<8.5	<8.5
1,1,1-Trichloroethane	5,000 (EE) st	NC	<11	<11	<11	<11			<11	<11
1,1,2,2-Tetrachloroethane	0.44 ca	NC	<14	<14	<14	<14			<14	<14
1,1,2-Trichloroethane	0.21 nc	NC	<11	<11	<11	<11			<11	<11
1,1,2-Trichlorotrifluoroethane	NC	NC	--	--	--	--			--	--
1,2,4-Trichlorobenzene	2.1 nc	NC	<37	<37	<37	<37			<37	<37
1,2,4-Trimethylbenzene	63 (JT) nc	NC	<9.8	<9.8	<9.8	<9.8			<9.8	<9.8
1,3,5-Trimethylbenzene	63 (JT) nc	NC	<9.8	<9.8	<9.8	<9.8			<9.8	<9.8
2,2,4-Trimethylpentane	3,700 nc	NC	<9.3	<9.3	<9.3	<9.3			<9.3	<9.3
Tert-butyl Alcohol	NC	NC	<30	<30	<30	<30			<30	<61
Tetrachloroethene	41 (EE) st	NC	<14	<14	<14	<14			<14	<14
Tetrahydrofuran	2,100 nc	12	12	44	<5.9	<5.9			<5.9	8.8
Toluene	5,200 nc	38	38	11	<7.5	<7.5			11	<7.5
Trichloroethene	2.0 (DD) dev	NC	<11	<11	<11	<11			<11	<11
Trichlorofluoromethane	460 nc	NC	<11	<11	<11	<11			<11	<11
Vinyl chloride	1.6 (MM) mut	NC	<5.1	<5.1	<5.1	<5.1			<5.1	<5.1
Vinyl acetate	NC	NC	<7.0	<7.0	<7.0	<7.0			<7.0	<7.0
p,m-Xylene	NC	NC	<17	<17	<17	<17			<17	<17
o-Xylene	NC	NC	<8.7	<8.7	<8.7	<8.7			<8.7	<8.7
Total Xylene	230 (J)	NC	<26	<26	<26	<26			<26	<26

Groundwater Interference. Groundwater Sample Collected. See Table 2.

Groundwater Interference. Groundwater Sample Attempted. Low Volume. No Vapor or Groundwater Sample Collected.

Notes on Page 19.

TABLE 1
RACER Trust - Coldwater Road
Vapor Intrusion Sampling
Soil Gas Results December 2017 through December 2022
Compared to SSVIAC Table 1 (crawl space with a dirt floor)

Compound	Sample ID: Units:	EGLE Site-Specific Residential Volatilization to Indoor Air Criteria (SSVIAC) - Table 1 (crawlspce with a dirt floor) µg/m³	VP-5M µg/m³	VP-5M µg/m³	VP-5M µg/m³	VP-5M µg/m³	VP-5M µg/m³	VP-5M µg/m³	VP-5M (VP-DUP-082621) µg/m³	VP-5M µg/m³	VP-5M µg/m³	VP-5M µg/m³ (Analyzed by ALS)
Sample Date:			10/25/2018	11/18/2019	2/22/2021	5/27/2021	8/26/2021	8/26/2021	12/8/2021	12/21/2022	12/21/2022	
Acetone	NC		<48	<48	<48		260	260	190	<48	<17	
1,3-Butadiene	NC		<4.4	<4.4	<4.4		<44	<44	<44	<44	<1.7	
Benzene	3.3 ca		9.6	<6.4	<6.4		<6.4	<6.4	<6.4	<6.4	2.2	
Bromodichloromethane	NC		<13	<13	<13		<13	<13	<13	<13	<1.7	
Bromoform	NC		<21	<21	<21		<21	<21	<21	<21	<1.7	
Bromomethane	NC		<7.8	<7.8	<7.8		<7.8	<7.8	<7.8	<7.8	<1.7	
Vinyl bromide	NC		<8.7	<8.7	<8.7		<8.7	<8.7	<8.7	<8.7	--	
Benzyl chloride	NC		<10	<10	<10		<10	<10	<10	<10	<6.6	
Carbon Disulfide	NC		290	<16	<16		<16	<16	<16	<62	<3.6	
Chlorobenzene	NC		<9.2	<9.2	<9.2		<9.2	<9.2	<9.2	<9.2	<1.7	
Chloroethane	NC		<5.3	<5.3	<5.3		<53	<53	<53	<53	<1.7	
Chloroform	NC		<9.8	<9.8	<9.8		<9.8	<9.8	<9.8	<9.8	<1.8	
Chloromethane	NC		<4.1	<4.1	<4.1		<41	<41	<41	<41	<1.7	
3-Chloropropene	NC		<6.3	<6.3	<6.3		<63	<63	<63	<63	--	
2-Chlorotoluene	NC		<10	<10	<10		<10	<10	<10	<10	--	
Carbon tetrachloride	NC		<13	<13	<13		<13	<13	<13	<13	<1.6	
Cumene	NC		--	--	--		--	--	--	--	<1.7	
Cyclohexane	6,300 nc		<6.9	<6.9	<6.9		<6.9	<6.9	<6.9	<6.9	<3.6	
1,1-Dichloroethane	16 ca		<8.1	<8.1	<8.1		<8.1	<8.1	<8.1	<8.1	<1.7	
1,1-Dichloroethene	210 nc		<7.9	<7.9	<7.9		<7.9	<7.9	<7.9	<7.9	<1.8	
1,2-Dichloro-1,1,2,2-tetrafluoroethane	NR		--	--	--		--	--	--	--	<1.8	
1,2-Dibromoethane	NC		<15	<15	<15		<15	<15	<15	<15	<1.7	
1,2-Dichloroethane	0.98 ca		<8.1	<8.1	<8.1		<8.1	<8.1	<8.1	<8.1	<1.7	
1,2-Dichloropropane	4.2 nc		<9.2	<9.2	<9.2		<9.2	<9.2	<9.2	<9.2	<1.6	
1,4-Dioxane	5.1 ca		<90	<90	<90		<90	<90	<90	<90	<1.7	
Dichlorodifluoromethane	340 nc		<9.9	<9.9	<9.9		<9.9	<9.9	<9.9	<9.9	2.1	
Dibromochloromethane	43 (MM) mut		<17	<17	<17		<17	<17	<17	<17	<1.7	
trans-1,2-Dichloroethene	83		<7.9	<7.9	<7.9		<7.9	<7.9	<7.9	<7.9	<1.7	
cis-1,2-Dichloroethene	8.3 nc		<7.9	<7.9	<7.9		<7.9	<7.9	<7.9	<7.9	<1.7	
cis-1,3-Dichloropropene	6.4 (J) ca		<9.1	<9.1	<9.1		<9.1	<9.1	<9.1	<9.1	<1.6	
1,3-Dichlorobenzene	3.1 nc		<12	<12	<12		<12	<12	<12	<12	<1.7	
1,2-Dichlorobenzene	310 nc		<12	<12	<12		<12	<12	<12	<12	<1.7	
1,4-Dichlorobenzene	6.5 ca		<12	<12	<12		<12	<12	<12	<12	<1.7	
trans-1,3-Dichloropropene	NC		<9.1	<9.1	<9.1		<9.1	<9.1	<9.1	<9.1	<1.7	
Ethanol	19,000 (EE) st		<47	<47	<230		948	799	110	<47	--	
Ethylbenzene	10 ca		<8.7	<8.7	<8.7		<8.7	<8.7	<8.7	<8.7	<1.7	
Ethyl Acetate	73 nc		<36	<36	<36		<72	<72	<72	<72	<6.9	
4-Ethyltoluene	NC		<9.8	<9.8	<9.8		<9.8	<9.8	<9.8	<9.8	<1.7	
Freon 113	NC		<15	<15	<15		<15	<15	<15	<15	--	
Freon 114	NC		<14	<14	<14		<14	<14	<14	<14	--	
Heptane	3,700 nc		<8.2	<8.2	<8.2		<8.2	<8.2	<8.2	<8.2	1.8	
Hexachlorobutadiene	1.2 ca		<21	<21	<21		<21	<21	<21	<21	<1.7	
Hexane	730 nc		18	<7.0	<7.0		<7.0	<7.0	<7.0	<7.0	2.7	
2-Hexanone	31 nc		<20	<20	<20		<20	<20	<20	<20	<3.6	
Isopropyl Alcohol	210 nc		<49	<49	<49		1,900	1,700	2,400	150	190	
Methylene Chloride	NC		<17	<17	<17		<17	<17	<17	<17	<1.7	
2-Butanone (MEK)	5,000 (DD) dev		<29	<29	<29		<59	<59	<59	<59	9	
4-Methyl-2-pentanone (MIBK)	3,000 (DD) dev		<20	<20	<20		<20	<20	<20	<20	<3.6	
tert-Methyl butyl ether (MTBE)	98 ca		<7.2	<7.2	<7.2		<7.2	<7.2	<7.2	<7.2	<1.7	
Methyl methacrylate	NC		<8.2	<8.2	<8.2		<8.2	<8.2	<8.2	<8.2	--	
Naphthalene	0.75 ca		<10	<10	<10		73	<10	<10	<10	<1.7	
Propylene	NC		<6.9 X	<6.9 X	<170		<170	<170	<170	<170	<1.7	
Styrene	45 ca		<8.5	<8.5	<8.5		<8.5	<8.5	<8.5	<8.5	<1.6	
1,1,1-Trichloroethane	5,000 (EE) st		<11	<11	<11		<11	<11	<11	<11	<1.7	
1,1,2,2-Tetrachloroethane	0.44 ca		<14	<14	<14		<14	<14	<14	<14	<1.7	
1,1,2-Trichloroethane	0.21 nc		<11	<11	<11		<11	<11	<11	<11	<1.7	
1,1,2-Trichlorotrifluoroethane	NC		--	--	--		--	--	--	--	<1.8	
1,2,4-Trichlorobenzene	2.1 nc		<37	<37	<37		<37	<37	<37	<37	<3.6	
1,2,4-Trimethylbenzene	63 (JT) nc		<9.8	<9.8	<9.8		<9.8	<9.8	<9.8	<9.8	2.1	
1,3,5-Trimethylbenzene	63 (JT) nc		<9.8	<9.8	<9.8		<9.8	<9.8	<9.8	<9.8	<1.7	
2,2,4-Trimethylpentane	3,700 nc		14	<9.3	<9.3		<9.3	<9.3	<9.3	<9.3	--	
Tert-butyl Alcohol	NC		<30	<30	<30		<30	30	<30	<61	--	
Tetrachloroethene	41 (EE) st		<14	<14	<14		<14	<14	<14	<14	<1.7	
Tetrahydrofuran	2,100 nc		15	27	<5.9		15	15	8.8	8.8	12	
Toluene	5,200 nc		45	<7.5	<7.5		11	7.5	<7.5	11	15	
Trichloroethene	2.0 (DD) dev		<11	<11	<11		<11	<11	<11	<11	<1.7	
Trichlorofluoromethane	460 nc		<11	<11	<11		<11	<11	<11	<11	<1.7	
Vinyl chloride	1.6 (MM) mut		<5.1	<5.1	<5.1		<5.1	<5.1	<5.1	<5.1	<1.7	
Vinyl acetate	NC		<7.0	<7.0	<7.0		<7.0	<7.0	<7.0	<7.0	--	
p,m-Xylene	NC		22	<17	<17		<17	<17	<17	<17	6.1	
o-Xylene	NC		<8.7	<8.7	<8.7		<8.7	<8.7	<8.7	<8.7	1.8	
Total Xylene	230 (J)		<26	<26	<26		<26	<26	<26	<26	--	

Groundwater Interference, Groundwater Sample Collected See Table 2.

Notes on Page 19.

TABLE 1
RACER Trust - Coldwater Road
Vapor Intrusion Sampling
Soil Gas Results December 2017 through December 2022
Compared to SSVIAC Table 1 (crawl space with a dirt floor)

Compound	Sample ID: Units:	EGLE Site-Specific Residential Volatilization to Indoor Air Criteria (SSVIAC) - Table 1 (crawl space with a dirt floor) µg/m ³	VP-5D µg/m ³	VP-5D µg/m ³	VP-5D µg/m ³	VP-5D µg/m ³	VP-5D µg/m ³	VP-5D µg/m ³	VP-5D µg/m ³	VP-5D µg/m ³	VP-5D µg/m ³
Sample Date:			10/25/2018	11/18/2019	2/22/2021	5/27/2021	8/26/2021	12/8/2021	12/8/2021	12/21/2022	12/21/2022
Acetone		NC		<48	<48		<48	71	95	<48	18
1,3-Butadiene		NC		<4.4	<4.4		<4.4	<4.4	<4.4	<4.4	<1.8
Benzene		3.3 ca		<6.4	<6.4		<6.4	<6.4	<6.4	<6.4	<1.7
Bromodichloromethane		NC		<13	<13		<13	<13	<13	<13	<1.8
Bromoform		NC		<21	<21		<21	<21	<21	<21	<1.8
Bromomethane		NC		<7.8	<7.8		<7.8	<7.8	<7.8	<7.8	<1.7
Vinyl bromide		NC		<8.7	<8.7		<8.7	<8.7	<8.7	<8.7	--
Benzyl chloride		NC		<10	<10		<10	<10	<10	<10	<6.8
Carbon Disulfide		NC		<16	<16		<16	<16	<16	<62	<3.7
Chlorobenzene		NC		<9.2	<9.2		<9.2	<9.2	<9.2	<9.2	<1.8
Chloroethane		NC		<5.3	<5.3		<53	<53	<53	<53	<1.7
Chloroform		NC		<9.8	<9.8		<9.8	<9.8	<9.8	<9.8	<1.8
Chloromethane		NC		<4.1	<4.1		<41	<41	<41	<41	<1.7
3-Chloropropene		NC		<6.3	<6.3		<63	<63	<63	<63	--
2-Chlorotoluene		NC		<10	<10		<10	<10	<10	<10	--
Carbon tetrachloride		NC		<13	<13		<13	<13	<13	<13	<1.7
Cumene		NC		--	--		--	--	--	--	<1.8
Cyclohexane		6,300 nc		<6.9	<6.9		<6.9	<6.9	<6.9	<6.9	<3.7
1,1-Dichloroethane		16 ca		<8.1	<8.1		<8.1	<8.1	<8.1	<8.1	<1.8
1,1-Dichloroethene		210 nc		<7.9	<7.9		<7.9	<7.9	<7.9	<7.9	<1.8
1,2-Dichloro-1,1,2,2-tetrafluoroethane		NR		--	--		--	--	--	--	<1.8
1,2-Dibromoethane		NC		<15	<15		<15	<15	<15	<15	<1.8
1,2-Dichloroethane		0.98 ca		<8.1	<8.1		<8.1	<8.1	<8.1	<8.1	<1.8
1,2-Dichloropropane		4.2 nc		<9.2	<9.2		<9.2	<9.2	<9.2	<9.2	<1.7
1,4-Dioxane		5.1 ca		<90	<90		<90	<90	<90	<90	<1.8
Dichlorodifluoromethane		340 nc		<9.9	<9.9		<9.9	<9.9	<9.9	<9.9	2.1
Dibromochloromethane		43 (MM) mut		<17	<17		<17	<17	<17	<17	<1.8
trans-1,2-Dichloroethene		83		<7.9	<7.9		<7.9	<7.9	<7.9	<7.9	<1.8
cis-1,2-Dichloroethene		8.3 nc		<7.9	<7.9		<7.9	<7.9	<7.9	<7.9	<1.8
cis-1,3-Dichloropropene		6.4 (J) ca		<9.1	<9.1		<9.1	<9.1	<9.1	<9.1	<1.7
1,3-Dichlorobenzene		3.1 nc		<12	<12		<12	<12	<12	<12	<1.8
1,2-Dichlorobenzene		310 nc		<12	<12		<12	<12	<12	<12	<1.8
1,4-Dichlorobenzene		6.5 ca		<12	<12		<12	<12	<12	<12	<1.8
trans-1,3-Dichloropropene		NC		<9.1	<9.1		<9.1	<9.1	<9.1	<9.1	<1.7
Ethanol		19,000 (EE) st		<47	<47		160	110	140	<47	--
Ethylbenzene		10 ca		<8.7	<8.7		<8.7	<8.7	<8.7	<8.7	<1.8
Ethyl Acetate		73 nc		<36	<36		<72	<72	<72	<72	<1.7
4-Ethyltoluene		NC		<9.8	<9.8		<9.8	<9.8	<9.8	<9.8	<1.8
Freon 113		NC		<15	<15		<15	<15	<15	<15	--
Freon 114		NC		<14	<14		<14	<14	<14	<14	--
Heptane		3,700 nc		<8.2	<8.2		<8.2	<8.2	<8.2	<8.2	<1.8
Hexachlorobutadiene		1.2 ca		<21	<21		<21	<21	<21	<21	<1.8
Hexane		730 nc		<7.0	<7.0		<7.0	<7.0	<7.0	<7.0	2.1
2-Hexanone		31 nc		<20	<20		<20	<20	<20	<20	<3.7
Isopropyl Alcohol		210 nc		<49	<49		120	370	2,930 E	49	91
Methylene Chloride		NC		<17	<17		<17	<17	<17	<17	<1.8
2-Butanone (MEK)		5,000 (DD) dev		<29	<29		<59	<59	<59	<59	6.2
4-Methyl-2-pentanone (MIBK)		3,000 (DD) dev		<20	<20		<20	<20	<20	<20	<3.7
tert-Methyl butyl ether (MTBE)		98 ca		<7.2	<7.2		<7.2	<7.2	<7.2	<7.2	<1.8
Methyl methacrylate		NC		<8.2	<8.2		<8.2	<8.2	<8.2	<8.2	--
Naphthalene		0.75 ca		<10	<10		<10	<10	<10	<10	<1.8
Propylene		NC		<3.4	<3.4		<170	<170	<170	<170	<1.8
Styrene		45 ca		<8.5	<8.5		<8.5	<8.5	<8.5	<8.5	<1.7
1,1,1-Trichloroethane		5,000 (EE) st		<11	<11		<11	<11	<11	<11	<1.8
1,1,2,2-Tetrachloroethane		0.44 ca		<14	<14		<14	<14	<14	<14	<1.8
1,1,2-Trichloroethane		0.21 nc		<11	<11		<11	<11	<11	<11	<1.8
1,1,2-Trichlorotrifluoroethane		NC		--	--		--	--	--	--	<1.8
1,2,4-Trichlorobenzene		2.1 nc		<37	<37		<37	<37	<37	<37	<3.7
1,2,4-Trimethylbenzene		63 (JT) nc		<9.8	<9.8		<9.8	<9.8	<9.8	<9.8	2.2
1,3,5-Trimethylbenzene		63 (JT) nc		<9.8	<9.8		<9.8	<9.8	<9.8	<9.8	<1.8
2,2,4-Trimethylpentane		3,700 nc		<9.3	<9.3		<9.3	<9.3	<9.3	<9.3	--
Tert-butyl Alcohol		NC		<30	<30		<30	<30	<30	<61	--
Tetrachloroethene		41 (EE) st		<14	<14		<14	<14	<14	<14	<1.8
Tetrahydrofuran		2,100 nc		15	8.8		12	<5.9	5.9	5.9	12
Toluene		5,200 nc		<7.5	<7.5		<7.5	<7.5	<7.5	<7.5	8.6
Trichloroethene		2.0 (DD) dev		<11	<11		<11	<11	<11	<11	<1.8
Trichlorofluoromethane		460 nc		<11	<11		<11	<11	<11	<11	<1.8
Vinyl chloride		1.6 (MM) mut		<5.1	<5.1		<5.1	<5.1	<5.1	<5.1	<1.8
Vinyl acetate		NC		<7.0	<7.0		<7.0	<7.0	<7.0	<7.0	--
p,m-Xylene		NC		<17	<17		<17	<17	<17	<17	5.3
o-Xylene		NC		<8.7	<8.7		<8.7	<8.7	<8.7	<8.7	<1.8
Total Xylene		230 (J)		<26	<26		<26	<26	<26	<26	--

Notes on Page 19.

TABLE 1
RACER Trust - Coldwater Road
Vapor Intrusion Sampling
Soil Gas Results December 2017 through December 2022
Compared to SSVIAC Table 1 (crawlspce with a dirt floor)

Compound	Sample ID: Units: Sample Date:	EGLE Site-Specific Residential Volatilization to Indoor Air Criteria (SSVIAC) - Table 1 (crawlspce with a dirt floor) µg/m ³	VP-6S µg/m ³ 10/25/2018	VP-6S µg/m ³ 11/18/2019	VP-6S µg/m ³ 2/21/2021	VP-6S µg/m ³ 5/27/2021	VP-6S µg/m ³ 8/26/2021	VP-6S µg/m ³ 12/8/2021	VP-6S µg/m ³ 12/20/2022
Acetone		NC	<48				48		<48
1,3-Butadiene		NC	<4.4				<44		<44
Benzene		3.3 ca	<6.4				89		<6.4
Bromodichloromethane		NC	<13				<13		<13
Bromoform		NC	<21				<21		<21
Bromomethane		NC	<7.8				<7.8		<7.8
Vinyl bromide		NC	<8.7				<8.7		<8.7
Benzyl chloride		NC	<10				<10		<10
Carbon Disulfide		NC	140				<16		<62
Chlorobenzene		NC	<9.2				<9.2		<9.2
Chloroethane		NC	<5.3				<53		<53
Chloroform		NC	<9.8				<9.8		<9.8
Chloromethane		NC	<4.1				<41		<41
3-Chloropropene		NC	<6.3				<63		<63
2-Chlorotoluene		NC	<10				<10		<10
Carbon tetrachloride		NC	<13				<13		<13
Cumene		NC	--				--		--
Cyclohexane		6,300 nc	<6.9				10		<6.9
1,1-Dichloroethane		16 ca	<8.1				<8.1		<8.1
1,1-Dichloroethene		210 nc	<7.9				<7.9		<7.9
1,2-Dichloro-1,1,2,2-tetrafluoroethane		NR	--				--		--
1,2-Dibromoethane		NC	<15				<15		<15
1,2-Dichloroethane		0.98 ca	<8.1				<8.1		<8.1
1,2-Dichloropropane		4.2 nc	<9.2				<9.2		<9.2
1,4-Dioxane		5.1 ca	<90				<90		<90
Dichlorodifluoromethane		340 nc	<9.9				<9.9		<9.9
Dibromochloromethane		43 (MM) mut	<17				<17		<17
trans-1,2-Dichloroethene		83	<7.9				<7.9		<7.9
cis-1,2-Dichloroethene		8.3 nc	<7.9				<7.9		<7.9
cis-1,3-Dichloropropene		6.4 (J) ca	<9.1				<9.1		<9.1
1,3-Dichlorobenzene		3.1 nc	<12				<12		<12
1,2-Dichlorobenzene		310 nc	<12				<12		<12
1,4-Dichlorobenzene		6.5 ca	<12				<12		<12
trans-1,3-Dichloropropene		NC	<9.1				<9.1		<9.1
Ethanol		19,000 (EE) st	<47				<47		<47
Ethylbenzene		10 ca	<8.7				13		<8.7
Ethyl Acetate		73 nc	<36				<72		<72
4-Ethyltoluene		NC	<9.8				<9.8		<9.8
Freon 113		NC	<15				<15		<15
Freon 114		NC	<14				<14		<14
Heptane		3,700 nc	<8.2				20		<8.2
Hexachlorobutadiene		1.2 ca	<21				<21		<21
Hexane		730 nc	11				32		<7.0
2-Hexanone		31 nc	<20				<20		<20
Isopropyl Alcohol		210 nc	<49				120		<49
Methylene Chloride		NC	<17				<17		<17
2-Butanone (MEK)		5,000 (DD) dev	<29				<59		<59
4-Methyl-2-pentanone (MIBK)		3,000 (DD) dev	<20				<20		<20
tert-Methyl butyl ether (MTBE)		98 ca	<7.2				<7.2		<7.2
Methyl methacrylate		NC	<8.2				<8.2		<8.2
Naphthalene		0.75 ca	<10				<10		<10
Propylene		NC	<15 X				<170		<170
Styrene		45 ca	<8.5				<8.5		<8.5
1,1,1-Trichloroethane		5,000 (EE) st	<11				<11		<11
1,1,2,2-Tetrachloroethane		0.44 ca	<14				<14		<14
1,1,2-Trichloroethane		0.21 nc	<11				<11		<11
1,1,2-Trichlorotrifluoroethane		NC	--				--		--
1,2,4-Trichlorobenzene		2.1 nc	<37				<37		<37
1,2,4-Trimethylbenzene		63 (JT) nc	<9.8				25		<9.8
1,3,5-Trimethylbenzene		63 (JT) nc	<9.8				<9.8		<9.8
2,2,4-Trimethylpentane		3,700 nc	<9.3				14		<9.3
Tert-butyl Alcohol		NC	<30				<30		<61
Tetrachloroethene		41 (EE) st	<14				<14		<14
Tetrahydrofuran		2,100 nc	12				32		<5.9
Toluene		5,200 nc	19				64		<7.5
Trichloroethene		2.0 (DD) dev	<11				<11		<11
Trichlorofluoromethane		460 nc	<11				<11		<11
Vinyl chloride		1.6 (MM) mut	<5.1				<5.1		<5.1
Vinyl acetate		NC	<7.0				<7.0		<7.0
p,m-Xylene		NC	<17				39		<17
o-Xylene		NC	<8.7				17		<8.7
Total Xylene		230 (J)	<26				56		<26

Notes on Page 19.

TABLE 1
RACER Trust - Coldwater Road
Vapor Intrusion Sampling
Soil Gas Results December 2017 through December 2022
Compared to SSVIAC Table 1 (crawlspce with a dirt floor)

Compound	Sample ID: Units:	EGLE Site-Specific Residential Volatilization to Indoor Air Criteria (SSVIAC) - Table 1 (crawlspce with a dirt floor) µg/m ³	VP-6M µg/m ³	VP-6M µg/m ³	VP-6M µg/m ³	VP-6M µg/m ³	VP-6M µg/m ³	VP-6M µg/m ³	VP-6M µg/m ³
Sample Date:			10/25/2018	11/18/2019	2/21/2021	5/27/2021	8/26/2021	12/8/2021	12/20/2022
Acetone		NC	<48			71			<48
1,3-Butadiene		NC	<4.4			<22			<44
Benzene		3.3 ca	<6.4			<6.4			<6.4
Bromodichloromethane		NC	<13			<13			<13
Bromoform		NC	<21			<21			<21
Bromomethane		NC	<7.8			<7.8			<7.8
Vinyl bromide		NC	<8.7			<8.7			<8.7
Benzyl chloride		NC	<10			<10			<10
Carbon Disulfide		NC	250			<16			<62
Chlorobenzene		NC	<9.2			<9.2			<9.2
Chloroethane		NC	<5.3			<53			<53
Chloroform		NC	<9.8			<9.8			<9.8
Chloromethane		NC	<4.1			<41			<41
3-Chloropropene		NC	<6.3			<6.3			<63
2-Chlorotoluene		NC	<10			<10			<10
Carbon tetrachloride		NC	<13			<13			<13
Cumene		NC	--			--			--
Cyclohexane		6,300 nc	<6.9			<6.9			<6.9
1,1-Dichloroethane		16 ca	<8.1			<8.1			<8.1
1,1-Dichloroethene		210 nc	<7.9			<7.9			<7.9
1,2-Dichloro-1,1,2,2-tetrafluoroethane		NR	--			--			--
1,2-Dibromoethane		NC	<15			<15			<15
1,2-Dichloroethane		0.98 ca	<8.1			<8.1			<8.1
1,2-Dichloropropane		4.2 nc	<9.2			<9.2			<9.2
1,4-Dioxane		5.1 ca	<90			<90			<90
Dichlorodifluoromethane		340 nc	<9.9			<9.9			<9.9
Dibromochloromethane		43 (MM) mut	<17			<17			<17
trans-1,2-Dichloroethene		83	<7.9			<7.9			<7.9
cis-1,2-Dichloroethene		8.3 nc	<7.9			<7.9			<7.9
cis-1,3-Dichloropropene		6.4 (J) ca	<9.1			<9.1			<9.1
1,3-Dichlorobenzene		3.1 nc	<12			<12			<12
1,2-Dichlorobenzene		310 nc	<12			<12			<12
1,4-Dichlorobenzene		6.5 ca	<12			<12			<12
trans-1,3-Dichloropropene		NC	<9.1			<9.1			<9.1
Ethanol		19,000 (EE) st	<47			55			<47
Ethylbenzene		10 ca	<8.7			<8.7			<8.7
Ethyl Acetate		73 nc	<36			<72			<72
4-Ethyltoluene		NC	<9.8			<9.8			<9.8
Freon 113		NC	<15			<15			<15
Freon 114		NC	<14			<14			<14
Heptane		3,700 nc	<8.2			<8.2			<8.2
Hexachlorobutadiene		1.2 ca	<21			<21			<21
Hexane		730 nc	<7.0			<7.0			<7.0
2-Hexanone		31 nc	<20			<20			<20
Isopropyl Alcohol		210 nc	<49			<49			<49
Methylene Chloride		NC	<17			<17			<17
2-Butanone (MEK)		5,000 (DD) dev	<29			<59			<59
4-Methyl-2-pentanone (MIBK)		3,000 (DD) dev	<20			<20			<20
tert-Methyl butyl ether (MTBE)		98 ca	<7.2			<7.2			<7.2
Methyl methacrylate		NC	<8.2			<8.2			<8.2
Naphthalene		0.75 ca	<10			<10			<10
Propylene		NC	<12 X			<170			<170
Styrene		45 ca	<8.5			<8.5			<8.5
1,1,1-Trichloroethane		5,000 (EE) st	<11			<11			<11
1,1,2,2-Tetrachloroethane		0.44 ca	<14			<14			<14
1,1,2-Trichloroethane		0.21 nc	<11			<11			<11
1,1,2-Trichlorotrifluoroethane		NC	--			--			--
1,2,4-Trichlorobenzene		2.1 nc	<37			<37			<37
1,2,4-Trimethylbenzene		63 (JT) nc	<9.8			<9.8			<9.8
1,3,5-Trimethylbenzene		63 (JT) nc	<9.8			<9.8			<9.8
2,2,4-Trimethylpentane		3,700 nc	<9.3			<9.3			<9.3
Tert-butyl Alcohol		NC	<30			<30			<61
Tetrachloroethene		41 (EE) st	<14			<14			<14
Tetrahydrofuran		2,100 nc	8.8			24			<5.9
Toluene		5,200 nc	15			30			<7.5
Trichloroethene		2.0 (DD) dev	<11			<11			<11
Trichlorofluoromethane		460 nc	<11			<11			<11
Vinyl chloride		1.6 (MM) mut	<5.1			<5.1			<5.1
Vinyl acetate		NC	<7.0			<7.0			<7.0
p,m-Xylene		NC	<17			17			<17
o-Xylene		NC	<8.7			<8.7			<8.7
Total Xylene		230 (J)	<26			<26			<26

Notes on Page 19.

TABLE 1
RACER Trust - Coldwater Road
Vapor Intrusion Sampling
Soil Gas Results December 2017 through December 2022
Compared to SSVIAC Table 1 (crawlspce with a dirt floor)

Compound	Sample ID: Units:	EGLE Site-Specific Residential Volatilization to Indoor Air Criteria (SSVIAC) - Table 1 (crawlspce with a dirt floor) µg/m ³	VP-6D µg/m ³	VP-6D µg/m ³	VP-6D µg/m ³	VP-6D µg/m ³	VP-6D µg/m ³	VP-6D µg/m ³	VP-6D µg/m ³
Sample Date:			10/25/2018	11/18/2019	2/21/2021	5/27/2021	8/26/2021	12/8/2021	12/21/2022
Acetone		NC	<48	95	No Vapor or Groundwater Sample Collected Due to Groundwater Interference and/or Low Permeability of the Soils. Attempted 8 hour Soil Gas Sample which was Unsuccessful.	No Vapor or Groundwater Sample Collected Due to Groundwater Interference and/or Low Permeability of the Soils. Attempted 8 hour Soil Gas Sample which was Unsuccessful.	No Vapor or Groundwater Sample Collected Due to Groundwater Interference and/or Low Permeability of the Soils. Attempted 8 hour Soil Gas Sample which was Unsuccessful.	No Vapor or Groundwater Sample Collected Due to Groundwater Interference and/or Low Permeability of the Soils. Attempted 8 hour Soil Gas Sample which was Unsuccessful.	<48
1,3-Butadiene		NC	<4.4	<4.4					<44
Benzene		3.3 ca	<6.4	<6.4					<6.4
Bromodichloromethane		NC	<13	<13					<13
Bromoform		NC	<21	<21					<21
Bromomethane		NC	<7.8	<7.8					<7.8
Vinyl bromide		NC	<8.7	<8.7					<8.7
Benzyl chloride		NC	<10	<10					<10
Carbon Disulfide		NC	<16	<16					<62
Chlorobenzene		NC	<9.2	<9.2					<9.2
Chloroethane		NC	<5.3	<5.3					<53
Chloroform		NC	<9.8	<9.8					<9.8
Chloromethane		NC	<4.1	<4.1					<41
3-Chloropropene		NC	<6.3	<6.3					<63
2-Chlorotoluene		NC	<10	<10					<10
Carbon tetrachloride		NC	<13	<13					<13
Cumene		NC	--	--					--
Cyclohexane		6,300 nc	<6.9	<6.9					<6.9
1,1-Dichloroethane		16 ca	<8.1	<8.1					<8.1
1,1-Dichloroethene		210 nc	<7.9	<7.9					<7.9
1,2-Dichloro-1,1,2,2-tetrafluoroethane		NR	--	--					--
1,2-Dibromoethane		NC	<15	<15					<15
1,2-Dichloroethane		0.98 ca	<8.1	<8.1					<8.1
1,2-Dichloropropane		4.2 nc	<9.2	<9.2					<9.2
1,4-Dioxane		5.1 ca	<90	<90					<90
Dichlorodifluoromethane		340 nc	<9.9	<9.9					<9.9
Dibromochloromethane		43 (MM) mut	<17	<17					<17
trans-1,2-Dichloroethene		83	<7.9	<7.9					<7.9
cis-1,2-Dichloroethene		8.3 nc	<7.9	<7.9					<7.9
cis-1,3-Dichloropropene		6.4 (J) ca	<9.1	<9.1					<9.1
1,3-Dichlorobenzene		3.1 nc	<12	<12					<12
1,2-Dichlorobenzene		310 nc	<12	<12					<12
1,4-Dichlorobenzene		6.5 ca	<12	<12					<12
trans-1,3-Dichloropropene		NC	<9.1	<9.1					<9.1
Ethanol		19,000 (EE) st	<47	85					<47
Ethylbenzene		10 ca	<8.7	<8.7					<8.7
Ethyl Acetate		73 nc	<36	<36					<72
4-Ethyltoluene		NC	<9.8	<9.8					<9.8
Freon 113		NC	<15	<15					<15
Freon 114		NC	<14	<14					<14
Heptane		3,700 nc	<8.2	<8.2					<8.2
Hexachlorobutadiene		1.2 ca	<21	<21					<21
Hexane		730 nc	<7.0	49					11
2-Hexanone		31 nc	<20	<20					<20
Isopropyl Alcohol		210 nc	<49	<49					200
Methylene Chloride		NC	<17	28					<17
2-Butanone (MEK)		5,000 (DD) dev	<29	<29					<59
4-Methyl-2-pentanone (MIBK)		3,000 (DD) dev	<20	<20					<20
tert-Methyl butyl ether (MTBE)		98 ca	<7.2	<7.2					<7.2
Methyl methacrylate		NC	<8.2	<8.2					<8.2
Naphthalene		0.75 ca	<10	<10					<10
Propylene		NC	<3.9	12					<170
Styrene		45 ca	<8.5	<8.5					<8.5
1,1,1-Trichloroethane		5,000 (EE) st	<11	<11					<11
1,1,2,2-Tetrachloroethane		0.44 ca	<14	<14					<14
1,1,2-Trichloroethane		0.21 nc	<11	<11					<11
1,1,2-Trichlorotrifluoroethane		NC	--	--					--
1,2,4-Trichlorobenzene		2.1 nc	<37	<37					<37
1,2,4-Trimethylbenzene		63 (JT) nc	<9.8	<9.8					<9.8
1,3,5-Trimethylbenzene		63 (JT) nc	<9.8	<9.8					<9.8
2,2,4-Trimethylpentane		3,700 nc	<9.3	<9.3					<9.3
Tert-butyl Alcohol		NC	<30	<30					<61
Tetrachloroethene		41 (EE) st	<14	<14					<14
Tetrahydrofuran		2,100 nc	5.9	29					12
Toluene		5,200 nc	11	23					19
Trichloroethene		2.0 (DD) dev	<11	<11					<11
Trichlorofluoromethane		460 nc	<11	<11					<11
Vinyl chloride		1.6 (MM) mut	<5.1	<5.1					<5.1
Vinyl acetate		NC	<7.0	<7.0					<70
p,m-Xylene		NC	<17	<17					<17
o-Xylene		NC	<8.7	<8.7					<8.7
Total Xylene		230 (J)	<26	<26					<26

Notes on Page 19.

TABLE 1
RACER Trust - Coldwater Road
Vapor Intrusion Sampling
Soil Gas Results December 2017 through December 2022
Compared to SSVIAC Table 2 (slab-on-grade)

Compound	Sample ID: Units:	EGLE Site-Specific Residential Volatilization to Indoor Air Criteria (SSVIAC) - Table 2 (slab-on-grade) µg/m³	VP-2S µg/m³	VP-2S (VP-DUP-1) µg/m³	VP-2S µg/m³	VP-2S µg/m³	VP-2S µg/m³	VP-2S µg/m³	VP-2S µg/m³	VP-2S µg/m³	VP-2S µg/m³	VP-2S µg/m³
	Sample Date:		12/8/2017	12/8/2017	6/29/2018	10/25/2018	11/18/2019	2/22/2021	5/27/2021	8/26/2021	12/8/2021	12/20/2022
Acetone		NC	<48	<48	<48		<48					
1,3-Butadiene		NC	<4.4	<4.4	<4.4		<4.4					
Benzene		110 ca	<6.4	<6.4	<6.4		<6.4					
Bromodichloromethane		NC	<13	<13	<13		<13					
Bromoform		NC	<21	<21	<21		<21					
Bromomethane		NC	<7.8	<7.8	<7.8		<7.8					
Vinyl bromide		NC	<8.7	<8.7	<8.7		<8.7					
Benzyl chloride		NC	<10	<10	<10		<10					
Carbon Disulfide		NC	<16	<16	<16		<16					
Chlorobenzene		NC	<9.2	<9.2	<9.2		<9.2					
Chloroethane		NC	<5.3	<5.3	<5.3		<5.3					
Chloroform		NC	<9.8	<9.8	<9.8		<9.8					
Chloromethane		NC	<4.1	<4.1	<4.1		<4.1					
3-Chloropropene		NC	<6.3	<6.3	<6.3		<6.3					
2-Chlorotoluene		NC	<10	<10	<10		<10					
Carbon tetrachloride		NC	<13	<13	<13		<13					
Cumene		NC	--	--	--		--					
Cyclohexane		2.1E+05 nc	<6.9	<6.9	<6.9		<6.9					
1,1-Dichloroethane		530 ca	<8.1	<8.1	<8.1		<8.1					
1,1-Dichloroethene		7,000 nc	<7.9	<7.9	<7.9		<7.9					
1,2-Dichloro-1,1,2,2-tetrafluoroethane		NR	--	--	--		--					
1,2-Dibromoethane		NC	<15	<15	<15		<15					
1,2-Dichloroethane		33 ca	8.1	12	<8.1		<8.1					
1,2-Dichloropropane		140 nc	<9.2	<9.2	<9.2		<9.2					
1,4-Dioxane		170 ca	<90	<90	<90		<90					
Dichlorodifluoromethane		11,000 nc	<9.9	<9.9	<9.9		<9.9					
Dibromochloromethane		14 (MM) mut	<17	<17	<17		<17					
trans-1,2-Dichloroethene		2,800 nc	<7.9	<7.9	<7.9		<7.9					
cis-1,2-Dichloroethene		280 nc	<7.9	<7.9	<7.9		<7.9					
cis-1,3-Dichloropropene		NC	<9.1	<9.1	<9.1		<9.1					
1,3-Dichlorobenzene		100 nc	<12	<12	<12		<12					
1,2-Dichlorobenzene		10,000 nc	<12	<12	<12		<12					
1,4-Dichlorobenzene		220 ca	<12	<12	<12		<12					
trans-1,3-Dichloropropene		NC	<9.1	<9.1	<9.1		<9.1					
Ethanol		6.3E+05 (EE) st	<47	<47	<47		<47					
Ethylbenzene		340 ca	<8.7	<8.7	8.7		<8.7					
Ethyl Acetate		2,400 nc	<36	<36	<36		<36					
4-Ethyltoluene		NC	<9.8	<9.8	<9.8		<9.8					
Freon 113		NC	<15	<15	<15		<15					
Freon 114		NC	<14	<14	<14		<14					
Heptane		1.2E+05 nc	<8.2	<8.2	12		<8.2					
Hexachlorobutadiene		39 ca	<21	<21	<21		<21					
Hexane		24,000 nc	<7.0	<7.0	14		<7.0					
2-Hexanone		1,000 nc	<20	<20	<20		<20					
Isopropyl Alcohol		7,000 nc	49	74	<49		<49					
Methylene Chloride		NC	<17	<17	<17		<17					
2-Butanone (MEK)		1.7E+05 (DD) dev	<29	<29	<29		<29					
4-Methyl-2-pentanone (MIBK)		1.0E+05 (DD) dev	<20	<20	<20		<20					
tert-Methyl butyl ether (MTBE)		3,300 ca	<7.2	<7.2	<7.2		<7.2					
Methyl methacrylate		NC	<8.2	<8.2	<8.2		<8.2					
Naphthalene		25 ca	<10	<10	<10		<10					
Propylene		NC	<3.4	<3.4	<3.4		<3.4					
Styrene		1,500 ca	<8.5	<8.5	<8.5		<8.5					
1,1,1-Trichloroethane		1.7E+05 (EE) st	<11	<11	<11		<11					
1,1,2,2-Tetrachloroethane		15 ca	<14	<14	<14		<14					
1,1,2-Trichloroethane		7.0 nc	<11	<11	<11		<11					
1,1,2-Trichlorotrifluoroethane		NC	--	--	--		--					
1,2,4-Trichlorobenzene		70 nc	<37	<37	<37		<37					
1,2,4-Trimethylbenzene		2,100 (JT) nc	<9.8	<9.8	15		<9.8					
1,3,5-Trimethylbenzene		2,100 (JT) nc	<9.8	<9.8	<9.8		<9.8					
2,2,4-Trimethylpentane		1.2E+05 nc	<9.3	<9.3	14		<9.3					
Tert-butyl Alcohol		NC	<30	<30	<30		<30					
Tetrachloroethene		1,400 (EE) st	<14	<14	<14		<14					
Tetrahydrofuran		70,000 nc	<5.9	<5.9	24		18					
Toluene		1.7E+05 nc	<7.5	<7.5	41		<7.5					
Trichloroethene		67 (DD) dev	<11	<11	32		<11					
Trichlorofluoromethane		15,000 nc	<11	<11	<11		<11					
Vinyl chloride		54 (MM) mut	<5.1	<5.1	<5.1		<5.1					
Vinyl acetate		NC	<7.0	<7.0	<7.0		<7.0					
p,m-Xylene		NC	<17	<17	30		<17					
o-Xylene		NC	<8.7	<8.7	13		<8.7					
Total Xylene		7,600 (J) nc	<26	<26	43		<26					

Notes on Page 19.

