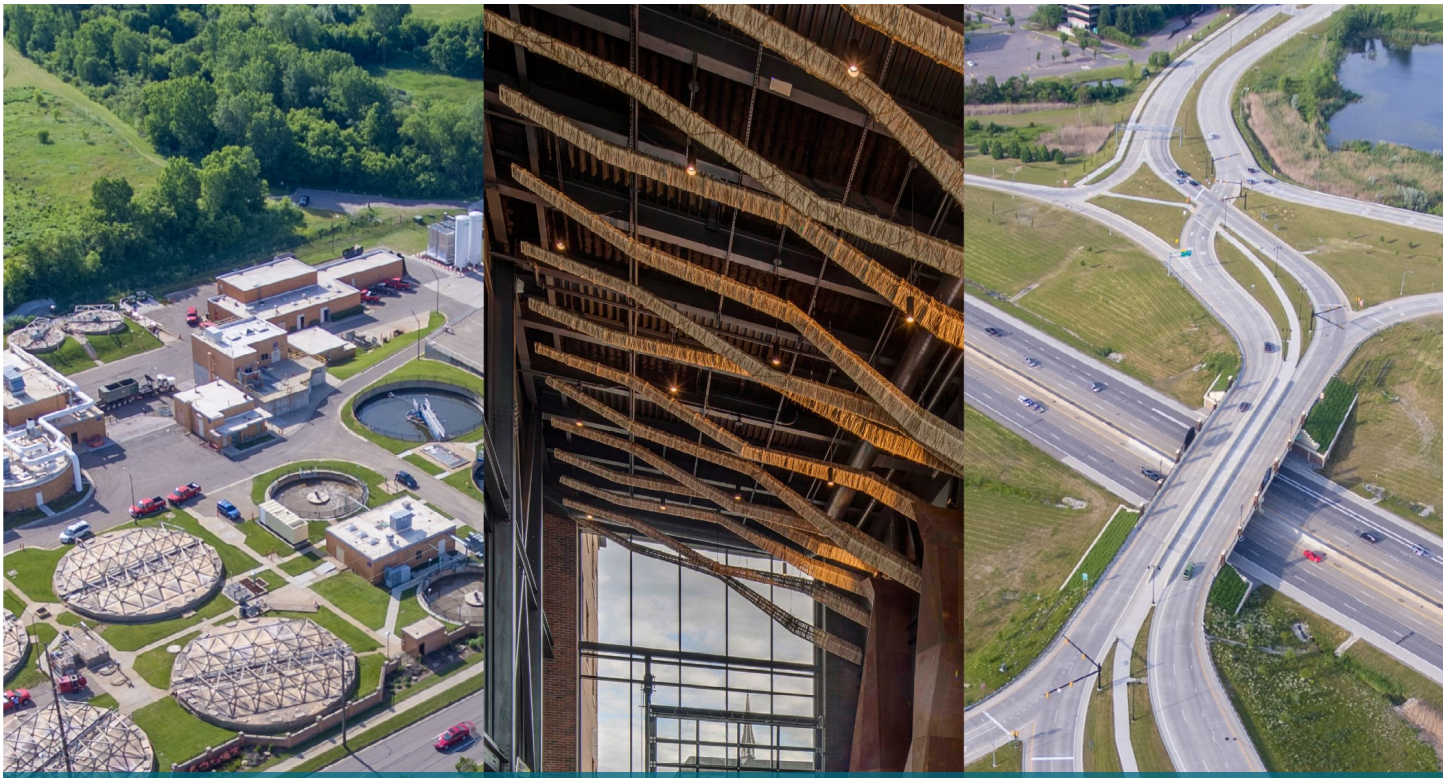

Phase II Environmental Site Assessment

3 and 15 East Main Street and 15 Courtland Street
Hart, Michigan

Prepared For:
City of Hart Tax Increment Financing Authority

Project No. 231596
April 17, 2024

fishbeck
Engineers | Architects | Scientists | Constructors

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Engineers | Architects | Scientists | Constructors

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Phase II Environmental Site Assessment

3 and 15 East Main Street and 15 Courtland Street
Hart, Michigan

Parcel Nos.: 64-020-207-004-50, 64-020-207-004-00, 64-020-207-001-00, 64-020-207-005-00, 64-020-207-008-00

Prepared For:
City of Hart Tax Increment Financing Authority (TIFA)
Hart, Michigan

April 17, 2024
Project No. 231596

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List of Abbreviations/Acronyms

AST	aboveground storage tank
bgs	below ground surface
COC	contaminants of concern
EGLE	Michigan Department of Environment, Great Lakes, and Energy
ESA	Environmental Site Assessment
facility	*Any area, place, parcel or parcels of property, or portion of a parcel of property where a hazardous substance in excess of the concentrations that satisfy the cleanup criteria for unrestricted residential use has been released, deposited, disposed of, or otherwise comes to be located.*
GRCC	Generic Residential Cleanup Criteria
Part 201	Part 201 (Environmental Remediation) of the Natural Resources and Environmental Protection Act, 1994 of Public Act 451, as amended (NREPA)
PCE	tetrachloroethene
PID	photoionization detector
PNA	polynuclear aromatic hydrocarbons
ppm	part(s) per million
PVC	polyvinyl criteria
QA/QC	quality assurance/quality control
QAPP	Quality Assurance Project Plan
REC	Recognized Environmental Condition
SAP	Sampling and Analysis Plan
TMB	trimethylbenzene
TOV	total organic vapor
UST	underground storage tank
USEPA	U.S. Environmental Protection Agency
VIASL	Volatilization to Indoor Air Screening Level
VOC	volatile organic compound

1.0 Introduction

Fishbeck conducted an additional Phase II Environmental Site Assessment (ESA) on October 30 and 31, 2023, at the vacant commercial property located at 3 and 15 East Main Street and 15 Courtland Street, Hart, Michigan (Site). The Phase II ESA was performed to supplement data from a prior Phase I ESA, Phase II ESA, and Baseline Environmental Assessment, the last of which was completed April 19, 2023. During those investigations, contamination was discovered in the soil and groundwater. In order to better define the quantitative attributes of the contaminants on site, Fishbeck returned to the Site for additional sampling activities. These sampling activities are described herein. The Phase I ESA that led to the initial round of investigations identified the following Recognized Environmental Conditions (RECs) associated with the Site:

- A gasoline UST was shown on the 1910 and 1920 Sanborn Maps on the southwest portion of the Subject Property. Additionally, a gasoline UST was shown in the East Main Street right-of-way on the 1920 Sanborn Map, near the northeast corner of the Subject Property. It is unknown whether the USTs are still present. One 550-gallon diesel UST was removed in 1990; however, the location of the former USTs is unknown. Heating oil USTs associated with the former residences and other USTs may also be present.
- A gasoline bulk storage area with four ASTs was shown as present on the 1946 Sanborn Map, near the southwest corner of the Subject Property. The ASTs remained present until sometime between 1977 and 1986.
- An auto repair shop was shown near the northeast corner of the Subject Property on the Sanborn Maps dated 1920 through 1946. Hazardous substances and/or petroleum substances were likely stored and used during this time.
- The historic presence of railroad tracks on the west side of the Subject Property.
- The use and storage of agricultural chemicals, including hazardous substances and petroleum products on the Subject Property.

Fishbeck submitted a Phase II ESA Sampling and Analysis Plan (SAP) to the U.S. Environmental Protection Agency (USEPA) for review and approval. The SAP documented proposed sampling locations and laboratory analyses to address the RECs identified in the Phase I ESA and included a Health and Safety Plan. The Phase II ESA is discussed in the sections below.

2.0 Investigation Methods

On October 30 and 31, 2023, Fishbeck oversaw the completion of eighteen soil borings (SB-1 through SB-10, SG-01 through SG-05, and TMW-01 through TMW-03) at the Site. Temporary groundwater monitoring wells were installed in three borings (TMW-01 through TMW-03). In addition, five temporary soil gas probes were installed in five borings (SG-01 through SG-05). After sampling was completed, each soil boring, temporary monitoring well, and soil gas sampling probe was removed; the borings were backfilled with cuttings and bentonite; and the ground surface was restored to its original condition. The soil boring/temporary monitoring well locations and temporary soil gas probes are shown on Figure 3.

2.1 Soil Sampling

Fishbeck subcontracted Rosendall Well Drilling of Grand Rapids, Michigan, to provide drilling services at the Subject Property. The soil borings (SB-01 through SB-10) were advanced using a direct-push rig (Geoprobe® 7822DT) and macro cores equipped with single-use acetate liners. A continuous core of soil was collected at each soil boring location, and the soils were described by a Fishbeck geologist. The soils were field screened for the presence of total organic vapors (TOVs) using a photoionization detector (PID).

Soil borings SB-01 through SB-05 were located in the area of the former gasoline bulk storage area and southwestern gasoline underground storage tank (UST). These borings were advanced to a depth of 25 feet below ground surface (bgs). The soils were native materials, and TOVs were not detected above background levels in soils from these borings, except SB-05, which indicated TOVs as high as 183.3 ppm at 24 feet. Other than these PID readings, no indications of contamination were observed in these borings. Samples taken in this area were from depths of 9–10 feet bgs or 24–25 feet bgs, in order to further characterize contamination related to the past use of aboveground storage tanks (ASTs) or USTs. In general, the soils encountered at these soil boring locations consisted of a foot of crushed stone and concrete, underlain by a fine-grained brown sand with few subrounded gravel extending to depths ranging from 10 to 20 feet bgs. A poorly graded, brown sand to the terminus of the borings at 25 feet bgs.

Soil boring SB-06, installed with a stainless-steel hand auger, was conducted in the southern storage building. The boring was extended to a depth of 5 feet bgs. The maximum PID reading at this boring was 1.0 ppm. No staining or odors were observed in the soils at this location. Soils encountered by Fishbeck were characterized predominantly as fill down to 1 foot bgs and poorly graded brown sand down to 5 feet bgs. Upon completion, all boring locations were backfilled with native soil. A sample was taken from 3 to 4 feet bgs in this boring.

Fishbeck staff also completed the installation of four additional hand-auger soil borings within the interior of the buildings on the northeastern portion of the Site, which were identified as an automotive service garage and associated storage building. In addition, on a 1920 Sanborn Map, a UST was depicted as being in the East Main Street right-of-way near this portion of the Site. SB-07 and SB-08 were located in the former service garage building, and SB-09 and SB-10 were in the former storage building. Refer to the Sample Location Map (Figure 3) detailing the boring locations. All four borings were extended to a depth of 5 feet bgs, and samples were collected from 4 to 5 feet bgs in all of these locations. No staining, odors, or other olfactory indications of impact were observed. No fill material was observed in the soils below these structures. A copy of the soil boring logs is provided as Appendix 1.

All subsurface sampling equipment was cleaned with a phosphate-free detergent wash, followed by a freshwater rinse, and a deionized water rinse, prior to and between each use in order to prevent cross-contamination.

The soil samples were collected directly into laboratory-prepared bottles, stored on ice in an insulated cooler, sealed, and transported under chain-of-custody documentation to Merit Laboratories, Inc. of East Lansing, Michigan, for laboratory analysis of the 8260 plus list of volatile organic compounds (VOCs), polynuclear aromatic hydrocarbons (PNAs) using USEPA Method 8270, and Michigan 10 Metals (arsenic, barium, cadmium, chromium, copper, lead, mercury, selenium, silver, and zinc).

To meet the Data Quality Objectives in the Quality Assurance Project Plan (QAPP), duplicate samples, matrix spike/matrix spike duplicate samples, an equipment blank, a field blank, and a trip blank were collected. These additional samples were collected to evaluate the precision and accuracy of the reported data. Refer to Section 4 and Appendix 3 for additional information relative to the data validation.

2.2 Groundwater Sampling

Temporary monitoring wells were installed at three soil borings (TMW-01 through TMW-03) using 1-inch-diameter PVC casings and 1-inch-diameter, 5-foot-long PVC screens. Monitoring well locations were selected to better determine where groundwater contamination exists across the extent of the Site. The bottom of each screen was generally installed approximately 3 to 4 feet below the water table. Borehole logs that include well construction details are presented in Appendix 1. The wells were sampled using a peristaltic pump equipped with disposable tubing, following Michigan Department of Environment, Great Lakes, and Energy (EGLE) approved low-flow methods. Refer to Figures 3 and 4 for the specific locations of temporary groundwater monitoring wells.

The groundwater samples were collected directly into laboratory-prepared bottles, stored on ice in an insulated cooler, sealed, and transported under chain-of-custody documentation to Merit Laboratories Inc. of East Lansing, Michigan, for laboratory analysis of the 8260 plus list of VOCs, PNAs using USEPA Method 8270, and Michigan 10 Metals (arsenic, barium, cadmium, chromium, copper, lead, mercury, selenium, silver, and zinc).

To meet the Data Quality Objectives in the QAPP, duplicate samples, matrix spike/matrix spike duplicate samples, an equipment blank, and a trip blank were collected. These additional samples are conducted to evaluate the precision and accuracy of the reported data. Refer to Section 4 and Appendix 3 for additional information relative to the data validation.

2.3 Soil Gas Sampling

Fishbeck oversaw the completion of five temporary soil gas probes (SG-01 through SG-05) around the exterior of the property, constructed using PVC micro screen implants. The implants were installed using a direct-push rig (Geoprobe® 7822DT). The temporary soil gas probe locations are shown on Figure 3. Sand pack was placed around the micro screens, with a bentonite seal installed above the micro screen to the ground surface. The PVC micro screen implants were connected to the ground surface with Nylon tubing. Quality assurance/quality control (QA/QC) procedures, consisting of leak testing using a shroud and ultra-pure helium as a tracer gas, were performed prior to sampling at each location. Additionally, soil gas vapor readings were performed to evaluate the carbon dioxide, oxygen, and methane concentrations. All field readings indicated an aerobic environment containing oxygen ranging between 17.5% and 20.5%.

In addition, Fishbeck staff installed and collected samples from five sub-slab Vapor Pins® (SSVP-1 through SSVP-5) in the building. The sub-slab soil gas samples were collected through the installed Cox-Colvin Vapor Pins®. The installation of a Vapor Pin® involves drilling a 5/8-inch-diameter hole through the concrete floor. Silicone tubing is placed around the Vapor Pin®, which provides an air-tight seal, and the Vapor Pin® is installed into the hole. The installation of the Vapor Pin® was conducted in accordance with EGLE guidance.

Sample collection was conducted at each of the five temporary soil gas probes and five Vapor Pin® locations, in accordance with EGLE *Indoor Air Sampling Procedure Via USEPA Method TO-15* (February 1, 2013, Revision #1) and the QAPP. One-liter bottle vac containers, equipped with regulators calibrated for a 7-minute sampling period, were used for the sample collection. The samples were shipped under chain-of-custody documentation to Merit Laboratories, Inc, in East Lansing, Michigan, for VOC analysis, in accordance with USEPA Method TO-15. The Vapor Pin® locations are shown on Figure 3.

QA/QC procedures, consisting of shut-in testing and leak testing using a shroud and ultra-pure helium as a tracer gas, were performed prior to sampling at each location. No leaks were observed at any of the locations; therefore, the vapor probes/Vapor Pins® were installed with a sufficient seal, and the soil gas samples can be considered representative of subsurface conditions.

3.0 Investigation Results

All samples collected during this Phase II ESA were submitted to Merit Laboratories, Inc. in East Lansing, Michigan, for laboratory analysis of PNAs, VOCs, and the Michigan 10 Metals. The soil, groundwater, and soil gas analytical results were compared to applicable EGLE Part 201 Generic Residential Cleanup Criteria (GRCC) and/or Volatilization to Indoor Air Screening Levels (VIASLs) and are provided in Tables 1, 2, and 3, respectively. The analytical results exceeding Part 201 GRCC or the EGLE VIASLs are shown on Figure 4. Copies of the laboratory reports are provided as Appendix 2.

3.1 Soil

Several contaminants of concern (COCs) have been identified in soils at the Site at concentrations exceeding Part 201 GRCC in the following borings:

- SB-02: 1,3,5-trimethylbenzene (TMB), 2-methylnaphthalene, naphthalene, and xylenes (total)
- SB-05: 1,2,4-TMB, 1,3,5-TMB, 2-methylnaphthalene, cumene(also known as isopropylbenzene), n-butylbenzene, n-propylbenzene, naphthalene, sec-butylbenzene, styrene, phenanthrene, and xylenes (total)
- SB-06: mercury
- SB-10: copper and mercury

Several other COCs were detected in soils at the site at concentrations below Part 201 GRCC.

A summary of the soil results is presented in Table 1. The laboratory reports are provided as Appendix 2.

3.2 Groundwater

Arsenic and copper were detected in TMW-1 and chromium (total) and copper were detected in TMW-03 at concentrations exceeding Part 201 GRCC. All other contaminants were detected below Part 201 GRCC.

A summary of the groundwater results is presented in Table 2. The laboratory reports are provided as Appendix 2.

3.3 Soil Gas

Tetrachloroethene (PCE) was detected in the soil gas sample collected from sample MG-1, a blind duplicate collected at SSVP-2, at concentrations exceeding EGLE VIASLs. The investigative sample to be collected from this same location was voided due to sampler error. No other VOCs were detected in any of the soil gas samples at concentrations exceeding laboratory reporting limits.

A summary of the soil gas results is presented in Table 3. The laboratory reports are provided as Appendix 2.

4.0 Data Validation and Assessment

Validation of the soil, groundwater, and soil gas monitoring data was performed as required by the QAPP. The completeness objective for the task was met and sufficient data was available to support decision-making. The data validation report is provided in Appendix 3.

5.0 Summary and Conclusions

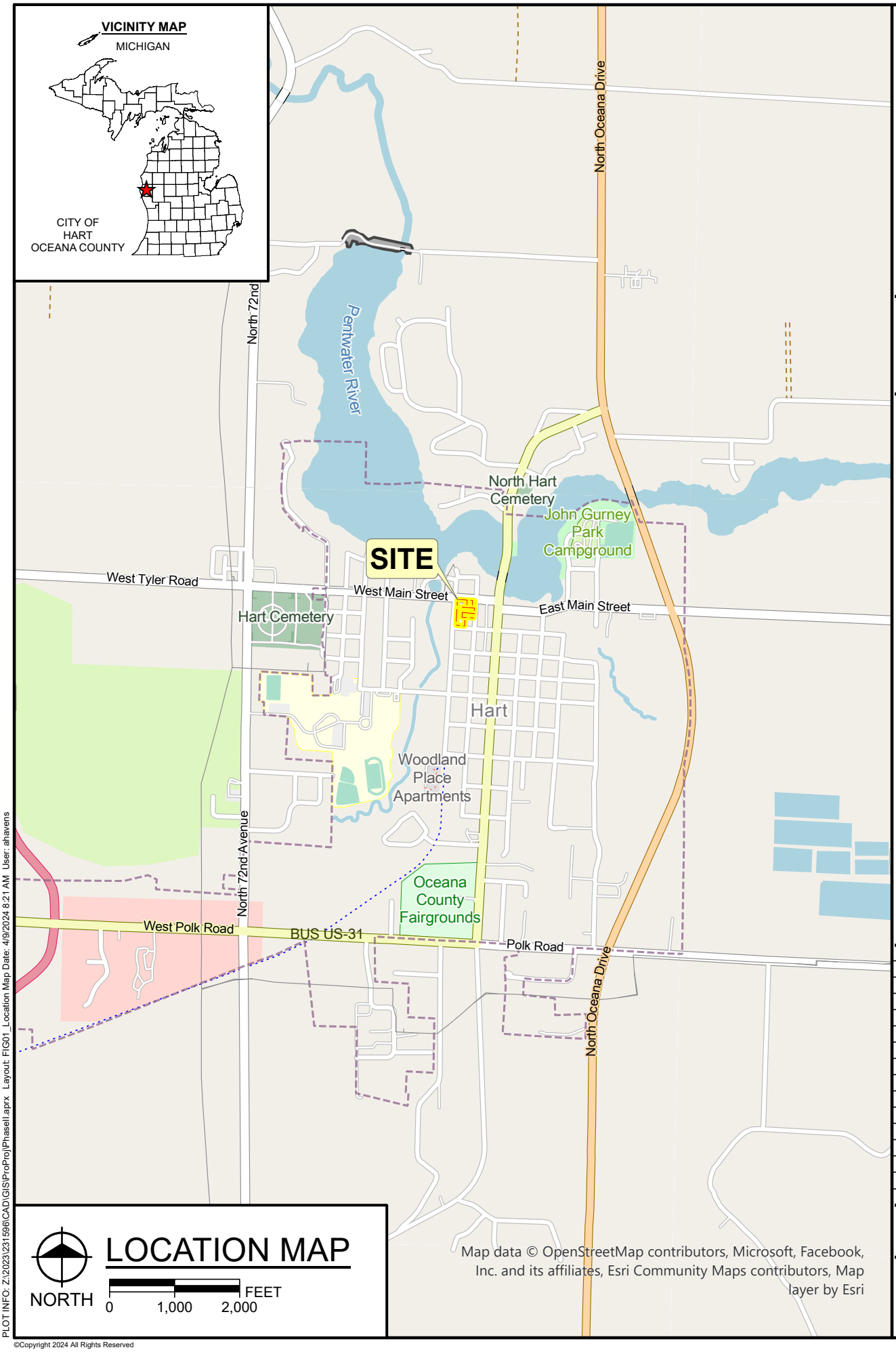
Fishbeck conducted a Phase II ESA on October 30 and 31, 2023, at 3 and 15 Main Street and 15 Courtland Street, Hart, Michigan (Site). The Phase II ESA was performed to supplement data from a prior Phase I ESA, Phase II ESA, and Baseline Environmental Assessment, the last of which was completed April 19, 2023. During those investigations, contamination was discovered in the soil and groundwater. In order to further define the extent of contaminants on Site, Fishbeck returned to the Site for additional sampling activities. These sampling activities are described herein. The Phase I ESA that led to the initial round of investigations identified the following RECs associated with the Site:

- A gasoline UST was shown on the 1910 and 1920 Sanborn Maps on the southwest portion of the Subject Property. Additionally, a gasoline UST was shown in the East Main Street right-of-way on the 1920 Sanborn Map, near the northeast corner of the Subject Property. It is unknown whether the USTs are still present. One 550-gallon diesel UST was removed in 1990; however, the location of the former USTs is unknown. Heating oil USTs associated with the former residences and other USTs may also be present.

- A gasoline bulk storage area with four ASTs was shown as present on the 1946 Sanborn Map, near the southwest corner of the Subject Property. The ASTs remained present until sometime between 1977 and 1986.
- An auto repair shop was shown near the northeast corner of the Subject Property on the Sanborn Maps dated 1920 through 1946. Hazardous substances and/or petroleum substances were likely stored and used during this time.
- The historic presence of railroad tracks on the west side of the Subject Property.
- The use and storage of agricultural chemicals, including hazardous substances and petroleum products on the Subject Property.

2024 Phase II ESA activities included the completion of ten soil borings (utilized for the collection of 10 soil samples), three temporary wells (utilized for the collection of three groundwater samples), five exterior soil gas wells (utilized for the collection of five soil gas samples), and installation of five Vapor Pins® (utilized for the collection of five soil gas samples). Cumene, 2-methylnaphthalene, 1,2,4-TMB, 1,3,5-TMB, n-butylbenzene, n-propylbenzene, naphthalene, sec-butylbenzene, styrene, xylenes (total), phenanthrene, copper, and mercury (total) were detected in soil and arsenic, copper, and chromium (total) were detected in groundwater at concentrations exceeding Part 201 GRCC during this investigation. In addition, PCE was detected in a soil gas sample (MG-1) collected from SSVP-2 above the EGLE VIASL. Therefore, based on the Phase II ESA, the Site is considered a *facility*. The completion of a Baseline Environmental Assessment and Documentation of Due Care Compliance Report for the Site has already been submitted by the owner. This Phase II ESA was performed to assist with the redevelopment planning of the Site, and as the Data Quality Objectives have been met, this goal has been met.

Figures



LOCATION MAP

NORTH

0 1,000 2,000 FEET

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3 & 15 E Main St & 15 Courtland St
Hart, Michigan
Phase II
Environmental Site Assessment

PROJECT NO.
231596

FIGURE NO.
1

PLOT INFO: Z:\2023\231596\CAD\GIS\ProPro\PhaseII.aprx Layout: FIG01_Location Map Date: 4/9/2024 8:21 AM User: ahavens

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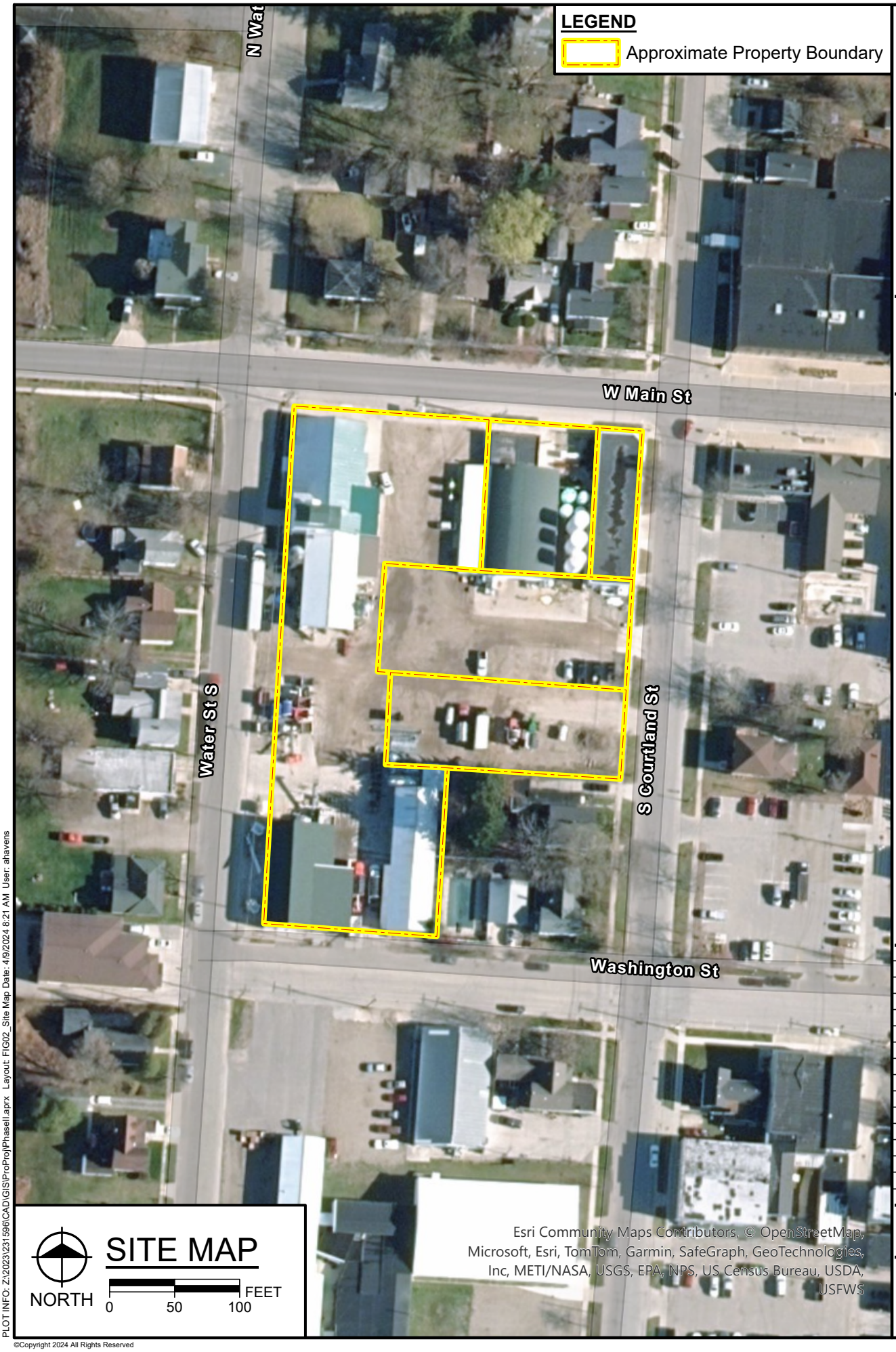

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Hart, Michigan

Phase II
Environmental Site Assessment

PROJECT NO.
231596

FIGURE NO.
2

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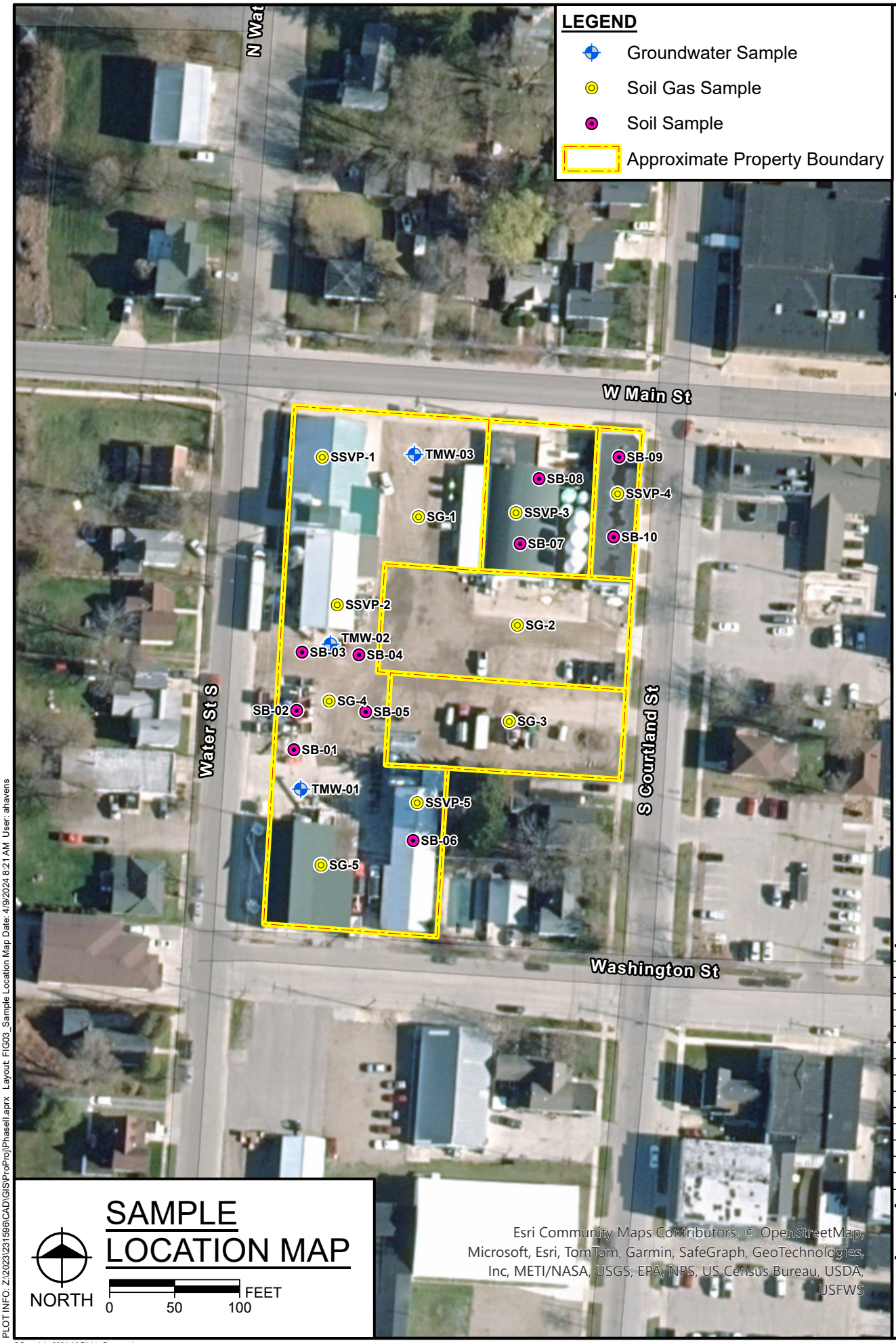

SAMPLE LOCATION MAP

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3 & 15 E Main St & 15 Courtland St

Hart, Michigan

Phase II Environmental Site Assessment

PROJECT NO.
231596

FIGURE NO.
3

PLOT INFO: Z:\2023\231596\CAD\GIS\ProProj\PhaseII.aprx Layout: FIG03_Sample Location Map Date: 4/9/2024 8:21 AM User: ahavens

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124TMB - 1,2,4-Trimethylbenzene
135TMB - 1,2,3-Trimethylbenzene
As- Arsenic
Cr, Total - Total Chromium
Cu - Copper
Hg, Total - Mercury, Total
PCE - Tetrachloroethene

Results expressed in µg/Kg dry weight.
Results expressed in µg/L.
Results expressed in µg/L.

LEGEND

- Groundwater Sample
- Soil Gas Sample
- Soil Sample
- Approximate Property Boundary

TMW-03 11/1/23	
Cr, Total	65
Cu	23

MG-1 10/31/23	
PCE	6,080

SB-02 10/30/23	
135TMB	3,050
Xylenes, Total	1,400
2-Methylnaphthalene	21,990
Naphthalene	8,570

SB-05 10/30/23	
124TMB	429,000
135TMB	134,000
Phenanthrene	2,350
Naphthalene	62,000
2-Methylnaphthalene	69,550
Cumene	23,000
n-Butylbenzene	54,000
n-Propylbenzene	62,000
sec-Butylbenzene	17,000
Styrene	5,000
Xylenes, Total	274,000

TMW-01 10/31/23	
As	13
Cu	20

SB-10 10/31/23	
Cu	133,000
Hg, Total	242

SB-6 10/31/23	
Hg, Total	174

W Main St
S Courtland St
Washington St

SAMPLE LOCATION MAP WITH EXCEEDANCES

NORTH

0 50 100 FEET

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3 & 15 E Main St & 15 Courtland St
Hart, Michigan
Phase II Environmental Site Assessment

PROJECT NO. 231596

FIGURE NO. 4

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Tables

Table 1 - Soil Data Summary
15 East Main Street, Hart, Michigan
October 2023

Sample Location:		SB-01	SB-02	SB-03	SB-04	SB-04	SB-05	SB-06	SB-07	SB-08	SB-09	SB-10	*Statewide Default Background Levels [1]*	*Drinking Water Protection Criteria [1]*	*GSIP Criteria [1]*	*Soil Volatilization to Indoor Air Inhalation Criteria [1]*	*Infinite Source VSIC [1]*	*Finite VSIC for 5 Meter Source Thickness [1]*	*Finite VSIC for 2 Meter Source Thickness [1]*	*Particulate Soil Inhalation Criteria [1]*	*Direct Contact Criteria [1]*	*Soil Saturation Concentration SL [1]*	*Soil VIAP SL [2]*
Depth Interval (ft):		(24-25)	(24-25)	(11-12)	(9-10)	(9-10)	(24-25)	(3-4)	(4-5)	(4-5)	(4-5)	(4-5)											
Investigative/Field Duplicate/QC:		Investigative	Investigative	Investigative	Investigative	Duplicate	Investigative	Investigative	Investigative	Investigative	Investigative	Investigative											
Laboratory ID:		S55327.04	S55327.06	S55327.07	S55327.08	S55327.05	S55327.01	S55327.09	S55327.10	S55327.11	S55327.12	S55327.13											
Collection Date:		10/30/23	10/30/23	10/30/23	10/30/23	10/30/23	10/30/23	10/31/23	10/31/23	10/31/23	10/31/23	10/31/23											
Volatile Organic Compounds	***CAS Number***																						
1,1,1,2-Tetrachloroethane	630-20-6	100 U	100 U	100 U	100 U	100 U	2,000 U	100 U	100 U	100 U	100 U	100 U	*NA*	*1,500*	*ID*	*6,200*	*36,000*	*54,000*	*1.00E+05*	*4.20E+08*	*4.80E+05 (C)*	*4.40E+05*	*3.2 (M*)*
1,1,1-Trichloroethane	71-55-6	50 U	60 U	50 U	50 U	60 U	1,000 U	50 U	50 U	50 U	60 U	60 U	*NA*	*4,000*	*1,800*	*2.50E+05*	*3.80E+06*	*1.20E+07*	*2.80E+07*	*6.70E+10*	*5.00E+08 (C)*	*4.60E+05*	*450 (EE)*
1,1,2,2-Tetrachloroethane	79-34-5	50 U	60 U	50 U	50 U	60 U	1,000 U	50 U	50 U	50 U	60 U	60 U	*NA*	*170*	*1,600 (X)*	*4,300*	*10,000*	*10,000*	*14,000*	*5.40E+07*	*53,000*	*8.70E+05*	*2.7 (M*)*
1,1,2-Trichloroethane	79-00-5	50 U	60 U	50 U	50 U	60 U	1,000 U	50 U	50 U	50 U	60 U	60 U	*NA*	*100*	*6,600 (X)*	*4,600*	*17,000*	*21,000*	*44,000*	*1.90E+08*	*1.80E+05*	*9.20E+05*	*0.37 (M*)*
1,1-Dichloroethane	75-34-3	50 U	60 U	50 U	50 U	60 U	1,000 U	50 U	50 U	50 U	60 U	60 U	*NA*	*18,000*	*15,000*	*2.30E+05*	*2.10E+06*	*5.90E+06*	*1.40E+07*	*3.30E+10*	*2.70E+07 (C)*	*8.90E+05*	*2.6 (M*)*
1,1-Dichloroethene	75-35-4	50 U	60 U	50 U	50 U	60 U	1,000 U	50 U	50 U	50 U	60 U	60 U	*NA*	*140*	*2,600*	*62*	*1,100*	*5,300*	*13,000*	*6.20E+07*	*2.00E+05*	*5.70E+05*	*12 (M*)*
1,2,3-Trichlorobenzene	87-61-6	340 U	410 U	330 U	350 U	430 U	7,500 UJ	360 U	330 U	350 U	380 U	370 U	--	--	--	--	--	--	--	--	--	--	*830*
1,2,3-Trichloropropane	96-18-4	100 U	100 U	100 U	100 U	100 U	2,000 U	100 U	100 U	100 U	100 U	100 U	*NA*	*840*	*NA*	*4,000*	*9,200*	*9,200*	*11,000*	*2.00E+07*	*1.30E+06 (C)*	*8.30E+05*	*2.6 (M*)*
1,2,3-Trimethylbenzene	526-73-8	50 U	8,470	50 U	50 U	60 U	129,000 J	50 U	50 U	50 U	60 U	60 U	--	--	--	--	--	--	--	--	--	--	*270 (IT)*
1,2,4-Trichlorobenzene	120-82-1	340 U	410 U	330 U	350 U	430 U	7,500 U	360 U	330 U	350 U	380 U	370 U	*NA*	*4,200*	*5,900 (X)*	*9.60E+06 (C)*	*2.80E+07*	*2.80E+07*	*2.80E+07*	*2.50E+10*	*9.90E+05 (DD)*	*1.10E+06*	*53 (M*)*
1,2,4-Trimethylbenzene	95-63-6	50 U	5,720	50 U	50 U	60 U	**429,000**	50 U	50 U	50 U	60 U	60 U	*NA*	*2,100*	*570*	*4.30E+06 (C)*	*2.10E+07*	*5.00E+08*	*5.00E+08*	*8.20E+10*	*3.20E+07 (C)*	*1.10E+05*	*150 (IT)*
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	300 U	300 U	300 U	300 U	300 U	6,000 U	300 U	300 U	300 U	300 U	300 U	*NA*	*10 (M); 4.0*	*ID*	*220*	*260*	*260*	*260*	*5.60E+05*	*4,400 (C)*	*1,200*	*DATA*
1,2-Dibromoethane (EDB)	106-93-4	20 U	20 U	20 U	20 U	30 U	500 U	20 U	20 U	20 U	20 U	20 U	*NA*	*20 (M); 1.0*	*110 (X)*	*670*	*1,700*	*1,700*	*3,300*	*1.40E+07*	*92*	*8.90E+05*	*0.074 (M*)*
1,2-Dichlorobenzene	95-50-1	100 U	100 U	100 U	100 U	100 U	2,000 U	100 U	100 U	100 U	100 U	100 U	*NA*	*14,000*	*280*	*1.10E+07 (C)*	*3.90E+07*	*3.90E+07*	*5.20E+07*	*1.00E+11*	*1.90E+07 (C)*	*2.10E+05*	*1,500*
1,2-Dichloroethane	107-06-2	50 U	60 U	50 U	50 U	60 U	1,000 U	50 U	50 U	50 U	60 U	60 U	*NA*	*100*	*7,200 (X)*	*2,100*	*6,200*	*11,000*	*26,000*	*1.20E+08*	*91,000*	*1.20E+06*	*0.82 (M*)*
1,2-Dichloropropane	78-87-5	50 U	60 U	50 U	50 U	60 U	1,000 U	50 U	50 U	50 U	60 U	60 U	*NA*	*100*	*4,600 (X)*	*4,000*	*25,000*	*50,000*	*1.10E+05*	*2.70E+08*	*1.40E+05*	*5.50E+05*	*2.1 (M*)*
1,3,5-Trimethylbenzene	108-67-8	50 U	**3,050**	50 U	50 U	60 U	**134,000**	50 U	50 U	50 U	60 U	60 U	*NA*	*1,800*	*1,100*	*2.60E+06 (C)*	*1.60E+07*	*3.80E+08*	*3.80E+08*	*8.20E+10*	*3.20E+07 (C)*	*94,000*	*100 (IT)*
1,3-Dichlorobenzene	541-73-1	100 U	100 U	100 U	100 U	100 U	2,000 U	100 U	100 U	100 U	100 U	100 U	*NA*	*170*	*680*	*26,000*	*79,000*	*79,000*	*1.10E+05*	*2.00E+08*	*2.00E+05 (C)*	*1.70E+05*	*10 (M*)*
1,3-Dichloropropene, cis-	10061-01-5	50 U	60 U	50 U	50 U	60 U	1,000 U	50 U	50 U	50 U	60 U	60 U	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropene, trans-	10061-02-6	50 U	60 U	50 U	50 U	60 U	1,000 U	50 U	50 U	50 U	60 U	60 U	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropene (Total)	542-75-6	100 U	120 U	100 U	100 U	120 U	2,000 U	100 U	100 U	100 U	120 U	120 U	*NA*	*170*	*180 (X)*	*1,000*	*18,000*	*68,000*	*1.60E+05*	*7.80E+08*	*10,000*	*6.20E+05*	*3.1 (J,M*)*
1,4-Dichlorobenzene	106-46-7	100 U	100 U	100 U	100 U	100 U	2,000 U	100 U	100 U	100 U	100 U	100 U	*NA*	*1,700*	*360*	*19,000*	*77,000*	*77,000*	*1.10E+05*	*4.50E+08*	*4.00E+05*	*NA*	*23 (M*)*
2-Butanone (MEK)	78-93-3	780 U	940 U	750 U	780 U	970 U	17,000 U	820 U	760 U	790 U	870 U	840 U	*NA*	*2.60E+05*	*44,000*	*5.40E+07 (C)*	*2.90E+07*	*2.90E+07*	*3.50E+07*	*6.70E+10*	*1.20E+08 (C,DD)*	*2.70E+07*	*31,000 (DD*)*
2-Hexanone	591-78-6	3,000 U	3,000 U	3,000 U	3,000 U	3,000 U	60,000 U	3,000 U	3,000 U	3,000 U	3,000 U	3,000 U	*NA*	*20,000*	*ID*	*9.90E+05*	*1.10E+06*	*1.10E+06*	*1.40E+06*	*2.70E+09*	*3.20E+07 (C)*	*2.50E+06*	*210 (M*)*
2-Methylnaphthalene [3]	91-57-6	100 U	**10,900**	200	100 U	100 U	**87,000**	100 J	100 U	100 U	100 U	100 U	*NA*	*57,000*	*4,200*	*2.70E+06*	*1.50E+06*	*1.50E+06*	*1.50E+06*	*6.70E+08*	*8.10E+06*	*NA*	*1,700*
4-Isopropyltoluene	99-87-6	100 U	700	100 U	100 U	100 U	9,000	100 U	100 U	100 U	100 U	100 U	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone (MIBK)	108-10-1	3,000 U	3,000 U	3,000 U	3,000 U	3,000 U	60,000 U	3,000 U	3,000 U	3,000 U	3,000 U	3,000 U	*NA*	*36,000*	*ID*	*3.70E+07 (C)*	*4.50E+07*	*4.50E+07*	*6.70E+07*	*1.40E+11*	*5.60E+07 (C)*	*2.70E+06*	*3,300*
Acetone	67-64-1	1,000 U	1,000 U	1,000 U	1,000 U	1,000 U	20,000 U	1,000 U	1,000 U	1,000 U	1,000 U	1,000 U	*NA*	*15,000*	*34,000*	*2.90E+08 (C)*	*1.30E+08*	*1.30E+08*	*1.90E+08*	*3.90E+11*	*2.30E+07*	*1.10E+08*	*2.60E+05 (EE)*
Acrylonitrile	107-13-1	100 U	100 U	100 U	100 U	100 U	2,000 U	100 U	100 U	100 U	100 U	100 U	*NA*	*100 (M); 52*	*100 (M); 40*	*6,600*	*5,000*	*5,100*	*10,000*	*4.60E+07*	*16,000*	*8.30E+06*	*1.2 (M*)*
Benzene	71-43-2	50 U	60 U	50 U	50 U	60 U	1,000 U	50 U	50 U	50 U	60 U	60 U	*NA*	*100*	*4,000 (X)*	*1,600*	*13,000*	*34,000*	*79,000*	*3.80E+08*	*1.80E+05*	*4.00E+05*	*1.7 (M*)*
Bromobenzene	108-86-1	100 U	100 U	100 U	100 U	100 U	2,000 U	100 U	100 U	100 U	100 U	100 U	*NA*	*550*	*NA*	*3.10E+05*	*4.50E+05*	*4.50E+05*	*4.50E+05*	*5.30E+08*	*5.40E+05*	*7.60E+05*	*160*
Bromochloromethane	74-97-5	100 U	100 U	100 U	100 U	100 U	2,000 U	100 U	100 U	100 U	100 U	100 U	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	75-27-4	100 U	100 U	100 U	100 U	100 U	2,000 U	100 U	100 U	100 U	100 U	100 U	*NA*	*1,600 (W)*	*ID*	*1,200*	*9,100*	*9,700*	*19,000*	*8.40E+07*	*1.10E+05*	*1.50E+06*	*0.61 (M*)*
Bromoform	75-25-2	100 U	100 U	100 U	100 U	100 U	2,000 U	100 U	100 U	100 U	100 U	100 U	*NA*	*1,600 (W)*	*ID*	*1.50E+05*	*9.00E+05*	*9.00E+05*	*9.00E+05*	*2.80E+09*	*8.20E+05*	*8.70E+05*	*45 (M*)*
Bromomethane	74-83-9	200 U	200 U	200 U	200 U	300 U	5,000 U	200 U	200 U	200 U	200 U	200 U	*NA*	*200*	*100*	*860*	*11,000*	*57,000*	*1.40E+05*	*3.30E+08*	*3.20E+05*	*2.20E+06*	*0.90 (M*)*
Carbon disulfide	75-15-0	300 U	300 U	300 U	300 U	300 U	6,000 U	300 U	300 U	300 U	300 U	300 U	*NA*	*16,000*	*ID*	*76,000*	*1.30E+06*	*7.90E+06*	*1.90E+07*	*4.70E+10*	*7.20E+06 (C,DD)*	*2.80E+05*	*52 (M*)*
Carbon tetrachloride	56-23-5	50 U	60 U	50 U	50 U	60 U	1,000 U	50 U	50 U	50 U	60 U	60 U	*NA*	*100*	*760 (X)*	*190*	*3,500*	*12,000*	*28,000*	*1.30E+08*	*96,000*	*3.90E+05*	*0.31 (M*)*
Chlorobenzene	108-90-7	50 U	60 U	50 U	50 U	60 U	1,000 U	50 U	50 U	50 U	60 U	60 U	*NA*	*2,000*	*500*	*1.20E+05*	*7.70E+05*	*9.90E+05*	*2.10E+06*	*4.70E+09*	*4.30E+06 (C)*	*2.60E+05*	*82*
Chloroethane	75-00-3	300 U	300 U	300 U	300 U	300 U	6,000 U	300 U	300 U	300 U	300 U	300 U	*NA*	*8,600*	*22,000 (X)*	*2.90E+06 (C)*	*3.00E+07*	*1.20E+08*	*2.80E+08*	*6.70E+11*	*2.60E+06 (C)*	*9.50E+05*	*330*
Chloroform	67-66-3	50 U	60 U	50 U	50 U	60 U	1,000 U	50 U	50 U	50 U	60 U	60 U	*NA*	*1,600 (W)*	*7,000*	*7,200*	*45,000*	*1.20E+05*	*2.70E+05*	*1.30E+09*	*1.20E+06*	*1.50E+06*	*0.26 (M*)*
Chloromethane	74-87-3	300 U	300 U	300 U	300 U	300 U	6,000 U	300 U	300 U	300 U	300 U	300 U	*NA*	*5,200*	*ID*	*2,300*	*40,000*	*4.10E+05*	*1.00E+06*	*4.90E+09*	*1.60E+06 (C)*	*1.10E+06*	*6.9 (M*)*
cis-1,2-Dichloroethene	156-59-2	50 U	60 U	50 U	50 U	60 U	1,000 U	50 U	50 U	50 U	60 U	60 U	*NA*	*1,400*	*12,000*	*22,000*	*1.80E+05*	*4.20E+05*	*9.90E+05*	*2.30E+09*	*2.50E+06 (C)*	*6.40E+05*	*2.1 (M*)*
Dibromochloromethane	124-48-1	100 U	100 U	100 U	100 U	100 U	2,000 U	100 U	100 U	100 U	100 U	100 U	*NA*	*1,600 (W)*	*ID*	*3,900*	*24,000*	*24,000*	*33,000*	*1.30E+08*	*1.10E+05*	*6.10E+05*	*0.40 (M*,MM)*
Dibromomethane	74-95-3	300 U	300 U	300 U	300 U	300 U	6,000 U	300 U	300 U	300 U	300 U	300 U	*NA*	*1,600*	*NA*	*ID*	*ID*	*ID*	*ID*	*ID*	*2.50E+06 (C)*	*2.00E+06*	*3.5 (M*)*
Dichlorodifluoromethane	75-71-8	300 U	300 U	300 U	300 U	300 U	6,000 U	300 U	300 U	300 U	300 U	300 U	*NA*	*95,000*	*ID*	*9.00E+05*	*5.30E+07*	*5.50E+08*	*1.40E+09*	*3.30E+12*	*5.20E+07 (C)*	*1.00E+06*	*12 (M*)*
Diethyl ether	60-29-7	200 U	200 U	200 U	200 U	300 U	5,000 U	200 U	200 U	200 U	200 U	200 U	*NA*	*200*	*ID*	*2.80E+07 (C)*	*8.50E+07*	*1.50E+08*	*3.40E+08*	*8.00E+11*	*1.10E+08 (C)*	*7.40E+06*	*350*
Ethylbenzene	100-41-4	50 U	60 U	50 U	50 U	60 U	1,000 U	50 U	50 U	50 U	60 U	60 U	*NA*	*1,500*	*360*	*87,000*	*7.20E+05*	*1.00E+06*	*2.20E+06*	*1.00E+10*	*2.20E+07 (C)*	*1.40E+05*	*12 (M*)*
Hexachloroethane	67-72-1	300 U	400 U	300 U	300 U	400 U	7,000 U	300 U	300 U	300 U	300 U	300 U	*NA*	*430*	*1,800 (X)*	*40,000*	*5.50E+05*	*9.30E+05*	*9.30E+05*	*2.30E+08*	*2.30E+05*	*NA*	*3.2 (M*)*
Iodomethane	74-88-4	100 U	100 U	100 U	100 U	100 U	2,000 U	100 U	100 U	100 U	100 U	100 U	--	--	--	--	--	--	--	--	--	--	--
Isopropyl benzene (Cumene)	98-82-8	300 U	300 U	300 U	300 U	300 U	**23,000**	300 U	300 U	300 U	300 U	300 U	*NA*	*91,000*	*3,200*	*4.00E+05 (C)*	*1.70E+06*	*1.70E+06*	*2.80E+06*	*5.80E+09*	*2.50E+07 (C)*	*3.90E+05*	*3.8 (M*)*
Methyl-tert-butyl ether (MTBE)	1634-04-4	200 U	200 U	200 U	200 U	300 U	5,000 U	200 U	200 U	200 U	200 U	200 U	*NA*	*800*	*1.40E+05 (X)*	*9.90E+06 (C)*	*2.50E+07*	*3.90E+07*	*8.70E+07*	*2.00E+11*	*1.50E+06*	*5.90E+06*	*74 (M*)*
Methylene chloride	75-09-2	100 U	100 U	100 U	100 U	100 U	2,000 U	100 U	100 U	100 U	100 U	100 U	*NA*	*100*	*30,000 (X)*	*45,000*	*2.10E+05*	*5.90E+05*	*1.40E+06*	*6.60E+09*	*1.30E+06*	*2.30E+06*	*130*
n-Butylbenzene	104-51-8	50 U	2,400 U	50 U	50 U	60 U	**54,000**	50 U	50 U	50 U	60 U	60 U	*NA*	*1,600*	*ID*	*ID*	*ID*	*ID*	*ID*	*2.00E+09*	*2.50E+06*	*1.00E+07*	*550*
n-Propylbenzene	103-65-1	50 U	90	50 U	50 U	60 U	**62,000**	50 U	50 U	50 U	60 U	60 U	*NA*	*1,600*	*ID*	*ID*	*ID*	*ID*	*ID*	*1.30E+09*	*2.50E+06*	*1.00E+07*	*1,800 (DD*)*
Naphthalene [3]	91-20-3	300 U	**7,600**	300 U	300 U	300 U	**62,000**	300 U	300 U	300 U	300 U	300 U	*NA*	*35,000*	*730*	*2.50E+05*	*3.00E+05*	*3.00E+05*	*3.00E+05*	*2.00E+08*	*1.60E+07*	*NA*	*67 (M*)*
sec-Butylbenzene	135-98-8	50 U	370	50 U	50 U	60 U	**17,000**	50 U	50 U	50 U	60 U	60 U	*NA*	*1,600*	*ID*	*ID*	*ID*	*ID*	*ID*	*4.00E+08*	*2.50E+06*	*1.00E+07*	*3,800*
Styrene	100-42-5	50 U	60 U	50 U	50 U	60 U	**5,000**	50 U	50 U	50 U	60 U	60 U	*NA*	*2,700*	*2,100 (X)*	*2.50E+05*	*9.70E+05*	*9.70E+05*	*1.40E+06*	*5.50E+09*	*4.00E+05*	*5.20E+05*	*150*
t-Butylbenzene	98-06-6	50 U	60 U	50 U	50 U	60 U	1,000 UJ	50 U	50 U	50 U	60 U	60 U	*NA*	*1,600*	*ID*	*ID*	*ID*	*ID*	*ID*	*6.70E+08*	*2.50E+06*	*1.00E+07*	*0.64 (M*)*
Tetrachloroethene (PCE)	127-18-4	50 U	60 U	50 U	50 U	60 U	1,000 U	50 U	50 U	50 U	60 U	60 U	*NA*	*100*	*1,200 (X)*	*11,000*	*1.70E+05*	*4.80E+05*	*1.10E+06*	*2.70E+09*	*2.00E+05 (C)*	*88,000*	*6.2 (M*,EE)*
Tetrahydrofuran	109-99-9	1,000 U	1,000 U	1,000 U	1,000 U	1,000 U	20,000 U	1,000 U	1,000 U	1,000 U	1,000 U	1,000 U	*NA*	*1,900*	*2.20E+05 (X)*	*1.30E+06*	*1.30E+07*	*6.70E+07*	*1.60E+08*	*3.90E+11*	*2.90E+06*	*1.20E+08*	*13,000*
Toluene	108-88-3	50 U	60 U	160	50 U	60 U	1,000 U	50 U	50 U	50 U	60 U	60 U	*NA*	*16,000*	*5,400*	*3.30E+05 (C)*	*2.80E+06*	*5.10E+06*	*1.20E+07*	*2.70E+10*	*5.00E+07 (C)*	*2.50E+05*	*3,700*
trans-1,2-Dichloroethene	156-60-5	50 U	60 U	50 U	50 U	60 U	1,000 U	50 U	50 U	50 U	60 U	60 U	*NA*	*2,000*	*30,000 (X)*	*23,000*	*2.80E+05*	*8.30E+05*	*2.00E+06*	*4.70E+09*	*3.80E+06 (C)*	*1.40E+06*	*12 (M*)*
trans-1,4-Dichloro-2-butene	110-57-6	50 U	60 U	50 U	50 U	60 U	1,000 U	50 U	50 U	50 U	60 U	60 U	--	--	--	--	--	--	--	--	--	--	--
Trichloroethene (TCE)	79-01-6	50 U	60 U	50 U	50 U	60 U	1,000 U	50 U	50 U	50 U	60 U	60 U	*NA*	*100*	*4,000 (X)*	*1,000*	*11,000*	*25,000*	*57,000*	*1.30E+08*	*1.10E+05 (DD)*	*5.00E+05*	*0.33 (M*,DD*)*
Trichlorofluoromethane	75-69-4	100 U	100 U	100 U	100 U	100 U	2,000 U	100 U	100 U	100 U	100 U	100 U	*NA*	*52,000*	*NA*	*2.80E+06 (C)*	*9.20E+07*	*6.30E+08*	*1.50E+09*	*3.80E+12*	*7.90E+07 (C)*	*5.60E+05*	*19 (M*)*
Vinyl chloride	75-01-4	50 U	60 U	50 U	50 U	60 U	1,000 U	50 U	50 U	50 U	60 U	60 U	*NA*	*40*	*260 (X)*	*270*	*4,200*	*30,000*	*73,000*	*3.50E+08*	*3,800*	*4.90E+05*	*0.082 (M*,MM)*
Xylenes, meta- & para-	179601-23-1	100 U	100 U	100	100 U	100 U	102,000	100 U	100 U	100 U	100 U	100 U	--	--	--	--	--	--	--	--	--	--	--
Xylene, ortho-	95-47-6	50 U	1,400	80	50 U	60 U	172,000 J	50 U	50 U	50 U	60 U	60 U	--	--	--	--	--	--	--	--	--	--	--
Xylenes, Total	1330-20-7	150 U	**1,400**	180	150 U	160 U	**274,000**	150 U	150 U	150 U	160 U	160 U	*NA*	*5,600*	*980*	*6.30E+06 (C)*	*4.60E+07*	*6.10E+07*	*1.30E+08*	*2.90E+11*	*4.10E+08 (C)*	*1.50E+05*	*280 (J)*

Table 1 - Soil Data Summary
15 East Main Street, Hart, Michigan
October 2023

Sample Location: *Depth Interval (ft):* *Investigative/Field Duplicate/QC:* *Laboratory ID:* *Collection Date:*		SB-01 (24-25) Investigative S55327.04 10/30/23	SB-02 (24-25) Investigative S55327.06 10/30/23	SB-03 (11-12) Investigative S55327.07 10/30/23	SB-04 (9-10) Investigative S55327.08 10/30/23	SB-04 (9-10) Duplicate S55327.05 10/30/23	SB-05 (24-25) Investigative S55327.01 10/30/23	SB-06 (3-4) Investigative S55327.09 10/31/23	SB-07 (4-5) Investigative S55327.10 10/31/23	SB-08 (4-5) Investigative S55327.11 10/31/23	SB-09 (4-5) Investigative S55327.12 10/31/23	SB-10 (4-5) Investigative S55327.13 10/31/23	*Statewide Default Background Levels [1]*	*Drinking Water Protection Criteria [1]*	*GSIP Criteria [1]*	*Soil Volatilization to Indoor Air Inhalation Criteria [1]*	*Infinite Source VSIC [1]*	*Finite VSIC for 5 Meter Source Thickness [1]*	*Finite VSIC for 2 Meter Source Thickness [1]*	*Particulate Soil Inhalation Criteria [1]*	*Direct Contact Criteria [1]*	*Soil Saturation Concentration SL [1]*	*Soil VIAP SL [2]*
Polynuclear Aromatic Compounds	***CAS Number***																						
1-Methylnaphthalene	90-12-0	330 U	13,690	330 U	330 U	330 U	41,560	430	330 U	330 U	330 U	330 U	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene[3]	91-57-6	330 U	**21,990**	330 U	330 U	330 U	**69,550**	540	330 U	330 U	330 U	330 U	*NA*	*57,000*	*4,200*	*2.70E+06*	*1.50E+06*	*1.50E+06*	*1.50E+06*	*6.70E+08*	*8.10E+06*	*NA*	*1,700*
Acenaphthene	83-32-9	330 U	550	330 U	330 U	330 U	760	330 U	330 U	330 U	330 U	330 U	*NA*	*3.00E+05*	*8,700*	*1.90E+08*	*8.10E+07*	*8.10E+07*	*8.10E+07*	*1.40E+10*	*4.10E+07*	*NA*	*2.00E+05*
Acenaphthylene	208-96-8	330 U	330 U	330 U	330 U	330 U	540 U	330 U	330 U	330 U	330 U	330 U	*NA*	*5,900*	*ID*	*1.60E+06*	*2.20E+06*	*2.20E+06*	*2.20E+06*	*2.30E+09*	*1.60E+06*	*NA*	*DATA*
Anthracene	120-12-7	330 U	330 U	330 U	330 U	330 U	540 U	330 U	330 U	330 U	330 U	330 U	*NA*	*41,000*	*ID*	*1.00E+09*	*1.40E+09*	*1.40E+09*	*1.40E+09*	*6.70E+10*	*2.30E+08*	*NA*	*1.30E+07*
Benzo(a)anthracene	56-55-3	330 U	330 U	330 U	330 U	330 U	540 U	330 U	330 U	330 U	330 U	960	*NA*	*NLL*	*NLL*	*NLV*	*NLV*	*NLV*	*NLV*	*ID*	*20,000*	*NA*	*1.60E+05 (MM)*
Benzo(a)pyrene	50-32-8	330 U	330 U	330 U	330 U	330 U	540 U	330 U	330 U	330 U	330 U	1,080	*NA*	*NLL*	*NLL*	*NLV*	*NLV*	*NLV*	*NLV*	*1.50E+06*	*2,000*	*NA*	*NA*
Benzo(b)fluoranthene	205-99-2	330 U	330 U	330 U	330 U	330 U	540 U	330 U	330 U	330 U	330 U	2,160	*NA*	*NLL*	*NLL*	*ID*	*ID*	*ID*	*ID*	*ID*	*20,000*	*NA*	*NA*
Benzo(g,h,i)perylene	191-24-2	330 U	330 U	330 U	330 U	330 U	540 U	330 U	330 U	330 U	330 U	650	*NA*	*NLL*	*NLL*	*NLV*	*NLV*	*NLV*	*NLV*	*8.00E+08*	*2.50E+06*	*NA*	*NA*
Benzo(k)fluoranthene	207-08-9	330 U	330 U	330 U	330 U	330 U	540 U	330 U	330 U	330 U	330 U	2,460	*NA*	*NLL*	*NLL*	*NLV*	*NLV*	*NLV*	*NLV*	*ID*	*2.00E+05*	*NA*	*NA*
Chrysene	218-01-9	330 U	330 U	330 U	330 U	330 U	540 U	330 U	330 U	330 U	330 U	1,240	*NA*	*NLL*	*NLL*	*ID*	*ID*	*ID*	*ID*	*ID*	*2.00E+06*	*NA*	*NA*
Dibenzo(a,h)anthracene	53-70-3	330 U	330 U	330 U	330 U	330 U	540 U	330 U	330 U	330 U	330 U	330 U	*NA*	*NLL*	*NLL*	*NLV*	*NLV*	*NLV*	*NLV*	*ID*	*2,000*	*NA*	*NA*
Fluoranthene	206-44-0	330 U	330 U	330 U	330 U	330 U	540 U	330 U	330 U	330 U	330 U	2,320	*NA*	*7.30E+05*	*5,500*	*1.00E+09*	*7.40E+08*	*7.40E+08*	*7.40E+08*	*9.30E+09*	*4.60E+07*	*NA*	*NA*
Fluorene	86-73-7	330 U	1,100	330 U	330 U	330 U	2,090	330 U	330 U	330 U	330 U	330 U	*NA*	*3.90E+05*	*5,300*	*5.80E+08*	*1.30E+08*	*1.30E+08*	*1.30E+08*	*9.30E+09*	*2.70E+07*	*NA*	*4.70E+05*
Indeno(1,2,3-cd)pyrene	193-39-5	330 U	330 U	330 U	330 U	330 U	540 U	330 U	330 U	330 U	330 U	550	*NA*	*NLL*	*NLL*	*NLV*	*NLV*	*NLV*	*NLV*	*ID*	*20,000*	*NA*	*NA*
Naphthalene[3]	91-20-3	330 U	**8,570**	330 U	330 U	330 U	**43,960**	330 U	330 U	330 U	330 U	330 U	*NA*	*35,000*	*730*	*2.50E+05*	*3.00E+05*	*3.00E+05*	*3.00E+05*	*2.00E+08*	*1.60E+07*	*NA*	*67 (M*)*
Phenanthrene	85-01-8	330 U	1,910	330 U	330 U	330 U	**2,350**	330 U	330 U	330 U	330 U	820	*NA*	*56,000*	*2,100*	*2.80E+06*	*1.60E+05*	*1.60E+05*	*1.60E+05*	*6.70E+06*	*1.60E+06*	*NA*	*1,700*
Pyrene	129-00-0	330 U	330 U	330 U	330 U	330 U	540 U	330 U	330 U	330 U	330 U	2,250	*NA*	*4.80E+05*	*ID*	*1.00E+09 (D)*	*6.50E+08*	*6.50E+08*	*6.50E+08*	*6.70E+09*	*2.90E+07*	*NA*	*2.50E+07*
Metals, Total	***CAS Number***																						
Arsenic	7440-38-2	3,200	400	*4,660*	370	430	280	690	880	410	1,770	*5,750*	*5,800*	*4,600*	*4,600*	*NLV*	*NLV*	*NLV*	*NLV*	*7.20E+05*	*7,600*	*NA*	*NA*
Barium (B)	7440-39-3	20,900	2,200	16,200	3,360	7,860	1,700	81,800	9,380	5,060	37,600	181,000	*75,000*	*1.30E+06*	*4.42E+05 (G)*	*NLV*	*NLV*	*NLV*	*NLV*	*3.30E+08*	*3.70E+07*	*NA*	*NA*
Cadmium (B)	7440-43-9	540	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	510	*1,200*	*6,000*	*3,600 (G,X)*	*NLV*	*NLV*	*NLV*	*NLV*	*1.70E+06*	*5.50E+05*	*NA*	*NA*
Chromium, Total (B, H)	7440-47-3	*3,820*	1,240	*3,940*	1,070	1,220	790	2,060	*7,170*	2,010	3,110	*6,500*	*18,000 (total)*	*30,000*	*3,300*	*NLV*	*NLV*	*NLV*	*NLV*	*2.60E+05*	*2.50E+06*	*NA*	*NA*
Copper (B)	7440-50-8	3,250	760	6,470	590	930	730	3,500	21,300	890	2,930	**133,000**	*32,000*	*5.80E+06*	*74,880 (G) (G)*	*NLV*	*NLV*	*NLV*	*NLV*	*1.30E+08*	*2.00E+07*	*NA*	*NA*
Lead (B)	7439-92-1	7,440	1,480	20,600	640	400	19,200	6,470	6,380	1,270	9,890	144,000	*21,000*	*7.00E+05*	*5.98E+06 (G,X)*	*NLV*	*NLV*	*NLV*	*NLV*	*1.00E+08*	*4.00E+05*	*NA*	*NA*
Mercury (Total) (B)	7439-97-6	50 U	50 U	50 U	50 U	50 U	50 U	**174**	50 U	50 U	*116*	**242**	*130*	*1,700*	*50 (M); 1.2*	*48,000*	*52,000*	*52,000*	*52,000*	*2.00E+07*	*1.60E+05*	*NA*	*22 (M*)*
Selenium (B)	7782-49-2	400 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	*410*	*4,000*	*400*	*NLV*	*NLV*	*NLV*	*NLV*	*1.30E+08*	*2.60E+06*	*NA*	*NA*
Silver (B)	7440-22-4	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	*1,000*	*4,500*	*100 (M); 27*	*NLV*	*NLV*	*NLV*	*NLV*	*6.70E+06*	*2.50E+06*	*NA*	*NA*
Zinc (B)	7440-66-6	44,300	2,110	31,300	8,050	6,780	1,500	24,300	10,100	2,780	14,100	155,000	*47,000*	*2.40E+06*	*1.66E+05 (G)*	*NLV*	*NLV*	*NLV*	*NLV*	*ID*	*1.70E+08*	*NA*	*NA*
Solids, Total (%)	--	*97*	*88*	*97*	*97*	*86*	*91*	*92*	*97*	*98*	*98*	*94*	--	--	--	--	--	--	--	--	--	--	--

Results expressed in µg/Kg dry weight.
Bolded values exceed Statewide Default Background Level and an applicable criterion or screening level.
Italicized values are below Statewide Default Background Level but exceed an applicable criterion or screening level.
Underlined parameters are classified as Polynuclear Aromatic Compounds.

Data Qualifiers:
J Estimated value
U Not detected

Footnotes/Abbreviations:
[1] *Part 201 Residential Soil Generic Cleanup Criteria and Screening Levels/Part 213 Risk-based Screening Levels, October 12, 2023.*
[2] *EGLE Volatilization to Indoor Air Pathway Screening Levels, September 4, 2020.*
[3] Method 8260 is used for quantitation of volatile organics with boiling points below 200 °C. With boiling points >200 °C, 2-methylnaphthalene and naphthalene are better suited to analysis by Method 8270.
(B) Background, as defined in R 299.5701(b), may be substituted if higher than the calculated criterion.
(C) Value is screening level based on the chemical-specific generic soil saturation concentration (Csat).
(D) Calculated criterion exceeds 100 percent; hence it is reduced to 100 percent or 1.00E+09 parts per billion (ppb).
(G) Criterion dependent on receiving surface water (SW) hardness; calculated criteria based on water hardness of 150 mg/L.
(H) Data provided for total chromium only; evaluated against hexavalent chromium criteria.
(J) Hazardous substance may be present in several isomer forms. Isomer-specific concentrations must be added together for comparison to criteria.
(JT) Hazardous substance may be present in several isomer forms. The VIAP SL 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 VIAP SL of the detected isomers.
(M) Calculated criterion is below the target detection limit (TDL); first number is the criterion (TDL), the second is the risk-based value.
(M*) The VIAP SL may be below TDL. In accordance with Sec. 20120a(10) when the TDL for a hazardous substance is greater than the developed VIAP SL, the TDL is used to evaluate the risk posed from the pathway.
(W) Concentrations of trihalomethanes must be added together to determine compliance with criterion.
(X) Criterion is not protective for SW used as a drinking water (DW) source.
(DD) Hazardous substance causes developmental effects. Residential direct contact criteria are protective of both prenatal and postnatal exposure.
(DD*) Hazardous substance causes developmental effects. Residential VIAP SLs are protective of both prenatal exposure using a pregnant female receptor and postnatal exposure using a child receptor. Prenatal developmental effects may occur after an acute (i.e. short- term) or full-term exposure.
(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 USEPA Integrated Risk Information System (IRIS) acute reference concentration, or an acute initial threshold screening level (ITSL) by the EGLE's Air Quality Division.
(MM) Hazardous substance is a carcinogen with a mutagenic mode of action. The cancer potency values used in calculating VIAP SLs are modified using age-dependent adjustment factors for those carcinogenic chemicals identified as mutagenic.
DATA Insufficient physical chemical parameters to calculate a VIAP SL for specified media. If detections are present in specified media, health-based soil vapor value should be used to evaluate risk.
GSIP groundwater surface water interface protection
ID Insufficient data to develop criterion.
NA not available
NLL Not likely to leach under most soil conditions.
NLV Not likely to volatilize under most conditions.
SL screening level
VIAP volatilization to indoor air pathway
VSIC volatile soil inhalation criteria

Table 2 - Groundwater Data Summary
15 East Main Street, Hart, Michigan
October 2023

Monitoring Location:		TMW-01	TMW-01 Duplicate	TMW-02	TMW-03	Equip. Blank	Field Blank	Trip Blank-01	Trip Blank-02	*Residential DWC [1]*	*GSI Criteria [1]*	*Residential Groundwater VIAIC [1]*	*Water Solubility [1]*	*Flammability and Explosivity SL [1]*	*Residential GW-Shallow VIAP SL [2]*	*Residential GW-Not in Contact VIAP SL [2]*
Field Duplicate:			S55336.05													
Laboratory ID:		S55336.01		S55336.04	S55336.06	S55336.09	S55336.08	S55336.07	S55336.10							
Collection Date:		10/31/23	11/01/23	11/01/23	11/01/23	11/01/23	11/01/23	10/31/23	10/31/23							
Volatile Organic Compounds (VOC)	***CAS Number***															
1,1,1,2-Tetrachloroethane	630-20-6	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	*77*	*ID*	*15,000*	*1.10E+06*	*ID*	*3.1*	*89*
1,1,1-Trichloroethane	71-55-6	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	*200 (A)*	*89*	*6.60E+05*	*1.33E+06*	*ID*	*180 (FF*)*	*17,000 (EE*)*
1,1,2,2-Tetrachloroethane	79-34-5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	*8.5*	*78 (X)*	*12,000*	*2.97E+06*	*ID*	*2.4*	*71*
1,1,2-Trichloroethane	79-00-5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	*5.0 (A)*	*330 (X)*	*17,000*	*4.42E+06*	*NA*	*0.47 (M*)*	*14*
1,1-Dichloroethane	75-34-3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	*880*	*740*	*1.00E+06*	*5.06E+06*	*3.80E+05*	*4.7*	*130*
1,1-Dichloroethene	75-35-4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	*7.0 (A)*	*130*	*200*	*2.25E+06*	*97,000*	*18*	*330*
1,2,3-Trichlorobenzene	87-61-6	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	--	--	--	--	--	*58*	*1,700*
1,2,3-Trichloropropane	96-18-4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	*42*	*NA*	*8,300*	*1.90E+06*	*NA*	*1.9*	*57*
1,2,3-Trimethylbenzene	526-73-8	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	--	--	--	--	*43 (JT)*	*1,200 (JT)*
1,2,4-Trichlorobenzene	120-82-1	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	*70 (A)*	*99 (X)*	*3.00E+05 (S)*	*3.00E+05*	*NA*	*3.8 (M*)*	*110*
1,2,4-Trimethylbenzene	95-63-6	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	*63/1,000 (E)*	*17*	*56,000 (S)*	*55,890*	*56,000 (S)*	*25 (JT)*	*670 (JT)*
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	*0.20 (A)*	*ID*	*220*	*1,230*	*NA*	*0.00045 (M*,MM)*	*0.00045 (CC*,M*,MM)*
1,2-Dibromoethane (EDB)	106-93-4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	*0.050 (A)*	*5.7 (X)*	*2,400*	*4.20E+06*	*ID*	*0.13*	*3.8*
1,2-Dichlorobenzene	95-50-1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	*600 (A)*	*13*	*1.60E+05 (S)*	*1.56E+05*	*NA*	*370*	*11,000*
1,2-Dichloroethane	107-06-2	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	*5.0 (A)*	*360 (X)*	*9,600*	*8.52E+06*	*2.50E+06*	*1.4*	*41*
1,2-Dichloropropane	78-87-5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	*5.0 (A)*	*230 (X)*	*16,000*	*2.80E+06*	*5.50E+05*	*2.6*	*74*
1,3,5-Trimethylbenzene	108-67-8	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	*72/1,000 (E)*	*45*	*61,000 (S)*	*61,150*	*ID*	*18 (JT)*	*470 (JT)*
1,3-Dichlorobenzene	541-73-1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	*6.6*	*28*	*18,000*	*1.11E+05*	*ID*	*2.6*	*75*
1,3-Dichloropropene, cis-	10061-01-5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	--	--	--	--	--	--
1,3-Dichloropropene, trans-	10061-02-6	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	--	--	--	--	--	--
1,3-Dichloropropene (Total) (Calc.)	542-75-6	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	*8.5*	*9.0 (X)*	*3,900*	*2.80E+06*	*1.30E+05*	*3.3 (J)*	*95 (J)*
1,4-Dichlorobenzene	106-46-7	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	*75 (A)*	*17*	*16,000*	*73,800*	*NA*	*5.9*	*170*
2-Butanone (MEK)	78-93-3	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	*13,000*	*2,200*	*2.40E+08 (S)*	*2.40E+08*	*ID*	*2,600 (DD)*	*4.30E+06 (DD)*
2-Hexanone	591-78-6	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	*1,000*	*ID*	*4.20E+06*	*1.60E+07*	*NA*	*660*	*20,000*
2-Methylnaphthalene[3]	91-57-6	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	*260*	*19*	*25,000 (S)*	*24,600*	*ID*	*66*	*2,000*
4-Isopropyltoluene	99-87-6	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	--	--	--	--	--	--	--
4-Methyl-2-pentanone (MIBK)	108-10-1	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	*1,800*	*ID*	*2.00E+07 (S)*	*2.00E+07*	*ID*	*660*	*20,000*
Acetone	67-64-1	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	*730*	*1,700*	*1.00E+09 (D,S)*	*1.00E+09*	*1.50E+07*	*50,000 (FF*)*	*50,000*
Acrylonitrile	107-13-1	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	*2.6*	*2.0 (M); 1.2*	*34,000*	*7.50E+07*	*6.40E+06*	*4.6*	*140*
Benzene	71-43-2	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	*5.0 (A)*	*200 (X)*	*5,600*	*1.75E+06*	*68,000*	*1.0*	*28*
Bromobenzene	108-86-1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	*18*	*NA*	*1.80E+05*	*4.13E+05*	*ID*	*62*	*1,800*
Bromochloromethane	74-97-5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	--	--	--	--	--	--
Bromodichloromethane	75-27-4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	*80 (A,W)*	*ID*	*4,800*	*6.74E+06*	*ID*	*1.2*	*34*
Bromoform	75-25-2	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	*80 (A,W)*	*ID*	*4.70E+05*	*3.10E+06*	*ID*	*89*	*2,700*
Bromomethane	74-83-9	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	*10*	*5.0 (M); 4.2*	*4,000*	*1.45E+07*	*ID*	*2.1 (M*)*	*55*
Carbon disulfide	75-15-0	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	*800*	*ID*	*2.50E+05*	*1.19E+06*	*13,000*	*92*	*2,100*
Carbon tetrachloride	56-23-5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	*5.0 (A)*	*38 (X)*	*370*	*7.93E+05*	*ID*	*0.41 (M*)*	*7.7*
Chlorobenzene	108-90-7	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	*100 (A)*	*25*	*2.10E+05*	*4.72E+05*	*1.60E+05*	*33*	*940*
Chloroethane	75-00-3	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	*430*	*1,100 (X)*	*5.70E+06 (S)*	*5.74E+06*	*1.10E+05*	*620*	*15,000*
Chloroform	67-66-3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	*80 (A,W)*	*350*	*28,000*	*7.92E+06*	*ID*	*0.49 (M*)*	*14*
Chloromethane	74-87-3	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	*260*	*ID*	*8,600*	*6.34E+06*	*36,000*	*15*	*380*
cis-1,2-Dichloroethene	156-59-2	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	*70 (A)*	*620*	*93,000*	*3.50E+06*	*5.30E+05*	*3.4*	*95*
Dibromochloromethane	124-48-1	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	*80 (A,W)*	*ID*	*14,000*	*2.60E+06*	*ID*	*0.78 (M*,MM)*	*23 (MM)*
Dibromomethane	74-95-3	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	*80*	*NA*	*ID*	*1.10E+07*	*ID*	*8.8*	*260*
Dichlorodifluoromethane	75-71-8	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	*1,700*	*ID*	*2.20E+05*	*3.00E+05*	*ID*	*13*	*49*
Diethyl ether	60-29-7	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	*10/3,700 (E)*	*ID*	*6.10E+07 (S)*	*6.10E+07*	*6.50E+05*	*1,200*	*36,000*
Ethylbenzene	100-41-4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	*74/700 (E)*	*18*	*1.10E+05*	*1.69E+05*	*43,000*	*2.8*	*74*
Hexachloroethane	67-72-1	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	*7.3*	*6.7 (X)*	*27,000*	*50,000*	*ID*	*1.5 (M*)*	*43*
Iodomethane	74-88-4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	--	--	--	--	--	--
Isopropylbenzene (Cumene)	98-82-8	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	*800*	*28*	*56,000 (S)*	*56,000*	*29,000*	*0.60 (M*)*	*15*
Methyl tert-butyl ether (MTBE)	1634-04-4	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	*40/240 (E)*	*7,100 (X)*	*4.70E+07 (S)*	*4.68E+07*	*ID*	*250*	*7,400*
Methylene chloride	75-09-2	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	*5.0 (A)*	*1,500 (X)*	*2.20E+05*	*1.70E+07*	*ID*	*79 (FF*)*	*8,400*

Table 2 - Groundwater Data Summary
15 East Main Street, Hart, Michigan
October 2023

Monitoring Location: *Field Duplicate:* *Laboratory ID:* *Collection Date:*		TMW-01 S55336.01 10/31/23	TMW-01 Duplicate S55336.05 11/01/23	TMW-02 S55336.04 11/01/23	TMW-03 S55336.06 11/01/23	Equip. Blank S55336.09 11/01/23	Field Blank S55336.08 11/01/23	Trip Blank-01 S55336.07 10/31/23	Trip Blank-02 S55336.10 10/31/23	*Residential DWC [1]*	*GSI Criteria [1]*	*Residential Groundwater VIAIC [1]*	*Water Solubility [1]*	*Flammability and Explosivity SL [1]*	*Residential GW-Shallow VIAP SL [2]*	*Residential GW-Not in Contact VIAP SL [2]*
n-Butylbenzene	104-51-8	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	*80*	*ID*	*ID*	*NA*	*ID*	*44*	*1,100*
n-Propylbenzene	103-65-1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	*80*	*ID*	*ID*	*NA*	*ID*	*43 (DD)*	*6,100 (DD)*
Naphthalene[3]	91-20-3	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	*520*	*11*	*31,000 (S)*	*31,000*	*NA*	*4.2 (M*)*	*130*
sec-Butylbenzene	135-98-8	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	*80*	*ID*	*ID*	*NA*	*ID*	*270*	*8,100*
Styrene	100-42-5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	*100 (A)*	*80 (X)*	*1.70E+05*	*3.10E+05*	*1.40E+05*	*33*	*960*
t-Butylbenzene	98-06-6	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	*80*	*ID*	*ID*	*NA*	*ID*	*0.077 (M*)*	*1.8*
Tetrachloroethene (PCE)	127-18-4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	*5.0 (A)*	*60 (X)*	*25,000*	*2.00E+05*	*ID*	*1.5 (FF*)*	*130 (EE*)*
Tetrahydrofuran	109-99-9	90 U	90 U	90 U	90 U	90 U	90 U	90 U	90 U	*95*	*11,000 (X)*	*6.90E+06*	*1.00E+09*	*60,000*	*45,000*	*1.40E+06*
Toluene	108-88-3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	*790/1,000 (E)*	*270*	*5.30E+05 (S)*	*5.26E+05*	*61,000*	*300 (FF*)*	*41,000*
trans-1,2-Dichloroethene	156-60-5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	*100 (A)*	*1,500 (X)*	*85,000*	*6.30E+06*	*2.30E+05*	*16*	*390*
trans-1,4-Dichloro-2-butene	110-57-6	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	--	--	--	--	--	--
Trichloroethene (TCE)	79-01-6	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	*5.0 (A)*	*200 (X)*	*2,200*	*1.10E+06*	*ID*	*0.073 (M*,DD)*	*10 (DD)*
Trichlorofluoromethane (CFC-11)	75-69-4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	*2,600*	*NA*	*1.10E+06 (S)*	*1.10E+06*	*ID*	*22*	*190*
Vinyl chloride	75-01-4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	*2.0 (A)*	*13 (X)*	*1,100*	*2.76E+06*	*33,000*	*0.12 (M*,MM)*	*2.1 (MM)*
Xylenes, meta- & para-	179601-23-1	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	--	--	--	--	--	--	--
Xylene, ortho-	95-47-6	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	--	--	--	--	--	--
Xylenes, Total	1330-20-7	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	*280/10,000 (E)*	*49*	*1.90E+05 (S)*	*1.86E+05*	*70,000*	*75 (J)*	*2,000 (J)*
Polynuclear Aromatic Compounds	***CAS Number***															
1-Methylnaphthalene	90-12-0	5 U	5 U	5 U	5 U	5 U	5 U	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene[3]	91-57-6	5 U	5 U	5 U	5 U	5 U	5 U	--	--	*260*	*19*	*25,000 (S)*	*24,600*	*ID*	*66*	*2,000*
Acenaphthene	83-32-9	5 U	5 U	5 U	5 U	5 U	5 U	--	--	*1,300*	*38*	*4,200 (S)*	*4,240*	*ID*	*3,900 (S)*	*3,900 (S)*
Acenaphthylene	208-96-8	5 U	5 U	5 U	5 U	5 U	5 U	--	--	*52*	*ID*	*3,900 (S)*	*3,930*	*ID*	*65*	*65 (CC*)*
Anthracene	120-12-7	5 UJ	5 U	5 U	5 U	5 U	5 U	--	--	*43 (S)*	*ID*	*43 (S)*	*43.4*	*ID*	*43 (S)*	*43 (S)*
Benzo(a)anthracene	56-55-3	1 U	1 U	1 U	1 U	1 U	1 U	--	--	*2.1*	*ID*	*NLV*	*9.4*	*ID*	*9.4 (S,MM)*	*9.4 (S,MM)*
Benzo(a)pyrene	50-32-8	1 U	1 U	1 U	1 U	1 U	1 U	--	--	*5.0 (A)*	*ID*	*NLV*	*1.62*	*ID*	*NA*	*NA*
Benzo(b)fluoranthene	205-99-2	1 U	1 U	1 U	1 U	1 U	1 U	--	--	*1.5 (S,AA)*	*ID*	*ID*	*1.5*	*ID*	*NA*	*NA*
Benzo(g,h,i)perylene	191-24-2	1 U	1 U	1 U	1 U	1 U	1 U	--	--	*1.0 (M); 0.26 (S)*	*ID*	*NLV*	*0.26*	*ID*	*NA*	*NA*
Benzo(k)fluoranthene	207-08-9	1 U	1 U	1 U	1 U	1 U	1 U	--	--	*1.0 (M); 0.80 (S)*	*NA*	*NLV*	*0.80*	*ID*	*NA*	*NA*
Chrysene	218-01-9	1 U	1 U	1 U	1 U	1 U	1 U	--	--	*1.6 (S)*	*ID*	*ID*	*1.6*	*ID*	*NA*	*NA*
Dibenzo(a,h)anthracene	53-70-3	2 U	2 U	2 U	2 U	2 U	2 U	--	--	*2.0 (M); 0.21*	*ID*	*NLV*	*2.49*	*ID*	*NA*	*NA*
Fluoranthene	206-44-0	1 U	1 U	1 U	1 U	1 U	1 U	--	--	*210 (S)*	*1.6*	*210 (S)*	*206*	*ID*	*NA*	*NA*
Fluorene	86-73-7	5 U	5 U	5 U	5 U	5 U	5 U	--	--	*880*	*12*	*2,000 (S)*	*1,980*	*ID*	*1,700 (S)*	*1,700 (S)*
Indeno(1,2,3-cd)pyrene	193-39-5	2 U	2 U	2 U	2 U	2 U	2 U	--	--	*2.0 (M); 0.022 (S)*	*ID*	*NLV*	*0.022*	*ID*	*NA*	*NA*
Naphthalene[3]	91-20-3	5 U	5 U	5 U	5 U	5 U	5 U	--	--	*520*	*11*	*31,000 (S)*	*31,000*	*NA*	*4.2 (M*)*	*130*
Phenanthrene	85-01-8	2 U	2 U	2 U	2 U	2 U	2 U	--	--	*52*	*2.0 (M); 1.7*	*1,000 (S)*	*1,000*	*ID*	*9.5*	*290*
Pyrene	129-00-0	5 U	5 U	5 U	5 U	5 U	5 U	--	--	*140 (S)*	*ID*	*140 (S)*	*135*	*ID*	*140 (S)*	*140 (S)*
Metals, Total	***CAS Number***															
Arsenic	7440-38-2	**13**	2 U	2 U	3.0	2 U	2 U	--	--	*10 (A)*	*10*	*NLV*	*NA*	*ID*	*NA*	*NA*
Barium (B)	7440-39-3	44	270	256	60	5 U	5 U	--	--	*2,000 (A)*	*674 (G)*	*NLV*	*NA*	*ID*	*NA*	*NA*
Cadmium (B)	7440-43-9	1 U	1 U	1 U	1 U	1 U	1 U	--	--	*5.0 (A)*	*3.0 (G,X)*	*NLV*	*NA*	*ID*	*NA*	*NA*
Chromium, Total (B,H)	7440-47-3	5 U	5 U	5 U	**65**	5 U	5 U	--	--	*100 (A)*	*11*	*NLV*	*NA*	*ID*	*NA*	*NA*
Copper (B)	7440-50-8	**20**	5 U	5 U	**23**	8.0	7.0	--	--	*1,000/1,400 (E)*	*13 (G)*	*NLV*	*NA*	*ID*	*NA*	*NA*
Lead (B)	7439-92-1	3 U	3 U	3 U	3 U	3 U	3 U	--	--	*4.0 (L)*	*34 (G,X)*	*NLV*	*NA*	*ID*	*NA*	*NA*
Mercury (Total) (B)	7439-97-6	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	--	--	*2.0 (A)*	*0.0013*	*56 (S)*	*56*	*ID*	*0.088*	*2.5*
Selenium (B)	7782-49-2	5 U	5 U	5 U	5 U	5 U	5 U	--	--	*50 (A)*	*5.0*	*NLV*	*NA*	*ID*	*NA*	*NA*
Silver (B)	7440-22-4	1 U	1 U	1 U	1 U	1 U	1 U	--	--	*34*	*0.20 (M); 0.060*	*NLV*	*NA*	*ID*	*NA*	*NA*
Zinc (B)	7440-66-6	12	5 U	5 U	12	8.0	9.0	--	--	*2,400*	*167 (G)*	*NLV*	*NA*	*ID*	*NA*	*NA*

Table 2 - Groundwater Data Summary
15 East Main Street, Hart, Michigan
October 2023

Monitoring Location:		TMW-01	TMW-01	TMW-02	TMW-03	Equip. Blank	Field Blank	Trip Blank-01	Trip Blank-02	*Residential DWC [1]*	*GSI Criteria [1]*	*Residential Groundwater VIAIC [1]*	*Water Solubility [1]*	*Flammability and Explosivity SL [1]*	*Residential GW-Shallow VIAP SL [2]*	*Residential GW-Not in Contact VIAP SL [2]*
Field Duplicate:			Duplicate													
Laboratory ID:		S55336.01	S55336.05	S55336.04	S55336.06	S55336.09	S55336.08	S55336.07	S55336.10							
Collection Date:		10/31/23	11/01/23	11/01/23	11/01/23	11/01/23	11/01/23	10/31/23	10/31/23							
Field Parameters	***CAS Number***															
Dissolved oxygen (DO) (mg/L)	--	0.2	--	5.4	4.4	--	--	--	--	*ID*	*(EE)*	*ID*	*NA*	*NA*	--	--
ORP (mV)	--	-230	--	-68	-140	--	--	--	--	--	--	--	--	--	--	--
pH (SU)	--	7.1	--	7.0	7.3	--	--	--	--	*6.5 to 8.5 (E)*	*6.5 to 9.0*	*ID*	*NA*	*NA*	--	--
Specific conductance (µmhos/cm)	--	2,500	--	2,800	1,200	--	--	--	--	--	--	--	--	--	--	--
Temperature (°C)	--	12.5	--	12.2	12	--	--	--	--	--	--	--	--	--	--	--
Turbidity (NTU)	--	12	--	15	OR	--	--	--	--	--	--	--	--	--	--	--

Results expressed in µg/L.
Bolded values exceed an applicable criterion and/or screening level.
Underlined compounds classified as polynuclear aromatic compounds.

