

**> Phase II Environmental Site Assessment
400 and 410 East Third Street
Imlay City, Lapeer County, Michigan 48444**

November 9, 2022
ECT No. 220365-0100

Prepared for:
Michigan Department of Environmental, Great Lakes, and Energy

on Behalf of:
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Document Review

The dual signatory process is an integral part of Environmental Consulting & Technology, Inc.'s (ECT's) Document Review Policy No. 9.03. All ECT documents undergo technical/peer review prior to dispatching these documents to any outside entity.

The environmental assessment described herein was conducted by the undersigned employees of ECT. ECT's investigation consisted solely of the activities described in the Introduction of this report, and in accordance with the Terms and Conditions of the Standard Consulting Services Agreement signed prior to initiation of the assessment, as applicable.

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Table of Contents

1.0	Introduction	1
1.1	Purpose	1
2.0	Background Information	2
2.1	Site Description	2
2.2	Environmental Findings	2
3.0	Sampling Activities	3
3.1	Methods	3
3.1.1	Soil Sampling	3
3.1.2	Groundwater Sampling.....	4
3.1.3	Soil Gas Sampling.....	4
3.2	Deviations from the SAP	5
3.3	Quality Assurance/Quality Control	5
3.4	Analytical Laboratory Testing Summary.....	5
4.0	Results.....	7
4.1	Soil Lithology and Hydrogeology	7
4.2	Analytical Results	7
4.2.1	Soil.....	7
4.2.2	Groundwater	9
4.2.3	Soil Gas.....	9
4.3	Quality Assurance / Quality Control	10
5.0	Interpretations and Conclusions	11
6.0	References	12

Figures

Figure 1	Sample Locations
Figure 2	Soil Analytical Results
Figure 3	Groundwater Analytical Results
Figure 4	Soil Gas Analytical Results

Tables

Table 1	Soil Analytical Summary
Table 2	Groundwater Analytical Summary
Table 3	Soil Gas Analytical Summary

Appendices

Appendix A	Soil Boring Logs
Appendix B	Groundwater Low-Flow Stabilization Logs
Appendix C	Soil Gas Sampling Logs
Appendix D	Laboratory Analytical Reports

List of Acronyms and Abbreviations

bgs	below ground surface
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
ECT	Environmental Consulting & Technology, Inc.
EGLE	Michigan Department of Environment, Great Lakes and Energy
EPA	Environmental Protection Agency
FES	Fibertec Environmental Services
GSI	groundwater surface water interface
NREPA	Natural Resources and Environmental Protection Act, 1994 PA 451, as amended
PCE	tetrachloroethene
PID	photoionization detector
ppm	part per million
RCRA	Resource Conservation and Recovery Act
REC	recognized environmental condition
SAP	Sampling and Analysis Plan
SVOC	Semi-volatile organic compound
TCE	trichloroethene
TMB	Trimethylbenzene
Ug/L	micrograms per liter
ug/kg	micrograms per kilogram
ug/m ³	micrograms per cubic meter
VIAP	Volatilization to Indoor Air Pathway
VOC	volatile organic compound

1.0 Introduction

Environmental Consulting & Technology, Inc. (ECT) was retained by the Michigan Department of Environment, Great Lakes, and Energy (EGLE) on behalf of Lapeer Development Corporation (the Client) to conduct a Phase II Environmental Site Assessment (ESA) at the property addressed as 400 and 410 East Third Street, Imlay City, Michigan (herein referred to as the Subject Property).

1.1 **Purpose**

The purpose of the Phase II ESA is to evaluate the presence or absence of environmental impact associated with the Subject Property. This Phase II ESA report is intended to follow the ASTM International Standard E1903-19 (Standard Practice for Phase II Environmental Site Assessment Process). The purpose of ASTM E1903-19 is to conduct a Phase II ESA of a parcel of property with respect to the presence of, or the likely presence of regulated substances, including but not limited to those required per the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA; 42 U.S.C. §9601) (e.g., hazardous substances) for documenting the assessment, scope, and the constraints on the conduct of the assessment process.

2.0 Background Information

2.1 Site Description

The Subject Property is situated in the Southeast ¼ of Section 17, Township 7 North, Range 12 East in Imlay City, Lapeer County, Michigan. The Subject Property is currently developed with an approximately 2,300-square foot commercial structure and paved parking lot. The structure is currently vacant except for Imlay City Department of Public Works (DPW) implement storage.

2.2 Environmental Findings

As a preliminary investigation, ECT conducted a site reconnaissance on June 17, 2022 to evaluate Subject Property conditions that would be indicative of a recognized environmental condition (REC). Significant items observed during the site reconnaissance are described below:

OBSERVATION	YES	NO
Hazardous Substances and/or Petroleum Products in Connection with Property Use	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Hazardous Substances and/or Petroleum Products not in Connection with Property Use	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Aboveground Storage Tanks (ASTs)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Underground Storage Tanks (USTs), vent pipes, fill pipes, or access ways indicating USTs may be present	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Unidentified Substance Containers	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Strong, Pungent, or Noxious Odors	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Drains, Sumps, Clarifiers, or Pools of Liquid	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Electrical or Hydraulic Equipment Likely to Contain Fluids	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Staining or Stressed Vegetation	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Pits, Ponds, Ditches, Streams, or Lagoons	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Solid Waste Disposal	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Evidence of Fill Materials or Dumping of Debris	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Wastewater or Storm Water Discharges	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Wells	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Septic System	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.0 Sampling Activities

A Brownfield Site Assessment Sampling and Analysis Plan was prepared for the Phase II ESA Investigation by ECT and dated August 1, 2022, which provided an explanation of the proposed sampling activities, rationale, data quality objectives, data generation methodologies, and quality assurance measures. Sampling activities were conducted on August 16, 2022 and were performed in accordance with the Sampling and Analysis Plan (SAP). The Sample Locations Map is provided as **Figure 1**.

3.1 Methods

The following methods and/or guidance were utilized during this Phase II ESA:

Activity	Method or Guidance
Decontamination	ECT SOP-4
Geoprobe Drilling	ASTM D-6282
Groundwater Sampling	ECT SOP-2
Soil Sampling	ECT SOP-1 and EPA Method 5035
Soil Gas Sampling	EGLI Vapor Intrusion Pathway Guidance Document

3.1.1 Soil Sampling

Four soil borings (notated as SB-3 through SB-6) were advanced using direct-push drilling technologies along the exterior perimeter of the structure and situated near areas of environmental significances that were identified during the preliminary site reconnaissance. Two soil borings (notated as SB-1 and SB-2) were advanced using a hand auger inside the building. Soils were screened with a calibrated photoionization detector (PID), logged, and characterized by an environmental professional. The Soil Boring Logs are provided as **Appendix A**.

The direct-push borings were advanced to a maximum depth of 20 feet below ground surface (bgs) and hand auger borings were advanced to a maximum depth of six feet bgs. One soil sample was collected from each boring based on field conditions, such as elevated PID readings, staining, odor, and/or stratigraphy changes. The six soil samples were analyzed for volatile organic compounds (VOCs), polynuclear aromatic hydrocarbons (PAHs), and/or the Michigan Ten Metals (including arsenic, barium, cadmium, chromium, copper, lead, mercury, silver, selenium, and zinc) using Environmental Protection Agency (EPA) Methods 8260, 8270, and 6020/7470, respectively.

3.1.2 Groundwater Sampling

Four temporary groundwater monitoring wells (TMW-3 through TMW-6) were installed at four soil borings (SB-3 through SB-6), respectively. Each temporary monitoring well was constructed using one-inch PVC casing and a slotted five-foot screen. Prior to sampling activities, groundwater was purged at approximately 100 milliliters per minute for at least 15 minutes. A copy of the groundwater low-flow stabilization forms is included in **Appendix B**. One groundwater sample was collected per boring and analyzed for VOCs and PAHs using EPA Methods 8260 and 8270, respectively.

It is noted that the temporary monitoring well at SB-5/TMW-5 was dry; therefore, no groundwater was collected.

A groundwater sample was also collected from MW-1 and analyzed for VOCs using EPA Method 8260. Monitoring wells MW-5 and MW-12 could not be located; therefore, groundwater samples were not collected from the two monitoring wells.

The bay door to the garage was not operational; therefore, the hand auger boring method at SB-1 and SB-2 limited the maximum depth of the borings. Groundwater was not encountered at soil borings SB-1 and SB-2.

3.1.3 Soil Gas Sampling

Four sub-slab vapor pins (notated as VP-1 through VP-4) were advanced within the interior of the structure to assess sub-slab soil gas conditions. Soil gas sampling activities for each vapor pin location included a shut-in-test and an argon chamber. A shut-in-test was used to verify that the sampling apparatus did not have any leaks; the sampling procedure did not move forward without a successful shut-in-test. Argon was used instead of helium due to the helium shortage at the time of the Phase II ESA. The argon chamber was used to ensure that the connections at the vapor pin did not allow ambient air to enter the sampling apparatus during purge or sampling activities. The Vapor Pin Field Logs/Soil Gas Sampling Logs are provided as **Appendix C**. At each vapor pin location, one soil gas

sample was collected in a one-liter bottlevac canister for laboratory analysis of VOCs using EPA Method TO-15.

3.2 Deviations from the SAP

The following summarizes the deviations from the SAP:

- The location of SB-5/TMW-5 was relocated approximately 25 feet west from the proposed location indicated in the SAP to the sanitary sewer.
- A groundwater sample was not collected from TMW-5 due to lack of groundwater at SB-5/TMW-5.
- Groundwater samples were not collected from MW-5 and MW-12. The two monitoring wells could not be located.
- Argon was used instead of helium due to the helium shortage at the time of the Phase II ESA. The argon chamber and field meter were provided by the laboratory. Prior to purging the respective vapor pins, the field meter was zeroed and then placed inside the chamber to ensure that the argon gas has adequately filled the chamber.

3.3 Quality Assurance/Quality Control

Environmental protocols consisting of equipment decontamination, sample preservation, and chain-of-custody documentation were followed during sampling activities. ECT submitted seven quality assurance/quality control (QA/QC) samples.

- Soil samples – ECT submitted a field duplicate, a matrix spike, and a matrix spike duplicate.
- Groundwater samples – ECT submitted a field duplicate, a matrix spike, a matrix spike duplicate, and a trip blank.

3.4 Analytical Laboratory Testing Summary

Samples collected during Phase II ESA activities were submitted under chain-of-custody to EGLE Environmental Laboratory for quantitative analyses. A summary of samples collected during this investigation is described in the table below:

Sample ID	Areas of Interest	Media	VOCs Method 8260	PAHs Method 8270	MI Ten Metals Method 6020/7470	VOCs Method TO-15
SB-1	REC #1 Trench/floor drain	Soil	1	1	1	0
SB-2		Soil	1	1	1	0
SB-3 TMW-3	REC #2 Former USTs	Soil	1	0	0	0
		Groundwater	1	0	0	0
SB-4 TMW-4	REC #2 Former UST #1	Soil	1	0	0	0
		Groundwater	1	0	0	0
SB-5 TMW-5	REC #2 Former USTs	Soil	1	0	0	0
		Groundwater	0	0	0	0
SB-6 TMW-6	REC #2 Former heating oil UST	Soil	1	1	0	0
		Groundwater	1	1	0	0
VP-1	REC #1 and REC #2	Soil Gas	0	0	0	1
VP-2		Soil Gas	0	0	0	1
VP-3		Soil Gas	0	0	0	1
VP-4		Soil Gas	0	0	0	1
TB005475	QA/QC Trip Blank	Water	1	0	0	0

4.0 Results

The following sections discuss the results of the Phase II ESA.

4.1 Soil Lithology and Hydrogeology

The Soil Boring Logs are provided as **Appendix A**. The subsurface soil type from the surface to approximately 12 feet was predominantly clay. The clay was underlain by sand which extended to the maximum depth of investigation (20 feet bgs). At SB-3, a sand layer was observed from eight to 10 feet; the sand layer was underlain by two feet of clay. At SB-5, a 0.5-foot clay layer was observed within the sand at approximately 16 feet.

The highest PID reading was recorded as 1,540 ppm within the clay at SB-1 at four to six feet depth. Elevated PID readings were also recorded at SB-2, SB-4, and SB-6. ECT did not observe any other indicators of environmental impact within borings (SB-3 and SB-5).

Groundwater at MW-1, TMW-3, TMW-4, and TMW-6 averaged 12.58 feet bgs. The ground surface varies approximately seven feet from the front to the back of the Subject Property. Toward the front of the building, groundwater at TMW-6 was observed at 9.38 feet bgs. At the back of the building, groundwater at TMW-3 and TMW-4 were observed at 16.17 and 13.03 feet bgs, respectively. Groundwater was observed as clear at MW-1 and TMW-4, and cloudy/turbid at TMW-3 and TMW-6.

4.2 Analytical Results

The Analytical Laboratory Reports are provided in **Appendix D**.

4.2.1 Soil

The Soil Analytical Summary is provided as **Table 1** and compares the lab results to the Michigan Department of Environment, Great Lakes, and Energy (EGLE) Part 201 residential and nonresidential cleanup criteria/screening levels. A figure summarizing the analytical concentrations and exceedances is included as **Figure 2**. A summary of the analytical soil results is presented below:

VOCs

VOCs were analyzed for seven soil samples including the duplicate soil sample collected from SB-6. Elevated concentrations of VOCs were detected at SB-1, SB-2, SB-4, and SB-6. No VOCs were detected at SB-3 and SB-5.

- Various 18 compounds, including naphthalene and 2-methylnaphthalene, were detected in the soil samples collected from SB-1, SB-2, SB-4, and SB-6.
- VOC concentrations at SB-1, SB-2, SB-4, and SB-6 exceed the drinking water protection and groundwater surface water interface (GSI) protection criteria.
- VOC concentrations at SB-1, SB-2, SB-4, and SB-6 exceed the volatilization to indoor air pathway (VIAP) residential and nonresidential screening levels.

PAHs

Four soil samples were analyzed for PAHs, including the field duplicate soil sample collected from SB-6. Elevated PAH concentrations were detected at all four soil samples.

- Two compounds (naphthalene and 2-methylnaphthalene) were detected at SB-1, SB-2, and SB-6. No other PAH compounds were detected.
- PAH concentrations at SB-1, SB-2, and SB-6 exceed the GSI protection criterion.
- PAH concentrations at SB-1, SB-2, and SB-6 exceed the VIAP's residential and nonresidential screening levels.

Metals

Two soil samples were analyzed for Ten Michigan Metals. Elevated selenium concentrations were detected at SB-1 and SB-2.

- The selenium concentrations at SB-1 and SB-2 exceed the statewide default background level and the GSI protection criterion.
- Using the 2015 Michigan Background Soil Survey (MBSS) to further evaluate selenium, the maximum selenium concentration (700 ug/kg) do not exceed the lesser of the following:
 - The 97.5 quantile (2 standard deviations) for clay in the Huron-Erie Glacial Lobe is 1,200 ug/kg and for clay in the Saginaw Glacial Lobe is 1,100 ug/kg.
 - The upper limit of the typical statewide range is 1,300 ug/kg.

4.2.2 Groundwater

The Groundwater Analytical Summary is provided as **Table 2** and compares the results to the EGLE Part 201 residential and nonresidential cleanup criteria/screening levels. A figure summarizing the analytical concentrations and exceedances is included as **Figure 3**. A summary of the analytical groundwater results is presented below:

VOCs

Five groundwater samples including a field duplicate were analyzed for VOCs. Elevated VOC concentrations were detected at TMW-3, TMW-4, and TMW-6. There were no detections at MW-1.

- Various 21 compounds were detected at TMW-3, TMW-4, and TMW-6.
- VOC concentrations at TMW-3, TMW-4, and TMW-6 exceed the residential and nonresidential drinking water protection and GSI protection criteria.
- None of the VOC concentrations exceed the generic residential groundwater volatilization to indoor air criteria.
- VOC concentrations at TMW-3, TMW-4, and TMW-6 exceed the VIAP residential and nonresidential screening levels for shallow groundwater and groundwater not-in-contact.

PAHs

PAHs were analyzed for two groundwater samples, including the field duplicate collected from TMW-6. Lab results reported no detections for PAHs.

4.2.3 Soil Gas

The Soil Gas Analytical Summary is provided as **Table 3** and compares the results to the EGLE VIAP residential and nonresidential screening levels. A figure summarizing the analytical concentrations and exceedances is included as **Figure 4**. A summary of the analytical soil gas results is presented below:

VOCs

Soil gas samples collected from (VP-1 through VP-4) were analyzed VOCs. Elevated VOC concentrations were detected in all four samples.

- Various 21 compounds were detected at VP-1, VP-2, VP-3, and VP-4.

- VOC concentrations (2,2,4-trimethylpentane, benzene, and hexane) at VP-1 exceed the residential and nonresidential soil vapor screening levels.
- The VOC concentrations at VP-2, VP-3, and VP-4 do not exceed screening levels.

4.3 Quality Assurance / Quality Control

ECT submitted seven quality assurance/quality control (QA/QC) samples. As referenced;

- Soil samples – ECT submitted a field duplicate, a matrix spike, and a matrix spike duplicate,
- Groundwater samples – ECT submitted a field duplicate, a matrix spike, a matrix spike duplicate, and a trip blank.

No VOCs were detected in the trip blank quality assurance sample. All samples were analyzed within their respective hold times. The results of the laboratory's qualifiers and control limits are included within the Analytical Laboratory Reports, provided in **Appendix D**. It is ECT's opinion that the laboratory's qualifiers do not impact the conclusions of this report.

5.0 Interpretations and Conclusions

Based on the results of the environmental site assessments completed at the Subject Property, ECT offers the following conclusions and opinions:

Soil

The concentrations of VOCs (including 2-methylnaphthalene and naphthalene) exceed residential drinking water protection and GSI protection criteria/screening levels. The concentrations also exceed the VIAP residential and nonresidential criteria/screening levels. The elevated concentrations of VOCs are consistent with the historical soil results from 2011 and 2015, included in **Table 1**.

Although the concentrations of selenium were found to exceed the statewide default background level, some degree of its presence is naturally occurring. The selenium concentrations do not exceed the MBSS's 97.5 quantile for clay or the upper limit of the typical statewide range. ECT believes the exceeding values of selenium are **not** indicative of a significant release of materials at the Subject Property.

Groundwater

Groundwater concentrations for VOCs exceed the residential drinking water and GSI criteria/screening levels. The concentrations also exceed the VIAP residential and nonresidential shallow groundwater and groundwater not-in-contact screening levels. The elevated concentrations of VOCs are consistent with historical groundwater results from 2010 and 2012, included in **Table 2**.

Soil Gas

Soil gas concentrations for VOCs at VP-1 exceed the VIAP residential and nonresidential soil vapor screening levels.

6.0 References

ASTM International Standard E1903-19: Standard Practice for the Phase I Environmental Site Assessment Process, 2019.

Remediation and Redevelopment Division, Cleanup Criteria Requirements for Response Activity, R 299.44 Generic groundwater cleanup criteria, Table 1. Groundwater: Residential and Nonresidential Part 201 Generic Cleanup Criteria and Screening Levels, pages 36-44, effective December 30, 2013, revised August 3, 2020.

Remediation and Redevelopment Division, Cleanup Criteria Requirements for Response Activity, R 299.46 Generic soil cleanup criteria for residential category, Table 2. Soil: Residential Part 201 Generic Cleanup Criteria and Screening Levels, pages 48-68, effective December 30, 2013, revised June 25, 2018.

Figures

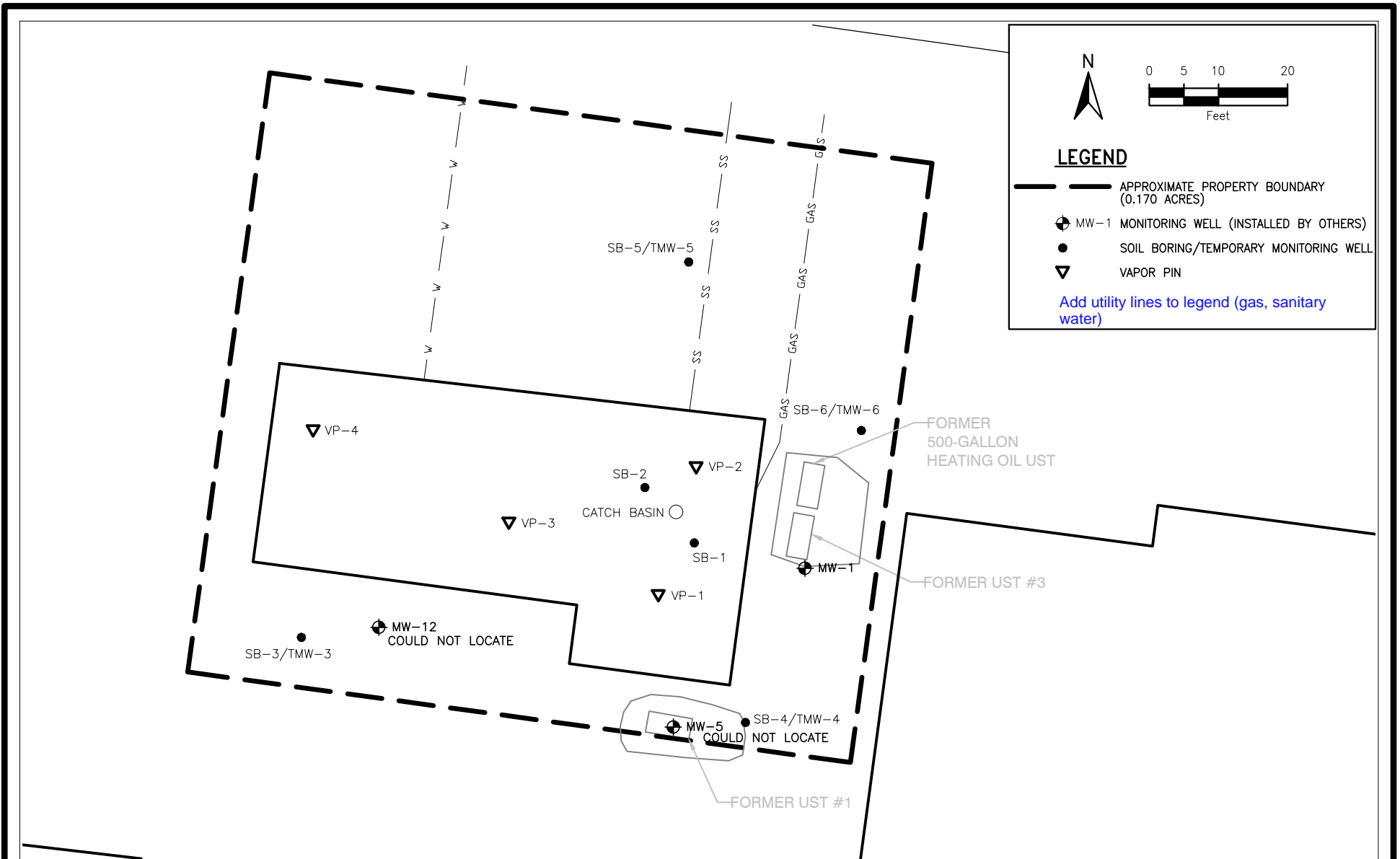


FIGURE 1.
SAMPLE LOCATIONS
400 AND 410 EAST THIRD STREET
IMLAY CITY, MICHIGAN 48444

Source: AKT Peerless, 2010; Huron Consultants, 2013; Mannik and Smith Group, 2015; Google, 2022 (imagery date: 3/24/19), ECT, 2022.



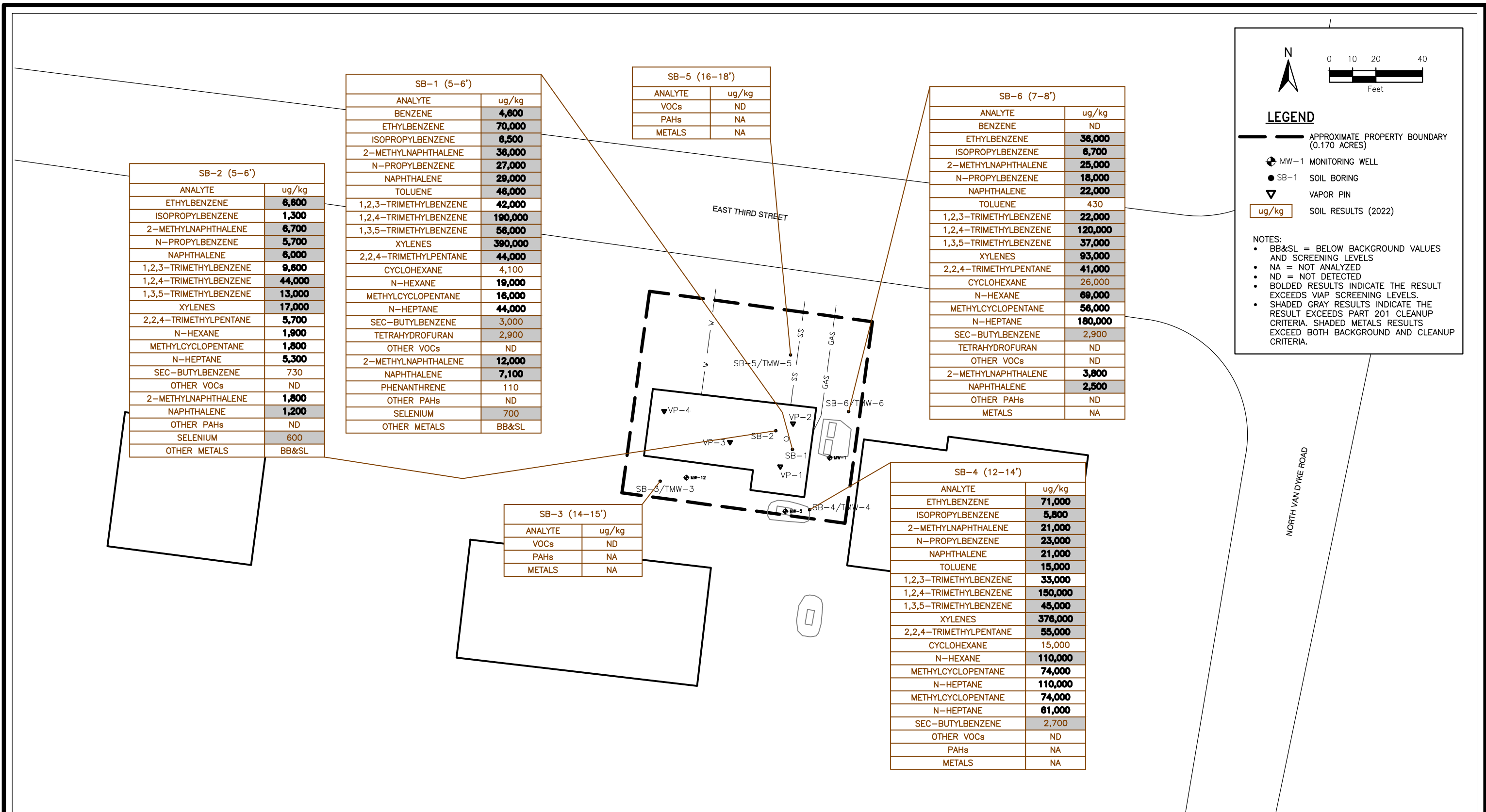


FIGURE 2.
SOIL ANALYTICAL RESULTS
400 AND 410 EAST THIRD STREET
IMLAY CITY, MICHIGAN 48444

Source: Google, 2022; ECT, 2022.



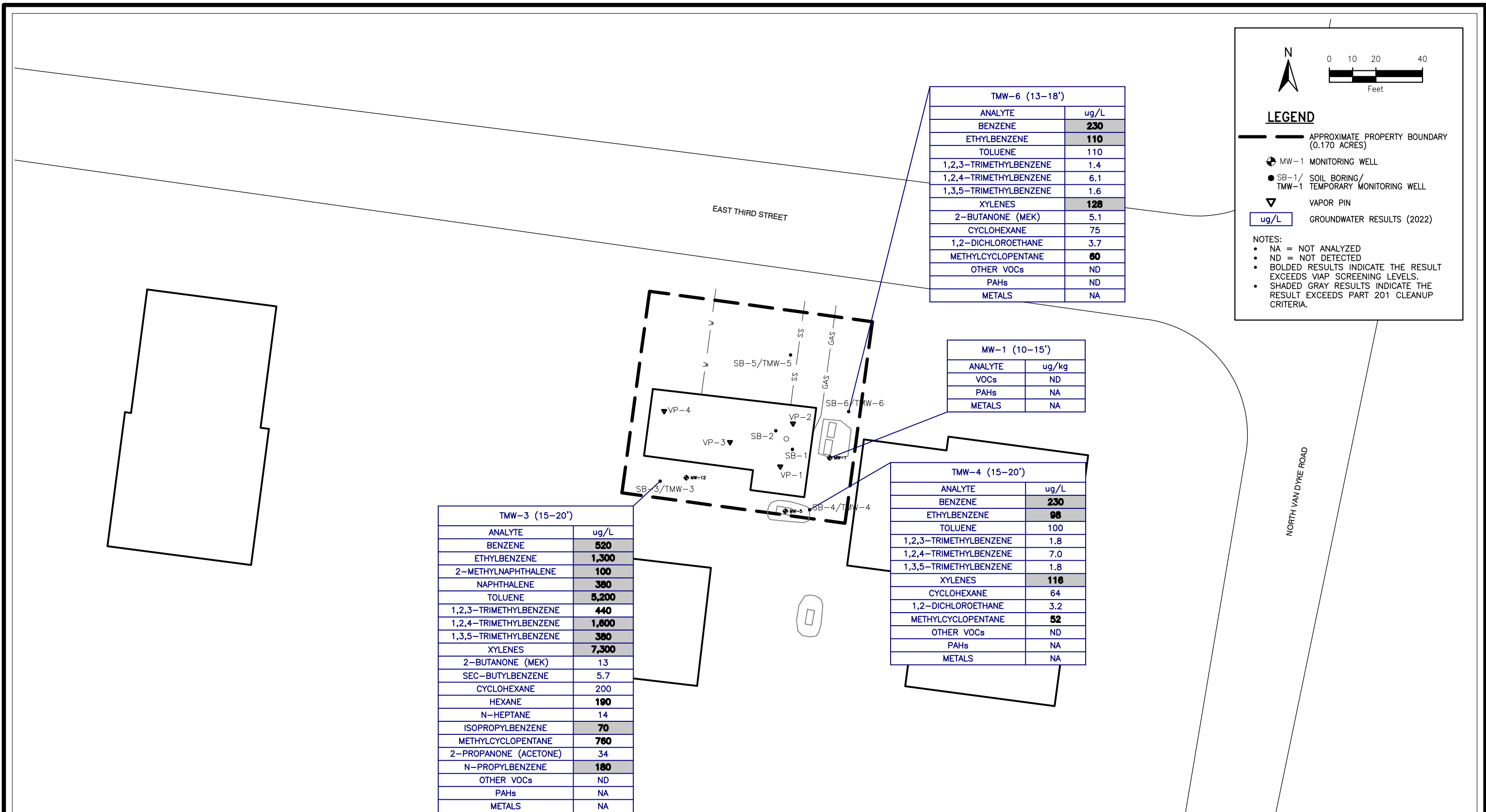


FIGURE 3.
GROUNDWATER ANALYTICAL RESULTS
400 AND 410 EAST THIRD STREET
IMLAY CITY, MICHIGAN 48444

Source: Google, 2022; ECT, 2022.



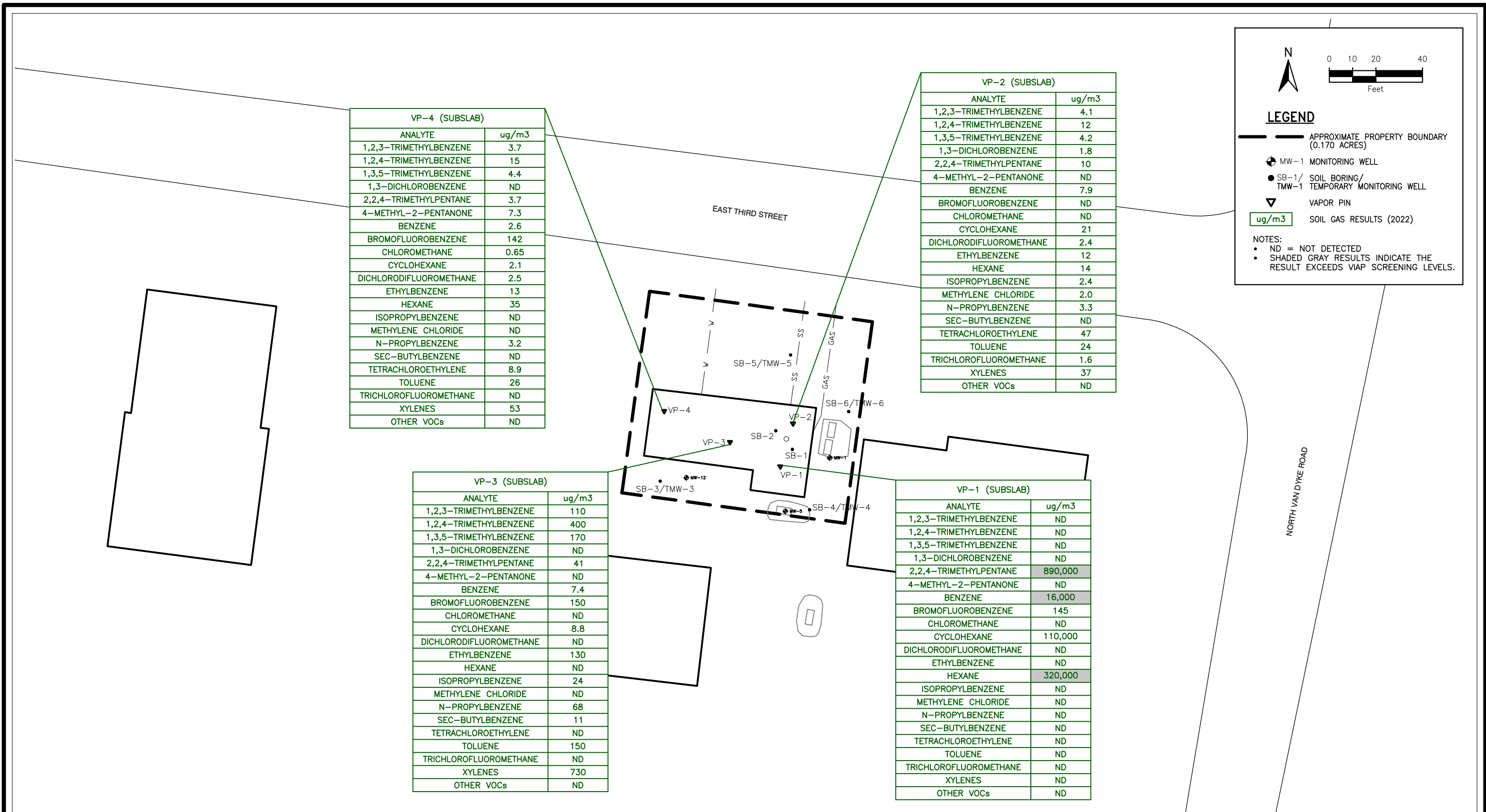


FIGURE 4.
SOIL GAS ANALYTICAL RESULTS
400 AND 410 EAST THIRD STREET
IMLAY CITY, MICHIGAN 48444

Source: Google, 2022; ECT, 2022.



Tables

Table 1. Soil Analytical Summary
400 and 410 East Third Street, Imlay City, MI
 Matrix: Soil
 Cleanup Criteria: Residential/Nonresidential

	Chemical Abstract Service Numbers	Statewide Default Background Levels	Part 201 Cleanup Criteria (June 2018)					VIAP (2020)		Historical Soil Results (2011 to 2015)												Sample Locations (and Depths)									
			Drinking Water Protection Criteria	GSI Protection Criteria	Soil Volatilization to Indoor Air Inhalation	Infinite Source Volatile Soil Inhalation	Direct Contact Criteria	Residential Screening Levels	Nonres Screening Levels	Residential		Nonres		SB-01 (11') MSG		SB-04 (15') MSG		SB-1 (5-6') ECT		SB-2 (5-6') ECT		SB-3 (14-15') ECT		SB-4 (12-14') ECT		SB-5 (16-18') ECT		SB-6 (7-8') ECT		SB-1 DUP (5-6') ECT	
										2/6/11	2/16/11	10/25/11	7/14/15	7/14/15	8/16/22	8/16/22	8/16/22	8/16/22	8/16/22	8/16/22	8/16/22	8/16/22	8/16/22	8/16/22	8/16/22	8/16/22	8/16/22				
VOC, ug/kg - Method 8260M, 8260																															
Benzene	71432	NA	100	240	1,600	13,000	180,000	1.7	47	nd	96	nd	nd	nd	4,600	<600	<79	<2400	<60	<240	<60	<240	4,800								
Ethylbenzene	100414	NA	1,500	360	87,000	720,000	22,000,000	12	340	520	960	nd	nd	UNK	UNK	70,000	6,600	<79	71,000	<60	36,000	79,000									
Isopropylbenzene	98828	NA	91,000	3,200	400,000	1,700,000	25,000,000	3.8	110	140	210	nd	nd	2,000	250	6,500	1,300	<79	5,800	<60	6,700	7,700									
2-Methylnaphthalene	91576	NA	57,000	4,200	2,700,000	1,500,000	8,100,000	1,700	30,000	2,000	nd	nd	nd	UNK	2,900	36,000	6,700	<400	21,000	<300	25,000	44,000									
n-Propylbenzene	103651	NA	1,600	ID	ID	ID	2,500,000	1,800	21,000	530	470	nd	nd	6,200	1,100	27,000	5,700	<79	23,000	<60	18,000	32,000									
Naphthalene	91203	NA	35,000	730	250,000	300,000	16,000,000	67	1,900	1,000	310	nd	nd	UNK	660	29,000	6,000	<400	21,000	<300	22,000	34,000									
Toluene	108883	NA	16,000	5,400	330,000	2,800,000	50,000,000	3,700	64,000	200	970	nd	nd	1,100	UNK	46,000	<600	<79	15,000	<60	430	51,000									
1,2,3-Trimethylbenzene	526738	NA	NA	NA	NA	NA	NA	270	4,800	1,100	770	nd	nd	5,300	1,400	42,000	9,600	<79	33,000	<60	22,000	48,000									
1,2,4-Trimethylbenzene	95636	NA	2,100	570	4,300,000	21,000,000	32,000,000	150	2,600	3,700	2,400	nd	nd	UNK	UNK	190,000	44,000	<79	150,000	<60	120,000	220,000									
1,3,5-Trimethylbenzene	108678	NA	1,800	1,100	2,600,000	16,000,000	32,000,000	100	1,800	1,400	820	nd	nd	UNK	UNK	56,000	13,000	<79	45,000	<60	37,000	66,000									
Xylenes	1330207	NA	5,600	980	6,300,000	46,000,000	410,000,000	280	5,000	3,500	5,800	nd	nd	42,600	2,390	390,000	17,000	<79	376,000	<60	93,000	450,000									
2,2,4-Trimethylpentane	540841	NA	ID	NA	110,000	5,200,000	ID	130	2,200	na	na	na	na	na	na	44,000	5,700	<400	55,000	<300	41,000	48,000									
Cyclohexane	108941	NA	5,200,000	NA	17,000	1,000,000	1,000,000,000	68,000	1,200,000	na	na	na	na	na	na	4,100	<3000	<400	15,000	<300	26,000	4,300									
n-Hexane	110543	NA	180,000	NA	510,000	3,000,000	92,000,000	25	440	na	na	na	na	na	na	19,000	1,900	<79	110,000	<60	69,000	20,000									
Methylcyclopentane	96377	NA	ID	NA	92,000	2,300,000	ID	29	510	na	na	na	na	na	na	16,000	1,800	<79	74,000	<60	56,000	17,000									
n-Heptane	142825	NA	46,000,000	NA	1,500,000	21,000,000	990,000,000	130	2,300	na	na	na	na	na	na	44,000	5,300	<79	61,000	<60	180,000	43,000									
sec-Butylbenzene	135988	NA	1,600	ID	ID	ID	2,500,000	3,800	66,000	na	na	na	na	na	na	3,000	730	<79	2,700	<60	2,900	3,700									
Tetrahydrofuran	109999	NA	1,900	7,700	1,300,000	13,000,000	2,900,000	13,000	220,000	na	na	na	na	na	na	2,900	<3000	<400	<12000	<300	<1200	<1200									
PAH, ug/kg - Method 8270																															
2-Methylnaphthalene	91576	NA	57,000	4,200	2,700,000	1,500,000	8,100,000	1,700	30,000	nd	nd	nd	nd	nd	12,000	1,800	na	na	na	3,800	13,000										
Acenaphthene	83329	NA	300,000	8,700	190,000,000	81,000,000	41,000,000	200,000	3,600,000	nd	nd	nd	nd	nd	<110	<110	na	na	na	<110	<110										
Acenaphthylene	208968	NA	5,900	ID	1,600,000	2,200,000	1,600,000	NA	NA	nd	nd	nd	nd	nd	<110	<110	na	na	na	<110	<110										
Anthracene	120127	NA	41,000	ID	1,000,000,000	1,400,000,000	230,000,000	13,000,000	220,000,000	nd	nd	nd	nd	nd	<110	<110	na	na	na	<110	<110										
Benzo(a)anthracene	56553	NA	NLL	NLL	NLV	NLV	20,000	160,000	11,000,000	nd	nd	nd	nd	nd	<110	<110	na	na	na	<110	<110										
Benzo(a)pyrene	50328	NA	NLL	NLL	NLV	NLV	2,000	NA	NA	nd	nd	nd	nd	nd	<220	<220	na	na	na	<220	<220										
Benzo(b)fluoranthene	205992	NA	NLL	NLL	ID	ID	20,000	NA	NA	nd	nd	nd	nd	nd	<220	<220	na	na	na	<220	<220										
Benzo(g,h,i)perylene	191242	NA	NLL	NLL	NLV	NLV	2,500,000	NA	NA	nd	nd	nd	nd	nd	<220	<220	na	na	na	<220	<220										
Benzo(k)fluoranthene	207089	NA	NLL	NLL	NLV	NLV	200,000	NA	NA	nd	nd	nd	nd	nd	<220	<220	na	na	na	<220	<220										
Chrysene	218019	NA	NLL	NLL	ID	ID	2,000,000	NA	NA	nd	nd	nd	nd	nd	<110	<110	na	na	na	<110	<110										
Dibenzo(a,h)anthracene	53703	NA	NLL	NLL	NLV	NLV	2,000	NA	NA	nd	nd	nd	nd	nd	<220	<220	na	na	na	<220	<220										
Fluoranthene	206440	NA	730,000	5,500	1,000,000,000	740,000,000	46,000,000	NA	NA	nd	nd	nd	nd	nd	<110	<110	na	na	na	<110	<110										
Fluorene	86737	NA	390,000	5,300	580,000,000	130,000,000	27,000,000	470,000	8,300,000	nd	nd	nd	nd	nd	<110	<110	na	na	na	<110	<110										
Indeno(1,2,3-cd)pyrene	193395	NA	NLL	NLL	NLV	NLV	20,000	NA	NA	nd	nd	nd	nd	nd	<220	<220	na	na	na	<220	<220										
Naphthalene	91203	NA	35,000	730	250,000	300,000	16,000,000	67	1,900	nd	nd	nd	nd	nd	7,100	1,200	na	na	na	2,500	7,400										
Phenanthrene	85018	NA	56,000	2,100	2,800,000	160,000	1,600,000	1,700	29,000	nd	nd	nd	nd	nd	110	<110	na	na	na	<110	120										
Pyrene	129000	NA	480,000	ID	1,000,000,000	650,000,000	29,000,000	25,000,000	440,000,000	nd	nd	nd	nd	nd	<110	<110	na	na	na	<110	<110										
Total Metals, ug/kg - Method 6020/7470/7471																															
Arsenic	7440382	5,800	4,600	4,600	NLV	NLV	7,600	NA	NA	na	na	na	na	na	5,400	5,700	na	na	na	na	na										
Barium	7440393	75,000	1,300,000	440,000	NLV	NLV	37,000,000	NA	NA	na	na	na	na	na	31,000	26,000	na	na	na	na	na										
Cadmium	7440439	1,200	6,000	3,000	NLV	NLV	550,000	NA	NA	na	na	na	na	na	<200	<200	na	na	na	na	na										
Chromium	7440473	18,000	30,000	3,300	NLV	NLV	2,500,000	NA	NA	na	na	na	na	na	7,900	9,600	na	na	na	na	na										
Copper	7440508	32,000	5,800,000	75,000	NLV	NLV	20,000,000	NA	NA	na	na	na	na	na	7,800	8,600	na	na	na	na	na										
Lead (total)	7439921	21,000	700,000	2,500,000	NLV	NLV	400,000	NA	NA	na	na	na	na	na	4,500	5,200	na	na	na	na	na										
Mercury (Total)	Varies	130	1,700	50	48,000	52,000	160,000	22	390	na	na	na	na	na	<50	<60	na	na	na	na	na										
Selenium	7782492	410	4,000	400	NLV	NLV	2,600,000	NA	NA	na	na	na	na	na	700	600	na	na	na	na	na										
Silver	7440224	1,000	4,500	100	NLV	NLV	2,500,000	NA	NA	na	na	na	na	na	<100	<100	na	na	na	na	na										
Zinc	7440666	47,000	2,400,000	170,000	NLV	NLV	170,000,000	NA	NA	na	na	na	na	na	34,000	26,000	na	na	na	na	na										

Abbreviations: ID = insufficient data to develop criterion
 na = not analyzed
 NA = not available
 nd = not detected
 NLL = not likely to leach under most soil conditions
 NLV = not likely to volatilize under most conditions
 UNK = unknown due to illegible value but reported to exceed cleanup criteria

Notes: bolded results indicates the result exceeds VIAP screening level, but not cleanup criteria
 shaded result indicates the result exceeds cleanup criteria (for metals, shaded result exceeds both background levels and criteria)
 shaded criterion or screening level indicates exceedance
 Huron Consultants (HC) sourced from data tables
 Mannik and Smith Group (MSG) sourced from data tables

Assumptions: hardness of receiving waters = 150 mg/L
 protective for surface water that is used as a drinking water source

Table 2. Groundwater Analytical Summary

400 and 410 East Third Street, Imlay City, MI

Matrix: Groundwater

Cleanup Criteria: Residential/Nonresidential

Chemical Abstract Service Numbers	Part 201 Criteria (August 2020)			VIAP (2020)				Sample Locations												
	Residential	Res/Nonres	Residential	Residential		Nonresidential		Historical Groundwater Results (2010 to 2012)						ECT 2022						
	Drinking Water Criteria	GSI Criteria	Groundwater Volatization to Indoor Air	Shallow Groundwater	Groundwater Not in Contact	Shallow Groundwater	Groundwater Not in Contact	MW-5 AKT 3/26/10	MW-7 AKT 3/26/10	MW-1 HC 7/5/12	MW-5 HC 7/5/12	MW-12 HC 7/6/12	MW-D HC 7/5/12	MW-H HC 7/5/12	MW-1 (10-15') 8/16/22	TMW-3 (15-20') 8/16/22	TMW-4 (15-20') 8/16/22	TMW-6 (13-18') 8/16/22	TMW-6 (13-18') 8/16/22	
VOC, ug/l - Method 8260																				
1,2,3-Trimethylbenzene	526738	NA	NA	NA	43	1,200	150	1,800	150	55	36	26	nd	4.6	2.9	<1.0	440	1.8	1.3	1.4
1,2,4-Trimethylbenzene	95636	63	17	56,000	25	670	120	990	450	5.7	240	110	nd	14	12	<1.0	1,600	7.0	2.9	6.1
1,2-Dichloroethane	107062	5.0	6.0	9,600	1.4	41	5.1	97	na	na	na	na	na	na	na	<1.0	<1.0	3.2	<1.0	3.7
1,3,5-Trimethylbenzene	108678	72	45	61,000	18	470	110	690	99	4.9	110	19	nd	4.6	2.3	<1.0	380	1.8	1.3	1.6
2,2,4-Trimethylpentane	540841	ID	NA	2,300	160	160	2,400	2,400	na	na	na	na	na	na	na	<5.0	13	<5.0	15	<5.0
2-Butanone (MEK)	78933	13,000	2,200	240,000,000	2,600	4,300,000	12,000	4,300,000	55	nd	nd	nd	nd	nd	nd	<5.0	13	<5.0	<5.0	5.1
2-Methylnaphthalene	91576	260	19	25,000	66	2,000	110	2,900	35	nd	59	39	nd	11	nd	<5.0	100	<5.0	<5.0	<5.0
2-Propanone (acetone)	67641	730	1,700	1,000,000,000	50,000	40,000,000	200,000	40,000,000	na	na	na	na	na	na	na	<20	34	<20	<20	<20
Benzene	71432	5.0	12	5,600	1.0	28	8.4	66	71	5.2	nd	14	nd	nd	nd	<1.0	520	230	<1.0	230
Cyclohexane	110827	NL	NL	NL	290	2,000	8,100	8,100	na	na	na	na	na	na	na	<5.0	200	64	<5.0	75
Ethylbenzene	100414	74	18	110,000	2.8	74	28	170	260	150	61	44	nd	1.1	2.1	<1.0	1,300	98	1.3	110
Hexane	110543	3,000	NA	12,000	29	29	1,000	1,000	na	na	na	na	na	na	na	<1.0	190	<1.0	<1.0	<1.0
Isopropylbenzene	98828	800	28	56,000	0.60	15	6.7	36	22	19	9.7	4.0	nd	nd	nd	<1.0	70	<1.0	<1.0	<1.0
Methylcyclopentane	96377	ID	NA	22,000	30	93	950	950	na	na	na	na	na	na	na	<1.0	760	52	7.9	60
Naphthalene	91203	520	11	31,000	4.2	130	12	300	88	29	49	23	nd	nd	nd	<5.0	380	<5.0	<5.0	<5.0
n-Butylbenzene	104518	80	ID	ID	44	1,100	360	1,600	11	3.7	5.7	3.9	nd	2.6	nd	<1.0	<1.0	<1.0	1.1	<1.0
n-Heptane	142825	2,700	NA	2,700	150	150	3,400	3,400	na	na	na	na	na	na	na	<1.0	14	<1.0	<1.0	<1.0
n-Propylbenzene	103651	80	ID	ID	43	6,100	970	6,100	51	26	20	12	nd	nd	nd	<1.0	180	<1.0	2.6	<1.0
sec-Butylbenzene	135988	80	ID	ID	270	8,100	400	12,000	5.4	2.7	3.7	3.5	nd	nd	nd	<1.0	5.7	<1.0	<1.0	<1.0
Toluene	108883	790	270	530,000	300	41,000	6,600	59,000	1,100	1.2	19	140	nd	4.5	2.7	<1.0	5,200	100	<1.0	110
Xylenes	1330207	280	49	190,000	75	2,000	410	3,000	2,000	94	120	240	nd	8	13	<3.0	7,300	116	<3.0	128
PAH, ug/kg - Method 8270																				
2-Methylnaphthalene	91576	260	19	25,000	66	2,000	110	2,900	na	na	na	na	na	na	na	na	na	na	<5.0	<5.0
Acenaphthene	83329	1,300	38	4,200	3,900	3,900	3,900	3,900	na	na	na	na	na	na	na	na	na	na	<1.0	<1.0
Acenaphthylene	208968	52	ID	3,900	65	65	710	710	na	na	na	na	na	na	na	na	na	na	<1.0	<1.0
Anthracene	120127	43	ID	43	43	43	43	43	na	na	na	na	na	na	na	na	na	na	<1.0	<1.0
Benzo(a)anthracene	56553	2.1	ID	NLV	9.4	9.4	9.4	9.4	na	na	na	na	na	na	na	na	na	na	<1.0	<1.0
Benzo(a)pyrene	50328	5.0	ID	NLV	NA	NA	NA	NA	na	na	na	na	na	na	na	na	na	na	<1.0	<1.0
Benzo(b)fluoranthene	205992	1.5	ID	ID	NA	NA	NA	NA	na	na	na	na	na	na	na	na	na	na	<1.0	<1.0
Benzo(g,h,i)perylene	191242	1.0	ID	NLV	NA	NA	NA	NA	na	na	na	na	na	na	na	na	na	na	<1.0	<1.0
Benzo(k)fluoranthene	207089	1.0	NA	NLV	NA	NA	NA	NA	na	na	na	na	na	na	na	na	na	na	<1.0	<1.0
Chrysene	218019	1.6	ID	ID	NA	NA	NA	NA	na	na	na	na	na	na	na	na	na	na	<1.0	<1.0
Dibenzo(a,h)anthracene	53703	2.0	ID	NLV	NA	NA	NA	NA	na	na	na	na	na	na	na	na	na	na	<2.0	<2.0
Fluoranthene	206440	210	1.6	210	NA	NA	NA	NA	na	na	na	na	na	na	na	na	na	na	<1.0	<1.0
Fluorene	86737	880	12	2,000	1,700	1,700	1,700	1,700	na	na	na	na	na	na	na	na	na	na	<1.0	<1.0
Indeno(1,2,3-cd)pyrene	193395	2.0	ID	NLV	NA	NA	NA	NA	na	na	na	na	na	na	na	na	na	na	<2.0	<2.0
Naphthalene	91203	520	11	31,000	4	130	12	300	na	na	na	na	na	na	na	na	na	na	<1.0	<1.0
Phenanthrene	85018	52	2.0	1,000	10	290	15	420	na	na	na	na	na	na	na	na	na	na	<1.0	<1.0
Pyrene	129000	140	ID	140	140	140	140	140	na	na	na	na	na	na	na	na	na	na	<1.0	<1.0