Groundwater Interference. Groundwater Sample Attempted. Low Volume. No Vapor or Groundwater Sample Collected.

Groundwater Interference. Groundwater Sample Collected. See Table 2.

Groundwater Interference. Groundwater Sample Collected. See Table 2.

Groundwater Interference. Groundwater Sample Collected. See Table 2.

Groundwater Interference. Groundwater Sample Collected. See Table 2.

Not Sampled.

TABLE 1
RACER Trust - Coldwater Road
Vapor Intrusion Sampling
Soil Gas Results December 2017 through December 2022
Compared to SSVIAC Table 2 (slab-on-grade)

Compound	Sample ID: Units:	EGLE Site-Specific Residential Volatilization to Indoor Air Criteria (SSVIAC) - Table 2 (slab-on-grade) µg/m ³	VP-2D µg/m ³	VP-2D µg/m ³	VP-2D µg/m ³	VP-2D µg/m ³	VP-2D µg/m ³	VP-2D µg/m ³	VP-2D µg/m ³	VP-2D µg/m ³	VP-2D µg/m ³	VP-2D µg/m ³
Sample Date:			12/18/2017	6/29/2018	10/25/2018	11/18/2019	2/22/2021	5/27/2021	8/26/2021	12/8/2021	12/20/2022	12/20/2022
Acetone		NC				<48	<48	120	48			<48
1,3-Butadiene		NC				<4.4	<4.4	<22	<44			<44
Benzene		110 ca				<6.4	9.6	13	<6.4			<6.4
Bromodichloromethane		NC				<13	<13	<13	<13			<13
Bromoform		NC				<21	<21	<21	<21			<21
Bromomethane		NC				<7.8	<7.8	<7.8	<7.8			<7.8
Vinyl bromide		NC				<8.7	<8.7	<8.7	<8.7			<8.7
Benzyl chloride		NC				<10	<10	<10	<10			<10
Carbon Disulfide		NC				<16	<16	<16	<16			<62
Chlorobenzene		NC				<9.2	<9.2	<9.2	<9.2			<9.2
Chloroethane		NC				<5.3	<5.3	<53	<53			<53
Chloroform		NC				<9.8	<9.8	<9.8	<9.8			<9.8
Chloromethane		NC				<4.1	<4.1	<41	<41			<41
3-Chloropropene		NC				<6.3	<6.3	<6.3	<63			<63
2-Chlorotoluene		NC				<10	<10	<10	<10			<10
Carbon tetrachloride		NC				<13	<13	<13	<13			<13
Cumene		NC				--	--	--	--			--
Cyclohexane		2.1E+05 nc				<6.9	<6.9	<6.9	<6.9			<6.9
1,1-Dichloroethane		530 ca				<8.1	<8.1	<8.1	<8.1			<8.1
1,1-Dichloroethene		7,000 nc				<7.9	<7.9	<7.9	<7.9			<7.9
1,2-Dichloro-1,1,2,2-tetrafluoroethane		NR				--	--	--	--			--
1,2-Dibromoethane		NC				<15	<15	<15	<15			<15
1,2-Dichloroethane		33 ca				<8.1	<8.1	<8.1	<8.1			<8.1
1,2-Dichloropropane		140 nc				<9.2	<9.2	<9.2	<9.2			<9.2
1,4-Dioxane		170 ca				<90	<90	<90	<90			<90
Dichlorodifluoromethane		11,000 nc				<9.9	<9.9	<9.9	<9.9			<9.9
Dibromochloromethane		14 (MM) mut				<17	<17	<17	<17			<17
trans-1,2-Dichloroethene		2,800 nc				<7.9	<7.9	<7.9	<7.9			<7.9
cis-1,2-Dichloroethene		280 nc				<7.9	<7.9	<7.9	<7.9			<7.9
cis-1,3-Dichloropropene		NC				<9.1	<9.1	<9.1	<9.1			<9.1
1,3-Dichlorobenzene		100 nc				<12	<12	<12	<12			<12
1,2-Dichlorobenzene		10,000 nc				<12	<12	<12	<12			<12
1,4-Dichlorobenzene		220 ca				<12	<12	<12	<12			<12
trans-1,3-Dichloropropene		NC				<9.1	<9.1	<9.1	<9.1			<9.1
Ethanol		6.3E+05 (EE) st				<47	<230	110	<47			<47
Ethylbenzene		340 ca				<8.7	<8.7	<8.7	<8.7			<8.7
Ethyl Acetate		2,400 nc				<36	<36	<72	<72			<72
4-Ethyltoluene		NC				<9.8	<9.8	<9.8	<9.8			<9.8
Freon 113		NC				<15	<15	<15	<15			<15
Freon 114		NC				<14	<14	<14	<14			<14
Heptane		1.2E+05 nc				<8.2	<8.2	<8.2	<8.2			<8.2
Hexachlorobutadiene		39 ca				<21	<21	<21	<21			<21
Hexane		24,000 nc				<7.0	<7.0	<7.0	<7.0			<7.0
2-Hexanone		1,000 nc				<20	<20	<20	<20			<20
Isopropyl Alcohol		7,000 nc				<49	<49	<49	49			120
Methylene Chloride		NC				<17	<17	<17	<17			<17
2-Butanone (MEK)		1.7E+05 (DD) dev				<29	<29	<59	<59			<59
4-Methyl-2-pentanone (MIBK)		1.0E+05 (DD) dev				<20	<20	<20	<20			<20
tert-Methyl butyl ether (MTBE)		3,300 ca				<7.2	<7.2	<7.2	<7.2			<7.2
Methyl methacrylate		NC				<8.2	<8.2	<8.2	<8.2			<8.2
Naphthalene		25 ca				<10	<10	<10	<10			<10
Propylene		NC				<3.4	<170	<170	<170			<170
Styrene		1,500 ca				<8.5	<8.5	<8.5	<8.5			<8.5
1,1,1-Trichloroethane		1.7E+05 (EE) st				<11	<11	<11	<11			<11
1,1,2,2-Tetrachloroethane		15 ca				<14	<14	<14	<14			<14
1,1,2-Trichloroethane		7.0 nc				<11	<11	<11	<11			<11
1,1,2-Trichlorotrifluoroethane		NC				--	--	--	--			--
1,2,4-Trichlorobenzene		70 nc				<37	<37	<37	<37			<37
1,2,4-Trimethylbenzene		2,100 (JT) nc				<9.8	<9.8	<9.8	<9.8			<9.8
1,3,5-Trimethylbenzene		2,100 (JT) nc				<9.8	<9.8	<9.8	<9.8			<9.8
2,2,4-Trimethylpentane		1.2E+05 nc				<9.3	<9.3	<9.3	<9.3			<9.3
Tert-butyl Alcohol		NC				<30	<30	<30	<30			<61
Tetrachloroethene		1,400 (EE) st				<14	<14	<14	<14			<14
Tetrahydrofuran		70,000 nc				12	21	21	21			8.8
Toluene		1.7E+05 nc				<7.5	<7.5	<7.5	11			11
Trichloroethene		67 (DD) dev				<11	<11	<11	<11			<11
Trichlorofluoromethane		15,000 nc				<11	<11	<11	<11			<11
Vinyl chloride		54 (MM) mut				<5.1	<5.1	<5.1	<5.1			<5.1
Vinyl acetate		NC				<7.0	<7.0	<7.0	<7.0			<7.0
p,m-Xylene		NC				<17	<17	<17	<17			<17
o-Xylene		NC				<8.7	<8.7	<8.7	<8.7			<8.7
Total Xylene		7,600 (J) nc				<26	<26	<26	<26			<26

Notes on Page 19.

Groundwater Interference. No Vapor or Groundwater Sample Collected.

Groundwater Interference. No Vapor or Groundwater Sample Collected.

Not Sampled.

Groundwater Interference. Groundwater Sample Collected. See Table 2.

Groundwater Interference. Groundwater Sample Collected. See Table 2.

TABLE 1
RACER Trust - Coldwater Road
Vapor Intrusion Sampling
Soil Gas Results December 2017 through December 2022
Compared to SSVIAC Table 3 (basement)

Compound	Sample ID: Units:	EGLE Site-Specific Residential Volatilization to Indoor Air Criteria (SSVIAC) - Table 3 (basement) µg/m³	VP-3S µg/m³	VP-3S µg/m³	VP-3S µg/m³	VP-3S µg/m³	VP-3S (DUP-1) µg/m³	VP-3S µg/m³	VP-3S µg/m³	VP-3S µg/m³	VP-3S µg/m³	VP-3S µg/m³	VP-3S µg/m³ (Analyzed by ALS)
Sample Date:			6/29/2018	10/25/2018	11/19/2019	2/22/2021	2/22/2021	5/27/2021	8/26/2021	12/8/2021	12/21/2022	12/21/2022	
Acetone	NC	48		<48	<48	<48			<48	<48	<48	<18	
1,3-Butadiene	NC	<4.4		<4.4	<4.4	<4.4			<44	<44	<44	<1.8	
Benzene	110 ca	16		<6.4	<6.4	<6.4			<6.4	<6.4	<6.4	<1.7	
Bromodichloromethane	NC	<13		<13	<13	<13			<13	<13	<13	<1.8	
Bromoform	NC	<21		<21	<21	<21			<21	<21	<21	<1.8	
Bromomethane	NC	<7.8		<7.8	<7.8	<7.8			<7.8	<7.8	<7.8	<1.7	
Vinyl bromide	NC	<8.7		<8.7	<8.7	<8.7			<8.7	<8.7	<8.7	--	
Benzyl chloride	NC	<10		<10	<10	<10			<10	<10	<10	<6.8	
Carbon Disulfide	NC	56		<16	<16	<16			<16	<16	<62	<3.7	
Chlorobenzene	NC	<9.2		<9.2	<9.2	<9.2			<9.2	<9.2	<9.2	<1.8	
Chloroethane	NC	<5.3		<5.3	<5.3	<5.3			<53	<53	<53	<1.7	
Chloroform	NC	15		<9.8	<9.8	<9.8			<9.8	<9.8	<9.8	<1.8	
Chloromethane	NC	<4.1		<4.1	<4.1	<4.1			<41	<41	<41	<1.7	
3-Chloropropene	NC	<6.3		<6.3	<6.3	<6.3			<63	<63	<63	--	
2-Chlorotoluene	NC	<10		<10	<10	<10			<10	<10	<10	--	
Carbon tetrachloride	NC	<13		<13	<13	<13			<13	<13	<13	<1.7	
Cumene	NC	--		--	--	--			--	--	--	<1.8	
Cyclohexane	2.1E+05 nc	<6.9		<6.9	<6.9	<6.9			<6.9	<6.9	<6.9	<3.7	
1,1-Dichloroethane	530 ca	<8.1		<8.1	<8.1	<8.1			<8.1	<8.1	<8.1	<1.8	
1,1-Dichloroethene	7,000 nc	<7.9		<7.9	<7.9	<7.9			<7.9	<7.9	<7.9	<1.8	
1,2-Dichloro-1,1,2,2-tetrafluoroethane	NR	--		--	--	--			--	--	--	<1.8	
1,2-Dibromoethane	NC	<15		<15	<15	<15			<15	<15	<15	<1.8	
1,2-Dichloroethane	33 ca	<8.1		<8.1	<8.1	<8.1			<8.1	<8.1	<8.1	<1.8	
1,2-Dichloropropane	140 nc	<9.2		<9.2	<9.2	<9.2			<9.2	<9.2	<9.2	<1.7	
1,4-Dioxane	170 ca	<90		<90	<90	<90			<90	<90	<90	<1.8	
Dichlorodifluoromethane	11,000 nc	<9.9		<9.9	<9.9	<9.9			<9.9	<9.9	<9.9	2.2	
Dibromochloromethane	14 (MM) mut	<17		<17	<17	<17			<17	<17	<17	<1.8	
trans-1,2-Dichloroethene	2,800 nc	<7.9		<7.9	<7.9	<7.9			<7.9	<7.9	<7.9	<1.8	
cis-1,2-Dichloroethene	280 nc	<7.9		<7.9	<7.9	<7.9			<7.9	<7.9	<7.9	<1.8	
cis-1,3-Dichloropropene	NC	<9.1		<9.1	<9.1	<9.1			<9.1	<9.1	<9.1	<1.7	
1,3-Dichlorobenzene	100 nc	<12		<12	<12	<12			<12	<12	<12	<1.8	
1,2-Dichlorobenzene	10,000 nc	<12		<12	<12	<12			<12	<12	<12	<1.8	
1,4-Dichlorobenzene	220 ca	<12		<12	<12	<12			<12	<12	<12	<1.8	
trans-1,3-Dichloropropene	NC	<9.1		<9.1	<9.1	<9.1			<9.1	<9.1	<9.1	<1.7	
Ethanol	6.3E+05 (EE) st	<47		<47	<230	<230			130	196	<47	--	
Ethylbenzene	340 ca	<8.7		<8.7	<8.7	<8.7			<8.7	<8.7	<8.7	<1.8	
Ethyl Acetate	2,400 nc	<36		<36	<36	<36			<72	<72	<72	<7.1	
4-Ethyltoluene	NC	<9.8		<9.8	<9.8	<9.8			<9.8	<9.8	<9.8	<1.8	
Freon 113	NC	<15		<15	<15	<15			<15	<15	<15	--	
Freon 114	NC	<14		<14	<14	<14			<14	<14	<14	--	
Heptane	1.2E+05 nc	16		<8.2	<8.2	<8.2			<8.2	<8.2	<8.2	<1.8	
Hexachlorobutadiene	39 ca	<21		<21	<21	<21			<21	<21	<21	<1.8	
Hexane	24,000 nc	25		<7.0	<7.0	<7.0			11	<7.0	<7.0	1.9	
2-Hexanone	1,000 nc	<20		<20	<20	<20			<20	<20	<20	<3.7	
Isopropyl Alcohol	7,000 nc	<49		<49	<49	<49			250	3,270	49	91	
Methylene Chloride	NC	<17		<17	<17	<17			<17	<17	<17	<1.8	
2-Butanone (MEK)	1.7E+05 (DD) dev	<29		<29	<59	<59			<59	<59	<59	5.3	
4-Methyl-2-pentanone (MIBK)	1.0E+05 (DD) dev	<20		<20	<20	<20			<20	<20	<20	<3.7	
tert-Methyl butyl ether (MTBE)	3,300 ca	<7.2		<7.2	<7.2	<7.2			<7.2	<7.2	<7.2	<1.8	
Methyl methacrylate	NC	<8.2		<8.2	<8.2	<8.2			<8.2	<8.2	<8.2	--	
Naphthalene	25 ca	<10		<10	<10	<10			<10	<10	<10	<1.8	
Propylene	NC	<21		<10	<170	<170			<170	<170	<170	<1.8	
Styrene	1,500 ca	<8.5		<8.5	<8.5	<8.5			<8.5	<8.5	<8.5	<1.7	
1,1,1-Trichloroethane	1.7E+05 (EE) st	<11		<11	<11	<11			<11	<11	<11	<1.8	
1,1,2,2-Tetrachloroethane	15 ca	<14		<14	<14	<14			<14	<14	<14	<1.8	
1,1,2-Trichloroethane	7.0 nc	<11		<11	<11	<11			<11	<11	<11	<1.8	
1,1,2-Trichlorotrifluoroethane	NC	--		--	--	--			--	--	--	<1.8	
1,2,4-Trichlorobenzene	70 nc	<37		<37	<37	<37			<37	<37	<37	<3.7	
1,2,4-Trimethylbenzene	2,100 (JT) nc	15		<9.8	<9.8	<9.8			15	<9.8	<9.8	<1.8	
1,3,5-Trimethylbenzene	2,100 (JT) nc	<9.8		<9.8	<9.8	<9.8			<9.8	<9.8	<9.8	<1.8	
2,2,4-Trimethylpentane	1.2E+05 nc	14		<9.3	<9.3	<9.3			9.3	<9.3	<9.3	--	
Tert-butyl Alcohol	NC	<30		<30	<30	<30			<30	<30	<61	--	
Tetrachloroethene	1,400 (EE) st	<14		<14	<14	<14			<14	<14	<14	<1.8	
Tetrahydrofuran	70,000 nc	15		8.8	12	12			24	<5.9	<5.9	7.1	
Toluene	1.7E+05 nc	49		11	<7.5	<7.5			26	<7.5	<7.5	11	
Trichloroethene	67 (DD) dev	<11		<11	<11	<11			<11	<11	<11	<1.8	
Trichlorofluoromethane	15,000 nc	<11		<11	<11	<11			<11	<11	<11	<1.8	
Vinyl chloride	54 (MM) mut	<5.1		<5.1	<5.1	<5.1			<5.1	<5.1	<5.1	<1.8	
Vinyl acetate	NC	<7.0		<7.0	<7.0	<7.0			<7.0	<7.0	<7.0	--	
p,m-Xylene	NC	30		<17	<17	<17			17	<17	<17	4.5	
o-Xylene	NC	13		<8.7	<8.7	<8.7			<8.7	<8.7	<8.7	<1.8	
Total Xylene	7,600 (J) nc	43		<26	<26	<26			<26	<26	<26	--	

Notes on Page 19.

TABLE 1
RACER Trust - Coldwater Road
Vapor Intrusion Sampling
Soil Gas Results December 2017 through December 2022
Compared to SSVIAC Table 3 (basement)

Compound	Sample ID: Units:	EGLE Site-Specific Residential Volatilization to Indoor Air Criteria (SSVIAC) - Table 3 (basement) µg/m ³	VP-3M µg/m ³	VP-3M µg/m ³	VP-3M µg/m ³	VP-3M µg/m ³	VP-3M µg/m ³	VP-3M µg/m ³	VP-3M µg/m ³	VP-3M µg/m ³
	Sample Date:		6/29/2018	10/25/2018	11/19/2019	2/22/2021	5/27/2021	8/26/2021	12/8/2021	12/21/2022
Acetone		NC								<48
1,3-Butadiene		NC								<44
Benzene		110 ca								<6.4
Bromodichloromethane		NC								<13
Bromoform		NC								<21
Bromomethane		NC								<7.8
Vinyl bromide		NC								<8.7
Benzyl chloride		NC								<10
Carbon Disulfide		NC								<62
Chlorobenzene		NC								<9.2
Chloroethane		NC								<53
Chloroform		NC								<9.8
Chloromethane		NC								<41
3-Chloropropene		NC								<63
2-Chlorotoluene		NC								<10
Carbon tetrachloride		NC								<13
Cumene		NC								-
Cyclohexane		2.1E+05 nc								<6.9
1,1-Dichloroethane		530 ca								<8.1
1,1-Dichloroethene		7,000 nc								<7.9
1,2-Dichloro-1,1,2,2-tetrafluoroethane		NR								-
1,2-Dibromoethane		NC								<15
1,2-Dichloroethane		33 ca								<8.1
1,2-Dichloropropane		140 nc								<9.2
1,4-Dioxane		170 ca								<90
Dichlorodifluoromethane		11,000 nc								<9.9
Dibromochloromethane		14 (MM) mut								<17
trans-1,2-Dichloroethene		2,800 nc								<7.9
cis-1,2-Dichloroethene		280 nc								<7.9
cis-1,3-Dichloropropene		NC								<9.1
1,3-Dichlorobenzene		100 nc								<12
1,2-Dichlorobenzene		10,000 nc								<12
1,4-Dichlorobenzene		220 ca								<12
trans-1,3-Dichloropropene		NC								<9.1
Ethanol		6.3E+05 (EE) st								<47
Ethylbenzene		340 ca								<8.7
Ethyl Acetate		2,400 nc								<72
4-Ethyltoluene		NC								<9.8
Freon 113		NC								<15
Freon 114		NC								<14
Heptane		1.2E+05 nc								<8.2
Hexachlorobutadiene		39 ca								<21
Hexane		24,000 nc								<7.0
2-Hexanone		1,000 nc								<20
Isopropyl Alcohol		7,000 nc								120
Methylene Chloride		NC								<17
2-Butanone (MEK)		1.7E+05 (DD) dev								<59
4-Methyl-2-pentanone (MIBK)		1.0E+05 (DD) dev								<20
tert-Methyl butyl ether (MTBE)		3,300 ca								<7.2
Methyl methacrylate		NC								<8.2
Naphthalene		25 ca								<10
Propylene		NC								<170
Styrene		1,500 ca								<8.5
1,1,1-Trichloroethane		1.7E+05 (EE) st								<11
1,1,2,2-Tetrachloroethane		15 ca								<14
1,1,2-Trichloroethane		7.0 nc								<11
1,1,2-Trichlorotrifluoroethane		NC								-
1,2,4-Trichlorobenzene		70 nc								<37
1,2,4-Trimethylbenzene		2,100 (JT) nc								<9.8
1,3,5-Trimethylbenzene		2,100 (JT) nc								<9.8
2,2,4-Trimethylpentane		1.2E+05 nc								<9.3
Tert-butyl Alcohol		NC								<61
Tetrachloroethene		1,400 (EE) st								<14
Tetrahydrofuran		70,000 nc								<5.9
Toluene		1.7E+05 nc								7.5
Trichloroethene		67 (DD) dev								<11
Trichlorofluoromethane		15,000 nc								<11
Vinyl chloride		54 (MM) mut								<5.1
Vinyl acetate		NC								<70
p,m-Xylene		NC								<17
o-Xylene		NC								<8.7
Total Xylene		7,600 (J) nc								<26

Notes on Page 19.

TABLE 1
RACER Trust - Coldwater Road
Vapor Intrusion Sampling
Soil Gas Results December 2017 through December 2022
Compared to SSVIAC Table 3 (basement)

Compound	Sample ID: Units:	EGLE Site-Specific Residential Volatilization to Indoor Air Criteria (SSVIAC) - Table 3 (basement) µg/m ³	VP-3D µg/m ³	VP-3D µg/m ³	VP-3D µg/m ³	VP-3D µg/m ³	VP-3D µg/m ³	VP-3D µg/m ³	VP-3D µg/m ³	VP-3D µg/m ³
Sample Date:			6/29/2018	10/25/2018	11/19/2019	2/22/2021	5/27/2021	8/26/2021	12/8/2021	12/21/2022
Acetone		NC	570							
1,3-Butadiene		NC	<4.4							
Benzene		110 ca	16							
Bromodichloromethane		NC	<13							
Bromoform		NC	<21							
Bromomethane		NC	<7.8							
Vinyl bromide		NC	<8.7							
Benzyl chloride		NC	<10							
Carbon Disulfide		NC	40							
Chlorobenzene		NC	<9.2							
Chloroethane		NC	<5.3							
Chloroform		NC	<9.8							
Chloromethane		NC	<4.1							
3-Chloropropene		NC	<6.3							
2-Chlorotoluene		NC	<10							
Carbon tetrachloride		NC	<13							
Cumene		NC	--							
Cyclohexane		2.1E+05 nc	6.9							
1,1-Dichloroethane		530 ca	<8.1							
1,1-Dichloroethene		7,000 nc	<7.9							
1,2-Dichloro-1,1,2,2-tetrafluoroethane		NR	--							
1,2-Dibromoethane		NC	<15							
1,2-Dichloroethane		33 ca	<8.1							
1,2-Dichloropropane		140 nc	<9.2							
1,4-Dioxane		170 ca	<90							
Dichlorodifluoromethane		11,000 nc	<9.9							
Dibromochloromethane		14 (MM) mut	<17							
trans-1,2-Dichloroethene		2,800 nc	<7.9							
cis-1,2-Dichloroethene		280 nc	<7.9							
cis-1,3-Dichloropropene		NC	<9.1							
1,3-Dichlorobenzene		100 nc	<12							
1,2-Dichlorobenzene		10,000 nc	<12							
1,4-Dichlorobenzene		220 ca	<12							
trans-1,3-Dichloropropene		NC	<9.1							
Ethanol		6.3E+05 (EE) st	2,116 E							
Ethylbenzene		340 ca	130							
Ethyl Acetate		2,400 nc	<36							
4-Ethyltoluene		NC	<9.8							
Freon 113		NC	<15							
Freon 114		NC	<14							
Heptane		1.2E+05 nc	25							
Hexachlorobutadiene		39 ca	<21							
Hexane		24,000 nc	63							
2-Hexanone		1,000 nc	<20							
Isopropyl Alcohol		7,000 nc	170							
Methylene Chloride		NC	<17							
2-Butanone (MEK)		1.7E+05 (DD) dev	59							
4-Methyl-2-pentanone (MIBK)		1.0E+05 (DD) dev	<20							
tert-Methyl butyl ether (MTBE)		3,300 ca	<7.2							
Methyl methacrylate		NC	<8.2							
Naphthalene		25 ca	<10							
Propylene		NC	1,800 E							
Styrene		1,500 ca	<8.5							
1,1,1-Trichloroethane		1.7E+05 (EE) st	<11							
1,1,2,2-Tetrachloroethane		15 ca	<14							
1,1,2-Trichloroethane		7.0 nc	<11							
1,1,2-Trichlorotrifluoroethane		NC	--							
1,2,4-Trichlorobenzene		70 nc	<37							
1,2,4-Trimethylbenzene		2,100 (JT) nc	<20 X							
1,3,5-Trimethylbenzene		2,100 (JT) nc	<9.8							
2,2,4-Trimethylpentane		1.2E+05 nc	28							
Tert-butyl Alcohol		NC	120							
Tetrachloroethene		1,400 (EE) st	<14							
Tetrahydrofuran		70,000 nc	8.8							
Toluene		1.7E+05 nc	60							
Trichloroethene		67 (DD) dev	<11							
Trichlorofluoromethane		15,000 nc	<11							
Vinyl chloride		54 (MM) mut	<5.1							
Vinyl acetate		NC	<7.0							
p,m-Xylene		NC	380							
o-Xylene		NC	96							
Total Xylene		7,600 (J) nc	480							

Notes on Page 19.

TABLE 1
RACER Trust - Coldwater Road
Vapor Intrusion Sampling
Soil Gas Results December 2017 through December 2021

Notes

- 1) Vapor probe samples from VP-1S/D, VP-3S/M/D, VP-4S/M/D, VP-5S/M/D, and VP-6S/M/D were compared to the EGLE Site-Specific Residential Volatilization to Indoor Air (VIAC) Criteria Table 1 (crawl space with a dirt floor) based on the foundation type of adjacent structures. Concentrations above the Table 1 criteria are highlighted in yellow.
- 2) Vapor probe samples from VP-2S/D were compared against the EGLE Site-Specific Residential Volatilization to Indoor Air (VIAC) Criteria Table 2 (slab on grade) based on the foundation type of adjacent structures. Concentrations above the Table 2 criteria are highlighted in yellow.
- 3) Vapor probe samples from VP-3S/M/D were compared against the EGLE Site-Specific Residential Volatilization to Indoor Air (VIAC) Criteria Table 3 (basement) in addition to Table 1 (crawl space with a dirt floor) based on the foundation types of adjacent structures. Concentrations above the Table 3 criteria are highlighted in yellow.
- 4) Light gray header is most recent sampling event result.
- 5) Concentrations in $\mu\text{g}/\text{m}^3$ as noted
- 6) Detections highlighted in bold.
- 7) < = Not detected at specified reporting limit.
- 8) -- = Not analyzed.
- 9) DUP = Duplicate sample.
- 10) E = Concentration exceeds calibration range.
- 11) X = Elevated reporting limit due to matrix interference.
- 12) Sample was not collected during 12/8/17 event from vapor point VP-2D due to interference with groundwater.
- 13) Samples were not collected during 6/29/18 event from vapor points VP-1D, VP-2D, and VP-3M due to interference with groundwater.
- 14) Samples were not collected during 10/25/18 event from vapor points VP-4S, VP-4M, VP-4D, and VP-5D due to interference with groundwater.
- 15) During the 11/18/19 event groundwater samples were collected from (VP-1D, VP-3M, VP-3D, VP-4S, VP-4M, VP-4D, VP-6S, & VP-6M) where groundwater interference was encountered.
- 16) During the 2/22/21 & 2/23/21 event groundwater samples were collected from (VP-1S, VP-1D, VP-2S, VP-3M, VP-3D, VP-6S, & VP-6M) where groundwater interference was encountered.
- 17) During the 5/27/21 event groundwater samples were collected from (VP-1D, VP-2S, VP-3S, VP-5S, VP-5M, VP-5D, & VP-6S) where groundwater interference was encountered.
- 18) During the 8/26/21 event groundwater samples were attempted or collected from (VP-1D, VP-2S, VP-3M, VP-3D, VP-5S, VP-6M, & VP-6D) where groundwater interference was encountered.
- 19) During the 12/8/21 event groundwater samples were attempted or collected from (VP-1S, VP-1D, VP-2S, VP-2D, VP-3M, VP-6S, & VP-6M) where groundwater interference was encountered.
- 20) During the 12/20/22 and 12/21/22 event groundwater samples were attempted or collected from (VP-1D, VP-2S, & VP-3D) where groundwater interference was encountered.

Criteria Notes

- 1) Acceptable Air Values (AAV) endpoint basis used for site-specific criterion: (ca) = Carcinogenic; (nc) = Non-Carcinogenic; (dev) = Developmental; (mut) = Mutagenic cancer; (st) = Short-term (i.e., less than chronic exposure): Agency for Toxic Substances and Disease Registry Inhalation Minimum Risk Level for Acute Inhalation or Intermediate Inhalation exposure durations; U.S. Environmental Protection Agency Integrated Risk Information System Reference Concentration for short-term exposure; of Air Quality Division Acute Initial Threshold Screening Level.
- 2) DD = 'Hazardous substance causes developmental effects. Residential SSVIAC are protective of both prenatal exposure using a pregnant female receptor and postnatal exposure using a child receptor. Nonresidential SSVIAC are protective of prenatal exposure using a pregnant female receptor. Prenatal developmental effects may occur after an acute (i.e. short-term) or full-term exposure.
- 3) EE = The acceptable air concentration (AAC) for the volatile hazardous substances is not derived using standard equations. The hazardous substance may cause adverse human health effects for less than chronic exposures (i.e. short-term or acute). The AAC for these hazardous substances is the acute or intermediate minimum risk level (MRL) developed by the Agency for Toxic Substances and Disease Registry (ATSDR), a United States Environmental Protection Agency Integrated Risk Information System (IRIS) acute reference concentration, or an acute initial threshold screening level (ITSL) by the EGLE's Air Quality Division.
- 4) FF = The AAC for the volatile hazardous substances are based on toxicity values that have been identified to have the potential to cause adverse human health effects for less than chronic exposures (i.e. short-term or acute). The short-term exposure for shallow groundwater health-based SSVIAC are based on modification of the standard equations by the department to develop applicable shallow groundwater values.
- 5) J = Hazardous substance may be present in several isomer forms. Isomer-specific concentrations must be added together for comparison to criteria.
- 6) JT = Hazardous substance may be present in several isomer forms. The health-based SSVIAC may be used for the individual isomer provided that it is the sole isomer detected; however, when multiple isomers are detected in a medium, the isomer-specific concentrations must be added together and compared to the most restrictive health-based SSVIAC of the detected isomers.
- 7) MM = Hazardous substance is a carcinogen with a mutagenic mode of action. The cancer potency values used in calculating health-based SSVIAC are modified using age-dependent adjustment factors for those carcinogenic chemicals identified as mutagenic.
- 8) NC = No Criterion.
- 9) NR = The hazardous substance has not been previously evaluated by the Remediation and Redevelopment Division Toxicology Unit. The identification, collection, and evaluation of toxicological literature and chemical-physical data cannot be completed within the timeframe requested.

TABLE 2
RACER Trust - Coldwater Road
Volatile Organics (VOCs) Groundwater Analytical Results
Collected from Vapor Probes - Nov 2019 through Dec 2022
Compared to SSVIAC Table 1 (Groundwater in Contact) crawlspace with a dirt floor

Well ID	EGLE Site-Specific Residential Volatilization to Indoor Air Criteria (SSVIAC) - Table 1 (Groundwater in Contact) crawlspace with a dirt floor	VP-1S	VP-1S	VP-1D	VP-1D	VP-1D	VP-1D	VP-1D	VP-1D	VP-1D	VP-3S
Sample Date	µg/L	2/23/2021	12/8/2021	11/19/2019	2/23/2021	5/27/2021	8/26/2021	12/8/2021	12/20/2022	5/27/2021	
Acetone	NC	<50	<50	<50	<50	<50	<50	<50	<50	<50	
Acrylonitrile	NC	<2	<2	<2	<2	<2	<2	<2	<2	<2	
2-Butanone	2,600 (DD) dev	<25	<25	<25	<25	<25	<25	<25	<25	<25	
Benzene	0.14 (M) ca TDL 1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
n-Butylbenzene	9.9 nc	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Bromobenzene	NC	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Bromochloromethane	NC	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Bromodichloromethane	NC	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Bromoform	NC	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Bromomethane	NC	<5	<5	<5	<5	<5	<5	<5	<5	<5	
sec-Butylbenzene	8.1 nc	<1	<1	<1	<1	<1	<1	<1	<1	<1	
tert-Butylbenzene	1.9E-02 (M) nc TDL 1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Carbon disulfide	NC	<5	<5	<5	<5	<5	<5	0.13 JB	<5	<5	
Carbon tetrachloride	NC	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Chlorobenzene	NC	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Chloroethane	NC	<5	<5	<5	<5	<5	<5	<5	<5	<5	
Chloroform	NC	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Chloromethane	NC	<5	<5	<5	<5	<5	<5	<5	<5	<5	
1,1-Dichloroethane	0.66 (M) ca TDL 1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,1-Dichloroethene	7.0 nc	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,2-Dibromo-3-chloropropane	NC	<5	<5	<5	<5	<5	<5	<5	<5	<5	
1,2-Dibromoethane	NC	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,2-Dichlorobenzene	23 nc	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,2-Dichloroethane	7.5E-02 (M) ca TDL 1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,2-Dichloropropane	0.22 (M) nc TDL 1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,3-Dichlorobenzene	0.19 (M) nc TDL 1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,4-Dichlorobenzene	0.42 (M) nc TDL 1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
cis-1,2-Dichloroethene	0.36 (M) nc TDL 1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
cis-1,3-Dichloropropene	NC	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Dibromochloromethane	4.0E-02 (MM) (M) mut TDL 5	<5	<5	<5	<5	<5	<5	<5	<5	<5	
Dibromomethane	NC	<5	<5	<5	<5	<5	<5	<5	<5	<5	
Dichlorodifluoromethane	13 nc	<5	<5	<5	<5	<5	<5	<5	<5	<5	
Diethyl ether	75 nc	<10	<10	<10	<10	<10	<10	<10	<10	<10	
trans-1,2-Dichloroethene	3.0 nc	<1	<1	<1	<1	<1	<1	<1	<1	<1	
trans-1,3-Dichloropropene	NC	<1	<1	<1	<1	<1	<1	<1	<1	<1	
trans-1,4-Dichloro-2-butene	NC	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Ethylbenzene	0.47 (M) ca TDL 1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
2-Hexanone	22 (M) nc TDL 50	<50	<50	<50	<50	<50	<50	<50	<50	<50	
Hexachloroethane	NC	<5	<5	<5	<5	<5	<5	<5	<5	<5	
p-Isopropyltoluene	NC	<5	<5	<5	<5	<5	<5	<5	<5	<5	
Isopropylbenzene	0.11 (M) ca TDL 5	<5	<5	<5	<5	<5	<5	<5	<5	<5	
2-Methylnapthalene	2.5 (M) nc* TDL 5	<5	<5	<5	<5	<5	<5	<5	<5	<5	
4-Methyl-2-pentanone	720 (DD) dev	<50	<50	<50	<50	<50	<50	<50	<50	<50	
tert-Methyl butyl ether (MTBE)	12 ca	<5	<5	<5	<5	<5	<5	<5	<5	<5	
Methyl iodide	NC	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Methylene chloride	NC	<5	<5	<5	<5	<5	<5	<5	<5	<5	
Napthalene	0.16 (M) ca TDL 5	<5	<5	<5	<5	<5	<5	<5	<5	<5	
n-Propylbenzene	43 (DD) dev	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Styrene	2.7 ca	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,1,1,2-Tetrachloroethane	0.22 (M) ca TDL 1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,1,1-Trichloroethane	180 (FF) st	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,1,2,2-Tetrachloroethane	9.2E-02 (M) ca TDL 1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,1,2-Trichloroethane	2.2E-02 (M) nc TDL 1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,2,3-Trichlorobenzene	2.9 (M) nc TDL 5	<5	<5	<5	<5	<5	<5	<5	<5	<5	
1,2,3-Trichloropropane	NC	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,2,3-Trimethylbenzene	3.7 (M) (JT) nc TDL 5	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,2,4-Trichlorobenzene	0.20 (M) nc TDL 5	<5	<5	<5	<5	<5	<5	<5	<5	<5	
1,2,4-Trimethylbenzene	3.2 (JT) nc	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,3,5-Trimethylbenzene	3.0 (JT) nc	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Tetrachloroethene	1.5 (FF) st	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Tetrahydrofuran	1,500 nc	<90	<90	<90	<90	<90	<90	<90	<90	<90	
Toluene	300 (FF) st	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Trichloroethene	7.3E-02 (M) (DD) dev TDL 1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Trichlorofluoromethane	16 nc	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Vinyl chloride	5.1E-02 (MM) (M) mut TDL 1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
o-Xylene	11 (J) nc	<1	<1	<1	<1	<1	<1	0.120 J	<1	<1	
p,m-Xylene	11 (J) nc	<2	<2	<2	<2	<2	0.64 J	0.42 J	<2	<2	

Notes on Page 7.

