SUMMARY REPORT

ALLEN CREEK DRAIN SAMPLING INVESTIGATION

WEST PARK AREA OF THE

CITY OF ANN ARBOR

DEPARTMENT OF ENVIRONMENT GREAT LAKES AND ENERGY

NOVEMBER 2019

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF APPENDICES

1.0 INTRODUCTION

The Department of Environment Great Lakes and Energy (EGLE) conducted a sampling investigation (investigation) of the Allen Creek Drain storm water conveyance system in the West Park area of the City of Ann Arbor. Gelman Sciences, Inc. (Gelman) retained Fleis & VandenBrink (F&V) to assist EGLE in completing the sampling activities. The Gelman Laboratory also conducted analysis for 1,4-dioxane on water samples collected as part of the Investigation. The Investigation area and sampling locations are depicted on Figure 1.

The investigation was initiated in response to discussions with the Washtenaw County Water Resources Commissioner, Mr. Evan Pratt, that identified questions related to detections of 1,4-dioxane identified during previous sampling by EGLE of the Allen Creek Drain.

Specifically, the investigation was conducted in general accordance with an EGLE Interoffice Communication dated January 11, 2019 titled “Allen Creek Drain Work Plan, Ann Arbor, Michigan” (Appendix A).

The objectives of the investigation, as stated in the EGLE Work Plan, were to:

- Determine and evaluate for the presence of 1,4-dioxane in the Allen Creek storm sewer system at locations where contaminated groundwater, related to the Gelman Site, might enter the Allen Creek Drain.
- Compare water from the storm sewer analytical data with risk-based assumptions and screening levels.

Investigation sampling activities were initiated on February 7, 2019 and completed on July 24, 2019.

2.0 INVESTIGATION ACTIVITIES

The investigation consisted of sampling of the Allen Creek Drain at selected manholes in and around West Park. The sampling was conducted monthly for a period of six months. EGLE coordinated and scheduled the monthly events on dates when precipitation had not occurred for a 1-2 day period prior to sampling. Washtenaw County personnel assisted the sampling activities by opening the manholes and providing traffic control for each of the monthly events. The actual sampling activities were conducted by F&V personnel under EGLE oversight.

2.1 Manhole Sampling Locations

Sampling locations were chosen based on discussions between the Washtenaw County Water Resources Commissioner and EGLE. The specific sampling locations are described below and depicted on Figure 1;

- Allen Creek/West Park SW. Manhole in Westpark (that has been previously sampled).
- Allen Creek/Chapin-West Park. Manhole on Chaplin Street south of entrance to West Park.
- Allen Creek/Maple Ridge-Arborview. Manhole at intersection of Maple Ridge and Arborview.
- Allen Creek/Wildwood-Arborview. Manhole at intersection of Wildwood Avenue and Arborview Blvd.
- Allen Creek/Murry-Washington. Manhole on Murry Avenue south of Washington Street.
- Allen Creek/Eighth-Waterworks. Manhole on 8th Street adjacent to Waterworks Park.
- Allen Creek – Maryfield-Wildwood Park. Manhole in the ravine in Maryfield-Wildwood Park.

2.2 Sampling Method and Procedure

Water samples were collected from the main flow water stream in the storm sewer pipe at each manhole sampling location using a dipping pole constructed of 1-inch PVC pipe and a clean 250 ml wide mouth plastic sampling bottle. Each sample was collected using a grab method. This method consisted of collecting the water sample by dipping a clean plastic sample bottle into the water stream at the base of the manhole. A new clean sampling bottle was used at each location. The water sample was then dispensed from the plastic bottle to the individual 40 ml glass vials (provided by the analytical laboratories) containing hydrochloric acid (HCL) preservative as required by analytical methods. Samples were held on ice in an insulated cooler and proper chain of custody procedures were utilized to document sample possession during the collection and transport to the laboratories.

2.3 Sample Analysis

A portion of all water samples collected were (1) submitted to the Gelman Laboratory for analysis of 1,4-dioxane using USEPA Method 1624C; and (2) were submitted to the EGLE Environmental Laboratory for analysis of volatile organic compounds (VOCs) by USEPA Method 8260B.

In addition, samples from selected locations, during each sampling event, were submitted to the EGLE Environmental Laboratory for analysis of 1,4-dioxane by USEPA Method 8260 - Modified (Selective Ion Monitoring).

The analytical data for the samples collected during each monthly sampling event are summarized on Tables 1 and 2.

The laboratory analytical data provided by Gelman and the EGLE laboratory reports are included in Appendix B.

3.0 ANALYTICAL RESULTS

3.1 1,4-Dioxane

The data provided from the Gelman laboratory indicated that 1,4-dioxane was detected at least once during the Investigation at all sampling locations except for the manhole locations listed below:

- Mapleridge-Arborview
- Maryfield-Wildwood Park
- Wildwood-Arborview

Detected concentrations of 1,4-dioxane ranged from a high of 18 µg/L (ppb) at the West Park SW location in March 2019 to a low of 1 µg/L (ppb) at the Eighth-Waterworks location in July 2019 (Figure 1). It should be noted that during the May, June and July sampling events the Wildwood-Arborview manhole sample location did not contain enough flowing water to sample or was dry.

The data provided by the EGLE Environmental Laboratory of the samples collected at specific sampling locations during the investigation correlated well with the Gelman laboratory results. Detected concentrations of 1,4-dioxane ranged from a high of 22 µg/L (ppb) at West Park SW in July 2019 to a low of 0.96 µg/L (ppb) at the Eighth-Waterworks location in July 2019.

Please note that the EGLE Environmental Laboratory qualifies results reported below 5 µg/L (ppb) as estimated because the analysis is performed using selective ion monitoring (SIM).

3.2 VOCs

The EGLE Environmental Laboratory identified the following VOC compounds at various manhole sampling locations during the Investigation:

- Chloroform (Range 2.6 – 17 µg/L)
- Bromodichloromethane (3.7 µg/L)
- Ethylbenzene (Range 1.0 – 21 µg/L)
- Dibromochloromethane (1.1 µg/L)
- Styrene (Range 1.8 – 25 µg/L)
- Trichloroethylene (Range 1.0 – 1.6 µg/L)

Table 2 lists the specific manhole sampling locations where each of the VOCs identified above were detected for each of the sampling events. In general, VOCs were detected at the manhole sampling locations listed below:

- West Park SW Ethylbenzene;Styrene
- Chapin-Waterworks Chloroform
- Mapleridge-Arborview Bromodichloromethane;Chloroform;Dibromochloromethane
- Murry-Washington Trichloroethylene
- Maryfield-Wildwood Park Ethylbenzene;Styrene

4.0 SUMMARY OF FINDINGS

A review of the water samples collected during the investigation show that 1,4-dioxane was detected at four of the seven manhole locations during the six-month sampling period. When detected, concentrations of 1,4-dioxane ranged from 0.96 µg/L (ppb) at the Eighth-Waterworks location to 22 µg/L (ppb) at the West Park SW location (See Figure 1). For a general comparison the concentration ranges at each sampling location and the current groundwater criteria are listed below.

	1,4-Dioxane	Current Criteria (µg/L)			
Location	Concentration Range (µg/L)	DWC	GSIC	GVIIC	FAV
		7.2	280[1]	NLV	390,000[2]
West Park SW	14 – 22				
Chapin-Waterworks	5.8 – 11				
Murry-Washington	0.98 – 1.4				
Eighth-Waterworks	0.96 – 1.0				
Maryfield-Wildwood Park	Not Detected				
Maple Ridge-Arborview	Not Detected				
Wildwood-Arborview	Not Detected				

[1] - Groundwater Surface Water Criteria (GSIC) listed is the Rule 57 Surface Water Quality Value for Non-drinking water Human Cancer Value (HCV).
[2] - Final Acute Value (FAV) listed is the Rule 57 Surface Water Quality Aquatic Life Value.

Laboratory analysis for VOCs completed as part of the investigation detected the compounds within the concentration ranges listed below:

- Chloroform (Range 2.6 – 17 µg/L)
- Bromodichloromethane (3.7 µg/L)
- Ethylbenzene (Range 1.0 – 21 µg/L)
- Dibromochloromethane (1.1 µg/L)
- Styrene (Range 1.8 – 25 µg/L)
- Trichloroethylene (Range 1.0 – 1.6 µg/L)

For a general comparison the current groundwater criteria are listed below.

			Target Detection Limit (TDL)	Drinking Water Criteria (DWC)	GW Surface Water Interface Criteria (GSIC)	GW Volatilization to Indoor Air Inhalation Criteria (GVIIC)	Rule 57 Final Acute Value (FAV)
Analyte	Units		Organics-Volatiles				
Bromodichloromethane	µg/L		1	80	ID	4,800	ID
Chloroform	µg/L		1	80	350	28,000	11,000
Dibromochloromethane	µg/L		5	80	ID	14,000	ID
Ethylbenzene	µg/L		1	74	18	110,000	320
Styrene	µg/L		1	100	80	170,000	2,900
Trichloroethylene	µg/L		1	5	200	2,200	3,500
“ID” means insufficient data to develop criterion.							
“NA” means a criterion or value is not available or, in the case of background, not applicable.							
“NLV” means hazardous substance is not likely to volatilize under most conditions.							

FIGURE

Wildwood-Arborview		
Date	EGLE Lab 1,4-dioxane ug/L 8260 Modified	Gelman Lab 1,4-dioxane ug/L EPA 1624c
02/07/19	< 1	< 1
03/19/19	NA	< 1
04/18/19	NA	< 1
05/28/19	DRY	DRY
06/18/19	DRY	DRY
07/24/19	DRY	DRY

Maple Ridge-Arbor View		
Date	EGLE Lab 1,4-dioxane ug/L 8260 Modified	Gelman Lab 1,4-dioxane ug/L EPA 1624c
02/07/19	NA	< 1
03/19/19	< 1	< 1
04/18/19	NA	< 1
05/28/19	< 1	< 1
06/18/19	NA	< 1
07/24/19	NA	< 1

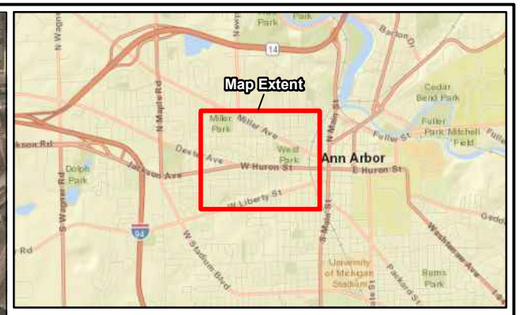
Chapin		
Date	EGLE Lab 1,4-dioxane ug/L 8260 Modified	Gelman Lab 1,4-dioxane ug/L EPA 1624c
02/07/19	8.7	8.8
03/19/19	11	9.8
04/18/19	10	8.6
05/28/19	NA	9.1
06/18/19	6.5	5.8
07/24/19	NA	9.8

West Park SW		
Date	EGLE Lab 1,4-dioxane ug/L 8260 Modified	Gelman Lab 1,4-dioxane ug/L EPA 1624c
02/07/19	15	16
03/19/19	19	18
04/18/19	17	15
05/28/19	16	16
06/18/19	15	14
07/24/19	22	16

Maryfield-Wildwood Park		
Date	EGLE Lab 1,4-dioxane ug/L 8260 Modified	Gelman Lab 1,4-dioxane ug/L EPA 1624c
02/07/19	NA	< 1
03/19/19	NA	< 1
04/18/19	< 1	< 1
05/28/19	NA	< 1
06/18/19	NA	< 1
07/24/19	NA	< 1

Eighth		
Date	EGLE Lab 1,4-dioxane ug/L 8260 Modified	Gelman Lab 1,4-dioxane ug/L EPA 1624c
02/07/19	< 1	< 1
03/19/19	NA	< 1
04/18/19	NA	< 1
05/28/19	< 1	< 1
06/18/19	1	< 1
07/24/19	0.96	1

Murray		
Date	EGLE Lab 1,4-dioxane ug/L 8260 Modified	Gelman Lab 1,4-dioxane ug/L EPA 1624c
02/07/19	NA	< 1
03/19/19	1	1.3
04/18/19	0.98	< 1
05/28/19	NA	1.3
06/18/19	< 1	< 1
07/24/19	1.4	1.3



Allen Creek Manhole Samples and 1,4-dioxane Results

0 500 1,000

Feet

Source of Aerial Image: Michigan Imagery Solution Washtenaw - 215 - 6in - 4-band

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FIGURE 1

Allen Creek Manhole Sample Results

DATE	DRAWN BY	DESIGNED BY	PROJECT NO.
10/23/19	KRB	KRB	EGLE0006

Date Saved: 10/23/19 1:58:26 PM
Path: W:\Projects\Projects A-E\EGLE0006\ENGAPPS\GIS\mxds\20191021_AllenCreek_MHs\Fig01_AllenCreek_MH_Results_v20191023.mxd

TABLES

Table 1
1,4-Dioxane Analytical Results

Sample ID			West Park SW	West Park SW	West Park SW	West Park SW	West Park SW	West Park SW
Sample Depth								
Date Collected			2/7/2019	3/19/2019	4/18/2019	5/28/2019	6/18/2019	7/24/2019
Analyte	Units	Method						
1,4-dioxane (EGLE Laboratory)	ug/L	8260 Modified	15	19	17	16	15	22
1,4-dioxane (Gelman Laboratory)	ug/L	EPA 1624c	16	18	15	16	14	16

Sample ID			Chapin	Chapin	Chapin	Chapin	Chapin	Chapin
Sample Depth								
Date Collected			2/7/2019	3/19/2019	4/18/2019	5/28/2019	6/18/2019	7/24/2019
Analyte	Units	Method						
1,4-dioxane (EGLE Laboratory)	ug/L	8260 Modified	8.7	11	10	NA	6.5	NA
1,4-dioxane (Gelman Laboratory)	ug/L	EPA 1624c	8.8	9.8	8.6	9.1	5.8	9.8

Sample ID			Murray	Murray	Murray	Murray	Murray	Murry
Sample Depth								
Date Collected			2/7/2019	3/19/2019	4/18/2019	5/28/2019	6/18/2019	7/24/2019
Analyte	Units	Method						
1,4-dioxane (EGLE Laboratory)	ug/L	8260 Modified	NA	1	0.98	NA	< 1	1.4
1,4-dioxane (Gelman Laboratory)	ug/L	EPA 1624c	< 1	1.3	< 1	1.3	< 1	1.3

Current Criteria			Target Detection Limit (TDL)	Drinking Water Criteria (DWC)	Groundwater Surface Water Interface Criteria (GSIC)	Groundwater Volatilization to Indoor Air Inhalation Criteria (GVIIC)	Rule 57 Final Acute Value (FAV)
Analyte	Units		Organics-Dioxane				
1,4-dioxane	ug/L		1	7.2	280	NLV	390,000

"NLV" - Not likely to volitalize under most conditions.
< 1 - Non-detect at the listed reporting limit.
NA - Not analyzed by laboratory.

Table 1
1,4-Dioxane Analytical Results

Sample ID			Maple Ridge-Arbor View	Maple Ridge-Arbor View	Maple Ridge-Arbor View	Maple Ridge-Arbor View	Maple Ridge-Arbor View	Maple Ridge-Arbor View
Sample Depth								
Date Collected			2/7/2019	3/19/2019	4/18/2019	5/28/2019	6/18/2019	7/24/2019
Analyte	Units	Method						
1,4-dioxane (EGLE Laboratory)	ug/L	8260 Modified	NA	< 1	NA	< 1	NA	NA
1,4-dioxane (Gelman Laboratory)	ug/L	EPA 1624c	< 1	< 1	< 1	< 1	< 1	< 1

Sample ID			Eighth	Eighth	Eighth	Eighth	Eighth	Eighth
Sample Depth								
Date Collected			2/7/2019	3/19/2019	4/18/2019	5/28/2019	6/18/2019	7/24/2019
Analyte	Units	Method						
1,4-dioxane (EGLE Laboratory)	ug/L	8260 Modified	< 1	NA	NA	< 1	1	0.96
1,4-dioxane (Gelman Laboratory)	ug/L	EPA 1624c	< 1	< 1	< 1	< 1	< 1	1

Sample ID			Maryfield-Wildwood Park	Maryfield-Wildwood Park	Maryfield-Wildwood Park	Maryfield-Wildwood Park	Maryfield-Wildwood Park	Maryfield-Wildwood Park
Sample Depth								
Date Collected			2/7/2019	3/19/2019	4/18/2019	5/28/2019	6/18/2019	7/24/2019
Analyte	Units	Method						
1,4-dioxane (EGLE Laboratory)	ug/L	8260 Modified	NA	NA	< 1	NA	NA	NA
1,4-dioxane (Gelman Laboratory)	ug/L	EPA 1624c	< 1	< 1	< 1	< 1	< 1	< 1

Current Criteria			Target Detection Limit (TDL)	Drinking Water Criteria (DWC)	Groundwater Surface Water Interface Criteria (GSIC)	Groundwater Volatilization to Indoor Air Inhalation Criteria (GVIIC)	Rule 57 Final Acute Value (FAV)
Analyte	Units		Organics-Dioxane				
1,4-dioxane	ug/L		1	7.2	280	NLV	390,000

"NLV" - Not likely to volitalize under most conditions.
< 1 - Non-detect at the listed reporting limit.
NA - Not analyzed by laboratory.

Table 1
1,4-Dioxane Analytical Results

Sample ID			Wildwood-Arborview	Wildwood-Arborview	Wildwood-Arborview	Wildwood-Arborview	Wildwood-Arborview	Wildwood-Arborview
Sample Depth								
Date Collected			2/7/2019	3/19/2019	4/18/2019	5/28/2019	6/18/2019	7/24/2019
Analyte	Units	Method						
1,4-dioxane (EGLE Laboratory)	ug/L	8260 Modified	< 1	NA	NA	DRY	DRY	DRY
1,4-dioxane (Gelman Laboratory)	ug/L	EPA 1624c	< 1	< 1	< 1	DRY	DRY	DRY

Current Criteria			Target Detection Limit (TDL)	Drinking Water Criteria (DWC)	Groundwater Surface Water Interface Criteria (GSIC)	Groundwater Volatilization to Indoor Air Inhalation Criteria (GVIIC)	Rule 57 Final Acute Value (FAV)
Analyte	Units		Organics-Dioxane				
1,4-dioxane	ug/L		1	7.2	280	NLV	390,000

"NLV" - Not likely to volitalize under most conditions.
< 1 - Non-detect at the listed reporting limit.
NA - Not analyzed by laboratory.

Table 2
VOC Analytical Results

Sample Number								1902033-01	1903143-01	1904148-01	1905292-01	1906161-01	1907223-01
Sample ID								West Park SW	West Park SW	West Park SW	West Park SW	West Park SW	West Park SW
Date Collected			Target Detection Limit (TDL)	Drinking Water Criteria (DWC)	Groundwater Surface Water Interface Criteria (GSIC)	Groundwater Volatilization to Indoor Air Inhalation Criteria (GVIIC)	Rule 57 Final Acute Value (FAV)	2/7/2019	3/19/2019	4/18/2019	5/28/2019	6/18/2019	7/24/2019
Date Received								2/7/2019	3/22/2019	4/18/2019	5/29/2019	6/18/2019	7/24/2019
Analyte	Units	Method	Organics-Volatiles										
1,1,1,2-Tetrachloroethane	ug/L	8260	1	77	ID	15,000	ID	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,1-Trichloroethane	ug/L	8260	1	200	89	660,000	1,600	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane	ug/L	8260	1	9	78	12,000	1,800	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	ug/L	8260	1	5	330	17,000	6,400	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	ug/L	8260	1	880	740	1,000,000	13,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethylene	ug/L	8260	1	7	130	200	2,300	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3-Trichlorobenzene	ug/L	8260	NA	NA	NA	NA	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2,3-Trichloropropane	ug/L	8260	1	42	NA	8,300	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3-Trimethylbenzene	ug/L	8260	NA	NA	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4-Trichlorobenzene	ug/L	8260	5	70	99	300,000	850	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2,4-Trimethylbenzene	ug/L	8260	1	63	17	56,000	310	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dibromoethane	ug/L	8260	0	0	6	2,400	280	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichlorobenzene	ug/L	8260	1	600	13	160,000	240	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethane	ug/L	8260	1	5	360	9,600	16,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloropropane	ug/L	8260	1	5	230	16,000	4,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3,5-Trimethylbenzene	ug/L	8260	1	72	45	61,000	810	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3-Dichlorobenzene	ug/L	8260	1	7	28	18,000	200	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,4-Dichlorobenzene	ug/L	8260	1	75	17	16,000	210	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2,2,4-Trimethylpentane	ug/L	8260	50	ID	NA	2,300	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2-Butanone (MEK)	ug/L	8260	25	13,000	2,200	240,000,000	40,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2-Methylnaphthalene	ug/L	8260	5	260	19	25,000	340	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2-Propanone (acetone)	ug/L	8260	50	730	1,700	1,000,000,000	30,000	<20	<20	<20	<20	<20	<20
4-Methyl-2-pentanone (MIBK)	ug/L	8260	50	1,800	ID	20,000,000	ID	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Acrylonitrile	ug/L	8260	2	3	2	34,000	1,200	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Benzene	ug/L	8260	1	5	200	5,600	1,900	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromochloromethane	ug/L	8260	NA	NA	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromodichloromethane	ug/L	8260	1	80	ID	4,800	ID	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromoform	ug/L	8260	1	80	ID	470,000	ID	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromomethane	ug/L	8260	5	10	35	4,000	640	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Carbon disulfide	ug/L	8260	5	800	ID	250,000	ID	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Carbon tetrachloride	ug/L	8260	1	5	45	370	1,400	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chlorobenzene	ug/L	8260	1	100	25	210,000	450	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroethane	ug/L	8260	5	430	1,100	5,700,000	20,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chloroform	ug/L	8260	1	80	350	28,000	11,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloromethane	ug/L	8260	5	260	ID	8,600	ID	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
cis-1,2-Dichloroethylene	ug/L	8260	1	70	620	93,000	11,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,3-Dichloropropylene	ug/L	8260	NA	NA	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Cyclohexane	ug/L	8260	NA	NA	NA	NA	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Dibromochloromethane	ug/L	8260	5	80	ID	14,000	ID	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dibromomethane	ug/L	8260	5	80	NA	ID	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

Table 2
VOC Analytical Results

Sample Number								1902033-01	1903143-01	1904148-01	1905292-01	1906161-01	1907223-01
Sample ID								West Park SW	West Park SW	West Park SW	West Park SW	West Park SW	West Park SW
Date Collected			Target Detection Limit (TDL)	Drinking Water Criteria (DWC)	Groundwater Surface Water Interface Criteria (GSIC)	Groundwater Volatilization to Indoor Air Inhalation Criteria (GVIIC)	Rule 57 Final Acute Value (FAV)	2/7/2019	3/19/2019	4/18/2019	5/28/2019	6/18/2019	7/24/2019
Date Received								2/7/2019	3/22/2019	4/18/2019	5/29/2019	6/18/2019	7/24/2019
Analyte	Units	Method	Organics-Volatiles										
Dichlorodifluoromethane	ug/L	8260	5	1,700	ID	220,000	ID	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Diethyl ether	ug/L	8260	10	10	ID	61,000,000	ID	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Diisopropyl Ether	ug/L	8260	5	30	ID	8,000	ID	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Ethylbenzene	ug/L	8260	1	74	18	110,000	320	**1.0**	<1.0	<1.0	<1.0	**1.0**	<1.0
Ethyltertiarybutylether	ug/L	8260	5	49	ID	2,900,000	ID	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Hexachloroethane	ug/L	8260	5	7	7	27,000	210	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Hexane	ug/L	8260	NA	3,000	NA	12,000	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Isopropylbenzene	ug/L	8260	5	800	28	56,000	500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
m & p - Xylene	ug/L	8260	NA	NA	NA	NA	NA	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Methylene chloride	ug/L	8260	5	5	1,500	220,000	17,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methyltertiarybutylether	ug/L	8260	5	40	7,100	47,000,000	420,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Naphthalene	ug/L	8260	5	520	11	31,000	200	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
n-Butylbenzene	ug/L	8260	1	80	ID	ID	ID	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
n-Propylbenzene	ug/L	8260	1	80	ID	ID	ID	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
o-Xylene	ug/L	8260	NA	NA	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
sec-Butylbenzene	ug/L	8260	1	80	ID	ID	ID	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Styrene	ug/L	8260	1	100	80	170,000	2,900	**1.8**	<1.0	<1.0	<1.0	<1.0	<1.0
tert-Butylbenzene	ug/L	8260	1	80	ID	ID	ID	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
tertiary Butyl Alcohol	ug/L	8260	50	3,900	NA	1,000,000,000	NA	<50	<50	<50	<50	<50	<50
tertiaryAmylmethylether	ug/L	8260	5	190	NA	260,000	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Tetrachloroethylene	ug/L	8260	1	5	60	25,000	2,900	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Tetrahydrofuran	ug/L	8260	90	95	11,000	6,900,000	150,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Toluene	ug/L	8260	1	790	270	530,000	2,600	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,2-Dichloroethylene	ug/L	8260	1	100	1,500	85,000	28,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,3-Dichloropropylene	ug/L	8260	NA	NA	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethylene	ug/L	8260	1	5	200	2,200	3,500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichlorofluoromethane	ug/L	8260	1	2,600	NA	1,100,000	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Vinyl chloride	ug/L	8260	1	2	13	1,100	17,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

"ID" means insufficient data to develop criterion.
"NA" means a criterion or value is not available or, in the case of background, not applicable.
"NLV" means hazardous substance is not likely to volatilize under most conditions.
Letters in criteria columns refer to Footnotes of the Criteria/RBSLs tables.

Table 2
VOC Analytical Results

Sample Number								1902033-02	1903143-02	1904148-02	1905292-02	1906161-02	1907223-02
Sample ID								Chapin	Chapin	Chapin	Chapin	Chapin	Chapin
Date Collected			Target Detection Limit (TDL)	Drinking Water Criteria (DWC)	Groundwater Surface Water Interface Criteria (GSIC)	Groundwater Volatilization to Indoor Air Inhalation Criteria (GVIIC)	Rule 57 Final Acute Value (FAV)	2/7/2019	3/19/2019	4/18/2019	5/28/2019	6/18/2019	7/24/2019
Date Received								2/7/2019	3/22/2019	4/18/2019	5/29/2019	6/18/2019	7/24/2019
Analyte	Units	Method	Organics-Volatiles										
1,1,1,2-Tetrachloroethane	ug/L	8260	1	77	ID	15,000	ID	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,1-Trichloroethane	ug/L	8260	1	200	89	660,000	1,600	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane	ug/L	8260	1	9	78	12,000	1,800	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	ug/L	8260	1	5	330	17,000	6,400	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	ug/L	8260	1	880	740	1,000,000	13,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethylene	ug/L	8260	1	7	130	200	2,300	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3-Trichlorobenzene	ug/L	8260	NA	NA	NA	NA	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2,3-Trichloropropane	ug/L	8260	1	42	NA	8,300	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3-Trimethylbenzene	ug/L	8260	NA	NA	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4-Trichlorobenzene	ug/L	8260	5	70	99	300,000	850	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2,4-Trimethylbenzene	ug/L	8260	1	63	17	56,000	310	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dibromoethane	ug/L	8260	0	0	6	2,400	280	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichlorobenzene	ug/L	8260	1	600	13	160,000	240	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethane	ug/L	8260	1	5	360	9,600	16,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloropropane	ug/L	8260	1	5	230	16,000	4,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3,5-Trimethylbenzene	ug/L	8260	1	72	45	61,000	810	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3-Dichlorobenzene	ug/L	8260	1	7	28	18,000	200	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,4-Dichlorobenzene	ug/L	8260	1	75	17	16,000	210	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2,2,4-Trimethylpentane	ug/L	8260	50	ID	NA	2,300	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2-Butanone (MEK)	ug/L	8260	25	13,000	2,200	240,000,000	40,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2-Methylnaphthalene	ug/L	8260	5	260	19	25,000	340	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2-Propanone (acetone)	ug/L	8260	50	730	1,700	1,000,000,000	30,000	<20	<20	<20	<20	<20	<20
4-Methyl-2-pentanone (MIBK)	ug/L	8260	50	1,800	ID	20,000,000	ID	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Acrylonitrile	ug/L	8260	2	3	2	34,000	1,200	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Benzene	ug/L	8260	1	5	200	5,600	1,900	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromochloromethane	ug/L	8260	NA	NA	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromodichloromethane	ug/L	8260	1	80	ID	4,800	ID	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromoform	ug/L	8260	1	80	ID	470,000	ID	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromomethane	ug/L	8260	5	10	35	4,000	640	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Carbon disulfide	ug/L	8260	5	800	ID	250,000	ID	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Carbon tetrachloride	ug/L	8260	1	5	45	370	1,400	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chlorobenzene	ug/L	8260	1	100	25	210,000	450	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroethane	ug/L	8260	5	430	1,100	5,700,000	20,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chloroform	ug/L	8260	1	80	350	28,000	11,000	<1.0	<1.0	<1.0	<1.0	**2.6**	<1.0
Chloromethane	ug/L	8260	5	260	ID	8,600	ID	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
cis-1,2-Dichloroethylene	ug/L	8260	1	70	620	93,000	11,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,3-Dichloropropylene	ug/L	8260	NA	NA	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Cyclohexane	ug/L	8260	NA	NA	NA	NA	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Dibromochloromethane	ug/L	8260	5	80	ID	14,000	ID	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dibromomethane	ug/L	8260	5	80	NA	ID	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

Table 2
VOC Analytical Results

Sample Number								1902033-02	1903143-02	1904148-02	1905292-02	1906161-02	1907223-02
Sample ID								Chapin	Chapin	Chapin	Chapin	Chapin	Chapin
Date Collected			Target Detection Limit (TDL)	Drinking Water Criteria (DWC)	Groundwater Surface Water Interface Criteria (GSIC)	Groundwater Volatilization to Indoor Air Inhalation Criteria (GVIIC)	Rule 57 Final Acute Value (FAV)	2/7/2019	3/19/2019	4/18/2019	5/28/2019	6/18/2019	7/24/2019
Date Received								2/7/2019	3/22/2019	4/18/2019	5/29/2019	6/18/2019	7/24/2019
Analyte	Units	Method	Organics-Volatiles										
Dichlorodifluoromethane	ug/L	8260	5	1,700	ID	220,000	ID	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Diethyl ether	ug/L	8260	10	10	ID	61,000,000	ID	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Diisopropyl Ether	ug/L	8260	5	30	ID	8,000	ID	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Ethylbenzene	ug/L	8260	1	74	18	110,000	320	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Ethyltertiarybutylether	ug/L	8260	5	49	ID	2,900,000	ID	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Hexachloroethane	ug/L	8260	5	7	7	27,000	210	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Hexane	ug/L	8260	NA	3,000	NA	12,000	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Isopropylbenzene	ug/L	8260	5	800	28	56,000	500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
m & p - Xylene	ug/L	8260	NA	NA	NA	NA	NA	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Methylene chloride	ug/L	8260	5	5	1,500	220,000	17,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methyltertiarybutylether	ug/L	8260	5	40	7,100	47,000,000	420,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Naphthalene	ug/L	8260	5	520	11	31,000	200	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
n-Butylbenzene	ug/L	8260	1	80	ID	ID	ID	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
n-Propylbenzene	ug/L	8260	1	80	ID	ID	ID	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
o-Xylene	ug/L	8260	NA	NA	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
sec-Butylbenzene	ug/L	8260	1	80	ID	ID	ID	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Styrene	ug/L	8260	1	100	80	170,000	2,900	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
tert-Butylbenzene	ug/L	8260	1	80	ID	ID	ID	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
tertiary Butyl Alcohol	ug/L	8260	50	3,900	NA	1,000,000,000	NA	<50	<50	<50	<50	<50	<50
tertiaryAmylmethylether	ug/L	8260	5	190	NA	260,000	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Tetrachloroethylene	ug/L	8260	1	5	60	25,000	2,900	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Tetrahydrofuran	ug/L	8260	90	95	11,000	6,900,000	150,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Toluene	ug/L	8260	1	790	270	530,000	2,600	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,2-Dichloroethylene	ug/L	8260	1	100	1,500	85,000	28,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,3-Dichloropropylene	ug/L	8260	NA	NA	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethylene	ug/L	8260	1	5	200	2,200	3,500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichlorofluoromethane	ug/L	8260	1	2,600	NA	1,100,000	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Vinyl chloride	ug/L	8260	1	2	13	1,100	17,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

"ID" means insufficient data to develop criterion.
"NA" means a criterion or value is not available or, in the case of background, not applicable.
"NLV" means hazardous substance is not likely to volatilize under most conditions.
Letters in criteria columns refer to Footnotes of the Criteria/RBSLs tables.