Abbreviations: ID = insufficient data to develop criterion
na = not analyzed
NA = not available
nd = not detected
NLV = not likely to volatilize under most conditions
VIAP = volatilization to indoor air pathway

Notes: bolded results indicates the result exceeds VIAP screening level, but not cleanup criteria
shaded result indicates the result exceeds cleanup criteria
shaded criterion or screening level indicates exceedance
AKT Peerless (AKT) sourced from data tables
Huron Consultants (HC) sourced from data tables



Table 3. Soil Gas Analytical Summary
400 and 410 East Third Street, Imlay City, MI

Matrix: Subslab Soil Gas

Cleanup Criteria: Residential and Nonresidential

	Chemical Abstract Service Numbers	VIAP Screening Levels (09-2020)		Sample Locations (and Depths)			
		Residential Soil Vapor	Nonresidential Soil Vapor	VP-1 (subslab) 8/16/22	VP-2 (subslab) 8/16/22	VP-3 (subslab) 8/16/22	VP-4 (subslab) 8/16/22
VOC, ug/m³ - Method TO-15							
1,2,3-Trimethylbenzene	526738	2,100	3,100	nd	4.1	110	3.7
1,2,4-Trimethylbenzene	95636	2,100	3,100	nd	12	400	15
1,3,5-Trimethylbenzene	108678	2,100	3,100	nd	4.2	170	4.4
1,3-Dichlorobenzene	541731	100	150	nd	1.8	nd	nd
2,2,4-Trimethylpentane	540841	120,000	180,000	890,000	10	41	3.7
4-Methyl-2-pentanone (MIBK)	108101	27,000	27,000	nd	nd	nd	7.3
Benzene	71432	110	260	16,000	7.9	7.4	2.6
Bromofluorobenzene	460004	NL	NL	145	nd	150	142
Chloromethane	74873	3,100	4,600	nd	nd	nd	0.65
Cyclohexane	110827	210,000	310,000	110,000	21	8.8	2.1
Dichlorodifluoromethane	75718	11,000	17,000	nd	2.4	nd	2.5
Ethylbenzene	100414	340	800	nd	12	130	13
Hexane	110543	24,000	36,000	320,000	14	nd	35
Isopropylbenzene	98828	81	190	nd	2.4	24	nd
Methylene chloride	75092	21,000	31,000	nd	2.0	nd	nd
n-Propylbenzene	103651	33,000	33,000	nd	3.3	68	3.2
sec-Butylbenzene	135988	14	20	nd	nd	11	nd
Tetrachloroethylene	127184	1,400	1,400	nd	47	nd	8.9
Toluene	108883	170,000	250,000	nd	24	150	26
Trichlorofluoromethane	75694	15,000	22,000	nd	1.6	nd	nd
Xylenes	1330207	7,600	11,000	nd	37	730	53
Other VOCs	varies	varies	varies	nd	nd	nd	nd

Notes: nd = not detected
 NA = not available
 NL = not listed in the VIAP source tables

Appendix A Soil Boring Logs







LOG OF BORING: SB-1

Michigan Department of Environment,
Great Lakes, and Energy (EGLE) on
behalf of Lapeer Development

Date Completed : 8/16/2022
Hole Diameter : 3"
Drilling Company : Terraprobe
Drilling Method : Hand Auger
Company Rep. : J. Kennedy (ECT)

Boring Location : Imlay City Public Works
: 400 and 410 East Third St.
: Imlay City, Michigan

Project #220365

Depth in Feet	USCS	GRAPHIC	PID (ppm)	Recovery (ft)	Sample ID	DESCRIPTION	REMARKS
0	FB					concrete	
1			<1			brown, stiff CLAY, some sand	
3	CL		329.0				
5			1540		SB-1 (5-6')		
6						End of Boring at 6' bgs	
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							









LOG OF BORING: SB-2

Michigan Department of Environment,
Great Lakes, and Energy (EGLE) on
behalf of Lapeer Development

Date Completed : 8/16/2022
Hole Diameter : 3"
Drilling Company : Terraprobe
Drilling Method : Hand Auger
Company Rep. : J. Kennedy (ECT)

Boring Location : Imlay City Public Works
: 400 and 410 East Third St.
: Imlay City, Michigan

Project #220365

Depth in Feet	USCS	GRAPHIC	PID (ppm)	Recovery (ft)	Sample ID	DESCRIPTION	REMARKS
0	FB					concrete with black SAND and CLAY	
1			<1			brown CLAY, some sand	
2			2.1				
3	CL		<1				
4			7.6				
5			434.5				
5					SB-2 (5-6')		
6						End of Boring at 6' bgs	
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							



LOG OF BORING: SB-3

Michigan Department of Environment,
Great Lakes, and Energy (EGLE) on
behalf of Lapeer Development

Date Completed : 8/16/2022
Hole Diameter : 2"
Drilling Company : Terraprobe
Drilling Method : Geoprobe
Company Rep. : J. Kennedy (ECT)

Boring Location : Imlay City Public Works
: 400 and 410 East Third St.
: Imlay City, Michigan

Project #220365

Depth in Feet	USCS	GRAPHIC	PID (ppm)	Recovery (ft)	Sample ID	DESCRIPTION	REMARKS	Temporary Monitoring Well Identification: TMW-3
0	SP					brown, fine to medium grained SAND, some gravel, damp		<p>1" PVC Riser</p> <p>1" PVC Screen #10 Slot</p>
1			<1			brown, stiff CLAY, trace gravel		
2				2				
3			<1					
4	CL							
5			<1					
6				3.3				
7								
8			<1			brown, fine to medium grained SAND, some gravel, moist		
9	SP		<1					
10				2.9		brown, stiff CLAY, trace gravel		
11	CL		<1					
12						brown, fine to coarse grained SAND, damp		
13	SP		<1					
14				3.2	SB-3 (14-15')			
15			<1			brown, fine to medium grained SAND, moist to wet		
16						wet at 16' bgs		
17	SP		<1					
18				3.9				
19			<1					
20								

End of Boring at 20' bgs



LOG OF BORING: SB-4

Michigan Department of Environment,
Great Lakes, and Energy (EGLE) on
behalf of Lapeer Development

Date Completed : 8/16/2022
Hole Diameter : 2"
Drilling Company : Terraprobe
Drilling Method : Geoprobe
Company Rep. : J. Kennedy (ECT)

Boring Location : Imlay City Public Works
: 400 and 410 East Third St.
: Imlay City, Michigan

Project #220365

Depth in Feet	USCS	GRAPHIC	PID (ppm)	Recovery (ft)	Sample ID	DESCRIPTION	REMARKS	Temporary Monitoring Well Identification: TMW-4
0	CG					GRAVEL with some sand and wood debris		<p>1" PVC Riser</p> <p>1" PVC Screen #10 Slot</p>
1			<1			brown, stiff CLAY		
2	CL			2.5				
3			<1					
4						brown, stiff CLAY, some sand and gravel		
5			<1					
6				3.2				
7			<1					
8	CL							
9			4.4					
10				2.2				
11			8.9					
12						brown, stiff CLAY with some sand		
13	CL		897		SB-4 (12-14')			
14				1.5		brown to black, fine to medium grained SAND, moist to wet		
15	SP		161.3					
16						brown, fine to medium grained SAND, wet		
17	SP		124					
18				3.9		black, fine to medium grained SAND, wet		
19	SP		14.3					
20	SP					brown, fine to medium grained SAND, wet		
						End of Boring at 20' bgs		



LOG OF BORING: SB-5

Michigan Department of Environment,
Great Lakes, and Energy (EGLE) on
behalf of Lapeer Development

Date Completed : 8/16/2022
Hole Diameter : 2"
Drilling Company : Terraprobe
Drilling Method : Geoprobe
Company Rep. : J. Kennedy (ECT)

Boring Location : Imlay City Public Works
: 400 and 410 East Third St.
: Imlay City, Michigan

Project #220365

Depth in Feet	USCS	GRAPHIC	PID (ppm)	Recovery (ft)	Sample ID	DESCRIPTION	REMARKS
0	SW		<1			SAND and GRAVEL	
1			<1			CLAY and SAND, some gravel, moist	
2	SC		<1	2.7			
3			<1				
4			<1			brown, fine to medium grained SAND, some clay, trace gravel, wet	
5	SP		<1				
6			<1	2.1		brown, stiff CLAY, trace sand	
7	CL		<1				
8			<1			brown, soft to stiff CLAY, some sand, trace gravel, moist	
9			<1				
10	CL		<1	2.0			
11			<1				
12			<1			SAND	
13			<1				
14	SP		<1	2.5			
15			<1				
16	CL		<1			brown, soft CLAY, some sand, trace gravel, moist	
17			<1		SB-5 (16-18')	brown, fine to coarse SAND, some clay and gravel, moist	
18	SP		<1	1.2			
19			<1				
20							End of Boring at 20' bgs



LOG OF BORING: SB-6

Michigan Department of Environment,
Great Lakes, and Energy (EGLE) on
behalf of Lapeer Development

Date Completed : 8/16/2022
Hole Diameter : 3"
Drilling Company : Terraprobe
Drilling Method : Geoprobe
Company Rep. : J. Kennedy (ECT)

Boring Location : Imlay City Public Works
: 400 and 410 East Third St.
: Imlay City, Michigan

Project #220365

Depth in Feet	USCS	GRAPHIC	PID (ppm)	Recovery (ft)	Sample ID	DESCRIPTION	REMARKS	Temporary Monitoring Well Identification: TMW-6
0	SW					dark brown, fine to coarse SAND and GRAVEL		<p>1" PVC Riser</p> <p>1" PVC Screen #10 Slot</p>
1			<1			brown, stiff CLAY		
2	CL			2.7				
3			1.1					
4						brown, stiff CLAY. some sand, trace gravel		
5			54.8					
6	CL			3.4				
7			565.9		SB-6 (7-8')			
8						brown, stiff CLAY, some sand, trace gravel, moist		
9			107.1					
10	CL			2.5				
11			6.7					
12						brown, fine to medium grained SAND, some clay, some gravel, moist		
13			16.1					
14	SP			2.4				
15			6.4					
16						SAND and CLAY, some gravel, wet		
17			<1					
18	SC			0.9				
19			<1					
20						End of Boring at 20' bgs		

Appendix B Groundwater Low-Flow Stabilization Logs

CLIENT: **EGLE RRD BARS**
 LOCATION: **Imlay City Public Works Property**
 ADDRESS: **400 and 410 East Third Street, Imlay City, Michigan**
 PROJECT: **220365-0100**

Monitoring Location: **Subject Property**
 Sample ID: MW-1
 Well Type: 2" PVC

INSPECTION

Label on well? YES NO REMEDIED
 Is reference mark visible? YES NO REMEDIED - High side (NE)
 Standing water present? YES NO REMEDIED
 Indication of surface runoff in well? YES NO REMEDIED
 Repair Notes:
 Is cement pad in good repair? YES NO REMEDIED
 Is protective casing locked and in good repair? YES NO REMEDIED
 Is inner cap in place and properly sealing well? YES NO REMEDIED
 Is well casing in visibly good repair? YES NO REMEDIED

STATIC WATER LEVEL

Date: 8/16/22 Time: 9:00
 Top of Casing Elevation: _____
 Depth to Water: 11.75
 Elevation of Water: _____
 Measured with: ELECTRONIC TAPE CHALKED TAPE OTHER
 Well depth verified? YES NO

WELL PURGING

Purge Method: PERISTALTIC BLADDER OTHER _____ Date: 8/16/22 Start Time: 9:06
 Measured Well Depth: 14.62 Screen Length: _____ Depth to Screen Midpoint: _____

Time	Water Level (feet)	Drawdown (feet)	Pumping Rate (ml/min)	Temp (°C)	Spec Cond. (umhos/cm)	Diss Oxy (mg/l)	pH (S.U.)	ORP (mV)	Turbidity (NTU)
9:20	12.63	0.86	100	17.9	0.560	0.58	6.89	-71.3	36.2
9:25	12.64	0.89	100	17.6	0.561	0.42	6.97	-96.6	13.9
9:30	12.69	0.94	100	17.5	0.560	0.28	6.99	-119.8	9.77
9:35	12.71	0.96	100	17.9	0.558	0.24	6.99	-126.2	9.31
9:40	12.74	0.99	100	17.7	0.559	0.21	6.99	-132.7	10.4
9:45	12.74	0.99	100	18.1	0.557	0.19	6.99	-137.4	10.4
Final	12.83								

Total Volume Purged (gal): 1 gal Stabilization Criteria: +/- 3% +/- 3% +/- 10% +/- 0.1 Units +/- 10 mV +/- 10%
 (if > 0.5 mg/l) (if > 5 NTU)

Stabilization Criteria Reference Doc. USEPA EQASOP-GW 001 Rev #3, January 19, 2010

FIELD ANALYSIS

Time: 9:45
 Temperature: 18.1 deg. C
 Specific Conductance: 0.557 umhos/cm
 Dissolved Oxygen: 0.19 mg/L
 pH: 6.99 S.U.
 ORP: -137.4 mV
 Turbidity: 10.4 NTU

- Added ~ 20' of new tubing + 0.5' mustache

SAMPLE COLLECTION

Time: 9:50 Sample Duplicate?: Yes - m/s/m/s
 Appearance of Sample: Clear - slight odor Sample Method: peristaltic

NO./BOTTLES:	SIZE:	TYPE:	FILTERED:	PRESERVATIVE:	PARAMETER:
<u>3</u>	<u>40 ml</u>	<u>glass</u>	<u>no</u>	<u>HCl VOCs</u>	
	<u>1000 ml</u>	<u>glass</u>	<u>no</u>	<u>None</u>	
<u>3 - m/s</u>	<u>40 ml</u>	<u>glass plastic</u>	<u>yes</u> <input checked="" type="checkbox"/>	<u>None (HCl) HNO₃, NaOH, H₂SO₄</u>	<u>VOCs</u>
<u>3 - m/s/D</u>	<u>40 ml</u>	<u>glass plastic</u>	<u>yes</u> <input checked="" type="checkbox"/>	<u>None (HCl) HNO₃, NaOH, H₂SO₄</u>	<u>VOCs</u>
		<u>glass plastic</u>	<u>yes</u> <input type="checkbox"/>	<u>None, HCl, HNO₃, NaOH, H₂SO₄</u>	
		<u>glass plastic</u>	<u>yes</u> <input type="checkbox"/>	<u>None, HCl, HNO₃, NaOH, H₂SO₄</u>	
		<u>glass plastic</u>	<u>yes</u> <input type="checkbox"/>	<u>None, HCl, HNO₃, NaOH, H₂SO₄</u>	
		<u>glass plastic</u>	<u>yes</u> <input type="checkbox"/>	<u>None, HCl, HNO₃, NaOH, H₂SO₄</u>	
		<u>glass plastic</u>	<u>yes</u> <input type="checkbox"/>	<u>None, HCl, HNO₃, NaOH, H₂SO₄</u>	
		<u>glass plastic</u>	<u>yes</u> <input type="checkbox"/>	<u>None, HCl, HNO₃, NaOH, H₂SO₄</u>	

SAMPLING PERSONNEL

Name (SIGNATURE): _____ Chain of Custody No. _____
 Name (SIGNATURE): _____

CLIENT: **EGLE RRD BARS**
 LOCATION: **Imlay City Public Works Property**
 ADDRESS: **400 and 410 East Third Street, Imlay City, Michigan**
 PROJECT: **220365-0100**

Monitoring Location: **Subject Property**
 Sample ID: TW-3
 Well Type: 1" PVC

INSPECTION

Label on well? YES NO REMEDIED
 Is reference mark visible? YES NO REMEDIED
 Standing water present? YES NO REMEDIED
 Indication of surface runoff in well? YES NO REMEDIED
 Repair Notes: _____
 Is cement pad in good repair? YES NO REMEDIED
 Is protective casing locked and in good repair? YES NO REMEDIED
 Is inner cap in place and properly sealing well? YES NO REMEDIED
 Is well casing in visibly good repair? YES NO REMEDIED

STATIC WATER LEVEL

Date: 8/16/22 Time: 10:25
 Top of Casing Elevation: _____
 Depth to Water: 16.17 bgs
 Elevation of Water: _____
 Measured with: ELECTRONIC TAPE CHALKED TAPE OTHER
 Well depth verified? YES NO

WELL PURGING

Purge Method: PERISTALTIC BLADDER OTHER _____ Date: 8/16/22 Start Time: 10:32
 Measured Well Depth: 19.77 bgs Screen Length: _____ Depth to Screen Midpoint: _____

Time	Water Level (feet) bgs	Drawdown (feet)	Pumping Rate (ml/min)	Temp (°C)	Spec Cond. (µmhos/cm)	Diss Oxy (mg/l)	pH (S.U.)	ORP (mV)	Turbidity (NTU)
10:40	17.09	0.92	100	16.6	1.140	1.18	7.42	-81.1	+++
10:45	17.10	0.93	100	16.7	1.184	1.25	7.39	-78.6	+++
10:50	17.15	0.98	100	16.8	1.169	1.42	7.40	-73.8	+++
10:55	17.18	1.01	100	16.7	1.171	1.42	7.42	-66.1	+++
11:00 Final	17.16								

Stabilization Criteria: +/- 3% +/- 3% +/- 10% (if > 0.5 mg/l) +/- 0.1 Units +/- 10 mV +/- 10% (if > 5 NTU)

- Water level would not stabilize pumping at lowest rate

FIELD ANALYSIS

Time: 10:55
 Temperature: 16.7 deg. C
 Specific Conductance: 1.171 umhos/cm
 Dissolved Oxygen: 1.42 mg/L
 pH: 7.42 S.U.
 ORP: -66.1 mV
 Turbidity: +++ NTU

TOL = 1' above ground surface
 - measurements are taken below ground surface (bgs)
 +++ = Over-range for turbidimeter
 - Added ~ 25' new tubing + 0.5' flex

SAMPLE COLLECTION

Time: 11:00 Sample Duplicate?: NO
 Appearance of Sample: Turbid, no odor Sample Method: peristaltic

NO./BOTTLES:	SIZE:	TYPE:	FILTERED:	PRESERVATIVE:	PARAMETER:
<u>3</u>	<u>40 ml</u>	<u>glass</u>	<u>no</u>	<u>HCl VOCs</u>	
	<u>40 ml</u>	<u>glass</u>	<u>no</u>	<u>None</u>	
	ml	glass plastic	yes no	None, HCl, HNO ₃ , NaOH, H ₂ SO ₄	
	ml	glass plastic	yes no	None, HCl, HNO ₃ , NaOH, H ₂ SO ₄	
	ml	glass plastic	yes no	(filter if > 10 NTUs) None, HCl, HNO ₃ , NaOH, H ₂ SO ₄	
	ml	glass plastic	yes no	None, HCl, HNO ₃ , NaOH, H ₂ SO ₄	
	ml	glass plastic	yes no	None, HCl, HNO ₃ , NaOH, H ₂ SO ₄	
	ml	glass plastic	yes no	None, HCl, HNO ₃ , NaOH, H ₂ SO ₄	
	ml	glass plastic	yes no	None, HCl, HNO ₃ , NaOH, H ₂ SO ₄	

SAMPLING PERSONNEL

Name (SIGNATURE): _____ Chain of Custody No. _____
 Name (SIGNATURE): _____

CLIENT: **EGLE RRD BARS**
 LOCATION: **Imlay City Public Works Property**
 ADDRESS: **400 and 410 East Third Street, Imlay City, Michigan**
 PROJECT: **220365-0100**

Monitoring Location: **Subject Property**
 Sample ID: Tu16-4
 Well Type: 1" PVC

INSPECTION

Label on well?	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	REMEDIED	Is cement pad in good repair?	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	REMEDIED
Is reference mark visible?	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	REMEDIED	Is protective casing locked and in good repair?	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	REMEDIED
Standing water present?	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	REMEDIED	Is inner cap in place and properly sealing well?	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	REMEDIED
Indication of surface runoff in well?	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	REMEDIED	Is well casing in visibly good repair?	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	REMEDIED

STATIC WATER LEVEL

Date: 8/16/22 Time: 11:20
 Top of Casing Elevation: _____
 Depth to Water: 13.03
 Elevation of Water: _____
 Measured with: ELECTRONIC TAPE CHALKED TAPE OTHER
 Well depth verified? YES NO

WELL PURGING

Purge Method: PERISTALTIC BLADDER OTHER _____ Date: 8/16/22 Start Time: 11:29
 Measured Well Depth: 16.25 Screen Length: _____ Depth to Screen Midpoint: _____

Time	Water Level (feet)	Drawdown (feet)	Pumping Rate (ml/min)	Temp (°C)	Spec Cond. (µmhos/cm)	Diss Oxy (mg/l)	pH (S.U.)	ORP (mV)	Turbidity (NTU)
11:50	13.29	0.26	100	17.2	1.025	0.24	7.13	-155.41	183
11:55	13.29	0.26	100	17.3	1.013	0.23	7.13	-155.8	93.2
12:00	13.30	0.27	100	16.9	0.987	0.22	7.14	-155.8	45.4
12:05	13.30	0.27	100	17.1	0.970	0.22	7.12	-155.0	44.4
12:10	13.30	0.27	100	17.0	0.959	0.25	7.14	-158.6	40.1
Final	13.30								

Total Volume Purged (gal): 1 gal Stabilization Criteria: +/- 3% +/- 3% +/- 10% +/- 0.1 Units +/- 10 mV +/- 10%
(if > 0.5 mg/l) (if > 5 NTU)

Stabilization Criteria Reference Doc. USEPA EQASOP-GW 001 Rev #3, January 19, 2010

FIELD ANALYSIS

Time: 12:10
 Temperature: 17.0 deg. C
 Specific Conductance: 0.959 umhos/cm
 Dissolved Oxygen: 0.25 mg/L
 pH: 7.14 S.U.
 ORP: -153.6 mV
 Turbidity: 40.1 NTU

*TOC = 3.83' above ground surface
 - measurements are taken from below ground surface (logs)
 - Added ~ 21' new tubing + 0.5' masterflex*

SAMPLE COLLECTION

Time: 12:15 Sample Duplicate?: NO
 Appearance of Sample: Clear, no odor Sample Method: peristaltic

NO./BOTTLES:	SIZE:	TYPE:	FILTERED:	PRESERVATIVE:	PARAMETER:
<u>5</u>	<u>40 ml</u>	<u>glass</u>	<u>no</u>	<u>HCl VOCs</u>	
	<u>100 ml</u>	<u>glass</u>	<u>no</u>	<u>None, Filter</u>	
	ml	glass plastic	yes no	None, HCl, HNO ₃ , NaOH, H ₂ SO ₄	
	ml	glass plastic	yes no	None, HCl, HNO ₃ , NaOH, H ₂ SO ₄	
	ml	glass plastic	yes no	(filter if > 10 NTUs) None, HCl, HNO ₃ , NaOH, H ₂ SO ₄	
	ml	glass plastic	yes no	None, HCl, HNO ₃ , NaOH, H ₂ SO ₄	
	ml	glass plastic	yes no	None, HCl, HNO ₃ , NaOH, H ₂ SO ₄	
	ml	glass plastic	yes no	None, HCl, HNO ₃ , NaOH, H ₂ SO ₄	
	ml	glass plastic	yes no	None, HCl, HNO ₃ , NaOH, H ₂ SO ₄	
	ml	glass plastic	yes no	None, HCl, HNO ₃ , NaOH, H ₂ SO ₄	

SAMPLING PERSONNEL

Name (SIGNATURE): _____

Chain of Custody No. _____

Name (SIGNATURE): _____

CLIENT: **EGLE RRD BARS**
 LOCATION: **Imlay City Public Works Property**
 ADDRESS: **400 and 410 East Third Street, Imlay City, Michigan**
 PROJECT: **220365-0100**

Monitoring Location: **Subject Property**
 Sample ID: **TMW-6**
 Well Type: **1" PVC**

INSPECTION

Label on well?	YES <input checked="" type="checkbox"/> NO <input checked="" type="checkbox"/> REMEDIED	Is cement pad in good repair?	YES <input checked="" type="checkbox"/> NO <input checked="" type="checkbox"/> REMEDIED
Is reference mark visible?	YES <input checked="" type="checkbox"/> NO <input checked="" type="checkbox"/> REMEDIED	Is protective casing locked and in good repair?	YES <input checked="" type="checkbox"/> NO <input checked="" type="checkbox"/> REMEDIED
Standing water present?	YES <input checked="" type="checkbox"/> NO <input checked="" type="checkbox"/> REMEDIED	Is inner cap in place and properly sealing well?	YES <input checked="" type="checkbox"/> NO <input checked="" type="checkbox"/> REMEDIED
Indication of surface runoff in well?	YES <input checked="" type="checkbox"/> NO <input checked="" type="checkbox"/> REMEDIED	Is well casing in visibly good repair?	YES <input checked="" type="checkbox"/> NO <input checked="" type="checkbox"/> REMEDIED

Repair Notes:

STATIC WATER LEVEL

Date: 8/16/22 Time: 12:30
 Top of Casing Elevation: _____
 Depth to Water: 9.38 Measured with: ELECTRONIC TAPE CHALKED TAPE OTHER
 Elevation of Water: _____ Well depth verified? YES NO

WELL PURGING

Purge Method: PERISTALTIC BLADDER OTHER _____ Date: 8/16/22 Start Time: 12:34
 Measured Well Depth: 17.73 Screen Length: _____ Depth to Screen Midpoint: _____

Time	Water Level (feet)	Drawdown (feet)	Pumping Rate (ml/min)	Temp (°C)	Spec Cond. (umho/cm)	Diss Oxy (mg/l)	pH (S.U.)	ORP (mV)	Turbidity (NTU)
<u>12:00</u>	<u>12.39</u>			<u>19.2</u>	<u>0.827</u>	<u>0.09</u>	<u>7.38</u>	<u>-180.1</u>	<u>cloudy</u>
<u>12:05</u>	<u>12.41</u>			<u>19.7</u>	<u>0.826</u>	<u>0.11</u>	<u>7.33</u>	<u>-169.6</u>	<u>cloudy</u>
<u>12:10</u>	<u>12.42</u>			<u>19.5</u>	<u>0.815</u>	<u>0.11</u>	<u>7.31</u>	<u>-166.2</u>	<u>cloudy</u>
<u>12:15</u>	<u>12.42</u>			<u>19.9</u>	<u>0.811</u>	<u>0.11</u>	<u>7.30</u>	<u>-165.2</u>	<u>953</u>
<u>12:20</u>	<u>12.48</u>			<u>19.6</u>	<u>0.807</u>	<u>0.10</u>	<u>7.29</u>	<u>-164.4</u>	<u>790</u>
<u>12:25</u>	<u>12.57</u>			<u>19.6</u>	<u>0.811</u>	<u>0.08</u>	<u>7.28</u>	<u>-163.5</u>	<u>721</u>
<u>13:00</u>	<u>12.57</u>			<u>19.6</u>	<u>0.808</u>	<u>0.08</u>	<u>7.29</u>	<u>-161.4</u>	<u>cloudy</u>

Total Volume Purged (gal): _____ Stabilization Criteria: +/- 3% +/- 3% +/- 10% +/- 0.1 Units +/- 10 mV +/- 10% (if > 0.5 mg/l) (if > 5 NTU)

FIELD ANALYSIS

Time: _____
 Temperature: _____ deg. C
 Specific Conductance: _____ umhos/cm
 Dissolved Oxygen: _____ mg/L
 pH: _____ S.U.
 ORP: _____ mV
 Turbidity: _____ NTU

*TOLC 1.23' above ground surface
 - measurements taken from below ground surface (bgs)
 - added ~ 23' of new tubing + 0.5' masterbox*

SAMPLE COLLECTION

Time: 1:30 Sample Duplicate?: YES - Dup
 Appearance of Sample: cloudy white Sample Method: peristaltic

NO./BOTTLES:	SIZE:	TYPE:	FILTERED:	PRESERVATIVE:	PARAMETER:
<u>7</u>	<u>40</u> ml	<u>glass</u>	<u>no</u>	<u>None, HCl, HNO₃, NaOH, H₂SO₄</u>	<u>HCl VOCs</u>
<u>1</u>	<u>1,000</u> ml	<u>glass</u>	<u>no</u>	<u>None, HCl, HNO₃, NaOH, H₂SO₄</u>	<u>None PNA</u>
<u>7</u>	<u>250</u> ml	<u>glass plastic</u>	<u>yes</u> <input checked="" type="checkbox"/>	<u>None, HCl, HNO₃, NaOH, H₂SO₄</u>	<u>VOLs</u>
<u>1</u>	<u>1000</u> ml	<u>glass plastic</u>	<u>yes</u> <input checked="" type="checkbox"/>	<u>None, HCl, HNO₃, NaOH, H₂SO₄</u>	<u>PJA</u>
_____	_____ ml	_____ glass plastic	_____ yes no	(filter if >10 NTUs) <u>None, HCl, HNO₃, NaOH, H₂SO₄</u>	_____
_____	_____ ml	_____ glass plastic	_____ yes no	<u>None, HCl, HNO₃, NaOH, H₂SO₄</u>	_____
_____	_____ ml	_____ glass plastic	_____ yes no	<u>None, HCl, HNO₃, NaOH, H₂SO₄</u>	_____
_____	_____ ml	_____ glass plastic	_____ yes no	<u>None, HCl, HNO₃, NaOH, H₂SO₄</u>	_____
_____	_____ ml	_____ glass plastic	_____ yes no	<u>None, HCl, HNO₃, NaOH, H₂SO₄</u>	_____
_____	_____ ml	_____ glass plastic	_____ yes no	<u>None, HCl, HNO₃, NaOH, H₂SO₄</u>	_____

SAMPLING PERSONNEL

Name (SIGNATURE): _____ Chain of Custody No. _____
 Name (SIGNATURE): _____

Appendix C Soil Gas Sampling Logs

CLIENT: EGLE RRD BARS
 LOCATION: 400 and 410 East 3rd St, Imlay City, Michigan
 Site ID#: 14763



Sample ID: VP- 1
 Well Type: COX PIN SS

Date:	8/16/22	Sampler:	JBL
Container Type:	Bottle	Container ID:	1586
Lab:	EGLE		

Concrete Thickness (ft) & Required Purge Volume:		Purge Testing, He Vacuum Test	
Purge Volumes: (circle)	1.5 ft	30 cc	Pre -Purge (cc):
	Pin	40 cc	

Pre-Purge PID Readings: _____ ppm
 Purging Moisture Identified (circle): Yes No System Failure, if water in sampling tubing!

Sample Start Time:	13:17	Sample End Time:	13:25
Leak Detection Method:	argon chamber	Last Known Rain Event:	>48 hours
Weather Conditions:	Sunny	Barometric Pressure:	30.07 inHg
Temperature (°F):	79°F	Relative Humidity:	43%
Wind Speed (mph):	7 mph	Other:	
Wind Direction:	NE		

Cox Pin - Needs to be installed and capped 45 Minutes before Sampling! (Recommend Purge Testing)

Canister Starting Vacuum:	29	in Hg	Canister Ending Vacuum:	0	in Hg
Volume of Canister (mL):	1000		Other:	Time:	
Regulator ID #	201		Leak Test (circle):	Pass	Fail

Field Measurements

Test Time (min)	Flow Rate (ml/min)	Vacuum (in Hg)	Comments	
			Water in Tubing	Comments
0	100-200	28	Y/N	
2	100-200	18	Y/N	
4	100-200	8	Y/N	
6	100-200	3	Y/N	
8	100-200	0	Y/N	
10	100-200		Y/N	
12	100-200		Y/N	
			Y/N	
			Y/N	

Sample Notes:
 Standardized tubing/fitting types/sizes used.

Pin Cap Type (circle): SS PVC

Post Sampling PID Reading (ppm):
 Post Sampling QRAE Readings: |CO (ppm)= |H2S(ppm)= |O2(%)= |LEL(%)=
 COC#: Circle: VOCs / Methane / CVOCs

CH4 - 0% LEL
 O2 - 15.1 vol%
 CO2 - 3.1 vol%

CLIENT: EGLE RRD BARS
 LOCATION: 400 and 410 East 3rd St, Imlay City, Michigan
 Site ID#: 14763



Sample ID: VP- 2
 Well Type: COX PIN SS

Date:	8/16/22	Sampler:	JRW
Container Type:	Bottle	Container ID:	1610
Lab:	EGLE		
Concrete Thickness (ft) & Required Purge Volume:		Purge Testing, He Vacuum Test	
Purge Volumes: (circle)	1.5 ft	30 cc	Pre -Purge (cc):
	Pin	40 cc	
Pre-Purge PID Readings:		ppm	
Purging Moisture Identified (circle):		System Failure, if water in sampling tubing!	
Sample Start Time:	12:46	Sample End Time:	13:04
Leak Detection Method:	argon chamber	Last Known Rain Event:	>48 hours
Weather Conditions:	Sunny	Barometric Pressure:	30.07 inHg
Temperature (°F):	79° F	Relative Humidity:	43%
Wind Speed (mph):	2 mph	Other:	
Wind Direction:	NE		

Cox Pin - Needs to be installed and capped 45 Minutes before Sampling! (Recommend Purge Testing)

Canister Starting Vacuum:	27	in Hg	Canister Ending Vacuum:	0	in Hg
Volume of Canister (mL):	1000		Other:	Time:	
Regulator ID #	229		Leak Test (circle):	Pass	Fail

Field Measurements

Test Time (min)	Flow Rate (ml/min)	Vacuum (in Hg)	Comments	
			Water in Tubing	Comments
0	100-200	27	Y/N	
2	100-200	16	Y/N	
4	100-200	8	Y/N	
6	100-200	4	Y/N	
8	100-200	0	Y/N	
10	100-200		Y/N	
12	100-200		Y/N	
			Y/N	
			Y/N	

Sample Notes:
 Standardized tubing/fitting types/sizes used.

Pin Cap Type (circle): SS PVC

Post Sampling PID Reading (ppm):

Post Sampling QRAE Readings: |CO (ppm)= |H2S(ppm)= |O2(%)= |LEL(%)=

COC#: Circle: VOCs / Methane / CVOCs

CH4 - 0 % LEL
 O2 - 13.7 vol %
 CO2 - 3.4 vol %

CLIENT: EGLE RRD BARS
 LOCATION: 400 and 410 East 3rd St, Imlay City, Michigan
 Site ID#: 14763



Sample ID: VP- 3
 Well Type: COX PIN SS

Date: 8/16/22 Sampler: JBR
 Container Type: Portland Container ID: 1680

Lab: EGLE

Concrete Thickness (ft) & Required Purge Volume: Purge Testing, He Vacuum Test

Purge Volumes: (circle)	1.5 ft	30 cc	Pre -Purge (cc):	Actual _____ min.
	Pin	40 cc		

Pre-Purge PID Readings: _____ ppm

Purging Moisture Identified (circle): Yes No System Failure, if water in sampling tubing!

Sample Start Time: 15:35 Sample End Time: 15:47

Leak Detection Method: argon chamber Last Known Rain Event: >48 hours

Weather Conditions: Sunny Barometric Pressure: 30.07 inHg

Temperature (°F): 79°F Relative Humidity: 43%

Wind Speed (mph): 7 mph Other:

Wind Direction: NE

Cox Pin - Needs to be installed and capped 45 Minutes before Sampling! (Recommend Purge Testing)

Canister Starting Vacuum: 30 in Hg Canister Ending Vacuum: 4 in Hg

Volume of Canister (mL): 1000 Other: Time:

Regulator ID #: 220

Leak Test (circle): Pass Fail

Field Measurements

Test Time (min)	Flow Rate (ml/min)	Vacuum (in Hg)	Comments	
			Water in Tubing	Comments
0	100-200	30	Y/N	
2	100-200	15	Y/N	Regulator zeroed
4	100-200	11	Y/N	at 4 psi on scale
6	100-200	8	Y/N	
8	100-200	5	Y/N	
10	100-200	4	Y/N	
12	100-200	4	Y/N	
			Y/N	
			Y/N	

Sample Notes:
 Standardized tubing/fitting types/sizes used.

Pin Cap Type (circle): SS PVC

Post Sampling PID Reading (ppm):

Post Sampling QRAE Readings: |CO (ppm)= |H2S(ppm)= |O2(%)= |LEL(%)=
 COC#: Circle: VOCs / Methane / CVOCs

CH4 - 0% LEL
 O2 - 16.8 vol %
 CO2 - 2.1 vol %

CLIENT: EGLE RRD BARS
 LOCATION: 400 and 410 East 3rd St, Imlay City, Michigan
 Site ID#: 14763



Sample ID: VP- 44
 Well Type: COX PIN SS

Date:	8/16/22	Sampler:	JBL
Container Type:	Bottle	Container ID:	1110
Lab:	EGLE		

Concrete Thickness (ft) & Required Purge Volume:		Purge Testing, He Vacuum Test	
Purge Volumes: (circle)	1.5 ft	30 cc	Pre -Purge (cc):
	Pin	40 cc	
Pre-Purge PID Readings:		ppm	
Purging Moisture Identified (circle):		Yes <input type="radio"/> No <input checked="" type="radio"/> System Failure, if water in sampling tubing!	

Sample Start Time:	14:00	Sample End Time:	14:10
Leak Detection Method:	argon chamber	Last Known Rain Event:	>48 hours
Weather Conditions:	Sunny	Barometric Pressure:	30.07 inHg
Temperature (°F):	79°F	Relative Humidity:	43%
Wind Speed (mph):	7 mph	Other:	
Wind Direction:	NE		

Cox Pin - Needs to be installed and capped 45 Minutes before Sampling! (Recommend Purge Testing)

Canister Starting Vacuum:	29 in Hg	Canister Ending Vacuum:	0 in Hg
Volume of Canister (mL):	1000	Other:	Time:
Regulator ID #	252	Leak Test (circle):	Pass <input checked="" type="radio"/> Fail <input type="radio"/>

Field Measurements

Test Time (min)	Flow Rate (ml/min)	Vacuum (in Hg)	Comments	
			Water in Tubing	Comments
0	100-200	29	Y/N	
2	100-200	17	Y/N	
4	100-200	11	Y/N	
6	100-200	5	Y/N	
8	100-200	3	Y/N	
10	100-200	0	Y/N	
12	100-200		Y/N	
			Y/N	
			Y/N	

Sample Notes:
 Standardized tubing/fitting types/sizes used.

Pin Cap Type (circle): SS PVC

Post Sampling PID Reading (ppm):			
Post Sampling QRAE Readings: CO (ppm)=	H2S(ppm)=	O2(%)=	LEL(%)=
COC#:		Circle: VOCs / Methane / CVOCs	

CH4 - 0% LEL
 O2 - 16.3 vol %
 CO2 - 2.0 vol %

Appendix D Laboratory Analytical Reports



MICHIGAN DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY

MICHIGAN DEPARTMENT OF
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ENVIRONMENTAL LABORATORY

P.O. Box 30270
Lansing, MI 48909
TEL: (517) 335-9800
FAX: (517) 335-9600

23 September 2022

Work Order: 2208126

Price: \$2,475.00

Janet Michaluk
EGLE-RRD-LANSING
525 W. Allegan Street
Lansing, MI 48909

RE: EGLE/CITY OF IMLAY CITY/PUBLIC WORKS

This is the official environmental laboratory report for testing conducted by the Michigan Department of Environment, Great Lakes, and Energy. Analyses performed by the laboratory were conducted using methods published by the U.S. Environmental Protection Agency, Standard Methods for the Examination of Water and Wastewater, ASTM, or other published or approved reference methods.

Kirby Shane
Laboratory Director



MICHIGAN DEPARTMENT OF
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EGLE-RRD-LANSING
525 W. Allegan Street
Lansing MI, 48909

Project: EGLE/CITY OF IMLAY CITY/PUBLIC WORKS
Site Code: 00014763
Project Manager: Janet Michaluk

Reported:
09/23/2022

Analytical Report for Samples

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Qualifier
SB-1 (5-6)	2208126-01	Soil/Sediment	08/16/2022	08/18/2022	
SB-2 (5-6)	2208126-02	Soil/Sediment	08/16/2022	08/18/2022	
SB-3 (14-15')	2208126-03	Soil/Sediment	08/16/2022	08/18/2022	
SB-4 (12-14')	2208126-04	Soil/Sediment	08/16/2022	08/18/2022	
SB-5 (16-18')	2208126-05	Soil/Sediment	08/16/2022	08/18/2022	
SB-6 (7-8')	2208126-06	Soil/Sediment	08/16/2022	08/18/2022	
SB-1 DUP (5-6')	2208126-07	Soil/Sediment	08/16/2022	08/18/2022	
SB-2 (5-6) MS	2208126-08	Soil/Sediment	08/16/2022	08/18/2022	
SB-2 (5-6) MSD	2208126-09	Soil/Sediment	08/16/2022	08/18/2022	

Notes and Definitions

- Y17 Probable petroleum product(s) present.
- Y11 Unidentified peaks present in sample.
- V Value not available due to dilution.
- A09 Result is estimated due to high recovery of batch QC.
- A07 Result(s) and reporting limit(s) are estimated due to poor precision.
- A06 Result is estimated due to high continuing calibration standard criteria failure.
- A05 Result(s) and reporting limit(s) are estimated due to low continuing calibration standard criteria failure.
- A04 Result is estimated due to high matrix spike recovery.
- A03 Result(s) and reporting limit(s) are estimated due to low matrix spike recovery.
- ND Indicates compound analyzed for but not detected at or above the reporting limit (RL).
- RL Reporting Limit
- NA Not Applicable
- dry Sample results reported on a dry weight basis

*****Case Narrative*****

Samples were received **8/18/2022 2:30:00PM** for client **EGLE-RRD-LANSING** as a part of project **EGLE/CITY OF IMLAY CITY/PUBLIC WORKS**.

Samples were logged and designated as Work Order # **2208126** on **8/18/2022 3:29:00PM**.

This Report was created **9/23/2022 3:39:06PM**.

Additional Notes/Narrative (if applicable):



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FAX: (517) 335-9600

Client ID: SB-1 (5-6)

Lab ID: 2208126-01

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Analyst	Qualifier
Organics-Volatiles										See note Y11
630-20-6	1,1,1,2-Tetrachloroethane	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
71-55-6	1,1,1-Trichloroethane	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
79-34-5	1,1,2,2-Tetrachloroethane	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
79-00-5	1,1,2-Trichloroethane	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
75-34-3	1,1-Dichloroethane	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
75-35-4	1,1-Dichloroethylene	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
87-61-6	1,2,3-Trichlorobenzene	ND	1200	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
96-18-4	1,2,3-Trichloropropane	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
526-73-8	1,2,3-Trimethylbenzene	42000	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
120-82-1	1,2,4-Trichlorobenzene	ND	1200	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
95-63-6	1,2,4-Trimethylbenzene	190000	2400	ug/kg dry	2000	08/23/22	B2H2211	8260	SJR	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1200	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
106-93-4	1,2-Dibromoethane	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
95-50-1	1,2-Dichlorobenzene	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
107-06-2	1,2-Dichloroethane	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
78-87-5	1,2-Dichloropropane	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
108-67-8	1,3,5-Trimethylbenzene	56000	2400	ug/kg dry	2000	08/23/22	B2H2211	8260	SJR	
541-73-1	1,3-Dichlorobenzene	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
106-46-7	1,4-Dichlorobenzene	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
540-84-1	2,2,4-Trimethylpentane	44000	12000	ug/kg dry	2000	08/23/22	B2H2211	8260	SJR	
78-93-3	2-Butanone (MEK)	ND	1200	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
91-57-6	2-Methylnaphthalene	36000	1200	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	A05
67-64-1	2-Propanone (acetone)	ND	4700	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	1200	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
107-13-1	Acrylonitrile	ND	1200	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
71-43-2	Benzene	4600	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
74-97-5	Bromochloromethane	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
75-27-4	Bromodichloromethane	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
75-25-2	Bromoform	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
74-83-9	Bromomethane	ND	950	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
75-15-0	Carbon disulfide	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
56-23-5	Carbon tetrachloride	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
108-90-7	Chlorobenzene	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
75-00-3	Chloroethane	ND	1200	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
67-66-3	Chloroform	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
74-87-3	Chloromethane	ND	1200	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
156-59-2	cis-1,2-Dichloroethylene	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
10061-01-5	cis-1,3-Dichloropropylene	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
110-82-7	Cyclohexane	4100	1200	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
124-48-1	Dibromochloromethane	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
74-95-3	Dibromomethane	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	



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Lansing, MI 48909
TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: SB-1 (5-6)

Lab ID: 2208126-01

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Analyst	Qualifier
Organics-Volatiles										See note Y11
75-71-8	Dichlorodifluoromethane	ND	1200	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
60-29-7	Diethyl ether	ND	950	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
108-20-3	Diisopropyl Ether	ND	1200	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
100-41-4	Ethylbenzene	70000	2400	ug/kg dry	2000	08/23/22	B2H2211	8260	SJR	
637-92-3	Ethyltertiarybutylether	ND	1200	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
67-72-1	Hexachloroethane	ND	1200	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
110-54-3	Hexane	19000	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
98-82-8	Isopropylbenzene	6500	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
1330-20-7	m & p - Xylene	280000	4700	ug/kg dry	2000	08/23/22	B2H2211	8260	SJR	
96-37-7	Methylcyclopentane	16000	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
75-09-2	Methylene chloride	ND	470	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
1634-04-4	Methyltertiarybutylether	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
91-20-3	Naphthalene	29000	1200	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
104-51-8	n-Butylbenzene	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
142-82-5	n-Heptane	44000	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
103-65-1	n-Propylbenzene	27000	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
95-47-6	o-Xylene	110000	2400	ug/kg dry	2000	08/23/22	B2H2211	8260	SJR	
135-98-8	sec-Butylbenzene	3000	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
100-42-5	Styrene	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
98-06-6	tert-Butylbenzene	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
75-65-0	tertiary Butyl Alcohol	ND	12000	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
994-05-8	tertiaryAmylmeylether	ND	1200	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
127-18-4	Tetrachloroethylene	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
109-99-9	Tetrahydrofuran	2900	1200	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
108-88-3	Toluene	46000	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
156-60-5	trans-1,2-Dichloroethylene	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
10061-02-6	trans-1,3-Dichloropropylene	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
79-01-6	Trichloroethylene	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
75-69-4	Trichlorofluoromethane	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
75-01-4	Vinyl chloride	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
Surrogate: Bromofluorobenzene		Not Applicable		40.3-194		08/19/22	B2H2211	8260	SJR	V
Surrogate: Dibromofluoromethane		Not Applicable		52.1-217		08/19/22	B2H2211	8260	SJR	V
Surrogate: Toluene-d8		Not Applicable		55.4-196		08/19/22	B2H2211	8260	SJR	V



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FAX: (517) 335-9600

Client ID: SB-1 (5-6)

Lab ID: 2208126-01

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Analyst	Qualifier
Organics-Semivolatiles										See note Y17
91-57-6	2-Methylnaphthalene	12000	2700	ug/kg dry	10	08/26/22	B2H2410	8270	MF	
83-32-9	Acenaphthene	ND	110	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
208-96-8	Acenaphthylene	ND	110	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
120-12-7	Anthracene	ND	110	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
56-55-3	Benz[a]anthracene	ND	110	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
50-32-8	Benzo[a]pyrene	ND	220	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
205-99-2	Benzo[b]fluoranthene	ND	220	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
191-24-2	Benzo[g,h,i]perylene	ND	220	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
207-08-9	Benzo[k]fluoranthene	ND	220	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
218-01-9	Chrysene	ND	110	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
53-70-3	Dibenz[a,h]anthracene	ND	220	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
206-44-0	Fluoranthene	ND	110	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
86-73-7	Fluorene	ND	110	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
193-39-5	Indeno(1,2,3-c,d)pyrene	ND	220	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
91-20-3	Naphthalene	7100	1100	ug/kg dry	10	08/26/22	B2H2410	8270	MF	
85-01-8	Phenanthrene	110	110	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
129-00-0	Pyrene	ND	110	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
<i>Surrogate: 2-Fluorobiphenyl</i>			93.7 %	36-133		08/24/22	B2H2410	8270	MF	
<i>Surrogate: Nitrobenzene-d5</i>			89.6 %	26-123		08/24/22	B2H2410	8270	MF	
<i>Surrogate: p-Terphenyl-d14</i>			114 %	36-142		08/24/22	B2H2410	8270	MF	
Inorganics-General Chemistry										
TS	% Total Solids	91.3	0.1	%	1	08/22/22	B2H2213	2540 B	SG	
Inorganics-Metals										
7440-38-2	Arsenic	5.4	0.5	mg/kg dry	10	09/06/22	B2H3114	200.8	ARH	
7440-39-3	Barium	31	1.0	mg/kg dry	10	09/06/22	B2H3114	200.8	ARH	
7440-43-9	Cadmium	ND	0.2	mg/kg dry	10	09/06/22	B2H3114	200.8	ARH	
7440-47-3	Chromium	7.9	2.0	mg/kg dry	10	09/06/22	B2H3114	200.8	ARH	
7440-50-8	Copper	7.8	1.0	mg/kg dry	10	09/06/22	B2H3114	200.8	ARH	
7439-92-1	Lead	4.5	1.0	mg/kg dry	10	09/06/22	B2H3114	200.8	ARH	
7439-97-6	Mercury	ND	0.05	mg/kg dry	1	08/30/22	B2H2215	245.5	JP1	
7782-49-2	Selenium	0.7	0.2	mg/kg dry	10	09/06/22	B2H3114	200.8	ARH	
7440-22-4	Silver	ND	0.1	mg/kg dry	10	09/06/22	B2H3114	200.8	ARH	
7440-66-6	Zinc	34	1.0	mg/kg dry	10	09/06/22	B2H3114	200.8	ARH	



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MICHIGAN DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY

Client ID: SB-2 (5-6)