TABLE 2
RACER Trust - Coldwater Road
Volatile Organics (VOCs) Groundwater Analytical Results
Collected from Vapor Probes - Nov 2019 through Dec 2022
Compared to SSVIAC Table 1 (Groundwater in Contact) crawlspace with a dirt floor

Well ID	EGLE Site-Specific Residential Volatilization to Indoor Air Criteria (SSVIAC) - Table 1 (Groundwater in Contact) crawlspace with a dirt floor	VP-3M		VP-3M		VP-3D		VP-4S		VP-4M	
		11/19/2019	2/22/2021	12/8/2021	11/19/2019	2/22/2021	11/19/2019	11/19/2019	11/19/2019	11/19/2019	11/19/2019
Sample Date	µg/L										
Acetone	NC	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Acrylonitrile	NC	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
2-Butanone	2,600 (DD) dev	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25
Benzene	0.14 (M) ca TDL 1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene	9.9 nc	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromobenzene	NC	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	NC	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	NC	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	NC	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	NC	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
sec-Butylbenzene	8.1 nc	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	1.9E-02 (M) nc TDL 1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon disulfide	NC	<5	<5	0.14 J	<5	<5	<5	<5	<5	<5	<5
Carbon tetrachloride	NC	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	NC	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	NC	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloroform	NC	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	NC	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1-Dichloroethane	0.66 (M) ca TDL 1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	7.0 nc	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	NC	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2-Dibromoethane	NC	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	23 nc	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	7.5E-02 (M) ca TDL 1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloropropane	0.22 (M) nc TDL 1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	0.19 (M) nc TDL 1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-Dichlorobenzene	0.42 (M) nc TDL 1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	0.36 (M) nc TDL 1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,3-Dichloropropene	NC	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromochloromethane	4.0E-02 (MM) (M) mut TDL 5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Dibromomethane	NC	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Dichlorodifluoromethane	13 nc	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Diethyl ether	75 nc	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
trans-1,2-Dichloroethene	3.0 nc	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	NC	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,4-Dichloro-2-butene	NC	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	0.47 (M) ca TDL 1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-Hexanone	22 (M) nc TDL 50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Hexachloroethane	NC	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
p-Isopropyltoluene	NC	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Isopropylbenzene	0.11 (M) ca TDL 5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-Methylnaphthalene	2.5 (M) nc* TDL 5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-Methyl-2-pentanone	720 (DD) dev	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
tert-Methyl butyl ether (MTBE)	12 ca	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Methyl iodide	NC	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	NC	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Napthalene	0.16 (M) ca TDL 5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
n-Propylbenzene	43 (DD) dev	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Styrene	2.7 ca	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1,2-Tetrachloroethane	0.22 (M) ca TDL 1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-Trichloroethane	180 (FF) st	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	9.2E-02 (M) ca TDL 1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-Trichloroethane	2.2E-02 (M) nc TDL 1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	2.9 (M) nc TDL 5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2,3-Trichloropropane	NC	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trimethylbenzene	3.7 (M) (JT) nc TDL 5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	0.20 (M) nc TDL 5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2,4-Trimethylbenzene	3.2 (JT) nc	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene	3.0 (JT) nc	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	1.5 (FF) st	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrahydrofuran	1,500 nc	<90	<90	<90	<90	<90	<90	<90	<90	<90	<90
Toluene	300 (FF) st	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	7.3E-02 (M) (DD) dev TDL 1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	16 nc	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride	5.1E-02 (MM) (M) mut TDL 1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
o-Xylene	11 (J) nc	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
p,m-Xylene	11 (J) nc	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2

Notes on Page 7.

TABLE 2
RACER Trust - Coldwater Road
Volatile Organics (VOCs) Groundwater Analytical Results
Collected from Vapor Probes - Nov 2019 through Dec 2022
Compared to SSVIAC Table 1 (Groundwater in Contact) crawlspace with a dirt floor

Well ID	EGLE Site-Specific Residential Volatilization to Indoor Air Criteria (SSVIAC) - Table 1 (Groundwater in Contact) crawlspace with a dirt floor	VP-5S	VP-5M	VP-5D	VP-6S	VP-6S	VP-6S	VP-6S
Sample Date	µg/L	5/27/2021	5/27/2021	5/27/2021	11/18/2019	2/22/2021	5/27/2021	12/8/2021
Acetone	NC	<50	<50	<50	<50	<50	<50	<50
Acrylonitrile	NC	<2	<2	<2	<2	<2	<2	<2
2-Butanone	2,600 (DD) dev	<25	<25	<25	<25	<25	<25	<25
Benzene	0.14 (M) ca TDL 1	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene	9.9 nc	<1	<1	<1	<1	<1	<1	<1
Bromobenzene	NC	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	NC	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	NC	<1	<1	<1	<1	<1	<1	<1
Bromoform	NC	<1	<1	<1	<1	<1	<1	<1
Bromomethane	NC	<5	<5	<5	<5	<5	<5	<5
sec-Butylbenzene	8.1 nc	<1	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	1.9E-02 (M) nc TDL 1	<1	<1	<1	<1	<1	<1	<1
Carbon disulfide	NC	<5	<5	<5	<5	<5	<5	<5
Carbon tetrachloride	NC	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	NC	<1	<1	<1	<1	<1	<1	<1
Chloroethane	NC	<5	<5	<5	<5	<5	<5	<5
Chloroform	NC	<1	<1	<1	<1	<1	<1	<1
Chloromethane	NC	<5	<5	<5	<5	<5	<5	<5
1,1-Dichloroethane	0.66 (M) ca TDL 1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	7.0 nc	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	NC	<5	<5	<5	<5	<5	<5	<5
1,2-Dibromoethane	NC	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	23 nc	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	7.5E-02 (M) ca TDL 1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloropropane	0.22 (M) nc TDL 1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	0.19 (M) nc TDL 1	<1	<1	<1	<1	<1	<1	<1
1,4-Dichlorobenzene	0.42 (M) nc TDL 1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	0.36 (M) nc TDL 1	<1	<1	<1	<1	<1	<1	<1
cis-1,3-Dichloropropene	NC	<1	<1	<1	<1	<1	<1	<1
Dibromochloromethane	4.0E-02 (MM) (M) mut TDL 5	<5	<5	<5	<5	<5	<5	<5
Dibromomethane	NC	<5	<5	<5	<5	<5	<5	<5
Dichlorodifluoromethane	13 nc	<5	<5	<5	<5	<5	<5	<5
Diethyl ether	75 nc	<10	<10	<10	<10	<10	<10	<10
trans-1,2-Dichloroethene	3.0 nc	<1	<1	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	NC	<1	<1	<1	<1	<1	<1	<1
trans-1,4-Dichloro-2-butene	NC	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	0.47 (M) ca TDL 1	<1	<1	<1	<1	<1	<1	<1
2-Hexanone	22 (M) nc TDL 50	<50	<50	<50	<50	<50	<50	<50
Hexachloroethane	NC	<5	<5	<5	<5	<5	<5	<5
p-Isopropyltoluene	NC	<5	<5	<5	<5	<5	<5	<5
Isopropylbenzene	0.11 (M) ca TDL 5	<5	<5	<5	<5	<5	<5	<5
2-Methylnaphthalene	2.5 (M) nc* TDL 5	<5	<5	<5	<5	<5	<5	<5
4-Methyl-2-pentanone	720 (DD) dev	<50	<50	<50	<50	<50	<50	<50
tert-Methyl butyl ether (MTBE)	12 ca	<5	<5	<5	<5	<5	<5	<5
Methyl iodide	NC	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	NC	<5	<5	<5	<5	<5	<5	<5
Napthalene	0.16 (M) ca TDL 5	<5	<5	<5	<5	<5	<5	<5
n-Propylbenzene	43 (DD) dev	<1	<1	<1	<1	<1	<1	<1
Styrene	2.7 ca	<1	<1	<1	<1	<1	<1	<1
1,1,1,2-Tetrachloroethane	0.22 (M) ca TDL 1	<1	<1	<1	<1	<1	<1	<1
1,1,1-Trichloroethane	180 (FF) st	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	9.2E-02 (M) ca TDL 1	<1	<1	<1	<1	<1	<1	<1
1,1,2-Trichloroethane	2.2E-02 (M) nc TDL 1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	2.9 (M) nc TDL 5	<5	<5	<5	<5	<5	<5	<5
1,2,3-Trichloropropane	NC	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trimethylbenzene	3.7 (M) (JT) nc TDL 5	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	0.20 (M) nc TDL 5	<5	<5	<5	<5	<5	<5	<5
1,2,4-Trimethylbenzene	3.2 (JT) nc	<1	<1	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene	3.0 (JT) nc	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	1.5 (FF) st	<1	<1	<1	<1	<1	<1	<1
Tetrahydrofuran	1,500 nc	<90	<90	<90	<90	<90	<90	<90
Toluene	300 (FF) st	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	7.3E-02 (M) (DD) dev TDL 1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	16 nc	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride	5.1E-02 (MM) (M) mut TDL 1	<1	<1	<1	<1	<1	<1	<1
o-Xylene	11 (J) nc	<1	<1	<1	<1	<1	<1	<1
p,m-Xylene	11 (J) nc	<2	<2	<2	<2	<2	<2	<2

Notes on Page 7.

TABLE 2
RACER Trust - Coldwater Road
Volatile Organics (VOCs) Groundwater Analytical Results
Collected from Vapor Probes - Nov 2019 through Dec 2022
Compared to SSVIAC Table 1 (Groundwater in Contact) crawlspace with a dirt floor

Well ID	EGLE Site-Specific Residential Volatilization to Indoor Air Criteria (SSVIAC) - Table 1 (Groundwater in Contact) crawlspace with a dirt floor	VP-6M	VP-6M	VP-6M	VP-6M	Trip Blank-111919	Trip Blank-022321	Trip Blank-052721	Trip Blank-082621	Trip Blank-120821	Trip Blank-122222
Sample Date	µg/L	11/18/2019	2/22/2021	8/26/2021	12/8/2021	11/19/2019	2/23/2021	5/27/2021	8/26/2021	12/8/2021	12/22/2022
Acetone	NC	<50	<50	<50	<50	<50	<50	<50	<50	15 J	<50
Acrylonitrile	NC	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
2-Butanone	2,600 (DD) dev	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25
Benzene	0.14 (M) ca TDL 1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene	9.9 nc	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromobenzene	NC	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	NC	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	NC	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	NC	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	NC	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
sec-Butylbenzene	8.1 nc	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	1.9E-02 (M) nc TDL 1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon disulfide	NC	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Carbon tetrachloride	NC	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	NC	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	NC	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloroform	NC	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	NC	<5	<5	<5	0.76 J	<5	<5	<5	<5	<5	<5
1,1-Dichloroethane	0.66 (M) ca TDL 1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	7.0 nc	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	NC	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2-Dibromoethane	NC	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	23 nc	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	7.5E-02 (M) ca TDL 1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloropropane	0.22 (M) nc TDL 1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	0.19 (M) nc TDL 1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-Dichlorobenzene	0.42 (M) nc TDL 1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	0.36 (M) nc TDL 1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,3-Dichloropropene	NC	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromochloromethane	4.0E-02 (MM) (M) mut TDL 5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Dibromomethane	NC	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Dichlorodifluoromethane	13 nc	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Diethyl ether	75 nc	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
trans-1,2-Dichloroethene	3.0 nc	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	NC	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,4-Dichloro-2-butene	NC	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	0.47 (M) ca TDL 1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-Hexanone	22 (M) nc TDL 50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Hexachloroethane	NC	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
p-Isopropyltoluene	NC	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Isopropylbenzene	0.11 (M) ca TDL 5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-Methylnaphthalene	2.5 (M) nc* TDL 5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-Methyl-2-pentanone	720 (DD) dev	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
tert-Methyl butyl ether (MTBE)	12 ca	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Methyl iodide	NC	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	NC	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Napthalene	0.16 (M) ca TDL 5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
n-Propylbenzene	43 (DD) dev	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Styrene	2.7 ca	<1	<1	<1	<1	<1	<1	<1	<1	0.17 J	<1
1,1,1,2-Tetrachloroethane	0.22 (M) ca TDL 1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-Trichloroethane	180 (FF) st	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	9.2E-02 (M) ca TDL 1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-Trichloroethane	2.2E-02 (M) nc TDL 1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	2.9 (M) nc TDL 5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2,3-Trichloropropane	NC	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trimethylbenzene	3.7 (M) (JT) nc TDL 5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	0.20 (M) nc TDL 5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2,4-Trimethylbenzene	3.2 (JT) nc	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene	3.0 (JT) nc	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	1.5 (FF) st	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrahydrofuran	1,500 nc	<90	<90	<90	<90	<90	<90	<90	<90	<90	<90
Toluene	300 (FF) st	<1	<1	<1	<1	<1	<1	<1	<1	0.25 J	<1
Trichloroethene	7.3E-02 (M) (DD) dev TDL 1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	16 nc	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride	5.1E-02 (MM) (M) mut TDL 1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
o-Xylene	11 (J) nc	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
p,m-Xylene	11 (J) nc	<2	<2	<2	<2	<2	<2	<2	<2	0.23 J	<2

Notes on Page 7.

TABLE 2
RACER Trust - Coldwater Road
Volatile Organics (VOCs) Groundwater Analytical Results
Collected from Vapor Probes - Nov 2019 through Dec 2022
Compared to SSVIAC Table 2 (Groundwater in Contact) slab-on-grade

Well ID	EGLE Site-Specific Residential Volatilization to Indoor Air Criteria (SSVIAC) - Table 2 (Groundwater in Contact) slab-on-grade - µg/L	VP-2S	VP-2S	VP-2S	VP-2S	VP-2S	VP-2D	Trip Blank- 022321	Trip Blank- 052721	Trip Blank- 082621	Trip Blank- 120821	Trip Blank- 122222
Sample Date		2/23/2021	5/27/2021	8/26/2021	12/8/2021	12/20/2022	12/8/2021	2/23/2021	5/27/2021	8/26/2021	12/8/2021	12/22/2022
Acetone	NC	<50	<50	<50	<50	<50	<50 r	<50	<50	<50	15 J	<50
Acrylonitrile	NC	<2	<2	<2	<2	<2	<2 r	<2	<2	<2	<2	<2
2-Butanone	2,600 (DD) dev	<25	<25	<25	<25	<25	<25 r	<25	<25	<25	<25	<25
Benzene	1.0 ca	<1	<1	0.22 J	<1	<1	<1 r	<1	<1	<1	<1	<1
n-Butylbenzene	44 nc	<1	<1	<1	<1	<1	<1 r	<1	<1	<1	<1	<1
Bromobenzene	NC	<1	<1	<1	<1	<1	<1 r	<1	<1	<1	<1	<1
Bromochloromethane	NC	<1	<1	<1	<1	<1	<1 r	<1	<1	<1	<1	<1
Bromodichloromethane	NC	<1	<1	<1	<1	<1	<1 r	<1	<1	<1	<1	<1
Bromoform	NC	<1	<1	<1	<1	<1	<1 r	<1	<1	<1	<1	<1
Bromomethane	NC	<5	<5	<5	<5	<5	<5 r	<5	<5	<5	<5	<5
sec-Butylbenzene	270 nc	<1	<1	<1	<1	<1	<1 r	<1	<1	<1	<1	<1
tert-Butylbenzene	7.7E-02 (M) nc TDL 1	<1	<1	<1	<1	<1	<1 r	<1	<1	<1	<1	<1
Carbon disulfide	NC	<5	<5	<5	<5	<5	<5 r	<5	<5	<5	<5	<5
Carbon tetrachloride	NC	<1	<1	<1	<1	<1	<1 r	<1	<1	<1	<1	<1
Chlorobenzene	NC	<1	<1	<1	<1	<1	<1 r	<1	<1	<1	<1	<1
Chloroethane	NC	<5	<5	<5	<5	<5	<5 r	<5	<5	<5	<5	<5
Chloroform	NC	<1	<1	<1	<1	<1	<1 r	<1	<1	<1	<1	<1
Chloromethane	NC	<5	<5	<5	<5	<5	<5 r	<5	<5	<5	<5	<5
1,1-Dichloroethane	4.7 ca	<1	<1	<1	<1	<1	<1 r	<1	<1	<1	<1	<1
1,1-Dichloroethene	18 nc	<1	<1	<1	<1	<1	<1 r	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	NC	<5	<5	<5	<5	<5	<5 r	<5	<5	<5	<5	<5
1,2-Dibromoethane	NC	<1	<1	<1	<1	<1	<1 r	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	370 nc	<1	<1	<1	<1	<1	<1 r	<1	<1	<1	<1	<1
1,2-Dichloroethane	1.4 ca	<1	<1	<1	<1	<1	<1 r	<1	<1	<1	<1	<1
1,2-Dichloropropane	2.6 nc	<1	<1	<1	<1	<1	<1 r	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	2.6 nc	<1	<1	<1	<1	<1	<1 r	<1	<1	<1	<1	<1
1,4-Dichlorobenzene	5.9 ca	<1	<1	<1	<1	<1	<1 r	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	3.4 nc	<1	<1	<1	<1	<1	<1 r	<1	<1	<1	<1	<1
cis-1,3-Dichloropropene	NC	<1	<1	<1	<1	<1	<1 r	<1	<1	<1	<1	<1
Dibromochloromethane	0.78 (MM) (M) mut TDL 5	<5	<5	<5	<5	<5	<5 r	<5	<5	<5	<5	<5
Dibromomethane	NC	<5	<5	<5	<5	<5	<5 r	<5	<5	<5	<5	<5
Dichlorodifluoromethane	13 nc	<5	<5	<5	<5	<5	<5 r	<5	<5	<5	<5	<5
Diethyl ether	1,200 nc	<10	<10	<10	<10	<10	<10 r	<10	<10	<10	<10	<10
trans-1,2-Dichloroethene	16 nc	<1	<1	<1	<1	<1	<1 r	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	NC	<1	<1	<1	<1	<1	<1 r	<1	<1	<1	<1	<1
trans-1,4-Dichloro-2-butene	NC	<1	<1	<1	<1	<1	<1 r	<1	<1	<1	<1	<1
Ethylbenzene	2.8 ca	<1	<1	<1	<1	<1	<1 r	<1	<1	<1	<1	<1
2-Hexanone	660 nc	<50	<50	<50	<50	<50	<50 r	<50	<50	<50	<50	<50
Hexachloroethane	NC	<5	<5	<5	<5	<5	<5 r	<5	<5	<5	<5	<5
p-Isopropyltoluene	NC	<5	<5	<5	<5	<5	<5 r	<5	<5	<5	<5	<5
Isopropylbenzene	0.60 (M) ca TDL 5	<5	<5	<5	<5	<5	<5 r	<5	<5	<5	<5	<5
2-Methylnaphthalene	66 nc	<5	<5	<5	<5	<5	<5 r	<5	<5	<5	<5	<5
4-Methyl-2-pentanone	720 (DD) dev	<50	<50	<50	<50	<50	<50 r	<50	<50	<50	<50	<50
tert-Methyl butyl ether (MTBE)	250 ca	<5	<5	<5	<5	<5	<5 r	<5	<5	<5	<5	<5
Methyl iodide	NC	<1	<1	<1	<1	<1	<1 r	<1	<1	<1	<1	<1
Methylene chloride	NC	<5	<5	<5	<5	<5	<5 r	<5	<5	<5	<5	<5
Napthalene	4.2 (M) ca TDL 5	<5	<5	<5	<5	<5	<5 r	<5	<5	<5	<5	<5
n-Propylbenzene	43 (DD) dev	<1	<1	<1	<1	<1	<1 r	<1	<1	<1	<1	<1
Styrene	33 ca	<1	<1	<1	<1	<1	<1 r	<1	<1	<1	0.17 J	<1
1,1,1,2-Tetrachloroethane	3.1 ca	<1	<1	<1	<1	<1	<1 r	<1	<1	<1	<1	<1
1,1,1-Trichloroethane	180 (FF) st	<1	<1	<1	<1	<1	<1 r	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	2.4 ca	<1	<1	<1	<1	<1	<1 r	<1	<1	<1	<1	<1
1,1,2-Trichloroethane	0.47 (M) nc TDL 1	<1	<1	<1	<1	<1	<1 r	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	58 nc	<5	<5	<5	<5	<5	<5 r	<5	<5	<5	<5	<5
1,2,3-Trichloropropane	NC	<1	<1	<1	<1	<1	<1 r	<1	<1	<1	<1	<1
1,2,3-Trimethylbenzene	43 (JT) nc	<1	<1	<1	<1	<1	<1 r	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	3.8 (M) nc TDL 5	<5	<5	<5	<5	<5	<5 r	<5	<5	<5	<5	<5
1,2,4-Trimethylbenzene	25 (JT) nc	<1	<1	<1	<1	<1	<1 r	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene	18 (JT) nc	<1	<1	<1	<1	<1	<1 r	<1	<1	<1	<1	<1
Tetrachloroethene	1.5 (FF) st	<1	<1	<1	<1	<1	<1 r	<1	<1	<1	<1	<1
Tetrahydrofuran	45,000 nc	<90	<90	<90	<90	<90	<90 r	<90	<90	<90	<90	<90
Toluene	300 (FF) st	<1	<1	0.44 J	0.19 J	<1	<1 r	<1	<1	<1	0.25 J	<1
Trichloroethene	7.3E-02 (M) (DD) dev TDL 1	<1	<1	<1	<1	<1	<1 r	<1	<1	<1	<1	<1
Trichlorofluoromethane	22 nc	<1	<1	<1	<1	<1	<1 r	<1	<1	<1	<1	<1
Vinyl chloride	0.12 (MM) (M) mut TDL 1	<1	<1	<1	<1	<1	<1 r	<1	<1	<1	<1	<1
o-Xylene	75 (J) nc	<1	<1	<1	<1	<1	<1 r	<1	<1	<1	<1	<1
p,m-Xylene	75 (J) nc	<2	<2	<2	<2	<2	<2 r	<2	<2	<2	0.23 J	<2

Notes on Page 7.

TABLE 2
RACER Trust - Coldwater Road
Volatile Organics (VOCs) Groundwater Analytical Results
Collected from Vapor Probes - Nov 2019 through Dec 2022
Compared to SSVIAC Table 3 (Groundwater in Contact) basement

Well ID	EGLE Site-Specific Residential Volatilization to Indoor Air Criteria (SSVIAC) - Table 3 (Groundwater in Contact) basement -	VP-3S	VP-3M	VP-3M	VP-3M	VP-3D	VP-3D	Trip Blank- 111919	Trip Blank- 022321	Trip Blank- 052721	Trip Blank- 120821	Trip Blank- 122222
Sample Date	µg/L	5/27/2021	11/19/2019	2/22/2021	12/8/2021	11/19/2019	2/22/2021	11/19/2019	2/23/2021	5/27/2021	12/8/2021	12/22/2022
Acetone	NC	<50	<50	<50	<50	<50	<50	<50	<50	<50	15 J	<50
Acrylonitrile	NC	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
2-Butanone	2,600 (DD) dev	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25
Benzene	1.0 ca	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene	44 nc	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromobenzene	NC	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	NC	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	NC	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	NC	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	NC	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
sec-Butylbenzene	270 nc	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	7.7E-02 (M) nc TDL 1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon disulfide	NC	<5	<5	<5	0.14 J	<5	<5	<5	<5	<5	<5	<5
Carbon tetrachloride	NC	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	NC	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	NC	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloroform	NC	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	NC	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1-Dichloroethane	4.7 ca	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	18 nc	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	NC	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2-Dibromomethane	NC	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	370 nc	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	1.4 ca	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloropropane	2.6 nc	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	2.6 nc	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-Dichlorobenzene	5.9 ca	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	3.4 nc	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,3-Dichloropropene	NC	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromochloromethane	0.78 (MM) (M) mut TDL 5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Dibromomethane	NC	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Dichlorodifluoromethane	13 nc	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Diethyl ether	1,200 nc	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
trans-1,2-Dichloroethene	16 nc	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	NC	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,4-Dichloro-2-butene	NC	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	2.8 ca	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-Hexanone	660 nc	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Hexachloroethane	NC	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
p-Isopropyltoluene	NC	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Isopropylbenzene	0.60 (M) ca TDL 5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-Methylnaphthalene	66 nc	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-Methyl-2-pentanone	720 (DD) dev	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
tert-Methyl butyl ether (MTBE)	250 ca	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Methyl iodide	NC	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	NC	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Napthalene	4.2 (M) ca TDL 5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
n-Propylbenzene	43 (DD) dev	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Styrene	33 ca	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.17 J	<1
1,1,1,2-Tetrachloroethane	3.1 ca	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-Trichloroethane	180 (FF) st	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	2.4 ca	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-Trichloroethane	0.47 (M) nc TDL 1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	58 nc	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2,3-Trichloropropane	NC	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trimethylbenzene	43 (JT) nc	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	3.8 (M) nc TDL 5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2,4-Trimethylbenzene	25 (JT) nc	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene	18 (JT) nc	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	1.5 (FF) st	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrahydrofuran	45,000 nc	<90	<90	<90	<90	<90	<90	<90	<90	<90	<90	<90
Toluene	300 (FF) st	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.25 J	<1
Trichloroethene	7.3E-02 (M) (DD) dev TDL 1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	22 nc	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride	0.12 (MM) (M) mut TDL 1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
o-Xylene	75 (J) nc	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
p,m-Xylene	75 (J) nc	<2	<2	<2	<2	<2	<2	<2	<2	<2	0.23 J	<2

Notes on Page 7.

TABLE 2
RACER Trust - Coldwater Road
Volatile Organics (VOCs) Groundwater Analytical Results
Collected from Vapor Probes - November 2019 through December 2022

Notes

- 1) Groundwater samples from vapor probes VP-1S/D, VP-3S/M/D, VP-4S/M/D, VP-5S/M/D, and VP-6S/M/D were compared to the EGLE Site-Specific Residential Volatilization to Indoor Air (VIAC) Criteria Table 1 (crawl space with a dirt floor) based on the foundation type of adjacent structures. Concentrations above the Table 1 criteria are highlighted in yellow.
- 2) Groundwater samples from vapor probes VP-2S/D were compared against the EGLE Site-Specific Residential Volatilization to Indoor Air (VIAC) Criteria Table 2 (slab on grade) based on the foundation type of adjacent structures. Concentrations above the Table 2 criteria are highlighted in yellow.
- 3) Groundwater samples from vapor probes VP-3S/M/D were compared against the EGLE Site-Specific Residential Volatilization to Indoor Air (VIAC) Criteria Table 3 (basement) in addition to Table 1 (crawl space with a dirt floor) based on the foundation types of adjacent structures. Concentrations above the Table 3 criteria are highlighted in yellow.
- 4) Light gray header is most recent sampling event result.
- 5) Concentrations in µg/L as noted
- 6) Detections highlighted in bold.
- 7) < = Not detected at specified reporting limit.
- 8) DUP = Duplicate sample.
- 9) r = This analyte is being reported as the best result from multiple runs.
- 10) S = Surrogate recovery outside of control limits
- 11) Groundwater samples were not collected during the 12/8/17, 6/28/18, and 10/25/18 sampling events.
- 12) During the 11/18/19 event groundwater samples were collected from (VP-1D, VP-3M, VP-3D, VP-4S, VP-4M, VP-4D, VP-6S, & VP-6M) where groundwater interference was encountered.
- 13) During the 2/22/21 & 2/23/21 event groundwater samples were collected from (VP-1S, VP-1D, VP-2S, VP-3M, VP-3D, VP-6S, & VP-6M) where groundwater interference was encountered.
- 14) During the 5/27/21 event groundwater samples were collected from (VP-1D, VP-2S, VP-3S, VP-5S, VP-5M, VP-5D, & VP-6S) where groundwater interference was encountered.
- 15) During the 8/26/21 event groundwater samples were attempted or collected from (VP-1D, VP-2S, VP-3M, VP-3D, VP-5S, VP-6M, & VP-6D) where groundwater interference was encountered.
- 16) During the 12/8/21 event groundwater samples were attempted or collected from (VP-1S, VP-1D, VP-2S, VP-2D, VP-3M, VP-6S, & VP-6M) where groundwater interference was encountered.
- 17) During the 12/20/22 and 12/21/22 event groundwater samples were attempted or collected from (VP-1D, VP-2S, & VP-3D) where groundwater interference was encountered.

Criteria Notes

- 1) Acceptable Air Values (AAV) endpoint basis used for site-specific criterion: (ca) = Carcinogenic; (nc) = Non-Carcinogenic; (dev) = Developmental; (mut) = Mutagenic cancer; (st) = Short-term (i.e., less than chronic exposure): Agency for Toxic Substances and Disease Registry Inhalation Minimum Risk Level for Acute Inhalation or Intermediate Inhalation exposure durations; U.S. Environmental Protection Agency Integrated Risk Information System Reference Concentration for short-term exposure; of Air Quality Division Acute Initial Threshold Screening Level.
- 2) DD = 'Hazardous substance causes developmental effects. Residential SSVIAC are protective of both prenatal exposure using a pregnant female receptor and postnatal exposure using a child receptor. Nonresidential SSVIAC are protective of prenatal exposure using a pregnant female receptor. Prenatal developmental effects may occur after an acute (i.e. short-term) or full-term exposure.
- 3) EE = The acceptable air concentration (AAC) for the volatile hazardous substances is not derived using standard equations. The hazardous substance may cause adverse human health effects for less than chronic exposures (i.e. short-term or acute). The AAC for these hazardous substances is the acute or intermediate minimum risk level (MRL) developed by the Agency for Toxic Substances and Disease Registry (ATSDR), a United States Environmental Protection Agency Integrated Risk Information System (IRIS) acute reference concentration, or an acute initial threshold screening level (ITSL) by the EGLE's Air Quality Division.
- 4) FF = The AAC for the volatile hazardous substances are based on toxicity values that have been identified to have the potential to cause adverse human health effects for less than chronic exposures (i.e. short-term or acute). The short-term exposure for shallow groundwater health-based SSVIAC are based on modification of the standard equations by the department to develop applicable shallow groundwater values.
- 5) J = Hazardous substance may be present in several isomer forms. Isomer-specific concentrations must be added together for comparison to criteria.
- 6) JT = Hazardous substance may be present in several isomer forms. The health-based SSVIAC may be used for the individual isomer provided that it is the sole isomer detected; however, when multiple isomers are detected in a medium, the isomer-specific concentrations must be added together and compared to the most restrictive health-based SSVIAC of the detected isomers.
- 7) M = The health-based SSVIAC may be below target detection limits (TDL). In accordance with Sec. 20120a(10) when the TDL for a hazardous substance is greater than the developed health-based SSVIAC, the TDL is used to evaluate the risk posed from the pathway.
- 8) MM = Hazardous substance is a carcinogen with a mutagenic mode of action. The cancer potency values used in calculating health-based SSVIAC are modified using age-dependent adjustment factors for those carcinogenic chemicals identified as mutagenic.
- 9) NC = No Criterion.
- 10) TDL = Target Detection Limits.

TABLE 3
RACER Trust - Coldwater Road
Volatile Organics (VOCs) Groundwater Analytical Results
Collected from Monitoring Wells - December 2022
Compared to SSVIAC Table 1 (Groundwater in Contact) crawlspace with a dirt floor

Well ID	EGLE Site-Specific Residential Volatilization to Indoor Air Criteria (SSVIAC) - Table 1 (Groundwater in Contact) - µg/L	OBG MW-5	OBG MW-6	OBG MW-7	OBG MW-8	OBG MW-11	OBG MW-14
Sample Date		12/21/2022	12/21/2022	12/22/2022	12/21/2022	12/22/2022	12/22/2022
Acetone	NC	<50	<50	<50	<50	<50	<50
Acrylonitrile	NC	<2	<2	<2	<2	<2	<2
2-Butanone	2,600 (DD) dev	<25	<25	<25	<25	<25	<25
Benzene	0.14 (M) ca TDL 1	<1	<1	<1	<1	<1	<1
n-Butylbenzene	9.9 nc	<1	<1	<1	<1	<1	<1
Bromobenzene	NC	<1	<1	<1	<1	<1	<1
Bromochloromethane	NC	<1	<1	<1	<1	<1	<1
Bromodichloromethane	NC	<1	<1	<1	<1	<1	<1
Bromoform	NC	<1	<1	<1	<1	<1	<1
Bromomethane	NC	<5	<5	<5	<5	<5	<5
sec-Butylbenzene	8.1 nc	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	1.9E-02 (M) nc TDL 1	<1	<1	<1	<1	<1	<1
Carbon disulfide	NC	<5	<5	<5	<5	<5	<5
Carbon tetrachloride	NC	<1	<1	<1	<1	<1	<1
Chlorobenzene	NC	<1	<1	<1	<1	<1	<1
Chloroethane	NC	<5	<5	<5	<5	<5	<5
Chloroform	NC	<1	<1	<1	<1	<1	<1
Chloromethane	NC	<5	<5	<5	<5	<5	<5
1,1-Dichloroethane	0.66 (M) ca TDL 1	1	<1	<1	<1	<1	<1
1,1-Dichloroethene	7.0 nc	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	NC	<5	<5	<5	<5	<5	<5
1,2-Dibromoethane	NC	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	23 nc	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	7.5E-02 (M) ca TDL 1	<1	<1	<1	<1	<1	<1
1,2-Dichloropropane	0.22 (M) nc TDL 1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	0.19 (M) nc TDL 1	<1	<1	<1	<1	<1	<1
1,4-Dichlorobenzene	0.42 (M) nc TDL 1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	0.36 (M) nc TDL 1	3	<1	<1	<1	<1	<1
cis-1,3-Dichloropropene	NC	<1	<1	<1	<1	<1	<1
Dibromochloromethane	4.0E-02 (MM) (M) mut TDL 5	<5	<5	<5	<5	<5	<5
Dibromomethane	NC	<5	<5	<5	<5	<5	<5
Dichlorodifluoromethane	13 nc	<5	<5	<5	<5	<5	<5
Diethyl ether	75 nc	<10	<10	<10	<10	<10	<10
trans-1,2-Dichloroethene	3.0 nc	<1	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	NC	<1	<1	<1	<1	<1	<1
trans-1,4-Dichloro-2-butene	NC	<1	<1	<1	<1	<1	<1
Ethylbenzene	0.47 (M) ca TDL 1	<1	<1	<1	<1	<1	<1
2-Hexanone	22 (M) nc TDL 50	<50	<50	<50	<50	<50	<50
Hexachloroethane	NC	<5	<5	<5	<5	<5	<5
p-Isopropyltoluene	NC	<5	<5	<5	<5	<5	<5
Isopropylbenzene	0.11 (M) ca TDL 5	<5	<5	<5	<5	<5	<5
2-Methylnaphthalene	2.5 (M) nc* TDL 5	<5	<5	<5	<5	<5	<5
4-Methyl-2-pentanone	720 (DD) dev	<50	<50	<50	<50	<50	<50
tert-Methyl butyl ether (MTBE)	12 ca	<5	<5	<5	<5	<5	<5
Methyl iodide	NC	<1	<1	<1	<1	<1	<1
Methylene chloride	NC	<5	<5	<5	<5	<5	<5
Napthalene	0.16 (M) ca TDL 5	<5	<5	<5	<5	<5	<5
n-Propylbenzene	43 (DD) dev	<1	<1	<1	<1	<1	<1
Styrene	2.7 ca	<1	<1	<1	<1	<1	<1
1,1,1,2-Tetrachloroethane	0.22 (M) ca TDL 1	<1	<1	<1	<1	<1	<1
1,1,1-Trichloroethane	180 (FF) st	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	9.2E-02 (M) ca TDL 1	<1	<1	<1	<1	<1	<1
1,1,2-Trichloroethane	2.2E-02 (M) nc TDL 1	<1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	2.9 (M) nc TDL 5	<5	<5	<5	<5	<5	<5
1,2,3-Trichloropropane	NC	<1	<1	<1	<1	<1	<1
1,2,3-Trimethylbenzene	3.7 (M) (JT) nc TDL 5	<1	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	0.20 (M) nc TDL 5	<5	<5	<5	<5	<5	<5
1,2,4-Trimethylbenzene	3.2 (JT) nc	<1	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene	3.0 (JT) nc	<1	<1	<1	<1	<1	<1
Tetrachloroethene	1.5 (FF) st	<1	<1	<1	<1	<1	<1
Tetrahydrofuran	1,500 nc	<90	<90	<90	<90	<90	<90
Toluene	300 (FF) st	<1	<1	<1	<1	<1	<1
Trichloroethene	7.3E-02 (M) (DD) dev TDL 1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	16 nc	<1	<1	<1	<1	<1	<1
Vinyl chloride	5.1E-02 (MM) (M) mut TDL 1	2	<1	<1	<1	<1	<1
o-Xylene	11 (J) nc	<1	<1	<1	<1	<1	<1
p,m-Xylene	11 (J) nc	<2	<2	<2	<2	<2	<2

Notes on Page 2.

TABLE 3
RACER Trust - Coldwater Road
Volatile Organics (VOCs) Groundwater Analytical Results
Collected from Vapor Probes - November 2019 through December 2022

Notes

- 1) Light gray header is most recent sampling event result.
- 2) Concentrations in µg/L as noted
- 3) Detections highlighted in bold.
- 4) < = Not detected at specified reporting limit.

Criteria Notes

- 1) Acceptable Air Values (AAV) endpoint basis used for site-specific criterion: (ca) = Carcinogenic; (nc) = Non-Carcinogenic; (dev) = Developmental; (mut) = Mutagenic cancer; (st) = Short-term (i.e., less than chronic exposure); Agency for Toxic Substances and Disease Registry Inhalation Minimum Risk Level for Acute Inhalation or Intermediate Inhalation exposure durations; U.S. Environmental Protection Agency Integrated Risk Information System Reference Concentration for short-term exposure; of Air Quality Division Acute Initial Threshold Screening Level.
- 2) DD = 'Hazardous substance causes developmental effects. Residential SSVIAC are protective of both prenatal exposure using a pregnant female receptor and postnatal exposure using a child receptor. Nonresidential SSVIAC are protective of prenatal exposure using a pregnant female receptor. Prenatal developmental effects may occur after an acute (i.e. short-term) or full-term exposure.
- 3) EE = The acceptable air concentration (AAC) for the volatile hazardous substances is not derived using standard equations. The hazardous substance may cause adverse human health effects for less than chronic exposures (i.e. short-term or acute). The AAC for these hazardous substances is the acute or intermediate minimum risk level (MRL) developed by the Agency for Toxic Substances and Disease Registry (ATSDR), a United States Environmental Protection Agency Integrated Risk Information System (IRIS) acute reference concentration, or an acute initial threshold screening level (ITSL) by the EGLE's Air Quality Division.
- 4) FF = The AAC for the volatile hazardous substances are based on toxicity values that have been identified to have the potential to cause adverse human health effects for less than chronic exposures (i.e. short-term or acute). The short-term exposure for shallow groundwater health-based SSVIAC are based on modification of the standard equations by the department to develop applicable shallow groundwater values.
- 5) J = Hazardous substance may be present in several isomer forms. Isomer-specific concentrations must be added together for comparison to criteria.
- 6) JT = Hazardous substance may be present in several isomer forms. The health-based SSVIAC may be used for the individual isomer provided that it is the sole isomer detected; however, when multiple isomers are detected in a medium, the isomer-specific concentrations must be added together and compared to the most restrictive health-based SSVIAC of the detected isomers.
- 7) M = The health-based SSVIAC may be below target detection limits (TDL). In accordance with Sec. 20120a(10) when the TDL for a hazardous substance is greater than the developed health-based SSVIAC, the TDL is used to evaluate the risk posed from the pathway.
- 8) MM = Hazardous substance is a carcinogen with a mutagenic mode of action. The cancer potency values used in calculating health-based SSVIAC are modified using age-dependent adjustment factors for those carcinogenic chemicals identified as mutagenic.
- 9) NC = No Criterion.
- 10) TDL = Target Detection Limits.

TABLE 3
RACER Trust - Coldwater Road
Isopropyl Alcohol Groundwater Analytical Results
Collected from Monitoring Wells - January 2022 - December 2022
Compared to SSVIAC Table 1 (Groundwater in Contact) crawlspace with a dirt floor

Well ID	EGLE Site-Specific Residential Volatilization to Indoor Air Criteria (SSVIAC) - Table 1 (Groundwater in Contact) crawlspace with a dirt floor - µg/L	OBG MW-5	OBG MW-6	OBG MW-6	OBG MW-7
		12/21/2022	1/20/2022	12/21/2022	12/22/2022
1- Butanol	NC	--	<5.0	--	--
Isobutanol	NC	--	<5.0	--	--
Methanol	NC	--	<5.0	--	--
Isopropyl alcohol	1,700 nc	<5.0	<5.0	<5.0	<5.0

Notes:

EPA Method 8015D used for analysis.

Analysis in µg/L.

Acceptable Air Values (AAV) endpoint basis used for site-specific criterion: (nc) = Non-Carcinogenetic

-- = not analyzed.

NC = No Criterion.

Light gray header is most recent sampling event result.

TABLE 3
RACER Trust - Coldwater Road
Isopropyl Alcohol Groundwater Analytical Results
Collected from Monitoring Wells - January 2022 - December 2022
Compared to SSVIAC Table 1 (Groundwater in Contact) crawlspace with a dirt floor

Well ID	EGLE Site-Specific Residential Volatilization to Indoor Air Criteria (SSVIAC) - Table 1 (Groundwater in Contact) crawlspace with a dirt floor - µg/L	OBG MW-8	OBG MW-8	OBG MW-11	OBG MW-14
<i>Sample Date</i>		<i>1/20/2022</i>	<i>12/21/2022</i>	<i>12/22/2022</i>	<i>12/22/2022</i>
1- Butanol	NC	<5.0	--	--	--
Isobutanol	NC	<5.0	--	--	--
Methanol	NC	<5.0	--	--	--
Isopropyl alcohol	1,700 nc	<5.0	<5.0	<5.0	<5.0

Notes:

EPA Method 8015D used for analysis.