Table 2
VOC Analytical Results

Sample Number								1902033-03	1903143-03	1904148-03	1905292-03	1906161-03	1907223-03
Sample ID								Maple Ridge	Maple Ridge	Maple Ridge	Maple Ridge	Maple Ridge	Maple Ridge
Date Collected			Target Detection Limit (TDL)	Drinking Water Criteria (DWC)	Groundwater Surface Water Interface Criteria (GSIC)	Groundwater Volatilization to Indoor Air Inhalation Criteria (GVIIC)	Rule 57 Final Acute Value (FAV)	2/7/2019	3/19/2019	4/18/2019	5/28/2019	6/18/2019	7/24/2019
Date Received								2/7/2019	3/22/2019	4/18/2019	5/29/2019	6/18/2019	7/24/2019
Analyte	Units	Method	Organics-Volatiles										
1,1,1,2-Tetrachloroethane	ug/L	8260	1	77	ID	15,000	ID	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,1-Trichloroethane	ug/L	8260	1	200	89	660,000	1,600	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane	ug/L	8260	1	9	78	12,000	1,800	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	ug/L	8260	1	5	330	17,000	6,400	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	ug/L	8260	1	880	740	1,000,000	13,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethylene	ug/L	8260	1	7	130	200	2,300	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3-Trichlorobenzene	ug/L	8260	NA	NA	NA	NA	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2,3-Trichloropropane	ug/L	8260	1	42	NA	8,300	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3-Trimethylbenzene	ug/L	8260	NA	NA	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4-Trichlorobenzene	ug/L	8260	5	70	99	300,000	850	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2,4-Trimethylbenzene	ug/L	8260	1	63	17	56,000	310	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dibromoethane	ug/L	8260	0	0	6	2,400	280	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichlorobenzene	ug/L	8260	1	600	13	160,000	240	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethane	ug/L	8260	1	5	360	9,600	16,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloropropane	ug/L	8260	1	5	230	16,000	4,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3,5-Trimethylbenzene	ug/L	8260	1	72	45	61,000	810	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3-Dichlorobenzene	ug/L	8260	1	7	28	18,000	200	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,4-Dichlorobenzene	ug/L	8260	1	75	17	16,000	210	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2,2,4-Trimethylpentane	ug/L	8260	50	ID	NA	2,300	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2-Butanone (MEK)	ug/L	8260	25	13,000	2,200	240,000,000	40,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2-Methylnaphthalene	ug/L	8260	5	260	19	25,000	340	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2-Propanone (acetone)	ug/L	8260	50	730	1,700	1,000,000,000	30,000	<20	<20	<20	<20	<20	<20
4-Methyl-2-pentanone (MIBK)	ug/L	8260	50	1,800	ID	20,000,000	ID	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Acrylonitrile	ug/L	8260	2	3	2	34,000	1,200	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Benzene	ug/L	8260	1	5	200	5,600	1,900	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromochloromethane	ug/L	8260	NA	NA	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromodichloromethane	ug/L	8260	1	80	ID	4,800	ID	<1.0	<1.0	<1.0	<1.0	**3.7**	<1.0
Bromoform	ug/L	8260	1	80	ID	470,000	ID	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromomethane	ug/L	8260	5	10	35	4,000	640	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Carbon disulfide	ug/L	8260	5	800	ID	250,000	ID	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Carbon tetrachloride	ug/L	8260	1	5	45	370	1,400	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chlorobenzene	ug/L	8260	1	100	25	210,000	450	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroethane	ug/L	8260	5	430	1,100	5,700,000	20,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chloroform	ug/L	8260	1	80	350	28,000	11,000	<1.0	<1.0	<1.0	<1.0	**17**	<1.0
Chloromethane	ug/L	8260	5	260	ID	8,600	ID	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
cis-1,2-Dichloroethylene	ug/L	8260	1	70	620	93,000	11,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,3-Dichloropropylene	ug/L	8260	NA	NA	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Cyclohexane	ug/L	8260	NA	NA	NA	NA	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Dibromochloromethane	ug/L	8260	5	80	ID	14,000	ID	<1.0	<1.0	<1.0	<1.0	**1.1**	<1.0
Dibromomethane	ug/L	8260	5	80	NA	ID	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

Table 2
VOC Analytical Results

Sample Number								1902033-03	1903143-03	1904148-03	1905292-03	1906161-03	1907223-03
Sample ID								Maple Ridge	Maple Ridge	Maple Ridge	Maple Ridge	Maple Ridge	Maple Ridge
Date Collected			Target Detection Limit (TDL)	Drinking Water Criteria (DWC)	Groundwater Surface Water Interface Criteria (GSIC)	Groundwater Volatilization to Indoor Air Inhalation Criteria (GVIIC)	Rule 57 Final Acute Value (FAV)	2/7/2019	3/19/2019	4/18/2019	5/28/2019	6/18/2019	7/24/2019
Date Received								2/7/2019	3/22/2019	4/18/2019	5/29/2019	6/18/2019	7/24/2019
Analyte	Units	Method	Organics-Volatiles										
Dichlorodifluoromethane	ug/L	8260	5	1,700	ID	220,000	ID	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Diethyl ether	ug/L	8260	10	10	ID	61,000,000	ID	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Diisopropyl Ether	ug/L	8260	5	30	ID	8,000	ID	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Ethylbenzene	ug/L	8260	1	74	18	110,000	320	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Ethyltertiarybutylether	ug/L	8260	5	49	ID	2,900,000	ID	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Hexachloroethane	ug/L	8260	5	7	7	27,000	210	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Hexane	ug/L	8260	NA	3,000	NA	12,000	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Isopropylbenzene	ug/L	8260	5	800	28	56,000	500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
m & p - Xylene	ug/L	8260	NA	NA	NA	NA	NA	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Methylene chloride	ug/L	8260	5	5	1,500	220,000	17,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methyltertiarybutylether	ug/L	8260	5	40	7,100	47,000,000	420,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Naphthalene	ug/L	8260	5	520	11	31,000	200	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
n-Butylbenzene	ug/L	8260	1	80	ID	ID	ID	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
n-Propylbenzene	ug/L	8260	1	80	ID	ID	ID	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
o-Xylene	ug/L	8260	NA	NA	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
sec-Butylbenzene	ug/L	8260	1	80	ID	ID	ID	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Styrene	ug/L	8260	1	100	80	170,000	2,900	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
tert-Butylbenzene	ug/L	8260	1	80	ID	ID	ID	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
tertiary Butyl Alcohol	ug/L	8260	50	3,900	NA	1,000,000,000	NA	<50	<50	<50	<50	<50	<50
tertiaryAmylmethylether	ug/L	8260	5	190	NA	260,000	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Tetrachloroethylene	ug/L	8260	1	5	60	25,000	2,900	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Tetrahydrofuran	ug/L	8260	90	95	11,000	6,900,000	150,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Toluene	ug/L	8260	1	790	270	530,000	2,600	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,2-Dichloroethylene	ug/L	8260	1	100	1,500	85,000	28,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,3-Dichloropropylene	ug/L	8260	NA	NA	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethylene	ug/L	8260	1	5	200	2,200	3,500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichlorofluoromethane	ug/L	8260	1	2,600	NA	1,100,000	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Vinyl chloride	ug/L	8260	1	2	13	1,100	17,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

"ID" means insufficient data to develop criterion.
"NA" means a criterion or value is not available or, in the case of background, not applicable.
"NLV" means hazardous substance is not likely to volatilize under most conditions.
Letters in criteria columns refer to Footnotes of the Criteria/RBSLs tables.

Table 2
VOC Analytical Results

Sample Number								1902033-05	1903143-05	1904148-05	1905292-04	1906161-04	1907223-04
Sample ID								Murray	Murray	Murray	Murray	Murray	Murry
Date Collected			Target Detection Limit (TDL)	Drinking Water Criteria (DWC)	Groundwater Surface Water Interface Criteria (GSIC)	Groundwater Volatilization to Indoor Air Inhalation Criteria (GVIIC)	Rule 57 Final Acute Value (FAV)	2/7/2019	3/19/2019	4/18/2019	5/28/2019	6/18/2019	7/24/2019
Date Received								2/7/2019	3/22/2019	4/18/2019	5/29/2019	6/18/2019	7/24/2019
Analyte	Units	Method	Organics-Volatiles										
1,1,1,2-Tetrachloroethane	ug/L	8260	1	77	ID	15,000	ID	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,1-Trichloroethane	ug/L	8260	1	200	89	660,000	1,600	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane	ug/L	8260	1	9	78	12,000	1,800	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	ug/L	8260	1	5	330	17,000	6,400	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	ug/L	8260	1	880	740	1,000,000	13,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethylene	ug/L	8260	1	7	130	200	2,300	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3-Trichlorobenzene	ug/L	8260	NA	NA	NA	NA	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2,3-Trichloropropane	ug/L	8260	1	42	NA	8,300	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3-Trimethylbenzene	ug/L	8260	NA	NA	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4-Trichlorobenzene	ug/L	8260	5	70	99	300,000	850	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2,4-Trimethylbenzene	ug/L	8260	1	63	17	56,000	310	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dibromoethane	ug/L	8260	0	0	6	2,400	280	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichlorobenzene	ug/L	8260	1	600	13	160,000	240	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethane	ug/L	8260	1	5	360	9,600	16,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloropropane	ug/L	8260	1	5	230	16,000	4,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3,5-Trimethylbenzene	ug/L	8260	1	72	45	61,000	810	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3-Dichlorobenzene	ug/L	8260	1	7	28	18,000	200	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,4-Dichlorobenzene	ug/L	8260	1	75	17	16,000	210	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2,2,4-Trimethylpentane	ug/L	8260	50	ID	NA	2,300	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2-Butanone (MEK)	ug/L	8260	25	13,000	2,200	240,000,000	40,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2-Methylnaphthalene	ug/L	8260	5	260	19	25,000	340	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2-Propanone (acetone)	ug/L	8260	50	730	1,700	1,000,000,000	30,000	<20	<20	<20	<20	<20	<20
4-Methyl-2-pentanone (MIBK)	ug/L	8260	50	1,800	ID	20,000,000	ID	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Acrylonitrile	ug/L	8260	2	3	2	34,000	1,200	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Benzene	ug/L	8260	1	5	200	5,600	1,900	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromochloromethane	ug/L	8260	NA	NA	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromodichloromethane	ug/L	8260	1	80	ID	4,800	ID	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromoform	ug/L	8260	1	80	ID	470,000	ID	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromomethane	ug/L	8260	5	10	35	4,000	640	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Carbon disulfide	ug/L	8260	5	800	ID	250,000	ID	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Carbon tetrachloride	ug/L	8260	1	5	45	370	1,400	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chlorobenzene	ug/L	8260	1	100	25	210,000	450	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroethane	ug/L	8260	5	430	1,100	5,700,000	20,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chloroform	ug/L	8260	1	80	350	28,000	11,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloromethane	ug/L	8260	5	260	ID	8,600	ID	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
cis-1,2-Dichloroethylene	ug/L	8260	1	70	620	93,000	11,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,3-Dichloropropylene	ug/L	8260	NA	NA	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Cyclohexane	ug/L	8260	NA	NA	NA	NA	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Dibromochloromethane	ug/L	8260	5	80	ID	14,000	ID	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dibromomethane	ug/L	8260	5	80	NA	ID	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

Table 2
VOC Analytical Results

Sample Number								1902033-05	1903143-05	1904148-05	1905292-04	1906161-04	1907223-04
Sample ID								Murray	Murray	Murray	Murray	Murray	Murry
Date Collected			Target Detection Limit (TDL)	Drinking Water Criteria (DWC)	Groundwater Surface Water Interface Criteria (GSIC)	Groundwater Volatilization to Indoor Air Inhalation Criteria (GVIIC)	Rule 57 Final Acute Value (FAV)	2/7/2019	3/19/2019	4/18/2019	5/28/2019	6/18/2019	7/24/2019
Date Received								2/7/2019	3/22/2019	4/18/2019	5/29/2019	6/18/2019	7/24/2019
Analyte	Units	Method	Organics-Volatiles										
Dichlorodifluoromethane	ug/L	8260	5	1,700	ID	220,000	ID	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Diethyl ether	ug/L	8260	10	10	ID	61,000,000	ID	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Diisopropyl Ether	ug/L	8260	5	30	ID	8,000	ID	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Ethylbenzene	ug/L	8260	1	74	18	110,000	320	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Ethyltertiarybutylether	ug/L	8260	5	49	ID	2,900,000	ID	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Hexachloroethane	ug/L	8260	5	7	7	27,000	210	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Hexane	ug/L	8260	NA	3,000	NA	12,000	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Isopropylbenzene	ug/L	8260	5	800	28	56,000	500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
m & p - Xylene	ug/L	8260	NA	NA	NA	NA	NA	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Methylene chloride	ug/L	8260	5	5	1,500	220,000	17,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methyltertiarybutylether	ug/L	8260	5	40	7,100	47,000,000	420,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Naphthalene	ug/L	8260	5	520	11	31,000	200	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
n-Butylbenzene	ug/L	8260	1	80	ID	ID	ID	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
n-Propylbenzene	ug/L	8260	1	80	ID	ID	ID	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
o-Xylene	ug/L	8260	NA	NA	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
sec-Butylbenzene	ug/L	8260	1	80	ID	ID	ID	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Styrene	ug/L	8260	1	100	80	170,000	2,900	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
tert-Butylbenzene	ug/L	8260	1	80	ID	ID	ID	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
tertiary Butyl Alcohol	ug/L	8260	50	3,900	NA	1,000,000,000	NA	<50	<50	<50	<50	<50	<50
tertiaryAmylmethylether	ug/L	8260	5	190	NA	260,000	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Tetrachloroethylene	ug/L	8260	1	5	60	25,000	2,900	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Tetrahydrofuran	ug/L	8260	90	95	11,000	6,900,000	150,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Toluene	ug/L	8260	1	790	270	530,000	2,600	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,2-Dichloroethylene	ug/L	8260	1	100	1,500	85,000	28,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,3-Dichloropropylene	ug/L	8260	NA	NA	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethylene	ug/L	8260	1	5	200	2,200	3,500	**1.0**	**1.6**	**1.1**	**1.0**	<1.0	**1.4**
Trichlorofluoromethane	ug/L	8260	1	2,600	NA	1,100,000	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Vinyl chloride	ug/L	8260	1	2	13	1,100	17,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

"ID" means insufficient data to develop criterion.
"NA" means a criterion or value is not available or, in the case of background, not applicable.
"NLV" means hazardous substance is not likely to volatilize under most conditions.
Letters in criteria columns refer to Footnotes of the Criteria/RBSLs tables.

Table 2
VOC Analytical Results

Sample Number								1902033-06	1903143-06	1904148-06	1905292-05	1906161-05	1907223-05
Sample ID								Eighth	Eighth	Eighth	Eighth	Eighth	Eighth
Date Collected			Target Detection Limit (TDL)	Drinking Water Criteria (DWC)	Groundwater Surface Water Interface Criteria (GSIC)	Groundwater Volatilization to Indoor Air Inhalation Criteria (GVIIC)	Rule 57 Final Acute Value (FAV)	2/7/2019	3/19/2019	4/18/2019	5/28/2019	6/18/2019	7/24/2019
Date Received								2/7/2019	3/22/2019	4/18/2019	5/29/2019	6/18/2019	7/24/2019
Analyte	Units	Method	Organics-Volatiles										
1,1,1,2-Tetrachloroethane	ug/L	8260	1	77	ID	15,000	ID	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,1-Trichloroethane	ug/L	8260	1	200	89	660,000	1,600	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane	ug/L	8260	1	9	78	12,000	1,800	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	ug/L	8260	1	5	330	17,000	6,400	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	ug/L	8260	1	880	740	1,000,000	13,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethylene	ug/L	8260	1	7	130	200	2,300	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3-Trichlorobenzene	ug/L	8260	NA	NA	NA	NA	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2,3-Trichloropropane	ug/L	8260	1	42	NA	8,300	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3-Trimethylbenzene	ug/L	8260	NA	NA	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4-Trichlorobenzene	ug/L	8260	5	70	99	300,000	850	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2,4-Trimethylbenzene	ug/L	8260	1	63	17	56,000	310	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dibromoethane	ug/L	8260	0	0	6	2,400	280	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichlorobenzene	ug/L	8260	1	600	13	160,000	240	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethane	ug/L	8260	1	5	360	9,600	16,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloropropane	ug/L	8260	1	5	230	16,000	4,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3,5-Trimethylbenzene	ug/L	8260	1	72	45	61,000	810	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3-Dichlorobenzene	ug/L	8260	1	7	28	18,000	200	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,4-Dichlorobenzene	ug/L	8260	1	75	17	16,000	210	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2,2,4-Trimethylpentane	ug/L	8260	50	ID	NA	2,300	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2-Butanone (MEK)	ug/L	8260	25	13,000	2,200	240,000,000	40,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2-Methylnaphthalene	ug/L	8260	5	260	19	25,000	340	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2-Propanone (acetone)	ug/L	8260	50	730	1,700	1,000,000,000	30,000	<20	<20	<20	<20	<20	<20
4-Methyl-2-pentanone (MIBK)	ug/L	8260	50	1,800	ID	20,000,000	ID	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Acrylonitrile	ug/L	8260	2	3	2	34,000	1,200	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Benzene	ug/L	8260	1	5	200	5,600	1,900	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromochloromethane	ug/L	8260	NA	NA	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromodichloromethane	ug/L	8260	1	80	ID	4,800	ID	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromoform	ug/L	8260	1	80	ID	470,000	ID	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromomethane	ug/L	8260	5	10	35	4,000	640	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Carbon disulfide	ug/L	8260	5	800	ID	250,000	ID	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Carbon tetrachloride	ug/L	8260	1	5	45	370	1,400	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chlorobenzene	ug/L	8260	1	100	25	210,000	450	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroethane	ug/L	8260	5	430	1,100	5,700,000	20,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chloroform	ug/L	8260	1	80	350	28,000	11,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloromethane	ug/L	8260	5	260	ID	8,600	ID	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
cis-1,2-Dichloroethylene	ug/L	8260	1	70	620	93,000	11,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,3-Dichloropropylene	ug/L	8260	NA	NA	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Cyclohexane	ug/L	8260	NA	NA	NA	NA	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Dibromochloromethane	ug/L	8260	5	80	ID	14,000	ID	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dibromomethane	ug/L	8260	5	80	NA	ID	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

Table 2
VOC Analytical Results

Sample Number								1902033-06	1903143-06	1904148-06	1905292-05	1906161-05	1907223-05
Sample ID								Eighth	Eighth	Eighth	Eighth	Eighth	Eighth
Date Collected			Target Detection Limit (TDL)	Drinking Water Criteria (DWC)	Groundwater Surface Water Interface Criteria (GSIC)	Groundwater Volatilization to Indoor Air Inhalation Criteria (GVIIC)	Rule 57 Final Acute Value (FAV)	2/7/2019	3/19/2019	4/18/2019	5/28/2019	6/18/2019	7/24/2019
Date Received								2/7/2019	3/22/2019	4/18/2019	5/29/2019	6/18/2019	7/24/2019
Analyte	Units	Method	Organics-Volatiles										
Dichlorodifluoromethane	ug/L	8260	5	1,700	ID	220,000	ID	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Diethyl ether	ug/L	8260	10	10	ID	61,000,000	ID	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Diisopropyl Ether	ug/L	8260	5	30	ID	8,000	ID	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Ethylbenzene	ug/L	8260	1	74	18	110,000	320	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Ethyltertiarybutylether	ug/L	8260	5	49	ID	2,900,000	ID	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Hexachloroethane	ug/L	8260	5	7	7	27,000	210	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Hexane	ug/L	8260	NA	3,000	NA	12,000	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Isopropylbenzene	ug/L	8260	5	800	28	56,000	500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
m & p - Xylene	ug/L	8260	NA	NA	NA	NA	NA	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Methylene chloride	ug/L	8260	5	5	1,500	220,000	17,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methyltertiarybutylether	ug/L	8260	5	40	7,100	47,000,000	420,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Naphthalene	ug/L	8260	5	520	11	31,000	200	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
n-Butylbenzene	ug/L	8260	1	80	ID	ID	ID	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
n-Propylbenzene	ug/L	8260	1	80	ID	ID	ID	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
o-Xylene	ug/L	8260	NA	NA	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
sec-Butylbenzene	ug/L	8260	1	80	ID	ID	ID	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Styrene	ug/L	8260	1	100	80	170,000	2,900	<1.0	<1.0	<1.0	<1.0		<1.0
tert-Butylbenzene	ug/L	8260	1	80	ID	ID	ID	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
tertiary Butyl Alcohol	ug/L	8260	50	3,900	NA	1,000,000,000	NA	<50	<50	<50	<50	<50	<50
tertiaryAmylmethylether	ug/L	8260	5	190	NA	260,000	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Tetrachloroethylene	ug/L	8260	1	5	60	25,000	2,900	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Tetrahydrofuran	ug/L	8260	90	95	11,000	6,900,000	150,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Toluene	ug/L	8260	1	790	270	530,000	2,600	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,2-Dichloroethylene	ug/L	8260	1	100	1,500	85,000	28,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,3-Dichloropropylene	ug/L	8260	NA	NA	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethylene	ug/L	8260	1	5	200	2,200	3,500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichlorofluoromethane	ug/L	8260	1	2,600	NA	1,100,000	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Vinyl chloride	ug/L	8260	1	2	13	1,100	17,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

"ID" means insufficient data to develop criterion.
"NA" means a criterion or value is not available or, in the case of background, not applicable.
"NLV" means hazardous substance is not likely to volatilize under most conditions.
Letters in criteria columns refer to Footnotes of the Criteria/RBSLs tables.

Table 2
VOC Analytical Results

Sample Number								1902033-07	1903143-07	1904148-07	1905292-06	1906161-06	1907223-06
Sample ID								Maryfield	Maryfield	Maryfield	Maryfield	Maryfield	Maryfield
Date Collected			Target Detection Limit (TDL)	Drinking Water Criteria (DWC)	Groundwater Surface Water Interface Criteria (GSIC)	Groundwater Volatilization to Indoor Air Inhalation Criteria (GVIIC)	Rule 57 Final Acute Value (FAV)	2/7/2019	3/19/2019	4/18/2019	5/28/2019	6/18/2019	7/24/2019
Date Received								2/7/2019	3/22/2019	4/18/2019	5/29/2019	6/18/2019	7/24/2019
Analyte	Units	Method	Organics-Volatiles										
1,1,1,2-Tetrachloroethane	ug/L	8260	1	77	ID	15,000	ID	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,1-Trichloroethane	ug/L	8260	1	200	89	660,000	1,600	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane	ug/L	8260	1	9	78	12,000	1,800	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	ug/L	8260	1	5	330	17,000	6,400	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	ug/L	8260	1	880	740	1,000,000	13,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethylene	ug/L	8260	1	7	130	200	2,300	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3-Trichlorobenzene	ug/L	8260	NA	NA	NA	NA	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2,3-Trichloropropane	ug/L	8260	1	42	NA	8,300	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3-Trimethylbenzene	ug/L	8260	NA	NA	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4-Trichlorobenzene	ug/L	8260	5	70	99	300,000	850	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2,4-Trimethylbenzene	ug/L	8260	1	63	17	56,000	310	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dibromoethane	ug/L	8260	0	0	6	2,400	280	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichlorobenzene	ug/L	8260	1	600	13	160,000	240	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethane	ug/L	8260	1	5	360	9,600	16,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloropropane	ug/L	8260	1	5	230	16,000	4,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3,5-Trimethylbenzene	ug/L	8260	1	72	45	61,000	810	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3-Dichlorobenzene	ug/L	8260	1	7	28	18,000	200	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,4-Dichlorobenzene	ug/L	8260	1	75	17	16,000	210	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2,2,4-Trimethylpentane	ug/L	8260	50	ID	NA	2,300	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2-Butanone (MEK)	ug/L	8260	25	13,000	2,200	240,000,000	40,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2-Methylnaphthalene	ug/L	8260	5	260	19	25,000	340	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2-Propanone (acetone)	ug/L	8260	50	730	1,700	1,000,000,000	30,000	<20	<20	<20	<20	<20	<20
4-Methyl-2-pentanone (MIBK)	ug/L	8260	50	1,800	ID	20,000,000	ID	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Acrylonitrile	ug/L	8260	2	3	2	34,000	1,200	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Benzene	ug/L	8260	1	5	200	5,600	1,900	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromochloromethane	ug/L	8260	NA	NA	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromodichloromethane	ug/L	8260	1	80	ID	4,800	ID	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromoform	ug/L	8260	1	80	ID	470,000	ID	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromomethane	ug/L	8260	5	10	35	4,000	640	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Carbon disulfide	ug/L	8260	5	800	ID	250,000	ID	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Carbon tetrachloride	ug/L	8260	1	5	45	370	1,400	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chlorobenzene	ug/L	8260	1	100	25	210,000	450	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroethane	ug/L	8260	5	430	1,100	5,700,000	20,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chloroform	ug/L	8260	1	80	350	28,000	11,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloromethane	ug/L	8260	5	260	ID	8,600	ID	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
cis-1,2-Dichloroethylene	ug/L	8260	1	70	620	93,000	11,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,3-Dichloropropylene	ug/L	8260	NA	NA	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Cyclohexane	ug/L	8260	NA	NA	NA	NA	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Dibromochloromethane	ug/L	8260	5	80	ID	14,000	ID	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dibromomethane	ug/L	8260	5	80	NA	ID	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

Table 2
VOC Analytical Results

Sample Number								1902033-07	1903143-07	1904148-07	1905292-06	1906161-06	1907223-06
Sample ID								Maryfield	Maryfield	Maryfield	Maryfield	Maryfield	Maryfield
Date Collected			Target Detection Limit (TDL)	Drinking Water Criteria (DWC)	Groundwater Surface Water Interface Criteria (GSIC)	Groundwater Volatilization to Indoor Air Inhalation Criteria (GVIIC)	Rule 57 Final Acute Value (FAV)	2/7/2019	3/19/2019	4/18/2019	5/28/2019	6/18/2019	7/24/2019
Date Received								2/7/2019	3/22/2019	4/18/2019	5/29/2019	6/18/2019	7/24/2019
Analyte	Units	Method	Organics-Volatiles										
Dichlorodifluoromethane	ug/L	8260	5	1,700	ID	220,000	ID	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Diethyl ether	ug/L	8260	10	10	ID	61,000,000	ID	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Diisopropyl Ether	ug/L	8260	5	30	ID	8,000	ID	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Ethylbenzene	ug/L	8260	1	74	18	110,000	320	**14**	**14**	**9.6**	**13**	**21**	**5.1**
Ethyltertiarybutylether	ug/L	8260	5	49	ID	2,900,000	ID	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Hexachloroethane	ug/L	8260	5	7	7	27,000	210	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Hexane	ug/L	8260	NA	3,000	NA	12,000	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Isopropylbenzene	ug/L	8260	5	800	28	56,000	500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
m & p - Xylene	ug/L	8260	NA	NA	NA	NA	NA	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Methylene chloride	ug/L	8260	5	5	1,500	220,000	17,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methyltertiarybutylether	ug/L	8260	5	40	7,100	47,000,000	420,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Naphthalene	ug/L	8260	5	520	11	31,000	200	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
n-Butylbenzene	ug/L	8260	1	80	ID	ID	ID	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
n-Propylbenzene	ug/L	8260	1	80	ID	ID	ID	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
o-Xylene	ug/L	8260	NA	NA	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
sec-Butylbenzene	ug/L	8260	1	80	ID	ID	ID	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Styrene	ug/L	8260	1	100	80	170,000	2,900	**25**	**14**	**4.5**	**12**	**14**	**1.5**
tert-Butylbenzene	ug/L	8260	1	80	ID	ID	ID	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
tertiary Butyl Alcohol	ug/L	8260	50	3,900	NA	1,000,000,000	NA	<50	<50	<50	<50	<50	<50
tertiaryAmylmethylether	ug/L	8260	5	190	NA	260,000	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Tetrachloroethylene	ug/L	8260	1	5	60	25,000	2,900	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Tetrahydrofuran	ug/L	8260	90	95	11,000	6,900,000	150,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Toluene	ug/L	8260	1	790	270	530,000	2,600	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,2-Dichloroethylene	ug/L	8260	1	100	1,500	85,000	28,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,3-Dichloropropylene	ug/L	8260	NA	NA	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethylene	ug/L	8260	1	5	200	2,200	3,500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichlorofluoromethane	ug/L	8260	1	2,600	NA	1,100,000	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Vinyl chloride	ug/L	8260	1	2	13	1,100	17,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

"ID" means insufficient data to develop criterion.
"NA" means a criterion or value is not available or, in the case of background, not applicable.
"NLV" means hazardous substance is not likely to volatilize under most conditions.
Letters in criteria columns refer to Footnotes of the Criteria/RBSLs tables.