Data Qualifiers:
J Estimated value
U Not detected above the given limit

Footnotes/Abbreviations:
[1] *Part 201 Groundwater Generic Cleanup Criteria and Screening Levels, October 12, 2023.*
[2] *EGLE Volatilization to Indoor Air Pathway Screening Levels, September 4, 2020.*
[3] Method 8260 is used for quantitation of volatile organics with boiling points below 200 °C. With boiling points >200 °C, 2-methylnaphthalene and naphthalene are better suited to analysis by Method 8270.
(A) Criterion is the state of Michigan drinking water (DW) standard.
(B) Background, as defined in R 299.5701(b), may be substituted if higher than the calculated criterion.
(D) Calculated criterion exceeds 100%; hence it is reduced to 100%, or 1.00E+09 µg/L.
(E) Aesthetic drinking water (DW) value. Notice of aesthetic impact may be employed as an institutional control if concentration exceeds the aesthetic DWC but not the health-based DW value (second value, if provided).
(G) Criterion dependent on receiving surface water (SW) hardness; calculated criteria based on water hardness of 150 mg/L.
(H) Data provided for total Chromium only; compare to hexavalent Chromium criteria. If both trivalent Chromium and hexavalent Chromium are present, the total concentration of both cannot exceed the DW criterion of 100 µg/L.
(J) Substance may be present in several isomer forms. Isomer-specific concentrations shall be added together for comparison to criteria.
(JT) Substance present in several isomer forms. The VIAP SL may be used for the individual isomer provided that it is 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 VIAP SL of the detected isomers.
(L) Concentrations up to the State action level of 15 µg/L may still allow for DW use if soil concentrations are below 400 mg/Kg.
(M) Calculated criterion is below the analytical target detection limit (TDL), therefore, the criterion defaults to the TDL (first value is criterion, second value is the risk based or solubility value).
(M*) The VIAP SL 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 VIAP SL, the TDL is used to evaluate the risk posed from the pathway.
(S) Criterion defaults to the hazardous substance-specific water solubility limit.
(W) Concentrations of trihalomethanes shall be added together to determine compliance with the Michigan DW standard of 80 µg/L.
(X) Criterion is not protective for SW used as a DW source.
(AA) Use 10,000 µg/L where GW enters a structure through the use of a water well, sump or other device. Use 28,000 µg/L for all other uses.
(CC*) Insufficient chemical-physical input parameters have been identified to allow the development of a VIAP SL using standard equations. The VIAP SL for GW is developed based solely on the approach that the department uses for shallow GW. If GW detections are present, soil vapor may be the most appropriate media to evaluate risk.
(DD) Hazardous substance causes developmental effects. Residential VIAP SLs are protective of both prenatal exposure using a pregnant female receptor and postnatal exposure using a child receptor. Nonresidential VIAP screening levels 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.
(EE) Cold receiving waters ≥7,000 µg/L; Warm receiving waters ≥5,000 µg/L; Since a low level of DO can be harmful to aquatic life, the criterion represents a minimum level that on-site samples must exceed. Criteria are not applicable if GW Carbonaceous Biochemical Oxygen Demand (CBOD) is less than 10,000 µg/L and GW ammonia concentration is less than 2,000 µg/L.
(EE*) The acceptable air concentration (AAC) for the volatile hazardous substance 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 this hazardous substance is the acute or intermediate minimum risk level (MRL) developed by the Agency for Toxic Substances and Disease Registry (ATSDR), a USEPA Integrated Risk Information System (IRIS) acute reference concentration, or an acute initial threshold screening level (ITSL) by the EGLE's Air Quality Division.
(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 VIAP SLs are based on modification of the standard equations by the department to develop applicable shallow groundwater VIAP SLs.
(MM) Hazardous substance is a carcinogen with a mutagenic mode of action. The cancer potency values used in calculating VIAP SLs are modified using age-dependent adjustment factors for those carcinogenic chemicals identified as mutagenic.
DWC drinking water criterion
GSI groundwater surface water interface
ID Insufficient data to develop criterion.
NA not available
NLV Not likely to volatilize under most conditions.
SL screening level
VIAIC volatilization to indoor air inhalation criteria
VIAP volatilization to indoor air pathway

Table 3 -Soil Gas Data Summary
15 East Main Street, Hart, Michigan
October 2023

Monitoring Location:		SSVP-1	SSVP-3	SSVP-4	SSVP-5	SG-2	SG-3	SG-4	SG-5	MG-1	***Residential***
Laboratory ID:		S55384.01	S55384.03	S55384.04	S55384.05	S55384.07	S55384.08	S55384.09	S55384.10	S55384.11	***Soil Vapor***
Collection Date:		10/31/23	10/31/23	10/31/23	10/31/23	10/31/23	10/31/23	10/31/23	10/31/23	10/31/23	***VIAP SL*** [(1)]
Volatile Organic Compounds	***CAS Number***										
1,1,1-Trichloroethane	71-55-6	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	*1.70E+05 (EE)*
1,1,2,2-Tetrachloroethane	79-34-5	14 U	14 U	14 U	14 U	14 U	14 U	14 U	14 U	14 U	*15*
1,1,2-Trichloro-1,2,2-trifluoroethane (CFC 113)	76-13-1	15 U	15 U	15 U	15 U	15 U	15 U	15 U	15 U	15 U	*6.60E+05*
1,1,2-Trichloroethane	79-00-5	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	*7.0*
1,1-Dichloroethane	75-34-3	8.1 U	8.1 U	8.1 U	8.1 U	8.1 U	8.1 U	8.1 U	8.1 U	8.1 U	*530*
1,1-Dichloroethene	75-35-4	7.9 U	7.9 U	7.9 U	7.9 U	7.9 U	7.9 U	7.9 U	7.9 U	7.9 U	*7,000*
1,2,4-Trichlorobenzene	120-82-1	15 U	15 U	15 U	15 U	15 U	15 U	15 U	15 U	15 U	*70*
1,2,4-Trimethylbenzene	95-63-6	9.8 U	9.8 U	9.8 U	9.8 U	9.8 U	9.8 U	9.8 U	9.8 U	9.8 U	*2,100 (JT)*
1,2-Dibromoethane (EDB)	106-93-4	15 U	15 U	15 U	15 U	15 U	15 U	15 U	15 U	15 U	*1.4*
1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	76-14-2	14 U	14 U	14 U	14 U	14 U	14 U	14 U	14 U	14 U	--
1,2-Dichlorobenzene	95-50-1	12 U	12 U	12 U	12 U	12 U	12 U	12 U	12 U	12 U	*10,000*
1,2-Dichloroethane	107-06-2	8.1 U	8.1 U	8.1 U	8.1 U	8.1 U	8.1 U	8.1 U	8.1 U	8.1 U	*33*
1,2-Dichloropropane	78-87-5	9.2 U	9.2 U	9.2 U	9.2 U	9.2 U	9.2 U	9.2 U	9.2 U	9.2 U	*140*
1,3,5-Trimethylbenzene	108-67-8	9.8 U	9.8 U	9.8 U	9.8 U	9.8 U	9.8 U	9.8 U	9.8 U	9.8 U	*2,100 (JT)*
1,3-Butadiene	106-99-0	44 U	44 U	44 U	44 U	44 U	44 U	44 U	44 U	44 U	--
1,3-Dichlorobenzene	541-73-1	12 U	12 U	12 U	12 U	12 U	12 U	12 U	12 U	12 U	*100*
1,3-Dichloropropene, cis-	10061-01-5	9.1 U	9.1 U	9.1 U	9.1 U	9.1 U	9.1 U	9.1 U	9.1 U	9.1 U	--
1,3-Dichloropropene, trans-	10061-02-6	9.1 U	9.1 U	9.1 U	9.1 U	9.1 U	9.1 U	9.1 U	9.1 U	9.1 U	--
1,3-Dichloropropene (J)	542-75-6	18 U	18 U	18 U	18 U	18 U	18 U	18 U	18 U	18 U	*210 (J)*
1,4-Dichlorobenzene	106-46-7	12 U	12 U	12 U	12 U	12 U	12 U	12 U	12 U	12 U	*220*
1,4-Dioxane	123-91-1	72 U	72 U	72 U	72 U	72 U	72 U	72 U	72 U	72 U	*170*
2,2,4-Trimethylpentane	540-84-1	9.3 U	9.3 U	19	9.3 U	9.3 U	9.3 U	9.3 U	9.3 U	9.3 U	*1.20E+05*
2-Butanone (MEK)	78-93-3	59 U	59 U	59 U	59 U	59 U	59 U	59 U	59 U	59 U	*1.70E+05 (DD)*
2-Chlorotoluene	95-49-8	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	*2,800*
2-Hexanone	591-78-6	82 U	82 U	82 U	82 U	82 U	82 U	82 U	82 U	82 U	*1,000*
2-Propanol (Isopropyl alcohol)	67-63-0	49 U	49 U	49 U	49 U	49 U	49 U	49 U	49 U	49 U	*7,000*
3-Chloro-1-propene (Allyl chloride)	107-05-1	63 U	63 U	63 U	63 U	63 U	63 U	63 U	63 U	63 U	--
4-Ethyltoluene	622-96-8	9.8 U	9.8 U	9.8 U	9.8 U	9.8 U	9.8 U	9.8 U	9.8 U	9.8 U	--
4-Methyl-2-pentanone (MIBK)	108-10-1	82 U	82 U	82 U	82 U	82 U	82 U	82 U	82 U	82 U	*27,000*
Acetone	67-64-1	290	120	48 U	48 U	48 U	48 U	48 U	48 U	48 U	*1.00E+06 (EE)*
Benzene	71-43-2	6.4 U	6.4 U	6.4 U	6.4 U	6.4 U	6.4 U	6.4 U	6.4 U	6.4 U	*110*
Benzyl chloride	100-44-7	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	*17*
Bromodichloromethane	75-27-4	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	*48*
Bromoform	75-25-2	21 U	21 U	21 U	21 U	21 U	21 U	21 U	21 U	21 U	*770*
Bromomethane	74-83-9	7.8 U	7.8 U	7.8 U	7.8 U	7.8 U	7.8 U	7.8 U	7.8 U	7.8 U	*350*
Carbon disulfide	75-15-0	62 U	62 U	62 U	62 U	62 U	62 U	62 U	62 U	62 U	*24,000*
Carbon tetrachloride	56-23-5	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	*150*
Chlorobenzene	108-90-7	9.2 U	9.2 U	9.2 U	9.2 U	9.2 U	9.2 U	9.2 U	9.2 U	9.2 U	*1,700*
Chloroethane	75-00-3	53 U	53 U	53 U	53 U	53 U	53 U	53 U	53 U	53 U	*1.40E+05*
Chloroform	67-66-3	9.8 U	9.8 U	9.8 U	9.8 U	9.8 U	9.8 U	9.8 U	9.8 U	9.8 U	*37*
Chloromethane	74-87-3	41 U	41 U	41 U	41 U	41 U	41 U	41 U	41 U	41 U	*3,100*
cis-1,2-Dichloroethene	156-59-2	7.9 U	7.9 U	7.9 U	7.9 U	7.9 U	7.9 U	7.9 U	7.9 U	7.9 U	*280*
Cyclohexane	110-82-7	6.9 U	6.9 U	10	6.9	6.9 U	6.9 U	6.9 U	6.9 U	6.9 U	*2.10E+05*
Dibromochloromethane	124-48-1	17 U	17 U	17 U	17 U	17 U	17 U	17 U	17 U	17 U	*14 (MM)*
Dichlorodifluoromethane (CFC 12)	75-71-8	9.9 U	9.9 U	9.9 U	9.9 U	9.9 U	9.9 U	9.9 U	9.9 U	9.9 U	*11,000*

Table 3 -Soil Gas Data Summary
15 East Main Street, Hart, Michigan
October 2023

Monitoring Location:		SSVP-1	SSVP-3	SSVP-4	SSVP-5	SG-2	SG-3	SG-4	SG-5	MG-1	***Residential Soil Vapor VIAP SL*** [(1)]
Laboratory ID:		S55384.01	S55384.03	S55384.04	S55384.05	S55384.07	S55384.08	S55384.09	S55384.10	S55384.11	
Collection Date:		10/31/23	10/31/23	10/31/23	10/31/23	10/31/23	10/31/23	10/31/23	10/31/23	10/31/23	
Volatile Organic Compounds	***CAS Number***										
Ethanol	64-17-5	810	210	38 U	57	38 U	430	38 U	38 U	38 U	*6.30E+05 (EE)*
Ethyl acetate	141-78-6	72 U	72 U	72 U	72 U	72 U	72 U	72 U	72 U	72 U	*2,400*
Ethylbenzene	100-41-4	8.7 U	8.7 U	8.7 U	8.7 U	8.7 U	8.7 U	8.7 U	8.7 U	8.7 U	*340*
Hexachlorobutadiene	87-68-3	21 U	21 U	21 U	21 U	21 U	21 U	21 U	21 U	21 U	*39*
Methyl methacrylate	80-62-6	8.2 U	8.2 U	8.2 U	8.2 U	8.2 U	8.2 U	8.2 U	8.2 U	8.2 U	--
Methyl tert-butyl ether (MTBE)	1634-04-4	7.2 U	7.2 U	7.2 U	7.2 U	7.2 U	7.2 U	7.2 U	7.2 U	7.2 U	*3,300*
Methylene chloride	75-09-2	69 U	69 U	69 U	69 U	69 U	69 U	69 U	69 U	69 U	*21,000*
n-Heptane	142-82-5	8.2 U	8.2 U	8.2 U	8.2 U	8.2 U	8.2 U	8.2 U	8.2 U	8.2 U	*1.20E+05*
n-Hexane	110-54-3	7.0 U	7.0 U	7.0 U	7.0 U	7.0 U	7.0 U	7.0 U	18.0	7.0 U	*24,000*
Naphthalene*	91-20-3	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	*25*
Propene	115-07-1	170 U	170 U	170 U	170 U	170 U	170 U	170 U	170 U	170 U	--
Styrene	100-42-5	8.5 U	8.5 U	8.5 U	8.5 U	8.5 U	8.5 U	8.5 U	8.5 U	8.5 U	*1,500*
t-Butyl alcohol	75-65-0	61 U	61 U	610	61 U	61 U	61 U	61 U	61 U	61 U	*2,500*
Tetrachloroethene (PCE)	127-18-4	110	220	75	14 U	705	34	47	14 U	**6,080**	*1,400 (EE)*
Tetrahydrofuran (THF)	109-99-9	5.9 U	5.9 U	5.9 U	5.9 U	5.9 U	5.9 U	5.9 U	5.9 U	5.9 U	*70,000*
Toluene	108-88-3	7.5 U	7.5 U	11	7.5 U	7.5 U	7.5 U	11	7.5 U	7.5 U	*170,000*
trans-1,2-Dichloroethene	156-60-5	7.9 U	7.9 U	7.9 U	7.9 U	7.9 U	7.9 U	7.9 U	7.9 U	7.9 U	*2,800*
Trichloroethene (TCE)	79-01-6	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	*67 (DD)*
Trichlorofluoromethane	75-69-4	11 U	11 U	11 U	11 U	17	17	11 U	11 U	11 U	*15,000*
Vinyl acetate	108-05-4	70 U	70 U	70 U	70 U	70 U	70 U	70 U	70 U	70 U	*7,000*
Vinyl bromide	593-60-2	8.7 U	8.7 U	8.7 U	8.7 U	8.7 U	8.7 U	8.7 U	8.7 U	8.7 U	--
Vinyl chloride	75-01-4	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	*54 (MM)*
Xylenes, m-&p-	179601-23-1	17 U	17 U	17 U	17 U	17 U	17 U	17 U	17 U	17 U	--
Xylene, o-	95-47-6	8.7 U	8.7 U	8.7	8.7 U	8.7 U	8.7 U	8.7 U	8.7 U	8.7 U	--
Xylenes, Total	1330-20-7	26 U	26 U	26 U	26 U	26 U	26 U	26 U	26 U	26 U	*7,600 (J)*

Results are expressed in µg/m^3.
Bolded values exceed an applicable criterion.

Data Qualifiers:
U Not detected above the given limit.

Footnotes/Abbreviations:
[(1)] *EGLE Volatilization to Indoor Air Pathway Screening Levels, September 4, 2020.*
* Method TO-15 is used for the analysis of VOCs in air. Naphthalene and 2-Methylnaphthalene are SVOCs and results should be considered estimated.
(J) Substance present in several isomer forms; isomer concentrations must be added together for comparison to criteria.
(JT) Substance present in several isomer forms. The VIAP SL may be used for the individual isomer provided that it is 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 VIAP SL of the detected isomers.
(DD) Hazardous substance causes developmental effects. Residential VIAP SLs are protective of both prenatal exposure using a pregnant female receptor and postnatal exposure using a child receptor. Nonresidential VIAP SLs 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.
(EE) The acceptable air concentration (AAC) for the volatile hazardous substance 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 this hazardous substance is the acute or intermediate minimum risk level (MRL) developed by the Agency for Toxic Substances and Disease Registry (ATSDR), a USEPA Integrated Risk Information System (IRIS) acute reference concentration, or an acute initial threshold screening level (ITSL) by the EGLE's Air Quality Division.
(MM) Hazardous substance is a carcinogen with a mutagenic mode of action. The cancer potency values used in calculating VIAP SLs are modified using age-dependent adjustment factors for those carcinogenic chemicals identified as mutagenic.
SL screening level
VIAP volatilization to indoor air pathway

Appendix 1

BOREHOLE LOG

BORING/WELL ID: **SB-01**

TOTAL DEPTH (ft.): **25**

PROJECT: OCBRA/CERES Hart	**START DATE:** 10/30/23	**DRILLING CO.:** Rosendall Well Drilling
SITE LOCATION: Hart, MI	**END DATE:** 10/30/23	**DRILLER:** Micah / Ben
PROJECT NO.: 231596	**TOC ELEV.:**	**RIG TYPE:** Geoprobe 7822DT
PROJECT MANAGER: K. Perschbacher	**GROUND ELEV.:**	**METHOD OF DRILLING:** Direct Push
LOGGED BY: R. Knoll	**STATIC WATER LVL.:** 24' bgs	**SAMPLING METHODS:** Continuous

NOTES:

Static Water Level

DESCRIPTION	USCS	PID (ppm)	GRAPHIC LOG	DEPTH (ft. bgl)	Static Water Level	Sample Recovery	Sample ID	COMMENTS
TOPSOIL: Organics.								
ASPHALT: Crushed. (FILL)								
POORLY GRADED SAND: Brown, fine grained; trace fine, subrounded gravel; dry.	SP	0.0		0		4.0'		
		0.0		1				
		0.0		2				
		0.0		3				
		0.0		4				
		0.0		5		4.0'		
		0.0		6				
		0.0		7				
		0.0		8				
		0.0		9				
		0.0		10		4.0'		
		0.0		11				
		0.0		12				
		0.0		13				
		0.0		14				
		0.0		15		5.0'		
		0.0		16				
		0.0		17				
		0.0		18				
		0.0		19				
		0.0		20		4.0'		
		0.0		21				
		0.0		22				
		0.0		23				
		0.0		24	▼		SB-01 (24-25')	
POORLY GRADED SAND: Same as above; wet.		0.0		25				

BOREHOLE LOG

BORING/WELL ID: **SB-02**

TOTAL DEPTH (ft.): **25**

PROJECT: OCBRA/CERES Hart	**START DATE:** 10/30/23	**DRILLING CO.:** Rosendall Well Drilling
SITE LOCATION: Hart, MI	**END DATE:** 10/30/23	**DRILLER:** Micah / Ben
PROJECT NO.: 231596	**TOC ELEV.:**	**RIG TYPE:** Geoprobe 7822DT
PROJECT MANAGER: K. Perschbacher	**GROUND ELEV.:**	**METHOD OF DRILLING:** Direct Push
LOGGED BY: R. Knoll	**STATIC WATER LVL.:** 25' bgs	**SAMPLING METHODS:** Continuous

NOTES:

Static Water Level

DESCRIPTION	USCS	PID (ppm)	GRAPHIC LOG	DEPTH (ft. bgl)	Static Water Level	Sample Recovery	Sample ID	COMMENTS
ASPHALT: Crushed. (FILL)				0				
CONCRETE: Crushed. (FILL)				1				
POORLY GRADED SAND: Brown, fine grained, subrounded; trace fine, subrounded gravel; dry.	SP	0.0		2		3.0'		
		0.0		3				
		0.0		4				
		0.0		5				
		0.0		6				
		0.0		7				
		0.0		8		4.5'		
		0.0		9				
		0.0		10				
		0.0		11				
		0.0		12				
POORLY GRADED SAND WITH SILT: Brown, fine grained, subrounded; few non plastic silt; dry.	SP-SM	0.0		13		5.0'		
POORLY GRADED SAND: Brown, fine grained, subrounded; trace fine, subrounded gravel; dry.	SP	0.0		14				
		0.0		15				
		0.0		16				
		0.0		17		4.0'		
		0.0		18				
		0.0		19				
		0.0		20				
		0.0		21				
		2.0		22				
		2.0		23				
		3.8		24				
POORLY GRADED SAND: Same as above; wet.		60.8		25	▼		SB-02 (24-25')	
		5.7						

BOREHOLE LOG

BORING/WELL ID: **SB-03**

TOTAL DEPTH (ft.): **25**

PROJECT: OCBRA/CERES Hart	**START DATE:** 10/30/23	**DRILLING CO.:** Rosendall Well Drilling
SITE LOCATION: Hart, MI	**END DATE:** 10/30/23	**DRILLER:** Micah / Ben
PROJECT NO.: 231596	**TOC ELEV.:**	**RIG TYPE:** Geoprobe 7822DT
PROJECT MANAGER: K. Perschbacher	**GROUND ELEV.:**	**METHOD OF DRILLING:** Direct Push
LOGGED BY: R. Knoll	**STATIC WATER LVL.:** 24.5' bgs	**SAMPLING METHODS:** Continuous

NOTES:

Static Water Level

DESCRIPTION	USCS	PID (ppm)	GRAPHIC LOG	DEPTH (ft. bgl)	Static Water Level	Sample Recovery	Sample ID	COMMENTS
CONCRETE: Crushed/crushed stone. (FILL)				0				
ASPHALT: Crushed. (FILL)				1				
POORLY GRADED SAND: Brown, fine grained, subrounded; trace fine, subrounded gravel; dry.	SP	0.0		1		4.0'		
		0.0		2				
		0.0		3				
		0.0		4				
		0.0		5				
		0.0		6				
		0.0		7		4.0'		
		0.0		8				
		0.0		9				
		0.0		10				
		0.0		11			SB-03 (11-12')	
POORLY GRADED SAND WITH SILT: Brown, fine grained, subrounded; few non plastic silt; dry.	SP-SM	0.0		12		5.0'		
POORLY GRADED SAND: Brown, fine grained, subrounded; trace fine, subrounded gravel; dry.	SP	0.0		13				
		0.0		14				
		0.0		15				
		0.0		16				
		0.0		17		5.0'		
		0.0		18				
		0.0		19				
		0.0		20				
		0.0		21				
		0.0		22		5.0'		
		0.0		23				
		0.0		24				
POORLY GRADED SAND: Same as above; wet.		0.0		25	▼			

BOREHOLE LOG

BORING/WELL ID: **SB-04**

TOTAL DEPTH (ft.): **25**

PROJECT: OCBRA/CERES Hart	**START DATE:** 10/30/23	**DRILLING CO.:** Rosendall Well Drilling
SITE LOCATION: Hart, MI	**END DATE:** 10/30/23	**DRILLER:** Micah / Ben
PROJECT NO.: 231596	**TOC ELEV.:**	**RIG TYPE:** Geoprobe 7822DT
PROJECT MANAGER: K. Perschbacher	**GROUND ELEV.:**	**METHOD OF DRILLING:** Direct Push
LOGGED BY: R. Knoll	**STATIC WATER LVL.:** 24.5' bgs	**SAMPLING METHODS:** Continuous

NOTES:

Static Water Level

DESCRIPTION	USCS	PID (ppm)	GRAPHIC LOG	DEPTH (ft. bgl)	Static Water Level	Sample Recovery	Sample ID	COMMENTS
CONCRETE: Crushed/crushed stone. (FILL)				0				
ASPHALT: Crushed. (FILL)				1				
POORLY GRADED SAND: Brown, fine grained, subrounded; trace fine, subrounded gravel; dry.	SP	0.0		2		4.0'	SB-04 (9-10')	
		0.0		3				
		0.0		4				
		0.0		5				
		0.0		6				
		0.0		7		4.0'		
		0.0		8				
		0.0		9				
		0.0		10				
POORLY GRADED GRAVEL: Brown, fine, subrounded; few fine grained sand; dry.	GP	0.0		11				
POORLY GRADED SAND: Brown, fine grained, subrounded; trace fine, subrounded gravel; dry.	SP	0.0		12		4.0'		
		0.0		13				
		0.0		14				
		0.0		15				
		0.0		16				
		0.0		17		4.0'		
		0.0		18				
		0.0		19				
		0.0		20				
		0.0		21				
		0.0		22				
		0.0		23		4.0'		
		0.0		24				
POORLY GRADED SAND: Same as above; wet.		0.0		25	▼			

BOREHOLE LOG

BORING/WELL ID: **SB-05**

TOTAL DEPTH (ft.): **25**

PROJECT: OCBRA/CERES Hart	**START DATE:** 10/30/23	**DRILLING CO.:** Rosendall Well Drilling
SITE LOCATION: Hart, MI	**END DATE:** 10/30/23	**DRILLER:** Micah / Ben
PROJECT NO.: 231596	**TOC ELEV.:**	**RIG TYPE:** Geoprobe 7822DT
PROJECT MANAGER: K. Perschbacher	**GROUND ELEV.:**	**METHOD OF DRILLING:** Direct Push
LOGGED BY: R. Knoll	**STATIC WATER LVL.:** 24' bgs	**SAMPLING METHODS:** Continuous

NOTES:

Static Water Level

DESCRIPTION	USCS	PID (ppm)	GRAPHIC LOG	DEPTH (ft. bgl)	Static Water Level	Sample Recovery	Sample ID	COMMENTS
GRAVEL: Crushed/crushed stone. (FILL)				0				
POORLY GRADED SAND: Brown, fine grained, subrounded; trace fine, subrounded gravel; dry.	SP	0.0		1				
		0.0		2		3.0'		
		0.0		3				
		0.2		4				
		0.5		5				
		0.5		6				
		0.8		7		4.5'		
		0.8		8				
		0.8		9				
		1.0		10				
		0.7		11				
POORLY GRADED SAND WITH SILT: Brown, fine grained, subrounded; few non plastic silt; dry.	SP-SM	1.0		12		5.0'		
		1.2		13				
POORLY GRADED SAND: Brown, fine grained, subrounded; trace fine, subrounded gravel; dry.	SP	1.8		14				
		11.2		15				
		2.0		16				
		2.5		17		5.0'		
		3.0		18				
		4.5		19				
		5.9		20				
		6.2		21				
		90.0		22				
		117.0		23		5.0'		
POORLY GRADED SAND: Same as above; wet.		183.3		24	▼		SB-05 (24-25')	
		179.5		25				

BOREHOLE LOG

BORING/WELL ID: **SB-06**

TOTAL DEPTH (ft.): **5.0**

PROJECT: OCBRA/CERES Hart	**START DATE:** 10/30/23	**DRILLING CO.:** Rosendall Well Drilling
SITE LOCATION: Hart, MI	**END DATE:** 10/30/23	**DRILLER:** Micah / Ben
PROJECT NO.: 231596	**TOC ELEV.:**	**RIG TYPE:** Geoprobe 7822DT
PROJECT MANAGER: K. Perschbacher	**GROUND ELEV.:**	**METHOD OF DRILLING:** Direct Push
LOGGED BY: R. Knoll	**STATIC WATER LVL.:** --	**SAMPLING METHODS:** Continuous

NOTES: Located inside southern storage building.

Static Water Level

DESCRIPTION	USCS	PID (ppm)	GRAPHIC LOG	DEPTH (ft. bgl)	Static Water Level	Sample Recovery	Sample ID	COMMENTS
CONCRETE				0				
ASPHALT: Crushed. (FILL)				1				
POORLY GRADED SAND: Dark brown, fine grained; trace fine gravel; dry.	SP	0.0						
		0.0		2		4.5'		
		1.0		3			SB-06 (3-4')	
POORLY GRADED SAND: Same as above; brown.		0.8		4				
		0.0		5				

BOREHOLE LOG

BORING/WELL ID: **SB-07**

TOTAL DEPTH (ft.): **5.0**

PROJECT: OCBRA/CERES Hart	**START DATE:** 10/31/23	**DRILLING CO.:** Diamond Concrete Coring
SITE LOCATION: Hart, MI	**END DATE:** 10/31/23	**DRILLER:**
PROJECT NO.: 231596	**TOC ELEV.:**	**RIG TYPE:** Hand Auger
PROJECT MANAGER: K. Perschbacher	**GROUND ELEV.:**	**METHOD OF DRILLING:** Hand Auger
LOGGED BY: R. Knoll	**STATIC WATER LVL.:** --	**SAMPLING METHODS:** Hand Auger

NOTES:

Static Water Level

DESCRIPTION	USCS	PID (ppm)	GRAPHIC LOG	DEPTH (ft. bgl)	Static Water Level	Sample Recovery	Sample ID	COMMENTS
CONCRETE				0				
POORLY GRADED SAND: Dark brown, fine grained; trace fine gravel; dry.	SP	0.0		1		4.0'		
POORLY GRADED SAND: Brown, fine grained, subrounded; trace fine, subrounded gravel; dry.	SP	0.0		2				
		0.0		3				
		1.0		4			SB-07 (4-5')	
		1.2		5				

BOREHOLE LOG

BORING/WELL ID: **SB-08**

TOTAL DEPTH (ft.): **5.0**

PROJECT: OCBRA/CERES Hart	**START DATE:** 10/31/23	**DRILLING CO.:** Diamond Concrete Coring
SITE LOCATION: Hart, MI	**END DATE:** 10/31/23	**DRILLER:**
PROJECT NO.: 231596	**TOC ELEV.:**	**RIG TYPE:** Hand Auger
PROJECT MANAGER: K. Perschbacher	**GROUND ELEV.:**	**METHOD OF DRILLING:** Hand Auger
LOGGED BY: R. Knoll	**STATIC WATER LVL.:** --	**SAMPLING METHODS:** Hand Auger

NOTES:

Static Water Level

DESCRIPTION	USCS	PID (ppm)	GRAPHIC LOG	DEPTH (ft. bgl)	Static Water Level	Sample Recovery	Sample ID	COMMENTS
CONCRETE				0				
POORLY GRADED SAND: Dark brown, fine grained, subrounded; trace fine gravel; dry.	SP	0.0		1		4.0'	SB-08 (4-5')	
POORLY GRADED SAND: Brown, fine grained, subrounded; trace fine, subrounded gravel; dry.	SP	0.0		2				
		0.0		3				
		0.0		4				
		0.0		5				

BOREHOLE LOG

BORING/WELL ID: **SB-09**

TOTAL DEPTH (ft.): **5.0**

PROJECT: OCBRA/CERES Hart	**START DATE:** 10/31/23	**DRILLING CO.:** Diamond Concrete Coring
SITE LOCATION: Hart, MI	**END DATE:** 10/31/23	**DRILLER:**
PROJECT NO.: 231596	**TOC ELEV.:**	**RIG TYPE:** Hand Auger
PROJECT MANAGER: K. Perschbacher	**GROUND ELEV.:**	**METHOD OF DRILLING:** Hand Auger
LOGGED BY: R. Knoll	**STATIC WATER LVL.:** --	**SAMPLING METHODS:** Hand Auger

NOTES:

Static Water Level

DESCRIPTION	USCS	PID (ppm)	GRAPHIC LOG	DEPTH (ft. bgl)	Static Water Level	Sample Recovery	Sample ID	COMMENTS
CONCRETE				0				
POORLY GRADED SAND: Dark brown, fine grained, subrounded; trace fine, subrounded gravel; dry.	SP	0.0		1		4.0'	SB-09 (4-5')	
POORLY GRADED SAND: Same as above; brown.		0.0		2				
		0.0		3				
		0.0		4				
		0.0		5				

BOREHOLE LOG

BORING/WELL ID: **SB-10**

TOTAL DEPTH (ft.): **5.0**

PROJECT: OCBRA/CERES Hart	**START DATE:** 10/31/23	**DRILLING CO.:** Diamond Concrete Coring
SITE LOCATION: Hart, MI	**END DATE:** 10/31/23	**DRILLER:**
PROJECT NO.: 231596	**TOC ELEV.:**	**RIG TYPE:** Hand Auger
PROJECT MANAGER: K. Perschbacher	**GROUND ELEV.:**	**METHOD OF DRILLING:** Hand Auger
LOGGED BY: R. Knoll	**STATIC WATER LVL.:** --	**SAMPLING METHODS:** Hand Auger

NOTES:

Static Water Level

DESCRIPTION	USCS	PID (ppm)	GRAPHIC LOG	DEPTH (ft. bgl)	Static Water Level	Sample Recovery	Sample ID	COMMENTS
CONCRETE				0				
POORLY GRADED SAND: Dark brown, fine grained, subrounded; trace fine, subrounded gravel; dry.	SP	0.0		1				
		0.0		2				
		0.0		3				
		0.0		4			SB-10 (4-5')	
		0.0		5				

BOREHOLE LOG

BORING/WELL ID: **SG-01**

TOTAL DEPTH (ft.): **5.0**

PROJECT: OCBRA/CERES Hart	**START DATE:** 10/30/23	**DRILLING CO.:** Rosendall Well Drilling
SITE LOCATION: Hart, MI	**END DATE:** 10/30/23	**DRILLER:** Micah / Ben
PROJECT NO.: 231596	**TOC ELEV.:**	**RIG TYPE:** Geoprobe 7822DT
PROJECT MANAGER: K. Perschbacher	**GROUND ELEV.:**	**METHOD OF DRILLING:** Direct Push
LOGGED BY: R. Knoll	**STATIC WATER LVL.:** --	**SAMPLING METHODS:** Contiuous

NOTES: Location: South end of site.

▼ Static Water Level

DESCRIPTION	USCS	PID ppm	GRAPHIC LOG	DEPTH (ft. bgl)	Static Water Level	Sample Recovery	Sample ID	WELL CONSTRUCTION DETAIL
GRAVEL: Crushed stone. (FILL)				0				0.25" OD Tygon Tubing
POORLY GRADED SAND: Brown, fine grained, subrounded; trace fine, subrounded gravel; dry.	SP	0.0		1				
		0.0		2				
		0.0		3				
POORLY GRADED SAND: Same as above; black.								
POORLY GRADED SAND: Same as above; brown.		0.0		4				
		0.0		5				0.5" Stainless Steel Vapor Implant (0.005" Slot)

BOREHOLE LOG

BORING/WELL ID: **SG-02**

TOTAL DEPTH (ft.): **5.0**

PROJECT: OCBRA/CERES Hart	**START DATE:** 10/30/23	**DRILLING CO.:** Rosendall Well Drilling
SITE LOCATION: Hart, MI	**END DATE:** 10/30/23	**DRILLER:** Micah / Ben
PROJECT NO.: 231596	**TOC ELEV.:**	**RIG TYPE:** Geoprobe 7822DT
PROJECT MANAGER: K. Perschbacher	**GROUND ELEV.:**	**METHOD OF DRILLING:** Direct Push
LOGGED BY: R. Knoll	**STATIC WATER LVL.:** --	**SAMPLING METHODS:** Contiuous

NOTES: Location: Northeast of SG-01.

▼ Static Water Level

DESCRIPTION	USCS	PID ppm	GRAPHIC LOG	DEPTH (ft. bgl)	Static Water Level	Sample Recovery	Sample ID	WELL CONSTRUCTION DETAIL
ASPHALT				0				0.25" OD Tygon Tubing
GRAVEL: Crushed stone. (FILL)				1				
POORLY GRADED SAND: Brown, fine grained, subrounded; trace fine, subrounded gravel; dry.	SP	0.0		2				
		0.0		3				
		0.0		4				
		0.0		5				0.5" Stainless Steel Vapor Implant (0.005" Slot)

BOREHOLE LOG

BORING/WELL ID: **SG-03**

TOTAL DEPTH (ft.): **5.0**

PROJECT: OCBRA/CERES Hart	**START DATE:** 10/30/23	**DRILLING CO.:** Rosendall Well Drilling
SITE LOCATION: Hart, MI	**END DATE:** 10/30/23	**DRILLER:** Micah / Ben
PROJECT NO.: 231596	**TOC ELEV.:**	**RIG TYPE:** Geoprobe 7822DT
PROJECT MANAGER: K. Perschbacher	**GROUND ELEV.:**	**METHOD OF DRILLING:** Direct Push
LOGGED BY: R. Knoll	**STATIC WATER LVL.:** --	**SAMPLING METHODS:** Contiuous

NOTES: Location: North of SG-02.

▼ Static Water Level

DESCRIPTION	USCS	PID ppm	GRAPHIC LOG	DEPTH (ft. bgl)	Static Water Level	Sample Recovery	Sample ID	WELL CONSTRUCTION DETAIL
GRAVEL: Crushed/crushed stone. (FILL)				0				0.25" OD Tygon Tubing
POORLY GRADED SAND: Brown, fine grained, subrounded; trace fine, subrounded gravel; dry.	SP	0.0		1				
		0.0		2				
		0.0		3				
		0.0		4				0.5" Stainless Steel Vapor Implant (0.005" Slot)
		0.0		5				

BOREHOLE LOG

BORING/WELL ID: **SG-04**

TOTAL DEPTH (ft.): **5.0**

PROJECT: OCBRA/CERES Hart	**START DATE:** 10/30/23	**DRILLING CO.:** Rosendall Well Drilling
SITE LOCATION: Hart, MI	**END DATE:** 10/30/23	**DRILLER:** Micah / Ben
PROJECT NO.: 231596	**TOC ELEV.:**	**RIG TYPE:** Geoprobe 7822DT
PROJECT MANAGER: K. Perschbacher	**GROUND ELEV.:**	**METHOD OF DRILLING:** Direct Push
LOGGED BY: R. Knoll	**STATIC WATER LVL.:** --	**SAMPLING METHODS:** Contiuous

NOTES: Location: South of TMW-03.

▼ Static Water Level

DESCRIPTION	USCS	PID ppm	GRAPHIC LOG	DEPTH (ft. bgl)	Static Water Level	Sample Recovery	Sample ID	WELL CONSTRUCTION DETAIL
GRAVEL: Crushed/crushed stone. (FILL)				0				0.25" OD Tygon Tubing
POORLY GRADED SAND: Brown, fine grained, subrounded; trace fine, subrounded gravel; dry.	SP	0.0		1				
		0.0		2				
		0.0		3				
		0.0		4				0.5" Stainless Steel Vapor Implant (0.005" Slot)
		0.0		5				

BOREHOLE LOG

BORING/WELL ID: **SG-05**

TOTAL DEPTH (ft.): **5.0**

PROJECT: OCBRA/CERES Hart	**START DATE:** 10/30/23	**DRILLING CO.:** Rosendall Well Drilling
SITE LOCATION: Hart, MI	**END DATE:** 10/30/23	**DRILLER:** Micah / Ben
PROJECT NO.: 231596	**TOC ELEV.:**	**RIG TYPE:** Geoprobe 7822DT
PROJECT MANAGER: K. Perschbacher	**GROUND ELEV.:**	**METHOD OF DRILLING:** Direct Push
LOGGED BY: R. Knoll	**STATIC WATER LVL.:** --	**SAMPLING METHODS:** Contiuous

NOTES: Location: Between SB-02 and SB-05.

▼ Static Water Level

DESCRIPTION	USCS	PID ppm	GRAPHIC LOG	DEPTH (ft. bgl)	Static Water Level	Sample Recovery	Sample ID	WELL CONSTRUCTION DETAIL
CONCRETE: Crushed/crushed stone. (FILL)				0				0.25" OD Tygon Tubing
ASPHALT: Crushed. (FILL)				1				
POORLY GRADED SAND: Brown, fine grained, subrounded; trace fine, subrounded gravel; dry.	SP	0.0						
		0.0		2				
		0.0		3				
		0.0		4				
		0.0		5				0.5" Stainless Steel Vapor Implant (0.005" Slot)

BOREHOLE LOG

BORING/WELL ID: **TMW-01**

TOTAL DEPTH (ft.): **30**

PROJECT: OCBRA/CERES Hart	**START DATE:** 10/30/23	**DRILLING CO.:** Rosendall Well Drilling
SITE LOCATION: Hart, MI	**END DATE:** 10/30/23	**DRILLER:** Micah / Ben
PROJECT NO.: 231596	**TOC ELEV.:**	**RIG TYPE:** Geoprobe 7822DT
PROJECT MANAGER: K. Perschbacher	**GROUND ELEV.:**	**METHOD OF DRILLING:** Direct Push
LOGGED BY: R. Knoll	**STATIC WATER LVL.:** 24.0' bgs	**SAMPLING METHODS:** Macrocore

NOTES:

▼ Static Water Level

DESCRIPTION	USCS	PID ppm	GRAPHIC LOG	DEPTH (ft. bgl)	Static Water Level	Sample Recovery	Sample ID	WELL CONSTRUCTION DETAIL
CONCRETE				0				1" PVC Casing
GRAVEL: Crushed stone. (FILL)				1				
POORLY GRADED SAND: Brown, fine grained; trace fine, subrounded gravel; dry.	SP	0.0		2				
		0.0		3		3.5'		
		0.0		4				
		0.0		5				
		0.0		6				
		0.0		7				
		0.0		8		4.0'		
		0.0		9				
		0.0		10				
		0.0		11				
		0.0		12				
		0.0		13		4.0'		
		0.0		14				
		0.0		15				
		0.0		16				
		0.0		17				
		0.0		18		4.0'		
		0.0		19				
		0.0		20				
		0.0		21				
		0.0		22				
		0.0		23		5.0'		
		0.0		24	▼			
POORLY GRADED SAND: Same as above; wet.		0.0		25				1" PVC Screen (Slot 0.010")
		0.0		26				
		0.0		27				
		0.0		28		5.0'		
		0.0		29				
		0.0		30				

BOREHOLE LOG

BORING/WELL ID: **TMW-02**

TOTAL DEPTH (ft.): **30**

PROJECT: OCBRA/CERES Hart	**START DATE:** 10/30/23	**DRILLING CO.:** Rosendall Well Drilling
SITE LOCATION: Hart, MI	**END DATE:** 10/30/23	**DRILLER:** Micah / Ben
PROJECT NO.: 231596	**TOC ELEV.:**	**RIG TYPE:** Geoprobe 7822DT
PROJECT MANAGER: K. Perschbacher	**GROUND ELEV.:**	**METHOD OF DRILLING:** Direct Push
LOGGED BY: R. Knoll	**STATIC WATER LVL.:** 25.0' bgs	**SAMPLING METHODS:** Macrocore

NOTES:

▼ Static Water Level

DESCRIPTION	USCS	PID ppm	DEPTH (ft. bgl)	Sample Recovery	Sample ID	WELL CONSTRUCTION DETAIL
GRAVEL: Crushed/crushed stone. (FILL)			0			1" PVC Casing
ASPHALT: Crushed. (FILL)			1			
POORLY GRADED SAND: Brown, fine grained; trace fine, subrounded gravel; dry.	SP	0.0	2			
		0.0	3	4.0'		
		0.0	4			
		0.0	5			
		0.0	6			
		0.0	7			
		0.0	8	4.0'		
		0.0	9			
		0.0	10			
		0.0	11			
		0.0	12			
POORLY GRADED SAND WITH SILT: Brown, fine grained; few non plastic silt; dry.	SP-SM	0.0	13	5.0'		
POORLY GRADED SAND: Brown, fine grained; trace fine, subrounded gravel; dry.	SP	0.0	14			
		0.0	15			
		0.0	16			
		0.0	17			
		0.0	18	5.0'		
		0.0	19			
		0.0	20			
		0.0	21			
		0.0	22			
		0.0	23	5.0'		
		0.0	24			
POORLY GRADED SAND: Same as above; wet.		0.0	25 ▼			1" PVC Screen (Slot 0.010")
		0.0	26			
		0.0	27			
		0.0	28	5.0'		
		0.0	29			
		0.0	30			

BOREHOLE LOG

BORING/WELL ID: **TMW-03**

TOTAL DEPTH (ft.): **30**

PROJECT: OCBRA/CERES Hart	**START DATE:** 10/30/23	**DRILLING CO.:** Rosendall Well Drilling
SITE LOCATION: Hart, MI	**END DATE:** 10/30/23	**DRILLER:** Micah / Ben
PROJECT NO.: 231596	**TOC ELEV.:**	**RIG TYPE:** Geoprobe 7822DT
PROJECT MANAGER: K. Perschbacher	**GROUND ELEV.:**	**METHOD OF DRILLING:** Direct Push
LOGGED BY: R. Knoll	**STATIC WATER LVL.:** 24.92' bgs	**SAMPLING METHODS:** Macrocore

NOTES:

▼ Static Water Level

DESCRIPTION	USCS	PID ppm	GRAPHIC LOG	DEPTH (ft. bgl)	Static Water Level	Sample Recovery	Sample ID	WELL CONSTRUCTION DETAIL
GRAVEL: Crushed/crushed stone. (FILL)								1" PVC Casing
POORLY GRADED SAND: Brown, fine grained, subrounded; trace fine, subrounded gravel; dry.	SP	0.0		0				
		0.0		1				
		0.0		2		3.0'		
		0.0		3				
		0.0		4				
		0.0		5				
		0.0		6				
		0.0		7		4.0'		
		0.0		8				
		0.0		9				
		0.0		10				
		0.0		11				
		0.0		12		4.0'		
		0.0		13				
		0.0		14				
		0.0		15				
		0.0		16				
		0.0		17		4.5'		
		0.0		18				
		0.0		19				
		0.0		20				
		0.0		21				
		0.0		22		5.0'		
		0.0		23				
		0.0		24				
POORLY GRADED SAND: Same as above; wet.		0.0		25	▼			1" PVC Screen (Slot 0.010")
				26				
				27				
				28				
				29				
				30				

Appendix 2

Analytical Laboratory Report

Report ID: S55327.01(01)
Generated on 11/10/2023

Report to

Attention: Penni Mahler
Fishbeck
1515 Arboretum Drive SE
Grand Rapids, MI 49546

Phone: 616-464-3751 FAX:
Email: pdmahler@fishbeck.com

Addtional Contacts: Doug Ervin

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 Laverty (johnlaverty@meritlabs.com)
Barbara Ball (bball@meritlabs.com)

Report Summary

Lab Sample ID(s): S55327.01-S55327.15
Project: 231596 / OCBRA / CERES Hart
Collected Date(s): 10/30/2023 - 10/31/2023
Submitted Date/Time: 11/02/2023 16:30
Sampled by: Unknown
P.O. #: 221916

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Maya Murshak
Technical Director

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.
All accreditations/certifications held by this laboratory are listed on page 3. Not all accreditations/certifications are applicable to this report.
For a specific list of accredited analytes, please feel free to contact the laboratory or visit https://www.meritlabs.com/certifications.

Report Narrative

There is no additional narrative for this analytical report

Laboratory Accreditations

Authority	Accreditation ID
Michigan DEQ	#9956
DOD ELAP & ISO/IEC 17025:2017	#69699 PJLA Testing
WBENC	#2005110032
Ohio VAP	#CL0002
Indiana DOH	#C-MI-07
New York NELAC	#11814
North Carolina DENR	#680
North Carolina DOH	#26702
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

Method Summary

Method	Version
SM2540B	Standard Method 2540 B 2015
SW3050B	SW 846 Method 3050B Revision 2 December 1996
SW3546	SW 846 Method 3546 Revision 0 February 2007
SW5035A	SW 846 Method 5035A Revision 1 July 2002
SW5035A/8260C	SW 846 Method 8260C Revision 3 August 2006 / 5035A Revision 1 July 2002
SW6020A	SW 846 Method 6020A Revision 1 February 2007
SW7471B	SW 846 Method 7471B Revision 2 February 2007
SW8270D	SW 846 Method 8270D Revision 4 February 2007

Sample Summary (15 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S55327.01	SB-05(24-25) I	Soil	10/30/23 18:30
S55327.02	SB-05(24-25) I MS	Soil	10/30/23 18:30
S55327.03	SB-05(24-25) I MSD	Soil	10/30/23 18:30
S55327.04	SB-01 (24-25) I	Soil	10/30/23 16:00
S55327.05	Blind Duplicate	Soil	10/30/23 00:01
S55327.06	SB-02 (24-25) I	Soil	10/30/23 16:30
S55327.07	SB-03 (11-12) I	Soil	10/30/23 16:50
S55327.08	SB-04 (9-10) I	Soil	10/30/23 17:30
S55327.09	SB-06 (3-4) I	Soil	10/31/23 09:20
S55327.10	SB-07 (4-5) I	Soil	10/31/23 11:30
S55327.11	SB-08 (4-5) I	Soil	10/31/23 10:45
S55327.12	SB-09 (4-5) I	Soil	10/31/23 12:15
S55327.13	SB-10 (4-5) I	Soil	10/31/23 13:00
S55327.14	QCFB-01	Methanol	10/31/23 13:30
S55327.15	EB-01	Methanol	10/31/23 13:40

Lab Sample ID: S55327.01
Sample Tag: SB-05(24-25) I
Collected Date/Time: 10/30/2023 18:30
Matrix: Soil
COC Reference: 2023-10-30-01

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	3.8	IR
1	40ml Glass	MeOH	Yes	3.8	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Metal Digestion	Completed	SW3050B	11/07/23 12:00	JRH	
PNA Extraction*	Completed	SW3546	11/07/23 15:00	JWR	
Sample wt. (g) / Methanol (ml)*	10.636/10	SW5035A	11/03/23 13:42	NDK	
Mercury Digestion	Completed	SW7471B	11/07/23 10:50	CTV	

Inorganics

Method: SM2540B, Run Date: 11/06/23 13:12, Analyst: MAM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	91	1		%	1		

Metals

Method: SW6020A, Run Date: 11/07/23 13:21, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Arsenic	0.28	0.20		mg/kg	231	7440-38-2	
Barium	1.70	1.0		mg/kg	231	7440-39-3	
Cadmium	Not detected	0.20		mg/kg	231	7440-43-9	
Chromium	0.79	0.50		mg/kg	231	7440-47-3	
Copper	0.73	0.50		mg/kg	231	7440-50-8	
Lead	19.2	0.30		mg/kg	231	7439-92-1	
Selenium	Not detected	0.40		mg/kg	231	7782-49-2	
Silver	Not detected	0.20		mg/kg	231	7440-22-4	
Zinc	1.50	0.50		mg/kg	231	7440-66-6	

Method: SW7471B, Run Date: 11/07/23 14:45, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury	Not detected	0.050		mg/kg	63	7439-97-6	

Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 11/09/23 23:52, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	760	540		ug/kg	20	83-32-9	Y
Acenaphthylene	Not detected	540		ug/kg	20	208-96-8	Y
Anthracene	Not detected	540		ug/kg	20	120-12-7	Y
Benzo(a)anthracene	Not detected	540		ug/kg	20	56-55-3	Y
Benzo(a)pyrene	Not detected	540		ug/kg	20	50-32-8	Y
Benzo(b)fluoranthene	Not detected	540		ug/kg	20	205-99-2	Y
Benzo(ghi)perylene	Not detected	540		ug/kg	20	191-24-2	Y
Benzo(k)fluoranthene	Not detected	540		ug/kg	20	207-08-9	Y
Chrysene	Not detected	540		ug/kg	20	218-01-9	Y
Dibenzo(ah)anthracene	Not detected	540		ug/kg	20	53-70-3	Y

Y-Elevated reporting limit due to high target concentration

Lab Sample ID: S55327.01 (continued)
Sample Tag: SB-05(24-25) I

Polynuclear Aromatics, Method: SW8270D, Run Date: 11/09/23 23:52, Analyst: PL (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Fluoranthene	Not detected	540		ug/kg	20	206-44-0	Y
Fluorene	2,090	540		ug/kg	20	86-73-7	Y
Indeno(1,2,3-cd)pyrene	Not detected	540		ug/kg	20	193-39-5	Y
2-Methylnaphthalene	69,550	540		ug/kg	20	91-57-6	Y
Naphthalene	43,960	540		ug/kg	20	91-20-3	Y
Phenanthrene	2,350	540		ug/kg	20	85-01-8	Y
Pyrene	Not detected	540		ug/kg	20	129-00-0	Y
1-Methylnaphthalene	41,560	540		ug/kg	20	90-12-0	Y

Organics - Volatiles

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 11/08/23 15:26, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	5,000		ug/kg	1130	60-29-7	Y
Acetone	Not detected	20,000		ug/kg	1130	67-64-1	Y
Methyl iodide	Not detected	2,000		ug/kg	1130	74-88-4	Y
Carbon disulfide	Not detected	6,000		ug/kg	1130	75-15-0	Y
tert-Methyl butyl ether (MTBE)	Not detected	5,000		ug/kg	1130	1634-04-4	Y
Acrylonitrile	Not detected	2,000		ug/kg	1130	107-13-1	Y
2-Butanone (MEK)	Not detected	17,000		ug/kg	1130	78-93-3	Y
Dichlorodifluoromethane	Not detected	6,000		ug/kg	1130	75-71-8	Y
Chloromethane	Not detected	6,000		ug/kg	1130	74-87-3	Y
Vinyl chloride	Not detected	1,000		ug/kg	1130	75-01-4	Y
Bromomethane	Not detected	5,000		ug/kg	1130	74-83-9	Y
Chloroethane	Not detected	6,000		ug/kg	1130	75-00-3	Y
Trichlorofluoromethane	Not detected	2,000		ug/kg	1130	75-69-4	Y
1,1-Dichloroethene	Not detected	1,000		ug/kg	1130	75-35-4	Y
Methylene chloride	Not detected	2,000		ug/kg	1130	75-09-2	Y
trans-1,2-Dichloroethene	Not detected	1,000		ug/kg	1130	156-60-5	Y
1,1-Dichloroethane	Not detected	1,000		ug/kg	1130	75-34-3	Y
cis-1,2-Dichloroethene	Not detected	1,000		ug/kg	1130	156-59-2	Y
Tetrahydrofuran*	Not detected	20,000		ug/kg	1130	109-99-9	Y
Chloroform	Not detected	1,000		ug/kg	1130	67-66-3	Y
Bromochloromethane	Not detected	2,000		ug/kg	1130	74-97-5	Y
1,1,1-Trichloroethane	Not detected	1,000		ug/kg	1130	71-55-6	Y
4-Methyl-2-pentanone (MIBK)	Not detected	60,000		ug/kg	1130	108-10-1	Y
2-Hexanone	Not detected	60,000		ug/kg	1130	591-78-6	Y
Carbon tetrachloride	Not detected	1,000		ug/kg	1130	56-23-5	Y
Benzene	Not detected	1,000		ug/kg	1130	71-43-2	Y
1,2-Dichloroethane	Not detected	1,000		ug/kg	1130	107-06-2	Y
Trichloroethene	Not detected	1,000		ug/kg	1130	79-01-6	Y
1,2-Dichloropropane	Not detected	1,000		ug/kg	1130	78-87-5	Y
Bromodichloromethane	Not detected	2,000		ug/kg	1130	75-27-4	Y
Dibromomethane	Not detected	6,000		ug/kg	1130	74-95-3	Y
cis-1,3-Dichloropropene	Not detected	1,000		ug/kg	1130	10061-01-5	Y
Toluene	Not detected	1,000		ug/kg	1130	108-88-3	Y
trans-1,3-Dichloropropene	Not detected	1,000		ug/kg	1130	10061-02-6	Y
1,1,2-Trichloroethane	Not detected	1,000		ug/kg	1130	79-00-5	Y
Tetrachloroethene	Not detected	1,000		ug/kg	1130	127-18-4	Y
trans-1,4-Dichloro-2-butene	Not detected	1,000		ug/kg	1130	110-57-6	Y

Y-Elevated reporting limit due to high target concentration

Lab Sample ID: S55327.01 (continued)
Sample Tag: SB-05(24-25) I

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 11/08/23 15:26, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Dibromochloromethane	Not detected	2,000		ug/kg	1130	124-48-1	Y
1,2-Dibromoethane	Not detected	500		ug/kg	1130	106-93-4	YM
Chlorobenzene	Not detected	1,000		ug/kg	1130	108-90-7	Y
1,1,1,2-Tetrachloroethane	Not detected	2,000		ug/kg	1130	630-20-6	Y
Ethylbenzene	Not detected	1,000		ug/kg	1130	100-41-4	Y
p,m-Xylene	102,000	2,000		ug/kg	1130		Y
o-Xylene	172,000	1,000		ug/kg	1130	95-47-6	Y
Styrene	5,000	1,000		ug/kg	1130	100-42-5	Y
Isopropylbenzene	23,000	6,000		ug/kg	1130	98-82-8	Y
Bromoform	Not detected	2,000		ug/kg	1130	75-25-2	Y
1,1,2,2-Tetrachloroethane	Not detected	1,000		ug/kg	1130	79-34-5	Y
1,2,3-Trichloropropane	Not detected	2,000		ug/kg	1130	96-18-4	Y
n-Propylbenzene	62,000	1,000		ug/kg	1130	103-65-1	Y
Bromobenzene	Not detected	2,000		ug/kg	1130	108-86-1	Y
1,3,5-Trimethylbenzene	134,000	1,000		ug/kg	1130	108-67-8	Y
tert-Butylbenzene	Not detected	1,000		ug/kg	1130	98-06-6	Y
1,2,4-Trimethylbenzene	360,000	1,000		ug/kg	1130	95-63-6	YE
sec-Butylbenzene	17,000	1,000		ug/kg	1130	135-98-8	Y
p-Isopropyltoluene	9,000	2,000		ug/kg	1130	99-87-6	Y
1,3-Dichlorobenzene	Not detected	2,000		ug/kg	1130	541-73-1	Y
1,4-Dichlorobenzene	Not detected	2,000		ug/kg	1130	106-46-7	Y
1,2-Dichlorobenzene	Not detected	2,000		ug/kg	1130	95-50-1	Y
1,2,3-Trimethylbenzene	129,000	1,000		ug/kg	1130	526-73-8	Y
n-Butylbenzene	54,000	1,000		ug/kg	1130	104-51-8	Y
Hexachloroethane	Not detected	7,000		ug/kg	1130	67-72-1	Y
1,2-Dibromo-3-chloropropane	Not detected	6,000		ug/kg	1130	96-12-8	Y
1,2,4-Trichlorobenzene	Not detected	7,500		ug/kg	1130	120-82-1	Y
1,2,3-Trichlorobenzene	Not detected	7,500		ug/kg	1130	87-61-6	Y
Naphthalene	62,000	6,000		ug/kg	1130	91-20-3	Y
2-Methylnaphthalene	87,000	2,000		ug/kg	1130	91-57-6	Y

Volatile Organics 5035 (Replicate 01), Method: SW5035A/8260C, Run Date: 11/08/23 22:58, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	20,000		ug/kg	5660	60-29-7	Y
Acetone	Not detected	100,000		ug/kg	5660	67-64-1	Y
Methyl iodide	Not detected	10,000		ug/kg	5660	74-88-4	Y
Carbon disulfide	Not detected	30,000		ug/kg	5660	75-15-0	Y
tert-Methyl butyl ether (MTBE)	Not detected	20,000		ug/kg	5660	1634-04-4	Y
Acrylonitrile	Not detected	10,000		ug/kg	5660	107-13-1	Y
2-Butanone (MEK)	Not detected	85,000		ug/kg	5660	78-93-3	Y
Dichlorodifluoromethane	Not detected	30,000		ug/kg	5660	75-71-8	Y
Chloromethane	Not detected	30,000		ug/kg	5660	74-87-3	Y
Vinyl chloride	Not detected	6,000		ug/kg	5660	75-01-4	Y
Bromomethane	Not detected	20,000		ug/kg	5660	74-83-9	Y
Chloroethane	Not detected	30,000		ug/kg	5660	75-00-3	Y
Trichlorofluoromethane	Not detected	10,000		ug/kg	5660	75-69-4	Y
1,1-Dichloroethene	Not detected	6,000		ug/kg	5660	75-35-4	Y

Y-Elevated reporting limit due to high target concentration
M-Result reported to MDL not RDL
E-Concentration exceeds calibration range

Lab Sample ID: S55327.01 (continued)
Sample Tag: SB-05(24-25) I

Volatile Organics 5035 (Replicate 01), Method: SW5035A/8260C, Run Date: 11/08/23 22:58, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Methylene chloride	Not detected	10,000		ug/kg	5660	75-09-2	Y
trans-1,2-Dichloroethene	Not detected	6,000		ug/kg	5660	156-60-5	Y
1,1-Dichloroethane	Not detected	6,000		ug/kg	5660	75-34-3	Y
cis-1,2-Dichloroethene	Not detected	6,000		ug/kg	5660	156-59-2	Y
Tetrahydrofuran*	Not detected	100,000		ug/kg	5660	109-99-9	Y
Chloroform	Not detected	6,000		ug/kg	5660	67-66-3	Y
Bromochloromethane	Not detected	10,000		ug/kg	5660	74-97-5	Y
1,1,1-Trichloroethane	Not detected	6,000		ug/kg	5660	71-55-6	Y
4-Methyl-2-pentanone (MIBK)	Not detected	300,000		ug/kg	5660	108-10-1	Y
2-Hexanone	Not detected	300,000		ug/kg	5660	591-78-6	Y
Carbon tetrachloride	Not detected	6,000		ug/kg	5660	56-23-5	Y
Benzene	Not detected	6,000		ug/kg	5660	71-43-2	Y
1,2-Dichloroethane	Not detected	6,000		ug/kg	5660	107-06-2	Y
Trichloroethene	Not detected	6,000		ug/kg	5660	79-01-6	Y
1,2-Dichloropropane	Not detected	6,000		ug/kg	5660	78-87-5	Y
Bromodichloromethane	Not detected	10,000		ug/kg	5660	75-27-4	Y
Dibromomethane	Not detected	30,000		ug/kg	5660	74-95-3	Y
cis-1,3-Dichloropropene	Not detected	6,000		ug/kg	5660	10061-01-5	Y
Toluene	Not detected	6,000		ug/kg	5660	108-88-3	Y
trans-1,3-Dichloropropene	Not detected	6,000		ug/kg	5660	10061-02-6	Y
1,1,2-Trichloroethane	Not detected	6,000		ug/kg	5660	79-00-5	Y
Tetrachloroethene	Not detected	6,000		ug/kg	5660	127-18-4	Y
trans-1,4-Dichloro-2-butene	Not detected	6,000		ug/kg	5660	110-57-6	Y
Dibromochloromethane	Not detected	10,000		ug/kg	5660	124-48-1	Y
1,2-Dibromoethane	Not detected	2,000		ug/kg	5660	106-93-4	YM
Chlorobenzene	Not detected	6,000		ug/kg	5660	108-90-7	Y
1,1,1,2-Tetrachloroethane	Not detected	10,000		ug/kg	5660	630-20-6	Y
Ethylbenzene	Not detected	6,000		ug/kg	5660	100-41-4	Y
p,m-Xylene	110,000	10,000		ug/kg	5660		Y
o-Xylene	183,000	6,000		ug/kg	5660	95-47-6	Y
Styrene	Not detected	6,000		ug/kg	5660	100-42-5	Y
Isopropylbenzene	Not detected	30,000		ug/kg	5660	98-82-8	Y
Bromoform	Not detected	10,000		ug/kg	5660	75-25-2	Y
1,1,2,2-Tetrachloroethane	Not detected	6,000		ug/kg	5660	79-34-5	Y
1,2,3-Trichloropropane	Not detected	10,000		ug/kg	5660	96-18-4	Y
n-Propylbenzene	69,000	6,000		ug/kg	5660	103-65-1	Y
Bromobenzene	Not detected	10,000		ug/kg	5660	108-86-1	Y
1,3,5-Trimethylbenzene	153,000	6,000		ug/kg	5660	108-67-8	Y
tert-Butylbenzene	Not detected	6,000		ug/kg	5660	98-06-6	Y
1,2,4-Trimethylbenzene	429,000	6,000		ug/kg	5660	95-63-6	Y
sec-Butylbenzene	20,000	6,000		ug/kg	5660	135-98-8	Y
p-Isopropyltoluene	Not detected	10,000		ug/kg	5660	99-87-6	Y
1,3-Dichlorobenzene	Not detected	10,000		ug/kg	5660	541-73-1	Y
1,4-Dichlorobenzene	Not detected	10,000		ug/kg	5660	106-46-7	Y
1,2-Dichlorobenzene	Not detected	10,000		ug/kg	5660	95-50-1	Y
1,2,3-Trimethylbenzene	155,000	6,000		ug/kg	5660	526-73-8	Y
n-Butylbenzene	70,000	6,000		ug/kg	5660	104-51-8	Y
Hexachloroethane	Not detected	30,000		ug/kg	5660	67-72-1	Y

Y-Elevated reporting limit due to high target concentration
M-Result reported to MDL not RDL

Lab Sample ID: S55327.01 (continued)
Sample Tag: SB-05(24-25) I

Volatile Organics 5035 (Replicate 01), Method: SW5035A/8260C, Run Date: 11/08/23 22:58, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,2-Dibromo-3-chloropropane	Not detected	30,000		ug/kg	5660	96-12-8	Y
1,2,4-Trichlorobenzene	Not detected	37,000		ug/kg	5660	120-82-1	Y
1,2,3-Trichlorobenzene	Not detected	37,000		ug/kg	5660	87-61-6	Y
Naphthalene	90,000	30,000		ug/kg	5660	91-20-3	Y
2-Methylnaphthalene	150,000	10,000		ug/kg	5660	91-57-6	Y

Y-Elevated reporting limit due to high target concentration

Analytical Laboratory Report

Lab Sample ID: S55327.02
Sample Tag: SB-05(24-25) I MS
Collected Date/Time: 10/30/2023 18:30
Matrix: Soil
COC Reference: 2023-10-30-01

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	3.8	IR
1	40ml Glass	MeOH	Yes	3.8	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Metal Digestion	Completed	SW3050B	11/07/23 12:00	JRH	
PNA Extraction*	Completed	SW3546	11/07/23 15:00	JWR	
Sample wt. (g) / Methanol (ml)*	10.965/10	SW5035A	11/03/23 13:42	NDK	
Mercury Digestion	Completed	SW7471B	11/07/23 10:50	CTV	

Inorganics

Method: SM2540B, Run Date: 11/06/23 13:12, Analyst: MAM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	91	1		%	1		

Metals

Method: SW6020A, Run Date: 11/07/23 13:23, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Arsenic	24.9	0.20		mg/kg	233	7440-38-2	
Barium	26.2	1.0		mg/kg	233	7440-39-3	
Cadmium	24.6	0.20		mg/kg	233	7440-43-9	
Chromium	23.6	0.50		mg/kg	233	7440-47-3	
Copper	22.9	0.50		mg/kg	233	7440-50-8	
Lead	44.4	0.30		mg/kg	233	7439-92-1	
Selenium	24.3	0.40		mg/kg	233	7782-49-2	
Silver	20.8	0.20		mg/kg	233	7440-22-4	
Zinc	25.7	0.50		mg/kg	233	7440-66-6	

Method: SW7471B, Run Date: 11/07/23 14:49, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury	0.128	0.050		mg/kg	63	7439-97-6	

Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 11/10/23 00:09, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	3,230	550		ug/kg	20	83-32-9	1Y
Acenaphthylene	3,080	550		ug/kg	20	208-96-8	1Y
Anthracene	1,680	550		ug/kg	20	120-12-7	1Y
Benzo(a)anthracene	2,040	550		ug/kg	20	56-55-3	1Y
Benzo(a)pyrene	1,930	550		ug/kg	20	50-32-8	1Y
Benzo(b)fluoranthene	2,270	550		ug/kg	20	205-99-2	1Y
Benzo(ghi)perylene	1,470	550		ug/kg	20	191-24-2	1Y
Benzo(k)fluoranthene	2,260	550		ug/kg	20	207-08-9	1Y
Chrysene	2,140	550		ug/kg	20	218-01-9	1Y
Dibenzo(ah)anthracene	1,530	550		ug/kg	20	53-70-3	1Y

1-Sample spiked at 2.50 mg/kg Y-Elevated reporting limit due to high target concentration

Lab Sample ID: S55327.02 (continued)
Sample Tag: SB-05(24-25) I MS

Polynuclear Aromatics, Method: SW8270D, Run Date: 11/10/23 00:09, Analyst: PL (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Fluoranthene	2,470	550		ug/kg	20	206-44-0	1Y
Fluorene	4,950	550		ug/kg	20	86-73-7	1Y
Indeno(1,2,3-cd)pyrene	1,550	550		ug/kg	20	193-39-5	1Y
2-Methylnaphthalene	81,850	550		ug/kg	20	91-57-6	1Y
Naphthalene	54,300	550		ug/kg	20	91-20-3	1Y
Phenanthrene	4,950	550		ug/kg	20	85-01-8	1Y
Pyrene	2,400	550		ug/kg	20	129-00-0	1Y
1-Methylnaphthalene	50,220	550		ug/kg	20	90-12-0	1Y

Organics - Volatiles

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 11/08/23 13:50, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	62,000	4,000		ug/kg	1100	60-29-7	Y2
Acetone	60,000	20,000		ug/kg	1100	67-64-1	Y2
Methyl iodide	58,000	2,000		ug/kg	1100	74-88-4	Y2
Carbon disulfide	57,000	6,000		ug/kg	1100	75-15-0	Y2
tert-Methyl butyl ether (MTBE)	59,000	4,000		ug/kg	1100	1634-04-4	Y2
Acrylonitrile	57,000	2,000		ug/kg	1100	107-13-1	Y2
2-Butanone (MEK)	52,000	17,000		ug/kg	1100	78-93-3	Y2
Dichlorodifluoromethane	67,000	6,000		ug/kg	1100	75-71-8	Y2
Chloromethane	40,000	6,000		ug/kg	1100	74-87-3	Y2
Vinyl chloride	59,000	1,000		ug/kg	1100	75-01-4	Y2
Bromomethane	63,000	4,000		ug/kg	1100	74-83-9	Y2
Chloroethane	65,000	6,000		ug/kg	1100	75-00-3	Y2
Trichlorofluoromethane	64,000	2,000		ug/kg	1100	75-69-4	Y2
1,1-Dichloroethene	59,000	1,000		ug/kg	1100	75-35-4	Y2
Methylene chloride	58,000	2,000		ug/kg	1100	75-09-2	Y2
trans-1,2-Dichloroethene	58,000	1,000		ug/kg	1100	156-60-5	Y2
1,1-Dichloroethane	59,000	1,000		ug/kg	1100	75-34-3	Y2
cis-1,2-Dichloroethene	57,000	1,000		ug/kg	1100	156-59-2	Y2
Tetrahydrofuran*	60,000	20,000		ug/kg	1100	109-99-9	Y2
Chloroform	58,000	1,000		ug/kg	1100	67-66-3	Y2
Bromochloromethane	56,000	2,000		ug/kg	1100	74-97-5	Y2
1,1,1-Trichloroethane	59,000	1,000		ug/kg	1100	71-55-6	Y2
4-Methyl-2-pentanone (MIBK)	80,000	60,000		ug/kg	1100	108-10-1	Y2
2-Hexanone	60,000	60,000		ug/kg	1100	591-78-6	Y2
Carbon tetrachloride	56,000	1,000		ug/kg	1100	56-23-5	Y2
Benzene	56,000	1,000		ug/kg	1100	71-43-2	Y2
1,2-Dichloroethane	58,000	1,000		ug/kg	1100	107-06-2	Y2
Trichloroethene	56,000	1,000		ug/kg	1100	79-01-6	Y2
1,2-Dichloropropane	58,000	1,000		ug/kg	1100	78-87-5	Y2
Bromodichloromethane	61,000	2,000		ug/kg	1100	75-27-4	Y2
Dibromomethane	57,000	6,000		ug/kg	1100	74-95-3	Y2
cis-1,3-Dichloropropene	57,000	1,000		ug/kg	1100	10061-01-5	Y2
Toluene	55,000	1,000		ug/kg	1100	108-88-3	Y2
trans-1,3-Dichloropropene	56,000	1,000		ug/kg	1100	10061-02-6	Y2
1,1,2-Trichloroethane	64,000	1,000		ug/kg	1100	79-00-5	Y2
Tetrachloroethene	52,000	1,000		ug/kg	1100	127-18-4	Y2

1-Sample spiked at 2.50 mg/kg Y-Elevated reporting limit due to high target concentration
2-Spiked at 55mg/kg