Analysis in µg/L.

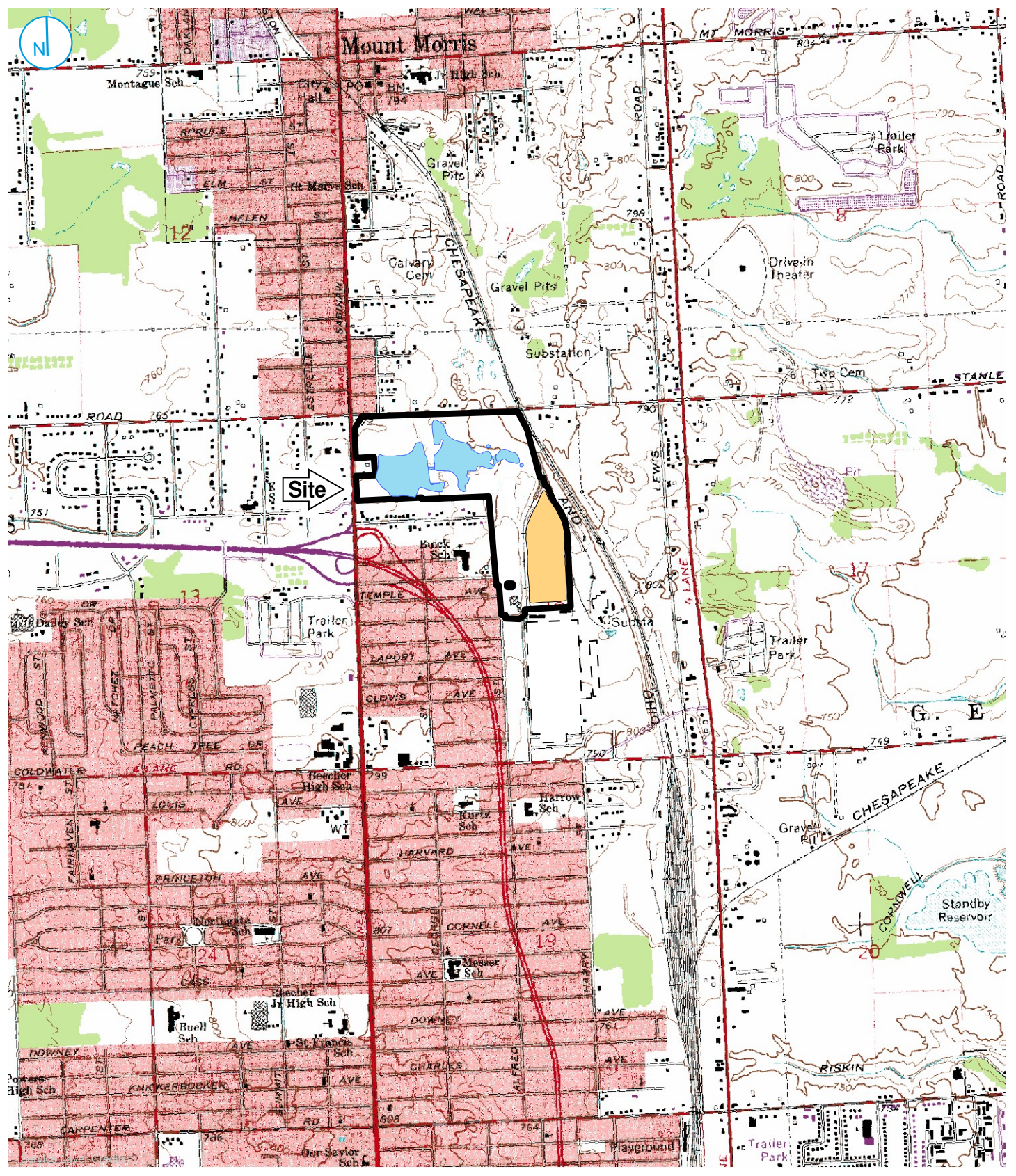
Acceptable Air Values (AAV) endpoint basis used for site-specific

-- = not analyzed.

NC = No Criterion.

Light gray header is most recent sampling event result.

FIGURES



Map Scale: 1:124,000;
Map Center: 83°41'9"W 43°5'51"N

0 1,000 2,000 Feet

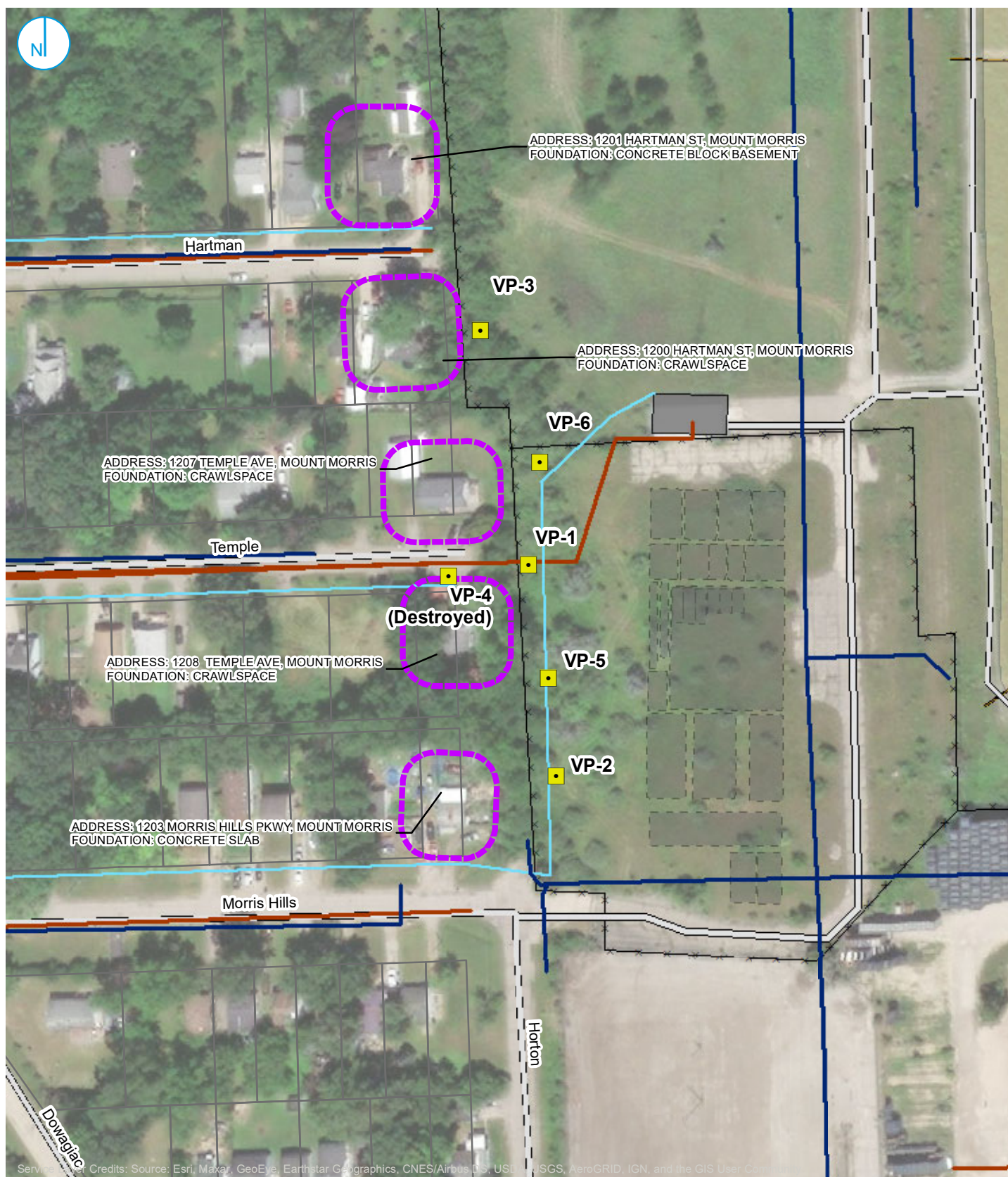
SITE LOCATION

FIGURE 01

Racer Trust
Coldwater Road Landfill Facility
Flint, Michigan

O'BRIEN & GERE ENGINEERS, INC.
A RAMBOLL COMPANY

RAMBOLL



- VAPOR POINT LOCATION
- FORMER BUILDING
- WATER LINE
- SANITARY SEWER LINE
- STORM SEWER LINE
- 30 FT DISTANCE FROM RESIDENCE (DEFAULT LATERAL INCLUSION ZONE FOR A PETROLEUM VAPOR SOURCE)

0 62.5 125 Feet

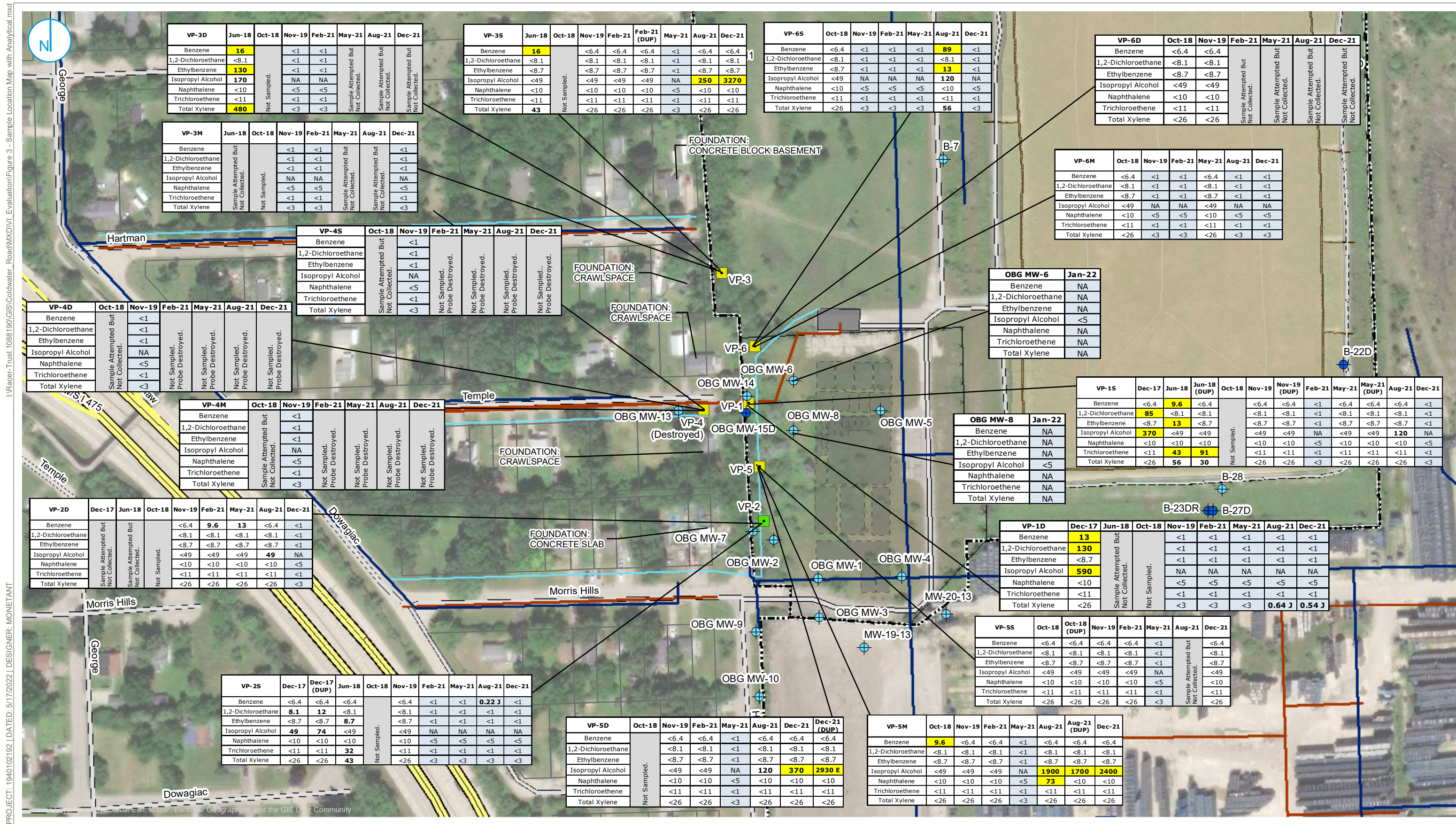
VAPOR POINT LOCATIONS

FIGURE 02

RACER TRUST
COLDWATER ROAD
FLINT, MICHIGAN

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.
A RAMBOLL COMPANY

RAMBOLL



APPENDIX A
SOIL VAPOR (Bottle Vac®) SAMPLE COLLECTION FIELD FORMS

**Soil Vapor (Bottle Vac®) Sample Collection Field Form**

Project # 1940102192 Date 12/20/2022
Project Name Coldwater Road Collector KBS

Sample ID	VP-1S	VP-1D		VP-1S	VP-1D
Vacuum gauge "zero" ("Hg)	yes	yes			
Start Date/Time	12/20/22 - 14:13	14:52	Start Pressure ("Hg)	-29	-27
End Date/Time	12/20/22 - 14:26	15:00	End Pressure ("Hg)	-2	-25
Canister ID	16837	18325	End pressure > "zero"?	yes	yes
Flow controller ID	130	253	Sampling duration (intended)	10 minutes	
Associated ambient air sample ID	N/A		Depth of sample point	5 fbg	10 fbg 15 fbg
Analytical method required	TO-15		Laboratory used	Merit Laboratories	

Tubing type used 1/4 I.D. 3/8 O.D. Length of tubing

S	M	D
8	13	18

 cm Tubing volume

S	M	D
77	125	173

 cc

Volume purged

S	M	D
231	375	519

 cc @ 0.1 l/min (100cc/min) 3 volumes purged @ < 200cc/min? Yes
VP-1S VP-1D VP-1S VP-1D

Shroud tracer gas conc. Beginning: 85.1% 83% End of purging: 49.1% 38% End of sampling: _____

Helium Short Before:

S	M	D
70 ppm		0.0

 After:

S	M	D
0.0		0.0

 PID reading Before:

S	M	D
0.0		0.0

 (ppmv) After:

S	M	D
0.0		0.0

 (ppmv)

Gas Analyzer Readings %O₂ N/A %CO₂ N/A %CH₄ N/A

Noticeable odor None Soil type Clay

Weather Conditions during Probe Installation:

Air temperature (°F) _____ Rainfall _____ Wind direction _____
Barometric pressure _____ Wind speed (mph) _____

Substantial changes in weather conditions during sampling or over the past 24 to 48 hrs:

Weather Conditions at Start of Sampling:

Air temperature (°F) 33 Rainfall None Wind direction SW
Barometric pressure 29.53 Wind speed (mph) 8

Substantial changes in weather conditions during sampling or over the past 24 to 48 hrs:

Site Plan showing sample location, buildings, landmarks, potential soil vapor and outdoor air sources, preferential pathways



Comments: VP-DUP-122022 collected at VP-1S - canister ID 45553

VP-1D - water visible in the line. Collected 1.5 voas of water for VOCs

**Soil Vapor (Bottle Vac®) Sample Collection Field Form**

Project # 1940102192 Date 12/20/2022
Project Name Coldwater Road Collector KBS

Sample ID	VP-2S	VP-2D		VP-2S	VP-2D
Vacuum gauge "zero" ("Hg)	yes	yes			
Start Date/Time	12/20/22 - 16:03	16:22	Start Pressure ("Hg)	-28	-28
End Date/Time	12/20/22 - 16:03	16:29	End Pressure ("Hg)	-28	-2
Canister ID	48674	44172	End pressure > "zero"?	yes	yes
Flow controller ID	37	456	Sampling duration (intended)	10 minutes	
Associated ambient air sample ID	N/A		Depth of sample point	5 fbg	10 fbg 15 fbg
Analytical method required	TO-15		Laboratory used	Merit Laboratories	

Tubing type used 1/4 I.D. 3/8 O.D. Length of tubing

S	M	D
8	13	18

 cm Tubing volume

S	M	D
77	125	173

 cc

Volume purged

S	M	D
231	375	519

 cc @ 0.1 l/min (100cc/min) 3 volumes purged @ < 200cc/min? Yes
VP-2S VP-2D VP-2S VP-2D

Shroud tracer gas conc. Beginning: 89% 77.2% End of purging: 41% 41.2% End of sampling: _____

Helium Short Before:

S	M	D
20 ppm		0.0

 After:

S	M	D
0.0		0.0

 PID reading Before:

S	M	D
0.0		0.0

 (ppmv) After:

S	M	D
0.0		0.0

 (ppmv)

Gas Analyzer Readings %O₂ N/A %CO₂ N/A %CH₄ N/A

Noticeable odor None Soil type Clay

Weather Conditions during Probe Installation:

Air temperature (°F) _____ Rainfall _____ Wind direction _____
Barometric pressure _____ Wind speed (mph) _____

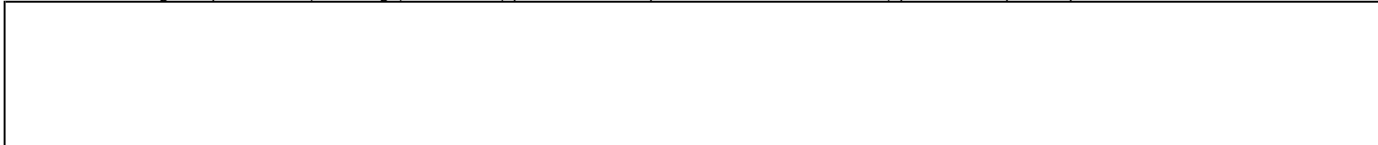
Substantial changes in weather conditions during sampling or over the past 24 to 48 hrs:

Weather Conditions at Start of Sampling:

Air temperature (°F) 29 Rainfall None Wind direction W
Barometric pressure 29.55 Wind speed (mph) 5

Substantial changes in weather conditions during sampling or over the past 24 to 48 hrs:

Site Plan showing sample location, buildings, landmarks, potential soil vapor and outdoor air sources, preferential pathways



Comments: VP-2S - water visible in the line. Collected 1 voa of water for VOCs

Project # 1940102192 Date 12/21/2022
 Project Name Coldwater Road Collector KBS

Sample ID	VP-3S	VP-3M	VP-3D	Vacuum gauge "zero" ("Hg)	VP-3S	VP-3M	VP-3D
Start Date/Time	12/21/22 - 10:00	10:19	10:33	Start Pressure ("Hg)	-26	-26	-27
End Date/Time	12/21/22 - 10:07	10:26	10:53	End Pressure ("Hg)	-2	-2	-26.5
Canister ID	45510	48636	44078	End pressure > "zero"?	yes	yes	yes
Flow controller ID	341	299	263	Sampling duration (intended)	10 minutes		
Associated ambient air sample ID	N/A			Depth of sample point	5 fbg	10 fbg	15 fbg
Analytical method required	TO-15			Laboratory used	Merit Laboratories		

Tubing type used 1/4 I.D. 3/8 O.D. Length of tubing

S	M	D
8	13	18

 cm Tubing volume

S	M	D
77	125	173

 cc

Volume purged

S	M	D
231	375	519

 cc @ 0.1 l/min (100cc/min) 3 volumes purged @ < 200cc/min? Yes
 VP-3S VP-3M VP-3S VP-3M

Shroud tracer gas conc. Beginning: 86.9% 58.6% End of purging: 30.8% 27.1% End of sampling: _____

Before:

S	M	D
330	210	0.0

 ppm After:

S	M	D
0.0	0.0	0.0

 PID reading Before:

S	M	D
0.0	0.0	0.0

 (ppmv) After:

S	M	D
0.0	0.0	0.0

 (ppmv)

Gas Analyzer Readings %O₂ N/A %CO₂ N/A %CH₄ N/A

Noticeable odor None Soil type Clay

Weather Conditions during Probe Installation:

Air temperature (°F) _____ Rainfall _____ Wind direction _____
 Barometric pressure _____ Wind speed (mph) _____

Substantial changes in weather conditions during sampling or over the past 24 to 48 hrs:

Weather Conditions at Start of Sampling:

Air temperature (°F) 17 Rainfall None Wind direction WNW
 Barometric pressure 29.6 Wind speed (mph) 7

Substantial changes in weather conditions during sampling or over the past 24 to 48 hrs:

Site Plan showing sample location, buildings, landmarks, potential soil vapor and outdoor air sources, preferential pathways

Comments: VP-3D - water visible in the line. Attempted to collect water sample. Not enough volume to submit sample.

VP-3S - duplicate sample collected to send to ALS. Canister ID: 46627, Controller ID: 105

Start Time: 10:00, End Time: 10:06; Start pressure: -27, End pressure: -2

**Soil Vapor (Bottle Vac®) Sample Collection Field Form**

Project # 1940102192 Date 12/21/2022
Project Name Coldwater Road Collector KBS

Sample ID	VP-5S	VP-5M	VP-5D	Vacuum gauge "zero" ("Hg)	VP-5S	VP-5M	VP-5D
Start Date/Time	12/21/22 - 12:00	12:29	12:57	Start Pressure ("Hg)	-28	-26	-30
End Date/Time	12/21/22 - 12:14	12:35	13:08	End Pressure ("Hg)	-2	-2	-3
Canister ID	43733	48699	13740	End pressure > "zero"?	yes	yes	no
Flow controller ID	146	217	25	Sampling duration (intended)	10 minutes		
Associated ambient air sample ID	N/A			Depth of sample point	5 fbg	10 fbg	15 fbg
Analytical method required	TO-15			Laboratory used	Merit Laboratories		

Tubing type used 1/4 I.D. 3/8 O.D. Length of tubing

S	M	D
8	13	18

 cm Tubing volume

S	M	D
77	125	173

 cc

Volume purged

S	M	D
231	375	519

 cc @ 0.1 l/min (100cc/min) 3 volumes purged @ < 200cc/min? Yes
VP-5S VP-5M VP-5D - 77% VP-5S VP-5M VP-5D - 25.4%

Shroud tracer gas conc. Beginning: 80.6% 90.9% End of purging: 33.8% 34.5% End of sampling: _____

Helium Short Before:

S	M	D
200	300	0.0

 ppm After:

S	M	D
0.0	0.0	0.0

 PID reading Before:

S	M	D
0.0	0.0	0.0

 (ppmv) After:

S	M	D
0.0	0.0	0.0

 (ppmv)

Gas Analyzer Readings %O₂ N/A %CO₂ N/A %CH₄ N/A

Noticeable odor None Soil type Clay

Weather Conditions during Probe Installation:

Air temperature (°F) _____ Rainfall _____ Wind direction _____
Barometric pressure _____ Wind speed (mph) _____

Substantial changes in weather conditions during sampling or over the past 24 to 48 hrs:

Weather Conditions at Start of Sampling:

Air temperature (°F) 20 Rainfall None Wind direction W
Barometric pressure 29.62 Wind speed (mph) 5

Substantial changes in weather conditions during sampling or over the past 24 to 48 hrs:

Site Plan showing sample location, buildings, landmarks, potential soil vapor and outdoor air sources, preferential pathways

Comments: VP-5M - duplicate sample collected to send to ALS. Canister ID: 46541, Controller ID: 91

Start Time: 12:29, End Time: 12:35; Start pressure: -25, End pressure: -2

VP-5D - duplicate sample collected to send to ALS. Canister ID: 46538, Controller ID: 349

Start Time: 12:57, End Time: 13:03; Start pressure: -28, End pressure: -2

**Soil Vapor (Bottle Vac®) Sample Collection Field Form**

Project # 1940102192 Date 12/20/2022 - 12/21/22
Project Name Coldwater Road Collector KBS

Sample ID	VP-6S	VP-6M	VP-6D	Vacuum gauge "zero" ("Hg)	VP-6S	VP-6M	VP-6D
Start Date/Time	<u>12/20/22 - 12:15</u>	<u>12:36</u>	<u>12:53 - 12/21/22 - 8:40</u>	Start Pressure ("Hg)	<u>-26</u>	<u>-27</u>	<u>-28</u>
End Date/Time	<u>12/20/22 - 12:21</u>	<u>12:42</u>	<u>1:23 - 12/21/22 - 17:35</u>	End Pressure ("Hg)	<u>-2</u>	<u>-2</u>	<u>-18</u>
Canister ID	<u>38958</u>	<u>45541</u>	<u>44922</u>	End pressure > "zero"?	<u>yes</u>	<u>yes</u>	<u>no</u>
Flow controller ID	<u>415</u>	<u>453</u>	<u>338</u>	Sampling duration (intended)	<u>10 minutes</u>		
Associated ambient air sample ID	<u>N/A</u>			Depth of sample point	<u>5 fbg</u>	<u>10 fbg</u>	<u>15 fbg</u>
Analytical method required	<u>TO-15</u>			Laboratory used	<u>Merit Laboratories</u>		

Tubing type used 1/4 I.D. 3/8 O.D. Length of tubing

S	M	D
<u>8</u>	<u>13</u>	<u>18</u>

 cm Tubing volume

S	M	D
<u>77</u>	<u>125</u>	<u>173</u>

 cc

Volume purged

S	M	D
<u>231</u>	<u>375</u>	<u>519</u>

 cc @ 0.1 l/min (100cc/min) 3 volumes purged @ < 200cc/min? Yes
VP-6S VP-6M VP-6D - 85.2% VP-6S VP-6M VP-6D - 39% - zero after 8hrs

Shroud tracer gas conc. Beginning: 79.6% 87.0% End of purging: 10.1% 42.0% End of sampling: _____

Helium Short Before:

S	M	D
<u>0.0</u>	<u>0.0</u>	<u>0.0</u>

 After:

S	M	D
<u>0.0</u>	<u>0.0</u>	<u>0.0</u>

 PID reading Before:

S	M	D
<u>0.0</u>	<u>0.0</u>	<u>0.0</u>

 (ppmv) After:

S	M	D
<u>0.0</u>	<u>0.0</u>	<u>0.0</u>

 (ppmv)

Gas Analyzer Readings %O₂ N/A %CO₂ N/A %CH₄ N/A

Noticeable odor None Soil type Clay

Weather Conditions during Probe Installation:

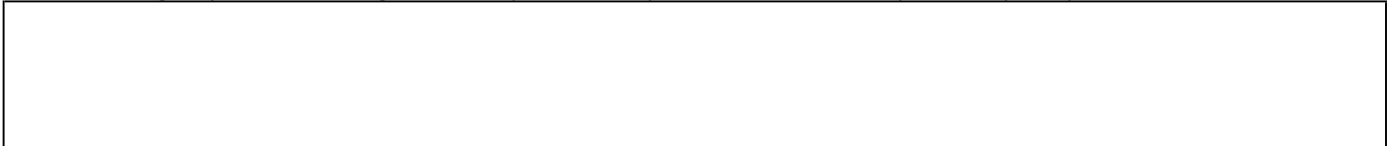
Air temperature (°F) _____ Rainfall _____ Wind direction _____
Barometric pressure _____ Wind speed (mph) _____

Substantial changes in weather conditions during sampling or over the past 24 to 48 hrs:

Weather Conditions at Start of Sampling:

Air temperature (°F) 15 Rainfall None Wind direction W
Barometric pressure 29.6 Wind speed (mph) 7

Substantial changes in weather conditions during sampling or over the past 24 to 48 hrs:

Site Plan showing sample location, buildings, landmarks, potential soil vapor and outdoor air sources, preferential pathways

Comments: VP-6D was run for 8-hour sample time.

<u>8:40 pressure -28</u>	<u>15:32 pressure -19</u>
<u>9:26 pressure -23</u>	<u>16:25 pressure -18</u>
<u>10:43 pressure -21</u>	<u>17:35 pressure -18</u>

APPENDIX B

GROUNDWATER SAMPLE COLLECTION FIELD FORMS

Standard Groundwater Sampling Log

Date 12/21/2022
Site Name RACER Coldwater Rd
Location Flint, MI
Project No. 1940103462
Personnel KBS

Weather cloudy 30's F
Well # OBG MW-5
Evacuation Method peristaltic pump
Sampling Method low flow

Well Information:

Depth of Well * 21.64 ft.
Depth to Water * 9.70 ft.
Length of Water Column 11.94 ft.
Volume of Water in Well 1.95 gal.(s)
3X Volume of Water in Well 5.84 gal.(s)

Water Volume /ft. for:

X 2" Diameter Well = 0.163 X LWC
4" Diameter Well = 0.653 X LWC
6" Diameter Well = 1.469 X LWC

Volume removed before sampling 3 liters
Did well go dry? no

* Measurements taken from ☒ Well Casing ☐ Protective Casing ☐ (Other, Specify)

Instrument Calibration:

Calibrated within range

pH Yes
ORP Yes
Conductivity Yes
DO Yes

Water parameters:

Drawdown measured		Temperature Celsius		Conductivity mS/cm		Dissolved Oxygen mg/L		pH		ORP mV		Turbidity NTUs	
0.3 feet or less		±3 percent		±3 percent		±10 percent		±0.1 pH units		±10 millivolts		±10 percent	
initial	10.15	initial	7.3	initial	0.613	initial	0.50	initial	7.65	initial	-81.4	initial	14.6
5 min	10.46		8.5		0.649		0.23		7.49		-113.6		13.4
10 min	10.80		9.0		0.581		0.11		7.54		-133.1		
15 min	11.02		9.0		0.428		0.07		7.62		-132.8		10.2
20 min	11.14		9.2		0.401		0.06		7.62		-130.1		6.85
25 min	11.25		8.9		0.397		0.02		7.63		-130.7		6.18
30 min	11.29		8.6		0.394		0.03		7.65		-131.2		5.75
35 min													
40 min													
45 min													
50 min													
55 min													
60 min													
65 min													
70 min													
75 min													
80 min													
85 min													
90 min													

Water Sample:

Time Collected 15:58

Physical Appearance at Start

Physical Appearance at Sampling

Color clear/black flecks
Odor no
Turbidity (> 100 NTU) no
Sheen/Free Product no

Color clear/black flecks
Odor no
Turbidity (> 100 NTU) no
Sheen/Free Product no

Samples collected:

Analyses	# Bottles	Bottle size/type	Preservative	Field Filtered
VOCs	3	40 ml Glass	HCL	
Isopropyl alcohol	3	40 ml Glass	None	

Notes: Pumping rate 100 ml per min

Standard Groundwater Sampling Log

Date 12/21/2022
 Site Name RACER Coldwater Rd
 Location Flint, MI
 Project No. 1940103462
 Personnel KBS

Weather cloudy 20's F
 Well # OBG MW-6
 Evacuation Method peristaltic pump
 Sampling Method low flow

Well Information:

Depth of Well * 27.23 ft.
 Depth to Water * 16.02 ft.
 Length of Water Column 11.21 ft.
 Volume of Water in Well 1.83 gal.(s)
 3X Volume of Water in Well 5.48 gal.(s)

Water Volume /ft. for:
 X 2" Diameter Well = 0.163 X LWC
4" Diameter Well = 0.653 X LWC
6" Diameter Well = 1.469 X LWC

Volume removed before sampling 3 liters
 Did well go dry? no

* Measurements taken from ☒ Well Casing ☐ Protective Casing ☐ (Other, Specify) _____

Instrument Calibration:

Calibrated within range

pH Yes
 ORP Yes
 Conductivity Yes
 DO Yes

Water parameters:

Drawdown measured		Temperature Celsius		Conductivity mS/cm		Dissolved Oxygen mg/L		pH		ORP mV		Turbidity NTUs	
0.3 feet or less		±3 percent		±3 percent		±10 percent		±0.1 pH units		±10 millivolts		±10 percent	
initial		initial	6.1	initial	1.71	initial	1.78	initial	6.79	initial	-32.8	initial	0.57
5 min	16.49		6.8		1.83		0.36		6.75		-30.2		3.99
10 min	16.89		7.2		1.87		0.21		6.81		-31.0		2.08
15 min	17.25		6.9		1.87		0.19		6.86		-29.2		2.24
20 min	17.23		6.8		1.87		0.14		6.88		-27.3		2.40
25 min	17.25		6.7		1.87		0.03		6.90		-25.5		2.02
30 min	17.35		6.8		1.87		0.06		6.91		-23.3		1.69
35 min	17.45		6.8		1.87		0.05		6.92		-20.9		1.83
40 min													
45 min													
50 min													
55 min													
60 min													
65 min													
70 min													
75 min													
80 min													
85 min													
90 min													

Water Sample:

Time Collected 16:58

Physical Appearance at Start

Physical Appearance at Sampling

Color clear
 Odor no
 Turbidity (> 100 NTU) no
 Sheen/Free Product no

Color clear
 Odor no
 Turbidity (> 100 NTU) no
 Sheen/Free Product no

Samples collected:

Analyses	# Bottles	Bottle size/type	Preservative	Field Filtered
VOCs	3	40 ml Glass	HCL	
Isopropyl alcohol	3	40 ml Glass	None	

Notes: Pumping rate 100 ml per min

Standard Groundwater Sampling Log

Date 12/22/2022
 Site Name RACER Coldwater Rd
 Location Flint, MI
 Project No. 1940103462
 Personnel KBS

Weather cloudy 30s F
 Well # OBG MW-7
 Evacuation Method peristaltic pump
 Sampling Method low flow

Well Information:

Depth of Well * 22.90 ft.
 Depth to Water * 10.30 ft.
 Length of Water Column 12.60 ft.
 Volume of Water in Well 2.05 gal.(s)
 3X Volume of Water in Well 6.16 gal.(s)

Water Volume /ft. for:
 X 2" Diameter Well = 0.163 X LWC
 4" Diameter Well = 0.653 X LWC
 6" Diameter Well = 1.469 X LWC

Volume removed before sampling 3 liters
 Did well go dry? no

* Measurements taken from ☒ Well Casing ☐ Protective Casing ☐ (Other, Specify) _____

Instrument Calibration:

Calibrated within range

pH Yes
 ORP Yes
 Conductivity Yes
 DO Yes

Water parameters:

Drawdown measured 0.3 feet or less	Temperature Celsius ±3 percent	Conductivity mS/cm ±3 percent	Dissolved Oxygen mg/L ±10 percent	pH ±0.1 pH units	ORP mV ±10 millivolts	Turbidity NTUs ±10 percent
initial <u>10.52</u>	initial <u>12.9</u>	initial <u>1.03</u>	initial <u>1.36</u>	initial <u>6.90</u>	initial <u>53.3</u>	initial <u>40.0</u>
5 min <u></u>	<u>8.8</u>	<u>1.03</u>	<u>0.67</u>	<u>6.82</u>	<u>27.9</u>	<u>36.2</u>
10 min <u>10.90</u>	<u>8.9</u>	<u>1.03</u>	<u>0.68</u>	<u>6.82</u>	<u>24.5</u>	<u>36.1</u>
15 min <u>11.20</u>	<u>9.0</u>	<u>1.03</u>	<u>0.65</u>	<u>6.82</u>	<u>22.7</u>	<u>36.0</u>
20 min <u>11.30</u>	<u>9.0</u>	<u>1.03</u>	<u>0.69</u>	<u>6.82</u>	<u>23.8</u>	<u>31.9</u>
25 min <u>11.48</u>	<u>9.1</u>	<u>1.02</u>	<u>0.99</u>	<u>6.82</u>	<u>26.8</u>	<u>31.1</u>
30 min <u>11.59</u>	<u>9.3</u>	<u>1.03</u>	<u>0.97</u>	<u>6.82</u>	<u>25.8</u>	<u>26.2</u>
35 min <u>11.75</u>	<u>9.4</u>	<u>1.03</u>	<u>0.96</u>	<u>6.81</u>	<u>24.2</u>	<u>24.0</u>
40 min <u>11.85</u>	<u>9.5</u>	<u>1.03</u>	<u>0.94</u>	<u>6.81</u>	<u>22.2</u>	<u>24.3</u>
45 min <u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>
50 min <u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>
55 min <u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>
60 min <u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>
65 min <u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>
70 min <u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>
75 min <u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>
80 min <u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>
85 min <u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>
90 min <u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>

Water Sample:

Time Collected 11:02

Physical Appearance at Start

Physical Appearance at Sampling

Color clear/rust color globs
 Odor no
 Turbidity (> 100 NTU) no
 Sheen/Free Product no

Color clear
 Odor no
 Turbidity (> 100 NTU) no
 Sheen/Free Product no

Samples collected:

Analyses	# Bottles	Bottle size/type	Preservative	Field Filtered
VOCs	3	40 ml Glass	HCL	
Isopropyl alcohol	3	40 ml Glass	None	

Notes: Pumping rate 100 ml per min

Standard Groundwater Sampling Log

Date 12/21/2022
Site Name RACER Coldwater Rd
Location Flint, MI
Project No. 1940103462
Personnel KBS

Weather cloudy 20s F
Well # OBG MW-8
Evacuation Method peristaltic pump
Sampling Method low flow

Well Information:

Depth of Well * 22.63 ft.
Depth to Water * 14.14 ft.
Length of Water Column 8.49 ft.
Volume of Water in Well 1.38 gal.(s)
3X Volume of Water in Well 4.15 gal.(s)

Water Volume /ft. for:

X 2" Diameter Well = 0.163 X LWC
4" Diameter Well = 0.653 X LWC
6" Diameter Well = 1.469 X LWC

Volume removed before sampling 1 gal.(s)
Did well go dry? no

* Measurements taken from ☒ Well Casing ☐ Protective Casing ☐ (Other, Specify)

Instrument Calibration:

Calibrated within range

pH Yes
ORP Yes
Conductivity Yes
DO Yes

Water parameters:

Drawdown measured 0.3 feet or less		Temperature Celsius ±3 percent		Conductivity mS/cm ±3 percent		Dissolved Oxygen mg/L ±10 percent		pH ±0.1 pH units		ORP mV ±10 millivolts		Turbidity NTUs ±10 percent	
initial	14.22	initial	8.3	initial	1.18	initial	0.54	initial	7.01	initial	-37.6	initial	
5 min	14.29		8.4		1.19		0.33		6.99		-39.7		30.5
10 min	14.46		8.9		1.16		0.88		6.98		-38.8		34.8
15 min	14.48		8.8		1.15		0.82		6.95		-35.1		23.6
20 min	14.56		8.9		1.14		0.80		6.95		-29.2		22.2
25 min	14.62		8.2		1.12		0.82		6.96		-24.4		19.8
30 min	14.65		7.4		1.11		0.84		6.95		-23.6		19.2
35 min													
40 min													
45 min													
50 min													
55 min													
60 min													
65 min													
70 min													
75 min													
80 min													
85 min													
90 min													

Water Sample:

Time Collected 17:52

Physical Appearance at Start

Physical Appearance at Sampling

Color slightly cloudy
Odor no
Turbidity (> 100 NTU) no
Sheen/Free Product no

Color clear
Odor no
Turbidity (> 100 NTU) no
Sheen/Free Product no

Samples collected:

Analyses	# Bottles	Bottle size/type	Preservative	Field Filtered
VOCs	3	40 ml Glass	HCL	
Isopropyl alcohol	3	40 ml Glass	None	

Notes: Pumping rate 100 ml per min

Standard Groundwater Sampling Log

Date 12/22/2022
Site Name RACER Coldwater Rd
Location Flint, MI
Project No. 1940103462
Personnel KBS

Weather cloudy 30s F
Well # OBG MW-11
Evacuation Method peristaltic pump
Sampling Method low flow

Well Information:

Depth of Well * 24.67 ft.
Depth to Water * 11.13 ft.
Length of Water Column 13.54 ft.
Volume of Water in Well 2.21 gal.(s)
3X Volume of Water in Well 6.62 gal.(s)

Water Volume /ft. for:
X 2" Diameter Well = 0.163 X LWC
4" Diameter Well = 0.653 X LWC
6" Diameter Well = 1.469 X LWC

Volume removed before sampling 1 gal.(s)
Did well go dry? no

* Measurements taken from ☒ Well Casing ☐ Protective Casing ☐ (Other, Specify)

Instrument Calibration:

Calibrated within range

pH Yes
ORP Yes
Conductivity Yes
DO Yes

Water parameters:

Drawdown measured		Temperature Celsius		Conductivity mS/cm		Dissolved Oxygen mg/L		pH		ORP mV		Turbidity NTUs	
0.3 feet or less		±3 percent		±3 percent		±10 percent		±0.1 pH units		±10 millivolts		±10 percent	
initial	11.61	initial	8.8	initial	1.77	initial	0.34	initial	6.86	initial	-101.6	initial	28.5
5 min	11.70		9.1		1.77		0.38		6.90		-107.6		16.2
10 min	11.87		9.3		1.76		0.43		6.95		-112.1		10.5
15 min	12.12		9.9		1.76		0.36		6.92		-112.7		10.7
20 min	12.25		10.0		1.76		0.39		6.92		-112.8		8.51
25 min	12.39		10.1		1.76		0.38		6.92		-114.1		9.82
30 min	12.46		10.2		1.76		0.35		6.91		-115.0		7.79
35 min													
40 min													
45 min													
50 min													
55 min													
60 min													
65 min													
70 min													
75 min													
80 min													
85 min													
90 min													

Water Sample:

Time Collected 12:22

Physical Appearance at Start

Physical Appearance at Sampling

Color clear/black flecks
Odor no
Turbidity (> 100 NTU) no
Sheen/Free Product no

Color clear
Odor no
Turbidity (> 100 NTU) no
Sheen/Free Product no

Samples collected:

Analyses	# Bottles	Bottle size/type	Preservative	Field Filtered
VOCs	3	40 ml Glass	HCL	
Isopropyl alcohol	3	40 ml Glass	None	

Notes: Pumping rate 100 ml per min

Standard Groundwater Sampling Log

Date 12/22/2022
Site Name RACER Coldwater Rd
Location Flint, MI
Project No. 1940103462
Personnel KBS

Weather cloudy 30s F
Well # OBG MW-14
Evacuation Method peristaltic pump
Sampling Method low flow

Well Information:

Depth of Well * 17.75 ft.
Depth to Water * 11.75 ft.
Length of Water Column 6.00 ft.
Volume of Water in Well 0.98 gal.(s)
3X Volume of Water in Well 2.93 gal.(s)

Water Volume /ft. for:

X 2" Diameter Well = 0.163 X LWC
4" Diameter Well = 0.653 X LWC
6" Diameter Well = 1.469 X LWC

Volume removed before sampling 1 1/2 gal.(s)
Did well go dry? no

* Measurements taken from ☒ Well Casing ☐ Protective Casing ☐ (Other, Specify)

Instrument Calibration:

Calibrated within range

pH Yes
ORP Yes
Conductivity Yes
DO Yes

Water parameters:

Drawdown measured		Temperature Celsius		Conductivity mS/cm		Dissolved Oxygen mg/L		pH		ORP mV		Turbidity NTUs	
0.3 feet or less		±3 percent		±3 percent		±10 percent		±0.1 pH units		±10 millivolts		±10 percent	
initial	12.60	initial	9.3	initial	1.56	initial	2.11	initial	7.00	initial	51.6	initial	181
5 min	12.99		9.0		1.85		1.82		7.02		52.0		87.4
10 min	13.19		8.8		1.56		2.00		7.04		57.3		44.4
15 min	13.31		9.0		1.56		1.95		7.05		60.4		41.6
20 min	13.50		8.5		1.78		1.56		7.04		64.5		40
25 min	13.70		8.6		1.57		1.61		7.04		66.9		40
30 min	13.80		8.9		1.56		1.50		7.03		70.3		40
35 min	14.16		9.1		1.55		1.05		7.01		72.3		39
40 min	14.28		9.0		1.55		0.70		6.99		72.9		
45 min	14.48		9.1		1.55		0.44		6.99		73.2		22
50 min	14.70		9.1		1.56		0.38		6.97		74.6		20
55 min	14.85		9.2		1.56		0.41		6.97		75.0		19
60 min													
65 min													
70 min													
75 min													
80 min													
85 min													
90 min													

Water Sample:

Time Collected 10:02

Physical Appearance at Start

Physical Appearance at Sampling

Color slightly cloudy
Odor no
Turbidity (> 100 NTU) no
Sheen/Free Product no

Color clear
Odor no
Turbidity (> 100 NTU) no
Sheen/Free Product no

Samples collected:

Analyses	# Bottles	Bottle size/type	Preservative	Field Filtered
VOCs	3	40 ml Glass	HCL	
Isopropyl alcohol	3	40 ml Glass	None	

Notes: Pumping rate 100 ml per min

APPENDIX C

ANALYTICAL LABORATORY RESULTS

APPENDIX C

SOIL VAPOR - ANALYTICAL LABORATORY RESULTS



Analytical Laboratory Report

Report ID: S43808.01(01)
Generated on 01/17/2023

Report to
Attention: Clifford Yantz
Ramboll Americas
2090 Commonwealth Blvd
Ann Arbor, MI 48105

Phone: 313-333-0211 FAX:
Email: Clifford.Yantz@ramboll.com

Additional Contacts: Kevin Schneider

Report produced by
Merit Laboratories, Inc.
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Contacts for report questions:
John Lavery (johnlavery@meritlabs.com)
Barbara Ball (bball@meritlabs.com)

Report Summary
Lab Sample ID(s): S43808.01-S43808.14
Project: RACER Coldwater Road
Collected Date(s): 12/20/2022 - 12/21/2022
Submitted Date/Time: 12/22/2022 16:40
Sampled by: Kevin Schneider
P.O. #: 1940002628 TASK 10

Table of Contents

- Cover Page (Page 1)
- General Report Notes (Page 2)
- Report Narrative (Page 2)
- Laboratory Certifications (Page 3)
- Qualifier Descriptions (Page 3)
- Glossary of Abbreviations (Page 3)
- Method Summary (Page 4)
- Sample Summary (Page 5)


Maya Murshak
Technical Director



Analytical Laboratory Report

General Report Notes

Analytical results relate only to the samples tested, in the condition received by the laboratory.