Table 2
VOC Analytical Results

Sample Number								1902033-04	1903143-04	1904148-04	No Sample	No Sample	No Sample
Sample ID								Wildwood	Wildwood	Wildwood	Wildwood	Wildwood	Wildwood
Date Collected			Target Detection Limit (TDL)	Drinking Water Criteria (DWC)	Groundwater Surface Water Interface Criteria (GSIC)	Groundwater Volatilization to Indoor Air Inhalation Criteria (GVIIC)	Rule 57 Final Acute Value (FAV)	2/7/2019	3/19/2019	4/18/2019	N/A	N/A	N/A
Date Received								2/7/2019	3/22/2019	4/18/2019	N/A	N/A	N/A
Analyte	Units	Method	Organics-Volatiles										
1,1,1,2-Tetrachloroethane	ug/L	8260	1	77	ID	15,000	ID	<1.0	<1.0	<1.0	DRY	DRY	DRY
1,1,1-Trichloroethane	ug/L	8260	1	200	89	660,000	1,600	<1.0	<1.0	<1.0	DRY	DRY	DRY
1,1,2,2-Tetrachloroethane	ug/L	8260	1	9	78	12,000	1,800	<1.0	<1.0	<1.0	DRY	DRY	DRY
1,1,2-Trichloroethane	ug/L	8260	1	5	330	17,000	6,400	<1.0	<1.0	<1.0	DRY	DRY	DRY
1,1-Dichloroethane	ug/L	8260	1	880	740	1,000,000	13,000	<1.0	<1.0	<1.0	DRY	DRY	DRY
1,1-Dichloroethylene	ug/L	8260	1	7	130	200	2,300	<1.0	<1.0	<1.0	DRY	DRY	DRY
1,2,3-Trichlorobenzene	ug/L	8260	NA	NA	NA	NA	NA	<5.0	<5.0	<5.0	DRY	DRY	DRY
1,2,3-Trichloropropane	ug/L	8260	1	42	NA	8,300	NA	<1.0	<1.0	<1.0	DRY	DRY	DRY
1,2,3-Trimethylbenzene	ug/L	8260	NA	NA	NA	NA	NA	<1.0	<1.0	<1.0	DRY	DRY	DRY
1,2,4-Trichlorobenzene	ug/L	8260	5	70	99	300,000	850	<5.0	<5.0	<5.0	DRY	DRY	DRY
1,2,4-Trimethylbenzene	ug/L	8260	1	63	17	56,000	310	<1.0	<1.0	<1.0	DRY	DRY	DRY
1,2-Dibromoethane	ug/L	8260	0	0	6	2,400	280	<1.0	<1.0	<1.0	DRY	DRY	DRY
1,2-Dichlorobenzene	ug/L	8260	1	600	13	160,000	240	<1.0	<1.0	<1.0	DRY	DRY	DRY
1,2-Dichloroethane	ug/L	8260	1	5	360	9,600	16,000	<1.0	<1.0	<1.0	DRY	DRY	DRY
1,2-Dichloropropane	ug/L	8260	1	5	230	16,000	4,000	<1.0	<1.0	<1.0	DRY	DRY	DRY
1,3,5-Trimethylbenzene	ug/L	8260	1	72	45	61,000	810	<1.0	<1.0	<1.0	DRY	DRY	DRY
1,3-Dichlorobenzene	ug/L	8260	1	7	28	18,000	200	<1.0	<1.0	<1.0	DRY	DRY	DRY
1,4-Dichlorobenzene	ug/L	8260	1	75	17	16,000	210	<1.0	<1.0	<1.0	DRY	DRY	DRY
2,2,4-Trimethylpentane	ug/L	8260	50	ID	NA	2,300	NA	<5.0	<5.0	<5.0	DRY	DRY	DRY
2-Butanone (MEK)	ug/L	8260	25	13,000	2,200	240,000,000	40,000	<5.0	<5.0	<5.0	DRY	DRY	DRY
2-Methylnaphthalene	ug/L	8260	5	260	19	25,000	340	<5.0	<5.0	<5.0	DRY	DRY	DRY
2-Propanone (acetone)	ug/L	8260	50	730	1,700	1,000,000,000	30,000	<20	<20	<20	DRY	DRY	DRY
4-Methyl-2-pentanone (MIBK)	ug/L	8260	50	1,800	ID	20,000,000	ID	<5.0	<5.0	<5.0	DRY	DRY	DRY
Acrylonitrile	ug/L	8260	2	3	2	34,000	1,200	<5.0	<5.0	<5.0	DRY	DRY	DRY
Benzene	ug/L	8260	1	5	200	5,600	1,900	<1.0	<1.0	<1.0	DRY	DRY	DRY
Bromochloromethane	ug/L	8260	NA	NA	NA	NA	NA	<1.0	<1.0	<1.0	DRY	DRY	DRY
Bromodichloromethane	ug/L	8260	1	80	ID	4,800	ID	<1.0	<1.0	<1.0	DRY	DRY	DRY
Bromoform	ug/L	8260	1	80	ID	470,000	ID	<1.0	<1.0	<1.0	DRY	DRY	DRY
Bromomethane	ug/L	8260	5	10	35	4,000	640	<5.0	<5.0	<5.0	DRY	DRY	DRY
Carbon disulfide	ug/L	8260	5	800	ID	250,000	ID	<1.0	<1.0	<1.0	DRY	DRY	DRY
Carbon tetrachloride	ug/L	8260	1	5	45	370	1,400	<1.0	<1.0	<1.0	DRY	DRY	DRY
Chlorobenzene	ug/L	8260	1	100	25	210,000	450	<1.0	<1.0	<1.0	DRY	DRY	DRY
Chloroethane	ug/L	8260	5	430	1,100	5,700,000	20,000	<5.0	<5.0	<5.0	DRY	DRY	DRY
Chloroform	ug/L	8260	1	80	350	28,000	11,000	<1.0	<1.0	<1.0	DRY	DRY	DRY
Chloromethane	ug/L	8260	5	260	ID	8,600	ID	<5.0	<5.0	<5.0	DRY	DRY	DRY
cis-1,2-Dichloroethylene	ug/L	8260	1	70	620	93,000	11,000	<1.0	<1.0	<1.0	DRY	DRY	DRY
cis-1,3-Dichloropropylene	ug/L	8260	NA	NA	NA	NA	NA	<1.0	<1.0	<1.0	DRY	DRY	DRY
Cyclohexane	ug/L	8260	NA	NA	NA	NA	NA	<5.0	<5.0	<5.0	DRY	DRY	DRY
Dibromochloromethane	ug/L	8260	5	80	ID	14,000	ID	<1.0	<1.0	<1.0	DRY	DRY	DRY
Dibromomethane	ug/L	8260	5	80	NA	ID	NA	<1.0	<1.0	<1.0	DRY	DRY	DRY

Table 2
VOC Analytical Results

Sample Number								1902033-04	1903143-04	1904148-04	No Sample	No Sample	No Sample
Sample ID								Wildwood	Wildwood	Wildwood	Wildwood	Wildwood	Wildwood
Date Collected			Target Detection Limit (TDL)	Drinking Water Criteria (DWC)	Groundwater Surface Water Interface Criteria (GSIC)	Groundwater Volatilization to Indoor Air Inhalation Criteria (GVIIC)	Rule 57 Final Acute Value (FAV)	2/7/2019	3/19/2019	4/18/2019	N/A	N/A	N/A
Date Received								2/7/2019	3/22/2019	4/18/2019	N/A	N/A	N/A
Analyte	Units	Method	Organics-Volatiles										
Dichlorodifluoromethane	ug/L	8260	5	1,700	ID	220,000	ID	<5.0	<5.0	<5.0	DRY	DRY	DRY
Diethyl ether	ug/L	8260	10	10	ID	61,000,000	ID	<5.0	<5.0	<5.0	DRY	DRY	DRY
Diisopropyl Ether	ug/L	8260	5	30	ID	8,000	ID	<5.0	<5.0	<5.0	DRY	DRY	DRY
Ethylbenzene	ug/L	8260	1	74	18	110,000	320	<1.0	<1.0	<1.0	DRY	DRY	DRY
Ethyltertiarybutylether	ug/L	8260	5	49	ID	2,900,000	ID	<5.0	<5.0	<5.0	DRY	DRY	DRY
Hexachloroethane	ug/L	8260	5	7	7	27,000	210	<5.0	<5.0	<5.0	DRY	DRY	DRY
Hexane	ug/L	8260	NA	3,000	NA	12,000	NA	<1.0	<1.0	<1.0	DRY	DRY	DRY
Isopropylbenzene	ug/L	8260	5	800	28	56,000	500	<1.0	<1.0	<1.0	DRY	DRY	DRY
m & p - Xylene	ug/L	8260	NA	NA	NA	NA	NA	<2.0	<2.0	<2.0	DRY	DRY	DRY
Methylene chloride	ug/L	8260	5	5	1,500	220,000	17,000	<5.0	<5.0	<5.0	DRY	DRY	DRY
Methyltertiarybutylether	ug/L	8260	5	40	7,100	47,000,000	420,000	<1.0	<1.0	<1.0	DRY	DRY	DRY
Naphthalene	ug/L	8260	5	520	11	31,000	200	<5.0	<5.0	<5.0	DRY	DRY	DRY
n-Butylbenzene	ug/L	8260	1	80	ID	ID	ID	<1.0	<1.0	<1.0	DRY	DRY	DRY
n-Propylbenzene	ug/L	8260	1	80	ID	ID	ID	<1.0	<1.0	<1.0	DRY	DRY	DRY
o-Xylene	ug/L	8260	NA	NA	NA	NA	NA	<1.0	<1.0	<1.0	DRY	DRY	DRY
sec-Butylbenzene	ug/L	8260	1	80	ID	ID	ID	<1.0	<1.0	<1.0	DRY	DRY	DRY
Styrene	ug/L	8260	1	100	80	170,000	2,900	<1.0	<1.0	<1.0	DRY	DRY	DRY
tert-Butylbenzene	ug/L	8260	1	80	ID	ID	ID	<1.0	<1.0	<1.0	DRY	DRY	DRY
tertiary Butyl Alcohol	ug/L	8260	50	3,900	NA	1,000,000,000	NA	<50	<50	<50	DRY	DRY	DRY
tertiaryAmylmethylether	ug/L	8260	5	190	NA	260,000	NA	<5.0	<5.0	<5.0	DRY	DRY	DRY
Tetrachloroethylene	ug/L	8260	1	5	60	25,000	2,900	<1.0	<1.0	<1.0	DRY	DRY	DRY
Tetrahydrofuran	ug/L	8260	90	95	11,000	6,900,000	150,000	<5.0	<5.0	<5.0	DRY	DRY	DRY
Toluene	ug/L	8260	1	790	270	530,000	2,600	<1.0	<1.0	<1.0	DRY	DRY	DRY
trans-1,2-Dichloroethylene	ug/L	8260	1	100	1,500	85,000	28,000	<1.0	<1.0	<1.0	DRY	DRY	DRY
trans-1,3-Dichloropropylene	ug/L	8260	NA	NA	NA	NA	NA	<1.0	<1.0	<1.0	DRY	DRY	DRY
Trichloroethylene	ug/L	8260	1	5	200	2,200	3,500	<1.0	<1.0	<1.0	DRY	DRY	DRY
Trichlorofluoromethane	ug/L	8260	1	2,600	NA	1,100,000	NA	<1.0	<1.0	<1.0	DRY	DRY	DRY
Vinyl chloride	ug/L	8260	1	2	13	1,100	17,000	<1.0	<1.0	<1.0	DRY	DRY	DRY

"ID" means insufficient data to develop criterion.
"NA" means a criterion or value is not available or, in the case of background, not applicable.
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APPENDIX A

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE COMMUNICATION

January 11, 2019

TO: Dan Hamel, Project Manager
Remediation and Redevelopment Division
Jackson District Office

FROM: Kevin Lund, Licensed Engineer
Remediation and Redevelopment Division
Jackson District Office

SUBJECT: Allen Creek Drain Sampling Work Plan, Ann Arbor, Michigan

Introduction

The scope of this Work Plan is to collect water within the Allen Creek Drain storm sewer system to evaluate for the presence of 1,4-Dioxane (Dioxane). The field activities will be conducted for the Michigan Department of Environmental Quality (DEQ), Remediation and Redevelopment Division (RRD) by the DEQ Geological Services Unit (GSU) or Jackson District RRD staff.

Background

Washtenaw County Water Resources Commissioner (Commissioner) Evan Pratt announced in a press release (November 20, 2018) that surface water sampling results provided by the DEQ showed no substantive changes in surface water concentrations of Dioxane at 17 repeat sampling locations in Scio Township and the City of Ann Arbor. Pratt said, “We were glad to hear that 10 of the locations sampled continued to detect no Dioxane, including the three surface waters connected to Allen Creek.”

The DEQ sampled the Allen Creek drain storm sewer system at one location in West Park (Allen Creek – West Park SW) in December 2017 and September 2018 for Dioxane. In 2017, the Dioxane concentration at that location was 4.4 parts per billion (ppb). The concentration increased to 19 ppb in the 2018 sample. Washtenaw County Water Resources Commission staff met with the DEQ to discuss details for more frequent sampling for Dioxane in the Allen Creek storm sewer system at locations where storm sewers are potentially impacted by groundwater to establish baseline levels in the area. Pratt said, “Right now we don’t know if the higher reading (West Park sample location) is a trend, the norm, or an anomaly – we’ve only got two data points a year apart. No one is threatened from the increased 1,4-Dioxane level observed in the storm sewer in West Park. The levels are well below any relevant exposure pathway but raise the question of whether sampling annually is often enough”. Mr. Pratt requested that the DEQ collect a series of six (6) monthly samples at 4-5 additional locations in the Allen Creek storm sewer system to better decide on a long-term plan. Pratt also stated that “We need more data from the branches of Allen Creek that are within the known plume area. More data at several storm sewer

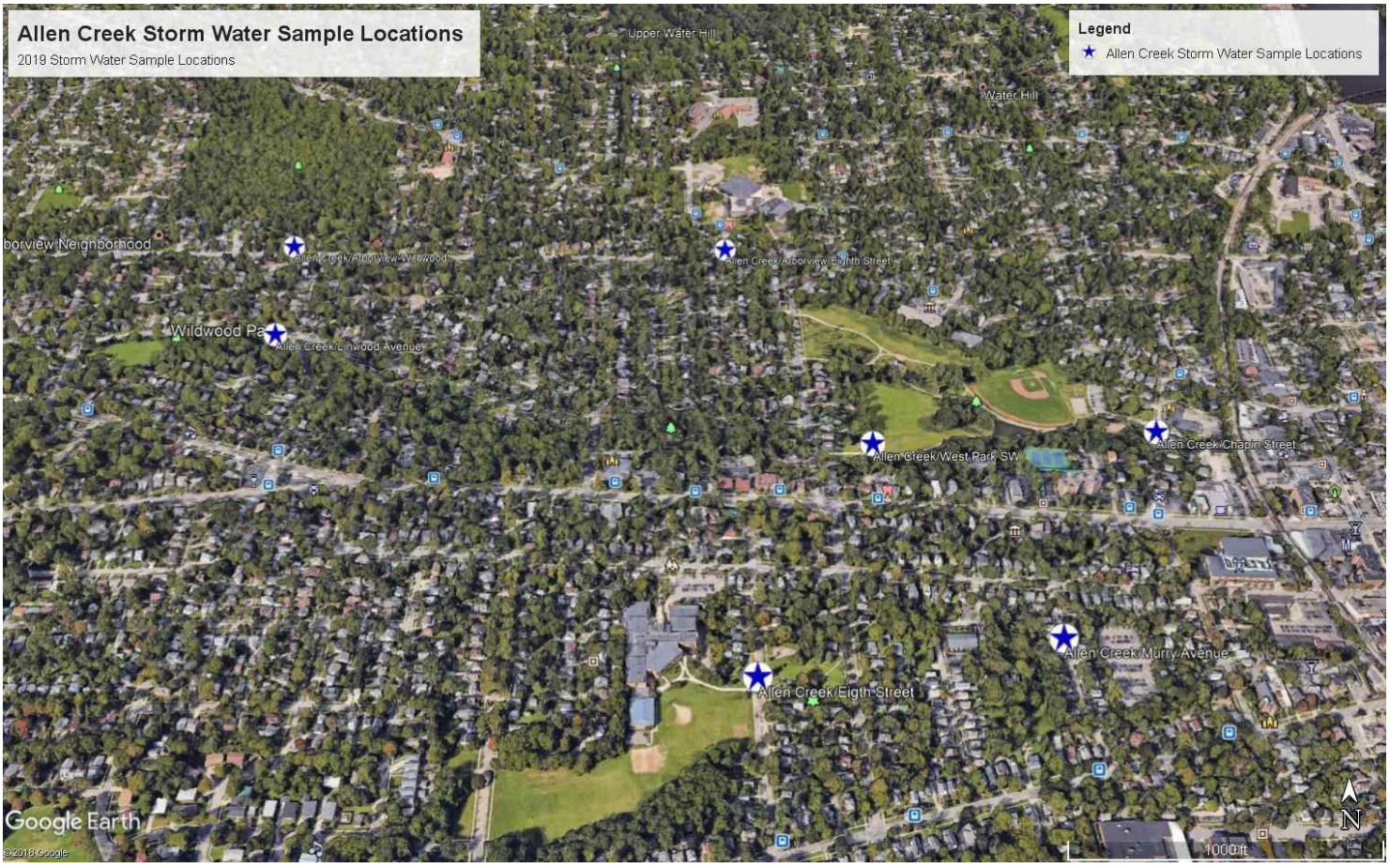
locations will establish a better picture of where we are now. From there we can identify trends long before Dioxane is at a level that might impact people or the Huron River".
The objectives of collecting water within storm sewers are to:

- Determine and evaluate for the presence of Dioxane in the Allen Creek storm sewer system at locations where contaminated groundwater, related to the Gelman Site, might enter the storm sewer.

- Compare water from the storm sewers data with risk-based assumptions and screening levels.

The Commissioner proposed specific locations to conduct additional sampling (Figure 1). The DEQ reviewed the sample locations including a field verification of manhole locations. Based on the objectives identified for the sampling activities the DEQ agrees that the proposed locations are a good first step for sampling on a monthly basis to initiate the evaluation of potential impact of Dioxane contaminated groundwater on the Allen Creek Drain system.

Figure 1. Washtenaw County Water Resources Commission Proposed Storm Water Sample Locations in Ann Arbor



SAMPLING AND ANALYSIS PLAN

This Sampling and Analysis Plan (SAP) will be used to evaluate for the presence of Dioxane in the Allen Creek Drain storm water conveyances as shown in Figure 1.

SAMPLING STRATEGY, RATIONALE, AND APPROACH

The field activities consist of storm water sampling to determine the presence of contaminants including Dioxane in storm sewers at locations where contaminated groundwater, potentially related to the Gelman Site, might enter the storm sewer. The field work will be performed by DEQ, GSU personnel or DEQ Jackson District RRD staff. The field work will be performed in accordance with the DEQ Health and Safety protocols and procedures.

The Jackson District RRD staff will arrange access agreements, utility clearance and obtain any required permit(s) and staff assistance, from the City of Ann Arbor and Washtenaw County, necessary to access the storm water through existing Allen Creek drain storm water system manholes. The agreements and confirmation of assistance will be completed before the storm water investigation activities commence. It is anticipated that permission/permits will be required for storm water sampling in the City of Ann Arbor Right-of-Way (issued through the City) and Washtenaw County (issued by the County). All sampling will be conducted safely without entering a confined space.

The DEQ Environmental Laboratory (Laboratory) will be utilized to analyze storm sewer water samples for Dioxane by Method 8260 Modified SIM (selective ion monitoring). Samples will also be analyzed for full scan volatile organic compounds (VOCs) using Method 8260. Sample designations are listed below in Table 1.

Table 1 – Sample Locations (Allen Creek Drain Stormwater Manholes

- Allen Creek/West Park SW. Manhole in Westpark (that has been previously sampled).
- Allen Creek/Chaplin-West Park. Manhole on Chaplin Street south of entrance to West Park.
- Allen Creek/Maple Ridge-Arborview. Manhole at intersection of Maple Ridge and Arborview.
- Allen Creek/Wildwood-Arborview. Manhole at intersection of Wildwood Avenue and Arborview Blvd.
- Allen Creek/Murry-Washington. Manhole on Murry Avenue south of Washington Street.
- Allen Creek/Eighth-Waterworks. Manhole on 8th Street adjacent to Waterworks Park.
- Allen Creek – Maryfield-Wildwood Park. Manhole in the ravine in Maryfield-Wildwood Park.

SAMPLING METHODS AND PROCEDURES

This section describes the methods and procedures used to collect the grab storm water samples.

All sampling locations will be accessed from existing storm sewer manholes. Grab samples of water from the main flow of the storm water conveyance will be collected, at seven locations (Table 1, Figures 1). The samples will be collected from the manholes directly using a Pro-Curve Extension Pole (Mr. Longarm, Inc.) or equivalent, fitted with a bottle holder at the end or a gloved hand if water is accessible at a shallow depth in the manhole. Entering the manhole (confined space entry) will not be conducted. The water sample will be collected by dipping a clean plastic 500 ml bottle with the dip-pole or gloved hand. The sample will be dispensed from the 500 ml collection bottle into two glass 40 ml VOC vials with Teflon lined screw caps (certified clean by supplier) for both Dioxane and full scan VOC analysis (Total of 4 VOC vials). The required sample bottles and vials will be provided by the Laboratory. Samples will be preserved, in the field, to a pH of < 2 with HCL acid and cooled to 4° C for transport to the Laboratory. All personnel handling sample bottles will use nitrile gloved hands.

Table 2 - QA/QC Samples

The following QA/QC samples will be collected during each sampling event:

- Field Duplicate – One field duplicate will be collected per sampling event.
- Equipment Rinsate Blank – One rinsate blank will be collected from the 500 ml plastic bottle using reagent-grade water provided by the Laboratory per sampling event.
- Trip Blank – If the Laboratory provides the sample bottles/vials in a cooler shipment to the Jackson District Office then a trip blank will be provided by the Laboratory and included in the container shipment and return cooler shipment or delivery to the Laboratory.

Data Evaluation

A final report prepared by DEQ GSU and/or RRD detailing the sample activities, laboratory results and global positioning system (GPS) locations from this investigation will be issued to Dan Hamel, the DEQ Project Manager for the Gelman Site.

Current Estimated Schedule

Access Agreement and Assistance Confirmation – January 2019
Field Work/Sampling Activities – January 2019 thru June 2019
Sampling Report – July 2019

CC: Gelman File
Jerry Tiernan, District Supervisor, RRD

APPENDIX B

EGLE DATA

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL LABORATORY

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

26 February 2019

Work Order: 1902033

Price: $1,325.00

Dan Hamel
MDEQ-RRD-JACKSON
301 E. Louis Glick Highway
Jackson, MI 49201-1556

RE: GELMAN SCIENCES, INC

I certify that the analyses performed by the MDEQ Environmental Laboratory were conducted by methods approved by the U.S. Environmental Protection Agency and other appropriate regulatory agencies.