Lab Sample ID: S55327.02 (continued)
Sample Tag: SB-05(24-25) I MS

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 11/08/23 13:50, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
trans-1,4-Dichloro-2-butene	57,000	1,000		ug/kg	1100	110-57-6	Y1
Dibromochloromethane	57,000	2,000		ug/kg	1100	124-48-1	Y1
1,2-Dibromoethane	55,100	400		ug/kg	1100	106-93-4	YM1
Chlorobenzene	52,000	1,000		ug/kg	1100	108-90-7	Y1
1,1,1,2-Tetrachloroethane	54,000	2,000		ug/kg	1100	630-20-6	Y1
Ethylbenzene	54,000	1,000		ug/kg	1100	100-41-4	Y1
p,m-Xylene	234,000	2,000		ug/kg	1100		Y1
o-Xylene	241,000	1,000		ug/kg	1100	95-47-6	YE1
Styrene	59,000	1,000		ug/kg	1100	100-42-5	Y1
Isopropylbenzene	73,000	6,000		ug/kg	1100	98-82-8	Y1
Bromoform	57,000	2,000		ug/kg	1100	75-25-2	Y1
1,1,2,2-Tetrachloroethane	50,000	1,000		ug/kg	1100	79-34-5	Y1
1,2,3-Trichloropropane	65,000	2,000		ug/kg	1100	96-18-4	Y1
n-Propylbenzene	121,000	1,000		ug/kg	1100	103-65-1	Y1
Bromobenzene	51,000	2,000		ug/kg	1100	108-86-1	Y1
1,3,5-Trimethylbenzene	205,000	1,000		ug/kg	1100	108-67-8	Y1
tert-Butylbenzene	38,000	1,000		ug/kg	1100	98-06-6	Y1
1,2,4-Trimethylbenzene	465,000	1,000		ug/kg	1100	95-63-6	YE1
sec-Butylbenzene	67,000	1,000		ug/kg	1100	135-98-8	Y1
p-Isopropyltoluene	53,000	2,000		ug/kg	1100	99-87-6	Y1
1,3-Dichlorobenzene	52,000	2,000		ug/kg	1100	541-73-1	Y1
1,4-Dichlorobenzene	51,000	2,000		ug/kg	1100	106-46-7	Y1
1,2-Dichlorobenzene	49,000	2,000		ug/kg	1100	95-50-1	Y1
1,2,3-Trimethylbenzene	215,000	1,000		ug/kg	1100	526-73-8	Y1
n-Butylbenzene	101,000	1,000		ug/kg	1100	104-51-8	Y1
Hexachloroethane	45,000	7,000		ug/kg	1100	67-72-1	Y1
1,2-Dibromo-3-chloropropane	48,000	6,000		ug/kg	1100	96-12-8	Y1
1,2,4-Trichlorobenzene	30,500	7,300		ug/kg	1100	120-82-1	Y1
1,2,3-Trichlorobenzene	31,500	7,300		ug/kg	1100	87-61-6	Y1
Naphthalene	135,000	6,000		ug/kg	1100	91-20-3	Y1
2-Methylnaphthalene	178,000	2,000		ug/kg	1100	91-57-6	Y1

Y-Elevated reporting limit due to high target concentration 1-Spiked at 55mg/kg
M-Result reported to MDL not RDL
E-Concentration exceeds calibration range

Lab Sample ID: S55327.03
Sample Tag: SB-05(24-25) I MSD
Collected Date/Time: 10/30/2023 18:30
Matrix: Soil
COC Reference: 2023-10-30-01

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	3.8	IR
1	40ml Glass	MeOH	Yes	3.8	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Metal Digestion	Completed	SW3050B	11/07/23 12:00	JRH	
PNA Extraction*	Completed	SW3546	11/07/23 15:00	JWR	
Sample wt. (g) / Methanol (ml)*	10.965/10	SW5035A	11/03/23 13:42	NDK	
Mercury Digestion	Completed	SW7471B	11/07/23 10:50	CTV	

Inorganics

Method: SM2540B, Run Date: 11/06/23 13:12, Analyst: MAM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	89	1		%	1		

Metals

Method: SW6020A, Run Date: 11/07/23 13:26, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Arsenic	25.9	0.20		mg/kg	240	7440-38-2	
Barium	27.9	1.0		mg/kg	240	7440-39-3	
Cadmium	25.0	0.20		mg/kg	240	7440-43-9	
Chromium	25.1	0.50		mg/kg	240	7440-47-3	
Copper	23.7	0.50		mg/kg	240	7440-50-8	
Lead	51.5	0.30		mg/kg	240	7439-92-1	
Selenium	24.8	0.40		mg/kg	240	7782-49-2	
Silver	21.5	0.20		mg/kg	240	7440-22-4	
Zinc	26.6	0.50		mg/kg	240	7440-66-6	

Method: SW7471B, Run Date: 11/07/23 14:52, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury	0.130	0.050		mg/kg	63	7439-97-6	

Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 11/10/23 00:26, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	3,730	560		ug/kg	20	83-32-9	1Y
Acenaphthylene	3,570	560		ug/kg	20	208-96-8	1Y
Anthracene	1,950	560		ug/kg	20	120-12-7	1Y
Benzo(a)anthracene	2,360	560		ug/kg	20	56-55-3	1Y
Benzo(a)pyrene	2,230	560		ug/kg	20	50-32-8	1Y
Benzo(b)fluoranthene	2,540	560		ug/kg	20	205-99-2	1Y
Benzo(ghi)perylene	1,640	560		ug/kg	20	191-24-2	1Y
Benzo(k)fluoranthene	2,750	560		ug/kg	20	207-08-9	1Y
Chrysene	2,480	560		ug/kg	20	218-01-9	1Y
Dibenzo(ah)anthracene	1,770	560		ug/kg	20	53-70-3	1Y

1-Sample spiked at 2.50 mg/kg Y-Elevated reporting limit due to high target concentration

Lab Sample ID: S55327.03 (continued)
Sample Tag: SB-05(24-25) I MSD

Polynuclear Aromatics, Method: SW8270D, Run Date: 11/10/23 00:26, Analyst: PL (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Fluoranthene	2,900	560		ug/kg	20	206-44-0	1Y
Fluorene	6,060	560		ug/kg	20	86-73-7	1Y
Indeno(1,2,3-cd)pyrene	1,800	560		ug/kg	20	193-39-5	1Y
2-Methylnaphthalene	99,060	560		ug/kg	20	91-57-6	1Y
Naphthalene	65,510	560		ug/kg	20	91-20-3	1Y
Phenanthrene	6,020	560		ug/kg	20	85-01-8	1Y
Pyrene	2,770	560		ug/kg	20	129-00-0	1Y
1-Methylnaphthalene	61,770	560		ug/kg	20	90-12-0	1Y

Organics - Volatiles

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 11/08/23 14:14, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	65,000	5,000		ug/kg	1150	60-29-7	Y2
Acetone	70,000	20,000		ug/kg	1150	67-64-1	Y2
Methyl iodide	58,000	2,000		ug/kg	1150	74-88-4	Y2
Carbon disulfide	58,000	6,000		ug/kg	1150	75-15-0	Y2
tert-Methyl butyl ether (MTBE)	64,000	5,000		ug/kg	1150	1634-04-4	Y2
Acrylonitrile	63,000	2,000		ug/kg	1150	107-13-1	Y2
2-Butanone (MEK)	58,000	17,000		ug/kg	1150	78-93-3	Y2
Dichlorodifluoromethane	70,000	6,000		ug/kg	1150	75-71-8	Y2
Chloromethane	60,000	6,000		ug/kg	1150	74-87-3	Y2
Vinyl chloride	63,000	1,000		ug/kg	1150	75-01-4	Y2
Bromomethane	72,000	5,000		ug/kg	1150	74-83-9	Y2
Chloroethane	73,000	6,000		ug/kg	1150	75-00-3	Y2
Trichlorofluoromethane	68,000	2,000		ug/kg	1150	75-69-4	Y2
1,1-Dichloroethene	62,000	1,000		ug/kg	1150	75-35-4	Y2
Methylene chloride	61,000	2,000		ug/kg	1150	75-09-2	Y2
trans-1,2-Dichloroethene	60,000	1,000		ug/kg	1150	156-60-5	Y2
1,1-Dichloroethane	62,000	1,000		ug/kg	1150	75-34-3	Y2
cis-1,2-Dichloroethene	61,000	1,000		ug/kg	1150	156-59-2	Y2
Tetrahydrofuran*	60,000	20,000		ug/kg	1150	109-99-9	Y2
Chloroform	62,000	1,000		ug/kg	1150	67-66-3	Y2
Bromochloromethane	61,000	2,000		ug/kg	1150	74-97-5	Y2
1,1,1-Trichloroethane	63,000	1,000		ug/kg	1150	71-55-6	Y2
4-Methyl-2-pentanone (MIBK)	90,000	60,000		ug/kg	1150	108-10-1	Y2
2-Hexanone	60,000	60,000		ug/kg	1150	591-78-6	Y2
Carbon tetrachloride	61,000	1,000		ug/kg	1150	56-23-5	Y2
Benzene	60,000	1,000		ug/kg	1150	71-43-2	Y2
1,2-Dichloroethane	62,000	1,000		ug/kg	1150	107-06-2	Y2
Trichloroethene	59,000	1,000		ug/kg	1150	79-01-6	Y2
1,2-Dichloropropane	63,000	1,000		ug/kg	1150	78-87-5	Y2
Bromodichloromethane	66,000	2,000		ug/kg	1150	75-27-4	Y2
Dibromomethane	61,000	6,000		ug/kg	1150	74-95-3	Y2
cis-1,3-Dichloropropene	63,000	1,000		ug/kg	1150	10061-01-5	Y2
Toluene	59,000	1,000		ug/kg	1150	108-88-3	Y2
trans-1,3-Dichloropropene	63,000	1,000		ug/kg	1150	10061-02-6	Y2
1,1,2-Trichloroethane	72,000	1,000		ug/kg	1150	79-00-5	Y2
Tetrachloroethene	57,000	1,000		ug/kg	1150	127-18-4	Y2

1-Sample spiked at 2.50 mg/kg Y-Elevated reporting limit due to high target concentration
2-Spiked at 57.5mg/kg

Lab Sample ID: S55327.03 (continued)
Sample Tag: SB-05(24-25) I MSD

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 11/08/23 14:14, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
trans-1,4-Dichloro-2-butene	64,000	1,000		ug/kg	1150	110-57-6	Y1
Dibromochloromethane	61,000	2,000		ug/kg	1150	124-48-1	Y1
1,2-Dibromoethane	59,500	500		ug/kg	1150	106-93-4	YM1
Chlorobenzene	55,000	1,000		ug/kg	1150	108-90-7	Y1
1,1,1,2-Tetrachloroethane	59,000	2,000		ug/kg	1150	630-20-6	Y1
Ethylbenzene	57,000	1,000		ug/kg	1150	100-41-4	Y1
p,m-Xylene	261,000	2,000		ug/kg	1150		Y1
o-Xylene	273,000	1,000		ug/kg	1150	95-47-6	YE1
Styrene	64,000	1,000		ug/kg	1150	100-42-5	Y1
Isopropylbenzene	81,000	6,000		ug/kg	1150	98-82-8	Y1
Bromoform	62,000	2,000		ug/kg	1150	75-25-2	Y1
1,1,2,2-Tetrachloroethane	55,000	1,000		ug/kg	1150	79-34-5	Y1
1,2,3-Trichloropropane	72,000	2,000		ug/kg	1150	96-18-4	Y1
n-Propylbenzene	137,000	1,000		ug/kg	1150	103-65-1	Y1
Bromobenzene	55,000	2,000		ug/kg	1150	108-86-1	Y1
1,3,5-Trimethylbenzene	222,000	1,000		ug/kg	1150	108-67-8	Y1
tert-Butylbenzene	45,000	1,000		ug/kg	1150	98-06-6	Y1
1,2,4-Trimethylbenzene	499,000	1,000		ug/kg	1150	95-63-6	YE1
sec-Butylbenzene	68,000	1,000		ug/kg	1150	135-98-8	Y1
p-Isopropyltoluene	54,000	2,000		ug/kg	1150	99-87-6	Y1
1,3-Dichlorobenzene	56,000	2,000		ug/kg	1150	541-73-1	Y1
1,4-Dichlorobenzene	54,000	2,000		ug/kg	1150	106-46-7	Y1
1,2-Dichlorobenzene	53,000	2,000		ug/kg	1150	95-50-1	Y1
1,2,3-Trimethylbenzene	226,000	1,000		ug/kg	1150	526-73-8	Y1
n-Butylbenzene	105,000	1,000		ug/kg	1150	104-51-8	Y1
Hexachloroethane	44,000	7,000		ug/kg	1150	67-72-1	Y1
1,2-Dibromo-3-chloropropane	48,000	6,000		ug/kg	1150	96-12-8	Y1
1,2,4-Trichlorobenzene	28,600	7,600		ug/kg	1150	120-82-1	Y1
1,2,3-Trichlorobenzene	28,000	7,600		ug/kg	1150	87-61-6	Y1
Naphthalene	121,000	6,000		ug/kg	1150	91-20-3	Y1
2-Methylnaphthalene	131,000	2,000		ug/kg	1150	91-57-6	Y1

Y-Elevated reporting limit due to high target concentration 1-Spiked at 57.5mg/kg
M-Result reported to MDL not RDL
E-Concentration exceeds calibration range

Lab Sample ID: S55327.04
Sample Tag: SB-01 (24-25) I
Collected Date/Time: 10/30/2023 16:00
Matrix: Soil
COC Reference: 2023-10-30-01

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	3.8	IR
1	40ml Glass	MeOH	Yes	3.8	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Metal Digestion	Completed	SW3050B	11/07/23 12:00	JRH	
PNA Extraction*	Completed	SW3546	11/07/23 15:00	JWR	
Sample wt. (g) / Methanol (ml)*	10.284/10	SW5035A	11/03/23 13:42	NDK	
Mercury Digestion	Completed	SW7471B	11/07/23 10:50	CTV	

Inorganics

Method: SM2540B, Run Date: 11/06/23 13:12, Analyst: MAM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	97	1		%	1		

Metals

Method: SW6020A, Run Date: 11/07/23 14:55, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Arsenic	3.20	0.20		mg/kg	224	7440-38-2	
Barium	20.9	1.0		mg/kg	224	7440-39-3	
Cadmium	0.54	0.20		mg/kg	224	7440-43-9	
Chromium	3.82	0.50		mg/kg	224	7440-47-3	
Copper	3.25	0.50		mg/kg	224	7440-50-8	
Lead	7.44	0.30		mg/kg	224	7439-92-1	
Selenium	Not detected	0.40		mg/kg	224	7782-49-2	
Silver	Not detected	0.20		mg/kg	224	7440-22-4	
Zinc	44.3	0.50		mg/kg	224	7440-66-6	

Method: SW7471B, Run Date: 11/07/23 14:55, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury	Not detected	0.050		mg/kg	58	7439-97-6	

Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 11/08/23 22:43, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	330		ug/kg	10	83-32-9	
Acenaphthylene	Not detected	330		ug/kg	10	208-96-8	
Anthracene	Not detected	330		ug/kg	10	120-12-7	
Benzo(a)anthracene	Not detected	330		ug/kg	10	56-55-3	
Benzo(a)pyrene	Not detected	330		ug/kg	10	50-32-8	
Benzo(b)fluoranthene	Not detected	330		ug/kg	10	205-99-2	
Benzo(ghi)perylene	Not detected	330		ug/kg	10	191-24-2	
Benzo(k)fluoranthene	Not detected	330		ug/kg	10	207-08-9	
Chrysene	Not detected	330		ug/kg	10	218-01-9	
Dibenzo(ah)anthracene	Not detected	330		ug/kg	10	53-70-3	
Fluoranthene	Not detected	330		ug/kg	10	206-44-0	

Lab Sample ID: S55327.04 (continued)
Sample Tag: SB-01 (24-25) I

Polynuclear Aromatics, Method: SW8270D, Run Date: 11/08/23 22:43, Analyst: PL (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Fluorene	Not detected	330		ug/kg	10	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	330		ug/kg	10	193-39-5	
2-Methylnaphthalene	Not detected	330		ug/kg	10	91-57-6	
Naphthalene	Not detected	330		ug/kg	10	91-20-3	
Phenanthrene	Not detected	330		ug/kg	10	85-01-8	
Pyrene	Not detected	330		ug/kg	10	129-00-0	
1-Methylnaphthalene	Not detected	330		ug/kg	10	90-12-0	

Organics - Volatiles

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 11/07/23 18:09, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	200		ug/kg	51.7	60-29-7	
Acetone	Not detected	1,000		ug/kg	51.7	67-64-1	
Methyl iodide	Not detected	100		ug/kg	51.7	74-88-4	
Carbon disulfide	Not detected	300		ug/kg	51.7	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	200		ug/kg	51.7	1634-04-4	
Acrylonitrile	Not detected	100		ug/kg	51.7	107-13-1	
2-Butanone (MEK)	Not detected	780		ug/kg	51.7	78-93-3	
Dichlorodifluoromethane	Not detected	300		ug/kg	51.7	75-71-8	
Chloromethane	Not detected	300		ug/kg	51.7	74-87-3	
Vinyl chloride	Not detected	50		ug/kg	51.7	75-01-4	
Bromomethane	Not detected	200		ug/kg	51.7	74-83-9	
Chloroethane	Not detected	300		ug/kg	51.7	75-00-3	
Trichlorofluoromethane	Not detected	100		ug/kg	51.7	75-69-4	
1,1-Dichloroethene	Not detected	50		ug/kg	51.7	75-35-4	
Methylene chloride	Not detected	100		ug/kg	51.7	75-09-2	
trans-1,2-Dichloroethene	Not detected	50		ug/kg	51.7	156-60-5	
1,1-Dichloroethane	Not detected	50		ug/kg	51.7	75-34-3	
cis-1,2-Dichloroethene	Not detected	50		ug/kg	51.7	156-59-2	
Tetrahydrofuran*	Not detected	1,000		ug/kg	51.7	109-99-9	
Chloroform	Not detected	50		ug/kg	51.7	67-66-3	
Bromochloromethane	Not detected	100		ug/kg	51.7	74-97-5	
1,1,1-Trichloroethane	Not detected	50		ug/kg	51.7	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	3,000		ug/kg	51.7	108-10-1	
2-Hexanone	Not detected	3,000		ug/kg	51.7	591-78-6	
Carbon tetrachloride	Not detected	50		ug/kg	51.7	56-23-5	
Benzene	Not detected	50		ug/kg	51.7	71-43-2	
1,2-Dichloroethane	Not detected	50		ug/kg	51.7	107-06-2	
Trichloroethene	Not detected	50		ug/kg	51.7	79-01-6	
1,2-Dichloropropane	Not detected	50		ug/kg	51.7	78-87-5	
Bromodichloromethane	Not detected	100		ug/kg	51.7	75-27-4	
Dibromomethane	Not detected	300		ug/kg	51.7	74-95-3	
cis-1,3-Dichloropropene	Not detected	50		ug/kg	51.7	10061-01-5	
Toluene	Not detected	50		ug/kg	51.7	108-88-3	
trans-1,3-Dichloropropene	Not detected	50		ug/kg	51.7	10061-02-6	
1,1,2-Trichloroethane	Not detected	50		ug/kg	51.7	79-00-5	
Tetrachloroethene	Not detected	50		ug/kg	51.7	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	50		ug/kg	51.7	110-57-6	
Dibromochloromethane	Not detected	100		ug/kg	51.7	124-48-1	
1,2-Dibromoethane	Not detected	20		ug/kg	51.7	106-93-4	M

M-Result reported to MDL not RDL

Lab Sample ID: S55327.04 (continued)
Sample Tag: SB-01 (24-25) I

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 11/07/23 18:09, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chlorobenzene	Not detected	50		ug/kg	51.7	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	100		ug/kg	51.7	630-20-6	
Ethylbenzene	Not detected	50		ug/kg	51.7	100-41-4	
p,m-Xylene	Not detected	100		ug/kg	51.7		
o-Xylene	Not detected	50		ug/kg	51.7	95-47-6	
Styrene	Not detected	50		ug/kg	51.7	100-42-5	
Isopropylbenzene	Not detected	300		ug/kg	51.7	98-82-8	
Bromoform	Not detected	100		ug/kg	51.7	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	50		ug/kg	51.7	79-34-5	
1,2,3-Trichloropropane	Not detected	100		ug/kg	51.7	96-18-4	
n-Propylbenzene	Not detected	50		ug/kg	51.7	103-65-1	
Bromobenzene	Not detected	100		ug/kg	51.7	108-86-1	
1,3,5-Trimethylbenzene	Not detected	50		ug/kg	51.7	108-67-8	
tert-Butylbenzene	Not detected	50		ug/kg	51.7	98-06-6	
1,2,4-Trimethylbenzene	Not detected	50		ug/kg	51.7	95-63-6	
sec-Butylbenzene	Not detected	50		ug/kg	51.7	135-98-8	
p-Isopropyltoluene	Not detected	100		ug/kg	51.7	99-87-6	
1,3-Dichlorobenzene	Not detected	100		ug/kg	51.7	541-73-1	
1,4-Dichlorobenzene	Not detected	100		ug/kg	51.7	106-46-7	
1,2-Dichlorobenzene	Not detected	100		ug/kg	51.7	95-50-1	
1,2,3-Trimethylbenzene	Not detected	50		ug/kg	51.7	526-73-8	
n-Butylbenzene	Not detected	50		ug/kg	51.7	104-51-8	
Hexachloroethane	Not detected	300		ug/kg	51.7	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	300		ug/kg	51.7	96-12-8	
1,2,4-Trichlorobenzene	Not detected	340		ug/kg	51.7	120-82-1	
1,2,3-Trichlorobenzene	Not detected	340		ug/kg	51.7	87-61-6	
Naphthalene	Not detected	300		ug/kg	51.7	91-20-3	
2-Methylnaphthalene	Not detected	100		ug/kg	51.7	91-57-6	

Lab Sample ID: S55327.05
Sample Tag: Blind Duplicate
Collected Date/Time: 10/30/2023 00:01
Matrix: Soil
COC Reference: 2023-10-30-01

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	3.8	IR
1	40ml Glass	MeOH	Yes	3.8	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Metal Digestion	Completed	SW3050B	11/07/23 12:00	JRH	
PNA Extraction*	Completed	SW3546	11/07/23 15:00	JWR	
Sample wt. (g) / Methanol (ml)*	10.272/10	SW5035A	11/03/23 13:42	NDK	
Mercury Digestion	Completed	SW7471B	11/07/23 10:50	CTV	

Inorganics

Method: SM2540B, Run Date: 11/06/23 13:12, Analyst: MAM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	86	1		%	1		

Metals

Method: SW6020A, Run Date: 11/07/23 14:57, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Arsenic	0.43	0.20		mg/kg	248	7440-38-2	
Barium	7.86	1.0		mg/kg	248	7440-39-3	
Cadmium	Not detected	0.20		mg/kg	248	7440-43-9	
Chromium	1.22	0.50		mg/kg	248	7440-47-3	
Copper	0.93	0.50		mg/kg	248	7440-50-8	
Lead	0.40	0.30		mg/kg	248	7439-92-1	
Selenium	Not detected	0.40		mg/kg	248	7782-49-2	
Silver	Not detected	0.20		mg/kg	248	7440-22-4	
Zinc	6.78	0.50		mg/kg	248	7440-66-6	

Method: SW7471B, Run Date: 11/07/23 14:59, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury	Not detected	0.050		mg/kg	72	7439-97-6	

Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 11/08/23 23:04, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	330		ug/kg	10	83-32-9	
Acenaphthylene	Not detected	330		ug/kg	10	208-96-8	
Anthracene	Not detected	330		ug/kg	10	120-12-7	
Benzo(a)anthracene	Not detected	330		ug/kg	10	56-55-3	
Benzo(a)pyrene	Not detected	330		ug/kg	10	50-32-8	
Benzo(b)fluoranthene	Not detected	330		ug/kg	10	205-99-2	
Benzo(ghi)perylene	Not detected	330		ug/kg	10	191-24-2	
Benzo(k)fluoranthene	Not detected	330		ug/kg	10	207-08-9	
Chrysene	Not detected	330		ug/kg	10	218-01-9	
Dibenzo(ah)anthracene	Not detected	330		ug/kg	10	53-70-3	
Fluoranthene	Not detected	330		ug/kg	10	206-44-0	

Lab Sample ID: S55327.05 (continued)
Sample Tag: Blind Duplicate

Polynuclear Aromatics, Method: SW8270D, Run Date: 11/08/23 23:04, Analyst: PL (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Fluorene	Not detected	330		ug/kg	10	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	330		ug/kg	10	193-39-5	
2-Methylnaphthalene	Not detected	330		ug/kg	10	91-57-6	
Naphthalene	Not detected	330		ug/kg	10	91-20-3	
Phenanthrene	Not detected	330		ug/kg	10	85-01-8	
Pyrene	Not detected	330		ug/kg	10	129-00-0	
1-Methylnaphthalene	Not detected	330		ug/kg	10	90-12-0	

Organics - Volatiles

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 11/07/23 18:33, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	300		ug/kg	64.7	60-29-7	
Acetone	Not detected	1,000		ug/kg	64.7	67-64-1	
Methyl iodide	Not detected	100		ug/kg	64.7	74-88-4	
Carbon disulfide	Not detected	300		ug/kg	64.7	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	300		ug/kg	64.7	1634-04-4	
Acrylonitrile	Not detected	100		ug/kg	64.7	107-13-1	
2-Butanone (MEK)	Not detected	970		ug/kg	64.7	78-93-3	
Dichlorodifluoromethane	Not detected	300		ug/kg	64.7	75-71-8	
Chloromethane	Not detected	300		ug/kg	64.7	74-87-3	
Vinyl chloride	Not detected	60		ug/kg	64.7	75-01-4	
Bromomethane	Not detected	300		ug/kg	64.7	74-83-9	
Chloroethane	Not detected	300		ug/kg	64.7	75-00-3	
Trichlorofluoromethane	Not detected	100		ug/kg	64.7	75-69-4	
1,1-Dichloroethene	Not detected	60		ug/kg	64.7	75-35-4	
Methylene chloride	Not detected	100		ug/kg	64.7	75-09-2	
trans-1,2-Dichloroethene	Not detected	60		ug/kg	64.7	156-60-5	
1,1-Dichloroethane	Not detected	60		ug/kg	64.7	75-34-3	
cis-1,2-Dichloroethene	Not detected	60		ug/kg	64.7	156-59-2	
Tetrahydrofuran*	Not detected	1,000		ug/kg	64.7	109-99-9	
Chloroform	Not detected	60		ug/kg	64.7	67-66-3	
Bromochloromethane	Not detected	100		ug/kg	64.7	74-97-5	
1,1,1-Trichloroethane	Not detected	60		ug/kg	64.7	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	3,000		ug/kg	64.7	108-10-1	
2-Hexanone	Not detected	3,000		ug/kg	64.7	591-78-6	
Carbon tetrachloride	Not detected	60		ug/kg	64.7	56-23-5	
Benzene	Not detected	60		ug/kg	64.7	71-43-2	
1,2-Dichloroethane	Not detected	60		ug/kg	64.7	107-06-2	
Trichloroethene	Not detected	60		ug/kg	64.7	79-01-6	
1,2-Dichloropropane	Not detected	60		ug/kg	64.7	78-87-5	
Bromodichloromethane	Not detected	100		ug/kg	64.7	75-27-4	
Dibromomethane	Not detected	300		ug/kg	64.7	74-95-3	
cis-1,3-Dichloropropene	Not detected	60		ug/kg	64.7	10061-01-5	
Toluene	Not detected	60		ug/kg	64.7	108-88-3	
trans-1,3-Dichloropropene	Not detected	60		ug/kg	64.7	10061-02-6	
1,1,2-Trichloroethane	Not detected	60		ug/kg	64.7	79-00-5	
Tetrachloroethene	Not detected	60		ug/kg	64.7	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	60		ug/kg	64.7	110-57-6	
Dibromochloromethane	Not detected	100		ug/kg	64.7	124-48-1	
1,2-Dibromoethane	Not detected	30		ug/kg	64.7	106-93-4	M

M-Result reported to MDL not RDL

Lab Sample ID: S55327.05 (continued)
Sample Tag: Blind Duplicate

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 11/07/23 18:33, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chlorobenzene	Not detected	60		ug/kg	64.7	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	100		ug/kg	64.7	630-20-6	
Ethylbenzene	Not detected	60		ug/kg	64.7	100-41-4	
p,m-Xylene	Not detected	100		ug/kg	64.7		
o-Xylene	Not detected	60		ug/kg	64.7	95-47-6	
Styrene	Not detected	60		ug/kg	64.7	100-42-5	
Isopropylbenzene	Not detected	300		ug/kg	64.7	98-82-8	
Bromoform	Not detected	100		ug/kg	64.7	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	60		ug/kg	64.7	79-34-5	
1,2,3-Trichloropropane	Not detected	100		ug/kg	64.7	96-18-4	
n-Propylbenzene	Not detected	60		ug/kg	64.7	103-65-1	
Bromobenzene	Not detected	100		ug/kg	64.7	108-86-1	
1,3,5-Trimethylbenzene	Not detected	60		ug/kg	64.7	108-67-8	
tert-Butylbenzene	Not detected	60		ug/kg	64.7	98-06-6	
1,2,4-Trimethylbenzene	Not detected	60		ug/kg	64.7	95-63-6	
sec-Butylbenzene	Not detected	60		ug/kg	64.7	135-98-8	
p-Isopropyltoluene	Not detected	100		ug/kg	64.7	99-87-6	
1,3-Dichlorobenzene	Not detected	100		ug/kg	64.7	541-73-1	
1,4-Dichlorobenzene	Not detected	100		ug/kg	64.7	106-46-7	
1,2-Dichlorobenzene	Not detected	100		ug/kg	64.7	95-50-1	
1,2,3-Trimethylbenzene	Not detected	60		ug/kg	64.7	526-73-8	
n-Butylbenzene	Not detected	60		ug/kg	64.7	104-51-8	
Hexachloroethane	Not detected	400		ug/kg	64.7	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	300		ug/kg	64.7	96-12-8	
1,2,4-Trichlorobenzene	Not detected	430		ug/kg	64.7	120-82-1	
1,2,3-Trichlorobenzene	Not detected	430		ug/kg	64.7	87-61-6	
Naphthalene	Not detected	300		ug/kg	64.7	91-20-3	
2-Methylnaphthalene	Not detected	100		ug/kg	64.7	91-57-6	

Lab Sample ID: S55327.06
Sample Tag: SB-02 (24-25) I
Collected Date/Time: 10/30/2023 16:30
Matrix: Soil
COC Reference: 2023-10-30-01

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	3.8	IR
1	40ml Glass	MeOH	Yes	3.8	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Metal Digestion	Completed	SW3050B	11/07/23 12:00	JRH	
PNA Extraction*	Completed	SW3546	11/07/23 15:00	JWR	
Sample wt. (g) / Methanol (ml)*	10.215/10	SW5035A	11/03/23 13:42	NDK	
Mercury Digestion	Completed	SW7471B	11/07/23 10:50	CTV	

Inorganics

Method: SM2540B, Run Date: 11/06/23 13:12, Analyst: MAM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	88	1		%	1		

Metals

Method: SW6020A, Run Date: 11/07/23 14:59, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Arsenic	0.40	0.20		mg/kg	238	7440-38-2	
Barium	2.20	1.0		mg/kg	238	7440-39-3	
Cadmium	Not detected	0.20		mg/kg	238	7440-43-9	
Chromium	1.24	0.50		mg/kg	238	7440-47-3	
Copper	0.76	0.50		mg/kg	238	7440-50-8	
Lead	1.48	0.30		mg/kg	238	7439-92-1	
Selenium	Not detected	0.40		mg/kg	238	7782-49-2	
Silver	Not detected	0.20		mg/kg	238	7440-22-4	
Zinc	2.11	0.50		mg/kg	238	7440-66-6	

Method: SW7471B, Run Date: 11/07/23 15:02, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury	Not detected	0.050		mg/kg	69	7439-97-6	

Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 11/08/23 23:25, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	550	330		ug/kg	10	83-32-9	
Acenaphthylene	Not detected	330		ug/kg	10	208-96-8	
Anthracene	Not detected	330		ug/kg	10	120-12-7	
Benzo(a)anthracene	Not detected	330		ug/kg	10	56-55-3	
Benzo(a)pyrene	Not detected	330		ug/kg	10	50-32-8	
Benzo(b)fluoranthene	Not detected	330		ug/kg	10	205-99-2	
Benzo(ghi)perylene	Not detected	330		ug/kg	10	191-24-2	
Benzo(k)fluoranthene	Not detected	330		ug/kg	10	207-08-9	
Chrysene	Not detected	330		ug/kg	10	218-01-9	
Dibenzo(ah)anthracene	Not detected	330		ug/kg	10	53-70-3	
Fluoranthene	Not detected	330		ug/kg	10	206-44-0	

Lab Sample ID: S55327.06 (continued)
Sample Tag: SB-02 (24-25) I

Polynuclear Aromatics, Method: SW8270D, Run Date: 11/08/23 23:25, Analyst: PL (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Fluorene	1,100	330		ug/kg	10	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	330		ug/kg	10	193-39-5	
2-Methylnaphthalene	21,990	330		ug/kg	10	91-57-6	
Naphthalene	8,570	330		ug/kg	10	91-20-3	
Phenanthrene	1,910	330		ug/kg	10	85-01-8	
Pyrene	Not detected	330		ug/kg	10	129-00-0	
1-Methylnaphthalene	13,690	330		ug/kg	10	90-12-0	

Organics - Volatiles

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 11/08/23 19:23, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	200		ug/kg	62.4	60-29-7	
Acetone	Not detected	1,000		ug/kg	62.4	67-64-1	
Methyl iodide	Not detected	100		ug/kg	62.4	74-88-4	
Carbon disulfide	Not detected	300		ug/kg	62.4	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	200		ug/kg	62.4	1634-04-4	
Acrylonitrile	Not detected	100		ug/kg	62.4	107-13-1	
2-Butanone (MEK)	Not detected	940		ug/kg	62.4	78-93-3	
Dichlorodifluoromethane	Not detected	300		ug/kg	62.4	75-71-8	
Chloromethane	Not detected	300		ug/kg	62.4	74-87-3	
Vinyl chloride	Not detected	60		ug/kg	62.4	75-01-4	
Bromomethane	Not detected	200		ug/kg	62.4	74-83-9	
Chloroethane	Not detected	300		ug/kg	62.4	75-00-3	
Trichlorofluoromethane	Not detected	100		ug/kg	62.4	75-69-4	
1,1-Dichloroethene	Not detected	60		ug/kg	62.4	75-35-4	
Methylene chloride	Not detected	100		ug/kg	62.4	75-09-2	
trans-1,2-Dichloroethene	Not detected	60		ug/kg	62.4	156-60-5	
1,1-Dichloroethane	Not detected	60		ug/kg	62.4	75-34-3	
cis-1,2-Dichloroethene	Not detected	60		ug/kg	62.4	156-59-2	
Tetrahydrofuran*	Not detected	1,000		ug/kg	62.4	109-99-9	
Chloroform	Not detected	60		ug/kg	62.4	67-66-3	
Bromochloromethane	Not detected	100		ug/kg	62.4	74-97-5	
1,1,1-Trichloroethane	Not detected	60		ug/kg	62.4	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	3,000		ug/kg	62.4	108-10-1	
2-Hexanone	Not detected	3,000		ug/kg	62.4	591-78-6	
Carbon tetrachloride	Not detected	60		ug/kg	62.4	56-23-5	
Benzene	Not detected	60		ug/kg	62.4	71-43-2	
1,2-Dichloroethane	Not detected	60		ug/kg	62.4	107-06-2	
Trichloroethene	Not detected	60		ug/kg	62.4	79-01-6	
1,2-Dichloropropane	Not detected	60		ug/kg	62.4	78-87-5	
Bromodichloromethane	Not detected	100		ug/kg	62.4	75-27-4	
Dibromomethane	Not detected	300		ug/kg	62.4	74-95-3	
cis-1,3-Dichloropropene	Not detected	60		ug/kg	62.4	10061-01-5	
Toluene	Not detected	60		ug/kg	62.4	108-88-3	
trans-1,3-Dichloropropene	Not detected	60		ug/kg	62.4	10061-02-6	
1,1,2-Trichloroethane	Not detected	60		ug/kg	62.4	79-00-5	
Tetrachloroethene	Not detected	60		ug/kg	62.4	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	60		ug/kg	62.4	110-57-6	
Dibromochloromethane	Not detected	100		ug/kg	62.4	124-48-1	
1,2-Dibromoethane	Not detected	20		ug/kg	62.4	106-93-4	M

M-Result reported to MDL not RDL

Lab Sample ID: S55327.06 (continued)
Sample Tag: SB-02 (24-25) I

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 11/08/23 19:23, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chlorobenzene	Not detected	60		ug/kg	62.4	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	100		ug/kg	62.4	630-20-6	
Ethylbenzene	Not detected	60		ug/kg	62.4	100-41-4	
p,m-Xylene	Not detected	100		ug/kg	62.4		
o-Xylene	1,400	60		ug/kg	62.4	95-47-6	
Styrene	Not detected	60		ug/kg	62.4	100-42-5	
Isopropylbenzene	Not detected	300		ug/kg	62.4	98-82-8	
Bromoform	Not detected	100		ug/kg	62.4	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	60		ug/kg	62.4	79-34-5	
1,2,3-Trichloropropane	Not detected	100		ug/kg	62.4	96-18-4	
n-Propylbenzene	90	60		ug/kg	62.4	103-65-1	
Bromobenzene	Not detected	100		ug/kg	62.4	108-86-1	
1,3,5-Trimethylbenzene	3,050	60		ug/kg	62.4	108-67-8	
tert-Butylbenzene	Not detected	60		ug/kg	62.4	98-06-6	
1,2,4-Trimethylbenzene	5,720	60		ug/kg	62.4	95-63-6	
sec-Butylbenzene	370	60		ug/kg	62.4	135-98-8	
p-Isopropyltoluene	700	100		ug/kg	62.4	99-87-6	
1,3-Dichlorobenzene	Not detected	100		ug/kg	62.4	541-73-1	
1,4-Dichlorobenzene	Not detected	100		ug/kg	62.4	106-46-7	
1,2-Dichlorobenzene	Not detected	100		ug/kg	62.4	95-50-1	
1,2,3-Trimethylbenzene	8,470	60		ug/kg	62.4	526-73-8	
n-Butylbenzene	Not detected	2,400		ug/kg	62.4	104-51-8	X
Hexachloroethane	Not detected	400		ug/kg	62.4	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	300		ug/kg	62.4	96-12-8	
1,2,4-Trichlorobenzene	Not detected	410		ug/kg	62.4	120-82-1	
1,2,3-Trichlorobenzene	Not detected	410		ug/kg	62.4	87-61-6	
Naphthalene	7,600	300		ug/kg	62.4	91-20-3	
2-Methylnaphthalene	10,900	100		ug/kg	62.4	91-57-6	

X-Elevated reporting limit due to matrix interference

Lab Sample ID: S55327.07
Sample Tag: SB-03 (11-12) I
Collected Date/Time: 10/30/2023 16:50
Matrix: Soil
COC Reference: 2023-10-30-01

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	3.8	IR
1	40ml Glass	MeOH	Yes	3.8	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Metal Digestion	Completed	SW3050B	11/07/23 12:00	JRH	
PNA Extraction*	Completed	SW3546	11/07/23 15:00	JWR	
Sample wt. (g) / Methanol (ml)*	10.611/10	SW5035A	11/03/23 13:42	NDK	
Mercury Digestion	Completed	SW7471B	11/07/23 10:50	CTV	

Inorganics

Method: SM2540B, Run Date: 11/06/23 13:12, Analyst: MAM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	97	1		%	1		

Metals

Method: SW6020A, Run Date: 11/07/23 15:01, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Arsenic	4.66	0.20		mg/kg	224	7440-38-2	
Barium	16.2	1.0		mg/kg	224	7440-39-3	
Cadmium	Not detected	0.20		mg/kg	224	7440-43-9	
Chromium	3.94	0.50		mg/kg	224	7440-47-3	
Copper	6.47	0.50		mg/kg	224	7440-50-8	
Lead	20.6	0.30		mg/kg	224	7439-92-1	
Selenium	Not detected	0.40		mg/kg	224	7782-49-2	
Silver	Not detected	0.20		mg/kg	224	7440-22-4	
Zinc	31.3	0.50		mg/kg	224	7440-66-6	

Method: SW7471B, Run Date: 11/07/23 15:05, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury	Not detected	0.050		mg/kg	61	7439-97-6	

Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 11/08/23 23:46, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	330		ug/kg	10	83-32-9	
Acenaphthylene	Not detected	330		ug/kg	10	208-96-8	
Anthracene	Not detected	330		ug/kg	10	120-12-7	
Benzo(a)anthracene	Not detected	330		ug/kg	10	56-55-3	
Benzo(a)pyrene	Not detected	330		ug/kg	10	50-32-8	
Benzo(b)fluoranthene	Not detected	330		ug/kg	10	205-99-2	
Benzo(ghi)perylene	Not detected	330		ug/kg	10	191-24-2	
Benzo(k)fluoranthene	Not detected	330		ug/kg	10	207-08-9	
Chrysene	Not detected	330		ug/kg	10	218-01-9	
Dibenzo(ah)anthracene	Not detected	330		ug/kg	10	53-70-3	
Fluoranthene	Not detected	330		ug/kg	10	206-44-0	

Lab Sample ID: S55327.07 (continued)
Sample Tag: SB-03 (11-12) I

Polynuclear Aromatics, Method: SW8270D, Run Date: 11/08/23 23:46, Analyst: PL (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Fluorene	Not detected	330		ug/kg	10	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	330		ug/kg	10	193-39-5	
2-Methylnaphthalene	Not detected	330		ug/kg	10	91-57-6	
Naphthalene	Not detected	330		ug/kg	10	91-20-3	
Phenanthrene	Not detected	330		ug/kg	10	85-01-8	
Pyrene	Not detected	330		ug/kg	10	129-00-0	
1-Methylnaphthalene	Not detected	330		ug/kg	10	90-12-0	

Organics - Volatiles

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 11/07/23 18:58, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	200		ug/kg	50.1	60-29-7	
Acetone	Not detected	1,000		ug/kg	50.1	67-64-1	
Methyl iodide	Not detected	100		ug/kg	50.1	74-88-4	
Carbon disulfide	Not detected	300		ug/kg	50.1	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	200		ug/kg	50.1	1634-04-4	
Acrylonitrile	Not detected	100		ug/kg	50.1	107-13-1	
2-Butanone (MEK)	Not detected	750		ug/kg	50.1	78-93-3	
Dichlorodifluoromethane	Not detected	300		ug/kg	50.1	75-71-8	
Chloromethane	Not detected	300		ug/kg	50.1	74-87-3	
Vinyl chloride	Not detected	50		ug/kg	50.1	75-01-4	
Bromomethane	Not detected	200		ug/kg	50.1	74-83-9	
Chloroethane	Not detected	300		ug/kg	50.1	75-00-3	
Trichlorofluoromethane	Not detected	100		ug/kg	50.1	75-69-4	
1,1-Dichloroethene	Not detected	50		ug/kg	50.1	75-35-4	
Methylene chloride	Not detected	100		ug/kg	50.1	75-09-2	
trans-1,2-Dichloroethene	Not detected	50		ug/kg	50.1	156-60-5	
1,1-Dichloroethane	Not detected	50		ug/kg	50.1	75-34-3	
cis-1,2-Dichloroethene	Not detected	50		ug/kg	50.1	156-59-2	
Tetrahydrofuran*	Not detected	1,000		ug/kg	50.1	109-99-9	
Chloroform	Not detected	50		ug/kg	50.1	67-66-3	
Bromochloromethane	Not detected	100		ug/kg	50.1	74-97-5	
1,1,1-Trichloroethane	Not detected	50		ug/kg	50.1	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	3,000		ug/kg	50.1	108-10-1	
2-Hexanone	Not detected	3,000		ug/kg	50.1	591-78-6	
Carbon tetrachloride	Not detected	50		ug/kg	50.1	56-23-5	
Benzene	Not detected	50		ug/kg	50.1	71-43-2	
1,2-Dichloroethane	Not detected	50		ug/kg	50.1	107-06-2	
Trichloroethene	Not detected	50		ug/kg	50.1	79-01-6	
1,2-Dichloropropane	Not detected	50		ug/kg	50.1	78-87-5	
Bromodichloromethane	Not detected	100		ug/kg	50.1	75-27-4	
Dibromomethane	Not detected	300		ug/kg	50.1	74-95-3	
cis-1,3-Dichloropropene	Not detected	50		ug/kg	50.1	10061-01-5	
Toluene	160	50		ug/kg	50.1	108-88-3	
trans-1,3-Dichloropropene	Not detected	50		ug/kg	50.1	10061-02-6	
1,1,2-Trichloroethane	Not detected	50		ug/kg	50.1	79-00-5	
Tetrachloroethene	Not detected	50		ug/kg	50.1	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	50		ug/kg	50.1	110-57-6	
Dibromochloromethane	Not detected	100		ug/kg	50.1	124-48-1	
1,2-Dibromoethane	Not detected	20		ug/kg	50.1	106-93-4	M

M-Result reported to MDL not RDL

Lab Sample ID: S55327.07 (continued)
Sample Tag: SB-03 (11-12) I

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 11/07/23 18:58, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chlorobenzene	Not detected	50		ug/kg	50.1	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	100		ug/kg	50.1	630-20-6	
Ethylbenzene	Not detected	50		ug/kg	50.1	100-41-4	
p,m-Xylene	100	100		ug/kg	50.1		
o-Xylene	80	50		ug/kg	50.1	95-47-6	
Styrene	Not detected	50		ug/kg	50.1	100-42-5	
Isopropylbenzene	Not detected	300		ug/kg	50.1	98-82-8	
Bromoform	Not detected	100		ug/kg	50.1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	50		ug/kg	50.1	79-34-5	
1,2,3-Trichloropropane	Not detected	100		ug/kg	50.1	96-18-4	
n-Propylbenzene	Not detected	50		ug/kg	50.1	103-65-1	
Bromobenzene	Not detected	100		ug/kg	50.1	108-86-1	
1,3,5-Trimethylbenzene	Not detected	50		ug/kg	50.1	108-67-8	
tert-Butylbenzene	Not detected	50		ug/kg	50.1	98-06-6	
1,2,4-Trimethylbenzene	Not detected	50		ug/kg	50.1	95-63-6	
sec-Butylbenzene	Not detected	50		ug/kg	50.1	135-98-8	
p-Isopropyltoluene	Not detected	100		ug/kg	50.1	99-87-6	
1,3-Dichlorobenzene	Not detected	100		ug/kg	50.1	541-73-1	
1,4-Dichlorobenzene	Not detected	100		ug/kg	50.1	106-46-7	
1,2-Dichlorobenzene	Not detected	100		ug/kg	50.1	95-50-1	
1,2,3-Trimethylbenzene	Not detected	50		ug/kg	50.1	526-73-8	
n-Butylbenzene	Not detected	50		ug/kg	50.1	104-51-8	
Hexachloroethane	Not detected	300		ug/kg	50.1	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	300		ug/kg	50.1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	330		ug/kg	50.1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	330		ug/kg	50.1	87-61-6	
Naphthalene	Not detected	300		ug/kg	50.1	91-20-3	
2-Methylnaphthalene	200	100		ug/kg	50.1	91-57-6	

Lab Sample ID: S55327.08
Sample Tag: SB-04 (9-10) I
Collected Date/Time: 10/30/2023 17:30
Matrix: Soil
COC Reference: 2023-10-30-01

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	3.8	IR
1	40ml Glass	MeOH	Yes	3.8	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Metal Digestion	Completed	SW3050B	11/07/23 12:00	JRH	
PNA Extraction*	Completed	SW3546	11/07/23 15:00	JWR	
Sample wt. (g) / Methanol (ml)*	11.161/11	SW5035A	11/03/23 13:42	NDK	
Mercury Digestion	Completed	SW7471B	11/07/23 10:50	CTV	

Inorganics

Method: SM2540B, Run Date: 11/06/23 13:12, Analyst: MAM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	97	1		%	1		

Metals

Method: SW6020A, Run Date: 11/07/23 15:04, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Arsenic	0.37	0.20		mg/kg	216	7440-38-2	
Barium	3.36	1.0		mg/kg	216	7440-39-3	
Cadmium	Not detected	0.20		mg/kg	216	7440-43-9	
Chromium	1.07	0.50		mg/kg	216	7440-47-3	
Copper	0.59	0.50		mg/kg	216	7440-50-8	
Lead	0.64	0.30		mg/kg	216	7439-92-1	
Selenium	Not detected	0.40		mg/kg	216	7782-49-2	
Silver	Not detected	0.20		mg/kg	216	7440-22-4	
Zinc	8.05	0.50		mg/kg	216	7440-66-6	

Method: SW7471B, Run Date: 11/07/23 15:08, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury	Not detected	0.050		mg/kg	63	7439-97-6	

Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 11/09/23 00:08, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	330		ug/kg	10	83-32-9	
Acenaphthylene	Not detected	330		ug/kg	10	208-96-8	
Anthracene	Not detected	330		ug/kg	10	120-12-7	
Benzo(a)anthracene	Not detected	330		ug/kg	10	56-55-3	
Benzo(a)pyrene	Not detected	330		ug/kg	10	50-32-8	
Benzo(b)fluoranthene	Not detected	330		ug/kg	10	205-99-2	
Benzo(ghi)perylene	Not detected	330		ug/kg	10	191-24-2	
Benzo(k)fluoranthene	Not detected	330		ug/kg	10	207-08-9	
Chrysene	Not detected	330		ug/kg	10	218-01-9	
Dibenzo(ah)anthracene	Not detected	330		ug/kg	10	53-70-3	
Fluoranthene	Not detected	330		ug/kg	10	206-44-0	

Lab Sample ID: S55327.08 (continued)
Sample Tag: SB-04 (9-10) I

Polynuclear Aromatics, Method: SW8270D, Run Date: 11/09/23 00:08, Analyst: PL (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Fluorene	Not detected	330		ug/kg	10	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	330		ug/kg	10	193-39-5	
2-Methylnaphthalene	Not detected	330		ug/kg	10	91-57-6	
Naphthalene	Not detected	330		ug/kg	10	91-20-3	
Phenanthrene	Not detected	330		ug/kg	10	85-01-8	
Pyrene	Not detected	330		ug/kg	10	129-00-0	
1-Methylnaphthalene	Not detected	330		ug/kg	10	90-12-0	

Organics - Volatiles

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 11/07/23 19:22, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	200		ug/kg	52.3	60-29-7	
Acetone	Not detected	1,000		ug/kg	52.3	67-64-1	
Methyl iodide	Not detected	100		ug/kg	52.3	74-88-4	
Carbon disulfide	Not detected	300		ug/kg	52.3	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	200		ug/kg	52.3	1634-04-4	
Acrylonitrile	Not detected	100		ug/kg	52.3	107-13-1	
2-Butanone (MEK)	Not detected	780		ug/kg	52.3	78-93-3	
Dichlorodifluoromethane	Not detected	300		ug/kg	52.3	75-71-8	
Chloromethane	Not detected	300		ug/kg	52.3	74-87-3	
Vinyl chloride	Not detected	50		ug/kg	52.3	75-01-4	
Bromomethane	Not detected	200		ug/kg	52.3	74-83-9	
Chloroethane	Not detected	300		ug/kg	52.3	75-00-3	
Trichlorofluoromethane	Not detected	100		ug/kg	52.3	75-69-4	
1,1-Dichloroethene	Not detected	50		ug/kg	52.3	75-35-4	
Methylene chloride	Not detected	100		ug/kg	52.3	75-09-2	
trans-1,2-Dichloroethene	Not detected	50		ug/kg	52.3	156-60-5	
1,1-Dichloroethane	Not detected	50		ug/kg	52.3	75-34-3	
cis-1,2-Dichloroethene	Not detected	50		ug/kg	52.3	156-59-2	
Tetrahydrofuran*	Not detected	1,000		ug/kg	52.3	109-99-9	
Chloroform	Not detected	50		ug/kg	52.3	67-66-3	
Bromochloromethane	Not detected	100		ug/kg	52.3	74-97-5	
1,1,1-Trichloroethane	Not detected	50		ug/kg	52.3	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	3,000		ug/kg	52.3	108-10-1	
2-Hexanone	Not detected	3,000		ug/kg	52.3	591-78-6	
Carbon tetrachloride	Not detected	50		ug/kg	52.3	56-23-5	
Benzene	Not detected	50		ug/kg	52.3	71-43-2	
1,2-Dichloroethane	Not detected	50		ug/kg	52.3	107-06-2	
Trichloroethene	Not detected	50		ug/kg	52.3	79-01-6	
1,2-Dichloropropane	Not detected	50		ug/kg	52.3	78-87-5	
Bromodichloromethane	Not detected	100		ug/kg	52.3	75-27-4	
Dibromomethane	Not detected	300		ug/kg	52.3	74-95-3	
cis-1,3-Dichloropropene	Not detected	50		ug/kg	52.3	10061-01-5	
Toluene	Not detected	50		ug/kg	52.3	108-88-3	
trans-1,3-Dichloropropene	Not detected	50		ug/kg	52.3	10061-02-6	
1,1,2-Trichloroethane	Not detected	50		ug/kg	52.3	79-00-5	
Tetrachloroethene	Not detected	50		ug/kg	52.3	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	50		ug/kg	52.3	110-57-6	
Dibromochloromethane	Not detected	100		ug/kg	52.3	124-48-1	
1,2-Dibromoethane	Not detected	20		ug/kg	52.3	106-93-4	M

M-Result reported to MDL not RDL

Lab Sample ID: S55327.08 (continued)
Sample Tag: SB-04 (9-10) I

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 11/07/23 19:22, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chlorobenzene	Not detected	50		ug/kg	52.3	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	100		ug/kg	52.3	630-20-6	
Ethylbenzene	Not detected	50		ug/kg	52.3	100-41-4	
p,m-Xylene	Not detected	100		ug/kg	52.3		
o-Xylene	Not detected	50		ug/kg	52.3	95-47-6	
Styrene	Not detected	50		ug/kg	52.3	100-42-5	
Isopropylbenzene	Not detected	300		ug/kg	52.3	98-82-8	
Bromoform	Not detected	100		ug/kg	52.3	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	50		ug/kg	52.3	79-34-5	
1,2,3-Trichloropropane	Not detected	100		ug/kg	52.3	96-18-4	
n-Propylbenzene	Not detected	50		ug/kg	52.3	103-65-1	
Bromobenzene	Not detected	100		ug/kg	52.3	108-86-1	
1,3,5-Trimethylbenzene	Not detected	50		ug/kg	52.3	108-67-8	
tert-Butylbenzene	Not detected	50		ug/kg	52.3	98-06-6	
1,2,4-Trimethylbenzene	Not detected	50		ug/kg	52.3	95-63-6	
sec-Butylbenzene	Not detected	50		ug/kg	52.3	135-98-8	
p-Isopropyltoluene	Not detected	100		ug/kg	52.3	99-87-6	
1,3-Dichlorobenzene	Not detected	100		ug/kg	52.3	541-73-1	
1,4-Dichlorobenzene	Not detected	100		ug/kg	52.3	106-46-7	
1,2-Dichlorobenzene	Not detected	100		ug/kg	52.3	95-50-1	
1,2,3-Trimethylbenzene	Not detected	50		ug/kg	52.3	526-73-8	
n-Butylbenzene	Not detected	50		ug/kg	52.3	104-51-8	
Hexachloroethane	Not detected	300		ug/kg	52.3	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	300		ug/kg	52.3	96-12-8	
1,2,4-Trichlorobenzene	Not detected	350		ug/kg	52.3	120-82-1	
1,2,3-Trichlorobenzene	Not detected	350		ug/kg	52.3	87-61-6	
Naphthalene	Not detected	300		ug/kg	52.3	91-20-3	
2-Methylnaphthalene	Not detected	100		ug/kg	52.3	91-57-6	

Lab Sample ID: S55327.09
Sample Tag: SB-06 (3-4) I
Collected Date/Time: 10/31/2023 09:20
Matrix: Soil
COC Reference: 2023-10-30-01

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	3.8	IR
1	40ml Glass	MeOH	Yes	3.8	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Metal Digestion	Completed	SW3050B	11/07/23 12:00	JRH	
PNA Extraction*	Completed	SW3546	11/08/23 13:00	JWR	
Sample wt. (g) / Methanol (ml)*	10.812/10	SW5035A	11/03/23 13:42	NDK	
Mercury Digestion	Completed	SW7471B	11/07/23 10:50	CTV	

Inorganics

Method: SM2540B, Run Date: 11/06/23 13:12, Analyst: MAM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	92	1		%	1		

Metals

Method: SW6020A, Run Date: 11/07/23 15:06, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Arsenic	0.69	0.20		mg/kg	229	7440-38-2	
Barium	81.8	1.0		mg/kg	229	7440-39-3	
Cadmium	Not detected	0.20		mg/kg	229	7440-43-9	
Chromium	2.06	0.50		mg/kg	229	7440-47-3	
Copper	3.50	0.50		mg/kg	229	7440-50-8	
Lead	6.47	0.30		mg/kg	229	7439-92-1	
Selenium	Not detected	0.40		mg/kg	229	7782-49-2	
Silver	Not detected	0.20		mg/kg	229	7440-22-4	
Zinc	24.3	0.50		mg/kg	229	7440-66-6	

Method: SW7471B, Run Date: 11/07/23 15:12, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury	0.174	0.050		mg/kg	59	7439-97-6	

Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 11/08/23 21:52, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	330		ug/kg	10	83-32-9	
Acenaphthylene	Not detected	330		ug/kg	10	208-96-8	
Anthracene	Not detected	330		ug/kg	10	120-12-7	
Benzo(a)anthracene	Not detected	330		ug/kg	10	56-55-3	
Benzo(a)pyrene	Not detected	330		ug/kg	10	50-32-8	
Benzo(b)fluoranthene	Not detected	330		ug/kg	10	205-99-2	
Benzo(ghi)perylene	Not detected	330		ug/kg	10	191-24-2	
Benzo(k)fluoranthene	Not detected	330		ug/kg	10	207-08-9	
Chrysene	Not detected	330		ug/kg	10	218-01-9	
Dibenzo(ah)anthracene	Not detected	330		ug/kg	10	53-70-3	
Fluoranthene	Not detected	330		ug/kg	10	206-44-0	

Lab Sample ID: S55327.09 (continued)
Sample Tag: SB-06 (3-4) I

Polynuclear Aromatics, Method: SW8270D, Run Date: 11/08/23 21:52, Analyst: PL (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Fluorene	Not detected	330		ug/kg	10	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	330		ug/kg	10	193-39-5	
2-Methylnaphthalene	540	330		ug/kg	10	91-57-6	
Naphthalene	Not detected	330		ug/kg	10	91-20-3	
Phenanthrene	Not detected	330		ug/kg	10	85-01-8	
Pyrene	Not detected	330		ug/kg	10	129-00-0	
1-Methylnaphthalene	430	330		ug/kg	10	90-12-0	

Organics - Volatiles

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 11/07/23 19:45, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	200		ug/kg	54.6	60-29-7	
Acetone	Not detected	1,000		ug/kg	54.6	67-64-1	
Methyl iodide	Not detected	100		ug/kg	54.6	74-88-4	
Carbon disulfide	Not detected	300		ug/kg	54.6	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	200		ug/kg	54.6	1634-04-4	
Acrylonitrile	Not detected	100		ug/kg	54.6	107-13-1	
2-Butanone (MEK)	Not detected	820		ug/kg	54.6	78-93-3	
Dichlorodifluoromethane	Not detected	300		ug/kg	54.6	75-71-8	
Chloromethane	Not detected	300		ug/kg	54.6	74-87-3	
Vinyl chloride	Not detected	50		ug/kg	54.6	75-01-4	
Bromomethane	Not detected	200		ug/kg	54.6	74-83-9	
Chloroethane	Not detected	300		ug/kg	54.6	75-00-3	
Trichlorofluoromethane	Not detected	100		ug/kg	54.6	75-69-4	
1,1-Dichloroethene	Not detected	50		ug/kg	54.6	75-35-4	
Methylene chloride	Not detected	100		ug/kg	54.6	75-09-2	
trans-1,2-Dichloroethene	Not detected	50		ug/kg	54.6	156-60-5	
1,1-Dichloroethane	Not detected	50		ug/kg	54.6	75-34-3	
cis-1,2-Dichloroethene	Not detected	50		ug/kg	54.6	156-59-2	
Tetrahydrofuran*	Not detected	1,000		ug/kg	54.6	109-99-9	
Chloroform	Not detected	50		ug/kg	54.6	67-66-3	
Bromochloromethane	Not detected	100		ug/kg	54.6	74-97-5	
1,1,1-Trichloroethane	Not detected	50		ug/kg	54.6	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	3,000		ug/kg	54.6	108-10-1	
2-Hexanone	Not detected	3,000		ug/kg	54.6	591-78-6	
Carbon tetrachloride	Not detected	50		ug/kg	54.6	56-23-5	
Benzene	Not detected	50		ug/kg	54.6	71-43-2	
1,2-Dichloroethane	Not detected	50		ug/kg	54.6	107-06-2	
Trichloroethene	Not detected	50		ug/kg	54.6	79-01-6	
1,2-Dichloropropane	Not detected	50		ug/kg	54.6	78-87-5	
Bromodichloromethane	Not detected	100		ug/kg	54.6	75-27-4	
Dibromomethane	Not detected	300		ug/kg	54.6	74-95-3	
cis-1,3-Dichloropropene	Not detected	50		ug/kg	54.6	10061-01-5	
Toluene	Not detected	50		ug/kg	54.6	108-88-3	
trans-1,3-Dichloropropene	Not detected	50		ug/kg	54.6	10061-02-6	
1,1,2-Trichloroethane	Not detected	50		ug/kg	54.6	79-00-5	
Tetrachloroethene	Not detected	50		ug/kg	54.6	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	50		ug/kg	54.6	110-57-6	
Dibromochloromethane	Not detected	100		ug/kg	54.6	124-48-1	
1,2-Dibromoethane	Not detected	20		ug/kg	54.6	106-93-4	M

M-Result reported to MDL not RDL

Lab Sample ID: S55327.09 (continued)
Sample Tag: SB-06 (3-4) I

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 11/07/23 19:45, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chlorobenzene	Not detected	50		ug/kg	54.6	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	100		ug/kg	54.6	630-20-6	
Ethylbenzene	Not detected	50		ug/kg	54.6	100-41-4	
p,m-Xylene	Not detected	100		ug/kg	54.6		
o-Xylene	Not detected	50		ug/kg	54.6	95-47-6	
Styrene	Not detected	50		ug/kg	54.6	100-42-5	
Isopropylbenzene	Not detected	300		ug/kg	54.6	98-82-8	
Bromoform	Not detected	100		ug/kg	54.6	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	50		ug/kg	54.6	79-34-5	
1,2,3-Trichloropropane	Not detected	100		ug/kg	54.6	96-18-4	
n-Propylbenzene	Not detected	50		ug/kg	54.6	103-65-1	
Bromobenzene	Not detected	100		ug/kg	54.6	108-86-1	
1,3,5-Trimethylbenzene	Not detected	50		ug/kg	54.6	108-67-8	
tert-Butylbenzene	Not detected	50		ug/kg	54.6	98-06-6	
1,2,4-Trimethylbenzene	Not detected	50		ug/kg	54.6	95-63-6	
sec-Butylbenzene	Not detected	50		ug/kg	54.6	135-98-8	
p-Isopropyltoluene	Not detected	100		ug/kg	54.6	99-87-6	
1,3-Dichlorobenzene	Not detected	100		ug/kg	54.6	541-73-1	
1,4-Dichlorobenzene	Not detected	100		ug/kg	54.6	106-46-7	
1,2-Dichlorobenzene	Not detected	100		ug/kg	54.6	95-50-1	
1,2,3-Trimethylbenzene	Not detected	50		ug/kg	54.6	526-73-8	
n-Butylbenzene	Not detected	50		ug/kg	54.6	104-51-8	
Hexachloroethane	Not detected	300		ug/kg	54.6	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	300		ug/kg	54.6	96-12-8	
1,2,4-Trichlorobenzene	Not detected	360		ug/kg	54.6	120-82-1	
1,2,3-Trichlorobenzene	Not detected	360		ug/kg	54.6	87-61-6	
Naphthalene	Not detected	300		ug/kg	54.6	91-20-3	
2-Methylnaphthalene	100	100		ug/kg	54.6	91-57-6	

Lab Sample ID: S55327.10
Sample Tag: SB-07 (4-5) I
Collected Date/Time: 10/31/2023 11:30
Matrix: Soil
COC Reference: 2023-10-30-01

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	3.8	IR
1	40ml Glass	MeOH	Yes	3.8	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Metal Digestion	Completed	SW3050B	11/07/23 12:00	JRH	
PNA Extraction*	Completed	SW3546	11/08/23 13:00	JWR	
Sample wt. (g) / Methanol (ml)*	10.516/10	SW5035A	11/03/23 13:42	NDK	
Mercury Digestion	Completed	SW7471B	11/07/23 10:50	CTV	

Inorganics

Method: SM2540B, Run Date: 11/06/23 13:12, Analyst: MAM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	97	1		%	1		

Metals

Method: SW6020A, Run Date: 11/07/23 15:08, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Arsenic	0.88	0.20		mg/kg	224	7440-38-2	
Barium	9.38	1.0		mg/kg	224	7440-39-3	
Cadmium	Not detected	0.20		mg/kg	224	7440-43-9	
Chromium	7.17	0.50		mg/kg	224	7440-47-3	
Copper	21.3	0.50		mg/kg	224	7440-50-8	
Lead	6.38	0.30		mg/kg	224	7439-92-1	
Selenium	Not detected	0.40		mg/kg	224	7782-49-2	
Silver	Not detected	0.20		mg/kg	224	7440-22-4	
Zinc	10.1	0.50		mg/kg	224	7440-66-6	

Method: SW7471B, Run Date: 11/07/23 15:15, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury	Not detected	0.050		mg/kg	62	7439-97-6	

Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 11/08/23 22:09, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	330		ug/kg	10	83-32-9	
Acenaphthylene	Not detected	330		ug/kg	10	208-96-8	
Anthracene	Not detected	330		ug/kg	10	120-12-7	
Benzo(a)anthracene	Not detected	330		ug/kg	10	56-55-3	
Benzo(a)pyrene	Not detected	330		ug/kg	10	50-32-8	
Benzo(b)fluoranthene	Not detected	330		ug/kg	10	205-99-2	
Benzo(ghi)perylene	Not detected	330		ug/kg	10	191-24-2	
Benzo(k)fluoranthene	Not detected	330		ug/kg	10	207-08-9	
Chrysene	Not detected	330		ug/kg	10	218-01-9	
Dibenzo(ah)anthracene	Not detected	330		ug/kg	10	53-70-3	
Fluoranthene	Not detected	330		ug/kg	10	206-44-0	

Lab Sample ID: S55327.10 (continued)
Sample Tag: SB-07 (4-5) I

Polynuclear Aromatics, Method: SW8270D, Run Date: 11/08/23 22:09, Analyst: PL (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Fluorene	Not detected	330		ug/kg	10	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	330		ug/kg	10	193-39-5	
2-Methylnaphthalene	Not detected	330		ug/kg	10	91-57-6	
Naphthalene	Not detected	330		ug/kg	10	91-20-3	
Phenanthrene	Not detected	330		ug/kg	10	85-01-8	
Pyrene	Not detected	330		ug/kg	10	129-00-0	
1-Methylnaphthalene	Not detected	330		ug/kg	10	90-12-0	

Organics - Volatiles

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 11/07/23 20:09, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	200		ug/kg	50.6	60-29-7	
Acetone	Not detected	1,000		ug/kg	50.6	67-64-1	
Methyl iodide	Not detected	100		ug/kg	50.6	74-88-4	
Carbon disulfide	Not detected	300		ug/kg	50.6	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	200		ug/kg	50.6	1634-04-4	
Acrylonitrile	Not detected	100		ug/kg	50.6	107-13-1	
2-Butanone (MEK)	Not detected	760		ug/kg	50.6	78-93-3	
Dichlorodifluoromethane	Not detected	300		ug/kg	50.6	75-71-8	
Chloromethane	Not detected	300		ug/kg	50.6	74-87-3	
Vinyl chloride	Not detected	50		ug/kg	50.6	75-01-4	
Bromomethane	Not detected	200		ug/kg	50.6	74-83-9	
Chloroethane	Not detected	300		ug/kg	50.6	75-00-3	
Trichlorofluoromethane	Not detected	100		ug/kg	50.6	75-69-4	
1,1-Dichloroethene	Not detected	50		ug/kg	50.6	75-35-4	
Methylene chloride	Not detected	100		ug/kg	50.6	75-09-2	
trans-1,2-Dichloroethene	Not detected	50		ug/kg	50.6	156-60-5	
1,1-Dichloroethane	Not detected	50		ug/kg	50.6	75-34-3	
cis-1,2-Dichloroethene	Not detected	50		ug/kg	50.6	156-59-2	
Tetrahydrofuran*	Not detected	1,000		ug/kg	50.6	109-99-9	
Chloroform	Not detected	50		ug/kg	50.6	67-66-3	
Bromochloromethane	Not detected	100		ug/kg	50.6	74-97-5	
1,1,1-Trichloroethane	Not detected	50		ug/kg	50.6	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	3,000		ug/kg	50.6	108-10-1	
2-Hexanone	Not detected	3,000		ug/kg	50.6	591-78-6	
Carbon tetrachloride	Not detected	50		ug/kg	50.6	56-23-5	
Benzene	Not detected	50		ug/kg	50.6	71-43-2	
1,2-Dichloroethane	Not detected	50		ug/kg	50.6	107-06-2	
Trichloroethene	Not detected	50		ug/kg	50.6	79-01-6	
1,2-Dichloropropane	Not detected	50		ug/kg	50.6	78-87-5	
Bromodichloromethane	Not detected	100		ug/kg	50.6	75-27-4	
Dibromomethane	Not detected	300		ug/kg	50.6	74-95-3	
cis-1,3-Dichloropropene	Not detected	50		ug/kg	50.6	10061-01-5	
Toluene	Not detected	50		ug/kg	50.6	108-88-3	
trans-1,3-Dichloropropene	Not detected	50		ug/kg	50.6	10061-02-6	
1,1,2-Trichloroethane	Not detected	50		ug/kg	50.6	79-00-5	
Tetrachloroethene	Not detected	50		ug/kg	50.6	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	50		ug/kg	50.6	110-57-6	
Dibromochloromethane	Not detected	100		ug/kg	50.6	124-48-1	
1,2-Dibromoethane	Not detected	20		ug/kg	50.6	106-93-4	M

M-Result reported to MDL not RDL

Lab Sample ID: S55327.10 (continued)
Sample Tag: SB-07 (4-5) I

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 11/07/23 20:09, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chlorobenzene	Not detected	50		ug/kg	50.6	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	100		ug/kg	50.6	630-20-6	
Ethylbenzene	Not detected	50		ug/kg	50.6	100-41-4	
p,m-Xylene	Not detected	100		ug/kg	50.6		
o-Xylene	Not detected	50		ug/kg	50.6	95-47-6	
Styrene	Not detected	50		ug/kg	50.6	100-42-5	
Isopropylbenzene	Not detected	300		ug/kg	50.6	98-82-8	
Bromoform	Not detected	100		ug/kg	50.6	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	50		ug/kg	50.6	79-34-5	
1,2,3-Trichloropropane	Not detected	100		ug/kg	50.6	96-18-4	
n-Propylbenzene	Not detected	50		ug/kg	50.6	103-65-1	
Bromobenzene	Not detected	100		ug/kg	50.6	108-86-1	
1,3,5-Trimethylbenzene	Not detected	50		ug/kg	50.6	108-67-8	
tert-Butylbenzene	Not detected	50		ug/kg	50.6	98-06-6	
1,2,4-Trimethylbenzene	Not detected	50		ug/kg	50.6	95-63-6	
sec-Butylbenzene	Not detected	50		ug/kg	50.6	135-98-8	
p-Isopropyltoluene	Not detected	100		ug/kg	50.6	99-87-6	
1,3-Dichlorobenzene	Not detected	100		ug/kg	50.6	541-73-1	
1,4-Dichlorobenzene	Not detected	100		ug/kg	50.6	106-46-7	
1,2-Dichlorobenzene	Not detected	100		ug/kg	50.6	95-50-1	
1,2,3-Trimethylbenzene	Not detected	50		ug/kg	50.6	526-73-8	
n-Butylbenzene	Not detected	50		ug/kg	50.6	104-51-8	
Hexachloroethane	Not detected	300		ug/kg	50.6	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	300		ug/kg	50.6	96-12-8	
1,2,4-Trichlorobenzene	Not detected	330		ug/kg	50.6	120-82-1	
1,2,3-Trichlorobenzene	Not detected	330		ug/kg	50.6	87-61-6	
Naphthalene	Not detected	300		ug/kg	50.6	91-20-3	
2-Methylnaphthalene	Not detected	100		ug/kg	50.6	91-57-6	

Lab Sample ID: S55327.11
Sample Tag: SB-08 (4-5) I
Collected Date/Time: 10/31/2023 10:45
Matrix: Soil
COC Reference: 2023-10-30-01

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	3.8	IR
1	40ml Glass	MeOH	Yes	3.8	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Metal Digestion	Completed	SW3050B	11/07/23 12:00	JRH	
PNA Extraction*	Completed	SW3546	11/08/23 13:00	JWR	
Sample wt. (g) / Methanol (ml)*	9.850/10	SW5035A	11/03/23 13:42	NDK	
Mercury Digestion	Completed	SW7471B	11/07/23 10:50	CTV	

Inorganics

Method: SM2540B, Run Date: 11/06/23 13:12, Analyst: MAM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	98	1		%	1		

Metals

Method: SW6020A, Run Date: 11/07/23 15:10, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Arsenic	0.41	0.20		mg/kg	216	7440-38-2	
Barium	5.06	1.0		mg/kg	216	7440-39-3	
Cadmium	Not detected	0.20		mg/kg	216	7440-43-9	
Chromium	2.01	0.50		mg/kg	216	7440-47-3	
Copper	0.89	0.50		mg/kg	216	7440-50-8	
Lead	1.27	0.30		mg/kg	216	7439-92-1	
Selenium	Not detected	0.40		mg/kg	216	7782-49-2	
Silver	Not detected	0.20		mg/kg	216	7440-22-4	
Zinc	2.78	0.50		mg/kg	216	7440-66-6	

Method: SW7471B, Run Date: 11/07/23 15:18, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury	Not detected	0.050		mg/kg	55	7439-97-6	

Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 11/08/23 22:27, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	330		ug/kg	10	83-32-9	
Acenaphthylene	Not detected	330		ug/kg	10	208-96-8	
Anthracene	Not detected	330		ug/kg	10	120-12-7	
Benzo(a)anthracene	Not detected	330		ug/kg	10	56-55-3	
Benzo(a)pyrene	Not detected	330		ug/kg	10	50-32-8	
Benzo(b)fluoranthene	Not detected	330		ug/kg	10	205-99-2	
Benzo(ghi)perylene	Not detected	330		ug/kg	10	191-24-2	
Benzo(k)fluoranthene	Not detected	330		ug/kg	10	207-08-9	
Chrysene	Not detected	330		ug/kg	10	218-01-9	
Dibenzo(ah)anthracene	Not detected	330		ug/kg	10	53-70-3	
Fluoranthene	Not detected	330		ug/kg	10	206-44-0	

Lab Sample ID: S55327.11 (continued)
Sample Tag: SB-08 (4-5) I

Polynuclear Aromatics, Method: SW8270D, Run Date: 11/08/23 22:27, Analyst: PL (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Fluorene	Not detected	330		ug/kg	10	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	330		ug/kg	10	193-39-5	
2-Methylnaphthalene	Not detected	330		ug/kg	10	91-57-6	
Naphthalene	Not detected	330		ug/kg	10	91-20-3	
Phenanthrene	Not detected	330		ug/kg	10	85-01-8	
Pyrene	Not detected	330		ug/kg	10	129-00-0	
1-Methylnaphthalene	Not detected	330		ug/kg	10	90-12-0	

Organics - Volatiles

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 11/07/23 20:34, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	200		ug/kg	52.8	60-29-7	
Acetone	Not detected	1,000		ug/kg	52.8	67-64-1	
Methyl iodide	Not detected	100		ug/kg	52.8	74-88-4	
Carbon disulfide	Not detected	300		ug/kg	52.8	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	200		ug/kg	52.8	1634-04-4	
Acrylonitrile	Not detected	100		ug/kg	52.8	107-13-1	
2-Butanone (MEK)	Not detected	790		ug/kg	52.8	78-93-3	
Dichlorodifluoromethane	Not detected	300		ug/kg	52.8	75-71-8	
Chloromethane	Not detected	300		ug/kg	52.8	74-87-3	
Vinyl chloride	Not detected	50		ug/kg	52.8	75-01-4	
Bromomethane	Not detected	200		ug/kg	52.8	74-83-9	
Chloroethane	Not detected	300		ug/kg	52.8	75-00-3	
Trichlorofluoromethane	Not detected	100		ug/kg	52.8	75-69-4	
1,1-Dichloroethene	Not detected	50		ug/kg	52.8	75-35-4	
Methylene chloride	Not detected	100		ug/kg	52.8	75-09-2	
trans-1,2-Dichloroethene	Not detected	50		ug/kg	52.8	156-60-5	
1,1-Dichloroethane	Not detected	50		ug/kg	52.8	75-34-3	
cis-1,2-Dichloroethene	Not detected	50		ug/kg	52.8	156-59-2	
Tetrahydrofuran*	Not detected	1,000		ug/kg	52.8	109-99-9	
Chloroform	Not detected	50		ug/kg	52.8	67-66-3	
Bromochloromethane	Not detected	100		ug/kg	52.8	74-97-5	
1,1,1-Trichloroethane	Not detected	50		ug/kg	52.8	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	3,000		ug/kg	52.8	108-10-1	
2-Hexanone	Not detected	3,000		ug/kg	52.8	591-78-6	
Carbon tetrachloride	Not detected	50		ug/kg	52.8	56-23-5	
Benzene	Not detected	50		ug/kg	52.8	71-43-2	
1,2-Dichloroethane	Not detected	50		ug/kg	52.8	107-06-2	
Trichloroethene	Not detected	50		ug/kg	52.8	79-01-6	
1,2-Dichloropropane	Not detected	50		ug/kg	52.8	78-87-5	
Bromodichloromethane	Not detected	100		ug/kg	52.8	75-27-4	
Dibromomethane	Not detected	300		ug/kg	52.8	74-95-3	
cis-1,3-Dichloropropene	Not detected	50		ug/kg	52.8	10061-01-5	
Toluene	Not detected	50		ug/kg	52.8	108-88-3	
trans-1,3-Dichloropropene	Not detected	50		ug/kg	52.8	10061-02-6	
1,1,2-Trichloroethane	Not detected	50		ug/kg	52.8	79-00-5	
Tetrachloroethene	Not detected	50		ug/kg	52.8	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	50		ug/kg	52.8	110-57-6	
Dibromochloromethane	Not detected	100		ug/kg	52.8	124-48-1	
1,2-Dibromoethane	Not detected	20		ug/kg	52.8	106-93-4	M

M-Result reported to MDL not RDL

Lab Sample ID: S55327.11 (continued)
Sample Tag: SB-08 (4-5) I

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 11/07/23 20:34, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chlorobenzene	Not detected	50		ug/kg	52.8	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	100		ug/kg	52.8	630-20-6	
Ethylbenzene	Not detected	50		ug/kg	52.8	100-41-4	
p,m-Xylene	Not detected	100		ug/kg	52.8		
o-Xylene	Not detected	50		ug/kg	52.8	95-47-6	
Styrene	Not detected	50		ug/kg	52.8	100-42-5	
Isopropylbenzene	Not detected	300		ug/kg	52.8	98-82-8	
Bromoform	Not detected	100		ug/kg	52.8	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	50		ug/kg	52.8	79-34-5	
1,2,3-Trichloropropane	Not detected	100		ug/kg	52.8	96-18-4	
n-Propylbenzene	Not detected	50		ug/kg	52.8	103-65-1	
Bromobenzene	Not detected	100		ug/kg	52.8	108-86-1	
1,3,5-Trimethylbenzene	Not detected	50		ug/kg	52.8	108-67-8	
tert-Butylbenzene	Not detected	50		ug/kg	52.8	98-06-6	
1,2,4-Trimethylbenzene	Not detected	50		ug/kg	52.8	95-63-6	
sec-Butylbenzene	Not detected	50		ug/kg	52.8	135-98-8	
p-Isopropyltoluene	Not detected	100		ug/kg	52.8	99-87-6	
1,3-Dichlorobenzene	Not detected	100		ug/kg	52.8	541-73-1	
1,4-Dichlorobenzene	Not detected	100		ug/kg	52.8	106-46-7	
1,2-Dichlorobenzene	Not detected	100		ug/kg	52.8	95-50-1	
1,2,3-Trimethylbenzene	Not detected	50		ug/kg	52.8	526-73-8	
n-Butylbenzene	Not detected	50		ug/kg	52.8	104-51-8	
Hexachloroethane	Not detected	300		ug/kg	52.8	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	300		ug/kg	52.8	96-12-8	
1,2,4-Trichlorobenzene	Not detected	350		ug/kg	52.8	120-82-1	
1,2,3-Trichlorobenzene	Not detected	350		ug/kg	52.8	87-61-6	
Naphthalene	Not detected	300		ug/kg	52.8	91-20-3	
2-Methylnaphthalene	Not detected	100		ug/kg	52.8	91-57-6	

Lab Sample ID: S55327.12
Sample Tag: SB-09 (4-5) I
Collected Date/Time: 10/31/2023 12:15
Matrix: Soil
COC Reference: 2023-10-30-01

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	3.8	IR
1	40ml Glass	MeOH	Yes	3.8	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Metal Digestion	Completed	SW3050B	11/07/23 12:00	JRH	
PNA Extraction*	Completed	SW3546	11/08/23 13:00	JWR	
Sample wt. (g) / Methanol (ml)*	8.915/10	SW5035A	11/03/23 13:42	NDK	
Mercury Digestion	Completed	SW7471B	11/07/23 10:50	CTV	

Inorganics

Method: SM2540B, Run Date: 11/06/23 13:12, Analyst: MAM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	98	1		%	1		

Metals

Method: SW6020A, Run Date: 11/07/23 15:12, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Arsenic	1.77	0.20		mg/kg	226	7440-38-2	
Barium	37.6	1.0		mg/kg	226	7440-39-3	
Cadmium	Not detected	0.20		mg/kg	226	7440-43-9	
Chromium	3.11	0.50		mg/kg	226	7440-47-3	
Copper	2.93	0.50		mg/kg	226	7440-50-8	
Lead	9.89	0.30		mg/kg	226	7439-92-1	
Selenium	Not detected	0.40		mg/kg	226	7782-49-2	
Silver	Not detected	0.20		mg/kg	226	7440-22-4	
Zinc	14.1	0.50		mg/kg	226	7440-66-6	

Method: SW7471B, Run Date: 11/07/23 15:28, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury	0.116	0.050		mg/kg	57	7439-97-6	

Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 11/08/23 22:44, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	330		ug/kg	10	83-32-9	
Acenaphthylene	Not detected	330		ug/kg	10	208-96-8	
Anthracene	Not detected	330		ug/kg	10	120-12-7	
Benzo(a)anthracene	Not detected	330		ug/kg	10	56-55-3	
Benzo(a)pyrene	Not detected	330		ug/kg	10	50-32-8	
Benzo(b)fluoranthene	Not detected	330		ug/kg	10	205-99-2	
Benzo(ghi)perylene	Not detected	330		ug/kg	10	191-24-2	
Benzo(k)fluoranthene	Not detected	330		ug/kg	10	207-08-9	
Chrysene	Not detected	330		ug/kg	10	218-01-9	
Dibenzo(ah)anthracene	Not detected	330		ug/kg	10	53-70-3	
Fluoranthene	Not detected	330		ug/kg	10	206-44-0	

Lab Sample ID: S55327.12 (continued)
Sample Tag: SB-09 (4-5) I

Polynuclear Aromatics, Method: SW8270D, Run Date: 11/08/23 22:44, Analyst: PL (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Fluorene	Not detected	330		ug/kg	10	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	330		ug/kg	10	193-39-5	
2-Methylnaphthalene	Not detected	330		ug/kg	10	91-57-6	
Naphthalene	Not detected	330		ug/kg	10	91-20-3	
Phenanthrene	Not detected	330		ug/kg	10	85-01-8	
Pyrene	Not detected	330		ug/kg	10	129-00-0	
1-Methylnaphthalene	Not detected	330		ug/kg	10	90-12-0	

Organics - Volatiles

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 11/09/23 15:11, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	200		ug/kg	58.3	60-29-7	
Acetone	Not detected	1,000		ug/kg	58.3	67-64-1	
Methyl iodide	Not detected	100		ug/kg	58.3	74-88-4	
Carbon disulfide	Not detected	300		ug/kg	58.3	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	200		ug/kg	58.3	1634-04-4	
Acrylonitrile	Not detected	100		ug/kg	58.3	107-13-1	
2-Butanone (MEK)	Not detected	870		ug/kg	58.3	78-93-3	
Dichlorodifluoromethane	Not detected	300		ug/kg	58.3	75-71-8	
Chloromethane	Not detected	300		ug/kg	58.3	74-87-3	
Vinyl chloride	Not detected	60		ug/kg	58.3	75-01-4	
Bromomethane	Not detected	200		ug/kg	58.3	74-83-9	
Chloroethane	Not detected	300		ug/kg	58.3	75-00-3	
Trichlorofluoromethane	Not detected	100		ug/kg	58.3	75-69-4	
1,1-Dichloroethene	Not detected	60		ug/kg	58.3	75-35-4	
Methylene chloride	Not detected	100		ug/kg	58.3	75-09-2	
trans-1,2-Dichloroethene	Not detected	60		ug/kg	58.3	156-60-5	
1,1-Dichloroethane	Not detected	60		ug/kg	58.3	75-34-3	
cis-1,2-Dichloroethene	Not detected	60		ug/kg	58.3	156-59-2	
Tetrahydrofuran*	Not detected	1,000		ug/kg	58.3	109-99-9	
Chloroform	Not detected	60		ug/kg	58.3	67-66-3	
Bromochloromethane	Not detected	100		ug/kg	58.3	74-97-5	
1,1,1-Trichloroethane	Not detected	60		ug/kg	58.3	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	3,000		ug/kg	58.3	108-10-1	
2-Hexanone	Not detected	3,000		ug/kg	58.3	591-78-6	
Carbon tetrachloride	Not detected	60		ug/kg	58.3	56-23-5	
Benzene	Not detected	60		ug/kg	58.3	71-43-2	
1,2-Dichloroethane	Not detected	60		ug/kg	58.3	107-06-2	
Trichloroethene	Not detected	60		ug/kg	58.3	79-01-6	
1,2-Dichloropropane	Not detected	60		ug/kg	58.3	78-87-5	
Bromodichloromethane	Not detected	100		ug/kg	58.3	75-27-4	
Dibromomethane	Not detected	300		ug/kg	58.3	74-95-3	
cis-1,3-Dichloropropene	Not detected	60		ug/kg	58.3	10061-01-5	
Toluene	Not detected	60		ug/kg	58.3	108-88-3	
trans-1,3-Dichloropropene	Not detected	60		ug/kg	58.3	10061-02-6	
1,1,2-Trichloroethane	Not detected	60		ug/kg	58.3	79-00-5	
Tetrachloroethene	Not detected	60		ug/kg	58.3	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	60		ug/kg	58.3	110-57-6	
Dibromochloromethane	Not detected	100		ug/kg	58.3	124-48-1	
1,2-Dibromoethane	Not detected	20		ug/kg	58.3	106-93-4	M

M-Result reported to MDL not RDL

Lab Sample ID: S55327.12 (continued)
Sample Tag: SB-09 (4-5) I

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 11/09/23 15:11, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chlorobenzene	Not detected	60		ug/kg	58.3	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	100		ug/kg	58.3	630-20-6	
Ethylbenzene	Not detected	60		ug/kg	58.3	100-41-4	
p,m-Xylene	Not detected	100		ug/kg	58.3		
o-Xylene	Not detected	60		ug/kg	58.3	95-47-6	
Styrene	Not detected	60		ug/kg	58.3	100-42-5	
Isopropylbenzene	Not detected	300		ug/kg	58.3	98-82-8	
Bromoform	Not detected	100		ug/kg	58.3	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	60		ug/kg	58.3	79-34-5	
1,2,3-Trichloropropane	Not detected	100		ug/kg	58.3	96-18-4	
n-Propylbenzene	Not detected	60		ug/kg	58.3	103-65-1	
Bromobenzene	Not detected	100		ug/kg	58.3	108-86-1	
1,3,5-Trimethylbenzene	Not detected	60		ug/kg	58.3	108-67-8	
tert-Butylbenzene	Not detected	60		ug/kg	58.3	98-06-6	
1,2,4-Trimethylbenzene	Not detected	60		ug/kg	58.3	95-63-6	
sec-Butylbenzene	Not detected	60		ug/kg	58.3	135-98-8	
p-Isopropyltoluene	Not detected	100		ug/kg	58.3	99-87-6	
1,3-Dichlorobenzene	Not detected	100		ug/kg	58.3	541-73-1	
1,4-Dichlorobenzene	Not detected	100		ug/kg	58.3	106-46-7	
1,2-Dichlorobenzene	Not detected	100		ug/kg	58.3	95-50-1	
1,2,3-Trimethylbenzene	Not detected	60		ug/kg	58.3	526-73-8	
n-Butylbenzene	Not detected	60		ug/kg	58.3	104-51-8	
Hexachloroethane	Not detected	300		ug/kg	58.3	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	300		ug/kg	58.3	96-12-8	
1,2,4-Trichlorobenzene	Not detected	380		ug/kg	58.3	120-82-1	
1,2,3-Trichlorobenzene	Not detected	380		ug/kg	58.3	87-61-6	
Naphthalene	Not detected	300		ug/kg	58.3	91-20-3	
2-Methylnaphthalene	Not detected	100		ug/kg	58.3	91-57-6	

Lab Sample ID: S55327.13
Sample Tag: SB-10 (4-5) I
Collected Date/Time: 10/31/2023 13:00
Matrix: Soil
COC Reference: 2023-10-30-01

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	3.8	IR
1	40ml Glass	MeOH	Yes	3.8	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Metal Digestion	Completed	SW3050B	11/07/23 12:00	JRH	
PNA Extraction*	Completed	SW3546	11/08/23 13:00	JWR	
Sample wt. (g) / Methanol (ml)*	11.045/11	SW5035A	11/03/23 13:42	NDK	
Mercury Digestion	Completed	SW7471B	11/07/23 10:50	CTV	

Inorganics

Method: SM2540B, Run Date: 11/06/23 13:12, Analyst: MAM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	94	1		%	1		

Metals

Method: SW6020A, Run Date: 11/07/23 15:14, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Arsenic	5.75	0.20		mg/kg	257	7440-38-2	
Barium	181	1.0		mg/kg	257	7440-39-3	
Cadmium	0.51	0.20		mg/kg	257	7440-43-9	
Chromium	6.50	0.50		mg/kg	257	7440-47-3	
Copper	133	0.50		mg/kg	257	7440-50-8	
Lead	144	0.30		mg/kg	257	7439-92-1	
Selenium	Not detected	0.40		mg/kg	257	7782-49-2	
Silver	Not detected	0.20		mg/kg	257	7440-22-4	
Zinc	155	0.50		mg/kg	257	7440-66-6	

Method: SW7471B, Run Date: 11/07/23 15:31, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury	0.242	0.050		mg/kg	64	7439-97-6	

Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 11/09/23 01:52, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	330		ug/kg	10	83-32-9	
Acenaphthylene	Not detected	330		ug/kg	10	208-96-8	
Anthracene	Not detected	330		ug/kg	10	120-12-7	
Benzo(a)anthracene	960	330		ug/kg	10	56-55-3	
Benzo(a)pyrene	1,080	330		ug/kg	10	50-32-8	
Benzo(b)fluoranthene	2,160	330		ug/kg	10	205-99-2	p
Benzo(ghi)perylene	650	330		ug/kg	10	191-24-2	
Benzo(k)fluoranthene	2,460	330		ug/kg	10	207-08-9	p
Chrysene	1,240	330		ug/kg	10	218-01-9	
Dibenzo(ah)anthracene	Not detected	330		ug/kg	10	53-70-3	

p-Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak.