Methods may be modified for improved performance.

Results reported on a dry weight basis where applicable.

'Not detected' indicates that parameter was not found at a level equal to or greater than the reporting limit (RL).

When MDL results are provided, then 'Not detected' indicates that parameter was not found at a level equal to or greater than the MDL.

40 CFR Part 136 Table II Required Containers, Preservation Techniques and Holding Times for the Clean Water Act specify that samples for acrolein and acrylonitrile, and 2-chloroethylvinyl ether need to be preserved at a pH in the range of 4 to 5 or if not preserved, analyzed within 3 days of sampling.

QA/QC corresponding to this analytical report is a separate document with the same Merit ID reference and is available upon request.

Full accreditation certificates are available upon request. Starred (*) analytes are not NELAP accredited.

Samples are held by the lab for 30 days from the final report date unless a written request to hold longer is provided by the client.

Report shall not be reproduced except in full, without the written approval of Merit Laboratories, Inc.

Limits for drinking water samples, are listed as the MCL Limits (Maximum Contaminant Level Concentrations)

PFAS requirement: Section 9.3.8 of U.S. EPA Method 537.1 states "If the method analyte(s) found in the Field Sample is present in the

FRB at a concentration greater than 1/3 the MRL, then all samples collected with that FRB are invalid and must be recollected and reanalyzed."

Samples submitted without an accompanying FRB may not be acceptable for compliance purposes.

Wisconsin PFAs analysis: MDL = LOD; RL = LOQ. LOD and LOQ are adjusted for dilution.

Report Narrative

There is no additional narrative for this analytical report

Laboratory Certifications

Authority	Certification ID
Michigan DEQ	#9956
DOD ELAP/ISO 17025	#69699
WBENC	#2005110032
Ohio VAP	#CL0002
Indiana DOH	#C-MI-07
New York NELAC	#11814
North Carolina DENR	#680
North Carolina DOH	#26702
Alaska CSLAP	#17-001
Pennsylvania DEP	#68-05884
Wisconsin DNR	FID# 399147320

Qualifier Descriptions

Qualifier	Description
!	Result is outside of stated limit criteria
B	Compound also found in associated method blank
E	Concentration exceeds calibration range
F	Analysis run outside of holding time
G	Estimated result due to extraction run outside of holding time
H	Sample submitted and run outside of holding time
I	Matrix interference with internal standard
J	Estimated value less than reporting limit, but greater than MDL
L	Elevated reporting limit due to low sample amount
M	Result reported to MDL not RDL
O	Analysis performed by outside laboratory. See attached report.
R	Preliminary result
S	Surrogate recovery outside of control limits
T	No correction for total solids
X	Elevated reporting limit due to matrix interference
Y	Elevated reporting limit due to high target concentration
b	Value detected less than reporting limit, but greater than MDL
e	Reported value estimated due to interference
j	Analyte also found in associated method blank
p	Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak.
x	Preserved from bulk sample

Glossary of Abbreviations

Abbreviation	Description
RL/RDL	Reporting Limit
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
SW	EPA SW 846 (Soil and Wastewater) Methods
E	EPA Methods
SM	Standard Methods
LN	Linear
BR	Branched



Analytical Laboratory Report

Method Summary

Method	Version
N/A	Not Applicable
TO-15	EPA TO-15 Second Edition January 1999



Analytical Laboratory Report

Sample Summary (14 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S43808.01	VP-1S	Air	12/20/22 14:13 - 12/20/22 14:26
S43808.02	VP-1D*	Air	12/20/22 14:52 - 12/20/22 15:00
S43808.03	VP-2S*	Air	12/20/22 16:03 - 12/20/22 16:04
S43808.04	VP-2D	Air	12/20/22 16:22 - 12/20/22 16:29
S43808.05	VP-3S	Air	12/21/22 10:00 - 12/21/22 10:07
S43808.06	VP-3M	Air	12/21/22 10:19 - 12/21/22 10:26
S43808.07	VP-3D*	Air	12/21/22 10:33 - 12/21/22 10:53
S43808.08	VP-5S	Air	12/21/22 12:00 - 12/21/22 12:14
S43808.09	VP-5M	Air	12/21/22 12:29 - 12/21/22 12:35
S43808.10	VP-5D	Air	12/21/22 12:57 - 12/21/22 13:08
S43808.11	VP-6S	Air	12/20/22 12:15 - 12/20/22 12:21
S43808.12	VP-6M	Air	12/20/22 12:36 - 12/20/22 12:42
S43808.13	VP-6D	Air	12/21/22 08:40 - 12/21/22 17:35
S43808.14	VP-DUP-122022	Air	12/20/22 00:01 - 12/20/22 00:02



Analytical Laboratory Report

Lab Sample ID: S43808.01

Sample Tag: VP-1S

Collected Date/Time: 12/20/2022 14:13 - 12/20/2022 14:26

Matrix: Air

COC Reference: A6461

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	Air Canister	None	No	RT	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Pressure check for TO-15*	0	N/A	12/29/22 16:45	BDO	

Organics - Volatiles

TO-15, Method: TO-15, Run Date: 01/16/23 18:11, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	20		ppbv	10	67-64-1	
1,3-Butadiene	Not detected	20		ppbv	10	106-99-0	
Benzene	Not detected	2		ppbv	10	71-43-2	
Bromodichloromethane	Not detected	2		ppbv	10	75-27-4	
Bromoform	Not detected	2		ppbv	10	75-25-2	
Bromomethane	Not detected	2		ppbv	10	74-83-9	
Vinyl bromide	Not detected	2		ppbv	10	593-60-2	
Benzyl chloride	Not detected	2		ppbv	10	100-44-7	
Carbon disulfide	Not detected	20		ppbv	10	75-15-0	
Chlorobenzene	Not detected	2		ppbv	10	108-90-7	
Chloroethane	Not detected	20		ppbv	10	75-00-3	
Chloroform	Not detected	2		ppbv	10	67-66-3	
Chloromethane	Not detected	20		ppbv	10	74-87-3	
3-Chloropropene	Not detected	20		ppbv	10	107-05-1	
2-Chlorotoluene	Not detected	2		ppbv	10	95-49-8	
Carbon tetrachloride	Not detected	2		ppbv	10	56-23-5	
Cyclohexane	Not detected	2		ppbv	10	110-82-7	
1,1-Dichloroethane	Not detected	2		ppbv	10	75-34-3	
1,1-Dichloroethene	Not detected	2		ppbv	10	75-35-4	
1,2-Dibromoethane	Not detected	2		ppbv	10	106-93-4	
1,2-Dichloroethane	Not detected	2		ppbv	10	107-06-2	
1,2-Dichloropropane	Not detected	2		ppbv	10	78-87-5	
1,4-Dioxane	Not detected	25		ppbv	10	123-91-1	
Dichlorodifluoromethane	Not detected	2		ppbv	10	75-71-8	
Dibromochloromethane	Not detected	2		ppbv	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	2		ppbv	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	2		ppbv	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	2		ppbv	10	541-73-1	
1,2-Dichlorobenzene	Not detected	2		ppbv	10	95-50-1	
1,4-Dichlorobenzene	Not detected	2		ppbv	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-02-6	
Ethanol*	Not detected	25		ppbv	10	64-17-5	
Ethylbenzene	Not detected	2		ppbv	10	100-41-4	
Ethyl Acetate*	Not detected	20		ppbv	10	141-78-6	
4-Ethyltoluene	Not detected	2		ppbv	10	622-96-8	
Freon 113	Not detected	2		ppbv	10	76-13-1	



Analytical Laboratory Report

Lab Sample ID: S43808.01 (continued)

Sample Tag: VP-1S

TO-15, Method: TO-15, Run Date: 01/16/23 18:11, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Freon 114	Not detected	2		ppbv	10	76-14-2	
Heptane	Not detected	2		ppbv	10	142-82-5	
Hexachlorobutadiene	Not detected	2		ppbv	10	87-68-3	
Hexane	Not detected	2		ppbv	10	110-54-3	
2-Hexanone*	Not detected	5		ppbv	10	591-78-6	
Isopropyl Alcohol*	50	20		ppbv	10	67-63-0	
Methylene chloride	Not detected	5		ppbv	10	75-09-2	
2-Butanone (MEK)	Not detected	20		ppbv	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	5		ppbv	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	2		ppbv	10	1634-04-4	
Methyl methacrylate	Not detected	2		ppbv	10	80-62-6	
Naphthalene	Not detected	2		ppbv	10	91-20-3	
Propylene*	Not detected	100		ppbv	10	115-07-1	
Styrene	Not detected	2		ppbv	10	100-42-5	
1,1,1-Trichloroethane	Not detected	2		ppbv	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	2		ppbv	10	79-34-5	
1,1,2-Trichloroethane	Not detected	2		ppbv	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	5		ppbv	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	2		ppbv	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	2		ppbv	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	2		ppbv	10	540-84-1	
Tert-butyl Alcohol	Not detected	20		ppbv	10	75-65-0	
Tetrachloroethene	Not detected	2		ppbv	10	127-18-4	
Tetrahydrofuran*	4	2		ppbv	10	109-99-9	
Toluene	3	2		ppbv	10	108-88-3	
Trichloroethene	Not detected	2		ppbv	10	79-01-6	
Trichlorofluoromethane	Not detected	2		ppbv	10	75-69-4	
Vinyl chloride	Not detected	2		ppbv	10	75-01-4	
Vinyl acetate	Not detected	20		ppbv	10	108-05-4	
p,m-Xylene	Not detected	4		ppbv	10		
o-Xylene	Not detected	2		ppbv	10	95-47-6	
Total Xylenes	Not detected	6		ppbv	10	1330-20-7	

TO-15, Method: TO-15, Run Date: 01/16/23 18:11, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	48		ug/m3	10	67-64-1	
1,3-Butadiene	Not detected	44		ug/m3	10	106-99-0	
Benzene	Not detected	6.4		ug/m3	10	71-43-2	
Bromodichloromethane	Not detected	13		ug/m3	10	75-27-4	
Bromoform	Not detected	21		ug/m3	10	75-25-2	
Bromomethane	Not detected	7.8		ug/m3	10	74-83-9	
Vinyl bromide	Not detected	8.7		ug/m3	10	593-60-2	
Benzyl chloride	Not detected	10		ug/m3	10	100-44-7	
Carbon disulfide	Not detected	62		ug/m3	10	75-15-0	
Chlorobenzene	Not detected	9.2		ug/m3	10	108-90-7	
Chloroethane	Not detected	53		ug/m3	10	75-00-3	
Chloroform	Not detected	9.8		ug/m3	10	67-66-3	
Chloromethane	Not detected	41		ug/m3	10	74-87-3	
3-Chloropropene	Not detected	63		ug/m3	10	107-05-1	
2-Chlorotoluene	Not detected	10		ug/m3	10	95-49-8	



Analytical Laboratory Report

Lab Sample ID: S43808.01 (continued)

Sample Tag: VP-1S

TO-15, Method: TO-15, Run Date: 01/16/23 18:11, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Carbon tetrachloride	Not detected	13		ug/m3	10	56-23-5	
Cyclohexane	Not detected	6.9		ug/m3	10	110-82-7	
1,1-Dichloroethane	Not detected	8.1		ug/m3	10	75-34-3	
1,1-Dichloroethene	Not detected	7.9		ug/m3	10	75-35-4	
1,2-Dibromoethane	Not detected	15		ug/m3	10	106-93-4	
1,2-Dichloroethane	Not detected	8.1		ug/m3	10	107-06-2	
1,2-Dichloropropane	Not detected	9.2		ug/m3	10	78-87-5	
1,4-Dioxane	Not detected	90		ug/m3	10	123-91-1	
Dichlorodifluoromethane	Not detected	9.9		ug/m3	10	75-71-8	
Dibromochloromethane	Not detected	17		ug/m3	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	12		ug/m3	10	541-73-1	
1,2-Dichlorobenzene	Not detected	12		ug/m3	10	95-50-1	
1,4-Dichlorobenzene	Not detected	12		ug/m3	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-02-6	
Ethanol*	Not detected	47		ug/m3	10	64-17-5	
Ethylbenzene	Not detected	8.7		ug/m3	10	100-41-4	
Ethyl Acetate*	Not detected	72		ug/m3	10	141-78-6	
4-Ethyltoluene	Not detected	9.8		ug/m3	10	622-96-8	
Freon 113	Not detected	15		ug/m3	10	76-13-1	
Freon 114	Not detected	14		ug/m3	10	76-14-2	
Heptane	Not detected	8.2		ug/m3	10	142-82-5	
Hexachlorobutadiene	Not detected	21		ug/m3	10	87-68-3	
Hexane	Not detected	7.0		ug/m3	10	110-54-3	
2-Hexanone*	Not detected	20		ug/m3	10	591-78-6	
Isopropyl Alcohol*	120	49		ug/m3	10	67-63-0	
Methylene chloride	Not detected	17		ug/m3	10	75-09-2	
2-Butanone (MEK)	Not detected	59		ug/m3	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	20		ug/m3	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	7.2		ug/m3	10	1634-04-4	
Methyl methacrylate	Not detected	8.2		ug/m3	10	80-62-6	
Naphthalene	Not detected	10		ug/m3	10	91-20-3	
Propylene*	Not detected	170		ug/m3	10	115-07-1	
Styrene	Not detected	8.5		ug/m3	10	100-42-5	
1,1,1-Trichloroethane	Not detected	11		ug/m3	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	14		ug/m3	10	79-34-5	
1,1,2-Trichloroethane	Not detected	11		ug/m3	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	37		ug/m3	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	9.8		ug/m3	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	9.8		ug/m3	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	9.3		ug/m3	10	540-84-1	
Tert-butyl Alcohol	Not detected	61		ug/m3	10	75-65-0	
Tetrachloroethene	Not detected	14		ug/m3	10	127-18-4	
Tetrahydrofuran*	12	5.9		ug/m3	10	109-99-9	
Toluene	11	7.5		ug/m3	10	108-88-3	
Trichloroethene	Not detected	11		ug/m3	10	79-01-6	
Trichlorofluoromethane	Not detected	11		ug/m3	10	75-69-4	
Vinyl chloride	Not detected	5.1		ug/m3	10	75-01-4	



Analytical Laboratory Report

Lab Sample ID: S43808.01 (continued)

Sample Tag: VP-1S

TO-15, Method: TO-15, Run Date: 01/16/23 18:11, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Vinyl acetate	Not detected	70		ug/m3	10	108-05-4	
p,m-Xylene	Not detected	17		ug/m3	10		
o-Xylene	Not detected	8.7		ug/m3	10	95-47-6	
Total Xylenes	Not detected	26		ug/m3	10	1330-20-7	



Analytical Laboratory Report

Lab Sample ID: S43808.02

Sample Tag: VP-1D*

Collected Date/Time: 12/20/2022 14:52 - 12/20/2022 15:00

Matrix: Air

COC Reference: A6461

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	Air Canister	None	No	RT	IR

Other / Misc.

Method: , Run Date: 12/23/22 08:45, Analyst: MMC

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Hold until notified*	Completed				1		



Analytical Laboratory Report

Lab Sample ID: S43808.03

Sample Tag: VP-2S*

Collected Date/Time: 12/20/2022 16:03 - 12/20/2022 16:04

Matrix: Air

COC Reference: A6461

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	Air Canister	None	No	RT	IR

Other / Misc.

Method: , Run Date: 12/23/22 08:45, Analyst: MMC

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Hold until notified*	Completed				1		



Analytical Laboratory Report

Lab Sample ID: S43808.04

Sample Tag: VP-2D

Collected Date/Time: 12/20/2022 16:22 - 12/20/2022 16:29

Matrix: Air

COC Reference: A6461

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	Air Canister	None	No	RT	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Pressure check for TO-15*	0	N/A	12/29/22 16:45	BDO	

Organics - Volatiles

TO-15, Method: TO-15, Run Date: 01/16/23 18:41, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	20		ppbv	10	67-64-1	
1,3-Butadiene	Not detected	20		ppbv	10	106-99-0	
Benzene	Not detected	2		ppbv	10	71-43-2	
Bromodichloromethane	Not detected	2		ppbv	10	75-27-4	
Bromoform	Not detected	2		ppbv	10	75-25-2	
Bromomethane	Not detected	2		ppbv	10	74-83-9	
Vinyl bromide	Not detected	2		ppbv	10	593-60-2	
Benzyl chloride	Not detected	2		ppbv	10	100-44-7	
Carbon disulfide	Not detected	20		ppbv	10	75-15-0	
Chlorobenzene	Not detected	2		ppbv	10	108-90-7	
Chloroethane	Not detected	20		ppbv	10	75-00-3	
Chloroform	Not detected	2		ppbv	10	67-66-3	
Chloromethane	Not detected	20		ppbv	10	74-87-3	
3-Chloropropene	Not detected	20		ppbv	10	107-05-1	
2-Chlorotoluene	Not detected	2		ppbv	10	95-49-8	
Carbon tetrachloride	Not detected	2		ppbv	10	56-23-5	
Cyclohexane	Not detected	2		ppbv	10	110-82-7	
1,1-Dichloroethane	Not detected	2		ppbv	10	75-34-3	
1,1-Dichloroethene	Not detected	2		ppbv	10	75-35-4	
1,2-Dibromoethane	Not detected	2		ppbv	10	106-93-4	
1,2-Dichloroethane	Not detected	2		ppbv	10	107-06-2	
1,2-Dichloropropane	Not detected	2		ppbv	10	78-87-5	
1,4-Dioxane	Not detected	25		ppbv	10	123-91-1	
Dichlorodifluoromethane	Not detected	2		ppbv	10	75-71-8	
Dibromochloromethane	Not detected	2		ppbv	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	2		ppbv	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	2		ppbv	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	2		ppbv	10	541-73-1	
1,2-Dichlorobenzene	Not detected	2		ppbv	10	95-50-1	
1,4-Dichlorobenzene	Not detected	2		ppbv	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-02-6	
Ethanol*	Not detected	25		ppbv	10	64-17-5	
Ethylbenzene	Not detected	2		ppbv	10	100-41-4	
Ethyl Acetate*	Not detected	20		ppbv	10	141-78-6	
4-Ethyltoluene	Not detected	2		ppbv	10	622-96-8	
Freon 113	Not detected	2		ppbv	10	76-13-1	



Analytical Laboratory Report

Lab Sample ID: S43808.04 (continued)

Sample Tag: VP-2D

TO-15, Method: TO-15, Run Date: 01/16/23 18:41, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Freon 114	Not detected	2		ppbv	10	76-14-2	
Heptane	Not detected	2		ppbv	10	142-82-5	
Hexachlorobutadiene	Not detected	2		ppbv	10	87-68-3	
Hexane	Not detected	2		ppbv	10	110-54-3	
2-Hexanone*	Not detected	5		ppbv	10	591-78-6	
Isopropyl Alcohol*	50	20		ppbv	10	67-63-0	
Methylene chloride	Not detected	5		ppbv	10	75-09-2	
2-Butanone (MEK)	Not detected	20		ppbv	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	5		ppbv	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	2		ppbv	10	1634-04-4	
Methyl methacrylate	Not detected	2		ppbv	10	80-62-6	
Naphthalene	Not detected	2		ppbv	10	91-20-3	
Propylene*	Not detected	100		ppbv	10	115-07-1	
Styrene	Not detected	2		ppbv	10	100-42-5	
1,1,1-Trichloroethane	Not detected	2		ppbv	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	2		ppbv	10	79-34-5	
1,1,2-Trichloroethane	Not detected	2		ppbv	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	5		ppbv	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	2		ppbv	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	2		ppbv	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	2		ppbv	10	540-84-1	
Tert-butyl Alcohol	Not detected	20		ppbv	10	75-65-0	
Tetrachloroethene	Not detected	2		ppbv	10	127-18-4	
Tetrahydrofuran*	3	2		ppbv	10	109-99-9	
Toluene	3	2		ppbv	10	108-88-3	
Trichloroethene	Not detected	2		ppbv	10	79-01-6	
Trichlorofluoromethane	Not detected	2		ppbv	10	75-69-4	
Vinyl chloride	Not detected	2		ppbv	10	75-01-4	
Vinyl acetate	Not detected	20		ppbv	10	108-05-4	
p,m-Xylene	Not detected	4		ppbv	10		
o-Xylene	Not detected	2		ppbv	10	95-47-6	
Total Xylenes	Not detected	6		ppbv	10	1330-20-7	

TO-15, Method: TO-15, Run Date: 01/16/23 18:41, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	48		ug/m3	10	67-64-1	
1,3-Butadiene	Not detected	44		ug/m3	10	106-99-0	
Benzene	Not detected	6.4		ug/m3	10	71-43-2	
Bromodichloromethane	Not detected	13		ug/m3	10	75-27-4	
Bromoform	Not detected	21		ug/m3	10	75-25-2	
Bromomethane	Not detected	7.8		ug/m3	10	74-83-9	
Vinyl bromide	Not detected	8.7		ug/m3	10	593-60-2	
Benzyl chloride	Not detected	10		ug/m3	10	100-44-7	
Carbon disulfide	Not detected	62		ug/m3	10	75-15-0	
Chlorobenzene	Not detected	9.2		ug/m3	10	108-90-7	
Chloroethane	Not detected	53		ug/m3	10	75-00-3	
Chloroform	Not detected	9.8		ug/m3	10	67-66-3	
Chloromethane	Not detected	41		ug/m3	10	74-87-3	
3-Chloropropene	Not detected	63		ug/m3	10	107-05-1	
2-Chlorotoluene	Not detected	10		ug/m3	10	95-49-8	



Analytical Laboratory Report

Lab Sample ID: S43808.04 (continued)

Sample Tag: VP-2D

TO-15, Method: TO-15, Run Date: 01/16/23 18:41, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Carbon tetrachloride	Not detected	13		ug/m3	10	56-23-5	
Cyclohexane	Not detected	6.9		ug/m3	10	110-82-7	
1,1-Dichloroethane	Not detected	8.1		ug/m3	10	75-34-3	
1,1-Dichloroethene	Not detected	7.9		ug/m3	10	75-35-4	
1,2-Dibromoethane	Not detected	15		ug/m3	10	106-93-4	
1,2-Dichloroethane	Not detected	8.1		ug/m3	10	107-06-2	
1,2-Dichloropropane	Not detected	9.2		ug/m3	10	78-87-5	
1,4-Dioxane	Not detected	90		ug/m3	10	123-91-1	
Dichlorodifluoromethane	Not detected	9.9		ug/m3	10	75-71-8	
Dibromochloromethane	Not detected	17		ug/m3	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	12		ug/m3	10	541-73-1	
1,2-Dichlorobenzene	Not detected	12		ug/m3	10	95-50-1	
1,4-Dichlorobenzene	Not detected	12		ug/m3	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-02-6	
Ethanol*	Not detected	47		ug/m3	10	64-17-5	
Ethylbenzene	Not detected	8.7		ug/m3	10	100-41-4	
Ethyl Acetate*	Not detected	72		ug/m3	10	141-78-6	
4-Ethyltoluene	Not detected	9.8		ug/m3	10	622-96-8	
Freon 113	Not detected	15		ug/m3	10	76-13-1	
Freon 114	Not detected	14		ug/m3	10	76-14-2	
Heptane	Not detected	8.2		ug/m3	10	142-82-5	
Hexachlorobutadiene	Not detected	21		ug/m3	10	87-68-3	
Hexane	Not detected	7.0		ug/m3	10	110-54-3	
2-Hexanone*	Not detected	20		ug/m3	10	591-78-6	
Isopropyl Alcohol*	120	49		ug/m3	10	67-63-0	
Methylene chloride	Not detected	17		ug/m3	10	75-09-2	
2-Butanone (MEK)	Not detected	59		ug/m3	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	20		ug/m3	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	7.2		ug/m3	10	1634-04-4	
Methyl methacrylate	Not detected	8.2		ug/m3	10	80-62-6	
Naphthalene	Not detected	10		ug/m3	10	91-20-3	
Propylene*	Not detected	170		ug/m3	10	115-07-1	
Styrene	Not detected	8.5		ug/m3	10	100-42-5	
1,1,1-Trichloroethane	Not detected	11		ug/m3	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	14		ug/m3	10	79-34-5	
1,1,2-Trichloroethane	Not detected	11		ug/m3	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	37		ug/m3	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	9.8		ug/m3	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	9.8		ug/m3	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	9.3		ug/m3	10	540-84-1	
Tert-butyl Alcohol	Not detected	61		ug/m3	10	75-65-0	
Tetrachloroethene	Not detected	14		ug/m3	10	127-18-4	
Tetrahydrofuran*	8.8	5.9		ug/m3	10	109-99-9	
Toluene	11	7.5		ug/m3	10	108-88-3	
Trichloroethene	Not detected	11		ug/m3	10	79-01-6	
Trichlorofluoromethane	Not detected	11		ug/m3	10	75-69-4	
Vinyl chloride	Not detected	5.1		ug/m3	10	75-01-4	



Analytical Laboratory Report

Lab Sample ID: S43808.04 (continued)
Sample Tag: VP-2D

TO-15, Method: TO-15, Run Date: 01/16/23 18:41, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Vinyl acetate	Not detected	70		ug/m3	10	108-05-4	
p,m-Xylene	Not detected	17		ug/m3	10		
o-Xylene	Not detected	8.7		ug/m3	10	95-47-6	
Total Xylenes	Not detected	26		ug/m3	10	1330-20-7	



Analytical Laboratory Report

Lab Sample ID: S43808.05

Sample Tag: VP-3S

Collected Date/Time: 12/21/2022 10:00 - 12/21/2022 10:07

Matrix: Air

COC Reference: A6461

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	Air Canister	None	No	RT	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Pressure check for TO-15*	0	N/A	12/29/22 16:45	BDO	

Organics - Volatiles

TO-15, Method: TO-15, Run Date: 01/16/23 19:11, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	20		ppbv	10	67-64-1	
1,3-Butadiene	Not detected	20		ppbv	10	106-99-0	
Benzene	Not detected	2		ppbv	10	71-43-2	
Bromodichloromethane	Not detected	2		ppbv	10	75-27-4	
Bromoform	Not detected	2		ppbv	10	75-25-2	
Bromomethane	Not detected	2		ppbv	10	74-83-9	
Vinyl bromide	Not detected	2		ppbv	10	593-60-2	
Benzyl chloride	Not detected	2		ppbv	10	100-44-7	
Carbon disulfide	Not detected	20		ppbv	10	75-15-0	
Chlorobenzene	Not detected	2		ppbv	10	108-90-7	
Chloroethane	Not detected	20		ppbv	10	75-00-3	
Chloroform	Not detected	2		ppbv	10	67-66-3	
Chloromethane	Not detected	20		ppbv	10	74-87-3	
3-Chloropropene	Not detected	20		ppbv	10	107-05-1	
2-Chlorotoluene	Not detected	2		ppbv	10	95-49-8	
Carbon tetrachloride	Not detected	2		ppbv	10	56-23-5	
Cyclohexane	Not detected	2		ppbv	10	110-82-7	
1,1-Dichloroethane	Not detected	2		ppbv	10	75-34-3	
1,1-Dichloroethene	Not detected	2		ppbv	10	75-35-4	
1,2-Dibromoethane	Not detected	2		ppbv	10	106-93-4	
1,2-Dichloroethane	Not detected	2		ppbv	10	107-06-2	
1,2-Dichloropropane	Not detected	2		ppbv	10	78-87-5	
1,4-Dioxane	Not detected	25		ppbv	10	123-91-1	
Dichlorodifluoromethane	Not detected	2		ppbv	10	75-71-8	
Dibromochloromethane	Not detected	2		ppbv	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	2		ppbv	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	2		ppbv	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	2		ppbv	10	541-73-1	
1,2-Dichlorobenzene	Not detected	2		ppbv	10	95-50-1	
1,4-Dichlorobenzene	Not detected	2		ppbv	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-02-6	
Ethanol*	Not detected	25		ppbv	10	64-17-5	
Ethylbenzene	Not detected	2		ppbv	10	100-41-4	
Ethyl Acetate*	Not detected	20		ppbv	10	141-78-6	
4-Ethyltoluene	Not detected	2		ppbv	10	622-96-8	
Freon 113	Not detected	2		ppbv	10	76-13-1	



Analytical Laboratory Report

Lab Sample ID: S43808.05 (continued)

Sample Tag: VP-3S

TO-15, Method: TO-15, Run Date: 01/16/23 19:11, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Freon 114	Not detected	2		ppbv	10	76-14-2	
Heptane	Not detected	2		ppbv	10	142-82-5	
Hexachlorobutadiene	Not detected	2		ppbv	10	87-68-3	
Hexane	Not detected	2		ppbv	10	110-54-3	
2-Hexanone*	Not detected	5		ppbv	10	591-78-6	
Isopropyl Alcohol*	20	20		ppbv	10	67-63-0	
Methylene chloride	Not detected	5		ppbv	10	75-09-2	
2-Butanone (MEK)	Not detected	20		ppbv	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	5		ppbv	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	2		ppbv	10	1634-04-4	
Methyl methacrylate	Not detected	2		ppbv	10	80-62-6	
Naphthalene	Not detected	2		ppbv	10	91-20-3	
Propylene*	Not detected	100		ppbv	10	115-07-1	
Styrene	Not detected	2		ppbv	10	100-42-5	
1,1,1-Trichloroethane	Not detected	2		ppbv	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	2		ppbv	10	79-34-5	
1,1,2-Trichloroethane	Not detected	2		ppbv	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	5		ppbv	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	2		ppbv	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	2		ppbv	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	2		ppbv	10	540-84-1	
Tert-butyl Alcohol	Not detected	20		ppbv	10	75-65-0	
Tetrachloroethene	Not detected	2		ppbv	10	127-18-4	
Tetrahydrofuran*	Not detected	2		ppbv	10	109-99-9	
Toluene	Not detected	2		ppbv	10	108-88-3	
Trichloroethene	Not detected	2		ppbv	10	79-01-6	
Trichlorofluoromethane	Not detected	2		ppbv	10	75-69-4	
Vinyl chloride	Not detected	2		ppbv	10	75-01-4	
Vinyl acetate	Not detected	20		ppbv	10	108-05-4	
p,m-Xylene	Not detected	4		ppbv	10		
o-Xylene	Not detected	2		ppbv	10	95-47-6	
Total Xylenes	Not detected	6		ppbv	10	1330-20-7	

TO-15, Method: TO-15, Run Date: 01/16/23 19:11, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	48		ug/m3	10	67-64-1	
1,3-Butadiene	Not detected	44		ug/m3	10	106-99-0	
Benzene	Not detected	6.4		ug/m3	10	71-43-2	
Bromodichloromethane	Not detected	13		ug/m3	10	75-27-4	
Bromoform	Not detected	21		ug/m3	10	75-25-2	
Bromomethane	Not detected	7.8		ug/m3	10	74-83-9	
Vinyl bromide	Not detected	8.7		ug/m3	10	593-60-2	
Benzyl chloride	Not detected	10		ug/m3	10	100-44-7	
Carbon disulfide	Not detected	62		ug/m3	10	75-15-0	
Chlorobenzene	Not detected	9.2		ug/m3	10	108-90-7	
Chloroethane	Not detected	53		ug/m3	10	75-00-3	
Chloroform	Not detected	9.8		ug/m3	10	67-66-3	
Chloromethane	Not detected	41		ug/m3	10	74-87-3	
3-Chloropropene	Not detected	63		ug/m3	10	107-05-1	
2-Chlorotoluene	Not detected	10		ug/m3	10	95-49-8	



Analytical Laboratory Report

Lab Sample ID: S43808.05 (continued)

Sample Tag: VP-3S

TO-15, Method: TO-15, Run Date: 01/16/23 19:11, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Carbon tetrachloride	Not detected	13		ug/m3	10	56-23-5	
Cyclohexane	Not detected	6.9		ug/m3	10	110-82-7	
1,1-Dichloroethane	Not detected	8.1		ug/m3	10	75-34-3	
1,1-Dichloroethene	Not detected	7.9		ug/m3	10	75-35-4	
1,2-Dibromoethane	Not detected	15		ug/m3	10	106-93-4	
1,2-Dichloroethane	Not detected	8.1		ug/m3	10	107-06-2	
1,2-Dichloropropane	Not detected	9.2		ug/m3	10	78-87-5	
1,4-Dioxane	Not detected	90		ug/m3	10	123-91-1	
Dichlorodifluoromethane	Not detected	9.9		ug/m3	10	75-71-8	
Dibromochloromethane	Not detected	17		ug/m3	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	12		ug/m3	10	541-73-1	
1,2-Dichlorobenzene	Not detected	12		ug/m3	10	95-50-1	
1,4-Dichlorobenzene	Not detected	12		ug/m3	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-02-6	
Ethanol*	Not detected	47		ug/m3	10	64-17-5	
Ethylbenzene	Not detected	8.7		ug/m3	10	100-41-4	
Ethyl Acetate*	Not detected	72		ug/m3	10	141-78-6	
4-Ethyltoluene	Not detected	9.8		ug/m3	10	622-96-8	
Freon 113	Not detected	15		ug/m3	10	76-13-1	
Freon 114	Not detected	14		ug/m3	10	76-14-2	
Heptane	Not detected	8.2		ug/m3	10	142-82-5	
Hexachlorobutadiene	Not detected	21		ug/m3	10	87-68-3	
Hexane	Not detected	7.0		ug/m3	10	110-54-3	
2-Hexanone*	Not detected	20		ug/m3	10	591-78-6	
Isopropyl Alcohol*	49	49		ug/m3	10	67-63-0	
Methylene chloride	Not detected	17		ug/m3	10	75-09-2	
2-Butanone (MEK)	Not detected	59		ug/m3	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	20		ug/m3	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	7.2		ug/m3	10	1634-04-4	
Methyl methacrylate	Not detected	8.2		ug/m3	10	80-62-6	
Naphthalene	Not detected	10		ug/m3	10	91-20-3	
Propylene*	Not detected	170		ug/m3	10	115-07-1	
Styrene	Not detected	8.5		ug/m3	10	100-42-5	
1,1,1-Trichloroethane	Not detected	11		ug/m3	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	14		ug/m3	10	79-34-5	
1,1,2-Trichloroethane	Not detected	11		ug/m3	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	37		ug/m3	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	9.8		ug/m3	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	9.8		ug/m3	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	9.3		ug/m3	10	540-84-1	
Tert-butyl Alcohol	Not detected	61		ug/m3	10	75-65-0	
Tetrachloroethene	Not detected	14		ug/m3	10	127-18-4	
Tetrahydrofuran*	Not detected	5.9		ug/m3	10	109-99-9	
Toluene	Not detected	7.5		ug/m3	10	108-88-3	
Trichloroethene	Not detected	11		ug/m3	10	79-01-6	
Trichlorofluoromethane	Not detected	11		ug/m3	10	75-69-4	
Vinyl chloride	Not detected	5.1		ug/m3	10	75-01-4	



Analytical Laboratory Report

Lab Sample ID: S43808.05 (continued)

Sample Tag: VP-3S

TO-15, Method: TO-15, Run Date: 01/16/23 19:11, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Vinyl acetate	Not detected	70		ug/m3	10	108-05-4	
p,m-Xylene	Not detected	17		ug/m3	10		
o-Xylene	Not detected	8.7		ug/m3	10	95-47-6	
Total Xylenes	Not detected	26		ug/m3	10	1330-20-7	



Analytical Laboratory Report

Lab Sample ID: S43808.06

Sample Tag: VP-3M

Collected Date/Time: 12/21/2022 10:19 - 12/21/2022 10:26

Matrix: Air

COC Reference: A6461

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	Air Canister	None	No	RT	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Pressure check for TO-15*	0	N/A	12/29/22 16:45	BDO	