Sincerely,

Kirby Shane
Laboratory Director

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL LABORATORY

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

MDEQ-RRD-JACKSON
301 E. Louis Glick Highway
Jackson MI, 49201-1556

Project: GELMAN SCIENCES, INC
Site Code: 81000018
Project Manager: Dan Hamel

Reported:
02/26/2019

Analytical Report for Samples

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Qualifier
Allen Creek/West Park SW	1902033-01	Water	02/07/2019	02/07/2019	
Allen Creek/Chapin-West Park	1902033-02	Water	02/07/2019	02/07/2019	
Allen Creek/Maple Ridge-Arborview	1902033-03	Water	02/07/2019	02/07/2019	
Allen Creek/Wildwood-Arborview	1902033-04	Water	02/07/2019	02/07/2019	
Allen Creek/Murray-Washington	1902033-05	Water	02/07/2019	02/07/2019	
Allen Creek/Eighth-Waterworks	1902033-06	Water	02/07/2019	02/07/2019	
Allen Creek-Maryfield-Wildwood Park	1902033-07	Water	02/07/2019	02/07/2019	

Notes and Definitions

Y28	1,4-dioxane analysis is performed using selective ion monitoring (SIM). Results reported below 5 ug/L (aqueous) or 1000 ug/Kg (solids) are estimated.
X	Methods 8260 & 624 are used to analyze volatile organics that have boiling points below 200 ºC. 2-Methylnaphthalene & naphthalene have boiling points above 200 ºC and are better suited to analysis by methods 8270 & 625 as semivolatile organics.
A08	Result(s) and reporting limits(s) are estimated due to low 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
RL	Reporting Limit
NA	Not Applicable

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL LABORATORY

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

Client ID: Allen Creek/West Park SW

Lab ID: 1902033-01

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	02/14/19	B9B1406	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	02/14/19	B9B1406	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
540-84-1	2,2,4-Trimethylpentane	ND	5.0	ug/L	1	02/14/19	B9B1406	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	02/14/19	B9B1406	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	02/14/19	B9B1406	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	02/14/19	B9B1406	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	02/14/19	B9B1406	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	02/14/19	B9B1406	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	02/14/19	B9B1406	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	02/14/19	B9B1406	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	02/14/19	B9B1406	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	02/14/19	B9B1406	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
74-95-3	Dibromomethane	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	

STATE OF MICHIGAN
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ENVIRONMENTAL LABORATORY

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

Client ID: Allen Creek/West Park SW

Lab ID: 1902033-01

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	02/14/19	B9B1406	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	02/14/19	B9B1406	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	02/14/19	B9B1406	8260	
100-41-4	**Ethylbenzene**	**1.0**	1.0	ug/L	1	02/14/19	B9B1406	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	02/14/19	B9B1406	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	02/14/19	B9B1406	8260	
110-54-3	Hexane	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	02/14/19	B9B1406	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	02/14/19	B9B1406	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	02/14/19	B9B1406	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
100-42-5	**Styrene**	**1.8**	1.0	ug/L	1	02/14/19	B9B1406	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	02/14/19	B9B1406	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	02/14/19	B9B1406	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	02/14/19	B9B1406	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
Surrogate: Bromofluorobenzene			*98.3 %*	*85-115*		*02/14/19*	B9B1406	*8260*	
Surrogate: Dibromofluoromethane			*99.3 %*	*82.7-115*		*02/14/19*	B9B1406	*8260*	
Surrogate: Toluene-d8			*99.1 %*	*85-115*		*02/14/19*	B9B1406	*8260*	

STATE OF MICHIGAN
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ENVIRONMENTAL LABORATORY

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

Client ID: Allen Creek/West Park SW

Lab ID: 1902033-01

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Dioxane									
123-91-1	**1,4-dioxane**	**15**	1.0	ug/L	1	02/19/19	B9B2002	8260 Modified	

Lab Work Order # 1902033

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ENVIRONMENTAL LABORATORY

P.O. Box 30270
Lansing, MI 48909
TEL: (517) 335-9800
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Client ID: Allen Creek/Chapin-West Park

Lab ID: 1902033-02

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
540-84-1	2,2,4-Trimethylpentane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	02/12/19	B9B1202	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
74-95-3	Dibromomethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	

STATE OF MICHIGAN
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ENVIRONMENTAL LABORATORY

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

Client ID: Allen Creek/Chapin-West Park

Lab ID: 1902033-02

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
110-54-3	Hexane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	02/12/19	B9B1202	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	02/12/19	B9B1202	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
Surrogate: Bromofluorobenzene			*107 %*	*85-115*		*02/12/19*	B9B1202	*8260*	
Surrogate: Dibromofluoromethane			*102 %*	*82.7-115*		*02/12/19*	B9B1202	*8260*	
Surrogate: Toluene-d8			*102 %*	*85-115*		*02/12/19*	B9B1202	*8260*	

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TEL: (517) 335-9800
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Client ID: Allen Creek/Chapin-West Park

Lab ID: 1902033-02

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Dioxane									
123-91-1	**1,4-dioxane**	**8.7**	1.0	ug/L	1	02/19/19	B9B2002	8260 Modified	

Lab Work Order # 1902033

STATE OF MICHIGAN
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ENVIRONMENTAL LABORATORY

P.O. Box 30270
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TEL: (517) 335-9800
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Client ID: Allen Creek/Maple Ridge-Arborview

Lab ID: 1902033-03

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
540-84-1	2,2,4-Trimethylpentane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	02/12/19	B9B1202	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
74-95-3	Dibromomethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL LABORATORY

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

Client ID: Allen Creek/Maple Ridge-Arborview

Lab ID: 1902033-03

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
110-54-3	Hexane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	02/12/19	B9B1202	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	02/12/19	B9B1202	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
Surrogate: Bromofluorobenzene			*103 %*	*85-115*		*02/12/19*	B9B1202	*8260*	
Surrogate: Dibromofluoromethane			*104 %*	*82.7-115*		*02/12/19*	B9B1202	*8260*	
Surrogate: Toluene-d8			*101 %*	*85-115*		*02/12/19*	B9B1202	*8260*	

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL LABORATORY

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

Client ID: Allen Creek/Wildwood-Arborview

Lab ID: 1902033-04

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
540-84-1	2,2,4-Trimethylpentane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	02/12/19	B9B1202	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
74-95-3	Dibromomethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL LABORATORY

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

Client ID: Allen Creek/Wildwood-Arborview

Lab ID: 1902033-04

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
110-54-3	Hexane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	02/12/19	B9B1202	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	02/12/19	B9B1202	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
Surrogate: Bromofluorobenzene			*105 %*	*85-115*		*02/12/19*	B9B1202	*8260*	
Surrogate: Dibromofluoromethane			*106 %*	*82.7-115*		*02/12/19*	B9B1202	*8260*	
Surrogate: Toluene-d8			*99.9 %*	*85-115*		*02/12/19*	B9B1202	*8260*	

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL LABORATORY

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

Client ID: Allen Creek/Murray-Washington

Lab ID: 1902033-05

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
540-84-1	2,2,4-Trimethylpentane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	02/12/19	B9B1202	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
74-95-3	Dibromomethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL LABORATORY

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

Client ID: Allen Creek/Murray-Washington

Lab ID: 1902033-05

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
110-54-3	Hexane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	02/12/19	B9B1202	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	02/12/19	B9B1202	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
79-01-6	**Trichloroethylene**	**1.0**	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
Surrogate: Bromofluorobenzene			*102 %*	*85-115*		*02/12/19*	B9B1202	*8260*	
Surrogate: Dibromofluoromethane			*103 %*	*82.7-115*		*02/12/19*	B9B1202	*8260*	
Surrogate: Toluene-d8			*99.3 %*	*85-115*		*02/12/19*	B9B1202	*8260*	

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL LABORATORY

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

Client ID: Allen Creek/Eighth-Waterworks

Lab ID: 1902033-06

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
540-84-1	2,2,4-Trimethylpentane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	02/12/19	B9B1202	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
74-95-3	Dibromomethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	

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Client ID: Allen Creek/Eighth-Waterworks

Lab ID: 1902033-06

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
110-54-3	Hexane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	02/12/19	B9B1202	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	02/12/19	B9B1202	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
Surrogate: Bromofluorobenzene			*102 %*	*85-115*		*02/12/19*	B9B1202	*8260*	
Surrogate: Dibromofluoromethane			*104 %*	*82.7-115*		*02/12/19*	B9B1202	*8260*	
Surrogate: Toluene-d8			*100 %*	*85-115*		*02/12/19*	B9B1202	*8260*	

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Client ID: Allen Creek/Eighth-Waterworks

Lab ID: 1902033-06

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Dioxane									**See note Y28**
123-91-1	1,4-dioxane	ND	1.0	ug/L	1	02/19/19	B9B2002	8260 Modified	

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Client ID: Allen Creek-Maryfield-Wildwood Park

Lab ID: 1902033-07

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
540-84-1	2,2,4-Trimethylpentane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	02/12/19	B9B1202	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
74-95-3	Dibromomethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	

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Client ID: Allen Creek-Maryfield-Wildwood Park

Lab ID: 1902033-07

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
100-41-4	**Ethylbenzene**	**14**	1.0	ug/L	1	02/12/19	B9B1202	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
110-54-3	Hexane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	02/12/19	B9B1202	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
100-42-5	**Styrene**	**25**	1.0	ug/L	1	02/12/19	B9B1202	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	02/12/19	B9B1202	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
Surrogate: Bromofluorobenzene			*103 %*	*85-115*		*02/12/19*	B9B1202	*8260*	
Surrogate: Dibromofluoromethane			*102 %*	*82.7-115*		*02/12/19*	B9B1202	*8260*	
Surrogate: Toluene-d8			*102 %*	*85-115*		*02/12/19*	B9B1202	*8260*	

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Lab ID: 1902033-07

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Dioxane									**See note Y28**
123-91-1	1,4-dioxane	ND	1.0	ug/L	1	02/19/19	B9B2002	8260 Modified	

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9B1202 - Method: 5030				**Prepared: 02/12/2019**							
Blank (B9B1202-BLK1)											
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L							02/12/2019	
1,1,1-Trichloroethane	ND	1.0	ug/L							02/12/2019	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L							02/12/2019	
1,1,2-Trichloroethane	ND	1.0	ug/L							02/12/2019	
1,1-Dichloroethane	ND	1.0	ug/L							02/12/2019	
1,1-Dichloroethylene	ND	1.0	ug/L							02/12/2019	
1,2,3-Trichlorobenzene	ND	5.0	ug/L							02/12/2019	
1,2,3-Trichloropropane	ND	1.0	ug/L							02/12/2019	
1,2,3-Trimethylbenzene	ND	1.0	ug/L							02/12/2019	
1,2,4-Trichlorobenzene	ND	5.0	ug/L							02/12/2019	
1,2,4-Trimethylbenzene	ND	1.0	ug/L							02/12/2019	
1,2-Dibromoethane	ND	1.0	ug/L							02/12/2019	
1,2-Dichlorobenzene	ND	1.0	ug/L							02/12/2019	
1,2-Dichloroethane	ND	1.0	ug/L							02/12/2019	
1,2-Dichloropropane	ND	1.0	ug/L							02/12/2019	
1,3,5-Trimethylbenzene	ND	1.0	ug/L							02/12/2019	
1,3-Dichlorobenzene	ND	1.0	ug/L							02/12/2019	
1,4-Dichlorobenzene	ND	1.0	ug/L							02/12/2019	
2,2,4-Trimethylpentane	ND	5.0	ug/L							02/12/2019	
2-Butanone (MEK)	ND	5.0	ug/L							02/12/2019	
2-Methylnaphthalene	ND	5.0	ug/L							02/12/2019	X
2-Propanone (acetone)	ND	20	ug/L							02/12/2019	
4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L							02/12/2019	
Acrylonitrile	ND	5.0	ug/L							02/12/2019	
Benzene	ND	1.0	ug/L							02/12/2019	
Bromochloromethane	ND	1.0	ug/L							02/12/2019	
Bromodichloromethane	ND	1.0	ug/L							02/12/2019	
Bromoform	ND	1.0	ug/L							02/12/2019	
Bromomethane	ND	5.0	ug/L							02/12/2019	
Carbon disulfide	ND	1.0	ug/L							02/12/2019	
Carbon tetrachloride	ND	1.0	ug/L							02/12/2019	
Chlorobenzene	ND	1.0	ug/L							02/12/2019	
Chloroethane	ND	5.0	ug/L							02/12/2019	
Chloroform	ND	1.0	ug/L							02/12/2019	
Chloromethane	ND	5.0	ug/L							02/12/2019	
cis-1,2-Dichloroethylene	ND	1.0	ug/L							02/12/2019	
cis-1,3-Dichloropropylene	ND	1.0	ug/L							02/12/2019	
Cyclohexane	ND	5.0	ug/L							02/12/2019	
Dibromochloromethane	ND	1.0	ug/L							02/12/2019	
Dibromomethane	ND	1.0	ug/L							02/12/2019	
Dichlorodifluoromethane	ND	5.0	ug/L							02/12/2019	
Diethyl ether	ND	5.0	ug/L							02/12/2019	
Diisopropyl Ether	ND	5.0	ug/L							02/12/2019	
Ethylbenzene	ND	1.0	ug/L							02/12/2019	
Ethyltertiarybutylether	ND	5.0	ug/L							02/12/2019	
Hexachloroethane	ND	5.0	ug/L							02/12/2019	
Hexane	ND	1.0	ug/L							02/12/2019	

STATE OF MICHIGAN
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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9B1202 - Method: 5030				**Prepared: 02/12/2019**							
Blank (B9B1202-BLK1)											
Isopropylbenzene	ND	1.0	ug/L							02/12/2019	
m & p - Xylene	ND	2.0	ug/L							02/12/2019	
Methylene chloride	ND	5.0	ug/L							02/12/2019	
Methyltertiarybutylether	ND	1.0	ug/L							02/12/2019	
Naphthalene	ND	5.0	ug/L							02/12/2019	X
n-Butylbenzene	ND	1.0	ug/L							02/12/2019	
n-Propylbenzene	ND	1.0	ug/L							02/12/2019	
o-Xylene	ND	1.0	ug/L							02/12/2019	
sec-Butylbenzene	ND	1.0	ug/L							02/12/2019	
Styrene	ND	1.0	ug/L							02/12/2019	
tert-Butylbenzene	ND	1.0	ug/L							02/12/2019	
tertiary Butyl Alcohol	ND	50	ug/L							02/12/2019	
tertiaryAmylmethylether	ND	5.0	ug/L							02/12/2019	
Tetrachloroethylene	ND	1.0	ug/L							02/12/2019	
Tetrahydrofuran	ND	5.0	ug/L							02/12/2019	
Toluene	ND	1.0	ug/L							02/12/2019	
trans-1,2-Dichloroethylene	ND	1.0	ug/L							02/12/2019	
trans-1,3-Dichloropropylene	ND	1.0	ug/L							02/12/2019	
Trichloroethylene	ND	1.0	ug/L							02/12/2019	
Trichlorofluoromethane	ND	1.0	ug/L							02/12/2019	
Vinyl chloride	ND	1.0	ug/L							02/12/2019	
Surrogate: Bromofluorobenzene	*51.3*		ug/L	*50.00*		*103*	*85-115*			02/12/2019	
Surrogate: Dibromofluoromethane	*51.3*		ug/L	*50.00*		*103*	*82.7-115*			02/12/2019	
Surrogate: Toluene-d8	*50.7*		ug/L	*50.00*		*101*	*85-115*			02/12/2019	
LCS (B9B1202-BS1)											
1,1,1,2-Tetrachloroethane	43.4	1.0	ug/L	50.00		86.7	70-130			02/12/2019	
1,1,1-Trichloroethane	42.2	1.0	ug/L	50.00		84.5	70-130			02/12/2019	
1,1,2,2-Tetrachloroethane	52.4	1.0	ug/L	50.00		105	70-130			02/12/2019	
1,1,2-Trichloroethane	50.3	1.0	ug/L	50.00		101	70-130			02/12/2019	
1,1-Dichloroethane	46.9	1.0	ug/L	50.00		93.7	70-130			02/12/2019	
1,1-Dichloroethylene	35.4	1.0	ug/L	50.00		70.8	70-130			02/12/2019	
1,2,3-Trichlorobenzene	53.3	5.0	ug/L	50.00		107	70-130			02/12/2019	
1,2,3-Trichloropropane	49.8	1.0	ug/L	50.00		99.6	70-130			02/12/2019	
1,2,3-Trimethylbenzene	53.1	1.0	ug/L	50.00		106	70-130			02/12/2019	
1,2,4-Trichlorobenzene	52.7	5.0	ug/L	50.00		105	70-130			02/12/2019	
1,2,4-Trimethylbenzene	52.4	1.0	ug/L	50.00		105	70-130			02/12/2019	
1,2-Dibromoethane	51.6	1.0	ug/L	50.00		103	70-130			02/12/2019	
1,2-Dichlorobenzene	48.4	1.0	ug/L	50.00		96.8	70-130			02/12/2019	
1,2-Dichloroethane	43.0	1.0	ug/L	50.00		86.1	70-130			02/12/2019	
1,2-Dichloropropane	48.7	1.0	ug/L	50.00		97.4	70-130			02/12/2019	
1,3,5-Trimethylbenzene	50.8	1.0	ug/L	50.00		102	70-130			02/12/2019	
1,3-Dichlorobenzene	48.6	1.0	ug/L	50.00		97.2	70-130			02/12/2019	
1,4-Dichlorobenzene	45.7	1.0	ug/L	50.00		91.4	70-130			02/12/2019	
2,2,4-Trimethylpentane	48.3	5.0	ug/L	50.00		96.6	70-130			02/12/2019	
2-Butanone (MEK)	53.6	5.0	ug/L	50.00		107	70-130			02/12/2019	
2-Methylnaphthalene	56.7	5.0	ug/L	50.00		113	70-130			02/12/2019	A06, X

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9B1202 - Method: 5030				**Prepared: 02/12/2019**							
LCS (B9B1202-BS1)											
2-Propanone (acetone)	29.4	20	ug/L	50.00		58.7	70-130			02/12/2019	A08
4-Methyl-2-pentanone (MIBK)	51.2	5.0	ug/L	50.00		102	70-130			02/12/2019	
Acrylonitrile	46.6	5.0	ug/L	50.00		93.2	70-130			02/12/2019	
Benzene	45.8	1.0	ug/L	50.00		91.7	70-130			02/12/2019	
Bromochloromethane	44.7	1.0	ug/L	50.00		89.5	70-130			02/12/2019	
Bromodichloromethane	43.8	1.0	ug/L	50.00		87.5	70-130			02/12/2019	
Bromoform	41.1	1.0	ug/L	50.00		82.1	70-130			02/12/2019	
Bromomethane	42.0	5.0	ug/L	50.00		84.0	70-130			02/12/2019	
Carbon disulfide	27.9	1.0	ug/L	50.00		55.7	70-130			02/12/2019	A08
Carbon tetrachloride	39.2	1.0	ug/L	50.00		78.4	70-130			02/12/2019	
Chlorobenzene	48.7	1.0	ug/L	50.00		97.4	70-130			02/12/2019	
Chloroethane	37.8	5.0	ug/L	50.00		75.7	70-130			02/12/2019	
Chloroform	44.4	1.0	ug/L	50.00		88.9	70-130			02/12/2019	
Chloromethane	47.4	5.0	ug/L	50.00		94.8	70-130			02/12/2019	
cis-1,2-Dichloroethylene	46.0	1.0	ug/L	50.00		92.1	70-130			02/12/2019	
cis-1,3-Dichloropropylene	49.0	1.0	ug/L	50.00		98.0	70-130			02/12/2019	
Cyclohexane	51.8	5.0	ug/L	50.00		104	70-130			02/12/2019	
Dibromochloromethane	41.6	1.0	ug/L	50.00		83.1	70-130			02/12/2019	
Dibromomethane	44.5	1.0	ug/L	50.00		89.0	70-130			02/12/2019	
Dichlorodifluoromethane	54.3	5.0	ug/L	50.00		109	70-130			02/12/2019	
Diethyl ether	36.8	5.0	ug/L	50.00		73.6	70-130			02/12/2019	
Diisopropyl Ether	50.3	5.0	ug/L	50.00		101	70-130			02/12/2019	
Ethylbenzene	50.2	1.0	ug/L	50.00		100	70-130			02/12/2019	
Ethyltertiarybutylether	46.5	5.0	ug/L	50.00		93.0	70-130			02/12/2019	
Hexachloroethane	41.6	5.0	ug/L	50.00		83.3	70-130			02/12/2019	
Hexane	46.1	1.0	ug/L	50.00		92.1	70-130			02/12/2019	
Isopropylbenzene	49.5	1.0	ug/L	50.00		99.0	70-130			02/12/2019	
m & p - Xylene	101	2.0	ug/L	100.0		101	70-130			02/12/2019	
Methylene chloride	29.5	5.0	ug/L	50.00		59.0	70-130			02/12/2019	A08
Methyltertiarybutylether	50.3	1.0	ug/L	50.00		101	70-130			02/12/2019	
Naphthalene	62.5	5.0	ug/L	50.00		125	70-130			02/12/2019	X
n-Butylbenzene	52.9	1.0	ug/L	50.00		106	70-130			02/12/2019	
n-Propylbenzene	49.8	1.0	ug/L	50.00		99.5	70-130			02/12/2019	
o-Xylene	50.0	1.0	ug/L	50.00		100	70-130			02/12/2019	
sec-Butylbenzene	55.0	1.0	ug/L	50.00		110	70-130			02/12/2019	
Styrene	52.3	1.0	ug/L	50.00		105	70-130			02/12/2019	
tert-Butylbenzene	48.9	1.0	ug/L	50.00		97.9	70-130			02/12/2019	
tertiary Butyl Alcohol	228	50	ug/L	250.0		91.2	70-130			02/12/2019	
tertiaryAmylmethylether	46.9	5.0	ug/L	50.00		93.8	70-130			02/12/2019	
Tetrachloroethylene	47.2	1.0	ug/L	50.00		94.4	70-130			02/12/2019	
Tetrahydrofuran	51.5	5.0	ug/L	50.00		103	70-130			02/12/2019	
Toluene	50.1	1.0	ug/L	50.00		100	70-130			02/12/2019	
trans-1,2-Dichloroethylene	45.6	1.0	ug/L	50.00		91.3	70-130			02/12/2019	
trans-1,3-Dichloropropylene	46.0	1.0	ug/L	50.00		92.0	70-130			02/12/2019	
Trichloroethylene	43.8	1.0	ug/L	50.00		87.7	70-130			02/12/2019	
Trichlorofluoromethane	37.1	1.0	ug/L	50.00		74.2	70-130			02/12/2019	
Vinyl chloride	44.0	1.0	ug/L	50.00		88.0	70-130			02/12/2019	

Lab Work Order # 1902033

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9B1202 - Method: 5030				**Prepared: 02/12/2019**							
LCS (B9B1202-BS1)											
Surrogate: Bromofluorobenzene	*50.1*		ug/L	*50.00*		*100*	*85-115*			02/12/2019	
Surrogate: Dibromofluoromethane	*48.0*		ug/L	*50.00*		*96.0*	*82.7-115*			02/12/2019	
Surrogate: Toluene-d8	*52.2*		ug/L	*50.00*		*104*	*85-115*			02/12/2019	
Matrix Spike (B9B1202-MS1)	**Source: 1902033-02**										
1,1,1,2-Tetrachloroethane	48.8	1.0	ug/L	50.00	ND	97.6	70-130			02/12/2019	
1,1,1-Trichloroethane	47.7	1.0	ug/L	50.00	ND	95.4	70-130			02/12/2019	
1,1,2,2-Tetrachloroethane	57.0	1.0	ug/L	50.00	ND	114	70-130			02/12/2019	
1,1,2-Trichloroethane	52.4	1.0	ug/L	50.00	ND	105	70-130			02/12/2019	
1,1-Dichloroethane	51.3	1.0	ug/L	50.00	ND	103	70-130			02/12/2019	
1,1-Dichloroethylene	43.4	1.0	ug/L	50.00	ND	86.8	70-130			02/12/2019	
1,2,3-Trichlorobenzene	59.4	5.0	ug/L	50.00	ND	119	70-130			02/12/2019	
1,2,3-Trichloropropane	52.3	1.0	ug/L	50.00	ND	105	70-130			02/12/2019	
1,2,3-Trimethylbenzene	56.1	1.0	ug/L	50.00	ND	112	70-130			02/12/2019	
1,2,4-Trichlorobenzene	59.1	5.0	ug/L	50.00	ND	118	70-130			02/12/2019	
1,2,4-Trimethylbenzene	54.8	1.0	ug/L	50.00	ND	110	70-130			02/12/2019	
1,2-Dibromoethane	54.7	1.0	ug/L	50.00	ND	109	70-130			02/12/2019	
1,2-Dichlorobenzene	53.5	1.0	ug/L	50.00	ND	107	70-130			02/12/2019	
1,2-Dichloroethane	46.6	1.0	ug/L	50.00	ND	93.1	70-130			02/12/2019	
1,2-Dichloropropane	53.0	1.0	ug/L	50.00	ND	106	70-130			02/12/2019	
1,3,5-Trimethylbenzene	54.0	1.0	ug/L	50.00	ND	108	70-130			02/12/2019	
1,3-Dichlorobenzene	53.4	1.0	ug/L	50.00	ND	107	70-130			02/12/2019	
1,4-Dichlorobenzene	50.5	1.0	ug/L	50.00	ND	101	70-130			02/12/2019	
2,2,4-Trimethylpentane	52.0	5.0	ug/L	50.00	ND	104	70-130			02/12/2019	
2-Butanone (MEK)	60.5	5.0	ug/L	50.00	ND	121	70-130			02/12/2019	
2-Methylnaphthalene	66.4	5.0	ug/L	50.00	ND	133	70-130			02/12/2019	A04, A06, X
2-Propanone (acetone)	39.0	20	ug/L	50.00	ND	77.9	70-130			02/12/2019	
4-Methyl-2-pentanone (MIBK)	55.4	5.0	ug/L	50.00	ND	111	70-130			02/12/2019	
Acrylonitrile	54.0	5.0	ug/L	50.00	ND	108	70-130			02/12/2019	
Benzene	52.4	1.0	ug/L	50.00	ND	105	70-130			02/12/2019	
Bromochloromethane	51.2	1.0	ug/L	50.00	ND	102	70-130			02/12/2019	
Bromodichloromethane	50.1	1.0	ug/L	50.00	ND	100	70-130			02/12/2019	
Bromoform	45.4	1.0	ug/L	50.00	ND	90.8	70-130			02/12/2019	
Bromomethane	43.3	5.0	ug/L	50.00	ND	86.6	70-130			02/12/2019	
Carbon disulfide	44.7	1.0	ug/L	50.00	ND	89.3	70-130			02/12/2019	
Carbon tetrachloride	46.0	1.0	ug/L	50.00	ND	92.0	70-130			02/12/2019	
Chlorobenzene	51.9	1.0	ug/L	50.00	ND	104	70-130			02/12/2019	
Chloroethane	44.8	5.0	ug/L	50.00	ND	89.6	70-130			02/12/2019	
Chloroform	49.0	1.0	ug/L	50.00	ND	98.0	70-130			02/12/2019	
Chloromethane	59.2	5.0	ug/L	50.00	ND	118	70-130			02/12/2019	
cis-1,2-Dichloroethylene	51.8	1.0	ug/L	50.00	ND	104	70-130			02/12/2019	
cis-1,3-Dichloropropylene	55.0	1.0	ug/L	50.00	ND	110	70-130			02/12/2019	
Cyclohexane	57.9	5.0	ug/L	50.00	ND	116	70-130			02/12/2019	
Dibromochloromethane	47.8	1.0	ug/L	50.00	ND	95.7	70-130			02/12/2019	
Dibromomethane	50.0	1.0	ug/L	50.00	ND	99.9	70-130			02/12/2019	
Dichlorodifluoromethane	61.9	5.0	ug/L	50.00	ND	124	70-130			02/12/2019	

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9B1202 - Method: 5030				**Prepared: 02/12/2019**							
Matrix Spike (B9B1202-MS1)	**Source: 1902033-02**										
Diethyl ether	44.1	5.0	ug/L	50.00	ND	88.2	70-130			02/12/2019	
Diisopropyl Ether	57.0	5.0	ug/L	50.00	ND	114	70-130			02/12/2019	
Ethylbenzene	53.5	1.0	ug/L	50.00	ND	107	70-130			02/12/2019	
Ethyltertiarybutylether	53.9	5.0	ug/L	50.00	ND	108	70-130			02/12/2019	
Hexachloroethane	48.5	5.0	ug/L	50.00	ND	97.1	70-130			02/12/2019	
Hexane	54.6	1.0	ug/L	50.00	ND	109	70-130			02/12/2019	
Isopropylbenzene	54.3	1.0	ug/L	50.00	ND	109	70-130			02/12/2019	
m & p - Xylene	105	2.0	ug/L	100.0	ND	105	70-130			02/12/2019	
Methylene chloride	51.9	5.0	ug/L	50.00	ND	104	70-130			02/12/2019	
Methyltertiarybutylether	55.7	1.0	ug/L	50.00	ND	111	70-130			02/12/2019	
Naphthalene	63.7	5.0	ug/L	50.00	ND	127	70-130			02/12/2019	X
n-Butylbenzene	58.5	1.0	ug/L	50.00	ND	117	70-130			02/12/2019	
n-Propylbenzene	54.1	1.0	ug/L	50.00	ND	108	70-130			02/12/2019	
o-Xylene	53.4	1.0	ug/L	50.00	ND	107	70-130			02/12/2019	
sec-Butylbenzene	60.1	1.0	ug/L	50.00	ND	120	70-130			02/12/2019	
Styrene	56.2	1.0	ug/L	50.00	ND	112	70-130			02/12/2019	
tert-Butylbenzene	53.0	1.0	ug/L	50.00	ND	106	70-130			02/12/2019	
tertiary Butyl Alcohol	267	50	ug/L	250.0	ND	107	70-130			02/12/2019	
tertiaryAmylmethylether	53.0	5.0	ug/L	50.00	ND	106	70-130			02/12/2019	
Tetrachloroethylene	49.3	1.0	ug/L	50.00	ND	98.7	70-130			02/12/2019	
Tetrahydrofuran	56.7	5.0	ug/L	50.00	ND	113	70-130			02/12/2019	
Toluene	53.0	1.0	ug/L	50.00	ND	106	70-130			02/12/2019	
trans-1,2-Dichloroethylene	51.5	1.0	ug/L	50.00	ND	103	70-130			02/12/2019	
trans-1,3-Dichloropropylene	51.7	1.0	ug/L	50.00	ND	103	70-130			02/12/2019	
Trichloroethylene	48.6	1.0	ug/L	50.00	ND	97.3	70-130			02/12/2019	
Trichlorofluoromethane	36.3	1.0	ug/L	50.00	ND	72.7	70-130			02/12/2019	
Vinyl chloride	56.4	1.0	ug/L	50.00	ND	113	70-130			02/12/2019	
Surrogate: Bromofluorobenzene	*50.3*		ug/L	*50.00*		*101*	*85-115*			02/12/2019	
Surrogate: Dibromofluoromethane	*48.3*		ug/L	*50.00*		*96.6*	*82.7-115*			02/12/2019	
Surrogate: Toluene-d8	*51.4*		ug/L	*50.00*		*103*	*85-115*			02/12/2019	
Matrix Spike Dup (B9B1202-MSD1)	**Source: 1902033-02**										
1,1,1,2-Tetrachloroethane	48.5	1.0	ug/L	50.00	ND	96.9	70-130	0.701	30	02/12/2019	
1,1,1-Trichloroethane	48.7	1.0	ug/L	50.00	ND	97.4	70-130	2.13	30	02/12/2019	
1,1,2,2-Tetrachloroethane	53.7	1.0	ug/L	50.00	ND	107	70-130	5.95	30	02/12/2019	
1,1,2-Trichloroethane	51.1	1.0	ug/L	50.00	ND	102	70-130	2.58	30	02/12/2019	
1,1-Dichloroethane	52.1	1.0	ug/L	50.00	ND	104	70-130	1.64	30	02/12/2019	
1,1-Dichloroethylene	43.6	1.0	ug/L	50.00	ND	87.2	70-130	0.447	30	02/12/2019	
1,2,3-Trichlorobenzene	57.3	5.0	ug/L	50.00	ND	115	70-130	3.62	30	02/12/2019	
1,2,3-Trichloropropane	50.7	1.0	ug/L	50.00	ND	101	70-130	3.06	30	02/12/2019	
1,2,3-Trimethylbenzene	54.2	1.0	ug/L	50.00	ND	108	70-130	3.33	30	02/12/2019	
1,2,4-Trichlorobenzene	57.3	5.0	ug/L	50.00	ND	115	70-130	3.00	30	02/12/2019	
1,2,4-Trimethylbenzene	52.5	1.0	ug/L	50.00	ND	105	70-130	4.25	30	02/12/2019	
1,2-Dibromoethane	54.6	1.0	ug/L	50.00	ND	109	70-130	0.273	30	02/12/2019	
1,2-Dichlorobenzene	50.5	1.0	ug/L	50.00	ND	101	70-130	5.80	30	02/12/2019	
1,2-Dichloroethane	46.3	1.0	ug/L	50.00	ND	92.7	70-130	0.435	30	02/12/2019	
1,2-Dichloropropane	52.9	1.0	ug/L	50.00	ND	106	70-130	0.319	30	02/12/2019	