Lab Sample ID: S55327.13 (continued)
Sample Tag: SB-10 (4-5) I

Polynuclear Aromatics, Method: SW8270D, Run Date: 11/09/23 01:52, Analyst: PL (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Fluoranthene	2,320	330		ug/kg	10	206-44-0	
Fluorene	Not detected	330		ug/kg	10	86-73-7	
Indeno(1,2,3-cd)pyrene	550	330		ug/kg	10	193-39-5	
2-Methylnaphthalene	Not detected	330		ug/kg	10	91-57-6	
Naphthalene	Not detected	330		ug/kg	10	91-20-3	
Phenanthrene	820	330		ug/kg	10	85-01-8	
Pyrene	2,250	330		ug/kg	10	129-00-0	
1-Methylnaphthalene	Not detected	330		ug/kg	10	90-12-0	

Organics - Volatiles

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 11/09/23 02:56, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	200		ug/kg	56.2	60-29-7	
Acetone	Not detected	1,000		ug/kg	56.2	67-64-1	
Methyl iodide	Not detected	100		ug/kg	56.2	74-88-4	
Carbon disulfide	Not detected	300		ug/kg	56.2	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	200		ug/kg	56.2	1634-04-4	
Acrylonitrile	Not detected	100		ug/kg	56.2	107-13-1	
2-Butanone (MEK)	Not detected	840		ug/kg	56.2	78-93-3	
Dichlorodifluoromethane	Not detected	300		ug/kg	56.2	75-71-8	
Chloromethane	Not detected	300		ug/kg	56.2	74-87-3	
Vinyl chloride	Not detected	60		ug/kg	56.2	75-01-4	
Bromomethane	Not detected	200		ug/kg	56.2	74-83-9	
Chloroethane	Not detected	300		ug/kg	56.2	75-00-3	
Trichlorofluoromethane	Not detected	100		ug/kg	56.2	75-69-4	
1,1-Dichloroethene	Not detected	60		ug/kg	56.2	75-35-4	
Methylene chloride	Not detected	100		ug/kg	56.2	75-09-2	
trans-1,2-Dichloroethene	Not detected	60		ug/kg	56.2	156-60-5	
1,1-Dichloroethane	Not detected	60		ug/kg	56.2	75-34-3	
cis-1,2-Dichloroethene	Not detected	60		ug/kg	56.2	156-59-2	
Tetrahydrofuran*	Not detected	1,000		ug/kg	56.2	109-99-9	
Chloroform	Not detected	60		ug/kg	56.2	67-66-3	
Bromochloromethane	Not detected	100		ug/kg	56.2	74-97-5	
1,1,1-Trichloroethane	Not detected	60		ug/kg	56.2	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	3,000		ug/kg	56.2	108-10-1	
2-Hexanone	Not detected	3,000		ug/kg	56.2	591-78-6	
Carbon tetrachloride	Not detected	60		ug/kg	56.2	56-23-5	
Benzene	Not detected	60		ug/kg	56.2	71-43-2	
1,2-Dichloroethane	Not detected	60		ug/kg	56.2	107-06-2	
Trichloroethene	Not detected	60		ug/kg	56.2	79-01-6	
1,2-Dichloropropane	Not detected	60		ug/kg	56.2	78-87-5	
Bromodichloromethane	Not detected	100		ug/kg	56.2	75-27-4	
Dibromomethane	Not detected	300		ug/kg	56.2	74-95-3	
cis-1,3-Dichloropropene	Not detected	60		ug/kg	56.2	10061-01-5	
Toluene	Not detected	60		ug/kg	56.2	108-88-3	
trans-1,3-Dichloropropene	Not detected	60		ug/kg	56.2	10061-02-6	
1,1,2-Trichloroethane	Not detected	60		ug/kg	56.2	79-00-5	
Tetrachloroethene	Not detected	60		ug/kg	56.2	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	60		ug/kg	56.2	110-57-6	
Dibromochloromethane	Not detected	100		ug/kg	56.2	124-48-1	

Lab Sample ID: S55327.13 (continued)
Sample Tag: SB-10 (4-5) I

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 11/09/23 02:56, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,2-Dibromoethane	Not detected	20		ug/kg	56.2	106-93-4	M
Chlorobenzene	Not detected	60		ug/kg	56.2	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	100		ug/kg	56.2	630-20-6	
Ethylbenzene	Not detected	60		ug/kg	56.2	100-41-4	
p,m-Xylene	Not detected	100		ug/kg	56.2		
o-Xylene	Not detected	60		ug/kg	56.2	95-47-6	
Styrene	Not detected	60		ug/kg	56.2	100-42-5	
Isopropylbenzene	Not detected	300		ug/kg	56.2	98-82-8	
Bromoform	Not detected	100		ug/kg	56.2	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	60		ug/kg	56.2	79-34-5	
1,2,3-Trichloropropane	Not detected	100		ug/kg	56.2	96-18-4	
n-Propylbenzene	Not detected	60		ug/kg	56.2	103-65-1	
Bromobenzene	Not detected	100		ug/kg	56.2	108-86-1	
1,3,5-Trimethylbenzene	Not detected	60		ug/kg	56.2	108-67-8	
tert-Butylbenzene	Not detected	60		ug/kg	56.2	98-06-6	
1,2,4-Trimethylbenzene	Not detected	60		ug/kg	56.2	95-63-6	
sec-Butylbenzene	Not detected	60		ug/kg	56.2	135-98-8	
p-Isopropyltoluene	Not detected	100		ug/kg	56.2	99-87-6	
1,3-Dichlorobenzene	Not detected	100		ug/kg	56.2	541-73-1	
1,4-Dichlorobenzene	Not detected	100		ug/kg	56.2	106-46-7	
1,2-Dichlorobenzene	Not detected	100		ug/kg	56.2	95-50-1	
1,2,3-Trimethylbenzene	Not detected	60		ug/kg	56.2	526-73-8	
n-Butylbenzene	Not detected	60		ug/kg	56.2	104-51-8	
Hexachloroethane	Not detected	300		ug/kg	56.2	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	300		ug/kg	56.2	96-12-8	
1,2,4-Trichlorobenzene	Not detected	370		ug/kg	56.2	120-82-1	
1,2,3-Trichlorobenzene	Not detected	370		ug/kg	56.2	87-61-6	
Naphthalene	Not detected	300		ug/kg	56.2	91-20-3	
2-Methylnaphthalene	Not detected	100		ug/kg	56.2	91-57-6	

M-Result reported to MDL not RDL

Lab Sample ID: S55327.14
Sample Tag: QCFB-01
Collected Date/Time: 10/31/2023 13:30
Matrix: Methanol
COC Reference: 2023-10-30-01

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	3.8	IR

Other / Misc.

Method: , Run Date: 11/06/23 11:33, Analyst: JRM

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

Analytical Laboratory Report

Lab Sample ID: S55327.15
Sample Tag: EB-01
Collected Date/Time: 10/31/2023 13:40
Matrix: Methanol
COC Reference: 2023-10-30-02

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	3.8	IR

Other / Misc.

Method: , Run Date: 11/06/23 11:33, Analyst: JRM

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

Merit Laboratories Login Checklist

Lab Set ID: S55327
Client: FISHBECK (Fishbeck)
Project: 231596 / OCBRA / CERES Hart
Submitted: 11/02/2023 16:30 Login User: PFD

Attention: Penni Mahler
Address: Fishbeck
1515 Arboretum Drive SE
Grand Rapids, MI 49546

Phone: 616-464-3751 FAX:
Email: pdmahler@fishbeck.com

Selection				Description	Note
Sample Receiving					
01.	[X] Yes	[ ] No	[ ] N/A	Samples are received at 4C +/- 2C Thermometer #	IR 3.8
02.	[X] Yes	[ ] No	[ ] N/A	Received on ice/ cooling process begun	
03.	[ ] Yes	[X] No	[ ] N/A	Samples shipped	
04.	[ ] Yes	[X] No	[ ] N/A	Samples left in 24 hr. drop box	
05.	[ ] Yes	[ ] No	[X] N/A	Are there custody seals/tape or is the drop box locked	
Chain of Custody					
06.	[X] Yes	[ ] No	[ ] N/A	COC adequately filled out	
07.	[X] Yes	[ ] No	[ ] N/A	COC signed and relinquished to the lab	
08.	[X] Yes	[ ] No	[ ] N/A	Sample tag on bottles match COC	
09.	[ ] Yes	[X] No	[ ] N/A	Subcontracting needed? Subcontacted to:	
Preservation					
10.	[X] Yes	[ ] No	[ ] N/A	Do sample have correct chemical preservation	
11.	[ ] Yes	[ ] No	[X] N/A	Completed pH checks on preserved samples? (no VOAs)	
12.	[ ] Yes	[X] No	[ ] N/A	Did any samples need to be preserved in the lab?	
Bottle Conditions					
13.	[X] Yes	[ ] No	[ ] N/A	All bottles intact	
14.	[X] Yes	[ ] No	[ ] N/A	Appropriate analytical bottles are used	Samples .14/.15 filled with water
15.	[X] Yes	[ ] No	[ ] N/A	Merit bottles used	
16.	[X] Yes	[ ] No	[ ] N/A	Sufficient sample volume received	
17.	[ ] Yes	[X] No	[ ] N/A	Samples require laboratory filtration	
18.	[X] Yes	[ ] No	[ ] N/A	Samples submitted within holding time	
19.	[ ] Yes	[ ] No	[X] 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: _____

Merit Laboratories, Inc.

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

COC# 2023-10-30-01

CHAIN OF CUSTODY RECORD

REPORT TO

CONTACT NAME: Penni Mahler
COMPANY: fishbeck
ADDRESS: 1515 Arboretum Dr. SE
CITY: Grand Rapids STATE: MI ZIP CODE: 49546
PHONE NO.: 616.575.3824 FAX NO.: P.O. NO.:
E-MAIL ADDRESS: pdmahler@fishbeck.com QUOTE NO.:

INVOICE TO

CONTACT NAME: Accounts Payable ☐ SAME
COMPANY: fishbeck
ADDRESS: 1515 Arboretum Dr. SE
CITY: Grand Rapids STATE: MI ZIP CODE: 49546
PHONE NO.: 616.464.3708 E-MAIL ADDRESS: acpay@fishbeck.com

PROJECT NO./NAME: 231596/OCBRA/ CERES Hart
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: GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID SL=SLUDGE DW=DRINKING WATER O=OIL WP=WIPE A=AIR W=WASTE

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

Certifications: ☐ OHIO VAP ☐ Drinking Water ☐ DoD ☐ NPDES

Project Locations: ☐ Detroit ☐ New York ☐ Other

MERIT LAB NO. (FOR LAB USE ONLY)	YEAR DATE	TIME	SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	# Containers & Preservatives: NONE	HCl	HNO_3	H_2SO_4	NaOH	MeOH	OTHER	PNAs (EPA 8270), MI 10, % soli	VOCs (EPA 8260+)	Special Instructions
01,02,03	10-30-23	1830	SB-05 (24-25)I/MS/MSD	S	4	2					2		X	X	~185 ppm
55327,04	10-30-23	1600	SB-01 (24-25)I	S	2	1					1				
,05	10-30-23	—	SB-0[redacted] (—)D	S	2	1					1				Blind duplicate
,06		1630	SB-02 (24-25)I	S	2	1					1				
,07		1650	SB-03 (11-12)I	S	2	1					1				
,08	↓	1730	SB-04 (9-10)I	S	2	1					1				
,09	10-31-23	920	SB-06 (3-4)I	S	2	1					1				
,10	10-31-23	1130	SB-07 (4-5)I	S	2	1					1				
,11		1045	SB-08 (4-5)I	S	2	1					1				
,12		1215	SB-09 (4-5)I	S	2	1					1				
,13		1300	SB-10 (4-5)I	S	2	1					1				
,14	↓	1330	QCFB-01	S	1						1		↓	↓	ICE

RELINQUISHED BY: SIGNATURE/ORGANIZATION: R. Knoll / Fishbeck (Sampler) DATE: 11-2-23 TIME: 730
RECEIVED BY: SIGNATURE/ORGANIZATION: Fishbeck sample Storage / Fishbeck DATE: 11-2-23 TIME: 730
RELINQUISHED BY: SIGNATURE/ORGANIZATION: Storage DATE: 11/2/23 TIME: 2:38
RECEIVED BY: SIGNATURE/ORGANIZATION: Leanne Jeannot DATE: 11/2/23 TIME: 2:38

RELINQUISHED BY: SIGNATURE/ORGANIZATION: Leanne Jeannot DATE: 11/2/23 TIME: 2:38
RECEIVED BY: SIGNATURE/ORGANIZATION: DATE: 11/2/23 TIME: 2:38

SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS
SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS

NOTES: TEMP ON ARRIVAL 4.3° 11/2/23 1630 3.0

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

Rev. 5.18.12

Merit Laboratories, Inc.

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

C.O.C. PAGE # 2 OF 2

COC # 2023-10-30-02

CHAIN OF CUSTODY RECORD

REPORT TO

CONTACT NAME: Penni Mahler
COMPANY: fishbeck
ADDRESS: 1515 Arboretum Dr. SE
CITY: Grand Rapids | STATE: MI | ZIP CODE: 49546
PHONE NO.: 616.575.3824 | FAX NO.: | P.O. NO.:
E-MAIL ADDRESS: pdmahler@fishbeck.com | QUOTE NO.:

INVOICE TO

CONTACT NAME: Accounts Payable ☐ SAME
COMPANY: fishbeck
ADDRESS: 1515 Arboretum Dr. SE
CITY: Grand Rapids | STATE: MI | ZIP CODE: 49546
PHONE NO.: 616.464.3708 | E-MAIL ADDRESS: acpay@fishbeck.com

PROJECT NO./NAME: 231596/OCBRA/ CERES Hart
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: GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID SL=SLUDGE DW=DRINKING WATER O=OIL WP=WIPE A=AIR W=WASTE

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

Certifications
☐ OHIO VAP ☐ Drinking Water
☐ DoD ☐ NPDES

Project Locations
☐ Detroit ☐ New York
☐ Other

Special Instructions

MERIT LAB NO. (FOR LAB USE ONLY)	YEAR DATE	YEAR TIME	SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	# Containers & Preservatives: NONE	HCl	HNO_3	H_2SO_4	NaOH	MeOH	OTHER	VOCs (EPA 8260+)
55327.15	10-31-23	1340	EB-01	S	1						1		X

FLE

RELINQUISHED BY: SIGNATURE/ORGANIZATION: R. Krol / Fishbecks (Sampler) DATE: 11-2-23 TIME: 730
RECEIVED BY: SIGNATURE/ORGANIZATION: [redacted] / Fishbeck/FB sample storage DATE: 11-2-23 TIME: 730
RELINQUISHED BY: SIGNATURE/ORGANIZATION: Storage DATE: 11/2/23 TIME: 2:38
RECEIVED BY: SIGNATURE/ORGANIZATION: Leanne Jeannot DATE: 11/2/23 TIME: 2:38

RELINQUISHED BY: SIGNATURE/ORGANIZATION: Leanne Jeannot DATE: 11/2/23 TIME: 2:38
RECEIVED BY: SIGNATURE/ORGANIZATION: DATE: 11/2/23 TIME: 2:38

SEAL NO. | SEAL INTACT YES ☐ NO ☐ | INITIALS
SEAL NO. | SEAL INTACT YES ☐ NO ☐ | INITIALS

NOTES: TEMP ON ARRIVAL 4.3.0
11/2/23 1630 3.8

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

Rev. 5.18.12

Laboratory Services Request – Fishbeck

Project Information

Name:	OCBRA/ CERES Hart
Number:	231596
Manager:	Kirk Perschbacher
Sampling Date:	10/30/2023
Laboratory/Location:	Merti Labs

Regulatory Program (Reporting Limits)

Part 201	■
Part 213	
NPDES Permit	
Other:	

Billing Information

Fishbeck	■	Quote No.
Client		

Sample Quantity/Matrix

Indicate number of samples in box provided.

A separate form must be completed per matrix type.

INVESTIGATIVE	3	Groundwater
	14	Soil
		Surface Water
		Drinking Water
		Wastewater- Dewatering Effluent
	11	Other- Soil Gas
QA/QC	4	Duplicates
	2	MS/MSDs
	3	Equipment Blanks
	2	Field Blanks
	2	Trip Blanks

Reporting Information

Fishbeck	■	
Client		
Std QC Report (Level II)	■	← *MUST specify QC Report for all projects*
Full Deliverables (Level IV)		
Turnaround Time:	■	Standard
		Priority:

If direct reporting or billing client, please provide information below:

Company Name:

Attention:

Email Address:

Additional Project Information for Laboratory

3 Groundwater samples for VOCs, PNAs and MI 10 metals. 1 duplicate for all parameters, 1 MS/MSD for all parameters
11 Soil gas samples for EPA Method To-15 VOCs, 1 duplicate also needed
4 Incremental Sampling Method (ISM) surface soil samples for VOCS, PNAs and MI 10 metals. Duplicate and Triplicate needed for all of the samples.
10 Soil Samples for VOCs, PNAs and MI 10 Metals. 1 duplicate for all parameters, 1 MS/MSD for all parameters
3 equipment blanks for VOCs, PNAs and MI 10 Metals
2 field blanks for VOCs (2 days of sampling so 1 per day)
2 Trip Blanks for VOCs (2 days of sampling so 1 per day)

General Chemistry

Alkalinity, Total		Cyanide, Total		pH		Solids, V.S.	
Bicarbonate Alkalinity		Fluoride		Phenols, T.		Specific Conductivity	
Carbonate Alkalinity		Hardness		Phosphorus, D.		Specific Gravity	
BOD				Phosphorus, O.		Sulfate	
Chloride		N, Ammonia		Phosphorus, T.		Sulfide	
COD		N, Nitrate		Solids, Total		TPH	
Color		N, Nitrite		Solids, T.D.		TOC	
Cyanide, Amenable		N, Total Kjeldahl		Solids, T.S.		PFAS/537.1/18 list	DW
Cyanide, Available		Oil & Grease		Solids, V.		PFAS/537M/28 list	

Metals

		Dissolved		Total			
Aluminum		Chromium, Hexavalent		Manganese		Sodium	
Antimony		Chromium, Total		Mercury		Thallium	
Arsenic		Cobalt		Mercury (EPA 1631)		Vanadium	
Barium		Copper		Molybdenum		Zinc	
Beryllium		Iron		Nickel		Michigan 10	■
Boron		Lead		Potassium		OM 2/ATT 8/Table 3	
Cadmium		Lead (Total, Fine, Coarse)		Selenium			
Calcium		Magnesium		Silver			

Organics

EPA 601 (Halocarbons)		EPA 608 (Pest/PCBs)		EPA 8270 (PNAs)	■	EPA 8082 (PCBs)	
EPA 602 (Aromatics)		EPA 8260 (VOCs)		EPA 8270 (Acids)		EPA 8015/GRO	
EPA 624 (VOCs)		EPA 8260 Plus (VOCs)	■	EPA 8270 (B/N)		EPA 8015/DRO	
EPA 625 (A/BN)		EPA 8270 (SVOCs)		EPA 8081A (Pest)		EPA 8011/EDB	

Waste Characterization

Federal Regulatory Parameters and Limits unless otherwise specified

TCLP/Metals		SPLP/SVOCs (A/BN)		ASTM D3987-85/SVOCs		Paint Filter Test	
TCLP/SVOCs (Full)		SPLP/PCBs		ASTM D3987-85/Pest & PCBs		Cyanide, Reactive	
TCLP/SVOCs (A/BN)		SPLP/Cyanide		ASTM D3987-85/Cyanide		Sulfide, Reactive	
TCLP/VOCs		SPLP/Sulfide		ASTM D3987-85/Cyanide		Flash Point	
SPLP/Metals		SPLP/VOCs		ASTM D3987-85/Sulfide		pH	
SPLP/SVOCs (Full)		SPLP/Hex Cr		ASTM D3987-85/Hex Cr			

Sample Bottle Specification

Project Name: OCBRA/ CERES Hart

Project No.: 231596

Date: 10/30/2023

Sample Information

SOIL MATRIX

QUANTITY

Investigative: 9

I/MS/MSD: 1

Duplicates: 1

Equipment Blanks:

Field Blanks: 2 vials per FB: ☑ 1 ☐ 2

WATER MATRIX

QUANTITY

Investigative: 2

I/MS/MSD: 1

Duplicates: 1

Equipment Blanks:

Trip Blanks: 2 vials per TB: ☑ 1 ☐ 2

Special Instructions:

	Parameters	Preservative	Number of Containers Required										
			4 oz Clear G	8 oz Clear G	16 oz Clear G	250 mL Amber G	500 mL Amber G	1000 mL Amber G	40 mL	125 mL P	250 mL P	500 mL P	1000 mL P
SOIL (I) or (D) or QCEB	PNAs (EPA 8270), MI 10, % solids	None	1										
	VOCs (EPA 8260+)	MeOH							1				
SOIL (I/MS/MSD)													
WATER (I) or (D) or QCEB	PNAs (EPA 8270)	None						2					
	Total Metals; MI 10	HNO_3								1			
	VOCs (EPA 8260+)	HCl							3				
WATER (I/MS/MSD)													

Quality Control Report

Report ID: QC-S55327-01
Generated on 11/10/2023

Report to

Attention: Penni Mahler
Fishbeck
1515 Arboretum Drive SE
Grand Rapids, MI 49546

Phone: 616-464-3751 FAX:

Report Produced by

Merit Laboratories
2680 East Lansing Drive
East Lansing, MI 48823

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

Report Summary

Lab Sample ID(s): S55327.01-S55327.13
Project: 231596 / OCBRA / CERES Hart
Submitted Date/Time: 11/02/2023 16:30
Sampled by: Unknown
P.O. #: 221916

QC Report Sections

Cover Page (Page 1)
Analysis Summary (Pages 2-14)
Prep Batch Summary (Pages 15-19)
Surrogates per Lab Sample (Pages 20-30)
Surrogates per QC Sample (Pages 31-37)
Batch QC Results (Pages 38-68)

Report Flag Descriptions

*: QC result is outside of indicated control limits
W: Surrogate result not applicable due to sample dilution

I certify that this data package is in compliance with the terms and conditions of the program, and project, and contractual requirements both technically and for completeness. Release of the data contained in this hardcopy data package and its computer-readable data submitted has been authorized by the Quality Assurance Manager and his/her designee, as verified by the following signature.

Barbara Ball
Quality Assurance Manager

QC Report - Analysis Summary

Lab Sample ID: S55327.01
Sample Tag: SB-05(24-25) I
Collected Date/Time: 10/30/2023 18:30
Matrix: Soil
COC Reference: 2023-10-30-01

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Inorganics						
Total Solids	SM2540B	11/06/23 13:12	TS231106B	TS231106B	No	BLK/LCS/DUP
Metals						
Arsenic	SW6020A	11/07/23 13:21	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Barium	SW6020A	11/07/23 13:21	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Cadmium	SW6020A	11/07/23 13:21	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Chromium	SW6020A	11/07/23 13:21	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Copper	SW6020A	11/07/23 13:21	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Lead	SW6020A	11/07/23 13:21	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Mercury	SW7471B	11/07/23 14:45	HG-23-1107A	HGD-110723-2	No	BLK/LCS/MS/MSD
Selenium	SW6020A	11/07/23 13:21	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Silver	SW6020A	11/07/23 13:21	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Zinc	SW6020A	11/07/23 13:21	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Organics - Semi-Volatiles						
Polynuclear Aromatics	SW8270D	11/09/23 23:52	H231109	SP231107S2	Yes	BLK/LCS/MS/MSD
Organics - Volatiles						
Volatile Organics 5035	SW5035A/8260C	11/08/23 15:26	231108A5	VF231108S1	Yes	BLK/LCS/LCSD/MS/MS
Volatile Organics 5035 (Replicate 01)	SW5035A/8260C	11/08/23 22:58	231108A5	VF231108S1	Yes	BLK/LCS/LCSD/MS/MS

Lab Sample ID: S55327.02

Sample Tag: SB-05(24-25) I MS

Collected Date/Time: 10/30/2023 18:30

Matrix: Soil

COC Reference: 2023-10-30-01

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Inorganics						
Total Solids	SM2540B	11/06/23 13:12	TS231106B	TS231106B	No	BLK/LCS/DUP
Metals						
Arsenic	SW6020A	11/07/23 13:23	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Barium	SW6020A	11/07/23 13:23	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Cadmium	SW6020A	11/07/23 13:23	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Chromium	SW6020A	11/07/23 13:23	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Copper	SW6020A	11/07/23 13:23	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Lead	SW6020A	11/07/23 13:23	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Mercury	SW7471B	11/07/23 14:49	HG-23-1107A	HGD-110723-2	No	BLK/LCS/MS/MSD
Selenium	SW6020A	11/07/23 13:23	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Silver	SW6020A	11/07/23 13:23	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Zinc	SW6020A	11/07/23 13:23	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Organics - Semi-Volatiles						
Polynuclear Aromatics	SW8270D	11/10/23 00:09	H231109	SP231107S2	Yes	BLK/LCS/MS/MSD
Organics - Volatiles						
Volatile Organics 5035	SW5035A/8260C	11/08/23 13:50	231108A5	VF231108S1	Yes	BLK/LCS/LCSD/MS/MS

QC Report - Analysis Summary

Lab Sample ID: S55327.03
Sample Tag: SB-05(24-25) I MSD
Collected Date/Time: 10/30/2023 18:30
Matrix: Soil
COC Reference: 2023-10-30-01

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Inorganics						
Total Solids	SM2540B	11/06/23 13:12	TS231106B	TS231106B	No	BLK/LCS/DUP
Metals						
Arsenic	SW6020A	11/07/23 13:26	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Barium	SW6020A	11/07/23 13:26	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Cadmium	SW6020A	11/07/23 13:26	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Chromium	SW6020A	11/07/23 13:26	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Copper	SW6020A	11/07/23 13:26	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Lead	SW6020A	11/07/23 13:26	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Mercury	SW7471B	11/07/23 14:52	HG-23-1107A	HGD-110723-2	No	BLK/LCS/MS/MSD
Selenium	SW6020A	11/07/23 13:26	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Silver	SW6020A	11/07/23 13:26	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Zinc	SW6020A	11/07/23 13:26	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Organics - Semi-Volatiles						
Polynuclear Aromatics	SW8270D	11/10/23 00:26	H231109	SP231107S2	Yes	BLK/LCS/MS/MSD
Organics - Volatiles						
Volatile Organics 5035	SW5035A/8260C	11/08/23 14:14	231108A5	VF231108S1	Yes	BLK/LCS/LCSD/MS/MS

QC Report - Analysis Summary

Lab Sample ID: S55327.04
Sample Tag: SB-01 (24-25) I
Collected Date/Time: 10/30/2023 16:00
Matrix: Soil
COC Reference: 2023-10-30-01

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Inorganics						
Total Solids	SM2540B	11/06/23 13:12	TS231106B	TS231106B	No	BLK/LCS/DUP
Metals						
Arsenic	SW6020A	11/07/23 14:55	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Barium	SW6020A	11/07/23 14:55	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Cadmium	SW6020A	11/07/23 14:55	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Chromium	SW6020A	11/07/23 14:55	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Copper	SW6020A	11/07/23 14:55	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Lead	SW6020A	11/07/23 14:55	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Mercury	SW7471B	11/07/23 14:55	HG-23-1107A	HGD-110723-2	No	BLK/LCS/MS/MSD
Selenium	SW6020A	11/07/23 14:55	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Silver	SW6020A	11/07/23 14:55	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Zinc	SW6020A	11/07/23 14:55	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Organics - Semi-Volatiles						
Polynuclear Aromatics	SW8270D	11/08/23 22:43	Z231108	SP231107S2	Yes	BLK/LCS/MS/MSD
Organics - Volatiles						
Volatile Organics 5035	SW5035A/8260C	11/07/23 18:09	231107A3	VF231107S2	Yes	BLK/LCS/LCSD

Lab Sample ID: S55327.05

Sample Tag: Blind Duplicate

Collected Date/Time: 10/30/2023 00:01

Matrix: Soil

COC Reference: 2023-10-30-01

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Inorganics						
Total Solids	SM2540B	11/06/23 13:12	TS231106B	TS231106B	No	BLK/LCS/DUP
Metals						
Arsenic	SW6020A	11/07/23 14:57	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Barium	SW6020A	11/07/23 14:57	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Cadmium	SW6020A	11/07/23 14:57	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Chromium	SW6020A	11/07/23 14:57	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Copper	SW6020A	11/07/23 14:57	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Lead	SW6020A	11/07/23 14:57	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Mercury	SW7471B	11/07/23 14:59	HG-23-1107A	HGD-110723-2	No	BLK/LCS/MS/MSD
Selenium	SW6020A	11/07/23 14:57	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Silver	SW6020A	11/07/23 14:57	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Zinc	SW6020A	11/07/23 14:57	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Organics - Semi-Volatiles						
Polynuclear Aromatics	SW8270D	11/08/23 23:04	Z231108	SP231107S2	Yes	BLK/LCS/MS/MSD
Organics - Volatiles						
Volatile Organics 5035	SW5035A/8260C	11/07/23 18:33	231107A3	VF231107S2	Yes	BLK/LCS/LCSD

Lab Sample ID: S55327.06

Sample Tag: SB-02 (24-25) I

Collected Date/Time: 10/30/2023 16:30

Matrix: Soil

COC Reference: 2023-10-30-01

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Inorganics						
Total Solids	SM2540B	11/06/23 13:12	TS231106B	TS231106B	No	BLK/LCS/DUP
Metals						
Arsenic	SW6020A	11/07/23 14:59	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Barium	SW6020A	11/07/23 14:59	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Cadmium	SW6020A	11/07/23 14:59	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Chromium	SW6020A	11/07/23 14:59	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Copper	SW6020A	11/07/23 14:59	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Lead	SW6020A	11/07/23 14:59	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Mercury	SW7471B	11/07/23 15:02	HG-23-1107A	HGD-110723-2	No	BLK/LCS/MS/MSD
Selenium	SW6020A	11/07/23 14:59	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Silver	SW6020A	11/07/23 14:59	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Zinc	SW6020A	11/07/23 14:59	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Organics - Semi-Volatiles						
Polynuclear Aromatics	SW8270D	11/08/23 23:25	Z231108	SP231107S2	Yes	BLK/LCS/MS/MSD
Organics - Volatiles						
Volatile Organics 5035	SW5035A/8260C	11/08/23 19:23	231108A5	VF231108S1	Yes	BLK/LCS/LCSD/MS/MS

QC Report - Analysis Summary

Lab Sample ID: S55327.07
Sample Tag: SB-03 (11-12) I
Collected Date/Time: 10/30/2023 16:50
Matrix: Soil
COC Reference: 2023-10-30-01

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Inorganics						
Total Solids	SM2540B	11/06/23 13:12	TS231106B	TS231106B	No	BLK/LCS/DUP
Metals						
Arsenic	SW6020A	11/07/23 15:01	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Barium	SW6020A	11/07/23 15:01	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Cadmium	SW6020A	11/07/23 15:01	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Chromium	SW6020A	11/07/23 15:01	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Copper	SW6020A	11/07/23 15:01	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Lead	SW6020A	11/07/23 15:01	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Mercury	SW7471B	11/07/23 15:05	HG-23-1107A	HGD-110723-2	No	BLK/LCS/MS/MSD
Selenium	SW6020A	11/07/23 15:01	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Silver	SW6020A	11/07/23 15:01	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Zinc	SW6020A	11/07/23 15:01	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Organics - Semi-Volatiles						
Polynuclear Aromatics	SW8270D	11/08/23 23:46	Z231108	SP231107S2	Yes	BLK/LCS/MS/MSD
Organics - Volatiles						
Volatile Organics 5035	SW5035A/8260C	11/07/23 18:58	231107A3	VF231107S2	Yes	BLK/LCS/LCSD

Lab Sample ID: S55327.08

Sample Tag: SB-04 (9-10) I

Collected Date/Time: 10/30/2023 17:30

Matrix: Soil

COC Reference: 2023-10-30-01

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Inorganics						
Total Solids	SM2540B	11/06/23 13:12	TS231106B	TS231106B	No	BLK/LCS/DUP
Metals						
Arsenic	SW6020A	11/07/23 15:04	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Barium	SW6020A	11/07/23 15:04	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Cadmium	SW6020A	11/07/23 15:04	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Chromium	SW6020A	11/07/23 15:04	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Copper	SW6020A	11/07/23 15:04	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Lead	SW6020A	11/07/23 15:04	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Mercury	SW7471B	11/07/23 15:08	HG-23-1107A	HGD-110723-2	No	BLK/LCS/MS/MSD
Selenium	SW6020A	11/07/23 15:04	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Silver	SW6020A	11/07/23 15:04	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Zinc	SW6020A	11/07/23 15:04	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Organics - Semi-Volatiles						
Polynuclear Aromatics	SW8270D	11/09/23 00:08	Z231108	SP231107S2	Yes	BLK/LCS/MS/MSD
Organics - Volatiles						
Volatile Organics 5035	SW5035A/8260C	11/07/23 19:22	231107A3	VF231107S2	Yes	BLK/LCS/LCSD

QC Report - Analysis Summary

Lab Sample ID: S55327.09
Sample Tag: SB-06 (3-4) I
Collected Date/Time: 10/31/2023 09:20
Matrix: Soil
COC Reference: 2023-10-30-01

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Inorganics						
Total Solids	SM2540B	11/06/23 13:12	TS231106B	TS231106B	No	BLK/LCS/DUP
Metals						
Arsenic	SW6020A	11/07/23 15:06	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Barium	SW6020A	11/07/23 15:06	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Cadmium	SW6020A	11/07/23 15:06	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Chromium	SW6020A	11/07/23 15:06	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Copper	SW6020A	11/07/23 15:06	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Lead	SW6020A	11/07/23 15:06	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Mercury	SW7471B	11/07/23 15:12	HG-23-1107A	HGD-110723-2	No	BLK/LCS/MS/MSD
Selenium	SW6020A	11/07/23 15:06	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Silver	SW6020A	11/07/23 15:06	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Zinc	SW6020A	11/07/23 15:06	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Organics - Semi-Volatiles						
Polynuclear Aromatics	SW8270D	11/08/23 21:52	H231108	SP231108S1	Yes	BLK/LCS/LCSD
Organics - Volatiles						
Volatile Organics 5035	SW5035A/8260C	11/07/23 19:45	231107A3	VF231107S2	Yes	BLK/LCS/LCSD

Lab Sample ID: S55327.10

Sample Tag: SB-07 (4-5) I

Collected Date/Time: 10/31/2023 11:30

Matrix: Soil

COC Reference: 2023-10-30-01

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Inorganics						
Total Solids	SM2540B	11/06/23 13:12	TS231106B	TS231106B	No	BLK/LCS/DUP
Metals						
Arsenic	SW6020A	11/07/23 15:08	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Barium	SW6020A	11/07/23 15:08	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Cadmium	SW6020A	11/07/23 15:08	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Chromium	SW6020A	11/07/23 15:08	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Copper	SW6020A	11/07/23 15:08	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Lead	SW6020A	11/07/23 15:08	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Mercury	SW7471B	11/07/23 15:15	HG-23-1107A	HGD-110723-2	No	BLK/LCS/MS/MSD
Selenium	SW6020A	11/07/23 15:08	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Silver	SW6020A	11/07/23 15:08	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Zinc	SW6020A	11/07/23 15:08	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Organics - Semi-Volatiles						
Polynuclear Aromatics	SW8270D	11/08/23 22:09	H231108	SP231108S1	Yes	BLK/LCS/LCSD
Organics - Volatiles						
Volatile Organics 5035	SW5035A/8260C	11/07/23 20:09	231107A3	VF231107S2	Yes	BLK/LCS/LCSD

QC Report - Analysis Summary

Lab Sample ID: S55327.11
Sample Tag: SB-08 (4-5) I
Collected Date/Time: 10/31/2023 10:45
Matrix: Soil
COC Reference: 2023-10-30-01

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Inorganics						
Total Solids	SM2540B	11/06/23 13:12	TS231106B	TS231106B	No	BLK/LCS/DUP
Metals						
Arsenic	SW6020A	11/07/23 15:10	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Barium	SW6020A	11/07/23 15:10	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Cadmium	SW6020A	11/07/23 15:10	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Chromium	SW6020A	11/07/23 15:10	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Copper	SW6020A	11/07/23 15:10	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Lead	SW6020A	11/07/23 15:10	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Mercury	SW7471B	11/07/23 15:18	HG-23-1107A	HGD-110723-2	No	BLK/LCS/MS/MSD
Selenium	SW6020A	11/07/23 15:10	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Silver	SW6020A	11/07/23 15:10	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Zinc	SW6020A	11/07/23 15:10	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Organics - Semi-Volatiles						
Polynuclear Aromatics	SW8270D	11/08/23 22:27	H231108	SP231108S1	Yes	BLK/LCS/LCSD
Organics - Volatiles						
Volatile Organics 5035	SW5035A/8260C	11/07/23 20:34	231107A3	VF231107S2	Yes	BLK/LCS/LCSD

Lab Sample ID: S55327.12

Sample Tag: SB-09 (4-5) I

Collected Date/Time: 10/31/2023 12:15

Matrix: Soil

COC Reference: 2023-10-30-01

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Inorganics						
Total Solids	SM2540B	11/06/23 13:12	TS231106B	TS231106B	No	BLK/LCS/DUP
Metals						
Arsenic	SW6020A	11/07/23 15:12	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Barium	SW6020A	11/07/23 15:12	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Cadmium	SW6020A	11/07/23 15:12	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Chromium	SW6020A	11/07/23 15:12	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Copper	SW6020A	11/07/23 15:12	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Lead	SW6020A	11/07/23 15:12	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Mercury	SW7471B	11/07/23 15:28	HG-23-1107A	HGD-110723-2	No	BLK/LCS/MS/MSD
Selenium	SW6020A	11/07/23 15:12	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Silver	SW6020A	11/07/23 15:12	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Zinc	SW6020A	11/07/23 15:12	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Organics - Semi-Volatiles						
Polynuclear Aromatics	SW8270D	11/08/23 22:44	H231108	SP231108S1	Yes	BLK/LCS/LCSD
Organics - Volatiles						
Volatile Organics 5035	SW5035A/8260C	11/09/23 15:11	231109A5	VF231109S1	Yes	BLK/LCS/LCSD

Lab Sample ID: S55327.13
Sample Tag: SB-10 (4-5) I
Collected Date/Time: 10/31/2023 13:00
Matrix: Soil
COC Reference: 2023-10-30-01

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Inorganics						
Total Solids	SM2540B	11/06/23 13:12	TS231106B	TS231106B	No	BLK/LCS/DUP
Metals						
Arsenic	SW6020A	11/07/23 15:14	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Barium	SW6020A	11/07/23 15:14	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Cadmium	SW6020A	11/07/23 15:14	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Chromium	SW6020A	11/07/23 15:14	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Copper	SW6020A	11/07/23 15:14	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Lead	SW6020A	11/07/23 15:14	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Mercury	SW7471B	11/07/23 15:31	HG-23-1107A	HGD-110723-2	No	BLK/LCS/MS/MSD
Selenium	SW6020A	11/07/23 15:14	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Silver	SW6020A	11/07/23 15:14	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Zinc	SW6020A	11/07/23 15:14	MT5-23-1107A	MTD-110723-2	No	BLK/LCS/MS/MSD
Organics - Semi-Volatiles						
Polynuclear Aromatics	SW8270D	11/09/23 01:52	H231108	SP231108S1	Yes	BLK/LCS/LCSD
Organics - Volatiles						
Volatile Organics 5035	SW5035A/8260C	11/09/23 02:56	231108B5	VF231108S3	Yes	BLK/LCS/LCSD

Inorganics, Prep Batch ID: TS231106B

Surrogates: No, QC Types: BLK/LCS/DUP

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S55327.01	Total Solids	SM2540B	11/06/23 13:12	TS231106B
S55327.02	Total Solids	SM2540B	11/06/23 13:12	TS231106B
S55327.03	Total Solids	SM2540B	11/06/23 13:12	TS231106B
S55327.04	Total Solids	SM2540B	11/06/23 13:12	TS231106B
S55327.05	Total Solids	SM2540B	11/06/23 13:12	TS231106B
S55327.06	Total Solids	SM2540B	11/06/23 13:12	TS231106B
S55327.07	Total Solids	SM2540B	11/06/23 13:12	TS231106B
S55327.08	Total Solids	SM2540B	11/06/23 13:12	TS231106B
S55327.09	Total Solids	SM2540B	11/06/23 13:12	TS231106B
S55327.10	Total Solids	SM2540B	11/06/23 13:12	TS231106B
S55327.11	Total Solids	SM2540B	11/06/23 13:12	TS231106B
S55327.12	Total Solids	SM2540B	11/06/23 13:12	TS231106B
S55327.13	Total Solids	SM2540B	11/06/23 13:12	TS231106B

Metals, Prep Batch ID: HGD-110723-2

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S55327.01	Mercury	SW7471B	11/07/23 14:45	HG-23-1107A
S55327.02	Mercury	SW7471B	11/07/23 14:49	HG-23-1107A
S55327.03	Mercury	SW7471B	11/07/23 14:52	HG-23-1107A
S55327.04	Mercury	SW7471B	11/07/23 14:55	HG-23-1107A
S55327.05	Mercury	SW7471B	11/07/23 14:59	HG-23-1107A
S55327.06	Mercury	SW7471B	11/07/23 15:02	HG-23-1107A
S55327.07	Mercury	SW7471B	11/07/23 15:05	HG-23-1107A
S55327.08	Mercury	SW7471B	11/07/23 15:08	HG-23-1107A
S55327.09	Mercury	SW7471B	11/07/23 15:12	HG-23-1107A
S55327.10	Mercury	SW7471B	11/07/23 15:15	HG-23-1107A
S55327.11	Mercury	SW7471B	11/07/23 15:18	HG-23-1107A
S55327.12	Mercury	SW7471B	11/07/23 15:28	HG-23-1107A
S55327.13	Mercury	SW7471B	11/07/23 15:31	HG-23-1107A

Metals, Prep Batch ID: MTD-110723-2

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S55327.01	Arsenic	SW6020A	11/07/23 13:21	MT5-23-1107A
S55327.01	Barium	SW6020A	11/07/23 13:21	MT5-23-1107A
S55327.01	Cadmium	SW6020A	11/07/23 13:21	MT5-23-1107A
S55327.01	Chromium	SW6020A	11/07/23 13:21	MT5-23-1107A
S55327.01	Copper	SW6020A	11/07/23 13:21	MT5-23-1107A
S55327.01	Lead	SW6020A	11/07/23 13:21	MT5-23-1107A
S55327.01	Selenium	SW6020A	11/07/23 13:21	MT5-23-1107A
S55327.01	Silver	SW6020A	11/07/23 13:21	MT5-23-1107A
S55327.01	Zinc	SW6020A	11/07/23 13:21	MT5-23-1107A
S55327.02	Arsenic	SW6020A	11/07/23 13:23	MT5-23-1107A
S55327.02	Barium	SW6020A	11/07/23 13:23	MT5-23-1107A
S55327.02	Cadmium	SW6020A	11/07/23 13:23	MT5-23-1107A
S55327.02	Chromium	SW6020A	11/07/23 13:23	MT5-23-1107A
S55327.02	Copper	SW6020A	11/07/23 13:23	MT5-23-1107A
S55327.02	Lead	SW6020A	11/07/23 13:23	MT5-23-1107A
S55327.02	Selenium	SW6020A	11/07/23 13:23	MT5-23-1107A

Metals, Prep Batch ID: MTD-110723-2 (continued)

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S55327.02	Silver	SW6020A	11/07/23 13:23	MT5-23-1107A
S55327.02	Zinc	SW6020A	11/07/23 13:23	MT5-23-1107A
S55327.03	Arsenic	SW6020A	11/07/23 13:26	MT5-23-1107A
S55327.03	Barium	SW6020A	11/07/23 13:26	MT5-23-1107A
S55327.03	Cadmium	SW6020A	11/07/23 13:26	MT5-23-1107A
S55327.03	Chromium	SW6020A	11/07/23 13:26	MT5-23-1107A
S55327.03	Copper	SW6020A	11/07/23 13:26	MT5-23-1107A
S55327.03	Lead	SW6020A	11/07/23 13:26	MT5-23-1107A
S55327.03	Selenium	SW6020A	11/07/23 13:26	MT5-23-1107A
S55327.03	Silver	SW6020A	11/07/23 13:26	MT5-23-1107A
S55327.03	Zinc	SW6020A	11/07/23 13:26	MT5-23-1107A
S55327.04	Arsenic	SW6020A	11/07/23 14:55	MT5-23-1107A
S55327.04	Barium	SW6020A	11/07/23 14:55	MT5-23-1107A
S55327.04	Cadmium	SW6020A	11/07/23 14:55	MT5-23-1107A
S55327.04	Chromium	SW6020A	11/07/23 14:55	MT5-23-1107A
S55327.04	Copper	SW6020A	11/07/23 14:55	MT5-23-1107A
S55327.04	Lead	SW6020A	11/07/23 14:55	MT5-23-1107A
S55327.04	Selenium	SW6020A	11/07/23 14:55	MT5-23-1107A
S55327.04	Silver	SW6020A	11/07/23 14:55	MT5-23-1107A
S55327.04	Zinc	SW6020A	11/07/23 14:55	MT5-23-1107A
S55327.05	Arsenic	SW6020A	11/07/23 14:57	MT5-23-1107A
S55327.05	Barium	SW6020A	11/07/23 14:57	MT5-23-1107A
S55327.05	Cadmium	SW6020A	11/07/23 14:57	MT5-23-1107A
S55327.05	Chromium	SW6020A	11/07/23 14:57	MT5-23-1107A
S55327.05	Copper	SW6020A	11/07/23 14:57	MT5-23-1107A
S55327.05	Lead	SW6020A	11/07/23 14:57	MT5-23-1107A
S55327.05	Selenium	SW6020A	11/07/23 14:57	MT5-23-1107A
S55327.05	Silver	SW6020A	11/07/23 14:57	MT5-23-1107A
S55327.05	Zinc	SW6020A	11/07/23 14:57	MT5-23-1107A
S55327.06	Arsenic	SW6020A	11/07/23 14:59	MT5-23-1107A
S55327.06	Barium	SW6020A	11/07/23 14:59	MT5-23-1107A
S55327.06	Cadmium	SW6020A	11/07/23 14:59	MT5-23-1107A
S55327.06	Chromium	SW6020A	11/07/23 14:59	MT5-23-1107A
S55327.06	Copper	SW6020A	11/07/23 14:59	MT5-23-1107A
S55327.06	Lead	SW6020A	11/07/23 14:59	MT5-23-1107A
S55327.06	Selenium	SW6020A	11/07/23 14:59	MT5-23-1107A
S55327.06	Silver	SW6020A	11/07/23 14:59	MT5-23-1107A
S55327.06	Zinc	SW6020A	11/07/23 14:59	MT5-23-1107A
S55327.07	Arsenic	SW6020A	11/07/23 15:01	MT5-23-1107A
S55327.07	Barium	SW6020A	11/07/23 15:01	MT5-23-1107A
S55327.07	Cadmium	SW6020A	11/07/23 15:01	MT5-23-1107A
S55327.07	Chromium	SW6020A	11/07/23 15:01	MT5-23-1107A
S55327.07	Copper	SW6020A	11/07/23 15:01	MT5-23-1107A
S55327.07	Lead	SW6020A	11/07/23 15:01	MT5-23-1107A
S55327.07	Selenium	SW6020A	11/07/23 15:01	MT5-23-1107A
S55327.07	Silver	SW6020A	11/07/23 15:01	MT5-23-1107A
S55327.07	Zinc	SW6020A	11/07/23 15:01	MT5-23-1107A
S55327.08	Arsenic	SW6020A	11/07/23 15:04	MT5-23-1107A
S55327.08	Barium	SW6020A	11/07/23 15:04	MT5-23-1107A

Metals, Prep Batch ID: MTD-110723-2 (continued)

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S55327.08	Cadmium	SW6020A	11/07/23 15:04	MT5-23-1107A
S55327.08	Chromium	SW6020A	11/07/23 15:04	MT5-23-1107A
S55327.08	Copper	SW6020A	11/07/23 15:04	MT5-23-1107A
S55327.08	Lead	SW6020A	11/07/23 15:04	MT5-23-1107A
S55327.08	Selenium	SW6020A	11/07/23 15:04	MT5-23-1107A
S55327.08	Silver	SW6020A	11/07/23 15:04	MT5-23-1107A
S55327.08	Zinc	SW6020A	11/07/23 15:04	MT5-23-1107A
S55327.09	Arsenic	SW6020A	11/07/23 15:06	MT5-23-1107A
S55327.09	Barium	SW6020A	11/07/23 15:06	MT5-23-1107A
S55327.09	Cadmium	SW6020A	11/07/23 15:06	MT5-23-1107A
S55327.09	Chromium	SW6020A	11/07/23 15:06	MT5-23-1107A
S55327.09	Copper	SW6020A	11/07/23 15:06	MT5-23-1107A
S55327.09	Lead	SW6020A	11/07/23 15:06	MT5-23-1107A
S55327.09	Selenium	SW6020A	11/07/23 15:06	MT5-23-1107A
S55327.09	Silver	SW6020A	11/07/23 15:06	MT5-23-1107A
S55327.09	Zinc	SW6020A	11/07/23 15:06	MT5-23-1107A
S55327.10	Arsenic	SW6020A	11/07/23 15:08	MT5-23-1107A
S55327.10	Barium	SW6020A	11/07/23 15:08	MT5-23-1107A
S55327.10	Cadmium	SW6020A	11/07/23 15:08	MT5-23-1107A
S55327.10	Chromium	SW6020A	11/07/23 15:08	MT5-23-1107A
S55327.10	Copper	SW6020A	11/07/23 15:08	MT5-23-1107A
S55327.10	Lead	SW6020A	11/07/23 15:08	MT5-23-1107A
S55327.10	Selenium	SW6020A	11/07/23 15:08	MT5-23-1107A
S55327.10	Silver	SW6020A	11/07/23 15:08	MT5-23-1107A
S55327.10	Zinc	SW6020A	11/07/23 15:08	MT5-23-1107A
S55327.11	Arsenic	SW6020A	11/07/23 15:10	MT5-23-1107A
S55327.11	Barium	SW6020A	11/07/23 15:10	MT5-23-1107A
S55327.11	Cadmium	SW6020A	11/07/23 15:10	MT5-23-1107A
S55327.11	Chromium	SW6020A	11/07/23 15:10	MT5-23-1107A
S55327.11	Copper	SW6020A	11/07/23 15:10	MT5-23-1107A
S55327.11	Lead	SW6020A	11/07/23 15:10	MT5-23-1107A
S55327.11	Selenium	SW6020A	11/07/23 15:10	MT5-23-1107A
S55327.11	Silver	SW6020A	11/07/23 15:10	MT5-23-1107A
S55327.11	Zinc	SW6020A	11/07/23 15:10	MT5-23-1107A
S55327.12	Arsenic	SW6020A	11/07/23 15:12	MT5-23-1107A
S55327.12	Barium	SW6020A	11/07/23 15:12	MT5-23-1107A
S55327.12	Cadmium	SW6020A	11/07/23 15:12	MT5-23-1107A
S55327.12	Chromium	SW6020A	11/07/23 15:12	MT5-23-1107A
S55327.12	Copper	SW6020A	11/07/23 15:12	MT5-23-1107A
S55327.12	Lead	SW6020A	11/07/23 15:12	MT5-23-1107A
S55327.12	Selenium	SW6020A	11/07/23 15:12	MT5-23-1107A
S55327.12	Silver	SW6020A	11/07/23 15:12	MT5-23-1107A
S55327.12	Zinc	SW6020A	11/07/23 15:12	MT5-23-1107A
S55327.13	Arsenic	SW6020A	11/07/23 15:14	MT5-23-1107A
S55327.13	Barium	SW6020A	11/07/23 15:14	MT5-23-1107A
S55327.13	Cadmium	SW6020A	11/07/23 15:14	MT5-23-1107A
S55327.13	Chromium	SW6020A	11/07/23 15:14	MT5-23-1107A
S55327.13	Copper	SW6020A	11/07/23 15:14	MT5-23-1107A
S55327.13	Lead	SW6020A	11/07/23 15:14	MT5-23-1107A

Metals, Prep Batch ID: MTD-110723-2 (continued)

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S55327.13	Selenium	SW6020A	11/07/23 15:14	MT5-23-1107A
S55327.13	Silver	SW6020A	11/07/23 15:14	MT5-23-1107A
S55327.13	Zinc	SW6020A	11/07/23 15:14	MT5-23-1107A

Organics - Semi-Volatiles, Prep Batch ID: SP231107S2

Surrogates: Yes, QC Types: BLK/LCS/MS/MSD

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S55327.01	Polynuclear Aromatics	SW8270D	11/09/23 23:52	H231109
S55327.02	Polynuclear Aromatics	SW8270D	11/10/23 00:09	H231109
S55327.03	Polynuclear Aromatics	SW8270D	11/10/23 00:26	H231109
S55327.04	Polynuclear Aromatics	SW8270D	11/08/23 22:43	Z231108
S55327.05	Polynuclear Aromatics	SW8270D	11/08/23 23:04	Z231108
S55327.06	Polynuclear Aromatics	SW8270D	11/08/23 23:25	Z231108
S55327.07	Polynuclear Aromatics	SW8270D	11/08/23 23:46	Z231108
S55327.08	Polynuclear Aromatics	SW8270D	11/09/23 00:08	Z231108

Organics - Semi-Volatiles, Prep Batch ID: SP231108S1

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S55327.09	Polynuclear Aromatics	SW8270D	11/08/23 21:52	H231108
S55327.10	Polynuclear Aromatics	SW8270D	11/08/23 22:09	H231108
S55327.11	Polynuclear Aromatics	SW8270D	11/08/23 22:27	H231108
S55327.12	Polynuclear Aromatics	SW8270D	11/08/23 22:44	H231108
S55327.13	Polynuclear Aromatics	SW8270D	11/09/23 01:52	H231108

Organics - Volatiles, Prep Batch ID: VF231107S2

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S55327.04	Volatile Organics 5035	SW5035A/8260C	11/07/23 18:09	231107A3
S55327.05	Volatile Organics 5035	SW5035A/8260C	11/07/23 18:33	231107A3
S55327.07	Volatile Organics 5035	SW5035A/8260C	11/07/23 18:58	231107A3
S55327.08	Volatile Organics 5035	SW5035A/8260C	11/07/23 19:22	231107A3
S55327.09	Volatile Organics 5035	SW5035A/8260C	11/07/23 19:45	231107A3
S55327.10	Volatile Organics 5035	SW5035A/8260C	11/07/23 20:09	231107A3
S55327.11	Volatile Organics 5035	SW5035A/8260C	11/07/23 20:34	231107A3

Organics - Volatiles, Prep Batch ID: VF231108S1

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S55327.01	Volatile Organics 5035	SW5035A/8260C	11/08/23 15:26	231108A5
S55327.01	Volatile Organics 5035 (Replicate 01)	SW5035A/8260C	11/08/23 22:58	231108A5
S55327.02	Volatile Organics 5035	SW5035A/8260C	11/08/23 13:50	231108A5
S55327.03	Volatile Organics 5035	SW5035A/8260C	11/08/23 14:14	231108A5
S55327.06	Volatile Organics 5035	SW5035A/8260C	11/08/23 19:23	231108A5

Organics - Volatiles, Prep Batch ID: VF231108S3

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S55327.13	Volatile Organics 5035	SW5035A/8260C	11/09/23 02:56	231108B5

QC Report - Prep Batch Summary

Organics - Volatiles, Prep Batch ID: VF231109S1

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S55327.12	Volatile Organics 5035	SW5035A/8260C	11/09/23 15:11	231109A5

QC Report - Surrogates per Lab Sample

Lab Sample ID: S55327.01

Sample Tag: SB-05(24-25) I

Collected Date/Time: 10/30/2023 18:30

Matrix: Soil

COC Reference: 2023-10-30-01

Organics - Semi-Volatiles, Analysis: Polynuclear Aromatics

Run in Batch: H231109, Run Date: 11/09/2023 23:52, Matrix: SO, Dilution: 20

Surrogate	Flags	**%Rec**	LCL	UCL
Nitrobenzene-D5		**88.3**	18.5	120.0
2-Fluorobiphenyl		**88.8**	10.0	115.0
Terphenyl-D14		**101.0**	10.3	137.0

Organics - Volatiles, Analysis: Volatile Organics 5035

Run in Batch: 231108A5, Run Date: 11/08/2023 15:26, Matrix: SO, Dilution: 1130

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**97.1**	81.0	124.0
1,2-Dichloroethane-D4		**101.5**	71.0	124.0
Toluene-D8		**105.2**	83.0	120.0

Organics - Volatiles, Analysis: Volatile Organics 5035 (Replicate 01)

Run in Batch: 231108A5, Run Date: 11/08/2023 22:58, Matrix: SO, Dilution: 5660

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**99.9**	81.0	124.0
1,2-Dichloroethane-D4		**102.6**	71.0	124.0
Toluene-D8		**104.9**	83.0	120.0

QC Report - Surrogates per Lab Sample

Lab Sample ID: S55327.04

Sample Tag: SB-01 (24-25) I

Collected Date/Time: 10/30/2023 16:00

Matrix: Soil

COC Reference: 2023-10-30-01

Organics - Semi-Volatiles, Analysis: Polynuclear Aromatics

Run in Batch: Z231108, Run Date: 11/08/2023 22:43, Matrix: SO, Dilution: 10

Surrogate	Flags	**%Rec**	LCL	UCL
Nitrobenzene-D5		**68.1**	18.5	120.0
2-Fluorobiphenyl		**71.5**	10.0	115.0
Terphenyl-D14		**72.0**	10.3	137.0

Organics - Volatiles, Analysis: Volatile Organics 5035

Run in Batch: 231107A3, Run Date: 11/07/2023 18:09, Matrix: SO, Dilution: 51.7

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**103.7**	81.0	124.0
1,2-Dichloroethane-D4		**95.1**	71.0	124.0
Toluene-D8		**99.0**	83.0	120.0

QC Report - Surrogates per Lab Sample

Lab Sample ID: S55327.05

Sample Tag: Blind Duplicate

Collected Date/Time: 10/30/2023 00:01

Matrix: Soil

COC Reference: 2023-10-30-01

Organics - Semi-Volatiles, Analysis: Polynuclear Aromatics

Run in Batch: Z231108, Run Date: 11/08/2023 23:04, Matrix: SO, Dilution: 10

Surrogate	Flags	**%Rec**	LCL	UCL
Nitrobenzene-D5		**55.7**	18.5	120.0
2-Fluorobiphenyl		**54.8**	10.0	115.0
Terphenyl-D14		**60.0**	10.3	137.0

Organics - Volatiles, Analysis: Volatile Organics 5035

Run in Batch: 231107A3, Run Date: 11/07/2023 18:33, Matrix: SO, Dilution: 64.7

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**101.6**	81.0	124.0
1,2-Dichloroethane-D4		**92.1**	71.0	124.0
Toluene-D8		**98.9**	83.0	120.0

QC Report - Surrogates per Lab Sample

Lab Sample ID: S55327.06

Sample Tag: SB-02 (24-25) I

Collected Date/Time: 10/30/2023 16:30

Matrix: Soil

COC Reference: 2023-10-30-01

Organics - Semi-Volatiles, Analysis: Polynuclear Aromatics

Run in Batch: Z231108, Run Date: 11/08/2023 23:25, Matrix: SO, Dilution: 10

Surrogate	Flags	**%Rec**	LCL	UCL
Nitrobenzene-D5		**116.0**	18.5	120.0
2-Fluorobiphenyl		**96.5**	10.0	115.0
Terphenyl-D14		**89.7**	10.3	137.0

Organics - Volatiles, Analysis: Volatile Organics 5035

Run in Batch: 231108A5, Run Date: 11/08/2023 19:23, Matrix: SO, Dilution: 62.4

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**98.4**	81.0	124.0
1,2-Dichloroethane-D4		**104.5**	71.0	124.0
Toluene-D8		**103.3**	83.0	120.0

QC Report - Surrogates per Lab Sample

Lab Sample ID: S55327.07

Sample Tag: SB-03 (11-12) I

Collected Date/Time: 10/30/2023 16:50

Matrix: Soil

COC Reference: 2023-10-30-01

Organics - Semi-Volatiles, Analysis: Polynuclear Aromatics

Run in Batch: Z231108, Run Date: 11/08/2023 23:46, Matrix: SO, Dilution: 10

Surrogate	Flags	**%Rec**	LCL	UCL
Nitrobenzene-D5		**57.3**	18.5	120.0
2-Fluorobiphenyl		**61.6**	10.0	115.0
Terphenyl-D14		**59.7**	10.3	137.0

Organics - Volatiles, Analysis: Volatile Organics 5035

Run in Batch: 231107A3, Run Date: 11/07/2023 18:58, Matrix: SO, Dilution: 50.1

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**102.9**	81.0	124.0
1,2-Dichloroethane-D4		**97.4**	71.0	124.0
Toluene-D8		**99.4**	83.0	120.0

QC Report - Surrogates per Lab Sample

Lab Sample ID: S55327.08

Sample Tag: SB-04 (9-10) I

Collected Date/Time: 10/30/2023 17:30

Matrix: Soil

COC Reference: 2023-10-30-01

Organics - Semi-Volatiles, Analysis: Polynuclear Aromatics

Run in Batch: Z231108, Run Date: 11/09/2023 00:08, Matrix: SO, Dilution: 10

Surrogate	Flags	**%Rec**	LCL	UCL
Nitrobenzene-D5		**69.8**	18.5	120.0
2-Fluorobiphenyl		**70.9**	10.0	115.0
Terphenyl-D14		**69.7**	10.3	137.0

Organics - Volatiles, Analysis: Volatile Organics 5035

Run in Batch: 231107A3, Run Date: 11/07/2023 19:22, Matrix: SO, Dilution: 52.3

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**102.3**	81.0	124.0
1,2-Dichloroethane-D4		**92.7**	71.0	124.0
Toluene-D8		**98.7**	83.0	120.0

QC Report - Surrogates per Lab Sample

Lab Sample ID: S55327.09

Sample Tag: SB-06 (3-4) I

Collected Date/Time: 10/31/2023 09:20

Matrix: Soil

COC Reference: 2023-10-30-01

Organics - Semi-Volatiles, Analysis: Polynuclear Aromatics

Run in Batch: H231108, Run Date: 11/08/2023 21:52, Matrix: SO, Dilution: 10

Surrogate	Flags	**%Rec**	LCL	UCL
Nitrobenzene-D5		**73.0**	18.5	120.0
2-Fluorobiphenyl		**89.7**	10.0	115.0
Terphenyl-D14		**98.5**	10.3	137.0

Organics - Volatiles, Analysis: Volatile Organics 5035

Run in Batch: 231107A3, Run Date: 11/07/2023 19:45, Matrix: SO, Dilution: 54.6

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**102.8**	81.0	124.0
1,2-Dichloroethane-D4		**94.5**	71.0	124.0
Toluene-D8		**99.6**	83.0	120.0

QC Report - Surrogates per Lab Sample

Lab Sample ID: S55327.10

Sample Tag: SB-07 (4-5) I

Collected Date/Time: 10/31/2023 11:30

Matrix: Soil

COC Reference: 2023-10-30-01

Organics - Semi-Volatiles, Analysis: Polynuclear Aromatics

Run in Batch: H231108, Run Date: 11/08/2023 22:09, Matrix: SO, Dilution: 10

Surrogate	Flags	**%Rec**	LCL	UCL
Nitrobenzene-D5		**63.1**	18.5	120.0
2-Fluorobiphenyl		**80.6**	10.0	115.0
Terphenyl-D14		**90.7**	10.3	137.0

Organics - Volatiles, Analysis: Volatile Organics 5035

Run in Batch: 231107A3, Run Date: 11/07/2023 20:09, Matrix: SO, Dilution: 50.6

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**104.3**	81.0	124.0
1,2-Dichloroethane-D4		**94.8**	71.0	124.0
Toluene-D8		**98.7**	83.0	120.0

QC Report - Surrogates per Lab Sample

Lab Sample ID: S55327.11

Sample Tag: SB-08 (4-5) I

Collected Date/Time: 10/31/2023 10:45

Matrix: Soil

COC Reference: 2023-10-30-01

Organics - Semi-Volatiles, Analysis: Polynuclear Aromatics

Run in Batch: H231108, Run Date: 11/08/2023 22:27, Matrix: SO, Dilution: 10

Surrogate	Flags	**%Rec**	LCL	UCL
Nitrobenzene-D5		**65.1**	18.5	120.0
2-Fluorobiphenyl		**84.1**	10.0	115.0
Terphenyl-D14		**100.5**	10.3	137.0

Organics - Volatiles, Analysis: Volatile Organics 5035

Run in Batch: 231107A3, Run Date: 11/07/2023 20:34, Matrix: SO, Dilution: 52.8

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**105.0**	81.0	124.0
1,2-Dichloroethane-D4		**95.2**	71.0	124.0
Toluene-D8		**99.5**	83.0	120.0

QC Report - Surrogates per Lab Sample

Lab Sample ID: S55327.12

Sample Tag: SB-09 (4-5) I

Collected Date/Time: 10/31/2023 12:15

Matrix: Soil

COC Reference: 2023-10-30-01

Organics - Semi-Volatiles, Analysis: Polynuclear Aromatics

Run in Batch: H231108, Run Date: 11/08/2023 22:44, Matrix: SO, Dilution: 10

Surrogate	Flags	**%Rec**	LCL	UCL
Nitrobenzene-D5		**64.7**	18.5	120.0
2-Fluorobiphenyl		**82.9**	10.0	115.0
Terphenyl-D14		**94.9**	10.3	137.0

Organics - Volatiles, Analysis: Volatile Organics 5035

Run in Batch: 231109A5, Run Date: 11/09/2023 15:11, Matrix: SO, Dilution: 58.3

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**99.5**	81.0	124.0
1,2-Dichloroethane-D4		**106.6**	71.0	124.0
Toluene-D8		**103.7**	83.0	120.0

Lab Sample ID: S55327.13

Sample Tag: SB-10 (4-5) I

Collected Date/Time: 10/31/2023 13:00

Matrix: Soil

COC Reference: 2023-10-30-01

Organics - Semi-Volatiles, Analysis: Polynuclear Aromatics

Run in Batch: H231108, Run Date: 11/09/2023 01:52, Matrix: SO, Dilution: 10

Surrogate	Flags	**%Rec**	LCL	UCL
Nitrobenzene-D5		**69.3**	18.5	120.0
2-Fluorobiphenyl		**85.6**	10.0	115.0
Terphenyl-D14		**91.8**	10.3	137.0

Organics - Volatiles, Analysis: Volatile Organics 5035

Run in Batch: 231108B5, Run Date: 11/09/2023 02:56, Matrix: SO, Dilution: 56.2

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**99.7**	81.0	124.0
1,2-Dichloroethane-D4		**110.0**	71.0	124.0
Toluene-D8		**104.8**	83.0	120.0

Organics - Semi-Volatiles, Prep Batch ID: SP231107S2

QC Types: BLK/LCS/MS/MSD

Blank (BLK)

Lab Sample ID: Z231108.BLKS07B

Run in Batch: Z231108, Run Date: 11/08/2023 16:19, Prep Date: 11/07/2023, Matrix: SO, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
Nitrobenzene-D5		**67.5**	18.5	120.0
2-Fluorobiphenyl		**70.5**	10.0	115.0
Terphenyl-D14		**71.1**	10.3	137.0

Laboratory Control Sample (LCS)

Lab Sample ID: Z231108.LCSS07B

Run in Batch: Z231108, Run Date: 11/08/2023 16:41, Prep Date: 11/07/2023, Matrix: SO, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
Nitrobenzene-D5		**71.2**	18.5	120.0
2-Fluorobiphenyl		**76.7**	10.0	115.0
Terphenyl-D14		**75.4**	10.3	137.0

Matrix Spike (MS)

Lab Sample ID: H231109.5532702M, Parent Sample ID: S55327.01

Run in Batch: H231109, Run Date: 11/10/2023 00:09, Prep Date: 11/07/2023, Matrix: SO, Dilution: 20

Surrogate	Flags	%Rec	LCL	UCL
Nitrobenzene-D5		**89.3**	18.5	120.0
2-Fluorobiphenyl		**97.9**	10.0	115.0
Terphenyl-D14		**101.0**	10.3	137.0

Matrix Spike Duplicate (MSD)

Lab Sample ID: H231109.5532703N, Parent Sample ID: H231109.5532702M

Run in Batch: H231109, Run Date: 11/10/2023 00:26, Prep Date: 11/07/2023, Matrix: SO, Dilution: 20

Surrogate	Flags	%Rec	LCL	UCL
Nitrobenzene-D5		**106.8**	18.5	120.0
2-Fluorobiphenyl		**108.7**	10.0	115.0
Terphenyl-D14		**116.4**	10.3	137.0

Organics - Semi-Volatiles, Prep Batch ID: SP231108S1

QC Types: BLK/LCS/LCSD

Blank (BLK)

Lab Sample ID: H231108.BLKS08A

Run in Batch: H231108, Run Date: 11/08/2023 17:00, Prep Date: 11/08/2023, Matrix: SO, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
Nitrobenzene-D5		**59.5**	18.5	120.0
2-Fluorobiphenyl		**64.4**	10.0	115.0
Terphenyl-D14		**75.8**	10.3	137.0

Blank (BLK)

Lab Sample ID: H231108B.BLKS08A

Run in Batch: H231108B, Run Date: 11/08/2023 17:00, Prep Date: 11/08/2023, Matrix: SO, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
2-Fluorobiphenyl		**57.3**	10.0	115.0

Laboratory Control Sample (LCS)

Lab Sample ID: H231108.LCSS08A

Run in Batch: H231108, Run Date: 11/08/2023 17:17, Prep Date: 11/08/2023, Matrix: SO, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
Nitrobenzene-D5		**68.9**	18.5	120.0
2-Fluorobiphenyl		**71.3**	10.0	115.0
Terphenyl-D14		**82.6**	10.3	137.0

Laboratory Control Sample (LCS)

Lab Sample ID: H231108B.LCSS08A

Run in Batch: H231108B, Run Date: 11/08/2023 17:17, Prep Date: 11/08/2023, Matrix: SO, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
2-Fluorobiphenyl		**63.3**	10.0	115.0

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: H231108.LCSDS08A, Parent Sample ID: H231108.LCSS08A

Run in Batch: H231108, Run Date: 11/08/2023 17:34, Prep Date: 11/08/2023, Matrix: SO, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
Nitrobenzene-D5		**63.1**	18.5	120.0
2-Fluorobiphenyl		**66.3**	10.0	115.0
Terphenyl-D14		**79.3**	10.3	137.0

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: H231108B.LCSDS08A, Parent Sample ID: H231108B.LCSS08A

Run in Batch: H231108B, Run Date: 11/08/2023 17:34, Prep Date: 11/08/2023, Matrix: SO, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
2-Fluorobiphenyl		**58.8**	10.0	115.0

Organics - Volatiles, Prep Batch ID: VF231107S2

QC Types: BLK/LCS/LCSD

Blank (BLK)

Lab Sample ID: 231107A3.BLKS07A

Run in Batch: 231107A3, Run Date: 11/07/2023 15:21, Prep Date: 11/07/2023, Matrix: SO, Dilution: 50

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		**104.8**	81.0	124.0
1,2-Dichloroethane-D4		**93.9**	71.0	124.0
Toluene-D8		**99.7**	83.0	120.0

Blank (BLK)

Lab Sample ID: 231107B3.BLKS07A

Run in Batch: 231107B3, Run Date: 11/07/2023 15:21, Prep Date: 11/07/2023, Matrix: SO, Dilution: 50

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		**106.1**	70.0	130.0
1,2-Dichloroethane-D4		**98.6**	70.0	130.0
Toluene-D8		**100.6**	70.0	130.0

Laboratory Control Sample (LCS)

Lab Sample ID: 231107A3.LCSS07A

Run in Batch: 231107A3, Run Date: 11/07/2023 12:07, Prep Date: 11/07/2023, Matrix: SO, Dilution: 50

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		**107.0**	81.0	124.0
1,2-Dichloroethane-D4		**89.0**	71.0	124.0
Toluene-D8		**100.4**	83.0	120.0

Laboratory Control Sample (LCS)

Lab Sample ID: 231107B3.LCSF07A

Run in Batch: 231107B3, Run Date: 11/07/2023 14:08, Prep Date: 11/07/2023, Matrix: SO, Dilution: 50

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		**106.1**	70.0	130.0
1,2-Dichloroethane-D4		**96.0**	70.0	130.0
Toluene-D8		**101.3**	70.0	130.0

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: 231107A3.LCSDS07A, Parent Sample ID: 231107A3.LCSS07A

Run in Batch: 231107A3, Run Date: 11/07/2023 12:32, Prep Date: 11/07/2023, Matrix: SO, Dilution: 50

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		**105.7**	81.0	124.0
1,2-Dichloroethane-D4		**89.1**	71.0	124.0
Toluene-D8		**100.3**	83.0	120.0

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: 231107B3.LCSDF07A, Parent Sample ID: 231107B3.LCSF07A

Run in Batch: 231107B3, Run Date: 11/07/2023 14:33, Prep Date: 11/07/2023, Matrix: SO, Dilution: 50

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**107.0**	70.0	130.0
1,2-Dichloroethane-D4		**96.7**	70.0	130.0
Toluene-D8		**100.3**	70.0	130.0

Organics - Volatiles, Prep Batch ID: VF231108S1

QC Types: BLK/LCS/LCSD/MS/MSD

Blank (BLK)

Lab Sample ID: 231108A5.BLKS08A

Run in Batch: 231108A5, Run Date: 11/08/2023 15:02, Prep Date: 11/08/2023, Matrix: SO, Dilution: 50

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		**99.3**	81.0	124.0
1,2-Dichloroethane-D4		**108.1**	71.0	124.0
Toluene-D8		**103.6**	83.0	120.0

Laboratory Control Sample (LCS)

Lab Sample ID: 231108A5.LCSS08A

Run in Batch: 231108A5, Run Date: 11/08/2023 13:02, Prep Date: 11/08/2023, Matrix: SO, Dilution: 50

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		**98.6**	81.0	124.0
1,2-Dichloroethane-D4		**115.6**	71.0	124.0
Toluene-D8		**103.8**	83.0	120.0

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: 231108A5.LCSDS08A, Parent Sample ID: 231108A5.LCSS08A

Run in Batch: 231108A5, Run Date: 11/08/2023 13:26, Prep Date: 11/08/2023, Matrix: SO, Dilution: 50

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		**99.1**	81.0	124.0
1,2-Dichloroethane-D4		**114.8**	71.0	124.0
Toluene-D8		**104.3**	83.0	120.0

Matrix Spike (MS)