Organics - Volatiles

TO-15, Method: TO-15, Run Date: 01/16/23 19:40, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	20		ppbv	10	67-64-1	
1,3-Butadiene	Not detected	20		ppbv	10	106-99-0	
Benzene	Not detected	2		ppbv	10	71-43-2	
Bromodichloromethane	Not detected	2		ppbv	10	75-27-4	
Bromoform	Not detected	2		ppbv	10	75-25-2	
Bromomethane	Not detected	2		ppbv	10	74-83-9	
Vinyl bromide	Not detected	2		ppbv	10	593-60-2	
Benzyl chloride	Not detected	2		ppbv	10	100-44-7	
Carbon disulfide	Not detected	20		ppbv	10	75-15-0	
Chlorobenzene	Not detected	2		ppbv	10	108-90-7	
Chloroethane	Not detected	20		ppbv	10	75-00-3	
Chloroform	Not detected	2		ppbv	10	67-66-3	
Chloromethane	Not detected	20		ppbv	10	74-87-3	
3-Chloropropene	Not detected	20		ppbv	10	107-05-1	
2-Chlorotoluene	Not detected	2		ppbv	10	95-49-8	
Carbon tetrachloride	Not detected	2		ppbv	10	56-23-5	
Cyclohexane	Not detected	2		ppbv	10	110-82-7	
1,1-Dichloroethane	Not detected	2		ppbv	10	75-34-3	
1,1-Dichloroethene	Not detected	2		ppbv	10	75-35-4	
1,2-Dibromoethane	Not detected	2		ppbv	10	106-93-4	
1,2-Dichloroethane	Not detected	2		ppbv	10	107-06-2	
1,2-Dichloropropane	Not detected	2		ppbv	10	78-87-5	
1,4-Dioxane	Not detected	25		ppbv	10	123-91-1	
Dichlorodifluoromethane	Not detected	2		ppbv	10	75-71-8	
Dibromochloromethane	Not detected	2		ppbv	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	2		ppbv	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	2		ppbv	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	2		ppbv	10	541-73-1	
1,2-Dichlorobenzene	Not detected	2		ppbv	10	95-50-1	
1,4-Dichlorobenzene	Not detected	2		ppbv	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-02-6	
Ethanol*	Not detected	25		ppbv	10	64-17-5	
Ethylbenzene	Not detected	2		ppbv	10	100-41-4	
Ethyl Acetate*	Not detected	20		ppbv	10	141-78-6	
4-Ethyltoluene	Not detected	2		ppbv	10	622-96-8	
Freon 113	Not detected	2		ppbv	10	76-13-1	



Analytical Laboratory Report

Lab Sample ID: S43808.06 (continued)

Sample Tag: VP-3M

TO-15, Method: TO-15, Run Date: 01/16/23 19:40, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Freon 114	Not detected	2		ppbv	10	76-14-2	
Heptane	Not detected	2		ppbv	10	142-82-5	
Hexachlorobutadiene	Not detected	2		ppbv	10	87-68-3	
Hexane	Not detected	2		ppbv	10	110-54-3	
2-Hexanone*	Not detected	5		ppbv	10	591-78-6	
Isopropyl Alcohol*	50	20		ppbv	10	67-63-0	
Methylene chloride	Not detected	5		ppbv	10	75-09-2	
2-Butanone (MEK)	Not detected	20		ppbv	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	5		ppbv	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	2		ppbv	10	1634-04-4	
Methyl methacrylate	Not detected	2		ppbv	10	80-62-6	
Naphthalene	Not detected	2		ppbv	10	91-20-3	
Propylene*	Not detected	100		ppbv	10	115-07-1	
Styrene	Not detected	2		ppbv	10	100-42-5	
1,1,1-Trichloroethane	Not detected	2		ppbv	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	2		ppbv	10	79-34-5	
1,1,2-Trichloroethane	Not detected	2		ppbv	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	5		ppbv	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	2		ppbv	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	2		ppbv	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	2		ppbv	10	540-84-1	
Tert-butyl Alcohol	Not detected	20		ppbv	10	75-65-0	
Tetrachloroethene	Not detected	2		ppbv	10	127-18-4	
Tetrahydrofuran*	Not detected	2		ppbv	10	109-99-9	
Toluene	2	2		ppbv	10	108-88-3	
Trichloroethene	Not detected	2		ppbv	10	79-01-6	
Trichlorofluoromethane	Not detected	2		ppbv	10	75-69-4	
Vinyl chloride	Not detected	2		ppbv	10	75-01-4	
Vinyl acetate	Not detected	20		ppbv	10	108-05-4	
p,m-Xylene	Not detected	4		ppbv	10		
o-Xylene	Not detected	2		ppbv	10	95-47-6	
Total Xylenes	Not detected	6		ppbv	10	1330-20-7	

TO-15, Method: TO-15, Run Date: 01/16/23 19:40, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	48		ug/m3	10	67-64-1	
1,3-Butadiene	Not detected	44		ug/m3	10	106-99-0	
Benzene	Not detected	6.4		ug/m3	10	71-43-2	
Bromodichloromethane	Not detected	13		ug/m3	10	75-27-4	
Bromoform	Not detected	21		ug/m3	10	75-25-2	
Bromomethane	Not detected	7.8		ug/m3	10	74-83-9	
Vinyl bromide	Not detected	8.7		ug/m3	10	593-60-2	
Benzyl chloride	Not detected	10		ug/m3	10	100-44-7	
Carbon disulfide	Not detected	62		ug/m3	10	75-15-0	
Chlorobenzene	Not detected	9.2		ug/m3	10	108-90-7	
Chloroethane	Not detected	53		ug/m3	10	75-00-3	
Chloroform	Not detected	9.8		ug/m3	10	67-66-3	
Chloromethane	Not detected	41		ug/m3	10	74-87-3	
3-Chloropropene	Not detected	63		ug/m3	10	107-05-1	
2-Chlorotoluene	Not detected	10		ug/m3	10	95-49-8	



Analytical Laboratory Report

Lab Sample ID: S43808.06 (continued)

Sample Tag: VP-3M

TO-15, Method: TO-15, Run Date: 01/16/23 19:40, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Carbon tetrachloride	Not detected	13		ug/m3	10	56-23-5	
Cyclohexane	Not detected	6.9		ug/m3	10	110-82-7	
1,1-Dichloroethane	Not detected	8.1		ug/m3	10	75-34-3	
1,1-Dichloroethene	Not detected	7.9		ug/m3	10	75-35-4	
1,2-Dibromoethane	Not detected	15		ug/m3	10	106-93-4	
1,2-Dichloroethane	Not detected	8.1		ug/m3	10	107-06-2	
1,2-Dichloropropane	Not detected	9.2		ug/m3	10	78-87-5	
1,4-Dioxane	Not detected	90		ug/m3	10	123-91-1	
Dichlorodifluoromethane	Not detected	9.9		ug/m3	10	75-71-8	
Dibromochloromethane	Not detected	17		ug/m3	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	12		ug/m3	10	541-73-1	
1,2-Dichlorobenzene	Not detected	12		ug/m3	10	95-50-1	
1,4-Dichlorobenzene	Not detected	12		ug/m3	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-02-6	
Ethanol*	Not detected	47		ug/m3	10	64-17-5	
Ethylbenzene	Not detected	8.7		ug/m3	10	100-41-4	
Ethyl Acetate*	Not detected	72		ug/m3	10	141-78-6	
4-Ethyltoluene	Not detected	9.8		ug/m3	10	622-96-8	
Freon 113	Not detected	15		ug/m3	10	76-13-1	
Freon 114	Not detected	14		ug/m3	10	76-14-2	
Heptane	Not detected	8.2		ug/m3	10	142-82-5	
Hexachlorobutadiene	Not detected	21		ug/m3	10	87-68-3	
Hexane	Not detected	7.0		ug/m3	10	110-54-3	
2-Hexanone*	Not detected	20		ug/m3	10	591-78-6	
Isopropyl Alcohol*	120	49		ug/m3	10	67-63-0	
Methylene chloride	Not detected	17		ug/m3	10	75-09-2	
2-Butanone (MEK)	Not detected	59		ug/m3	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	20		ug/m3	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	7.2		ug/m3	10	1634-04-4	
Methyl methacrylate	Not detected	8.2		ug/m3	10	80-62-6	
Naphthalene	Not detected	10		ug/m3	10	91-20-3	
Propylene*	Not detected	170		ug/m3	10	115-07-1	
Styrene	Not detected	8.5		ug/m3	10	100-42-5	
1,1,1-Trichloroethane	Not detected	11		ug/m3	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	14		ug/m3	10	79-34-5	
1,1,2-Trichloroethane	Not detected	11		ug/m3	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	37		ug/m3	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	9.8		ug/m3	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	9.8		ug/m3	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	9.3		ug/m3	10	540-84-1	
Tert-butyl Alcohol	Not detected	61		ug/m3	10	75-65-0	
Tetrachloroethene	Not detected	14		ug/m3	10	127-18-4	
Tetrahydrofuran*	Not detected	5.9		ug/m3	10	109-99-9	
Toluene	7.5	7.5		ug/m3	10	108-88-3	
Trichloroethene	Not detected	11		ug/m3	10	79-01-6	
Trichlorofluoromethane	Not detected	11		ug/m3	10	75-69-4	
Vinyl chloride	Not detected	5.1		ug/m3	10	75-01-4	



Analytical Laboratory Report

Lab Sample ID: S43808.06 (continued)

Sample Tag: VP-3M

TO-15, Method: TO-15, Run Date: 01/16/23 19:40, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Vinyl acetate	Not detected	70		ug/m3	10	108-05-4	
p,m-Xylene	Not detected	17		ug/m3	10		
o-Xylene	Not detected	8.7		ug/m3	10	95-47-6	
Total Xylenes	Not detected	26		ug/m3	10	1330-20-7	



Analytical Laboratory Report

Lab Sample ID: S43808.07

Sample Tag: VP-3D*

Collected Date/Time: 12/21/2022 10:33 - 12/21/2022 10:53

Matrix: Air

COC Reference: A6461

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	Air Canister	None	No	RT	IR

Other / Misc.

Method: , Run Date: 12/23/22 08:45, Analyst: MMC

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Hold until notified*	Completed				1		



Analytical Laboratory Report

Lab Sample ID: S43808.08

Sample Tag: VP-5S

Collected Date/Time: 12/21/2022 12:00 - 12/21/2022 12:14

Matrix: Air

COC Reference: A6461

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	Air Canister	None	No	RT	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Pressure check for TO-15*	0	N/A	12/29/22 16:45	BDO	

Organics - Volatiles

TO-15, Method: TO-15, Run Date: 01/16/23 20:10, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	20		ppbv	10	67-64-1	
1,3-Butadiene	Not detected	20		ppbv	10	106-99-0	
Benzene	Not detected	2		ppbv	10	71-43-2	
Bromodichloromethane	Not detected	2		ppbv	10	75-27-4	
Bromoform	Not detected	2		ppbv	10	75-25-2	
Bromomethane	Not detected	2		ppbv	10	74-83-9	
Vinyl bromide	Not detected	2		ppbv	10	593-60-2	
Benzyl chloride	Not detected	2		ppbv	10	100-44-7	
Carbon disulfide	Not detected	20		ppbv	10	75-15-0	
Chlorobenzene	Not detected	2		ppbv	10	108-90-7	
Chloroethane	Not detected	20		ppbv	10	75-00-3	
Chloroform	Not detected	2		ppbv	10	67-66-3	
Chloromethane	Not detected	20		ppbv	10	74-87-3	
3-Chloropropene	Not detected	20		ppbv	10	107-05-1	
2-Chlorotoluene	Not detected	2		ppbv	10	95-49-8	
Carbon tetrachloride	Not detected	2		ppbv	10	56-23-5	
Cyclohexane	Not detected	2		ppbv	10	110-82-7	
1,1-Dichloroethane	Not detected	2		ppbv	10	75-34-3	
1,1-Dichloroethene	Not detected	2		ppbv	10	75-35-4	
1,2-Dibromoethane	Not detected	2		ppbv	10	106-93-4	
1,2-Dichloroethane	Not detected	2		ppbv	10	107-06-2	
1,2-Dichloropropane	Not detected	2		ppbv	10	78-87-5	
1,4-Dioxane	Not detected	25		ppbv	10	123-91-1	
Dichlorodifluoromethane	Not detected	2		ppbv	10	75-71-8	
Dibromochloromethane	Not detected	2		ppbv	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	2		ppbv	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	2		ppbv	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	2		ppbv	10	541-73-1	
1,2-Dichlorobenzene	Not detected	2		ppbv	10	95-50-1	
1,4-Dichlorobenzene	Not detected	2		ppbv	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-02-6	
Ethanol*	Not detected	25		ppbv	10	64-17-5	
Ethylbenzene	Not detected	2		ppbv	10	100-41-4	
Ethyl Acetate*	Not detected	20		ppbv	10	141-78-6	
4-Ethyltoluene	Not detected	2		ppbv	10	622-96-8	
Freon 113	Not detected	2		ppbv	10	76-13-1	



Analytical Laboratory Report

Lab Sample ID: S43808.08 (continued)

Sample Tag: VP-5S

TO-15, Method: TO-15, Run Date: 01/16/23 20:10, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Freon 114	Not detected	2		ppbv	10	76-14-2	
Heptane	Not detected	2		ppbv	10	142-82-5	
Hexachlorobutadiene	Not detected	2		ppbv	10	87-68-3	
Hexane	Not detected	2		ppbv	10	110-54-3	
2-Hexanone*	Not detected	5		ppbv	10	591-78-6	
Isopropyl Alcohol*	50	20		ppbv	10	67-63-0	
Methylene chloride	Not detected	5		ppbv	10	75-09-2	
2-Butanone (MEK)	Not detected	20		ppbv	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	5		ppbv	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	2		ppbv	10	1634-04-4	
Methyl methacrylate	Not detected	2		ppbv	10	80-62-6	
Naphthalene	Not detected	2		ppbv	10	91-20-3	
Propylene*	Not detected	100		ppbv	10	115-07-1	
Styrene	Not detected	2		ppbv	10	100-42-5	
1,1,1-Trichloroethane	Not detected	2		ppbv	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	2		ppbv	10	79-34-5	
1,1,2-Trichloroethane	Not detected	2		ppbv	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	5		ppbv	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	2		ppbv	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	2		ppbv	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	2		ppbv	10	540-84-1	
Tert-butyl Alcohol	Not detected	20		ppbv	10	75-65-0	
Tetrachloroethene	Not detected	2		ppbv	10	127-18-4	
Tetrahydrofuran*	3	2		ppbv	10	109-99-9	
Toluene	Not detected	2		ppbv	10	108-88-3	
Trichloroethene	Not detected	2		ppbv	10	79-01-6	
Trichlorofluoromethane	Not detected	2		ppbv	10	75-69-4	
Vinyl chloride	Not detected	2		ppbv	10	75-01-4	
Vinyl acetate	Not detected	20		ppbv	10	108-05-4	
p,m-Xylene	Not detected	4		ppbv	10		
o-Xylene	Not detected	2		ppbv	10	95-47-6	
Total Xylenes	Not detected	6		ppbv	10	1330-20-7	

TO-15, Method: TO-15, Run Date: 01/16/23 20:10, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	48		ug/m3	10	67-64-1	
1,3-Butadiene	Not detected	44		ug/m3	10	106-99-0	
Benzene	Not detected	6.4		ug/m3	10	71-43-2	
Bromodichloromethane	Not detected	13		ug/m3	10	75-27-4	
Bromoform	Not detected	21		ug/m3	10	75-25-2	
Bromomethane	Not detected	7.8		ug/m3	10	74-83-9	
Vinyl bromide	Not detected	8.7		ug/m3	10	593-60-2	
Benzyl chloride	Not detected	10		ug/m3	10	100-44-7	
Carbon disulfide	Not detected	62		ug/m3	10	75-15-0	
Chlorobenzene	Not detected	9.2		ug/m3	10	108-90-7	
Chloroethane	Not detected	53		ug/m3	10	75-00-3	
Chloroform	Not detected	9.8		ug/m3	10	67-66-3	
Chloromethane	Not detected	41		ug/m3	10	74-87-3	
3-Chloropropene	Not detected	63		ug/m3	10	107-05-1	
2-Chlorotoluene	Not detected	10		ug/m3	10	95-49-8	



Analytical Laboratory Report

Lab Sample ID: S43808.08 (continued)

Sample Tag: VP-5S

TO-15, Method: TO-15, Run Date: 01/16/23 20:10, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Carbon tetrachloride	Not detected	13		ug/m3	10	56-23-5	
Cyclohexane	Not detected	6.9		ug/m3	10	110-82-7	
1,1-Dichloroethane	Not detected	8.1		ug/m3	10	75-34-3	
1,1-Dichloroethene	Not detected	7.9		ug/m3	10	75-35-4	
1,2-Dibromoethane	Not detected	15		ug/m3	10	106-93-4	
1,2-Dichloroethane	Not detected	8.1		ug/m3	10	107-06-2	
1,2-Dichloropropane	Not detected	9.2		ug/m3	10	78-87-5	
1,4-Dioxane	Not detected	90		ug/m3	10	123-91-1	
Dichlorodifluoromethane	Not detected	9.9		ug/m3	10	75-71-8	
Dibromochloromethane	Not detected	17		ug/m3	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	12		ug/m3	10	541-73-1	
1,2-Dichlorobenzene	Not detected	12		ug/m3	10	95-50-1	
1,4-Dichlorobenzene	Not detected	12		ug/m3	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-02-6	
Ethanol*	Not detected	47		ug/m3	10	64-17-5	
Ethylbenzene	Not detected	8.7		ug/m3	10	100-41-4	
Ethyl Acetate*	Not detected	72		ug/m3	10	141-78-6	
4-Ethyltoluene	Not detected	9.8		ug/m3	10	622-96-8	
Freon 113	Not detected	15		ug/m3	10	76-13-1	
Freon 114	Not detected	14		ug/m3	10	76-14-2	
Heptane	Not detected	8.2		ug/m3	10	142-82-5	
Hexachlorobutadiene	Not detected	21		ug/m3	10	87-68-3	
Hexane	Not detected	7.0		ug/m3	10	110-54-3	
2-Hexanone*	Not detected	20		ug/m3	10	591-78-6	
Isopropyl Alcohol*	120	49		ug/m3	10	67-63-0	
Methylene chloride	Not detected	17		ug/m3	10	75-09-2	
2-Butanone (MEK)	Not detected	59		ug/m3	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	20		ug/m3	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	7.2		ug/m3	10	1634-04-4	
Methyl methacrylate	Not detected	8.2		ug/m3	10	80-62-6	
Naphthalene	Not detected	10		ug/m3	10	91-20-3	
Propylene*	Not detected	170		ug/m3	10	115-07-1	
Styrene	Not detected	8.5		ug/m3	10	100-42-5	
1,1,1-Trichloroethane	Not detected	11		ug/m3	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	14		ug/m3	10	79-34-5	
1,1,2-Trichloroethane	Not detected	11		ug/m3	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	37		ug/m3	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	9.8		ug/m3	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	9.8		ug/m3	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	9.3		ug/m3	10	540-84-1	
Tert-butyl Alcohol	Not detected	61		ug/m3	10	75-65-0	
Tetrachloroethene	Not detected	14		ug/m3	10	127-18-4	
Tetrahydrofuran*	8.8	5.9		ug/m3	10	109-99-9	
Toluene	Not detected	7.5		ug/m3	10	108-88-3	
Trichloroethene	Not detected	11		ug/m3	10	79-01-6	
Trichlorofluoromethane	Not detected	11		ug/m3	10	75-69-4	
Vinyl chloride	Not detected	5.1		ug/m3	10	75-01-4	



Analytical Laboratory Report

Lab Sample ID: S43808.08 (continued)

Sample Tag: VP-5S

TO-15, Method: TO-15, Run Date: 01/16/23 20:10, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Vinyl acetate	Not detected	70		ug/m3	10	108-05-4	
p,m-Xylene	Not detected	17		ug/m3	10		
o-Xylene	Not detected	8.7		ug/m3	10	95-47-6	
Total Xylenes	Not detected	26		ug/m3	10	1330-20-7	



Analytical Laboratory Report

Lab Sample ID: S43808.09

Sample Tag: VP-5M

Collected Date/Time: 12/21/2022 12:29 - 12/21/2022 12:35

Matrix: Air

COC Reference: A6461

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	Air Canister	None	No	RT	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Pressure check for TO-15*	0	N/A	12/29/22 16:45	BDO	

Organics - Volatiles

TO-15, Method: TO-15, Run Date: 01/16/23 20:40, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	20		ppbv	10	67-64-1	
1,3-Butadiene	Not detected	20		ppbv	10	106-99-0	
Benzene	Not detected	2		ppbv	10	71-43-2	
Bromodichloromethane	Not detected	2		ppbv	10	75-27-4	
Bromoform	Not detected	2		ppbv	10	75-25-2	
Bromomethane	Not detected	2		ppbv	10	74-83-9	
Vinyl bromide	Not detected	2		ppbv	10	593-60-2	
Benzyl chloride	Not detected	2		ppbv	10	100-44-7	
Carbon disulfide	Not detected	20		ppbv	10	75-15-0	
Chlorobenzene	Not detected	2		ppbv	10	108-90-7	
Chloroethane	Not detected	20		ppbv	10	75-00-3	
Chloroform	Not detected	2		ppbv	10	67-66-3	
Chloromethane	Not detected	20		ppbv	10	74-87-3	
3-Chloropropene	Not detected	20		ppbv	10	107-05-1	
2-Chlorotoluene	Not detected	2		ppbv	10	95-49-8	
Carbon tetrachloride	Not detected	2		ppbv	10	56-23-5	
Cyclohexane	Not detected	2		ppbv	10	110-82-7	
1,1-Dichloroethane	Not detected	2		ppbv	10	75-34-3	
1,1-Dichloroethene	Not detected	2		ppbv	10	75-35-4	
1,2-Dibromoethane	Not detected	2		ppbv	10	106-93-4	
1,2-Dichloroethane	Not detected	2		ppbv	10	107-06-2	
1,2-Dichloropropane	Not detected	2		ppbv	10	78-87-5	
1,4-Dioxane	Not detected	25		ppbv	10	123-91-1	
Dichlorodifluoromethane	Not detected	2		ppbv	10	75-71-8	
Dibromochloromethane	Not detected	2		ppbv	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	2		ppbv	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	2		ppbv	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	2		ppbv	10	541-73-1	
1,2-Dichlorobenzene	Not detected	2		ppbv	10	95-50-1	
1,4-Dichlorobenzene	Not detected	2		ppbv	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-02-6	
Ethanol*	Not detected	25		ppbv	10	64-17-5	
Ethylbenzene	Not detected	2		ppbv	10	100-41-4	
Ethyl Acetate*	Not detected	20		ppbv	10	141-78-6	
4-Ethyltoluene	Not detected	2		ppbv	10	622-96-8	
Freon 113	Not detected	2		ppbv	10	76-13-1	



Analytical Laboratory Report

Lab Sample ID: S43808.09 (continued)

Sample Tag: VP-5M

TO-15, Method: TO-15, Run Date: 01/16/23 20:40, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Freon 114	Not detected	2		ppbv	10	76-14-2	
Heptane	Not detected	2		ppbv	10	142-82-5	
Hexachlorobutadiene	Not detected	2		ppbv	10	87-68-3	
Hexane	Not detected	2		ppbv	10	110-54-3	
2-Hexanone*	Not detected	5		ppbv	10	591-78-6	
Isopropyl Alcohol*	60	20		ppbv	10	67-63-0	
Methylene chloride	Not detected	5		ppbv	10	75-09-2	
2-Butanone (MEK)	Not detected	20		ppbv	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	5		ppbv	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	2		ppbv	10	1634-04-4	
Methyl methacrylate	Not detected	2		ppbv	10	80-62-6	
Naphthalene	Not detected	2		ppbv	10	91-20-3	
Propylene*	Not detected	100		ppbv	10	115-07-1	
Styrene	Not detected	2		ppbv	10	100-42-5	
1,1,1-Trichloroethane	Not detected	2		ppbv	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	2		ppbv	10	79-34-5	
1,1,2-Trichloroethane	Not detected	2		ppbv	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	5		ppbv	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	2		ppbv	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	2		ppbv	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	2		ppbv	10	540-84-1	
Tert-butyl Alcohol	Not detected	20		ppbv	10	75-65-0	
Tetrachloroethene	Not detected	2		ppbv	10	127-18-4	
Tetrahydrofuran*	3	2		ppbv	10	109-99-9	
Toluene	3	2		ppbv	10	108-88-3	
Trichloroethene	Not detected	2		ppbv	10	79-01-6	
Trichlorofluoromethane	Not detected	2		ppbv	10	75-69-4	
Vinyl chloride	Not detected	2		ppbv	10	75-01-4	
Vinyl acetate	Not detected	20		ppbv	10	108-05-4	
p,m-Xylene	Not detected	4		ppbv	10		
o-Xylene	Not detected	2		ppbv	10	95-47-6	
Total Xylenes	Not detected	6		ppbv	10	1330-20-7	

TO-15, Method: TO-15, Run Date: 01/16/23 20:40, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	48		ug/m3	10	67-64-1	
1,3-Butadiene	Not detected	44		ug/m3	10	106-99-0	
Benzene	Not detected	6.4		ug/m3	10	71-43-2	
Bromodichloromethane	Not detected	13		ug/m3	10	75-27-4	
Bromoform	Not detected	21		ug/m3	10	75-25-2	
Bromomethane	Not detected	7.8		ug/m3	10	74-83-9	
Vinyl bromide	Not detected	8.7		ug/m3	10	593-60-2	
Benzyl chloride	Not detected	10		ug/m3	10	100-44-7	
Carbon disulfide	Not detected	62		ug/m3	10	75-15-0	
Chlorobenzene	Not detected	9.2		ug/m3	10	108-90-7	
Chloroethane	Not detected	53		ug/m3	10	75-00-3	
Chloroform	Not detected	9.8		ug/m3	10	67-66-3	
Chloromethane	Not detected	41		ug/m3	10	74-87-3	
3-Chloropropene	Not detected	63		ug/m3	10	107-05-1	
2-Chlorotoluene	Not detected	10		ug/m3	10	95-49-8	



Analytical Laboratory Report

Lab Sample ID: S43808.09 (continued)

Sample Tag: VP-5M

TO-15, Method: TO-15, Run Date: 01/16/23 20:40, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Carbon tetrachloride	Not detected	13		ug/m3	10	56-23-5	
Cyclohexane	Not detected	6.9		ug/m3	10	110-82-7	
1,1-Dichloroethane	Not detected	8.1		ug/m3	10	75-34-3	
1,1-Dichloroethene	Not detected	7.9		ug/m3	10	75-35-4	
1,2-Dibromoethane	Not detected	15		ug/m3	10	106-93-4	
1,2-Dichloroethane	Not detected	8.1		ug/m3	10	107-06-2	
1,2-Dichloropropane	Not detected	9.2		ug/m3	10	78-87-5	
1,4-Dioxane	Not detected	90		ug/m3	10	123-91-1	
Dichlorodifluoromethane	Not detected	9.9		ug/m3	10	75-71-8	
Dibromochloromethane	Not detected	17		ug/m3	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	12		ug/m3	10	541-73-1	
1,2-Dichlorobenzene	Not detected	12		ug/m3	10	95-50-1	
1,4-Dichlorobenzene	Not detected	12		ug/m3	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-02-6	
Ethanol*	Not detected	47		ug/m3	10	64-17-5	
Ethylbenzene	Not detected	8.7		ug/m3	10	100-41-4	
Ethyl Acetate*	Not detected	72		ug/m3	10	141-78-6	
4-Ethyltoluene	Not detected	9.8		ug/m3	10	622-96-8	
Freon 113	Not detected	15		ug/m3	10	76-13-1	
Freon 114	Not detected	14		ug/m3	10	76-14-2	
Heptane	Not detected	8.2		ug/m3	10	142-82-5	
Hexachlorobutadiene	Not detected	21		ug/m3	10	87-68-3	
Hexane	Not detected	7.0		ug/m3	10	110-54-3	
2-Hexanone*	Not detected	20		ug/m3	10	591-78-6	
Isopropyl Alcohol*	150	49		ug/m3	10	67-63-0	
Methylene chloride	Not detected	17		ug/m3	10	75-09-2	
2-Butanone (MEK)	Not detected	59		ug/m3	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	20		ug/m3	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	7.2		ug/m3	10	1634-04-4	
Methyl methacrylate	Not detected	8.2		ug/m3	10	80-62-6	
Naphthalene	Not detected	10		ug/m3	10	91-20-3	
Propylene*	Not detected	170		ug/m3	10	115-07-1	
Styrene	Not detected	8.5		ug/m3	10	100-42-5	
1,1,1-Trichloroethane	Not detected	11		ug/m3	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	14		ug/m3	10	79-34-5	
1,1,2-Trichloroethane	Not detected	11		ug/m3	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	37		ug/m3	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	9.8		ug/m3	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	9.8		ug/m3	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	9.3		ug/m3	10	540-84-1	
Tert-butyl Alcohol	Not detected	61		ug/m3	10	75-65-0	
Tetrachloroethene	Not detected	14		ug/m3	10	127-18-4	
Tetrahydrofuran*	8.8	5.9		ug/m3	10	109-99-9	
Toluene	11	7.5		ug/m3	10	108-88-3	
Trichloroethene	Not detected	11		ug/m3	10	79-01-6	
Trichlorofluoromethane	Not detected	11		ug/m3	10	75-69-4	
Vinyl chloride	Not detected	5.1		ug/m3	10	75-01-4	



Analytical Laboratory Report

Lab Sample ID: S43808.09 (continued)
Sample Tag: VP-5M

TO-15, Method: TO-15, Run Date: 01/16/23 20:40, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Vinyl acetate	Not detected	70		ug/m3	10	108-05-4	
p,m-Xylene	Not detected	17		ug/m3	10		
o-Xylene	Not detected	8.7		ug/m3	10	95-47-6	
Total Xylenes	Not detected	26		ug/m3	10	1330-20-7	



Analytical Laboratory Report

Lab Sample ID: S43808.10

Sample Tag: VP-5D

Collected Date/Time: 12/21/2022 12:57 - 12/21/2022 13:08

Matrix: Air

COC Reference: A6461

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	Air Canister	None	No	RT	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Pressure check for TO-15*	0	N/A	12/29/22 16:45	BDO	

Organics - Volatiles

TO-15, Method: TO-15, Run Date: 01/16/23 21:10, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	20		ppbv	10	67-64-1	
1,3-Butadiene	Not detected	20		ppbv	10	106-99-0	
Benzene	Not detected	2		ppbv	10	71-43-2	
Bromodichloromethane	Not detected	2		ppbv	10	75-27-4	
Bromoform	Not detected	2		ppbv	10	75-25-2	
Bromomethane	Not detected	2		ppbv	10	74-83-9	
Vinyl bromide	Not detected	2		ppbv	10	593-60-2	
Benzyl chloride	Not detected	2		ppbv	10	100-44-7	
Carbon disulfide	Not detected	20		ppbv	10	75-15-0	
Chlorobenzene	Not detected	2		ppbv	10	108-90-7	
Chloroethane	Not detected	20		ppbv	10	75-00-3	
Chloroform	Not detected	2		ppbv	10	67-66-3	
Chloromethane	Not detected	20		ppbv	10	74-87-3	
3-Chloropropene	Not detected	20		ppbv	10	107-05-1	
2-Chlorotoluene	Not detected	2		ppbv	10	95-49-8	
Carbon tetrachloride	Not detected	2		ppbv	10	56-23-5	
Cyclohexane	Not detected	2		ppbv	10	110-82-7	
1,1-Dichloroethane	Not detected	2		ppbv	10	75-34-3	
1,1-Dichloroethene	Not detected	2		ppbv	10	75-35-4	
1,2-Dibromoethane	Not detected	2		ppbv	10	106-93-4	
1,2-Dichloroethane	Not detected	2		ppbv	10	107-06-2	
1,2-Dichloropropane	Not detected	2		ppbv	10	78-87-5	
1,4-Dioxane	Not detected	25		ppbv	10	123-91-1	
Dichlorodifluoromethane	Not detected	2		ppbv	10	75-71-8	
Dibromochloromethane	Not detected	2		ppbv	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	2		ppbv	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	2		ppbv	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	2		ppbv	10	541-73-1	
1,2-Dichlorobenzene	Not detected	2		ppbv	10	95-50-1	
1,4-Dichlorobenzene	Not detected	2		ppbv	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-02-6	
Ethanol*	Not detected	25		ppbv	10	64-17-5	
Ethylbenzene	Not detected	2		ppbv	10	100-41-4	
Ethyl Acetate*	Not detected	20		ppbv	10	141-78-6	
4-Ethyltoluene	Not detected	2		ppbv	10	622-96-8	
Freon 113	Not detected	2		ppbv	10	76-13-1	



Analytical Laboratory Report

Lab Sample ID: S43808.10 (continued)

Sample Tag: VP-5D

TO-15, Method: TO-15, Run Date: 01/16/23 21:10, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Freon 114	Not detected	2		ppbv	10	76-14-2	
Heptane	Not detected	2		ppbv	10	142-82-5	
Hexachlorobutadiene	Not detected	2		ppbv	10	87-68-3	
Hexane	Not detected	2		ppbv	10	110-54-3	
2-Hexanone*	Not detected	5		ppbv	10	591-78-6	
Isopropyl Alcohol*	20	20		ppbv	10	67-63-0	
Methylene chloride	Not detected	5		ppbv	10	75-09-2	
2-Butanone (MEK)	Not detected	20		ppbv	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	5		ppbv	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	2		ppbv	10	1634-04-4	
Methyl methacrylate	Not detected	2		ppbv	10	80-62-6	
Naphthalene	Not detected	2		ppbv	10	91-20-3	
Propylene*	Not detected	100		ppbv	10	115-07-1	
Styrene	Not detected	2		ppbv	10	100-42-5	
1,1,1-Trichloroethane	Not detected	2		ppbv	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	2		ppbv	10	79-34-5	
1,1,2-Trichloroethane	Not detected	2		ppbv	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	5		ppbv	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	2		ppbv	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	2		ppbv	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	2		ppbv	10	540-84-1	
Tert-butyl Alcohol	Not detected	20		ppbv	10	75-65-0	
Tetrachloroethene	Not detected	2		ppbv	10	127-18-4	
Tetrahydrofuran*	2	2		ppbv	10	109-99-9	
Toluene	Not detected	2		ppbv	10	108-88-3	
Trichloroethene	Not detected	2		ppbv	10	79-01-6	
Trichlorofluoromethane	Not detected	2		ppbv	10	75-69-4	
Vinyl chloride	Not detected	2		ppbv	10	75-01-4	
Vinyl acetate	Not detected	20		ppbv	10	108-05-4	
p,m-Xylene	Not detected	4		ppbv	10		
o-Xylene	Not detected	2		ppbv	10	95-47-6	
Total Xylenes	Not detected	6		ppbv	10	1330-20-7	

TO-15, Method: TO-15, Run Date: 01/16/23 21:10, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	48		ug/m3	10	67-64-1	
1,3-Butadiene	Not detected	44		ug/m3	10	106-99-0	
Benzene	Not detected	6.4		ug/m3	10	71-43-2	
Bromodichloromethane	Not detected	13		ug/m3	10	75-27-4	
Bromoform	Not detected	21		ug/m3	10	75-25-2	
Bromomethane	Not detected	7.8		ug/m3	10	74-83-9	
Vinyl bromide	Not detected	8.7		ug/m3	10	593-60-2	
Benzyl chloride	Not detected	10		ug/m3	10	100-44-7	
Carbon disulfide	Not detected	62		ug/m3	10	75-15-0	
Chlorobenzene	Not detected	9.2		ug/m3	10	108-90-7	
Chloroethane	Not detected	53		ug/m3	10	75-00-3	
Chloroform	Not detected	9.8		ug/m3	10	67-66-3	
Chloromethane	Not detected	41		ug/m3	10	74-87-3	
3-Chloropropene	Not detected	63		ug/m3	10	107-05-1	
2-Chlorotoluene	Not detected	10		ug/m3	10	95-49-8	



Analytical Laboratory Report

Lab Sample ID: S43808.10 (continued)

Sample Tag: VP-5D

TO-15, Method: TO-15, Run Date: 01/16/23 21:10, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Carbon tetrachloride	Not detected	13		ug/m3	10	56-23-5	
Cyclohexane	Not detected	6.9		ug/m3	10	110-82-7	
1,1-Dichloroethane	Not detected	8.1		ug/m3	10	75-34-3	
1,1-Dichloroethene	Not detected	7.9		ug/m3	10	75-35-4	
1,2-Dibromoethane	Not detected	15		ug/m3	10	106-93-4	
1,2-Dichloroethane	Not detected	8.1		ug/m3	10	107-06-2	
1,2-Dichloropropane	Not detected	9.2		ug/m3	10	78-87-5	
1,4-Dioxane	Not detected	90		ug/m3	10	123-91-1	
Dichlorodifluoromethane	Not detected	9.9		ug/m3	10	75-71-8	
Dibromochloromethane	Not detected	17		ug/m3	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	12		ug/m3	10	541-73-1	
1,2-Dichlorobenzene	Not detected	12		ug/m3	10	95-50-1	
1,4-Dichlorobenzene	Not detected	12		ug/m3	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-02-6	
Ethanol*	Not detected	47		ug/m3	10	64-17-5	
Ethylbenzene	Not detected	8.7		ug/m3	10	100-41-4	
Ethyl Acetate*	Not detected	72		ug/m3	10	141-78-6	
4-Ethyltoluene	Not detected	9.8		ug/m3	10	622-96-8	
Freon 113	Not detected	15		ug/m3	10	76-13-1	
Freon 114	Not detected	14		ug/m3	10	76-14-2	
Heptane	Not detected	8.2		ug/m3	10	142-82-5	
Hexachlorobutadiene	Not detected	21		ug/m3	10	87-68-3	
Hexane	Not detected	7.0		ug/m3	10	110-54-3	
2-Hexanone*	Not detected	20		ug/m3	10	591-78-6	
Isopropyl Alcohol*	49	49		ug/m3	10	67-63-0	
Methylene chloride	Not detected	17		ug/m3	10	75-09-2	
2-Butanone (MEK)	Not detected	59		ug/m3	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	20		ug/m3	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	7.2		ug/m3	10	1634-04-4	
Methyl methacrylate	Not detected	8.2		ug/m3	10	80-62-6	
Naphthalene	Not detected	10		ug/m3	10	91-20-3	
Propylene*	Not detected	170		ug/m3	10	115-07-1	
Styrene	Not detected	8.5		ug/m3	10	100-42-5	
1,1,1-Trichloroethane	Not detected	11		ug/m3	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	14		ug/m3	10	79-34-5	
1,1,2-Trichloroethane	Not detected	11		ug/m3	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	37		ug/m3	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	9.8		ug/m3	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	9.8		ug/m3	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	9.3		ug/m3	10	540-84-1	
Tert-butyl Alcohol	Not detected	61		ug/m3	10	75-65-0	
Tetrachloroethene	Not detected	14		ug/m3	10	127-18-4	
Tetrahydrofuran*	5.9	5.9		ug/m3	10	109-99-9	
Toluene	Not detected	7.5		ug/m3	10	108-88-3	
Trichloroethene	Not detected	11		ug/m3	10	79-01-6	
Trichlorofluoromethane	Not detected	11		ug/m3	10	75-69-4	
Vinyl chloride	Not detected	5.1		ug/m3	10	75-01-4	



Analytical Laboratory Report

Lab Sample ID: S43808.10 (continued)

Sample Tag: VP-5D

TO-15, Method: TO-15, Run Date: 01/16/23 21:10, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Vinyl acetate	Not detected	70		ug/m3	10	108-05-4	
p,m-Xylene	Not detected	17		ug/m3	10		
o-Xylene	Not detected	8.7		ug/m3	10	95-47-6	
Total Xylenes	Not detected	26		ug/m3	10	1330-20-7	



Analytical Laboratory Report

Lab Sample ID: S43808.11

Sample Tag: VP-6S

Collected Date/Time: 12/20/2022 12:15 - 12/20/2022 12:21

Matrix: Air

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	Air Canister	None	No	RT	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Pressure check for TO-15*	0	N/A	12/29/22 16:45	BDO	