Lab ID: 2208126-02

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Analyst	Qualifier
Organics-Volatiles										See note Y11
630-20-6	1,1,1,2-Tetrachloroethane	ND	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
71-55-6	1,1,1-Trichloroethane	ND	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
79-34-5	1,1,2,2-Tetrachloroethane	ND	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
79-00-5	1,1,2-Trichloroethane	ND	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
75-34-3	1,1-Dichloroethane	ND	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
75-35-4	1,1-Dichloroethylene	ND	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
87-61-6	1,2,3-Trichlorobenzene	ND	3000	ug/kg dry	500	08/23/22	B211419	8260	SJR	
96-18-4	1,2,3-Trichloropropane	ND	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
526-73-8	1,2,3-Trimethylbenzene	9600	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
120-82-1	1,2,4-Trichlorobenzene	ND	3000	ug/kg dry	500	08/23/22	B211419	8260	SJR	
95-63-6	1,2,4-Trimethylbenzene	44000	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
96-12-8	1,2-Dibromo-3-chloropropane	ND	3000	ug/kg dry	500	08/23/22	B211419	8260	SJR	
106-93-4	1,2-Dibromoethane	ND	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
95-50-1	1,2-Dichlorobenzene	ND	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
107-06-2	1,2-Dichloroethane	ND	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
78-87-5	1,2-Dichloropropane	ND	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
108-67-8	1,3,5-Trimethylbenzene	13000	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
541-73-1	1,3-Dichlorobenzene	ND	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
106-46-7	1,4-Dichlorobenzene	ND	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
540-84-1	2,2,4-Trimethylpentane	5700	3000	ug/kg dry	500	08/23/22	B211419	8260	SJR	
78-93-3	2-Butanone (MEK)	ND	3000	ug/kg dry	500	08/23/22	B211419	8260	SJR	
91-57-6	2-Methylnaphthalene	6700	3000	ug/kg dry	500	08/23/22	B211419	8260	SJR	A05
67-64-1	2-Propanone (acetone)	ND	12000	ug/kg dry	500	08/23/22	B211419	8260	SJR	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	3000	ug/kg dry	500	08/23/22	B211419	8260	SJR	
107-13-1	Acrylonitrile	ND	3000	ug/kg dry	500	08/23/22	B211419	8260	SJR	
71-43-2	Benzene	ND	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
74-97-5	Bromochloromethane	ND	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
75-27-4	Bromodichloromethane	ND	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
75-25-2	Bromoform	ND	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
74-83-9	Bromomethane	ND	2400	ug/kg dry	500	08/23/22	B211419	8260	SJR	
75-15-0	Carbon disulfide	ND	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
56-23-5	Carbon tetrachloride	ND	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
108-90-7	Chlorobenzene	ND	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
75-00-3	Chloroethane	ND	3000	ug/kg dry	500	08/23/22	B211419	8260	SJR	
67-66-3	Chloroform	ND	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
74-87-3	Chloromethane	ND	3000	ug/kg dry	500	08/23/22	B211419	8260	SJR	
156-59-2	cis-1,2-Dichloroethylene	ND	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
10061-01-5	cis-1,3-Dichloropropylene	ND	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
110-82-7	Cyclohexane	ND	3000	ug/kg dry	500	08/23/22	B211419	8260	SJR	
124-48-1	Dibromochloromethane	ND	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
74-95-3	Dibromomethane	ND	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	



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ENVIRONMENTAL LABORATORY

P.O. Box 30270
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TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: SB-2 (5-6)

Lab ID: 2208126-02

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Analyst	Qualifier
Organics-Volatiles										See note Y11
75-71-8	Dichlorodifluoromethane	ND	3000	ug/kg dry	500	08/23/22	B211419	8260	SJR	
60-29-7	Diethyl ether	ND	2400	ug/kg dry	500	08/23/22	B211419	8260	SJR	
108-20-3	Diisopropyl Ether	ND	3000	ug/kg dry	500	08/23/22	B211419	8260	SJR	
100-41-4	Ethylbenzene	6600	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
637-92-3	Ethyltertiarybutylether	ND	3000	ug/kg dry	500	08/23/22	B211419	8260	SJR	
67-72-1	Hexachloroethane	ND	3000	ug/kg dry	500	08/23/22	B211419	8260	SJR	
110-54-3	Hexane	1900	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
98-82-8	Isopropylbenzene	1300	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
1330-20-7	m & p - Xylene	17000	1200	ug/kg dry	500	08/23/22	B211419	8260	SJR	
96-37-7	Methylcyclopentane	1800	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
75-09-2	Methylene chloride	ND	1200	ug/kg dry	500	08/23/22	B211419	8260	SJR	
1634-04-4	Methyltertiarybutylether	ND	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
91-20-3	Naphthalene	6000	3000	ug/kg dry	500	08/23/22	B211419	8260	SJR	
104-51-8	n-Butylbenzene	ND	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
142-82-5	n-Heptane	5300	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
103-65-1	n-Propylbenzene	5700	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
95-47-6	o-Xylene	ND	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
135-98-8	sec-Butylbenzene	730	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
100-42-5	Styrene	ND	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
98-06-6	tert-Butylbenzene	ND	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
75-65-0	tertiary Butyl Alcohol	ND	30000	ug/kg dry	500	08/23/22	B211419	8260	SJR	
994-05-8	tertiaryAmylmethylether	ND	3000	ug/kg dry	500	08/23/22	B211419	8260	SJR	
127-18-4	Tetrachloroethylene	ND	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
109-99-9	Tetrahydrofuran	ND	3000	ug/kg dry	500	08/23/22	B211419	8260	SJR	
108-88-3	Toluene	ND	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
156-60-5	trans-1,2-Dichloroethylene	ND	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
10061-02-6	trans-1,3-Dichloropropylene	ND	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
79-01-6	Trichloroethylene	ND	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
75-69-4	Trichlorofluoromethane	ND	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
75-01-4	Vinyl chloride	ND	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
Surrogate: Bromofluorobenzene		Not Applicable		40.3-194		08/23/22	B211419	8260	SJR	V
Surrogate: Dibromofluoromethane		Not Applicable		52.1-217		08/23/22	B211419	8260	SJR	V
Surrogate: Toluene-d8		Not Applicable		55.4-196		08/23/22	B211419	8260	SJR	V



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ENVIRONMENTAL LABORATORY

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TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: SB-2 (5-6)

Lab ID: 2208126-02

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Analyst	Qualifier
Organics-Semivolatiles										See note Y17
91-57-6	2-Methylnaphthalene	1800	280	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
83-32-9	Acenaphthene	ND	110	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
208-96-8	Acenaphthylene	ND	110	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
120-12-7	Anthracene	ND	110	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
56-55-3	Benz[a]anthracene	ND	110	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
50-32-8	Benzo[a]pyrene	ND	220	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
205-99-2	Benzo[b]fluoranthene	ND	220	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
191-24-2	Benzo[g,h,i]perylene	ND	220	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
207-08-9	Benzo[k]fluoranthene	ND	220	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
218-01-9	Chrysene	ND	110	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
53-70-3	Dibenz[a,h]anthracene	ND	220	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
206-44-0	Fluoranthene	ND	110	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
86-73-7	Fluorene	ND	110	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
193-39-5	Indeno(1,2,3-c,d)pyrene	ND	220	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
91-20-3	Naphthalene	1200	110	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
85-01-8	Phenanthrene	ND	110	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
129-00-0	Pyrene	ND	110	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
<i>Surrogate: 2-Fluorobiphenyl</i>			95.5 %	36-133		08/24/22	B2H2410	8270	MF	
<i>Surrogate: Nitrobenzene-d5</i>			93.2 %	26-123		08/24/22	B2H2410	8270	MF	
<i>Surrogate: p-Terphenyl-d14</i>			123 %	36-142		08/24/22	B2H2410	8270	MF	
Inorganics-General Chemistry										
TS	% Total Solids	90.5	0.1	%	1	08/22/22	B2H2213	2540 B	SG	
Inorganics-Metals										
7440-38-2	Arsenic	5.7	0.5	mg/kg dry	10	09/06/22	B2H3114	200.8	ARH	
7440-39-3	Barium	26	1.0	mg/kg dry	10	09/06/22	B2H3114	200.8	ARH	
7440-43-9	Cadmium	ND	0.2	mg/kg dry	10	09/06/22	B2H3114	200.8	ARH	
7440-47-3	Chromium	9.6	2.0	mg/kg dry	10	09/06/22	B2H3114	200.8	ARH	
7440-50-8	Copper	8.6	1.0	mg/kg dry	10	09/06/22	B2H3114	200.8	ARH	
7439-92-1	Lead	5.2	1.0	mg/kg dry	10	09/06/22	B2H3114	200.8	ARH	
7439-97-6	Mercury	ND	0.06	mg/kg dry	1	08/30/22	B2H2215	245.5	JP1	
7782-49-2	Selenium	0.6	0.2	mg/kg dry	10	09/06/22	B2H3114	200.8	ARH	
7440-22-4	Silver	ND	0.1	mg/kg dry	10	09/06/22	B2H3114	200.8	ARH	
7440-66-6	Zinc	26	1.0	mg/kg dry	10	09/06/22	B2H3114	200.8	ARH	



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MICHIGAN DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY

Client ID: SB-3 (14-15')

Lab ID: 2208126-03

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Analyst	Qualifier
Organics-Volatiles										
630-20-6	1,1,1,2-Tetrachloroethane	ND	79	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
71-55-6	1,1,1-Trichloroethane	ND	79	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
79-34-5	1,1,2,2-Tetrachloroethane	ND	79	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
79-00-5	1,1,2-Trichloroethane	ND	79	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	79	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
75-34-3	1,1-Dichloroethane	ND	79	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
75-35-4	1,1-Dichloroethylene	ND	79	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
87-61-6	1,2,3-Trichlorobenzene	ND	400	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
96-18-4	1,2,3-Trichloropropane	ND	79	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
526-73-8	1,2,3-Trimethylbenzene	ND	79	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
120-82-1	1,2,4-Trichlorobenzene	ND	400	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
95-63-6	1,2,4-Trimethylbenzene	ND	79	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
96-12-8	1,2-Dibromo-3-chloropropane	ND	400	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
106-93-4	1,2-Dibromoethane	ND	79	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
95-50-1	1,2-Dichlorobenzene	ND	79	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
107-06-2	1,2-Dichloroethane	ND	79	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
78-87-5	1,2-Dichloropropane	ND	79	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
108-67-8	1,3,5-Trimethylbenzene	ND	79	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
541-73-1	1,3-Dichlorobenzene	ND	79	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
106-46-7	1,4-Dichlorobenzene	ND	79	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
540-84-1	2,2,4-Trimethylpentane	ND	400	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
78-93-3	2-Butanone (MEK)	ND	400	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
91-57-6	2-Methylnaphthalene	ND	400	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	A05
67-64-1	2-Propanone (acetone)	ND	1600	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	400	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
107-13-1	Acrylonitrile	ND	400	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
71-43-2	Benzene	ND	79	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
74-97-5	Bromochloromethane	ND	79	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
75-27-4	Bromodichloromethane	ND	79	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
75-25-2	Bromoform	ND	79	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
74-83-9	Bromomethane	ND	320	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
75-15-0	Carbon disulfide	ND	79	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
56-23-5	Carbon tetrachloride	ND	79	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
108-90-7	Chlorobenzene	ND	79	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
75-00-3	Chloroethane	ND	400	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
67-66-3	Chloroform	ND	79	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
74-87-3	Chloromethane	ND	400	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
156-59-2	cis-1,2-Dichloroethylene	ND	79	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
10061-01-5	cis-1,3-Dichloropropylene	ND	79	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
110-82-7	Cyclohexane	ND	400	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
124-48-1	Dibromochloromethane	ND	79	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
74-95-3	Dibromomethane	ND	79	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
75-71-8	Dichlorodifluoromethane	ND	400	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	



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Client ID: SB-3 (14-15')

Lab ID: 2208126-03

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Analyst	Qualifier
Organics-Volatiles										
60-29-7	Diethyl ether	ND	320	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
108-20-3	Diisopropyl Ether	ND	400	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
100-41-4	Ethylbenzene	ND	79	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
637-92-3	Ethyltertiarybutylether	ND	400	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
67-72-1	Hexachloroethane	ND	400	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
110-54-3	Hexane	ND	79	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
98-82-8	Isopropylbenzene	ND	79	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
1330-20-7	m & p - Xylene	ND	160	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
96-37-7	Methylcyclopentane	ND	79	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
75-09-2	Methylene chloride	ND	160	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
1634-04-4	Methyltertiarybutylether	ND	79	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
91-20-3	Naphthalene	ND	400	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
104-51-8	n-Butylbenzene	ND	79	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
142-82-5	n-Heptane	ND	79	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
103-65-1	n-Propylbenzene	ND	79	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
95-47-6	o-Xylene	ND	79	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
135-98-8	sec-Butylbenzene	ND	79	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
100-42-5	Styrene	ND	79	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
98-06-6	tert-Butylbenzene	ND	79	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
75-65-0	tertiary Butyl Alcohol	ND	4000	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
994-05-8	tertiaryAmylmehtylether	ND	400	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
127-18-4	Tetrachloroethylene	ND	79	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
109-99-9	Tetrahydrofuran	ND	400	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
108-88-3	Toluene	ND	79	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
156-60-5	trans-1,2-Dichloroethylene	ND	79	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
10061-02-6	trans-1,3-Dichloropropylene	ND	79	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
79-01-6	Trichloroethylene	ND	79	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
75-69-4	Trichlorofluoromethane	ND	79	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
75-01-4	Vinyl chloride	ND	79	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
Surrogate: Bromofluorobenzene			112 %	40.3-194		08/23/22	B2H2319	8260	SJR	
Surrogate: Dibromofluoromethane			116 %	52.1-217		08/23/22	B2H2319	8260	SJR	
Surrogate: Toluene-d8			114 %	55.4-196		08/23/22	B2H2319	8260	SJR	



MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY ENVIRONMENTAL LABORATORY

P.O. Box 30270 Lansing, MI 48909 TEL: (517) 335-9800 FAX: (517) 335-9600

Client ID: SB-3 (14-15')

Lab ID: 2208126-03

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Analyst	Qualifier
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Inorganics-General Chemistry

TS	% Total Solids	81.8	0.1	%	1	08/22/22	B2H2213	2540 B	SG	
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MICHIGAN DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY
ENVIRONMENTAL LABORATORY

P.O. Box 30270
Lansing, MI 48909
TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: SB-4 (12-14')

Lab ID: 2208126-04

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Analyst	Qualifier
Organics-Volatiles										See note Y11
630-20-6	1,1,1,2-Tetrachloroethane	ND	2400	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
71-55-6	1,1,1-Trichloroethane	ND	2400	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2400	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
79-00-5	1,1,2-Trichloroethane	ND	2400	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	2400	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
75-34-3	1,1-Dichloroethane	ND	2400	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
75-35-4	1,1-Dichloroethylene	ND	2400	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
87-61-6	1,2,3-Trichlorobenzene	ND	12000	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
96-18-4	1,2,3-Trichloropropane	ND	2400	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
526-73-8	1,2,3-Trimethylbenzene	33000	2400	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
120-82-1	1,2,4-Trichlorobenzene	ND	12000	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
95-63-6	1,2,4-Trimethylbenzene	150000	2400	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
96-12-8	1,2-Dibromo-3-chloropropane	ND	12000	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
106-93-4	1,2-Dibromoethane	ND	2400	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
95-50-1	1,2-Dichlorobenzene	ND	2400	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
107-06-2	1,2-Dichloroethane	ND	2400	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
78-87-5	1,2-Dichloropropane	ND	2400	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
108-67-8	1,3,5-Trimethylbenzene	45000	2400	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
541-73-1	1,3-Dichlorobenzene	ND	2400	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
106-46-7	1,4-Dichlorobenzene	ND	2400	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
540-84-1	2,2,4-Trimethylpentane	55000	12000	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
78-93-3	2-Butanone (MEK)	ND	12000	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
91-57-6	2-Methylnaphthalene	21000	12000	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	A05
67-64-1	2-Propanone (acetone)	ND	48000	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	12000	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
107-13-1	Acrylonitrile	ND	12000	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
71-43-2	Benzene	ND	2400	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
74-97-5	Bromochloromethane	ND	2400	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
75-27-4	Bromodichloromethane	ND	2400	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
75-25-2	Bromoform	ND	2400	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
74-83-9	Bromomethane	ND	9700	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
75-15-0	Carbon disulfide	ND	2400	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
56-23-5	Carbon tetrachloride	ND	2400	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
108-90-7	Chlorobenzene	ND	2400	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
75-00-3	Chloroethane	ND	12000	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
67-66-3	Chloroform	ND	2400	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
74-87-3	Chloromethane	ND	12000	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
156-59-2	cis-1,2-Dichloroethylene	ND	2400	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
10061-01-5	cis-1,3-Dichloropropylene	ND	2400	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
110-82-7	Cyclohexane	15000	12000	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
124-48-1	Dibromochloromethane	ND	2400	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
74-95-3	Dibromomethane	ND	2400	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	



MICHIGAN DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY

MICHIGAN DEPARTMENT OF
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ENVIRONMENTAL LABORATORY

P.O. Box 30270
Lansing, MI 48909
TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: SB-4 (12-14')

Lab ID: 2208126-04

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Analyst	Qualifier
Organics-Volatiles										See note Y11
75-71-8	Dichlorodifluoromethane	ND	12000	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
60-29-7	Diethyl ether	ND	9700	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
108-20-3	Diisopropyl Ether	ND	12000	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
100-41-4	Ethylbenzene	71000	2400	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
637-92-3	Ethyltertiarybutylether	ND	12000	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
67-72-1	Hexachloroethane	ND	12000	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
110-54-3	Hexane	110000	2400	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
98-82-8	Isopropylbenzene	5800	2400	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
1330-20-7	m & p - Xylene	280000	4800	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
96-37-7	Methylcyclopentane	74000	2400	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
75-09-2	Methylene chloride	ND	4800	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
1634-04-4	Methyltertiarybutylether	ND	2400	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
91-20-3	Naphthalene	21000	12000	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
104-51-8	n-Butylbenzene	ND	2400	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
142-82-5	n-Heptane	61000	2400	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
103-65-1	n-Propylbenzene	23000	2400	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
95-47-6	o-Xylene	96000	2400	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
135-98-8	sec-Butylbenzene	2700	2400	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
100-42-5	Styrene	ND	2400	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
98-06-6	tert-Butylbenzene	ND	2400	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
75-65-0	tertiary Butyl Alcohol	ND	120000	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
994-05-8	tertiaryAmylmeylether	ND	12000	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
127-18-4	Tetrachloroethylene	ND	2400	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
109-99-9	Tetrahydrofuran	ND	12000	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
108-88-3	Toluene	15000	2400	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
156-60-5	trans-1,2-Dichloroethylene	ND	2400	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
10061-02-6	trans-1,3-Dichloropropylene	ND	2400	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
79-01-6	Trichloroethylene	ND	2400	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
75-69-4	Trichlorofluoromethane	ND	2400	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
75-01-4	Vinyl chloride	ND	2400	ug/kg dry	2000	08/23/22	B2H2319	8260	SJR	
Surrogate: Bromofluorobenzene		Not Applicable		40.3-194		08/23/22	B2H2319	8260	SJR	V
Surrogate: Dibromofluoromethane		Not Applicable		52.1-217		08/23/22	B2H2319	8260	SJR	V
Surrogate: Toluene-d8		Not Applicable		55.4-196		08/23/22	B2H2319	8260	SJR	V



MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY ENVIRONMENTAL LABORATORY

P.O. Box 30270 Lansing, MI 48909 TEL: (517) 335-9800 FAX: (517) 335-9600

Client ID: SB-4 (12-14')

Lab ID: 2208126-04

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Analyst	Qualifier
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Inorganics-General Chemistry

TS	% Total Solids	89.5	0.1	%	1	08/22/22	B2H2213	2540 B	SG	
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MICHIGAN DEPARTMENT OF
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MICHIGAN DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY
ENVIRONMENTAL LABORATORY

P.O. Box 30270
Lansing, MI 48909
TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: SB-5 (16-18')

Lab ID: 2208126-05

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Analyst	Qualifier
Organics-Volatiles										
630-20-6	1,1,1,2-Tetrachloroethane	ND	60	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
71-55-6	1,1,1-Trichloroethane	ND	60	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
79-34-5	1,1,2,2-Tetrachloroethane	ND	60	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
79-00-5	1,1,2-Trichloroethane	ND	60	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	60	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
75-34-3	1,1-Dichloroethane	ND	60	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
75-35-4	1,1-Dichloroethylene	ND	60	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
87-61-6	1,2,3-Trichlorobenzene	ND	300	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
96-18-4	1,2,3-Trichloropropane	ND	60	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
526-73-8	1,2,3-Trimethylbenzene	ND	60	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
120-82-1	1,2,4-Trichlorobenzene	ND	300	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
95-63-6	1,2,4-Trimethylbenzene	ND	60	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
96-12-8	1,2-Dibromo-3-chloropropane	ND	300	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
106-93-4	1,2-Dibromoethane	ND	60	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
95-50-1	1,2-Dichlorobenzene	ND	60	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
107-06-2	1,2-Dichloroethane	ND	60	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
78-87-5	1,2-Dichloropropane	ND	60	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
108-67-8	1,3,5-Trimethylbenzene	ND	60	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
541-73-1	1,3-Dichlorobenzene	ND	60	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
106-46-7	1,4-Dichlorobenzene	ND	60	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
540-84-1	2,2,4-Trimethylpentane	ND	300	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
78-93-3	2-Butanone (MEK)	ND	300	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
91-57-6	2-Methylnaphthalene	ND	300	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	A05
67-64-1	2-Propanone (acetone)	ND	1200	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	300	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
107-13-1	Acrylonitrile	ND	300	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
71-43-2	Benzene	ND	60	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
74-97-5	Bromochloromethane	ND	60	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
75-27-4	Bromodichloromethane	ND	60	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
75-25-2	Bromoform	ND	60	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
74-83-9	Bromomethane	ND	240	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
75-15-0	Carbon disulfide	ND	60	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
56-23-5	Carbon tetrachloride	ND	60	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
108-90-7	Chlorobenzene	ND	60	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
75-00-3	Chloroethane	ND	300	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
67-66-3	Chloroform	ND	60	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
74-87-3	Chloromethane	ND	300	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
156-59-2	cis-1,2-Dichloroethylene	ND	60	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
10061-01-5	cis-1,3-Dichloropropylene	ND	60	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
110-82-7	Cyclohexane	ND	300	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
124-48-1	Dibromochloromethane	ND	60	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
74-95-3	Dibromomethane	ND	60	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
75-71-8	Dichlorodifluoromethane	ND	300	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	



MICHIGAN DEPARTMENT OF
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ENVIRONMENTAL LABORATORY

P.O. Box 30270
Lansing, MI 48909
TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: SB-5 (16-18')

Lab ID: 2208126-05

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Analyst	Qualifier
Organics-Volatiles										
60-29-7	Diethyl ether	ND	240	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
108-20-3	Diisopropyl Ether	ND	300	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
100-41-4	Ethylbenzene	ND	60	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
637-92-3	Ethyltertiarybutylether	ND	300	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
67-72-1	Hexachloroethane	ND	300	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
110-54-3	Hexane	ND	60	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
98-82-8	Isopropylbenzene	ND	60	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
1330-20-7	m & p - Xylene	ND	120	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
96-37-7	Methylcyclopentane	ND	60	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
75-09-2	Methylene chloride	ND	120	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
1634-04-4	Methyltertiarybutylether	ND	60	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
91-20-3	Naphthalene	ND	300	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
104-51-8	n-Butylbenzene	ND	60	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
142-82-5	n-Heptane	ND	60	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
103-65-1	n-Propylbenzene	ND	60	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
95-47-6	o-Xylene	ND	60	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
135-98-8	sec-Butylbenzene	ND	60	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
100-42-5	Styrene	ND	60	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
98-06-6	tert-Butylbenzene	ND	60	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
75-65-0	tertiary Butyl Alcohol	ND	3000	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
994-05-8	tertiaryAmylmehtylether	ND	300	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
127-18-4	Tetrachloroethylene	ND	60	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
109-99-9	Tetrahydrofuran	ND	300	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
108-88-3	Toluene	ND	60	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
156-60-5	trans-1,2-Dichloroethylene	ND	60	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
10061-02-6	trans-1,3-Dichloropropylene	ND	60	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
79-01-6	Trichloroethylene	ND	60	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
75-69-4	Trichlorofluoromethane	ND	60	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
75-01-4	Vinyl chloride	ND	60	ug/kg dry	50	08/23/22	B2H2319	8260	SJR	
<i>Surrogate: Bromofluorobenzene</i>			103 %	40.3-194		08/23/22	B2H2319	8260	SJR	
<i>Surrogate: Dibromofluoromethane</i>			107 %	52.1-217		08/23/22	B2H2319	8260	SJR	
<i>Surrogate: Toluene-d8</i>			106 %	55.4-196		08/23/22	B2H2319	8260	SJR	



MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY ENVIRONMENTAL LABORATORY

P.O. Box 30270 Lansing, MI 48909 TEL: (517) 335-9800 FAX: (517) 335-9600

Client ID: SB-5 (16-18')

Lab ID: 2208126-05

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Analyst	Qualifier
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Inorganics-General Chemistry

TS	% Total Solids	90.8	0.1	%	1	08/22/22	B2H2213	2540 B	SG	
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MICHIGAN DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY

Client ID: SB-6 (7-8')

Lab ID: 2208126-06

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Analyst	Qualifier
Organics-Volatiles										See note Y11
630-20-6	1,1,1,2-Tetrachloroethane	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
71-55-6	1,1,1-Trichloroethane	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
79-34-5	1,1,2,2-Tetrachloroethane	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
79-00-5	1,1,2-Trichloroethane	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
75-34-3	1,1-Dichloroethane	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
75-35-4	1,1-Dichloroethylene	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
87-61-6	1,2,3-Trichlorobenzene	ND	1200	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
96-18-4	1,2,3-Trichloropropane	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
526-73-8	1,2,3-Trimethylbenzene	22000	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
120-82-1	1,2,4-Trichlorobenzene	ND	1200	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
95-63-6	1,2,4-Trimethylbenzene	120000	2400	ug/kg dry	2000	08/23/22	B2H2211	8260	SJR	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1200	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
106-93-4	1,2-Dibromoethane	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
95-50-1	1,2-Dichlorobenzene	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
107-06-2	1,2-Dichloroethane	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
78-87-5	1,2-Dichloropropane	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
108-67-8	1,3,5-Trimethylbenzene	37000	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
541-73-1	1,3-Dichlorobenzene	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
106-46-7	1,4-Dichlorobenzene	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
540-84-1	2,2,4-Trimethylpentane	41000	1200	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
78-93-3	2-Butanone (MEK)	ND	1200	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
91-57-6	2-Methylnaphthalene	25000	1200	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	A05
67-64-1	2-Propanone (acetone)	ND	4800	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	1200	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
107-13-1	Acrylonitrile	ND	1200	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
71-43-2	Benzene	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
74-97-5	Bromochloromethane	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
75-27-4	Bromodichloromethane	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
75-25-2	Bromoform	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
74-83-9	Bromomethane	ND	950	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
75-15-0	Carbon disulfide	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
56-23-5	Carbon tetrachloride	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
108-90-7	Chlorobenzene	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
75-00-3	Chloroethane	ND	1200	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
67-66-3	Chloroform	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
74-87-3	Chloromethane	ND	1200	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
156-59-2	cis-1,2-Dichloroethylene	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
10061-01-5	cis-1,3-Dichloropropylene	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
110-82-7	Cyclohexane	26000	1200	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
124-48-1	Dibromochloromethane	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
74-95-3	Dibromomethane	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	



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ENVIRONMENTAL LABORATORY

P.O. Box 30270
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TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: SB-6 (7-8')

Lab ID: 2208126-06

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Analyst	Qualifier
Organics-Volatiles										See note Y11
75-71-8	Dichlorodifluoromethane	ND	1200	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
60-29-7	Diethyl ether	ND	950	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
108-20-3	Diisopropyl Ether	ND	1200	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
100-41-4	Ethylbenzene	36000	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
637-92-3	Ethyltertiarybutylether	ND	1200	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
67-72-1	Hexachloroethane	ND	1200	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
110-54-3	Hexane	69000	2400	ug/kg dry	2000	08/23/22	B2H2211	8260	SJR	
98-82-8	Isopropylbenzene	6700	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
1330-20-7	m & p - Xylene	80000	480	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
96-37-7	Methylcyclopentane	56000	2400	ug/kg dry	2000	08/23/22	B2H2211	8260	SJR	
75-09-2	Methylene chloride	ND	480	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
1634-04-4	Methyltertiarybutylether	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
91-20-3	Naphthalene	22000	1200	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
104-51-8	n-Butylbenzene	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
142-82-5	n-Heptane	180000	2400	ug/kg dry	2000	08/23/22	B2H2211	8260	SJR	
103-65-1	n-Propylbenzene	18000	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
95-47-6	o-Xylene	13000	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
135-98-8	sec-Butylbenzene	2900	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
100-42-5	Styrene	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
98-06-6	tert-Butylbenzene	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
75-65-0	tertiary Butyl Alcohol	ND	12000	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
994-05-8	tertiaryAmylmeylether	ND	1200	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
127-18-4	Tetrachloroethylene	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
109-99-9	Tetrahydrofuran	ND	1200	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
108-88-3	Toluene	430	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
156-60-5	trans-1,2-Dichloroethylene	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
10061-02-6	trans-1,3-Dichloropropylene	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
79-01-6	Trichloroethylene	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
75-69-4	Trichlorofluoromethane	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
75-01-4	Vinyl chloride	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
Surrogate: Bromofluorobenzene		Not Applicable		40.3-194		08/19/22	B2H2211	8260	SJR	V
Surrogate: Dibromofluoromethane		Not Applicable		52.1-217		08/19/22	B2H2211	8260	SJR	V
Surrogate: Toluene-d8		Not Applicable		55.4-196		08/19/22	B2H2211	8260	SJR	V



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ENVIRONMENT, GREAT LAKES, AND ENERGY

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ENVIRONMENTAL LABORATORY

P.O. Box 30270
Lansing, MI 48909
TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: SB-6 (7-8')

Lab ID: 2208126-06

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Analyst	Qualifier
Organics-Semivolatiles										See note Y17
91-57-6	2-Methylnaphthalene	3800	280	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
83-32-9	Acenaphthene	ND	110	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
208-96-8	Acenaphthylene	ND	110	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
120-12-7	Anthracene	ND	110	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
56-55-3	Benz[a]anthracene	ND	110	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
50-32-8	Benzo[a]pyrene	ND	220	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
205-99-2	Benzo[b]fluoranthene	ND	220	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
191-24-2	Benzo[g,h,i]perylene	ND	220	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
207-08-9	Benzo[k]fluoranthene	ND	220	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
218-01-9	Chrysene	ND	110	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
53-70-3	Dibenz[a,h]anthracene	ND	220	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
206-44-0	Fluoranthene	ND	110	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
86-73-7	Fluorene	ND	110	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
193-39-5	Indeno(1,2,3-c,d)pyrene	ND	220	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
91-20-3	Naphthalene	2500	110	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
85-01-8	Phenanthrene	ND	110	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
129-00-0	Pyrene	ND	110	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
Surrogate: 2-Fluorobiphenyl			95.5 %	36-133		08/24/22	B2H2410	8270	MF	
Surrogate: Nitrobenzene-d5			92.4 %	26-123		08/24/22	B2H2410	8270	MF	
Surrogate: p-Terphenyl-d14			120 %	36-142		08/24/22	B2H2410	8270	MF	
Inorganics-General Chemistry										
TS	% Total Solids	90.2	0.1	%	1	08/22/22	B2H2213	2540 B	SG	



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MICHIGAN DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY

Client ID: SB-1 DUP (5-6')

Lab ID: 2208126-07

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Analyst	Qualifier
Organics-Volatiles										See note Y11
630-20-6	1,1,1,2-Tetrachloroethane	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
71-55-6	1,1,1-Trichloroethane	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
79-34-5	1,1,2,2-Tetrachloroethane	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
79-00-5	1,1,2-Trichloroethane	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
75-34-3	1,1-Dichloroethane	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
75-35-4	1,1-Dichloroethylene	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
87-61-6	1,2,3-Trichlorobenzene	ND	1200	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
96-18-4	1,2,3-Trichloropropane	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
526-73-8	1,2,3-Trimethylbenzene	48000	2400	ug/kg dry	2000	08/23/22	B2H2211	8260	SJR	
120-82-1	1,2,4-Trichlorobenzene	ND	1200	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
95-63-6	1,2,4-Trimethylbenzene	220000	2400	ug/kg dry	2000	08/23/22	B2H2211	8260	SJR	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1200	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
106-93-4	1,2-Dibromoethane	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
95-50-1	1,2-Dichlorobenzene	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
107-06-2	1,2-Dichloroethane	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
78-87-5	1,2-Dichloropropane	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
108-67-8	1,3,5-Trimethylbenzene	66000	2400	ug/kg dry	2000	08/23/22	B2H2211	8260	SJR	
541-73-1	1,3-Dichlorobenzene	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
106-46-7	1,4-Dichlorobenzene	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
540-84-1	2,2,4-Trimethylpentane	48000	12000	ug/kg dry	2000	08/23/22	B2H2211	8260	SJR	
78-93-3	2-Butanone (MEK)	ND	1200	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
91-57-6	2-Methylnaphthalene	44000	1200	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	A05
67-64-1	2-Propanone (acetone)	ND	4800	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	1200	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
107-13-1	Acrylonitrile	ND	1200	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
71-43-2	Benzene	4800	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
74-97-5	Bromochloromethane	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
75-27-4	Bromodichloromethane	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
75-25-2	Bromoform	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
74-83-9	Bromomethane	ND	970	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
75-15-0	Carbon disulfide	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
56-23-5	Carbon tetrachloride	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
108-90-7	Chlorobenzene	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
75-00-3	Chloroethane	ND	1200	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
67-66-3	Chloroform	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
74-87-3	Chloromethane	ND	1200	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
156-59-2	cis-1,2-Dichloroethylene	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
10061-01-5	cis-1,3-Dichloropropylene	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
110-82-7	Cyclohexane	4300	1200	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
124-48-1	Dibromochloromethane	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
74-95-3	Dibromomethane	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	



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ENVIRONMENTAL LABORATORY

P.O. Box 30270
Lansing, MI 48909
TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: SB-1 DUP (5-6')

Lab ID: 2208126-07

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Analyst	Qualifier
Organics-Volatiles										See note Y11
75-71-8	Dichlorodifluoromethane	ND	1200	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
60-29-7	Diethyl ether	ND	970	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
108-20-3	Diisopropyl Ether	ND	1200	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
100-41-4	Ethylbenzene	79000	2400	ug/kg dry	2000	08/23/22	B2H2211	8260	SJR	
637-92-3	Ethyltertiarybutylether	ND	1200	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
67-72-1	Hexachloroethane	ND	1200	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
110-54-3	Hexane	20000	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
98-82-8	Isopropylbenzene	7700	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
1330-20-7	m & p - Xylene	330000	4800	ug/kg dry	2000	08/23/22	B2H2211	8260	SJR	
96-37-7	Methylcyclopentane	17000	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
75-09-2	Methylene chloride	ND	480	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
1634-04-4	Methyltertiarybutylether	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
91-20-3	Naphthalene	34000	1200	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
104-51-8	n-Butylbenzene	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
142-82-5	n-Heptane	43000	2400	ug/kg dry	2000	08/23/22	B2H2211	8260	SJR	
103-65-1	n-Propylbenzene	32000	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
95-47-6	o-Xylene	120000	2400	ug/kg dry	2000	08/23/22	B2H2211	8260	SJR	
135-98-8	sec-Butylbenzene	3700	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
100-42-5	Styrene	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
98-06-6	tert-Butylbenzene	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
75-65-0	tertiary Butyl Alcohol	ND	12000	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
994-05-8	tertiaryAmylmeylether	ND	1200	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
127-18-4	Tetrachloroethylene	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
109-99-9	Tetrahydrofuran	ND	1200	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
108-88-3	Toluene	51000	2400	ug/kg dry	2000	08/23/22	B2H2211	8260	SJR	
156-60-5	trans-1,2-Dichloroethylene	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
10061-02-6	trans-1,3-Dichloropropylene	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
79-01-6	Trichloroethylene	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
75-69-4	Trichlorofluoromethane	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
75-01-4	Vinyl chloride	ND	240	ug/kg dry	200	08/19/22	B2H2211	8260	SJR	
Surrogate: Bromofluorobenzene		Not Applicable		40.3-194		08/19/22	B2H2211	8260	SJR	V
Surrogate: Dibromofluoromethane		Not Applicable		52.1-217		08/19/22	B2H2211	8260	SJR	V
Surrogate: Toluene-d8		Not Applicable		55.4-196		08/19/22	B2H2211	8260	SJR	V



MICHIGAN DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY

MICHIGAN DEPARTMENT OF
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ENVIRONMENTAL LABORATORY

P.O. Box 30270
Lansing, MI 48909
TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: SB-1 DUP (5-6')

Lab ID: 2208126-07

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Analyst	Qualifier
Organics-Semivolatiles										
See note Y17										
91-57-6	2-Methylnaphthalene	13000	2800	ug/kg dry	10	08/29/22	B2H2410	8270	MF	
83-32-9	Acenaphthene	ND	110	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
208-96-8	Acenaphthylene	ND	110	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
120-12-7	Anthracene	ND	110	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
56-55-3	Benz[a]anthracene	ND	110	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
50-32-8	Benzo[a]pyrene	ND	220	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
205-99-2	Benzo[b]fluoranthene	ND	220	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
191-24-2	Benzo[g,h,i]perylene	ND	220	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
207-08-9	Benzo[k]fluoranthene	ND	220	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
218-01-9	Chrysene	ND	110	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
53-70-3	Dibenz[a,h]anthracene	ND	220	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
206-44-0	Fluoranthene	ND	110	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
86-73-7	Fluorene	ND	110	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
193-39-5	Indeno(1,2,3-c,d)pyrene	ND	220	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
91-20-3	Naphthalene	7400	1100	ug/kg dry	10	08/29/22	B2H2410	8270	MF	
85-01-8	Phenanthrene	120	110	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
129-00-0	Pyrene	ND	110	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
<i>Surrogate: 2-Fluorobiphenyl</i>			94.6 %	36-133		08/24/22	B2H2410	8270	MF	
<i>Surrogate: Nitrobenzene-d5</i>			94.3 %	26-123		08/24/22	B2H2410	8270	MF	
<i>Surrogate: p-Terphenyl-d14</i>			120 %	36-142		08/24/22	B2H2410	8270	MF	
Inorganics-General Chemistry										
TS	% Total Solids	90.9	0.1	%	1	08/22/22	B2H2213	2540 B	SG	
Inorganics-Metals										
7440-38-2	Arsenic	5.7	0.5	mg/kg dry	10	09/06/22	B2H3114	200.8	ARH	
7440-39-3	Barium	27	1.0	mg/kg dry	10	09/06/22	B2H3114	200.8	ARH	
7440-43-9	Cadmium	ND	0.2	mg/kg dry	10	09/06/22	B2H3114	200.8	ARH	
7440-47-3	Chromium	8.6	2.0	mg/kg dry	10	09/06/22	B2H3114	200.8	ARH	
7440-50-8	Copper	8.4	1.0	mg/kg dry	10	09/06/22	B2H3114	200.8	ARH	A04, A07
7439-92-1	Lead	4.4	1.0	mg/kg dry	10	09/06/22	B2H3114	200.8	ARH	
7439-97-6	Mercury	ND	0.06	mg/kg dry	1	08/30/22	B2H2215	245.5	JP1	
7782-49-2	Selenium	0.8	0.2	mg/kg dry	10	09/07/22	B2H3114	200.8	ARH	
7440-22-4	Silver	ND	0.1	mg/kg dry	10	09/06/22	B2H3114	200.8	ARH	
7440-66-6	Zinc	43	1.0	mg/kg dry	10	09/06/22	B2H3114	200.8	ARH	A04, A07



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ENVIRONMENTAL LABORATORY

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TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: SB-2 (5-6) MS

Lab ID: 2208126-08

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Analyst	Qualifier
Organics-Volatiles										See note Y11
630-20-6	1,1,1,2-Tetrachloroethane	29000	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
71-55-6	1,1,1-Trichloroethane	30000	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
79-34-5	1,1,2,2-Tetrachloroethane	30000	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
79-00-5	1,1,2-Trichloroethane	29000	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
76-13-1	1,1,2-Trichlorotrifluoroethane	29000	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
75-34-3	1,1-Dichloroethane	31000	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
75-35-4	1,1-Dichloroethylene	29000	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
87-61-6	1,2,3-Trichlorobenzene	30000	3000	ug/kg dry	500	08/23/22	B211419	8260	SJR	
96-18-4	1,2,3-Trichloropropane	30000	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
526-73-8	1,2,3-Trimethylbenzene	41000	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
120-82-1	1,2,4-Trichlorobenzene	30000	3000	ug/kg dry	500	08/23/22	B211419	8260	SJR	
95-63-6	1,2,4-Trimethylbenzene	76000	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
96-12-8	1,2-Dibromo-3-chloropropane	30000	3000	ug/kg dry	500	08/23/22	B211419	8260	SJR	
106-93-4	1,2-Dibromoethane	29000	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
95-50-1	1,2-Dichlorobenzene	29000	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
107-06-2	1,2-Dichloroethane	30000	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
78-87-5	1,2-Dichloropropane	30000	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
108-67-8	1,3,5-Trimethylbenzene	44000	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
541-73-1	1,3-Dichlorobenzene	30000	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
106-46-7	1,4-Dichlorobenzene	30000	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
540-84-1	2,2,4-Trimethylpentane	33000	3000	ug/kg dry	500	08/23/22	B211419	8260	SJR	
78-93-3	2-Butanone (MEK)	34000	3000	ug/kg dry	500	08/23/22	B211419	8260	SJR	
91-57-6	2-Methylnaphthalene	35000	3000	ug/kg dry	500	08/23/22	B211419	8260	SJR	A05
67-64-1	2-Propanone (acetone)	43000	12000	ug/kg dry	500	08/23/22	B211419	8260	SJR	A04, A06
108-10-1	4-Methyl-2-pentanone (MIBK)	32000	3000	ug/kg dry	500	08/23/22	B211419	8260	SJR	
107-13-1	Acrylonitrile	29000	3000	ug/kg dry	500	08/23/22	B211419	8260	SJR	
71-43-2	Benzene	29000	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
74-97-5	Bromochloromethane	31000	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
75-27-4	Bromodichloromethane	29000	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
75-25-2	Bromoform	28000	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
74-83-9	Bromomethane	27000	2400	ug/kg dry	500	08/23/22	B211419	8260	SJR	
75-15-0	Carbon disulfide	27000	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
56-23-5	Carbon tetrachloride	29000	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
108-90-7	Chlorobenzene	29000	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
75-00-3	Chloroethane	29000	3000	ug/kg dry	500	08/23/22	B211419	8260	SJR	
67-66-3	Chloroform	31000	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
74-87-3	Chloromethane	29000	3000	ug/kg dry	500	08/23/22	B211419	8260	SJR	
156-59-2	cis-1,2-Dichloroethylene	31000	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
10061-01-5	cis-1,3-Dichloropropylene	30000	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	



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Client ID: SB-2 (5-6) MS

Lab ID: 2208126-08

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Analyst	Qualifier
Organics-Volatiles										See note Y11
110-82-7	Cyclohexane	29000	3000	ug/kg dry	500	08/23/22	B211419	8260	SJR	
124-48-1	Dibromochloromethane	29000	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
74-95-3	Dibromomethane	29000	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
75-71-8	Dichlorodifluoromethane	27000	3000	ug/kg dry	500	08/23/22	B211419	8260	SJR	
60-29-7	Diethyl ether	30000	2400	ug/kg dry	500	08/23/22	B211419	8260	SJR	
108-20-3	Diisopropyl Ether	31000	3000	ug/kg dry	500	08/23/22	B211419	8260	SJR	
100-41-4	Ethylbenzene	36000	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
637-92-3	Ethyltertiarybutylether	30000	3000	ug/kg dry	500	08/23/22	B211419	8260	SJR	
67-72-1	Hexachloroethane	33000	3000	ug/kg dry	500	08/23/22	B211419	8260	SJR	
110-54-3	Hexane	33000	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
98-82-8	Isopropylbenzene	32000	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
1330-20-7	m & p - Xylene	77000	1200	ug/kg dry	500	08/23/22	B211419	8260	SJR	
96-37-7	Methylcyclopentane	39000	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
75-09-2	Methylene chloride	31000	1200	ug/kg dry	500	08/23/22	B211419	8260	SJR	
1634-04-4	Methyltertiarybutylether	30000	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
91-20-3	Naphthalene	38000	3000	ug/kg dry	500	08/23/22	B211419	8260	SJR	
104-51-8	n-Butylbenzene	35000	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
142-82-5	n-Heptane	41000	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
103-65-1	n-Propylbenzene	38000	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
95-47-6	o-Xylene	30000	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
135-98-8	sec-Butylbenzene	32000	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
100-42-5	Styrene	30000	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
98-06-6	tert-Butylbenzene	32000	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
75-65-0	tertiary Butyl Alcohol	150000	30000	ug/kg dry	500	08/23/22	B211419	8260	SJR	
994-05-8	tertiaryAmylmethylether	30000	3000	ug/kg dry	500	08/23/22	B211419	8260	SJR	
127-18-4	Tetrachloroethylene	28000	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
109-99-9	Tetrahydrofuran	32000	3000	ug/kg dry	500	08/23/22	B211419	8260	SJR	
108-88-3	Toluene	28000	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
156-60-5	trans-1,2-Dichloroethylene	31000	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
10061-02-6	trans-1,3-Dichloropropylene	30000	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
79-01-6	Trichloroethylene	28000	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
75-69-4	Trichlorofluoromethane	31000	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
75-01-4	Vinyl chloride	30000	600	ug/kg dry	500	08/23/22	B211419	8260	SJR	
Surrogate: Bromofluorobenzene		Not Applicable		40.3-194		08/23/22	B211419	8260	SJR	V
Surrogate: Dibromofluoromethane		Not Applicable		52.1-217		08/23/22	B211419	8260	SJR	V
Surrogate: Toluene-d8		Not Applicable		55.4-196		08/23/22	B211419	8260	SJR	V



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ENVIRONMENTAL LABORATORY

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Client ID: SB-2 (5-6) MS

Lab ID: 2208126-08

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Analyst	Qualifier
Organics-Semivolatiles										
91-57-6	2-Methylnaphthalene	4000	280	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
83-32-9	Acenaphthene	1800	110	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
208-96-8	Acenaphthylene	1900	110	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
120-12-7	Anthracene	1900	110	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
56-55-3	Benz[a]anthracene	2100	110	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
50-32-8	Benzo[a]pyrene	2100	220	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
205-99-2	Benzo[b]fluoranthene	2000	220	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
191-24-2	Benzo[g,h,i]perylene	2200	220	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
207-08-9	Benzo[k]fluoranthene	2100	220	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
218-01-9	Chrysene	2000	110	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
53-70-3	Dibenz[a,h]anthracene	2100	220	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
206-44-0	Fluoranthene	1900	110	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
86-73-7	Fluorene	2000	110	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
193-39-5	Indeno(1,2,3-c,d)pyrene	2100	220	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
91-20-3	Naphthalene	3200	110	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
85-01-8	Phenanthrene	2000	110	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
129-00-0	Pyrene	2100	110	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
Surrogate: 2-Fluorobiphenyl			96.2 %	36-133		08/24/22	B2H2410	8270	MF	
Surrogate: Nitrobenzene-d5			91.4 %	26-123		08/24/22	B2H2410	8270	MF	
Surrogate: p-Terphenyl-d14			118 %	36-142		08/24/22	B2H2410	8270	MF	
Inorganics-General Chemistry										
TS	% Total Solids	90.6	0.1	%	1	08/22/22	B2H2213	2540 B	SG	
Inorganics-Metals										
7440-38-2	Arsenic	100	0.5	mg/kg dry	10	09/19/22	B2H3114	200.8	ARH	
7440-39-3	Barium	110	1.0	mg/kg dry	10	09/19/22	B2H3114	200.8	ARH	
7440-43-9	Cadmium	9.3	0.2	mg/kg dry	10	09/19/22	B2H3114	200.8	ARH	
7440-47-3	Chromium	110	2.0	mg/kg dry	10	09/19/22	B2H3114	200.8	ARH	
7440-50-8	Copper	93	1.0	mg/kg dry	10	09/19/22	B2H3114	200.8	ARH	
7439-92-1	Lead	90	10	mg/kg dry	100	09/20/22	B2H3114	200.8	ARH	
7439-97-6	Mercury	0.4	0.06	mg/kg dry	1	08/30/22	B2H2215	245.5	JP1	
7782-49-2	Selenium	94	0.2	mg/kg dry	10	09/19/22	B2H3114	200.8	ARH	
7440-22-4	Silver	8.5	0.1	mg/kg dry	10	09/19/22	B2H3114	200.8	ARH	
7440-66-6	Zinc	110	1.0	mg/kg dry	10	09/19/22	B2H3114	200.8	ARH	



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ENVIRONMENTAL LABORATORY

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Client ID: SB-2 (5-6) MSD

Lab ID: 2208126-09

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Analyst	Qualifier
Organics-Volatiles										See note Y11
630-20-6	1,1,1,2-Tetrachloroethane	28000	590	ug/kg dry	500	08/23/22	B211419	8260	SJR	
71-55-6	1,1,1-Trichloroethane	29000	590	ug/kg dry	500	08/23/22	B211419	8260	SJR	
79-34-5	1,1,2,2-Tetrachloroethane	29000	590	ug/kg dry	500	08/23/22	B211419	8260	SJR	
79-00-5	1,1,2-Trichloroethane	29000	590	ug/kg dry	500	08/23/22	B211419	8260	SJR	
76-13-1	1,1,2-Trichlorotrifluoroethane	29000	590	ug/kg dry	500	08/23/22	B211419	8260	SJR	
75-34-3	1,1-Dichloroethane	31000	590	ug/kg dry	500	08/23/22	B211419	8260	SJR	
75-35-4	1,1-Dichloroethylene	29000	590	ug/kg dry	500	08/23/22	B211419	8260	SJR	
87-61-6	1,2,3-Trichlorobenzene	32000	3000	ug/kg dry	500	08/23/22	B211419	8260	SJR	
96-18-4	1,2,3-Trichloropropane	30000	590	ug/kg dry	500	08/23/22	B211419	8260	SJR	
526-73-8	1,2,3-Trimethylbenzene	40000	590	ug/kg dry	500	08/23/22	B211419	8260	SJR	
120-82-1	1,2,4-Trichlorobenzene	31000	3000	ug/kg dry	500	08/23/22	B211419	8260	SJR	
95-63-6	1,2,4-Trimethylbenzene	75000	590	ug/kg dry	500	08/23/22	B211419	8260	SJR	
96-12-8	1,2-Dibromo-3-chloropropane	30000	3000	ug/kg dry	500	08/23/22	B211419	8260	SJR	
106-93-4	1,2-Dibromoethane	29000	590	ug/kg dry	500	08/23/22	B211419	8260	SJR	
95-50-1	1,2-Dichlorobenzene	30000	590	ug/kg dry	500	08/23/22	B211419	8260	SJR	
107-06-2	1,2-Dichloroethane	30000	590	ug/kg dry	500	08/23/22	B211419	8260	SJR	
78-87-5	1,2-Dichloropropane	29000	590	ug/kg dry	500	08/23/22	B211419	8260	SJR	
108-67-8	1,3,5-Trimethylbenzene	44000	590	ug/kg dry	500	08/23/22	B211419	8260	SJR	
541-73-1	1,3-Dichlorobenzene	30000	590	ug/kg dry	500	08/23/22	B211419	8260	SJR	
106-46-7	1,4-Dichlorobenzene	30000	590	ug/kg dry	500	08/23/22	B211419	8260	SJR	
540-84-1	2,2,4-Trimethylpentane	34000	3000	ug/kg dry	500	08/23/22	B211419	8260	SJR	
78-93-3	2-Butanone (MEK)	35000	3000	ug/kg dry	500	08/23/22	B211419	8260	SJR	
91-57-6	2-Methylnaphthalene	38000	3000	ug/kg dry	500	08/23/22	B211419	8260	SJR	A05
67-64-1	2-Propanone (acetone)	43000	12000	ug/kg dry	500	08/23/22	B211419	8260	SJR	A04, A06
108-10-1	4-Methyl-2-pentanone (MIBK)	31000	3000	ug/kg dry	500	08/23/22	B211419	8260	SJR	
107-13-1	Acrylonitrile	29000	3000	ug/kg dry	500	08/23/22	B211419	8260	SJR	
71-43-2	Benzene	29000	590	ug/kg dry	500	08/23/22	B211419	8260	SJR	
74-97-5	Bromochloromethane	30000	590	ug/kg dry	500	08/23/22	B211419	8260	SJR	
75-27-4	Bromodichloromethane	28000	590	ug/kg dry	500	08/23/22	B211419	8260	SJR	
75-25-2	Bromoform	28000	590	ug/kg dry	500	08/23/22	B211419	8260	SJR	
74-83-9	Bromomethane	29000	2400	ug/kg dry	500	08/23/22	B211419	8260	SJR	
75-15-0	Carbon disulfide	27000	590	ug/kg dry	500	08/23/22	B211419	8260	SJR	
56-23-5	Carbon tetrachloride	28000	590	ug/kg dry	500	08/23/22	B211419	8260	SJR	
108-90-7	Chlorobenzene	29000	590	ug/kg dry	500	08/23/22	B211419	8260	SJR	
75-00-3	Chloroethane	29000	3000	ug/kg dry	500	08/23/22	B211419	8260	SJR	
67-66-3	Chloroform	30000	590	ug/kg dry	500	08/23/22	B211419	8260	SJR	
74-87-3	Chloromethane	30000	3000	ug/kg dry	500	08/23/22	B211419	8260	SJR	
156-59-2	cis-1,2-Dichloroethylene	31000	590	ug/kg dry	500	08/23/22	B211419	8260	SJR	
10061-01-5	cis-1,3-Dichloropropylene	30000	590	ug/kg dry	500	08/23/22	B211419	8260	SJR	



MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

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P.O. Box 30270
Lansing, MI 48909
TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: SB-2 (5-6) MSD

Lab ID: 2208126-09

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Analyst	Qualifier
Organics-Volatiles										See note Y11
110-82-7	Cyclohexane	29000	3000	ug/kg dry	500	08/23/22	B211419	8260	SJR	
124-48-1	Dibromochloromethane	29000	590	ug/kg dry	500	08/23/22	B211419	8260	SJR	
74-95-3	Dibromomethane	28000	590	ug/kg dry	500	08/23/22	B211419	8260	SJR	
75-71-8	Dichlorodifluoromethane	28000	3000	ug/kg dry	500	08/23/22	B211419	8260	SJR	
60-29-7	Diethyl ether	29000	2400	ug/kg dry	500	08/23/22	B211419	8260	SJR	
108-20-3	Diisopropyl Ether	31000	3000	ug/kg dry	500	08/23/22	B211419	8260	SJR	
100-41-4	Ethylbenzene	36000	590	ug/kg dry	500	08/23/22	B211419	8260	SJR	
637-92-3	Ethyltertiarybutylether	30000	3000	ug/kg dry	500	08/23/22	B211419	8260	SJR	
67-72-1	Hexachloroethane	33000	3000	ug/kg dry	500	08/23/22	B211419	8260	SJR	
110-54-3	Hexane	33000	590	ug/kg dry	500	08/23/22	B211419	8260	SJR	
98-82-8	Isopropylbenzene	31000	590	ug/kg dry	500	08/23/22	B211419	8260	SJR	
1330-20-7	m & p - Xylene	77000	1200	ug/kg dry	500	08/23/22	B211419	8260	SJR	
96-37-7	Methylcyclopentane	38000	590	ug/kg dry	500	08/23/22	B211419	8260	SJR	
75-09-2	Methylene chloride	31000	1200	ug/kg dry	500	08/23/22	B211419	8260	SJR	
1634-04-4	Methyltertiarybutylether	30000	590	ug/kg dry	500	08/23/22	B211419	8260	SJR	
91-20-3	Naphthalene	39000	3000	ug/kg dry	500	08/23/22	B211419	8260	SJR	
104-51-8	n-Butylbenzene	36000	590	ug/kg dry	500	08/23/22	B211419	8260	SJR	
142-82-5	n-Heptane	41000	590	ug/kg dry	500	08/23/22	B211419	8260	SJR	
103-65-1	n-Propylbenzene	38000	590	ug/kg dry	500	08/23/22	B211419	8260	SJR	
95-47-6	o-Xylene	30000	590	ug/kg dry	500	08/23/22	B211419	8260	SJR	
135-98-8	sec-Butylbenzene	32000	590	ug/kg dry	500	08/23/22	B211419	8260	SJR	
100-42-5	Styrene	30000	590	ug/kg dry	500	08/23/22	B211419	8260	SJR	
98-06-6	tert-Butylbenzene	32000	590	ug/kg dry	500	08/23/22	B211419	8260	SJR	
75-65-0	tertiary Butyl Alcohol	140000	30000	ug/kg dry	500	08/23/22	B211419	8260	SJR	
994-05-8	tertiaryAmylmethylether	30000	3000	ug/kg dry	500	08/23/22	B211419	8260	SJR	
127-18-4	Tetrachloroethylene	28000	590	ug/kg dry	500	08/23/22	B211419	8260	SJR	
109-99-9	Tetrahydrofuran	32000	3000	ug/kg dry	500	08/23/22	B211419	8260	SJR	
108-88-3	Toluene	28000	590	ug/kg dry	500	08/23/22	B211419	8260	SJR	
156-60-5	trans-1,2-Dichloroethylene	31000	590	ug/kg dry	500	08/23/22	B211419	8260	SJR	
10061-02-6	trans-1,3-Dichloropropylene	30000	590	ug/kg dry	500	08/23/22	B211419	8260	SJR	
79-01-6	Trichloroethylene	28000	590	ug/kg dry	500	08/23/22	B211419	8260	SJR	
75-69-4	Trichlorofluoromethane	30000	590	ug/kg dry	500	08/23/22	B211419	8260	SJR	
75-01-4	Vinyl chloride	30000	590	ug/kg dry	500	08/23/22	B211419	8260	SJR	
Surrogate: Bromofluorobenzene		Not Applicable		40.3-194		08/23/22	B211419	8260	SJR	V
Surrogate: Dibromofluoromethane		Not Applicable		52.1-217		08/23/22	B211419	8260	SJR	V
Surrogate: Toluene-d8		Not Applicable		55.4-196		08/23/22	B211419	8260	SJR	V



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ENVIRONMENTAL LABORATORY

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Lansing, MI 48909
TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: SB-2 (5-6) MSD

Lab ID: 2208126-09

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Analyst	Qualifier
Organics-Semivolatiles										
91-57-6	2-Methylnaphthalene	4100	270	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
83-32-9	Acenaphthene	1900	110	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
208-96-8	Acenaphthylene	1900	110	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
120-12-7	Anthracene	2000	110	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
56-55-3	Benz[a]anthracene	2100	110	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
50-32-8	Benzo[a]pyrene	2100	220	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
205-99-2	Benzo[b]fluoranthene	2000	220	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
191-24-2	Benzo[g,h,i]perylene	2100	220	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
207-08-9	Benzo[k]fluoranthene	2000	220	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
218-01-9	Chrysene	2000	110	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
53-70-3	Dibenz[a,h]anthracene	2100	220	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
206-44-0	Fluoranthene	2000	110	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
86-73-7	Fluorene	2000	110	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
193-39-5	Indeno(1,2,3-c,d)pyrene	2000	220	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
91-20-3	Naphthalene	2900	110	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
85-01-8	Phenanthrene	2000	110	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
129-00-0	Pyrene	2100	110	ug/kg dry	1	08/24/22	B2H2410	8270	MF	
Surrogate: 2-Fluorobiphenyl			94.8 %	36-133		08/24/22	B2H2410	8270	MF	
Surrogate: Nitrobenzene-d5			92.2 %	26-123		08/24/22	B2H2410	8270	MF	
Surrogate: p-Terphenyl-d14			123 %	36-142		08/24/22	B2H2410	8270	MF	
Inorganics-General Chemistry										
TS	% Total Solids	91.0	0.1	%	1	08/22/22	B2H2213	2540 B	SG	
Inorganics-Metals										
7440-38-2	Arsenic	100	0.5	mg/kg dry	10	09/19/22	B2H3114	200.8	ARH	
7440-39-3	Barium	110	1.0	mg/kg dry	10	09/19/22	B2H3114	200.8	ARH	
7440-43-9	Cadmium	9.5	0.2	mg/kg dry	10	09/19/22	B2H3114	200.8	ARH	
7440-47-3	Chromium	110	2.0	mg/kg dry	10	09/19/22	B2H3114	200.8	ARH	
7440-50-8	Copper	98	1.0	mg/kg dry	10	09/19/22	B2H3114	200.8	ARH	
7439-92-1	Lead	92	10	mg/kg dry	100	09/20/22	B2H3114	200.8	ARH	
7439-97-6	Mercury	0.4	0.05	mg/kg dry	1	08/30/22	B2H2215	245.5	JP1	
7782-49-2	Selenium	98	0.2	mg/kg dry	10	09/19/22	B2H3114	200.8	ARH	
7440-22-4	Silver	8.5	0.1	mg/kg dry	10	09/19/22	B2H3114	200.8	ARH	
7440-66-6	Zinc	120	1.0	mg/kg dry	10	09/19/22	B2H3114	200.8	ARH	



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FAX: (517) 335-9600

Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
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Batch B2H2211 - Method: 5035

Prepared: 08/19/2022

Blank (B2H2211-BLK1)

1,1,1,2-Tetrachloroethane	ND	50	ug/kg wet							08/19/2022	
1,1,1-Trichloroethane	ND	50	ug/kg wet							08/19/2022	
1,1,2,2-Tetrachloroethane	ND	50	ug/kg wet							08/19/2022	
1,1,2-Trichloroethane	ND	50	ug/kg wet							08/19/2022	
1,1,2-Trichlorotrifluoroethane	ND	50	ug/kg wet							08/19/2022	
1,1-Dichloroethane	ND	50	ug/kg wet							08/19/2022	
1,1-Dichloroethylene	ND	50	ug/kg wet							08/19/2022	
1,2,3-Trichlorobenzene	ND	250	ug/kg wet							08/19/2022	
1,2,3-Trichloropropane	ND	50	ug/kg wet							08/19/2022	
1,2,3-Trimethylbenzene	ND	50	ug/kg wet							08/19/2022	
1,2,4-Trichlorobenzene	ND	250	ug/kg wet							08/19/2022	
1,2,4-Trimethylbenzene	ND	50	ug/kg wet							08/19/2022	
1,2-Dibromo-3-chloropropane	ND	250	ug/kg wet							08/19/2022	
1,2-Dibromoethane	ND	50	ug/kg wet							08/19/2022	
1,2-Dichlorobenzene	ND	50	ug/kg wet							08/19/2022	
1,2-Dichloroethane	ND	50	ug/kg wet							08/19/2022	
1,2-Dichloropropane	ND	50	ug/kg wet							08/19/2022	
1,3,5-Trimethylbenzene	ND	50	ug/kg wet							08/19/2022	
1,3-Dichlorobenzene	ND	50	ug/kg wet							08/19/2022	
1,4-Dichlorobenzene	ND	50	ug/kg wet							08/19/2022	
2,2,4-Trimethylpentane	ND	250	ug/kg wet							08/19/2022	
2-Butanone (MEK)	ND	250	ug/kg wet							08/19/2022	
2-Methylnaphthalene	ND	250	ug/kg wet							08/19/2022	A05
2-Propanone (acetone)	ND	1000	ug/kg wet							08/19/2022	
4-Methyl-2-pentanone (MIBK)	ND	250	ug/kg wet							08/19/2022	
Acrylonitrile	ND	250	ug/kg wet							08/19/2022	
Benzene	ND	50	ug/kg wet							08/19/2022	
Bromochloromethane	ND	50	ug/kg wet							08/19/2022	
Bromodichloromethane	ND	50	ug/kg wet							08/19/2022	
Bromoform	ND	50	ug/kg wet							08/19/2022	
Bromomethane	ND	200	ug/kg wet							08/19/2022	
Carbon disulfide	ND	50	ug/kg wet							08/19/2022	
Carbon tetrachloride	ND	50	ug/kg wet							08/19/2022	
Chlorobenzene	ND	50	ug/kg wet							08/19/2022	
Chloroethane	ND	250	ug/kg wet							08/19/2022	
Chloroform	ND	50	ug/kg wet							08/19/2022	
Chloromethane	ND	250	ug/kg wet							08/19/2022	
cis-1,2-Dichloroethylene	ND	50	ug/kg wet							08/19/2022	
cis-1,3-Dichloropropylene	ND	50	ug/kg wet							08/19/2022	
Cyclohexane	ND	250	ug/kg wet							08/19/2022	
Dibromochloromethane	ND	50	ug/kg wet							08/19/2022	
Dibromomethane	ND	50	ug/kg wet							08/19/2022	
Dichlorodifluoromethane	ND	250	ug/kg wet							08/19/2022	
Diethyl ether	ND	200	ug/kg wet							08/19/2022	
Diisopropyl Ether	ND	250	ug/kg wet							08/19/2022	
Ethylbenzene	ND	50	ug/kg wet							08/19/2022	
Ethyltertiarybutylether	ND	250	ug/kg wet							08/19/2022	
Hexachloroethane	ND	250	ug/kg wet							08/19/2022	
Hexane	ND	50	ug/kg wet							08/19/2022	
Isopropylbenzene	ND	50	ug/kg wet							08/19/2022	



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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
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Batch B2H2211 - Method: 5035

Prepared: 08/19/2022

Blank (B2H2211-BLK1)

m & p - Xylene	ND	100	ug/kg wet							08/19/2022	
Methylcyclopentane	ND	50	ug/kg wet							08/19/2022	
Methylene chloride	ND	100	ug/kg wet							08/19/2022	
Methyltertiarybutylether	ND	50	ug/kg wet							08/19/2022	
Naphthalene	ND	250	ug/kg wet							08/19/2022	
n-Butylbenzene	ND	50	ug/kg wet							08/19/2022	
n-Heptane	ND	50	ug/kg wet							08/19/2022	
n-Propylbenzene	ND	50	ug/kg wet							08/19/2022	
o-Xylene	ND	50	ug/kg wet							08/19/2022	
sec-Butylbenzene	ND	50	ug/kg wet							08/19/2022	
Styrene	ND	50	ug/kg wet							08/19/2022	
tert-Butylbenzene	ND	50	ug/kg wet							08/19/2022	
tertiary Butyl Alcohol	ND	2500	ug/kg wet							08/19/2022	
tertiaryAmylmethylether	ND	250	ug/kg wet							08/19/2022	
Tetrachloroethylene	ND	50	ug/kg wet							08/19/2022	
Tetrahydrofuran	ND	250	ug/kg wet							08/19/2022	
Toluene	ND	50	ug/kg wet							08/19/2022	
trans-1,2-Dichloroethylene	ND	50	ug/kg wet							08/19/2022	
trans-1,3-Dichloropropylene	ND	50	ug/kg wet							08/19/2022	
Trichloroethylene	ND	50	ug/kg wet							08/19/2022	
Trichlorofluoromethane	ND	50	ug/kg wet							08/19/2022	
Vinyl chloride	ND	50	ug/kg wet							08/19/2022	
Surrogate: Bromofluorobenzene	51.3		ug/L	50.00		103	40.3-194			08/19/2022	
Surrogate: Dibromofluoromethane	51.1		ug/L	50.00		102	52.1-217			08/19/2022	
Surrogate: Toluene-d8	50.1		ug/L	50.00		100	55.4-196			08/19/2022	

LCS (B2H2211-BS1)

1,1,1,2-Tetrachloroethane	2500	50	ug/kg wet	2500		99.9	70-130			08/19/2022	
1,1,1-Trichloroethane	2580	50	ug/kg wet	2500		103	70-130			08/19/2022	
1,1,2,2-Tetrachloroethane	2550	50	ug/kg wet	2500		102	70-130			08/19/2022	
1,1,2-Trichloroethane	2490	50	ug/kg wet	2500		99.7	70-130			08/19/2022	
1,1,2-Trichlorotrifluoroethane	2420	50	ug/kg wet	2500		96.8	70-130			08/19/2022	
1,1-Dichloroethane	2700	50	ug/kg wet	2500		108	70-130			08/19/2022	
1,1-Dichloroethylene	2560	50	ug/kg wet	2500		103	70-130			08/19/2022	
1,2,3-Trichlorobenzene	2590	250	ug/kg wet	2500		104	70-130			08/19/2022	
1,2,3-Trichloropropane	2570	50	ug/kg wet	2500		103	70-130			08/19/2022	
1,2,3-Trimethylbenzene	2610	50	ug/kg wet	2500		104	70-130			08/19/2022	
1,2,4-Trichlorobenzene	2530	250	ug/kg wet	2500		101	70-130			08/19/2022	
1,2,4-Trimethylbenzene	2620	50	ug/kg wet	2500		105	70-130			08/19/2022	
1,2-Dibromo-3-chloropropane	2420	250	ug/kg wet	2500		96.8	70-130			08/19/2022	
1,2-Dibromoethane	2480	50	ug/kg wet	2500		99.2	70-130			08/19/2022	
1,2-Dichlorobenzene	2500	50	ug/kg wet	2500		100	70-130			08/19/2022	
1,2-Dichloroethane	2730	50	ug/kg wet	2500		109	70-130			08/19/2022	
1,2-Dichloropropane	2600	50	ug/kg wet	2500		104	70-130			08/19/2022	
1,3,5-Trimethylbenzene	2630	50	ug/kg wet	2500		105	70-130			08/19/2022	
1,3-Dichlorobenzene	2540	50	ug/kg wet	2500		102	70-130			08/19/2022	
1,4-Dichlorobenzene	2520	50	ug/kg wet	2500		101	70-130			08/19/2022	
2,2,4-Trimethylpentane	2240	250	ug/kg wet	2500		89.5	70-130			08/19/2022	
2-Butanone (MEK)	2880	250	ug/kg wet	2500		115	70-130			08/19/2022	
2-Methylnaphthalene	2100	250	ug/kg wet	2500		84.0	70-130			08/19/2022	A05



MICHIGAN DEPARTMENT OF
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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
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Batch B2H2211 - Method: 5035

Prepared: 08/19/2022

LCS (B2H2211-BS1)

2-Propanone (acetone)	3460	1000	ug/kg wet	2500		139	70-130			08/19/2022	A06, A09
4-Methyl-2-pentanone (MIBK)	2690	250	ug/kg wet	2500		108	70-130			08/19/2022	
Acrylonitrile	2450	250	ug/kg wet	2500		98.1	70-130			08/19/2022	
Benzene	2490	50	ug/kg wet	2500		99.4	70-130			08/19/2022	
Bromochloromethane	2700	50	ug/kg wet	2500		108	70-130			08/19/2022	
Bromodichloromethane	2550	50	ug/kg wet	2500		102	70-130			08/19/2022	
Bromoform	2480	50	ug/kg wet	2500		99.0	70-130			08/19/2022	
Bromomethane	2500	200	ug/kg wet	2500		99.9	70-130			08/19/2022	
Carbon disulfide	2360	50	ug/kg wet	2500		94.3	70-130			08/19/2022	
Carbon tetrachloride	2460	50	ug/kg wet	2500		98.3	70-130			08/19/2022	
Chlorobenzene	2460	50	ug/kg wet	2500		98.4	70-130			08/19/2022	
Chloroethane	2630	250	ug/kg wet	2500		105	70-130			08/19/2022	
Chloroform	2680	50	ug/kg wet	2500		107	70-130			08/19/2022	
Chloromethane	2640	250	ug/kg wet	2500		106	70-130			08/19/2022	
cis-1,2-Dichloroethylene	2720	50	ug/kg wet	2500		109	70-130			08/19/2022	
cis-1,3-Dichloropropylene	2650	50	ug/kg wet	2500		106	70-130			08/19/2022	
Cyclohexane	2350	250	ug/kg wet	2500		94.0	70-130			08/19/2022	
Dibromochloromethane	2540	50	ug/kg wet	2500		101	70-130			08/19/2022	
Dibromomethane	2440	50	ug/kg wet	2500		97.7	70-130			08/19/2022	
Dichlorodifluoromethane	2500	250	ug/kg wet	2500		99.9	70-130			08/19/2022	
Diethyl ether	2590	200	ug/kg wet	2500		104	70-130			08/19/2022	
Diisopropyl Ether	2770	250	ug/kg wet	2500		111	70-130			08/19/2022	
Ethylbenzene	2520	50	ug/kg wet	2500		101	70-130			08/19/2022	
Ethyltertiarybutylether	2650	250	ug/kg wet	2500		106	70-130			08/19/2022	
Hexachloroethane	2510	250	ug/kg wet	2500		100	70-130			08/19/2022	
Hexane	2560	50	ug/kg wet	2500		102	70-130			08/19/2022	
Isopropylbenzene	2520	50	ug/kg wet	2500		101	70-130			08/19/2022	
m & p - Xylene	5160	100	ug/kg wet	5000		103	70-130			08/19/2022	
Methylcyclopentane	3060	50	ug/kg wet	2500		123	70-130			08/19/2022	
Methylene chloride	2760	100	ug/kg wet	2500		110	70-130			08/19/2022	
Methyltertiarybutylether	2640	50	ug/kg wet	2500		106	70-130			08/19/2022	
Naphthalene	2540	250	ug/kg wet	2500		102	70-130			08/19/2022	
n-Butylbenzene	2680	50	ug/kg wet	2500		107	70-130			08/19/2022	
n-Heptane	2800	50	ug/kg wet	2500		112	70-130			08/19/2022	
n-Propylbenzene	2690	50	ug/kg wet	2500		108	70-130			08/19/2022	
o-Xylene	2580	50	ug/kg wet	2500		103	70-130			08/19/2022	
sec-Butylbenzene	2630	50	ug/kg wet	2500		105	70-130			08/19/2022	
Styrene	2630	50	ug/kg wet	2500		105	70-130			08/19/2022	
tert-Butylbenzene	2660	50	ug/kg wet	2500		106	70-130			08/19/2022	
tertiary Butyl Alcohol	14600	2500	ug/kg wet	12500		117	70-130			08/19/2022	
tertiaryAmylmethylether	2560	250	ug/kg wet	2500		103	70-130			08/19/2022	
Tetrachloroethylene	2360	50	ug/kg wet	2500		94.6	70-130			08/19/2022	
Tetrahydrofuran	2750	250	ug/kg wet	2500		110	70-130			08/19/2022	
Toluene	2420	50	ug/kg wet	2500		96.9	70-130			08/19/2022	
trans-1,2-Dichloroethylene	2720	50	ug/kg wet	2500		109	70-130			08/19/2022	
trans-1,3-Dichloropropylene	2640	50	ug/kg wet	2500		106	70-130			08/19/2022	
Trichloroethylene	2330	50	ug/kg wet	2500		93.3	70-130			08/19/2022	
Trichlorofluoromethane	2640	50	ug/kg wet	2500		106	70-130			08/19/2022	
Vinyl chloride	2590	50	ug/kg wet	2500		104	70-130			08/19/2022	
Surrogate: Bromofluorobenzene	50.3		ug/L	50.00		101	40.3-194			08/19/2022	



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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
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Batch B2H2211 - Method: 5035

Prepared: 08/19/2022

LCS (B2H2211-BS1)

Surrogate: Dibromofluoromethane	51.6		ug/L	50.00		103	52.1-217			08/19/2022	
Surrogate: Toluene-d8	50.0		ug/L	50.00		99.9	55.4-196			08/19/2022	

Matrix Spike (B2H2211-MS1)

Source: 2208112-05

1,1,1,2-Tetrachloroethane	2540	52	ug/kg dry	2611	ND	97.4	70-130			08/25/2022	
1,1,1-Trichloroethane	2660	52	ug/kg dry	2611	ND	102	70-130			08/25/2022	
1,1,2,2-Tetrachloroethane	2450	52	ug/kg dry	2611	ND	93.8	70-130			08/25/2022	
1,1,2-Trichloroethane	2550	52	ug/kg dry	2611	ND	97.8	70-130			08/25/2022	
1,1,2-Trichlorotrifluoroethane	2550	52	ug/kg dry	2611	ND	97.5	70-130			08/25/2022	
1,1-Dichloroethane	2790	52	ug/kg dry	2611	ND	107	70-130			08/25/2022	
1,1-Dichloroethylene	2600	52	ug/kg dry	2611	ND	99.5	70-130			08/25/2022	
1,2,3-Trichlorobenzene	2540	260	ug/kg dry	2611	ND	97.4	70-130			08/25/2022	
1,2,3-Trichloropropane	2640	52	ug/kg dry	2611	ND	101	70-130			08/25/2022	
1,2,3-Trimethylbenzene	2670	52	ug/kg dry	2611	ND	102	70-130			08/25/2022	
1,2,4-Trichlorobenzene	2520	260	ug/kg dry	2611	ND	96.6	70-130			08/25/2022	
1,2,4-Trimethylbenzene	2690	52	ug/kg dry	2611	ND	103	70-130			08/25/2022	
1,2-Dibromo-3-chloropropane	2480	260	ug/kg dry	2611	ND	94.9	70-130			08/25/2022	
1,2-Dibromoethane	2570	52	ug/kg dry	2611	ND	98.3	70-130			08/25/2022	
1,2-Dichlorobenzene	2550	52	ug/kg dry	2611	ND	97.8	70-130			08/25/2022	
1,2-Dichloroethane	2780	52	ug/kg dry	2611	ND	106	70-130			08/25/2022	
1,2-Dichloropropane	2680	52	ug/kg dry	2611	ND	103	70-130			08/25/2022	
1,3,5-Trimethylbenzene	2670	52	ug/kg dry	2611	ND	102	70-130			08/25/2022	
1,3-Dichlorobenzene	2600	52	ug/kg dry	2611	ND	99.6	70-130			08/25/2022	
1,4-Dichlorobenzene	2580	52	ug/kg dry	2611	ND	98.9	70-130			08/25/2022	
2,2,4-Trimethylpentane	2320	260	ug/kg dry	2611	ND	88.9	70-130			08/25/2022	
2-Butanone (MEK)	3040	260	ug/kg dry	2611	ND	117	70-130			08/25/2022	
2-Methylnaphthalene	2040	260	ug/kg dry	2611	ND	78.2	70-130			08/25/2022	A05
2-Propanone (acetone)	3850	1000	ug/kg dry	2611	ND	148	70-130			08/25/2022	A04, A06
4-Methyl-2-pentanone (MIBK)	2760	260	ug/kg dry	2611	ND	106	70-130			08/25/2022	
Acrylonitrile	2650	260	ug/kg dry	2611	ND	101	70-130			08/25/2022	
Benzene	2620	52	ug/kg dry	2611	ND	100	70-130			08/25/2022	
Bromochloromethane	2800	52	ug/kg dry	2611	ND	107	70-130			08/25/2022	
Bromodichloromethane	2620	52	ug/kg dry	2611	ND	100	70-130			08/25/2022	
Bromoform	2430	52	ug/kg dry	2611	ND	93.2	70-130			08/25/2022	
Bromomethane	2410	210	ug/kg dry	2611	ND	92.3	70-130			08/25/2022	
Carbon disulfide	2350	52	ug/kg dry	2611	ND	90.0	70-130			08/25/2022	
Carbon tetrachloride	2560	52	ug/kg dry	2611	ND	98.2	70-130			08/25/2022	
Chlorobenzene	2600	52	ug/kg dry	2611	ND	99.7	70-130			08/25/2022	
Chloroethane	2630	260	ug/kg dry	2611	ND	101	70-130			08/25/2022	
Chloroform	2760	52	ug/kg dry	2611	ND	106	70-130			08/25/2022	
Chloromethane	2470	260	ug/kg dry	2611	ND	94.5	70-130			08/25/2022	
cis-1,2-Dichloroethylene	2730	52	ug/kg dry	2611	ND	105	70-130			08/25/2022	
cis-1,3-Dichloropropylene	2630	52	ug/kg dry	2611	ND	101	70-130			08/25/2022	
Cyclohexane	2490	260	ug/kg dry	2611	ND	95.5	70-130			08/25/2022	
Dibromochloromethane	2580	52	ug/kg dry	2611	ND	98.7	70-130			08/25/2022	
Dibromomethane	2590	52	ug/kg dry	2611	ND	99.4	70-130			08/25/2022	
Dichlorodifluoromethane	2130	260	ug/kg dry	2611	ND	81.4	70-130			08/25/2022	
Diethyl ether	2630	210	ug/kg dry	2611	ND	101	70-130			08/25/2022	
Diisopropyl Ether	2860	260	ug/kg dry	2611	ND	110	70-130			08/25/2022	
Ethylbenzene	2620	52	ug/kg dry	2611	ND	100	70-130			08/25/2022	



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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
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Batch B2H2211 - Method: 5035

Prepared: 08/19/2022

Matrix Spike (B2H2211-MS1)

Source: 2208112-05

Ethyltertiarybutylether	2720	260	ug/kg dry	2611	ND	104	70-130			08/25/2022	
Hexachloroethane	2500	260	ug/kg dry	2611	ND	95.7	70-130			08/25/2022	
Hexane	2680	52	ug/kg dry	2611	ND	103	70-130			08/25/2022	
Isopropylbenzene	2600	52	ug/kg dry	2611	ND	99.7	70-130			08/25/2022	
m & p - Xylene	5390	100	ug/kg dry	5223	ND	103	70-130			08/25/2022	
Methylcyclopentane	3190	52	ug/kg dry	2611	ND	122	70-130			08/25/2022	
Methylene chloride	2790	100	ug/kg dry	2611	ND	107	70-130			08/25/2022	
Methyltertiarybutylether	2700	52	ug/kg dry	2611	ND	103	70-130			08/25/2022	
Naphthalene	2580	260	ug/kg dry	2611	ND	98.8	70-130			08/25/2022	
n-Butylbenzene	2680	52	ug/kg dry	2611	ND	103	70-130			08/25/2022	
n-Heptane	3030	52	ug/kg dry	2611	ND	116	70-130			08/25/2022	
n-Propylbenzene	2700	52	ug/kg dry	2611	ND	104	70-130			08/25/2022	
o-Xylene	2680	52	ug/kg dry	2611	ND	103	70-130			08/25/2022	
sec-Butylbenzene	2650	52	ug/kg dry	2611	ND	102	70-130			08/25/2022	
Styrene	2740	52	ug/kg dry	2611	ND	105	70-130			08/25/2022	
tert-Butylbenzene	2670	52	ug/kg dry	2611	ND	102	70-130			08/25/2022	
tertiary Butyl Alcohol	12700	2600	ug/kg dry	13060	ND	97.5	70-130			08/25/2022	
tertiaryAmylmethylether	2680	260	ug/kg dry	2611	ND	103	70-130			08/25/2022	
Tetrachloroethylene	2580	52	ug/kg dry	2611	ND	98.6	70-130			08/25/2022	
Tetrahydrofuran	2840	260	ug/kg dry	2611	ND	109	70-130			08/25/2022	
Toluene	2540	52	ug/kg dry	2611	ND	97.3	70-130			08/25/2022	
trans-1,2-Dichloroethylene	2760	52	ug/kg dry	2611	ND	106	70-130			08/25/2022	
trans-1,3-Dichloropropylene	2670	52	ug/kg dry	2611	ND	102	70-130			08/25/2022	
Trichloroethylene	2570	52	ug/kg dry	2611	ND	98.3	70-130			08/25/2022	
Trichlorofluoromethane	2670	52	ug/kg dry	2611	ND	102	70-130			08/25/2022	
Vinyl chloride	2560	52	ug/kg dry	2611	ND	97.9	70-130			08/25/2022	
Surrogate: Bromofluorobenzene	56.7		ug/kg dry	50.94		111	40.3-194			08/25/2022	
Surrogate: Dibromofluoromethane	61.6		ug/kg dry	50.94		121	52.1-217			08/25/2022	
Surrogate: Toluene-d8	59.7		ug/kg dry	50.94		117	55.4-196			08/25/2022	

Matrix Spike Dup (B2H2211-MSD1)

Source: 2208112-05

1,1,1,2-Tetrachloroethane	2420	52	ug/kg dry	2611	ND	92.5	70-130	5.21	30	08/25/2022	
1,1,1-Trichloroethane	2370	52	ug/kg dry	2611	ND	90.7	70-130	11.8	30	08/25/2022	
1,1,2,2-Tetrachloroethane	2400	52	ug/kg dry	2611	ND	91.8	70-130	2.15	30	08/25/2022	
1,1,2-Trichloroethane	2520	52	ug/kg dry	2611	ND	96.4	70-130	1.47	30	08/25/2022	
1,1,2-Trichlorotrifluoroethane	2160	52	ug/kg dry	2611	ND	82.6	70-130	16.6	30	08/25/2022	
1,1-Dichloroethane	2520	52	ug/kg dry	2611	ND	96.7	70-130	10.1	30	08/25/2022	
1,1-Dichloroethylene	2270	52	ug/kg dry	2611	ND	87.1	70-130	13.4	30	08/25/2022	
1,2,3-Trichlorobenzene	2650	260	ug/kg dry	2611	ND	101	70-130	3.93	30	08/25/2022	
1,2,3-Trichloropropane	2650	52	ug/kg dry	2611	ND	101	70-130	0.138	30	08/25/2022	
1,2,3-Trimethylbenzene	2570	52	ug/kg dry	2611	ND	98.4	70-130	3.76	30	08/25/2022	
1,2,4-Trichlorobenzene	2470	260	ug/kg dry	2611	ND	94.6	70-130	2.08	30	08/25/2022	
1,2,4-Trimethylbenzene	2530	52	ug/kg dry	2611	ND	96.9	70-130	6.22	30	08/25/2022	
1,2-Dibromo-3-chloropropane	2490	260	ug/kg dry	2611	ND	95.5	70-130	0.585	30	08/25/2022	
1,2-Dibromoethane	2540	52	ug/kg dry	2611	ND	97.2	70-130	1.16	30	08/25/2022	
1,2-Dichlorobenzene	2470	52	ug/kg dry	2611	ND	94.7	70-130	3.20	30	08/25/2022	
1,2-Dichloroethane	2680	52	ug/kg dry	2611	ND	103	70-130	3.60	30	08/25/2022	
1,2-Dichloropropane	2500	52	ug/kg dry	2611	ND	95.7	70-130	7.02	30	08/25/2022	
1,3,5-Trimethylbenzene	2510	52	ug/kg dry	2611	ND	96.1	70-130	6.26	30	08/25/2022	
1,3-Dichlorobenzene	2460	52	ug/kg dry	2611	ND	94.4	70-130	5.44	30	08/25/2022	



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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
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Batch B2H2211 - Method: 5035

Prepared: 08/19/2022

Matrix Spike Dup (B2H2211-MSD1)

Source: 2208112-05

1,4-Dichlorobenzene	2480	52	ug/kg dry	2611	ND	95.0	70-130	4.05	30	08/25/2022	
2,2,4-Trimethylpentane	1850	260	ug/kg dry	2611	ND	71.0	70-130	22.4	30	08/25/2022	
2-Butanone (MEK)	2990	260	ug/kg dry	2611	ND	114	70-130	1.82	30	08/25/2022	
2-Methylnaphthalene	2120	260	ug/kg dry	2611	ND	81.1	70-130	3.63	30	08/25/2022	A05
2-Propanone (acetone)	3680	1000	ug/kg dry	2611	ND	141	70-130	4.61	30	08/25/2022	A04, A06
4-Methyl-2-pentanone (MIBK)	2700	260	ug/kg dry	2611	ND	103	70-130	2.18	30	08/25/2022	
Acrylonitrile	2740	260	ug/kg dry	2611	ND	105	70-130	3.49	30	08/25/2022	
Benzene	2330	52	ug/kg dry	2611	ND	89.1	70-130	11.8	30	08/25/2022	
Bromochloromethane	2620	52	ug/kg dry	2611	ND	100	70-130	6.76	30	08/25/2022	
Bromodichloromethane	2470	52	ug/kg dry	2611	ND	94.4	70-130	6.09	30	08/25/2022	
Bromoform	2400	52	ug/kg dry	2611	ND	92.0	70-130	1.30	30	08/25/2022	
Bromomethane	2220	210	ug/kg dry	2611	ND	85.1	70-130	8.19	30	08/25/2022	
Carbon disulfide	2020	52	ug/kg dry	2611	ND	77.4	70-130	15.1	30	08/25/2022	
Carbon tetrachloride	2290	52	ug/kg dry	2611	ND	87.8	70-130	11.2	30	08/25/2022	
Chlorobenzene	2420	52	ug/kg dry	2611	ND	92.7	70-130	7.27	30	08/25/2022	
Chloroethane	2350	260	ug/kg dry	2611	ND	89.9	70-130	11.3	30	08/25/2022	
Chloroform	2550	52	ug/kg dry	2611	ND	97.8	70-130	7.74	30	08/25/2022	
Chloromethane	2210	260	ug/kg dry	2611	ND	84.7	70-130	10.9	30	08/25/2022	
cis-1,2-Dichloroethylene	2560	52	ug/kg dry	2611	ND	98.1	70-130	6.49	30	08/25/2022	
cis-1,3-Dichloropropylene	2480	52	ug/kg dry	2611	ND	95.0	70-130	5.68	30	08/25/2022	
Cyclohexane	2170	260	ug/kg dry	2611	ND	83.2	70-130	13.7	30	08/25/2022	
Dibromochloromethane	2480	52	ug/kg dry	2611	ND	95.2	70-130	3.65	30	08/25/2022	
Dibromomethane	2430	52	ug/kg dry	2611	ND	92.9	70-130	6.73	30	08/25/2022	
Dichlorodifluoromethane	1780	260	ug/kg dry	2611	ND	68.1	70-130	17.8	30	08/25/2022	A03
Diethyl ether	2550	210	ug/kg dry	2611	ND	97.7	70-130	3.10	30	08/25/2022	
Diisopropyl Ether	2660	260	ug/kg dry	2611	ND	102	70-130	7.27	30	08/25/2022	
Ethylbenzene	2390	52	ug/kg dry	2611	ND	91.6	70-130	9.06	30	08/25/2022	
Ethyltertiarybutylether	2580	260	ug/kg dry	2611	ND	98.8	70-130	5.38	30	08/25/2022	
Hexachloroethane	2370	260	ug/kg dry	2611	ND	90.7	70-130	5.34	30	08/25/2022	
Hexane	2090	52	ug/kg dry	2611	ND	80.1	70-130	24.6	30	08/25/2022	
Isopropylbenzene	2390	52	ug/kg dry	2611	ND	91.6	70-130	8.51	30	08/25/2022	
m & p - Xylene	4870	100	ug/kg dry	5223	ND	93.3	70-130	10.2	30	08/25/2022	
Methylcyclopentane	2670	52	ug/kg dry	2611	ND	102	70-130	17.9	30	08/25/2022	
Methylene chloride	2580	100	ug/kg dry	2611	ND	98.8	70-130	7.77	30	08/25/2022	
Methyltertiarybutylether	2590	52	ug/kg dry	2611	ND	99.3	70-130	3.91	30	08/25/2022	
Naphthalene	2660	260	ug/kg dry	2611	ND	102	70-130	3.13	30	08/25/2022	
n-Butylbenzene	2520	52	ug/kg dry	2611	ND	96.4	70-130	6.23	30	08/25/2022	
n-Heptane	2370	52	ug/kg dry	2611	ND	90.7	70-130	24.6	30	08/25/2022	
n-Propylbenzene	2490	52	ug/kg dry	2611	ND	95.2	70-130	8.36	30	08/25/2022	
o-Xylene	2510	52	ug/kg dry	2611	ND	96.0	70-130	6.81	30	08/25/2022	
sec-Butylbenzene	2480	52	ug/kg dry	2611	ND	95.1	70-130	6.59	30	08/25/2022	
Styrene	2550	52	ug/kg dry	2611	ND	97.8	70-130	7.00	30	08/25/2022	
tert-Butylbenzene	2510	52	ug/kg dry	2611	ND	95.9	70-130	6.44	30	08/25/2022	
tertiary Butyl Alcohol	13300	2600	ug/kg dry	13060	ND	102	70-130	4.51	30	08/25/2022	
tertiaryAmylmethylether	2560	260	ug/kg dry	2611	ND	98.1	70-130	4.58	30	08/25/2022	
Tetrachloroethylene	2220	52	ug/kg dry	2611	ND	84.9	70-130	14.9	30	08/25/2022	
Tetrahydrofuran	2790	260	ug/kg dry	2611	ND	107	70-130	1.72	30	08/25/2022	
Toluene	2360	52	ug/kg dry	2611	ND	90.2	70-130	7.62	30	08/25/2022	
trans-1,2-Dichloroethylene	2450	52	ug/kg dry	2611	ND	93.7	70-130	11.9	30	08/25/2022	
trans-1,3-Dichloropropylene	2520	52	ug/kg dry	2611	ND	96.7	70-130	5.80	30	08/25/2022	



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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
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Batch B2H2211 - Method: 5035

Prepared: 08/19/2022

Matrix Spike Dup (B2H2211-MSD1)

Source: 2208112-05

Trichloroethylene	2280	52	ug/kg dry	2611	ND	87.3	70-130	11.9	30	08/25/2022	
Trichlorofluoromethane	2320	52	ug/kg dry	2611	ND	88.8	70-130	14.0	30	08/25/2022	
Vinyl chloride	2200	52	ug/kg dry	2611	ND	84.3	70-130	14.9	30	08/25/2022	
Surrogate: Bromofluorobenzene	53.4		ug/kg dry	50.94		105	40.3-194			08/25/2022	
Surrogate: Dibromofluoromethane	58.4		ug/kg dry	50.94		115	52.1-217			08/25/2022	
Surrogate: Toluene-d8	54.4		ug/kg dry	50.94		107	55.4-196			08/25/2022	

Batch B2H2319 - Method: 5035

Prepared: 08/23/2022

Blank (B2H2319-BLK1)

1,1,1,2-Tetrachloroethane	ND	50	ug/kg wet							08/23/2022	
1,1,1-Trichloroethane	ND	50	ug/kg wet							08/23/2022	
1,1,2,2-Tetrachloroethane	ND	50	ug/kg wet							08/23/2022	
1,1,2-Trichloroethane	ND	50	ug/kg wet							08/23/2022	
1,1,2-Trichlorotrifluoroethane	ND	50	ug/kg wet							08/23/2022	
1,1-Dichloroethane	ND	50	ug/kg wet							08/23/2022	
1,1-Dichloroethylene	ND	50	ug/kg wet							08/23/2022	
1,2,3-Trichlorobenzene	ND	250	ug/kg wet							08/23/2022	
1,2,3-Trichloropropane	ND	50	ug/kg wet							08/23/2022	
1,2,3-Trimethylbenzene	ND	50	ug/kg wet							08/23/2022	
1,2,4-Trichlorobenzene	ND	250	ug/kg wet							08/23/2022	
1,2,4-Trimethylbenzene	ND	50	ug/kg wet							08/23/2022	
1,2-Dibromo-3-chloropropane	ND	250	ug/kg wet							08/23/2022	
1,2-Dibromoethane	ND	50	ug/kg wet							08/23/2022	
1,2-Dichlorobenzene	ND	50	ug/kg wet							08/23/2022	
1,2-Dichloroethane	ND	50	ug/kg wet							08/23/2022	
1,2-Dichloropropane	ND	50	ug/kg wet							08/23/2022	
1,3,5-Trimethylbenzene	ND	50	ug/kg wet							08/23/2022	
1,3-Dichlorobenzene	ND	50	ug/kg wet							08/23/2022	
1,4-Dichlorobenzene	ND	50	ug/kg wet							08/23/2022	
2,2,4-Trimethylpentane	ND	250	ug/kg wet							08/23/2022	
2-Butanone (MEK)	ND	250	ug/kg wet							08/23/2022	
2-Methylnaphthalene	ND	250	ug/kg wet							08/23/2022	A05
2-Propanone (acetone)	ND	1000	ug/kg wet							08/23/2022	
4-Methyl-2-pentanone (MIBK)	ND	250	ug/kg wet							08/23/2022	
Acrylonitrile	ND	250	ug/kg wet							08/23/2022	
Benzene	ND	50	ug/kg wet							08/23/2022	
Bromochloromethane	ND	50	ug/kg wet							08/23/2022	
Bromodichloromethane	ND	50	ug/kg wet							08/23/2022	
Bromoform	ND	50	ug/kg wet							08/23/2022	
Bromomethane	ND	200	ug/kg wet							08/23/2022	
Carbon disulfide	ND	50	ug/kg wet							08/23/2022	
Carbon tetrachloride	ND	50	ug/kg wet							08/23/2022	
Chlorobenzene	ND	50	ug/kg wet							08/23/2022	
Chloroethane	ND	250	ug/kg wet							08/23/2022	
Chloroform	ND	50	ug/kg wet							08/23/2022	
Chloromethane	ND	250	ug/kg wet							08/23/2022	
cis-1,2-Dichloroethylene	ND	50	ug/kg wet							08/23/2022	
cis-1,3-Dichloropropylene	ND	50	ug/kg wet							08/23/2022	



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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
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Batch B2H2319 - Method: 5035

Prepared: 08/23/2022

Blank (B2H2319-BLK1)

Cyclohexane	ND	250	ug/kg wet							08/23/2022	
Dibromochloromethane	ND	50	ug/kg wet							08/23/2022	
Dibromomethane	ND	50	ug/kg wet							08/23/2022	
Dichlorodifluoromethane	ND	250	ug/kg wet							08/23/2022	
Diethyl ether	ND	200	ug/kg wet							08/23/2022	
Diisopropyl Ether	ND	250	ug/kg wet							08/23/2022	
Ethylbenzene	ND	50	ug/kg wet							08/23/2022	
Ethyltertiarybutylether	ND	250	ug/kg wet							08/23/2022	
Hexachloroethane	ND	250	ug/kg wet							08/23/2022	
Hexane	ND	50	ug/kg wet							08/23/2022	
Isopropylbenzene	ND	50	ug/kg wet							08/23/2022	
m & p - Xylene	ND	100	ug/kg wet							08/23/2022	
Methylcyclopentane	ND	50	ug/kg wet							08/23/2022	
Methylene chloride	ND	100	ug/kg wet							08/23/2022	
Methyltertiarybutylether	ND	50	ug/kg wet							08/23/2022	
Naphthalene	ND	250	ug/kg wet							08/23/2022	
n-Butylbenzene	ND	50	ug/kg wet							08/23/2022	
n-Heptane	ND	50	ug/kg wet							08/23/2022	
n-Propylbenzene	ND	50	ug/kg wet							08/23/2022	
o-Xylene	ND	50	ug/kg wet							08/23/2022	
sec-Butylbenzene	ND	50	ug/kg wet							08/23/2022	
Styrene	ND	50	ug/kg wet							08/23/2022	
tert-Butylbenzene	ND	50	ug/kg wet							08/23/2022	
tertiary Butyl Alcohol	ND	2500	ug/kg wet							08/23/2022	
tertiaryAmylmethylether	ND	250	ug/kg wet							08/23/2022	
Tetrachloroethylene	ND	50	ug/kg wet							08/23/2022	
Tetrahydrofuran	ND	250	ug/kg wet							08/23/2022	
Toluene	ND	50	ug/kg wet							08/23/2022	
trans-1,2-Dichloroethylene	ND	50	ug/kg wet							08/23/2022	
trans-1,3-Dichloropropylene	ND	50	ug/kg wet							08/23/2022	
Trichloroethylene	ND	50	ug/kg wet							08/23/2022	
Trichlorofluoromethane	ND	50	ug/kg wet							08/23/2022	
Vinyl chloride	ND	50	ug/kg wet							08/23/2022	
Surrogate: Bromofluorobenzene	50.8		ug/L	50.00		102	40.3-194			08/23/2022	
Surrogate: Dibromofluoromethane	49.9		ug/L	50.00		99.7	52.1-217			08/23/2022	
Surrogate: Toluene-d8	49.9		ug/L	50.00		99.9	55.4-196			08/23/2022	

LCS (B2H2319-BS1)

1,1,1,2-Tetrachloroethane	2390	50	ug/kg wet	2500		95.5	70-130			08/23/2022	
1,1,1-Trichloroethane	2490	50	ug/kg wet	2500		99.5	70-130			08/23/2022	
1,1,2,2-Tetrachloroethane	2520	50	ug/kg wet	2500		101	70-130			08/23/2022	
1,1,2-Trichloroethane	2440	50	ug/kg wet	2500		97.4	70-130			08/23/2022	
1,1,2-Trichlorotrifluoroethane	2370	50	ug/kg wet	2500		94.7	70-130			08/23/2022	
1,1-Dichloroethane	2570	50	ug/kg wet	2500		103	70-130			08/23/2022	
1,1-Dichloroethylene	2420	50	ug/kg wet	2500		96.9	70-130			08/23/2022	
1,2,3-Trichlorobenzene	2620	250	ug/kg wet	2500		105	70-130			08/23/2022	
1,2,3-Trichloropropane	2520	50	ug/kg wet	2500		101	70-130			08/23/2022	
1,2,3-Trimethylbenzene	2570	50	ug/kg wet	2500		103	70-130			08/23/2022	
1,2,4-Trichlorobenzene	2590	250	ug/kg wet	2500		104	70-130			08/23/2022	
1,2,4-Trimethylbenzene	2600	50	ug/kg wet	2500		104	70-130			08/23/2022	



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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
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Batch B2H2319 - Method: 5035

Prepared: 08/23/2022

LCS (B2H2319-BS1)