Lab Sample ID: 231108A5.5532702M, Parent Sample ID: S55327.01

Run in Batch: 231108A5, Run Date: 11/08/2023 13:50, Prep Date: 11/08/2023, Matrix: SO, Dilution: 1100

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		**95.1**	81.0	124.0
1,2-Dichloroethane-D4		**116.3**	71.0	124.0
Toluene-D8		**105.2**	83.0	120.0

Matrix Spike Duplicate (MSD)

Lab Sample ID: 231108A5.5532703N, Parent Sample ID: 231108A5.5532702M

Run in Batch: 231108A5, Run Date: 11/08/2023 14:14, Prep Date: 11/08/2023, Matrix: SO, Dilution: 1150

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		**96.2**	81.0	124.0
1,2-Dichloroethane-D4		**113.1**	71.0	124.0
Toluene-D8		**106.4**	83.0	120.0

Organics - Volatiles, Prep Batch ID: VF231108S3

QC Types: BLK/LCS/LCSD

Blank (BLK)

Lab Sample ID: 231108B5.BLKS08B

Run in Batch: 231108B5, Run Date: 11/09/2023 02:33, Prep Date: 11/08/2023, Matrix: SO, Dilution: 50

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		**100.4**	81.0	124.0
1,2-Dichloroethane-D4		**104.9**	71.0	124.0
Toluene-D8		**102.9**	83.0	120.0

Blank (BLK)

Lab Sample ID: 231108C5.BLKS08B

Run in Batch: 231108C5, Run Date: 11/09/2023 02:33, Prep Date: 11/08/2023, Matrix: SO, Dilution: 50

Surrogate	Flags	%Rec	LCL	UCL
Toluene-D8		**102.1**	83.0	120.0

Laboratory Control Sample (LCS)

Lab Sample ID: 231108B5.LCSS08B

Run in Batch: 231108B5, Run Date: 11/09/2023 00:33, Prep Date: 11/08/2023, Matrix: SO, Dilution: 50

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		**98.5**	81.0	124.0
1,2-Dichloroethane-D4		**114.0**	71.0	124.0
Toluene-D8		**104.4**	83.0	120.0

Laboratory Control Sample (LCS)

Lab Sample ID: 231108C5.LCSG08B

Run in Batch: 231108C5, Run Date: 11/09/2023 01:45, Prep Date: 11/08/2023, Matrix: SO, Dilution: 50

Surrogate	Flags	%Rec	LCL	UCL
Toluene-D8		**103.3**	83.0	120.0

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: 231108B5.LCSDS08B, Parent Sample ID: 231108B5.LCSS08B

Run in Batch: 231108B5, Run Date: 11/09/2023 00:57, Prep Date: 11/08/2023, Matrix: SO, Dilution: 50

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		**101.0**	81.0	124.0
1,2-Dichloroethane-D4		**115.9**	71.0	124.0
Toluene-D8		**104.3**	83.0	120.0

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: 231108C5.LCSDG08B, Parent Sample ID: 231108C5.LCSG08B

Run in Batch: 231108C5, Run Date: 11/09/2023 02:09, Prep Date: 11/08/2023, Matrix: SO, Dilution: 50

Surrogate	Flags	%Rec	LCL	UCL
Toluene-D8		**103.8**	83.0	120.0

Organics - Volatiles, Prep Batch ID: VF231109S1

QC Types: BLK/LCS/LCSD

Blank (BLK)

Lab Sample ID: 231109A5.BLKS09A

Run in Batch: 231109A5, Run Date: 11/09/2023 14:34, Prep Date: 11/09/2023, Matrix: SO, Dilution: 50

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		**100.6**	81.0	124.0
1,2-Dichloroethane-D4		**105.7**	71.0	124.0
Toluene-D8		**102.8**	83.0	120.0

Laboratory Control Sample (LCS)

Lab Sample ID: 231109A5.LCSS09A

Run in Batch: 231109A5, Run Date: 11/09/2023 13:22, Prep Date: 11/09/2023, Matrix: SO, Dilution: 50

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		**98.8**	81.0	124.0
1,2-Dichloroethane-D4		**117.3**	71.0	124.0
Toluene-D8		**105.5**	83.0	120.0

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: 231109A5.LCSDS09A, Parent Sample ID: 231109A5.LCSS09A

Run in Batch: 231109A5, Run Date: 11/09/2023 13:46, Prep Date: 11/09/2023, Matrix: SO, Dilution: 50

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		**100.4**	81.0	124.0
1,2-Dichloroethane-D4		**117.1**	71.0	124.0
Toluene-D8		**103.8**	83.0	120.0

Inorganics, Prep Batch ID: TS231106B

Surrogates: No, QC Types: BLK/LCS/DUP

Blank (BLK)

Lab Sample ID: TS231106B.LRB1

Run in Batch: TS231106B, Run Date: 11/06/2023 13:12, Prep Date: 11/06/2023, Matrix: Liquid, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Total Solids		ND	1	%

Laboratory Control Sample (LCS)

Lab Sample ID: TS231106B.LCS1

Run in Batch: TS231106B, Run Date: 11/06/2023 13:12, Prep Date: 11/06/2023, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Total Solids		100	90	110

Duplicate (DUP)

Lab Sample ID: TS231106B.DP1, Parent Sample ID: S55324.02

Run in Batch: TS231106B, Run Date: 11/06/2023 13:12, Prep Date: 11/06/2023, Matrix: Soil, Dilution: 1

Analyte	Flags	RPD	RPD CL
Total Solids		0	5

Duplicate (DUP)

Lab Sample ID: TS231106B.DP2, Parent Sample ID: S55327.04

Run in Batch: TS231106B, Run Date: 11/06/2023 13:12, Prep Date: 11/06/2023, Matrix: Soil, Dilution: 1

Analyte	Flags	RPD	RPD CL
Total Solids		0	5

Metals, Prep Batch ID: HGD-110723-2

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Blank (BLK)

Lab Sample ID: HG-23-1107A.043.LRB

Run in Batch: HG-23-1107A, Run Date: 11/07/2023 14:39, Prep Date: 11/07/2023, Matrix: Liquid, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Mercury		ND	0.20	ug/L

Laboratory Control Sample (LCS)

Lab Sample ID: HG-23-1107A.042.LCS

Run in Batch: HG-23-1107A, Run Date: 11/07/2023 14:35, Prep Date: 11/07/2023, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Mercury		103	85	115

Matrix Spike (MS)

Lab Sample ID: HG-23-1107A.046.MS, Parent Sample ID: S55327.01

Run in Batch: HG-23-1107A, Run Date: 11/07/2023 14:49, Prep Date: 11/07/2023, Matrix: Soil, Dilution: 63

Analyte	Flags	% Rec	LCL	UCL
Mercury		102	80	120

Matrix Spike Duplicate (MSD)

Lab Sample ID: HG-23-1107A.047.MSD, Parent Sample ID: HG-23-1107A.046.MS

Run in Batch: HG-23-1107A, Run Date: 11/07/2023 14:52, Prep Date: 11/07/2023, Matrix: Soil, Dilution: 63

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Mercury		103	80	120	2	20

Metals, Prep Batch ID: MTD-110723-2

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Blank (BLK)

Lab Sample ID: MT5-23-1107A.056.LRB

Run in Batch: MT5-23-1107A, Run Date: 11/07/2023 13:11, Prep Date: 11/07/2023, Matrix: Liquid, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Arsenic		ND	0.0004	mg/L
Barium		ND	0.001	mg/L
Cadmium		ND	0.0001	mg/L
Chromium		ND	0.001	mg/L
Copper		ND	0.001	mg/L
Lead		ND	0.0006	mg/L
Selenium		ND	0.001	mg/L
Silver		ND	0.0001	mg/L
Zinc		ND	0.001	mg/L

Laboratory Control Sample (LCS)

Lab Sample ID: MT5-23-1107A.055.LCS

Run in Batch: MT5-23-1107A, Run Date: 11/07/2023 13:02, Prep Date: 11/07/2023, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Arsenic		101	85	115
Barium		102	85	115
Cadmium		102	85	115
Chromium		101	85	115
Copper		102	85	115
Lead		99	85	115
Selenium		99	85	115
Silver		94	85	115
Zinc		100	85	115

Matrix Spike (MS)

Lab Sample ID: MT5-23-1107A.060.MS, Parent Sample ID: S55327.01

Run in Batch: MT5-23-1107A, Run Date: 11/07/2023 13:23, Prep Date: 11/07/2023, Matrix: Soil, Dilution: 233

Analyte	Flags	% Rec	LCL	UCL
Arsenic		106	75	125
Barium		105	75	125
Cadmium		106	75	125
Chromium		98	75	125
Copper		95	75	125
Lead		108	75	125
Selenium		104	75	125
Silver		89	75	125
Zinc		104	75	125

Matrix Spike Duplicate (MSD)

Lab Sample ID: MT5-23-1107A.061.MSD, Parent Sample ID: MT5-23-1107A.060.MS

Run in Batch: MT5-23-1107A, Run Date: 11/07/2023 13:26, Prep Date: 11/07/2023, Matrix: Soil, Dilution: 240

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Arsenic		110	75	125	4	20
Barium		112	75	125	6	20
Cadmium		107	75	125	2	20
Chromium		104	75	125	6	20

Metals, Prep Batch ID: MTD-110723-2 (continued)

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Matrix Spike Duplicate (MSD) (continued)

Lab Sample ID: MT5-23-1107A.061.MSD, Parent Sample ID: MT5-23-1107A.060.MS

Run in Batch: MT5-23-1107A, Run Date: 11/07/2023 13:26, Prep Date: 11/07/2023, Matrix: Soil, Dilution: 240

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Copper		99	75	125	3	20
Lead	*	139	75	125	15	20
Selenium		106	75	125	2	20
Silver		92	75	125	3	20
Zinc		108	75	125	3	20

Organics - Semi-Volatiles, Prep Batch ID: SP231107S2

Surrogates: Yes, QC Types: BLK/LCS/MS/MSD

Blank (BLK)

Lab Sample ID: Z231108.BLKS07B

Run in Batch: Z231108, Run Date: 11/08/2023 16:19, Prep Date: 11/07/2023, Matrix: SO, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Acenaphthene		ND	0.025	mg/kg
Acenaphthylene		ND	0.025	mg/kg
Anthracene		ND	0.025	mg/kg
Benzo(a)anthracene		ND	0.025	mg/kg
Benzo(a)pyrene		ND	0.025	mg/kg
Benzo(b)fluoranthene		ND	0.025	mg/kg
Benzo(ghi)perylene		ND	0.025	mg/kg
Benzo(k)fluoranthene		ND	0.025	mg/kg
Chrysene		ND	0.025	mg/kg
Dibenzo(ah)anthracene		ND	0.025	mg/kg
Fluoranthene		ND	0.025	mg/kg
Fluorene		ND	0.025	mg/kg
Indeno(1,2,3-cd)pyrene		ND	0.025	mg/kg
2-Methylnaphthalene		ND	0.025	mg/kg
Naphthalene		ND	0.025	mg/kg
Phenanthrene		ND	0.025	mg/kg
Pyrene		ND	0.025	mg/kg
1-Methylnaphthalene		ND	0.025	mg/kg

Laboratory Control Sample (LCS)

Lab Sample ID: Z231108.LCSS07B

Run in Batch: Z231108, Run Date: 11/08/2023 16:41, Prep Date: 11/07/2023, Matrix: SO, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Acenaphthene		63.8	10.0	121.0
Acenaphthylene		70.4	35.4	127.7
Anthracene		44.3	32.3	142.4
Benzo(a)anthracene		69.2	36.7	134.7
Benzo(a)pyrene		71.1	10.0	140.8
Benzo(b)fluoranthene		81.6	29.0	152.7
Benzo(ghi)perylene		77.3	35.0	116.0
Benzo(k)fluoranthene		68.5	29.8	136.0
Chrysene		73.4	38.7	137.1
Dibenzo(ah)anthracene		78.9	39.0	115.0
Fluoranthene		74.2	10.0	145.8
Fluorene		69.3	37.8	127.8
Indeno(1,2,3-cd)pyrene		77.5	39.2	137.4
2-Methylnaphthalene		67.1	35.6	120.0
Naphthalene		63.8	10.0	110.0
Phenanthrene		70.1	36.4	143.0
Pyrene		73.2	10.0	135.8
1-Methylnaphthalene		69.2	10.0	120.0

Organics - Semi-Volatiles, Prep Batch ID: SP231107S2 (continued)

Surrogates: Yes, QC Types: BLK/LCS/MS/MSD

Matrix Spike (MS)

Lab Sample ID: H231109.5532702M, Parent Sample ID: S55327.01

Run in Batch: H231109, Run Date: 11/10/2023 00:09, Prep Date: 11/07/2023, Matrix: SO, Dilution: 20

Analyte	Flags	% Rec	LCL	UCL
Acenaphthene		90.0	10.0	121.0
Acenaphthylene		112.8	35.4	127.7
Anthracene		55.6	32.3	142.4
Benzo(a)anthracene		74.8	36.7	134.7
Benzo(a)pyrene		70.6	10.0	140.8
Benzo(b)fluoranthene		83.1	29.0	152.7
Benzo(ghi)perylene		53.9	35.0	116.0
Benzo(k)fluoranthene		82.8	29.8	136.0
Chrysene		78.3	38.7	137.1
Dibenzo(ah)anthracene		56.0	39.0	115.0
Fluoranthene		89.3	10.0	145.8
Fluorene		103.5	37.8	127.8
Indeno(1,2,3-cd)pyrene		56.6	39.2	137.4
2-Methylnaphthalene	*	412.2	35.6	120.0
Naphthalene	*	354.1	10.0	110.0
Phenanthrene		93.8	36.4	143.0
Pyrene		84.5	10.0	135.8
1-Methylnaphthalene	*	294.4	10.0	120.0

Matrix Spike Duplicate (MSD)

Lab Sample ID: H231109.5532703N, Parent Sample ID: H231109.5532702M

Run in Batch: H231109, Run Date: 11/10/2023 00:26, Prep Date: 11/07/2023, Matrix: SO, Dilution: 20

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Acenaphthene		106.0	10.0	121.0	12.7	30.0
Acenaphthylene	*	128.4	35.4	127.7	12.9	30.0
Anthracene		64.1	32.3	142.4	13.0	30.0
Benzo(a)anthracene		84.9	36.7	134.7	12.7	30.0
Benzo(a)pyrene		80.3	10.0	140.8	12.8	30.0
Benzo(b)fluoranthene		91.4	29.0	152.7	9.5	30.0
Benzo(ghi)perylene		59.1	35.0	116.0	9.3	30.0
Benzo(k)fluoranthene		98.9	29.8	136.0	17.7	30.0
Chrysene		89.0	38.7	137.1	12.8	30.0
Dibenzo(ah)anthracene		63.8	39.0	115.0	13.1	30.0
Fluoranthene		103.2	10.0	145.8	14.3	30.0
Fluorene	*	140.3	37.8	127.8	18.4	30.0
Indeno(1,2,3-cd)pyrene		64.9	39.2	137.4	13.7	30.0
2-Methylnaphthalene	*	979.8	35.6	120.0	17.3	30.0
Naphthalene	*	723.3	10.0	110.0	17.0	30.0
Phenanthrene		129.1	36.4	143.0	17.8	30.0
Pyrene		96.2	10.0	135.8	12.6	30.0
1-Methylnaphthalene	*	677.9	10.0	120.0	18.9	30.0

Organics - Semi-Volatiles, Prep Batch ID: SP231108S1

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Blank (BLK)

Lab Sample ID: H231108.BLKS08A

Run in Batch: H231108, Run Date: 11/08/2023 17:00, Prep Date: 11/08/2023, Matrix: SO, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Acenaphthene		ND	0.025	mg/kg
Acenaphthylene		ND	0.025	mg/kg
Anthracene		ND	0.025	mg/kg
Benzo(a)anthracene		ND	0.025	mg/kg
Benzo(a)pyrene		ND	0.025	mg/kg
Benzo(b)fluoranthene		ND	0.025	mg/kg
Benzo(ghi)perylene		ND	0.025	mg/kg
Benzo(k)fluoranthene		ND	0.025	mg/kg
Chrysene		ND	0.025	mg/kg
Dibenzo(ah)anthracene		ND	0.025	mg/kg
Fluoranthene		ND	0.025	mg/kg
Fluorene		ND	0.025	mg/kg
Indeno(1,2,3-cd)pyrene		ND	0.025	mg/kg
2-Methylnaphthalene		ND	0.025	mg/kg
Naphthalene		ND	0.025	mg/kg
Phenanthrene		ND	0.025	mg/kg
Pyrene		ND	0.025	mg/kg
1-Methylnaphthalene		ND	0.025	mg/kg

Laboratory Control Sample (LCS)

Lab Sample ID: H231108.LCSS08A

Run in Batch: H231108, Run Date: 11/08/2023 17:17, Prep Date: 11/08/2023, Matrix: SO, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Acenaphthene		66.3	10.0	121.0
Acenaphthylene		71.7	35.4	127.7
Anthracene		47.0	32.3	142.4
Benzo(a)anthracene		66.7	36.7	134.7
Benzo(a)pyrene		69.5	10.0	140.8
Benzo(b)fluoranthene		76.4	29.0	152.7
Benzo(ghi)perylene		78.5	35.0	116.0
Benzo(k)fluoranthene		68.9	29.8	136.0
Chrysene		70.7	38.7	137.1
Dibenzo(ah)anthracene		79.4	39.0	115.0
Fluoranthene		76.9	10.0	145.8
Fluorene		73.4	37.8	127.8
Indeno(1,2,3-cd)pyrene		81.1	39.2	137.4
2-Methylnaphthalene		68.8	35.6	120.0
Naphthalene		64.1	10.0	110.0
Phenanthrene		71.0	36.4	143.0
Pyrene		65.4	10.0	135.8
1-Methylnaphthalene		69.2	10.0	120.0

Organics - Semi-Volatiles, Prep Batch ID: SP231108S1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: H231108.LCSDS08A, Parent Sample ID: H231108.LCSS08A

Run in Batch: H231108, Run Date: 11/08/2023 17:34, Prep Date: 11/08/2023, Matrix: SO, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Acenaphthene		61.2	10.0	121.0	8.0	30.0
Acenaphthylene		67.1	35.4	127.7	6.7	30.0
Anthracene		45.0	32.3	142.4	4.3	30.0
Benzo(a)anthracene		65.0	36.7	134.7	2.6	30.0
Benzo(a)pyrene		66.7	10.0	140.8	4.1	30.0
Benzo(b)fluoranthene		77.5	29.0	152.7	1.4	30.0
Benzo(ghi)perylene		76.4	35.0	116.0	2.7	30.0
Benzo(k)fluoranthene		62.6	29.8	136.0	9.6	30.0
Chrysene		69.4	38.7	137.1	1.8	30.0
Dibenzo(ah)anthracene		77.2	39.0	115.0	2.8	30.0
Fluoranthene		74.8	10.0	145.8	2.8	30.0
Fluorene		70.4	37.8	127.8	4.2	30.0
Indeno(1,2,3-cd)pyrene		78.7	39.2	137.4	3.0	30.0
2-Methylnaphthalene		64.3	35.6	120.0	6.9	30.0
Naphthalene		60.2	10.0	110.0	6.3	30.0
Phenanthrene		68.1	36.4	143.0	4.1	30.0
Pyrene		63.2	10.0	135.8	3.5	30.0
1-Methylnaphthalene		64.6	10.0	120.0	6.8	30.0

Organics - Volatiles, Prep Batch ID: VF231107S2

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Blank (BLK)

Lab Sample ID: 231107A3.BLKS07A

Run in Batch: 231107A3, Run Date: 11/07/2023 15:21, Prep Date: 11/07/2023, Matrix: SO, Dilution: 50

Analyte	Flags	Conc	RDL	Units
Diethyl ether		ND	50.0	ug/kg
Acetone		ND	500.0	ug/kg
Methyl iodide		ND	50.0	ug/kg
Carbon disulfide		ND	50.0	ug/kg
tert-Methyl butyl ether (MTBE)		ND	50.0	ug/kg
Acrylonitrile		ND	50.0	ug/kg
2-Butanone (MEK)		ND	500.0	ug/kg
Dichlorodifluoromethane		ND	50.0	ug/kg
Chloromethane		ND	50.0	ug/kg
Vinyl chloride		ND	50.0	ug/kg
Bromomethane		ND	50.0	ug/kg
Chloroethane		ND	50.0	ug/kg
Trichlorofluoromethane		ND	50.0	ug/kg
1,1-Dichloroethene		ND	50.0	ug/kg
Methylene chloride		ND	50.0	ug/kg
trans-1,2-Dichloroethene		ND	50.0	ug/kg
1,1-Dichloroethane		ND	50.0	ug/kg
cis-1,2-Dichloroethene		ND	50.0	ug/kg
Tetrahydrofuran		ND	500.0	ug/kg
Chloroform		ND	50.0	ug/kg
Bromochloromethane		ND	50.0	ug/kg
1,1,1-Trichloroethane		ND	50.0	ug/kg
4-Methyl-2-pentanone (MIBK)		ND	50.0	ug/kg
2-Hexanone		ND	50.0	ug/kg
Carbon tetrachloride		ND	50.0	ug/kg
Benzene		ND	50.0	ug/kg
1,2-Dichloroethane		ND	50.0	ug/kg
Trichloroethene		ND	50.0	ug/kg
1,2-Dichloropropane		ND	50.0	ug/kg
Bromodichloromethane		ND	50.0	ug/kg
Dibromomethane		ND	50.0	ug/kg
cis-1,3-Dichloropropene		ND	50.0	ug/kg
Toluene		ND	50.0	ug/kg
trans-1,3-Dichloropropene		ND	50.0	ug/kg
1,1,2-Trichloroethane		ND	50.0	ug/kg
Tetrachloroethene		ND	50.0	ug/kg
trans-1,4-Dichloro-2-butene		ND	50.0	ug/kg
Dibromochloromethane		ND	50.0	ug/kg
1,2-Dibromoethane		ND	50.0	ug/kg
Chlorobenzene		ND	50.0	ug/kg
1,1,1,2-Tetrachloroethane		ND	50.0	ug/kg
Ethylbenzene		ND	50.0	ug/kg
p,m-Xylene		ND	50.0	ug/kg
o-Xylene		ND	50.0	ug/kg
Styrene		ND	50.0	ug/kg
Isopropylbenzene		ND	50.0	ug/kg

Organics - Volatiles, Prep Batch ID: VF231107S2 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Blank (BLK) (continued)

Lab Sample ID: 231107A3.BLKS07A

Run in Batch: 231107A3, Run Date: 11/07/2023 15:21, Prep Date: 11/07/2023, Matrix: SO, Dilution: 50

Analyte	Flags	Conc	RDL	Units
Bromoform		ND	50.0	ug/kg
1,1,2,2-Tetrachloroethane		ND	50.0	ug/kg
1,2,3-Trichloropropane		ND	50.0	ug/kg
n-Propylbenzene		ND	50.0	ug/kg
Bromobenzene		ND	50.0	ug/kg
1,3,5-Trimethylbenzene		ND	50.0	ug/kg
tert-Butylbenzene		ND	50.0	ug/kg
1,2,4-Trimethylbenzene		ND	50.0	ug/kg
sec-Butylbenzene		ND	50.0	ug/kg
p-Isopropyltoluene		ND	50.0	ug/kg
1,3-Dichlorobenzene		ND	50.0	ug/kg
1,4-Dichlorobenzene		ND	50.0	ug/kg
1,2-Dichlorobenzene		ND	50.0	ug/kg
1,2,3-Trimethylbenzene		ND	50.0	ug/kg
n-Butylbenzene		ND	50.0	ug/kg
Hexachloroethane		ND	50.0	ug/kg
1,2-Dibromo-3-chloropropane		ND	50.0	ug/kg
1,2,4-Trichlorobenzene		ND	50.0	ug/kg
1,2,3-Trichlorobenzene		ND	50.0	ug/kg
Naphthalene		ND	50.0	ug/kg
2-Methylnaphthalene		ND	50.0	ug/kg

Laboratory Control Sample (LCS)

Lab Sample ID: 231107A3.LCSS07A

Run in Batch: 231107A3, Run Date: 11/07/2023 12:07, Prep Date: 11/07/2023, Matrix: SO, Dilution: 50

Analyte	Flags	% Rec	LCL	UCL
Diethyl ether		96.1	51.7	123.0
Acetone		96.4	25.3	155.1
Methyl iodide		100.7	56.9	110.8
Carbon disulfide		96.6	57.0	123.0
tert-Methyl butyl ether (MTBE)		97.8	67.5	123.7
Acrylonitrile		95.9	58.7	133.0
2-Butanone (MEK)		92.3	38.7	136.9
Dichlorodifluoromethane		130.6	10.0	171.8
Chloromethane		108.4	30.2	152.7
Vinyl chloride		106.5	45.3	138.7
Bromomethane		108.0	10.0	157.4
Chloroethane		106.1	10.0	169.1
Trichlorofluoromethane		114.7	25.7	157.8
1,1-Dichloroethene		97.4	59.2	137.5
Methylene chloride		92.0	70.5	121.5
trans-1,2-Dichloroethene		96.9	72.5	128.8
1,1-Dichloroethane		96.9	72.5	123.4
cis-1,2-Dichloroethene		96.7	75.0	120.5
Tetrahydrofuran		87.8	48.2	125.7
Chloroform		95.4	74.6	123.2

Organics - Volatiles, Prep Batch ID: VF231107S2 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Laboratory Control Sample (LCS) (continued)

Lab Sample ID: 231107A3.LCSS07A

Run in Batch: 231107A3, Run Date: 11/07/2023 12:07, Prep Date: 11/07/2023, Matrix: SO, Dilution: 50

Analyte	Flags	% Rec	LCL	UCL
Bromochloromethane		98.1	72.3	122.8
1,1,1-Trichloroethane		99.5	73.8	128.9
4-Methyl-2-pentanone (MIBK)		103.6	60.4	133.8
2-Hexanone		101.6	45.7	141.9
Carbon tetrachloride		104.6	70.1	132.7
Benzene		100.8	74.6	128.9
1,2-Dichloroethane		98.1	73.2	125.4
Trichloroethene		102.2	74.1	127.6
1,2-Dichloropropane		100.9	77.6	124.4
Bromodichloromethane		102.7	76.7	128.4
Dibromomethane		102.8	72.5	127.3
cis-1,3-Dichloropropene		105.0	79.3	128.3
Toluene		101.8	74.8	129.2
trans-1,3-Dichloropropene		103.8	74.5	129.7
1,1,2-Trichloroethane		101.9	71.3	125.7
Tetrachloroethene		104.8	73.0	124.7
trans-1,4-Dichloro-2-butene		95.9	58.3	143.3
Dibromochloromethane		99.3	68.9	132.7
1,2-Dibromoethane		98.3	71.4	129.3
Chlorobenzene		97.3	74.2	128.1
1,1,1,2-Tetrachloroethane		99.9	76.6	133.0
Ethylbenzene		97.8	77.7	130.4
p,m-Xylene		97.9	79.8	132.0
o-Xylene		97.4	79.4	132.3
Styrene		97.7	71.3	119.3
Isopropylbenzene		99.4	70.3	128.2
Bromoform		99.5	54.7	137.4
1,1,2,2-Tetrachloroethane		96.8	65.4	134.9
1,2,3-Trichloropropane		95.4	67.2	154.5
n-Propylbenzene		99.6	77.3	135.2
Bromobenzene		97.8	74.0	132.4
1,3,5-Trimethylbenzene		99.7	75.6	137.0
tert-Butylbenzene		98.3	75.6	134.6
1,2,4-Trimethylbenzene		99.9	76.9	139.1
sec-Butylbenzene		94.2	72.7	135.6
p-Isopropyltoluene		96.3	77.1	140.9
1,3-Dichlorobenzene		93.0	77.3	131.0
1,4-Dichlorobenzene		93.0	33.1	125.8
1,2-Dichlorobenzene		92.9	73.5	132.7
1,2,3-Trimethylbenzene		92.6	70.9	130.2
n-Butylbenzene		93.9	75.0	138.6
Hexachloroethane		97.1	55.5	129.0
1,2-Dibromo-3-chloropropane		92.4	54.1	156.4
1,2,4-Trichlorobenzene		95.4	37.1	131.3
1,2,3-Trichlorobenzene		95.0	59.4	157.9
Naphthalene		94.1	39.3	129.2

Organics - Volatiles, Prep Batch ID: VF231107S2 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Laboratory Control Sample (LCS) (continued)

Lab Sample ID: 231107A3.LCSS07A

Run in Batch: 231107A3, Run Date: 11/07/2023 12:07, Prep Date: 11/07/2023, Matrix: SO, Dilution: 50

Analyte	Flags	% Rec	LCL	UCL
2-Methylnaphthalene		101.4	10.0	175.9

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: 231107A3.LCSDS07A, Parent Sample ID: 231107A3.LCSS07A

Run in Batch: 231107A3, Run Date: 11/07/2023 12:32, Prep Date: 11/07/2023, Matrix: SO, Dilution: 50

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Diethyl ether		96.4	51.7	123.0	0.3	30.0
Acetone		96.4	25.3	155.1	0.0	30.0
Methyl iodide		100.3	56.9	110.8	0.4	30.0
Carbon disulfide		97.0	57.0	123.0	0.4	30.0
tert-Methyl butyl ether (MTBE)		97.0	67.5	123.7	0.8	30.0
Acrylonitrile		93.7	58.7	133.0	2.4	30.0
2-Butanone (MEK)		90.6	38.7	136.9	1.9	30.0
Dichlorodifluoromethane		131.9	10.0	171.8	1.0	30.0
Chloromethane		106.8	30.2	152.7	1.5	30.0
Vinyl chloride		105.8	45.3	138.7	0.7	30.0
Bromomethane		108.3	10.0	157.4	0.2	30.0
Chloroethane		105.5	10.0	169.1	0.6	30.0
Trichlorofluoromethane		114.0	25.7	157.8	0.6	30.0
1,1-Dichloroethene		98.0	59.2	137.5	0.7	30.0
Methylene chloride		93.3	70.5	121.5	1.4	30.0
trans-1,2-Dichloroethene		97.4	72.5	128.8	0.5	30.0
1,1-Dichloroethane		97.7	72.5	123.4	0.8	30.0
cis-1,2-Dichloroethene		97.3	75.0	120.5	0.7	30.0
Tetrahydrofuran		86.3	48.2	125.7	1.7	30.0
Chloroform		95.8	74.6	123.2	0.4	30.0
Bromochloromethane		98.0	72.3	122.8	0.1	30.0
1,1,1-Trichloroethane		99.9	73.8	128.9	0.4	30.0
4-Methyl-2-pentanone (MIBK)		99.8	60.4	133.8	3.7	30.0
2-Hexanone		100.8	45.7	141.9	0.8	30.0
Carbon tetrachloride		105.6	70.1	132.7	0.9	30.0
Benzene		100.9	74.6	128.9	0.1	30.0
1,2-Dichloroethane		97.1	73.2	125.4	1.1	30.0
Trichloroethene		102.2	74.1	127.6	0.0	30.0
1,2-Dichloropropane		101.4	77.6	124.4	0.5	30.0
Bromodichloromethane		101.3	76.7	128.4	1.3	30.0
Dibromomethane		101.1	72.5	127.3	1.6	30.0
cis-1,3-Dichloropropene		105.7	79.3	128.3	0.6	30.0
Toluene		101.6	74.8	129.2	0.2	30.0
trans-1,3-Dichloropropene		103.2	74.5	129.7	0.6	30.0
1,1,2-Trichloroethane		101.5	71.3	125.7	0.4	30.0
Tetrachloroethene		104.8	73.0	124.7	0.0	30.0
trans-1,4-Dichloro-2-butene		94.2	58.3	143.3	1.8	30.0
Dibromochloromethane		98.0	68.9	132.7	1.3	30.0
1,2-Dibromoethane		97.1	71.4	129.3	1.2	30.0
Chlorobenzene		96.7	74.2	128.1	0.7	30.0

Organics - Volatiles, Prep Batch ID: VF231107S2 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Laboratory Control Sample Duplicate (LCSD) (continued)

Lab Sample ID: 231107A3.LCSDS07A, Parent Sample ID: 231107A3.LCSS07A

Run in Batch: 231107A3, Run Date: 11/07/2023 12:32, Prep Date: 11/07/2023, Matrix: SO, Dilution: 50

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
1,1,1,2-Tetrachloroethane		99.9	76.6	133.0	0.0	30.0
Ethylbenzene		97.4	77.7	130.4	0.5	30.0
p,m-Xylene		97.6	79.8	132.0	0.3	30.0
o-Xylene		97.5	79.4	132.3	0.0	30.0
Styrene		96.8	71.3	119.3	0.9	30.0
Isopropylbenzene		99.3	70.3	128.2	0.2	30.0
Bromoform		97.4	54.7	137.4	2.2	30.0
1,1,2,2-Tetrachloroethane		93.9	65.4	134.9	3.0	30.0
1,2,3-Trichloropropane		93.6	67.2	154.5	1.9	30.0
n-Propylbenzene		98.2	77.3	135.2	1.4	30.0
Bromobenzene		97.2	74.0	132.4	0.6	30.0
1,3,5-Trimethylbenzene		99.1	75.6	137.0	0.6	30.0
tert-Butylbenzene		97.6	75.6	134.6	0.7	30.0
1,2,4-Trimethylbenzene		99.3	76.9	139.1	0.5	30.0
sec-Butylbenzene		95.0	72.7	135.6	0.9	30.0
p-Isopropyltoluene		95.9	77.1	140.9	0.4	30.0
1,3-Dichlorobenzene		92.1	77.3	131.0	1.0	30.0
1,4-Dichlorobenzene		92.0	33.1	125.8	1.0	30.0
1,2-Dichlorobenzene		93.3	73.5	132.7	0.4	30.0
1,2,3-Trimethylbenzene		92.6	70.9	130.2	0.0	30.0
n-Butylbenzene		93.9	75.0	138.6	0.0	30.0
Hexachloroethane		97.8	55.5	129.0	0.6	30.0
1,2-Dibromo-3-chloropropane		91.1	54.1	156.4	1.5	30.0
1,2,4-Trichlorobenzene		92.8	37.1	131.3	2.8	30.0
1,2,3-Trichlorobenzene		93.8	59.4	157.9	1.3	30.0
Naphthalene		91.9	39.3	129.2	2.4	30.0
2-Methylnaphthalene		100.5	10.0	175.9	0.9	30.0

Organics - Volatiles, Prep Batch ID: VF231108S1

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Blank (BLK)

Lab Sample ID: 231108A5.BLKS08A

Run in Batch: 231108A5, Run Date: 11/08/2023 15:02, Prep Date: 11/08/2023, Matrix: SO, Dilution: 50

Analyte	Flags	Conc	RDL	Units
Acetone		ND	500.0	ug/kg
Acrylonitrile		ND	50.0	ug/kg
2-Butanone (MEK)		ND	500.0	ug/kg
Benzene		ND	50.0	ug/kg
n-Butylbenzene		ND	50.0	ug/kg
Bromobenzene		ND	50.0	ug/kg
Bromochloromethane		ND	50.0	ug/kg
Bromodichloromethane		ND	50.0	ug/kg
Bromoform		ND	50.0	ug/kg
Bromomethane		ND	50.0	ug/kg
sec-Butylbenzene		ND	50.0	ug/kg
tert-Butylbenzene		ND	50.0	ug/kg
Carbon disulfide		ND	50.0	ug/kg
Carbon tetrachloride		ND	50.0	ug/kg
Chlorobenzene		ND	50.0	ug/kg
Chloroethane		ND	50.0	ug/kg
Chloroform		ND	50.0	ug/kg
Chloromethane		ND	50.0	ug/kg
1,1-Dichloroethane		ND	50.0	ug/kg
1,1-Dichloroethene		ND	50.0	ug/kg
1,2-Dibromo-3-chloropropane		ND	50.0	ug/kg
1,2-Dibromoethane		ND	50.0	ug/kg
1,2-Dichlorobenzene		ND	50.0	ug/kg
1,2-Dichloroethane		ND	50.0	ug/kg
1,2-Dichloropropane		ND	50.0	ug/kg
1,3-Dichlorobenzene		ND	50.0	ug/kg
1,4-Dichlorobenzene		ND	50.0	ug/kg
cis-1,2-Dichloroethene		ND	50.0	ug/kg
cis-1,3-Dichloropropene		ND	50.0	ug/kg
Dibromochloromethane		ND	50.0	ug/kg
Dibromomethane		ND	50.0	ug/kg
Dichlorodifluoromethane		ND	50.0	ug/kg
Diethyl ether		ND	50.0	ug/kg
trans-1,2-Dichloroethene		ND	50.0	ug/kg
trans-1,3-Dichloropropene		ND	50.0	ug/kg
trans-1,4-Dichloro-2-butene		ND	50.0	ug/kg
Ethylbenzene		ND	50.0	ug/kg
2-Hexanone		ND	500.0	ug/kg
Hexachloroethane		ND	50.0	ug/kg
p-Isopropyltoluene		ND	50.0	ug/kg
Isopropylbenzene		ND	50.0	ug/kg
2-Methylnaphthalene	*	93.5	50.0	ug/kg
4-Methyl-2-pentanone (MIBK)		ND	500.0	ug/kg
tert-Methyl butyl ether (MTBE)		ND	50.0	ug/kg
Methyl iodide		ND	50.0	ug/kg
Methylene chloride		ND	50.0	ug/kg

Organics - Volatiles, Prep Batch ID: VF231108S1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Blank (BLK) (continued)

Lab Sample ID: 231108A5.BLKS08A

Run in Batch: 231108A5, Run Date: 11/08/2023 15:02, Prep Date: 11/08/2023, Matrix: SO, Dilution: 50

Analyte	Flags	Conc	RDL	Units
Naphthalene		ND	50.0	ug/kg
n-Propylbenzene		ND	50.0	ug/kg
Styrene		ND	50.0	ug/kg
1,1,1,2-Tetrachloroethane		ND	50.0	ug/kg
1,1,1-Trichloroethane		ND	50.0	ug/kg
1,1,2,2-Tetrachloroethane		ND	50.0	ug/kg
1,1,2-Trichloroethane		ND	50.0	ug/kg
1,2,3-Trichlorobenzene		ND	50.0	ug/kg
1,2,3-Trichloropropane		ND	50.0	ug/kg
1,2,3-Trimethylbenzene		ND	50.0	ug/kg
1,2,4-Trichlorobenzene		ND	50.0	ug/kg
1,2,4-Trimethylbenzene		ND	50.0	ug/kg
1,3,5-Trimethylbenzene		ND	50.0	ug/kg
Tetrachloroethene		ND	50.0	ug/kg
Tetrahydrofuran		ND	500.0	ug/kg
Toluene		ND	50.0	ug/kg
Trichloroethene		ND	50.0	ug/kg
Trichlorofluoromethane		ND	50.0	ug/kg
Vinyl chloride		ND	50.0	ug/kg
o-Xylene		ND	50.0	ug/kg
p,m-Xylene		ND	50.0	ug/kg

Laboratory Control Sample (LCS)

Lab Sample ID: 231108A5.LCSS08A

Run in Batch: 231108A5, Run Date: 11/08/2023 13:02, Prep Date: 11/08/2023, Matrix: SO, Dilution: 50

Analyte	Flags	% Rec	LCL	UCL
Acetone		105.2	25.3	155.1
Acrylonitrile		108.5	58.7	133.0
2-Butanone (MEK)		103.8	38.7	136.9
Benzene		106.5	74.6	128.9
n-Butylbenzene		112.6	75.0	138.6
Bromobenzene		101.4	74.0	132.4
Bromochloromethane		105.4	72.3	122.8
Bromodichloromethane		110.9	76.7	128.4
Bromoform		106.3	54.7	137.4
Bromomethane		98.7	10.0	157.4
sec-Butylbenzene		112.0	72.7	135.6
tert-Butylbenzene		105.6	75.6	134.6
Carbon disulfide		108.3	57.0	123.0
Carbon tetrachloride		107.9	70.1	132.7
Chlorobenzene		103.1	74.2	128.1
Chloroethane		118.6	10.0	169.1
Chloroform		108.5	74.6	123.2
Chloromethane		106.6	30.2	152.7
1,1-Dichloroethane		111.3	72.5	123.4
1,1-Dichloroethene		112.0	59.2	137.5

Organics - Volatiles, Prep Batch ID: VF231108S1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Laboratory Control Sample (LCS) (continued)

Lab Sample ID: 231108A5.LCSS08A

Run in Batch: 231108A5, Run Date: 11/08/2023 13:02, Prep Date: 11/08/2023, Matrix: SO, Dilution: 50

Analyte	Flags	% Rec	LCL	UCL
1,2-Dibromo-3-chloropropane		106.8	54.1	156.4
1,2-Dibromoethane		104.7	71.4	129.3
1,2-Dichlorobenzene		106.9	73.5	132.7
1,2-Dichloroethane		109.3	73.2	125.4
1,2-Dichloropropane		107.3	77.6	124.4
1,3-Dichlorobenzene		109.8	77.3	131.0
1,4-Dichlorobenzene		107.5	33.1	125.8
cis-1,2-Dichloroethene		108.2	75.0	120.5
cis-1,3-Dichloropropene		112.4	79.3	128.3
Dibromochloromethane		108.2	68.9	132.7
Dibromomethane		105.0	72.5	127.3
Dichlorodifluoromethane		126.3	10.0	171.8
Diethyl ether		113.2	51.7	123.0
trans-1,2-Dichloroethene		111.9	72.5	128.8
trans-1,3-Dichloropropene		113.4	74.5	129.7
trans-1,4-Dichloro-2-butene		109.9	58.3	143.3
Ethylbenzene		106.5	77.7	130.4
2-Hexanone		106.7	45.7	141.9
Hexachloroethane		111.5	55.5	129.0
p-Isopropyltoluene		113.1	77.1	140.9
Isopropylbenzene		106.1	70.3	128.2
2-Methylnaphthalene		115.9	10.0	175.9
4-Methyl-2-pentanone (MIBK)		107.5	60.4	133.8
tert-Methyl butyl ether (MTBE)		110.3	67.5	123.7
Methyl iodide		105.8	56.9	110.8
Methylene chloride		107.4	70.5	121.5
Naphthalene		107.5	39.3	129.2
n-Propylbenzene		108.0	77.3	135.2
Styrene		106.1	71.3	119.3
1,1,1,2-Tetrachloroethane		107.8	76.6	133.0
1,1,1-Trichloroethane		112.1	73.8	128.9
1,1,2,2-Tetrachloroethane		101.9	65.4	134.9
1,1,2-Trichloroethane		106.8	71.3	125.7
1,2,3-Trichlorobenzene		108.9	59.4	157.9
1,2,3-Trichloropropane		107.6	67.2	154.5
1,2,3-Trimethylbenzene		110.4	70.9	130.2
1,2,4-Trichlorobenzene		111.3	37.1	131.3
1,2,4-Trimethylbenzene		105.6	76.9	139.1
1,3,5-Trimethylbenzene		104.0	75.6	137.0
Tetrachloroethene		104.1	73.0	124.7
Tetrahydrofuran		101.6	48.2	125.7
Toluene		105.6	74.8	129.2
Trichloroethene		107.3	74.1	127.6
Trichlorofluoromethane		117.5	25.7	157.8
Vinyl chloride		111.6	45.3	138.7
o-Xylene		105.5	79.4	132.3

Organics - Volatiles, Prep Batch ID: VF231108S1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Laboratory Control Sample (LCS) (continued)

Lab Sample ID: 231108A5.LCSS08A

Run in Batch: 231108A5, Run Date: 11/08/2023 13:02, Prep Date: 11/08/2023, Matrix: SO, Dilution: 50

Analyte	Flags	% Rec	LCL	UCL
p,m-Xylene		105.6	79.8	132.0

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: 231108A5.LCSDS08A, Parent Sample ID: 231108A5.LCSS08A

Run in Batch: 231108A5, Run Date: 11/08/2023 13:26, Prep Date: 11/08/2023, Matrix: SO, Dilution: 50

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Acetone		102.7	25.3	155.1	2.4	30.0
Acrylonitrile		107.2	58.7	133.0	1.2	30.0
2-Butanone (MEK)		102.2	38.7	136.9	1.6	30.0
Benzene		108.7	74.6	128.9	2.0	30.0
n-Butylbenzene		115.4	75.0	138.6	2.4	30.0
Bromobenzene		106.0	74.0	132.4	4.5	30.0
Bromochloromethane		108.4	72.3	122.8	2.8	30.0
Bromodichloromethane		115.1	76.7	128.4	3.8	30.0
Bromoform		108.7	54.7	137.4	2.3	30.0
Bromomethane		106.6	10.0	157.4	7.7	30.0
sec-Butylbenzene		116.2	72.7	135.6	3.6	30.0
tert-Butylbenzene		110.8	75.6	134.6	4.8	30.0
Carbon disulfide		108.2	57.0	123.0	0.1	30.0
Carbon tetrachloride		112.7	70.1	132.7	4.4	30.0
Chlorobenzene		106.5	74.2	128.1	3.3	30.0
Chloroethane		115.7	10.0	169.1	2.5	30.0
Chloroform		110.8	74.6	123.2	2.2	30.0
Chloromethane		105.0	30.2	152.7	1.5	30.0
1,1-Dichloroethane		113.0	72.5	123.4	1.6	30.0
1,1-Dichloroethene		114.0	59.2	137.5	1.8	30.0
1,2-Dibromo-3-chloropropane		105.9	54.1	156.4	0.8	30.0
1,2-Dibromoethane		109.0	71.4	129.3	4.0	30.0
1,2-Dichlorobenzene		108.6	73.5	132.7	1.5	30.0
1,2-Dichloroethane		112.4	73.2	125.4	2.8	30.0
1,2-Dichloropropane		110.3	77.6	124.4	2.8	30.0
1,3-Dichlorobenzene		111.0	77.3	131.0	1.1	30.0
1,4-Dichlorobenzene		110.5	33.1	125.8	2.7	30.0
cis-1,2-Dichloroethene		110.0	75.0	120.5	1.7	30.0
cis-1,3-Dichloropropene		117.7	79.3	128.3	4.6	30.0
Dibromochloromethane		110.9	68.9	132.7	2.5	30.0
Dibromomethane		107.8	72.5	127.3	2.7	30.0
Dichlorodifluoromethane		134.5	10.0	171.8	6.3	30.0
Diethyl ether		113.2	51.7	123.0	0.0	30.0
trans-1,2-Dichloroethene		113.4	72.5	128.8	1.3	30.0
trans-1,3-Dichloropropene		118.0	74.5	129.7	4.0	30.0
trans-1,4-Dichloro-2-butene		109.6	58.3	143.3	0.3	30.0
Ethylbenzene		108.8	77.7	130.4	2.1	30.0
2-Hexanone		107.1	45.7	141.9	0.3	30.0
Hexachloroethane		114.5	55.5	129.0	2.6	30.0
p-Isopropyltoluene		116.0	77.1	140.9	2.5	30.0

Organics - Volatiles, Prep Batch ID: VF231108S1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Laboratory Control Sample Duplicate (LCSD) (continued)

Lab Sample ID: 231108A5.LCSDS08A, Parent Sample ID: 231108A5.LCSS08A

Run in Batch: 231108A5, Run Date: 11/08/2023 13:26, Prep Date: 11/08/2023, Matrix: SO, Dilution: 50

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Isopropylbenzene		110.8	70.3	128.2	4.3	30.0
2-Methylnaphthalene		121.2	10.0	175.9	4.5	30.0
4-Methyl-2-pentanone (MIBK)		104.3	60.4	133.8	3.1	30.0
tert-Methyl butyl ether (MTBE)		112.9	67.5	123.7	2.3	30.0
Methyl iodide		100.6	56.9	110.8	5.1	30.0
Methylene chloride		110.2	70.5	121.5	2.6	30.0
Naphthalene		111.7	39.3	129.2	3.9	30.0
n-Propylbenzene		111.0	77.3	135.2	2.8	30.0
Styrene		108.5	71.3	119.3	2.3	30.0
1,1,1,2-Tetrachloroethane		111.0	76.6	133.0	3.0	30.0
1,1,1-Trichloroethane		115.5	73.8	128.9	3.0	30.0
1,1,2,2-Tetrachloroethane		102.1	65.4	134.9	0.2	30.0
1,1,2-Trichloroethane		109.5	71.3	125.7	2.5	30.0
1,2,3-Trichlorobenzene		113.0	59.4	157.9	3.7	30.0
1,2,3-Trichloropropane		107.0	67.2	154.5	0.5	30.0
1,2,3-Trimethylbenzene		114.6	70.9	130.2	3.8	30.0
1,2,4-Trichlorobenzene		115.7	37.1	131.3	3.9	30.0
1,2,4-Trimethylbenzene		108.8	76.9	139.1	2.9	30.0
1,3,5-Trimethylbenzene		109.0	75.6	137.0	4.7	30.0
Tetrachloroethene		108.5	73.0	124.7	4.1	30.0
Tetrahydrofuran		103.8	48.2	125.7	2.1	30.0
Toluene		108.5	74.8	129.2	2.7	30.0
Trichloroethene		111.3	74.1	127.6	3.7	30.0
Trichlorofluoromethane		119.7	25.7	157.8	1.9	30.0
Vinyl chloride		116.1	45.3	138.7	3.9	30.0
o-Xylene		109.3	79.4	132.3	3.6	30.0
p,m-Xylene		108.5	79.8	132.0	2.8	30.0

Matrix Spike (MS)

Lab Sample ID: 231108A5.5532702M, Parent Sample ID: S55327.01

Run in Batch: 231108A5, Run Date: 11/08/2023 13:50, Prep Date: 11/08/2023, Matrix: SO, Dilution: 1100

Analyte	Flags	% Rec	LCL	UCL
Acetone		102.4	25.3	155.1
Acrylonitrile		103.8	58.7	133.0
2-Butanone (MEK)		93.8	38.7	136.9
Benzene		102.6	74.6	128.9
n-Butylbenzene		88.0	75.0	138.6
Bromobenzene		92.1	74.0	132.4
Bromochloromethane		102.4	72.3	122.8
Bromodichloromethane		110.8	76.7	128.4
Bromoform		103.9	54.7	137.4
Bromomethane		114.4	10.0	157.4
sec-Butylbenzene		92.2	72.7	135.6
tert-Butylbenzene	*	69.5	75.6	134.6
Carbon disulfide		104.2	57.0	123.0
Carbon tetrachloride		102.5	70.1	132.7

Organics - Volatiles, Prep Batch ID: VF231108S1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Matrix Spike (MS) (continued)

Lab Sample ID: 231108A5.5532702M, Parent Sample ID: S55327.01

Run in Batch: 231108A5, Run Date: 11/08/2023 13:50, Prep Date: 11/08/2023, Matrix: SO, Dilution: 1100

Analyte	Flags	% Rec	LCL	UCL
Chlorobenzene		94.5	74.2	128.1
Chloroethane		117.5	10.0	169.1
Chloroform		106.0	74.6	123.2
Chloromethane		73.1	30.2	152.7
1,1-Dichloroethane		107.2	72.5	123.4
1,1-Dichloroethene		106.9	59.2	137.5
1,2-Dibromo-3-chloropropane		88.0	54.1	156.4
1,2-Dibromoethane		100.2	71.4	129.3
1,2-Dichlorobenzene		90.0	73.5	132.7
1,2-Dichloroethane		105.9	73.2	125.4
1,2-Dichloropropane		105.1	77.6	124.4
1,3-Dichlorobenzene		95.0	77.3	131.0
1,4-Dichlorobenzene		92.8	33.1	125.8
cis-1,2-Dichloroethene		104.2	75.0	120.5
cis-1,3-Dichloropropene		103.6	79.3	128.3
Dibromochloromethane		103.0	68.9	132.7
Dibromomethane		103.3	72.5	127.3
Dichlorodifluoromethane		121.4	10.0	171.8
Diethyl ether		112.0	51.7	123.0
trans-1,2-Dichloroethene		105.5	72.5	128.8
trans-1,3-Dichloropropene		101.9	74.5	129.7
trans-1,4-Dichloro-2-butene		103.1	58.3	143.3
Ethylbenzene		98.5	77.7	130.4
2-Hexanone		102.0	45.7	141.9
Hexachloroethane		82.5	55.5	129.0
p-Isopropyltoluene		80.6	77.1	140.9
Isopropylbenzene		92.1	70.3	128.2
2-Methylnaphthalene		169.9	10.0	175.9
4-Methyl-2-pentanone (MIBK)	*	142.7	60.4	133.8
tert-Methyl butyl ether (MTBE)		106.4	67.5	123.7
Methyl iodide		105.2	56.9	110.8
Methylene chloride		105.9	70.5	121.5
Naphthalene	*	136.2	39.3	129.2
n-Propylbenzene		110.7	77.3	135.2
Styrene		98.8	71.3	119.3
1,1,1,2-Tetrachloroethane		98.7	76.6	133.0
1,1,1-Trichloroethane		107.3	73.8	128.9
1,1,2,2-Tetrachloroethane		90.9	65.4	134.9
1,1,2-Trichloroethane		115.8	71.3	125.7
1,2,3-Trichlorobenzene	*	57.3	59.4	157.9
1,2,3-Trichloropropane		117.9	67.2	154.5
1,2,3-Trimethylbenzene	*	161.7	70.9	130.2
1,2,4-Trichlorobenzene		55.4	37.1	131.3
1,2,4-Trimethylbenzene	*	208.8	76.9	139.1
1,3,5-Trimethylbenzene		135.5	75.6	137.0
Tetrachloroethene		93.9	73.0	124.7

Organics - Volatiles, Prep Batch ID: VF231108S1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Matrix Spike (MS) (continued)

Lab Sample ID: 231108A5.5532702M, Parent Sample ID: S55327.01

Run in Batch: 231108A5, Run Date: 11/08/2023 13:50, Prep Date: 11/08/2023, Matrix: SO, Dilution: 1100

Analyte	Flags	% Rec	LCL	UCL
Tetrahydrofuran		95.8	48.2	125.7
Toluene		99.7	74.8	129.2
Trichloroethene		101.2	74.1	127.6
Trichlorofluoromethane		115.8	25.7	157.8
Vinyl chloride		107.3	45.3	138.7
o-Xylene	*	133.3	79.4	132.3
p,m-Xylene		122.8	79.8	132.0

Matrix Spike Duplicate (MSD)

Lab Sample ID: 231108A5.5532703N, Parent Sample ID: 231108A5.5532702M

Run in Batch: 231108A5, Run Date: 11/08/2023 14:14, Prep Date: 11/08/2023, Matrix: SO, Dilution: 1150

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Acetone		108.0	25.3	155.1	5.0	30.0
Acrylonitrile		109.5	58.7	133.0	5.3	30.0
2-Butanone (MEK)		100.1	38.7	136.9	6.5	30.0
Benzene		104.6	74.6	128.9	1.9	30.0
n-Butylbenzene		86.0	75.0	138.6	1.1	30.0
Bromobenzene		95.2	74.0	132.4	3.4	30.0
Bromochloromethane		106.5	72.3	122.8	3.9	30.0
Bromodichloromethane		114.2	76.7	128.4	3.0	30.0
Bromoform		107.3	54.7	137.4	3.2	30.0
Bromomethane		125.0	10.0	157.4	8.8	30.0
sec-Butylbenzene		88.8	72.7	135.6	2.9	30.0
tert-Butylbenzene		77.8	75.6	134.6	11.2	30.0
Carbon disulfide		101.1	57.0	123.0	3.1	30.0
Carbon tetrachloride		106.1	70.1	132.7	3.4	30.0
Chlorobenzene		95.9	74.2	128.1	1.4	30.0
Chloroethane		127.5	10.0	169.1	8.1	30.0
Chloroform		107.0	74.6	123.2	1.0	30.0
Chloromethane	*	103.7	30.2	152.7	34.5	30.0
1,1-Dichloroethane		107.0	72.5	123.4	0.3	30.0
1,1-Dichloroethene		108.0	59.2	137.5	1.0	30.0
1,2-Dibromo-3-chloropropane		83.2	54.1	156.4	5.6	30.0
1,2-Dibromoethane		103.4	71.4	129.3	3.1	30.0
1,2-Dichlorobenzene		91.4	73.5	132.7	1.6	30.0
1,2-Dichloroethane		108.5	73.2	125.4	2.4	30.0
1,2-Dichloropropane		109.4	77.6	124.4	4.0	30.0
1,3-Dichlorobenzene		97.2	77.3	131.0	2.3	30.0
1,4-Dichlorobenzene		94.5	33.1	125.8	1.8	30.0
cis-1,2-Dichloroethene		105.9	75.0	120.5	1.6	30.0
cis-1,3-Dichloropropene		109.0	79.3	128.3	5.1	30.0
Dibromochloromethane		105.7	68.9	132.7	2.6	30.0
Dibromomethane		105.4	72.5	127.3	2.0	30.0
Dichlorodifluoromethane		121.1	10.0	171.8	0.2	30.0
Diethyl ether		113.4	51.7	123.0	1.2	30.0
trans-1,2-Dichloroethene		104.2	72.5	128.8	1.2	30.0

Organics - Volatiles, Prep Batch ID: VF231108S1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Matrix Spike Duplicate (MSD) (continued)

Lab Sample ID: 231108A5.5532703N, Parent Sample ID: 231108A5.5532702M

Run in Batch: 231108A5, Run Date: 11/08/2023 14:14, Prep Date: 11/08/2023, Matrix: SO, Dilution: 1150

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
trans-1,3-Dichloropropene		108.9	74.5	129.7	6.7	30.0
trans-1,4-Dichloro-2-butene		111.0	58.3	143.3	7.3	30.0
Ethylbenzene		99.9	77.7	130.4	1.4	30.0
2-Hexanone		111.7	45.7	141.9	9.1	30.0
Hexachloroethane		76.6	55.5	129.0	7.4	30.0
p-Isopropyltoluene		77.5	77.1	140.9	3.2	30.0
Isopropylbenzene		99.8	70.3	128.2	5.7	30.0
2-Methylnaphthalene	*	73.9	10.0	175.9	34.8	30.0
4-Methyl-2-pentanone (MIBK)	*	152.9	60.4	133.8	6.9	30.0
tert-Methyl butyl ether (MTBE)		111.1	67.5	123.7	4.3	30.0
Methyl iodide		101.2	56.9	110.8	3.9	30.0
Methylene chloride		106.9	70.5	121.5	1.0	30.0
Naphthalene		100.6	39.3	129.2	15.6	30.0
n-Propylbenzene		128.7	77.3	135.2	7.9	30.0
Styrene		102.3	71.3	119.3	3.2	30.0
1,1,1,2-Tetrachloroethane		103.2	76.6	133.0	4.5	30.0
1,1,1-Trichloroethane		109.3	73.8	128.9	1.9	30.0
1,1,2,2-Tetrachloroethane		95.7	65.4	134.9	5.1	30.0
1,1,2-Trichloroethane		125.5	71.3	125.7	8.0	30.0
1,2,3-Trichlorobenzene	*	48.6	59.4	157.9	16.4	30.0
1,2,3-Trichloropropane		125.0	67.2	154.5	5.8	30.0
1,2,3-Trimethylbenzene	*	164.2	70.9	130.2	0.6	30.0
1,2,4-Trichlorobenzene		49.7	37.1	131.3	10.9	30.0
1,2,4-Trimethylbenzene	*	230.6	76.9	139.1	2.5	30.0
1,3,5-Trimethylbenzene	*	148.0	75.6	137.0	3.3	30.0
Tetrachloroethene		99.9	73.0	124.7	6.2	30.0
Tetrahydrofuran		100.5	48.2	125.7	4.5	30.0
Toluene		103.3	74.8	129.2	3.5	30.0
Trichloroethene		103.5	74.1	127.6	2.2	30.0
Trichlorofluoromethane		117.6	25.7	157.8	1.6	30.0
Vinyl chloride		109.4	45.3	138.7	1.9	30.0
o-Xylene	*	170.3	79.4	132.3	8.1	30.0
p,m-Xylene	*	136.9	79.8	132.0	6.4	30.0

Organics - Volatiles, Prep Batch ID: VF231108S3

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Blank (BLK)

Lab Sample ID: 231108B5.BLKS08B

Run in Batch: 231108B5, Run Date: 11/09/2023 02:33, Prep Date: 11/08/2023, Matrix: SO, Dilution: 50

Analyte	Flags	Conc	RDL	Units
Diethyl ether		ND	50.0	ug/kg
Acetone		ND	500.0	ug/kg
Methyl iodide		ND	50.0	ug/kg
Carbon disulfide		ND	50.0	ug/kg
tert-Methyl butyl ether (MTBE)		ND	50.0	ug/kg
Acrylonitrile		ND	50.0	ug/kg
2-Butanone (MEK)		ND	500.0	ug/kg
Dichlorodifluoromethane		ND	50.0	ug/kg
Chloromethane		ND	50.0	ug/kg
Vinyl chloride		ND	50.0	ug/kg
Bromomethane		ND	50.0	ug/kg
Chloroethane		ND	50.0	ug/kg
Trichlorofluoromethane		ND	50.0	ug/kg
1,1-Dichloroethene		ND	50.0	ug/kg
Methylene chloride		ND	50.0	ug/kg
trans-1,2-Dichloroethene		ND	50.0	ug/kg
1,1-Dichloroethane		ND	50.0	ug/kg
cis-1,2-Dichloroethene		ND	50.0	ug/kg
Tetrahydrofuran		ND	500.0	ug/kg
Chloroform		ND	50.0	ug/kg
Bromochloromethane		ND	50.0	ug/kg
1,1,1-Trichloroethane		ND	50.0	ug/kg
4-Methyl-2-pentanone (MIBK)		ND	500.0	ug/kg
2-Hexanone		ND	500.0	ug/kg
Carbon tetrachloride		ND	50.0	ug/kg
Benzene		ND	50.0	ug/kg
1,2-Dichloroethane		ND	50.0	ug/kg
Trichloroethene		ND	50.0	ug/kg
1,2-Dichloropropane		ND	50.0	ug/kg
Bromodichloromethane		ND	50.0	ug/kg
Dibromomethane		ND	50.0	ug/kg
cis-1,3-Dichloropropene		ND	50.0	ug/kg
Toluene		ND	50.0	ug/kg
trans-1,3-Dichloropropene		ND	50.0	ug/kg
1,1,2-Trichloroethane		ND	50.0	ug/kg
Tetrachloroethene		ND	50.0	ug/kg
trans-1,4-Dichloro-2-butene		ND	50.0	ug/kg
Dibromochloromethane		ND	50.0	ug/kg
1,2-Dibromoethane		ND	50.0	ug/kg
Chlorobenzene		ND	50.0	ug/kg
1,1,1,2-Tetrachloroethane		ND	50.0	ug/kg
Ethylbenzene		ND	50.0	ug/kg
p,m-Xylene		ND	50.0	ug/kg
o-Xylene		ND	50.0	ug/kg
Styrene		ND	50.0	ug/kg
Isopropylbenzene		ND	50.0	ug/kg

Organics - Volatiles, Prep Batch ID: VF231108S3 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Blank (BLK) (continued)

Lab Sample ID: 231108B5.BLKS08B

Run in Batch: 231108B5, Run Date: 11/09/2023 02:33, Prep Date: 11/08/2023, Matrix: SO, Dilution: 50

Analyte	Flags	Conc	RDL	Units
Bromoform		ND	50.0	ug/kg
1,1,2,2-Tetrachloroethane		ND	50.0	ug/kg
1,2,3-Trichloropropane		ND	50.0	ug/kg
n-Propylbenzene		ND	50.0	ug/kg
Bromobenzene		ND	50.0	ug/kg
1,3,5-Trimethylbenzene		ND	50.0	ug/kg
tert-Butylbenzene		ND	50.0	ug/kg
1,2,4-Trimethylbenzene		ND	50.0	ug/kg
sec-Butylbenzene		ND	50.0	ug/kg
p-Isopropyltoluene		ND	50.0	ug/kg
1,3-Dichlorobenzene		ND	50.0	ug/kg
1,4-Dichlorobenzene		ND	50.0	ug/kg
1,2-Dichlorobenzene		ND	50.0	ug/kg
1,2,3-Trimethylbenzene		ND	50.0	ug/kg
n-Butylbenzene		ND	50.0	ug/kg
Hexachloroethane		ND	50.0	ug/kg
1,2-Dibromo-3-chloropropane		ND	50.0	ug/kg
1,2,4-Trichlorobenzene		ND	50.0	ug/kg
1,2,3-Trichlorobenzene		ND	50.0	ug/kg
Naphthalene		ND	50.0	ug/kg
2-Methylnaphthalene		ND	50.0	ug/kg

Laboratory Control Sample (LCS)

Lab Sample ID: 231108B5.LCSS08B

Run in Batch: 231108B5, Run Date: 11/09/2023 00:33, Prep Date: 11/08/2023, Matrix: SO, Dilution: 50

Analyte	Flags	% Rec	LCL	UCL
Diethyl ether		119.8	51.7	123.0
Acetone		109.6	25.3	155.1
Methyl iodide	*	115.4	56.9	110.8
Carbon disulfide		115.2	57.0	123.0
tert-Methyl butyl ether (MTBE)		116.1	67.5	123.7
Acrylonitrile		112.4	58.7	133.0
2-Butanone (MEK)		105.4	38.7	136.9
Dichlorodifluoromethane		134.3	10.0	171.8
Chloromethane		80.3	30.2	152.7
Vinyl chloride		116.9	45.3	138.7
Bromomethane		103.6	10.0	157.4
Chloroethane		116.2	10.0	169.1
Trichlorofluoromethane		122.7	25.7	157.8
1,1-Dichloroethene		118.8	59.2	137.5
Methylene chloride		114.7	70.5	121.5
trans-1,2-Dichloroethene		118.4	72.5	128.8
1,1-Dichloroethane		117.7	72.5	123.4
cis-1,2-Dichloroethene		116.0	75.0	120.5
Tetrahydrofuran		106.8	48.2	125.7
Chloroform		115.5	74.6	123.2

Organics - Volatiles, Prep Batch ID: VF231108S3 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Laboratory Control Sample (LCS) (continued)

Lab Sample ID: 231108B5.LCSS08B

Run in Batch: 231108B5, Run Date: 11/09/2023 00:33, Prep Date: 11/08/2023, Matrix: SO, Dilution: 50

Analyte	Flags	% Rec	LCL	UCL
Bromochloromethane		112.6	72.3	122.8
1,1,1-Trichloroethane		121.9	73.8	128.9
4-Methyl-2-pentanone (MIBK)		110.2	60.4	133.8
2-Hexanone		111.3	45.7	141.9
Carbon tetrachloride		116.9	70.1	132.7
Benzene		113.9	74.6	128.9
1,2-Dichloroethane		115.1	73.2	125.4
Trichloroethene		114.3	74.1	127.6
1,2-Dichloropropane		114.5	77.6	124.4
Bromodichloromethane		118.9	76.7	128.4
Dibromomethane		110.9	72.5	127.3
cis-1,3-Dichloropropene		116.3	79.3	128.3
Toluene		111.7	74.8	129.2
trans-1,3-Dichloropropene		116.6	74.5	129.7
1,1,2-Trichloroethane		114.3	71.3	125.7
Tetrachloroethene		109.2	73.0	124.7
trans-1,4-Dichloro-2-butene		107.5	58.3	143.3
Dibromochloromethane		114.5	68.9	132.7
1,2-Dibromoethane		109.9	71.4	129.3
Chlorobenzene		108.4	74.2	128.1
1,1,1,2-Tetrachloroethane		112.6	76.6	133.0
Ethylbenzene		112.1	77.7	130.4
p,m-Xylene		110.0	79.8	132.0
o-Xylene		110.9	79.4	132.3
Styrene		109.6	71.3	119.3
Isopropylbenzene		111.6	70.3	128.2
Bromoform		113.5	54.7	137.4
1,1,2,2-Tetrachloroethane		108.2	65.4	134.9
1,2,3-Trichloropropane		110.8	67.2	154.5
n-Propylbenzene		111.4	77.3	135.2
Bromobenzene		105.5	74.0	132.4
1,3,5-Trimethylbenzene		107.8	75.6	137.0
tert-Butylbenzene		110.7	75.6	134.6
1,2,4-Trimethylbenzene		108.5	76.9	139.1
sec-Butylbenzene		113.1	72.7	135.6
p-Isopropyltoluene		111.9	77.1	140.9
1,3-Dichlorobenzene		108.5	77.3	131.0
1,4-Dichlorobenzene		106.2	33.1	125.8
1,2-Dichlorobenzene		107.7	73.5	132.7
1,2,3-Trimethylbenzene		111.5	70.9	130.2
n-Butylbenzene		107.7	75.0	138.6
Hexachloroethane		117.1	55.5	129.0
1,2-Dibromo-3-chloropropane		109.9	54.1	156.4
1,2,4-Trichlorobenzene		103.7	37.1	131.3
1,2,3-Trichlorobenzene		105.4	59.4	157.9
Naphthalene		109.6	39.3	129.2

Organics - Volatiles, Prep Batch ID: VF231108S3 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Laboratory Control Sample (LCS) (continued)

Lab Sample ID: 231108B5.LCSS08B

Run in Batch: 231108B5, Run Date: 11/09/2023 00:33, Prep Date: 11/08/2023, Matrix: SO, Dilution: 50

Analyte	Flags	% Rec	LCL	UCL
2-Methylnaphthalene		116.3	10.0	175.9

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: 231108B5.LCSDS08B, Parent Sample ID: 231108B5.LCSS08B

Run in Batch: 231108B5, Run Date: 11/09/2023 00:57, Prep Date: 11/08/2023, Matrix: SO, Dilution: 50

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Diethyl ether		116.9	51.7	123.0	2.4	30.0
Acetone		112.0	25.3	155.1	2.2	30.0
Methyl iodide		105.8	56.9	110.8	8.6	30.0
Carbon disulfide		108.9	57.0	123.0	5.6	30.0
tert-Methyl butyl ether (MTBE)		116.1	67.5	123.7	0.0	30.0
Acrylonitrile		111.7	58.7	133.0	0.6	30.0
2-Butanone (MEK)		106.7	38.7	136.9	1.2	30.0
Dichlorodifluoromethane		128.2	10.0	171.8	4.6	30.0
Chloromethane	*	115.3	30.2	152.7	35.8	30.0
Vinyl chloride		115.3	45.3	138.7	1.4	30.0
Bromomethane		105.8	10.0	157.4	2.1	30.0
Chloroethane		118.3	10.0	169.1	1.8	30.0
Trichlorofluoromethane		118.2	25.7	157.8	3.8	30.0
1,1-Dichloroethene		112.0	59.2	137.5	5.9	30.0
Methylene chloride		110.5	70.5	121.5	3.7	30.0
trans-1,2-Dichloroethene		111.7	72.5	128.8	5.9	30.0
1,1-Dichloroethane		113.0	72.5	123.4	4.0	30.0
cis-1,2-Dichloroethene		109.6	75.0	120.5	5.7	30.0
Tetrahydrofuran		105.4	48.2	125.7	1.3	30.0
Chloroform		111.4	74.6	123.2	3.6	30.0
Bromochloromethane		109.2	72.3	122.8	3.1	30.0
1,1,1-Trichloroethane		115.6	73.8	128.9	5.3	30.0
4-Methyl-2-pentanone (MIBK)		111.9	60.4	133.8	1.5	30.0
2-Hexanone		112.2	45.7	141.9	0.8	30.0
Carbon tetrachloride		110.3	70.1	132.7	5.8	30.0
Benzene		108.5	74.6	128.9	4.9	30.0
1,2-Dichloroethane		112.1	73.2	125.4	2.6	30.0
Trichloroethene		106.6	74.1	127.6	7.0	30.0
1,2-Dichloropropane		110.2	77.6	124.4	3.8	30.0
Bromodichloromethane		114.3	76.7	128.4	4.0	30.0
Dibromomethane		108.6	72.5	127.3	2.1	30.0
cis-1,3-Dichloropropene		114.6	79.3	128.3	1.5	30.0
Toluene		106.6	74.8	129.2	4.7	30.0
trans-1,3-Dichloropropene		116.2	74.5	129.7	0.3	30.0
1,1,2-Trichloroethane		111.7	71.3	125.7	2.3	30.0
Tetrachloroethene		103.4	73.0	124.7	5.5	30.0
trans-1,4-Dichloro-2-butene		108.2	58.3	143.3	0.7	30.0
Dibromochloromethane		112.8	68.9	132.7	1.5	30.0
1,2-Dibromoethane		109.2	71.4	129.3	0.6	30.0
Chlorobenzene		103.9	74.2	128.1	4.2	30.0

Organics - Volatiles, Prep Batch ID: VF231108S3 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Laboratory Control Sample Duplicate (LCSD) (continued)

Lab Sample ID: 231108B5.LCSDS08B, Parent Sample ID: 231108B5.LCSS08B

Run in Batch: 231108B5, Run Date: 11/09/2023 00:57, Prep Date: 11/08/2023, Matrix: SO, Dilution: 50

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
1,1,1,2-Tetrachloroethane		110.8	76.6	133.0	1.5	30.0
Ethylbenzene		106.3	77.7	130.4	5.4	30.0
p,m-Xylene		104.5	79.8	132.0	5.1	30.0
o-Xylene		106.9	79.4	132.3	3.6	30.0
Styrene		106.1	71.3	119.3	3.3	30.0
Isopropylbenzene		107.2	70.3	128.2	4.0	30.0
Bromoform		112.9	54.7	137.4	0.5	30.0
1,1,2,2-Tetrachloroethane		107.2	65.4	134.9	0.9	30.0
1,2,3-Trichloropropane		111.5	67.2	154.5	0.7	30.0
n-Propylbenzene		105.9	77.3	135.2	5.0	30.0
Bromobenzene		102.6	74.0	132.4	2.8	30.0
1,3,5-Trimethylbenzene		104.7	75.6	137.0	2.9	30.0
tert-Butylbenzene		107.4	75.6	134.6	3.0	30.0
1,2,4-Trimethylbenzene		105.1	76.9	139.1	3.2	30.0
sec-Butylbenzene		108.9	72.7	135.6	3.8	30.0
p-Isopropyltoluene		107.5	77.1	140.9	4.0	30.0
1,3-Dichlorobenzene		104.2	77.3	131.0	4.1	30.0
1,4-Dichlorobenzene		102.1	33.1	125.8	4.0	30.0
1,2-Dichlorobenzene		105.5	73.5	132.7	2.1	30.0
1,2,3-Trimethylbenzene		110.5	70.9	130.2	0.9	30.0
n-Butylbenzene		103.2	75.0	138.6	4.3	30.0
Hexachloroethane		112.0	55.5	129.0	4.4	30.0
1,2-Dibromo-3-chloropropane		111.4	54.1	156.4	1.4	30.0
1,2,4-Trichlorobenzene		103.6	37.1	131.3	0.2	30.0
1,2,3-Trichlorobenzene		105.5	59.4	157.9	0.1	30.0
Naphthalene		109.8	39.3	129.2	0.1	30.0
2-Methylnaphthalene		118.2	10.0	175.9	1.6	30.0

Organics - Volatiles, Prep Batch ID: VF231109S1

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Blank (BLK)

Lab Sample ID: 231109A5.BLKS09A

Run in Batch: 231109A5, Run Date: 11/09/2023 14:34, Prep Date: 11/09/2023, Matrix: SO, Dilution: 50

Analyte	Flags	Conc	RDL	Units
Diethyl ether		ND	50.0	ug/kg
Acetone		ND	500.0	ug/kg
Methyl iodide		ND	50.0	ug/kg
Carbon disulfide		ND	50.0	ug/kg
tert-Methyl butyl ether (MTBE)		ND	50.0	ug/kg
Acrylonitrile		ND	50.0	ug/kg
2-Butanone (MEK)		ND	500.0	ug/kg
Dichlorodifluoromethane		ND	50.0	ug/kg
Chloromethane		ND	50.0	ug/kg
Vinyl chloride		ND	50.0	ug/kg
Bromomethane		ND	50.0	ug/kg
Chloroethane		ND	50.0	ug/kg
Trichlorofluoromethane		ND	50.0	ug/kg
1,1-Dichloroethene		ND	50.0	ug/kg
Methylene chloride		ND	50.0	ug/kg
trans-1,2-Dichloroethene		ND	50.0	ug/kg
1,1-Dichloroethane		ND	50.0	ug/kg
cis-1,2-Dichloroethene		ND	50.0	ug/kg
Tetrahydrofuran		ND	500.0	ug/kg
Chloroform		ND	50.0	ug/kg
Bromochloromethane		ND	50.0	ug/kg
1,1,1-Trichloroethane		ND	50.0	ug/kg
4-Methyl-2-pentanone (MIBK)		ND	500.0	ug/kg
2-Hexanone		ND	500.0	ug/kg
Carbon tetrachloride		ND	50.0	ug/kg
Benzene		ND	50.0	ug/kg
1,2-Dichloroethane		ND	50.0	ug/kg
Trichloroethene		ND	50.0	ug/kg
1,2-Dichloropropane		ND	50.0	ug/kg
Bromodichloromethane		ND	50.0	ug/kg
Dibromomethane		ND	50.0	ug/kg
cis-1,3-Dichloropropene		ND	50.0	ug/kg
Toluene		ND	50.0	ug/kg
trans-1,3-Dichloropropene		ND	50.0	ug/kg
1,1,2-Trichloroethane		ND	50.0	ug/kg
Tetrachloroethene		ND	50.0	ug/kg
trans-1,4-Dichloro-2-butene		ND	50.0	ug/kg
Dibromochloromethane		ND	50.0	ug/kg
1,2-Dibromoethane		ND	50.0	ug/kg
Chlorobenzene		ND	50.0	ug/kg
1,1,1,2-Tetrachloroethane		ND	50.0	ug/kg
Ethylbenzene		ND	50.0	ug/kg
p,m-Xylene		ND	50.0	ug/kg
o-Xylene		ND	50.0	ug/kg
Styrene		ND	50.0	ug/kg
Isopropylbenzene		ND	50.0	ug/kg

Organics - Volatiles, Prep Batch ID: VF231109S1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Blank (BLK) (continued)

Lab Sample ID: 231109A5.BLKS09A

Run in Batch: 231109A5, Run Date: 11/09/2023 14:34, Prep Date: 11/09/2023, Matrix: SO, Dilution: 50

Analyte	Flags	Conc	RDL	Units
Bromoform		ND	50.0	ug/kg
1,1,2,2-Tetrachloroethane		ND	50.0	ug/kg
1,2,3-Trichloropropane		ND	50.0	ug/kg
n-Propylbenzene		ND	50.0	ug/kg
Bromobenzene		ND	50.0	ug/kg
1,3,5-Trimethylbenzene		ND	50.0	ug/kg
tert-Butylbenzene		ND	50.0	ug/kg
1,2,4-Trimethylbenzene		ND	50.0	ug/kg
sec-Butylbenzene		ND	50.0	ug/kg
p-Isopropyltoluene		ND	50.0	ug/kg
1,3-Dichlorobenzene		ND	50.0	ug/kg
1,4-Dichlorobenzene		ND	50.0	ug/kg
1,2-Dichlorobenzene		ND	50.0	ug/kg
1,2,3-Trimethylbenzene		ND	50.0	ug/kg
n-Butylbenzene		ND	50.0	ug/kg
Hexachloroethane		ND	50.0	ug/kg
1,2-Dibromo-3-chloropropane		ND	50.0	ug/kg
1,2,4-Trichlorobenzene		ND	50.0	ug/kg
1,2,3-Trichlorobenzene		ND	50.0	ug/kg
Naphthalene		ND	50.0	ug/kg
2-Methylnaphthalene		ND	50.0	ug/kg

Laboratory Control Sample (LCS)

Lab Sample ID: 231109A5.LCSS09A

Run in Batch: 231109A5, Run Date: 11/09/2023 13:22, Prep Date: 11/09/2023, Matrix: SO, Dilution: 50

Analyte	Flags	% Rec	LCL	UCL
Diethyl ether		115.7	51.7	123.0
Acetone		106.7	25.3	155.1
Methyl iodide		108.9	56.9	110.8
Carbon disulfide		107.4	57.0	123.0
tert-Methyl butyl ether (MTBE)		113.8	67.5	123.7
Acrylonitrile		109.5	58.7	133.0
2-Butanone (MEK)		100.2	38.7	136.9
Dichlorodifluoromethane		127.0	10.0	171.8
Chloromethane		112.4	30.2	152.7
Vinyl chloride		111.7	45.3	138.7
Bromomethane		101.9	10.0	157.4
Chloroethane		110.7	10.0	169.1
Trichlorofluoromethane		113.8	25.7	157.8
1,1-Dichloroethene		112.0	59.2	137.5
Methylene chloride		111.4	70.5	121.5
trans-1,2-Dichloroethene		111.8	72.5	128.8
1,1-Dichloroethane		112.7	72.5	123.4
cis-1,2-Dichloroethene		110.5	75.0	120.5
Tetrahydrofuran		104.2	48.2	125.7
Chloroform		111.2	74.6	123.2

Organics - Volatiles, Prep Batch ID: VF231109S1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Laboratory Control Sample (LCS) (continued)

Lab Sample ID: 231109A5.LCSS09A

Run in Batch: 231109A5, Run Date: 11/09/2023 13:22, Prep Date: 11/09/2023, Matrix: SO, Dilution: 50

Analyte	Flags	% Rec	LCL	UCL
Bromochloromethane		109.9	72.3	122.8
1,1,1-Trichloroethane		114.3	73.8	128.9
4-Methyl-2-pentanone (MIBK)		106.8	60.4	133.8
2-Hexanone		105.0	45.7	141.9
Carbon tetrachloride		111.0	70.1	132.7
Benzene		108.7	74.6	128.9
1,2-Dichloroethane		112.8	73.2	125.4
Trichloroethene		106.6	74.1	127.6
1,2-Dichloropropane		110.3	77.6	124.4
Bromodichloromethane		115.8	76.7	128.4
Dibromomethane		107.3	72.5	127.3
cis-1,3-Dichloropropene		114.9	79.3	128.3
Toluene		106.0	74.8	129.2
trans-1,3-Dichloropropene		115.5	74.5	129.7
1,1,2-Trichloroethane		110.1	71.3	125.7
Tetrachloroethene		101.2	73.0	124.7
trans-1,4-Dichloro-2-butene		109.6	58.3	143.3
Dibromochloromethane		109.7	68.9	132.7
1,2-Dibromoethane		106.4	71.4	129.3
Chlorobenzene		102.1	74.2	128.1
1,1,1,2-Tetrachloroethane		110.7	76.6	133.0
Ethylbenzene		105.0	77.7	130.4
p,m-Xylene		102.4	79.8	132.0
o-Xylene		105.8	79.4	132.3
Styrene		103.5	71.3	119.3
Isopropylbenzene		105.3	70.3	128.2
Bromoform		108.2	54.7	137.4
1,1,2,2-Tetrachloroethane		104.7	65.4	134.9
1,2,3-Trichloropropane		107.0	67.2	154.5
n-Propylbenzene		102.9	77.3	135.2
Bromobenzene		101.8	74.0	132.4
1,3,5-Trimethylbenzene		102.5	75.6	137.0
tert-Butylbenzene		104.6	75.6	134.6
1,2,4-Trimethylbenzene		103.6	76.9	139.1
sec-Butylbenzene		108.0	72.7	135.6
p-Isopropyltoluene		106.3	77.1	140.9
1,3-Dichlorobenzene		103.4	77.3	131.0
1,4-Dichlorobenzene		101.5	33.1	125.8
1,2-Dichlorobenzene		106.0	73.5	132.7
1,2,3-Trimethylbenzene		110.4	70.9	130.2
n-Butylbenzene		98.9	75.0	138.6
Hexachloroethane		113.4	55.5	129.0
1,2-Dibromo-3-chloropropane		106.9	54.1	156.4
1,2,4-Trichlorobenzene		101.0	37.1	131.3
1,2,3-Trichlorobenzene		104.7	59.4	157.9
Naphthalene		108.2	39.3	129.2

Organics - Volatiles, Prep Batch ID: VF231109S1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Laboratory Control Sample (LCS) (continued)

Lab Sample ID: 231109A5.LCSS09A

Run in Batch: 231109A5, Run Date: 11/09/2023 13:22, Prep Date: 11/09/2023, Matrix: SO, Dilution: 50

Analyte	Flags	% Rec	LCL	UCL
2-Methylnaphthalene		112.5	10.0	175.9

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: 231109A5.LCSDS09A, Parent Sample ID: 231109A5.LCSS09A

Run in Batch: 231109A5, Run Date: 11/09/2023 13:46, Prep Date: 11/09/2023, Matrix: SO, Dilution: 50

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Diethyl ether		112.8	51.7	123.0	2.5	30.0
Acetone		105.2	25.3	155.1	1.4	30.0
Methyl iodide		102.9	56.9	110.8	5.6	30.0
Carbon disulfide		101.5	57.0	123.0	5.6	30.0
tert-Methyl butyl ether (MTBE)		114.4	67.5	123.7	0.5	30.0
Acrylonitrile		107.3	58.7	133.0	2.0	30.0
2-Butanone (MEK)		102.3	38.7	136.9	2.0	30.0
Dichlorodifluoromethane		119.5	10.0	171.8	6.0	30.0
Chloromethane		111.1	30.2	152.7	1.2	30.0
Vinyl chloride		106.5	45.3	138.7	4.8	30.0
Bromomethane		99.3	10.0	157.4	2.6	30.0
Chloroethane		111.5	10.0	169.1	0.6	30.0
Trichlorofluoromethane		109.6	25.7	157.8	3.7	30.0
1,1-Dichloroethene		105.9	59.2	137.5	5.6	30.0
Methylene chloride		107.1	70.5	121.5	4.0	30.0
trans-1,2-Dichloroethene		106.6	72.5	128.8	4.8	30.0
1,1-Dichloroethane		108.6	72.5	123.4	3.7	30.0
cis-1,2-Dichloroethene		106.1	75.0	120.5	4.1	30.0
Tetrahydrofuran		102.2	48.2	125.7	2.0	30.0
Chloroform		106.8	74.6	123.2	4.1	30.0
Bromochloromethane		106.0	72.3	122.8	3.6	30.0
1,1,1-Trichloroethane		109.2	73.8	128.9	4.5	30.0
4-Methyl-2-pentanone (MIBK)		108.0	60.4	133.8	1.1	30.0
2-Hexanone		108.5	45.7	141.9	3.3	30.0
Carbon tetrachloride		105.4	70.1	132.7	5.1	30.0
Benzene		104.4	74.6	128.9	4.1	30.0
1,2-Dichloroethane		110.4	73.2	125.4	2.2	30.0
Trichloroethene		101.7	74.1	127.6	4.7	30.0
1,2-Dichloropropane		107.4	77.6	124.4	2.7	30.0
Bromodichloromethane		110.0	76.7	128.4	5.1	30.0
Dibromomethane		105.6	72.5	127.3	1.6	30.0
cis-1,3-Dichloropropene		112.9	79.3	128.3	1.8	30.0
Toluene		101.1	74.8	129.2	4.7	30.0
trans-1,3-Dichloropropene		112.2	74.5	129.7	2.9	30.0
1,1,2-Trichloroethane		108.7	71.3	125.7	1.3	30.0
Tetrachloroethene		95.8	73.0	124.7	5.5	30.0
trans-1,4-Dichloro-2-butene		109.4	58.3	143.3	0.2	30.0
Dibromochloromethane		110.0	68.9	132.7	0.3	30.0
1,2-Dibromoethane		106.5	71.4	129.3	0.1	30.0
Chlorobenzene		99.2	74.2	128.1	2.8	30.0

Organics - Volatiles, Prep Batch ID: VF231109S1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Laboratory Control Sample Duplicate (LCSD) (continued)

Lab Sample ID: 231109A5.LCSDS09A, Parent Sample ID: 231109A5.LCSS09A

Run in Batch: 231109A5, Run Date: 11/09/2023 13:46, Prep Date: 11/09/2023, Matrix: SO, Dilution: 50

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
1,1,1,2-Tetrachloroethane		108.6	76.6	133.0	2.0	30.0
Ethylbenzene		100.6	77.7	130.4	4.2	30.0
p,m-Xylene		98.8	79.8	132.0	3.6	30.0
o-Xylene		102.2	79.4	132.3	3.5	30.0
Styrene		101.5	71.3	119.3	2.0	30.0
Isopropylbenzene		100.9	70.3	128.2	4.3	30.0
Bromoform		109.5	54.7	137.4	1.1	30.0
1,1,2,2-Tetrachloroethane		105.1	65.4	134.9	0.4	30.0
1,2,3-Trichloropropane		106.2	67.2	154.5	0.7	30.0
n-Propylbenzene		98.7	77.3	135.2	4.2	30.0
Bromobenzene		99.4	74.0	132.4	2.4	30.0
1,3,5-Trimethylbenzene		97.9	75.6	137.0	4.6	30.0
tert-Butylbenzene		101.7	75.6	134.6	2.7	30.0
1,2,4-Trimethylbenzene		99.2	76.9	139.1	4.3	30.0
sec-Butylbenzene		103.3	72.7	135.6	4.4	30.0
p-Isopropyltoluene		101.6	77.1	140.9	4.5	30.0
1,3-Dichlorobenzene		99.4	77.3	131.0	4.0	30.0
1,4-Dichlorobenzene		97.3	33.1	125.8	4.2	30.0
1,2-Dichlorobenzene		102.2	73.5	132.7	3.7	30.0
1,2,3-Trimethylbenzene		106.2	70.9	130.2	3.9	30.0
n-Butylbenzene		93.1	75.0	138.6	6.1	30.0
Hexachloroethane		109.3	55.5	129.0	3.7	30.0
1,2-Dibromo-3-chloropropane		107.8	54.1	156.4	0.9	30.0
1,2,4-Trichlorobenzene		97.9	37.1	131.3	3.2	30.0
1,2,3-Trichlorobenzene		101.7	59.4	157.9	2.9	30.0
Naphthalene		106.8	39.3	129.2	1.3	30.0
2-Methylnaphthalene		113.2	10.0	175.9	0.6	30.0

Merit Laboratories, Inc.