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9B1202 - Method: 5030				**Prepared: 02/12/2019**							
Matrix Spike Dup (B9B1202-MSD1)	**Source: 1902033-02**										
1,3,5-Trimethylbenzene	53.2	1.0	ug/L	50.00	ND	106	70-130	1.43	30	02/12/2019	
1,3-Dichlorobenzene	49.8	1.0	ug/L	50.00	ND	99.7	70-130	6.96	30	02/12/2019	
1,4-Dichlorobenzene	47.7	1.0	ug/L	50.00	ND	95.4	70-130	5.64	30	02/12/2019	
2,2,4-Trimethylpentane	54.6	5.0	ug/L	50.00	ND	109	70-130	4.86	30	02/12/2019	
2-Butanone (MEK)	60.4	5.0	ug/L	50.00	ND	121	70-130	0.190	30	02/12/2019	
2-Methylnaphthalene	68.6	5.0	ug/L	50.00	ND	137	70-130	3.19	30	02/12/2019	A04, A06, X
2-Propanone (acetone)	45.8	20	ug/L	50.00	ND	91.6	70-130	16.2	30	02/12/2019	
4-Methyl-2-pentanone (MIBK)	57.3	5.0	ug/L	50.00	ND	115	70-130	3.37	30	02/12/2019	
Acrylonitrile	53.9	5.0	ug/L	50.00	ND	108	70-130	0.264	30	02/12/2019	
Benzene	51.8	1.0	ug/L	50.00	ND	104	70-130	1.08	30	02/12/2019	
Bromochloromethane	51.1	1.0	ug/L	50.00	ND	102	70-130	0.221	30	02/12/2019	
Bromodichloromethane	50.0	1.0	ug/L	50.00	ND	100	70-130	0.243	30	02/12/2019	
Bromoform	44.3	1.0	ug/L	50.00	ND	88.5	70-130	2.54	30	02/12/2019	
Bromomethane	43.9	5.0	ug/L	50.00	ND	87.8	70-130	1.41	30	02/12/2019	
Carbon disulfide	50.0	1.0	ug/L	50.00	ND	100	70-130	11.3	30	02/12/2019	
Carbon tetrachloride	46.2	1.0	ug/L	50.00	ND	92.4	70-130	0.363	30	02/12/2019	
Chlorobenzene	50.6	1.0	ug/L	50.00	ND	101	70-130	2.53	30	02/12/2019	
Chloroethane	39.0	5.0	ug/L	50.00	ND	78.0	70-130	13.9	30	02/12/2019	
Chloroform	49.3	1.0	ug/L	50.00	ND	98.7	70-130	0.668	30	02/12/2019	
Chloromethane	60.6	5.0	ug/L	50.00	ND	121	70-130	2.34	30	02/12/2019	
cis-1,2-Dichloroethylene	52.3	1.0	ug/L	50.00	ND	105	70-130	1.04	30	02/12/2019	
cis-1,3-Dichloropropylene	55.0	1.0	ug/L	50.00	ND	110	70-130	0.0697	30	02/12/2019	
Cyclohexane	57.4	5.0	ug/L	50.00	ND	115	70-130	0.791	30	02/12/2019	
Dibromochloromethane	47.6	1.0	ug/L	50.00	ND	95.2	70-130	0.482	30	02/12/2019	
Dibromomethane	49.8	1.0	ug/L	50.00	ND	99.6	70-130	0.317	30	02/12/2019	
Dichlorodifluoromethane	62.8	5.0	ug/L	50.00	ND	126	70-130	1.46	30	02/12/2019	
Diethyl ether	36.0	5.0	ug/L	50.00	ND	72.0	70-130	20.3	30	02/12/2019	
Diisopropyl Ether	56.1	5.0	ug/L	50.00	ND	112	70-130	1.45	30	02/12/2019	
Ethylbenzene	51.4	1.0	ug/L	50.00	ND	103	70-130	4.04	30	02/12/2019	
Ethyltertiarybutylether	53.6	5.0	ug/L	50.00	ND	107	70-130	0.482	30	02/12/2019	
Hexachloroethane	48.8	5.0	ug/L	50.00	ND	97.6	70-130	0.575	30	02/12/2019	
Hexane	50.3	1.0	ug/L	50.00	ND	101	70-130	8.33	30	02/12/2019	
Isopropylbenzene	51.4	1.0	ug/L	50.00	ND	103	70-130	5.50	30	02/12/2019	
m & p - Xylene	103	2.0	ug/L	100.0	ND	103	70-130	1.88	30	02/12/2019	
Methylene chloride	54.0	5.0	ug/L	50.00	ND	108	70-130	3.88	30	02/12/2019	
Methyltertiarybutylether	55.7	1.0	ug/L	50.00	ND	111	70-130	0.0711	30	02/12/2019	
Naphthalene	59.9	5.0	ug/L	50.00	ND	120	70-130	6.10	30	02/12/2019	X
n-Butylbenzene	57.1	1.0	ug/L	50.00	ND	114	70-130	2.36	30	02/12/2019	
n-Propylbenzene	52.2	1.0	ug/L	50.00	ND	104	70-130	3.62	30	02/12/2019	
o-Xylene	53.1	1.0	ug/L	50.00	ND	106	70-130	0.467	30	02/12/2019	
sec-Butylbenzene	58.7	1.0	ug/L	50.00	ND	117	70-130	2.39	30	02/12/2019	
Styrene	55.0	1.0	ug/L	50.00	ND	110	70-130	2.28	30	02/12/2019	
tert-Butylbenzene	51.8	1.0	ug/L	50.00	ND	104	70-130	2.35	30	02/12/2019	
tertiary Butyl Alcohol	278	50	ug/L	250.0	ND	111	70-130	4.26	30	02/12/2019	
tertiaryAmylmethylether	51.7	5.0	ug/L	50.00	ND	103	70-130	2.55	30	02/12/2019	
Tetrachloroethylene	49.3	1.0	ug/L	50.00	ND	98.6	70-130	0.0862	30	02/12/2019	

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9B1202 - Method: 5030				**Prepared: 02/12/2019**							
Matrix Spike Dup (B9B1202-MSD1)	**Source: 1902033-02**										
Tetrahydrofuran	55.8	5.0	ug/L	50.00	ND	112	70-130	1.48	30	02/12/2019	
Toluene	51.0	1.0	ug/L	50.00	ND	102	70-130	3.95	30	02/12/2019	
trans-1,2-Dichloroethylene	51.2	1.0	ug/L	50.00	ND	102	70-130	0.591	30	02/12/2019	
trans-1,3-Dichloropropylene	52.4	1.0	ug/L	50.00	ND	105	70-130	1.34	30	02/12/2019	
Trichloroethylene	49.1	1.0	ug/L	50.00	ND	98.1	70-130	0.839	30	02/12/2019	
Trichlorofluoromethane	36.0	1.0	ug/L	50.00	ND	71.9	70-130	1.01	30	02/12/2019	
Vinyl chloride	57.5	1.0	ug/L	50.00	ND	115	70-130	2.01	30	02/12/2019	
Surrogate: Bromofluorobenzene	*49.2*		ug/L	*50.00*		*98.3*	*85-115*			02/12/2019	
Surrogate: Dibromofluoromethane	*50.2*		ug/L	*50.00*		*100*	*82.7-115*			02/12/2019	
Surrogate: Toluene-d8	*50.5*		ug/L	*50.00*		*101*	*85-115*			02/12/2019	
Batch B9B1406 - Method: 5030				**Prepared: 02/14/2019**							
Blank (B9B1406-BLK1)											
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L							02/14/2019	
1,1,1-Trichloroethane	ND	1.0	ug/L							02/14/2019	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L							02/14/2019	
1,1,2-Trichloroethane	ND	1.0	ug/L							02/14/2019	
1,1-Dichloroethane	ND	1.0	ug/L							02/14/2019	
1,1-Dichloroethylene	ND	1.0	ug/L							02/14/2019	
1,2,3-Trichlorobenzene	ND	5.0	ug/L							02/14/2019	
1,2,3-Trichloropropane	ND	1.0	ug/L							02/14/2019	
1,2,3-Trimethylbenzene	ND	1.0	ug/L							02/14/2019	
1,2,4-Trichlorobenzene	ND	5.0	ug/L							02/14/2019	
1,2,4-Trimethylbenzene	ND	1.0	ug/L							02/14/2019	
1,2-Dibromoethane	ND	1.0	ug/L							02/14/2019	
1,2-Dichlorobenzene	ND	1.0	ug/L							02/14/2019	
1,2-Dichloroethane	ND	1.0	ug/L							02/14/2019	
1,2-Dichloropropane	ND	1.0	ug/L							02/14/2019	
1,3,5-Trimethylbenzene	ND	1.0	ug/L							02/14/2019	
1,3-Dichlorobenzene	ND	1.0	ug/L							02/14/2019	
1,4-Dichlorobenzene	ND	1.0	ug/L							02/14/2019	
2,2,4-Trimethylpentane	ND	5.0	ug/L							02/14/2019	
2-Butanone (MEK)	ND	5.0	ug/L							02/14/2019	
2-Methylnaphthalene	ND	5.0	ug/L							02/14/2019	X
2-Propanone (acetone)	ND	20	ug/L							02/14/2019	
4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L							02/14/2019	
Acrylonitrile	ND	5.0	ug/L							02/14/2019	
Benzene	ND	1.0	ug/L							02/14/2019	
Bromochloromethane	ND	1.0	ug/L							02/14/2019	
Bromodichloromethane	ND	1.0	ug/L							02/14/2019	
Bromoform	ND	1.0	ug/L							02/14/2019	
Bromomethane	ND	5.0	ug/L							02/14/2019	
Carbon disulfide	ND	1.0	ug/L							02/14/2019	
Carbon tetrachloride	ND	1.0	ug/L							02/14/2019	
Chlorobenzene	ND	1.0	ug/L							02/14/2019	

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9B1406 - Method: 5030				**Prepared: 02/14/2019**							
Blank (B9B1406-BLK1)											
Chloroethane	ND	5.0	ug/L							02/14/2019	
Chloroform	ND	1.0	ug/L							02/14/2019	
Chloromethane	ND	5.0	ug/L							02/14/2019	
cis-1,2-Dichloroethylene	ND	1.0	ug/L							02/14/2019	
cis-1,3-Dichloropropylene	ND	1.0	ug/L							02/14/2019	
Cyclohexane	ND	5.0	ug/L							02/14/2019	
Dibromochloromethane	ND	1.0	ug/L							02/14/2019	
Dibromomethane	ND	1.0	ug/L							02/14/2019	
Dichlorodifluoromethane	ND	5.0	ug/L							02/14/2019	
Diethyl ether	ND	5.0	ug/L							02/14/2019	
Diisopropyl Ether	ND	5.0	ug/L							02/14/2019	
Ethylbenzene	ND	1.0	ug/L							02/14/2019	
Ethyltertiarybutylether	ND	5.0	ug/L							02/14/2019	
Hexachloroethane	ND	5.0	ug/L							02/14/2019	
Hexane	ND	1.0	ug/L							02/14/2019	
Isopropylbenzene	ND	1.0	ug/L							02/14/2019	
m & p - Xylene	ND	2.0	ug/L							02/14/2019	
Methylene chloride	ND	5.0	ug/L							02/14/2019	
Methyltertiarybutylether	ND	1.0	ug/L							02/14/2019	
Naphthalene	ND	5.0	ug/L							02/14/2019	X
n-Butylbenzene	ND	1.0	ug/L							02/14/2019	
n-Propylbenzene	ND	1.0	ug/L							02/14/2019	
o-Xylene	ND	1.0	ug/L							02/14/2019	
sec-Butylbenzene	ND	1.0	ug/L							02/14/2019	
Styrene	ND	1.0	ug/L							02/14/2019	
tert-Butylbenzene	ND	1.0	ug/L							02/14/2019	
tertiary Butyl Alcohol	ND	50	ug/L							02/14/2019	
tertiaryAmylmethylether	ND	5.0	ug/L							02/14/2019	
Tetrachloroethylene	ND	1.0	ug/L							02/14/2019	
Tetrahydrofuran	ND	5.0	ug/L							02/14/2019	
Toluene	ND	1.0	ug/L							02/14/2019	
trans-1,2-Dichloroethylene	ND	1.0	ug/L							02/14/2019	
trans-1,3-Dichloropropylene	ND	1.0	ug/L							02/14/2019	
Trichloroethylene	ND	1.0	ug/L							02/14/2019	
Trichlorofluoromethane	ND	1.0	ug/L							02/14/2019	
Vinyl chloride	ND	1.0	ug/L							02/14/2019	
Surrogate: Bromofluorobenzene	*50.0*		ug/L	*50.00*		*100*	*85-115*			02/14/2019	
Surrogate: Dibromofluoromethane	*51.0*		ug/L	*50.00*		*102*	*82.7-115*			02/14/2019	
Surrogate: Toluene-d8	*49.5*		ug/L	*50.00*		*99.0*	*85-115*			02/14/2019	
LCS (B9B1406-BS1)											
1,1,1,2-Tetrachloroethane	51.3	1.0	ug/L	50.00		103	70-130			02/14/2019	
1,1,1-Trichloroethane	49.0	1.0	ug/L	50.00		98.0	70-130			02/14/2019	
1,1,2,2-Tetrachloroethane	55.0	1.0	ug/L	50.00		110	70-130			02/14/2019	
1,1,2-Trichloroethane	51.0	1.0	ug/L	50.00		102	70-130			02/14/2019	
1,1-Dichloroethane	48.3	1.0	ug/L	50.00		96.5	70-130			02/14/2019	
1,1-Dichloroethylene	46.5	1.0	ug/L	50.00		92.9	70-130			02/14/2019	

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9B1406 - Method: 5030				**Prepared: 02/14/2019**							
LCS (B9B1406-BS1)											
1,2,3-Trichlorobenzene	53.2	5.0	ug/L	50.00		106	70-130			02/14/2019	
1,2,3-Trichloropropane	50.8	1.0	ug/L	50.00		102	70-130			02/14/2019	
1,2,3-Trimethylbenzene	53.0	1.0	ug/L	50.00		106	70-130			02/14/2019	
1,2,4-Trichlorobenzene	52.1	5.0	ug/L	50.00		104	70-130			02/14/2019	
1,2,4-Trimethylbenzene	53.1	1.0	ug/L	50.00		106	70-130			02/14/2019	
1,2-Dibromoethane	50.8	1.0	ug/L	50.00		102	70-130			02/14/2019	
1,2-Dichlorobenzene	50.7	1.0	ug/L	50.00		101	70-130			02/14/2019	
1,2-Dichloroethane	51.2	1.0	ug/L	50.00		102	70-130			02/14/2019	
1,2-Dichloropropane	52.6	1.0	ug/L	50.00		105	70-130			02/14/2019	
1,3,5-Trimethylbenzene	52.3	1.0	ug/L	50.00		105	70-130			02/14/2019	
1,3-Dichlorobenzene	50.9	1.0	ug/L	50.00		102	70-130			02/14/2019	
1,4-Dichlorobenzene	49.0	1.0	ug/L	50.00		97.9	70-130			02/14/2019	
2,2,4-Trimethylpentane	49.0	5.0	ug/L	50.00		98.0	70-130			02/14/2019	
2-Butanone (MEK)	60.4	5.0	ug/L	50.00		121	70-130			02/14/2019	
2-Methylnaphthalene	52.0	5.0	ug/L	50.00		104	70-130			02/14/2019	X
2-Propanone (acetone)	49.8	20	ug/L	50.00		99.6	70-130			02/14/2019	
4-Methyl-2-pentanone (MIBK)	55.0	5.0	ug/L	50.00		110	70-130			02/14/2019	
Acrylonitrile	50.9	5.0	ug/L	50.00		102	70-130			02/14/2019	
Benzene	49.8	1.0	ug/L	50.00		99.6	70-130			02/14/2019	
Bromochloromethane	50.5	1.0	ug/L	50.00		101	70-130			02/14/2019	
Bromodichloromethane	52.3	1.0	ug/L	50.00		105	70-130			02/14/2019	
Bromoform	50.8	1.0	ug/L	50.00		102	70-130			02/14/2019	
Bromomethane	51.1	5.0	ug/L	50.00		102	70-130			02/14/2019	
Carbon disulfide	46.7	1.0	ug/L	50.00		93.3	70-130			02/14/2019	
Carbon tetrachloride	47.7	1.0	ug/L	50.00		95.4	70-130			02/14/2019	
Chlorobenzene	49.7	1.0	ug/L	50.00		99.4	70-130			02/14/2019	
Chloroethane	49.8	5.0	ug/L	50.00		99.6	70-130			02/14/2019	
Chloroform	49.8	1.0	ug/L	50.00		99.5	70-130			02/14/2019	
Chloromethane	50.3	5.0	ug/L	50.00		101	70-130			02/14/2019	
cis-1,2-Dichloroethylene	50.0	1.0	ug/L	50.00		100	70-130			02/14/2019	
cis-1,3-Dichloropropylene	53.2	1.0	ug/L	50.00		106	70-130			02/14/2019	
Cyclohexane	52.2	5.0	ug/L	50.00		104	70-130			02/14/2019	
Dibromochloromethane	55.1	1.0	ug/L	50.00		110	70-130			02/14/2019	
Dibromomethane	49.4	1.0	ug/L	50.00		98.8	70-130			02/14/2019	
Dichlorodifluoromethane	51.2	5.0	ug/L	50.00		102	70-130			02/14/2019	A06
Diethyl ether	49.3	5.0	ug/L	50.00		98.6	70-130			02/14/2019	
Diisopropyl Ether	50.8	5.0	ug/L	50.00		102	70-130			02/14/2019	
Ethylbenzene	51.3	1.0	ug/L	50.00		103	70-130			02/14/2019	
Ethyltertiarybutylether	47.8	5.0	ug/L	50.00		95.5	70-130			02/14/2019	
Hexachloroethane	50.0	5.0	ug/L	50.00		99.9	70-130			02/14/2019	
Hexane	48.1	1.0	ug/L	50.00		96.1	70-130			02/14/2019	
Isopropylbenzene	51.6	1.0	ug/L	50.00		103	70-130			02/14/2019	
m & p - Xylene	104	2.0	ug/L	100.0		104	70-130			02/14/2019	
Methylene chloride	49.8	5.0	ug/L	50.00		99.6	70-130			02/14/2019	
Methyltertiarybutylether	55.8	1.0	ug/L	50.00		112	70-130			02/14/2019	
Naphthalene	55.2	5.0	ug/L	50.00		110	70-130			02/14/2019	X
n-Butylbenzene	52.6	1.0	ug/L	50.00		105	70-130			02/14/2019	

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9B1406 - Method: 5030				**Prepared: 02/14/2019**							
LCS (B9B1406-BS1)											
n-Propylbenzene	51.4	1.0	ug/L	50.00		103	70-130			02/14/2019	
o-Xylene	52.3	1.0	ug/L	50.00		105	70-130			02/14/2019	
sec-Butylbenzene	56.0	1.0	ug/L	50.00		112	70-130			02/14/2019	
Styrene	55.8	1.0	ug/L	50.00		112	70-130			02/14/2019	
tert-Butylbenzene	52.2	1.0	ug/L	50.00		104	70-130			02/14/2019	
tertiary Butyl Alcohol	276	50	ug/L	250.0		110	70-130			02/14/2019	
tertiaryAmylmethylether	50.8	5.0	ug/L	50.00		102	70-130			02/14/2019	
Tetrachloroethylene	46.5	1.0	ug/L	50.00		93.1	70-130			02/14/2019	
Tetrahydrofuran	53.7	5.0	ug/L	50.00		107	70-130			02/14/2019	
Toluene	49.5	1.0	ug/L	50.00		99.0	70-130			02/14/2019	
trans-1,2-Dichloroethylene	48.4	1.0	ug/L	50.00		96.7	70-130			02/14/2019	
trans-1,3-Dichloropropylene	53.9	1.0	ug/L	50.00		108	70-130			02/14/2019	
Trichloroethylene	48.4	1.0	ug/L	50.00		96.9	70-130			02/14/2019	
Trichlorofluoromethane	49.9	1.0	ug/L	50.00		99.7	70-130			02/14/2019	
Vinyl chloride	50.1	1.0	ug/L	50.00		100	70-130			02/14/2019	
Surrogate: Bromofluorobenzene	*51.0*		ug/L	*50.00*		*102*	*85-115*			02/14/2019	
Surrogate: Dibromofluoromethane	*49.2*		ug/L	*50.00*		*98.3*	*82.7-115*			02/14/2019	
Surrogate: Toluene-d8	*51.3*		ug/L	*50.00*		*103*	*85-115*			02/14/2019	
Matrix Spike (B9B1406-MS1)	**Source: 1902067-04**										
1,1,1,2-Tetrachloroethane	50.6	1.0	ug/L	50.00	ND	101	70-130			02/14/2019	
1,1,1-Trichloroethane	51.3	1.0	ug/L	50.00	ND	103	70-130			02/14/2019	
1,1,2,2-Tetrachloroethane	54.9	1.0	ug/L	50.00	ND	110	70-130			02/14/2019	
1,1,2-Trichloroethane	50.8	1.0	ug/L	50.00	ND	102	70-130			02/14/2019	
1,1-Dichloroethane	49.4	1.0	ug/L	50.00	ND	98.9	70-130			02/14/2019	
1,1-Dichloroethylene	51.0	1.0	ug/L	50.00	ND	102	70-130			02/14/2019	
1,2,3-Trichlorobenzene	50.7	5.0	ug/L	50.00	ND	101	70-130			02/14/2019	
1,2,3-Trichloropropane	49.9	1.0	ug/L	50.00	ND	99.8	70-130			02/14/2019	
1,2,3-Trimethylbenzene	52.6	1.0	ug/L	50.00	ND	105	70-130			02/14/2019	
1,2,4-Trichlorobenzene	50.6	5.0	ug/L	50.00	ND	101	70-130			02/14/2019	
1,2,4-Trimethylbenzene	52.3	1.0	ug/L	50.00	ND	105	70-130			02/14/2019	
1,2-Dibromoethane	50.0	1.0	ug/L	50.00	ND	99.9	70-130			02/14/2019	
1,2-Dichlorobenzene	50.1	1.0	ug/L	50.00	ND	100	70-130			02/14/2019	
1,2-Dichloroethane	52.7	1.0	ug/L	50.00	ND	105	70-130			02/14/2019	
1,2-Dichloropropane	53.3	1.0	ug/L	50.00	ND	107	70-130			02/14/2019	
1,3,5-Trimethylbenzene	53.3	1.0	ug/L	50.00	ND	107	70-130			02/14/2019	
1,3-Dichlorobenzene	50.6	1.0	ug/L	50.00	ND	101	70-130			02/14/2019	
1,4-Dichlorobenzene	48.5	1.0	ug/L	50.00	ND	97.0	70-130			02/14/2019	
2,2,4-Trimethylpentane	55.6	5.0	ug/L	50.00	ND	111	70-130			02/14/2019	
2-Butanone (MEK)	61.8	5.0	ug/L	50.00	ND	124	70-130			02/14/2019	
2-Methylnaphthalene	49.5	5.0	ug/L	50.00	ND	98.9	70-130			02/14/2019	X
2-Propanone (acetone)	56.4	20	ug/L	50.00	ND	113	70-130			02/14/2019	
4-Methyl-2-pentanone (MIBK)	54.5	5.0	ug/L	50.00	ND	109	70-130			02/14/2019	
Acrylonitrile	55.0	5.0	ug/L	50.00	ND	110	70-130			02/14/2019	
Benzene	51.5	1.0	ug/L	50.00	ND	103	70-130			02/14/2019	
Bromochloromethane	51.0	1.0	ug/L	50.00	ND	102	70-130			02/14/2019	
Bromodichloromethane	52.8	1.0	ug/L	50.00	ND	106	70-130			02/14/2019	

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9B1406 - Method: 5030				**Prepared: 02/14/2019**							
Matrix Spike (B9B1406-MS1)	**Source: 1902067-04**										
Bromoform	50.9	1.0	ug/L	50.00	ND	102	70-130			02/14/2019	
Bromomethane	53.1	5.0	ug/L	50.00	ND	106	70-130			02/14/2019	
Carbon disulfide	50.2	1.0	ug/L	50.00	ND	100	70-130			02/14/2019	
Carbon tetrachloride	52.6	1.0	ug/L	50.00	ND	105	70-130			02/14/2019	
Chlorobenzene	51.8	1.0	ug/L	50.00	ND	104	70-130			02/14/2019	
Chloroethane	52.0	5.0	ug/L	50.00	ND	104	70-130			02/14/2019	
Chloroform	51.8	1.0	ug/L	50.00	ND	104	70-130			02/14/2019	
Chloromethane	52.1	5.0	ug/L	50.00	ND	104	70-130			02/14/2019	
cis-1,2-Dichloroethylene	51.0	1.0	ug/L	50.00	ND	102	70-130			02/14/2019	
cis-1,3-Dichloropropylene	53.1	1.0	ug/L	50.00	ND	106	70-130			02/14/2019	
Cyclohexane	56.6	5.0	ug/L	50.00	ND	113	70-130			02/14/2019	
Dibromochloromethane	53.7	1.0	ug/L	50.00	ND	107	70-130			02/14/2019	
Dibromomethane	50.2	1.0	ug/L	50.00	ND	100	70-130			02/14/2019	
Dichlorodifluoromethane	57.4	5.0	ug/L	50.00	ND	115	70-130			02/14/2019	A06
Diethyl ether	50.4	5.0	ug/L	50.00	ND	101	70-130			02/14/2019	
Diisopropyl Ether	50.6	5.0	ug/L	50.00	ND	101	70-130			02/14/2019	
Ethylbenzene	53.5	1.0	ug/L	50.00	ND	107	70-130			02/14/2019	
Ethyltertiarybutylether	46.6	5.0	ug/L	50.00	ND	93.2	70-130			02/14/2019	
Hexachloroethane	52.6	5.0	ug/L	50.00	ND	105	70-130			02/14/2019	
Hexane	52.7	1.0	ug/L	50.00	ND	105	70-130			02/14/2019	
Isopropylbenzene	53.6	1.0	ug/L	50.00	ND	107	70-130			02/14/2019	
m & p - Xylene	108	2.0	ug/L	100.0	ND	108	70-130			02/14/2019	
Methylene chloride	49.5	5.0	ug/L	50.00	ND	99.0	70-130			02/14/2019	
Methyltertiarybutylether	55.3	1.0	ug/L	50.00	ND	111	70-130			02/14/2019	
Naphthalene	53.9	5.0	ug/L	50.00	ND	108	70-130			02/14/2019	X
n-Butylbenzene	53.2	1.0	ug/L	50.00	ND	106	70-130			02/14/2019	
n-Propylbenzene	52.5	1.0	ug/L	50.00	ND	105	70-130			02/14/2019	
o-Xylene	53.2	1.0	ug/L	50.00	ND	106	70-130			02/14/2019	
sec-Butylbenzene	56.8	1.0	ug/L	50.00	ND	114	70-130			02/14/2019	
Styrene	56.3	1.0	ug/L	50.00	ND	113	70-130			02/14/2019	
tert-Butylbenzene	53.4	1.0	ug/L	50.00	ND	107	70-130			02/14/2019	
tertiary Butyl Alcohol	279	50	ug/L	250.0	ND	112	70-130			02/14/2019	
tertiaryAmylmethylether	48.9	5.0	ug/L	50.00	ND	97.7	70-130			02/14/2019	
Tetrachloroethylene	50.9	1.0	ug/L	50.00	ND	102	70-130			02/14/2019	
Tetrahydrofuran	50.7	5.0	ug/L	50.00	ND	101	70-130			02/14/2019	
Toluene	51.3	1.0	ug/L	50.00	ND	103	70-130			02/14/2019	
trans-1,2-Dichloroethylene	50.4	1.0	ug/L	50.00	ND	101	70-130			02/14/2019	
trans-1,3-Dichloropropylene	52.7	1.0	ug/L	50.00	ND	105	70-130			02/14/2019	
Trichloroethylene	79.1	1.0	ug/L	50.00	30.1	98.1	70-130			02/14/2019	
Trichlorofluoromethane	55.1	1.0	ug/L	50.00	ND	110	70-130			02/14/2019	
Vinyl chloride	55.0	1.0	ug/L	50.00	ND	110	70-130			02/14/2019	
Surrogate: Bromofluorobenzene	*49.2*		ug/L	*50.00*		*98.3*	*85-115*			02/14/2019	
Surrogate: Dibromofluoromethane	*49.5*		ug/L	*50.00*		*98.9*	*82.7-115*			02/14/2019	
Surrogate: Toluene-d8	*50.4*		ug/L	*50.00*		*101*	*85-115*			02/14/2019	
Matrix Spike Dup (B9B1406-MSD1)	**Source: 1902067-04**										
1,1,1,2-Tetrachloroethane	48.0	1.0	ug/L	50.00	ND	95.9	70-130	5.42	30	02/14/2019	