Organics - Volatiles

TO-15, Method: TO-15, Run Date: 01/16/23 21:40, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	20		ppbv	10	67-64-1	
1,3-Butadiene	Not detected	20		ppbv	10	106-99-0	
Benzene	Not detected	2		ppbv	10	71-43-2	
Bromodichloromethane	Not detected	2		ppbv	10	75-27-4	
Bromoform	Not detected	2		ppbv	10	75-25-2	
Bromomethane	Not detected	2		ppbv	10	74-83-9	
Vinyl bromide	Not detected	2		ppbv	10	593-60-2	
Benzyl chloride	Not detected	2		ppbv	10	100-44-7	
Carbon disulfide	Not detected	20		ppbv	10	75-15-0	
Chlorobenzene	Not detected	2		ppbv	10	108-90-7	
Chloroethane	Not detected	20		ppbv	10	75-00-3	
Chloroform	Not detected	2		ppbv	10	67-66-3	
Chloromethane	Not detected	20		ppbv	10	74-87-3	
3-Chloropropene	Not detected	20		ppbv	10	107-05-1	
2-Chlorotoluene	Not detected	2		ppbv	10	95-49-8	
Carbon tetrachloride	Not detected	2		ppbv	10	56-23-5	
Cyclohexane	Not detected	2		ppbv	10	110-82-7	
1,1-Dichloroethane	Not detected	2		ppbv	10	75-34-3	
1,1-Dichloroethene	Not detected	2		ppbv	10	75-35-4	
1,2-Dibromoethane	Not detected	2		ppbv	10	106-93-4	
1,2-Dichloroethane	Not detected	2		ppbv	10	107-06-2	
1,2-Dichloropropane	Not detected	2		ppbv	10	78-87-5	
1,4-Dioxane	Not detected	25		ppbv	10	123-91-1	
Dichlorodifluoromethane	Not detected	2		ppbv	10	75-71-8	
Dibromochloromethane	Not detected	2		ppbv	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	2		ppbv	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	2		ppbv	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	2		ppbv	10	541-73-1	
1,2-Dichlorobenzene	Not detected	2		ppbv	10	95-50-1	
1,4-Dichlorobenzene	Not detected	2		ppbv	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-02-6	
Ethanol*	Not detected	25		ppbv	10	64-17-5	
Ethylbenzene	Not detected	2		ppbv	10	100-41-4	
Ethyl Acetate*	Not detected	20		ppbv	10	141-78-6	
4-Ethyltoluene	Not detected	2		ppbv	10	622-96-8	
Freon 113	Not detected	2		ppbv	10	76-13-1	



Analytical Laboratory Report

Lab Sample ID: S43808.11 (continued)

Sample Tag: VP-6S

TO-15, Method: TO-15, Run Date: 01/16/23 21:40, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Freon 114	Not detected	2		ppbv	10	76-14-2	
Heptane	Not detected	2		ppbv	10	142-82-5	
Hexachlorobutadiene	Not detected	2		ppbv	10	87-68-3	
Hexane	Not detected	2		ppbv	10	110-54-3	
2-Hexanone*	Not detected	5		ppbv	10	591-78-6	
Isopropyl Alcohol*	Not detected	20		ppbv	10	67-63-0	
Methylene chloride	Not detected	5		ppbv	10	75-09-2	
2-Butanone (MEK)	Not detected	20		ppbv	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	5		ppbv	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	2		ppbv	10	1634-04-4	
Methyl methacrylate	Not detected	2		ppbv	10	80-62-6	
Naphthalene	Not detected	2		ppbv	10	91-20-3	
Propylene*	Not detected	100		ppbv	10	115-07-1	
Styrene	Not detected	2		ppbv	10	100-42-5	
1,1,1-Trichloroethane	Not detected	2		ppbv	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	2		ppbv	10	79-34-5	
1,1,2-Trichloroethane	Not detected	2		ppbv	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	5		ppbv	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	2		ppbv	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	2		ppbv	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	2		ppbv	10	540-84-1	
Tert-butyl Alcohol	Not detected	20		ppbv	10	75-65-0	
Tetrachloroethene	Not detected	2		ppbv	10	127-18-4	
Tetrahydrofuran*	Not detected	2		ppbv	10	109-99-9	
Toluene	Not detected	2		ppbv	10	108-88-3	
Trichloroethene	Not detected	2		ppbv	10	79-01-6	
Trichlorofluoromethane	Not detected	2		ppbv	10	75-69-4	
Vinyl chloride	Not detected	2		ppbv	10	75-01-4	
Vinyl acetate	Not detected	20		ppbv	10	108-05-4	
p,m-Xylene	Not detected	4		ppbv	10		
o-Xylene	Not detected	2		ppbv	10	95-47-6	
Total Xylenes	Not detected	6		ppbv	10	1330-20-7	

TO-15, Method: TO-15, Run Date: 01/16/23 21:40, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	48		ug/m3	10	67-64-1	
1,3-Butadiene	Not detected	44		ug/m3	10	106-99-0	
Benzene	Not detected	6.4		ug/m3	10	71-43-2	
Bromodichloromethane	Not detected	13		ug/m3	10	75-27-4	
Bromoform	Not detected	21		ug/m3	10	75-25-2	
Bromomethane	Not detected	7.8		ug/m3	10	74-83-9	
Vinyl bromide	Not detected	8.7		ug/m3	10	593-60-2	
Benzyl chloride	Not detected	10		ug/m3	10	100-44-7	
Carbon disulfide	Not detected	62		ug/m3	10	75-15-0	
Chlorobenzene	Not detected	9.2		ug/m3	10	108-90-7	
Chloroethane	Not detected	53		ug/m3	10	75-00-3	
Chloroform	Not detected	9.8		ug/m3	10	67-66-3	
Chloromethane	Not detected	41		ug/m3	10	74-87-3	
3-Chloropropene	Not detected	63		ug/m3	10	107-05-1	
2-Chlorotoluene	Not detected	10		ug/m3	10	95-49-8	



Analytical Laboratory Report

Lab Sample ID: S43808.11 (continued)

Sample Tag: VP-6S

TO-15, Method: TO-15, Run Date: 01/16/23 21:40, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Carbon tetrachloride	Not detected	13		ug/m3	10	56-23-5	
Cyclohexane	Not detected	6.9		ug/m3	10	110-82-7	
1,1-Dichloroethane	Not detected	8.1		ug/m3	10	75-34-3	
1,1-Dichloroethene	Not detected	7.9		ug/m3	10	75-35-4	
1,2-Dibromoethane	Not detected	15		ug/m3	10	106-93-4	
1,2-Dichloroethane	Not detected	8.1		ug/m3	10	107-06-2	
1,2-Dichloropropane	Not detected	9.2		ug/m3	10	78-87-5	
1,4-Dioxane	Not detected	90		ug/m3	10	123-91-1	
Dichlorodifluoromethane	Not detected	9.9		ug/m3	10	75-71-8	
Dibromochloromethane	Not detected	17		ug/m3	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	12		ug/m3	10	541-73-1	
1,2-Dichlorobenzene	Not detected	12		ug/m3	10	95-50-1	
1,4-Dichlorobenzene	Not detected	12		ug/m3	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-02-6	
Ethanol*	Not detected	47		ug/m3	10	64-17-5	
Ethylbenzene	Not detected	8.7		ug/m3	10	100-41-4	
Ethyl Acetate*	Not detected	72		ug/m3	10	141-78-6	
4-Ethyltoluene	Not detected	9.8		ug/m3	10	622-96-8	
Freon 113	Not detected	15		ug/m3	10	76-13-1	
Freon 114	Not detected	14		ug/m3	10	76-14-2	
Heptane	Not detected	8.2		ug/m3	10	142-82-5	
Hexachlorobutadiene	Not detected	21		ug/m3	10	87-68-3	
Hexane	Not detected	7.0		ug/m3	10	110-54-3	
2-Hexanone*	Not detected	20		ug/m3	10	591-78-6	
Isopropyl Alcohol*	Not detected	49		ug/m3	10	67-63-0	
Methylene chloride	Not detected	17		ug/m3	10	75-09-2	
2-Butanone (MEK)	Not detected	59		ug/m3	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	20		ug/m3	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	7.2		ug/m3	10	1634-04-4	
Methyl methacrylate	Not detected	8.2		ug/m3	10	80-62-6	
Naphthalene	Not detected	10		ug/m3	10	91-20-3	
Propylene*	Not detected	170		ug/m3	10	115-07-1	
Styrene	Not detected	8.5		ug/m3	10	100-42-5	
1,1,1-Trichloroethane	Not detected	11		ug/m3	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	14		ug/m3	10	79-34-5	
1,1,2-Trichloroethane	Not detected	11		ug/m3	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	37		ug/m3	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	9.8		ug/m3	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	9.8		ug/m3	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	9.3		ug/m3	10	540-84-1	
Tert-butyl Alcohol	Not detected	61		ug/m3	10	75-65-0	
Tetrachloroethene	Not detected	14		ug/m3	10	127-18-4	
Tetrahydrofuran*	Not detected	5.9		ug/m3	10	109-99-9	
Toluene	Not detected	7.5		ug/m3	10	108-88-3	
Trichloroethene	Not detected	11		ug/m3	10	79-01-6	
Trichlorofluoromethane	Not detected	11		ug/m3	10	75-69-4	
Vinyl chloride	Not detected	5.1		ug/m3	10	75-01-4	



Analytical Laboratory Report

Lab Sample ID: S43808.11 (continued)
Sample Tag: VP-6S

TO-15, Method: TO-15, Run Date: 01/16/23 21:40, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Vinyl acetate	Not detected	70		ug/m3	10	108-05-4	
p,m-Xylene	Not detected	17		ug/m3	10		
o-Xylene	Not detected	8.7		ug/m3	10	95-47-6	
Total Xylenes	Not detected	26		ug/m3	10	1330-20-7	



Analytical Laboratory Report

Lab Sample ID: S43808.12

Sample Tag: VP-6M

Collected Date/Time: 12/20/2022 12:36 - 12/20/2022 12:42

Matrix: Air

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	Air Canister	None	No	RT	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Pressure check for TO-15*	0	N/A	12/29/22 16:45	BDO	

Organics - Volatiles

TO-15, Method: TO-15, Run Date: 01/16/23 22:10, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	20		ppbv	10	67-64-1	
1,3-Butadiene	Not detected	20		ppbv	10	106-99-0	
Benzene	Not detected	2		ppbv	10	71-43-2	
Bromodichloromethane	Not detected	2		ppbv	10	75-27-4	
Bromoform	Not detected	2		ppbv	10	75-25-2	
Bromomethane	Not detected	2		ppbv	10	74-83-9	
Vinyl bromide	Not detected	2		ppbv	10	593-60-2	
Benzyl chloride	Not detected	2		ppbv	10	100-44-7	
Carbon disulfide	Not detected	20		ppbv	10	75-15-0	
Chlorobenzene	Not detected	2		ppbv	10	108-90-7	
Chloroethane	Not detected	20		ppbv	10	75-00-3	
Chloroform	Not detected	2		ppbv	10	67-66-3	
Chloromethane	Not detected	20		ppbv	10	74-87-3	
3-Chloropropene	Not detected	20		ppbv	10	107-05-1	
2-Chlorotoluene	Not detected	2		ppbv	10	95-49-8	
Carbon tetrachloride	Not detected	2		ppbv	10	56-23-5	
Cyclohexane	Not detected	2		ppbv	10	110-82-7	
1,1-Dichloroethane	Not detected	2		ppbv	10	75-34-3	
1,1-Dichloroethene	Not detected	2		ppbv	10	75-35-4	
1,2-Dibromoethane	Not detected	2		ppbv	10	106-93-4	
1,2-Dichloroethane	Not detected	2		ppbv	10	107-06-2	
1,2-Dichloropropane	Not detected	2		ppbv	10	78-87-5	
1,4-Dioxane	Not detected	25		ppbv	10	123-91-1	
Dichlorodifluoromethane	Not detected	2		ppbv	10	75-71-8	
Dibromochloromethane	Not detected	2		ppbv	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	2		ppbv	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	2		ppbv	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	2		ppbv	10	541-73-1	
1,2-Dichlorobenzene	Not detected	2		ppbv	10	95-50-1	
1,4-Dichlorobenzene	Not detected	2		ppbv	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-02-6	
Ethanol*	Not detected	25		ppbv	10	64-17-5	
Ethylbenzene	Not detected	2		ppbv	10	100-41-4	
Ethyl Acetate*	Not detected	20		ppbv	10	141-78-6	
4-Ethyltoluene	Not detected	2		ppbv	10	622-96-8	
Freon 113	Not detected	2		ppbv	10	76-13-1	



Analytical Laboratory Report

Lab Sample ID: S43808.12 (continued)

Sample Tag: VP-6M

TO-15, Method: TO-15, Run Date: 01/16/23 22:10, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Freon 114	Not detected	2		ppbv	10	76-14-2	
Heptane	Not detected	2		ppbv	10	142-82-5	
Hexachlorobutadiene	Not detected	2		ppbv	10	87-68-3	
Hexane	Not detected	2		ppbv	10	110-54-3	
2-Hexanone*	Not detected	5		ppbv	10	591-78-6	
Isopropyl Alcohol*	Not detected	20		ppbv	10	67-63-0	
Methylene chloride	Not detected	5		ppbv	10	75-09-2	
2-Butanone (MEK)	Not detected	20		ppbv	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	5		ppbv	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	2		ppbv	10	1634-04-4	
Methyl methacrylate	Not detected	2		ppbv	10	80-62-6	
Naphthalene	Not detected	2		ppbv	10	91-20-3	
Propylene*	Not detected	100		ppbv	10	115-07-1	
Styrene	Not detected	2		ppbv	10	100-42-5	
1,1,1-Trichloroethane	Not detected	2		ppbv	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	2		ppbv	10	79-34-5	
1,1,2-Trichloroethane	Not detected	2		ppbv	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	5		ppbv	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	2		ppbv	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	2		ppbv	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	2		ppbv	10	540-84-1	
Tert-butyl Alcohol	Not detected	20		ppbv	10	75-65-0	
Tetrachloroethene	Not detected	2		ppbv	10	127-18-4	
Tetrahydrofuran*	Not detected	2		ppbv	10	109-99-9	
Toluene	Not detected	2		ppbv	10	108-88-3	
Trichloroethene	Not detected	2		ppbv	10	79-01-6	
Trichlorofluoromethane	Not detected	2		ppbv	10	75-69-4	
Vinyl chloride	Not detected	2		ppbv	10	75-01-4	
Vinyl acetate	Not detected	20		ppbv	10	108-05-4	
p,m-Xylene	Not detected	4		ppbv	10		
o-Xylene	Not detected	2		ppbv	10	95-47-6	
Total Xylenes	Not detected	6		ppbv	10	1330-20-7	

TO-15, Method: TO-15, Run Date: 01/16/23 22:10, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	48		ug/m3	10	67-64-1	
1,3-Butadiene	Not detected	44		ug/m3	10	106-99-0	
Benzene	Not detected	6.4		ug/m3	10	71-43-2	
Bromodichloromethane	Not detected	13		ug/m3	10	75-27-4	
Bromoform	Not detected	21		ug/m3	10	75-25-2	
Bromomethane	Not detected	7.8		ug/m3	10	74-83-9	
Vinyl bromide	Not detected	8.7		ug/m3	10	593-60-2	
Benzyl chloride	Not detected	10		ug/m3	10	100-44-7	
Carbon disulfide	Not detected	62		ug/m3	10	75-15-0	
Chlorobenzene	Not detected	9.2		ug/m3	10	108-90-7	
Chloroethane	Not detected	53		ug/m3	10	75-00-3	
Chloroform	Not detected	9.8		ug/m3	10	67-66-3	
Chloromethane	Not detected	41		ug/m3	10	74-87-3	
3-Chloropropene	Not detected	63		ug/m3	10	107-05-1	
2-Chlorotoluene	Not detected	10		ug/m3	10	95-49-8	



Analytical Laboratory Report

Lab Sample ID: S43808.12 (continued)

Sample Tag: VP-6M

TO-15, Method: TO-15, Run Date: 01/16/23 22:10, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Carbon tetrachloride	Not detected	13		ug/m3	10	56-23-5	
Cyclohexane	Not detected	6.9		ug/m3	10	110-82-7	
1,1-Dichloroethane	Not detected	8.1		ug/m3	10	75-34-3	
1,1-Dichloroethene	Not detected	7.9		ug/m3	10	75-35-4	
1,2-Dibromoethane	Not detected	15		ug/m3	10	106-93-4	
1,2-Dichloroethane	Not detected	8.1		ug/m3	10	107-06-2	
1,2-Dichloropropane	Not detected	9.2		ug/m3	10	78-87-5	
1,4-Dioxane	Not detected	90		ug/m3	10	123-91-1	
Dichlorodifluoromethane	Not detected	9.9		ug/m3	10	75-71-8	
Dibromochloromethane	Not detected	17		ug/m3	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	12		ug/m3	10	541-73-1	
1,2-Dichlorobenzene	Not detected	12		ug/m3	10	95-50-1	
1,4-Dichlorobenzene	Not detected	12		ug/m3	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-02-6	
Ethanol*	Not detected	47		ug/m3	10	64-17-5	
Ethylbenzene	Not detected	8.7		ug/m3	10	100-41-4	
Ethyl Acetate*	Not detected	72		ug/m3	10	141-78-6	
4-Ethyltoluene	Not detected	9.8		ug/m3	10	622-96-8	
Freon 113	Not detected	15		ug/m3	10	76-13-1	
Freon 114	Not detected	14		ug/m3	10	76-14-2	
Heptane	Not detected	8.2		ug/m3	10	142-82-5	
Hexachlorobutadiene	Not detected	21		ug/m3	10	87-68-3	
Hexane	Not detected	7.0		ug/m3	10	110-54-3	
2-Hexanone*	Not detected	20		ug/m3	10	591-78-6	
Isopropyl Alcohol*	Not detected	49		ug/m3	10	67-63-0	
Methylene chloride	Not detected	17		ug/m3	10	75-09-2	
2-Butanone (MEK)	Not detected	59		ug/m3	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	20		ug/m3	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	7.2		ug/m3	10	1634-04-4	
Methyl methacrylate	Not detected	8.2		ug/m3	10	80-62-6	
Naphthalene	Not detected	10		ug/m3	10	91-20-3	
Propylene*	Not detected	170		ug/m3	10	115-07-1	
Styrene	Not detected	8.5		ug/m3	10	100-42-5	
1,1,1-Trichloroethane	Not detected	11		ug/m3	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	14		ug/m3	10	79-34-5	
1,1,2-Trichloroethane	Not detected	11		ug/m3	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	37		ug/m3	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	9.8		ug/m3	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	9.8		ug/m3	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	9.3		ug/m3	10	540-84-1	
Tert-butyl Alcohol	Not detected	61		ug/m3	10	75-65-0	
Tetrachloroethene	Not detected	14		ug/m3	10	127-18-4	
Tetrahydrofuran*	Not detected	5.9		ug/m3	10	109-99-9	
Toluene	Not detected	7.5		ug/m3	10	108-88-3	
Trichloroethene	Not detected	11		ug/m3	10	79-01-6	
Trichlorofluoromethane	Not detected	11		ug/m3	10	75-69-4	
Vinyl chloride	Not detected	5.1		ug/m3	10	75-01-4	



Analytical Laboratory Report

Lab Sample ID: S43808.12 (continued)
Sample Tag: VP-6M

TO-15, Method: TO-15, Run Date: 01/16/23 22:10, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Vinyl acetate	Not detected	70		ug/m3	10	108-05-4	
p,m-Xylene	Not detected	17		ug/m3	10		
o-Xylene	Not detected	8.7		ug/m3	10	95-47-6	
Total Xylenes	Not detected	26		ug/m3	10	1330-20-7	



Analytical Laboratory Report

Lab Sample ID: S43808.13

Sample Tag: VP-6D

Collected Date/Time: 12/21/2022 08:40 - 12/21/2022 17:35

Matrix: Air

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	Air Canister	None	No	RT	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Pressure check for TO-15*	-17	N/A	12/29/22 16:45	BDO	

Organics - Volatiles

TO-15, Method: TO-15, Run Date: 01/16/23 22:41, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	20		ppbv	10	67-64-1	
1,3-Butadiene	Not detected	20		ppbv	10	106-99-0	
Benzene	Not detected	2		ppbv	10	71-43-2	
Bromodichloromethane	Not detected	2		ppbv	10	75-27-4	
Bromoform	Not detected	2		ppbv	10	75-25-2	
Bromomethane	Not detected	2		ppbv	10	74-83-9	
Vinyl bromide	Not detected	2		ppbv	10	593-60-2	
Benzyl chloride	Not detected	2		ppbv	10	100-44-7	
Carbon disulfide	Not detected	20		ppbv	10	75-15-0	
Chlorobenzene	Not detected	2		ppbv	10	108-90-7	
Chloroethane	Not detected	20		ppbv	10	75-00-3	
Chloroform	Not detected	2		ppbv	10	67-66-3	
Chloromethane	Not detected	20		ppbv	10	74-87-3	
3-Chloropropene	Not detected	20		ppbv	10	107-05-1	
2-Chlorotoluene	Not detected	2		ppbv	10	95-49-8	
Carbon tetrachloride	Not detected	2		ppbv	10	56-23-5	
Cyclohexane	Not detected	2		ppbv	10	110-82-7	
1,1-Dichloroethane	Not detected	2		ppbv	10	75-34-3	
1,1-Dichloroethene	Not detected	2		ppbv	10	75-35-4	
1,2-Dibromoethane	Not detected	2		ppbv	10	106-93-4	
1,2-Dichloroethane	Not detected	2		ppbv	10	107-06-2	
1,2-Dichloropropane	Not detected	2		ppbv	10	78-87-5	
1,4-Dioxane	Not detected	25		ppbv	10	123-91-1	
Dichlorodifluoromethane	Not detected	2		ppbv	10	75-71-8	
Dibromochloromethane	Not detected	2		ppbv	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	2		ppbv	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	2		ppbv	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	2		ppbv	10	541-73-1	
1,2-Dichlorobenzene	Not detected	2		ppbv	10	95-50-1	
1,4-Dichlorobenzene	Not detected	2		ppbv	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-02-6	
Ethanol*	Not detected	25		ppbv	10	64-17-5	
Ethylbenzene	Not detected	2		ppbv	10	100-41-4	
Ethyl Acetate*	Not detected	20		ppbv	10	141-78-6	
4-Ethyltoluene	Not detected	2		ppbv	10	622-96-8	
Freon 113	Not detected	2		ppbv	10	76-13-1	



Analytical Laboratory Report

Lab Sample ID: S43808.13 (continued)

Sample Tag: VP-6D

TO-15, Method: TO-15, Run Date: 01/16/23 22:41, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Freon 114	Not detected	2		ppbv	10	76-14-2	
Heptane	Not detected	2		ppbv	10	142-82-5	
Hexachlorobutadiene	Not detected	2		ppbv	10	87-68-3	
Hexane	3	2		ppbv	10	110-54-3	
2-Hexanone*	Not detected	5		ppbv	10	591-78-6	
Isopropyl Alcohol*	80	20		ppbv	10	67-63-0	
Methylene chloride	Not detected	5		ppbv	10	75-09-2	
2-Butanone (MEK)	Not detected	20		ppbv	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	5		ppbv	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	2		ppbv	10	1634-04-4	
Methyl methacrylate	Not detected	2		ppbv	10	80-62-6	
Naphthalene	Not detected	2		ppbv	10	91-20-3	
Propylene*	Not detected	100		ppbv	10	115-07-1	
Styrene	Not detected	2		ppbv	10	100-42-5	
1,1,1-Trichloroethane	Not detected	2		ppbv	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	2		ppbv	10	79-34-5	
1,1,2-Trichloroethane	Not detected	2		ppbv	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	5		ppbv	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	2		ppbv	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	2		ppbv	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	2		ppbv	10	540-84-1	
Tert-butyl Alcohol	Not detected	20		ppbv	10	75-65-0	
Tetrachloroethene	Not detected	2		ppbv	10	127-18-4	
Tetrahydrofuran*	4	2		ppbv	10	109-99-9	
Toluene	5	2		ppbv	10	108-88-3	
Trichloroethene	Not detected	2		ppbv	10	79-01-6	
Trichlorofluoromethane	Not detected	2		ppbv	10	75-69-4	
Vinyl chloride	Not detected	2		ppbv	10	75-01-4	
Vinyl acetate	Not detected	20		ppbv	10	108-05-4	
p,m-Xylene	Not detected	4		ppbv	10		
o-Xylene	Not detected	2		ppbv	10	95-47-6	
Total Xylenes	Not detected	6		ppbv	10	1330-20-7	

TO-15, Method: TO-15, Run Date: 01/16/23 22:41, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	48		ug/m3	10	67-64-1	
1,3-Butadiene	Not detected	44		ug/m3	10	106-99-0	
Benzene	Not detected	6.4		ug/m3	10	71-43-2	
Bromodichloromethane	Not detected	13		ug/m3	10	75-27-4	
Bromoform	Not detected	21		ug/m3	10	75-25-2	
Bromomethane	Not detected	7.8		ug/m3	10	74-83-9	
Vinyl bromide	Not detected	8.7		ug/m3	10	593-60-2	
Benzyl chloride	Not detected	10		ug/m3	10	100-44-7	
Carbon disulfide	Not detected	62		ug/m3	10	75-15-0	
Chlorobenzene	Not detected	9.2		ug/m3	10	108-90-7	
Chloroethane	Not detected	53		ug/m3	10	75-00-3	
Chloroform	Not detected	9.8		ug/m3	10	67-66-3	
Chloromethane	Not detected	41		ug/m3	10	74-87-3	
3-Chloropropene	Not detected	63		ug/m3	10	107-05-1	
2-Chlorotoluene	Not detected	10		ug/m3	10	95-49-8	



Analytical Laboratory Report

Lab Sample ID: S43808.13 (continued)

Sample Tag: VP-6D

TO-15, Method: TO-15, Run Date: 01/16/23 22:41, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Carbon tetrachloride	Not detected	13		ug/m3	10	56-23-5	
Cyclohexane	Not detected	6.9		ug/m3	10	110-82-7	
1,1-Dichloroethane	Not detected	8.1		ug/m3	10	75-34-3	
1,1-Dichloroethene	Not detected	7.9		ug/m3	10	75-35-4	
1,2-Dibromoethane	Not detected	15		ug/m3	10	106-93-4	
1,2-Dichloroethane	Not detected	8.1		ug/m3	10	107-06-2	
1,2-Dichloropropane	Not detected	9.2		ug/m3	10	78-87-5	
1,4-Dioxane	Not detected	90		ug/m3	10	123-91-1	
Dichlorodifluoromethane	Not detected	9.9		ug/m3	10	75-71-8	
Dibromochloromethane	Not detected	17		ug/m3	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	12		ug/m3	10	541-73-1	
1,2-Dichlorobenzene	Not detected	12		ug/m3	10	95-50-1	
1,4-Dichlorobenzene	Not detected	12		ug/m3	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-02-6	
Ethanol*	Not detected	47		ug/m3	10	64-17-5	
Ethylbenzene	Not detected	8.7		ug/m3	10	100-41-4	
Ethyl Acetate*	Not detected	72		ug/m3	10	141-78-6	
4-Ethyltoluene	Not detected	9.8		ug/m3	10	622-96-8	
Freon 113	Not detected	15		ug/m3	10	76-13-1	
Freon 114	Not detected	14		ug/m3	10	76-14-2	
Heptane	Not detected	8.2		ug/m3	10	142-82-5	
Hexachlorobutadiene	Not detected	21		ug/m3	10	87-68-3	
Hexane	11	7.0		ug/m3	10	110-54-3	
2-Hexanone*	Not detected	20		ug/m3	10	591-78-6	
Isopropyl Alcohol*	200	49		ug/m3	10	67-63-0	
Methylene chloride	Not detected	17		ug/m3	10	75-09-2	
2-Butanone (MEK)	Not detected	59		ug/m3	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	20		ug/m3	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	7.2		ug/m3	10	1634-04-4	
Methyl methacrylate	Not detected	8.2		ug/m3	10	80-62-6	
Naphthalene	Not detected	10		ug/m3	10	91-20-3	
Propylene*	Not detected	170		ug/m3	10	115-07-1	
Styrene	Not detected	8.5		ug/m3	10	100-42-5	
1,1,1-Trichloroethane	Not detected	11		ug/m3	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	14		ug/m3	10	79-34-5	
1,1,2-Trichloroethane	Not detected	11		ug/m3	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	37		ug/m3	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	9.8		ug/m3	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	9.8		ug/m3	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	9.3		ug/m3	10	540-84-1	
Tert-butyl Alcohol	Not detected	61		ug/m3	10	75-65-0	
Tetrachloroethene	Not detected	14		ug/m3	10	127-18-4	
Tetrahydrofuran*	12	5.9		ug/m3	10	109-99-9	
Toluene	19	7.5		ug/m3	10	108-88-3	
Trichloroethene	Not detected	11		ug/m3	10	79-01-6	
Trichlorofluoromethane	Not detected	11		ug/m3	10	75-69-4	
Vinyl chloride	Not detected	5.1		ug/m3	10	75-01-4	



Analytical Laboratory Report

Lab Sample ID: S43808.13 (continued)
Sample Tag: VP-6D

TO-15, Method: TO-15, Run Date: 01/16/23 22:41, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Vinyl acetate	Not detected	70		ug/m3	10	108-05-4	
p,m-Xylene	Not detected	17		ug/m3	10		
o-Xylene	Not detected	8.7		ug/m3	10	95-47-6	
Total Xylenes	Not detected	26		ug/m3	10	1330-20-7	



Analytical Laboratory Report

Lab Sample ID: S43808.14

Sample Tag: VP-DUP-122022

Collected Date/Time: 12/20/2022 00:01 - 12/20/2022 00:02

Matrix: Air

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	Air Canister	None	No	RT	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Pressure check for TO-15*	0	N/A	12/29/22 16:45	BDO	

Organics - Volatiles

TO-15, Method: TO-15, Run Date: 01/16/23 23:11, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	20		ppbv	10	67-64-1	
1,3-Butadiene	Not detected	20		ppbv	10	106-99-0	
Benzene	Not detected	2		ppbv	10	71-43-2	
Bromodichloromethane	Not detected	2		ppbv	10	75-27-4	
Bromoform	Not detected	2		ppbv	10	75-25-2	
Bromomethane	Not detected	2		ppbv	10	74-83-9	
Vinyl bromide	Not detected	2		ppbv	10	593-60-2	
Benzyl chloride	Not detected	2		ppbv	10	100-44-7	
Carbon disulfide	Not detected	20		ppbv	10	75-15-0	
Chlorobenzene	Not detected	2		ppbv	10	108-90-7	
Chloroethane	Not detected	20		ppbv	10	75-00-3	
Chloroform	Not detected	2		ppbv	10	67-66-3	
Chloromethane	Not detected	20		ppbv	10	74-87-3	
3-Chloropropene	Not detected	20		ppbv	10	107-05-1	
2-Chlorotoluene	Not detected	2		ppbv	10	95-49-8	
Carbon tetrachloride	Not detected	2		ppbv	10	56-23-5	
Cyclohexane	Not detected	2		ppbv	10	110-82-7	
1,1-Dichloroethane	Not detected	2		ppbv	10	75-34-3	
1,1-Dichloroethene	Not detected	2		ppbv	10	75-35-4	
1,2-Dibromoethane	Not detected	2		ppbv	10	106-93-4	
1,2-Dichloroethane	Not detected	2		ppbv	10	107-06-2	
1,2-Dichloropropane	Not detected	2		ppbv	10	78-87-5	
1,4-Dioxane	Not detected	25		ppbv	10	123-91-1	
Dichlorodifluoromethane	Not detected	2		ppbv	10	75-71-8	
Dibromochloromethane	Not detected	2		ppbv	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	2		ppbv	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	2		ppbv	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	2		ppbv	10	541-73-1	
1,2-Dichlorobenzene	Not detected	2		ppbv	10	95-50-1	
1,4-Dichlorobenzene	Not detected	2		ppbv	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-02-6	
Ethanol*	Not detected	25		ppbv	10	64-17-5	
Ethylbenzene	Not detected	2		ppbv	10	100-41-4	
Ethyl Acetate*	Not detected	20		ppbv	10	141-78-6	
4-Ethyltoluene	Not detected	2		ppbv	10	622-96-8	
Freon 113	Not detected	2		ppbv	10	76-13-1	



Analytical Laboratory Report

Lab Sample ID: S43808.14 (continued)

Sample Tag: VP-DUP-122022

TO-15, Method: TO-15, Run Date: 01/16/23 23:11, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Freon 114	Not detected	2		ppbv	10	76-14-2	
Heptane	Not detected	2		ppbv	10	142-82-5	
Hexachlorobutadiene	Not detected	2		ppbv	10	87-68-3	
Hexane	Not detected	2		ppbv	10	110-54-3	
2-Hexanone*	Not detected	5		ppbv	10	591-78-6	
Isopropyl Alcohol*	60	20		ppbv	10	67-63-0	
Methylene chloride	Not detected	5		ppbv	10	75-09-2	
2-Butanone (MEK)	Not detected	20		ppbv	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	5		ppbv	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	2		ppbv	10	1634-04-4	
Methyl methacrylate	Not detected	2		ppbv	10	80-62-6	
Naphthalene	Not detected	2		ppbv	10	91-20-3	
Propylene*	Not detected	100		ppbv	10	115-07-1	
Styrene	Not detected	2		ppbv	10	100-42-5	
1,1,1-Trichloroethane	Not detected	2		ppbv	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	2		ppbv	10	79-34-5	
1,1,2-Trichloroethane	Not detected	2		ppbv	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	5		ppbv	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	2		ppbv	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	2		ppbv	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	2		ppbv	10	540-84-1	
Tert-butyl Alcohol	Not detected	20		ppbv	10	75-65-0	
Tetrachloroethene	Not detected	2		ppbv	10	127-18-4	
Tetrahydrofuran*	4	2		ppbv	10	109-99-9	
Toluene	3	2		ppbv	10	108-88-3	
Trichloroethene	Not detected	2		ppbv	10	79-01-6	
Trichlorofluoromethane	Not detected	2		ppbv	10	75-69-4	
Vinyl chloride	Not detected	2		ppbv	10	75-01-4	
Vinyl acetate	Not detected	20		ppbv	10	108-05-4	
p,m-Xylene	Not detected	4		ppbv	10		
o-Xylene	Not detected	2		ppbv	10	95-47-6	
Total Xylenes	Not detected	6		ppbv	10	1330-20-7	

TO-15, Method: TO-15, Run Date: 01/16/23 23:11, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	48		ug/m3	10	67-64-1	
1,3-Butadiene	Not detected	44		ug/m3	10	106-99-0	
Benzene	Not detected	6.4		ug/m3	10	71-43-2	
Bromodichloromethane	Not detected	13		ug/m3	10	75-27-4	
Bromoform	Not detected	21		ug/m3	10	75-25-2	
Bromomethane	Not detected	7.8		ug/m3	10	74-83-9	
Vinyl bromide	Not detected	8.7		ug/m3	10	593-60-2	
Benzyl chloride	Not detected	10		ug/m3	10	100-44-7	
Carbon disulfide	Not detected	62		ug/m3	10	75-15-0	
Chlorobenzene	Not detected	9.2		ug/m3	10	108-90-7	
Chloroethane	Not detected	53		ug/m3	10	75-00-3	
Chloroform	Not detected	9.8		ug/m3	10	67-66-3	
Chloromethane	Not detected	41		ug/m3	10	74-87-3	
3-Chloropropene	Not detected	63		ug/m3	10	107-05-1	
2-Chlorotoluene	Not detected	10		ug/m3	10	95-49-8	



Analytical Laboratory Report

Lab Sample ID: S43808.14 (continued)

Sample Tag: VP-DUP-122022

TO-15, Method: TO-15, Run Date: 01/16/23 23:11, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Carbon tetrachloride	Not detected	13		ug/m3	10	56-23-5	
Cyclohexane	Not detected	6.9		ug/m3	10	110-82-7	
1,1-Dichloroethane	Not detected	8.1		ug/m3	10	75-34-3	
1,1-Dichloroethene	Not detected	7.9		ug/m3	10	75-35-4	
1,2-Dibromoethane	Not detected	15		ug/m3	10	106-93-4	
1,2-Dichloroethane	Not detected	8.1		ug/m3	10	107-06-2	
1,2-Dichloropropane	Not detected	9.2		ug/m3	10	78-87-5	
1,4-Dioxane	Not detected	90		ug/m3	10	123-91-1	
Dichlorodifluoromethane	Not detected	9.9		ug/m3	10	75-71-8	
Dibromochloromethane	Not detected	17		ug/m3	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	12		ug/m3	10	541-73-1	
1,2-Dichlorobenzene	Not detected	12		ug/m3	10	95-50-1	
1,4-Dichlorobenzene	Not detected	12		ug/m3	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-02-6	
Ethanol*	Not detected	47		ug/m3	10	64-17-5	
Ethylbenzene	Not detected	8.7		ug/m3	10	100-41-4	
Ethyl Acetate*	Not detected	72		ug/m3	10	141-78-6	
4-Ethyltoluene	Not detected	9.8		ug/m3	10	622-96-8	
Freon 113	Not detected	15		ug/m3	10	76-13-1	
Freon 114	Not detected	14		ug/m3	10	76-14-2	
Heptane	Not detected	8.2		ug/m3	10	142-82-5	
Hexachlorobutadiene	Not detected	21		ug/m3	10	87-68-3	
Hexane	Not detected	7.0		ug/m3	10	110-54-3	
2-Hexanone*	Not detected	20		ug/m3	10	591-78-6	
Isopropyl Alcohol*	150	49		ug/m3	10	67-63-0	
Methylene chloride	Not detected	17		ug/m3	10	75-09-2	
2-Butanone (MEK)	Not detected	59		ug/m3	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	20		ug/m3	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	7.2		ug/m3	10	1634-04-4	
Methyl methacrylate	Not detected	8.2		ug/m3	10	80-62-6	
Naphthalene	Not detected	10		ug/m3	10	91-20-3	
Propylene*	Not detected	170		ug/m3	10	115-07-1	
Styrene	Not detected	8.5		ug/m3	10	100-42-5	
1,1,1-Trichloroethane	Not detected	11		ug/m3	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	14		ug/m3	10	79-34-5	
1,1,2-Trichloroethane	Not detected	11		ug/m3	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	37		ug/m3	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	9.8		ug/m3	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	9.8		ug/m3	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	9.3		ug/m3	10	540-84-1	
Tert-butyl Alcohol	Not detected	61		ug/m3	10	75-65-0	
Tetrachloroethene	Not detected	14		ug/m3	10	127-18-4	
Tetrahydrofuran*	12	5.9		ug/m3	10	109-99-9	
Toluene	11	7.5		ug/m3	10	108-88-3	
Trichloroethene	Not detected	11		ug/m3	10	79-01-6	
Trichlorofluoromethane	Not detected	11		ug/m3	10	75-69-4	
Vinyl chloride	Not detected	5.1		ug/m3	10	75-01-4	



Analytical Laboratory Report

Lab Sample ID: S43808.14 (continued)
Sample Tag: VP-DUP-122022

TO-15, Method: TO-15, Run Date: 01/16/23 23:11, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Vinyl acetate	Not detected	70		ug/m3	10	108-05-4	
p,m-Xylene	Not detected	17		ug/m3	10		
o-Xylene	Not detected	8.7		ug/m3	10	95-47-6	
Total Xylenes	Not detected	26		ug/m3	10	1330-20-7	

Merit Laboratories Login Checklist

Lab Set ID:S43808

Client:OBG02 (Ramboll Americas)

Project: RACER Coldwater Road

Submitted: 12/22/2022 16:40 Login User: MMC

Attention: Clifford Yantz

Address: Ramboll Americas
2090 Commonwealth Blvd
Ann Arbor, MI 48105

Phone: 313-333-0211 FAX:
Email: Clifford.Yantz@ramboll.com

Selection	Description	Note
Sample Receiving		
01. ☐ Yes ☐ No ☒ N/A	Samples are received at 4C +/- 2C	Thermometer # RT
02. ☐ Yes ☐ No ☒ N/A	Received on ice/ cooling process begun	
03. ☐ Yes ☒ No ☐ N/A	Samples shipped	
04. ☐ Yes ☒ No ☐ N/A	Samples left in 24 hr. drop box	
05. ☐ Yes ☐ No ☒ N/A	Are there custody seals/tape or is the drop box locked	
Chain of Custody		
06. ☒ Yes ☐ No ☐ N/A	COC adequately filled out	
07. ☒ Yes ☐ No ☐ N/A	COC signed and relinquished to the lab	
08. ☒ Yes ☐ No ☐ N/A	Sample tag on bottles match COC	
09. ☐ Yes ☒ No ☐ N/A	Subcontracting needed? Subcontracted to:	
Preservation		
10. ☒ Yes ☐ No ☐ N/A	Do sample have correct chemical preservation	
11. ☐ Yes ☐ No ☒ N/A	Completed pH checks on preserved samples? (no VOAs)	
12. ☐ Yes ☒ No ☐ N/A	Did any samples need to be preserved in the lab?	
Bottle Conditions		
13. ☒ Yes ☐ No ☐ N/A	All bottles intact	
14. ☒ Yes ☐ No ☐ N/A	Appropriate analytical bottles are used	
15. ☒ Yes ☐ No ☐ N/A	Merit bottles used	
16. ☒ Yes ☐ No ☐ N/A	Sufficient sample volume received	
17. ☐ Yes ☒ No ☐ N/A	Samples require laboratory filtration	
18. ☒ Yes ☐ No ☐ N/A	Samples submitted within holding time	
19. ☐ Yes ☐ No ☒ N/A	Do water VOC or TOX bottles contain headspace	

Corrective action for all exceptions is to call the client and to notify the project manager.