1,2-Dibromo-3-chloropropane	2580	250	ug/kg wet	2500		103	70-130			08/23/2022	
1,2-Dibromoethane	2480	50	ug/kg wet	2500		99.3	70-130			08/23/2022	
1,2-Dichlorobenzene	2470	50	ug/kg wet	2500		99.0	70-130			08/23/2022	
1,2-Dichloroethane	2580	50	ug/kg wet	2500		103	70-130			08/23/2022	
1,2-Dichloropropane	2460	50	ug/kg wet	2500		98.5	70-130			08/23/2022	
1,3,5-Trimethylbenzene	2600	50	ug/kg wet	2500		104	70-130			08/23/2022	
1,3-Dichlorobenzene	2510	50	ug/kg wet	2500		100	70-130			08/23/2022	
1,4-Dichlorobenzene	2520	50	ug/kg wet	2500		101	70-130			08/23/2022	
2,2,4-Trimethylpentane	2370	250	ug/kg wet	2500		95.0	70-130			08/23/2022	
2-Butanone (MEK)	2880	250	ug/kg wet	2500		115	70-130			08/23/2022	
2-Methylnaphthalene	2200	250	ug/kg wet	2500		87.9	70-130			08/23/2022	A05
2-Propanone (acetone)	3330	1000	ug/kg wet	2500		133	70-130			08/23/2022	A06, A09
4-Methyl-2-pentanone (MIBK)	2670	250	ug/kg wet	2500		107	70-130			08/23/2022	
Acrylonitrile	2430	250	ug/kg wet	2500		97.1	70-130			08/23/2022	
Benzene	2410	50	ug/kg wet	2500		96.3	70-130			08/23/2022	
Bromochloromethane	2580	50	ug/kg wet	2500		103	70-130			08/23/2022	
Bromodichloromethane	2430	50	ug/kg wet	2500		97.3	70-130			08/23/2022	
Bromoform	2460	50	ug/kg wet	2500		98.3	70-130			08/23/2022	
Bromomethane	2440	200	ug/kg wet	2500		97.5	70-130			08/23/2022	
Carbon disulfide	2310	50	ug/kg wet	2500		92.5	70-130			08/23/2022	
Carbon tetrachloride	2360	50	ug/kg wet	2500		94.6	70-130			08/23/2022	
Chlorobenzene	2450	50	ug/kg wet	2500		98.0	70-130			08/23/2022	
Chloroethane	2450	250	ug/kg wet	2500		97.9	70-130			08/23/2022	
Chloroform	2530	50	ug/kg wet	2500		101	70-130			08/23/2022	
Chloromethane	2430	250	ug/kg wet	2500		97.2	70-130			08/23/2022	
cis-1,2-Dichloroethylene	2590	50	ug/kg wet	2500		104	70-130			08/23/2022	
cis-1,3-Dichloropropylene	2580	50	ug/kg wet	2500		103	70-130			08/23/2022	
Cyclohexane	2360	250	ug/kg wet	2500		94.6	70-130			08/23/2022	
Dibromochloromethane	2480	50	ug/kg wet	2500		99.2	70-130			08/23/2022	
Dibromomethane	2470	50	ug/kg wet	2500		98.7	70-130			08/23/2022	
Dichlorodifluoromethane	2320	250	ug/kg wet	2500		92.8	70-130			08/23/2022	
Diethyl ether	2510	200	ug/kg wet	2500		101	70-130			08/23/2022	
Diisopropyl Ether	2660	250	ug/kg wet	2500		106	70-130			08/23/2022	
Ethylbenzene	2470	50	ug/kg wet	2500		98.9	70-130			08/23/2022	
Ethyltertiarybutylether	2560	250	ug/kg wet	2500		102	70-130			08/23/2022	
Hexachloroethane	2480	250	ug/kg wet	2500		99.1	70-130			08/23/2022	
Hexane	2580	50	ug/kg wet	2500		103	70-130			08/23/2022	
Isopropylbenzene	2500	50	ug/kg wet	2500		99.9	70-130			08/23/2022	
m & p - Xylene	5020	100	ug/kg wet	5000		100	70-130			08/23/2022	
Methylcyclopentane	3030	50	ug/kg wet	2500		121	70-130			08/23/2022	
Methylene chloride	2560	100	ug/kg wet	2500		102	70-130			08/23/2022	
Methyltertiarybutylether	2580	50	ug/kg wet	2500		103	70-130			08/23/2022	
Naphthalene	2630	250	ug/kg wet	2500		105	70-130			08/23/2022	
n-Butylbenzene	2650	50	ug/kg wet	2500		106	70-130			08/23/2022	
n-Heptane	2970	50	ug/kg wet	2500		119	70-130			08/23/2022	
n-Propylbenzene	2610	50	ug/kg wet	2500		105	70-130			08/23/2022	
o-Xylene	2520	50	ug/kg wet	2500		101	70-130			08/23/2022	
sec-Butylbenzene	2590	50	ug/kg wet	2500		104	70-130			08/23/2022	
Styrene	2530	50	ug/kg wet	2500		101	70-130			08/23/2022	
tert-Butylbenzene	2640	50	ug/kg wet	2500		106	70-130			08/23/2022	



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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
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Batch B2H2319 - Method: 5035

Prepared: 08/23/2022

LCS (B2H2319-BS1)

tertiary Butyl Alcohol	14500	2500	ug/kg wet	12500		116	70-130			08/23/2022	
tertiaryAmylmethylether	2550	250	ug/kg wet	2500		102	70-130			08/23/2022	
Tetrachloroethylene	2410	50	ug/kg wet	2500		96.6	70-130			08/23/2022	
Tetrahydrofuran	2770	250	ug/kg wet	2500		111	70-130			08/23/2022	
Toluene	2390	50	ug/kg wet	2500		95.6	70-130			08/23/2022	
trans-1,2-Dichloroethylene	2580	50	ug/kg wet	2500		103	70-130			08/23/2022	
trans-1,3-Dichloropropylene	2580	50	ug/kg wet	2500		103	70-130			08/23/2022	
Trichloroethylene	2320	50	ug/kg wet	2500		92.9	70-130			08/23/2022	
Trichlorofluoromethane	2470	50	ug/kg wet	2500		99.0	70-130			08/23/2022	
Vinyl chloride	2480	50	ug/kg wet	2500		99.3	70-130			08/23/2022	
Surrogate: Bromofluorobenzene	51.0		ug/L	50.00		102	40.3-194			08/23/2022	
Surrogate: Dibromofluoromethane	50.4		ug/L	50.00		101	52.1-217			08/23/2022	
Surrogate: Toluene-d8	49.5		ug/L	50.00		99.1	55.4-196			08/23/2022	

Matrix Spike (B2H2319-MS1)

Source: 2208149-06

1,1,1,2-Tetrachloroethane	3050	63	ug/kg dry	3144	ND	97.0	70-130			08/23/2022	
1,1,1-Trichloroethane	3230	63	ug/kg dry	3144	ND	103	70-130			08/23/2022	
1,1,2,2-Tetrachloroethane	2920	63	ug/kg dry	3144	ND	93.0	70-130			08/23/2022	
1,1,2-Trichloroethane	3110	63	ug/kg dry	3144	ND	98.8	70-130			08/23/2022	
1,1,2-Trichlorotrifluoroethane	3250	63	ug/kg dry	3144	ND	104	70-130			08/23/2022	
1,1-Dichloroethane	3380	63	ug/kg dry	3144	ND	107	70-130			08/23/2022	
1,1-Dichloroethylene	3290	63	ug/kg dry	3144	ND	105	70-130			08/23/2022	
1,2,3-Trichlorobenzene	3110	310	ug/kg dry	3144	ND	98.9	70-130			08/23/2022	
1,2,3-Trichloropropane	3250	63	ug/kg dry	3144	ND	103	70-130			08/23/2022	
1,2,3-Trimethylbenzene	3250	63	ug/kg dry	3144	ND	103	70-130			08/23/2022	
1,2,4-Trichlorobenzene	3080	310	ug/kg dry	3144	ND	98.0	70-130			08/23/2022	
1,2,4-Trimethylbenzene	3330	63	ug/kg dry	3144	ND	106	70-130			08/23/2022	
1,2-Dibromo-3-chloropropane	3020	310	ug/kg dry	3144	ND	96.0	70-130			08/23/2022	
1,2-Dibromoethane	3110	63	ug/kg dry	3144	ND	99.0	70-130			08/23/2022	
1,2-Dichlorobenzene	3130	63	ug/kg dry	3144	ND	99.6	70-130			08/23/2022	
1,2-Dichloroethane	3360	63	ug/kg dry	3144	ND	107	70-130			08/23/2022	
1,2-Dichloropropane	3230	63	ug/kg dry	3144	ND	103	70-130			08/23/2022	
1,3,5-Trimethylbenzene	3220	63	ug/kg dry	3144	ND	103	70-130			08/23/2022	
1,3-Dichlorobenzene	3190	63	ug/kg dry	3144	ND	102	70-130			08/23/2022	
1,4-Dichlorobenzene	3170	63	ug/kg dry	3144	ND	101	70-130			08/23/2022	
2,2,4-Trimethylpentane	3020	310	ug/kg dry	3144	ND	96.1	70-130			08/23/2022	
2-Butanone (MEK)	3410	310	ug/kg dry	3144	ND	108	70-130			08/23/2022	
2-Methylnaphthalene	2460	310	ug/kg dry	3144	ND	78.3	70-130			08/23/2022	A05
2-Propanone (acetone)	4140	1300	ug/kg dry	3144	ND	132	70-130			08/23/2022	A04, A06
4-Methyl-2-pentanone (MIBK)	3290	310	ug/kg dry	3144	ND	105	70-130			08/23/2022	
Acrylonitrile	3130	310	ug/kg dry	3144	ND	99.7	70-130			08/23/2022	
Benzene	3170	63	ug/kg dry	3144	ND	101	70-130			08/23/2022	
Bromochloromethane	3340	63	ug/kg dry	3144	ND	106	70-130			08/23/2022	
Bromodichloromethane	3160	63	ug/kg dry	3144	ND	101	70-130			08/23/2022	
Bromoform	2970	63	ug/kg dry	3144	ND	94.4	70-130			08/23/2022	
Bromomethane	3140	250	ug/kg dry	3144	ND	99.7	70-130			08/23/2022	
Carbon disulfide	3030	63	ug/kg dry	3144	ND	96.4	70-130			08/23/2022	
Carbon tetrachloride	3100	63	ug/kg dry	3144	ND	98.6	70-130			08/23/2022	
Chlorobenzene	3100	63	ug/kg dry	3144	ND	98.8	70-130			08/23/2022	
Chloroethane	3190	310	ug/kg dry	3144	ND	102	70-130			08/23/2022	



MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
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Batch B2H2319 - Method: 5035

Prepared: 08/23/2022

Matrix Spike (B2H2319-MS1)

Source: 2208149-06

Chloroform	3360	63	ug/kg dry	3144	ND	107	70-130			08/23/2022	
Chloromethane	3250	310	ug/kg dry	3144	ND	103	70-130			08/23/2022	
cis-1,2-Dichloroethylene	3380	63	ug/kg dry	3144	ND	107	70-130			08/23/2022	
cis-1,3-Dichloropropylene	3270	63	ug/kg dry	3144	ND	104	70-130			08/23/2022	
Cyclohexane	3070	310	ug/kg dry	3144	ND	97.8	70-130			08/23/2022	
Dibromochloromethane	3140	63	ug/kg dry	3144	ND	99.8	70-130			08/23/2022	
Dibromomethane	3150	63	ug/kg dry	3144	ND	100	70-130			08/23/2022	
Dichlorodifluoromethane	3240	310	ug/kg dry	3144	ND	103	70-130			08/23/2022	
Diethyl ether	3320	250	ug/kg dry	3144	ND	105	70-130			08/23/2022	
Diisopropyl Ether	3430	310	ug/kg dry	3144	ND	109	70-130			08/23/2022	
Ethylbenzene	3170	63	ug/kg dry	3144	ND	101	70-130			08/23/2022	
Ethyltertiarybutylether	3290	310	ug/kg dry	3144	ND	105	70-130			08/23/2022	
Hexachloroethane	3040	310	ug/kg dry	3144	ND	96.7	70-130			08/23/2022	
Hexane	3410	63	ug/kg dry	3144	ND	108	70-130			08/23/2022	
Isopropylbenzene	3210	63	ug/kg dry	3144	ND	102	70-130			08/23/2022	
m & p - Xylene	6420	130	ug/kg dry	6288	ND	102	70-130			08/23/2022	
Methylcyclopentane	3950	63	ug/kg dry	3144	ND	126	70-130			08/23/2022	
Methylene chloride	3400	130	ug/kg dry	3144	ND	108	70-130			08/23/2022	
Methyltertiarybutylether	3310	63	ug/kg dry	3144	ND	105	70-130			08/23/2022	
Naphthalene	3190	310	ug/kg dry	3144	ND	101	70-130			08/23/2022	
n-Butylbenzene	3290	63	ug/kg dry	3144	ND	105	70-130			08/23/2022	
n-Heptane	3900	63	ug/kg dry	3144	ND	124	70-130			08/23/2022	
n-Propylbenzene	3350	63	ug/kg dry	3144	ND	107	70-130			08/23/2022	
o-Xylene	3220	63	ug/kg dry	3144	ND	102	70-130			08/23/2022	
sec-Butylbenzene	3260	63	ug/kg dry	3144	ND	104	70-130			08/23/2022	
Styrene	3230	63	ug/kg dry	3144	ND	103	70-130			08/23/2022	
tert-Butylbenzene	3280	63	ug/kg dry	3144	ND	104	70-130			08/23/2022	
tertiary Butyl Alcohol	14700	3100	ug/kg dry	15720	ND	93.2	70-130			08/23/2022	
tertiaryAmylmethylether	3230	310	ug/kg dry	3144	ND	103	70-130			08/23/2022	
Tetrachloroethylene	3020	63	ug/kg dry	3144	ND	96.2	70-130			08/23/2022	
Tetrahydrofuran	3180	310	ug/kg dry	3144	ND	101	70-130			08/23/2022	
Toluene	3110	63	ug/kg dry	3144	ND	99.0	70-130			08/23/2022	
trans-1,2-Dichloroethylene	3400	63	ug/kg dry	3144	ND	108	70-130			08/23/2022	
trans-1,3-Dichloropropylene	3250	63	ug/kg dry	3144	ND	103	70-130			08/23/2022	
Trichloroethylene	3220	63	ug/kg dry	3144	ND	102	70-130			08/23/2022	
Trichlorofluoromethane	3360	63	ug/kg dry	3144	ND	107	70-130			08/23/2022	
Vinyl chloride	3360	63	ug/kg dry	3144	ND	107	70-130			08/23/2022	
Surrogate: Bromofluorobenzene	60.2		ug/kg dry	56.96		106	40.3-194			08/23/2022	
Surrogate: Dibromofluoromethane	65.6		ug/kg dry	56.96		115	52.1-217			08/23/2022	
Surrogate: Toluene-d8	62.6		ug/kg dry	56.96		110	55.4-196			08/23/2022	

Matrix Spike Dup (B2H2319-MSD1)

Source: 2208149-06

1,1,1,2-Tetrachloroethane	2940	63	ug/kg dry	3144	ND	93.7	70-130	3.55	30	08/23/2022	
1,1,1-Trichloroethane	2910	63	ug/kg dry	3144	ND	92.5	70-130	10.3	30	08/23/2022	
1,1,2,2-Tetrachloroethane	2770	63	ug/kg dry	3144	ND	88.2	70-130	5.29	30	08/23/2022	
1,1,2-Trichloroethane	3100	63	ug/kg dry	3144	ND	98.5	70-130	0.285	30	08/23/2022	
1,1,2-Trichlorotrifluoroethane	2830	63	ug/kg dry	3144	ND	90.0	70-130	14.0	30	08/23/2022	
1,1-Dichloroethane	3150	63	ug/kg dry	3144	ND	100	70-130	7.16	30	08/23/2022	
1,1-Dichloroethylene	2920	63	ug/kg dry	3144	ND	92.9	70-130	11.9	30	08/23/2022	
1,2,3-Trichlorobenzene	3140	310	ug/kg dry	3144	ND	100	70-130	1.09	30	08/23/2022	



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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
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Batch B2H2319 - Method: 5035

Prepared: 08/23/2022

Matrix Spike Dup (B2H2319-MSD1)

Source: 2208149-06

1,2,3-Trichloropropane	3210	63	ug/kg dry	3144	ND	102	70-130	1.25	30	08/23/2022	
1,2,3-Trimethylbenzene	3110	63	ug/kg dry	3144	ND	99.0	70-130	4.33	30	08/23/2022	
1,2,4-Trichlorobenzene	3050	310	ug/kg dry	3144	ND	96.9	70-130	1.16	30	08/23/2022	
1,2,4-Trimethylbenzene	3090	63	ug/kg dry	3144	ND	98.3	70-130	7.42	30	08/23/2022	
1,2-Dibromo-3-chloropropane	3050	310	ug/kg dry	3144	ND	96.9	70-130	0.906	30	08/23/2022	
1,2-Dibromoethane	3060	63	ug/kg dry	3144	ND	97.4	70-130	1.63	30	08/23/2022	
1,2-Dichlorobenzene	3000	63	ug/kg dry	3144	ND	95.4	70-130	4.24	30	08/23/2022	
1,2-Dichloroethane	3200	63	ug/kg dry	3144	ND	102	70-130	5.02	30	08/23/2022	
1,2-Dichloropropane	3020	63	ug/kg dry	3144	ND	96.0	70-130	6.88	30	08/23/2022	
1,3,5-Trimethylbenzene	3090	63	ug/kg dry	3144	ND	98.2	70-130	4.29	30	08/23/2022	
1,3-Dichlorobenzene	3050	63	ug/kg dry	3144	ND	97.0	70-130	4.57	30	08/23/2022	
1,4-Dichlorobenzene	3010	63	ug/kg dry	3144	ND	95.7	70-130	5.16	30	08/23/2022	
2,2,4-Trimethylpentane	2450	310	ug/kg dry	3144	ND	77.9	70-130	20.9	30	08/23/2022	
2-Butanone (MEK)	3360	310	ug/kg dry	3144	ND	107	70-130	1.32	30	08/23/2022	
2-Methylnaphthalene	2650	310	ug/kg dry	3144	ND	84.2	70-130	7.28	30	08/23/2022	A05
2-Propanone (acetone)	4000	1300	ug/kg dry	3144	ND	127	70-130	3.62	30	08/23/2022	A06
4-Methyl-2-pentanone (MIBK)	3220	310	ug/kg dry	3144	ND	102	70-130	2.24	30	08/23/2022	
Acrylonitrile	3120	310	ug/kg dry	3144	ND	99.3	70-130	0.397	30	08/23/2022	
Benzene	2860	63	ug/kg dry	3144	ND	90.8	70-130	10.4	30	08/23/2022	
Bromochloromethane	3180	63	ug/kg dry	3144	ND	101	70-130	5.14	30	08/23/2022	
Bromodichloromethane	2960	63	ug/kg dry	3144	ND	94.2	70-130	6.60	30	08/23/2022	
Bromoform	2990	63	ug/kg dry	3144	ND	95.2	70-130	0.784	30	08/23/2022	
Bromomethane	2830	250	ug/kg dry	3144	ND	90.1	70-130	10.2	30	08/23/2022	
Carbon disulfide	2690	63	ug/kg dry	3144	ND	85.5	70-130	12.0	30	08/23/2022	
Carbon tetrachloride	2810	63	ug/kg dry	3144	ND	89.4	70-130	9.79	30	08/23/2022	
Chlorobenzene	2960	63	ug/kg dry	3144	ND	94.3	70-130	4.66	30	08/23/2022	
Chloroethane	2870	310	ug/kg dry	3144	ND	91.3	70-130	10.6	30	08/23/2022	
Chloroform	3110	63	ug/kg dry	3144	ND	98.9	70-130	7.76	30	08/23/2022	
Chloromethane	2910	310	ug/kg dry	3144	ND	92.6	70-130	10.9	30	08/23/2022	
cis-1,2-Dichloroethylene	3140	63	ug/kg dry	3144	ND	99.8	70-130	7.40	30	08/23/2022	
cis-1,3-Dichloropropylene	3050	63	ug/kg dry	3144	ND	96.9	70-130	7.15	30	08/23/2022	
Cyclohexane	2760	310	ug/kg dry	3144	ND	87.9	70-130	10.7	30	08/23/2022	
Dibromochloromethane	3030	63	ug/kg dry	3144	ND	96.3	70-130	3.65	30	08/23/2022	
Dibromomethane	3040	63	ug/kg dry	3144	ND	96.5	70-130	3.63	30	08/23/2022	
Dichlorodifluoromethane	2700	310	ug/kg dry	3144	ND	86.0	70-130	18.1	30	08/23/2022	
Diethyl ether	3150	250	ug/kg dry	3144	ND	100	70-130	5.09	30	08/23/2022	
Diisopropyl Ether	3290	310	ug/kg dry	3144	ND	105	70-130	4.09	30	08/23/2022	
Ethylbenzene	2960	63	ug/kg dry	3144	ND	94.1	70-130	6.76	30	08/23/2022	
Ethyltertiarybutylether	3170	310	ug/kg dry	3144	ND	101	70-130	3.70	30	08/23/2022	
Hexachloroethane	3040	310	ug/kg dry	3144	ND	96.8	70-130	0.0413	30	08/23/2022	
Hexane	2830	63	ug/kg dry	3144	ND	89.9	70-130	18.7	30	08/23/2022	
Isopropylbenzene	2960	63	ug/kg dry	3144	ND	94.0	70-130	8.08	30	08/23/2022	
m & p - Xylene	6030	130	ug/kg dry	6288	ND	95.8	70-130	6.42	30	08/23/2022	
Methylcyclopentane	3580	63	ug/kg dry	3144	ND	114	70-130	9.96	30	08/23/2022	
Methylene chloride	3160	130	ug/kg dry	3144	ND	100	70-130	7.48	30	08/23/2022	
Methyltertiarybutylether	3210	63	ug/kg dry	3144	ND	102	70-130	3.17	30	08/23/2022	
Naphthalene	3230	310	ug/kg dry	3144	ND	103	70-130	1.22	30	08/23/2022	
n-Butylbenzene	3080	63	ug/kg dry	3144	ND	98.1	70-130	6.37	30	08/23/2022	
n-Heptane	3160	63	ug/kg dry	3144	ND	101	70-130	20.8	30	08/23/2022	
n-Propylbenzene	3110	63	ug/kg dry	3144	ND	98.8	70-130	7.50	30	08/23/2022	



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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
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Batch B2H2319 - Method: 5035

Prepared: 08/23/2022

Matrix Spike Dup (B2H2319-MSD1)

Source: 2208149-06

o-Xylene	3050	63	ug/kg dry	3144	ND	97.1	70-130	5.36	30	08/23/2022	
sec-Butylbenzene	3080	63	ug/kg dry	3144	ND	97.9	70-130	5.86	30	08/23/2022	
Styrene	3080	63	ug/kg dry	3144	ND	98.1	70-130	4.73	30	08/23/2022	
tert-Butylbenzene	3180	63	ug/kg dry	3144	ND	101	70-130	3.02	30	08/23/2022	
tertiary Butyl Alcohol	15600	3100	ug/kg dry	15720	ND	99.3	70-130	6.35	30	08/23/2022	
tertiaryAmylmethylether	3100	310	ug/kg dry	3144	ND	98.5	70-130	4.09	30	08/23/2022	
Tetrachloroethylene	2790	63	ug/kg dry	3144	ND	88.9	70-130	7.90	30	08/23/2022	
Tetrahydrofuran	3230	310	ug/kg dry	3144	ND	103	70-130	1.34	30	08/23/2022	
Toluene	2880	63	ug/kg dry	3144	ND	91.4	70-130	7.95	30	08/23/2022	
trans-1,2-Dichloroethylene	3060	63	ug/kg dry	3144	ND	97.3	70-130	10.5	30	08/23/2022	
trans-1,3-Dichloropropylene	3090	63	ug/kg dry	3144	ND	98.4	70-130	4.96	30	08/23/2022	
Trichloroethylene	2930	63	ug/kg dry	3144	ND	93.2	70-130	9.40	30	08/23/2022	
Trichlorofluoromethane	3000	63	ug/kg dry	3144	ND	95.4	70-130	11.3	30	08/23/2022	
Vinyl chloride	2910	63	ug/kg dry	3144	ND	92.5	70-130	14.4	30	08/23/2022	
Surrogate: Bromofluorobenzene	57.1		ug/kg dry	56.96		100	40.3-194			08/23/2022	
Surrogate: Dibromofluoromethane	60.4		ug/kg dry	56.96		106	52.1-217			08/23/2022	
Surrogate: Toluene-d8	58.2		ug/kg dry	56.96		102	55.4-196			08/23/2022	

Batch B2I1419 - Method: 5035

Prepared: 08/23/2022

Blank (B2I1419-BLK1)

1,1,1,2-Tetrachloroethane	ND	50	ug/kg wet							08/23/2022	
1,1,1-Trichloroethane	ND	50	ug/kg wet							08/23/2022	
1,1,2,2-Tetrachloroethane	ND	50	ug/kg wet							08/23/2022	
1,1,2-Trichloroethane	ND	50	ug/kg wet							08/23/2022	
1,1,2-Trichlorotrifluoroethane	ND	50	ug/kg wet							08/23/2022	
1,1-Dichloroethane	ND	50	ug/kg wet							08/23/2022	
1,1-Dichloroethylene	ND	50	ug/kg wet							08/23/2022	
1,2,3-Trichlorobenzene	ND	250	ug/kg wet							08/23/2022	
1,2,3-Trichloropropane	ND	50	ug/kg wet							08/23/2022	
1,2,3-Trimethylbenzene	ND	50	ug/kg wet							08/23/2022	
1,2,4-Trichlorobenzene	ND	250	ug/kg wet							08/23/2022	
1,2,4-Trimethylbenzene	ND	50	ug/kg wet							08/23/2022	
1,2-Dibromo-3-chloropropane	ND	250	ug/kg wet							08/23/2022	
1,2-Dibromoethane	ND	50	ug/kg wet							08/23/2022	
1,2-Dichlorobenzene	ND	50	ug/kg wet							08/23/2022	
1,2-Dichloroethane	ND	50	ug/kg wet							08/23/2022	
1,2-Dichloropropane	ND	50	ug/kg wet							08/23/2022	
1,3,5-Trimethylbenzene	ND	50	ug/kg wet							08/23/2022	
1,3-Dichlorobenzene	ND	50	ug/kg wet							08/23/2022	
1,4-Dichlorobenzene	ND	50	ug/kg wet							08/23/2022	
2,2,4-Trimethylpentane	ND	250	ug/kg wet							08/23/2022	
2-Butanone (MEK)	ND	250	ug/kg wet							08/23/2022	
2-Methylnaphthalene	ND	250	ug/kg wet							08/23/2022	
2-Propanone (acetone)	ND	1000	ug/kg wet							08/23/2022	
4-Methyl-2-pentanone (MIBK)	ND	250	ug/kg wet							08/23/2022	
Acrylonitrile	ND	250	ug/kg wet							08/23/2022	
Benzene	ND	50	ug/kg wet							08/23/2022	
Bromochloromethane	ND	50	ug/kg wet							08/23/2022	



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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
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Batch B2I1419 - Method: 5035

Prepared: 08/23/2022

Blank (B2I1419-BLK1)

Bromodichloromethane	ND	50	ug/kg wet							08/23/2022	
Bromoform	ND	50	ug/kg wet							08/23/2022	
Bromomethane	ND	200	ug/kg wet							08/23/2022	
Carbon disulfide	ND	50	ug/kg wet							08/23/2022	
Carbon tetrachloride	ND	50	ug/kg wet							08/23/2022	
Chlorobenzene	ND	50	ug/kg wet							08/23/2022	
Chloroethane	ND	250	ug/kg wet							08/23/2022	
Chloroform	ND	50	ug/kg wet							08/23/2022	
Chloromethane	ND	250	ug/kg wet							08/23/2022	
cis-1,2-Dichloroethylene	ND	50	ug/kg wet							08/23/2022	
cis-1,3-Dichloropropylene	ND	50	ug/kg wet							08/23/2022	
Cyclohexane	ND	250	ug/kg wet							08/23/2022	
Dibromochloromethane	ND	50	ug/kg wet							08/23/2022	
Dibromomethane	ND	50	ug/kg wet							08/23/2022	
Dichlorodifluoromethane	ND	250	ug/kg wet							08/23/2022	
Diethyl ether	ND	200	ug/kg wet							08/23/2022	
Diisopropyl Ether	ND	250	ug/kg wet							08/23/2022	
Ethylbenzene	ND	50	ug/kg wet							08/23/2022	
Ethyltertiarybutylether	ND	250	ug/kg wet							08/23/2022	
Hexachloroethane	ND	250	ug/kg wet							08/23/2022	
Hexane	ND	50	ug/kg wet							08/23/2022	
Isopropylbenzene	ND	50	ug/kg wet							08/23/2022	
m & p - Xylene	ND	100	ug/kg wet							08/23/2022	
Methylcyclopentane	ND	50	ug/kg wet							08/23/2022	
Methylene chloride	ND	100	ug/kg wet							08/23/2022	
Methyltertiarybutylether	ND	50	ug/kg wet							08/23/2022	
Naphthalene	ND	250	ug/kg wet							08/23/2022	
n-Butylbenzene	ND	50	ug/kg wet							08/23/2022	
n-Heptane	ND	50	ug/kg wet							08/23/2022	
n-Propylbenzene	ND	50	ug/kg wet							08/23/2022	
o-Xylene	ND	50	ug/kg wet							08/23/2022	
sec-Butylbenzene	ND	50	ug/kg wet							08/23/2022	
Styrene	ND	50	ug/kg wet							08/23/2022	
tert-Butylbenzene	ND	50	ug/kg wet							08/23/2022	
tertiary Butyl Alcohol	ND	2500	ug/kg wet							08/23/2022	
tertiaryAmylmeylether	ND	250	ug/kg wet							08/23/2022	
Tetrachloroethylene	ND	50	ug/kg wet							08/23/2022	
Tetrahydrofuran	ND	250	ug/kg wet							08/23/2022	
Toluene	ND	50	ug/kg wet							08/23/2022	
trans-1,2-Dichloroethylene	ND	50	ug/kg wet							08/23/2022	
trans-1,3-Dichloropropylene	ND	50	ug/kg wet							08/23/2022	
Trichloroethylene	ND	50	ug/kg wet							08/23/2022	
Trichlorofluoromethane	ND	50	ug/kg wet							08/23/2022	
Vinyl chloride	ND	50	ug/kg wet							08/23/2022	
Surrogate: Bromofluorobenzene	50.8		ug/L	50.00		102	40.3-194			08/23/2022	
Surrogate: Dibromofluoromethane	49.9		ug/L	50.00		99.7	52.1-217			08/23/2022	
Surrogate: Toluene-d8	49.9		ug/L	50.00		99.9	55.4-196			08/23/2022	

Matrix Spike (B2I1419-MS1)

Source: 2208126-02

1,1,1,2-Tetrachloroethane	28700	600	ug/kg dry	29860	ND	96.1	70-130			08/23/2022	
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MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY ENVIRONMENTAL LABORATORY

P.O. Box 30270
Lansing, MI 48909
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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
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Batch B2I1419 - Method: 5035

Prepared: 08/23/2022

Matrix Spike (B2I1419-MS1)

Source: 2208126-02

1,1,1-Trichloroethane	29600	600	ug/kg dry	29860	ND	99.3	70-130			08/23/2022	
1,1,2,2-Tetrachloroethane	30100	600	ug/kg dry	29860	ND	101	70-130			08/23/2022	
1,1,2-Trichloroethane	29200	600	ug/kg dry	29860	ND	97.8	70-130			08/23/2022	
1,1,2-Trichlorotrifluoroethane	29200	600	ug/kg dry	29860	ND	97.9	70-130			08/23/2022	
1,1-Dichloroethane	31000	600	ug/kg dry	29860	ND	104	70-130			08/23/2022	
1,1-Dichloroethylene	29400	600	ug/kg dry	29860	ND	98.4	70-130			08/23/2022	
1,2,3-Trichlorobenzene	30100	3000	ug/kg dry	29860	ND	101	70-130			08/23/2022	
1,2,3-Trichloropropane	30300	600	ug/kg dry	29860	ND	102	70-130			08/23/2022	
1,2,3-Trimethylbenzene	40600	600	ug/kg dry	29860	9620	104	70-130			08/23/2022	
1,2,4-Trichlorobenzene	29700	3000	ug/kg dry	29860	ND	99.3	70-130			08/23/2022	
1,2,4-Trimethylbenzene	75600	600	ug/kg dry	29860	43700	107	70-130			08/23/2022	
1,2-Dibromo-3-chloropropane	29900	3000	ug/kg dry	29860	ND	100	70-130			08/23/2022	
1,2-Dibromoethane	28800	600	ug/kg dry	29860	ND	96.4	70-130			08/23/2022	
1,2-Dichlorobenzene	29300	600	ug/kg dry	29860	ND	98.2	70-130			08/23/2022	
1,2-Dichloroethane	30200	600	ug/kg dry	29860	ND	101	70-130			08/23/2022	
1,2-Dichloropropane	29900	600	ug/kg dry	29860	ND	100	70-130			08/23/2022	
1,3,5-Trimethylbenzene	44500	600	ug/kg dry	29860	12600	107	70-130			08/23/2022	
1,3-Dichlorobenzene	29900	600	ug/kg dry	29860	ND	100	70-130			08/23/2022	
1,4-Dichlorobenzene	29900	600	ug/kg dry	29860	ND	100	70-130			08/23/2022	
2,2,4-Trimethylpentane	33400	3000	ug/kg dry	29860	5750	92.5	70-130			08/23/2022	
2-Butanone (MEK)	34200	3000	ug/kg dry	29860	ND	114	70-130			08/23/2022	
2-Methylnaphthalene	34900	3000	ug/kg dry	29860	6680	94.6	70-130			08/23/2022	
2-Propanone (acetone)	42500	12000	ug/kg dry	29860	ND	142	70-130			08/23/2022	A04, A06
4-Methyl-2-pentanone (MIBK)	31600	3000	ug/kg dry	29860	ND	106	70-130			08/23/2022	
Acrylonitrile	29000	3000	ug/kg dry	29860	ND	97.0	70-130			08/23/2022	
Benzene	29000	600	ug/kg dry	29860	ND	97.1	70-130			08/23/2022	
Bromochloromethane	30800	600	ug/kg dry	29860	ND	103	70-130			08/23/2022	
Bromodichloromethane	28900	600	ug/kg dry	29860	ND	96.7	70-130			08/23/2022	
Bromoform	27700	600	ug/kg dry	29860	ND	92.8	70-130			08/23/2022	
Bromomethane	27500	2400	ug/kg dry	29860	ND	92.1	70-130			08/23/2022	
Carbon disulfide	27500	600	ug/kg dry	29860	ND	92.1	70-130			08/23/2022	
Carbon tetrachloride	28600	600	ug/kg dry	29860	ND	95.8	70-130			08/23/2022	
Chlorobenzene	29100	600	ug/kg dry	29860	ND	97.5	70-130			08/23/2022	
Chloroethane	29000	3000	ug/kg dry	29860	ND	97.1	70-130			08/23/2022	
Chloroform	30800	600	ug/kg dry	29860	ND	103	70-130			08/23/2022	
Chloromethane	28700	3000	ug/kg dry	29860	ND	96.2	70-130			08/23/2022	
cis-1,2-Dichloroethylene	30900	600	ug/kg dry	29860	ND	104	70-130			08/23/2022	
cis-1,3-Dichloropropylene	30300	600	ug/kg dry	29860	ND	102	70-130			08/23/2022	
Cyclohexane	28900	3000	ug/kg dry	29860	ND	96.9	70-130			08/23/2022	
Dibromochloromethane	28700	600	ug/kg dry	29860	ND	96.2	70-130			08/23/2022	
Dibromomethane	28500	600	ug/kg dry	29860	ND	95.6	70-130			08/23/2022	
Dichlorodifluoromethane	27500	3000	ug/kg dry	29860	ND	92.0	70-130			08/23/2022	
Diethyl ether	29900	2400	ug/kg dry	29860	ND	100	70-130			08/23/2022	
Diisopropyl Ether	31500	3000	ug/kg dry	29860	ND	105	70-130			08/23/2022	
Ethylbenzene	36100	600	ug/kg dry	29860	6560	98.9	70-130			08/23/2022	
Ethyltertiarybutylether	30400	3000	ug/kg dry	29860	ND	102	70-130			08/23/2022	
Hexachloroethane	32800	3000	ug/kg dry	29860	ND	110	70-130			08/23/2022	
Hexane	32600	600	ug/kg dry	29860	1900	103	70-130			08/23/2022	
Isopropylbenzene	32100	600	ug/kg dry	29860	1290	103	70-130			08/23/2022	
m & p - Xylene	77000	1200	ug/kg dry	59710	17200	100	70-130			08/23/2022	



MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
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Batch B2I1419 - Method: 5035

Prepared: 08/23/2022

Matrix Spike (B2I1419-MS1)

Source: 2208126-02

Methylcyclopentane	39400	600	ug/kg dry	29860	1780	126	70-130			08/23/2022	
Methylene chloride	30700	1200	ug/kg dry	29860	ND	103	70-130			08/23/2022	
Methyltertiarybutylether	30500	600	ug/kg dry	29860	ND	102	70-130			08/23/2022	
Naphthalene	38100	3000	ug/kg dry	29860	6000	108	70-130			08/23/2022	
n-Butylbenzene	35000	600	ug/kg dry	29860	ND	117	70-130			08/23/2022	
n-Heptane	41200	600	ug/kg dry	29860	5270	120	70-130			08/23/2022	
n-Propylbenzene	38200	600	ug/kg dry	29860	5740	109	70-130			08/23/2022	
o-Xylene	30000	600	ug/kg dry	29860	ND	100	70-130			08/23/2022	
sec-Butylbenzene	31900	600	ug/kg dry	29860	732	104	70-130			08/23/2022	
Styrene	30100	600	ug/kg dry	29860	ND	101	70-130			08/23/2022	
tert-Butylbenzene	32000	600	ug/kg dry	29860	ND	107	70-130			08/23/2022	
tertiary Butyl Alcohol	150000	30000	ug/kg dry	149300	ND	100	70-130			08/23/2022	
tertiaryAmylmethylether	30400	3000	ug/kg dry	29860	ND	102	70-130			08/23/2022	
Tetrachloroethylene	28000	600	ug/kg dry	29860	ND	93.9	70-130			08/23/2022	
Tetrahydrofuran	31900	3000	ug/kg dry	29860	ND	107	70-130			08/23/2022	
Toluene	28400	600	ug/kg dry	29860	ND	95.1	70-130			08/23/2022	
trans-1,2-Dichloroethylene	30600	600	ug/kg dry	29860	ND	102	70-130			08/23/2022	
trans-1,3-Dichloropropylene	30300	600	ug/kg dry	29860	ND	101	70-130			08/23/2022	
Trichloroethylene	28100	600	ug/kg dry	29860	ND	94.3	70-130			08/23/2022	
Trichlorofluoromethane	30800	600	ug/kg dry	29860	ND	103	70-130			08/23/2022	
Vinyl chloride	30500	600	ug/kg dry	29860	ND	102	70-130			08/23/2022	
Surrogate: Bromofluorobenzene	0.00		ug/kg dry	54.45			40.3-194			08/23/2022	V
Surrogate: Dibromofluoromethane	0.00		ug/kg dry	54.45			52.1-217			08/23/2022	V
Surrogate: Toluene-d8	0.00		ug/kg dry	54.45			55.4-196			08/23/2022	V

Matrix Spike Dup (B2I1419-MSD1)

Source: 2208126-02

1,1,1,2-Tetrachloroethane	28200	600	ug/kg dry	29860	ND	94.3	70-130	1.87	30	08/23/2022	
1,1,1-Trichloroethane	29300	600	ug/kg dry	29860	ND	98.0	70-130	1.26	30	08/23/2022	
1,1,2,2-Tetrachloroethane	29600	600	ug/kg dry	29860	ND	99.0	70-130	1.76	30	08/23/2022	
1,1,2-Trichloroethane	29400	600	ug/kg dry	29860	ND	98.6	70-130	0.782	30	08/23/2022	
1,1,2-Trichlorotrifluoroethane	29400	600	ug/kg dry	29860	ND	98.6	70-130	0.721	30	08/23/2022	
1,1-Dichloroethane	31000	600	ug/kg dry	29860	ND	104	70-130	0.0610	30	08/23/2022	
1,1-Dichloroethylene	28900	600	ug/kg dry	29860	ND	96.7	70-130	1.70	30	08/23/2022	
1,2,3-Trichlorobenzene	32000	3000	ug/kg dry	29860	ND	107	70-130	6.13	30	08/23/2022	
1,2,3-Trichloropropane	30400	600	ug/kg dry	29860	ND	102	70-130	0.253	30	08/23/2022	
1,2,3-Trimethylbenzene	40800	600	ug/kg dry	29860	9620	104	70-130	0.469	30	08/23/2022	
1,2,4-Trichlorobenzene	31800	3000	ug/kg dry	29860	ND	106	70-130	6.84	30	08/23/2022	
1,2,4-Trimethylbenzene	75300	600	ug/kg dry	29860	43700	106	70-130	0.448	30	08/23/2022	
1,2-Dibromo-3-chloropropane	30100	3000	ug/kg dry	29860	ND	101	70-130	0.757	30	08/23/2022	
1,2-Dibromoethane	29200	600	ug/kg dry	29860	ND	97.8	70-130	1.48	30	08/23/2022	
1,2-Dichlorobenzene	29800	600	ug/kg dry	29860	ND	99.8	70-130	1.54	30	08/23/2022	
1,2-Dichloroethane	30500	600	ug/kg dry	29860	ND	102	70-130	0.937	30	08/23/2022	
1,2-Dichloropropane	29300	600	ug/kg dry	29860	ND	98.2	70-130	2.01	30	08/23/2022	
1,3,5-Trimethylbenzene	44600	600	ug/kg dry	29860	12600	107	70-130	0.144	30	08/23/2022	
1,3-Dichlorobenzene	30600	600	ug/kg dry	29860	ND	102	70-130	2.08	30	08/23/2022	
1,4-Dichlorobenzene	29900	600	ug/kg dry	29860	ND	100	70-130	0.0408	30	08/23/2022	
2,2,4-Trimethylpentane	34400	3000	ug/kg dry	29860	5750	96.1	70-130	3.19	30	08/23/2022	
2-Butanone (MEK)	35000	3000	ug/kg dry	29860	ND	117	70-130	2.35	30	08/23/2022	
2-Methylnaphthalene	38000	3000	ug/kg dry	29860	6680	105	70-130	8.28	30	08/23/2022	
2-Propanone (acetone)	42900	12000	ug/kg dry	29860	ND	144	70-130	0.886	30	08/23/2022	A04, A06



MICHIGAN DEPARTMENT OF
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ENVIRONMENTAL LABORATORY

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
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Batch B2I1419 - Method: 5035

Prepared: 08/23/2022

Matrix Spike Dup (B2I1419-MSD1)

Source: 2208126-02

4-Methyl-2-pentanone (MIBK)	31700	3000	ug/kg dry	29860	ND	106	70-130	0.344	30	08/23/2022	
Acrylonitrile	29700	3000	ug/kg dry	29860	ND	99.4	70-130	2.50	30	08/23/2022	
Benzene	28800	600	ug/kg dry	29860	ND	96.3	70-130	0.858	30	08/23/2022	
Bromochloromethane	30600	600	ug/kg dry	29860	ND	103	70-130	0.717	30	08/23/2022	
Bromodichloromethane	28500	600	ug/kg dry	29860	ND	95.5	70-130	1.23	30	08/23/2022	
Bromoform	28100	600	ug/kg dry	29860	ND	94.2	70-130	1.45	30	08/23/2022	
Bromomethane	28800	2400	ug/kg dry	29860	ND	96.4	70-130	4.51	30	08/23/2022	
Carbon disulfide	27500	600	ug/kg dry	29860	ND	92.0	70-130	0.183	30	08/23/2022	
Carbon tetrachloride	28700	600	ug/kg dry	29860	ND	96.0	70-130	0.184	30	08/23/2022	
Chlorobenzene	29200	600	ug/kg dry	29860	ND	97.7	70-130	0.242	30	08/23/2022	
Chloroethane	29400	3000	ug/kg dry	29860	ND	98.4	70-130	1.39	30	08/23/2022	
Chloroform	30200	600	ug/kg dry	29860	ND	101	70-130	1.67	30	08/23/2022	
Chloromethane	30000	3000	ug/kg dry	29860	ND	101	70-130	4.38	30	08/23/2022	
cis-1,2-Dichloroethylene	30900	600	ug/kg dry	29860	ND	104	70-130	0.0677	30	08/23/2022	
cis-1,3-Dichloropropylene	30100	600	ug/kg dry	29860	ND	101	70-130	0.754	30	08/23/2022	
Cyclohexane	29700	3000	ug/kg dry	29860	ND	99.5	70-130	2.63	30	08/23/2022	
Dibromochloromethane	28800	600	ug/kg dry	29860	ND	96.5	70-130	0.342	30	08/23/2022	
Dibromomethane	28600	600	ug/kg dry	29860	ND	95.7	70-130	0.168	30	08/23/2022	
Dichlorodifluoromethane	28000	3000	ug/kg dry	29860	ND	93.8	70-130	1.90	30	08/23/2022	
Diethyl ether	29700	2400	ug/kg dry	29860	ND	99.6	70-130	0.379	30	08/23/2022	
Diisopropyl Ether	31400	3000	ug/kg dry	29860	ND	105	70-130	0.181	30	08/23/2022	
Ethylbenzene	36300	600	ug/kg dry	29860	6560	99.5	70-130	0.430	30	08/23/2022	
Ethyltertiarybutylether	30500	3000	ug/kg dry	29860	ND	102	70-130	0.281	30	08/23/2022	
Hexachloroethane	33100	3000	ug/kg dry	29860	ND	111	70-130	0.835	30	08/23/2022	
Hexane	33100	600	ug/kg dry	29860	1900	105	70-130	1.49	30	08/23/2022	
Isopropylbenzene	31700	600	ug/kg dry	29860	1290	102	70-130	1.13	30	08/23/2022	
m & p - Xylene	77600	1200	ug/kg dry	59710	17200	101	70-130	0.877	30	08/23/2022	
Methylcyclopentane	38800	600	ug/kg dry	29860	1780	124	70-130	1.54	30	08/23/2022	
Methylene chloride	30900	1200	ug/kg dry	29860	ND	103	70-130	0.413	30	08/23/2022	
Methyltertiarybutylether	30400	600	ug/kg dry	29860	ND	102	70-130	0.270	30	08/23/2022	
Naphthalene	39800	3000	ug/kg dry	29860	6000	113	70-130	4.43	30	08/23/2022	
n-Butylbenzene	36600	600	ug/kg dry	29860	ND	123	70-130	4.49	30	08/23/2022	
n-Heptane	41300	600	ug/kg dry	29860	5270	121	70-130	0.250	30	08/23/2022	
n-Propylbenzene	37900	600	ug/kg dry	29860	5740	108	70-130	0.706	30	08/23/2022	
o-Xylene	30100	600	ug/kg dry	29860	ND	101	70-130	0.284	30	08/23/2022	
sec-Butylbenzene	32700	600	ug/kg dry	29860	732	107	70-130	2.62	30	08/23/2022	
Styrene	30600	600	ug/kg dry	29860	ND	102	70-130	1.47	30	08/23/2022	
tert-Butylbenzene	32600	600	ug/kg dry	29860	ND	109	70-130	1.78	30	08/23/2022	
tertiary Butyl Alcohol	145000	30000	ug/kg dry	149300	ND	96.9	70-130	3.62	30	08/23/2022	
tertiaryAmylmeylether	30000	3000	ug/kg dry	29860	ND	100	70-130	1.60	30	08/23/2022	
Tetrachloroethylene	28500	600	ug/kg dry	29860	ND	95.5	70-130	1.71	30	08/23/2022	
Tetrahydrofuran	31900	3000	ug/kg dry	29860	ND	107	70-130	0.216	30	08/23/2022	
Toluene	28500	600	ug/kg dry	29860	ND	95.4	70-130	0.371	30	08/23/2022	
trans-1,2-Dichloroethylene	31200	600	ug/kg dry	29860	ND	105	70-130	2.20	30	08/23/2022	
trans-1,3-Dichloropropylene	29900	600	ug/kg dry	29860	ND	100	70-130	1.33	30	08/23/2022	
Trichloroethylene	27900	600	ug/kg dry	29860	ND	93.4	70-130	0.880	30	08/23/2022	
Trichlorofluoromethane	30700	600	ug/kg dry	29860	ND	103	70-130	0.404	30	08/23/2022	
Vinyl chloride	30000	600	ug/kg dry	29860	ND	101	70-130	1.50	30	08/23/2022	
Surrogate: Bromofluorobenzene	0.00		ug/kg dry	54.45			40.3-194			08/23/2022	V
Surrogate: Dibromofluoromethane	0.00		ug/kg dry	54.45			52.1-217			08/23/2022	V



MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
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Batch B2I1419 - Method: 5035

Prepared: 08/23/2022

Matrix Spike Dup (B2I1419-MSD1)

Source: 2208126-02

Surrogate: Toluene-d8	0.00		ug/kg dry	54.45			55.4-196			08/23/2022	V
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FAX: (517) 335-9600

Organics-Semivolatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
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Batch B2H2410 - Method: 3545 Soil SVOC

Prepared: 08/24/2022

Blank (B2H2410-BLK1)

2-Methylnaphthalene	ND	250	ug/kg wet							08/24/2022	
Acenaphthene	ND	100	ug/kg wet							08/24/2022	
Acenaphthylene	ND	100	ug/kg wet							08/24/2022	
Anthracene	ND	100	ug/kg wet							08/24/2022	
Benz[a]anthracene	ND	100	ug/kg wet							08/24/2022	
Benzo[a]pyrene	ND	200	ug/kg wet							08/24/2022	
Benzo[b]fluoranthene	ND	200	ug/kg wet							08/24/2022	
Benzo[g,h,i]perylene	ND	200	ug/kg wet							08/24/2022	
Benzo[k]fluoranthene	ND	200	ug/kg wet							08/24/2022	
Chrysene	ND	100	ug/kg wet							08/24/2022	
Dibenz[a,h]anthracene	ND	200	ug/kg wet							08/24/2022	
Fluoranthene	ND	100	ug/kg wet							08/24/2022	
Fluorene	ND	100	ug/kg wet							08/24/2022	
Indeno(1,2,3-c,d)pyrene	ND	200	ug/kg wet							08/24/2022	
Naphthalene	ND	100	ug/kg wet							08/24/2022	
Phenanthrene	ND	100	ug/kg wet							08/24/2022	
Pyrene	ND	100	ug/kg wet							08/24/2022	
Surrogate: 2-Fluorobiphenyl	1880		ug/kg wet	2000		94.1	36-133			08/24/2022	
Surrogate: Nitrobenzene-d5	1830		ug/kg wet	2000		91.3	26-123			08/24/2022	
Surrogate: p-Terphenyl-d14	2420		ug/kg wet	2000		121	36-142			08/24/2022	

LCS (B2H2410-BS1)

2-Methylnaphthalene	1680	250	ug/kg wet	2000		83.8	38.6-94.3			08/24/2022	
Acenaphthene	1720	100	ug/kg wet	2000		86.2	43.6-101.5			08/24/2022	
Acenaphthylene	1770	100	ug/kg wet	2000		88.7	46.3-108.7			08/24/2022	
Anthracene	1860	100	ug/kg wet	2000		92.8	48.9-106.4			08/24/2022	
Benz[a]anthracene	1860	100	ug/kg wet	2000		93.1	53.1-107.9			08/24/2022	
Benzo[a]pyrene	1890	200	ug/kg wet	2000		94.3	47.5-113.5			08/24/2022	
Benzo[b]fluoranthene	1870	200	ug/kg wet	2000		93.3	49.8-112.3			08/24/2022	
Benzo[g,h,i]perylene	1960	200	ug/kg wet	2000		98.2	25.7-120.5			08/24/2022	
Benzo[k]fluoranthene	1950	200	ug/kg wet	2000		97.4	49.6-112.4			08/24/2022	
Chrysene	1840	100	ug/kg wet	2000		92.1	54-109.3			08/24/2022	
Dibenz[a,h]anthracene	1900	200	ug/kg wet	2000		95.2	32.7-127			08/24/2022	
Fluoranthene	1760	100	ug/kg wet	2000		88.2	48.8-112.4			08/24/2022	
Fluorene	1850	100	ug/kg wet	2000		92.3	45.9-103.5			08/24/2022	
Indeno(1,2,3-c,d)pyrene	1890	200	ug/kg wet	2000		94.5	36.6-126.1			08/24/2022	
Naphthalene	1580	100	ug/kg wet	2000		78.8	36.2-91.2			08/24/2022	
Phenanthrene	1770	100	ug/kg wet	2000		88.7	50.9-105.9			08/24/2022	
Pyrene	1910	100	ug/kg wet	2000		95.5	46.2-113.7			08/24/2022	
Surrogate: 2-Fluorobiphenyl	1880		ug/kg wet	2000		93.9	36-133			08/24/2022	
Surrogate: Nitrobenzene-d5	1760		ug/kg wet	2000		88.2	26-123			08/24/2022	
Surrogate: p-Terphenyl-d14	2400		ug/kg wet	2000		120	36-142			08/24/2022	

LCS Dup (B2H2410-BSD1)