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9B1406 - Method: 5030				**Prepared: 02/14/2019**							
Matrix Spike Dup (B9B1406-MSD1)	**Source: 1902067-04**										
1,1,1-Trichloroethane	47.8	1.0	ug/L	50.00	ND	95.5	70-130	7.15	30	02/14/2019	
1,1,2,2-Tetrachloroethane	53.5	1.0	ug/L	50.00	ND	107	70-130	2.62	30	02/14/2019	
1,1,2-Trichloroethane	49.0	1.0	ug/L	50.00	ND	98.0	70-130	3.52	30	02/14/2019	
1,1-Dichloroethane	47.1	1.0	ug/L	50.00	ND	94.2	70-130	4.82	30	02/14/2019	
1,1-Dichloroethylene	46.6	1.0	ug/L	50.00	ND	93.2	70-130	9.08	30	02/14/2019	
1,2,3-Trichlorobenzene	50.3	5.0	ug/L	50.00	ND	101	70-130	0.832	30	02/14/2019	
1,2,3-Trichloropropane	50.0	1.0	ug/L	50.00	ND	100	70-130	0.172	30	02/14/2019	
1,2,3-Trimethylbenzene	50.8	1.0	ug/L	50.00	ND	102	70-130	3.44	30	02/14/2019	
1,2,4-Trichlorobenzene	48.8	5.0	ug/L	50.00	ND	97.7	70-130	3.47	30	02/14/2019	
1,2,4-Trimethylbenzene	49.9	1.0	ug/L	50.00	ND	99.8	70-130	4.75	30	02/14/2019	
1,2-Dibromoethane	50.3	1.0	ug/L	50.00	ND	101	70-130	0.611	30	02/14/2019	
1,2-Dichlorobenzene	48.1	1.0	ug/L	50.00	ND	96.2	70-130	4.03	30	02/14/2019	
1,2-Dichloroethane	48.7	1.0	ug/L	50.00	ND	97.5	70-130	7.87	30	02/14/2019	
1,2-Dichloropropane	48.7	1.0	ug/L	50.00	ND	97.4	70-130	9.09	30	02/14/2019	
1,3,5-Trimethylbenzene	50.0	1.0	ug/L	50.00	ND	100	70-130	6.46	30	02/14/2019	
1,3-Dichlorobenzene	49.5	1.0	ug/L	50.00	ND	98.9	70-130	2.31	30	02/14/2019	
1,4-Dichlorobenzene	46.9	1.0	ug/L	50.00	ND	93.8	70-130	3.33	30	02/14/2019	
2,2,4-Trimethylpentane	46.3	5.0	ug/L	50.00	ND	92.7	70-130	18.2	30	02/14/2019	
2-Butanone (MEK)	60.8	5.0	ug/L	50.00	ND	122	70-130	1.51	30	02/14/2019	
2-Methylnaphthalene	49.0	5.0	ug/L	50.00	ND	97.9	70-130	0.972	30	02/14/2019	X
2-Propanone (acetone)	56.4	20	ug/L	50.00	ND	113	70-130	0.112	30	02/14/2019	
4-Methyl-2-pentanone (MIBK)	53.5	5.0	ug/L	50.00	ND	107	70-130	1.95	30	02/14/2019	
Acrylonitrile	52.5	5.0	ug/L	50.00	ND	105	70-130	4.65	30	02/14/2019	
Benzene	47.5	1.0	ug/L	50.00	ND	95.1	70-130	8.02	30	02/14/2019	
Bromochloromethane	48.4	1.0	ug/L	50.00	ND	96.9	70-130	5.19	30	02/14/2019	
Bromodichloromethane	49.8	1.0	ug/L	50.00	ND	99.7	70-130	5.81	30	02/14/2019	
Bromoform	50.4	1.0	ug/L	50.00	ND	101	70-130	1.02	30	02/14/2019	
Bromomethane	48.6	5.0	ug/L	50.00	ND	97.3	70-130	8.75	30	02/14/2019	
Carbon disulfide	46.4	1.0	ug/L	50.00	ND	92.7	70-130	8.01	30	02/14/2019	
Carbon tetrachloride	47.8	1.0	ug/L	50.00	ND	95.5	70-130	9.56	30	02/14/2019	
Chlorobenzene	49.1	1.0	ug/L	50.00	ND	98.3	70-130	5.38	30	02/14/2019	
Chloroethane	48.0	5.0	ug/L	50.00	ND	96.0	70-130	8.05	30	02/14/2019	
Chloroform	48.0	1.0	ug/L	50.00	ND	96.0	70-130	7.54	30	02/14/2019	
Chloromethane	48.3	5.0	ug/L	50.00	ND	96.6	70-130	7.54	30	02/14/2019	
cis-1,2-Dichloroethylene	47.6	1.0	ug/L	50.00	ND	95.1	70-130	7.02	30	02/14/2019	
cis-1,3-Dichloropropylene	50.4	1.0	ug/L	50.00	ND	101	70-130	5.15	30	02/14/2019	
Cyclohexane	51.6	5.0	ug/L	50.00	ND	103	70-130	9.24	30	02/14/2019	
Dibromochloromethane	51.8	1.0	ug/L	50.00	ND	104	70-130	3.51	30	02/14/2019	
Dibromomethane	47.4	1.0	ug/L	50.00	ND	94.7	70-130	5.87	30	02/14/2019	
Dichlorodifluoromethane	52.0	5.0	ug/L	50.00	ND	104	70-130	9.90	30	02/14/2019	A06
Diethyl ether	48.0	5.0	ug/L	50.00	ND	96.0	70-130	4.87	30	02/14/2019	
Diisopropyl Ether	48.8	5.0	ug/L	50.00	ND	97.5	70-130	3.70	30	02/14/2019	
Ethylbenzene	50.3	1.0	ug/L	50.00	ND	101	70-130	6.34	30	02/14/2019	
Ethyltertiarybutylether	46.5	5.0	ug/L	50.00	ND	93.1	70-130	0.164	30	02/14/2019	
Hexachloroethane	48.8	5.0	ug/L	50.00	ND	97.7	70-130	7.48	30	02/14/2019	
Hexane	45.9	1.0	ug/L	50.00	ND	91.9	70-130	13.7	30	02/14/2019	
Isopropylbenzene	50.1	1.0	ug/L	50.00	ND	100	70-130	6.70	30	02/14/2019	

Lab Work Order # 1902033

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9B1406 - Method: 5030				**Prepared: 02/14/2019**							
Matrix Spike Dup (B9B1406-MSD1)	**Source: 1902067-04**										
m & p - Xylene	102	2.0	ug/L	100.0	ND	102	70-130	5.50	30	02/14/2019	
Methylene chloride	47.4	5.0	ug/L	50.00	ND	94.7	70-130	4.39	30	02/14/2019	
Methyltertiarybutylether	53.8	1.0	ug/L	50.00	ND	108	70-130	2.86	30	02/14/2019	
Naphthalene	53.2	5.0	ug/L	50.00	ND	106	70-130	1.27	30	02/14/2019	X
n-Butylbenzene	50.5	1.0	ug/L	50.00	ND	101	70-130	5.21	30	02/14/2019	
n-Propylbenzene	49.3	1.0	ug/L	50.00	ND	98.6	70-130	6.26	30	02/14/2019	
o-Xylene	51.1	1.0	ug/L	50.00	ND	102	70-130	3.97	30	02/14/2019	
sec-Butylbenzene	53.7	1.0	ug/L	50.00	ND	107	70-130	5.70	30	02/14/2019	
Styrene	52.9	1.0	ug/L	50.00	ND	106	70-130	6.27	30	02/14/2019	
tert-Butylbenzene	50.4	1.0	ug/L	50.00	ND	101	70-130	5.68	30	02/14/2019	
tertiary Butyl Alcohol	274	50	ug/L	250.0	ND	110	70-130	1.95	30	02/14/2019	
tertiaryAmylmethylether	48.0	5.0	ug/L	50.00	ND	96.0	70-130	1.77	30	02/14/2019	
Tetrachloroethylene	46.6	1.0	ug/L	50.00	ND	93.2	70-130	8.79	30	02/14/2019	
Tetrahydrofuran	48.8	5.0	ug/L	50.00	ND	97.5	70-130	3.83	30	02/14/2019	
Toluene	48.2	1.0	ug/L	50.00	ND	96.3	70-130	6.27	30	02/14/2019	
trans-1,2-Dichloroethylene	46.7	1.0	ug/L	50.00	ND	93.4	70-130	7.62	30	02/14/2019	
trans-1,3-Dichloropropylene	51.0	1.0	ug/L	50.00	ND	102	70-130	3.27	30	02/14/2019	
Trichloroethylene	72.8	1.0	ug/L	50.00	30.1	85.4	70-130	8.32	30	02/14/2019	
Trichlorofluoromethane	50.5	1.0	ug/L	50.00	ND	101	70-130	8.66	30	02/14/2019	
Vinyl chloride	49.2	1.0	ug/L	50.00	ND	98.4	70-130	11.1	30	02/14/2019	
Surrogate: Bromofluorobenzene	*48.6*		ug/L	*50.00*		*97.3*	*85-115*			02/14/2019	
Surrogate: Dibromofluoromethane	*49.2*		ug/L	*50.00*		*98.5*	*82.7-115*			02/14/2019	
Surrogate: Toluene-d8	*50.0*		ug/L	*50.00*		*100*	*85-115*			02/14/2019	

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

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ENVIRONMENTAL LABORATORY

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

Organics-Dioxane - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9B2002 - Method: 5030				**Prepared: 02/19/2019**							
Blank (B9B2002-BLK1)											
1,4-dioxane	ND	1.0	ug/L							02/19/2019	
LCS (B9B2002-BS1)											
1,4-dioxane	9.64	1.0	ug/L	10.00		96.4	70-130			02/19/2019	
Matrix Spike (B9B2002-MS1)	**Source: 1902033-06**										
1,4-dioxane	9.55	1.0	ug/L	10.00	ND	95.5	70-130			02/19/2019	
Matrix Spike Dup (B9B2002-MSD1)	**Source: 1902033-06**										
1,4-dioxane	9.27	1.0	ug/L	10.00	ND	92.7	70-130	2.98	30	02/19/2019	

Michigan Department of Environmental Quality
Laboratory Services Section

Analysis Request Sheet

Lab Work Order Number: 1902033

Project Name: Gelman Sciences

Matrix: WATER

Site Code/Project Number: 81000018/Location 6130

AY: 19

CC Email 1: lundk@michigan.gov

Project TAT Days:

Sample Collector: Dan Hamel

Dept-Division-District: DEQ-RRD-Jackson

Index:

CC Email 2:

Project Due Date:

Sample Collector Phone: 517-745-6595

State Project Manager: Dan Hamel

PCA:

CC Email 3:

Contract Firm:

State Project Manager Email: hameld@michigan.gov

Project: Location-6130

Overflow Lab Choice 1:

Accept Analysis hold time codes:

Contract Firm Primary Contact:

State Project Manager Phone: 517-745-6595

Phase:

Overflow Lab Choice 2:

Primary Contact Phone:

	Lab Use Only	Field Sample Identification	Collection Date	Collection Time	Container Count	Comments
1	01	Allen Creek/West Park SW	2/7/19	1004	5	Please include QA/QC with Lab Data Report(s)
2	02	Allen Creek/Chapin-West Park	2/7/19	0941	5	
3	03	Allen Creek/Maple Ridge-Arborview	2/7/19	1024	3	
4	04	Allen Creek/Wildwood-Arborview	2/7/19	1040	3	
5	05	Allen Creek/Murray-Washington	2/7/19	1130	3	
6	06	Allen Creek/Eighth-Waterworks	2/7/19	1110	5	
7	07	Allen Creek-Maryfield-Wildwood Park	2/7/19	1051	5	
8						
9						
10						

ORGANIC 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

METH - Methane, Ethane, Ethene
- Methane, Ethane, Ethene: 1 2 3 4 5 6 7 8 9 10

ON - 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
- Chlordane: 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
- Benzidines: 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
- Acids 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

METALS CHEMISTRY PACKAGES
- OpMemo2 - Total: 1 2 3 4 5 6 7 8 9 10
- OpMemo2 - Dissolved: 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
- Michigan10 - Dissolved: 1 2 3 4 5 6 7 8 9 10
  (As,Ba,Cd,Cr,Cu,Pb,Hg,Se,Ag,Zn)

MAD - DISSOLVED METALS
- 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

MA - TOTAL METALS
- 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

GENERAL CHEMISTRY
- GB Total Cyanide - CN: 1 2 3 4 5 6 7 8 9 10
- GB Amenable 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
- 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 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 (includes Total Alkalinity): 1 2 3 4 5 6 7 8 9 10
- 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 - SO4: 1 2 3 4 5 6 7 8 9 10
- MN Chromium 6 - Cr+6: 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 (FF) (Field - Filtered & Preserved): 1 2 3 4 5 6 7 8 9 10
- GN Diss Org Carbon - DOC (LF) (Lab - Filtered & Preserved): 1 2 3 4 5 6 7 8 9 10
- GA Total Org Carbon - TOC: 1 2 3 4 5 6 7 8 9 10
- GA Ammonia - NH3: 1 2 3 4 5 6 7 8 9 10
- GA Nitrate+Nitrite - NO3+NO2: 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.: DAN HAMEL DEQ-RRD	Melissa Smith	
Signature: Dan Hamel		2/7/19 1620
Print Name & Org.:		
Signature:		
Print Name & Org.:		
Signature:		

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

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ENVIRONMENTAL LABORATORY

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

26 March 2019

Work Order: 1903143

Price: $1,195.00

Dan Hamel
MDEQ-RRD-JACKSON
301 E. Louis Glick Highway
Jackson, MI 49201-1556

RE: GELMAN SCIENCES, INC

I certify that the analyses performed by the MDEQ Environmental Laboratory were conducted by methods approved by the U.S. Environmental Protection Agency and other appropriate regulatory agencies.

Sincerely,

Kirby Shane
Laboratory Director

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MDEQ-RRD-JACKSON
301 E. Louis Glick Highway
Jackson MI, 49201-1556

Project: GELMAN SCIENCES, INC
Site Code: 81000018/Location 6130
Project Manager: Dan Hamel

Reported:
03/26/2019

Analytical Report for Samples

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Qualifier
ALLEN CREEK/WEST PARK SW	1903143-01	Water	03/19/2019	03/22/2019	
ALLEN CREEK/CHAPIN-WEST PARK	1903143-02	Water	03/19/2019	03/22/2019	
ALLEN CREEK/MAPLE RIDGE-ARBORVIEW	1903143-03	Water	03/19/2019	03/22/2019	
ALLEN CREEK/WILDWOOD-ARBORVIEW	1903143-04	Water	03/19/2019	03/22/2019	
ALLEN CREEK/MURRAY-WASHINGTON	1903143-05	Water	03/19/2019	03/22/2019	
ALLEN CREEK/EIGHTH-WATERWORKS	1903143-06	Water	03/19/2019	03/22/2019	
ALLEN CREEK-MARYFIELD-WILDWOOD PARK	1903143-07	Water	03/19/2019	03/22/2019	

Notes and Definitions

Y28	1,4-dioxane analysis is performed using selective ion monitoring (SIM). Results reported below 5 ug/L (aqueous) or 1000 ug/Kg (solids) are estimated.
X	Methods 8260 & 624 are used to analyze volatile organics that have boiling points below 200 ºC. 2-Methylnaphthalene & naphthalene have boiling points above 200 ºC and are better suited to analysis by methods 8270 & 625 as semivolatile organics.
A03	Result(s) and reporting limit(s) are estimated due to low matrix spike recovery.
ND	Indicates compound analyzed for but not detected
RL	Reporting Limit
NA	Not Applicable

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Client ID: ALLEN CREEK/WEST PARK SW

Lab ID: 1903143-01

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
540-84-1	2,2,4-Trimethylpentane	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	03/22/19	B9C2203	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
74-95-3	Dibromomethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	

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Client ID: ALLEN CREEK/WEST PARK SW

Lab ID: 1903143-01

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
110-54-3	Hexane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	03/22/19	B9C2203	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	03/22/19	B9C2203	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
Surrogate: Bromofluorobenzene			*98.2 %*	*85-115*		*03/22/19*	B9C2203	*8260*	
Surrogate: Dibromofluoromethane			*96.0 %*	*82.7-115*		*03/22/19*	B9C2203	*8260*	
Surrogate: Toluene-d8			*98.6 %*	*85-115*		*03/22/19*	B9C2203	*8260*	

Lab Work Order # 1903143

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TEL: (517) 335-9800
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Client ID: ALLEN CREEK/WEST PARK SW

Lab ID: 1903143-01

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Dioxane									
123-91-1	**1,4-dioxane**	**19**	1.0	ug/L	1	03/22/19	B9C2507	8260 Modified	

Lab Work Order # 1903143

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL LABORATORY

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

Client ID: ALLEN CREEK/CHAPIN-WEST PARK

Lab ID: 1903143-02

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
540-84-1	2,2,4-Trimethylpentane	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	03/22/19	B9C2203	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
74-95-3	Dibromomethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	

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Client ID: ALLEN CREEK/CHAPIN-WEST PARK

Lab ID: 1903143-02

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
110-54-3	Hexane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	03/22/19	B9C2203	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	03/22/19	B9C2203	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
Surrogate: Bromofluorobenzene			*98.6 %*	*85-115*		*03/22/19*	B9C2203	*8260*	
Surrogate: Dibromofluoromethane			*98.2 %*	*82.7-115*		*03/22/19*	B9C2203	*8260*	
Surrogate: Toluene-d8			*97.5 %*	*85-115*		*03/22/19*	B9C2203	*8260*	

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TEL: (517) 335-9800
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Client ID: ALLEN CREEK/MAPLE RIDGE-ARBORVIEW

Lab ID: 1903143-03

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
540-84-1	2,2,4-Trimethylpentane	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	03/22/19	B9C2203	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
74-95-3	Dibromomethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	

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TEL: (517) 335-9800
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Client ID: ALLEN CREEK/MAPLE RIDGE-ARBORVIEW

Lab ID: 1903143-03

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
110-54-3	Hexane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	03/22/19	B9C2203	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	03/22/19	B9C2203	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
Surrogate: Bromofluorobenzene			*100 %*	*85-115*		*03/22/19*	B9C2203	*8260*	
Surrogate: Dibromofluoromethane			*97.1 %*	*82.7-115*		*03/22/19*	B9C2203	*8260*	
Surrogate: Toluene-d8			*97.8 %*	*85-115*		*03/22/19*	B9C2203	*8260*	

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Client ID: ALLEN CREEK/MAPLE RIDGE-ARBORVIEW

Lab ID: 1903143-03

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Dioxane									**See note Y28**
123-91-1	1,4-dioxane	ND	1.0	ug/L	1	03/22/19	B9C2507	8260 Modified	

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Client ID: ALLEN CREEK/WILDWOOD-ARBORVIEW

Lab ID: 1903143-04

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
540-84-1	2,2,4-Trimethylpentane	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	03/22/19	B9C2203	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
74-95-3	Dibromomethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL LABORATORY

P.O. Box 30270
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TEL: (517) 335-9800
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Client ID: ALLEN CREEK/WILDWOOD-ARBORVIEW

Lab ID: 1903143-04

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
110-54-3	Hexane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	03/22/19	B9C2203	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	03/22/19	B9C2203	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
Surrogate: Bromofluorobenzene			*98.8 %*	*85-115*		*03/22/19*	B9C2203	*8260*	
Surrogate: Dibromofluoromethane			*99.5 %*	*82.7-115*		*03/22/19*	B9C2203	*8260*	
Surrogate: Toluene-d8			*99.0 %*	*85-115*		*03/22/19*	B9C2203	*8260*	

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL LABORATORY

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Client ID: ALLEN CREEK/MURRAY-WASHINGTON

Lab ID: 1903143-05

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
540-84-1	2,2,4-Trimethylpentane	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	03/22/19	B9C2203	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
74-95-3	Dibromomethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	

STATE OF MICHIGAN
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Client ID: ALLEN CREEK/MURRAY-WASHINGTON

Lab ID: 1903143-05

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
110-54-3	Hexane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	03/22/19	B9C2203	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	03/22/19	B9C2203	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
79-01-6	**Trichloroethylene**	**1.6**	1.0	ug/L	1	03/22/19	B9C2203	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
Surrogate: Bromofluorobenzene			*97.8 %*	*85-115*		*03/22/19*	B9C2203	*8260*	
Surrogate: Dibromofluoromethane			*95.5 %*	*82.7-115*		*03/22/19*	B9C2203	*8260*	
Surrogate: Toluene-d8			*99.2 %*	*85-115*		*03/22/19*	B9C2203	*8260*	

STATE OF MICHIGAN
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ENVIRONMENTAL LABORATORY

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FAX: (517) 335-9600

Client ID: ALLEN CREEK/MURRAY-WASHINGTON

Lab ID: 1903143-05

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Dioxane									**See note Y28**
123-91-1	**1,4-dioxane**	**1.0**	1.0	ug/L	1	03/22/19	B9C2507	8260 Modified	

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Client ID: ALLEN CREEK/EIGHTH-WATERWORKS

Lab ID: 1903143-06

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
540-84-1	2,2,4-Trimethylpentane	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	03/22/19	B9C2203	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
74-95-3	Dibromomethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	

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Client ID: ALLEN CREEK/EIGHTH-WATERWORKS

Lab ID: 1903143-06

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
110-54-3	Hexane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	03/22/19	B9C2203	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	03/22/19	B9C2203	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
Surrogate: Bromofluorobenzene			*99.9 %*	*85-115*		*03/22/19*	B9C2203	*8260*	
Surrogate: Dibromofluoromethane			*95.8 %*	*82.7-115*		*03/22/19*	B9C2203	*8260*	
Surrogate: Toluene-d8			*97.4 %*	*85-115*		*03/22/19*	B9C2203	*8260*	

STATE OF MICHIGAN
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TEL: (517) 335-9800
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Client ID: ALLEN CREEK-MARYFIELD-WILDWOOD PARK

Lab ID: 1903143-07

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
540-84-1	2,2,4-Trimethylpentane	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	03/22/19	B9C2203	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
74-95-3	Dibromomethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	

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Client ID: ALLEN CREEK-MARYFIELD-WILDWOOD PARK

Lab ID: 1903143-07

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
100-41-4	**Ethylbenzene**	**14**	1.0	ug/L	1	03/22/19	B9C2203	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
110-54-3	Hexane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	03/22/19	B9C2203	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
100-42-5	**Styrene**	**14**	1.0	ug/L	1	03/22/19	B9C2203	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	03/22/19	B9C2203	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	03/22/19	B9C2203	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	03/22/19	B9C2203	8260	
Surrogate: Bromofluorobenzene			*102 %*	*85-115*		*03/22/19*	B9C2203	*8260*	
Surrogate: Dibromofluoromethane			*96.5 %*	*82.7-115*		*03/22/19*	B9C2203	*8260*	
Surrogate: Toluene-d8			*98.6 %*	*85-115*		*03/22/19*	B9C2203	*8260*	

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9C2203 - Method: 5030				**Prepared: 03/22/2019**							
Blank (B9C2203-BLK1)											
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L							03/22/2019	
1,1,1-Trichloroethane	ND	1.0	ug/L							03/22/2019	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L							03/22/2019	
1,1,2-Trichloroethane	ND	1.0	ug/L							03/22/2019	
1,1-Dichloroethane	ND	1.0	ug/L							03/22/2019	
1,1-Dichloroethylene	ND	1.0	ug/L							03/22/2019	
1,2,3-Trichlorobenzene	ND	5.0	ug/L							03/22/2019	
1,2,3-Trichloropropane	ND	1.0	ug/L							03/22/2019	
1,2,3-Trimethylbenzene	ND	1.0	ug/L							03/22/2019	
1,2,4-Trichlorobenzene	ND	5.0	ug/L							03/22/2019	
1,2,4-Trimethylbenzene	ND	1.0	ug/L							03/22/2019	
1,2-Dibromoethane	ND	1.0	ug/L							03/22/2019	
1,2-Dichlorobenzene	ND	1.0	ug/L							03/22/2019	
1,2-Dichloroethane	ND	1.0	ug/L							03/22/2019	
1,2-Dichloropropane	ND	1.0	ug/L							03/22/2019	
1,3,5-Trimethylbenzene	ND	1.0	ug/L							03/22/2019	
1,3-Dichlorobenzene	ND	1.0	ug/L							03/22/2019	
1,4-Dichlorobenzene	ND	1.0	ug/L							03/22/2019	
2,2,4-Trimethylpentane	ND	5.0	ug/L							03/22/2019	
2-Butanone (MEK)	ND	5.0	ug/L							03/22/2019	
2-Methylnaphthalene	ND	5.0	ug/L							03/22/2019	X
2-Propanone (acetone)	ND	20	ug/L							03/22/2019	
4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L							03/22/2019	
Acrylonitrile	ND	5.0	ug/L							03/22/2019	
Benzene	ND	1.0	ug/L							03/22/2019	
Bromochloromethane	ND	1.0	ug/L							03/22/2019	
Bromodichloromethane	ND	1.0	ug/L							03/22/2019	
Bromoform	ND	1.0	ug/L							03/22/2019	
Bromomethane	ND	5.0	ug/L							03/22/2019	
Carbon disulfide	ND	1.0	ug/L							03/22/2019	
Carbon tetrachloride	ND	1.0	ug/L							03/22/2019	
Chlorobenzene	ND	1.0	ug/L							03/22/2019	
Chloroethane	ND	5.0	ug/L							03/22/2019	
Chloroform	ND	1.0	ug/L							03/22/2019	
Chloromethane	ND	5.0	ug/L							03/22/2019	
cis-1,2-Dichloroethylene	ND	1.0	ug/L							03/22/2019	
cis-1,3-Dichloropropylene	ND	1.0	ug/L							03/22/2019	
Cyclohexane	ND	5.0	ug/L							03/22/2019	
Dibromochloromethane	ND	1.0	ug/L							03/22/2019	
Dibromomethane	ND	1.0	ug/L							03/22/2019	
Dichlorodifluoromethane	ND	5.0	ug/L							03/22/2019	
Diethyl ether	ND	5.0	ug/L							03/22/2019	
Diisopropyl Ether	ND	5.0	ug/L							03/22/2019	
Ethylbenzene	ND	1.0	ug/L							03/22/2019	
Ethyltertiarybutylether	ND	5.0	ug/L							03/22/2019	
Hexachloroethane	ND	5.0	ug/L							03/22/2019	
Hexane	ND	1.0	ug/L							03/22/2019	

Lab Work Order # 1903143

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9C2203 - Method: 5030				**Prepared: 03/22/2019**							
Blank (B9C2203-BLK1)											
Isopropylbenzene	ND	1.0	ug/L							03/22/2019	
m & p - Xylene	ND	2.0	ug/L							03/22/2019	
Methylene chloride	ND	5.0	ug/L							03/22/2019	
Methyltertiarybutylether	ND	1.0	ug/L							03/22/2019	
Naphthalene	ND	5.0	ug/L							03/22/2019	X
n-Butylbenzene	ND	1.0	ug/L							03/22/2019	
n-Propylbenzene	ND	1.0	ug/L							03/22/2019	
o-Xylene	ND	1.0	ug/L							03/22/2019	
sec-Butylbenzene	ND	1.0	ug/L							03/22/2019	
Styrene	ND	1.0	ug/L							03/22/2019	
tert-Butylbenzene	ND	1.0	ug/L							03/22/2019	
tertiary Butyl Alcohol	ND	50	ug/L							03/22/2019	
tertiaryAmylmethylether	ND	5.0	ug/L							03/22/2019	
Tetrachloroethylene	ND	1.0	ug/L							03/22/2019	
Tetrahydrofuran	ND	5.0	ug/L							03/22/2019	
Toluene	ND	1.0	ug/L							03/22/2019	
trans-1,2-Dichloroethylene	ND	1.0	ug/L							03/22/2019	
trans-1,3-Dichloropropylene	ND	1.0	ug/L							03/22/2019	
Trichloroethylene	ND	1.0	ug/L							03/22/2019	
Trichlorofluoromethane	ND	1.0	ug/L							03/22/2019	
Vinyl chloride	ND	1.0	ug/L							03/22/2019	
Surrogate: Bromofluorobenzene	*50.1*		ug/L	*50.00*		*100*	*85-115*			03/22/2019	
Surrogate: Dibromofluoromethane	*48.0*		ug/L	*50.00*		*96.0*	*82.7-115*			03/22/2019	
Surrogate: Toluene-d8	*49.9*		ug/L	*50.00*		*99.8*	*85-115*			03/22/2019	
LCS (B9C2203-BS1)											
1,1,1,2-Tetrachloroethane	47.9	1.0	ug/L	50.00		95.8	70-130			03/22/2019	
1,1,1-Trichloroethane	43.3	1.0	ug/L	50.00		86.5	70-130			03/22/2019	
1,1,2,2-Tetrachloroethane	47.1	1.0	ug/L	50.00		94.2	70-130			03/22/2019	
1,1,2-Trichloroethane	46.6	1.0	ug/L	50.00		93.2	70-130			03/22/2019	
1,1-Dichloroethane	42.5	1.0	ug/L	50.00		85.0	70-130			03/22/2019	
1,1-Dichloroethylene	41.9	1.0	ug/L	50.00		83.7	70-130			03/22/2019	
1,2,3-Trichlorobenzene	50.5	5.0	ug/L	50.00		101	70-130			03/22/2019	
1,2,3-Trichloropropane	45.0	1.0	ug/L	50.00		89.9	70-130			03/22/2019	
1,2,3-Trimethylbenzene	45.1	1.0	ug/L	50.00		90.2	70-130			03/22/2019	
1,2,4-Trichlorobenzene	49.7	5.0	ug/L	50.00		99.4	70-130			03/22/2019	
1,2,4-Trimethylbenzene	44.9	1.0	ug/L	50.00		89.8	70-130			03/22/2019	
1,2-Dibromoethane	49.2	1.0	ug/L	50.00		98.3	70-130			03/22/2019	
1,2-Dichlorobenzene	46.2	1.0	ug/L	50.00		92.4	70-130			03/22/2019	
1,2-Dichloroethane	43.5	1.0	ug/L	50.00		87.1	70-130			03/22/2019	
1,2-Dichloropropane	45.3	1.0	ug/L	50.00		90.5	70-130			03/22/2019	
1,3,5-Trimethylbenzene	45.3	1.0	ug/L	50.00		90.7	70-130			03/22/2019	
1,3-Dichlorobenzene	45.2	1.0	ug/L	50.00		90.4	70-130			03/22/2019	
1,4-Dichlorobenzene	45.5	1.0	ug/L	50.00		91.0	70-130			03/22/2019	
2,2,4-Trimethylpentane	47.4	5.0	ug/L	50.00		94.7	70-130			03/22/2019	
2-Butanone (MEK)	47.1	5.0	ug/L	50.00		94.2	70-130			03/22/2019	
2-Methylnaphthalene	47.8	5.0	ug/L	50.00		95.7	70-130			03/22/2019	X