Client Review By: _____ Date: _____



2680 East Lansing Dr., East Lansing, MI 48823
Phone (517) 332-0167 Fax (517) 332-4034
www.meritlabs.com

C.O.C. PAGE # 1 OF 2

A 6461

REPORT TO

AIR/GAS SAMPLES CHAIN OF CUSTODY RECORD

INVOICE TO

CONTACT NAME <u>Clifford Yantz / Kevin Schneider</u>			
COMPANY <u>Ramboll</u>			
ADDRESS <u>2090 Commonwealth Blvd</u>			
CITY <u>Ann Arbor</u>	STATE <u>MI</u>	ZIP CODE <u>48105</u>	
PHONE NO. <u>313-333-0211</u>	FAX NO.	P.O. NO. <u>194002628</u>	Task <u>10</u>
EMAIL ADDRESS <u>Clifford.Yantz@Ramboll.com</u> <u>Kevin.Schneider@Ramboll.com</u>			

CONTACT NAME <u>X SAME</u>	
COMPANY	
ADDRESS	
CITY	STATE ZIP CODE
PHONE NO.	EMAIL ADDRESS

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

PROJECT NO./NAME <u>RACER Coldwater Road</u>	SAMPLER(S) - PLEASE PRINT/SIGN NAME <u>Kevin Schneider</u> <u>SKL</u>
TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER	
DELIVERABLES REQUIRED ☒ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☐ OTHER	

Certifications

☐ DoD ☐ NELAP

MERIT LAB NO. FOR LAB USE ONLY	SAMPLE TAG IDENTIFICATION-DESCRIPTION	Start		Stop		Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	Sample Type					Analyses	
		Date	Time	Date	Time					Indoor Air	Ambient Air	Soil Gas	Landfill Gas	Other (specify in notes)	TO-15	Other (specify in notes)
43808.01	VP-1 S	12/30/22	1413	12/30/22	1426	-29	-2	130	16837			X			X	
.02	VP-1D *	12/30/22	1452	12/30/22	1500	-27	-25	253	18325			X			X	
.03	VP-2S *	12/30/22	1603	12/30/22	1603	-28	-28	37	48674			X			X	
.04	VP-2D	12/30/22	1622	12/30/22	1629	-28	-2	456	44172			X			X	
.05	VP-3S	12/31/22	1000	12/31/22	1007	-26	-2	341	45510			X			X	
.06	VP-3M	12/31/22	1019	12/31/22	1026	-26	-2	299	48636			X			X	
.07	VP-3D *	12/31/22	1033	12/31/22	1053	-27	-26.5	263	44078			X			X	
.08	VP-5S	12/31/22	1200	12/31/22	1214	-28	-2	146	43733			X			X	
.09	VP-5M	12/31/22	1229	12/31/22	1235	-26	-2	217	48699			X			X	
.10	VP-5D	12/31/22	1257	12/31/22	1308	-30	-3	25	13740			X			X	

Temperature (Fahrenheit)				Pressure (Inches of Hg)				Notes <u>* NO Sample collected due to groundwater interference</u>
	Interior	Ambient	Notes		Interior	Ambient	Notes	
Start		26		Start		29.59		
Stop		26		Stop		29.52		

RELINQUISHED BY: <u>SKL</u>	DATE <u>12/30/22</u> TIME <u>14:27</u>
SIGNATURE/ORGANIZATION	
RECEIVED BY: <u>Amund</u>	DATE <u>12/30/22</u> TIME <u>14:30</u>
SIGNATURE/ORGANIZATION	
RELINQUISHED BY: <u>Amund</u>	DATE <u>12/31/22</u> TIME <u>10:40</u>
SIGNATURE/ORGANIZATION	
RECEIVED BY: <u>M. Chilcoat</u>	DATE <u>12/22/22</u> TIME <u>16:40</u>
SIGNATURE/ORGANIZATION	

RELINQUISHED BY:	DATE	TIME
SIGNATURE/ORGANIZATION		
RECEIVED BY:	DATE	TIME
SIGNATURE/ORGANIZATION		
SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS
SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS
TEMP. ON ARRIVAL		<u>PT</u>



C.O.C. PAGE # 2 OF 2

A

AIR/GAS SAMPLES CHAIN OF CUSTODY RECORD

INVOICE TO

CONTACT NAME		☒ SAME	
COMPANY			
ADDRESS			
CITY		STATE	ZIP CODE
PHONE NO.	EMAIL ADDRESS		

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

Certifications

☐ OHIO VAP	☐ NELAP
☐ DoD	☐ NPDES

Temperature (Fahrenheit)				Pressure (inches of Hg)				Notes
	Interior	Ambient	Notes		Interior	Ambient	Notes	
Start		26		Start		29.59		
Stop		26		Stop		29.52		

RELINQUISHED BY:		DATE		TIME	
SIGNATURE/ORGANIZATION					
RECEIVED BY:		DATE		TIME	
SIGNATURE/ORGANIZATION					
SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS	NOTES,	TEMP. ON ARRIVAL	RT
SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS			

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE

APPENDIX C

GROUNDWATER - ANALYTICAL LABORATORY RESULTS



Analytical Laboratory Report

Report ID: S43806.01(01)
Generated on 01/06/2023

Report to

Attention: Clifford Yantz
Ramboll Americas
2090 Commonwealth Blvd
Ann Arbor, MI 48105

Phone: 313-333-0211 FAX:
Email: Clifford.Yantz@ramboll.com

Additional Contacts: Kevin Schneider

Report produced by

Merit Laboratories, Inc.
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Contacts for report questions:
John Lavery (johnlavery@meritlabs.com)
Barbara Ball (bball@meritlabs.com)

Report Summary

Lab Sample ID(s): S43806.01-S43806.09
Project: RACER Coldwater Road
Collected Date(s): 12/20/2022 - 12/22/2022
Submitted Date/Time: 12/22/2022 16:40
Sampled by: Kevin Schneider
P.O. #: 194002628 TASK 10

Table of Contents

Cover Page (Page 1)
General Report Notes (Page 2)
Report Narrative (Page 2)
Laboratory Certifications (Page 3)
Qualifier Descriptions (Page 3)
Glossary of Abbreviations (Page 3)
Method Summary (Page 4)
Sample Summary (Page 5)

Maya Murshak
Technical Director



Analytical Laboratory Report

General Report Notes

Analytical results relate only to the samples tested, in the condition received by the laboratory.

Methods may be modified for improved performance.

Results reported on a dry weight basis where applicable.

'Not detected' indicates that parameter was not found at a level equal to or greater than the reporting limit (RL).

When MDL results are provided, then 'Not detected' indicates that parameter was not found at a level equal to or greater than the MDL.

40 CFR Part 136 Table II Required Containers, Preservation Techniques and Holding Times for the Clean Water Act specify that samples for acrolein and acrylonitrile, and 2-chloroethylvinyl ether need to be preserved at a pH in the range of 4 to 5 or if not preserved, analyzed within 3 days of sampling.

QA/QC corresponding to this analytical report is a separate document with the same Merit ID reference and is available upon request.

Full accreditation certificates are available upon request. Starred (*) analytes are not NELAP accredited.

Samples are held by the lab for 30 days from the final report date unless a written request to hold longer is provided by the client.

Report shall not be reproduced except in full, without the written approval of Merit Laboratories, Inc.

Limits for drinking water samples, are listed as the MCL Limits (Maximum Contaminant Level Concentrations)

PFAS requirement: Section 9.3.8 of U.S. EPA Method 537.1 states "If the method analyte(s) found in the Field Sample is present in the

FRB at a concentration greater than 1/3 the MRL, then all samples collected with that FRB are invalid and must be recollected and reanalyzed."

Samples submitted without an accompanying FRB may not be acceptable for compliance purposes.

Wisconsin PFAs analysis: MDL = LOD; RL = LOQ. LOD and LOQ are adjusted for dilution.

Report Narrative

There is no additional narrative for this analytical report

Laboratory Certifications

Authority	Certification ID
Michigan DEQ	#9956
DOD ELAP/ISO 17025	#69699
WBENC	#2005110032
Ohio VAP	#CL0002
Indiana DOH	#C-MI-07
New York NELAC	#11814
North Carolina DENR	#680
North Carolina DOH	#26702
Alaska CSLAP	#17-001
Pennsylvania DEP	#68-05884
Wisconsin DNR	FID# 399147320

Qualifier Descriptions

Qualifier	Description
!	Result is outside of stated limit criteria
B	Compound also found in associated method blank
E	Concentration exceeds calibration range
F	Analysis run outside of holding time
G	Estimated result due to extraction run outside of holding time
H	Sample submitted and run outside of holding time
I	Matrix interference with internal standard
J	Estimated value less than reporting limit, but greater than MDL
L	Elevated reporting limit due to low sample amount
M	Result reported to MDL not RDL
O	Analysis performed by outside laboratory. See attached report.
R	Preliminary result
S	Surrogate recovery outside of control limits
T	No correction for total solids
X	Elevated reporting limit due to matrix interference
Y	Elevated reporting limit due to high target concentration
b	Value detected less than reporting limit, but greater than MDL
e	Reported value estimated due to interference
j	Analyte also found in associated method blank
p	Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak.
x	Preserved from bulk sample

Glossary of Abbreviations

Abbreviation	Description
RL/RDL	Reporting Limit
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
SW	EPA SW 846 (Soil and Wastewater) Methods
E	EPA Methods
SM	Standard Methods
LN	Linear
BR	Branched



Analytical Laboratory Report

Method Summary

Method	Version
N/A	Not Applicable
SW5030C/8260C	SW 846 Method 8260C Revision 3 August 2006 / 5030C Revision 3 May 2003



Analytical Laboratory Report

Sample Summary (9 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S43806.01	VP-1D	Groundwater	12/20/22 15:15
S43806.02	VP-2S	Groundwater	12/20/22 16:10
S43806.03	OBG MW-5	Groundwater	12/21/22 15:58
S43806.04	OBG MW-6	Groundwater	12/21/22 16:58
S43806.05	OBG MW-8	Groundwater	12/21/22 17:52
S43806.06	OBG MW-14	Groundwater	12/22/22 10:02
S43806.07	OBG MW-7	Groundwater	12/22/22 11:02
S43806.08	OBG MW-11	Groundwater	12/22/22 12:22
S43806.09	Trip Blank-122222	Liquid	12/22/22 00:01



Analytical Laboratory Report

Lab Sample ID: S43806.01

Sample Tag: VP-1D

Collected Date/Time: 12/20/2022 15:15

Matrix: Groundwater

COC Reference: 154986

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	HCL	Yes	4.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	12/27/22 11:10	KAG	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 12/24/22 13:20, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	10		ug/L	1	60-29-7	
Acetone	Not detected	50		ug/L	1	67-64-1	
Methyl iodide	Not detected	1		ug/L	1	74-88-4	
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
Tetrahydrofuran*	Not detected	90		ug/L	1	109-99-9	
Chloroform	Not detected	1		ug/L	1	67-66-3	
Bromochloromethane	Not detected	1		ug/L	1	74-97-5	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Benzene	Not detected	1		ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Toluene	Not detected	1		ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	1		ug/L	1	110-57-6	



Analytical Laboratory Report

Lab Sample ID: S43806.01 (continued)

Sample Tag: VP-1D

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 12/24/22 13:20, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
p,m-Xylene*	Not detected	2		ug/L	1		
o-Xylene	Not detected	1		ug/L	1	95-47-6	
Styrene	Not detected	1		ug/L	1	100-42-5	
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8	
Bromoform	Not detected	1		ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8	
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6	
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8	
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8	
Hexachloroethane	Not detected	5		ug/L	1	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
Naphthalene	Not detected	5		ug/L	1	91-20-3	
2-Methylnaphthalene	Not detected	5		ug/L	1	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S43806.02

Sample Tag: VP-2S

Collected Date/Time: 12/20/2022 16:10

Matrix: Groundwater

COC Reference: 154986

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	HCL	Yes	4.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	12/27/22 11:10	KAG	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 12/24/22 13:43, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	10		ug/L	1	60-29-7	
Acetone	Not detected	50		ug/L	1	67-64-1	
Methyl iodide	Not detected	1		ug/L	1	74-88-4	
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
Tetrahydrofuran*	Not detected	90		ug/L	1	109-99-9	
Chloroform	Not detected	1		ug/L	1	67-66-3	
Bromochloromethane	Not detected	1		ug/L	1	74-97-5	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Benzene	Not detected	1		ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Toluene	Not detected	1		ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	1		ug/L	1	110-57-6	



Analytical Laboratory Report

Lab Sample ID: S43806.02 (continued)

Sample Tag: VP-2S

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 12/24/22 13:43, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
p,m-Xylene*	Not detected	2		ug/L	1		
o-Xylene	Not detected	1		ug/L	1	95-47-6	
Styrene	Not detected	1		ug/L	1	100-42-5	
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8	
Bromoform	Not detected	1		ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8	
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6	
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8	
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8	
Hexachloroethane	Not detected	5		ug/L	1	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
Naphthalene	Not detected	5		ug/L	1	91-20-3	
2-Methylnaphthalene	Not detected	5		ug/L	1	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S43806.03

Sample Tag: OBG MW-5

Collected Date/Time: 12/21/2022 15:58

Matrix: Groundwater

COC Reference: 154986

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	4.6	IR
3	40ml Glass	None	Yes	4.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	12/27/22 11:10	KAG	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 12/24/22 14:07, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	10		ug/L	1	60-29-7	
Acetone	Not detected	50		ug/L	1	67-64-1	
Methyl iodide	Not detected	1		ug/L	1	74-88-4	
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
Vinyl chloride	2	1		ug/L	1	75-01-4	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
1,1-Dichloroethane	1	1		ug/L	1	75-34-3	
cis-1,2-Dichloroethene	3	1		ug/L	1	156-59-2	
Tetrahydrofuran*	Not detected	90		ug/L	1	109-99-9	
Chloroform	Not detected	1		ug/L	1	67-66-3	
Bromochloromethane	Not detected	1		ug/L	1	74-97-5	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Benzene	Not detected	1		ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Toluene	Not detected	1		ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	



Analytical Laboratory Report

Lab Sample ID: S43806.03 (continued)

Sample Tag: OBG MW-5

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 12/24/22 14:07, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
trans-1,4-Dichloro-2-butene	Not detected	1		ug/L	1	110-57-6	
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
p,m-Xylene*	Not detected	2		ug/L	1		
o-Xylene	Not detected	1		ug/L	1	95-47-6	
Styrene	Not detected	1		ug/L	1	100-42-5	
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8	
Bromoform	Not detected	1		ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8	
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6	
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8	
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8	
Hexachloroethane	Not detected	5		ug/L	1	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
Naphthalene	Not detected	5		ug/L	1	91-20-3	
2-Methylnaphthalene	Not detected	5		ug/L	1	91-57-6	

Other / Misc.

Method: , Run Date: 12/31/22 19:53, Analyst: EF

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Misc. Special Project*	Completed				1		O

O-Analysis performed by outside laboratory. See attached report.



Analytical Laboratory Report

Lab Sample ID: S43806.04

Sample Tag: OBG MW-6

Collected Date/Time: 12/21/2022 16:58

Matrix: Groundwater

COC Reference: 154986

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	4.6	IR
3	40ml Glass	None	Yes	4.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	12/27/22 11:10	KAG	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 12/24/22 14:31, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	10		ug/L	1	60-29-7	
Acetone	Not detected	50		ug/L	1	67-64-1	
Methyl iodide	Not detected	1		ug/L	1	74-88-4	
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
Tetrahydrofuran*	Not detected	90		ug/L	1	109-99-9	
Chloroform	Not detected	1		ug/L	1	67-66-3	
Bromochloromethane	Not detected	1		ug/L	1	74-97-5	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Benzene	Not detected	1		ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Toluene	Not detected	1		ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	



Analytical Laboratory Report

Lab Sample ID: S43806.04 (continued)

Sample Tag: OBG MW-6

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 12/24/22 14:31, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
trans-1,4-Dichloro-2-butene	Not detected	1		ug/L	1	110-57-6	
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
p,m-Xylene*	Not detected	2		ug/L	1		
o-Xylene	Not detected	1		ug/L	1	95-47-6	
Styrene	Not detected	1		ug/L	1	100-42-5	
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8	
Bromoform	Not detected	1		ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8	
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6	
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8	
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8	
Hexachloroethane	Not detected	5		ug/L	1	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
Naphthalene	Not detected	5		ug/L	1	91-20-3	
2-Methylnaphthalene	Not detected	5		ug/L	1	91-57-6	

Other / Misc.

Method: , Run Date: 12/31/22 20:15, Analyst: EF

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Misc. Special Project*	Completed				1		O

O-Analysis performed by outside laboratory. See attached report.



Analytical Laboratory Report

Lab Sample ID: S43806.05

Sample Tag: OBG MW-8

Collected Date/Time: 12/21/2022 17:52

Matrix: Groundwater

COC Reference: 154986

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	4.6	IR
3	40ml Glass	None	Yes	4.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	12/27/22 11:10	KAG	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 12/24/22 14:54, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	10		ug/L	1	60-29-7	
Acetone	Not detected	50		ug/L	1	67-64-1	
Methyl iodide	Not detected	1		ug/L	1	74-88-4	
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
Tetrahydrofuran*	Not detected	90		ug/L	1	109-99-9	
Chloroform	Not detected	1		ug/L	1	67-66-3	
Bromochloromethane	Not detected	1		ug/L	1	74-97-5	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Benzene	Not detected	1		ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Toluene	Not detected	1		ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	



Analytical Laboratory Report

Lab Sample ID: S43806.05 (continued)

Sample Tag: OBG MW-8

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 12/24/22 14:54, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
trans-1,4-Dichloro-2-butene	Not detected	1		ug/L	1	110-57-6	
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
p,m-Xylene*	Not detected	2		ug/L	1		
o-Xylene	Not detected	1		ug/L	1	95-47-6	
Styrene	Not detected	1		ug/L	1	100-42-5	
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8	
Bromoform	Not detected	1		ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8	
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6	
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8	
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8	
Hexachloroethane	Not detected	5		ug/L	1	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
Naphthalene	Not detected	5		ug/L	1	91-20-3	
2-Methylnaphthalene	Not detected	5		ug/L	1	91-57-6	

Other / Misc.

Method: , Run Date: 12/31/22 20:36, Analyst: EF

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Misc. Special Project*	Completed				1		O

O-Analysis performed by outside laboratory. See attached report.



Analytical Laboratory Report

Lab Sample ID: S43806.06

Sample Tag: OBG MW-14

Collected Date/Time: 12/22/2022 10:02

Matrix: Groundwater

COC Reference: 154986

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	4.6	IR
3	40ml Glass	None	Yes	4.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	12/27/22 11:10	KAG	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 12/24/22 15:18, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	10		ug/L	1	60-29-7	
Acetone	Not detected	50		ug/L	1	67-64-1	
Methyl iodide	Not detected	1		ug/L	1	74-88-4	
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
Tetrahydrofuran*	Not detected	90		ug/L	1	109-99-9	
Chloroform	Not detected	1		ug/L	1	67-66-3	
Bromochloromethane	Not detected	1		ug/L	1	74-97-5	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Benzene	Not detected	1		ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Toluene	Not detected	1		ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	



Analytical Laboratory Report

Lab Sample ID: S43806.06 (continued)

Sample Tag: OBG MW-14

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 12/24/22 15:18, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
trans-1,4-Dichloro-2-butene	Not detected	1		ug/L	1	110-57-6	
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
p,m-Xylene*	Not detected	2		ug/L	1		
o-Xylene	Not detected	1		ug/L	1	95-47-6	
Styrene	Not detected	1		ug/L	1	100-42-5	
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8	
Bromoform	Not detected	1		ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8	
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6	
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8	
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8	
Hexachloroethane	Not detected	5		ug/L	1	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
Naphthalene	Not detected	5		ug/L	1	91-20-3	
2-Methylnaphthalene	Not detected	5		ug/L	1	91-57-6	

Other / Misc.

Method: , Run Date: 12/31/22 20:58, Analyst: EF

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Misc. Special Project*	Completed				1		O

O-Analysis performed by outside laboratory. See attached report.



Analytical Laboratory Report

Lab Sample ID: S43806.07

Sample Tag: OBG MW-7

Collected Date/Time: 12/22/2022 11:02

Matrix: Groundwater

COC Reference: 154986

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	4.6	IR
3	40ml Glass	None	Yes	4.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	12/27/22 11:10	KAG	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 12/24/22 15:41, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	10		ug/L	1	60-29-7	
Acetone	Not detected	50		ug/L	1	67-64-1	
Methyl iodide	Not detected	1		ug/L	1	74-88-4	
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
Tetrahydrofuran*	Not detected	90		ug/L	1	109-99-9	
Chloroform	Not detected	1		ug/L	1	67-66-3	
Bromochloromethane	Not detected	1		ug/L	1	74-97-5	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Benzene	Not detected	1		ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Toluene	Not detected	1		ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	



Analytical Laboratory Report

Lab Sample ID: S43806.07 (continued)

Sample Tag: OBG MW-7

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 12/24/22 15:41, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
trans-1,4-Dichloro-2-butene	Not detected	1		ug/L	1	110-57-6	
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
p,m-Xylene*	Not detected	2		ug/L	1		
o-Xylene	Not detected	1		ug/L	1	95-47-6	
Styrene	Not detected	1		ug/L	1	100-42-5	
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8	
Bromoform	Not detected	1		ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8	
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6	
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8	
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8	
Hexachloroethane	Not detected	5		ug/L	1	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
Naphthalene	Not detected	5		ug/L	1	91-20-3	
2-Methylnaphthalene	Not detected	5		ug/L	1	91-57-6	

Other / Misc.

Method: , Run Date: 12/31/22 21:20, Analyst: EF

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Misc. Special Project*	Completed				1		O

O-Analysis performed by outside laboratory. See attached report.



Analytical Laboratory Report

Lab Sample ID: S43806.08

Sample Tag: OBG MW-11

Collected Date/Time: 12/22/2022 12:22

Matrix: Groundwater

COC Reference: 154986

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	4.6	IR
3	40ml Glass	None	Yes	4.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	12/27/22 11:10	KAG	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 12/24/22 16:05, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	10		ug/L	1	60-29-7	
Acetone	Not detected	50		ug/L	1	67-64-1	
Methyl iodide	Not detected	1		ug/L	1	74-88-4	
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
Tetrahydrofuran*	Not detected	90		ug/L	1	109-99-9	
Chloroform	Not detected	1		ug/L	1	67-66-3	
Bromochloromethane	Not detected	1		ug/L	1	74-97-5	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Benzene	Not detected	1		ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Toluene	Not detected	1		ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	



Analytical Laboratory Report

Lab Sample ID: S43806.08 (continued)

Sample Tag: OBG MW-11

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 12/24/22 16:05, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
trans-1,4-Dichloro-2-butene	Not detected	1		ug/L	1	110-57-6	
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
p,m-Xylene*	Not detected	2		ug/L	1		
o-Xylene	Not detected	1		ug/L	1	95-47-6	
Styrene	Not detected	1		ug/L	1	100-42-5	
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8	
Bromoform	Not detected	1		ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8	
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6	
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8	
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8	
Hexachloroethane	Not detected	5		ug/L	1	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
Naphthalene	Not detected	5		ug/L	1	91-20-3	
2-Methylnaphthalene	Not detected	5		ug/L	1	91-57-6	

Other / Misc.

Method: , Run Date: 12/31/22 21:42, Analyst: EF

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Misc. Special Project*	Completed				1		O

O-Analysis performed by outside laboratory. See attached report.



Analytical Laboratory Report

Lab Sample ID: S43806.09

Sample Tag: Trip Blank-122222

Collected Date/Time: 12/22/2022 00:01

Matrix: Liquid

COC Reference: 154986

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	HCL	Yes	4.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	12/27/22 11:10	KAG	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 12/24/22 12:56, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	10		ug/L	1	60-29-7	
Acetone	Not detected	50		ug/L	1	67-64-1	
Methyl iodide	Not detected	1		ug/L	1	74-88-4	
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
Tetrahydrofuran*	Not detected	90		ug/L	1	109-99-9	
Chloroform	Not detected	1		ug/L	1	67-66-3	
Bromochloromethane	Not detected	1		ug/L	1	74-97-5	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Benzene	Not detected	1		ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Toluene	Not detected	1		ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	1		ug/L	1	110-57-6	



Analytical Laboratory Report

Lab Sample ID: S43806.09 (continued)

Sample Tag: Trip Blank-122222

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 12/24/22 12:56, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
p,m-Xylene*	Not detected	2		ug/L	1		
o-Xylene	Not detected	1		ug/L	1	95-47-6	
Styrene	Not detected	1		ug/L	1	100-42-5	
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8	
Bromoform	Not detected	1		ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8	
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6	
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8	
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8	
Hexachloroethane	Not detected	5		ug/L	1	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
Naphthalene	Not detected	5		ug/L	1	91-20-3	
2-Methylnaphthalene	Not detected	5		ug/L	1	91-57-6	

Merit Laboratories Login Checklist

Lab Set ID:S43806

Client:OBG02 (Ramboll Americas)

Project: RACER Coldwater Road

Submitted: 12/22/2022 16:40 Login User: MMC

Attention: Clifford Yantz

Address: Ramboll Americas
2090 Commonwealth Blvd
Ann Arbor, MI 48105

Phone: 313-333-0211 FAX:
Email: Clifford.Yantz@ramboll.com

Selection	Description	Note
Sample Receiving		
01.	☒ Yes ☐ No ☐ N/A	Samples are received at 4C +/- 2C Thermometer # IR 4.6
02.	☒ Yes ☐ No ☐ N/A	Received on ice/ cooling process begun
03.	☐ Yes ☒ No ☐ N/A	Samples shipped
04.	☐ Yes ☒ No ☐ N/A	Samples left in 24 hr. drop box
05.	☐ Yes ☐ No ☒ N/A	Are there custody seals/tape or is the drop box locked
Chain of Custody		
06.	☒ Yes ☐ No ☐ N/A	COC adequately filled out
07.	☒ Yes ☐ No ☐ N/A	COC signed and relinquished to the lab
08.	☒ Yes ☐ No ☐ N/A	Sample tag on bottles match COC
09.	☒ Yes ☐ No ☐ N/A	Subcontracting needed? Subcontacted to: Fibertec
Preservation		
10.	☒ Yes ☐ No ☐ N/A	Do sample have correct chemical preservation
11.	☐ Yes ☐ No ☒ N/A	Completed pH checks on preserved samples? (no VOAs)
12.	☐ Yes ☒ No ☐ N/A	Did any samples need to be preserved in the lab?
Bottle Conditions		
13.	☒ Yes ☐ No ☐ N/A	All bottles intact
14.	☒ Yes ☐ No ☐ N/A	Appropriate analytical bottles are used
15.	☒ Yes ☐ No ☐ N/A	Merit bottles used
16.	☒ Yes ☐ No ☐ N/A	Sufficient sample volume received
17.	☐ Yes ☒ No ☐ N/A	Samples require laboratory filtration
18.	☒ Yes ☐ No ☐ N/A	Samples submitted within holding time
19.	☐ Yes ☒ No ☐ N/A	Do water VOC or TOX bottles contain headspace

Corrective action for all exceptions is to call the client and to notify the project manager.

Client Review By: _____ Date: _____

ANALYTICAL REPORT

PREPARED FOR

Attn: Lab Results
Merit Laboratories
2680 E Lansing Drive
East Lansing, Michigan 48823

Generated 1/5/2023 12:48:22 PM

JOB DESCRIPTION

S43806

JOB NUMBER

190-30705-1

Eurofins Michigan

Job Notes

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The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization



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Table of Contents

Cover Page	1
Table of Contents	3
Sample Summary	4
Case Narrative	5
Client Sample Results	6
QC Sample Results	7
Definitions/Glossary	8
QC Association Summary	9
Lab Chronicle	10
Certification Summary	11
Method Summary	12
Chain of Custody	13



Sample Summary

Client: Merit Laboratories
Project/Site: S43806

Job ID: 190-30705-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
190-30705-1	S43806.03	Water	12/21/22 15:58	12/28/22 08:00
190-30705-2	S43806.04	Water	12/21/22 16:58	12/28/22 08:00
190-30705-3	S43806.05	Water	12/21/22 17:52	12/28/22 08:00
190-30705-4	S43806.06	Water	12/22/22 10:02	12/28/22 08:00
190-30705-5	S43806.07	Water	12/22/22 11:02	12/28/22 08:00
190-30705-6	S43806.08	Water	12/22/22 12:22	12/28/22 08:00

Case Narrative

Client: Merit Laboratories
Project/Site: S43806

Job ID: 190-30705-1

Job ID: 190-30705-1

Laboratory: Eurofins Michigan

Narrative

Job Narrative 190-30705-1

Receipt

The samples were received on 12/28/2022 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.5°C

GC Semi VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample Results

Client: Merit Laboratories
Project/Site: S43806

Job ID: 190-30705-1

Client Sample ID: S43806.03

Lab Sample ID: 190-30705-1

Date Collected: 12/21/22 15:58

Matrix: Water

Date Received: 12/28/22 08:00

Method: SW846 8015D - Nonhalogenated Organic Compounds - Direct Injection (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl alcohol	<5.0		5.0	mg/L			12/31/22 19:53	1

Client Sample ID: S43806.04

Lab Sample ID: 190-30705-2

Date Collected: 12/21/22 16:58

Matrix: Water

Date Received: 12/28/22 08:00

Method: SW846 8015D - Nonhalogenated Organic Compounds - Direct Injection (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl alcohol	<5.0		5.0	mg/L			12/31/22 20:15	1

Client Sample ID: S43806.05

Lab Sample ID: 190-30705-3

Date Collected: 12/21/22 17:52

Matrix: Water

Date Received: 12/28/22 08:00

Method: SW846 8015D - Nonhalogenated Organic Compounds - Direct Injection (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl alcohol	<5.0		5.0	mg/L			12/31/22 20:36	1

Client Sample ID: S43806.06

Lab Sample ID: 190-30705-4

Date Collected: 12/22/22 10:02

Matrix: Water

Date Received: 12/28/22 08:00

Method: SW846 8015D - Nonhalogenated Organic Compounds - Direct Injection (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl alcohol	<5.0		5.0	mg/L			12/31/22 20:58	1

Client Sample ID: S43806.07

Lab Sample ID: 190-30705-5

Date Collected: 12/22/22 11:02

Matrix: Water

Date Received: 12/28/22 08:00

Method: SW846 8015D - Nonhalogenated Organic Compounds - Direct Injection (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl alcohol	<5.0		5.0	mg/L			12/31/22 21:20	1

Client Sample ID: S43806.08

Lab Sample ID: 190-30705-6

Date Collected: 12/22/22 12:22

Matrix: Water

Date Received: 12/28/22 08:00

Method: SW846 8015D - Nonhalogenated Organic Compounds - Direct Injection (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl alcohol	<5.0		5.0	mg/L			12/31/22 21:42	1

QC Sample Results

Client: Merit Laboratories
Project/Site: S43806

Job ID: 190-30705-1

Method: 8015D - Nonhalogenated Organic Compounds - Direct Injection (GC)

Lab Sample ID: MB 680-757529/16

Matrix: Water

Analysis Batch: 757529

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl alcohol	<5.0		5.0	mg/L			12/31/22 18:03	1

Lab Sample ID: LCS 680-757529/12

Matrix: Water

Analysis Batch: 757529

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Isopropyl alcohol	20.0	18.5		mg/L		93	70 - 130

Lab Sample ID: LCSD 680-757529/13

Matrix: Water

Analysis Batch: 757529

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Isopropyl alcohol	20.0	18.8		mg/L		94	70 - 130	2	50

Definitions/Glossary

Client: Merit Laboratories
Project/Site: S43806

Job ID: 190-30705-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

QC Association Summary

Client: Merit Laboratories
Project/Site: S43806

Job ID: 190-30705-1

GC Semi VOA

Analysis Batch: 757529

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
190-30705-1	S43806.03	Total/NA	Water	8015D	
190-30705-2	S43806.04	Total/NA	Water	8015D	
190-30705-3	S43806.05	Total/NA	Water	8015D	
190-30705-4	S43806.06	Total/NA	Water	8015D	
190-30705-5	S43806.07	Total/NA	Water	8015D	
190-30705-6	S43806.08	Total/NA	Water	8015D	
MB 680-757529/16	Method Blank	Total/NA	Water	8015D	
LCS 680-757529/12	Lab Control Sample	Total/NA	Water	8015D	
LCSD 680-757529/13	Lab Control Sample Dup	Total/NA	Water	8015D	

Lab Chronicle

Client: Merit Laboratories
Project/Site: S43806

Job ID: 190-30705-1

Client Sample ID: S43806.03

Lab Sample ID: 190-30705-1

Date Collected: 12/21/22 15:58

Matrix: Water

Date Received: 12/28/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015D		1	757529	JCK	EET SAV	12/31/22 19:53

Client Sample ID: S43806.04

Lab Sample ID: 190-30705-2

Date Collected: 12/21/22 16:58

Matrix: Water

Date Received: 12/28/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015D		1	757529	JCK	EET SAV	12/31/22 20:15

Client Sample ID: S43806.05

Lab Sample ID: 190-30705-3

Date Collected: 12/21/22 17:52

Matrix: Water

Date Received: 12/28/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015D		1	757529	JCK	EET SAV	12/31/22 20:36

Client Sample ID: S43806.06

Lab Sample ID: 190-30705-4

Date Collected: 12/22/22 10:02

Matrix: Water

Date Received: 12/28/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015D		1	757529	JCK	EET SAV	12/31/22 20:58

Client Sample ID: S43806.07

Lab Sample ID: 190-30705-5

Date Collected: 12/22/22 11:02

Matrix: Water

Date Received: 12/28/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015D		1	757529	JCK	EET SAV	12/31/22 21:20

Client Sample ID: S43806.08

Lab Sample ID: 190-30705-6

Date Collected: 12/22/22 12:22

Matrix: Water

Date Received: 12/28/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015D		1	757529	JCK	EET SAV	12/31/22 21:42

Laboratory References:

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Analyst References:

Lab: EET SAV

Batch Type: Analysis

JCK = Joshua Kellar

Eurofins Michigan

Accreditation/Certification Summary

Client: Merit Laboratories
Project/Site: S43806

Job ID: 190-30705-1

Laboratory: Eurofins Savannah

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
	AFCEE	SAVLAB	
Alabama	State	41450	06-30-23
ANAB	Dept. of Defense ELAP	L2463	09-22-24
Arkansas DEQ	State	19-015-0	02-01-23
California	State	2939	06-30-22 *
Connecticut	State	PH-0161	03-31-23
Florida	NELAP	E87052	06-23-23
Georgia	State	E87052	06-30-23
Georgia (DW)	State	803	06-30-23
Guam	State	19-007R	04-17-23
Hawaii	State	<cert No.>	06-30-23
Illinois	NELAP	200022	11-30-22 *
Indiana	State	C-GA-02	06-30-23
Iowa	State	353	07-01-23
Kentucky (UST)	State	NA	06-30-23
Louisiana	NELAP	30690	06-30-23
Louisiana (All)	NELAP	30690	06-30-23
Louisiana (DW)	State	LA009	12-31-22
Maine	State	GA00006	09-25-24
Maryland	State	250	12-31-23
Massachusetts	State	M-GA006	07-30-23
Michigan	State	9925	06-30-23
Mississippi	State	<cert No.>	06-30-23
Nebraska	State	NE-OS-7-04	06-30-23
New Jersey	NELAP	GA769	06-30-23
New Mexico	State	GA00006	06-30-23
New York	NELAP	10842	04-01-23
North Carolina (DW)	State	13701	07-31-23
North Carolina (WW/SW)	State	269	12-31-22
Pennsylvania	NELAP	68-00474	06-30-23
Puerto Rico	State	GA00006	01-01-24
South Carolina	State	98001	06-30-23
Tennessee	State	TN02961	06-30-23
Texas	NELAP	T1047004185-19-14	11-30-23
Texas	TCEQ Water Supply	T104704185	06-30-23
USDA	US Federal Programs	P330-18-00313	09-03-24
Virginia	NELAP	460161	06-14-23
Wisconsin	State	999819810	08-31-23
Wyoming	State	8TMS-L	06-30-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Michigan

Method Summary

Client: Merit Laboratories
Project/Site: S43806

Job ID: 190-30705-1

Method	Method Description	Protocol	Laboratory
8015D	Nonhalogenated Organic Compounds - Direct Injection (GC)	SW846	EET SAV

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

2680 East Lansing Dr., East Lansing, MI 48823
Phone (517) 332-0167 Fax (517) 332-4034
www.meritlabs.com

C.O.C. PAGE # 1 OF 1

REPORT TO

CONTACT NAME	Project Management Team		
COMPANY	Merit Laboratories		
ADDRESS	2680 East Lansing Drive		
CITY	East Lansing	STATE	MI
PHONE NO.	517-332-0167	ZIP CODE	48823
E-MAIL ADDRESS	results@meritlabs.com		
	TAX NO.	P.O. NO.	QUOTE NO.
	517-332-4034		

CHAIN OF CUSTODY RECORD

CONTACT NAME		Julie Teague	
COMPANY		Merit Laboratories	
ADDRESS		2680 East Lansing Drive	
CITY	East Lansing	STATE	MI
PHONE NO.	517-332-0167	ZIP CODE	48823
E-MAIL ADDRESS		juliet@meritlabs.com	

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

PROJECT NO. NAME	S43806	SAMPLER(S) - PLEASE PRINT/SIGN NAME
TURNAROUND TIME REQUIRED		
☐ 1 DAY	☐ 2 DAYS	☒ 3 DAYS
☐ STANDARD	☐ OTHER	
DELIVERABLES REQUIRED		
☐ STD	☒ LEVEL II	☐ LEVEL III
☐ LEVEL IV	☐ EDD	☐ OTHER

MATRIX CODE	MERIT LAB NO. FOR LAB USE ONLY	YEAR		IDENTIFICATION-DESCRIPTION						SD=SOLID		# Containers & Preservatives						
		DATE	TIME	GW=GROUNDWATER SL=SLUDGE	DW=DRINKING WATER	WW=WASTEWATER	S=SOIL	L=LIQUID	A=AIR	W=WASTE								
		12/21/22	1558			S43806.03				MATRIX	# OF BOTTLES	HCl	HNO ₃	H ₂ SO ₄	NaOH	MeOH	OTHER	
		12/21/22	1658			S43806.04					L	3						
		12/21/22	1752			S43806.05					L	3						
		12/22/22	1002			S43806.06					L	3						
		12/22/22	1102			S43806.07					L	3						
		12/22/22	1222			S43806.08					L	3						

Isopropyl Alcohol
Certifications
☐ OHIO VAP ☐ Drinking Water
☐ DoD ☐ NPDES
Project Locations
☐ Detroit ☐ New York
☐ Other _____
Special Instructions



190-30705 Chain of Custody

*** Subcontracted to Eurofins

REINQUIRED BY: SIGNATURE/ORGANIZATION	DATE 12/27/22	TIME 1200	[] Sampler	DATE 12/27/22	TIME 1200	DATE 12/27/22	TIME 1200
RECEIVED BY: SIGNATURE/ORGANIZATION	DATE 12/27/22	TIME 1200		DATE 12/27/22	TIME 1200	DATE 12/27/22	TIME 1200
REINQUIRED BY: SIGNATURE/ORGANIZATION	DATE 12/27/22	TIME 1200		DATE 12/27/22	TIME 1200	DATE 12/27/22	TIME 1200
RECEIVED BY: SIGNATURE/ORGANIZATION	DATE 12/27/22	TIME 1200		DATE 12/27/22	TIME 1200	DATE 12/27/22	TIME 1200

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE

77-87-71 DO: 8.00

Eurofins - Canton Sample Receipt Form/Narrative
Barberton Facility

Login # : 190-30705

Client Merit Site Name _____ Cooler unpacked by: Charlene
Cooler Received on 12-27-22 Opened on 12-27-22

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off Eurofins Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

Eurofins Cooler # RL Foam Box _____ Client Cooler Box _____ Other _____
Packing material used: Bubble Wrap Foam Plastic Bag None Other _____
COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
IR GUN # IR-13 (CF -0.2 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
IR GUN # IR-16 (CF -0.1 °C) Observed Cooler Temp. 0.6 °C Corrected Cooler Temp. 0.5 °C
IR GUN # IR-17 (CF -0.3 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity _____ Yes No
- Were the seals on the outside of the cooler(s) signed & dated? Yes No NA
- Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No
- Were tamper/custody seals intact and uncompromised? Yes No NA
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes No
7. Did all bottles arrive in good condition (Unbroken)? Yes No
8. Could all bottle labels (ID/Date/Time) be reconciled with the COC? Yes No
9. For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?
10. Were correct bottle(s) used for the test(s) indicated? Yes No
11. Sufficient quantity received to perform indicated analyses? Yes No
12. Are these work share samples and all listed on the COC? Yes No
If yes, Questions 13-17 have been checked at the originating laboratory.
13. Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC291590
14. Were VOAs on the COC? Yes No
15. Were air bubbles >6 mm in any VOA vials? Yes  Larger than this. Yes No NA
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____ Yes No
17. Was a LL Hg or Me Hg trip blank present? Yes No

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other _____

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Samples processed by: _____

19. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____

VOA Sample Preservation - Date/Time VOAs Frozen: _____