2-Methylnaphthalene	1640	250	ug/kg wet	2000		81.8	38.6-94.3	2.42	28.1	08/24/2022	
Acenaphthene	1650	100	ug/kg wet	2000		82.5	43.6-101.5	4.42	26.1	08/24/2022	
Acenaphthylene	1770	100	ug/kg wet	2000		88.5	46.3-108.7	0.264	27.3	08/24/2022	
Anthracene	1860	100	ug/kg wet	2000		92.9	48.9-106.4	0.100	24.2	08/24/2022	
Benz[a]anthracene	1950	100	ug/kg wet	2000		97.4	53.1-107.9	4.58	24.5	08/24/2022	
Benzo[a]pyrene	1920	200	ug/kg wet	2000		96.0	47.5-113.5	1.80	25.9	08/24/2022	



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Organics-Semivolatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
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Batch B2H2410 - Method: 3545 Soil SVOC

Prepared: 08/24/2022

LCS Dup (B2H2410-BSD1)

Benzo[b]fluoranthene	1900	200	ug/kg wet	2000		95.1	49.8-112.3	1.93	26.1	08/24/2022	
Benzo[g,h,i]perylene	2000	200	ug/kg wet	2000		100	25.7-120.5	1.92	37.8	08/24/2022	
Benzo[k]fluoranthene	1860	200	ug/kg wet	2000		93.2	49.6-112.4	4.43	25.7	08/24/2022	
Chrysene	1840	100	ug/kg wet	2000		92.2	54-109.3	0.0304	24.4	08/24/2022	
Dibenz[a,h]anthracene	1890	200	ug/kg wet	2000		94.6	32.7-127	0.580	40.3	08/24/2022	
Fluoranthene	1810	100	ug/kg wet	2000		90.4	48.8-112.4	2.49	27.9	08/24/2022	
Fluorene	1790	100	ug/kg wet	2000		89.5	45.9-103.5	3.01	25.2	08/24/2022	
Indeno(1,2,3-c,d)pyrene	1900	200	ug/kg wet	2000		95.1	36.6-126.1	0.608	34.3	08/24/2022	
Naphthalene	1590	100	ug/kg wet	2000		79.7	36.2-91.2	1.19	27.4	08/24/2022	
Phenanthrene	1790	100	ug/kg wet	2000		89.7	50.9-105.9	1.12	23.3	08/24/2022	
Pyrene	1900	100	ug/kg wet	2000		94.9	46.2-113.7	0.605	27.9	08/24/2022	
Surrogate: 2-Fluorobiphenyl	1890		ug/kg wet	2000		94.4	36-133			08/24/2022	
Surrogate: Nitrobenzene-d5	1810		ug/kg wet	2000		90.5	26-123			08/24/2022	
Surrogate: p-Terphenyl-d14	2380		ug/kg wet	2000		119	36-142			08/24/2022	

Matrix Spike (B2H2410-MS1)

Source: 2208126-02

2-Methylnaphthalene	3990	280	ug/kg dry	2209	1820	98.1	31.4-113.4			08/24/2022	
Acenaphthene	1840	110	ug/kg dry	2209	ND	83.4	41.1-113.8			08/24/2022	
Acenaphthylene	1940	110	ug/kg dry	2209	ND	87.8	46.8-117.3			08/24/2022	
Anthracene	1860	110	ug/kg dry	2209	ND	84.0	33.6-131			08/24/2022	
Benz[a]anthracene	2070	110	ug/kg dry	2209	ND	93.8	32.3-137.5			08/24/2022	
Benzo[a]pyrene	2050	220	ug/kg dry	2209	ND	93.0	33.4-140			08/24/2022	
Benzo[b]fluoranthene	1980	220	ug/kg dry	2209	ND	89.6	22.2-153.3			08/24/2022	
Benzo[g,h,i]perylene	2190	220	ug/kg dry	2209	ND	99.1	11.3-135			08/24/2022	
Benzo[k]fluoranthene	2090	220	ug/kg dry	2209	ND	94.5	34.8-138.7			08/24/2022	
Chrysene	2010	110	ug/kg dry	2209	ND	91.2	34.2-135.8			08/24/2022	
Dibenz[a,h]anthracene	2050	220	ug/kg dry	2209	ND	93.0	15.1-151.4			08/24/2022	
Fluoranthene	1920	110	ug/kg dry	2209	ND	86.9	15.2-153			08/24/2022	
Fluorene	1970	110	ug/kg dry	2209	ND	89.0	40.2-118.3			08/24/2022	
Indeno(1,2,3-c,d)pyrene	2060	220	ug/kg dry	2209	ND	93.2	18.8-148.7			08/24/2022	
Naphthalene	3220	110	ug/kg dry	2209	1160	93.3	26.4-107.8			08/24/2022	
Phenanthrene	1960	110	ug/kg dry	2209	ND	88.6	23.1-144.2			08/24/2022	
Pyrene	2080	110	ug/kg dry	2209	ND	93.9	24.1-148.9			08/24/2022	
Surrogate: 2-Fluorobiphenyl	2120		ug/kg dry	2209		96.2	36-133			08/24/2022	
Surrogate: Nitrobenzene-d5	2020		ug/kg dry	2209		91.4	26-123			08/24/2022	
Surrogate: p-Terphenyl-d14	2620		ug/kg dry	2209		118	36-142			08/24/2022	

Matrix Spike Dup (B2H2410-MSD1)

Source: 2208126-02

2-Methylnaphthalene	4120	280	ug/kg dry	2209	1820	104	31.4-113.4	3.35	35.6	08/24/2022	
Acenaphthene	1890	110	ug/kg dry	2209	ND	85.6	41.1-113.8	2.59	32.4	08/24/2022	
Acenaphthylene	1920	110	ug/kg dry	2209	ND	87.0	46.8-117.3	0.952	32.4	08/24/2022	
Anthracene	2040	110	ug/kg dry	2209	ND	92.2	33.6-131	9.23	49.4	08/24/2022	
Benz[a]anthracene	2100	110	ug/kg dry	2209	ND	95.0	32.3-137.5	1.34	47.3	08/24/2022	
Benzo[a]pyrene	2090	220	ug/kg dry	2209	ND	94.5	33.4-140	1.54	45	08/24/2022	
Benzo[b]fluoranthene	1980	220	ug/kg dry	2209	ND	89.7	22.2-153.3	0.107	45.7	08/24/2022	
Benzo[g,h,i]perylene	2150	220	ug/kg dry	2209	ND	97.1	11.3-135	2.05	45	08/24/2022	
Benzo[k]fluoranthene	1990	220	ug/kg dry	2209	ND	90.1	34.8-138.7	4.71	41	08/24/2022	
Chrysene	2040	110	ug/kg dry	2209	ND	92.5	34.2-135.8	1.39	45.5	08/24/2022	
Dibenz[a,h]anthracene	2110	220	ug/kg dry	2209	ND	95.4	15.1-151.4	2.61	64.9	08/24/2022	
Fluoranthene	1970	110	ug/kg dry	2209	ND	89.2	15.2-153	2.65	53.9	08/24/2022	



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Organics-Semivolatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
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Batch B2H2410 - Method: 3545 Soil SVOC

Prepared: 08/24/2022

Matrix Spike Dup (B2H2410-MSD1)

Source: 2208126-02

Fluorene	2020	110	ug/kg dry	2209	ND	91.2	40.2-118.3	2.47	36.8	08/24/2022	
Indeno(1,2,3-c,d)pyrene	2060	220	ug/kg dry	2209	ND	93.2	18.8-148.7	0.0369	46.1	08/24/2022	
Naphthalene	2930	110	ug/kg dry	2209	1160	80.0	26.4-107.8	9.52	36.8	08/24/2022	
Phenanthrene	1980	110	ug/kg dry	2209	ND	89.8	23.1-144.2	1.36	52.6	08/24/2022	
Pyrene	2080	110	ug/kg dry	2209	ND	94.4	24.1-148.9	0.473	53.6	08/24/2022	
Surrogate: 2-Fluorobiphenyl	2090		ug/kg dry	2209		94.8	36-133			08/24/2022	
Surrogate: Nitrobenzene-d5	2040		ug/kg dry	2209		92.2	26-123			08/24/2022	
Surrogate: p-Terphenyl-d14	2720		ug/kg dry	2209		123	36-142			08/24/2022	



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Inorganics-General Chemistry - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
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Batch B2H2213 - Method: Solids

Prepared: 08/22/2022

Duplicate (B2H2213-DUP1)

Source: 2208126-08

% Total Solids	90.6	0.1	%		90.6			0.0123	20	08/22/2022	
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Inorganics-Metals - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
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Batch B2H2215 - Method: 245.5

Prepared: 08/22/2022

Blank (B2H2215-BLK1)

Mercury	ND	0.05	mg/kg wet							08/30/2022	
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LCS (B2H2215-BS1)

Mercury	0.4	0.05	mg/kg wet	0.4000		94.5	85-115			08/30/2022	
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Matrix Spike (B2H2215-MS1)

Source: 2208126-02

Mercury	0.4	0.06	mg/kg dry	0.4418	0.007	98.8	85-115			08/30/2022	
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Matrix Spike Dup (B2H2215-MSD1)

Source: 2208126-02

Mercury	0.4	0.06	mg/kg dry	0.4418	0.007	99.1	85-115	0.303	20	08/30/2022	
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Batch B2H3114 - Method: 3050

Prepared: 08/31/2022

Blank (B2H3114-BLK1)

Arsenic	ND	0.5	mg/kg dry							09/06/2022	
Barium	ND	1.0	mg/kg dry							09/06/2022	
Cadmium	ND	0.2	mg/kg dry							09/06/2022	
Chromium	ND	2.0	mg/kg dry							09/06/2022	
Copper	ND	1.0	mg/kg dry							09/06/2022	
Lead	ND	1.0	mg/kg dry							09/06/2022	
Selenium	ND	0.2	mg/kg dry							09/06/2022	
Silver	ND	0.1	mg/kg dry							09/06/2022	
Zinc	ND	1.0	mg/kg dry							09/06/2022	

LCS (B2H3114-BS1)

Arsenic	96.1	5.0	mg/kg dry	100.0		96.1	85-115			09/06/2022	
Barium	97.5	10	mg/kg dry	100.0		97.5	85-115			09/06/2022	
Cadmium	10.5	2.0	mg/kg dry	10.00		105	85-115			09/06/2022	
Chromium	94.6	20	mg/kg dry	100.0		94.6	85-115			09/06/2022	
Copper	96.1	10	mg/kg dry	100.0		96.1	85-115			09/06/2022	
Lead	103	10	mg/kg dry	100.0		103	85-115			09/06/2022	
Selenium	104	2.0	mg/kg dry	100.0		104	85-115			09/06/2022	
Silver	10.2	1.0	mg/kg dry	10.00		102	85-115			09/06/2022	
Zinc	102	10	mg/kg dry	100.0		102	85-115			09/06/2022	

Matrix Spike (B2H3114-MS1)

Source: 2208126-07

Arsenic	105	5.0	mg/kg dry	100.0	5.7	99.4	70-130			09/06/2022	
Barium	129	10	mg/kg dry	100.0	26.7	102	70-130			09/06/2022	
Cadmium	9.8	2.0	mg/kg dry	10.00	ND	98.3	70-130			09/06/2022	
Chromium	111	20	mg/kg dry	100.0	8.6	102	70-130			09/06/2022	
Copper	139	10	mg/kg dry	100.0	8.4	130	70-130			09/06/2022	A04
Iron	11800	5.0	mg/kg dry	500.0	11100	139	70-130			09/20/2022	A04
Lead	108	10	mg/kg dry	100.0	4.4	103	70-130			09/06/2022	
Manganese	342	10	mg/kg dry	100.0	231	112	70-130			09/06/2022	
Selenium	100	2.0	mg/kg dry	100.0	0.8	99.5	70-130			09/06/2022	
Silver	9.5	1.0	mg/kg dry	10.00	ND	95.2	70-130			09/06/2022	
Zinc	174	10	mg/kg dry	100.0	42.6	131	70-130			09/06/2022	A04

Matrix Spike Dup (B2H3114-MSD1)

Source: 2208126-07

Arsenic	103	5.0	mg/kg dry	100.0	5.7	97.1	70-130	2.24	20	09/06/2022	
Barium	133	10	mg/kg dry	100.0	26.7	106	70-130	3.08	20	09/06/2022	
Cadmium	9.7	2.0	mg/kg dry	10.00	ND	97.4	70-130	1.00	20	09/06/2022	



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Inorganics-Metals - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
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Batch B2H3114 - Method: 3050

Prepared: 08/31/2022

Matrix Spike Dup (B2H3114-MSD1)	Source: 2208126-07										
Chromium	110	20	mg/kg dry	100.0	8.6	101	70-130	1.07	20	09/06/2022	
Copper	103	10	mg/kg dry	100.0	8.4	94.5	70-130	29.5	20	09/06/2022	A07
Lead	107	10	mg/kg dry	100.0	4.4	103	70-130	0.551	20	09/06/2022	
Selenium	99.2	2.0	mg/kg dry	100.0	0.8	98.3	70-130	1.13	20	09/06/2022	
Silver	9.4	1.0	mg/kg dry	10.00	ND	94.3	70-130	0.953	20	09/06/2022	
Zinc	142	10	mg/kg dry	100.0	42.6	99.3	70-130	20.1	20	09/06/2022	A07

Analysis Request Sheet

Lab Work Order Number 2208126		Project Name EGLE / City of Imlay City / Public Works		Matrix SOIL/SEDIMENT
Location ID 00014763	Program RRD-BARS	CC Email 1 mgibbons@ectinc.com	Project TAT Days standard	Sample Collector John Kennedy
Dept-Division-District RRD-BARS	Activity	CC Email 2 jkennedy@ectinc.com	Project Due Date	Sample Collector Phone 734-972-3007
State Project Manager Janet Michaluk	Funding Source	CC Email 3	ROI 9.4	Contract Firm ECT
State Project Manager Email michalukj@michigan.gov	Location Code 7D35	Overflow Lab Choice 1	Accept Analysis hold time codes	Contract Firm Primary Contact Mike Hebert
State Project Manager Phone 517-643-0314	SUD Location Code	Overflow Lab Choice 2		Primary Contact Phone 517-272-9200

Lab Use Only	Field Sample Identification	Collection Date	Collection Time	Bottle Count	Comments
1	01 SB-1 (5-6')	8/16/2022	1215	3	PSD = 1590 ppm
2	02 SB-2 (5-6')	8/16/2022	1250	3	PSD = 434.5 ppm
3	03 SB-3 (14-15')	8/16/2022	0930	2	
4	04 SB-4 (12-14')	8/16/2022	0955	2	PSD = 897.0 ppm
5	05 SB-5 (16-18')	8/16/2022	1115	2	
6	06 SB-6 (7-8')	8/16/2022	1035	3	PSD = 565.9 ppm
7	07 SB-1 DUP (5-6')	8/16/2022	1215	3	PSD = 1590 ppm
8	08 SB-2 MS (5-6')	8/16/2022	1250	3	PSD = 434.5 ppm
9	09 SB-2 MSD (5-6')	8/16/2022	1250	3	PSD = 434.5 ppm
10					

ORGANIC CHEMISTRY	METALS CHEMISTRY PACKAGES	MS - TOTAL METALS	GENERAL CHEMISTRY
VOA - Volatile Organic Acidic Volatiles - Full List 1 2 3 4 5 6 7 8 9 10 BTEX/MTBE/TMB only 1 2 3 4 5 6 7 8 9 10 Chlorinated only 1 2 3 4 5 6 7 8 9 10 GRO 1 2 3 4 5 6 7 8 9 10 1,4 Dioxane 1 2 3 4 5 6 7 8 9 10 OS - Pesticides, PCBs Pesticides & PCBs 1 2 3 4 5 6 7 8 9 10 Pesticides only 1 2 3 4 5 6 7 8 9 10 PCBs only 1 2 3 4 5 6 7 8 9 10 Toxaphene 1 2 3 4 5 6 7 8 9 10 BNA - Base Neutral Acids BNAs 1 2 3 4 5 6 7 8 9 10 PNAs only 1 2 3 4 5 6 7 8 9 10 BNs only 1 2 3 4 5 6 7 8 9 10 Organic Specialty Requests Library search - Volatiles 1 2 3 4 5 6 7 8 9 10 Library search - SemiVols 1 2 3 4 5 6 7 8 9 10 Finger Print 1 2 3 4 5 6 7 8 9 10 DRO / ORO 1 2 3 4 5 6 7 8 9 10	OpMemo2 - Total 1 2 3 4 5 6 7 8 9 10 (Sb,As,Ba,Be,Cd,Cr,Cu,Co,Fe,Pb,Mn,Hg,Mo,Ni,Se,Ag,Tl,V,Zn) Michigan10 - Total 1 2 3 4 5 6 7 8 9 10 (As,Ba,Cd,Cr,Cu,Pb,Hg,Se,Ag,Zn)	Silver - Ag 1 2 3 4 5 6 7 8 9 10 Aluminum - Al 1 2 3 4 5 6 7 8 9 10 Arsenic - As 1 2 3 4 5 6 7 8 9 10 Barium - Ba 1 2 3 4 5 6 7 8 9 10 Beryllium - Be 1 2 3 4 5 6 7 8 9 10 Cadmium - Cd 1 2 3 4 5 6 7 8 9 10 Cobalt - Co 1 2 3 4 5 6 7 8 9 10 Chromium - Cr 1 2 3 4 5 6 7 8 9 10 Copper - Cu 1 2 3 4 5 6 7 8 9 10 Iron - Fe 1 2 3 4 5 6 7 8 9 10 Mercury - Hg 1 2 3 4 5 6 7 8 9 10 Lithium - Li 1 2 3 4 5 6 7 8 9 10 Manganese - Mn 1 2 3 4 5 6 7 8 9 10 Molybdenum - Mo 1 2 3 4 5 6 7 8 9 10 Nickel - Ni 1 2 3 4 5 6 7 8 9 10 Lead - Pb 1 2 3 4 5 6 7 8 9 10 Antimony - Sb 1 2 3 4 5 6 7 8 9 10 Selenium - Se 1 2 3 4 5 6 7 8 9 10 Strontium - Sr 1 2 3 4 5 6 7 8 9 10 Titanium - Ti 1 2 3 4 5 6 7 8 9 10 Thallium - Tl 1 2 3 4 5 6 7 8 9 10 Uranium - U 1 2 3 4 5 6 7 8 9 10 Vanadium - V 1 2 3 4 5 6 7 8 9 10 Zinc - Zn 1 2 3 4 5 6 7 8 9 10 Calcium - Ca 1 2 3 4 5 6 7 8 9 10 Potassium - K 1 2 3 4 5 6 7 8 9 10 Magnesium - Mg 1 2 3 4 5 6 7 8 9 10 Sodium - Na 1 2 3 4 5 6 7 8 9 10	G5 - General Chemistry Total Cyanide - CN 1 2 3 4 5 6 7 8 9 10 Available Cyanide - CN 1 2 3 4 5 6 7 8 9 10

Chain of Custody	Relinquished by	Received By	Date / Time
	Print Name & Org. John Kennedy, ECT Signature: <i>[Signature]</i>	ECT Cold Storage	8/16/22 1430
	Print Name & Org. ECT Cold Storage Signature: <i>[Signature]</i>	Jocly Kniss ECT	8/18/22 14:30
Print Name & Org. Jocly Kniss ECT Signature: <i>[Signature]</i>	Melissa Smith	8/18/22 1430	



MICHIGAN DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY

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ENVIRONMENTAL LABORATORY

P.O. Box 30270
Lansing, MI 48909
TEL: (517) 335-9800
FAX: (517) 335-9600

31 August 2022

Work Order: 2208127

Price: \$1,080.00

Janet Michaluk
EGLE-RRD-LANSING
525 W. Allegan Street
Lansing, MI 48909

RE: EGLE/CITY OF IMLAY CITY/PUBLIC WORKS

This is the official environmental laboratory report for testing conducted by the Michigan Department of Environment, Great Lakes, and Energy. Analyses performed by the laboratory were conducted using methods published by the U.S. Environmental Protection Agency, Standard Methods for the Examination of Water and Wastewater, ASTM, or other published or approved reference methods.

Kirby Shane
Laboratory Director



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EGLE-RRD-LANSING
525 W. Allegan Street
Lansing MI, 48909

Project: EGLE/CITY OF IMLAY CITY/PUBLIC WORKS
Site Code: 00014763
Project Manager: Janet Michaluk

Reported:
08/31/2022

Analytical Report for Samples

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Qualifier
TMW-3	2208127-01	Water	08/16/2022	08/18/2022	
TMW-4	2208127-02	Water	08/16/2022	08/18/2022	
TMW-6	2208127-03	Water	08/16/2022	08/18/2022	
MW-1	2208127-04	Water	08/16/2022	08/18/2022	
TMW-6 DUP	2208127-05	Water	08/16/2022	08/18/2022	
MW-1 MS	2208127-06	Water	08/16/2022	08/18/2022	
MW-1 MSD	2208127-07	Water	08/16/2022	08/18/2022	
TRIP BLANK	2208127-08	Water	08/10/2022	08/18/2022	

Notes and Definitions

- Y17 Probable petroleum product(s) present.
- Y11 Unidentified peaks present in sample.
- A11 Result is estimated due to high initial verification standard criteria failure.
- A09 Result is estimated due to high recovery of batch QC.
- A06 Result is estimated due to high continuing calibration standard criteria failure.
- A04 Result is estimated due to high matrix spike recovery.
- ND Indicates compound analyzed for but not detected at or above the reporting limit (RL).
- RL Reporting Limit
- NA Not Applicable

*****Case Narrative*****

Samples were received 8/18/2022 3:20:00PM for client EGLE-RRD-LANSING as a part of project EGLE/CITY OF IMLAY CITY/PUBLIC WORKS.

Samples were logged and designated as Work Order # 2208127 on 8/18/2022 3:45:00PM.

This Report was created 8/31/2022 8:05:47AM.

Additional Notes/Narrative (if applicable):



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MICHIGAN DEPARTMENT OF
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Client ID: TMW-3

Lab ID: 2208127-01

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Analyst	Qualifier
Organics-Volatiles										
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
540-84-1	2,2,4-Trimethylpentane	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	08/22/22	B2H2205	8260	RC	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
71-43-2	Benzene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
75-25-2	Bromoform	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
74-83-9	Bromomethane	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
75-00-3	Chloroethane	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
67-66-3	Chloroform	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
74-87-3	Chloromethane	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
74-95-3	Dibromomethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	



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Client ID: TMW-3

Lab ID: 2208127-01

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Analyst	Qualifier
Organics-Volatiles										
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
110-54-3	Hexane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	08/22/22	B2H2205	8260	RC	
96-37-7	Methylcyclopentane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
91-20-3	Naphthalene	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
142-82-5	n-Heptane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
95-47-6	o-Xylene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
100-42-5	Styrene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	08/22/22	B2H2205	8260	RC	
994-05-8	tertiaryAmylmeylether	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
108-88-3	Toluene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
<i>Surrogate: Bromofluorobenzene</i>			103 %	85-115		08/22/22	B2H2205	8260	RC	
<i>Surrogate: Dibromofluoromethane</i>			102 %	82.7-115		08/22/22	B2H2205	8260	RC	
<i>Surrogate: Toluene-d8</i>			98.9 %	85-115		08/22/22	B2H2205	8260	RC	



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MICHIGAN DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY

Client ID: TMW-4

Lab ID: 2208127-02

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Analyst	Qualifier
Organics-Volatiles										See note Y11
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
526-73-8	1,2,3-Trimethylbenzene	440	5.2	ug/L	5.25	08/23/22	B2H2205	8260	RC	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
95-63-6	1,2,4-Trimethylbenzene	1600	52	ug/L	52.5	08/24/22	B2H2205	8260	RC	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
108-67-8	1,3,5-Trimethylbenzene	380	5.2	ug/L	5.25	08/23/22	B2H2205	8260	RC	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
540-84-1	2,2,4-Trimethylpentane	13	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
78-93-3	2-Butanone (MEK)	13	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
91-57-6	2-Methylnaphthalene	100	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
67-64-1	2-Propanone (acetone)	34	20	ug/L	1	08/22/22	B2H2205	8260	RC	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
71-43-2	Benzene	520	5.2	ug/L	5.25	08/23/22	B2H2205	8260	RC	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
75-25-2	Bromoform	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
74-83-9	Bromomethane	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
75-00-3	Chloroethane	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
67-66-3	Chloroform	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
74-87-3	Chloromethane	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
110-82-7	Cyclohexane	200	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
74-95-3	Dibromomethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	



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CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Analyst	Qualifier
Organics-Volatiles										See note Y11
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
100-41-4	Ethylbenzene	1300	52	ug/L	52.5	08/24/22	B2H2205	8260	RC	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
110-54-3	Hexane	190	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
98-82-8	Isopropylbenzene	70	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
1330-20-7	m & p - Xylene	5400	100	ug/L	52.5	08/24/22	B2H2205	8260	RC	
96-37-7	Methylcyclopentane	760	5.2	ug/L	5.25	08/23/22	B2H2205	8260	RC	A06, A09, A11
75-09-2	Methylene chloride	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
91-20-3	Naphthalene	380	26	ug/L	5.25	08/23/22	B2H2205	8260	RC	
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
142-82-5	n-Heptane	14	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
103-65-1	n-Propylbenzene	180	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
95-47-6	o-Xylene	1900	52	ug/L	52.5	08/24/22	B2H2205	8260	RC	
135-98-8	sec-Butylbenzene	5.7	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
100-42-5	Styrene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	08/22/22	B2H2205	8260	RC	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
108-88-3	Toluene	5200	52	ug/L	52.5	08/24/22	B2H2205	8260	RC	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
Surrogate: Bromofluorobenzene			105 %		85-115	08/22/22	B2H2205	8260	RC	
Surrogate: Dibromofluoromethane			92.7 %		82.7-115	08/22/22	B2H2205	8260	RC	
Surrogate: Toluene-d8			104 %		85-115	08/22/22	B2H2205	8260	RC	



MICHIGAN DEPARTMENT OF
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ENVIRONMENTAL LABORATORY

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MICHIGAN DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY

Client ID: TMW-6

Lab ID: 2208127-03

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Analyst	Qualifier
Organics-Volatiles										
See note Y11										
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
526-73-8	1,2,3-Trimethylbenzene	1.8	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
95-63-6	1,2,4-Trimethylbenzene	7.0	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
107-06-2	1,2-Dichloroethane	3.2	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
108-67-8	1,3,5-Trimethylbenzene	1.8	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
540-84-1	2,2,4-Trimethylpentane	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	08/22/22	B2H2205	8260	RC	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
71-43-2	Benzene	230	5.2	ug/L	5.25	08/23/22	B2H2205	8260	RC	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
75-25-2	Bromoform	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
74-83-9	Bromomethane	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
75-00-3	Chloroethane	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
67-66-3	Chloroform	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
74-87-3	Chloromethane	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
110-82-7	Cyclohexane	64	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
74-95-3	Dibromomethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	



MICHIGAN DEPARTMENT OF
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ENVIRONMENTAL LABORATORY

P.O. Box 30270
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TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: TMW-6

Lab ID: 2208127-03

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Analyst	Qualifier
Organics-Volatiles										See note Y11
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
100-41-4	Ethylbenzene	98	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
110-54-3	Hexane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
1330-20-7	m & p - Xylene	60	2.0	ug/L	1	08/22/22	B2H2205	8260	RC	
96-37-7	Methylcyclopentane	52	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	A06, A09, A11
75-09-2	Methylene chloride	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
91-20-3	Naphthalene	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
142-82-5	n-Heptane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
95-47-6	o-Xylene	56	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
100-42-5	Styrene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	08/22/22	B2H2205	8260	RC	
994-05-8	tertiaryAmylmeylether	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
108-88-3	Toluene	100	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
Surrogate: Bromofluorobenzene			97.9 %	85-115		08/22/22	B2H2205	8260	RC	
Surrogate: Dibromofluoromethane			92.8 %	82.7-115		08/22/22	B2H2205	8260	RC	
Surrogate: Toluene-d8			97.2 %	85-115		08/22/22	B2H2205	8260	RC	



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ENVIRONMENTAL LABORATORY

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TEL: (517) 335-9800
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Client ID: TMW-6

Lab ID: 2208127-03

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Analyst	Qualifier
Organics-Semivolatiles										See note Y17
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	08/23/22	B2H2212	8270	MF	
83-32-9	Acenaphthene	ND	1.0	ug/L	1	08/23/22	B2H2212	8270	MF	
208-96-8	Acenaphthylene	ND	1.0	ug/L	1	08/23/22	B2H2212	8270	MF	
120-12-7	Anthracene	ND	1.0	ug/L	1	08/23/22	B2H2212	8270	MF	
56-55-3	Benz[a]anthracene	ND	1.0	ug/L	1	08/23/22	B2H2212	8270	MF	
50-32-8	Benzo[a]pyrene	ND	1.0	ug/L	1	08/23/22	B2H2212	8270	MF	
205-99-2	Benzo[b]fluoranthene	ND	1.0	ug/L	1	08/23/22	B2H2212	8270	MF	
191-24-2	Benzo[g,h,i]perylene	ND	1.0	ug/L	1	08/23/22	B2H2212	8270	MF	
207-08-9	Benzo[k]fluoranthene	ND	1.0	ug/L	1	08/23/22	B2H2212	8270	MF	
218-01-9	Chrysene	ND	1.0	ug/L	1	08/23/22	B2H2212	8270	MF	
53-70-3	Dibenz[a,h]anthracene	ND	2.0	ug/L	1	08/23/22	B2H2212	8270	MF	
206-44-0	Fluoranthene	ND	1.0	ug/L	1	08/23/22	B2H2212	8270	MF	
86-73-7	Fluorene	ND	1.0	ug/L	1	08/23/22	B2H2212	8270	MF	
193-39-5	Indeno(1,2,3-c,d)pyrene	ND	2.0	ug/L	1	08/23/22	B2H2212	8270	MF	
91-20-3	Naphthalene	ND	1.0	ug/L	1	08/23/22	B2H2212	8270	MF	
85-01-8	Phenanthrene	ND	1.0	ug/L	1	08/23/22	B2H2212	8270	MF	
129-00-0	Pyrene	ND	1.0	ug/L	1	08/23/22	B2H2212	8270	MF	
Surrogate: 2-Fluorobiphenyl			80.2 %		20-101	08/23/22	B2H2212	8270	MF	
Surrogate: Nitrobenzene-d5			63.4 %		13-100	08/23/22	B2H2212	8270	MF	
Surrogate: p-Terphenyl-d14			103 %		18-150	08/23/22	B2H2212	8270	MF	



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ENVIRONMENTAL LABORATORY

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TEL: (517) 335-9800
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Client ID: MW-1
Lab ID: 2208127-04

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Analyst	Qualifier
Organics-Volatiles										
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
526-73-8	1,2,3-Trimethylbenzene	1.3	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	
95-63-6	1,2,4-Trimethylbenzene	2.9	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
108-67-8	1,3,5-Trimethylbenzene	1.3	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
540-84-1	2,2,4-Trimethylpentane	15	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	08/24/22	B2H2303	8260	RC	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	
71-43-2	Benzene	ND	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
75-25-2	Bromoform	ND	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
74-83-9	Bromomethane	ND	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
75-00-3	Chloroethane	ND	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	
67-66-3	Chloroform	ND	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
74-87-3	Chloromethane	ND	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
74-95-3	Dibromomethane	ND	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	



MICHIGAN DEPARTMENT OF
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ENVIRONMENTAL LABORATORY

P.O. Box 30270
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TEL: (517) 335-9800
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Client ID: MW-1
Lab ID: 2208127-04

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Analyst	Qualifier
Organics-Volatiles										
See note Y11										
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	
100-41-4	Ethylbenzene	1.3	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	
110-54-3	Hexane	ND	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	08/24/22	B2H2303	8260	RC	
96-37-7	Methylcyclopentane	7.9	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	A04, A06, A11
75-09-2	Methylene chloride	ND	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
91-20-3	Naphthalene	ND	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	
104-51-8	n-Butylbenzene	1.1	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
142-82-5	n-Heptane	ND	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
103-65-1	n-Propylbenzene	2.6	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
95-47-6	o-Xylene	ND	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
100-42-5	Styrene	ND	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	08/24/22	B2H2303	8260	RC	
994-05-8	tertiaryAmylmeylether	ND	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	
108-88-3	Toluene	ND	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
<i>Surrogate: Bromofluorobenzene</i>			105 %	85-115		08/24/22	B2H2303	8260	RC	
<i>Surrogate: Dibromofluoromethane</i>			102 %	82.7-115		08/24/22	B2H2303	8260	RC	
<i>Surrogate: Toluene-d8</i>			101 %	85-115		08/24/22	B2H2303	8260	RC	



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MICHIGAN DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY

Client ID: TMW-6 DUP

Lab ID: 2208127-05

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Analyst	Qualifier
Organics-Volatiles										
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
526-73-8	1,2,3-Trimethylbenzene	1.4	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
95-63-6	1,2,4-Trimethylbenzene	6.1	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
107-06-2	1,2-Dichloroethane	3.7	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
108-67-8	1,3,5-Trimethylbenzene	1.6	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
540-84-1	2,2,4-Trimethylpentane	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
78-93-3	2-Butanone (MEK)	5.1	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	08/22/22	B2H2205	8260	RC	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
71-43-2	Benzene	230	5.2	ug/L	5.25	08/23/22	B2H2205	8260	RC	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
75-25-2	Bromoform	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
74-83-9	Bromomethane	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
75-00-3	Chloroethane	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
67-66-3	Chloroform	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
74-87-3	Chloromethane	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
110-82-7	Cyclohexane	75	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
74-95-3	Dibromomethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	



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ENVIRONMENTAL LABORATORY

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Client ID: TMW-6 DUP

Lab ID: 2208127-05

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Analyst	Qualifier
Organics-Volatiles										See note Y11
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
100-41-4	Ethylbenzene	110	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
110-54-3	Hexane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
1330-20-7	m & p - Xylene	66	2.0	ug/L	1	08/22/22	B2H2205	8260	RC	
96-37-7	Methylcyclopentane	60	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	A06, A09, A11
75-09-2	Methylene chloride	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
91-20-3	Naphthalene	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
142-82-5	n-Heptane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
95-47-6	o-Xylene	62	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
100-42-5	Styrene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	08/22/22	B2H2205	8260	RC	
994-05-8	tertiaryAmylmeylether	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
108-88-3	Toluene	110	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
Surrogate: Bromofluorobenzene			103 %	85-115		08/22/22	B2H2205	8260	RC	
Surrogate: Dibromofluoromethane			100 %	82.7-115		08/22/22	B2H2205	8260	RC	
Surrogate: Toluene-d8			102 %	85-115		08/22/22	B2H2205	8260	RC	



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TEL: (517) 335-9800
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Client ID: TMW-6 DUP

Lab ID: 2208127-05

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Analyst	Qualifier
Organics-Semivolatiles										See note Y17
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	08/23/22	B2H2212	8270	MF	
83-32-9	Acenaphthene	ND	1.0	ug/L	1	08/23/22	B2H2212	8270	MF	
208-96-8	Acenaphthylene	ND	1.0	ug/L	1	08/23/22	B2H2212	8270	MF	
120-12-7	Anthracene	ND	1.0	ug/L	1	08/23/22	B2H2212	8270	MF	
56-55-3	Benz[a]anthracene	ND	1.0	ug/L	1	08/23/22	B2H2212	8270	MF	
50-32-8	Benzo[a]pyrene	ND	1.0	ug/L	1	08/23/22	B2H2212	8270	MF	
205-99-2	Benzo[b]fluoranthene	ND	1.0	ug/L	1	08/23/22	B2H2212	8270	MF	
191-24-2	Benzo[g,h,i]perylene	ND	1.0	ug/L	1	08/23/22	B2H2212	8270	MF	
207-08-9	Benzo[k]fluoranthene	ND	1.0	ug/L	1	08/23/22	B2H2212	8270	MF	
218-01-9	Chrysene	ND	1.0	ug/L	1	08/23/22	B2H2212	8270	MF	
53-70-3	Dibenz[a,h]anthracene	ND	2.0	ug/L	1	08/23/22	B2H2212	8270	MF	
206-44-0	Fluoranthene	ND	1.0	ug/L	1	08/23/22	B2H2212	8270	MF	
86-73-7	Fluorene	ND	1.0	ug/L	1	08/23/22	B2H2212	8270	MF	
193-39-5	Indeno(1,2,3-c,d)pyrene	ND	2.0	ug/L	1	08/23/22	B2H2212	8270	MF	
91-20-3	Naphthalene	ND	1.0	ug/L	1	08/23/22	B2H2212	8270	MF	
85-01-8	Phenanthrene	ND	1.0	ug/L	1	08/23/22	B2H2212	8270	MF	
129-00-0	Pyrene	ND	1.0	ug/L	1	08/23/22	B2H2212	8270	MF	
Surrogate: 2-Fluorobiphenyl			65.1 %	20-101		08/23/22	B2H2212	8270	MF	
Surrogate: Nitrobenzene-d5			53.4 %	13-100		08/23/22	B2H2212	8270	MF	
Surrogate: p-Terphenyl-d14			107 %	18-150		08/23/22	B2H2212	8270	MF	



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MICHIGAN DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY

Client ID: MW-1 MS

Lab ID: 2208127-06

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Analyst	Qualifier
Organics-Volatiles										
630-20-6	1,1,1,2-Tetrachloroethane	52	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
71-55-6	1,1,1-Trichloroethane	59	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
79-34-5	1,1,2,2-Tetrachloroethane	55	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
79-00-5	1,1,2-Trichloroethane	55	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
76-13-1	1,1,2-Trichlorotrifluoroethane	62	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
75-34-3	1,1-Dichloroethane	60	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
75-35-4	1,1-Dichloroethylene	64	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
87-61-6	1,2,3-Trichlorobenzene	50	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	
96-18-4	1,2,3-Trichloropropane	56	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
526-73-8	1,2,3-Trimethylbenzene	58	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
120-82-1	1,2,4-Trichlorobenzene	49	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	
95-63-6	1,2,4-Trimethylbenzene	60	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
96-12-8	1,2-Dibromo-3-chloropropane	50	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	
106-93-4	1,2-Dibromoethane	53	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
95-50-1	1,2-Dichlorobenzene	53	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
107-06-2	1,2-Dichloroethane	57	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
78-87-5	1,2-Dichloropropane	57	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
108-67-8	1,3,5-Trimethylbenzene	58	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
541-73-1	1,3-Dichlorobenzene	54	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
106-46-7	1,4-Dichlorobenzene	55	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
540-84-1	2,2,4-Trimethylpentane	60	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	
78-93-3	2-Butanone (MEK)	48	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	
91-57-6	2-Methylnaphthalene	46	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	
67-64-1	2-Propanone (acetone)	56	20	ug/L	1	08/24/22	B2H2303	8260	RC	
108-10-1	4-Methyl-2-pentanone (MIBK)	53	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	
107-13-1	Acrylonitrile	58	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	
71-43-2	Benzene	56	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
74-97-5	Bromochloromethane	52	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
75-27-4	Bromodichloromethane	51	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
75-25-2	Bromoform	45	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
74-83-9	Bromomethane	56	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	
75-15-0	Carbon disulfide	58	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
56-23-5	Carbon tetrachloride	55	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
108-90-7	Chlorobenzene	54	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
75-00-3	Chloroethane	65	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	
67-66-3	Chloroform	58	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
74-87-3	Chloromethane	66	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	A04
156-59-2	cis-1,2-Dichloroethylene	60	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
10061-01-5	cis-1,3-Dichloropropylene	52	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	



MICHIGAN DEPARTMENT OF
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MICHIGAN DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY
ENVIRONMENTAL LABORATORY

P.O. Box 30270
Lansing, MI 48909
TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: MW-1 MS

Lab ID: 2208127-06

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Analyst	Qualifier
Organics-Volatiles										
110-82-7	Cyclohexane	59	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	
124-48-1	Dibromochloromethane	51	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
74-95-3	Dibromomethane	54	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
75-71-8	Dichlorodifluoromethane	79	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	A04, A06, A11
60-29-7	Diethyl ether	57	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	
108-20-3	Diisopropyl Ether	58	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	
100-41-4	Ethylbenzene	56	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
637-92-3	Ethyltertiarybutylether	55	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	
67-72-1	Hexachloroethane	49	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	
110-54-3	Hexane	56	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
98-82-8	Isopropylbenzene	58	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
1330-20-7	m & p - Xylene	110	2.0	ug/L	1	08/24/22	B2H2303	8260	RC	
96-37-7	Methylcyclopentane	80	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	A04, A06, A11
75-09-2	Methylene chloride	60	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	
1634-04-4	Methyltertiarybutylether	53	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
91-20-3	Naphthalene	54	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	
104-51-8	n-Butylbenzene	56	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
142-82-5	n-Heptane	51	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
103-65-1	n-Propylbenzene	61	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
95-47-6	o-Xylene	56	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
135-98-8	sec-Butylbenzene	58	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
100-42-5	Styrene	54	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
98-06-6	tert-Butylbenzene	58	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
75-65-0	tertiary Butyl Alcohol	250	50	ug/L	1	08/24/22	B2H2303	8260	RC	
994-05-8	tertiaryAmylmethylether	51	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	
127-18-4	Tetrachloroethylene	53	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
109-99-9	Tetrahydrofuran	55	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	
108-88-3	Toluene	56	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
156-60-5	trans-1,2-Dichloroethylene	62	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
10061-02-6	trans-1,3-Dichloropropylene	50	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
79-01-6	Trichloroethylene	54	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
75-69-4	Trichlorofluoromethane	67	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	A04
75-01-4	Vinyl chloride	69	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	A04
Surrogate: Bromofluorobenzene			111 %	85-115		08/24/22	B2H2303	8260	RC	
Surrogate: Dibromofluoromethane			103 %	82.7-115		08/24/22	B2H2303	8260	RC	
Surrogate: Toluene-d8			107 %	85-115		08/24/22	B2H2303	8260	RC	



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ENVIRONMENTAL LABORATORY

P.O. Box 30270
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TEL: (517) 335-9800
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Client ID: MW-1 MSD

Lab ID: 2208127-07

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Analyst	Qualifier
Organics-Volatiles										
630-20-6	1,1,1,2-Tetrachloroethane	51	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
71-55-6	1,1,1-Trichloroethane	57	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
79-34-5	1,1,2,2-Tetrachloroethane	52	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
79-00-5	1,1,2-Trichloroethane	53	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
76-13-1	1,1,2-Trichlorotrifluoroethane	58	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
75-34-3	1,1-Dichloroethane	56	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
75-35-4	1,1-Dichloroethylene	59	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
87-61-6	1,2,3-Trichlorobenzene	48	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	
96-18-4	1,2,3-Trichloropropane	53	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
526-73-8	1,2,3-Trimethylbenzene	55	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
120-82-1	1,2,4-Trichlorobenzene	47	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	
95-63-6	1,2,4-Trimethylbenzene	57	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
96-12-8	1,2-Dibromo-3-chloropropane	46	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	
106-93-4	1,2-Dibromoethane	50	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
95-50-1	1,2-Dichlorobenzene	51	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
107-06-2	1,2-Dichloroethane	56	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
78-87-5	1,2-Dichloropropane	54	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
108-67-8	1,3,5-Trimethylbenzene	55	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
541-73-1	1,3-Dichlorobenzene	52	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
106-46-7	1,4-Dichlorobenzene	52	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
540-84-1	2,2,4-Trimethylpentane	61	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	
78-93-3	2-Butanone (MEK)	47	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	
91-57-6	2-Methylnaphthalene	44	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	
67-64-1	2-Propanone (acetone)	55	20	ug/L	1	08/24/22	B2H2303	8260	RC	
108-10-1	4-Methyl-2-pentanone (MIBK)	51	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	
107-13-1	Acrylonitrile	53	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	
71-43-2	Benzene	54	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
74-97-5	Bromochloromethane	49	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
75-27-4	Bromodichloromethane	52	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
75-25-2	Bromoform	44	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
74-83-9	Bromomethane	54	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	
75-15-0	Carbon disulfide	56	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
56-23-5	Carbon tetrachloride	52	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
108-90-7	Chlorobenzene	52	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
75-00-3	Chloroethane	63	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	
67-66-3	Chloroform	55	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
74-87-3	Chloromethane	63	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	A04
156-59-2	cis-1,2-Dichloroethylene	56	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
10061-01-5	cis-1,3-Dichloropropylene	51	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	



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MICHIGAN DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY

Client ID: MW-1 MSD

Lab ID: 2208127-07

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Analyst	Qualifier
Organics-Volatiles										
110-82-7	Cyclohexane	57	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	
124-48-1	Dibromochloromethane	49	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
74-95-3	Dibromomethane	53	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
75-71-8	Dichlorodifluoromethane	75	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	A04, A06, A11
60-29-7	Diethyl ether	54	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	
108-20-3	Diisopropyl Ether	55	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	
100-41-4	Ethylbenzene	54	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
637-92-3	Ethyltertiarybutylether	53	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	
67-72-1	Hexachloroethane	47	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	
110-54-3	Hexane	54	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
98-82-8	Isopropylbenzene	54	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
1330-20-7	m & p - Xylene	110	2.0	ug/L	1	08/24/22	B2H2303	8260	RC	
96-37-7	Methylcyclopentane	79	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	A04, A06, A11
75-09-2	Methylene chloride	57	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	
1634-04-4	Methyltertiarybutylether	50	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
91-20-3	Naphthalene	51	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	
104-51-8	n-Butylbenzene	54	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
142-82-5	n-Heptane	50	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
103-65-1	n-Propylbenzene	58	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
95-47-6	o-Xylene	53	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
135-98-8	sec-Butylbenzene	55	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
100-42-5	Styrene	52	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
98-06-6	tert-Butylbenzene	55	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
75-65-0	tertiary Butyl Alcohol	250	50	ug/L	1	08/24/22	B2H2303	8260	RC	
994-05-8	tertiaryAmylmeylether	50	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	
127-18-4	Tetrachloroethylene	51	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
109-99-9	Tetrahydrofuran	50	5.0	ug/L	1	08/24/22	B2H2303	8260	RC	
108-88-3	Toluene	53	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
156-60-5	trans-1,2-Dichloroethylene	58	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
10061-02-6	trans-1,3-Dichloropropylene	50	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
79-01-6	Trichloroethylene	52	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	
75-69-4	Trichlorofluoromethane	64	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	A04
75-01-4	Vinyl chloride	65	1.0	ug/L	1	08/24/22	B2H2303	8260	RC	A04
Surrogate: Bromofluorobenzene			102 %	85-115		08/24/22	B2H2303	8260	RC	
Surrogate: Dibromofluoromethane			98.1 %	82.7-115		08/24/22	B2H2303	8260	RC	
Surrogate: Toluene-d8			99.3 %	85-115		08/24/22	B2H2303	8260	RC	



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MICHIGAN DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY

Client ID: TRIP BLANK

Lab ID: 2208127-08

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Analyst	Qualifier
Organics-Volatiles										
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
540-84-1	2,2,4-Trimethylpentane	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	08/22/22	B2H2205	8260	RC	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
71-43-2	Benzene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
75-25-2	Bromoform	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
74-83-9	Bromomethane	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
75-00-3	Chloroethane	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
67-66-3	Chloroform	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
74-87-3	Chloromethane	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
74-95-3	Dibromomethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	



MICHIGAN DEPARTMENT OF
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P.O. Box 30270
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TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: TRIP BLANK

Lab ID: 2208127-08

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Analyst	Qualifier
Organics-Volatiles										
60-29-7	Diethyl ether	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
110-54-3	Hexane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	08/22/22	B2H2205	8260	RC	
96-37-7	Methylcyclopentane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
91-20-3	Naphthalene	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
142-82-5	n-Heptane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
95-47-6	o-Xylene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
100-42-5	Styrene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	08/22/22	B2H2205	8260	RC	
994-05-8	tertiaryAmylmetylether	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	08/22/22	B2H2205	8260	RC	
108-88-3	Toluene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	08/22/22	B2H2205	8260	RC	
<i>Surrogate: Bromofluorobenzene</i>			106 %	85-115		08/22/22	B2H2205	8260	RC	
<i>Surrogate: Dibromofluoromethane</i>			102 %	82.7-115		08/22/22	B2H2205	8260	RC	
<i>Surrogate: Toluene-d8</i>			98.2 %	85-115		08/22/22	B2H2205	8260	RC	



MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
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Batch B2H2205 - Method: 5030

Prepared: 08/22/2022

Blank (B2H2205-BLK1)

1,1,1,2-Tetrachloroethane	ND	1.0	ug/L							08/22/2022	
1,1,1-Trichloroethane	ND	1.0	ug/L							08/22/2022	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L							08/22/2022	
1,1,2-Trichloroethane	ND	1.0	ug/L							08/22/2022	
1,1,2-Trichlorotrifluoroethane	ND	1.0	ug/L							08/22/2022	
1,1-Dichloroethane	ND	1.0	ug/L							08/22/2022	
1,1-Dichloroethylene	ND	1.0	ug/L							08/22/2022	
1,2,3-Trichlorobenzene	ND	5.0	ug/L							08/22/2022	
1,2,3-Trichloropropane	ND	1.0	ug/L							08/22/2022	
1,2,3-Trimethylbenzene	ND	1.0	ug/L							08/22/2022	
1,2,4-Trichlorobenzene	ND	5.0	ug/L							08/22/2022	
1,2,4-Trimethylbenzene	ND	1.0	ug/L							08/22/2022	
1,2-Dibromo-3-chloropropane	ND	5.0	ug/L							08/22/2022	
1,2-Dibromoethane	ND	1.0	ug/L							08/22/2022	
1,2-Dichlorobenzene	ND	1.0	ug/L							08/22/2022	
1,2-Dichloroethane	ND	1.0	ug/L							08/22/2022	
1,2-Dichloropropane	ND	1.0	ug/L							08/22/2022	
1,3,5-Trimethylbenzene	ND	1.0	ug/L							08/22/2022	
1,3-Dichlorobenzene	ND	1.0	ug/L							08/22/2022	
1,4-Dichlorobenzene	ND	1.0	ug/L							08/22/2022	
2,2,4-Trimethylpentane	ND	5.0	ug/L							08/22/2022	
2-Butanone (MEK)	ND	5.0	ug/L							08/22/2022	
2-Methylnaphthalene	ND	5.0	ug/L							08/22/2022	
2-Propanone (acetone)	ND	20	ug/L							08/22/2022	
4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L							08/22/2022	
Acrylonitrile	ND	5.0	ug/L							08/22/2022	
Benzene	ND	1.0	ug/L							08/22/2022	
Bromochloromethane	ND	1.0	ug/L							08/22/2022	
Bromodichloromethane	ND	1.0	ug/L							08/22/2022	
Bromoform	ND	1.0	ug/L							08/22/2022	
Bromomethane	ND	5.0	ug/L							08/22/2022	
Carbon disulfide	ND	1.0	ug/L							08/22/2022	
Carbon tetrachloride	ND	1.0	ug/L							08/22/2022	
Chlorobenzene	ND	1.0	ug/L							08/22/2022	
Chloroethane	ND	5.0	ug/L							08/22/2022	
Chloroform	ND	1.0	ug/L							08/22/2022	
Chloromethane	ND	5.0	ug/L							08/22/2022	
cis-1,2-Dichloroethylene	ND	1.0	ug/L							08/22/2022	
cis-1,3-Dichloropropylene	ND	1.0	ug/L							08/22/2022	
Cyclohexane	ND	5.0	ug/L							08/22/2022	
Dibromochloromethane	ND	1.0	ug/L							08/22/2022	
Dibromomethane	ND	1.0	ug/L							08/22/2022	
Dichlorodifluoromethane	ND	5.0	ug/L							08/22/2022	
Diethyl ether	ND	5.0	ug/L							08/22/2022	
Diisopropyl Ether	ND	5.0	ug/L							08/22/2022	
Ethylbenzene	ND	1.0	ug/L							08/22/2022	
Ethyltertiarybutylether	ND	5.0	ug/L							08/22/2022	
Hexachloroethane	ND	5.0	ug/L							08/22/2022	
Hexane	ND	1.0	ug/L							08/22/2022	
Isopropylbenzene	ND	1.0	ug/L							08/22/2022	