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9C2203 - Method: 5030				**Prepared: 03/22/2019**							
LCS (B9C2203-BS1)											
2-Propanone (acetone)	44.0	20	ug/L	50.00		87.9	70-130			03/22/2019	
4-Methyl-2-pentanone (MIBK)	46.5	5.0	ug/L	50.00		93.1	70-130			03/22/2019	
Acrylonitrile	44.1	5.0	ug/L	50.00		88.2	70-130			03/22/2019	
Benzene	44.5	1.0	ug/L	50.00		89.1	70-130			03/22/2019	
Bromochloromethane	45.9	1.0	ug/L	50.00		91.7	70-130			03/22/2019	
Bromodichloromethane	45.7	1.0	ug/L	50.00		91.4	70-130			03/22/2019	
Bromoform	42.9	1.0	ug/L	50.00		85.8	70-130			03/22/2019	
Bromomethane	44.6	5.0	ug/L	50.00		89.2	70-130			03/22/2019	
Carbon disulfide	42.6	1.0	ug/L	50.00		85.2	70-130			03/22/2019	
Carbon tetrachloride	44.5	1.0	ug/L	50.00		89.1	70-130			03/22/2019	
Chlorobenzene	45.5	1.0	ug/L	50.00		90.9	70-130			03/22/2019	
Chloroethane	43.3	5.0	ug/L	50.00		86.7	70-130			03/22/2019	
Chloroform	43.5	1.0	ug/L	50.00		87.0	70-130			03/22/2019	
Chloromethane	46.1	5.0	ug/L	50.00		92.1	70-130			03/22/2019	
cis-1,2-Dichloroethylene	41.9	1.0	ug/L	50.00		83.8	70-130			03/22/2019	
cis-1,3-Dichloropropylene	44.9	1.0	ug/L	50.00		89.9	70-130			03/22/2019	
Cyclohexane	47.1	5.0	ug/L	50.00		94.2	70-130			03/22/2019	
Dibromochloromethane	42.3	1.0	ug/L	50.00		84.6	70-130			03/22/2019	
Dibromomethane	44.4	1.0	ug/L	50.00		88.8	70-130			03/22/2019	
Dichlorodifluoromethane	47.1	5.0	ug/L	50.00		94.1	70-130			03/22/2019	
Diethyl ether	41.9	5.0	ug/L	50.00		83.8	70-130			03/22/2019	
Diisopropyl Ether	43.2	5.0	ug/L	50.00		86.5	70-130			03/22/2019	
Ethylbenzene	46.8	1.0	ug/L	50.00		93.6	70-130			03/22/2019	
Ethyltertiarybutylether	39.2	5.0	ug/L	50.00		78.4	70-130			03/22/2019	
Hexachloroethane	38.2	5.0	ug/L	50.00		76.3	70-130			03/22/2019	
Hexane	44.2	1.0	ug/L	50.00		88.4	70-130			03/22/2019	
Isopropylbenzene	45.7	1.0	ug/L	50.00		91.4	70-130			03/22/2019	
m & p - Xylene	95.6	2.0	ug/L	100.0		95.6	70-130			03/22/2019	
Methylene chloride	43.2	5.0	ug/L	50.00		86.4	70-130			03/22/2019	
Methyltertiarybutylether	41.8	1.0	ug/L	50.00		83.5	70-130			03/22/2019	
Naphthalene	48.7	5.0	ug/L	50.00		97.4	70-130			03/22/2019	X
n-Butylbenzene	47.2	1.0	ug/L	50.00		94.4	70-130			03/22/2019	
n-Propylbenzene	46.3	1.0	ug/L	50.00		92.6	70-130			03/22/2019	
o-Xylene	46.9	1.0	ug/L	50.00		93.7	70-130			03/22/2019	
sec-Butylbenzene	47.3	1.0	ug/L	50.00		94.7	70-130			03/22/2019	
Styrene	47.2	1.0	ug/L	50.00		94.4	70-130			03/22/2019	
tert-Butylbenzene	45.0	1.0	ug/L	50.00		90.0	70-130			03/22/2019	
tertiary Butyl Alcohol	191	50	ug/L	250.0		76.2	70-130			03/22/2019	
tertiaryAmylmethylether	41.0	5.0	ug/L	50.00		81.9	70-130			03/22/2019	
Tetrachloroethylene	50.5	1.0	ug/L	50.00		101	70-130			03/22/2019	
Tetrahydrofuran	42.2	5.0	ug/L	50.00		84.3	70-130			03/22/2019	
Toluene	46.6	1.0	ug/L	50.00		93.3	70-130			03/22/2019	
trans-1,2-Dichloroethylene	41.6	1.0	ug/L	50.00		83.1	70-130			03/22/2019	
trans-1,3-Dichloropropylene	43.3	1.0	ug/L	50.00		86.6	70-130			03/22/2019	
Trichloroethylene	46.4	1.0	ug/L	50.00		92.7	70-130			03/22/2019	
Trichlorofluoromethane	45.8	1.0	ug/L	50.00		91.6	70-130			03/22/2019	
Vinyl chloride	44.3	1.0	ug/L	50.00		88.6	70-130			03/22/2019	

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9C2203 - Method: 5030				**Prepared: 03/22/2019**							
LCS (B9C2203-BS1)											
Surrogate: Bromofluorobenzene	*47.6*		ug/L	*50.00*		*95.3*	*85-115*			03/22/2019	
Surrogate: Dibromofluoromethane	*49.4*		ug/L	*50.00*		*98.8*	*82.7-115*			03/22/2019	
Surrogate: Toluene-d8	*51.0*		ug/L	*50.00*		*102*	*85-115*			03/22/2019	
Matrix Spike (B9C2203-MS1)	**Source: 1903142-01**										
1,1,1,2-Tetrachloroethane	60.6	1.0	ug/L	61.90	ND	98.0	70-130			03/22/2019	
1,1,1-Trichloroethane	58.2	1.0	ug/L	61.90	ND	94.1	70-130			03/22/2019	
1,1,2,2-Tetrachloroethane	61.7	1.0	ug/L	61.90	ND	99.7	70-130			03/22/2019	
1,1,2-Trichloroethane	59.7	1.0	ug/L	61.90	ND	96.5	70-130			03/22/2019	
1,1-Dichloroethane	59.1	1.0	ug/L	61.90	ND	95.5	70-130			03/22/2019	
1,1-Dichloroethylene	59.9	1.0	ug/L	61.90	ND	96.8	70-130			03/22/2019	
1,2,3-Trichlorobenzene	67.3	5.0	ug/L	61.90	ND	109	70-130			03/22/2019	
1,2,3-Trichloropropane	57.5	1.0	ug/L	61.90	ND	92.8	70-130			03/22/2019	
1,2,3-Trimethylbenzene	61.8	1.0	ug/L	61.90	ND	99.9	70-130			03/22/2019	
1,2,4-Trichlorobenzene	66.7	5.0	ug/L	61.90	ND	108	70-130			03/22/2019	
1,2,4-Trimethylbenzene	61.4	1.0	ug/L	61.90	ND	99.2	70-130			03/22/2019	
1,2-Dibromoethane	62.3	1.0	ug/L	61.90	ND	101	70-130			03/22/2019	
1,2-Dichlorobenzene	62.3	1.0	ug/L	61.90	ND	101	70-130			03/22/2019	
1,2-Dichloroethane	60.7	1.0	ug/L	61.90	ND	98.1	70-130			03/22/2019	
1,2-Dichloropropane	62.9	1.0	ug/L	61.90	ND	102	70-130			03/22/2019	
1,3,5-Trimethylbenzene	63.0	1.0	ug/L	61.90	ND	102	70-130			03/22/2019	
1,3-Dichlorobenzene	61.9	1.0	ug/L	61.90	ND	100	70-130			03/22/2019	
1,4-Dichlorobenzene	60.9	1.0	ug/L	61.90	ND	98.4	70-130			03/22/2019	
2,2,4-Trimethylpentane	65.0	5.0	ug/L	61.90	ND	105	70-130			03/22/2019	
2-Butanone (MEK)	62.8	5.0	ug/L	61.90	ND	101	70-130			03/22/2019	
2-Methylnaphthalene	65.4	5.0	ug/L	61.90	ND	106	70-130			03/22/2019	X
2-Propanone (acetone)	59.0	20	ug/L	61.90	ND	95.3	70-130			03/22/2019	
4-Methyl-2-pentanone (MIBK)	60.5	5.0	ug/L	61.90	ND	97.8	70-130			03/22/2019	
Acrylonitrile	59.0	5.0	ug/L	61.90	ND	95.3	70-130			03/22/2019	
Benzene	62.5	1.0	ug/L	61.90	ND	101	70-130			03/22/2019	
Bromochloromethane	64.3	1.0	ug/L	61.90	ND	104	70-130			03/22/2019	
Bromodichloromethane	61.2	1.0	ug/L	61.90	ND	98.9	70-130			03/22/2019	
Bromoform	49.6	1.0	ug/L	61.90	ND	80.2	70-130			03/22/2019	
Bromomethane	60.5	5.0	ug/L	61.90	ND	97.8	70-130			03/22/2019	
Carbon disulfide	62.4	1.0	ug/L	61.90	ND	101	70-130			03/22/2019	
Carbon tetrachloride	57.2	1.0	ug/L	61.90	ND	92.4	70-130			03/22/2019	
Chlorobenzene	61.3	1.0	ug/L	61.90	ND	99.0	70-130			03/22/2019	
Chloroethane	66.6	5.0	ug/L	61.90	ND	108	70-130			03/22/2019	
Chloroform	59.9	1.0	ug/L	61.90	ND	96.8	70-130			03/22/2019	
Chloromethane	72.2	5.0	ug/L	61.90	ND	117	70-130			03/22/2019	
cis-1,2-Dichloroethylene	59.5	1.0	ug/L	61.90	ND	96.2	70-130			03/22/2019	
cis-1,3-Dichloropropylene	60.2	1.0	ug/L	61.90	ND	97.3	70-130			03/22/2019	
Cyclohexane	69.3	5.0	ug/L	61.90	ND	112	70-130			03/22/2019	
Dibromochloromethane	52.5	1.0	ug/L	61.90	ND	84.8	70-130			03/22/2019	
Dibromomethane	59.3	1.0	ug/L	61.90	ND	95.8	70-130			03/22/2019	
Dichlorodifluoromethane	78.6	5.0	ug/L	61.90	ND	127	70-130			03/22/2019	
Diethyl ether	56.7	5.0	ug/L	61.90	ND	91.6	70-130			03/22/2019	

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9C2203 - Method: 5030				**Prepared: 03/22/2019**							
Matrix Spike (B9C2203-MS1)	**Source: 1903142-01**										
Diisopropyl Ether	58.5	5.0	ug/L	61.90	ND	94.5	70-130			03/22/2019	
Ethylbenzene	63.6	1.0	ug/L	61.90	ND	103	70-130			03/22/2019	
Ethyltertiarybutylether	49.9	5.0	ug/L	61.90	ND	80.6	70-130			03/22/2019	
Hexachloroethane	49.3	5.0	ug/L	61.90	ND	79.6	70-130			03/22/2019	
Hexane	62.2	1.0	ug/L	61.90	ND	100	70-130			03/22/2019	
Isopropylbenzene	62.5	1.0	ug/L	61.90	ND	101	70-130			03/22/2019	
m & p - Xylene	127	2.0	ug/L	123.8	ND	103	70-130			03/22/2019	
Methylene chloride	59.9	5.0	ug/L	61.90	ND	96.8	70-130			03/22/2019	
Methyltertiarybutylether	55.1	1.0	ug/L	61.90	ND	89.0	70-130			03/22/2019	
Naphthalene	63.0	5.0	ug/L	61.90	ND	102	70-130			03/22/2019	X
n-Butylbenzene	66.5	1.0	ug/L	61.90	ND	107	70-130			03/22/2019	
n-Propylbenzene	63.7	1.0	ug/L	61.90	ND	103	70-130			03/22/2019	
o-Xylene	62.4	1.0	ug/L	61.90	ND	101	70-130			03/22/2019	
sec-Butylbenzene	69.0	1.0	ug/L	61.90	ND	112	70-130			03/22/2019	
Styrene	62.5	1.0	ug/L	61.90	ND	101	70-130			03/22/2019	
tert-Butylbenzene	62.7	1.0	ug/L	61.90	ND	101	70-130			03/22/2019	
tertiary Butyl Alcohol	209	50	ug/L	309.5	ND	67.6	70-130			03/22/2019	A03
tertiaryAmylmethylether	54.1	5.0	ug/L	61.90	ND	87.3	70-130			03/22/2019	
Tetrachloroethylene	68.2	1.0	ug/L	61.90	ND	110	70-130			03/22/2019	
Tetrahydrofuran	57.5	5.0	ug/L	61.90	ND	92.9	70-130			03/22/2019	
Toluene	62.6	1.0	ug/L	61.90	ND	101	70-130			03/22/2019	
trans-1,2-Dichloroethylene	59.7	1.0	ug/L	61.90	ND	96.5	70-130			03/22/2019	
trans-1,3-Dichloropropylene	57.1	1.0	ug/L	61.90	ND	92.3	70-130			03/22/2019	
Trichloroethylene	64.1	1.0	ug/L	61.90	ND	104	70-130			03/22/2019	
Trichlorofluoromethane	68.2	1.0	ug/L	61.90	ND	110	70-130			03/22/2019	
Vinyl chloride	68.6	1.0	ug/L	61.90	ND	111	70-130			03/22/2019	
Surrogate: Bromofluorobenzene	*47.8*		ug/L	*50.00*		*95.7*	*85-115*			03/22/2019	
Surrogate: Dibromofluoromethane	*50.2*		ug/L	*50.00*		*100*	*82.7-115*			03/22/2019	
Surrogate: Toluene-d8	*50.0*		ug/L	*50.00*		*100*	*85-115*			03/22/2019	
Matrix Spike Dup (B9C2203-MSD1)	**Source: 1903142-01**										
1,1,1,2-Tetrachloroethane	65.0	1.0	ug/L	61.90	ND	105	70-130	6.93	30	03/22/2019	
1,1,1-Trichloroethane	61.0	1.0	ug/L	61.90	ND	98.5	70-130	4.62	30	03/22/2019	
1,1,2,2-Tetrachloroethane	65.7	1.0	ug/L	61.90	ND	106	70-130	6.26	30	03/22/2019	
1,1,2-Trichloroethane	60.2	1.0	ug/L	61.90	ND	97.2	70-130	0.791	30	03/22/2019	
1,1-Dichloroethane	61.1	1.0	ug/L	61.90	ND	98.8	70-130	3.36	30	03/22/2019	
1,1-Dichloroethylene	61.1	1.0	ug/L	61.90	ND	98.7	70-130	1.87	30	03/22/2019	
1,2,3-Trichlorobenzene	70.6	5.0	ug/L	61.90	ND	114	70-130	4.79	30	03/22/2019	
1,2,3-Trichloropropane	60.7	1.0	ug/L	61.90	ND	98.0	70-130	5.45	30	03/22/2019	
1,2,3-Trimethylbenzene	63.8	1.0	ug/L	61.90	ND	103	70-130	3.17	30	03/22/2019	
1,2,4-Trichlorobenzene	70.2	5.0	ug/L	61.90	ND	113	70-130	5.09	30	03/22/2019	
1,2,4-Trimethylbenzene	63.2	1.0	ug/L	61.90	ND	102	70-130	2.91	30	03/22/2019	
1,2-Dibromoethane	65.1	1.0	ug/L	61.90	ND	105	70-130	4.45	30	03/22/2019	
1,2-Dichlorobenzene	64.2	1.0	ug/L	61.90	ND	104	70-130	2.98	30	03/22/2019	
1,2-Dichloroethane	59.2	1.0	ug/L	61.90	ND	95.6	70-130	2.51	30	03/22/2019	
1,2-Dichloropropane	63.5	1.0	ug/L	61.90	ND	103	70-130	0.886	30	03/22/2019	
1,3,5-Trimethylbenzene	64.9	1.0	ug/L	61.90	ND	105	70-130	2.89	30	03/22/2019	

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9C2203 - Method: 5030				**Prepared: 03/22/2019**							
Matrix Spike Dup (B9C2203-MSD1)	**Source: 1903142-01**										
1,3-Dichlorobenzene	64.1	1.0	ug/L	61.90	ND	103	70-130	3.39	30	03/22/2019	
1,4-Dichlorobenzene	63.0	1.0	ug/L	61.90	ND	102	70-130	3.41	30	03/22/2019	
2,2,4-Trimethylpentane	59.1	5.0	ug/L	61.90	ND	95.5	70-130	9.52	30	03/22/2019	
2-Butanone (MEK)	65.6	5.0	ug/L	61.90	ND	106	70-130	4.37	30	03/22/2019	
2-Methylnaphthalene	75.2	5.0	ug/L	61.90	ND	122	70-130	14.0	30	03/22/2019	X
2-Propanone (acetone)	62.3	20	ug/L	61.90	ND	101	70-130	5.47	30	03/22/2019	
4-Methyl-2-pentanone (MIBK)	64.3	5.0	ug/L	61.90	ND	104	70-130	6.00	30	03/22/2019	
Acrylonitrile	61.1	5.0	ug/L	61.90	ND	98.7	70-130	3.54	30	03/22/2019	
Benzene	61.5	1.0	ug/L	61.90	ND	99.3	70-130	1.64	30	03/22/2019	
Bromochloromethane	64.1	1.0	ug/L	61.90	ND	104	70-130	0.386	30	03/22/2019	
Bromodichloromethane	63.1	1.0	ug/L	61.90	ND	102	70-130	3.01	30	03/22/2019	
Bromoform	54.7	1.0	ug/L	61.90	ND	88.4	70-130	9.68	30	03/22/2019	
Bromomethane	64.9	5.0	ug/L	61.90	ND	105	70-130	6.92	30	03/22/2019	
Carbon disulfide	64.4	1.0	ug/L	61.90	ND	104	70-130	3.21	30	03/22/2019	
Carbon tetrachloride	62.8	1.0	ug/L	61.90	ND	101	70-130	9.27	30	03/22/2019	
Chlorobenzene	62.4	1.0	ug/L	61.90	ND	101	70-130	1.87	30	03/22/2019	
Chloroethane	65.9	5.0	ug/L	61.90	ND	107	70-130	1.01	30	03/22/2019	
Chloroform	60.8	1.0	ug/L	61.90	ND	98.3	70-130	1.55	30	03/22/2019	
Chloromethane	73.4	5.0	ug/L	61.90	ND	119	70-130	1.63	30	03/22/2019	
cis-1,2-Dichloroethylene	60.1	1.0	ug/L	61.90	ND	97.0	70-130	0.921	30	03/22/2019	
cis-1,3-Dichloropropylene	61.7	1.0	ug/L	61.90	ND	99.6	70-130	2.36	30	03/22/2019	
Cyclohexane	66.2	5.0	ug/L	61.90	ND	107	70-130	4.65	30	03/22/2019	
Dibromochloromethane	57.6	1.0	ug/L	61.90	ND	93.1	70-130	9.35	30	03/22/2019	
Dibromomethane	60.2	1.0	ug/L	61.90	ND	97.3	70-130	1.52	30	03/22/2019	
Dichlorodifluoromethane	73.2	5.0	ug/L	61.90	ND	118	70-130	7.12	30	03/22/2019	
Diethyl ether	58.6	5.0	ug/L	61.90	ND	94.7	70-130	3.33	30	03/22/2019	
Diisopropyl Ether	59.7	5.0	ug/L	61.90	ND	96.5	70-130	2.07	30	03/22/2019	
Ethylbenzene	64.1	1.0	ug/L	61.90	ND	104	70-130	0.729	30	03/22/2019	
Ethyltertiarybutylether	52.4	5.0	ug/L	61.90	ND	84.6	70-130	4.84	30	03/22/2019	
Hexachloroethane	56.1	5.0	ug/L	61.90	ND	90.6	70-130	13.0	30	03/22/2019	
Hexane	56.2	1.0	ug/L	61.90	ND	90.7	70-130	10.2	30	03/22/2019	
Isopropylbenzene	64.7	1.0	ug/L	61.90	ND	105	70-130	3.53	30	03/22/2019	
m & p - Xylene	128	2.0	ug/L	123.8	ND	104	70-130	0.984	30	03/22/2019	
Methylene chloride	60.2	5.0	ug/L	61.90	ND	97.3	70-130	0.442	30	03/22/2019	
Methyltertiarybutylether	57.3	1.0	ug/L	61.90	ND	92.6	70-130	3.95	30	03/22/2019	
Naphthalene	67.8	5.0	ug/L	61.90	ND	110	70-130	7.39	30	03/22/2019	X
n-Butylbenzene	68.6	1.0	ug/L	61.90	ND	111	70-130	3.06	30	03/22/2019	
n-Propylbenzene	65.9	1.0	ug/L	61.90	ND	106	70-130	3.39	30	03/22/2019	
o-Xylene	63.6	1.0	ug/L	61.90	ND	103	70-130	1.86	30	03/22/2019	
sec-Butylbenzene	70.9	1.0	ug/L	61.90	ND	115	70-130	2.67	30	03/22/2019	
Styrene	63.3	1.0	ug/L	61.90	ND	102	70-130	1.29	30	03/22/2019	
tert-Butylbenzene	64.6	1.0	ug/L	61.90	ND	104	70-130	2.96	30	03/22/2019	
tertiary Butyl Alcohol	258	50	ug/L	309.5	ND	83.3	70-130	20.9	30	03/22/2019	
tertiaryAmylmethylether	54.9	5.0	ug/L	61.90	ND	88.6	70-130	1.49	30	03/22/2019	
Tetrachloroethylene	67.8	1.0	ug/L	61.90	ND	110	70-130	0.544	30	03/22/2019	
Tetrahydrofuran	59.8	5.0	ug/L	61.90	ND	96.6	70-130	3.93	30	03/22/2019	
Toluene	62.7	1.0	ug/L	61.90	ND	101	70-130	0.119	30	03/22/2019	

STATE OF MICHIGAN
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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
Batch B9C2203 - Method: 5030				**Prepared: 03/22/2019**							
Matrix Spike Dup (B9C2203-MSD1)	**Source: 1903142-01**										
trans-1,2-Dichloroethylene	59.2	1.0	ug/L	61.90	ND	95.6	70-130	0.929	30	03/22/2019	
trans-1,3-Dichloropropylene	59.3	1.0	ug/L	61.90	ND	95.7	70-130	3.69	30	03/22/2019	
Trichloroethylene	63.8	1.0	ug/L	61.90	ND	103	70-130	0.541	30	03/22/2019	
Trichlorofluoromethane	68.1	1.0	ug/L	61.90	ND	110	70-130	0.175	30	03/22/2019	
Vinyl chloride	69.0	1.0	ug/L	61.90	ND	111	70-130	0.593	30	03/22/2019	
Surrogate: Bromofluorobenzene	*48.9*		ug/L	*50.00*		*97.8*	*85-115*			03/22/2019	
Surrogate: Dibromofluoromethane	*49.1*		ug/L	*50.00*		*98.2*	*82.7-115*			03/22/2019	
Surrogate: Toluene-d8	*50.5*		ug/L	*50.00*		*101*	*85-115*			03/22/2019	

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Organics-Dioxane - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9C2507 - Method: 5030				**Prepared: 03/22/2019**							
Blank (B9C2507-BLK1)											
1,4-dioxane	ND	1.0	ug/L							03/22/2019	
LCS (B9C2507-BS1)											
1,4-dioxane	10.2	1.0	ug/L	10.00		102	70-130			03/22/2019	
Matrix Spike (B9C2507-MS1)	**Source: 1903143-03**										
1,4-dioxane	9.92	1.0	ug/L	10.00	ND	99.2	70-130			03/22/2019	
Matrix Spike Dup (B9C2507-MSD1)	**Source: 1903143-03**										
1,4-dioxane	8.15	1.0	ug/L	10.00	ND	81.5	70-130	19.6	30	03/22/2019	

Michigan Department of Environmental Quality
Laboratory Services Section

Analysis Request Sheet

Lab Work Order Number	Project Name	Matrix
1903143	Gelman Sciences	WATER

Site Code/Project Number: 81000018/Location 6130	AY: 19	CC Email 1: lundk@michigan.gov	Project TAT Days:	Sample Collector: Dan Hamel	
Dept-Division-District: DEQ-RRD-Jackson	Index:	CC Email 2:	Project Due Date:	Sample Collector Phone: 517-745-6595	
State Project Manager: Dan Hamel	PCA:	CC Email 3:		Contract Firm:	
State Project Manager Email: hameld@michigan.gov	Project: Location-6130	Overflow Lab Choice 1:	Accept Analysis hold time codes:	Contract Firm Primary Contact:	
State Project Manager Phone: 517-745-6595	Phase:	Overflow Lab Choice 2:		Primary Contact Phone:	

	Lab Use Only	Field Sample Identification	Collection Date	Collection Time	Container Count	Comments
1	01	Allen Creek/West Park SW	3/19/19	10:02	5	Please include QA/QC with Lab Data Report(s)
2	02	Allen Creek/Chapin-West Park	3/19/19	0940	3	
3	03	Allen Creek/Maple Ridge-Arborview	3/19/19	10:16	5	
4	04	Allen Creek/Wildwood-Arborview	3/19/19	10:30	~~5~~ 3	SMW
5	05	Allen Creek/Murray-Washington	3/19/19	1120	5	
6	06	Allen Creek/Eighth-Waterworks	3/19/19	1106	3	
7	07	Allen Creek-Maryfield-Wildwood Park	3/19/19	1044	3	
8						
9						
10						

ORGANIC CHEMISTRY

VOA - Volatile Organic Acidic	
Volatiles - Full List	1 (2) (3) (4) (5) (6) (7) 8 9 10
BTEX/MTBE/TM8 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
METH - Methane, Ethane, Ethene	
Methane, Ethane, Ethene	1 2 3 4 5 6 7 8 9 10
ON - 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
Chlordane	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
Benzidines	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
Acids 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

METALS CHEMISTRY PACKAGES

OpMemo2 - Total	1 2 3 4 5 6 7 8 9 10
OpMemo2 - Dissolved	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
Michigan10 - Dissolved	1 2 3 4 5 6 7 8 9 10
(As,Ba,Cd,Cr,Cu,Pb,Hg,Se,Ag,Zn)	

MAD - DISSOLVED METALS

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

MA - TOTAL METALS

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

GENERAL CHEMISTRY

GB	Total Cyanide - CN	1 2 3 4 5 6 7 8 9 10
GB	Amenable 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
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	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 (includes Total Alkalinity)	1 2 3 4 5 6 7 8 9 10
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 - SO4	1 2 3 4 5 6 7 8 9 10
MN	Chromium 6 - Cr+6	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 (FF) (Field - Filtered & Preserved)	1 2 3 4 5 6 7 8 9 10
GN	Diss Org Carbon - DOC (LF) (Lab - Filtered & Preserved)	1 2 3 4 5 6 7 8 9 10
GA	Total Org Carbon - TOC	1 2 3 4 5 6 7 8 9 10
GA	Ammonia - NH3	1 2 3 4 5 6 7 8 9 10
GA	Nitrate+Nitrite - NO3+NO2	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.	DAN HAMEL DEQ-RRD	Nicole Hardigan	3/22/19
Signature:	Dan Hamel	Nicole Hardigan	1105
Print Name & Org.			
Signature:			
Print Name & Org.			
Signature:			

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

01 May 2019

Work Order: 1904148

Price: $1,325.00

Dan Hamel
MDEQ-RRD-JACKSON
301 E. Louis Glick Highway
Jackson, MI 49201-1556

RE: GELMAN SCIENCES, INC

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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MDEQ-RRD-JACKSON
301 E. Louis Glick Highway
Jackson MI, 49201-1556

Project: GELMAN SCIENCES, INC
Site Code: 81000018
Project Manager: Dan Hamel

Reported:
05/01/2019

Analytical Report for Samples

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Qualifier
Allen Creek/West Park SW	1904148-01	Water	04/18/2019	04/18/2019	
Allen Creek/Chapin-West Park	1904148-02	Water	04/18/2019	04/18/2019	
Allen Creek/Maple Ridge-Arborview	1904148-03	Water	04/18/2019	04/18/2019	
Allen Creek/Wildwood Arborview	1904148-04	Water	04/18/2019	04/18/2019	
Allen Creek/Murray -Washington	1904148-05	Water	04/18/2019	04/18/2019	
Allen Creek/Eighth-Waterworks	1904148-06	Water	04/18/2019	04/18/2019	
Allen Creek-Maryfield-Wildwood Park	1904148-07	Water	04/18/2019	04/18/2019	

Notes and Definitions

Y28	1,4-dioxane analysis is performed using selective ion monitoring (SIM). Results reported below 5 ug/L (aqueous) or 1000 ug/Kg (solids) are estimated.
X	Methods 8260 & 624 are used to analyze volatile organics that have boiling points below 200 ºC. 2-Methylnaphthalene & naphthalene have boiling points above 200 ºC and are better suited to analysis by methods 8270 & 625 as semivolatile organics.
T	Reported value is less than the reporting limit (RL). Result is estimated.
A09	Result is estimated due to high recovery of batch quality control.
A06	Result is estimated due to high 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

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Client ID: Allen Creek/West Park SW

Lab ID: 1904148-01

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	04/19/19	B9D1910	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	04/19/19	B9D1910	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
540-84-1	2,2,4-Trimethylpentane	ND	5.0	ug/L	1	04/19/19	B9D1910	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	04/19/19	B9D1910	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	04/19/19	B9D1910	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	04/19/19	B9D1910	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	04/19/19	B9D1910	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	04/19/19	B9D1910	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	04/19/19	B9D1910	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	04/19/19	B9D1910	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	04/19/19	B9D1910	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	04/19/19	B9D1910	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
74-95-3	Dibromomethane	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	