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

COC# 2023-10-30-01

CHAIN OF CUSTODY RECORD

REPORT TO

CONTACT NAME: Penni Mahler
COMPANY: fishbeck
ADDRESS: 1515 Arboretum Dr. SE
CITY: Grand Rapids STATE: MI ZIP CODE: 49546
PHONE NO.: 616.575.3824 FAX NO.: P.O. NO.:
E-MAIL ADDRESS: pdmahler@fishbeck.com QUOTE NO.:

INVOICE TO

CONTACT NAME: Accounts Payable ☐ SAME
COMPANY: fishbeck
ADDRESS: 1515 Arboretum Dr. SE
CITY: Grand Rapids STATE: MI ZIP CODE: 49546
PHONE NO.: 616.464.3708 E-MAIL ADDRESS: acpay@fishbeck.com

PROJECT NO./NAME: 231596/OCBRA/ CERES Hart
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: GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID SL=SLUDGE DW=DRINKING WATER O=OIL WP=WIPE A=AIR W=WASTE

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

Certifications: ☐ OHIO VAP ☐ Drinking Water ☐ DoD ☐ NPDES

Project Locations: ☐ Detroit ☐ New York ☐ Other

MERIT LAB NO. (FOR LAB USE ONLY)	YEAR DATE	TIME	SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	# Containers & Preservatives: NONE	HCl	HNO_3	H_2SO_4	NaOH	MeOH	OTHER	PNAs (EPA 8270), MI 10, % soli	VOCs (EPA 8260+)	Special Instructions
01,02,03	10-30-23	1830	SB-05 (24-25)I/MS/MSD	S	4	2					2		X	X	~185 ppm
55327,04	10-30-23	1600	SB-01 (24-25)I	S	2	1					1				
,05	10-30-23	—	SB-0[redacted] (—)D	S	2	1					1				Blind duplicate
,06		1630	SB-02 (24-25)I	S	2	1					1				
,07		1650	SB-03 (11-12)I	S	2	1					1				
,08	↓	1730	SB-04 (9-10)I	S	2	1					1				
,09	10-31-23	920	SB-06 (3-4)I	S	2	1					1				
,10	10-31-23	1130	SB-07 (4-5)I	S	2	1					1				
,11		1045	SB-08 (4-5)I	S	2	1					1				
,12		1215	SB-09 (4-5)I	S	2	1					1				
,13		1300	SB-10 (4-5)I	S	2	1					1				
,14	↓	1330	QCFB-01	S	1						1		↓	↓	ICE

RELINQUISHED BY: SIGNATURE/ORGANIZATION: R. Knoll / Fishbeck (Sampler) DATE: 11-2-23 TIME: 730
RECEIVED BY: SIGNATURE/ORGANIZATION: Fishbeck sample Storage / Fishbeck DATE: 11-2-23 TIME: 730
RELINQUISHED BY: SIGNATURE/ORGANIZATION: Storage DATE: 11/2/23 TIME: 2:38
RECEIVED BY: SIGNATURE/ORGANIZATION: Leanne Jeannot DATE: 11/2/23 TIME: 2:38

RELINQUISHED BY: SIGNATURE/ORGANIZATION: Leanne Jeannot DATE: 11/2/23 TIME: 2:38
RECEIVED BY: SIGNATURE/ORGANIZATION: DATE: 11/2/23 TIME: 2:38

SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS
SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS

NOTES: TEMP ON ARRIVAL 4.3° 11/2/23 1630 3.0

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

Rev. 5.18.12

Merit Laboratories, Inc.

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

C.O.C. PAGE # 2 OF 2

COC # 2023-10-30-02

CHAIN OF CUSTODY RECORD

REPORT TO

CONTACT NAME: Penni Mahler
COMPANY: fishbeck
ADDRESS: 1515 Arboretum Dr. SE
CITY: Grand Rapids | STATE: MI | ZIP CODE: 49546
PHONE NO.: 616.575.3824 | FAX NO.: | P.O. NO.:
E-MAIL ADDRESS: pdmahler@fishbeck.com | QUOTE NO.:

INVOICE TO

CONTACT NAME: Accounts Payable ☐ SAME
COMPANY: fishbeck
ADDRESS: 1515 Arboretum Dr. SE
CITY: Grand Rapids | STATE: MI | ZIP CODE: 49546
PHONE NO.: 616.464.3708 | E-MAIL ADDRESS: acpay@fishbeck.com

PROJECT NO./NAME: 231596/OCBRA/ CERES Hart
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: GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID SL=SLUDGE DW=DRINKING WATER O=OIL WP=WIPE A=AIR W=WASTE

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

Certifications
☐ OHIO VAP ☐ Drinking Water
☐ DoD ☐ NPDES

Project Locations
☐ Detroit ☐ New York
☐ Other

Special Instructions

MERIT LAB NO. (FOR LAB USE ONLY)	YEAR DATE	YEAR TIME	SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	# Containers & Preservatives: NONE	HCl	HNO_3	H_2SO_4	NaOH	MeOH	OTHER	VOCs (EPA 8260+)
55327.15	10-31-23	1340	EB-01	S	1						1		X

FLE

RELINQUISHED BY: SIGNATURE/ORGANIZATION: R. Krol / Fishbecks (Sampler) DATE: 11-2-23 TIME: 730
RECEIVED BY: SIGNATURE/ORGANIZATION: [redacted] / Fishbeck/FB sample storage DATE: 11-2-23 TIME: 730
RELINQUISHED BY: SIGNATURE/ORGANIZATION: Storage DATE: 11/2/23 TIME: 2:38
RECEIVED BY: SIGNATURE/ORGANIZATION: Leanne Jeannot DATE: 11/2/23 TIME: 2:38

RELINQUISHED BY: SIGNATURE/ORGANIZATION: Leanne Jeannot DATE: 11/2/23 TIME: 2:38
RECEIVED BY: SIGNATURE/ORGANIZATION: DATE: 11/2/23 TIME: 2:38

SEAL NO. | SEAL INTACT YES ☐ NO ☐ | INITIALS
SEAL NO. | SEAL INTACT YES ☐ NO ☐ | INITIALS

NOTES: TEMP ON ARRIVAL 4.3.0
11/2/23 1630 3.8

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

Rev. 5.18.12

Laboratory Services Request – Fishbeck

Project Information

Name:	OCBRA/ CERES Hart
Number:	231596
Manager:	Kirk Perschbacher
Sampling Date:	10/30/2023
Laboratory/Location:	Merti Labs

Regulatory Program (Reporting Limits)

Part 201	■
Part 213	
NPDES Permit	
Other:	

Billing Information

Fishbeck	■	Quote No.
Client		

Sample Quantity/Matrix

Indicate number of samples in box provided.

A separate form must be completed per matrix type.

INVESTIGATIVE	3	Groundwater
	14	Soil
		Surface Water
		Drinking Water
		Wastewater- Dewatering Effluent
	11	Other- Soil Gas
QA/QC	4	Duplicates
	2	MS/MSDs
	3	Equipment Blanks
	2	Field Blanks
	2	Trip Blanks

Reporting Information

Fishbeck	■	
Client		
Std QC Report (Level II)	■	← *MUST specify QC Report for all projects*
Full Deliverables (Level IV)		
Turnaround Time:	■	Standard
		Priority:

If direct reporting or billing client, please provide information below:

Company Name:

Attention:

Email Address:

Additional Project Information for Laboratory

3 Groundwater samples for VOCs, PNAs and MI 10 metals. 1 duplicate for all parameters, 1 MS/MSD for all parameters
11 Soil gas samples for EPA Method To-15 VOCs, 1 duplicate also needed
4 Incremental Sampling Method (ISM) surface soil samples for VOCS, PNAs and MI 10 metals. Duplicate and Triplicate needed for all of the samples.
10 Soil Samples for VOCs, PNAs and MI 10 Metals. 1 duplicate for all parameters, 1 MS/MSD for all parameters
3 equipment blanks for VOCs, PNAs and MI 10 Metals
2 field blanks for VOCs (2 days of sampling so 1 per day)
2 Trip Blanks for VOCs (2 days of sampling so 1 per day)

General Chemistry

Alkalinity, Total		Cyanide, Total		pH		Solids, V.S.	
Bicarbonate Alkalinity		Fluoride		Phenols, T.		Specific Conductivity	
Carbonate Alkalinity		Hardness		Phosphorus, D.		Specific Gravity	
BOD				Phosphorus, O.		Sulfate	
Chloride		N, Ammonia		Phosphorus, T.		Sulfide	
COD		N, Nitrate		Solids, Total		TPH	
Color		N, Nitrite		Solids, T.D.		TOC	
Cyanide, Amenable		N, Total Kjeldahl		Solids, T.S.		PFAS/537.1/18 list	DW
Cyanide, Available		Oil & Grease		Solids, V.		PFAS/537M/28 list	

Metals

		Dissolved		Total			
Aluminum		Chromium, Hexavalent		Manganese		Sodium	
Antimony		Chromium, Total		Mercury		Thallium	
Arsenic		Cobalt		Mercury (EPA 1631)		Vanadium	
Barium		Copper		Molybdenum		Zinc	
Beryllium		Iron		Nickel		Michigan 10	■
Boron		Lead		Potassium		OM 2/ATT 8/Table 3	
Cadmium		Lead (Total, Fine, Coarse)		Selenium			
Calcium		Magnesium		Silver			

Organics

EPA 601 (Halocarbons)		EPA 608 (Pest/PCBs)		EPA 8270 (PNAs)	■	EPA 8082 (PCBs)	
EPA 602 (Aromatics)		EPA 8260 (VOCs)		EPA 8270 (Acids)		EPA 8015/GRO	
EPA 624 (VOCs)		EPA 8260 Plus (VOCs)	■	EPA 8270 (B/N)		EPA 8015/DRO	
EPA 625 (A/BN)		EPA 8270 (SVOCs)		EPA 8081A (Pest)		EPA 8011/EDB	

Waste Characterization

Federal Regulatory Parameters and Limits unless otherwise specified

TCLP/Metals		SPLP/SVOCs (A/BN)		ASTM D3987-85/SVOCs		Paint Filter Test	
TCLP/SVOCs (Full)		SPLP/PCBs		ASTM D3987-85/Pest & PCBs		Cyanide, Reactive	
TCLP/SVOCs (A/BN)		SPLP/Cyanide		ASTM D3987-85/Cyanide		Sulfide, Reactive	
TCLP/VOCs		SPLP/Sulfide		ASTM D3987-85/Cyanide		Flash Point	
SPLP/Metals		SPLP/VOCs		ASTM D3987-85/Sulfide		pH	
SPLP/SVOCs (Full)		SPLP/Hex Cr		ASTM D3987-85/Hex Cr			

Sample Bottle Specification

Project Name: OCBRA/ CERES Hart

Project No.: 231596

Date: 10/30/2023

Sample Information

SOIL MATRIX

QUANTITY

Investigative: 9

I/MS/MSD: 1

Duplicates: 1

Equipment Blanks:

Field Blanks: 2 vials per FB: ☑ 1 ☐ 2

WATER MATRIX

QUANTITY

Investigative: 2

I/MS/MSD: 1

Duplicates: 1

Equipment Blanks:

Trip Blanks: 2 vials per TB: ☑ 1 ☐ 2

Special Instructions:

	Parameters	Preservative	Number of Containers Required										
			4 oz Clear G	8 oz Clear G	16 oz Clear G	250 mL Amber G	500 mL Amber G	1000 mL Amber G	40 mL	125 mL P	250 mL P	500 mL P	1000 mL P
SOIL (I) or (D) or QCEB	PNAs (EPA 8270), MI 10, % solids	None	1										
	VOCs (EPA 8260+)	MeOH							1				
SOIL (I/MS/MSD)													
WATER (I) or (D) or QCEB	PNAs (EPA 8270)	None						2					
	Total Metals; MI 10	HNO_3								1			
	VOCs (EPA 8260+)	HCl							3				
WATER (I/MS/MSD)													

Analytical Laboratory Report

Report ID: S55336.01(01)
Generated on 11/09/2023

Report to

Attention: Penni Mahler
Fishbeck
1515 Arboretum Drive SE
Grand Rapids, MI 49546

Phone: 616-464-3751 FAX:
Email: pdmahler@fishbeck.com

Addtional Contacts: Doug Ervin

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 Laverty (johnlaverty@meritlabs.com)
Barbara Ball (bball@meritlabs.com)

Report Summary

Lab Sample ID(s): S55336.01-S55336.10
Project: 231596/OCBRA/CERES Hart
Collected Date(s): 10/31/2023 - 11/01/2023
Submitted Date/Time: 11/02/2023 16:30
Sampled by: Unknown
P.O. #:

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Maya Murshak
Technical Director

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.
All accreditations/certifications held by this laboratory are listed on page 3. Not all accreditations/certifications are applicable to this report.
For a specific list of accredited analytes, please feel free to contact the laboratory or visit https://www.meritlabs.com/certifications.

Report Narrative

There is no additional narrative for this analytical report

Laboratory Accreditations

Authority	Accreditation ID
Michigan DEQ	#9956
DOD ELAP & ISO/IEC 17025:2017	#69699 PJLA Testing
WBENC	#2005110032
Ohio VAP	#CL0002
Indiana DOH	#C-MI-07
New York NELAC	#11814
North Carolina DENR	#680
North Carolina DOH	#26702
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

Method Summary

Method	Version
E200.8	EPA Method 200.8 Revision 5.4
E245.1	EPA Method 245.1 Revision 3.0
N/A	Not Applicable
SW3015A	SW 846 Method 3015A Revision 1 February 2007
SW3510C	SW 846 Method 3510C Revision 3 December 1996
SW5030C/8260C	SW 846 Method 8260C Revision 3 August 2006 / 5030C Revision 3 May 2003
SW8270D	SW 846 Method 8270D Revision 4 February 2007

Sample Summary (10 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S55336.01	TMW-01 (I)	Groundwater	10/31/23 15:40
S55336.02	TMW-01 (I) MS	Groundwater	10/31/23 15:40
S55336.03	TMW-01 (I) MSD	Groundwater	10/31/23 15:40
S55336.04	TMW-02 (I)	Groundwater	11/01/23 11:30
S55336.05	TMW-01 (D)	Groundwater	11/01/23 00:01
S55336.06	TMW-03 (I)	Groundwater	11/01/23 09:15
S55336.07	QCTB-01	Groundwater	10/31/23 00:01
S55336.08	QCFB-01	Groundwater	11/01/23 13:00
S55336.09	QCEB-01	Groundwater	11/01/23 13:15
S55336.10	QCTB-02	Groundwater	10/31/23 00:01

Lab Sample ID: S55336.01
Sample Tag: TMW-01 (I)
Collected Date/Time: 10/31/2023 15:40
Matrix: Groundwater
COC Reference: 2023-10-31_01

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	3.8	IR
1	125mL Plastic	HNO3	Yes	3.8	IR
2	1L Amber	None	Yes	3.8	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Mercury Digestion	Completed	E245.1	11/06/23 10:30	CTV	
pH check for VOCs*	<2	N/A	11/08/23 11:29	ACK	
Metal Digestion	Completed	SW3015A	11/06/23 10:40	CCM	
PNA Extraction	Completed	SW3510C	11/06/23 10:00	JWR	

Metals

Method: E200.8, Run Date: 11/06/23 12:43, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Arsenic	0.013	0.002		mg/L	5	7440-38-2	
Barium	0.044	0.005		mg/L	5	7440-39-3	
Cadmium	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium	Not detected	0.005		mg/L	5	7440-47-3	
Copper	0.020	0.005		mg/L	5	7440-50-8	
Lead	Not detected	0.003		mg/L	5	7439-92-1	
Selenium	Not detected	0.005		mg/L	5	7782-49-2	
Silver	Not detected	0.0005		mg/L	5	7440-22-4	
Zinc	0.012	0.005		mg/L	5	7440-66-6	

Method: E245.1, Run Date: 11/06/23 14:11, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury	Not detected	0.0002		mg/L	1	7439-97-6	

Organics - Semi-Volatiles

Polynuclear Aromatic Hydrocarbon, Method: SW8270D, Run Date: 11/06/23 18:53, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	5		ug/L	2	83-32-9	
Acenaphthylene	Not detected	5		ug/L	2	208-96-8	
Anthracene	Not detected	5		ug/L	2	120-12-7	
Benzo(a)anthracene	Not detected	1		ug/L	2	56-55-3	
Benzo(a)pyrene	Not detected	1		ug/L	2	50-32-8	
Benzo(b)fluoranthene	Not detected	1		ug/L	2	205-99-2	
Benzo(k)fluoranthene	Not detected	1		ug/L	2	207-08-9	
Benzo(ghi)perylene	Not detected	1		ug/L	2	191-24-2	
Chrysene	Not detected	1		ug/L	2	218-01-9	
Dibenzo(ah)anthracene	Not detected	2		ug/L	2	53-70-3	
Fluoranthene	Not detected	1		ug/L	2	206-44-0	
Fluorene	Not detected	5		ug/L	2	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	2		ug/L	2	193-39-5	
Naphthalene	Not detected	5		ug/L	2	91-20-3	
Phenanthrene	Not detected	2		ug/L	2	85-01-8	

Lab Sample ID: S55336.01 (continued)
Sample Tag: TMW-01 (I)

Polynuclear Aromatic Hydrocarbon, Method: SW8270D, Run Date: 11/06/23 18:53, Analyst: PL (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Pyrene	Not detected	5		ug/L	2	129-00-0	
2-Methylnaphthalene	Not detected	5		ug/L	2	91-57-6	
1-Methylnaphthalene	Not detected	5		ug/L	2	90-12-0	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 11/07/23 20:36, Analyst: NDK

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	
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		

Lab Sample ID: S55336.01 (continued)
Sample Tag: TMW-01 (I)

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 11/07/23 20:36, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
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	

Lab Sample ID: S55336.02
Sample Tag: TMW-01 (I) MS
Collected Date/Time: 10/31/2023 15:40
Matrix: Groundwater
COC Reference: 2023-10-31_01

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	3.8	IR
1	125mL Plastic	HNO3	Yes	3.8	IR
2	1L Amber	None	Yes	3.8	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Mercury Digestion	Completed	E245.1	11/06/23 10:30	CTV	
pH check for VOCs*	<2	N/A	11/08/23 11:29	ACK	
Metal Digestion	Completed	SW3015A	11/06/23 10:40	CCM	
PNA Extraction	Completed	SW3510C	11/06/23 10:00	JWR	

Metals

Method: E200.8, Run Date: 11/06/23 12:45, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Arsenic	0.265	0.002		mg/L	5	7440-38-2	
Barium	0.279	0.005		mg/L	5	7440-39-3	
Cadmium	0.236	0.0005		mg/L	5	7440-43-9	
Chromium	0.242	0.005		mg/L	5	7440-47-3	
Copper	0.234	0.005		mg/L	5	7440-50-8	
Lead	0.231	0.003		mg/L	5	7439-92-1	
Selenium	0.256	0.005		mg/L	5	7782-49-2	
Silver	0.212	0.0005		mg/L	5	7440-22-4	
Zinc	0.235	0.005		mg/L	5	7440-66-6	

Method: E245.1, Run Date: 11/06/23 14:14, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury	0.0022	0.0002		mg/L	1	7439-97-6	

Organics - Semi-Volatiles

Polynuclear Aromatic Hydrocarbon, Method: SW8270D, Run Date: 11/06/23 19:14, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	23	5		ug/L	2	83-32-9	1
Acenaphthylene	26	5		ug/L	2	208-96-8	1
Anthracene	15	5		ug/L	2	120-12-7	1
Benzo(a)anthracene	23	1		ug/L	2	56-55-3	1
Benzo(a)pyrene	27	1		ug/L	2	50-32-8	1
Benzo(b)fluoranthene	29	1		ug/L	2	205-99-2	1
Benzo(k)fluoranthene	27	1		ug/L	2	207-08-9	1
Benzo(ghi)perylene	30	1		ug/L	2	191-24-2	1
Chrysene	25	1		ug/L	2	218-01-9	1
Dibenzo(ah)anthracene	32	2		ug/L	2	53-70-3	1
Fluoranthene	27	1		ug/L	2	206-44-0	1
Fluorene	25	5		ug/L	2	86-73-7	1
Indeno(1,2,3-cd)pyrene	32	2		ug/L	2	193-39-5	1
Naphthalene	23	5		ug/L	2	91-20-3	1

1-Sample spiked at 0.050 mg/l

Lab Sample ID: S55336.02 (continued)
Sample Tag: TMW-01 (I) MS

Polynuclear Aromatic Hydrocarbon, Method: SW8270D, Run Date: 11/06/23 19:14, Analyst: PL (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Phenanthrene	25	2		ug/L	2	85-01-8	1
Pyrene	25	5		ug/L	2	129-00-0	1
2-Methylnaphthalene	24	5		ug/L	2	91-57-6	1
1-Methylnaphthalene	24	5		ug/L	2	90-12-0	1

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 11/07/23 22:33, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	51	10		ug/L	1	60-29-7	2
Acetone	Not detected	50		ug/L	1	67-64-1	2
Methyl iodide	51	1		ug/L	1	74-88-4	2
Carbon disulfide	44	5		ug/L	1	75-15-0	2
tert-Methyl butyl ether (MTBE)	54	5		ug/L	1	1634-04-4	2
Acrylonitrile	51	2		ug/L	1	107-13-1	2
2-Butanone (MEK)	45	25		ug/L	1	78-93-3	2
Dichlorodifluoromethane	49	5		ug/L	1	75-71-8	2
Chloromethane	51	5		ug/L	1	74-87-3	2
Vinyl chloride	49	1		ug/L	1	75-01-4	2
Bromomethane	45	5		ug/L	1	74-83-9	2
Chloroethane	43	5		ug/L	1	75-00-3	2
Trichlorofluoromethane	41	1		ug/L	1	75-69-4	2
1,1-Dichloroethene	46	1		ug/L	1	75-35-4	2
Methylene chloride	51	5		ug/L	1	75-09-2	2
trans-1,2-Dichloroethene	49	1		ug/L	1	156-60-5	2
1,1-Dichloroethane	52	1		ug/L	1	75-34-3	2
cis-1,2-Dichloroethene	51	1		ug/L	1	156-59-2	2
Tetrahydrofuran*	Not detected	90		ug/L	1	109-99-9	2
Chloroform	50	1		ug/L	1	67-66-3	2
Bromochloromethane	51	1		ug/L	1	74-97-5	2
1,1,1-Trichloroethane	47	1		ug/L	1	71-55-6	2
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	2
2-Hexanone	Not detected	50		ug/L	1	591-78-6	2
Carbon tetrachloride	45	1		ug/L	1	56-23-5	2
Benzene	49	1		ug/L	1	71-43-2	2
1,2-Dichloroethane	49	1		ug/L	1	107-06-2	2
Trichloroethene	49	1		ug/L	1	79-01-6	2
1,2-Dichloropropane	52	1		ug/L	1	78-87-5	2
Bromodichloromethane	51	1		ug/L	1	75-27-4	2
Dibromomethane	51	5		ug/L	1	74-95-3	2
cis-1,3-Dichloropropene	54	1		ug/L	1	10061-01-5	2
Toluene	49	1		ug/L	1	108-88-3	2
trans-1,3-Dichloropropene	53	1		ug/L	1	10061-02-6	2
1,1,2-Trichloroethane	50	1		ug/L	1	79-00-5	2
Tetrachloroethene	49	1		ug/L	1	127-18-4	2
trans-1,4-Dichloro-2-butene	45	1		ug/L	1	110-57-6	2
Dibromochloromethane	50	5		ug/L	1	124-48-1	2
1,2-Dibromoethane	49	1		ug/L	1	106-93-4	2
Chlorobenzene	48	1		ug/L	1	108-90-7	2

1-Sample spiked at 0.050 mg/l
2-Spiked at 50 ug/L

Lab Sample ID: S55336.02 (continued)
Sample Tag: TMW-01 (I) MS

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 11/07/23 22:33, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,1,1,2-Tetrachloroethane	50	1		ug/L	1	630-20-6	1
Ethylbenzene	47	1		ug/L	1	100-41-4	1
p,m-Xylene*	92	2		ug/L	1		1
o-Xylene	46	1		ug/L	1	95-47-6	1
Styrene	48	1		ug/L	1	100-42-5	1
Isopropylbenzene	47	5		ug/L	1	98-82-8	1
Bromoform	48	1		ug/L	1	75-25-2	1
1,1,2,2-Tetrachloroethane	46	1		ug/L	1	79-34-5	1
1,2,3-Trichloropropane	44	1		ug/L	1	96-18-4	1
n-Propylbenzene	46	1		ug/L	1	103-65-1	1
Bromobenzene	48	1		ug/L	1	108-86-1	1
1,3,5-Trimethylbenzene	47	1		ug/L	1	108-67-8	1
tert-Butylbenzene	45	1		ug/L	1	98-06-6	1
1,2,4-Trimethylbenzene	46	1		ug/L	1	95-63-6	1
sec-Butylbenzene	46	1		ug/L	1	135-98-8	1
p-Isopropyltoluene	46	5		ug/L	1	99-87-6	1
1,3-Dichlorobenzene	47	1		ug/L	1	541-73-1	1
1,4-Dichlorobenzene	48	1		ug/L	1	106-46-7	1
1,2-Dichlorobenzene	48	1		ug/L	1	95-50-1	1
1,2,3-Trimethylbenzene	47	1		ug/L	1	526-73-8	1
n-Butylbenzene	46	1		ug/L	1	104-51-8	1
Hexachloroethane	51	5		ug/L	1	67-72-1	1
1,2-Dibromo-3-chloropropane	50	5		ug/L	1	96-12-8	1
1,2,4-Trichlorobenzene	51	5		ug/L	1	120-82-1	1
1,2,3-Trichlorobenzene	51	5		ug/L	1	87-61-6	1
Naphthalene	49	5		ug/L	1	91-20-3	1
2-Methylnaphthalene	43	5		ug/L	1	91-57-6	1

1-Spiked at 50 ug/L

Lab Sample ID: S55336.03
Sample Tag: TMW-01 (I) MSD
Collected Date/Time: 10/31/2023 15:40
Matrix: Groundwater
COC Reference: 2023-10-31_01

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	3.8	IR
1	125mL Plastic	HNO3	Yes	3.8	IR
2	1L Amber	None	Yes	3.8	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Mercury Digestion	Completed	E245.1	11/06/23 10:30	CTV	
pH check for VOCs*	<2	N/A	11/08/23 11:29	ACK	
Metal Digestion	Completed	SW3015A	11/06/23 10:40	CCM	
PNA Extraction	Completed	SW3510C	11/06/23 10:00	JWR	

Metals

Method: E200.8, Run Date: 11/06/23 12:46, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Arsenic	0.271	0.002		mg/L	5	7440-38-2	
Barium	0.282	0.005		mg/L	5	7440-39-3	
Cadmium	0.237	0.0005		mg/L	5	7440-43-9	
Chromium	0.243	0.005		mg/L	5	7440-47-3	
Copper	0.239	0.005		mg/L	5	7440-50-8	
Lead	0.233	0.003		mg/L	5	7439-92-1	
Selenium	0.265	0.005		mg/L	5	7782-49-2	
Silver	0.215	0.0005		mg/L	5	7440-22-4	
Zinc	0.243	0.005		mg/L	5	7440-66-6	

Method: E245.1, Run Date: 11/06/23 14:18, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury	0.0022	0.0002		mg/L	1	7439-97-6	

Organics - Semi-Volatiles

Polynuclear Aromatic Hydrocarbon, Method: SW8270D, Run Date: 11/06/23 19:36, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	22	5		ug/L	2	83-32-9	1
Acenaphthylene	24	5		ug/L	2	208-96-8	1
Anthracene	15	5		ug/L	2	120-12-7	1
Benzo(a)anthracene	23	1		ug/L	2	56-55-3	1
Benzo(a)pyrene	26	1		ug/L	2	50-32-8	1
Benzo(b)fluoranthene	29	1		ug/L	2	205-99-2	1
Benzo(k)fluoranthene	25	1		ug/L	2	207-08-9	1
Benzo(ghi)perylene	29	1		ug/L	2	191-24-2	1
Chrysene	25	1		ug/L	2	218-01-9	1
Dibenzo(ah)anthracene	30	2		ug/L	2	53-70-3	1
Fluoranthene	26	1		ug/L	2	206-44-0	1
Fluorene	24	5		ug/L	2	86-73-7	1
Indeno(1,2,3-cd)pyrene	30	2		ug/L	2	193-39-5	1
Naphthalene	22	5		ug/L	2	91-20-3	1

1-Sample spiked at 0.050 mg/l

Lab Sample ID: S55336.03 (continued)
Sample Tag: TMW-01 (I) MSD

Polynuclear Aromatic Hydrocarbon, Method: SW8270D, Run Date: 11/06/23 19:36, Analyst: PL (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Phenanthrene	25	2		ug/L	2	85-01-8	1
Pyrene	25	5		ug/L	2	129-00-0	1
2-Methylnaphthalene	23	5		ug/L	2	91-57-6	1
1-Methylnaphthalene	23	5		ug/L	2	90-12-0	1

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 11/07/23 22:57, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	52	10		ug/L	1	60-29-7	2
Acetone	Not detected	50		ug/L	1	67-64-1	2
Methyl iodide	50	1		ug/L	1	74-88-4	2
Carbon disulfide	43	5		ug/L	1	75-15-0	2
tert-Methyl butyl ether (MTBE)	55	5		ug/L	1	1634-04-4	2
Acrylonitrile	54	2		ug/L	1	107-13-1	2
2-Butanone (MEK)	51	25		ug/L	1	78-93-3	2
Dichlorodifluoromethane	49	5		ug/L	1	75-71-8	2
Chloromethane	49	5		ug/L	1	74-87-3	2
Vinyl chloride	44	1		ug/L	1	75-01-4	2
Bromomethane	44	5		ug/L	1	74-83-9	2
Chloroethane	42	5		ug/L	1	75-00-3	2
Trichlorofluoromethane	41	1		ug/L	1	75-69-4	2
1,1-Dichloroethene	48	1		ug/L	1	75-35-4	2
Methylene chloride	51	5		ug/L	1	75-09-2	2
trans-1,2-Dichloroethene	48	1		ug/L	1	156-60-5	2
1,1-Dichloroethane	52	1		ug/L	1	75-34-3	2
cis-1,2-Dichloroethene	51	1		ug/L	1	156-59-2	2
Tetrahydrofuran*	Not detected	90		ug/L	1	109-99-9	2
Chloroform	50	1		ug/L	1	67-66-3	2
Bromochloromethane	52	1		ug/L	1	74-97-5	2
1,1,1-Trichloroethane	46	1		ug/L	1	71-55-6	2
4-Methyl-2-pentanone (MIBK)	53	50		ug/L	1	108-10-1	2
2-Hexanone	53	50		ug/L	1	591-78-6	2
Carbon tetrachloride	45	1		ug/L	1	56-23-5	2
Benzene	49	1		ug/L	1	71-43-2	2
1,2-Dichloroethane	50	1		ug/L	1	107-06-2	2
Trichloroethene	49	1		ug/L	1	79-01-6	2
1,2-Dichloropropane	52	1		ug/L	1	78-87-5	2
Bromodichloromethane	52	1		ug/L	1	75-27-4	2
Dibromomethane	52	5		ug/L	1	74-95-3	2
cis-1,3-Dichloropropene	55	1		ug/L	1	10061-01-5	2
Toluene	49	1		ug/L	1	108-88-3	2
trans-1,3-Dichloropropene	54	1		ug/L	1	10061-02-6	2
1,1,2-Trichloroethane	52	1		ug/L	1	79-00-5	2
Tetrachloroethene	48	1		ug/L	1	127-18-4	2
trans-1,4-Dichloro-2-butene	49	1		ug/L	1	110-57-6	2
Dibromochloromethane	50	5		ug/L	1	124-48-1	2
1,2-Dibromoethane	50	1		ug/L	1	106-93-4	2
Chlorobenzene	47	1		ug/L	1	108-90-7	2

1-Sample spiked at 0.050 mg/l
2-Spiked at 50 ug/L

Lab Sample ID: S55336.03 (continued)
Sample Tag: TMW-01 (I) MSD

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 11/07/23 22:57, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,1,1,2-Tetrachloroethane	50	1		ug/L	1	630-20-6	1
Ethylbenzene	46	1		ug/L	1	100-41-4	1
p,m-Xylene*	92	2		ug/L	1		1
o-Xylene	46	1		ug/L	1	95-47-6	1
Styrene	47	1		ug/L	1	100-42-5	1
Isopropylbenzene	46	5		ug/L	1	98-82-8	1
Bromoform	50	1		ug/L	1	75-25-2	1
1,1,2,2-Tetrachloroethane	49	1		ug/L	1	79-34-5	1
1,2,3-Trichloropropane	47	1		ug/L	1	96-18-4	1
n-Propylbenzene	46	1		ug/L	1	103-65-1	1
Bromobenzene	47	1		ug/L	1	108-86-1	1
1,3,5-Trimethylbenzene	46	1		ug/L	1	108-67-8	1
tert-Butylbenzene	45	1		ug/L	1	98-06-6	1
1,2,4-Trimethylbenzene	46	1		ug/L	1	95-63-6	1
sec-Butylbenzene	47	1		ug/L	1	135-98-8	1
p-Isopropyltoluene	46	5		ug/L	1	99-87-6	1
1,3-Dichlorobenzene	47	1		ug/L	1	541-73-1	1
1,4-Dichlorobenzene	48	1		ug/L	1	106-46-7	1
1,2-Dichlorobenzene	49	1		ug/L	1	95-50-1	1
1,2,3-Trimethylbenzene	48	1		ug/L	1	526-73-8	1
n-Butylbenzene	46	1		ug/L	1	104-51-8	1
Hexachloroethane	51	5		ug/L	1	67-72-1	1
1,2-Dibromo-3-chloropropane	56	5		ug/L	1	96-12-8	1
1,2,4-Trichlorobenzene	52	5		ug/L	1	120-82-1	1
1,2,3-Trichlorobenzene	53	5		ug/L	1	87-61-6	1
Naphthalene	53	5		ug/L	1	91-20-3	1
2-Methylnaphthalene	47	5		ug/L	1	91-57-6	1

1-Spiked at 50 ug/L

Lab Sample ID: S55336.04
Sample Tag: TMW-02 (I)
Collected Date/Time: 11/01/2023 11:30
Matrix: Groundwater
COC Reference: 2023-10-31_01

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	3.8	IR
1	125mL Plastic	HNO3	Yes	3.8	IR
2	1L Amber	None	Yes	3.8	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Mercury Digestion	Completed	E245.1	11/06/23 10:30	CTV	
pH check for VOCs*	<2	N/A	11/08/23 11:29	ACK	
Metal Digestion	Completed	SW3015A	11/06/23 10:40	CCM	
PNA Extraction	Completed	SW3510C	11/06/23 10:00	JWR	

Metals

Method: E200.8, Run Date: 11/06/23 12:38, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Arsenic	Not detected	0.002		mg/L	5	7440-38-2	
Barium	0.256	0.005		mg/L	5	7440-39-3	
Cadmium	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium	Not detected	0.005		mg/L	5	7440-47-3	
Copper	Not detected	0.005		mg/L	5	7440-50-8	
Lead	Not detected	0.003		mg/L	5	7439-92-1	
Selenium	Not detected	0.005		mg/L	5	7782-49-2	
Silver	Not detected	0.0005		mg/L	5	7440-22-4	
Zinc	Not detected	0.005		mg/L	5	7440-66-6	

Method: E245.1, Run Date: 11/06/23 14:21, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury	Not detected	0.0002		mg/L	1	7439-97-6	

Organics - Semi-Volatiles

Polynuclear Aromatic Hydrocarbon, Method: SW8270D, Run Date: 11/06/23 19:57, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	5		ug/L	2	83-32-9	
Acenaphthylene	Not detected	5		ug/L	2	208-96-8	
Anthracene	Not detected	5		ug/L	2	120-12-7	
Benzo(a)anthracene	Not detected	1		ug/L	2	56-55-3	
Benzo(a)pyrene	Not detected	1		ug/L	2	50-32-8	
Benzo(b)fluoranthene	Not detected	1		ug/L	2	205-99-2	
Benzo(k)fluoranthene	Not detected	1		ug/L	2	207-08-9	
Benzo(ghi)perylene	Not detected	1		ug/L	2	191-24-2	
Chrysene	Not detected	1		ug/L	2	218-01-9	
Dibenzo(ah)anthracene	Not detected	2		ug/L	2	53-70-3	
Fluoranthene	Not detected	1		ug/L	2	206-44-0	
Fluorene	Not detected	5		ug/L	2	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	2		ug/L	2	193-39-5	
Naphthalene	Not detected	5		ug/L	2	91-20-3	
Phenanthrene	Not detected	2		ug/L	2	85-01-8	

Lab Sample ID: S55336.04 (continued)
Sample Tag: TMW-02 (I)

Polynuclear Aromatic Hydrocarbon, Method: SW8270D, Run Date: 11/06/23 19:57, Analyst: PL (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Pyrene	Not detected	5		ug/L	2	129-00-0	
2-Methylnaphthalene	Not detected	5		ug/L	2	91-57-6	
1-Methylnaphthalene	Not detected	5		ug/L	2	90-12-0	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 11/08/23 03:14, Analyst: NDK

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	
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		

Lab Sample ID: S55336.04 (continued)
Sample Tag: TMW-02 (I)

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 11/08/23 03:14, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
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	

Lab Sample ID: S55336.05
Sample Tag: TMW-01 (D)
Collected Date/Time: 11/01/2023 00:01
Matrix: Groundwater
COC Reference: 2023-10-31_01

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	3.8	IR
1	125mL Plastic	HNO3	Yes	3.8	IR
2	1L Amber	None	Yes	3.8	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Mercury Digestion	Completed	E245.1	11/06/23 10:30	CTV	
pH check for VOCs*	<2	N/A	11/09/23 11:34	ACK	
Metal Digestion	Completed	SW3015A	11/06/23 10:40	CCM	
PNA Extraction	Completed	SW3510C	11/06/23 10:00	JWR	

Metals

Method: E200.8, Run Date: 11/06/23 12:40, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Arsenic	Not detected	0.002		mg/L	5	7440-38-2	
Barium	0.270	0.005		mg/L	5	7440-39-3	
Cadmium	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium	Not detected	0.005		mg/L	5	7440-47-3	
Copper	Not detected	0.005		mg/L	5	7440-50-8	
Lead	Not detected	0.003		mg/L	5	7439-92-1	
Selenium	Not detected	0.005		mg/L	5	7782-49-2	
Silver	Not detected	0.0005		mg/L	5	7440-22-4	
Zinc	Not detected	0.005		mg/L	5	7440-66-6	

Method: E245.1, Run Date: 11/06/23 14:24, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury	Not detected	0.0002		mg/L	1	7439-97-6	

Organics - Semi-Volatiles

Polynuclear Aromatic Hydrocarbon, Method: SW8270D, Run Date: 11/06/23 20:18, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	5		ug/L	2	83-32-9	
Acenaphthylene	Not detected	5		ug/L	2	208-96-8	
Anthracene	Not detected	5		ug/L	2	120-12-7	
Benzo(a)anthracene	Not detected	1		ug/L	2	56-55-3	
Benzo(a)pyrene	Not detected	1		ug/L	2	50-32-8	
Benzo(b)fluoranthene	Not detected	1		ug/L	2	205-99-2	
Benzo(k)fluoranthene	Not detected	1		ug/L	2	207-08-9	
Benzo(ghi)perylene	Not detected	1		ug/L	2	191-24-2	
Chrysene	Not detected	1		ug/L	2	218-01-9	
Dibenzo(ah)anthracene	Not detected	2		ug/L	2	53-70-3	
Fluoranthene	Not detected	1		ug/L	2	206-44-0	
Fluorene	Not detected	5		ug/L	2	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	2		ug/L	2	193-39-5	
Naphthalene	Not detected	5		ug/L	2	91-20-3	
Phenanthrene	Not detected	2		ug/L	2	85-01-8	

Lab Sample ID: S55336.05 (continued)
Sample Tag: TMW-01 (D)

Polynuclear Aromatic Hydrocarbon, Method: SW8270D, Run Date: 11/06/23 20:18, Analyst: PL (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Pyrene	Not detected	5		ug/L	2	129-00-0	
2-Methylnaphthalene	Not detected	5		ug/L	2	91-57-6	
1-Methylnaphthalene	Not detected	5		ug/L	2	90-12-0	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 11/08/23 14:53, Analyst: NDK

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	
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		

Lab Sample ID: S55336.05 (continued)
Sample Tag: TMW-01 (D)

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 11/08/23 14:53, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
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	

Lab Sample ID: S55336.06
Sample Tag: TMW-03 (I)
Collected Date/Time: 11/01/2023 09:15
Matrix: Groundwater
COC Reference: 2023-10-31_01

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	3.8	IR
1	125mL Plastic	HNO3	Yes	3.8	IR
2	1L Amber	None	Yes	3.8	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Mercury Digestion	Completed	E245.1	11/06/23 10:30	CTV	
pH check for VOCs*	<2	N/A	11/08/23 11:29	ACK	
Metal Digestion	Completed	SW3015A	11/06/23 10:40	CCM	
PNA Extraction	Completed	SW3510C	11/06/23 10:00	JWR	

Metals

Method: E200.8, Run Date: 11/06/23 12:42, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Arsenic	0.003	0.002		mg/L	5	7440-38-2	
Barium	0.060	0.005		mg/L	5	7440-39-3	
Cadmium	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium	0.065	0.005		mg/L	5	7440-47-3	
Copper	0.023	0.005		mg/L	5	7440-50-8	
Lead	Not detected	0.003		mg/L	5	7439-92-1	
Selenium	Not detected	0.005		mg/L	5	7782-49-2	
Silver	Not detected	0.0005		mg/L	5	7440-22-4	
Zinc	0.012	0.005		mg/L	5	7440-66-6	

Method: E245.1, Run Date: 11/06/23 14:27, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury	Not detected	0.0002		mg/L	1	7439-97-6	

Organics - Semi-Volatiles

Polynuclear Aromatic Hydrocarbon, Method: SW8270D, Run Date: 11/06/23 20:40, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	5		ug/L	2	83-32-9	
Acenaphthylene	Not detected	5		ug/L	2	208-96-8	
Anthracene	Not detected	5		ug/L	2	120-12-7	
Benzo(a)anthracene	Not detected	1		ug/L	2	56-55-3	
Benzo(a)pyrene	Not detected	1		ug/L	2	50-32-8	
Benzo(b)fluoranthene	Not detected	1		ug/L	2	205-99-2	
Benzo(k)fluoranthene	Not detected	1		ug/L	2	207-08-9	
Benzo(ghi)perylene	Not detected	1		ug/L	2	191-24-2	
Chrysene	Not detected	1		ug/L	2	218-01-9	
Dibenzo(ah)anthracene	Not detected	2		ug/L	2	53-70-3	
Fluoranthene	Not detected	1		ug/L	2	206-44-0	
Fluorene	Not detected	5		ug/L	2	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	2		ug/L	2	193-39-5	
Naphthalene	Not detected	5		ug/L	2	91-20-3	
Phenanthrene	Not detected	2		ug/L	2	85-01-8	

Lab Sample ID: S55336.06 (continued)
Sample Tag: TMW-03 (I)

Polynuclear Aromatic Hydrocarbon, Method: SW8270D, Run Date: 11/06/23 20:40, Analyst: PL (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Pyrene	Not detected	5		ug/L	2	129-00-0	
2-Methylnaphthalene	Not detected	5		ug/L	2	91-57-6	
1-Methylnaphthalene	Not detected	5		ug/L	2	90-12-0	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 11/08/23 04:01, Analyst: NDK

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	
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		

Lab Sample ID: S55336.06 (continued)
Sample Tag: TMW-03 (I)

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 11/08/23 04:01, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
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	

Lab Sample ID: S55336.07
Sample Tag: QCTB-01
Collected Date/Time: 10/31/2023 00:01
Matrix: Groundwater
COC Reference: 2023-10-31_01

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	HCL	Yes	3.8	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	11/08/23 11:29	ACK	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 11/08/23 04:25, Analyst: NDK

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	

Lab Sample ID: S55336.07 (continued)
Sample Tag: QCTB-01

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 11/08/23 04:25, Analyst: NDK (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	

Lab Sample ID: S55336.08
Sample Tag: QCFB-01
Collected Date/Time: 11/01/2023 13:00
Matrix: Groundwater
COC Reference: 2023-10-31_01

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	3.8	IR
1	125mL Plastic	HNO3	Yes	3.8	IR
2	1L Amber	None	Yes	3.8	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Mercury Digestion	Completed	E245.1	11/06/23 10:30	CTV	
pH check for VOCs*	<2	N/A	11/08/23 11:29	ACK	
Metal Digestion	Completed	SW3015A	11/06/23 10:40	CCM	
PNA Extraction	Completed	SW3510C	11/06/23 10:00	JWR	

Metals

Method: E200.8, Run Date: 11/06/23 12:27, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Arsenic	Not detected	0.002		mg/L	2	7440-38-2	
Barium	Not detected	0.005		mg/L	2	7440-39-3	
Cadmium	Not detected	0.0005		mg/L	2	7440-43-9	
Chromium	Not detected	0.005		mg/L	2	7440-47-3	
Copper	0.007	0.005		mg/L	2	7440-50-8	
Lead	Not detected	0.003		mg/L	2	7439-92-1	
Selenium	Not detected	0.005		mg/L	2	7782-49-2	
Silver	Not detected	0.0005		mg/L	2	7440-22-4	
Zinc	0.009	0.005		mg/L	2	7440-66-6	

Method: E245.1, Run Date: 11/06/23 14:31, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury	Not detected	0.0002		mg/L	1	7439-97-6	

Organics - Semi-Volatiles

Polynuclear Aromatic Hydrocarbon, Method: SW8270D, Run Date: 11/06/23 21:01, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	5		ug/L	2	83-32-9	
Acenaphthylene	Not detected	5		ug/L	2	208-96-8	
Anthracene	Not detected	5		ug/L	2	120-12-7	
Benzo(a)anthracene	Not detected	1		ug/L	2	56-55-3	
Benzo(a)pyrene	Not detected	1		ug/L	2	50-32-8	
Benzo(b)fluoranthene	Not detected	1		ug/L	2	205-99-2	
Benzo(k)fluoranthene	Not detected	1		ug/L	2	207-08-9	
Benzo(ghi)perylene	Not detected	1		ug/L	2	191-24-2	
Chrysene	Not detected	1		ug/L	2	218-01-9	
Dibenzo(ah)anthracene	Not detected	2		ug/L	2	53-70-3	
Fluoranthene	Not detected	1		ug/L	2	206-44-0	
Fluorene	Not detected	5		ug/L	2	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	2		ug/L	2	193-39-5	
Naphthalene	Not detected	5		ug/L	2	91-20-3	
Phenanthrene	Not detected	2		ug/L	2	85-01-8	

Lab Sample ID: S55336.08 (continued)
Sample Tag: QCFB-01

Polynuclear Aromatic Hydrocarbon, Method: SW8270D, Run Date: 11/06/23 21:01, Analyst: PL (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Pyrene	Not detected	5		ug/L	2	129-00-0	
2-Methylnaphthalene	Not detected	5		ug/L	2	91-57-6	
1-Methylnaphthalene	Not detected	5		ug/L	2	90-12-0	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 11/08/23 04:48, Analyst: NDK

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	
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		

Lab Sample ID: S55336.08 (continued)
Sample Tag: QCFB-01

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 11/08/23 04:48, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
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	

Lab Sample ID: S55336.09
Sample Tag: QCEB-01
Collected Date/Time: 11/01/2023 13:15
Matrix: Groundwater
COC Reference: 2023-10-31_01

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	3.8	IR
1	125mL Plastic	HNO3	Yes	3.8	IR
2	1L Amber	None	Yes	3.8	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Mercury Digestion	Completed	E245.1	11/06/23 10:30	CTV	
pH check for VOCs*	<2	N/A	11/08/23 11:29	ACK	
Metal Digestion	Completed	SW3015A	11/06/23 10:40	CCM	
PNA Extraction	Completed	SW3510C	11/06/23 10:00	JWR	

Metals

Method: E200.8, Run Date: 11/06/23 12:29, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Arsenic	Not detected	0.002		mg/L	2	7440-38-2	
Barium	Not detected	0.005		mg/L	2	7440-39-3	
Cadmium	Not detected	0.0005		mg/L	2	7440-43-9	
Chromium	Not detected	0.005		mg/L	2	7440-47-3	
Copper	0.008	0.005		mg/L	2	7440-50-8	
Lead	Not detected	0.003		mg/L	2	7439-92-1	
Selenium	Not detected	0.005		mg/L	2	7782-49-2	
Silver	Not detected	0.0005		mg/L	2	7440-22-4	
Zinc	0.008	0.005		mg/L	2	7440-66-6	

Method: E245.1, Run Date: 11/06/23 14:34, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury	Not detected	0.0002		mg/L	1	7439-97-6	

Organics - Semi-Volatiles

Polynuclear Aromatic Hydrocarbon, Method: SW8270D, Run Date: 11/06/23 21:22, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	5		ug/L	2	83-32-9	
Acenaphthylene	Not detected	5		ug/L	2	208-96-8	
Anthracene	Not detected	5		ug/L	2	120-12-7	
Benzo(a)anthracene	Not detected	1		ug/L	2	56-55-3	
Benzo(a)pyrene	Not detected	1		ug/L	2	50-32-8	
Benzo(b)fluoranthene	Not detected	1		ug/L	2	205-99-2	
Benzo(k)fluoranthene	Not detected	1		ug/L	2	207-08-9	
Benzo(ghi)perylene	Not detected	1		ug/L	2	191-24-2	
Chrysene	Not detected	1		ug/L	2	218-01-9	
Dibenzo(ah)anthracene	Not detected	2		ug/L	2	53-70-3	
Fluoranthene	Not detected	1		ug/L	2	206-44-0	
Fluorene	Not detected	5		ug/L	2	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	2		ug/L	2	193-39-5	
Naphthalene	Not detected	5		ug/L	2	91-20-3	
Phenanthrene	Not detected	2		ug/L	2	85-01-8	

Lab Sample ID: S55336.09 (continued)
Sample Tag: QCEB-01

Polynuclear Aromatic Hydrocarbon, Method: SW8270D, Run Date: 11/06/23 21:22, Analyst: PL (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Pyrene	Not detected	5		ug/L	2	129-00-0	
2-Methylnaphthalene	Not detected	5		ug/L	2	91-57-6	
1-Methylnaphthalene	Not detected	5		ug/L	2	90-12-0	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 11/08/23 05:12, Analyst: NDK

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	
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		

Lab Sample ID: S55336.09 (continued)
Sample Tag: QCEB-01

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 11/08/23 05:12, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
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	

Lab Sample ID: S55336.10
Sample Tag: QCTB-02
Collected Date/Time: 10/31/2023 00:01
Matrix: Groundwater
COC Reference: 2023-10-31_01

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	HCL	Yes	3.8	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	11/08/23 11:29	ACK	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 11/08/23 05:36, Analyst: NDK

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	

Lab Sample ID: S55336.10 (continued)
Sample Tag: QCTB-02

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 11/08/23 05:36, Analyst: NDK (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: S55336
Client: FISHBECK (Fishbeck)
Project: 231596/OCBRA/CERES Hart
Submitted: 11/02/2023 16:30 Login User: BJB

Attention: Penni Mahler
Address: Fishbeck
1515 Arboretum Drive SE
Grand Rapids, MI 49546

Phone: 616-464-3751 FAX:
Email: pdmahler@fishbeck.com

Selection				Description	Note
Sample Receiving					
01.	[X] Yes	[ ] No	[ ] N/A	Samples are received at 4C +/- 2C Thermometer #	IR 3.8
02.	[X] Yes	[ ] No	[ ] N/A	Received on ice/ cooling process begun	
03.	[ ] Yes	[X] No	[ ] N/A	Samples shipped	
04.	[ ] Yes	[X] No	[ ] N/A	Samples left in 24 hr. drop box	
05.	[ ] Yes	[ ] No	[X] N/A	Are there custody seals/tape or is the drop box locked	
Chain of Custody					
06.	[X] Yes	[ ] No	[ ] N/A	COC adequately filled out	
07.	[X] Yes	[ ] No	[ ] N/A	COC signed and relinquished to the lab	
08.	[X] Yes	[ ] No	[ ] N/A	Sample tag on bottles match COC	
09.	[ ] Yes	[X] No	[ ] N/A	Subcontracting needed? Subcontacted to:	
Preservation					
10.	[X] Yes	[ ] No	[ ] N/A	Do sample have correct chemical preservation	
11.	[X] Yes	[ ] No	[ ] N/A	Completed pH checks on preserved samples? (no VOAs)	
12.	[ ] Yes	[X] No	[ ] N/A	Did any samples need to be preserved in the lab?	
Bottle Conditions					
13.	[X] Yes	[ ] No	[ ] N/A	All bottles intact	
14.	[X] Yes	[ ] No	[ ] N/A	Appropriate analytical bottles are used	
15.	[X] Yes	[ ] No	[ ] N/A	Merit bottles used	
16.	[X] Yes	[ ] No	[ ] N/A	Sufficient sample volume received	
17.	[ ] Yes	[X] No	[ ] N/A	Samples require laboratory filtration	
18.	[X] Yes	[ ] No	[ ] N/A	Samples submitted within holding time	
19.	[ ] Yes	[X] 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: _____

Merit Laboratories Bottle Preservation Check

Lab Set ID: S55336 Submitted: 11/02/2023 16:30

Client: FISHBECK (Fishbeck)

Project: 231596/OCBRA/CERES Hart

Initial Preservation Check: 11/02/2023 17:27 BJB

Preservation Recheck (E200.8): N/A

Attention: Penni Mahler
Address: Fishbeck
1515 Arboretum Drive SE
Grand Rapids, MI 49546

Phone: 616-464-3751 FAX:
Email: pdmahler@fishbeck.com

Sample ID	Bottle / Preservation	pH (Orig)	Add ml	pH (New)	Notes
S55336.01	125mL Plastic HNO3	<2			
S55336.02	125mL Plastic HNO3	<2			
S55336.03	125mL Plastic HNO3	<2			
S55336.04	125mL Plastic HNO3	<2			
S55336.05	125mL Plastic HNO3	<2			
S55336.06	125mL Plastic HNO3	<2			
S55336.08	125mL Plastic HNO3	<2			
S55336.09	125mL Plastic HNO3	<2			

Merit Laboratories, Inc.

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

COC #: 2023-10-31_01

CHAIN OF CUSTODY RECORD

REPORT TO

CONTACT NAME: Penni Mahler
COMPANY: fishbeck
ADDRESS: 1515 Arboretum Dr. SE
CITY: Grand Rapids STATE: MI ZIP CODE: 49546
PHONE NO.: 616.575.3824 FAX NO.: P.O. NO.:
E-MAIL ADDRESS: pdmahler@fishbeck.com QUOTE NO.:

INVOICE TO

CONTACT NAME: Accounts Payable ☐ SAME
COMPANY: fishbeck
ADDRESS: 1515 Arboretum Dr. SE
CITY: Grand Rapids STATE: MI ZIP CODE: 49546
PHONE NO.: 616.464.3708 E-MAIL ADDRESS: acpay@fishbeck.com

PROJECT NO./NAME: 231596/OCBRA/ CERES Hart
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: GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID SL=SLUDGE DW=DRINKING WATER O=OIL WP=WIPE A=AIR W=WASTE

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

Certifications: ☐ OHIO VAP ☐ Drinking Water ☐ DoD ☐ NPDES

Project Locations: ☐ Detroit ☐ New York ☐ Other

Special Instructions

MERIT LAB NO. (FOR LAB USE ONLY)	YEAR DATE	YEAR TIME	SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	# Containers & Preservatives: NONE	HCl	HNO_3	H_2SO_4	NaOH	MeOH	OTHER	VOCs (EPA 8260+)	Total Metals: MI 10	PNAs (EPA 8270)
53360.01/.02/.03	10-31-23	1540	TMW-01(I/MS/MSD)	GW	18	2	9	1					X	X	X
.04	11-01-23	1130	TMW-02(I)	GW	6	2	3	1					X	X	X
.05	11-01-23	—	TMW-0[redacted](D)	GW	6	2	3	1					X	X	X
.06	11-01-23	915	TMW-03(I)	GW	6	2	3	1					X	X	X
.07	8-23-23	—	QCTB-01	GW	1		1						X		
.08	11-01-23	1300	QCFB-01	GW	6	2	3	1					X	X	X
.09	11-01-23	1315	QCEB-01	GW	6	2	3	1					X	X	X
.10	8-23-23	—	QCTB-02	GW	1		1						X		

ICE

RELINQUISHED BY: SIGNATURE/ORGANIZATION: R. Knoll / Fishbeck (Sampler) DATE: 11-2-23 TIME: 730
RECEIVED BY: SIGNATURE/ORGANIZATION: Fishbeck sample storage / Fishbeck DATE: 11-2-23 TIME: 730
RELINQUISHED BY: SIGNATURE/ORGANIZATION: Fish Beck sample storage DATE: 11/2/23 TIME: 2:38
RECEIVED BY: SIGNATURE/ORGANIZATION: DATE: 11/2/23 TIME: 2:38

RELINQUISHED BY: SIGNATURE/ORGANIZATION: DATE: 11/2/23 TIME: 4:30
RECEIVED BY: SIGNATURE/ORGANIZATION: DATE: 11/2/23 TIME: 1830

SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS
SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS

NOTES: TEMP. ON ARRIVAL: 3.8

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

Rev. 5.18.12

Laboratory Services Request – Fishbeck

Project Information

Name:	OCBRA/ CERES Hart
Number:	231596
Manager:	Kirk Perschbacher
Sampling Date:	10/30/2023
Laboratory/Location:	Merti Labs

Billing Information

Fishbeck ■ Quote No.
Client

Reporting Information

Fishbeck ■
Client
Std QC Report (Level II) ■ ← *MUST specify QC Report for all projects*
Full Deliverables (Level IV)
Turnaround Time: ■ Standard
Priority:

If direct reporting or billing client, please provide information below:

Company Name:
Attention:
Email Address:

Regulatory Program (Reporting Limits)

Part 201 ■
Part 213
NPDES Permit
Other:

Sample Quantity/Matrix

Indicate number of samples in box provided.
A separate form must be completed per matrix type.

INVESTIGATIVE	3	Groundwater
	14	Soil
		Surface Water
		Drinking Water
		Wastewater- Dewatering Effluent
	11	Other- Soil Gas
QA/QC	4	Duplicates
	2	MS/MSDs
	3	Equipment Blanks
	2	Field Blanks
	2	Trip Blanks

Additional Project Information for Laboratory

3 Groundwater samples for VOCs, PNAs and MI 10 metals. 1 duplicate for all parameters, 1 MS/MSD for all parameters
11 Soil gas samples for EPA Method To-15 VOCs, 1 duplicate also needed
4 Incremental Sampling Method (ISM) surface soil samples for VOCS, PNAs and MI 10 metals. Duplicate and Triplicate needed for all of the samples.
10 Soil Samples for VOCs, PNAs and MI 10 Metals. 1 duplicate for all parameters, 1 MS/MSD for all parameters
3 equipment blanks for VOCs, PNAs and MI 10 Metals
2 field blanks for VOCs (2 days of sampling so 1 per day)
2 Trip Blanks for VOCs (2 days of sampling so 1 per day)

General Chemistry

Alkalinity, Total		Cyanide, Total		pH		Solids, V.S.	
Bicarbonate Alkalinity		Fluoride		Phenols, T.		Specific Conductivity	
Carbonate Alkalinity		Hardness		Phosphorus, D.		Specific Gravity	
BOD				Phosphorus, O.		Sulfate	
Chloride		N, Ammonia		Phosphorus, T.		Sulfide	
COD		N, Nitrate		Solids, Total		TPH	
Color		N, Nitrite		Solids, T.D.		TOC	
Cyanide, Amenable		N, Total Kjeldahl		Solids, T.S.		PFAS/537.1/18 list	DW
Cyanide, Available		Oil & Grease		Solids, V.		PFAS/537M/28 list	

Metals

Dissolved				Total			
Aluminum		Chromium, Hexavalent		Manganese		Sodium	
Antimony		Chromium, Total		Mercury		Thallium	
Arsenic		Cobalt		Mercury (EPA 1631)		Vanadium	
Barium		Copper		Molybdenum		Zinc	
Beryllium		Iron		Nickel		Michigan 10	■
Boron		Lead		Potassium		OM 2/ATT 8/Table 3	
Cadmium		Lead (Total, Fine, Coarse)		Selenium			
Calcium		Magnesium		Silver			

Organics

EPA 601 (Halocarbons)		EPA 608 (Pest/PCBs)		EPA 8270 (PNAs)	■	EPA 8082 (PCBs)	
EPA 602 (Aromatics)		EPA 8260 (VOCs)		EPA 8270 (Acids)		EPA 8015/GRO	
EPA 624 (VOCs)		EPA 8260 Plus (VOCs)	■	EPA 8270 (B/N)		EPA 8015/DRO	
EPA 625 (A/BN)		EPA 8270 (SVOCs)		EPA 8081A (Pest)		EPA 8011/EDB	

Waste Characterization — *Federal Regulatory Parameters and Limits unless otherwise specified*

TCLP/Metals		SPLP/SVOCs (A/BN)		ASTM D3987-85/SVOCs		Paint Filter Test	
TCLP/SVOCs (Full)		SPLP/PCBs		ASTM D3987-85/Pest & PCBs		Cyanide, Reactive	
TCLP/SVOCs (A/BN)		SPLP/Cyanide		ASTM D3987-85/Cyanide		Sulfide, Reactive	
TCLP/VOCs		SPLP/Sulfide		ASTM D3987-85/Cyanide		Flash Point	
SPLP/Metals		SPLP/VOCs		ASTM D3987-85/Sulfide		pH	
SPLP/SVOCs (Full)		SPLP/Hex Cr		ASTM D3987-85/Hex Cr			

Sample Bottle Specification

Project Name: OCBRA/ CERES Hart

Project No.: 231596

Date: 10/30/2023

Sample Information

QUANTITY

SOIL MATRIX

Investigative:	9
I/MS/MSD:	1
Duplicates:	1
Equipment Blanks:	
Field Blanks:	2

vials per FB: ☑ 1 ☐ 2

QUANTITY

WATER MATRIX

Investigative:	2
I/MS/MSD:	1
Duplicates:	1
Equipment Blanks:	
Trip Blanks:	2

vials per TB: ☑ 1 ☐ 2

Special Instructions:

	Parameters	Preservative	Number of Containers Required: 4 oz Clear G	8 oz Clear G	16 oz Clear G	250 mL Amber G	500 mL Amber G	1000 mL Amber G	40 mL	125 mL P	250 mL P	500 mL P	1000 mL P
SOIL (I) or (D) or QCEB	PNAs (EPA 8270), MI 10, % solids	None	1										
	VOCs (EPA 8260+)	MeOH							1				
SOIL (I/MS/MSD)													
WATER (I) or (D) or QCEB	PNAs (EPA 8270)	None						2					
	Total Metals; MI 10	HNO_3								1			
	VOCs (EPA 8260+)	HCl							3				
WATER (I/MS/MSD)													

Quality Control Report

Report ID: QC-S55336-01
Generated on 11/10/2023

Report to

Attention: Penni Mahler
Fishbeck
1515 Arboretum Drive SE
Grand Rapids, MI 49546

Phone: 616-464-3751 FAX:

Report Produced by

Merit Laboratories
2680 East Lansing Drive
East Lansing, MI 48823

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

Report Summary

Lab Sample ID(s): S55336.01-S55336.10
Project: 231596/OCBRA/CERES Hart
Submitted Date/Time: 11/02/2023 16:30
Sampled by: Unknown
P.O. #:

QC Report Sections

Cover Page (Page 1)
Analysis Summary (Pages 2-11)
Prep Batch Summary (Pages 12-14)
Surrogates per Lab Sample (Pages 15-22)
Surrogates per QC Sample (Pages 23-27)
Batch QC Results (Pages 28-53)

Report Flag Descriptions

*: QC result is outside of indicated control limits
W: Surrogate result not applicable due to sample dilution

I certify that this data package is in compliance with the terms and conditions of the program, and project, and contractual requirements both technically and for completeness. Release of the data contained in this hardcopy data package and its computer-readable data submitted has been authorized by the Quality Assurance Manager and his/her designee, as verified by the following signature.