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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
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Batch B2H2205 - Method: 5030

Prepared: 08/22/2022

Blank (B2H2205-BLK1)

m & p - Xylene	ND	2.0	ug/L							08/22/2022	
Methylcyclopentane	ND	1.0	ug/L							08/22/2022	
Methylene chloride	ND	5.0	ug/L							08/22/2022	
Methyltertiarybutylether	ND	1.0	ug/L							08/22/2022	
Naphthalene	ND	5.0	ug/L							08/22/2022	
n-Butylbenzene	ND	1.0	ug/L							08/22/2022	
n-Heptane	ND	1.0	ug/L							08/22/2022	
n-Propylbenzene	ND	1.0	ug/L							08/22/2022	
o-Xylene	ND	1.0	ug/L							08/22/2022	
sec-Butylbenzene	ND	1.0	ug/L							08/22/2022	
Styrene	ND	1.0	ug/L							08/22/2022	
tert-Butylbenzene	ND	1.0	ug/L							08/22/2022	
tertiary Butyl Alcohol	ND	50	ug/L							08/22/2022	
tertiaryAmylmethylether	ND	5.0	ug/L							08/22/2022	
Tetrachloroethylene	ND	1.0	ug/L							08/22/2022	
Tetrahydrofuran	ND	5.0	ug/L							08/22/2022	
Toluene	ND	1.0	ug/L							08/22/2022	
trans-1,2-Dichloroethylene	ND	1.0	ug/L							08/22/2022	
trans-1,3-Dichloropropylene	ND	1.0	ug/L							08/22/2022	
Trichloroethylene	ND	1.0	ug/L							08/22/2022	
Trichlorofluoromethane	ND	1.0	ug/L							08/22/2022	
Vinyl chloride	ND	1.0	ug/L							08/22/2022	
Surrogate: Bromofluorobenzene	52.0		ug/L	50.00		104	85-115			08/22/2022	
Surrogate: Dibromofluoromethane	51.4		ug/L	50.00		103	82.7-115			08/22/2022	
Surrogate: Toluene-d8	50.0		ug/L	50.00		100	85-115			08/22/2022	

LCS (B2H2205-BS1)

1,1,1,2-Tetrachloroethane	51.3	1.0	ug/L	50.00		103	70-130			08/22/2022	
1,1,1-Trichloroethane	55.9	1.0	ug/L	50.00		112	70-130			08/22/2022	
1,1,2,2-Tetrachloroethane	51.1	1.0	ug/L	50.00		102	70-130			08/22/2022	
1,1,2-Trichloroethane	53.3	1.0	ug/L	50.00		107	70-130			08/22/2022	
1,1,2-Trichlorotrifluoroethane	56.8	1.0	ug/L	50.00		114	70-130			08/22/2022	
1,1-Dichloroethane	53.1	1.0	ug/L	50.00		106	70-130			08/22/2022	
1,1-Dichloroethylene	53.6	1.0	ug/L	50.00		107	70-130			08/22/2022	
1,2,3-Trichlorobenzene	51.2	5.0	ug/L	50.00		102	70-130			08/22/2022	
1,2,3-Trichloropropane	53.3	1.0	ug/L	50.00		107	70-130			08/22/2022	
1,2,3-Trimethylbenzene	53.7	1.0	ug/L	50.00		107	70-130			08/22/2022	
1,2,4-Trichlorobenzene	51.2	5.0	ug/L	50.00		102	70-130			08/22/2022	
1,2,4-Trimethylbenzene	54.4	1.0	ug/L	50.00		109	70-130			08/22/2022	
1,2-Dibromo-3-chloropropane	52.2	5.0	ug/L	50.00		104	70-130			08/22/2022	
1,2-Dibromoethane	51.7	1.0	ug/L	50.00		103	70-130			08/22/2022	
1,2-Dichlorobenzene	52.0	1.0	ug/L	50.00		104	70-130			08/22/2022	
1,2-Dichloroethane	53.1	1.0	ug/L	50.00		106	70-130			08/22/2022	
1,2-Dichloropropane	53.6	1.0	ug/L	50.00		107	70-130			08/22/2022	
1,3,5-Trimethylbenzene	53.5	1.0	ug/L	50.00		107	70-130			08/22/2022	
1,3-Dichlorobenzene	53.1	1.0	ug/L	50.00		106	70-130			08/22/2022	
1,4-Dichlorobenzene	53.1	1.0	ug/L	50.00		106	70-130			08/22/2022	
2,2,4-Trimethylpentane	53.2	5.0	ug/L	50.00		106	70-130			08/22/2022	
2-Butanone (MEK)	47.4	5.0	ug/L	50.00		94.8	70-130			08/22/2022	
2-Methylnaphthalene	45.3	5.0	ug/L	50.00		90.6	70-130			08/22/2022	



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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
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Batch B2H2205 - Method: 5030

Prepared: 08/22/2022

LCS (B2H2205-BS1)

2-Propanone (acetone)	50.6	20	ug/L	50.00		101	70-130			08/22/2022	
4-Methyl-2-pentanone (MIBK)	48.6	5.0	ug/L	50.00		97.2	70-130			08/22/2022	
Acrylonitrile	50.4	5.0	ug/L	50.00		101	70-130			08/22/2022	
Benzene	52.7	1.0	ug/L	50.00		105	70-130			08/22/2022	
Bromochloromethane	50.7	1.0	ug/L	50.00		101	70-130			08/22/2022	
Bromodichloromethane	52.3	1.0	ug/L	50.00		105	70-130			08/22/2022	
Bromoform	49.0	1.0	ug/L	50.00		97.9	70-130			08/22/2022	
Bromomethane	61.9	5.0	ug/L	50.00		124	70-130			08/22/2022	
Carbon disulfide	53.1	1.0	ug/L	50.00		106	70-130			08/22/2022	
Carbon tetrachloride	52.2	1.0	ug/L	50.00		104	70-130			08/22/2022	
Chlorobenzene	51.2	1.0	ug/L	50.00		102	70-130			08/22/2022	
Chloroethane	56.4	5.0	ug/L	50.00		113	70-130			08/22/2022	
Chloroform	52.7	1.0	ug/L	50.00		105	70-130			08/22/2022	
Chloromethane	59.1	5.0	ug/L	50.00		118	70-130			08/22/2022	
cis-1,2-Dichloroethylene	53.9	1.0	ug/L	50.00		108	70-130			08/22/2022	
cis-1,3-Dichloropropylene	54.3	1.0	ug/L	50.00		109	70-130			08/22/2022	
Cyclohexane	51.4	5.0	ug/L	50.00		103	70-130			08/22/2022	
Dibromochloromethane	52.0	1.0	ug/L	50.00		104	70-130			08/22/2022	
Dibromomethane	53.1	1.0	ug/L	50.00		106	70-130			08/22/2022	
Dichlorodifluoromethane	70.8	5.0	ug/L	50.00		142	70-130			08/22/2022	A06, A09, A11
Diethyl ether	52.7	5.0	ug/L	50.00		105	70-130			08/22/2022	
Diisopropyl Ether	51.9	5.0	ug/L	50.00		104	70-130			08/22/2022	
Ethylbenzene	51.0	1.0	ug/L	50.00		102	70-130			08/22/2022	
Ethyltertiarybutylether	58.0	5.0	ug/L	50.00		116	70-130			08/22/2022	
Hexachloroethane	51.2	5.0	ug/L	50.00		102	70-130			08/22/2022	
Hexane	55.7	1.0	ug/L	50.00		111	70-130			08/22/2022	
Isopropylbenzene	52.8	1.0	ug/L	50.00		106	70-130			08/22/2022	
m & p - Xylene	103	2.0	ug/L	100.0		103	70-130			08/22/2022	
Methylcyclopentane	68.9	1.0	ug/L	50.00		138	70-130			08/22/2022	A06, A09, A11
Methylene chloride	52.8	5.0	ug/L	50.00		106	70-130			08/22/2022	
Methyltertiarybutylether	53.7	1.0	ug/L	50.00		107	70-130			08/22/2022	
Naphthalene	53.1	5.0	ug/L	50.00		106	70-130			08/22/2022	
n-Butylbenzene	54.0	1.0	ug/L	50.00		108	70-130			08/22/2022	
n-Heptane	61.1	1.0	ug/L	50.00		122	70-130			08/22/2022	
n-Propylbenzene	54.3	1.0	ug/L	50.00		109	70-130			08/22/2022	
o-Xylene	51.7	1.0	ug/L	50.00		103	70-130			08/22/2022	
sec-Butylbenzene	53.9	1.0	ug/L	50.00		108	70-130			08/22/2022	
Styrene	48.6	1.0	ug/L	50.00		97.2	70-130			08/22/2022	
tert-Butylbenzene	55.0	1.0	ug/L	50.00		110	70-130			08/22/2022	
tertiary Butyl Alcohol	277	50	ug/L	250.0		111	70-130			08/22/2022	
tertiaryAmylmeylether	57.4	5.0	ug/L	50.00		115	70-130			08/22/2022	
Tetrachloroethylene	51.3	1.0	ug/L	50.00		103	70-130			08/22/2022	
Tetrahydrofuran	51.2	5.0	ug/L	50.00		102	70-130			08/22/2022	
Toluene	49.9	1.0	ug/L	50.00		99.8	70-130			08/22/2022	
trans-1,2-Dichloroethylene	53.4	1.0	ug/L	50.00		107	70-130			08/22/2022	
trans-1,3-Dichloropropylene	54.7	1.0	ug/L	50.00		109	70-130			08/22/2022	
Trichloroethylene	52.6	1.0	ug/L	50.00		105	70-130			08/22/2022	
Trichlorofluoromethane	57.8	1.0	ug/L	50.00		116	70-130			08/22/2022	



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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
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Batch B2H2205 - Method: 5030

Prepared: 08/22/2022

LCS (B2H2205-BS1)

Vinyl chloride	58.8	1.0	ug/L	50.00		118	70-130			08/22/2022	
Surrogate: Bromofluorobenzene	51.2		ug/L	50.00		102	85-115			08/22/2022	
Surrogate: Dibromofluoromethane	50.0		ug/L	50.00		100	82.7-115			08/22/2022	
Surrogate: Toluene-d8	50.2		ug/L	50.00		100	85-115			08/22/2022	

Matrix Spike (B2H2205-MS1)

Source: 2208124-12

1,1,1,2-Tetrachloroethane	49.6	1.0	ug/L	50.00	ND	99.1	70-130			08/24/2022	
1,1,1-Trichloroethane	57.2	1.0	ug/L	50.00	ND	114	70-130			08/24/2022	
1,1,2,2-Tetrachloroethane	52.5	1.0	ug/L	50.00	ND	105	70-130			08/24/2022	
1,1,2-Trichloroethane	54.5	1.0	ug/L	50.00	ND	109	70-130			08/24/2022	
1,1,2-Trichlorotrifluoroethane	61.3	1.0	ug/L	50.00	ND	123	70-130			08/24/2022	
1,1-Dichloroethane	60.7	1.0	ug/L	50.00	ND	121	70-130			08/24/2022	
1,1-Dichloroethylene	63.9	1.0	ug/L	50.00	ND	128	70-130			08/24/2022	
1,2,3-Trichlorobenzene	47.7	5.0	ug/L	50.00	ND	95.4	70-130			08/24/2022	
1,2,3-Trichloropropane	54.1	1.0	ug/L	50.00	ND	108	70-130			08/24/2022	
1,2,3-Trimethylbenzene	55.6	1.0	ug/L	50.00	ND	111	70-130			08/24/2022	
1,2,4-Trichlorobenzene	46.9	5.0	ug/L	50.00	ND	93.9	70-130			08/24/2022	
1,2,4-Trimethylbenzene	55.8	1.0	ug/L	50.00	ND	112	70-130			08/24/2022	
1,2-Dibromo-3-chloropropane	45.6	5.0	ug/L	50.00	ND	91.1	70-130			08/24/2022	
1,2-Dibromoethane	50.8	1.0	ug/L	50.00	ND	102	70-130			08/24/2022	
1,2-Dichlorobenzene	53.0	1.0	ug/L	50.00	ND	106	70-130			08/24/2022	
1,2-Dichloroethane	57.1	1.0	ug/L	50.00	ND	114	70-130			08/24/2022	
1,2-Dichloropropane	55.7	1.0	ug/L	50.00	ND	111	70-130			08/24/2022	
1,3,5-Trimethylbenzene	55.4	1.0	ug/L	50.00	ND	111	70-130			08/24/2022	
1,3-Dichlorobenzene	52.4	1.0	ug/L	50.00	ND	105	70-130			08/24/2022	
1,4-Dichlorobenzene	52.9	1.0	ug/L	50.00	ND	106	70-130			08/24/2022	
2,2,4-Trimethylpentane	46.9	5.0	ug/L	50.00	ND	93.8	70-130			08/24/2022	
2-Butanone (MEK)	49.3	5.0	ug/L	50.00	ND	98.5	70-130			08/24/2022	
2-Methylnaphthalene	41.8	5.0	ug/L	50.00	ND	83.6	70-130			08/24/2022	
2-Propanone (acetone)	61.3	20	ug/L	50.00	ND	123	70-130			08/24/2022	
4-Methyl-2-pentanone (MIBK)	50.7	5.0	ug/L	50.00	ND	101	70-130			08/24/2022	
Acrylonitrile	54.0	5.0	ug/L	50.00	ND	108	70-130			08/24/2022	
Benzene	55.7	1.0	ug/L	50.00	ND	111	70-130			08/24/2022	
Bromochloromethane	49.9	1.0	ug/L	50.00	ND	99.9	70-130			08/24/2022	
Bromodichloromethane	52.5	1.0	ug/L	50.00	ND	105	70-130			08/24/2022	
Bromoform	41.2	1.0	ug/L	50.00	ND	82.5	70-130			08/24/2022	
Bromomethane	59.8	5.0	ug/L	50.00	ND	120	70-130			08/24/2022	
Carbon disulfide	58.7	1.0	ug/L	50.00	ND	117	70-130			08/24/2022	
Carbon tetrachloride	53.2	1.0	ug/L	50.00	ND	106	70-130			08/24/2022	
Chlorobenzene	52.5	1.0	ug/L	50.00	ND	105	70-130			08/24/2022	
Chloroethane	67.4	5.0	ug/L	50.00	ND	135	70-130			08/24/2022	A04
Chloroform	59.0	1.0	ug/L	50.00	ND	118	70-130			08/24/2022	
Chloromethane	69.0	5.0	ug/L	50.00	ND	138	70-130			08/24/2022	A04
cis-1,2-Dichloroethylene	61.8	1.0	ug/L	50.00	ND	124	70-130			08/24/2022	
cis-1,3-Dichloropropylene	51.4	1.0	ug/L	50.00	ND	103	70-130			08/24/2022	
Cyclohexane	57.7	5.0	ug/L	50.00	ND	115	70-130			08/24/2022	
Dibromochloromethane	48.3	1.0	ug/L	50.00	ND	96.7	70-130			08/24/2022	
Dibromomethane	54.0	1.0	ug/L	50.00	ND	108	70-130			08/24/2022	
Dichlorodifluoromethane	82.0	5.0	ug/L	50.00	ND	164	70-130			08/24/2022	A04, A06, A11



MICHIGAN DEPARTMENT OF
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ENVIRONMENTAL LABORATORY

P.O. Box 30270
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TEL: (517) 335-9800
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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
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Batch B2H2205 - Method: 5030

Prepared: 08/24/2022

Matrix Spike (B2H2205-MS1)

Source: 2208124-12

Diethyl ether	59.3	5.0	ug/L	50.00	ND	119	70-130			08/24/2022	
Diisopropyl Ether	58.8	5.0	ug/L	50.00	ND	118	70-130			08/24/2022	
Ethylbenzene	53.9	1.0	ug/L	50.00	ND	108	70-130			08/24/2022	
Ethyltertiarybutylether	54.3	5.0	ug/L	50.00	ND	109	70-130			08/24/2022	
Hexachloroethane	47.8	5.0	ug/L	50.00	ND	95.6	70-130			08/24/2022	
Hexane	58.0	1.0	ug/L	50.00	ND	116	70-130			08/24/2022	
Isopropylbenzene	55.7	1.0	ug/L	50.00	ND	111	70-130			08/24/2022	
m & p - Xylene	109	2.0	ug/L	100.0	ND	109	70-130			08/24/2022	
Methylcyclopentane	78.6	1.0	ug/L	50.00	ND	157	70-130			08/24/2022	A04, A06, A11
Methylene chloride	62.2	5.0	ug/L	50.00	ND	124	70-130			08/24/2022	
Methyltertiarybutylether	52.7	1.0	ug/L	50.00	ND	105	70-130			08/24/2022	
Naphthalene	49.9	5.0	ug/L	50.00	ND	99.8	70-130			08/24/2022	
n-Butylbenzene	55.5	1.0	ug/L	50.00	ND	111	70-130			08/24/2022	
n-Heptane	53.7	1.0	ug/L	50.00	ND	107	70-130			08/24/2022	
n-Propylbenzene	58.6	1.0	ug/L	50.00	ND	117	70-130			08/24/2022	
o-Xylene	54.3	1.0	ug/L	50.00	ND	109	70-130			08/24/2022	
sec-Butylbenzene	57.7	1.0	ug/L	50.00	ND	115	70-130			08/24/2022	
Styrene	52.9	1.0	ug/L	50.00	ND	106	70-130			08/24/2022	
tert-Butylbenzene	57.5	1.0	ug/L	50.00	ND	115	70-130			08/24/2022	
tertiary Butyl Alcohol	261	50	ug/L	250.0	ND	105	70-130			08/24/2022	
tertiaryAmylmeylether	48.2	5.0	ug/L	50.00	ND	96.5	70-130			08/24/2022	
Tetrachloroethylene	51.2	1.0	ug/L	50.00	ND	102	70-130			08/24/2022	
Tetrahydrofuran	55.8	5.0	ug/L	50.00	ND	112	70-130			08/24/2022	
Toluene	53.8	1.0	ug/L	50.00	ND	108	70-130			08/24/2022	
trans-1,2-Dichloroethylene	62.9	1.0	ug/L	50.00	ND	126	70-130			08/24/2022	
trans-1,3-Dichloropropylene	49.9	1.0	ug/L	50.00	ND	99.9	70-130			08/24/2022	
Trichloroethylene	53.0	1.0	ug/L	50.00	ND	106	70-130			08/24/2022	
Trichlorofluoromethane	69.3	1.0	ug/L	50.00	ND	139	70-130			08/24/2022	A04
Vinyl chloride	70.2	1.0	ug/L	50.00	ND	140	70-130			08/24/2022	A04
Surrogate: Bromofluorobenzene	51.1		ug/L	50.00		102	85-115			08/24/2022	
Surrogate: Dibromofluoromethane	48.5		ug/L	50.00		97.0	82.7-115			08/24/2022	
Surrogate: Toluene-d8	49.5		ug/L	50.00		99.1	85-115			08/24/2022	

Matrix Spike Dup (B2H2205-MSD1)

Source: 2208124-12

1,1,1,2-Tetrachloroethane	50.0	1.0	ug/L	50.00	ND	99.9	70-130	0.799	30	08/24/2022	
1,1,1-Trichloroethane	58.7	1.0	ug/L	50.00	ND	117	70-130	2.53	30	08/24/2022	
1,1,2,2-Tetrachloroethane	51.5	1.0	ug/L	50.00	ND	103	70-130	1.99	30	08/24/2022	
1,1,2-Trichloroethane	54.6	1.0	ug/L	50.00	ND	109	70-130	0.180	30	08/24/2022	
1,1,2-Trichlorotrifluoroethane	60.4	1.0	ug/L	50.00	ND	121	70-130	1.57	30	08/24/2022	
1,1-Dichloroethane	60.5	1.0	ug/L	50.00	ND	121	70-130	0.273	30	08/24/2022	
1,1-Dichloroethylene	64.8	1.0	ug/L	50.00	ND	130	70-130	1.31	30	08/24/2022	
1,2,3-Trichlorobenzene	48.9	5.0	ug/L	50.00	ND	97.7	70-130	2.41	30	08/24/2022	
1,2,3-Trichloropropane	53.4	1.0	ug/L	50.00	ND	107	70-130	1.28	30	08/24/2022	
1,2,3-Trimethylbenzene	54.8	1.0	ug/L	50.00	ND	110	70-130	1.36	30	08/24/2022	
1,2,4-Trichlorobenzene	47.6	5.0	ug/L	50.00	ND	95.3	70-130	1.51	30	08/24/2022	
1,2,4-Trimethylbenzene	56.3	1.0	ug/L	50.00	ND	113	70-130	0.854	30	08/24/2022	
1,2-Dibromo-3-chloropropane	44.3	5.0	ug/L	50.00	ND	88.5	70-130	2.91	30	08/24/2022	
1,2-Dibromoethane	51.3	1.0	ug/L	50.00	ND	103	70-130	0.893	30	08/24/2022	
1,2-Dichlorobenzene	52.8	1.0	ug/L	50.00	ND	106	70-130	0.388	30	08/24/2022	



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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
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Batch B2H2205 - Method: 5030

Prepared: 08/24/2022

Matrix Spike Dup (B2H2205-MSD1)

Source: 2208124-12

1,2-Dichloroethane	57.9	1.0	ug/L	50.00	ND	116	70-130	1.51	30	08/24/2022	
1,2-Dichloropropane	56.4	1.0	ug/L	50.00	ND	113	70-130	1.34	30	08/24/2022	
1,3,5-Trimethylbenzene	55.4	1.0	ug/L	50.00	ND	111	70-130	0.145	30	08/24/2022	
1,3-Dichlorobenzene	52.7	1.0	ug/L	50.00	ND	105	70-130	0.564	30	08/24/2022	
1,4-Dichlorobenzene	53.1	1.0	ug/L	50.00	ND	106	70-130	0.365	30	08/24/2022	
2,2,4-Trimethylpentane	48.0	5.0	ug/L	50.00	ND	96.0	70-130	2.36	30	08/24/2022	
2-Butanone (MEK)	48.9	5.0	ug/L	50.00	ND	97.9	70-130	0.663	30	08/24/2022	
2-Methylnaphthalene	42.1	5.0	ug/L	50.00	ND	84.3	70-130	0.746	30	08/24/2022	
2-Propanone (acetone)	60.5	20	ug/L	50.00	ND	121	70-130	1.38	30	08/24/2022	
4-Methyl-2-pentanone (MIBK)	50.6	5.0	ug/L	50.00	ND	101	70-130	0.153	30	08/24/2022	
Acrylonitrile	54.8	5.0	ug/L	50.00	ND	110	70-130	1.45	30	08/24/2022	
Benzene	55.5	1.0	ug/L	50.00	ND	111	70-130	0.196	30	08/24/2022	
Bromochloromethane	51.2	1.0	ug/L	50.00	ND	102	70-130	2.54	30	08/24/2022	
Bromodichloromethane	52.6	1.0	ug/L	50.00	ND	105	70-130	0.275	30	08/24/2022	
Bromoform	42.2	1.0	ug/L	50.00	ND	84.4	70-130	2.37	30	08/24/2022	
Bromomethane	59.0	5.0	ug/L	50.00	ND	118	70-130	1.26	30	08/24/2022	
Carbon disulfide	59.0	1.0	ug/L	50.00	ND	118	70-130	0.500	30	08/24/2022	
Carbon tetrachloride	53.1	1.0	ug/L	50.00	ND	106	70-130	0.283	30	08/24/2022	
Chlorobenzene	53.2	1.0	ug/L	50.00	ND	106	70-130	1.36	30	08/24/2022	
Chloroethane	67.3	5.0	ug/L	50.00	ND	135	70-130	0.127	30	08/24/2022	A04
Chloroform	59.0	1.0	ug/L	50.00	ND	118	70-130	0.0502	30	08/24/2022	
Chloromethane	67.8	5.0	ug/L	50.00	ND	136	70-130	1.63	30	08/24/2022	A04
cis-1,2-Dichloroethylene	61.5	1.0	ug/L	50.00	ND	123	70-130	0.374	30	08/24/2022	
cis-1,3-Dichloropropylene	51.8	1.0	ug/L	50.00	ND	104	70-130	0.836	30	08/24/2022	
Cyclohexane	57.0	5.0	ug/L	50.00	ND	114	70-130	1.27	30	08/24/2022	
Dibromochloromethane	49.1	1.0	ug/L	50.00	ND	98.1	70-130	1.46	30	08/24/2022	
Dibromomethane	54.0	1.0	ug/L	50.00	ND	108	70-130	0.0363	30	08/24/2022	
Dichlorodifluoromethane	82.0	5.0	ug/L	50.00	ND	164	70-130	0.0130	30	08/24/2022	A04, A06, A11
Diethyl ether	58.3	5.0	ug/L	50.00	ND	117	70-130	1.77	30	08/24/2022	
Diisopropyl Ether	57.8	5.0	ug/L	50.00	ND	116	70-130	1.69	30	08/24/2022	
Ethylbenzene	54.5	1.0	ug/L	50.00	ND	109	70-130	1.07	30	08/24/2022	
Ethyltertiarybutylether	53.5	5.0	ug/L	50.00	ND	107	70-130	1.37	30	08/24/2022	
Hexachloroethane	47.7	5.0	ug/L	50.00	ND	95.3	70-130	0.260	30	08/24/2022	
Hexane	57.5	1.0	ug/L	50.00	ND	115	70-130	0.785	30	08/24/2022	
Isopropylbenzene	55.0	1.0	ug/L	50.00	ND	110	70-130	1.34	30	08/24/2022	
m & p - Xylene	111	2.0	ug/L	100.0	ND	111	70-130	1.78	30	08/24/2022	
Methylcyclopentane	77.7	1.0	ug/L	50.00	ND	155	70-130	1.10	30	08/24/2022	A04, A06, A11
Methylene chloride	62.1	5.0	ug/L	50.00	ND	124	70-130	0.128	30	08/24/2022	
Methyltertiarybutylether	51.9	1.0	ug/L	50.00	ND	104	70-130	1.49	30	08/24/2022	
Naphthalene	49.9	5.0	ug/L	50.00	ND	99.9	70-130	0.0573	30	08/24/2022	
n-Butylbenzene	56.4	1.0	ug/L	50.00	ND	113	70-130	1.67	30	08/24/2022	
n-Heptane	51.8	1.0	ug/L	50.00	ND	104	70-130	3.54	30	08/24/2022	
n-Propylbenzene	57.8	1.0	ug/L	50.00	ND	116	70-130	1.27	30	08/24/2022	
o-Xylene	54.9	1.0	ug/L	50.00	ND	110	70-130	1.03	30	08/24/2022	
sec-Butylbenzene	56.8	1.0	ug/L	50.00	ND	114	70-130	1.58	30	08/24/2022	
Styrene	53.5	1.0	ug/L	50.00	ND	107	70-130	1.23	30	08/24/2022	
tert-Butylbenzene	56.0	1.0	ug/L	50.00	ND	112	70-130	2.62	30	08/24/2022	
tertiary Butyl Alcohol	260	50	ug/L	250.0	ND	104	70-130	0.438	30	08/24/2022	



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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
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Batch B2H2205 - Method: 5030

Prepared: 08/24/2022

Matrix Spike Dup (B2H2205-MSD1)

Source: 2208124-12

tertiaryAmylmethylether	48.2	5.0	ug/L	50.00	ND	96.4	70-130	0.0925	30	08/24/2022	
Tetrachloroethylene	50.9	1.0	ug/L	50.00	ND	102	70-130	0.714	30	08/24/2022	
Tetrahydrofuran	56.5	5.0	ug/L	50.00	ND	113	70-130	1.24	30	08/24/2022	
Toluene	54.2	1.0	ug/L	50.00	ND	108	70-130	0.654	30	08/24/2022	
trans-1,2-Dichloroethylene	62.5	1.0	ug/L	50.00	ND	125	70-130	0.713	30	08/24/2022	
trans-1,3-Dichloropropylene	50.6	1.0	ug/L	50.00	ND	101	70-130	1.30	30	08/24/2022	
Trichloroethylene	53.7	1.0	ug/L	50.00	ND	107	70-130	1.28	30	08/24/2022	
Trichlorofluoromethane	67.9	1.0	ug/L	50.00	ND	136	70-130	1.96	30	08/24/2022	A04
Vinyl chloride	69.5	1.0	ug/L	50.00	ND	139	70-130	1.01	30	08/24/2022	A04
Surrogate: Bromofluorobenzene	50.2		ug/L	50.00		100	85-115			08/24/2022	
Surrogate: Dibromofluoromethane	49.1		ug/L	50.00		98.3	82.7-115			08/24/2022	
Surrogate: Toluene-d8	50.3		ug/L	50.00		101	85-115			08/24/2022	

Batch B2H2303 - Method: 5030

Prepared: 08/23/2022

Blank (B2H2303-BLK1)

1,1,1,2-Tetrachloroethane	ND	1.0	ug/L							08/23/2022	
1,1,1-Trichloroethane	ND	1.0	ug/L							08/23/2022	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L							08/23/2022	
1,1,2-Trichloroethane	ND	1.0	ug/L							08/23/2022	
1,1,2-Trichlorotrifluoroethane	ND	1.0	ug/L							08/23/2022	
1,1-Dichloroethane	ND	1.0	ug/L							08/23/2022	
1,1-Dichloroethylene	ND	1.0	ug/L							08/23/2022	
1,2,3-Trichlorobenzene	ND	5.0	ug/L							08/23/2022	
1,2,3-Trichloropropane	ND	1.0	ug/L							08/23/2022	
1,2,3-Trimethylbenzene	ND	1.0	ug/L							08/23/2022	
1,2,4-Trichlorobenzene	ND	5.0	ug/L							08/23/2022	
1,2,4-Trimethylbenzene	ND	1.0	ug/L							08/23/2022	
1,2-Dibromo-3-chloropropane	ND	5.0	ug/L							08/23/2022	
1,2-Dibromoethane	ND	1.0	ug/L							08/23/2022	
1,2-Dichlorobenzene	ND	1.0	ug/L							08/23/2022	
1,2-Dichloroethane	ND	1.0	ug/L							08/23/2022	
1,2-Dichloropropane	ND	1.0	ug/L							08/23/2022	
1,3,5-Trimethylbenzene	ND	1.0	ug/L							08/23/2022	
1,3-Dichlorobenzene	ND	1.0	ug/L							08/23/2022	
1,4-Dichlorobenzene	ND	1.0	ug/L							08/23/2022	
2,2,4-Trimethylpentane	ND	5.0	ug/L							08/23/2022	
2-Butanone (MEK)	ND	5.0	ug/L							08/23/2022	
2-Methylnaphthalene	ND	5.0	ug/L							08/23/2022	
2-Propanone (acetone)	ND	20	ug/L							08/23/2022	
4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L							08/23/2022	
Acrylonitrile	ND	5.0	ug/L							08/23/2022	
Benzene	ND	1.0	ug/L							08/23/2022	
Bromochloromethane	ND	1.0	ug/L							08/23/2022	
Bromodichloromethane	ND	1.0	ug/L							08/23/2022	
Bromoform	ND	1.0	ug/L							08/23/2022	
Bromomethane	ND	5.0	ug/L							08/23/2022	
Carbon disulfide	ND	1.0	ug/L							08/23/2022	
Carbon tetrachloride	ND	1.0	ug/L							08/23/2022	



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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
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Batch B2H2303 - Method: 5030

Prepared: 08/23/2022

Blank (B2H2303-BLK1)

Chlorobenzene	ND	1.0	ug/L							08/23/2022	
Chloroethane	ND	5.0	ug/L							08/23/2022	
Chloroform	ND	1.0	ug/L							08/23/2022	
Chloromethane	ND	5.0	ug/L							08/23/2022	
cis-1,2-Dichloroethylene	ND	1.0	ug/L							08/23/2022	
cis-1,3-Dichloropropylene	ND	1.0	ug/L							08/23/2022	
Cyclohexane	ND	5.0	ug/L							08/23/2022	
Dibromochloromethane	ND	1.0	ug/L							08/23/2022	
Dibromomethane	ND	1.0	ug/L							08/23/2022	
Dichlorodifluoromethane	ND	5.0	ug/L							08/23/2022	
Diethyl ether	ND	5.0	ug/L							08/23/2022	
Diisopropyl Ether	ND	5.0	ug/L							08/23/2022	
Ethylbenzene	ND	1.0	ug/L							08/23/2022	
Ethyltertiarybutylether	ND	5.0	ug/L							08/23/2022	
Hexachloroethane	ND	5.0	ug/L							08/23/2022	
Hexane	ND	1.0	ug/L							08/23/2022	
Isopropylbenzene	ND	1.0	ug/L							08/23/2022	
m & p - Xylene	ND	2.0	ug/L							08/23/2022	
Methylcyclopentane	ND	1.0	ug/L							08/23/2022	
Methylene chloride	ND	5.0	ug/L							08/23/2022	
Methyltertiarybutylether	ND	1.0	ug/L							08/23/2022	
Naphthalene	ND	5.0	ug/L							08/23/2022	
n-Butylbenzene	ND	1.0	ug/L							08/23/2022	
n-Heptane	ND	1.0	ug/L							08/23/2022	
n-Propylbenzene	ND	1.0	ug/L							08/23/2022	
o-Xylene	ND	1.0	ug/L							08/23/2022	
sec-Butylbenzene	ND	1.0	ug/L							08/23/2022	
Styrene	ND	1.0	ug/L							08/23/2022	
tert-Butylbenzene	ND	1.0	ug/L							08/23/2022	
tertiary Butyl Alcohol	ND	50	ug/L							08/23/2022	
tertiaryAmylmethylether	ND	5.0	ug/L							08/23/2022	
Tetrachloroethylene	ND	1.0	ug/L							08/23/2022	
Tetrahydrofuran	ND	5.0	ug/L							08/23/2022	
Toluene	ND	1.0	ug/L							08/23/2022	
trans-1,2-Dichloroethylene	ND	1.0	ug/L							08/23/2022	
trans-1,3-Dichloropropylene	ND	1.0	ug/L							08/23/2022	
Trichloroethylene	ND	1.0	ug/L							08/23/2022	
Trichlorofluoromethane	ND	1.0	ug/L							08/23/2022	
Vinyl chloride	ND	1.0	ug/L							08/23/2022	
Surrogate: Bromofluorobenzene	52.4		ug/L	50.00	ND	105	70-130			08/23/2022	
Surrogate: Dibromofluoromethane	50.1		ug/L	50.00	ND	100	70-130			08/23/2022	
Surrogate: Toluene-d8	49.7		ug/L	50.00	ND	99.4	70-130			08/23/2022	

Matrix Spike (B2H2303-MS1)

Source: 2208127-04

1,1,1,2-Tetrachloroethane	52.4	1.0	ug/L	50.00	ND	105	70-130			08/24/2022	
1,1,1-Trichloroethane	58.7	1.0	ug/L	50.00	ND	117	70-130			08/24/2022	
1,1,2,2-Tetrachloroethane	54.6	1.0	ug/L	50.00	ND	109	70-130			08/24/2022	
1,1,2-Trichloroethane	54.9	1.0	ug/L	50.00	ND	110	70-130			08/24/2022	
1,1,2-Trichlorotrifluoroethane	61.6	1.0	ug/L	50.00	ND	123	70-130			08/24/2022	
1,1-Dichloroethane	59.8	1.0	ug/L	50.00	ND	120	70-130			08/24/2022	



MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY ENVIRONMENTAL LABORATORY

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Lansing, MI 48909
TEL: (517) 335-9800
FAX: (517) 335-9600

Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
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Batch B2H2303 - Method: 5030

Prepared: 08/24/2022

Matrix Spike (B2H2303-MS1)

Source: 2208127-04

1,1-Dichloroethylene	63.6	1.0	ug/L	50.00	ND	127	70-130			08/24/2022	
1,2,3-Trichlorobenzene	49.6	5.0	ug/L	50.00	ND	99.2	70-130			08/24/2022	
1,2,3-Trichloropropane	56.0	1.0	ug/L	50.00	ND	112	70-130			08/24/2022	
1,2,3-Trimethylbenzene	58.4	1.0	ug/L	50.00	1.33	114	70-130			08/24/2022	
1,2,4-Trichlorobenzene	49.2	5.0	ug/L	50.00	ND	98.5	70-130			08/24/2022	
1,2,4-Trimethylbenzene	60.3	1.0	ug/L	50.00	2.94	115	70-130			08/24/2022	
1,2-Dibromo-3-chloropropane	50.1	5.0	ug/L	50.00	ND	100	70-130			08/24/2022	
1,2-Dibromoethane	53.5	1.0	ug/L	50.00	ND	107	70-130			08/24/2022	
1,2-Dichlorobenzene	52.9	1.0	ug/L	50.00	ND	106	70-130			08/24/2022	
1,2-Dichloroethane	56.8	1.0	ug/L	50.00	ND	114	70-130			08/24/2022	
1,2-Dichloropropane	56.7	1.0	ug/L	50.00	ND	113	70-130			08/24/2022	
1,3,5-Trimethylbenzene	58.3	1.0	ug/L	50.00	1.32	114	70-130			08/24/2022	
1,3-Dichlorobenzene	54.0	1.0	ug/L	50.00	ND	108	70-130			08/24/2022	
1,4-Dichlorobenzene	54.6	1.0	ug/L	50.00	ND	109	70-130			08/24/2022	
2,2,4-Trimethylpentane	60.1	5.0	ug/L	50.00	14.6	90.9	70-130			08/24/2022	
2-Butanone (MEK)	48.5	5.0	ug/L	50.00	ND	97.0	70-130			08/24/2022	
2-Methylnaphthalene	46.1	5.0	ug/L	50.00	ND	92.1	70-130			08/24/2022	
2-Propanone (acetone)	55.6	20	ug/L	50.00	ND	111	70-130			08/24/2022	
4-Methyl-2-pentanone (MIBK)	53.0	5.0	ug/L	50.00	ND	106	70-130			08/24/2022	
Acrylonitrile	57.7	5.0	ug/L	50.00	ND	115	70-130			08/24/2022	
Benzene	55.9	1.0	ug/L	50.00	ND	112	70-130			08/24/2022	
Bromochloromethane	51.5	1.0	ug/L	50.00	ND	103	70-130			08/24/2022	
Bromodichloromethane	51.1	1.0	ug/L	50.00	ND	102	70-130			08/24/2022	
Bromoform	44.6	1.0	ug/L	50.00	ND	89.3	70-130			08/24/2022	
Bromomethane	56.4	5.0	ug/L	50.00	ND	113	70-130			08/24/2022	
Carbon disulfide	57.8	1.0	ug/L	50.00	ND	116	70-130			08/24/2022	
Carbon tetrachloride	54.8	1.0	ug/L	50.00	ND	110	70-130			08/24/2022	
Chlorobenzene	54.1	1.0	ug/L	50.00	ND	108	70-130			08/24/2022	
Chloroethane	64.6	5.0	ug/L	50.00	ND	129	70-130			08/24/2022	
Chloroform	58.0	1.0	ug/L	50.00	ND	116	70-130			08/24/2022	
Chloromethane	65.8	5.0	ug/L	50.00	ND	132	70-130			08/24/2022	A04
cis-1,2-Dichloroethylene	60.2	1.0	ug/L	50.00	ND	120	70-130			08/24/2022	
cis-1,3-Dichloropropylene	52.2	1.0	ug/L	50.00	ND	104	70-130			08/24/2022	
Cyclohexane	58.8	5.0	ug/L	50.00	ND	118	70-130			08/24/2022	
Dibromochloromethane	51.1	1.0	ug/L	50.00	ND	102	70-130			08/24/2022	
Dibromomethane	54.2	1.0	ug/L	50.00	ND	108	70-130			08/24/2022	
Dichlorodifluoromethane	79.3	5.0	ug/L	50.00	ND	159	70-130			08/24/2022	A04, A06, A11
Diethyl ether	56.9	5.0	ug/L	50.00	ND	114	70-130			08/24/2022	
Diisopropyl Ether	58.2	5.0	ug/L	50.00	ND	116	70-130			08/24/2022	
Ethylbenzene	56.4	1.0	ug/L	50.00	1.25	110	70-130			08/24/2022	
Ethyltertiarybutylether	55.1	5.0	ug/L	50.00	ND	110	70-130			08/24/2022	
Hexachloroethane	49.4	5.0	ug/L	50.00	ND	98.8	70-130			08/24/2022	
Hexane	56.4	1.0	ug/L	50.00	ND	113	70-130			08/24/2022	
Isopropylbenzene	57.7	1.0	ug/L	50.00	ND	115	70-130			08/24/2022	
m & p - Xylene	112	2.0	ug/L	100.0	ND	112	70-130			08/24/2022	
Methylcyclopentane	80.4	1.0	ug/L	50.00	7.85	145	70-130			08/24/2022	A04, A06, A11
Methylene chloride	59.7	5.0	ug/L	50.00	ND	119	70-130			08/24/2022	
Methyltertiarybutylether	53.1	1.0	ug/L	50.00	ND	106	70-130			08/24/2022	



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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
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Batch B2H2303 - Method: 5030

Prepared: 08/24/2022

Matrix Spike (B2H2303-MS1)

Source: 2208127-04

Naphthalene	53.9	5.0	ug/L	50.00	ND	108	70-130			08/24/2022	
n-Butylbenzene	56.2	1.0	ug/L	50.00	1.10	110	70-130			08/24/2022	
n-Heptane	50.9	1.0	ug/L	50.00	ND	102	70-130			08/24/2022	
n-Propylbenzene	61.3	1.0	ug/L	50.00	2.57	118	70-130			08/24/2022	
o-Xylene	55.6	1.0	ug/L	50.00	ND	111	70-130			08/24/2022	
sec-Butylbenzene	57.8	1.0	ug/L	50.00	ND	116	70-130			08/24/2022	
Styrene	54.1	1.0	ug/L	50.00	ND	108	70-130			08/24/2022	
tert-Butylbenzene	58.2	1.0	ug/L	50.00	ND	116	70-130			08/24/2022	
tertiary Butyl Alcohol	254	50	ug/L	250.0	ND	101	70-130			08/24/2022	
tertiary Amyl methyl ether	50.5	5.0	ug/L	50.00	ND	101	70-130			08/24/2022	
Tetrachloroethylene	53.4	1.0	ug/L	50.00	ND	107	70-130			08/24/2022	
Tetrahydrofuran	55.0	5.0	ug/L	50.00	ND	110	70-130			08/24/2022	
Toluene	55.7	1.0	ug/L	50.00	ND	111	70-130			08/24/2022	
trans-1,2-Dichloroethylene	61.5	1.0	ug/L	50.00	ND	123	70-130			08/24/2022	
trans-1,3-Dichloropropylene	50.1	1.0	ug/L	50.00	ND	100	70-130			08/24/2022	
Trichloroethylene	53.9	1.0	ug/L	50.00	ND	108	70-130			08/24/2022	
Trichlorofluoromethane	67.4	1.0	ug/L	50.00	ND	135	70-130			08/24/2022	A04
Vinyl chloride	68.6	1.0	ug/L	50.00	ND	137	70-130			08/24/2022	A04
Surrogate: Bromofluorobenzene	55.4		ug/L	50.00		111	85-115			08/24/2022	
Surrogate: Dibromofluoromethane	51.5		ug/L	50.00		103	82.7-115			08/24/2022	
Surrogate: Toluene-d8	53.7		ug/L	50.00		107	85-115			08/24/2022	

Matrix Spike Dup (B2H2303-MSD1)

Source: 2208127-04

1,1,1,2-Tetrachloroethane	50.5	1.0	ug/L	50.00	ND	101	70-130	3.64	30	08/24/2022	
1,1,1-Trichloroethane	56.5	1.0	ug/L	50.00	ND	113	70-130	3.82	30	08/24/2022	
1,1,2,2-Tetrachloroethane	51.8	1.0	ug/L	50.00	ND	104	70-130	5.36	30	08/24/2022	
1,1,2-Trichloroethane	53.3	1.0	ug/L	50.00	ND	107	70-130	2.95	30	08/24/2022	
1,1,2-Trichlorotrifluoroethane	58.2	1.0	ug/L	50.00	ND	116	70-130	5.75	30	08/24/2022	
1,1-Dichloroethane	56.4	1.0	ug/L	50.00	ND	113	70-130	5.86	30	08/24/2022	
1,1-Dichloroethylene	59.4	1.0	ug/L	50.00	ND	119	70-130	6.74	30	08/24/2022	
1,2,3-Trichlorobenzene	47.9	5.0	ug/L	50.00	ND	95.8	70-130	3.45	30	08/24/2022	
1,2,3-Trichloropropane	53.1	1.0	ug/L	50.00	ND	106	70-130	5.30	30	08/24/2022	
1,2,3-Trimethylbenzene	54.8	1.0	ug/L	50.00	1.33	107	70-130	6.24	30	08/24/2022	
1,2,4-Trichlorobenzene	46.9	5.0	ug/L	50.00	ND	93.8	70-130	4.85	30	08/24/2022	
1,2,4-Trimethylbenzene	57.3	1.0	ug/L	50.00	2.94	109	70-130	5.15	30	08/24/2022	
1,2-Dibromo-3-chloropropane	45.7	5.0	ug/L	50.00	ND	91.5	70-130	9.08	30	08/24/2022	
1,2-Dibromoethane	50.5	1.0	ug/L	50.00	ND	101	70-130	5.80	30	08/24/2022	
1,2-Dichlorobenzene	50.8	1.0	ug/L	50.00	ND	102	70-130	4.20	30	08/24/2022	
1,2-Dichloroethane	55.6	1.0	ug/L	50.00	ND	111	70-130	2.11	30	08/24/2022	
1,2-Dichloropropane	54.3	1.0	ug/L	50.00	ND	109	70-130	4.43	30	08/24/2022	
1,3,5-Trimethylbenzene	54.8	1.0	ug/L	50.00	1.32	107	70-130	6.03	30	08/24/2022	
1,3-Dichlorobenzene	51.9	1.0	ug/L	50.00	ND	104	70-130	3.88	30	08/24/2022	
1,4-Dichlorobenzene	51.6	1.0	ug/L	50.00	ND	103	70-130	5.63	30	08/24/2022	
2,2,4-Trimethylpentane	60.5	5.0	ug/L	50.00	14.6	91.7	70-130	0.720	30	08/24/2022	
2-Butanone (MEK)	46.8	5.0	ug/L	50.00	ND	93.6	70-130	3.47	30	08/24/2022	
2-Methylnaphthalene	43.9	5.0	ug/L	50.00	ND	87.8	70-130	4.77	30	08/24/2022	
2-Propanone (acetone)	55.1	20	ug/L	50.00	ND	110	70-130	0.959	30	08/24/2022	
4-Methyl-2-pentanone (MIBK)	51.3	5.0	ug/L	50.00	ND	103	70-130	3.16	30	08/24/2022	
Acrylonitrile	53.2	5.0	ug/L	50.00	ND	106	70-130	8.22	30	08/24/2022	
Benzene	54.4	1.0	ug/L	50.00	ND	109	70-130	2.67	30	08/24/2022	



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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
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Batch B2H2303 - Method: 5030

Prepared: 08/24/2022

Matrix Spike Dup (B2H2303-MSD1)

Source: 2208127-04

Bromochloromethane	49.0	1.0	ug/L	50.00	ND	98.1	70-130	4.93	30	08/24/2022	
Bromodichloromethane	51.5	1.0	ug/L	50.00	ND	103	70-130	0.925	30	08/24/2022	
Bromoform	44.1	1.0	ug/L	50.00	ND	88.1	70-130	1.29	30	08/24/2022	
Bromomethane	54.0	5.0	ug/L	50.00	ND	108	70-130	4.29	30	08/24/2022	
Carbon disulfide	56.1	1.0	ug/L	50.00	ND	112	70-130	2.96	30	08/24/2022	
Carbon tetrachloride	52.2	1.0	ug/L	50.00	ND	104	70-130	4.85	30	08/24/2022	
Chlorobenzene	51.8	1.0	ug/L	50.00	ND	104	70-130	4.47	30	08/24/2022	
Chloroethane	63.1	5.0	ug/L	50.00	ND	126	70-130	2.29	30	08/24/2022	
Chloroform	54.6	1.0	ug/L	50.00	ND	109	70-130	6.02	30	08/24/2022	
Chloromethane	62.8	5.0	ug/L	50.00	ND	126	70-130	4.67	30	08/24/2022	
cis-1,2-Dichloroethylene	56.4	1.0	ug/L	50.00	ND	113	70-130	6.41	30	08/24/2022	
cis-1,3-Dichloropropylene	50.5	1.0	ug/L	50.00	ND	101	70-130	3.24	30	08/24/2022	
Cyclohexane	56.9	5.0	ug/L	50.00	ND	114	70-130	3.36	30	08/24/2022	
Dibromochloromethane	48.7	1.0	ug/L	50.00	ND	97.4	70-130	4.84	30	08/24/2022	
Dibromomethane	52.9	1.0	ug/L	50.00	ND	106	70-130	2.43	30	08/24/2022	
Dichlorodifluoromethane	75.5	5.0	ug/L	50.00	ND	151	70-130	4.97	30	08/24/2022	A04, A06, A11
Diethyl ether	53.7	5.0	ug/L	50.00	ND	107	70-130	5.87	30	08/24/2022	
Diisopropyl Ether	54.9	5.0	ug/L	50.00	ND	110	70-130	5.85	30	08/24/2022	
Ethylbenzene	54.1	1.0	ug/L	50.00	1.25	106	70-130	4.22	30	08/24/2022	
Ethyltertiarybutylether	52.5	5.0	ug/L	50.00	ND	105	70-130	4.75	30	08/24/2022	
Hexachloroethane	47.3	5.0	ug/L	50.00	ND	94.5	70-130	4.40	30	08/24/2022	
Hexane	54.0	1.0	ug/L	50.00	ND	108	70-130	4.34	30	08/24/2022	
Isopropylbenzene	54.5	1.0	ug/L	50.00	ND	109	70-130	5.72	30	08/24/2022	
m & p - Xylene	107	2.0	ug/L	100.0	ND	107	70-130	4.90	30	08/24/2022	
Methylcyclopentane	79.3	1.0	ug/L	50.00	7.85	143	70-130	1.39	30	08/24/2022	A04, A06, A11
Methylene chloride	56.7	5.0	ug/L	50.00	ND	113	70-130	5.14	30	08/24/2022	
Methyltertiarybutylether	50.3	1.0	ug/L	50.00	ND	101	70-130	5.28	30	08/24/2022	
Naphthalene	51.3	5.0	ug/L	50.00	ND	103	70-130	5.03	30	08/24/2022	
n-Butylbenzene	53.8	1.0	ug/L	50.00	1.10	105	70-130	4.37	30	08/24/2022	
n-Heptane	50.1	1.0	ug/L	50.00	ND	100	70-130	1.60	30	08/24/2022	
n-Propylbenzene	58.2	1.0	ug/L	50.00	2.57	111	70-130	5.15	30	08/24/2022	
o-Xylene	52.6	1.0	ug/L	50.00	ND	105	70-130	5.54	30	08/24/2022	
sec-Butylbenzene	55.1	1.0	ug/L	50.00	ND	110	70-130	4.71	30	08/24/2022	
Styrene	51.5	1.0	ug/L	50.00	ND	103	70-130	4.87	30	08/24/2022	
tert-Butylbenzene	54.9	1.0	ug/L	50.00	ND	110	70-130	5.91	30	08/24/2022	
tertiary Butyl Alcohol	246	50	ug/L	250.0	ND	98.3	70-130	3.14	30	08/24/2022	
tertiaryAmylmethylether	49.6	5.0	ug/L	50.00	ND	99.1	70-130	1.90	30	08/24/2022	
Tetrachloroethylene	51.3	1.0	ug/L	50.00	ND	103	70-130	3.95	30	08/24/2022	
Tetrahydrofuran	50.0	5.0	ug/L	50.00	ND	100	70-130	9.34	30	08/24/2022	
Toluene	53.3	1.0	ug/L	50.00	ND	107	70-130	4.40	30	08/24/2022	
trans-1,2-Dichloroethylene	58.2	1.0	ug/L	50.00	ND	116	70-130	5.51	30	08/24/2022	
trans-1,3-Dichloropropylene	49.7	1.0	ug/L	50.00	ND	99.4	70-130	0.786	30	08/24/2022	
Trichloroethylene	52.4	1.0	ug/L	50.00	ND	105	70-130	2.71	30	08/24/2022	
Trichlorofluoromethane	63.5	1.0	ug/L	50.00	ND	127	70-130	5.90	30	08/24/2022	
Vinyl chloride	65.2	1.0	ug/L	50.00	ND	130	70-130	5.08	30	08/24/2022	A04
Surrogate: Bromofluorobenzene	50.8		ug/L	50.00		102	85-115			08/24/2022	
Surrogate: Dibromofluoromethane	49.1		ug/L	50.00		98.1	82.7-115			08/24/2022	
Surrogate: Toluene-d8	49.7		ug/L	50.00		99.3	85-115			08/24/2022	