Barbara Ball
Quality Assurance Manager

Lab Sample ID: S55336.01

Sample Tag: TMW-01 (I)

Collected Date/Time: 10/31/2023 15:40

Matrix: Groundwater

COC Reference: 2023-10-31_01

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Metals						
Arsenic	E200.8	11/06/23 12:43	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Barium	E200.8	11/06/23 12:43	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Cadmium	E200.8	11/06/23 12:43	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Chromium	E200.8	11/06/23 12:43	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Copper	E200.8	11/06/23 12:43	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Lead	E200.8	11/06/23 12:43	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Mercury	E245.1	11/06/23 14:11	HG-23-1106A	HGD-110623-1	No	BLK/LCS/MS/MSD
Selenium	E200.8	11/06/23 12:43	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Silver	E200.8	11/06/23 12:43	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Zinc	E200.8	11/06/23 12:43	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Organics - Semi-Volatiles						
Polynuclear Aromatic Hydrocarbon	SW8270D	11/06/23 18:53	Z231106	SP231106W1	Yes	BLK/LCS/MS/MSD
Organics - Volatiles						
Volatile Organics - DEQ List	SW5030C/8260C	11/07/23 20:36	231107A7	VF231107W2	Yes	BLK/LCS/LCSD/MS/MS

Lab Sample ID: S55336.02
Sample Tag: TMW-01 (I) MS
Collected Date/Time: 10/31/2023 15:40
Matrix: Groundwater
COC Reference: 2023-10-31_01

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Metals						
Arsenic	E200.8	11/06/23 12:45	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Barium	E200.8	11/06/23 12:45	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Cadmium	E200.8	11/06/23 12:45	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Chromium	E200.8	11/06/23 12:45	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Copper	E200.8	11/06/23 12:45	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Lead	E200.8	11/06/23 12:45	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Mercury	E245.1	11/06/23 14:14	HG-23-1106A	HGD-110623-1	No	BLK/LCS/MS/MSD
Selenium	E200.8	11/06/23 12:45	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Silver	E200.8	11/06/23 12:45	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Zinc	E200.8	11/06/23 12:45	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Organics - Semi-Volatiles						
Polynuclear Aromatic Hydrocarbon	SW8270D	11/06/23 19:14	Z231106	SP231106W1	Yes	BLK/LCS/MS/MSD
Organics - Volatiles						
Volatile Organics - DEQ List	SW5030C/8260C	11/07/23 22:33	231107A7	VF231107W2	Yes	BLK/LCS/LCSD/MS/MS

Lab Sample ID: S55336.03

Sample Tag: TMW-01 (I) MSD

Collected Date/Time: 10/31/2023 15:40

Matrix: Groundwater

COC Reference: 2023-10-31_01

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Metals						
Arsenic	E200.8	11/06/23 12:46	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Barium	E200.8	11/06/23 12:46	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Cadmium	E200.8	11/06/23 12:46	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Chromium	E200.8	11/06/23 12:46	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Copper	E200.8	11/06/23 12:46	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Lead	E200.8	11/06/23 12:46	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Mercury	E245.1	11/06/23 14:18	HG-23-1106A	HGD-110623-1	No	BLK/LCS/MS/MSD
Selenium	E200.8	11/06/23 12:46	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Silver	E200.8	11/06/23 12:46	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Zinc	E200.8	11/06/23 12:46	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Organics - Semi-Volatiles						
Polynuclear Aromatic Hydrocarbon	SW8270D	11/06/23 19:36	Z231106	SP231106W1	Yes	BLK/LCS/MS/MSD
Organics - Volatiles						
Volatile Organics - DEQ List	SW5030C/8260C	11/07/23 22:57	231107A7	VF231107W2	Yes	BLK/LCS/LCSD/MS/MS

Lab Sample ID: S55336.04

Sample Tag: TMW-02 (I)

Collected Date/Time: 11/01/2023 11:30

Matrix: Groundwater

COC Reference: 2023-10-31_01

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Metals						
Arsenic	E200.8	11/06/23 12:38	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Barium	E200.8	11/06/23 12:38	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Cadmium	E200.8	11/06/23 12:38	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Chromium	E200.8	11/06/23 12:38	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Copper	E200.8	11/06/23 12:38	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Lead	E200.8	11/06/23 12:38	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Mercury	E245.1	11/06/23 14:21	HG-23-1106A	HGD-110623-1	No	BLK/LCS/MS/MSD
Selenium	E200.8	11/06/23 12:38	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Silver	E200.8	11/06/23 12:38	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Zinc	E200.8	11/06/23 12:38	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Organics - Semi-Volatiles						
Polynuclear Aromatic Hydrocarbon	SW8270D	11/06/23 19:57	Z231106	SP231106W1	Yes	BLK/LCS/MS/MSD
Organics - Volatiles						
Volatile Organics - DEQ List	SW5030C/8260C	11/08/23 03:14	231107B7	VF231107W4	Yes	BLK/LCS/LCSD

Lab Sample ID: S55336.05
Sample Tag: TMW-01 (D)
Collected Date/Time: 11/01/2023 00:01
Matrix: Groundwater
COC Reference: 2023-10-31_01

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Metals						
Arsenic	E200.8	11/06/23 12:40	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Barium	E200.8	11/06/23 12:40	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Cadmium	E200.8	11/06/23 12:40	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Chromium	E200.8	11/06/23 12:40	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Copper	E200.8	11/06/23 12:40	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Lead	E200.8	11/06/23 12:40	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Mercury	E245.1	11/06/23 14:24	HG-23-1106A	HGD-110623-1	No	BLK/LCS/MS/MSD
Selenium	E200.8	11/06/23 12:40	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Silver	E200.8	11/06/23 12:40	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Zinc	E200.8	11/06/23 12:40	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Organics - Semi-Volatiles						
Polynuclear Aromatic Hydrocarbon	SW8270D	11/06/23 20:18	Z231106	SP231106W1	Yes	BLK/LCS/MS/MSD
Organics - Volatiles						
Volatile Organics - DEQ List	SW5030C/8260C	11/08/23 14:53	231108A9	VF231108W1	Yes	BLK/LCS/LCSD

Lab Sample ID: S55336.06

Sample Tag: TMW-03 (I)

Collected Date/Time: 11/01/2023 09:15

Matrix: Groundwater

COC Reference: 2023-10-31_01

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Metals						
Arsenic	E200.8	11/06/23 12:42	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Barium	E200.8	11/06/23 12:42	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Cadmium	E200.8	11/06/23 12:42	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Chromium	E200.8	11/06/23 12:42	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Copper	E200.8	11/06/23 12:42	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Lead	E200.8	11/06/23 12:42	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Mercury	E245.1	11/06/23 14:27	HG-23-1106A	HGD-110623-1	No	BLK/LCS/MS/MSD
Selenium	E200.8	11/06/23 12:42	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Silver	E200.8	11/06/23 12:42	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Zinc	E200.8	11/06/23 12:42	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Organics - Semi-Volatiles						
Polynuclear Aromatic Hydrocarbon	SW8270D	11/06/23 20:40	Z231106	SP231106W1	Yes	BLK/LCS/MS/MSD
Organics - Volatiles						
Volatile Organics - DEQ List	SW5030C/8260C	11/08/23 04:01	231107B7	VF231107W4	Yes	BLK/LCS/LCSD

Lab Sample ID: S55336.07

Sample Tag: QCTB-01

Collected Date/Time: 10/31/2023 00:01

Matrix: Groundwater

COC Reference: 2023-10-31_01

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
Volatile Organics - DEQ List	SW5030C/8260C	11/08/23 04:25	231107B7	VF231107W4	Yes	BLK/LCS/LCSD

Lab Sample ID: S55336.08

Sample Tag: QCFB-01

Collected Date/Time: 11/01/2023 13:00

Matrix: Groundwater

COC Reference: 2023-10-31_01

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Metals						
Arsenic	E200.8	11/06/23 12:27	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Barium	E200.8	11/06/23 12:27	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Cadmium	E200.8	11/06/23 12:27	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Chromium	E200.8	11/06/23 12:27	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Copper	E200.8	11/06/23 12:27	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Lead	E200.8	11/06/23 12:27	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Mercury	E245.1	11/06/23 14:31	HG-23-1106A	HGD-110623-1	No	BLK/LCS/MS/MSD
Selenium	E200.8	11/06/23 12:27	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Silver	E200.8	11/06/23 12:27	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Zinc	E200.8	11/06/23 12:27	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Organics - Semi-Volatiles						
Polynuclear Aromatic Hydrocarbon	SW8270D	11/06/23 21:01	Z231106	SP231106W1	Yes	BLK/LCS/MS/MSD
Organics - Volatiles						
Volatile Organics - DEQ List	SW5030C/8260C	11/08/23 04:48	231107B7	VF231107W4	Yes	BLK/LCS/LCSD

Lab Sample ID: S55336.09

Sample Tag: QCEB-01

Collected Date/Time: 11/01/2023 13:15

Matrix: Groundwater

COC Reference: 2023-10-31_01

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Metals						
Arsenic	E200.8	11/06/23 12:29	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Barium	E200.8	11/06/23 12:29	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Cadmium	E200.8	11/06/23 12:29	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Chromium	E200.8	11/06/23 12:29	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Copper	E200.8	11/06/23 12:29	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Lead	E200.8	11/06/23 12:29	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Mercury	E245.1	11/06/23 14:34	HG-23-1106A	HGD-110623-1	No	BLK/LCS/MS/MSD
Selenium	E200.8	11/06/23 12:29	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Silver	E200.8	11/06/23 12:29	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Zinc	E200.8	11/06/23 12:29	MT4-23-1106A	MTD-110623-3	No	BLK/LCS/MS/MSD
Organics - Semi-Volatiles						
Polynuclear Aromatic Hydrocarbon	SW8270D	11/06/23 21:22	Z231106	SP231106W1	Yes	BLK/LCS/MS/MSD
Organics - Volatiles						
Volatile Organics - DEQ List	SW5030C/8260C	11/08/23 05:12	231107B7	VF231107W4	Yes	BLK/LCS/LCSD

QC Report - Analysis Summary

Lab Sample ID: S55336.10
Sample Tag: QCTB-02
Collected Date/Time: 10/31/2023 00:01
Matrix: Groundwater
COC Reference: 2023-10-31_01

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
Volatile Organics - DEQ List	SW5030C/8260C	11/08/23 05:36	231107B7	VF231107W4	Yes	BLK/LCS/LCSD

Metals, Prep Batch ID: HGD-110623-1

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S55336.01	Mercury	E245.1	11/06/23 14:11	HG-23-1106A
S55336.02	Mercury	E245.1	11/06/23 14:14	HG-23-1106A
S55336.03	Mercury	E245.1	11/06/23 14:18	HG-23-1106A
S55336.04	Mercury	E245.1	11/06/23 14:21	HG-23-1106A
S55336.05	Mercury	E245.1	11/06/23 14:24	HG-23-1106A
S55336.06	Mercury	E245.1	11/06/23 14:27	HG-23-1106A
S55336.08	Mercury	E245.1	11/06/23 14:31	HG-23-1106A
S55336.09	Mercury	E245.1	11/06/23 14:34	HG-23-1106A

Metals, Prep Batch ID: MTD-110623-3

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S55336.01	Arsenic	E200.8	11/06/23 12:43	MT4-23-1106A
S55336.01	Barium	E200.8	11/06/23 12:43	MT4-23-1106A
S55336.01	Cadmium	E200.8	11/06/23 12:43	MT4-23-1106A
S55336.01	Chromium	E200.8	11/06/23 12:43	MT4-23-1106A
S55336.01	Copper	E200.8	11/06/23 12:43	MT4-23-1106A
S55336.01	Lead	E200.8	11/06/23 12:43	MT4-23-1106A
S55336.01	Selenium	E200.8	11/06/23 12:43	MT4-23-1106A
S55336.01	Silver	E200.8	11/06/23 12:43	MT4-23-1106A
S55336.01	Zinc	E200.8	11/06/23 12:43	MT4-23-1106A
S55336.02	Arsenic	E200.8	11/06/23 12:45	MT4-23-1106A
S55336.02	Barium	E200.8	11/06/23 12:45	MT4-23-1106A
S55336.02	Cadmium	E200.8	11/06/23 12:45	MT4-23-1106A
S55336.02	Chromium	E200.8	11/06/23 12:45	MT4-23-1106A
S55336.02	Copper	E200.8	11/06/23 12:45	MT4-23-1106A
S55336.02	Lead	E200.8	11/06/23 12:45	MT4-23-1106A
S55336.02	Selenium	E200.8	11/06/23 12:45	MT4-23-1106A
S55336.02	Silver	E200.8	11/06/23 12:45	MT4-23-1106A
S55336.02	Zinc	E200.8	11/06/23 12:45	MT4-23-1106A
S55336.03	Arsenic	E200.8	11/06/23 12:46	MT4-23-1106A
S55336.03	Barium	E200.8	11/06/23 12:46	MT4-23-1106A
S55336.03	Cadmium	E200.8	11/06/23 12:46	MT4-23-1106A
S55336.03	Chromium	E200.8	11/06/23 12:46	MT4-23-1106A
S55336.03	Copper	E200.8	11/06/23 12:46	MT4-23-1106A
S55336.03	Lead	E200.8	11/06/23 12:46	MT4-23-1106A
S55336.03	Selenium	E200.8	11/06/23 12:46	MT4-23-1106A
S55336.03	Silver	E200.8	11/06/23 12:46	MT4-23-1106A
S55336.03	Zinc	E200.8	11/06/23 12:46	MT4-23-1106A
S55336.04	Arsenic	E200.8	11/06/23 12:38	MT4-23-1106A
S55336.04	Barium	E200.8	11/06/23 12:38	MT4-23-1106A
S55336.04	Cadmium	E200.8	11/06/23 12:38	MT4-23-1106A
S55336.04	Chromium	E200.8	11/06/23 12:38	MT4-23-1106A
S55336.04	Copper	E200.8	11/06/23 12:38	MT4-23-1106A
S55336.04	Lead	E200.8	11/06/23 12:38	MT4-23-1106A
S55336.04	Selenium	E200.8	11/06/23 12:38	MT4-23-1106A
S55336.04	Silver	E200.8	11/06/23 12:38	MT4-23-1106A
S55336.04	Zinc	E200.8	11/06/23 12:38	MT4-23-1106A
S55336.05	Arsenic	E200.8	11/06/23 12:40	MT4-23-1106A
S55336.05	Barium	E200.8	11/06/23 12:40	MT4-23-1106A

Metals, Prep Batch ID: MTD-110623-3 (continued)

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S55336.05	Cadmium	E200.8	11/06/23 12:40	MT4-23-1106A
S55336.05	Chromium	E200.8	11/06/23 12:40	MT4-23-1106A
S55336.05	Copper	E200.8	11/06/23 12:40	MT4-23-1106A
S55336.05	Lead	E200.8	11/06/23 12:40	MT4-23-1106A
S55336.05	Selenium	E200.8	11/06/23 12:40	MT4-23-1106A
S55336.05	Silver	E200.8	11/06/23 12:40	MT4-23-1106A
S55336.05	Zinc	E200.8	11/06/23 12:40	MT4-23-1106A
S55336.06	Arsenic	E200.8	11/06/23 12:42	MT4-23-1106A
S55336.06	Barium	E200.8	11/06/23 12:42	MT4-23-1106A
S55336.06	Cadmium	E200.8	11/06/23 12:42	MT4-23-1106A
S55336.06	Chromium	E200.8	11/06/23 12:42	MT4-23-1106A
S55336.06	Copper	E200.8	11/06/23 12:42	MT4-23-1106A
S55336.06	Lead	E200.8	11/06/23 12:42	MT4-23-1106A
S55336.06	Selenium	E200.8	11/06/23 12:42	MT4-23-1106A
S55336.06	Silver	E200.8	11/06/23 12:42	MT4-23-1106A
S55336.06	Zinc	E200.8	11/06/23 12:42	MT4-23-1106A
S55336.08	Arsenic	E200.8	11/06/23 12:27	MT4-23-1106A
S55336.08	Barium	E200.8	11/06/23 12:27	MT4-23-1106A
S55336.08	Cadmium	E200.8	11/06/23 12:27	MT4-23-1106A
S55336.08	Chromium	E200.8	11/06/23 12:27	MT4-23-1106A
S55336.08	Copper	E200.8	11/06/23 12:27	MT4-23-1106A
S55336.08	Lead	E200.8	11/06/23 12:27	MT4-23-1106A
S55336.08	Selenium	E200.8	11/06/23 12:27	MT4-23-1106A
S55336.08	Silver	E200.8	11/06/23 12:27	MT4-23-1106A
S55336.08	Zinc	E200.8	11/06/23 12:27	MT4-23-1106A
S55336.09	Arsenic	E200.8	11/06/23 12:29	MT4-23-1106A
S55336.09	Barium	E200.8	11/06/23 12:29	MT4-23-1106A
S55336.09	Cadmium	E200.8	11/06/23 12:29	MT4-23-1106A
S55336.09	Chromium	E200.8	11/06/23 12:29	MT4-23-1106A
S55336.09	Copper	E200.8	11/06/23 12:29	MT4-23-1106A
S55336.09	Lead	E200.8	11/06/23 12:29	MT4-23-1106A
S55336.09	Selenium	E200.8	11/06/23 12:29	MT4-23-1106A
S55336.09	Silver	E200.8	11/06/23 12:29	MT4-23-1106A
S55336.09	Zinc	E200.8	11/06/23 12:29	MT4-23-1106A

Organics - Semi-Volatiles, Prep Batch ID: SP231106W1

Surrogates: Yes, QC Types: BLK/LCS/MS/MSD

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S55336.01	Polynuclear Aromatic Hydrocarbon	SW8270D	11/06/23 18:53	Z231106
S55336.02	Polynuclear Aromatic Hydrocarbon	SW8270D	11/06/23 19:14	Z231106
S55336.03	Polynuclear Aromatic Hydrocarbon	SW8270D	11/06/23 19:36	Z231106
S55336.04	Polynuclear Aromatic Hydrocarbon	SW8270D	11/06/23 19:57	Z231106
S55336.05	Polynuclear Aromatic Hydrocarbon	SW8270D	11/06/23 20:18	Z231106
S55336.06	Polynuclear Aromatic Hydrocarbon	SW8270D	11/06/23 20:40	Z231106
S55336.08	Polynuclear Aromatic Hydrocarbon	SW8270D	11/06/23 21:01	Z231106
S55336.09	Polynuclear Aromatic Hydrocarbon	SW8270D	11/06/23 21:22	Z231106

QC Report - Prep Batch Summary

Organics - Volatiles, Prep Batch ID: VF231107W2

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S55336.01	Volatile Organics - DEQ List	SW5030C/8260C	11/07/23 20:36	231107A7
S55336.02	Volatile Organics - DEQ List	SW5030C/8260C	11/07/23 22:33	231107A7
S55336.03	Volatile Organics - DEQ List	SW5030C/8260C	11/07/23 22:57	231107A7

Organics - Volatiles, Prep Batch ID: VF231107W4

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S55336.04	Volatile Organics - DEQ List	SW5030C/8260C	11/08/23 03:14	231107B7
S55336.06	Volatile Organics - DEQ List	SW5030C/8260C	11/08/23 04:01	231107B7
S55336.07	Volatile Organics - DEQ List	SW5030C/8260C	11/08/23 04:25	231107B7
S55336.08	Volatile Organics - DEQ List	SW5030C/8260C	11/08/23 04:48	231107B7
S55336.09	Volatile Organics - DEQ List	SW5030C/8260C	11/08/23 05:12	231107B7
S55336.10	Volatile Organics - DEQ List	SW5030C/8260C	11/08/23 05:36	231107B7

Organics - Volatiles, Prep Batch ID: VF231108W1

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S55336.05	Volatile Organics - DEQ List	SW5030C/8260C	11/08/23 14:53	231108A9

QC Report - Surrogates per Lab Sample

Lab Sample ID: S55336.01

Sample Tag: TMW-01 (I)

Collected Date/Time: 10/31/2023 15:40

Matrix: Groundwater

COC Reference: 2023-10-31_01

Organics - Semi-Volatiles, Analysis: Polynuclear Aromatic Hydrocarbon

Run in Batch: Z231106, Run Date: 11/06/2023 18:53, Matrix: WW, Dilution: 2

Surrogate	Flags	**%Rec**	LCL	UCL
Nitrobenzene-D5		**46.8**	10.0	114.0
2-Fluorobiphenyl		**48.3**	10.0	116.0
Terphenyl-D14		**48.5**	10.0	141.0

Organics - Volatiles, Analysis: Volatile Organics - DEQ List

Run in Batch: 231107A7, Run Date: 11/07/2023 20:36, Matrix: WW, Dilution: 1

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**96.3**	80.0	124.0
1,2-Dichloroethane-D4		**99.5**	72.0	125.0
Toluene-D8		**95.1**	89.0	112.0

QC Report - Surrogates per Lab Sample

Lab Sample ID: S55336.04

Sample Tag: TMW-02 (I)

Collected Date/Time: 11/01/2023 11:30

Matrix: Groundwater

COC Reference: 2023-10-31_01

Organics - Semi-Volatiles, Analysis: Polynuclear Aromatic Hydrocarbon

Run in Batch: Z231106, Run Date: 11/06/2023 19:57, Matrix: WW, Dilution: 2

Surrogate	Flags	**%Rec**	LCL	UCL
Nitrobenzene-D5		**48.5**	10.0	114.0
2-Fluorobiphenyl		**47.4**	10.0	116.0
Terphenyl-D14		**49.8**	10.0	141.0

Organics - Volatiles, Analysis: Volatile Organics - DEQ List

Run in Batch: 231107B7, Run Date: 11/08/2023 03:14, Matrix: WW, Dilution: 1

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**96.7**	80.0	124.0
1,2-Dichloroethane-D4		**104.1**	72.0	125.0
Toluene-D8		**94.4**	89.0	112.0

QC Report - Surrogates per Lab Sample

Lab Sample ID: S55336.05

Sample Tag: TMW-01 (D)

Collected Date/Time: 11/01/2023 00:01

Matrix: Groundwater

COC Reference: 2023-10-31_01

Organics - Semi-Volatiles, Analysis: Polynuclear Aromatic Hydrocarbon

Run in Batch: Z231106, Run Date: 11/06/2023 20:18, Matrix: WW, Dilution: 2

Surrogate	Flags	**%Rec**	LCL	UCL
Nitrobenzene-D5		**51.7**	10.0	114.0
2-Fluorobiphenyl		**51.5**	10.0	116.0
Terphenyl-D14		**51.6**	10.0	141.0

Organics - Volatiles, Analysis: Volatile Organics - DEQ List

Run in Batch: 231108A9, Run Date: 11/08/2023 14:53, Matrix: WW, Dilution: 1

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**108.1**	80.0	124.0
1,2-Dichloroethane-D4		**94.4**	72.0	125.0
Toluene-D8		**99.4**	89.0	112.0

QC Report - Surrogates per Lab Sample

Lab Sample ID: S55336.06

Sample Tag: TMW-03 (I)

Collected Date/Time: 11/01/2023 09:15

Matrix: Groundwater

COC Reference: 2023-10-31_01

Organics - Semi-Volatiles, Analysis: Polynuclear Aromatic Hydrocarbon

Run in Batch: Z231106, Run Date: 11/06/2023 20:40, Matrix: WW, Dilution: 2

Surrogate	Flags	**%Rec**	LCL	UCL
Nitrobenzene-D5		**55.6**	10.0	114.0
2-Fluorobiphenyl		**56.4**	10.0	116.0
Terphenyl-D14		**52.7**	10.0	141.0

Organics - Volatiles, Analysis: Volatile Organics - DEQ List

Run in Batch: 231107B7, Run Date: 11/08/2023 04:01, Matrix: WW, Dilution: 1

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**96.4**	80.0	124.0
1,2-Dichloroethane-D4		**97.5**	72.0	125.0
Toluene-D8		**94.2**	89.0	112.0

QC Report - Surrogates per Lab Sample

Lab Sample ID: S55336.07

Sample Tag: QCTB-01

Collected Date/Time: 10/31/2023 00:01

Matrix: Groundwater

COC Reference: 2023-10-31_01

Organics - Volatiles, Analysis: Volatile Organics - DEQ List

Run in Batch: 231107B7, Run Date: 11/08/2023 04:25, Matrix: WW, Dilution: 1

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**94.9**	80.0	124.0
1,2-Dichloroethane-D4		**94.5**	72.0	125.0
Toluene-D8		**95.1**	89.0	112.0

QC Report - Surrogates per Lab Sample

Lab Sample ID: S55336.08

Sample Tag: QCFB-01

Collected Date/Time: 11/01/2023 13:00

Matrix: Groundwater

COC Reference: 2023-10-31_01

Organics - Semi-Volatiles, Analysis: Polynuclear Aromatic Hydrocarbon

Run in Batch: Z231106, Run Date: 11/06/2023 21:01, Matrix: WW, Dilution: 2

Surrogate	Flags	**%Rec**	LCL	UCL
Nitrobenzene-D5		**56.9**	10.0	114.0
2-Fluorobiphenyl		**59.2**	10.0	116.0
Terphenyl-D14		**59.4**	10.0	141.0

Organics - Volatiles, Analysis: Volatile Organics - DEQ List

Run in Batch: 231107B7, Run Date: 11/08/2023 04:48, Matrix: WW, Dilution: 1

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**95.6**	80.0	124.0
1,2-Dichloroethane-D4		**95.9**	72.0	125.0
Toluene-D8		**93.7**	89.0	112.0

QC Report - Surrogates per Lab Sample

Lab Sample ID: S55336.09

Sample Tag: QCEB-01

Collected Date/Time: 11/01/2023 13:15

Matrix: Groundwater

COC Reference: 2023-10-31_01

Organics - Semi-Volatiles, Analysis: Polynuclear Aromatic Hydrocarbon

Run in Batch: Z231106, Run Date: 11/06/2023 21:22, Matrix: WW, Dilution: 2

Surrogate	Flags	**%Rec**	LCL	UCL
Nitrobenzene-D5		**56.6**	10.0	114.0
2-Fluorobiphenyl		**58.1**	10.0	116.0
Terphenyl-D14		**34.0**	10.0	141.0

Organics - Volatiles, Analysis: Volatile Organics - DEQ List

Run in Batch: 231107B7, Run Date: 11/08/2023 05:12, Matrix: WW, Dilution: 1

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**96.2**	80.0	124.0
1,2-Dichloroethane-D4		**95.6**	72.0	125.0
Toluene-D8		**94.2**	89.0	112.0

QC Report - Surrogates per Lab Sample

Lab Sample ID: S55336.10

Sample Tag: QCTB-02

Collected Date/Time: 10/31/2023 00:01

Matrix: Groundwater

COC Reference: 2023-10-31_01

Organics - Volatiles, Analysis: Volatile Organics - DEQ List

Run in Batch: 231107B7, Run Date: 11/08/2023 05:36, Matrix: WW, Dilution: 1

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**93.8**	80.0	124.0
1,2-Dichloroethane-D4		**94.8**	72.0	125.0
Toluene-D8		**94.9**	89.0	112.0

QC Report - Surrogates per QC Sample

Organics - Semi-Volatiles, Prep Batch ID: SP231106W1

QC Types: BLK/LCS/MS/MSD

Blank (BLK)

Lab Sample ID: Z231106.BLKW06A

Run in Batch: Z231106, Run Date: 11/06/2023 15:19, Prep Date: 11/06/2023, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
Nitrobenzene-D5		**55.9**	10.0	114.0
2-Fluorobiphenyl		**58.0**	10.0	116.0
Terphenyl-D14		**41.9**	10.0	141.0

Laboratory Control Sample (LCS)

Lab Sample ID: Z231106.LCSW06A

Run in Batch: Z231106, Run Date: 11/06/2023 15:41, Prep Date: 11/06/2023, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
Nitrobenzene-D5		**54.4**	10.0	114.0
2-Fluorobiphenyl		**59.6**	10.0	116.0
Terphenyl-D14		**55.8**	10.0	141.0

Matrix Spike (MS)

Lab Sample ID: Z231106.5533602M, Parent Sample ID: S55336.01

Run in Batch: Z231106, Run Date: 11/06/2023 19:14, Prep Date: 11/06/2023, Matrix: WW, Dilution: 2

Surrogate	Flags	%Rec	LCL	UCL
Nitrobenzene-D5		**51.4**	10.0	114.0
2-Fluorobiphenyl		**54.6**	10.0	116.0
Terphenyl-D14		**55.3**	10.0	141.0

Matrix Spike Duplicate (MSD)

Lab Sample ID: Z231106.5533603N, Parent Sample ID: Z231106.5533602M

Run in Batch: Z231106, Run Date: 11/06/2023 19:36, Prep Date: 11/06/2023, Matrix: WW, Dilution: 2

Surrogate	Flags	%Rec	LCL	UCL
Nitrobenzene-D5		**50.0**	10.0	114.0
2-Fluorobiphenyl		**52.1**	10.0	116.0
Terphenyl-D14		**55.6**	10.0	141.0

Organics - Volatiles, Prep Batch ID: VF231107W2

QC Types: BLK/LCS/LCSD/MS/MSD

Blank (BLK)

Lab Sample ID: 231107A7.BLKW07A

Run in Batch: 231107A7, Run Date: 11/07/2023 14:46, Prep Date: 11/07/2023, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		**97.7**	80.0	124.0
1,2-Dichloroethane-D4		**102.9**	72.0	125.0
Toluene-D8		**95.7**	89.0	112.0

Laboratory Control Sample (LCS)

Lab Sample ID: 231107A7.LCSW07A

Run in Batch: 231107A7, Run Date: 11/07/2023 13:11, Prep Date: 11/07/2023, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		**97.4**	80.0	124.0
1,2-Dichloroethane-D4		**98.1**	72.0	125.0
Toluene-D8		**96.1**	89.0	112.0

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: 231107A7.LCSDW07A, Parent Sample ID: 231107A7.LCSW07A

Run in Batch: 231107A7, Run Date: 11/07/2023 13:35, Prep Date: 11/07/2023, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		**97.5**	80.0	124.0
1,2-Dichloroethane-D4		**98.6**	72.0	125.0
Toluene-D8		**95.6**	89.0	112.0

Matrix Spike (MS)

Lab Sample ID: 231107A7.5512115M, Parent Sample ID: S55121.14

Run in Batch: 231107A7, Run Date: 11/07/2023 21:46, Prep Date: 11/07/2023, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		**98.9**	80.0	124.0
1,2-Dichloroethane-D4		**100.4**	72.0	125.0
Toluene-D8		**94.8**	89.0	112.0

Matrix Spike (MS)

Lab Sample ID: 231107A7.5533602M, Parent Sample ID: S55336.01

Run in Batch: 231107A7, Run Date: 11/07/2023 22:33, Prep Date: 11/07/2023, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		**97.8**	80.0	124.0
1,2-Dichloroethane-D4		**97.1**	72.0	125.0
Toluene-D8		**95.0**	89.0	112.0

Matrix Spike Duplicate (MSD)

Lab Sample ID: 231107A7.5512116N, Parent Sample ID: 231107A7.5512115M

Run in Batch: 231107A7, Run Date: 11/07/2023 22:10, Prep Date: 11/07/2023, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		**96.8**	80.0	124.0
1,2-Dichloroethane-D4		**96.2**	72.0	125.0
Toluene-D8		**95.7**	89.0	112.0

Matrix Spike Duplicate (MSD)

Lab Sample ID: 231107A7.5533603N, Parent Sample ID: 231107A7.5533602M

Run in Batch: 231107A7, Run Date: 11/07/2023 22:57, Prep Date: 11/07/2023, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		**97.1**	80.0	124.0
1,2-Dichloroethane-D4		**99.2**	72.0	125.0
Toluene-D8		**96.3**	89.0	112.0

Organics - Volatiles, Prep Batch ID: VF231107W4

QC Types: BLK/LCS/LCSD

Blank (BLK)

Lab Sample ID: 231107B7.BLKW07B

Run in Batch: 231107B7, Run Date: 11/08/2023 02:03, Prep Date: 11/07/2023, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		**96.5**	80.0	124.0
1,2-Dichloroethane-D4		**95.2**	72.0	125.0
Toluene-D8		**94.5**	89.0	112.0

Laboratory Control Sample (LCS)

Lab Sample ID: 231107B7.LCSW07B

Run in Batch: 231107B7, Run Date: 11/08/2023 00:30, Prep Date: 11/07/2023, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		**97.7**	80.0	124.0
1,2-Dichloroethane-D4		**92.1**	72.0	125.0
Toluene-D8		**95.0**	89.0	112.0

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: 231107B7.LCSDW07B, Parent Sample ID: 231107B7.LCSW07B

Run in Batch: 231107B7, Run Date: 11/08/2023 00:53, Prep Date: 11/07/2023, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		**96.4**	80.0	124.0
1,2-Dichloroethane-D4		**90.6**	72.0	125.0
Toluene-D8		**95.5**	89.0	112.0

QC Report - Surrogates per QC Sample

Organics - Volatiles, Prep Batch ID: VF231108W1

QC Types: BLK/LCS/LCSD

Blank (BLK)

Lab Sample ID: 231108A9.BLKW08A

Run in Batch: 231108A9, Run Date: 11/08/2023 13:35, Prep Date: 11/08/2023, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		**106.4**	80.0	124.0
1,2-Dichloroethane-D4		**88.9**	72.0	125.0
Toluene-D8		**100.1**	89.0	112.0

Blank (BLK)

Lab Sample ID: 231108C9.BLKW08A

Run in Batch: 231108C9, Run Date: 11/08/2023 13:35, Prep Date: 11/08/2023, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
Toluene-D8		**99.7**	86.0	118.0

Laboratory Control Sample (LCS)

Lab Sample ID: 231108A9.LCSW08A

Run in Batch: 231108A9, Run Date: 11/08/2023 11:56, Prep Date: 11/08/2023, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		**109.6**	80.0	124.0
1,2-Dichloroethane-D4		**88.7**	72.0	125.0
Toluene-D8		**97.9**	89.0	112.0

Laboratory Control Sample (LCS)

Lab Sample ID: 231108C9.LCSG08A

Run in Batch: 231108C9, Run Date: 11/08/2023 12:55, Prep Date: 11/08/2023, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
Toluene-D8		**98.2**	86.0	118.0

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: 231108A9.LCSDW08A, Parent Sample ID: 231108A9.LCSW08A

Run in Batch: 231108A9, Run Date: 11/08/2023 12:15, Prep Date: 11/08/2023, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		**109.0**	80.0	124.0
1,2-Dichloroethane-D4		**86.2**	72.0	125.0
Toluene-D8		**98.1**	89.0	112.0

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: 231108C9.LCSDG08A, Parent Sample ID: 231108C9.LCSG08A

Run in Batch: 231108C9, Run Date: 11/08/2023 13:15, Prep Date: 11/08/2023, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
Toluene-D8		**98.3**	86.0	118.0

Metals, Prep Batch ID: HGD-110623-1

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Blank (BLK)

Lab Sample ID: HG-23-1106A.015.LRB

Run in Batch: HG-23-1106A, Run Date: 11/06/2023 13:08, Prep Date: 11/06/2023, Matrix: Liquid, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Mercury		ND	0.20	ug/L

Laboratory Control Sample (LCS)

Lab Sample ID: HG-23-1106A.014.LCS

Run in Batch: HG-23-1106A, Run Date: 11/06/2023 13:05, Prep Date: 11/06/2023, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Mercury		107	85	115

Matrix Spike (MS)

Lab Sample ID: HG-23-1106A.022.MS, Parent Sample ID: S55225.01

Run in Batch: HG-23-1106A, Run Date: 11/06/2023 13:31, Prep Date: 11/06/2023, Matrix: Liquid, Dilution: 2

Analyte	Flags	% Rec	LCL	UCL
Mercury		100	80	120

Matrix Spike Duplicate (MSD)

Lab Sample ID: HG-23-1106A.023.MSD, Parent Sample ID: HG-23-1106A.022.MS

Run in Batch: HG-23-1106A, Run Date: 11/06/2023 13:35, Prep Date: 11/06/2023, Matrix: Liquid, Dilution: 2

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Mercury		109	80	120	9	20

Metals, Prep Batch ID: MTD-110623-3

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Blank (BLK)

Lab Sample ID: MT4-23-1106A.021.LRB

Run in Batch: MT4-23-1106A, Run Date: 11/06/2023 11:35, Prep Date: 11/06/2023, Matrix: Liquid, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Arsenic		ND	0.0004	mg/L
Barium		ND	0.001	mg/L
Cadmium		ND	0.0001	mg/L
Chromium		ND	0.001	mg/L
Copper		ND	0.001	mg/L
Lead		ND	0.0006	mg/L
Selenium		ND	0.001	mg/L
Silver		ND	0.0001	mg/L
Zinc		ND	0.001	mg/L

Laboratory Control Sample (LCS)

Lab Sample ID: MT4-23-1106A.020.LCS

Run in Batch: MT4-23-1106A, Run Date: 11/06/2023 11:31, Prep Date: 11/06/2023, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Arsenic		100	85	115
Barium		98	85	115
Cadmium		99	85	115
Chromium		98	85	115
Copper		100	85	115
Lead		102	85	115
Selenium		102	85	115
Silver		95	85	115
Zinc		102	85	115

Matrix Spike (MS)

Lab Sample ID: MT4-23-1106A.042.MS, Parent Sample ID: S55395.01

Run in Batch: MT4-23-1106A, Run Date: 11/06/2023 12:09, Prep Date: 11/06/2023, Matrix: Liquid, Dilution: 5

Analyte	Flags	% Rec	LCL	UCL
Arsenic		103	75	125
Barium		96	75	125
Cadmium		96	75	125
Chromium		100	75	125
Copper		95	75	125
Lead		96	75	125
Selenium		102	75	125
Silver		89	75	125
Zinc		100	75	125

Matrix Spike (MS)

Lab Sample ID: MT4-23-1106A.056.MS, Parent Sample ID: S55336.01

Run in Batch: MT4-23-1106A, Run Date: 11/06/2023 12:45, Prep Date: 11/06/2023, Matrix: Liquid, Dilution: 5

Analyte	Flags	% Rec	LCL	UCL
Arsenic		101	75	125
Barium		94	75	125
Cadmium		94	75	125
Chromium		97	75	125

Metals, Prep Batch ID: MTD-110623-3 (continued)

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Matrix Spike (MS) (continued)

Lab Sample ID: MT4-23-1106A.056.MS, Parent Sample ID: S55336.01

Run in Batch: MT4-23-1106A, Run Date: 11/06/2023 12:45, Prep Date: 11/06/2023, Matrix: Liquid, Dilution: 5

Analyte	Flags	% Rec	LCL	UCL
Copper		86	75	125
Lead		92	75	125
Selenium		102	75	125
Silver		85	75	125
Zinc		89	75	125

Matrix Spike Duplicate (MSD)

Lab Sample ID: MT4-23-1106A.043.MSD, Parent Sample ID: MT4-23-1106A.042.MS

Run in Batch: MT4-23-1106A, Run Date: 11/06/2023 12:11, Prep Date: 11/06/2023, Matrix: Liquid, Dilution: 5

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Arsenic		101	75	125	2	20
Barium		96	75	125	0	20
Cadmium		98	75	125	2	20
Chromium		99	75	125	0	20
Copper		96	75	125	1	20
Lead		96	75	125	0	20
Selenium		103	75	125	1	20
Silver		90	75	125	1	20
Zinc		104	75	125	1	20

Matrix Spike Duplicate (MSD)

Lab Sample ID: MT4-23-1106A.057.MSD, Parent Sample ID: MT4-23-1106A.056.MS

Run in Batch: MT4-23-1106A, Run Date: 11/06/2023 12:46, Prep Date: 11/06/2023, Matrix: Liquid, Dilution: 5

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Arsenic		103	75	125	2	20
Barium		95	75	125	1	20
Cadmium		95	75	125	0	20
Chromium		97	75	125	0	20
Copper		88	75	125	2	20
Lead		93	75	125	1	20
Selenium		106	75	125	3	20
Silver		86	75	125	1	20
Zinc		92	75	125	3	20

Organics - Semi-Volatiles, Prep Batch ID: SP231106W1

Surrogates: Yes, QC Types: BLK/LCS/MS/MSD

Blank (BLK)

Lab Sample ID: Z231106.BLKW06A

Run in Batch: Z231106, Run Date: 11/06/2023 15:19, Prep Date: 11/06/2023, Matrix: WW, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Acenaphthene		ND	0.00050	mg/l
Acenaphthylene		ND	0.00050	mg/l
Anthracene		ND	0.00050	mg/l
Benzo(a)anthracene		ND	0.00050	mg/l
Benzo(a)pyrene		ND	0.00050	mg/l
Benzo(b)fluoranthene		ND	0.00050	mg/l
Benzo(k)fluoranthene		ND	0.00050	mg/l
Benzo(ghi)perylene		ND	0.00050	mg/l
Chrysene		ND	0.00050	mg/l
Dibenzo(ah)anthracene		ND	0.00050	mg/l
Fluoranthene		ND	0.00050	mg/l
Fluorene		ND	0.00050	mg/l
Indeno(1,2,3-cd)pyrene		ND	0.00050	mg/l
Naphthalene		ND	0.00050	mg/l
Phenanthrene		ND	0.00050	mg/l
Pyrene		ND	0.00050	mg/l
2-Methylnaphthalene		ND	0.00050	mg/l
1-Methylnaphthalene		ND	0.00050	mg/l

Laboratory Control Sample (LCS)

Lab Sample ID: Z231106.LCSW06A

Run in Batch: Z231106, Run Date: 11/06/2023 15:41, Prep Date: 11/06/2023, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Acenaphthene		47.4	23.4	114.1
Acenaphthylene		53.0	35.4	127.7
Anthracene		33.9	32.3	142.4
Benzo(a)anthracene		47.3	36.7	134.7
Benzo(a)pyrene		51.7	14.4	142.5
Benzo(b)fluoranthene		57.6	29.0	152.7
Benzo(k)fluoranthene		48.3	29.8	136.0
Benzo(ghi)perylene		57.8	34.0	114.0
Chrysene		50.0	38.7	137.1
Dibenzo(ah)anthracene		59.8	38.0	115.0
Fluoranthene		54.2	29.3	135.3
Fluorene		51.7	37.8	127.8
Indeno(1,2,3-cd)pyrene		60.8	39.2	137.4
Naphthalene		46.0	22.1	110.0
Phenanthrene		52.1	36.4	143.0
Pyrene		49.6	32.1	126.8
2-Methylnaphthalene		47.1	35.6	120.0
1-Methylnaphthalene		48.5	10.0	120.0

Organics - Semi-Volatiles, Prep Batch ID: SP231106W1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/MS/MSD

Matrix Spike (MS)

Lab Sample ID: Z231106.5533602M, Parent Sample ID: S55336.01

Run in Batch: Z231106, Run Date: 11/06/2023 19:14, Prep Date: 11/06/2023, Matrix: WW, Dilution: 2

Analyte	Flags	% Rec	LCL	UCL
Acenaphthene		44.4	23.4	114.1
Acenaphthylene		49.5	35.4	127.7
Anthracene	*	29.1	32.3	142.4
Benzo(a)anthracene		45.5	36.7	134.7
Benzo(a)pyrene		53.1	14.4	142.5
Benzo(b)fluoranthene		55.8	29.0	152.7
Benzo(k)fluoranthene		51.6	29.8	136.0
Benzo(ghi)perylene		58.3	34.0	114.0
Chrysene		49.1	38.7	137.1
Dibenzo(ah)anthracene		61.3	38.0	115.0
Fluoranthene		51.5	29.3	135.3
Fluorene		48.1	37.8	127.8
Indeno(1,2,3-cd)pyrene		62.0	39.2	137.4
Naphthalene		44.5	22.1	110.0
Phenanthrene		49.3	36.4	143.0
Pyrene		49.2	32.1	126.8
2-Methylnaphthalene		46.8	35.6	120.0
1-Methylnaphthalene		47.3	10.0	120.0

Matrix Spike Duplicate (MSD)

Lab Sample ID: Z231106.5533603N, Parent Sample ID: Z231106.5533602M

Run in Batch: Z231106, Run Date: 11/06/2023 19:36, Prep Date: 11/06/2023, Matrix: WW, Dilution: 2

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Acenaphthene		44.2	23.4	114.1	0.4	30.0
Acenaphthylene		48.5	35.4	127.7	2.0	30.0
Anthracene	*	29.7	32.3	142.4	1.9	30.0
Benzo(a)anthracene		46.1	36.7	134.7	1.2	30.0
Benzo(a)pyrene		51.8	14.4	142.5	2.4	30.0
Benzo(b)fluoranthene		57.2	29.0	152.7	2.5	30.0
Benzo(k)fluoranthene		50.0	29.8	136.0	3.1	30.0
Benzo(ghi)perylene		58.8	34.0	114.0	0.8	30.0
Chrysene		49.1	38.7	137.1	0.0	30.0
Dibenzo(ah)anthracene		60.3	38.0	115.0	1.6	30.0
Fluoranthene		52.2	29.3	135.3	1.5	30.0
Fluorene		48.1	37.8	127.8	0.0	30.0
Indeno(1,2,3-cd)pyrene		60.5	39.2	137.4	2.4	30.0
Naphthalene		44.4	22.1	110.0	0.3	30.0
Phenanthrene		49.9	36.4	143.0	1.3	30.0
Pyrene		49.7	32.1	126.8	1.1	30.0
2-Methylnaphthalene		45.3	35.6	120.0	3.4	30.0
1-Methylnaphthalene		45.6	10.0	120.0	3.7	30.0

Organics - Volatiles, Prep Batch ID: VF231107W2

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Blank (BLK)

Lab Sample ID: 231107A7.BLKW07A

Run in Batch: 231107A7, Run Date: 11/07/2023 14:46, Prep Date: 11/07/2023, Matrix: WW, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Diethyl ether		ND	1.00	ug/l
Acetone		ND	10.00	ug/l
Methyl iodide		ND	1.00	ug/l
Carbon disulfide		ND	1.00	ug/l
tert-Methyl butyl ether (MTBE)		ND	1.00	ug/l
Acrylonitrile		ND	1.00	ug/l
2-Butanone (MEK)		ND	10.00	ug/l
Dichlorodifluoromethane		ND	1.00	ug/l
Chloromethane		ND	1.00	ug/l
Vinyl chloride		ND	1.00	ug/l
Bromomethane		ND	1.00	ug/l
Chloroethane		ND	1.00	ug/l
Trichlorofluoromethane		ND	1.00	ug/l
1,1-Dichloroethene		ND	1.00	ug/l
Methylene chloride		ND	1.00	ug/l
trans-1,2-Dichloroethene		ND	1.00	ug/l
1,1-Dichloroethane		ND	1.00	ug/l
cis-1,2-Dichloroethene		ND	1.00	ug/l
Tetrahydrofuran		ND	10.00	ug/l
Chloroform		ND	1.00	ug/l
Bromochloromethane		ND	1.00	ug/l
1,1,1-Trichloroethane		ND	1.00	ug/l
4-Methyl-2-pentanone (MIBK)		ND	10.00	ug/l
2-Hexanone		ND	10.00	ug/l
Carbon tetrachloride		ND	1.00	ug/l
Benzene		ND	1.00	ug/l
1,2-Dichloroethane		ND	1.00	ug/l
Trichloroethene		ND	1.00	ug/l
1,2-Dichloropropane		ND	1.00	ug/l
Bromodichloromethane		ND	1.00	ug/l
Dibromomethane		ND	1.00	ug/l
cis-1,3-Dichloropropene		ND	1.00	ug/l
Toluene		ND	1.00	ug/l
trans-1,3-Dichloropropene		ND	1.00	ug/l
1,1,2-Trichloroethane		ND	1.00	ug/l
Tetrachloroethene		ND	1.00	ug/l
trans-1,4-Dichloro-2-butene		ND	1.00	ug/l
Dibromochloromethane		ND	1.00	ug/l
1,2-Dibromoethane		ND	1.00	ug/l
Chlorobenzene		ND	1.00	ug/l
1,1,1,2-Tetrachloroethane		ND	1.00	ug/l
Ethylbenzene		ND	1.00	ug/l
p,m-Xylene		ND	1.00	ug/l
o-Xylene		ND	1.00	ug/l
Styrene		ND	1.00	ug/l
Isopropylbenzene		ND	1.00	ug/l

Organics - Volatiles, Prep Batch ID: VF231107W2 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Blank (BLK) (continued)

Lab Sample ID: 231107A7.BLKW07A

Run in Batch: 231107A7, Run Date: 11/07/2023 14:46, Prep Date: 11/07/2023, Matrix: WW, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Bromoform		ND	1.00	ug/l
1,1,2,2-Tetrachloroethane		ND	1.00	ug/l
1,2,3-Trichloropropane		ND	1.00	ug/l
n-Propylbenzene		ND	1.00	ug/l
Bromobenzene		ND	1.00	ug/l
1,3,5-Trimethylbenzene		ND	1.00	ug/l
tert-Butylbenzene		ND	1.00	ug/l
1,2,4-Trimethylbenzene		ND	1.00	ug/l
sec-Butylbenzene		ND	1.00	ug/l
p-Isopropyltoluene		ND	1.00	ug/l
1,3-Dichlorobenzene		ND	1.00	ug/l
1,4-Dichlorobenzene		ND	1.00	ug/l
1,2-Dichlorobenzene		ND	1.00	ug/l
1,2,3-Trimethylbenzene		ND	1.00	ug/l
n-Butylbenzene		ND	1.00	ug/l
Hexachloroethane		ND	1.00	ug/l
1,2-Dibromo-3-chloropropane		ND	1.00	ug/l
1,2,4-Trichlorobenzene		ND	1.00	ug/l
1,2,3-Trichlorobenzene		ND	1.00	ug/l
Naphthalene		ND	1.00	ug/l
2-Methylnaphthalene		ND	1.00	ug/l

Laboratory Control Sample (LCS)

Lab Sample ID: 231107A7.LCSW07A

Run in Batch: 231107A7, Run Date: 11/07/2023 13:11, Prep Date: 11/07/2023, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Diethyl ether		102.4	67.4	121.2
Acetone		77.9	29.9	161.5
Methyl iodide		102.5	68.8	116.4
Carbon disulfide		89.4	63.8	137.4
tert-Methyl butyl ether (MTBE)		111.1	73.2	122.4
Acrylonitrile		104.6	69.9	128.9
2-Butanone (MEK)		100.7	44.0	134.4
Dichlorodifluoromethane		99.3	10.0	222.8
Chloromethane		102.2	23.8	166.5
Vinyl chloride		94.9	43.5	149.1
Bromomethane		92.5	56.8	151.3
Chloroethane		84.0	53.4	149.4
Trichlorofluoromethane		83.6	59.7	151.8
1,1-Dichloroethene		98.6	69.6	139.4
Methylene chloride		102.0	73.3	121.1
trans-1,2-Dichloroethene		98.9	73.6	129.3
1,1-Dichloroethane		104.5	71.5	126.2
cis-1,2-Dichloroethene		101.9	76.6	122.1
Tetrahydrofuran		96.6	59.0	117.9
Chloroform		101.4	78.4	124.0

Organics - Volatiles, Prep Batch ID: VF231107W2 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Laboratory Control Sample (LCS) (continued)

Lab Sample ID: 231107A7.LCSW07A

Run in Batch: 231107A7, Run Date: 11/07/2023 13:11, Prep Date: 11/07/2023, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Bromochloromethane		104.4	78.2	120.8
1,1,1-Trichloroethane		93.6	79.4	130.9
4-Methyl-2-pentanone (MIBK)		102.3	71.6	125.2
2-Hexanone		106.2	55.4	136.9
Carbon tetrachloride		91.7	72.6	133.0
Benzene		100.8	79.9	124.9
1,2-Dichloroethane		101.7	76.0	126.3
Trichloroethene		100.2	79.7	124.2
1,2-Dichloropropane		106.5	78.6	126.4
Bromodichloromethane		107.0	80.4	128.2
Dibromomethane		106.7	76.9	122.1
cis-1,3-Dichloropropene		113.1	79.8	129.9
Toluene		99.6	79.8	124.5
trans-1,3-Dichloropropene		109.0	74.0	131.3
1,1,2-Trichloroethane		104.5	78.7	123.1
Tetrachloroethene		100.2	74.5	124.5
trans-1,4-Dichloro-2-butene		101.3	68.6	135.4
Dibromochloromethane		102.8	74.6	127.2
1,2-Dibromoethane		101.2	70.3	133.7
Chlorobenzene		96.9	79.2	122.7
1,1,1,2-Tetrachloroethane		102.7	80.3	128.2
Ethylbenzene		95.5	79.5	129.1
p,m-Xylene		94.6	79.4	132.2
o-Xylene		95.5	80.2	131.0
Styrene		97.9	69.5	126.7
Isopropylbenzene		94.9	74.4	121.5
Bromoform		102.3	69.4	128.0
1,1,2,2-Tetrachloroethane		99.8	79.8	126.3
1,2,3-Trichloropropane		96.7	78.3	138.8
n-Propylbenzene		95.8	82.0	130.7
Bromobenzene		98.7	78.7	124.6
1,3,5-Trimethylbenzene		96.2	81.3	128.9
tert-Butylbenzene		93.9	80.7	128.9
1,2,4-Trimethylbenzene		95.7	81.4	130.8
sec-Butylbenzene		95.7	77.4	129.8
p-Isopropyltoluene		95.1	79.8	137.5
1,3-Dichlorobenzene		97.1	77.0	131.3
1,4-Dichlorobenzene		98.8	20.7	137.7
1,2-Dichlorobenzene		99.8	10.0	166.2
1,2,3-Trimethylbenzene		97.5	76.3	124.2
n-Butylbenzene		97.5	80.0	133.3
Hexachloroethane		107.6	23.8	138.1
1,2-Dibromo-3-chloropropane		106.4	21.2	189.4
1,2,4-Trichlorobenzene		107.2	27.4	143.4
1,2,3-Trichlorobenzene		109.0	75.4	131.4
Naphthalene		105.5	32.9	135.8

Organics - Volatiles, Prep Batch ID: VF231107W2 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Laboratory Control Sample (LCS) (continued)

Lab Sample ID: 231107A7.LCSW07A

Run in Batch: 231107A7, Run Date: 11/07/2023 13:11, Prep Date: 11/07/2023, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
2-Methylnaphthalene		95.7	25.5	165.5

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: 231107A7.LCSDW07A, Parent Sample ID: 231107A7.LCSW07A

Run in Batch: 231107A7, Run Date: 11/07/2023 13:35, Prep Date: 11/07/2023, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Diethyl ether		102.7	67.4	121.2	0.3	30.0
Acetone		71.9	29.9	161.5	8.0	30.0
Methyl iodide		101.0	68.8	116.4	1.4	30.0
Carbon disulfide		85.2	63.8	137.4	4.9	30.0
tert-Methyl butyl ether (MTBE)		114.1	73.2	122.4	2.7	30.0
Acrylonitrile		102.9	69.9	128.9	1.6	30.0
2-Butanone (MEK)		95.8	44.0	134.4	5.0	30.0
Dichlorodifluoromethane		96.7	10.0	222.8	2.7	30.0
Chloromethane		99.5	23.8	166.5	2.7	30.0
Vinyl chloride		90.2	43.5	149.1	5.0	30.0
Bromomethane		90.4	56.8	151.3	2.3	30.0
Chloroethane		86.5	53.4	149.4	3.0	30.0
Trichlorofluoromethane		80.2	59.7	151.8	4.2	30.0
1,1-Dichloroethene		94.9	69.6	139.4	3.8	30.0
Methylene chloride		102.4	73.3	121.1	0.5	30.0
trans-1,2-Dichloroethene		95.9	73.6	129.3	3.0	30.0
1,1-Dichloroethane		102.3	71.5	126.2	2.1	30.0
cis-1,2-Dichloroethene		101.0	76.6	122.1	0.8	30.0
Tetrahydrofuran		93.1	59.0	117.9	3.7	30.0
Chloroform		101.0	78.4	124.0	0.3	30.0
Bromochloromethane		104.2	78.2	120.8	0.2	30.0
1,1,1-Trichloroethane		91.8	79.4	130.9	1.9	30.0
4-Methyl-2-pentanone (MIBK)		99.5	71.6	125.2	2.8	30.0
2-Hexanone		102.1	55.4	136.9	3.9	30.0
Carbon tetrachloride		89.0	72.6	133.0	3.0	30.0
Benzene		98.4	79.9	124.9	2.5	30.0
1,2-Dichloroethane		99.2	76.0	126.3	2.5	30.0
Trichloroethene		96.0	79.7	124.2	4.2	30.0
1,2-Dichloropropane		104.9	78.6	126.4	1.5	30.0
Bromodichloromethane		104.2	80.4	128.2	2.7	30.0
Dibromomethane		102.4	76.9	122.1	4.2	30.0
cis-1,3-Dichloropropene		112.7	79.8	129.9	0.4	30.0
Toluene		96.8	79.8	124.5	2.9	30.0
trans-1,3-Dichloropropene		108.0	74.0	131.3	0.9	30.0
1,1,2-Trichloroethane		102.1	78.7	123.1	2.3	30.0
Tetrachloroethene		96.1	74.5	124.5	4.2	30.0
trans-1,4-Dichloro-2-butene		99.5	68.6	135.4	1.7	30.0
Dibromochloromethane		102.7	74.6	127.2	0.1	30.0
1,2-Dibromoethane		99.1	70.3	133.7	2.0	30.0
Chlorobenzene		95.2	79.2	122.7	1.8	30.0

Organics - Volatiles, Prep Batch ID: VF231107W2 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Laboratory Control Sample Duplicate (LCSD) (continued)

Lab Sample ID: 231107A7.LCSDW07A, Parent Sample ID: 231107A7.LCSW07A

Run in Batch: 231107A7, Run Date: 11/07/2023 13:35, Prep Date: 11/07/2023, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
1,1,1,2-Tetrachloroethane		101.8	80.3	128.2	0.9	30.0
Ethylbenzene		93.3	79.5	129.1	2.4	30.0
p,m-Xylene		91.2	79.4	132.2	3.7	30.0
o-Xylene		94.2	80.2	131.0	1.4	30.0
Styrene		96.4	69.5	126.7	1.5	30.0
Isopropylbenzene		92.4	74.4	121.5	2.6	30.0
Bromoform		100.4	69.4	128.0	1.9	30.0
1,1,2,2-Tetrachloroethane		96.6	79.8	126.3	3.2	30.0
1,2,3-Trichloropropane		93.6	78.3	138.8	3.3	30.0
n-Propylbenzene		93.0	82.0	130.7	3.0	30.0
Bromobenzene		98.5	78.7	124.6	0.2	30.0
1,3,5-Trimethylbenzene		93.6	81.3	128.9	2.8	30.0
tert-Butylbenzene		90.6	80.7	128.9	3.5	30.0
1,2,4-Trimethylbenzene		94.3	81.4	130.8	1.6	30.0
sec-Butylbenzene		93.7	77.4	129.8	2.1	30.0
p-Isopropyltoluene		93.5	79.8	137.5	1.7	30.0
1,3-Dichlorobenzene		96.5	77.0	131.3	0.6	30.0
1,4-Dichlorobenzene		97.6	20.7	137.7	1.2	30.0
1,2-Dichlorobenzene		98.4	10.0	166.2	1.4	30.0
1,2,3-Trimethylbenzene		97.7	76.3	124.2	0.2	30.0
n-Butylbenzene		94.2	80.0	133.3	3.5	30.0
Hexachloroethane		106.0	23.8	138.1	1.5	30.0
1,2-Dibromo-3-chloropropane		105.6	21.2	189.4	0.7	30.0
1,2,4-Trichlorobenzene		106.1	27.4	143.4	1.0	30.0
1,2,3-Trichlorobenzene		106.6	75.4	131.4	2.2	30.0
Naphthalene		104.2	32.9	135.8	1.2	30.0
2-Methylnaphthalene		95.2	25.5	165.5	0.5	30.0

Matrix Spike (MS)

Lab Sample ID: 231107A7.5512115M, Parent Sample ID: S55121.14

Run in Batch: 231107A7, Run Date: 11/07/2023 21:46, Prep Date: 11/07/2023, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Diethyl ether		105.6	67.4	121.2
Acetone		88.4	29.9	161.5
Methyl iodide		102.4	68.8	116.4
Carbon disulfide		88.3	63.8	137.4
tert-Methyl butyl ether (MTBE)		108.8	73.2	122.4
Acrylonitrile		107.0	69.9	128.9
2-Butanone (MEK)		101.4	44.0	134.4
Dichlorodifluoromethane		98.7	10.0	222.8
Chloromethane		101.4	23.8	166.5
Vinyl chloride		96.1	43.5	149.1
Bromomethane		90.1	56.8	151.3
Chloroethane		89.1	53.4	149.4
Trichlorofluoromethane		83.2	59.7	151.8
1,1-Dichloroethene		100.3	69.6	139.4

Organics - Volatiles, Prep Batch ID: VF231107W2 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Matrix Spike (MS) (continued)

Lab Sample ID: 231107A7.5512115M, Parent Sample ID: S55121.14

Run in Batch: 231107A7, Run Date: 11/07/2023 21:46, Prep Date: 11/07/2023, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Methylene chloride		102.6	73.3	121.1
trans-1,2-Dichloroethene		99.7	73.6	129.3
1,1-Dichloroethane		105.1	71.5	126.2
cis-1,2-Dichloroethene		103.2	76.6	122.1
Tetrahydrofuran		94.2	59.0	117.9
Chloroform		101.5	78.4	124.0
Bromochloromethane		104.2	78.2	120.8
1,1,1-Trichloroethane		93.1	79.4	130.9
4-Methyl-2-pentanone (MIBK)		101.4	71.6	125.2
2-Hexanone		103.3	55.4	136.9
Carbon tetrachloride		90.9	72.6	133.0
Benzene		100.5	79.9	124.9
1,2-Dichloroethane		100.2	76.0	126.3
Trichloroethene		99.3	79.7	124.2
1,2-Dichloropropane		104.5	78.6	126.4
Bromodichloromethane		102.8	80.4	128.2
Dibromomethane		103.7	76.9	122.1
cis-1,3-Dichloropropene		107.1	79.8	129.9
Toluene		98.5	79.8	124.5
trans-1,3-Dichloropropene		104.5	74.0	131.3
1,1,2-Trichloroethane		103.1	78.7	123.1
Tetrachloroethene		98.3	74.5	124.5
trans-1,4-Dichloro-2-butene		95.2	68.6	135.4
Dibromochloromethane		100.6	74.6	127.2
1,2-Dibromoethane		99.8	70.3	133.7
Chlorobenzene		96.5	79.2	122.7
1,1,1,2-Tetrachloroethane		100.1	80.3	128.2
Ethylbenzene		96.2	79.5	129.1
p,m-Xylene		94.7	79.4	132.2
o-Xylene		95.3	80.2	131.0
Styrene		96.5	69.5	126.7
Isopropylbenzene		94.0	74.4	121.5
Bromoform		99.0	69.4	128.0
1,1,2,2-Tetrachloroethane		96.1	79.8	126.3
1,2,3-Trichloropropane		95.8	78.3	138.8
n-Propylbenzene		93.7	82.0	130.7
Bromobenzene		97.7	78.7	124.6
1,3,5-Trimethylbenzene		94.1	81.3	128.9
tert-Butylbenzene		91.0	80.7	128.9
1,2,4-Trimethylbenzene		93.9	81.4	130.8
sec-Butylbenzene		91.2	77.4	129.8
p-Isopropyltoluene		91.0	79.8	137.5
1,3-Dichlorobenzene		94.6	77.0	131.3
1,4-Dichlorobenzene		95.4	20.7	137.7
1,2-Dichlorobenzene		97.1	10.0	166.2
1,2,3-Trimethylbenzene		94.7	76.3	124.2

Organics - Volatiles, Prep Batch ID: VF231107W2 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Matrix Spike (MS) (continued)

Lab Sample ID: 231107A7.5512115M, Parent Sample ID: S55121.14

Run in Batch: 231107A7, Run Date: 11/07/2023 21:46, Prep Date: 11/07/2023, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
n-Butylbenzene		91.2	80.0	133.3
Hexachloroethane		98.7	23.8	138.1
1,2-Dibromo-3-chloropropane		100.2	21.2	189.4
1,2,4-Trichlorobenzene		99.1	27.4	143.4
1,2,3-Trichlorobenzene		100.9	75.4	131.4
Naphthalene		98.2	32.9	135.8
2-Methylnaphthalene		78.6	25.5	165.5

Matrix Spike (MS)

Lab Sample ID: 231107A7.5533602M, Parent Sample ID: S55336.01

Run in Batch: 231107A7, Run Date: 11/07/2023 22:33, Prep Date: 11/07/2023, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Diethyl ether		101.4	67.4	121.2
Acetone		78.7	29.9	161.5
Methyl iodide		101.2	68.8	116.4
Carbon disulfide		87.0	63.8	137.4
tert-Methyl butyl ether (MTBE)		108.4	73.2	122.4
Acrylonitrile		101.7	69.9	128.9
2-Butanone (MEK)		90.9	44.0	134.4
Dichlorodifluoromethane		98.2	10.0	222.8
Chloromethane		102.2	23.8	166.5
Vinyl chloride		97.0	43.5	149.1
Bromomethane		90.9	56.8	151.3
Chloroethane		86.5	53.4	149.4
Trichlorofluoromethane		82.8	59.7	151.8
1,1-Dichloroethene		91.3	69.6	139.4
Methylene chloride		101.6	73.3	121.1
trans-1,2-Dichloroethene		98.2	73.6	129.3
1,1-Dichloroethane		103.5	71.5	126.2
cis-1,2-Dichloroethene		101.0	76.6	122.1
Tetrahydrofuran		86.7	59.0	117.9
Chloroform		99.8	78.4	124.0
Bromochloromethane		101.8	78.2	120.8
1,1,1-Trichloroethane		93.5	79.4	130.9
4-Methyl-2-pentanone (MIBK)		94.0	71.6	125.2
2-Hexanone		95.1	55.4	136.9
Carbon tetrachloride		90.9	72.6	133.0
Benzene		98.7	79.9	124.9
1,2-Dichloroethane		97.2	76.0	126.3
Trichloroethene		97.7	79.7	124.2
1,2-Dichloropropane		104.0	78.6	126.4
Bromodichloromethane		101.5	80.4	128.2
Dibromomethane		101.2	76.9	122.1
cis-1,3-Dichloropropene		107.8	79.8	129.9
Toluene		97.0	79.8	124.5
trans-1,3-Dichloropropene		105.7	74.0	131.3

Organics - Volatiles, Prep Batch ID: VF231107W2 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Matrix Spike (MS) (continued)

Lab Sample ID: 231107A7.5533602M, Parent Sample ID: S55336.01

Run in Batch: 231107A7, Run Date: 11/07/2023 22:33, Prep Date: 11/07/2023, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
1,1,2-Trichloroethane		99.4	78.7	123.1
Tetrachloroethene		97.1	74.5	124.5
trans-1,4-Dichloro-2-butene		89.1	68.6	135.4
Dibromochloromethane		99.0	74.6	127.2
1,2-Dibromoethane		97.4	70.3	133.7
Chlorobenzene		95.0	79.2	122.7
1,1,1,2-Tetrachloroethane		100.1	80.3	128.2
Ethylbenzene		93.7	79.5	129.1
p,m-Xylene		92.3	79.4	132.2
o-Xylene		92.5	80.2	131.0
Styrene		95.0	69.5	126.7
Isopropylbenzene		93.0	74.4	121.5
Bromoform		95.1	69.4	128.0
1,1,2,2-Tetrachloroethane		92.5	79.8	126.3
1,2,3-Trichloropropane		87.5	78.3	138.8
n-Propylbenzene		92.1	82.0	130.7
Bromobenzene		96.0	78.7	124.6
1,3,5-Trimethylbenzene		93.3	81.3	128.9
tert-Butylbenzene		90.4	80.7	128.9
1,2,4-Trimethylbenzene		92.7	81.4	130.8
sec-Butylbenzene		91.8	77.4	129.8
p-Isopropyltoluene		91.7	79.8	137.5
1,3-Dichlorobenzene		94.4	77.0	131.3
1,4-Dichlorobenzene		95.6	20.7	137.7
1,2-Dichlorobenzene		95.5	10.0	166.2
1,2,3-Trimethylbenzene		94.2	76.3	124.2
n-Butylbenzene		92.6	80.0	133.3
Hexachloroethane		102.8	23.8	138.1
1,2-Dibromo-3-chloropropane		99.6	21.2	189.4
1,2,4-Trichlorobenzene		101.9	27.4	143.4
1,2,3-Trichlorobenzene		102.9	75.4	131.4
Naphthalene		97.3	32.9	135.8
2-Methylnaphthalene		86.1	25.5	165.5

Matrix Spike Duplicate (MSD)

Lab Sample ID: 231107A7.5512116N, Parent Sample ID: 231107A7.5512115M

Run in Batch: 231107A7, Run Date: 11/07/2023 22:10, Prep Date: 11/07/2023, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Diethyl ether		101.0	67.4	121.2	4.4	30.0
Acetone		102.2	29.9	161.5	14.3	30.0
Methyl iodide		97.6	68.8	116.4	4.8	30.0
Carbon disulfide		83.1	63.8	137.4	6.1	30.0
tert-Methyl butyl ether (MTBE)		103.0	73.2	122.4	5.5	30.0
Acrylonitrile		115.9	69.9	128.9	8.0	30.0
2-Butanone (MEK)		111.7	44.0	134.4	9.7	30.0
Dichlorodifluoromethane		98.6	10.0	222.8	0.1	30.0

Organics - Volatiles, Prep Batch ID: VF231107W2 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Matrix Spike Duplicate (MSD) (continued)

Lab Sample ID: 231107A7.5512116N, Parent Sample ID: 231107A7.5512115M

Run in Batch: 231107A7, Run Date: 11/07/2023 22:10, Prep Date: 11/07/2023, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Chloromethane		97.8	23.8	166.5	3.6	30.0
Vinyl chloride		93.2	43.5	149.1	3.1	30.0
Bromomethane		88.0	56.8	151.3	2.4	30.0
Chloroethane		86.4	53.4	149.4	3.0	30.0
Trichlorofluoromethane		80.5	59.7	151.8	3.3	30.0
1,1-Dichloroethene		90.8	69.6	139.4	9.9	30.0
Methylene chloride		94.9	73.3	121.1	7.7	30.0
trans-1,2-Dichloroethene		93.9	73.6	129.3	6.0	30.0
1,1-Dichloroethane		100.1	71.5	126.2	4.9	30.0
cis-1,2-Dichloroethene		97.3	76.6	122.1	5.9	30.0
Tetrahydrofuran		109.9	59.0	117.9	15.3	30.0
Chloroform		95.5	78.4	124.0	6.1	30.0
Bromochloromethane		96.8	78.2	120.8	7.3	30.0
1,1,1-Trichloroethane		89.8	79.4	130.9	3.6	30.0
4-Methyl-2-pentanone (MIBK)		115.5	71.6	125.2	13.0	30.0
2-Hexanone		118.9	55.4	136.9	14.1	30.0
Carbon tetrachloride		88.9	72.6	133.0	2.3	30.0
Benzene		95.9	79.9	124.9	4.7	30.0
1,2-Dichloroethane		94.3	76.0	126.3	6.1	30.0
Trichloroethene		96.0	79.7	124.2	3.4	30.0
1,2-Dichloropropane		99.4	78.6	126.4	5.0	30.0
Bromodichloromethane		98.4	80.4	128.2	4.4	30.0
Dibromomethane		101.4	76.9	122.1	2.2	30.0
cis-1,3-Dichloropropene		102.9	79.8	129.9	3.9	30.0
Toluene		94.7	79.8	124.5	3.9	30.0
trans-1,3-Dichloropropene		101.8	74.0	131.3	2.6	30.0
1,1,2-Trichloroethane		100.7	78.7	123.1	2.3	30.0
Tetrachloroethene		96.3	74.5	124.5	2.1	30.0
trans-1,4-Dichloro-2-butene		101.9	68.6	135.4	6.8	30.0
Dibromochloromethane		98.2	74.6	127.2	2.4	30.0
1,2-Dibromoethane		101.3	70.3	133.7	1.5	30.0
Chlorobenzene		93.2	79.2	122.7	3.6	30.0
1,1,1,2-Tetrachloroethane		96.6	80.3	128.2	3.6	30.0
Ethylbenzene		93.7	79.5	129.1	2.6	30.0
p,m-Xylene		92.7	79.4	132.2	2.1	30.0
o-Xylene		92.1	80.2	131.0	3.4	30.0
Styrene		92.3	69.5	126.7	4.5	30.0
Isopropylbenzene		92.5	74.4	121.5	1.6	30.0
Bromoform		101.2	69.4	128.0	2.2	30.0
1,1,2,2-Tetrachloroethane		102.2	79.8	126.3	6.1	30.0
1,2,3-Trichloropropane		102.8	78.3	138.8	7.1	30.0
n-Propylbenzene		93.9	82.0	130.7	0.3	30.0
Bromobenzene		93.5	78.7	124.6	4.4	30.0
1,3,5-Trimethylbenzene		92.8	81.3	128.9	1.3	30.0
tert-Butylbenzene		91.1	80.7	128.9	0.0	30.0
1,2,4-Trimethylbenzene		92.3	81.4	130.8	1.7	30.0

Organics - Volatiles, Prep Batch ID: VF231107W2 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Matrix Spike Duplicate (MSD) (continued)

Lab Sample ID: 231107A7.5512116N, Parent Sample ID: 231107A7.5512115M

Run in Batch: 231107A7, Run Date: 11/07/2023 22:10, Prep Date: 11/07/2023, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
sec-Butylbenzene		94.0	77.4	129.8	3.0	30.0
p-Isopropyltoluene		92.8	79.8	137.5	2.0	30.0
1,3-Dichlorobenzene		93.4	77.0	131.3	1.3	30.0
1,4-Dichlorobenzene		94.5	20.7	137.7	1.0	30.0
1,2-Dichlorobenzene		94.5	10.0	166.2	2.7	30.0
1,2,3-Trimethylbenzene		93.1	76.3	124.2	1.7	30.0
n-Butylbenzene		93.9	80.0	133.3	2.9	30.0
Hexachloroethane		102.4	23.8	138.1	3.7	30.0
1,2-Dibromo-3-chloropropane		121.6	21.2	189.4	19.3	30.0
1,2,4-Trichlorobenzene		101.5	27.4	143.4	2.4	30.0
1,2,3-Trichlorobenzene		106.4	75.4	131.4	5.3	30.0
Naphthalene		113.3	32.9	135.8	14.3	30.0
2-Methylnaphthalene		105.3	25.5	165.5	28.9	30.0

Matrix Spike Duplicate (MSD)

Lab Sample ID: 231107A7.5533603N, Parent Sample ID: 231107A7.5533602M

Run in Batch: 231107A7, Run Date: 11/07/2023 22:57, Prep Date: 11/07/2023, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Diethyl ether		104.5	67.4	121.2	3.0	30.0
Acetone		88.2	29.9	161.5	11.2	30.0
Methyl iodide		100.0	68.8	116.4	1.2	30.0
Carbon disulfide		85.4	63.8	137.4	1.9	30.0
tert-Methyl butyl ether (MTBE)		109.9	73.2	122.4	1.4	30.0
Acrylonitrile		107.4	69.9	128.9	5.4	30.0
2-Butanone (MEK)		101.3	44.0	134.4	10.9	30.0
Dichlorodifluoromethane		97.7	10.0	222.8	0.5	30.0
Chloromethane		99.0	23.8	166.5	3.2	30.0
Vinyl chloride		88.6	43.5	149.1	9.0	30.0
Bromomethane		88.9	56.8	151.3	2.2	30.0
Chloroethane		83.9	53.4	149.4	3.1	30.0
Trichlorofluoromethane		81.4	59.7	151.8	1.7	30.0
1,1-Dichloroethene		96.4	69.6	139.4	5.4	30.0
Methylene chloride		103.0	73.3	121.1	1.3	30.0
trans-1,2-Dichloroethene		96.5	73.6	129.3	1.7	30.0
1,1-Dichloroethane		103.8	71.5	126.2	0.3	30.0
cis-1,2-Dichloroethene		101.3	76.6	122.1	0.3	30.0
Tetrahydrofuran		97.3	59.0	117.9	11.6	30.0
Chloroform		99.8	78.4	124.0	0.0	30.0
Bromochloromethane		103.9	78.2	120.8	2.0	30.0
1,1,1-Trichloroethane		92.1	79.4	130.9	1.5	30.0
4-Methyl-2-pentanone (MIBK)		106.4	71.6	125.2	12.4	30.0
2-Hexanone		106.4	55.4	136.9	11.2	30.0
Carbon tetrachloride		89.4	72.6	133.0	1.6	30.0
Benzene		98.9	79.9	124.9	0.2	30.0
1,2-Dichloroethane		99.9	76.0	126.3	2.7	30.0
Trichloroethene		97.3	79.7	124.2	0.4	30.0

Organics - Volatiles, Prep Batch ID: VF231107W2 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Matrix Spike Duplicate (MSD) (continued)

Lab Sample ID: 231107A7.5533603N, Parent Sample ID: 231107A7.5533602M

Run in Batch: 231107A7, Run Date: 11/07/2023 22:57, Prep Date: 11/07/2023, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
1,2-Dichloropropane		104.0	78.6	126.4	0.0	30.0
Bromodichloromethane		103.5	80.4	128.2	1.9	30.0
Dibromomethane		104.9	76.9	122.1	3.7	30.0
cis-1,3-Dichloropropene		109.3	79.8	129.9	1.3	30.0
Toluene		96.9	79.8	124.5	0.1	30.0
trans-1,3-Dichloropropene		107.8	74.0	131.3	2.0	30.0
1,1,2-Trichloroethane		103.2	78.7	123.1	3.8	30.0
Tetrachloroethene		96.4	74.5	124.5	0.7	30.0
trans-1,4-Dichloro-2-butene		97.7	68.6	135.4	9.3	30.0
Dibromochloromethane		99.8	74.6	127.2	0.8	30.0
1,2-Dibromoethane		100.9	70.3	133.7	3.6	30.0
Chlorobenzene		94.4	79.2	122.7	0.7	30.0
1,1,1,2-Tetrachloroethane		100.7	80.3	128.2	0.6	30.0
Ethylbenzene		92.7	79.5	129.1	1.1	30.0
p,m-Xylene		91.4	79.4	132.2	0.9	30.0
o-Xylene		92.0	80.2	131.0	0.6	30.0
Styrene		94.1	69.5	126.7	1.0	30.0
Isopropylbenzene		91.3	74.4	121.5	1.9	30.0
Bromoform		100.0	69.4	128.0	5.0	30.0
1,1,2,2-Tetrachloroethane		97.0	79.8	126.3	4.7	30.0
1,2,3-Trichloropropane		94.0	78.3	138.8	7.1	30.0
n-Propylbenzene		91.9	82.0	130.7	0.3	30.0
Bromobenzene		94.8	78.7	124.6	1.2	30.0
1,3,5-Trimethylbenzene		92.0	81.3	128.9	1.4	30.0
tert-Butylbenzene		89.9	80.7	128.9	0.6	30.0
1,2,4-Trimethylbenzene		91.4	81.4	130.8	1.4	30.0
sec-Butylbenzene		93.0	77.4	129.8	1.3	30.0
p-Isopropyltoluene		91.9	79.8	137.5	0.2	30.0
1,3-Dichlorobenzene		94.6	77.0	131.3	0.1	30.0
1,4-Dichlorobenzene		95.8	20.7	137.7	0.2	30.0
1,2-Dichlorobenzene		97.3	10.0	166.2	1.9	30.0
1,2,3-Trimethylbenzene		95.1	76.3	124.2	0.9	30.0
n-Butylbenzene		92.6	80.0	133.3	0.0	30.0
Hexachloroethane		102.6	23.8	138.1	0.2	30.0
1,2-Dibromo-3-chloropropane		111.2	21.2	189.4	11.0	30.0
1,2,4-Trichlorobenzene		103.5	27.4	143.4	1.5	30.0
1,2,3-Trichlorobenzene		106.3	75.4	131.4	3.2	30.0
Naphthalene		105.4	32.9	135.8	8.0	30.0
2-Methylnaphthalene		94.3	25.5	165.5	9.1	30.0

Organics - Volatiles, Prep Batch ID: VF231107W4

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Blank (BLK)

Lab Sample ID: 231107B7.BLKW07B

Run in Batch: 231107B7, Run Date: 11/08/2023 02:03, Prep Date: 11/07/2023, Matrix: WW, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Diethyl ether		ND	1.00	ug/l
Acetone		ND	10.00	ug/l
Methyl iodide		ND	1.00	ug/l
Carbon disulfide		ND	1.00	ug/l
tert-Methyl butyl ether (MTBE)		ND	1.00	ug/l
Acrylonitrile		ND	1.00	ug/l
2-Butanone (MEK)		ND	10.00	ug/l
Dichlorodifluoromethane		ND	1.00	ug/l
Chloromethane		ND	1.00	ug/l
Vinyl chloride		ND	1.00	ug/l
Bromomethane		ND	1.00	ug/l
Chloroethane		ND	1.00	ug/l
Trichlorofluoromethane		ND	1.00	ug/l
1,1-Dichloroethene		ND	1.00	ug/l
Methylene chloride		ND	1.00	ug/l
trans-1,2-Dichloroethene		ND	1.00	ug/l
1,1-Dichloroethane		ND	1.00	ug/l
cis-1,2-Dichloroethene		ND	1.00	ug/l
Tetrahydrofuran		ND	10.00	ug/l
Chloroform		ND	1.00	ug/l
Bromochloromethane		ND	1.00	ug/l
1,1,1-Trichloroethane		ND	1.00	ug/l
4-Methyl-2-pentanone (MIBK)		ND	10.00	ug/l
2-Hexanone		ND	10.00	ug/l
Carbon tetrachloride		ND	1.00	ug/l
Benzene		ND	1.00	ug/l
1,2-Dichloroethane		ND	1.00	ug/l
Trichloroethene		ND	1.00	ug/l
1,2-Dichloropropane		ND	1.00	ug/l
Bromodichloromethane		ND	1.00	ug/l
Dibromomethane		ND	1.00	ug/l
cis-1,3-Dichloropropene		ND	1.00	ug/l
Toluene		ND	1.00	ug/l
trans-1,3-Dichloropropene		ND	1.00	ug/l
1,1,2-Trichloroethane		ND	1.00	ug/l
Tetrachloroethene		ND	1.00	ug/l
trans-1,4-Dichloro-2-butene		ND	1.00	ug/l
Dibromochloromethane		ND	1.00	ug/l
1,2-Dibromoethane		ND	1.00	ug/l
Chlorobenzene		ND	1.00	ug/l
1,1,1,2-Tetrachloroethane		ND	1.00	ug/l
Ethylbenzene		ND	1.00	ug/l
p,m-Xylene		ND	1.00	ug/l
o-Xylene		ND	1.00	ug/l
Styrene		ND	1.00	ug/l
Isopropylbenzene		ND	1.00	ug/l

Organics - Volatiles, Prep Batch ID: VF231107W4 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Blank (BLK) (continued)

Lab Sample ID: 231107B7.BLKW07B

Run in Batch: 231107B7, Run Date: 11/08/2023 02:03, Prep Date: 11/07/2023, Matrix: WW, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Bromoform		ND	1.00	ug/l
1,1,2,2-Tetrachloroethane		ND	1.00	ug/l
1,2,3-Trichloropropane		ND	1.00	ug/l
n-Propylbenzene		ND	1.00	ug/l
Bromobenzene		ND	1.00	ug/l
1,3,5-Trimethylbenzene		ND	1.00	ug/l
tert-Butylbenzene		ND	1.00	ug/l
1,2,4-Trimethylbenzene		ND	1.00	ug/l
sec-Butylbenzene		ND	1.00	ug/l
p-Isopropyltoluene		ND	1.00	ug/l
1,3-Dichlorobenzene		ND	1.00	ug/l
1,4-Dichlorobenzene		ND	1.00	ug/l
1,2-Dichlorobenzene		ND	1.00	ug/l
1,2,3-Trimethylbenzene		ND	1.00	ug/l
n-Butylbenzene		ND	1.00	ug/l
Hexachloroethane		ND	1.00	ug/l
1,2-Dibromo-3-chloropropane		ND	1.00	ug/l
1,2,4-Trichlorobenzene		ND	1.00	ug/l
1,2,3-Trichlorobenzene		ND	1.00	ug/l
Naphthalene		ND	1.00	ug/l
2-Methylnaphthalene		ND	1.00	ug/l

Laboratory Control Sample (LCS)

Lab Sample ID: 231107B7.LCSW07B

Run in Batch: 231107B7, Run Date: 11/08/2023 00:30, Prep Date: 11/07/2023, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Diethyl ether		107.3	67.4	121.2
Acetone		106.1	29.9	161.5
Methyl iodide		105.9	68.8	116.4
Carbon disulfide		89.7	63.8	137.4
tert-Methyl butyl ether (MTBE)		116.6	73.2	122.4
Acrylonitrile		121.4	69.9	128.9
2-Butanone (MEK)		119.5	44.0	134.4
Dichlorodifluoromethane		102.4	10.0	222.8
Chloromethane		106.1	23.8	166.5
Vinyl chloride		100.3	43.5	149.1
Bromomethane		95.4	56.8	151.3
Chloroethane		93.6	53.4	149.4
Trichlorofluoromethane		80.6	59.7	151.8
1,1-Dichloroethene		101.4	69.6	139.4
Methylene chloride		101.7	73.3	121.1
trans-1,2-Dichloroethene		101.5	73.6	129.3
1,1-Dichloroethane		108.6	71.5	126.2
cis-1,2-Dichloroethene		104.9	76.6	122.1
Tetrahydrofuran		116.5	59.0	117.9
Chloroform		104.4	78.4	124.0

Organics - Volatiles, Prep Batch ID: VF231107W4 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Laboratory Control Sample (LCS) (continued)

Lab Sample ID: 231107B7.LCSW07B

Run in Batch: 231107B7, Run Date: 11/08/2023 00:30, Prep Date: 11/07/2023, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Bromochloromethane		106.2	78.2	120.8
1,1,1-Trichloroethane		96.3	79.4	130.9
4-Methyl-2-pentanone (MIBK)		125.1	71.6	125.2
2-Hexanone		131.1	55.4	136.9
Carbon tetrachloride		98.3	72.6	133.0
Benzene		106.4	79.9	124.9
1,2-Dichloroethane		104.5	76.0	126.3
Trichloroethene		105.3	79.7	124.2
1,2-Dichloropropane		111.9	78.6	126.4
Bromodichloromethane		109.7	80.4	128.2
Dibromomethane		112.1	76.9	122.1
cis-1,3-Dichloropropene		116.1	79.8	129.9
Toluene		105.3	79.8	124.5
trans-1,3-Dichloropropene		112.5	74.0	131.3
1,1,2-Trichloroethane		110.6	78.7	123.1
Tetrachloroethene		104.4	74.5	124.5
trans-1,4-Dichloro-2-butene		119.6	68.6	135.4
Dibromochloromethane		109.3	74.6	127.2
1,2-Dibromoethane		112.4	70.3	133.7
Chlorobenzene		103.3	79.2	122.7
1,1,1,2-Tetrachloroethane		108.6	80.3	128.2
Ethylbenzene		103.2	79.5	129.1
p,m-Xylene		101.1	79.4	132.2
o-Xylene		100.5	80.2	131.0
Styrene		103.4	69.5	126.7
Isopropylbenzene		101.9	74.4	121.5
Bromoform		113.2	69.4	128.0
1,1,2,2-Tetrachloroethane		111.5	79.8	126.3
1,2,3-Trichloropropane		112.6	78.3	138.8
n-Propylbenzene		102.2	82.0	130.7
Bromobenzene		104.3	78.7	124.6
1,3,5-Trimethylbenzene		102.7	81.3	128.9
tert-Butylbenzene		100.5	80.7	128.9
1,2,4-Trimethylbenzene		103.2	81.4	130.8
sec-Butylbenzene		103.6	77.4	129.8
p-Isopropyltoluene		102.0	79.8	137.5
1,3-Dichlorobenzene		103.1	77.0	131.3
1,4-Dichlorobenzene		103.4	20.7	137.7
1,2-Dichlorobenzene		105.0	10.0	166.2
1,2,3-Trimethylbenzene		104.0	76.3	124.2
n-Butylbenzene		103.0	80.0	133.3
Hexachloroethane		115.6	23.8	138.1
1,2-Dibromo-3-chloropropane		134.7	21.2	189.4
1,2,4-Trichlorobenzene		114.0	27.4	143.4
1,2,3-Trichlorobenzene		119.0	75.4	131.4
Naphthalene		125.0	32.9	135.8

Organics - Volatiles, Prep Batch ID: VF231107W4 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Laboratory Control Sample (LCS) (continued)

Lab Sample ID: 231107B7.LCSW07B

Run in Batch: 231107B7, Run Date: 11/08/2023 00:30, Prep Date: 11/07/2023, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
2-Methylnaphthalene		119.4	25.5	165.5

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: 231107B7.LCSDW07B, Parent Sample ID: 231107B7.LCSW07B

Run in Batch: 231107B7, Run Date: 11/08/2023 00:53, Prep Date: 11/07/2023, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Diethyl ether		95.2	67.4	121.2	12.0	30.0
Acetone		91.8	29.9	161.5	14.5	30.0
Methyl iodide		95.8	68.8	116.4	10.0	30.0
Carbon disulfide		83.4	63.8	137.4	7.3	30.0
tert-Methyl butyl ether (MTBE)		99.6	73.2	122.4	15.8	30.0
Acrylonitrile		101.7	69.9	128.9	17.6	30.0
2-Butanone (MEK)		98.6	44.0	134.4	19.2	30.0
Dichlorodifluoromethane		94.3	10.0	222.8	8.3	30.0
Chloromethane		96.4	23.8	166.5	9.6	30.0
Vinyl chloride		90.6	43.5	149.1	10.2	30.0
Bromomethane		86.0	56.8	151.3	10.3	30.0
Chloroethane		81.8	53.4	149.4	13.5	30.0
Trichlorofluoromethane		77.9	59.7	151.8	3.5	30.0
1,1-Dichloroethene		93.8	69.6	139.4	7.8	30.0
Methylene chloride		95.3	73.3	121.1	6.5	30.0
trans-1,2-Dichloroethene		93.3	73.6	129.3	8.4	30.0
1,1-Dichloroethane		98.8	71.5	126.2	9.4	30.0
cis-1,2-Dichloroethene		95.0	76.6	122.1	9.8	30.0
Tetrahydrofuran		99.9	59.0	117.9	15.3	30.0
Chloroform		94.2	78.4	124.0	10.3	30.0
Bromochloromethane		95.5	78.2	120.8	10.5	30.0
1,1,1-Trichloroethane		88.3	79.4	130.9	8.7	30.0
4-Methyl-2-pentanone (MIBK)		104.0	71.6	125.2	18.4	30.0
2-Hexanone		108.7	55.4	136.9	18.7	30.0
Carbon tetrachloride		88.0	72.6	133.0	11.0	30.0
Benzene		96.0	79.9	124.9	10.3	30.0
1,2-Dichloroethane		95.0	76.0	126.3	9.6	30.0
Trichloroethene		95.2	79.7	124.2	10.0	30.0
1,2-Dichloropropane		99.7	78.6	126.4	11.5	30.0
Bromodichloromethane		99.5	80.4	128.2	9.8	30.0
Dibromomethane		99.9	76.9	122.1	11.5	30.0
cis-1,3-Dichloropropene		104.1	79.8	129.9	10.9	30.0
Toluene		95.8	79.8	124.5	9.4	30.0
trans-1,3-Dichloropropene		102.3	74.0	131.3	9.6	30.0
1,1,2-Trichloroethane		98.8	78.7	123.1	11.3	30.0
Tetrachloroethene		94.2	74.5	124.5	10.2	30.0
trans-1,4-Dichloro-2-butene		97.6	68.6	135.4	20.2	30.0
Dibromochloromethane		98.6	74.6	127.2	10.3	30.0
1,2-Dibromoethane		99.0	70.3	133.7	12.6	30.0
Chlorobenzene		93.2	79.2	122.7	10.3	30.0

Organics - Volatiles, Prep Batch ID: VF231107W4 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Laboratory Control Sample Duplicate (LCSD) (continued)

Lab Sample ID: 231107B7.LCSDW07B, Parent Sample ID: 231107B7.LCSW07B

Run in Batch: 231107B7, Run Date: 11/08/2023 00:53, Prep Date: 11/07/2023, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
1,1,1,2-Tetrachloroethane		98.5	80.3	128.2	9.7	30.0
Ethylbenzene		94.2	79.5	129.1	9.1	30.0
p,m-Xylene		91.5	79.4	132.2	10.0	30.0
o-Xylene		92.2	80.2	131.0	8.7	30.0
Styrene		92.9	69.5	126.7	10.7	30.0
Isopropylbenzene		92.0	74.4	121.5	10.2	30.0
Bromoform		98.7	69.4	128.0	13.7	30.0
1,1,2,2-Tetrachloroethane		98.7	79.8	126.3	12.1	30.0
1,2,3-Trichloropropane		96.5	78.3	138.8	15.3	30.0
n-Propylbenzene		92.2	82.0	130.7	10.3	30.0
Bromobenzene		94.0	78.7	124.6	10.4	30.0
1,3,5-Trimethylbenzene		93.0	81.3	128.9	10.0	30.0
tert-Butylbenzene		90.2	80.7	128.9	10.9	30.0
1,2,4-Trimethylbenzene		92.3	81.4	130.8	11.1	30.0
sec-Butylbenzene		93.0	77.4	129.8	10.8	30.0
p-Isopropyltoluene		91.9	79.8	137.5	10.4	30.0
1,3-Dichlorobenzene		94.6	77.0	131.3	8.6	30.0
1,4-Dichlorobenzene		95.2	20.7	137.7	8.3	30.0
1,2-Dichlorobenzene		95.7	10.0	166.2	9.2	30.0
1,2,3-Trimethylbenzene		95.2	76.3	124.2	8.9	30.0
n-Butylbenzene		91.8	80.0	133.3	11.5	30.0
Hexachloroethane		105.1	23.8	138.1	9.5	30.0
1,2-Dibromo-3-chloropropane		113.8	21.2	189.4	16.8	30.0
1,2,4-Trichlorobenzene		101.4	27.4	143.4	11.7	30.0
1,2,3-Trichlorobenzene		106.2	75.4	131.4	11.4	30.0
Naphthalene		107.2	32.9	135.8	15.4	30.0
2-Methylnaphthalene		100.4	25.5	165.5	17.3	30.0

Organics - Volatiles, Prep Batch ID: VF231108W1

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Blank (BLK)

Lab Sample ID: 231108A9.BLKW08A

Run in Batch: 231108A9, Run Date: 11/08/2023 13:35, Prep Date: 11/08/2023, Matrix: WW, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Diethyl ether		ND	1.00	ug/l
Acetone		ND	10.00	ug/l
Methyl iodide		ND	1.00	ug/l
Carbon disulfide		ND	1.00	ug/l
tert-Methyl butyl ether (MTBE)		ND	1.00	ug/l
Acrylonitrile		ND	1.00	ug/l
2-Butanone (MEK)		ND	10.00	ug/l
Dichlorodifluoromethane		ND	1.00	ug/l
Chloromethane		ND	1.00	ug/l
Vinyl chloride		ND	1.00	ug/l
Bromomethane		ND	1.00	ug/l
Chloroethane		ND	1.00	ug/l
Trichlorofluoromethane		ND	1.00	ug/l
1,1-Dichloroethene		ND	1.00	ug/l
Methylene chloride		ND	1.00	ug/l
trans-1,2-Dichloroethene		ND	1.00	ug/l
1,1-Dichloroethane		ND	1.00	ug/l
cis-1,2-Dichloroethene		ND	1.00	ug/l
Tetrahydrofuran		ND	10.00	ug/l
Chloroform		ND	1.00	ug/l
Bromochloromethane		ND	1.00	ug/l
1,1,1-Trichloroethane		ND	1.00	ug/l
4-Methyl-2-pentanone (MIBK)		ND	10.00	ug/l
2-Hexanone		ND	10.00	ug/l
Carbon tetrachloride		ND	1.00	ug/l
Benzene		ND	1.00	ug/l
1,2-Dichloroethane		ND	1.00	ug/l
Trichloroethene		ND	1.00	ug/l
1,2-Dichloropropane		ND	1.00	ug/l
Bromodichloromethane		ND	1.00	ug/l
Dibromomethane		ND	1.00	ug/l
cis-1,3-Dichloropropene		ND	1.00	ug/l
Toluene		ND	1.00	ug/l
trans-1,3-Dichloropropene		ND	1.00	ug/l
1,1,2-Trichloroethane		ND	1.00	ug/l
Tetrachloroethene		ND	1.00	ug/l
trans-1,4-Dichloro-2-butene		ND	1.00	ug/l
Dibromochloromethane		ND	1.00	ug/l
1,2-Dibromoethane		ND	1.00	ug/l
Chlorobenzene		ND	1.00	ug/l
1,1,1,2-Tetrachloroethane		ND	1.00	ug/l
Ethylbenzene		ND	1.00	ug/l
p,m-Xylene		ND	1.00	ug/l
o-Xylene		ND	1.00	ug/l
Styrene		ND	1.00	ug/l
Isopropylbenzene		ND	1.00	ug/l

Organics - Volatiles, Prep Batch ID: VF231108W1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Blank (BLK) (continued)

Lab Sample ID: 231108A9.BLKW08A

Run in Batch: 231108A9, Run Date: 11/08/2023 13:35, Prep Date: 11/08/2023, Matrix: WW, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Bromoform		ND	1.00	ug/l
1,1,2,2-Tetrachloroethane		ND	1.00	ug/l
1,2,3-Trichloropropane		ND	1.00	ug/l
n-Propylbenzene		ND	1.00	ug/l
Bromobenzene		ND	1.00	ug/l
1,3,5-Trimethylbenzene		ND	1.00	ug/l
tert-Butylbenzene		ND	1.00	ug/l
1,2,4-Trimethylbenzene		ND	1.00	ug/l
sec-Butylbenzene		ND	1.00	ug/l
p-Isopropyltoluene		ND	1.00	ug/l
1,3-Dichlorobenzene		ND	1.00	ug/l
1,4-Dichlorobenzene		ND	1.00	ug/l
1,2-Dichlorobenzene		ND	1.00	ug/l
1,2,3-Trimethylbenzene		ND	1.00	ug/l
n-Butylbenzene		ND	1.00	ug/l
Hexachloroethane		ND	1.00	ug/l
1,2-Dibromo-3-chloropropane		ND	1.00	ug/l
1,2,4-Trichlorobenzene		ND	1.00	ug/l
1,2,3-Trichlorobenzene		ND	1.00	ug/l
Naphthalene		ND	1.00	ug/l
2-Methylnaphthalene		ND	1.00	ug/l

Laboratory Control Sample (LCS)

Lab Sample ID: 231108A9.LCSW08A

Run in Batch: 231108A9, Run Date: 11/08/2023 11:56, Prep Date: 11/08/2023, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Diethyl ether		103.3	67.4	121.2
Acetone		84.0	29.9	161.5
Methyl iodide		106.4	68.8	116.4
Carbon disulfide		96.3	63.8	137.4
tert-Methyl butyl ether (MTBE)		98.1	73.2	122.4
Acrylonitrile		98.6	69.9	128.9
2-Butanone (MEK)		92.5	44.0	134.4
Dichlorodifluoromethane		87.6	10.0	222.8
Chloromethane		88.3	23.8	166.5
Vinyl chloride		85.0	43.5	149.1
Bromomethane		94.9	56.8	151.3
Chloroethane		88.2	53.4	149.4
Trichlorofluoromethane		91.4	59.7	151.8
1,1-Dichloroethene		94.9	69.6	139.4
Methylene chloride		104.0	73.3	121.1
trans-1,2-Dichloroethene		96.7	73.6	129.3
1,1-Dichloroethane		99.5	71.5	126.2
cis-1,2-Dichloroethene		105.9	76.6	122.1
Tetrahydrofuran		88.0	59.0	117.9
Chloroform		101.2	78.4	124.0

Organics - Volatiles, Prep Batch ID: VF231108W1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Laboratory Control Sample (LCS) (continued)

Lab Sample ID: 231108A9.LCSW08A

Run in Batch: 231108A9, Run Date: 11/08/2023 11:56, Prep Date: 11/08/2023, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Bromochloromethane		110.0	78.2	120.8
1,1,1-Trichloroethane		98.2	79.4	130.9
4-Methyl-2-pentanone (MIBK)		93.8	71.6	125.2
2-Hexanone		92.4	55.4	136.9
Carbon tetrachloride		105.4	72.6	133.0
Benzene		105.5	79.9	124.9
1,2-Dichloroethane		103.6	76.0	126.3
Trichloroethene		105.2	79.7	124.2
1,2-Dichloropropane		104.9	78.6	126.4
Bromodichloromethane		107.4	80.4	128.2
Dibromomethane		116.9	76.9	122.1
cis-1,3-Dichloropropene		106.1	79.8	129.9
Toluene		107.6	79.8	124.5
trans-1,3-Dichloropropene		108.6	74.0	131.3
1,1,2-Trichloroethane		107.2	78.7	123.1
Tetrachloroethene		110.5	74.5	124.5
trans-1,4-Dichloro-2-butene		96.2	68.6	135.4
Dibromochloromethane		114.0	74.6	127.2
1,2-Dibromoethane		111.3	70.3	133.7
Chlorobenzene		111.6	79.2	122.7
1,1,1,2-Tetrachloroethane		114.3	80.3	128.2
Ethylbenzene		110.4	79.5	129.1
p,m-Xylene		113.4	79.4	132.2
o-Xylene		111.8	80.2	131.0
Styrene		117.3	69.5	126.7
Isopropylbenzene		112.0	74.4	121.5
Bromoform		114.2	69.4	128.0
1,1,2,2-Tetrachloroethane		105.4	79.8	126.3
1,2,3-Trichloropropane		106.2	78.3	138.8
n-Propylbenzene		112.0	82.0	130.7
Bromobenzene		117.0	78.7	124.6
1,3,5-Trimethylbenzene		117.6	81.3	128.9
tert-Butylbenzene		110.4	80.7	128.9
1,2,4-Trimethylbenzene		117.9	81.4	130.8
sec-Butylbenzene		103.3	77.4	129.8
p-Isopropyltoluene		107.9	79.8	137.5
1,3-Dichlorobenzene		106.5	77.0	131.3
1,4-Dichlorobenzene		108.3	20.7	137.7
1,2-Dichlorobenzene		109.4	10.0	166.2
1,2,3-Trimethylbenzene		104.1	76.3	124.2
n-Butylbenzene		102.7	80.0	133.3
Hexachloroethane		105.1	23.8	138.1
1,2-Dibromo-3-chloropropane		101.2	21.2	189.4
1,2,4-Trichlorobenzene		111.8	27.4	143.4
1,2,3-Trichlorobenzene		112.9	75.4	131.4
Naphthalene		109.9	32.9	135.8

Organics - Volatiles, Prep Batch ID: VF231108W1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Laboratory Control Sample (LCS) (continued)

Lab Sample ID: 231108A9.LCSW08A

Run in Batch: 231108A9, Run Date: 11/08/2023 11:56, Prep Date: 11/08/2023, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
2-Methylnaphthalene		111.0	25.5	165.5

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: 231108A9.LCSDW08A, Parent Sample ID: 231108A9.LCSW08A

Run in Batch: 231108A9, Run Date: 11/08/2023 12:15, Prep Date: 11/08/2023, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Diethyl ether		94.2	67.4	121.2	9.3	30.0
Acetone		81.4	29.9	161.5	3.1	30.0
Methyl iodide		97.8	68.8	116.4	8.4	30.0
Carbon disulfide		88.6	63.8	137.4	8.3	30.0
tert-Methyl butyl ether (MTBE)		90.2	73.2	122.4	8.4	30.0
Acrylonitrile		89.6	69.9	128.9	9.5	30.0
2-Butanone (MEK)		90.4	44.0	134.4	2.2	30.0
Dichlorodifluoromethane		76.8	10.0	222.8	13.2	30.0
Chloromethane		81.0	23.8	166.5	8.5	30.0
Vinyl chloride		80.1	43.5	149.1	5.9	30.0
Bromomethane		86.3	56.8	151.3	9.5	30.0
Chloroethane		82.8	53.4	149.4	6.4	30.0
Trichlorofluoromethane		84.7	59.7	151.8	7.6	30.0
1,1-Dichloroethene		87.2	69.6	139.4	8.5	30.0
Methylene chloride		93.0	73.3	121.1	11.1	30.0
trans-1,2-Dichloroethene		88.6	73.6	129.3	8.7	30.0
1,1-Dichloroethane		91.2	71.5	126.2	8.7	30.0
cis-1,2-Dichloroethene		95.4	76.6	122.1	10.4	30.0
Tetrahydrofuran		86.8	59.0	117.9	1.4	30.0
Chloroform		93.4	78.4	124.0	8.0	30.0
Bromochloromethane		99.3	78.2	120.8	10.2	30.0
1,1,1-Trichloroethane		92.1	79.4	130.9	6.5	30.0
4-Methyl-2-pentanone (MIBK)		88.9	71.6	125.2	5.3	30.0
2-Hexanone		87.6	55.4	136.9	5.3	30.0
Carbon tetrachloride		98.3	72.6	133.0	7.0	30.0
Benzene		97.1	79.9	124.9	8.3	30.0
1,2-Dichloroethane		94.4	76.0	126.3	9.3	30.0
Trichloroethene		97.3	79.7	124.2	7.7	30.0
1,2-Dichloropropane		96.0	78.6	126.4	8.9	30.0
Bromodichloromethane		97.2	80.4	128.2	9.9	30.0
Dibromomethane		106.3	76.9	122.1	9.6	30.0
cis-1,3-Dichloropropene		96.5	79.8	129.9	9.5	30.0
Toluene		99.1	79.8	124.5	8.2	30.0
trans-1,3-Dichloropropene		98.5	74.0	131.3	9.8	30.0
1,1,2-Trichloroethane		98.6	78.7	123.1	8.3	30.0
Tetrachloroethene		103.3	74.5	124.5	6.8	30.0
trans-1,4-Dichloro-2-butene		91.9	68.6	135.4	4.6	30.0
Dibromochloromethane		105.2	74.6	127.2	8.0	30.0
1,2-Dibromoethane		103.8	70.3	133.7	7.0	30.0
Chlorobenzene		104.7	79.2	122.7	6.4	30.0

Organics - Volatiles, Prep Batch ID: VF231108W1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Laboratory Control Sample Duplicate (LCSD) (continued)

Lab Sample ID: 231108A9.LCSDW08A, Parent Sample ID: 231108A9.LCSW08A

Run in Batch: 231108A9, Run Date: 11/08/2023 12:15, Prep Date: 11/08/2023, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
1,1,1,2-Tetrachloroethane		107.1	80.3	128.2	6.5	30.0
Ethylbenzene		103.2	79.5	129.1	6.8	30.0
p,m-Xylene		106.1	79.4	132.2	6.7	30.0
o-Xylene		104.6	80.2	131.0	6.6	30.0
Styrene		108.5	69.5	126.7	7.8	30.0
Isopropylbenzene		104.7	74.4	121.5	6.8	30.0
Bromoform		107.4	69.4	128.0	6.1	30.0
1,1,2,2-Tetrachloroethane		101.1	79.8	126.3	4.2	30.0
1,2,3-Trichloropropane		101.4	78.3	138.8	4.6	30.0
n-Propylbenzene		104.8	82.0	130.7	6.7	30.0
Bromobenzene		107.2	78.7	124.6	8.8	30.0
1,3,5-Trimethylbenzene		110.1	81.3	128.9	6.6	30.0
tert-Butylbenzene		103.5	80.7	128.9	6.5	30.0
1,2,4-Trimethylbenzene		110.9	81.4	130.8	6.2	30.0
sec-Butylbenzene		100.1	77.4	129.8	3.1	30.0
p-Isopropyltoluene		104.0	79.8	137.5	3.7	30.0
1,3-Dichlorobenzene		100.8	77.0	131.3	5.5	30.0
1,4-Dichlorobenzene		101.7	20.7	137.7	6.3	30.0
1,2-Dichlorobenzene		103.9	10.0	166.2	5.2	30.0
1,2,3-Trimethylbenzene		98.6	76.3	124.2	5.4	30.0
n-Butylbenzene		98.7	80.0	133.3	3.9	30.0
Hexachloroethane		100.3	23.8	138.1	4.7	30.0
1,2-Dibromo-3-chloropropane		98.4	21.2	189.4	2.8	30.0
1,2,4-Trichlorobenzene		107.2	27.4	143.4	4.2	30.0
1,2,3-Trichlorobenzene		108.8	75.4	131.4	3.6	30.0
Naphthalene		107.4	32.9	135.8	2.3	30.0
2-Methylnaphthalene		109.2	25.5	165.5	1.6	30.0

Merit Laboratories, Inc.

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Phone (517) 332-0167 Fax (517) 332-4034
www.meritlabs.com

C.O.C. PAGE # 1 OF 1

COC #: 2023-10-31_01

CHAIN OF CUSTODY RECORD

REPORT TO

CONTACT NAME: Penni Mahler
COMPANY: fishbeck
ADDRESS: 1515 Arboretum Dr. SE
CITY: Grand Rapids STATE: MI ZIP CODE: 49546
PHONE NO.: 616.575.3824 FAX NO.: P.O. NO.:
E-MAIL ADDRESS: pdmahler@fishbeck.com QUOTE NO.:

INVOICE TO

CONTACT NAME: Accounts Payable ☐ SAME
COMPANY: fishbeck
ADDRESS: 1515 Arboretum Dr. SE
CITY: Grand Rapids STATE: MI ZIP CODE: 49546
PHONE NO.: 616.464.3708 E-MAIL ADDRESS: acpay@fishbeck.com

PROJECT NO./NAME: 231596/OCBRA/ CERES Hart
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: GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID SL=SLUDGE DW=DRINKING WATER O=OIL WP=WIPE A=AIR W=WASTE

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

Certifications: ☐ OHIO VAP ☐ Drinking Water ☐ DoD ☐ NPDES

Project Locations: ☐ Detroit ☐ New York ☐ Other

Special Instructions

MERIT LAB NO. (FOR LAB USE ONLY)	YEAR DATE	YEAR TIME	SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	# Containers & Preservatives: NONE	HCl	HNO_3	H_2SO_4	NaOH	MeOH	OTHER	VOCs (EPA 8260+)	Total Metals: MI 10	PNAs (EPA 8270)
53360.01/.02/.03	10-31-23	1540	TMW-01(I/MS/MSD)	GW	18	2	9	1					X	X	X
.04	11-01-23	1130	TMW-02(I)	GW	6	2	3	1					X	X	X
.05	11-01-23	—	TMW-0[redacted](D)	GW	6	2	3	1					X	X	X
.06	11-01-23	915	TMW-03(I)	GW	6	2	3	1					X	X	X
.07	8-23-23	—	QCTB-01	GW	1		1						X		
.08	11-01-23	1300	QCFB-01	GW	6	2	3	1					X	X	X
.09	11-01-23	1315	QCEB-01	GW	6	2	3	1					X	X	X
.10	8-23-23	—	QCTB-02	GW	1		1						X		

ICE

RELINQUISHED BY: SIGNATURE/ORGANIZATION: R. Knoll / Fishbeck (Sampler) DATE: 11-2-23 TIME: 730
RECEIVED BY: SIGNATURE/ORGANIZATION: Fishbeck sample storage / Fishbeck DATE: 11-2-23 TIME: 730
RELINQUISHED BY: SIGNATURE/ORGANIZATION: Fish Beck sample storage DATE: 11/2/23 TIME: 2:38
RECEIVED BY: SIGNATURE/ORGANIZATION: DATE: 11/2/23 TIME: 2:38

RELINQUISHED BY: SIGNATURE/ORGANIZATION: DATE: 11/2/23 TIME: 4:30
RECEIVED BY: SIGNATURE/ORGANIZATION: DATE: 11/2/23 TIME: 1830

SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS
SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS

NOTES: TEMP. ON ARRIVAL: 3.8

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

Rev. 5.18.12

Laboratory Services Request – Fishbeck

Project Information

Name:	OCBRA/ CERES Hart
Number:	231596
Manager:	Kirk Perschbacher
Sampling Date:	10/30/2023
Laboratory/Location:	Merti Labs

Billing Information

Fishbeck ■ Quote No.
Client

Reporting Information

Fishbeck ■
Client
Std QC Report (Level II) ■ ← *MUST specify QC Report for all projects*
Full Deliverables (Level IV)
Turnaround Time: ■ Standard
Priority:

If direct reporting or billing client, please provide information below:

Company Name:
Attention:
Email Address:

Regulatory Program (Reporting Limits)

Part 201 ■
Part 213
NPDES Permit
Other:

Sample Quantity/Matrix

Indicate number of samples in box provided.
A separate form must be completed per matrix type.

INVESTIGATIVE	3	Groundwater
	14	Soil
		Surface Water
		Drinking Water
		Wastewater- Dewatering Effluent
	11	Other- Soil Gas
QA/QC	4	Duplicates
	2	MS/MSDs
	3	Equipment Blanks
	2	Field Blanks
	2	Trip Blanks

Additional Project Information for Laboratory

3 Groundwater samples for VOCs, PNAs and MI 10 metals. 1 duplicate for all parameters, 1 MS/MSD for all parameters
11 Soil gas samples for EPA Method To-15 VOCs, 1 duplicate also needed
4 Incremental Sampling Method (ISM) surface soil samples for VOCS, PNAs and MI 10 metals. Duplicate and Triplicate needed for all of the samples.
10 Soil Samples for VOCs, PNAs and MI 10 Metals. 1 duplicate for all parameters, 1 MS/MSD for all parameters
3 equipment blanks for VOCs, PNAs and MI 10 Metals
2 field blanks for VOCs (2 days of sampling so 1 per day)
2 Trip Blanks for VOCs (2 days of sampling so 1 per day)

General Chemistry

Alkalinity, Total		Cyanide, Total		pH		Solids, V.S.	
Bicarbonate Alkalinity		Fluoride		Phenols, T.		Specific Conductivity	
Carbonate Alkalinity		Hardness		Phosphorus, D.		Specific Gravity	
BOD				Phosphorus, O.		Sulfate	
Chloride		N, Ammonia		Phosphorus, T.		Sulfide	
COD		N, Nitrate		Solids, Total		TPH	
Color		N, Nitrite		Solids, T.D.		TOC	
Cyanide, Amenable		N, Total Kjeldahl		Solids, T.S.		PFAS/537.1/18 list	DW
Cyanide, Available		Oil & Grease		Solids, V.		PFAS/537M/28 list	

Metals

Dissolved				Total			
Aluminum		Chromium, Hexavalent		Manganese		Sodium	
Antimony		Chromium, Total		Mercury		Thallium	
Arsenic		Cobalt		Mercury (EPA 1631)		Vanadium	
Barium		Copper		Molybdenum		Zinc	
Beryllium		Iron		Nickel		Michigan 10	■
Boron		Lead		Potassium		OM 2/ATT 8/Table 3	
Cadmium		Lead (Total, Fine, Coarse)		Selenium			
Calcium		Magnesium		Silver			

Organics

EPA 601 (Halocarbons)		EPA 608 (Pest/PCBs)		EPA 8270 (PNAs)	■	EPA 8082 (PCBs)	
EPA 602 (Aromatics)		EPA 8260 (VOCs)		EPA 8270 (Acids)		EPA 8015/GRO	
EPA 624 (VOCs)		EPA 8260 Plus (VOCs)	■	EPA 8270 (B/N)		EPA 8015/DRO	
EPA 625 (A/BN)		EPA 8270 (SVOCs)		EPA 8081A (Pest)		EPA 8011/EDB	

Waste Characterization — *Federal Regulatory Parameters and Limits unless otherwise specified*

TCLP/Metals		SPLP/SVOCs (A/BN)		ASTM D3987-85/SVOCs		Paint Filter Test	
TCLP/SVOCs (Full)		SPLP/PCBs		ASTM D3987-85/Pest & PCBs		Cyanide, Reactive	
TCLP/SVOCs (A/BN)		SPLP/Cyanide		ASTM D3987-85/Cyanide		Sulfide, Reactive	
TCLP/VOCs		SPLP/Sulfide		ASTM D3987-85/Cyanide		Flash Point	
SPLP/Metals		SPLP/VOCs		ASTM D3987-85/Sulfide		pH	
SPLP/SVOCs (Full)		SPLP/Hex Cr		ASTM D3987-85/Hex Cr			

Sample Bottle Specification

Project Name: OCBRA/ CERES Hart

Project No.: 231596

Date: 10/30/2023

Sample Information

QUANTITY

SOIL MATRIX

Investigative:	9
I/MS/MSD:	1
Duplicates:	1
Equipment Blanks:	
Field Blanks:	2

vials per FB: ☑ 1 ☐ 2

QUANTITY

WATER MATRIX

Investigative:	2
I/MS/MSD:	1
Duplicates:	1
Equipment Blanks:	
Trip Blanks:	2

vials per TB: ☑ 1 ☐ 2

Special Instructions:

	Parameters	Preservative	Number of Containers Required: 4 oz Clear G	8 oz Clear G	16 oz Clear G	250 mL Amber G	500 mL Amber G	1000 mL Amber G	40 mL	125 mL P	250 mL P	500 mL P	1000 mL P
SOIL (I) or (D) or QCEB	PNAs (EPA 8270), MI 10, % solids	None	1										
	VOCs (EPA 8260+)	MeOH							1				
SOIL (I/MS/MSD)													
WATER (I) or (D) or QCEB	PNAs (EPA 8270)	None						2					
	Total Metals; MI 10	HNO_3								1			
	VOCs (EPA 8260+)	HCl							3				
WATER (I/MS/MSD)													

Analytical Laboratory Report

Report ID: S55384.01(01)
Generated on 11/13/2023

Report to

Attention: Penni Mahler
Fishbeck
1515 Arboretum Drive SE
Grand Rapids, MI 49546

Phone: 616-464-3751 FAX:
Email: pdmahler@fishbeck.com

Addtional Contacts: Doug Ervin

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 Laverty (johnlaverty@meritlabs.com)
Barbara Ball (bball@meritlabs.com)

Report Summary

Lab Sample ID(s): S55384.01-S55384.11
Project: Monitoring
Collected Date(s): 10/31/2023
Submitted Date/Time: 11/03/2023 14:45
Sampled by: Unknown
P.O. #:

Table of Contents

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Maya Murshak
Technical Director

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.
All accreditations/certifications held by this laboratory are listed on page 3. Not all accreditations/certifications are applicable to this report.
For a specific list of accredited analytes, please feel free to contact the laboratory or visit https://www.meritlabs.com/certifications.

Report Narrative

There is no additional narrative for this analytical report

Laboratory Accreditations

Authority	Accreditation ID
Michigan DEQ	#9956
DOD ELAP & ISO/IEC 17025:2017	#69699 PJLA Testing
WBENC	#2005110032
Ohio VAP	#CL0002
Indiana DOH	#C-MI-07
New York NELAC	#11814
North Carolina DENR	#680
North Carolina DOH	#26702
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

Method Summary

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

Sample Summary (11 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S55384.01	SSVP-1	Air	10/31/23 11:29 - 10/31/23 11:36
S55384.02	SSVP-2	Air	10/31/23 10:32 - 10/31/23 10:40
S55384.03	SSVP-3	Air	10/31/23 12:01 - 10/31/23 12:04
S55384.04	SSVP-4	Air	10/31/23 12:29 - 10/31/23 12:35
S55384.05	SSVP-5	Air	10/31/23 10:00 - 10/31/23 10:08
S55384.06	SG-1	Air	10/31/23 13:21 - 10/31/23 13:28
S55384.07	SG-2	Air	10/31/23 13:57 - 10/31/23 14:03
S55384.08	SG-3	Air	10/31/23 14:15 - 10/31/23 14:23
S55384.09	SG-4	Air	10/31/23 14:57 - 10/31/23 15:03
S55384.10	SG-5	Air	10/31/23 15:23 - 10/31/23 15:31
S55384.11	MG-1	Air	10/31/23 00:01 - 10/31/23 00:08

Lab Sample ID: S55384.01
Sample Tag: SSVP-1
Collected Date/Time: 10/31/2023 11:29 - 10/31/2023 11:36
Matrix: Air
COC Reference: A02284

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	11/06/23 14:00	ACK	

Organics - Volatiles

TO-15, Method: TO-15, Run Date: 11/10/23 23:39, Analyst: ASW

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	120	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	20		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*	430	20		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	

Lab Sample ID: S55384.01 (continued)
Sample Tag: SSVP-1

TO-15, Method: TO-15, Run Date: 11/10/23 23:39, Analyst: ASW (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	20		ppbv	10	591-78-6	
Isopropyl Alcohol*	Not detected	20		ppbv	10	67-63-0	
Methylene chloride	Not detected	20		ppbv	10	75-09-2	
2-Butanone (MEK)	Not detected	20		ppbv	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	20		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	2		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	16	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: 11/10/23 23:39, Analyst: ASW

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	290	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	

Lab Sample ID: S55384.01 (continued)
Sample Tag: SSVP-1

TO-15, Method: TO-15, Run Date: 11/10/23 23:39, Analyst: ASW (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	72		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*	810	38		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	82		ug/m3	10	591-78-6	
Isopropyl Alcohol*	Not detected	49		ug/m3	10	67-63-0	
Methylene chloride	Not detected	69		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	82		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	15		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	110	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	

Lab Sample ID: S55384.01 (continued)
Sample Tag: SSVP-1

TO-15, Method: TO-15, Run Date: 11/10/23 23:39, Analyst: ASW (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	

Lab Sample ID: S55384.02
Sample Tag: SSVP-2
Collected Date/Time: 10/31/2023 10:32 - 10/31/2023 10:40
Matrix: Air
COC Reference: A02284

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*	30.0	N/A	11/06/23 14:00	ACK	

Lab Sample ID: S55384.03
Sample Tag: SSVP-3
Collected Date/Time: 10/31/2023 12:01 - 10/31/2023 12:04
Matrix: Air
COC Reference: A02284

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	11/09/23 16:40	ASW	

Organics - Volatiles

TO-15, Method: TO-15, Run Date: 11/11/23 00:10, Analyst: ASW

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	50	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	20		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*	110	20		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	

Lab Sample ID: S55384.03 (continued)
Sample Tag: SSVP-3

TO-15, Method: TO-15, Run Date: 11/11/23 00:10, Analyst: ASW (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	20		ppbv	10	591-78-6	
Isopropyl Alcohol*	Not detected	20		ppbv	10	67-63-0	
Methylene chloride	Not detected	20		ppbv	10	75-09-2	
2-Butanone (MEK)	Not detected	20		ppbv	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	20		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	2		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	33	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: 11/11/23 00:10, Analyst: ASW

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	120	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	

Lab Sample ID: S55384.03 (continued)
Sample Tag: SSVP-3

TO-15, Method: TO-15, Run Date: 11/11/23 00:10, Analyst: ASW (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	72		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*	210	38		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	82		ug/m3	10	591-78-6	
Isopropyl Alcohol*	Not detected	49		ug/m3	10	67-63-0	
Methylene chloride	Not detected	69		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	82		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	15		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	220	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	

Lab Sample ID: S55384.03 (continued)
Sample Tag: SSVP-3

TO-15, Method: TO-15, Run Date: 11/11/23 00:10, Analyst: ASW (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	

Lab Sample ID: S55384.04
Sample Tag: SSVP-4
Collected Date/Time: 10/31/2023 12:29 - 10/31/2023 12:35
Matrix: Air
COC Reference: A02284

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	11/06/23 15:12	KAG	

Organics - Volatiles

TO-15, Method: TO-15, Run Date: 11/11/23 00:41, Analyst: ASW

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	3	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	20		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	20		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	

Lab Sample ID: S55384.04 (continued)
Sample Tag: SSVP-4

TO-15, Method: TO-15, Run Date: 11/11/23 00:41, Analyst: ASW (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	20		ppbv	10	591-78-6	
Isopropyl Alcohol*	Not detected	20		ppbv	10	67-63-0	
Methylene chloride	Not detected	20		ppbv	10	75-09-2	
2-Butanone (MEK)	Not detected	20		ppbv	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	20		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	2		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	4	2		ppbv	10	540-84-1	
Tert-butyl Alcohol	200	20		ppbv	10	75-65-0	
Tetrachloroethene	11	2		ppbv	10	127-18-4	
Tetrahydrofuran*	Not detected	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	2	2		ppbv	10	95-47-6	
Total Xylenes	Not detected	6		ppbv	10	1330-20-7	

TO-15, Method: TO-15, Run Date: 11/11/23 00:41, Analyst: ASW

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	

Lab Sample ID: S55384.04 (continued)
Sample Tag: SSVP-4

TO-15, Method: TO-15, Run Date: 11/11/23 00:41, Analyst: ASW (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Carbon tetrachloride	Not detected	13		ug/m3	10	56-23-5	
Cyclohexane	10	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	72		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	38		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	82		ug/m3	10	591-78-6	
Isopropyl Alcohol*	Not detected	49		ug/m3	10	67-63-0	
Methylene chloride	Not detected	69		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	82		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	15		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	19	9.3		ug/m3	10	540-84-1	
Tert-butyl Alcohol	610	61		ug/m3	10	75-65-0	
Tetrachloroethene	75	14		ug/m3	10	127-18-4	
Tetrahydrofuran*	Not detected	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	

Lab Sample ID: S55384.04 (continued)
Sample Tag: SSVP-4

TO-15, Method: TO-15, Run Date: 11/11/23 00:41, Analyst: ASW (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	8.7	8.7		ug/m3	10	95-47-6	
Total Xylenes	Not detected	26		ug/m3	10	1330-20-7	

Lab Sample ID: S55384.05
Sample Tag: SSVP-5
Collected Date/Time: 10/31/2023 10:00 - 10/31/2023 10:08
Matrix: Air
COC Reference: A02284

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	11/06/23 15:12	KAG	

Organics - Volatiles

TO-15, Method: TO-15, Run Date: 11/11/23 01:12, Analyst: ASW

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	2	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	20		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*	30	20		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	

Lab Sample ID: S55384.05 (continued)
Sample Tag: SSVP-5

TO-15, Method: TO-15, Run Date: 11/11/23 01:12, Analyst: ASW (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	20		ppbv	10	591-78-6	
Isopropyl Alcohol*	Not detected	20		ppbv	10	67-63-0	
Methylene chloride	Not detected	20		ppbv	10	75-09-2	
2-Butanone (MEK)	Not detected	20		ppbv	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	20		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	2		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: 11/11/23 01:12, Analyst: ASW

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	

Lab Sample ID: S55384.05 (continued)
Sample Tag: SSVP-5

TO-15, Method: TO-15, Run Date: 11/11/23 01:12, Analyst: ASW (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Carbon tetrachloride	Not detected	13		ug/m3	10	56-23-5	
Cyclohexane	6.9	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	72		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*	57	38		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	82		ug/m3	10	591-78-6	
Isopropyl Alcohol*	Not detected	49		ug/m3	10	67-63-0	
Methylene chloride	Not detected	69		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	82		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	15		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	

Lab Sample ID: S55384.05 (continued)
Sample Tag: SSVP-5

TO-15, Method: TO-15, Run Date: 11/11/23 01:12, Analyst: ASW (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	

Lab Sample ID: S55384.06
Sample Tag: SG-1
Collected Date/Time: 10/31/2023 13:21 - 10/31/2023 13:28
Matrix: Air
COC Reference: A02284

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	11/06/23 15:12	KAG	

Lab Sample ID: S55384.07
Sample Tag: SG-2
Collected Date/Time: 10/31/2023 13:57 - 10/31/2023 14:03
Matrix: Air
COC Reference: A02284

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	11/06/23 15:12	KAG	

Organics - Volatiles

TO-15, Method: TO-15, Run Date: 11/11/23 01:43, Analyst: ASW

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	20		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	20		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	

Lab Sample ID: S55384.07 (continued)
Sample Tag: SG-2

TO-15, Method: TO-15, Run Date: 11/11/23 01:43, Analyst: ASW (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	20		ppbv	10	591-78-6	
Isopropyl Alcohol*	Not detected	20		ppbv	10	67-63-0	
Methylene chloride	Not detected	20		ppbv	10	75-09-2	
2-Butanone (MEK)	Not detected	20		ppbv	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	20		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	2		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	104	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	3	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: 11/11/23 01:43, Analyst: ASW

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	

Lab Sample ID: S55384.07 (continued)
Sample Tag: SG-2

TO-15, Method: TO-15, Run Date: 11/11/23 01:43, Analyst: ASW (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	72		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	38		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	82		ug/m3	10	591-78-6	
Isopropyl Alcohol*	Not detected	49		ug/m3	10	67-63-0	
Methylene chloride	Not detected	69		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	82		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	15		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	705	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	17	11		ug/m3	10	75-69-4	
Vinyl chloride	Not detected	5.1		ug/m3	10	75-01-4	

Lab Sample ID: S55384.07 (continued)

Sample Tag: SG-2

TO-15, Method: TO-15, Run Date: 11/11/23 01:43, Analyst: ASW (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	

Lab Sample ID: S55384.08
Sample Tag: SG-3
Collected Date/Time: 10/31/2023 14:15 - 10/31/2023 14:23
Matrix: Air
COC Reference: A02284

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*	3	N/A	11/06/23 15:12	KAG	

Organics - Volatiles

TO-15, Method: TO-15, Run Date: 11/11/23 02:14, Analyst: ASW

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	20		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*	230	20		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	

Lab Sample ID: S55384.08 (continued)
Sample Tag: SG-3

TO-15, Method: TO-15, Run Date: 11/11/23 02:14, Analyst: ASW (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	20		ppbv	10	591-78-6	
Isopropyl Alcohol*	Not detected	20		ppbv	10	67-63-0	
Methylene chloride	Not detected	20		ppbv	10	75-09-2	
2-Butanone (MEK)	Not detected	20		ppbv	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	20		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	2		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	5	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	3	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: 11/11/23 02:14, Analyst: ASW

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	

Lab Sample ID: S55384.08 (continued)
Sample Tag: SG-3

TO-15, Method: TO-15, Run Date: 11/11/23 02:14, Analyst: ASW (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	72		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*	430	38		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	82		ug/m3	10	591-78-6	
Isopropyl Alcohol*	Not detected	49		ug/m3	10	67-63-0	
Methylene chloride	Not detected	69		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	82		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	15		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	34	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	17	11		ug/m3	10	75-69-4	
Vinyl chloride	Not detected	5.1		ug/m3	10	75-01-4	

Lab Sample ID: S55384.08 (continued)

Sample Tag: SG-3

TO-15, Method: TO-15, Run Date: 11/11/23 02:14, Analyst: ASW (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	

Lab Sample ID: S55384.09
Sample Tag: SG-4
Collected Date/Time: 10/31/2023 14:57 - 10/31/2023 15:03
Matrix: Air
COC Reference: A02284

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	11/06/23 15:12	KAG	

Organics - Volatiles

TO-15, Method: TO-15, Run Date: 11/11/23 02:45, Analyst: ASW

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	20		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	20		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	

Lab Sample ID: S55384.09 (continued)
Sample Tag: SG-4

TO-15, Method: TO-15, Run Date: 11/11/23 02:45, Analyst: ASW (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	20		ppbv	10	591-78-6	
Isopropyl Alcohol*	Not detected	20		ppbv	10	67-63-0	
Methylene chloride	Not detected	20		ppbv	10	75-09-2	
2-Butanone (MEK)	Not detected	20		ppbv	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	20		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	2		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	7	2		ppbv	10	127-18-4	
Tetrahydrofuran*	Not detected	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: 11/11/23 02:45, Analyst: ASW

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	

Lab Sample ID: S55384.09 (continued)
Sample Tag: SG-4

TO-15, Method: TO-15, Run Date: 11/11/23 02:45, Analyst: ASW (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	72		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	38		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	82		ug/m3	10	591-78-6	
Isopropyl Alcohol*	Not detected	49		ug/m3	10	67-63-0	
Methylene chloride	Not detected	69		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	82		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	15		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	47	14		ug/m3	10	127-18-4	
Tetrahydrofuran*	Not detected	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	

Lab Sample ID: S55384.09 (continued)

Sample Tag: SG-4

TO-15, Method: TO-15, Run Date: 11/11/23 02:45, Analyst: ASW (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	

Lab Sample ID: S55384.10
Sample Tag: SG-5
Collected Date/Time: 10/31/2023 15:23 - 10/31/2023 15:31
Matrix: Air
COC Reference: A02285

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	11/06/23 15:12	KAG	

Organics - Volatiles

TO-15, Method: TO-15, Run Date: 11/11/23 03:16, Analyst: ASW

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	20		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	20		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	

Lab Sample ID: S55384.10 (continued)
Sample Tag: SG-5

TO-15, Method: TO-15, Run Date: 11/11/23 03:16, Analyst: ASW (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	5	2		ppbv	10	110-54-3	
2-Hexanone*	Not detected	20		ppbv	10	591-78-6	
Isopropyl Alcohol*	Not detected	20		ppbv	10	67-63-0	
Methylene chloride	Not detected	20		ppbv	10	75-09-2	
2-Butanone (MEK)	Not detected	20		ppbv	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	20		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	2		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: 11/11/23 03:16, Analyst: ASW

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	

Lab Sample ID: S55384.10 (continued)
Sample Tag: SG-5

TO-15, Method: TO-15, Run Date: 11/11/23 03:16, Analyst: ASW (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	72		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	38		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	18	7.0		ug/m3	10	110-54-3	
2-Hexanone*	Not detected	82		ug/m3	10	591-78-6	
Isopropyl Alcohol*	Not detected	49		ug/m3	10	67-63-0	
Methylene chloride	Not detected	69		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	82		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	15		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	

Lab Sample ID: S55384.10 (continued)

Sample Tag: SG-5

TO-15, Method: TO-15, Run Date: 11/11/23 03:16, Analyst: ASW (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	

Lab Sample ID: S55384.11
Sample Tag: MG-1
Collected Date/Time: 10/31/2023 00:01 - 10/31/2023 00:08
Matrix: Air
COC Reference: A02285

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*	3	N/A	11/06/23 15:12	KAG	

Organics - Volatiles

TO-15, Method: TO-15, Run Date: 11/11/23 04:17, Analyst: ASW

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	20		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	20		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	

Lab Sample ID: S55384.11 (continued)
Sample Tag: MG-1

TO-15, Method: TO-15, Run Date: 11/11/23 04:17, Analyst: ASW (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	20		ppbv	10	591-78-6	
Isopropyl Alcohol*	Not detected	20		ppbv	10	67-63-0	
Methylene chloride	Not detected	20		ppbv	10	75-09-2	
2-Butanone (MEK)	Not detected	20		ppbv	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	20		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	2		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	897	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: 11/11/23 04:17, Analyst: ASW

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	

Lab Sample ID: S55384.11 (continued)
Sample Tag: MG-1

TO-15, Method: TO-15, Run Date: 11/11/23 04:17, Analyst: ASW (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	72		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	38		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	82		ug/m3	10	591-78-6	
Isopropyl Alcohol*	Not detected	49		ug/m3	10	67-63-0	
Methylene chloride	Not detected	69		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	82		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	15		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	6,080	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	

Lab Sample ID: S55384.11 (continued)

Sample Tag: MG-1

TO-15, Method: TO-15, Run Date: 11/11/23 04:17, Analyst: ASW (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: S55384
Client: FISHBECK (Fishbeck)
Project: Monitoring
Submitted: 11/03/2023 14:45 Login User: PFD

Attention: Penni Mahler
Address: Fishbeck
1515 Arboretum Drive SE
Grand Rapids, MI 49546

Phone: 616-464-3751 FAX:
Email: pdmahler@fishbeck.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? Subcontacted 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: _____

Merit Laboratories, Inc.

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 02284

AIR/GAS SAMPLES CHAIN OF CUSTODY RECORD

REPORT TO

CONTACT NAME: Penni Mahler
COMPANY: Fishbeck
ADDRESS: 1515 Arboretum Dr. SE
CITY: Grand Rapids STATE: MI ZIP CODE: 49546
PHONE NO.: (616) 575-3824 FAX NO.: P.O. NO.:
EMAIL ADDRESS: pdmahler@fishbeck.com QUOTE NO.:

INVOICE TO

CONTACT NAME: Accounts Payable ☐ SAME
COMPANY: Fishbeck
ADDRESS: 1515 Arboretum Dr. SE
CITY: Grand Rapids STATE: MI ZIP CODE: 49546
PHONE NO.: (616) 464-3708 EMAIL ADDRESS: acpay@fishbeck.com

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

PROJECT NO./NAME:
SAMPLER(S) - PLEASE PRINT/SIGN NAME:

TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER

DELIVERABLES REQUIRED ☒ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☐ OTHER

Certifications
☐ OHIO VAP ☐ NELAP
☐ DoD ☐ NPDES

MERIT LAB NO. FOR LAB USE ONLY	SAMPLE TAG IDENTIFICATION-DESCRIPTION	Sample Date(s)	Time Start	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	Sample Type: Indoor Air	Ambient Air	Soil Gas	Landfill Gas	Other (specify in notes)	Analyses: TO-15	Other (specify in notes)
55384.01	SSVP-1	10/31	1129	1136	-28	-2	411	35568			X			X	
.02	SSVP-2		1032	1040	-24	-2	487	13750			X			X	
	SSVP-3		1201	1204	-26	-17	436	46632			X			X	
.03	SSVP-4		1229	1235	-26	-2	181	42302			X			X	
.04	SSVP-5		1000	1008	-25	-2	254	47656			X			X	
.05	SG-1		1321	1328	-26	-2	380	47311			X			X	
.06	SG-2		1357	1403	-24	-2	306	16835			X			X	
.07	SG-3		1415	1423	-25	-2	20	13718			X			X	
.08	SG-4		1457	1503	-27	-2	424	13735			X			X	
.09	SG-5		1523	1531	-28	-2	357	12438			X			X	

Temperature (Fahrenheit)	Interior	Ambient	Notes
Start		34	
Stop		32	

Pressure (inches of Hg)	Interior	Ambient	Notes
Start		30.03	
Stop		30.17	

Notes: I'm not convinced of SSVP-3 stop time or final pressure, may have been poor note taking
Do Not Run bottle 47311 cont. p.2

RELINQUISHED BY: SIGNATURE/ORGANIZATION: Mike Roberts ☒ Sampler	DATE: 11/2	TIME: 3:40	
RECEIVED BY: SIGNATURE/ORGANIZATION:	DATE: 11/3/23	TIME: 1245	
RELINQUISHED BY: SIGNATURE/ORGANIZATION:	DATE: 11/3/23	TIME: 245	
RECEIVED BY: SIGNATURE/ORGANIZATION:	DATE	TIME	

RELINQUISHED BY: SIGNATURE/ORGANIZATION:	DATE	TIME	
RECEIVED BY: SIGNATURE/ORGANIZATION:	DATE	TIME	

SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS
SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS

NOTES: TEMP. ON ARRIVAL RT

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

Rev. 7.10.15

Merit Laboratories, Inc.
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C.O.C. PAGE # 2 OF 2

A 02285

AIR/GAS SAMPLES CHAIN OF CUSTODY RECORD

REPORT TO

CONTACT NAME: Fenni Mahler
COMPANY: Fishbeck
ADDRESS: 1515 Arboretum Dr. SE
CITY: Grand Rapids STATE: MI ZIP CODE: 49546
PHONE NO.: (616) 575-3824 FAX NO.: P.O. NO.:
EMAIL ADDRESS: pdmahler@fishbeck.com QUOTE NO.:

INVOICE TO

CONTACT NAME: Accounts Payable ☐ SAME
COMPANY: Fishbeck
ADDRESS: 1515 Arboretum Dr. SE
CITY: Grand Rapids STATE: MI ZIP CODE: 49546
PHONE NO.: (616) 464-3708 EMAIL ADDRESS: acpay@fishbeck.com

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

PROJECT NO./NAME:
SAMPLER(S) - PLEASE PRINT/SIGN NAME:

TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER

DELIVERABLES REQUIRED ☒ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☐ OTHER

Certifications
☐ OHIO VAP ☐ NELAP
☐ DoD ☐ NPDES

MERIT LAB NO. FOR LAB USE ONLY	SAMPLE TAG IDENTIFICATION-DESCRIPTION	Sample Date(s)	Time Start	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	Sample Type: Indoor Air	Ambient Air	Soil Gas	Landfill Gas	Other (specify in notes)	Analyses: TO-15	Other (specify in notes)
55384.10	Mg-1	10/31/23	t	t+8min	-25	-2		13750			X			X	

Temperature (Fahrenheit)	Interior	Ambient	Notes
Start		34	
Stop		32	

Pressure (inches of Hg)	Interior	Ambient	Notes
Start		30.03	
Stop		30.17	

Notes: ...Bottle 47311 appeared depressurized upon initial plug-in to regulator
Mg-1 reg ID available upon request

		DATE	TIME
RELINQUISHED BY: SIGNATURE/ORGANIZATION: Mike Roberts ☒ Sampler		11/2	3:40
RECEIVED BY: SIGNATURE/ORGANIZATION		11/3/23	1245
RELINQUISHED BY: SIGNATURE/ORGANIZATION		11/3/22	245
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE	TIME

		DATE	TIME
RELINQUISHED BY: SIGNATURE/ORGANIZATION			
RECEIVED BY: SIGNATURE/ORGANIZATION			

SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS
SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS

NOTES: TEMP. ON ARRIVAL
RT

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

Quality Control Report

Report ID: QC-S55384-01
Generated on 11/14/2023

Report to

Attention: Penni Mahler
Fishbeck
1515 Arboretum Drive SE
Grand Rapids, MI 49546

Phone: 616-464-3751 FAX:

Report Produced by

Merit Laboratories
2680 East Lansing Drive
East Lansing, MI 48823

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

Report Summary

Lab Sample ID(s): S55384.01, S55384.03-S55384.05, S55384.07-S55384.11
Project: Monitoring
Submitted Date/Time: 11/03/2023 14:45
Sampled by: Unknown
P.O. #:

QC Report Sections

Cover Page (Page 1)
Analysis Summary (Pages 2-10)
Prep Batch Summary (Page 11)
Surrogates per Lab Sample (Pages 12-20)
Surrogates per QC Sample (Page 21)
Batch QC Results (Pages 22-26)

Report Flag Descriptions

*: QC result is outside of indicated control limits
W: Surrogate result not applicable due to sample dilution

I certify that this data package is in compliance with the terms and conditions of the program, and project, and contractual requirements both technically and for completeness. Release of the data contained in this hardcopy data package and its computer-readable data submitted has been authorized by the Quality Assurance Manager and his/her designee, as verified by the following signature.

Barbara Ball
Quality Assurance Manager

QC Report - Analysis Summary

Lab Sample ID: S55384.01

Sample Tag: SSVP-1

Collected Date/Time: 10/31/2023 11:29 - 10/31/2023 11:36

Matrix: Air

COC Reference: A02284

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
TO-15	TO-15	11/10/23 23:39	231110A8	GV231110G1	Yes	BLK/LCS/LCSD

QC Report - Analysis Summary

Lab Sample ID: S55384.03

Sample Tag: SSVP-3

Collected Date/Time: 10/31/2023 12:01 - 10/31/2023 12:04

Matrix: Air

COC Reference: A02284

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
TO-15	TO-15	11/11/23 00:10	231110A8	GV231110G1	Yes	BLK/LCS/LCSD

QC Report - Analysis Summary

Lab Sample ID: S55384.04

Sample Tag: SSVP-4

Collected Date/Time: 10/31/2023 12:29 - 10/31/2023 12:35

Matrix: Air

COC Reference: A02284

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
TO-15	TO-15	11/11/23 00:41	231110A8	GV231110G1	Yes	BLK/LCS/LCSD

QC Report - Analysis Summary

Lab Sample ID: S55384.05

Sample Tag: SSVP-5

Collected Date/Time: 10/31/2023 10:00 - 10/31/2023 10:08

Matrix: Air

COC Reference: A02284

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
TO-15	TO-15	11/11/23 01:12	231110A8	GV231110G1	Yes	BLK/LCS/LCSD

Lab Sample ID: S55384.07

Sample Tag: SG-2

Collected Date/Time: 10/31/2023 13:57 - 10/31/2023 14:03

Matrix: Air

COC Reference: A02284

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
TO-15	TO-15	11/11/23 01:43	231110A8	GV231110G1	Yes	BLK/LCS/LCSD

QC Report - Analysis Summary

Lab Sample ID: S55384.08

Sample Tag: SG-3

Collected Date/Time: 10/31/2023 14:15 - 10/31/2023 14:23

Matrix: Air

COC Reference: A02284

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
TO-15	TO-15	11/11/23 02:14	231110A8	GV231110G1	Yes	BLK/LCS/LCSD

QC Report - Analysis Summary

Lab Sample ID: S55384.09

Sample Tag: SG-4

Collected Date/Time: 10/31/2023 14:57 - 10/31/2023 15:03

Matrix: Air

COC Reference: A02284

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
TO-15	TO-15	11/11/23 02:45	231110A8	GV231110G1	Yes	BLK/LCS/LCSD

QC Report - Analysis Summary

Lab Sample ID: S55384.10

Sample Tag: SG-5

Collected Date/Time: 10/31/2023 15:23 - 10/31/2023 15:31

Matrix: Air

COC Reference: A02285

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
TO-15	TO-15	11/11/23 03:16	231110A8	GV231110G1	Yes	BLK/LCS/LCSD

Lab Sample ID: S55384.11

Sample Tag: MG-1

Collected Date/Time: 10/31/2023 00:01 - 10/31/2023 00:08

Matrix: Air

COC Reference: A02285

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
TO-15	TO-15	11/11/23 04:17	231110A8	GV231110G1	Yes	BLK/LCS/LCSD

QC Report - Prep Batch Summary

Organics - Volatiles, Prep Batch ID: GV231110G1

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S55384.01	TO-15	TO-15	11/10/23 23:39	231110A8
S55384.03	TO-15	TO-15	11/11/23 00:10	231110A8
S55384.04	TO-15	TO-15	11/11/23 00:41	231110A8
S55384.05	TO-15	TO-15	11/11/23 01:12	231110A8
S55384.07	TO-15	TO-15	11/11/23 01:43	231110A8
S55384.08	TO-15	TO-15	11/11/23 02:14	231110A8
S55384.09	TO-15	TO-15	11/11/23 02:45	231110A8
S55384.10	TO-15	TO-15	11/11/23 03:16	231110A8
S55384.11	TO-15	TO-15	11/11/23 04:17	231110A8

QC Report - Surrogates per Lab Sample

Lab Sample ID: S55384.01

Sample Tag: SSVP-1

Collected Date/Time: 10/31/2023 11:29 - 10/31/2023 11:36

Matrix: Air

COC Reference: A02284

Organics - Volatiles, Analysis: TO-15

Run in Batch: 231110A8, Run Date: 11/10/2023 23:39, Matrix: G, Dilution: 10

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**106.0**	60	140

QC Report - Surrogates per Lab Sample

Lab Sample ID: S55384.03

Sample Tag: SSVP-3

Collected Date/Time: 10/31/2023 12:01 - 10/31/2023 12:04

Matrix: Air

COC Reference: A02284

Organics - Volatiles, Analysis: TO-15

Run in Batch: 231110A8, Run Date: 11/11/2023 00:10, Matrix: G, Dilution: 10

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**105.4**	60	140

QC Report - Surrogates per Lab Sample

Lab Sample ID: S55384.04

Sample Tag: SSVP-4

Collected Date/Time: 10/31/2023 12:29 - 10/31/2023 12:35

Matrix: Air

COC Reference: A02284

Organics - Volatiles, Analysis: TO-15

Run in Batch: 231110A8, Run Date: 11/11/2023 00:41, Matrix: G, Dilution: 10

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**102.8**	60	140

QC Report - Surrogates per Lab Sample

Lab Sample ID: S55384.05

Sample Tag: SSVP-5

Collected Date/Time: 10/31/2023 10:00 - 10/31/2023 10:08

Matrix: Air

COC Reference: A02284

Organics - Volatiles, Analysis: TO-15

Run in Batch: 231110A8, Run Date: 11/11/2023 01:12, Matrix: G, Dilution: 10

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**104.8**	60	140

QC Report - Surrogates per Lab Sample

Lab Sample ID: S55384.07

Sample Tag: SG-2

Collected Date/Time: 10/31/2023 13:57 - 10/31/2023 14:03

Matrix: Air

COC Reference: A02284

Organics - Volatiles, Analysis: TO-15

Run in Batch: 231110A8, Run Date: 11/11/2023 01:43, Matrix: G, Dilution: 10

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**103.4**	60	140

QC Report - Surrogates per Lab Sample

Lab Sample ID: S55384.08

Sample Tag: SG-3

Collected Date/Time: 10/31/2023 14:15 - 10/31/2023 14:23

Matrix: Air

COC Reference: A02284

Organics - Volatiles, Analysis: TO-15

Run in Batch: 231110A8, Run Date: 11/11/2023 02:14, Matrix: G, Dilution: 10

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**105.7**	60	140

QC Report - Surrogates per Lab Sample

Lab Sample ID: S55384.09

Sample Tag: SG-4

Collected Date/Time: 10/31/2023 14:57 - 10/31/2023 15:03

Matrix: Air

COC Reference: A02284

Organics - Volatiles, Analysis: TO-15

Run in Batch: 231110A8, Run Date: 11/11/2023 02:45, Matrix: G, Dilution: 10

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**105.2**	60	140

QC Report - Surrogates per Lab Sample

Lab Sample ID: S55384.10

Sample Tag: SG-5

Collected Date/Time: 10/31/2023 15:23 - 10/31/2023 15:31

Matrix: Air

COC Reference: A02285

Organics - Volatiles, Analysis: TO-15

Run in Batch: 231110A8, Run Date: 11/11/2023 03:16, Matrix: G, Dilution: 10

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**107.4**	60	140

QC Report - Surrogates per Lab Sample

Lab Sample ID: S55384.11

Sample Tag: MG-1

Collected Date/Time: 10/31/2023 00:01 - 10/31/2023 00:08

Matrix: Air

COC Reference: A02285

Organics - Volatiles, Analysis: TO-15

Run in Batch: 231110A8, Run Date: 11/11/2023 04:17, Matrix: G, Dilution: 10

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**105.5**	60	140

Organics - Volatiles, Prep Batch ID: GV231110G1

QC Types: BLK/LCS/LCSD

Blank (BLK)

Lab Sample ID: 231110A8.BLKG10A

Run in Batch: 231110A8, Run Date: 11/10/2023 17:56, Prep Date: 11/10/2023, Matrix: G, Dilution: 1

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**106.1**	60	140

Laboratory Control Sample (LCS)

Lab Sample ID: 231110A8.LCSG10A

Run in Batch: 231110A8, Run Date: 11/10/2023 16:54, Prep Date: 11/10/2023, Matrix: G, Dilution: 1

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**112.8**	60	140

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: 231110A8.LCSDG10A, Parent Sample ID: 231110A8.LCSG10A

Run in Batch: 231110A8, Run Date: 11/10/2023 17:25, Prep Date: 11/10/2023, Matrix: G, Dilution: 1

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**110.4**	60	140

Organics - Volatiles, Prep Batch ID: GV231110G1

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Blank (BLK)

Lab Sample ID: 231110A8.BLKG10A

Run in Batch: 231110A8, Run Date: 11/10/2023 17:56, Prep Date: 11/10/2023, Matrix: G, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Acetone		ND	2.00	ppbv
1,3-Butadiene		ND	2.00	ppbv
Benzene		ND	0.20	ppbv
Bromodichloromethane		ND	0.20	ppbv
Bromoform		ND	0.20	ppbv
Bromomethane		ND	0.20	ppbv
Vinyl bromide		ND	0.20	ppbv
Benzyl chloride		ND	0.20	ppbv
Carbon disulfide		ND	2.00	ppbv
Chlorobenzene		ND	0.20	ppbv
Chloroethane		ND	2.00	ppbv
Chloroform		ND	0.20	ppbv
Chloromethane		ND	2.00	ppbv
3-Chloropropene		ND	2.00	ppbv
2-Chlorotoluene		ND	0.20	ppbv
Carbon tetrachloride		ND	0.20	ppbv
Cyclohexane		ND	0.20	ppbv
1,1-Dichloroethane		ND	0.20	ppbv
1,1-Dichloroethene		ND	0.20	ppbv
1,2-Dibromoethane		ND	0.20	ppbv
1,2-Dichloroethane		ND	0.20	ppbv
1,2-Dichloropropane		ND	0.20	ppbv
1,4-Dioxane		ND	2.00	ppbv
Dichlorodifluoromethane		ND	0.20	ppbv
Dibromochloromethane		ND	0.20	ppbv
trans-1,2-Dichloroethene		ND	0.20	ppbv
cis-1,2-Dichloroethene		ND	0.20	ppbv
cis-1,3-Dichloropropene		ND	0.20	ppbv
1,3-Dichlorobenzene		ND	0.20	ppbv
1,2-Dichlorobenzene		ND	0.20	ppbv
1,4-Dichlorobenzene		ND	0.20	ppbv
trans-1,3-Dichloropropene		ND	0.20	ppbv
Ethanol		ND	2.00	ppbv
Ethylbenzene		ND	0.20	ppbv
Ethyl Acetate		ND	2.00	ppbv
4-Ethyltoluene		ND	0.20	ppbv
Freon 113		ND	0.20	ppbv
Freon 114		ND	0.20	ppbv
Heptane		ND	0.20	ppbv
Hexachlorobutadiene		ND	0.20	ppbv
Hexane		ND	0.20	ppbv
2-Hexanone		ND	0.20	ppbv
Isopropyl Alcohol		ND	2.00	ppbv
Methylene chloride		ND	2.00	ppbv
2-Butanone (MEK)		ND	2.00	ppbv
4-Methyl-2-pentanone (MIBK)		ND	0.20	ppbv

Organics - Volatiles, Prep Batch ID: GV231110G1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Blank (BLK) (continued)

Lab Sample ID: 231110A8.BLKG10A

Run in Batch: 231110A8, Run Date: 11/10/2023 17:56, Prep Date: 11/10/2023, Matrix: G, Dilution: 1

Analyte	Flags	Conc	RDL	Units
tert-Methyl butyl ether (MTBE)		ND	0.20	ppbv
Methyl methacrylate		ND	0.20	ppbv
Naphthalene		ND	0.20	ppbv
Propylene		ND	2.00	ppbv
Styrene		ND	0.20	ppbv
1,1,1-Trichloroethane		ND	0.20	ppbv
1,1,2,2-Tetrachloroethane		ND	0.20	ppbv
1,1,2-Trichloroethane		ND	0.20	ppbv
1,2,4-Trichlorobenzene		ND	0.20	ppbv
1,2,4-Trimethylbenzene		ND	0.20	ppbv
1,3,5-Trimethylbenzene		ND	0.20	ppbv
2,2,4-Trimethylpentane		ND	0.20	ppbv
Tert-butyl Alcohol		ND	2.00	ppbv
Tetrachloroethene		ND	0.20	ppbv
Tetrahydrofuran		ND	0.20	ppbv
Toluene		ND	0.20	ppbv
Trichloroethene		ND	0.20	ppbv
Trichlorofluoromethane		ND	0.20	ppbv
Vinyl chloride		ND	0.20	ppbv
Vinyl acetate		ND	2.00	ppbv
p,m-Xylene		ND	0.20	ppbv
o-Xylene		ND	0.20	ppbv

Laboratory Control Sample (LCS)

Lab Sample ID: 231110A8.LCSG10A

Run in Batch: 231110A8, Run Date: 11/10/2023 16:54, Prep Date: 11/10/2023, Matrix: G, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Acetone		94.7	70.0	130.0
1,3-Butadiene		90.2	70.0	130.0
Benzene		90.3	70.0	130.0
Bromodichloromethane		85.5	70.0	130.0
Bromoform		95.1	70.0	130.0
Bromomethane		93.8	70.0	130.0
Vinyl bromide		94.0	70.0	130.0
Benzyl chloride		103.0	70.0	130.0
Carbon disulfide		93.2	70.0	130.0
Chlorobenzene		100.0	70.0	130.0
Chloroethane		95.3	70.0	130.0
Chloroform		91.7	70.0	130.0
Chloromethane		90.0	70.0	130.0
3-Chloropropene		86.7	70.0	130.0
2-Chlorotoluene		104.6	70.0	130.0
Carbon tetrachloride		92.9	70.0	130.0
Cyclohexane		90.1	70.0	130.0
1,1-Dichloroethane		90.5	70.0	130.0
1,1-Dichloroethene		88.3	70.0	130.0

Organics - Volatiles, Prep Batch ID: GV231110G1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Laboratory Control Sample (LCS) (continued)

Lab Sample ID: 231110A8.LCSG10A

Run in Batch: 231110A8, Run Date: 11/10/2023 16:54, Prep Date: 11/10/2023, Matrix: G, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
1,2-Dibromoethane		99.1	70.0	130.0
1,2-Dichloroethane		91.7	70.0	130.0
1,2-Dichloropropane		88.4	70.0	130.0
1,4-Dioxane		103.9	70.0	130.0
Dichlorodifluoromethane		90.4	70.0	130.0
Dibromochloromethane		96.0	70.0	130.0
trans-1,2-Dichloroethene		87.5	70.0	130.0
cis-1,2-Dichloroethene		95.2	70.0	130.0
cis-1,3-Dichloropropene		89.4	70.0	130.0
1,3-Dichlorobenzene		103.9	70.0	130.0
1,2-Dichlorobenzene		102.3	70.0	130.0
1,4-Dichlorobenzene		105.2	70.0	130.0
trans-1,3-Dichloropropene		92.4	70.0	130.0
Ethanol		113.4	70.0	130.0
Ethylbenzene		98.7	70.0	130.0
Ethyl Acetate		88.9	70.0	130.0
4-Ethyltoluene		98.7	70.0	130.0
Freon 113		90.7	70.0	130.0
Freon 114		90.3	70.0	130.0
Heptane		87.2	70.0	130.0
Hexachlorobutadiene		112.3	70.0	130.0
Hexane		90.7	70.0	130.0
2-Hexanone		84.8	70.0	130.0
Isopropyl Alcohol		102.0	70.0	130.0
Methylene chloride		92.9	70.0	130.0
2-Butanone (MEK)		92.5	70.0	130.0
4-Methyl-2-pentanone (MIBK)		85.0	70.0	130.0
tert-Methyl butyl ether (MTBE)		89.3	70.0	130.0
Methyl methacrylate		86.7	70.0	130.0
Naphthalene		116.8	70.0	130.0
Propylene		85.2	70.0	130.0
Styrene		101.2	70.0	130.0
1,1,1-Trichloroethane		91.0	70.0	130.0
1,1,2,2-Tetrachloroethane		92.8	70.0	130.0
1,1,2-Trichloroethane		87.5	70.0	130.0
1,2,4-Trichlorobenzene		116.0	70.0	130.0
1,2,4-Trimethylbenzene		103.5	70.0	130.0
1,3,5-Trimethylbenzene		103.7	70.0	130.0
2,2,4-Trimethylpentane		86.6	70.0	130.0
Tert-butyl Alcohol		100.8	70.0	130.0
Tetrachloroethene		103.7	70.0	130.0
Tetrahydrofuran		81.3	70.0	130.0
Toluene		92.7	70.0	130.0
Trichloroethene		94.2	70.0	130.0
Trichlorofluoromethane		92.5	70.0	130.0
Vinyl chloride		91.1	70.0	130.0

Organics - Volatiles, Prep Batch ID: GV231110G1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Laboratory Control Sample (LCS) (continued)

Lab Sample ID: 231110A8.LCSG10A

Run in Batch: 231110A8, Run Date: 11/10/2023 16:54, Prep Date: 11/10/2023, Matrix: G, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Vinyl acetate		103.6	70.0	130.0
p,m-Xylene		103.0	70.0	130.0
o-Xylene		100.8	70.0	130.0

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: 231110A8.LCSDG10A, Parent Sample ID: 231110A8.LCSG10A

Run in Batch: 231110A8, Run Date: 11/10/2023 17:25, Prep Date: 11/10/2023, Matrix: G, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Acetone		91.4	70.0	130.0	3.5	30.0
1,3-Butadiene		91.0	70.0	130.0	0.9	30.0
Benzene		90.5	70.0	130.0	0.2	30.0
Bromodichloromethane		84.5	70.0	130.0	1.2	30.0
Bromoform		93.3	70.0	130.0	1.9	30.0
Bromomethane		93.7	70.0	130.0	0.1	30.0
Vinyl bromide		92.1	70.0	130.0	2.0	30.0
Benzyl chloride		102.5	70.0	130.0	0.5	30.0
Carbon disulfide		90.1	70.0	130.0	3.4	30.0
Chlorobenzene		97.4	70.0	130.0	2.6	30.0
Chloroethane		94.4	70.0	130.0	0.9	30.0
Chloroform		89.9	70.0	130.0	2.0	30.0
Chloromethane		95.5	70.0	130.0	5.9	30.0
3-Chloropropene		86.4	70.0	130.0	0.3	30.0
2-Chlorotoluene		101.7	70.0	130.0	2.8	30.0
Carbon tetrachloride		92.3	70.0	130.0	0.6	30.0
Cyclohexane		89.2	70.0	130.0	1.0	30.0
1,1-Dichloroethane		89.9	70.0	130.0	0.7	30.0
1,1-Dichloroethene		87.5	70.0	130.0	0.9	30.0
1,2-Dibromoethane		96.8	70.0	130.0	2.3	30.0
1,2-Dichloroethane		89.8	70.0	130.0	2.1	30.0
1,2-Dichloropropane		86.4	70.0	130.0	2.3	30.0
1,4-Dioxane		91.2	70.0	130.0	13.0	30.0
Dichlorodifluoromethane		88.7	70.0	130.0	1.9	30.0
Dibromochloromethane		92.4	70.0	130.0	3.8	30.0
trans-1,2-Dichloroethene		85.8	70.0	130.0	2.0	30.0
cis-1,2-Dichloroethene		93.5	70.0	130.0	1.8	30.0
cis-1,3-Dichloropropene		89.5	70.0	130.0	0.1	30.0
1,3-Dichlorobenzene		101.9	70.0	130.0	1.9	30.0
1,2-Dichlorobenzene		101.6	70.0	130.0	0.7	30.0
1,4-Dichlorobenzene		103.0	70.0	130.0	2.1	30.0
trans-1,3-Dichloropropene		90.4	70.0	130.0	2.2	30.0
Ethanol		94.5	70.0	130.0	18.2	30.0
Ethylbenzene		96.5	70.0	130.0	2.3	30.0
Ethyl Acetate		87.8	70.0	130.0	1.2	30.0
4-Ethyltoluene		96.4	70.0	130.0	2.4	30.0
Freon 113		89.2	70.0	130.0	1.7	30.0
Freon 114		91.0	70.0	130.0	0.8	30.0

Organics - Volatiles, Prep Batch ID: GV231110G1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Laboratory Control Sample Duplicate (LCSD) (continued)

Lab Sample ID: 231110A8.LCSDG10A, Parent Sample ID: 231110A8.LCSG10A

Run in Batch: 231110A8, Run Date: 11/10/2023 17:25, Prep Date: 11/10/2023, Matrix: G, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Heptane		84.8	70.0	130.0	2.8	30.0
Hexachlorobutadiene		110.5	70.0	130.0	1.6	30.0
Hexane		90.7	70.0	130.0	0.0	30.0
2-Hexanone		84.6	70.0	130.0	0.2	30.0
Isopropyl Alcohol		87.1	70.0	130.0	15.8	30.0
Methylene chloride		92.6	70.0	130.0	0.3	30.0
2-Butanone (MEK)		90.7	70.0	130.0	2.0	30.0
4-Methyl-2-pentanone (MIBK)		83.2	70.0	130.0	2.1	30.0
tert-Methyl butyl ether (MTBE)		89.0	70.0	130.0	0.3	30.0
Methyl methacrylate		85.7	70.0	130.0	1.2	30.0
Naphthalene		116.7	70.0	130.0	0.1	30.0
Propylene		85.8	70.0	130.0	0.7	30.0
Styrene		98.3	70.0	130.0	2.9	30.0
1,1,1-Trichloroethane		89.8	70.0	130.0	1.3	30.0
1,1,2,2-Tetrachloroethane		90.4	70.0	130.0	2.6	30.0
1,1,2-Trichloroethane		86.9	70.0	130.0	0.7	30.0
1,2,4-Trichlorobenzene		117.7	70.0	130.0	1.5	30.0
1,2,4-Trimethylbenzene		101.1	70.0	130.0	2.3	30.0
1,3,5-Trimethylbenzene		100.5	70.0	130.0	3.1	30.0
2,2,4-Trimethylpentane		85.3	70.0	130.0	1.5	30.0
Tert-butyl Alcohol		87.7	70.0	130.0	13.9	30.0
Tetrachloroethene		100.2	70.0	130.0	3.4	30.0
Tetrahydrofuran		79.9	70.0	130.0	1.7	30.0
Toluene		90.7	70.0	130.0	2.2	30.0
Trichloroethene		92.5	70.0	130.0	1.8	30.0
Trichlorofluoromethane		90.6	70.0	130.0	2.1	30.0
Vinyl chloride		93.3	70.0	130.0	2.4	30.0
Vinyl acetate		103.3	70.0	130.0	0.3	30.0
p,m-Xylene		100.5	70.0	130.0	2.5	30.0
o-Xylene		98.0	70.0	130.0	2.8	30.0

Merit Laboratories, Inc.

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C.O.C. PAGE # 1 OF 2

A 02284

AIR/GAS SAMPLES CHAIN OF CUSTODY RECORD

REPORT TO

CONTACT NAME: Penni Mahler
COMPANY: Fishbeck
ADDRESS: 1515 Arboretum Dr. SE
CITY: Grand Rapids STATE: MI ZIP CODE: 49546
PHONE NO.: (616) 575-3824 FAX NO.: P.O. NO.:
EMAIL ADDRESS: pdmahler@fishbeck.com QUOTE NO.:

INVOICE TO

CONTACT NAME: Accounts Payable ☐ SAME
COMPANY: Fishbeck
ADDRESS: 1515 Arboretum Dr. SE
CITY: Grand Rapids STATE: MI ZIP CODE: 49546
PHONE NO.: (616) 464-3708 EMAIL ADDRESS: acpay@fishbeck.com

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

PROJECT NO./NAME:
SAMPLER(S) - PLEASE PRINT/SIGN NAME:

TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER

DELIVERABLES REQUIRED ☒ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☐ OTHER

Certifications
☐ OHIO VAP ☐ NELAP
☐ DoD ☐ NPDES

MERIT LAB NO. FOR LAB USE ONLY	SAMPLE TAG IDENTIFICATION-DESCRIPTION	Sample Date(s)	Time Start	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	Sample Type: Indoor Air	Ambient Air	Soil Gas	Landfill Gas	Other (specify in notes)	Analyses: TO-15	Other (specify in notes)
55384.01	SSVP-1	10/31	1129	1136	-28	-2	411	35568			X			X	
.02	SSVP-2		1032	1040	-24	-2	487	13750			X			X	
	SSVP-3		1201	1204	-26	-17	436	46632			X			X	
.03	SSVP-4		1229	1235	-26	-2	181	42302			X			X	
.04	SSVP-5		1000	1008	-25	-2	254	47656			X			X	
.05	SG-1		1321	1328	-26	-2	380	47311			X			X	
.06	SG-2		1357	1403	-24	-2	306	16835			X			X	
.07	SG-3		1415	1423	-25	-2	20	13718			X			X	
.08	SG-4		1457	1503	-27	-2	424	13735			X			X	
.09	SG-5		1523	1531	-28	-2	357	12438			X			X	

Temperature (Fahrenheit)	Interior	Ambient	Notes
Start		34	
Stop		32	

Pressure (inches of Hg)	Interior	Ambient	Notes
Start		30.03	
Stop		30.17	

Notes: I'm not convinced of SSVP-3 stop time or final pressure, may have been poor note taking
Do Not Run bottle 47311 cont. p.2

RELINQUISHED BY: SIGNATURE/ORGANIZATION: Mike Roberts ☒ Sampler	DATE: 11/2	TIME: 3:40	
RECEIVED BY: SIGNATURE/ORGANIZATION:	DATE: 11/3/23	TIME: 1245	
RELINQUISHED BY: SIGNATURE/ORGANIZATION:	DATE: 11/3/23	TIME: 245	
RECEIVED BY: SIGNATURE/ORGANIZATION:	DATE	TIME	

RELINQUISHED BY: SIGNATURE/ORGANIZATION:	DATE	TIME	
RECEIVED BY: SIGNATURE/ORGANIZATION:	DATE	TIME	

SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS
SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS

NOTES: TEMP. ON ARRIVAL RT

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

Rev. 7.10.15

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C.O.C. PAGE # 2 OF 2

A 02285

AIR/GAS SAMPLES CHAIN OF CUSTODY RECORD

REPORT TO

CONTACT NAME: Fenni Mahler
COMPANY: Fishbeck
ADDRESS: 1515 Arboretum Dr. SE
CITY: Grand Rapids STATE: MI ZIP CODE: 49546
PHONE NO.: (616) 575-3824 FAX NO.: P.O. NO.:
EMAIL ADDRESS: pdmahler@fishbeck.com QUOTE NO.:

INVOICE TO

CONTACT NAME: Accounts Payable ☐ SAME
COMPANY: Fishbeck
ADDRESS: 1515 Arboretum Dr. SE
CITY: Grand Rapids STATE: MI ZIP CODE: 49546
PHONE NO.: (616) 464-3708 EMAIL ADDRESS: acpay@fishbeck.com

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

PROJECT NO./NAME:
SAMPLER(S) - PLEASE PRINT/SIGN NAME:

TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER

DELIVERABLES REQUIRED ☒ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☐ OTHER

Certifications
☐ OHIO VAP ☐ NELAP
☐ DoD ☐ NPDES

MERIT LAB NO. FOR LAB USE ONLY	SAMPLE TAG IDENTIFICATION-DESCRIPTION	Sample Date(s)	Time Start	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	Sample Type: Indoor Air	Ambient Air	Soil Gas	Landfill Gas	Other (specify in notes)	Analyses: TO-15	Other (specify in notes)
55384.10	Mg-1	10/31/23	t	t+8min	-25	-2		13750			X			X	

Temperature (Fahrenheit)	Interior	Ambient	Notes
Start		34	
Stop		32	

Pressure (inches of Hg)	Interior	Ambient	Notes
Start		30.03	
Stop		30.17	

Notes: ...Bottle 47311 appeared depressurized upon initial plug-in to regulator
Mg-1 reg ID available upon request

		DATE	TIME
RELINQUISHED BY: SIGNATURE/ORGANIZATION: Mike Roberts ☒ Sampler		11/2	3:40
RECEIVED BY: SIGNATURE/ORGANIZATION		11/3/23	1245
RELINQUISHED BY: SIGNATURE/ORGANIZATION		11/3/22	245
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE	TIME

		DATE	TIME
RELINQUISHED BY: SIGNATURE/ORGANIZATION			
RECEIVED BY: SIGNATURE/ORGANIZATION			

SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS
SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS

NOTES: TEMP. ON ARRIVAL
RT

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

Appendix 3

fishbeck
Engineers | Architects | Scientists | Constructors

2960 Interstate Parkway
Kalamazoo, Michigan 49048

269.342.1100 | fishbeck.com

Data Validation Report
For
Phase II Environmental Site Assessment
3 and 15 E Main Street and 15 Courtland Street
Hart, Michigan

Fishbeck has completed a Phase II Environmental Site Assessment (ESA) of five parcels of land in Hart, Michigan. This work was conducted through the City of Hart using their U.S. Environmental Protection Agency (USEPA) Brownfield Assessment Grant (Cooperative Agreement BF-00E03216). The purpose of this *Data Validation and Assessment* report is to validate and verify the Phase II ESA data and to draw conclusions on the data in relation to the Data Quality Objectives (DQOs).

DQOS and Sample Design Review

This Sampling Plan was designed for specific DQOs described below related to the Recognized Environmental Conditions (RECs) identified by the Phase I ESA and in order to support the redevelopment planning of the site. Specific DQOs consisted of the following:

- What is the horizontal and vertical distribution of the petroleum contamination related to the former bulk fuel storage area?
- Where around the property is the groundwater contaminated?
- Where on the property is there soil vapor impact significant enough to necessitate a vapor intrusion mitigation system?

Data Verification and Validation

The data collected in the investigation was reviewed by the Data Manager, with supporting review provided by the Vice President/Brownfield Program Manager, David Stegink. The purpose of the review was to confirm (verify) that the data was collected in accordance with the Standard Operating Procedures (SOPs) and the Quality Assurance Project Plan (QAPP). The quality of the data was simultaneously assessed to determine that it was scientifically valid. The purpose of the data verification and validation was to determine the usefulness of the data in making decisions posed by the DQO and for making decisions on future property use with respect to environmental concerns. All of the collected data was determined to be verified and valid using the Precision, Accuracy, Representativeness, Completeness, and Comparability (PARCC) criteria as explained in the following table.

Criteria	Field Data	Lab Data
Precision	Field methods and equipment calibration SOPs were followed in order to provide data within the precision limits of the field equipment. Duplicate samples were also collected to measure the precision of the analytical methods.	The laboratory analytical results met the Reporting Limits.

Criteria	Field Data	Lab Data
Accuracy	The equipment blanks reported no contaminants, demonstrating that no contamination resulted from the deionized rinse water or in the field procedures.	The soil MS/MSD samples were generally within acceptable limits.
Representativeness	The laboratory results were generally representative of field observations. Analytical results generally confirmed field observations regarding lack of indications of impact observed during sample collection.	The samples for analysis were extracted from the original samples following standard methods and thus are representative.
Completeness	All of the samples collected in the field were analyzed as intended.	All of the analyses provided by the laboratory were determined to be complete.
Comparability	A mask duplicate sample was collected for both soil and groundwater. Analytical results for the original and duplicate samples were similar. A duplicate soil vapor sample was also planned to be taken, but due to sampler error, the investigative sample was voided.	The samples were analyzed following standard methods and thus are comparable to cleanup criteria and other samples from the project site.

Field Procedures

The Sampling Plan, SOP, and QAPP were reviewed in a pre-field work meeting held with Ronnie Knoll and Mike Roberts, Field Geologists with Fishbeck, and Rosendall Well Drilling Staff Member Micah, Geoprobe operator. Field notes, chain-of-custody procedures, and instrument calibration were reviewed for this data assessment and found to meet the performance criteria.

Quality Assurance/Quality Control Samples

The quality assurance/quality control (QA/QC) samples collected for this project are presented in following table:

Sample ID	Matrix	Type
SB-0 D	Soil	Masked duplicate collected from SB-04 @ 9-10’ bgs
SB-05 (24-25’) MS/MSD	Soil	Matrix spike and matrix spike duplicate collected from SB-05 @ 24-25’ bgs
QCFB-01	Soil	Field blank prepared by Fishbeck for VOCs
EB-01	Soil	Equipment blanks following decontamination of the soil sampling equipment
TMW-1 MS/MSD	Groundwater	Matrix spike and matrix spike duplicate collected from TMW-1
TMW-0 D	Groundwater	Masked duplicate collected from TMW-2
QCTB-01	Groundwater	Trip blank prepared by Fishbeck for VOCs
QCFB-01	Groundwater	Field blank prepared by Fishbeck for VOCs
QCEB-01	Groundwater	Equipment blanks following decontamination of the groundwater sampling equipment
QCTB-02	Groundwater	Trip Blank prepared by Fishbeck for VOCs
MG-1	Air	Duplicate sample collected from SSVP-2. Investigative sample failed during collection, so this sample is being used as an investigative sample for this point.

Field Blank

The purpose of the field blank was to verify that no cross-contamination had occurred during sample handling due to ambient conditions at the site. The field blank was prepared by Fishbeck during the sampling event. No analytes were detected above the method detection limit within the field blank.

Equipment Blank

Equipment blanks were collected after decontamination of the Geoprobe macrocore sampler. The purpose of the equipment blanks was to ensure that no cross-contamination was introduced by the sampling equipment and that the sampling equipment was sufficiently cleaned. The equipment blanks were analyzed for organic compounds (volatile organic compounds, or VOCs) using Method 8260. No analytes were detected in the equipment blanks, and therefore there are no indications of cross-contamination.

Duplicate Samples

The purpose of the masked duplicate samples was to evaluate the ability of the laboratory to replicate data from the samples. Similar results were achieved in the duplicate soil and groundwater samples. The masked duplicate soil gas sample was collected from SSVP-2, but due to sampler error, the investigative sample was voided and there were no data to compare the duplicate sample to. Similar results were achieved in the duplicate soil gas sample.

Laboratory Data

Fishbeck conducted a comparative analysis of the matrix spike and matrix spike duplicate (MS/MSD) results. The purpose of MS/MSD samples is to verify the accuracy and precision of the laboratory operations. The spike recoveries and the range of lower and upper control limits for all analyses were with established quality control limits.

Data Reduction and Processing

Limited data reduction and processing was conducted for this project. The field notes and well logs were composed by the Field Geologist. The analytical laboratory data sheets were reviewed by the Project Manager. The Phase II ESA report was reviewed by the Project Manager and Senior Environmental Scientist.

Statistical Test

Several statistical methods were used for the laboratory data. The first statistical analysis was the comparison of the actual reporting limit to the laboratory standard reporting limit. The standard reporting limits were achieved. The second statistical analysis was the direct comparison of the detected analytes to the cleanup criteria. Conclusions could be drawn from a direct comparison of numbers, and thus further statistics were not employed.

Conclusions

All of the data collected has been verified and is valid to make decisions for the DQOs. The data presents conditions that would logically be expected based upon the identified site use history.