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FAX: (517) 335-9600

Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
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Organics-Semivolatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
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Batch B2H2212 - Method: 3510 Water SVOC

Prepared: 08/22/2022

Blank (B2H2212-BLK1)

2-Methylnaphthalene	ND	5.0	ug/L							08/22/2022	
Acenaphthene	ND	1.0	ug/L							08/22/2022	
Acenaphthylene	ND	1.0	ug/L							08/22/2022	
Anthracene	ND	1.0	ug/L							08/22/2022	
Benz[a]anthracene	ND	1.0	ug/L							08/22/2022	
Benzo[a]pyrene	ND	1.0	ug/L							08/22/2022	
Benzo[b]fluoranthene	ND	1.0	ug/L							08/22/2022	
Benzo[g,h,i]perylene	ND	1.0	ug/L							08/22/2022	
Benzo[k]fluoranthene	ND	1.0	ug/L							08/22/2022	
Chrysene	ND	1.0	ug/L							08/22/2022	
Dibenz[a,h]anthracene	ND	2.0	ug/L							08/22/2022	
Fluoranthene	ND	1.0	ug/L							08/22/2022	
Fluorene	ND	1.0	ug/L							08/22/2022	
Indeno(1,2,3-c,d)pyrene	ND	2.0	ug/L							08/22/2022	
Naphthalene	ND	1.0	ug/L							08/22/2022	
Phenanthrene	ND	1.0	ug/L							08/22/2022	
Pyrene	ND	1.0	ug/L							08/22/2022	
Surrogate: 2-Fluorobiphenyl	15.0		ug/L	25.00		59.9	20-101			08/22/2022	
Surrogate: Nitrobenzene-d5	13.4		ug/L	25.00		53.6	13-100			08/22/2022	
Surrogate: p-Terphenyl-d14	29.7		ug/L	25.00		119	18-150			08/22/2022	

LCS (B2H2212-BS1)

2-Methylnaphthalene	26.4	5.0	ug/L	50.00		52.8	25.3-79.1			08/22/2022	
Acenaphthene	31.3	1.0	ug/L	50.00		62.5	35.2-90.9			08/22/2022	
Acenaphthylene	33.2	1.0	ug/L	50.00		66.3	38.7-99.1			08/22/2022	
Anthracene	41.6	1.0	ug/L	50.00		83.3	53.9-106.8			08/22/2022	
Benz[a]anthracene	43.9	1.0	ug/L	50.00		87.9	52.5-113.7			08/22/2022	
Benzo[a]pyrene	42.8	1.0	ug/L	50.00		85.5	43.7-118			08/22/2022	
Benzo[b]fluoranthene	44.8	1.0	ug/L	50.00		89.7	44.1-118.6			08/22/2022	
Benzo[g,h,i]perylene	40.4	1.0	ug/L	50.00		80.9	25.8-127			08/22/2022	
Benzo[k]fluoranthene	44.3	1.0	ug/L	50.00		88.7	41.9-117.7			08/22/2022	
Chrysene	42.9	1.0	ug/L	50.00		85.9	53.1-114.9			08/22/2022	
Dibenz[a,h]anthracene	41.0	2.0	ug/L	50.00		82.1	23.4-134.7			08/22/2022	
Fluoranthene	44.8	1.0	ug/L	50.00		89.6	55-112.1			08/22/2022	
Fluorene	37.6	1.0	ug/L	50.00		75.2	42-98			08/22/2022	
Indeno(1,2,3-c,d)pyrene	40.0	2.0	ug/L	50.00		80.0	29.1-133.2			08/22/2022	
Naphthalene	22.5	1.0	ug/L	50.00		45.1	22-76.8			08/22/2022	
Phenanthrene	41.0	1.0	ug/L	50.00		82.0	54.5-102.4			08/22/2022	
Pyrene	44.0	1.0	ug/L	50.00		88.0	54.2-110.5			08/22/2022	
Surrogate: 2-Fluorobiphenyl	18.9		ug/L	25.00		75.5	20-101			08/22/2022	
Surrogate: Nitrobenzene-d5	15.8		ug/L	25.00		63.3	13-100			08/22/2022	
Surrogate: p-Terphenyl-d14	28.8		ug/L	25.00		115	18-150			08/22/2022	

LCS Dup (B2H2212-BSD1)

2-Methylnaphthalene	26.8	5.0	ug/L	50.00		53.6	25.3-79.1	1.50	21.8	08/22/2022	
Acenaphthene	30.6	1.0	ug/L	50.00		61.3	35.2-90.9	2.01	19.1	08/22/2022	
Acenaphthylene	32.5	1.0	ug/L	50.00		65.0	38.7-99.1	2.06	18	08/22/2022	
Anthracene	40.4	1.0	ug/L	50.00		80.7	53.9-106.8	3.13	15	08/22/2022	
Benz[a]anthracene	43.1	1.0	ug/L	50.00		86.2	52.5-113.7	1.92	16	08/22/2022	
Benzo[a]pyrene	41.4	1.0	ug/L	50.00		82.8	43.7-118	3.23	22.8	08/22/2022	



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Organics-Semivolatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
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Batch B2H2212 - Method: 3510 Water SVOC

Prepared: 08/22/2022

LCS Dup (B2H2212-BSD1)

Benzo[b]fluoranthene	43.3	1.0	ug/L	50.00		86.7	44.1-118.6	3.38	23.4	08/22/2022	
Benzo[g,h,i]perylene	38.5	1.0	ug/L	50.00		76.9	25.8-127	4.98	32.2	08/22/2022	
Benzo[k]fluoranthene	43.0	1.0	ug/L	50.00		85.9	41.9-117.7	3.17	22.8	08/22/2022	
Chrysene	42.0	1.0	ug/L	50.00		84.1	53.1-114.9	2.11	16.3	08/22/2022	
Dibenz[a,h]anthracene	39.7	2.0	ug/L	50.00		79.5	23.4-134.7	3.21	29.8	08/22/2022	
Fluoranthene	43.6	1.0	ug/L	50.00		87.2	55-112.1	2.82	16.3	08/22/2022	
Fluorene	36.5	1.0	ug/L	50.00		72.9	42-98	3.09	16.4	08/22/2022	
Indeno(1,2,3-c,d)pyrene	38.4	2.0	ug/L	50.00		76.9	29.1-133.2	3.92	29.3	08/22/2022	
Naphthalene	23.8	1.0	ug/L	50.00		47.6	22-76.8	5.44	24.2	08/22/2022	
Phenanthrene	39.4	1.0	ug/L	50.00		78.9	54.5-102.4	3.84	15	08/22/2022	
Pyrene	42.9	1.0	ug/L	50.00		85.9	54.2-110.5	2.48	18.6	08/22/2022	
Surrogate: 2-Fluorobiphenyl	17.4		ug/L	25.00		69.8	20-101			08/22/2022	
Surrogate: Nitrobenzene-d5	15.9		ug/L	25.00		63.5	13-100			08/22/2022	
Surrogate: p-Terphenyl-d14	28.0		ug/L	25.00		112	18-150			08/22/2022	

Matrix Spike (B2H2212-MS1)

Source: 2208137-01

2-Methylnaphthalene	48.8	10	ug/L	100.0	ND	48.8	13.4-95.1			08/22/2022	
Acenaphthene	55.0	2.0	ug/L	100.0	ND	55.0	35.2-95.8			08/22/2022	
Acenaphthylene	58.5	2.0	ug/L	100.0	ND	58.5	38.3-103.1			08/22/2022	
Anthracene	73.8	2.0	ug/L	100.0	ND	73.8	54.2-105.4			08/22/2022	
Benz[a]anthracene	72.7	2.0	ug/L	100.0	ND	72.7	39.8-119.3			08/22/2022	
Benzo[a]pyrene	66.7	2.0	ug/L	100.0	ND	66.7	30-125.5			08/22/2022	
Benzo[b]fluoranthene	69.7	2.0	ug/L	100.0	ND	69.7	29.9-124.8			08/22/2022	
Benzo[g,h,i]perylene	63.6	2.0	ug/L	100.0	ND	63.6	10-133.9			08/22/2022	
Benzo[k]fluoranthene	68.6	2.0	ug/L	100.0	ND	68.6	28.6-120.8			08/22/2022	
Chrysene	71.2	2.0	ug/L	100.0	ND	71.2	39.3-119.7			08/22/2022	
Dibenz[a,h]anthracene	63.2	4.0	ug/L	100.0	ND	63.2	10-140.4			08/22/2022	
Fluoranthene	78.7	2.0	ug/L	100.0	ND	78.7	53.7-110.6			08/22/2022	
Fluorene	65.9	2.0	ug/L	100.0	ND	65.9	43.6-100.7			08/22/2022	
Indeno(1,2,3-c,d)pyrene	62.0	4.0	ug/L	100.0	ND	62.0	12.4-140.5			08/22/2022	
Naphthalene	44.0	2.0	ug/L	100.0	ND	44.0	10-104.5			08/22/2022	
Phenanthrene	72.4	2.0	ug/L	100.0	ND	72.4	55.4-103.2			08/22/2022	
Pyrene	78.1	2.0	ug/L	100.0	ND	78.1	49.1-113.8			08/22/2022	
Surrogate: 2-Fluorobiphenyl	30.6		ug/L	50.00		61.2	20-101			08/22/2022	
Surrogate: Nitrobenzene-d5	27.4		ug/L	50.00		54.7	13-100			08/22/2022	
Surrogate: p-Terphenyl-d14	46.4		ug/L	50.00		92.9	18-150			08/22/2022	

Matrix Spike Dup (B2H2212-MSD1)

Source: 2208137-01

2-Methylnaphthalene	54.9	10	ug/L	100.0	ND	54.9	13.4-95.1	11.7	54.2	08/22/2022	
Acenaphthene	60.5	2.0	ug/L	100.0	ND	60.5	35.2-95.8	9.54	34.5	08/22/2022	
Acenaphthylene	65.2	2.0	ug/L	100.0	ND	65.2	38.3-103.1	10.8	35	08/22/2022	
Anthracene	76.3	2.0	ug/L	100.0	ND	76.3	54.2-105.4	3.41	15	08/22/2022	
Benz[a]anthracene	69.1	2.0	ug/L	100.0	ND	69.1	39.8-119.3	5.08	21.1	08/22/2022	
Benzo[a]pyrene	63.3	2.0	ug/L	100.0	ND	63.3	30-125.5	5.26	27.1	08/22/2022	
Benzo[b]fluoranthene	66.7	2.0	ug/L	100.0	ND	66.7	29.9-124.8	4.32	27.2	08/22/2022	
Benzo[g,h,i]perylene	59.7	2.0	ug/L	100.0	ND	59.7	10-133.9	6.32	35.9	08/22/2022	
Benzo[k]fluoranthene	65.2	2.0	ug/L	100.0	ND	65.2	28.6-120.8	5.08	26.7	08/22/2022	
Chrysene	67.5	2.0	ug/L	100.0	ND	67.5	39.3-119.7	5.36	22.2	08/22/2022	
Dibenz[a,h]anthracene	58.9	4.0	ug/L	100.0	ND	58.9	10-140.4	6.96	39.2	08/22/2022	
Fluoranthene	79.3	2.0	ug/L	100.0	ND	79.3	53.7-110.6	0.831	18.2	08/22/2022	



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Organics-Semivolatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
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Batch B2H2212 - Method: 3510 Water SVOC

Prepared: 08/22/2022

Matrix Spike Dup (B2H2212-MSD1)

Source: 2208137-01

Fluorene	71.7	2.0	ug/L	100.0	ND	71.7	43.6-100.7	8.44	24.7	08/22/2022	
Indeno(1,2,3-c,d)pyrene	58.0	4.0	ug/L	100.0	ND	58.0	12.4-140.5	6.60	33.5	08/22/2022	
Naphthalene	49.5	2.0	ug/L	100.0	ND	49.5	10-104.5	11.6	71.1	08/22/2022	
Phenanthrene	75.5	2.0	ug/L	100.0	ND	75.5	55.4-103.2	4.28	15	08/22/2022	
Pyrene	78.1	2.0	ug/L	100.0	ND	78.1	49.1-113.8	0.0558	18.9	08/22/2022	
Surrogate: 2-Fluorobiphenyl	34.6		ug/L	50.00		69.3	20-101			08/22/2022	
Surrogate: Nitrobenzene-d5	30.8		ug/L	50.00		61.6	13-100			08/22/2022	
Surrogate: p-Terphenyl-d14	44.0		ug/L	50.00		88.1	18-150			08/22/2022	

Lab Work Order Number 2208127	Project Name EGLE / City of Imlay City / Public Works	Matrix WATER
Location ID 00014763	Program RRD-BARS	CC Email 1 mgibbons@ectinc.com
Dept-Division-District RRD-BARS	Activity	CC Email 2 jkennedy@ectinc.com
State Project Manager Janet Michaluk	Funding Source	CC Email 3
State Project Manager Email michalukj@michigan.gov	Location Code 7D35	Overflow Lab Choice 1
State Project Manager Phone 517-643-0314	SUD Location Code	Overflow Lab Choice 2
		Project TAT Days standard
		Project Due Date
		Sample Collector Joe Kniss
		Sample Collector Phone 231-632-0224
		Contract Firm ECT
		Contract Firm Primary Contact Mike Hebert
		Primary Contact Phone 517-272-9200

ROI 94
Accept Analysis hold time codes

Lab Use Only	Field Sample Identification	Collection Date	Collection Time	Bottle Count	Comments
01	TMW-3	8/16/22	11:00	3	
02	TMW-4	8/16/22	12:15	3	
03	TMW-5			0	
04	TMW-6	8/16/22	13:30	4	
05	MW-1	8/16/22	9:50	3	
06	MW-5			0	
07	MW-12			0	
08	TMW-6 DUP	8/16/22	13:30	4	
09	XXXXXX MW-1 MSD	8/16/22	9:50	3	
10	XXXXXX MW-1 MSD	8/16/22	9:50	3	

ORGANIC CHEMISTRY	MAD - DISSOLVED METALS	MA - TOTAL METALS	GENERAL CHEMISTRY
VOA - Volatile Organic Acidic Volatiles - Full List (1,2,3,4,5,6,7,8,9,10) BTEX/MTBE/TMB only 1,2,3,4,5,6,7,8,9,10 Chlorinated only 1,2,3,4,5,6,7,8,9,10 GRO 1,2,3,4,5,6,7,8,9,10 1,4 Dioxane 1,2,3,4,5,6,7,8,9,10	Diss - Silver - Ag 1,2,3,4,5,6,7,8,9,10 Diss - Aluminum - Al 1,2,3,4,5,6,7,8,9,10 Diss - Arsenic - As 1,2,3,4,5,6,7,8,9,10 Diss - Boron - B 1,2,3,4,5,6,7,8,9,10 Diss - Barium - Ba 1,2,3,4,5,6,7,8,9,10 Diss - Beryllium - Be 1,2,3,4,5,6,7,8,9,10 Diss - Cadmium - Cd 1,2,3,4,5,6,7,8,9,10 Diss - Cobalt - Co 1,2,3,4,5,6,7,8,9,10 Diss - Chromium - Cr 1,2,3,4,5,6,7,8,9,10 Diss - Copper - Cu 1,2,3,4,5,6,7,8,9,10 Diss - Iron - Fe 1,2,3,4,5,6,7,8,9,10 Diss - Mercury - Hg 1,2,3,4,5,6,7,8,9,10 Diss - Lithium - Li 1,2,3,4,5,6,7,8,9,10 Diss - Manganese - Mn 1,2,3,4,5,6,7,8,9,10 Diss - Molybdenum - Mo 1,2,3,4,5,6,7,8,9,10 Diss - Nickel - Ni 1,2,3,4,5,6,7,8,9,10 Diss - Lead - Pb 1,2,3,4,5,6,7,8,9,10 Diss - Antimony - Sb 1,2,3,4,5,6,7,8,9,10 Diss - Selenium - Se 1,2,3,4,5,6,7,8,9,10 Diss - Strontium - Sr 1,2,3,4,5,6,7,8,9,10 Diss - Titanium - Ti 1,2,3,4,5,6,7,8,9,10 Diss - Thallium - Tl 1,2,3,4,5,6,7,8,9,10 Diss - Uranium - U 1,2,3,4,5,6,7,8,9,10 Diss - Vanadium - V 1,2,3,4,5,6,7,8,9,10 Diss - Zinc - Zn 1,2,3,4,5,6,7,8,9,10 Diss - Calcium - Ca 1,2,3,4,5,6,7,8,9,10 Diss - Potassium - K 1,2,3,4,5,6,7,8,9,10 Diss - Magnesium - Mg 1,2,3,4,5,6,7,8,9,10 Diss - Sodium - Na 1,2,3,4,5,6,7,8,9,10 Diss - Hardness - Ca, Mg 1,2,3,4,5,6,7,8,9,10 MD - Metals Dissolved Lab Filtration 1,2,3,4,5,6,7,8,9,10	Silver - Ag 1,2,3,4,5,6,7,8,9,10 Aluminum - Al 1,2,3,4,5,6,7,8,9,10 Arsenic - As 1,2,3,4,5,6,7,8,9,10 Boron - B 1,2,3,4,5,6,7,8,9,10 Barium - Ba 1,2,3,4,5,6,7,8,9,10 Beryllium - Be 1,2,3,4,5,6,7,8,9,10 Cadmium - Cd 1,2,3,4,5,6,7,8,9,10 Cobalt - Co 1,2,3,4,5,6,7,8,9,10 Chromium - Cr 1,2,3,4,5,6,7,8,9,10 Copper - Cu 1,2,3,4,5,6,7,8,9,10 Iron - Fe 1,2,3,4,5,6,7,8,9,10 Mercury - Hg 1,2,3,4,5,6,7,8,9,10 Lithium - Li 1,2,3,4,5,6,7,8,9,10 Manganese - Mn 1,2,3,4,5,6,7,8,9,10 Molybdenum - Mo 1,2,3,4,5,6,7,8,9,10 Nickel - Ni 1,2,3,4,5,6,7,8,9,10 Lead - Pb 1,2,3,4,5,6,7,8,9,10 Antimony - Sb 1,2,3,4,5,6,7,8,9,10 Selenium - Se 1,2,3,4,5,6,7,8,9,10 Strontium - Sr 1,2,3,4,5,6,7,8,9,10 Titanium - Ti 1,2,3,4,5,6,7,8,9,10 Thallium - Tl 1,2,3,4,5,6,7,8,9,10 Uranium - U 1,2,3,4,5,6,7,8,9,10 Vanadium - V 1,2,3,4,5,6,7,8,9,10 Zinc - Zn 1,2,3,4,5,6,7,8,9,10 Calcium - Ca 1,2,3,4,5,6,7,8,9,10 Potassium - K 1,2,3,4,5,6,7,8,9,10 Magnesium - Mg 1,2,3,4,5,6,7,8,9,10 Sodium - Na 1,2,3,4,5,6,7,8,9,10 Hardness - Ca, Mg 1,2,3,4,5,6,7,8,9,10 LHG - Low Level Mercury Mercury Low Level - Hg 1,2,3,4,5,6,7,8,9,10	GB Total Cyanide - CN 1,2,3,4,5,6,7,8,9,10 GCN Available Cyanide - CN 1,2,3,4,5,6,7,8,9,10 (Amenable / Weak Acid Dissociable) CA Chlorophyll 1,2,3,4,5,6,7,8,9,10 GN Ortho Phosphate - OP 1,2,3,4,5,6,7,8,9,10 GN Diss Ortho Phosphate - *FF1 1,2,3,4,5,6,7,8,9,10 GN Nitrite - NO ₂ 1,2,3,4,5,6,7,8,9,10 GN Nitrate - NO ₃ (Calc.) 1,2,3,4,5,6,7,8,9,10 GN Suspended Solids - SS 1,2,3,4,5,6,7,8,9,10 GN Dissolved Solids - TDS 1,2,3,4,5,6,7,8,9,10 MN Diss Solids - TDS (Calc.) 1,2,3,4,5,6,7,8,9,10 GN Turbidity 1,2,3,4,5,6,7,8,9,10 MN Total Alkalinity 1,2,3,4,5,6,7,8,9,10 MN Bicarb/Carb Alkalinity 1,2,3,4,5,6,7,8,9,10 (Includes Total Alkalinity) MN Chloride - Cl 1,2,3,4,5,6,7,8,9,10 MN Fluoride - F 1,2,3,4,5,6,7,8,9,10 MN Sulfate - SO ₄ 1,2,3,4,5,6,7,8,9,10 MN Diss Chromium 6 - *FF 1,2,3,4,5,6,7,8,9,10 MN Conductivity 1,2,3,4,5,6,7,8,9,10 MN pH 1,2,3,4,5,6,7,8,9,10 GA Chem Oxyg Dem - COD 1,2,3,4,5,6,7,8,9,10 GA Diss Org Carbon - DOC *FF1 1,2,3,4,5,6,7,8,9,10 GN Diss Org Carbon - DOC (LF 1 1,2,3,4,5,6,7,8,9,10 (Lab - Filtered & Preserved) GA Total Org Carbon - TOC 1,2,3,4,5,6,7,8,9,10 GA Ammonia - NH ₃ 1,2,3,4,5,6,7,8,9,10 GA Nitrate+Nitrite - NO ₃ +NO ₂ 1,2,3,4,5,6,7,8,9,10 GA Kjeldahl Nitrogen - KN 1,2,3,4,5,6,7,8,9,10 GA Total Phosphorus - TP 1,2,3,4,5,6,7,8,9,10

Chain of Custody	Relinquished by	Received By	Date / Time
	Print Name & Org. <i>Joe Kniss ECT</i>	<i>ECT Cold Storage</i>	<i>8/16/22 16:00</i>
	Signature: <i>[Signature]</i>		
	Print Name & Org. <i>ECT Cold Storage</i>	<i>Joe Kniss ECT</i>	<i>8/18/22 14:30</i>
Signature: <i>[Signature]</i>			
Print Name & Org. <i>Joe Kniss ECT</i>	<i>Melissa Smith</i>	<i>8/18/22 15:20</i>	
Signature: <i>[Signature]</i>			

Lab Work Order Number

Project Name

Matrix

2208127

EGLE / City of Imlay City / Public Works

WATER

Form with fields for Location ID (00014763), Program (RRD-BARS), CC Email 1 (mgibbons@ectinc.com), Project TAT Days (standard), Sample Collector (John Kennedy / Joe Kniss), State Project Manager (Janet Michaluk), Location Code (7D35), and Primary Contact Phone (517-272-9200).

Table with columns: Lab Use Only, Field Sample Identification, Collection Date, Collection Time, Bottle Count, Comments. Row 1: 08 TRIP BLANK, 8/10/22, trip blank.

Table with columns: ORGANIC CHEMISTRY, MAD - DISSOLVED METALS, MA - TOTAL METALS, GENERAL CHEMISTRY. Lists various chemical tests and their availability (1-10).

Chain of Custody table with columns: Relinquished by, Received By, Date / Time. Includes signatures of Jocely Kniss and ECT Cold Storage, and dates 8/16/22 and 8/18/22.

26 August 2022

Work Order: 2208131

Price: \$720.00

Janet Michaluk
EGLE-RRD-LANSING
525 W. Allegan Street
Lansing, MI 48909

RE: EGLE/CITY OF IMLAY CITY/PUBLIC WORKS

This is the official environmental laboratory report for testing conducted by the Michigan Department of Environment, Great Lakes, and Energy. Analyses performed by the laboratory were conducted using methods published by the U.S. Environmental Protection Agency, Standard Methods for the Examination of Water and Wastewater, ASTM, or other published or approved reference methods.

Kirby Shane
Laboratory Director

EGLE-RRD-LANSING 525 W. Allegan Street Lansing MI, 48909	Project: EGLE/CITY OF IMLAY CITY/PUBLIC WORKS Site Code: 00014763 Project Manager: Janet Michaluk	Reported: 08/26/2022
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Analytical Report for Samples

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Qualifier
VP-1	2208131-01	Air	08/16/2022	08/18/2022	
VP-2	2208131-02	Air	08/16/2022	08/18/2022	
VP-3	2208131-03	Air	08/16/2022	08/18/2022	
VP-4	2208131-04	Air	08/16/2022	08/18/2022	

Notes and Definitions

- Y11 Unidentified peaks present in sample.
- X1 Method TO-15 is used for the analysis of volatile organic compounds in air. Naphthalene and 2-Methylnaphthalene are semi volatile compounds and results should be considered estimated.
- T Reported value is less than the reporting limit (RL). Result is estimated.
- ND Indicates compound analyzed for but not detected at or above the reporting limit (RL).
- RL Reporting Limit
- NA Not Applicable

*****Case Narrative*****

Samples were received **8/18/2022 3:10:00PM** for client **EGLE-RRD-LANSING** as a part of project **EGLE/CITY OF IMLAY CITY/PUBLIC WORKS**.

Samples were logged and designated as Work Order # **2208131** on **8/19/2022 7:45:00AM**.

This Report was created **8/26/2022 11:08:04AM**.

Additional Notes/Narrative (if applicable):

Client ID: VP-1
Lab ID: 2208131-01

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Analyst	Qualifier
Organics-Volatiles										See note Y11
71-55-6	1,1,1-Trichloroethane	ND	8000	ug/m3	5000	08/22/22	B2H2306	TO-15	CA	
79-34-5	1,1,2,2-Tetrachloroethane	ND	10000	ug/m3	5000	08/22/22	B2H2306	TO-15	CA	
79-00-5	1,1,2-Trichloroethane	ND	8000	ug/m3	5000	08/22/22	B2H2306	TO-15	CA	
75-34-3	1,1-Dichloroethane	ND	6000	ug/m3	5000	08/22/22	B2H2306	TO-15	CA	
75-35-4	1,1-Dichloroethylene	ND	5800	ug/m3	5000	08/22/22	B2H2306	TO-15	CA	
87-61-6	1,2,3-Trichlorobenzene	ND	36000	ug/m3	5000	08/22/22	B2H2306	TO-15	CA	
96-18-4	1,2,3-Trichloropropane	ND	8900	ug/m3	5000	08/22/22	B2H2306	TO-15	CA	
526-73-8	1,2,3-Trimethylbenzene	ND	7200	ug/m3	5000	08/22/22	B2H2306	TO-15	CA	
120-82-1	1,2,4-Trichlorobenzene	ND	18000	ug/m3	5000	08/22/22	B2H2306	TO-15	CA	
95-63-6	1,2,4-Trimethylbenzene	ND	7200	ug/m3	5000	08/22/22	B2H2306	TO-15	CA	
106-93-4	1,2-Dibromoethane	ND	11000	ug/m3	5000	08/22/22	B2H2306	TO-15	CA	
95-50-1	1,2-Dichlorobenzene	ND	8800	ug/m3	5000	08/22/22	B2H2306	TO-15	CA	
107-06-2	1,2-Dichloroethane	ND	6000	ug/m3	5000	08/22/22	B2H2306	TO-15	CA	
78-87-5	1,2-Dichloropropane	ND	6800	ug/m3	5000	08/22/22	B2H2306	TO-15	CA	
108-67-8	1,3,5-Trimethylbenzene	ND	7200	ug/m3	5000	08/22/22	B2H2306	TO-15	CA	
106-99-0	1,3-Butadiene	ND	3300	ug/m3	5000	08/22/22	B2H2306	TO-15	CA	
541-73-1	1,3-Dichlorobenzene	ND	8800	ug/m3	5000	08/22/22	B2H2306	TO-15	CA	
106-46-7	1,4-Dichlorobenzene	ND	8800	ug/m3	5000	08/22/22	B2H2306	TO-15	CA	
540-84-1	2,2,4-Trimethylpentane	890000	6900	ug/m3	5000	08/22/22	B2H2306	TO-15	CA	
78-93-3	2-Butanone (MEK)	ND	72000	ug/m3	5000	08/22/22	B2H2306	TO-15	CA	
91-57-6	2-Methylnaphthalene	ND	140000	ug/m3	5000	08/22/22	B2H2306	TO-15	CA	X1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	20000	ug/m3	5000	08/22/22	B2H2306	TO-15	CA	
75-05-8	Acetonitrile	ND	8200	ug/m3	5000	08/22/22	B2H2306	TO-15	CA	
107-13-1	Acrylonitrile	ND	5300	ug/m3	5000	08/22/22	B2H2306	TO-15	CA	
71-43-2	Benzene	16000	4700	ug/m3	5000	08/22/22	B2H2306	TO-15	CA	
75-27-4	Bromodichloromethane	ND	9900	ug/m3	5000	08/22/22	B2H2306	TO-15	CA	
75-25-2	Bromoform	ND	15000	ug/m3	5000	08/22/22	B2H2306	TO-15	CA	
74-83-9	Bromomethane	ND	5700	ug/m3	5000	08/22/22	B2H2306	TO-15	CA	
56-23-5	Carbon tetrachloride	ND	9300	ug/m3	5000	08/22/22	B2H2306	TO-15	CA	
108-90-7	Chlorobenzene	ND	6800	ug/m3	5000	08/22/22	B2H2306	TO-15	CA	
75-00-3	Chloroethane	ND	3900	ug/m3	5000	08/22/22	B2H2306	TO-15	CA	
67-66-3	Chloroform	ND	7200	ug/m3	5000	08/22/22	B2H2306	TO-15	CA	
74-87-3	Chloromethane	ND	3000	ug/m3	5000	08/22/22	B2H2306	TO-15	CA	
156-59-2	cis-1,2-Dichloroethylene	ND	5800	ug/m3	5000	08/22/22	B2H2306	TO-15	CA	
10061-01-5	cis-1,3-Dichloropropylene	ND	6700	ug/m3	5000	08/22/22	B2H2306	TO-15	CA	
110-82-7	Cyclohexane	110000	5100	ug/m3	5000	08/22/22	B2H2306	TO-15	CA	
124-48-1	Dibromochloromethane	ND	13000	ug/m3	5000	08/22/22	B2H2306	TO-15	CA	
75-71-8	Dichlorodifluoromethane	ND	7300	ug/m3	5000	08/22/22	B2H2306	TO-15	CA	
100-41-4	Ethylbenzene	ND	6400	ug/m3	5000	08/22/22	B2H2306	TO-15	CA	
110-54-3	Hexane	320000	17000	ug/m3	5000	08/22/22	B2H2306	TO-15	CA	
98-82-8	Isopropylbenzene	ND	7200	ug/m3	5000	08/22/22	B2H2306	TO-15	CA	
1330-20-7	m & p - Xylene	ND	6400	ug/m3	5000	08/22/22	B2H2306	TO-15	CA	

Client ID: VP-1

Lab ID: 2208131-01

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Analyst	Qualifier
Organics-Volatiles										See note Y11
75-09-2	Methylene chloride	ND	5100	ug/m3	5000	08/22/22	B2H2306	TO-15	CA	
1634-04-4	Methyltertiarybutylether	ND	8800	ug/m3	5000	08/22/22	B2H2306	TO-15	CA	
91-20-3	Naphthalene	ND	130000	ug/m3	5000	08/22/22	B2H2306	TO-15	CA	X1
104-51-8	n-Butylbenzene	ND	27000	ug/m3	5000	08/22/22	B2H2306	TO-15	CA	
103-65-1	n-Propylbenzene	ND	7200	ug/m3	5000	08/22/22	B2H2306	TO-15	CA	
95-47-6	o-Xylene	ND	6400	ug/m3	5000	08/22/22	B2H2306	TO-15	CA	
135-98-8	sec-Butylbenzene	ND	8100	ug/m3	5000	08/22/22	B2H2306	TO-15	CA	
100-42-5	Styrene	ND	6300	ug/m3	5000	08/22/22	B2H2306	TO-15	CA	
127-18-4	Tetrachloroethylene	ND	10000	ug/m3	5000	08/22/22	B2H2306	TO-15	CA	
108-88-3	Toluene	ND	5500	ug/m3	5000	08/22/22	B2H2306	TO-15	CA	
156-60-5	trans-1,2-Dichloroethylene	ND	5800	ug/m3	5000	08/22/22	B2H2306	TO-15	CA	
10061-02-6	trans-1,3-Dichloropropylene	ND	6700	ug/m3	5000	08/22/22	B2H2306	TO-15	CA	
79-01-6	Trichloroethylene	ND	7900	ug/m3	5000	08/22/22	B2H2306	TO-15	CA	
75-69-4	Trichlorofluoromethane	ND	8300	ug/m3	5000	08/22/22	B2H2306	TO-15	CA	
75-01-4	Vinyl chloride	ND	3800	ug/m3	5000	08/22/22	B2H2306	TO-15	CA	
<i>Surrogate: Bromofluorobenzene</i>			<i>102 %</i>	<i>70-130</i>		<i>08/22/22</i>	<i>B2H2306</i>	<i>TO-15</i>	<i>CA</i>	

Client ID: VP-2

Lab ID: 2208131-02

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Analyst	Qualifier
Organics-Volatiles										See note Y11
71-55-6	1,1,1-Trichloroethane	ND	1.6	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
79-00-5	1,1,2-Trichloroethane	ND	1.6	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
75-34-3	1,1-Dichloroethane	ND	1.2	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
75-35-4	1,1-Dichloroethylene	ND	1.2	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
87-61-6	1,2,3-Trichlorobenzene	ND	7.3	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
96-18-4	1,2,3-Trichloropropane	ND	1.8	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
526-73-8	1,2,3-Trimethylbenzene	4.1	1.4	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
120-82-1	1,2,4-Trichlorobenzene	ND	3.6	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
95-63-6	1,2,4-Trimethylbenzene	12	1.4	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
106-93-4	1,2-Dibromoethane	ND	2.3	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
95-50-1	1,2-Dichlorobenzene	ND	1.8	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
107-06-2	1,2-Dichloroethane	ND	1.2	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
78-87-5	1,2-Dichloropropane	ND	1.4	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
108-67-8	1,3,5-Trimethylbenzene	4.2	1.4	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
106-99-0	1,3-Butadiene	ND	0.65	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
541-73-1	1,3-Dichlorobenzene	1.8	1.8	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
106-46-7	1,4-Dichlorobenzene	ND	1.8	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
540-84-1	2,2,4-Trimethylpentane	10	1.4	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
78-93-3	2-Butanone (MEK)	ND	14	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
91-57-6	2-Methylnaphthalene	ND	29	ug/m3	1	08/22/22	B2H2306	TO-15	CA	X1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	4.0	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
75-05-8	Acetonitrile	ND	1.6	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
107-13-1	Acrylonitrile	ND	1.1	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
71-43-2	Benzene	7.9	0.94	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
75-27-4	Bromodichloromethane	ND	2.0	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
75-25-2	Bromoform	ND	3.0	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
74-83-9	Bromomethane	ND	1.1	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
56-23-5	Carbon tetrachloride	ND	1.9	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
108-90-7	Chlorobenzene	ND	1.4	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
75-00-3	Chloroethane	ND	0.78	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
67-66-3	Chloroform	ND	1.4	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
74-87-3	Chloromethane	ND	0.61	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
156-59-2	cis-1,2-Dichloroethylene	ND	1.2	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.3	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
110-82-7	Cyclohexane	21	1.0	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
124-48-1	Dibromochloromethane	ND	2.5	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
75-71-8	Dichlorodifluoromethane	2.4	1.5	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
100-41-4	Ethylbenzene	12	1.3	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
110-54-3	Hexane	14	3.5	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
98-82-8	Isopropylbenzene	2.4	1.4	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
1330-20-7	m & p - Xylene	25	1.3	ug/m3	1	08/22/22	B2H2306	TO-15	CA	

Client ID: VP-2

Lab ID: 2208131-02

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Analyst	Qualifier
Organics-Volatiles										See note Y11
75-09-2	Methylene chloride	2.0	1.0	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
1634-04-4	Methyltertiarybutylether	ND	1.8	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
91-20-3	Naphthalene	ND	26	ug/m3	1	08/22/22	B2H2306	TO-15	CA	X1
104-51-8	n-Butylbenzene	ND	5.4	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
103-65-1	n-Propylbenzene	3.3	1.4	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
95-47-6	o-Xylene	12	1.3	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
135-98-8	sec-Butylbenzene	ND	1.6	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
100-42-5	Styrene	ND	1.3	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
127-18-4	Tetrachloroethylene	47	2.0	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
108-88-3	Toluene	24	1.1	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
156-60-5	trans-1,2-Dichloroethylene	ND	1.2	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.3	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
79-01-6	Trichloroethylene	ND	1.6	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
75-69-4	Trichlorofluoromethane	1.6	1.7	ug/m3	1	08/22/22	B2H2306	TO-15	CA	T
75-01-4	Vinyl chloride	ND	0.75	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
<i>Surrogate: Bromofluorobenzene</i>			<i>101 %</i>	<i>70-130</i>		<i>08/22/22</i>	<i>B2H2306</i>	<i>TO-15</i>	<i>CA</i>	

Client ID: VP-3

Lab ID: 2208131-03

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Analyst	Qualifier
Organics-Volatiles										See note Y11
71-55-6	1,1,1-Trichloroethane	ND	8.0	ug/m3	5	08/22/22	B2H2306	TO-15	CA	
79-34-5	1,1,2,2-Tetrachloroethane	ND	10	ug/m3	5	08/22/22	B2H2306	TO-15	CA	
79-00-5	1,1,2-Trichloroethane	ND	8.0	ug/m3	5	08/22/22	B2H2306	TO-15	CA	
75-34-3	1,1-Dichloroethane	ND	6.0	ug/m3	5	08/22/22	B2H2306	TO-15	CA	
75-35-4	1,1-Dichloroethylene	ND	5.8	ug/m3	5	08/22/22	B2H2306	TO-15	CA	
87-61-6	1,2,3-Trichlorobenzene	ND	36	ug/m3	5	08/22/22	B2H2306	TO-15	CA	
96-18-4	1,2,3-Trichloropropane	ND	8.9	ug/m3	5	08/22/22	B2H2306	TO-15	CA	
526-73-8	1,2,3-Trimethylbenzene	110	7.2	ug/m3	5	08/22/22	B2H2306	TO-15	CA	
120-82-1	1,2,4-Trichlorobenzene	ND	18	ug/m3	5	08/22/22	B2H2306	TO-15	CA	
95-63-6	1,2,4-Trimethylbenzene	400	7.2	ug/m3	5	08/22/22	B2H2306	TO-15	CA	
106-93-4	1,2-Dibromoethane	ND	11	ug/m3	5	08/22/22	B2H2306	TO-15	CA	
95-50-1	1,2-Dichlorobenzene	ND	8.8	ug/m3	5	08/22/22	B2H2306	TO-15	CA	
107-06-2	1,2-Dichloroethane	ND	6.0	ug/m3	5	08/22/22	B2H2306	TO-15	CA	
78-87-5	1,2-Dichloropropane	ND	6.8	ug/m3	5	08/22/22	B2H2306	TO-15	CA	
108-67-8	1,3,5-Trimethylbenzene	170	7.2	ug/m3	5	08/22/22	B2H2306	TO-15	CA	
106-99-0	1,3-Butadiene	ND	3.3	ug/m3	5	08/22/22	B2H2306	TO-15	CA	
541-73-1	1,3-Dichlorobenzene	ND	8.8	ug/m3	5	08/22/22	B2H2306	TO-15	CA	
106-46-7	1,4-Dichlorobenzene	ND	8.8	ug/m3	5	08/22/22	B2H2306	TO-15	CA	
540-84-1	2,2,4-Trimethylpentane	41	6.9	ug/m3	5	08/22/22	B2H2306	TO-15	CA	
78-93-3	2-Butanone (MEK)	ND	72	ug/m3	5	08/22/22	B2H2306	TO-15	CA	
91-57-6	2-Methylnaphthalene	ND	140	ug/m3	5	08/22/22	B2H2306	TO-15	CA	X1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	20	ug/m3	5	08/22/22	B2H2306	TO-15	CA	
75-05-8	Acetonitrile	ND	8.2	ug/m3	5	08/22/22	B2H2306	TO-15	CA	
107-13-1	Acrylonitrile	ND	5.3	ug/m3	5	08/22/22	B2H2306	TO-15	CA	
71-43-2	Benzene	7.4	4.7	ug/m3	5	08/22/22	B2H2306	TO-15	CA	
75-27-4	Bromodichloromethane	ND	9.9	ug/m3	5	08/22/22	B2H2306	TO-15	CA	
75-25-2	Bromoform	ND	15	ug/m3	5	08/22/22	B2H2306	TO-15	CA	
74-83-9	Bromomethane	ND	5.7	ug/m3	5	08/22/22	B2H2306	TO-15	CA	
56-23-5	Carbon tetrachloride	ND	9.3	ug/m3	5	08/22/22	B2H2306	TO-15	CA	
108-90-7	Chlorobenzene	ND	6.8	ug/m3	5	08/22/22	B2H2306	TO-15	CA	
75-00-3	Chloroethane	ND	3.9	ug/m3	5	08/22/22	B2H2306	TO-15	CA	
67-66-3	Chloroform	ND	7.2	ug/m3	5	08/22/22	B2H2306	TO-15	CA	
74-87-3	Chloromethane	ND	3.0	ug/m3	5	08/22/22	B2H2306	TO-15	CA	
156-59-2	cis-1,2-Dichloroethylene	ND	5.8	ug/m3	5	08/22/22	B2H2306	TO-15	CA	
10061-01-5	cis-1,3-Dichloropropylene	ND	6.7	ug/m3	5	08/22/22	B2H2306	TO-15	CA	
110-82-7	Cyclohexane	8.8	5.1	ug/m3	5	08/22/22	B2H2306	TO-15	CA	
124-48-1	Dibromochloromethane	ND	13	ug/m3	5	08/22/22	B2H2306	TO-15	CA	
75-71-8	Dichlorodifluoromethane	ND	7.3	ug/m3	5	08/22/22	B2H2306	TO-15	CA	
100-41-4	Ethylbenzene	130	6.4	ug/m3	5	08/22/22	B2H2306	TO-15	CA	
110-54-3	Hexane	ND	17	ug/m3	5	08/22/22	B2H2306	TO-15	CA	
98-82-8	Isopropylbenzene	24	7.2	ug/m3	5	08/22/22	B2H2306	TO-15	CA	
1330-20-7	m & p - Xylene	520	6.4	ug/m3	5	08/22/22	B2H2306	TO-15	CA	

Client ID: VP-3

Lab ID: 2208131-03

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Analyst	Qualifier
Organics-Volatiles										
75-09-2	Methylene chloride	ND	5.1	ug/m3	5	08/22/22	B2H2306	TO-15	CA	
1634-04-4	Methyltertiarybutylether	ND	8.8	ug/m3	5	08/22/22	B2H2306	TO-15	CA	
91-20-3	Naphthalene	ND	130	ug/m3	5	08/22/22	B2H2306	TO-15	CA	X1
104-51-8	n-Butylbenzene	ND	27	ug/m3	5	08/22/22	B2H2306	TO-15	CA	
103-65-1	n-Propylbenzene	68	7.2	ug/m3	5	08/22/22	B2H2306	TO-15	CA	
95-47-6	o-Xylene	210	6.4	ug/m3	5	08/22/22	B2H2306	TO-15	CA	
135-98-8	sec-Butylbenzene	11	8.1	ug/m3	5	08/22/22	B2H2306	TO-15	CA	
100-42-5	Styrene	ND	6.3	ug/m3	5	08/22/22	B2H2306	TO-15	CA	
127-18-4	Tetrachloroethylene	ND	10	ug/m3	5	08/22/22	B2H2306	TO-15	CA	
108-88-3	Toluene	150	5.5	ug/m3	5	08/22/22	B2H2306	TO-15	CA	
156-60-5	trans-1,2-Dichloroethylene	ND	5.8	ug/m3	5	08/22/22	B2H2306	TO-15	CA	
10061-02-6	trans-1,3-Dichloropropylene	ND	6.7	ug/m3	5	08/22/22	B2H2306	TO-15	CA	
79-01-6	Trichloroethylene	ND	7.9	ug/m3	5	08/22/22	B2H2306	TO-15	CA	
75-69-4	Trichlorofluoromethane	ND	8.3	ug/m3	5	08/22/22	B2H2306	TO-15	CA	
75-01-4	Vinyl chloride	ND	3.8	ug/m3	5	08/22/22	B2H2306	TO-15	CA	
<i>Surrogate: Bromofluorobenzene</i>			<i>106 %</i>	<i>70-130</i>		<i>08/22/22</i>	<i>B2H2306</i>	<i>TO-15</i>	<i>CA</i>	

See note Y11

Client ID: VP-4

Lab ID: 2208131-04

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Analyst	Qualifier
Organics-Volatiles										See note Y11
71-55-6	1,1,1-Trichloroethane	ND	1.6	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
79-00-5	1,1,2-Trichloroethane	ND	1.6	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
75-34-3	1,1-Dichloroethane	ND	1.2	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
75-35-4	1,1-Dichloroethylene	ND	1.2	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
87-61-6	1,2,3-Trichlorobenzene	ND	7.3	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
96-18-4	1,2,3-Trichloropropane	ND	1.8	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
526-73-8	1,2,3-Trimethylbenzene	3.7	1.4	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
120-82-1	1,2,4-Trichlorobenzene	ND	3.6	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
95-63-6	1,2,4-Trimethylbenzene	15	1.4	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
106-93-4	1,2-Dibromoethane	ND	2.3	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
95-50-1	1,2-Dichlorobenzene	ND	1.8	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
107-06-2	1,2-Dichloroethane	ND	1.2	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
78-87-5	1,2-Dichloropropane	ND	1.4	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
108-67-8	1,3,5-Trimethylbenzene	4.4	1.4	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
106-99-0	1,3-Butadiene	ND	0.65	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
541-73-1	1,3-Dichlorobenzene	ND	1.8	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
106-46-7	1,4-Dichlorobenzene	ND	1.8	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
540-84-1	2,2,4-Trimethylpentane	3.7	1.4	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
78-93-3	2-Butanone (MEK)	ND	14	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
91-57-6	2-Methylnaphthalene	ND	29	ug/m3	1	08/22/22	B2H2306	TO-15	CA	X1
108-10-1	4-Methyl-2-pentanone (MIBK)	7.3	4.0	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
75-05-8	Acetonitrile	ND	1.6	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
107-13-1	Acrylonitrile	ND	1.1	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
71-43-2	Benzene	2.6	0.94	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
75-27-4	Bromodichloromethane	ND	2.0	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
75-25-2	Bromoform	ND	3.0	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
74-83-9	Bromomethane	ND	1.1	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
56-23-5	Carbon tetrachloride	ND	1.9	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
108-90-7	Chlorobenzene	ND	1.4	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
75-00-3	Chloroethane	ND	0.78	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
67-66-3	Chloroform	ND	1.4	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
74-87-3	Chloromethane	0.65	0.61	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
156-59-2	cis-1,2-Dichloroethylene	ND	1.2	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.3	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
110-82-7	Cyclohexane	2.1	1.0	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
124-48-1	Dibromochloromethane	ND	2.5	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
75-71-8	Dichlorodifluoromethane	2.5	1.5	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
100-41-4	Ethylbenzene	13	1.3	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
110-54-3	Hexane	35	3.5	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
98-82-8	Isopropylbenzene	ND	1.4	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
1330-20-7	m & p - Xylene	39	1.3	ug/m3	1	08/22/22	B2H2306	TO-15	CA	

Client ID: VP-4
Lab ID: 2208131-04

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Analyst	Qualifier
Organics-Volatiles										
See note Y11										
75-09-2	Methylene chloride	ND	1.0	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
1634-04-4	Methyltertiarybutylether	ND	1.8	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
91-20-3	Naphthalene	ND	26	ug/m3	1	08/22/22	B2H2306	TO-15	CA	X1
104-51-8	n-Butylbenzene	ND	5.4	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
103-65-1	n-Propylbenzene	3.2	1.4	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
95-47-6	o-Xylene	14	1.3	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
135-98-8	sec-Butylbenzene	ND	1.6	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
100-42-5	Styrene	ND	1.3	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
127-18-4	Tetrachloroethylene	8.9	2.0	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
108-88-3	Toluene	26	1.1	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
156-60-5	trans-1,2-Dichloroethylene	ND	1.2	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.3	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
79-01-6	Trichloroethylene	ND	1.6	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
75-69-4	Trichlorofluoromethane	ND	1.7	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
75-01-4	Vinyl chloride	ND	0.75	ug/m3	1	08/22/22	B2H2306	TO-15	CA	
<i>Surrogate: Bromofluorobenzene</i>			<i>100 %</i>	<i>70-130</i>		<i>08/22/22</i>	<i>B2H2306</i>	<i>TO-15</i>	<i>CA</i>	

Lab Work Order Number 2208131		Project Name EGLE / City of Imlay City / Public Works			Matrix AIR
Location ID 00014763	Program RRD-BARS	CC Email 1 mgibbons@ectinc.com	Project TAT Days standard	Sample Collector John Kennedy / Joe Kniss	
Dept-Division-District RRD-BARS	Activity	CC Email 2 jkennedy@ectinc.com	Project Due Date	Sample Collector Phone 734-972-3007	
State Project Manager Janet Michaluk	Funding Source	CC Email 3	Accept Analysis hold time codes	Contract Firm ECT	
State Project Manager Email michalukj@michigan.gov	Location Code 7D35	Overflow Lab Choice 1		Contract Firm Primary Contact Mike Hebert	
State Project Manager Phone 517-643-0314	SUD Location Code	Overflow Lab Choice 2		Primary Contact Phone 517-272-9200	

Lab Use Only	Field Sample Identification	Collection Date	Collection Time	Bottle Count	Comments	Regulator ID	Canister/Bottle Vac Number
01	VP-1	8/16/2022	13:17	1		201	1586
02	VP-2	8/16/2022	12:56	1		229	1610
03	VP-3	8/16/2022	13:35	1		220	1680
04	VP-4	8/16/2022	14:00	1		252	1110
5							
6							
7							
8							
9							
10							

<p>ORGANIC CHEMISTRY</p> <p>VOA - Volatile Organic Analysis</p> <p>Bottle/vac 1 2 3 4 5 6 7 8 9 10</p> <p>Canister - AQD 1 2 3 4 5 6 7 8 9 10</p> <p>Canister - RRD 1 2 3 4 5 6 7 8 9 10</p> <p>Tedlar - Volatiles 1 2 3 4 5 6 7 8 9 10</p> <p>METH - Methane, Ethane, Ethene</p> <p>Methane, Ethane, Ethene 1 2 3 4 5 6 7 8 9 10</p>	
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Chain of Custody	Relinquished by	Received By	Date / Time
	Print Name & Org. Joey Kniss ECT	ECT Storage	8/16/22
	Signature: <i>[Signature]</i>		16:00
Print Name & Org. ECT Storage	Joey Kniss ECT	8/18/22	14:30
Signature: <i>[Signature]</i>			
Print Name & Org. Joey Kniss ECT	Marlene Kane EGLE	8/18/22	15:10p
Signature: <i>[Signature]</i>	<i>[Signature]</i>		