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TEL: (517) 335-9800
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Client ID: Allen Creek/West Park SW

Lab ID: 1904148-01

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	04/19/19	B9D1910	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	04/19/19	B9D1910	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	04/19/19	B9D1910	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	04/19/19	B9D1910	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	04/19/19	B9D1910	8260	
110-54-3	Hexane	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	04/19/19	B9D1910	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	04/19/19	B9D1910	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	04/19/19	B9D1910	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	04/19/19	B9D1910	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	04/19/19	B9D1910	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	04/19/19	B9D1910	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
Surrogate: Bromofluorobenzene			*96.5 %*	*85-115*		*04/19/19*	B9D1910	*8260*	
Surrogate: Dibromofluoromethane			*98.1 %*	*82.7-115*		*04/19/19*	B9D1910	*8260*	
Surrogate: Toluene-d8			*94.2 %*	*85-115*		*04/19/19*	B9D1910	*8260*	

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: Allen Creek/West Park SW

Lab ID: 1904148-01

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Dioxane									
123-91-1	**1,4-dioxane**	**17**	1.0	ug/L	1	04/19/19	B9D2212	8260 Modified	

Lab Work Order # 1904148

MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

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P.O. Box 30270
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TEL: (517) 335-9800
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Client ID: Allen Creek/Chapin-West Park

Lab ID: 1904148-02

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	04/19/19	B9D1910	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	04/19/19	B9D1910	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
540-84-1	2,2,4-Trimethylpentane	ND	5.0	ug/L	1	04/19/19	B9D1910	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	04/19/19	B9D1910	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	04/19/19	B9D1910	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	04/19/19	B9D1910	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	04/19/19	B9D1910	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	04/19/19	B9D1910	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	04/19/19	B9D1910	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	04/19/19	B9D1910	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	04/19/19	B9D1910	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	04/19/19	B9D1910	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
74-95-3	Dibromomethane	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	

MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

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ENVIRONMENTAL LABORATORY

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

Client ID: Allen Creek/Chapin-West Park

Lab ID: 1904148-02

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	04/19/19	B9D1910	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	04/19/19	B9D1910	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	04/19/19	B9D1910	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	04/19/19	B9D1910	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	04/19/19	B9D1910	8260	
110-54-3	Hexane	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	04/19/19	B9D1910	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	04/19/19	B9D1910	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	04/19/19	B9D1910	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	04/19/19	B9D1910	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	04/19/19	B9D1910	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	04/19/19	B9D1910	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
Surrogate: Bromofluorobenzene			*95.7 %*	*85-115*		*04/19/19*	B9D1910	*8260*	
Surrogate: Dibromofluoromethane			*101 %*	*82.7-115*		*04/19/19*	B9D1910	*8260*	
Surrogate: Toluene-d8			*94.1 %*	*85-115*		*04/19/19*	B9D1910	*8260*	

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

Client ID: Allen Creek/Chapin-West Park

Lab ID: 1904148-02

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Dioxane									
123-91-1	**1,4-dioxane**	**10**	1.0	ug/L	1	04/19/19	B9D2212	8260 Modified	

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

Client ID: Allen Creek/Maple Ridge-Arborview

Lab ID: 1904148-03

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	04/19/19	B9D1910	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	04/19/19	B9D1910	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
540-84-1	2,2,4-Trimethylpentane	ND	5.0	ug/L	1	04/19/19	B9D1910	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	04/19/19	B9D1910	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	04/19/19	B9D1910	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	04/19/19	B9D1910	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	04/19/19	B9D1910	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	04/19/19	B9D1910	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	04/19/19	B9D1910	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	04/19/19	B9D1910	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	04/19/19	B9D1910	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	04/19/19	B9D1910	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
74-95-3	Dibromomethane	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	

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

Client ID: Allen Creek/Maple Ridge-Arborview

Lab ID: 1904148-03

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	04/19/19	B9D1910	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	04/19/19	B9D1910	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	04/19/19	B9D1910	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	04/19/19	B9D1910	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	04/19/19	B9D1910	8260	
110-54-3	Hexane	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	04/19/19	B9D1910	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	04/19/19	B9D1910	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	04/19/19	B9D1910	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	04/19/19	B9D1910	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	04/19/19	B9D1910	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	04/19/19	B9D1910	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	04/19/19	B9D1910	8260	
Surrogate: Bromofluorobenzene			*97.1 %*	*85-115*		*04/19/19*	B9D1910	*8260*	
Surrogate: Dibromofluoromethane			*100 %*	*82.7-115*		*04/19/19*	B9D1910	*8260*	
Surrogate: Toluene-d8			*94.5 %*	*85-115*		*04/19/19*	B9D1910	*8260*	

MICHIGAN DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY

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ENVIRONMENTAL LABORATORY**

P.O. Box 30270
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TEL: (517) 335-9800
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Client ID: Allen Creek/Wildwood Arborview

Lab ID: 1904148-04

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
540-84-1	2,2,4-Trimethylpentane	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	04/22/19	B9D2202	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
74-95-3	Dibromomethane	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	

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: Allen Creek/Wildwood Arborview

Lab ID: 1904148-04

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
110-54-3	Hexane	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	04/22/19	B9D2202	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	04/22/19	B9D2202	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
Surrogate: Bromofluorobenzene			*103 %*	*85-115*		*04/22/19*	B9D2202	*8260*	
Surrogate: Dibromofluoromethane			*109 %*	*82.7-115*		*04/22/19*	B9D2202	*8260*	
Surrogate: Toluene-d8			*109 %*	*85-115*		*04/22/19*	B9D2202	*8260*	

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: Allen Creek/Murray -Washington

Lab ID: 1904148-05

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
540-84-1	2,2,4-Trimethylpentane	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	04/22/19	B9D2202	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
74-95-3	Dibromomethane	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	

MICHIGAN DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY

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ENVIRONMENT, GREAT LAKES, AND ENERGY
ENVIRONMENTAL LABORATORY**

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

Client ID: Allen Creek/Murray -Washington

Lab ID: 1904148-05

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
110-54-3	Hexane	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	04/22/19	B9D2202	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	04/22/19	B9D2202	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
79-01-6	**Trichloroethylene**	**1.1**	1.0	ug/L	1	04/22/19	B9D2202	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
Surrogate: Bromofluorobenzene			*98.1 %*	*85-115*		*04/22/19*	B9D2202	*8260*	
Surrogate: Dibromofluoromethane			*105 %*	*82.7-115*		*04/22/19*	B9D2202	*8260*	
Surrogate: Toluene-d8			*102 %*	*85-115*		*04/22/19*	B9D2202	*8260*	

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: Allen Creek/Murray -Washington

Lab ID: 1904148-05

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Dioxane									**See note T, Y28**
123-91-1	**1,4-dioxane**	**0.98**	1.0	ug/L	1	04/19/19	B9D2212	8260 Modified	

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: Allen Creek/Eighth-Waterworks

Lab ID: 1904148-06

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
540-84-1	2,2,4-Trimethylpentane	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	04/22/19	B9D2202	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
74-95-3	Dibromomethane	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	

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: Allen Creek/Eighth-Waterworks

Lab ID: 1904148-06

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
110-54-3	Hexane	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	04/22/19	B9D2202	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	04/22/19	B9D2202	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
Surrogate: Bromofluorobenzene			*95.8 %*	*85-115*		*04/22/19*	B9D2202	*8260*	
Surrogate: Dibromofluoromethane			*105 %*	*82.7-115*		*04/22/19*	B9D2202	*8260*	
Surrogate: Toluene-d8			*105 %*	*85-115*		*04/22/19*	B9D2202	*8260*	

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

Client ID: Allen Creek-Maryfield-Wildwood Park

Lab ID: 1904148-07

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
540-84-1	2,2,4-Trimethylpentane	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	04/22/19	B9D2202	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
74-95-3	Dibromomethane	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	

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TEL: (517) 335-9800
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Client ID: Allen Creek-Maryfield-Wildwood Park

Lab ID: 1904148-07

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
100-41-4	**Ethylbenzene**	**9.6**	1.0	ug/L	1	04/22/19	B9D2202	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
110-54-3	Hexane	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	04/22/19	B9D2202	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
100-42-5	**Styrene**	**4.5**	1.0	ug/L	1	04/22/19	B9D2202	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	04/22/19	B9D2202	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	04/22/19	B9D2202	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	04/22/19	B9D2202	8260	
Surrogate: Bromofluorobenzene			*97.1 %*	*85-115*		*04/22/19*	B9D2202	*8260*	
Surrogate: Dibromofluoromethane			*107 %*	*82.7-115*		*04/22/19*	B9D2202	*8260*	
Surrogate: Toluene-d8			*106 %*	*85-115*		*04/22/19*	B9D2202	*8260*	

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

Client ID: Allen Creek-Maryfield-Wildwood Park

Lab ID: 1904148-07

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Dioxane									**See note Y28**
123-91-1	1,4-dioxane	ND	1.0	ug/L	1	04/19/19	B9D2212	8260 Modified	

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9D1910 - Method: 5030				**Prepared: 04/19/2019**							
Blank (B9D1910-BLK1)											
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L							04/19/2019	
1,1,1-Trichloroethane	ND	1.0	ug/L							04/19/2019	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L							04/19/2019	
1,1,2-Trichloroethane	ND	1.0	ug/L							04/19/2019	
1,1-Dichloroethane	ND	1.0	ug/L							04/19/2019	
1,1-Dichloroethylene	ND	1.0	ug/L							04/19/2019	
1,2,3-Trichlorobenzene	ND	5.0	ug/L							04/19/2019	
1,2,3-Trichloropropane	ND	1.0	ug/L							04/19/2019	
1,2,3-Trimethylbenzene	ND	1.0	ug/L							04/19/2019	
1,2,4-Trichlorobenzene	ND	5.0	ug/L							04/19/2019	
1,2,4-Trimethylbenzene	ND	1.0	ug/L							04/19/2019	
1,2-Dibromoethane	ND	1.0	ug/L							04/19/2019	
1,2-Dichlorobenzene	ND	1.0	ug/L							04/19/2019	
1,2-Dichloroethane	ND	1.0	ug/L							04/19/2019	
1,2-Dichloropropane	ND	1.0	ug/L							04/19/2019	
1,3,5-Trimethylbenzene	ND	1.0	ug/L							04/19/2019	
1,3-Dichlorobenzene	ND	1.0	ug/L							04/19/2019	
1,4-Dichlorobenzene	ND	1.0	ug/L							04/19/2019	
2,2,4-Trimethylpentane	ND	5.0	ug/L							04/19/2019	
2-Butanone (MEK)	ND	5.0	ug/L							04/19/2019	
2-Methylnaphthalene	ND	5.0	ug/L							04/19/2019	X
2-Propanone (acetone)	ND	20	ug/L							04/19/2019	
4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L							04/19/2019	
Acrylonitrile	ND	5.0	ug/L							04/19/2019	
Benzene	ND	1.0	ug/L							04/19/2019	
Bromochloromethane	ND	1.0	ug/L							04/19/2019	
Bromodichloromethane	ND	1.0	ug/L							04/19/2019	
Bromoform	ND	1.0	ug/L							04/19/2019	
Bromomethane	ND	5.0	ug/L							04/19/2019	
Carbon disulfide	ND	1.0	ug/L							04/19/2019	
Carbon tetrachloride	ND	1.0	ug/L							04/19/2019	
Chlorobenzene	ND	1.0	ug/L							04/19/2019	
Chloroethane	ND	5.0	ug/L							04/19/2019	
Chloroform	ND	1.0	ug/L							04/19/2019	
Chloromethane	ND	5.0	ug/L							04/19/2019	
cis-1,2-Dichloroethylene	ND	1.0	ug/L							04/19/2019	
cis-1,3-Dichloropropylene	ND	1.0	ug/L							04/19/2019	
Cyclohexane	ND	5.0	ug/L							04/19/2019	
Dibromochloromethane	ND	1.0	ug/L							04/19/2019	
Dibromomethane	ND	1.0	ug/L							04/19/2019	
Dichlorodifluoromethane	ND	5.0	ug/L							04/19/2019	
Diethyl ether	ND	5.0	ug/L							04/19/2019	
Diisopropyl Ether	ND	5.0	ug/L							04/19/2019	
Ethylbenzene	ND	1.0	ug/L							04/19/2019	
Ethyltertiarybutylether	ND	5.0	ug/L							04/19/2019	
Hexachloroethane	ND	5.0	ug/L							04/19/2019	
Hexane	ND	1.0	ug/L							04/19/2019	

MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

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ENVIRONMENTAL LABORATORY

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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
Batch B9D1910 - Method: 5030				**Prepared: 04/19/2019**							
Blank (B9D1910-BLK1)											
Isopropylbenzene	ND	1.0	ug/L							04/19/2019	
m & p - Xylene	ND	2.0	ug/L							04/19/2019	
Methylene chloride	ND	5.0	ug/L							04/19/2019	
Methyltertiarybutylether	ND	1.0	ug/L							04/19/2019	
Naphthalene	ND	5.0	ug/L							04/19/2019	X
n-Butylbenzene	ND	1.0	ug/L							04/19/2019	
n-Propylbenzene	ND	1.0	ug/L							04/19/2019	
o-Xylene	ND	1.0	ug/L							04/19/2019	
sec-Butylbenzene	ND	1.0	ug/L							04/19/2019	
Styrene	ND	1.0	ug/L							04/19/2019	
tert-Butylbenzene	ND	1.0	ug/L							04/19/2019	
tertiary Butyl Alcohol	ND	50	ug/L							04/19/2019	
tertiaryAmylmethylether	ND	5.0	ug/L							04/19/2019	
Tetrachloroethylene	ND	1.0	ug/L							04/19/2019	
Tetrahydrofuran	ND	5.0	ug/L							04/19/2019	
Toluene	ND	1.0	ug/L							04/19/2019	
trans-1,2-Dichloroethylene	ND	1.0	ug/L							04/19/2019	
trans-1,3-Dichloropropylene	ND	1.0	ug/L							04/19/2019	
Trichloroethylene	ND	1.0	ug/L							04/19/2019	
Trichlorofluoromethane	ND	1.0	ug/L							04/19/2019	
Vinyl chloride	ND	1.0	ug/L							04/19/2019	
Surrogate: Bromofluorobenzene	*45.7*		ug/L	*50.00*		*91.4*	*85-115*			04/19/2019	
Surrogate: Dibromofluoromethane	*47.9*		ug/L	*50.00*		*95.8*	*82.7-115*			04/19/2019	
Surrogate: Toluene-d8	*46.6*		ug/L	*50.00*		*93.2*	*85-115*			04/19/2019	
LCS (B9D1910-BS1)											
1,1,1,2-Tetrachloroethane	47.1	1.0	ug/L	50.00		94.2	70-130			04/19/2019	
1,1,1-Trichloroethane	45.9	1.0	ug/L	50.00		91.7	70-130			04/19/2019	
1,1,2,2-Tetrachloroethane	46.9	1.0	ug/L	50.00		93.8	70-130			04/19/2019	
1,1,2-Trichloroethane	46.6	1.0	ug/L	50.00		93.1	70-130			04/19/2019	
1,1-Dichloroethane	43.7	1.0	ug/L	50.00		87.4	70-130			04/19/2019	
1,1-Dichloroethylene	48.2	1.0	ug/L	50.00		96.5	70-130			04/19/2019	
1,2,3-Trichlorobenzene	48.4	5.0	ug/L	50.00		96.9	70-130			04/19/2019	
1,2,3-Trichloropropane	44.4	1.0	ug/L	50.00		88.7	70-130			04/19/2019	
1,2,3-Trimethylbenzene	48.2	1.0	ug/L	50.00		96.4	70-130			04/19/2019	
1,2,4-Trichlorobenzene	46.9	5.0	ug/L	50.00		93.7	70-130			04/19/2019	
1,2,4-Trimethylbenzene	46.9	1.0	ug/L	50.00		93.8	70-130			04/19/2019	
1,2-Dibromoethane	46.6	1.0	ug/L	50.00		93.2	70-130			04/19/2019	
1,2-Dichlorobenzene	48.0	1.0	ug/L	50.00		95.9	70-130			04/19/2019	
1,2-Dichloroethane	45.8	1.0	ug/L	50.00		91.7	70-130			04/19/2019	
1,2-Dichloropropane	46.6	1.0	ug/L	50.00		93.2	70-130			04/19/2019	
1,3,5-Trimethylbenzene	47.1	1.0	ug/L	50.00		94.3	70-130			04/19/2019	
1,3-Dichlorobenzene	47.9	1.0	ug/L	50.00		95.8	70-130			04/19/2019	
1,4-Dichlorobenzene	45.3	1.0	ug/L	50.00		90.5	70-130			04/19/2019	
2,2,4-Trimethylpentane	47.1	5.0	ug/L	50.00		94.3	70-130			04/19/2019	
2-Butanone (MEK)	47.4	5.0	ug/L	50.00		94.8	70-130			04/19/2019	
2-Methylnaphthalene	45.0	5.0	ug/L	50.00		90.0	70-130			04/19/2019	X

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9D1910 - Method: 5030				**Prepared: 04/19/2019**							
LCS (B9D1910-BS1)											
2-Propanone (acetone)	51.6	20	ug/L	50.00		103	70-130			04/19/2019	
4-Methyl-2-pentanone (MIBK)	45.4	5.0	ug/L	50.00		90.9	70-130			04/19/2019	
Acrylonitrile	42.9	5.0	ug/L	50.00		85.9	70-130			04/19/2019	
Benzene	45.6	1.0	ug/L	50.00		91.2	70-130			04/19/2019	
Bromochloromethane	48.8	1.0	ug/L	50.00		97.6	70-130			04/19/2019	
Bromodichloromethane	46.6	1.0	ug/L	50.00		93.2	70-130			04/19/2019	
Bromoform	47.2	1.0	ug/L	50.00		94.3	70-130			04/19/2019	
Bromomethane	49.0	5.0	ug/L	50.00		98.0	70-130			04/19/2019	
Carbon disulfide	46.0	1.0	ug/L	50.00		92.0	70-130			04/19/2019	
Carbon tetrachloride	46.4	1.0	ug/L	50.00		92.8	70-130			04/19/2019	
Chlorobenzene	48.3	1.0	ug/L	50.00		96.7	70-130			04/19/2019	
Chloroethane	45.3	5.0	ug/L	50.00		90.6	70-130			04/19/2019	
Chloroform	44.0	1.0	ug/L	50.00		88.0	70-130			04/19/2019	
Chloromethane	46.3	5.0	ug/L	50.00		92.5	70-130			04/19/2019	
cis-1,2-Dichloroethylene	45.3	1.0	ug/L	50.00		90.7	70-130			04/19/2019	
cis-1,3-Dichloropropylene	46.1	1.0	ug/L	50.00		92.2	70-130			04/19/2019	
Cyclohexane	49.5	5.0	ug/L	50.00		99.0	70-130			04/19/2019	
Dibromochloromethane	48.6	1.0	ug/L	50.00		97.2	70-130			04/19/2019	
Dibromomethane	46.6	1.0	ug/L	50.00		93.2	70-130			04/19/2019	
Dichlorodifluoromethane	56.1	5.0	ug/L	50.00		112	70-130			04/19/2019	A06
Diethyl ether	49.2	5.0	ug/L	50.00		98.4	70-130			04/19/2019	
Diisopropyl Ether	42.6	5.0	ug/L	50.00		85.3	70-130			04/19/2019	
Ethylbenzene	47.3	1.0	ug/L	50.00		94.7	70-130			04/19/2019	
Ethyltertiarybutylether	43.6	5.0	ug/L	50.00		87.2	70-130			04/19/2019	
Hexachloroethane	44.1	5.0	ug/L	50.00		88.2	70-130			04/19/2019	
Hexane	41.2	1.0	ug/L	50.00		82.3	70-130			04/19/2019	
Isopropylbenzene	46.5	1.0	ug/L	50.00		93.1	70-130			04/19/2019	
m & p - Xylene	97.9	2.0	ug/L	100.0		97.9	70-130			04/19/2019	
Methylene chloride	41.9	5.0	ug/L	50.00		83.7	70-130			04/19/2019	
Methyltertiarybutylether	45.0	1.0	ug/L	50.00		90.0	70-130			04/19/2019	
Naphthalene	49.3	5.0	ug/L	50.00		98.6	70-130			04/19/2019	X
n-Butylbenzene	47.5	1.0	ug/L	50.00		95.0	70-130			04/19/2019	
n-Propylbenzene	45.8	1.0	ug/L	50.00		91.7	70-130			04/19/2019	
o-Xylene	48.7	1.0	ug/L	50.00		97.5	70-130			04/19/2019	
sec-Butylbenzene	51.1	1.0	ug/L	50.00		102	70-130			04/19/2019	
Styrene	50.0	1.0	ug/L	50.00		100	70-130			04/19/2019	
tert-Butylbenzene	47.5	1.0	ug/L	50.00		95.1	70-130			04/19/2019	
tertiary Butyl Alcohol	207	50	ug/L	250.0		82.8	70-130			04/19/2019	
tertiaryAmylmethylether	45.9	5.0	ug/L	50.00		91.9	70-130			04/19/2019	
Tetrachloroethylene	47.0	1.0	ug/L	50.00		94.1	70-130			04/19/2019	
Tetrahydrofuran	43.2	5.0	ug/L	50.00		86.3	70-130			04/19/2019	
Toluene	46.5	1.0	ug/L	50.00		93.0	70-130			04/19/2019	
trans-1,2-Dichloroethylene	43.3	1.0	ug/L	50.00		86.5	70-130			04/19/2019	
trans-1,3-Dichloropropylene	44.8	1.0	ug/L	50.00		89.5	70-130			04/19/2019	
Trichloroethylene	47.4	1.0	ug/L	50.00		94.8	70-130			04/19/2019	
Trichlorofluoromethane	54.6	1.0	ug/L	50.00		109	70-130			04/19/2019	
Vinyl chloride	47.7	1.0	ug/L	50.00		95.5	70-130			04/19/2019	

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9D1910 - Method: 5030				**Prepared: 04/19/2019**							
LCS (B9D1910-BS1)											
Surrogate: Bromofluorobenzene	*46.9*		ug/L	*50.00*		*93.7*	*85-115*			04/19/2019	
Surrogate: Dibromofluoromethane	*48.2*		ug/L	*50.00*		*96.4*	*82.7-115*			04/19/2019	
Surrogate: Toluene-d8	*49.4*		ug/L	*50.00*		*98.8*	*85-115*			04/19/2019	
Matrix Spike (B9D1910-MS1)	**Source: 1904139-02**										
1,1,1,2-Tetrachloroethane	50.7	1.0	ug/L	50.00	ND	101	70-130			04/19/2019	
1,1,1-Trichloroethane	50.7	1.0	ug/L	50.00	ND	101	70-130			04/19/2019	
1,1,2,2-Tetrachloroethane	51.7	1.0	ug/L	50.00	ND	103	70-130			04/19/2019	
1,1,2-Trichloroethane	49.8	1.0	ug/L	50.00	ND	99.5	70-130			04/19/2019	
1,1-Dichloroethane	48.6	1.0	ug/L	50.00	ND	97.3	70-130			04/19/2019	
1,1-Dichloroethylene	54.8	1.0	ug/L	50.00	ND	110	70-130			04/19/2019	
1,2,3-Trichlorobenzene	53.0	5.0	ug/L	50.00	ND	106	70-130			04/19/2019	
1,2,3-Trichloropropane	47.1	1.0	ug/L	50.00	ND	94.2	70-130			04/19/2019	
1,2,3-Trimethylbenzene	53.0	1.0	ug/L	50.00	ND	106	70-130			04/19/2019	
1,2,4-Trichlorobenzene	51.6	5.0	ug/L	50.00	ND	103	70-130			04/19/2019	
1,2,4-Trimethylbenzene	52.4	1.0	ug/L	50.00	ND	105	70-130			04/19/2019	
1,2-Dibromoethane	48.6	1.0	ug/L	50.00	ND	97.2	70-130			04/19/2019	
1,2-Dichlorobenzene	51.9	1.0	ug/L	50.00	ND	104	70-130			04/19/2019	
1,2-Dichloroethane	48.4	1.0	ug/L	50.00	ND	96.7	70-130			04/19/2019	
1,2-Dichloropropane	50.1	1.0	ug/L	50.00	ND	100	70-130			04/19/2019	
1,3,5-Trimethylbenzene	52.4	1.0	ug/L	50.00	ND	105	70-130			04/19/2019	
1,3-Dichlorobenzene	51.0	1.0	ug/L	50.00	ND	102	70-130			04/19/2019	
1,4-Dichlorobenzene	49.3	1.0	ug/L	50.00	ND	98.6	70-130			04/19/2019	
2,2,4-Trimethylpentane	53.4	5.0	ug/L	50.00	ND	107	70-130			04/19/2019	
2-Butanone (MEK)	48.1	5.0	ug/L	50.00	ND	96.1	70-130			04/19/2019	
2-Methylnaphthalene	49.3	5.0	ug/L	50.00	ND	98.7	70-130			04/19/2019	X
2-Propanone (acetone)	56.2	20	ug/L	50.00	ND	112	70-130			04/19/2019	
4-Methyl-2-pentanone (MIBK)	47.5	5.0	ug/L	50.00	ND	95.1	70-130			04/19/2019	
Acrylonitrile	44.0	5.0	ug/L	50.00	ND	88.1	70-130			04/19/2019	
Benzene	49.7	1.0	ug/L	50.00	ND	99.3	70-130			04/19/2019	
Bromochloromethane	52.8	1.0	ug/L	50.00	ND	106	70-130			04/19/2019	
Bromodichloromethane	50.3	1.0	ug/L	50.00	ND	101	70-130			04/19/2019	
Bromoform	49.6	1.0	ug/L	50.00	ND	99.2	70-130			04/19/2019	
Bromomethane	54.2	5.0	ug/L	50.00	ND	108	70-130			04/19/2019	
Carbon disulfide	54.0	1.0	ug/L	50.00	ND	108	70-130			04/19/2019	
Carbon tetrachloride	53.2	1.0	ug/L	50.00	ND	106	70-130			04/19/2019	
Chlorobenzene	52.1	1.0	ug/L	50.00	ND	104	70-130			04/19/2019	
Chloroethane	54.2	5.0	ug/L	50.00	ND	108	70-130			04/19/2019	
Chloroform	48.2	1.0	ug/L	50.00	ND	96.4	70-130			04/19/2019	
Chloromethane	54.6	5.0	ug/L	50.00	ND	109	70-130			04/19/2019	
cis-1,2-Dichloroethylene	49.0	1.0	ug/L	50.00	ND	98.0	70-130			04/19/2019	
cis-1,3-Dichloropropylene	49.7	1.0	ug/L	50.00	ND	99.4	70-130			04/19/2019	
Cyclohexane	57.2	5.0	ug/L	50.00	ND	114	70-130			04/19/2019	
Dibromochloromethane	50.9	1.0	ug/L	50.00	ND	102	70-130			04/19/2019	
Dibromomethane	48.9	1.0	ug/L	50.00	ND	97.7	70-130			04/19/2019	
Dichlorodifluoromethane	65.2	5.0	ug/L	50.00	ND	130	70-130			04/19/2019	A04, A06
Diethyl ether	53.5	5.0	ug/L	50.00	ND	107	70-130			04/19/2019	

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9D1910 - Method: 5030				**Prepared: 04/19/2019**							
Matrix Spike (B9D1910-MS1)	**Source: 1904139-02**										
Diisopropyl Ether	46.0	5.0	ug/L	50.00	ND	92.0	70-130			04/19/2019	
Ethylbenzene	52.4	1.0	ug/L	50.00	ND	105	70-130			04/19/2019	
Ethyltertiarybutylether	45.7	5.0	ug/L	50.00	ND	91.4	70-130			04/19/2019	
Hexachloroethane	49.8	5.0	ug/L	50.00	ND	99.7	70-130			04/19/2019	
Hexane	47.2	1.0	ug/L	50.00	ND	94.4	70-130			04/19/2019	
Isopropylbenzene	52.9	1.0	ug/L	50.00	ND	106	70-130			04/19/2019	
m & p - Xylene	106	2.0	ug/L	100.0	ND	106	70-130			04/19/2019	
Methylene chloride	48.4	5.0	ug/L	50.00	ND	96.9	70-130			04/19/2019	
Methyltertiarybutylether	48.0	1.0	ug/L	50.00	ND	96.0	70-130			04/19/2019	
Naphthalene	53.4	5.0	ug/L	50.00	ND	107	70-130			04/19/2019	X
n-Butylbenzene	53.0	1.0	ug/L	50.00	ND	106	70-130			04/19/2019	
n-Propylbenzene	52.1	1.0	ug/L	50.00	ND	104	70-130			04/19/2019	
o-Xylene	53.7	1.0	ug/L	50.00	ND	107	70-130			04/19/2019	
sec-Butylbenzene	58.3	1.0	ug/L	50.00	ND	117	70-130			04/19/2019	
Styrene	55.4	1.0	ug/L	50.00	ND	111	70-130			04/19/2019	
tert-Butylbenzene	55.0	1.0	ug/L	50.00	ND	110	70-130			04/19/2019	
tertiary Butyl Alcohol	218	50	ug/L	250.0	ND	87.1	70-130			04/19/2019	
tertiaryAmylmethylether	48.7	5.0	ug/L	50.00	ND	97.5	70-130			04/19/2019	
Tetrachloroethylene	51.0	1.0	ug/L	50.00	ND	102	70-130			04/19/2019	
Tetrahydrofuran	45.9	5.0	ug/L	50.00	ND	91.7	70-130			04/19/2019	
Toluene	50.8	1.0	ug/L	50.00	ND	102	70-130			04/19/2019	
trans-1,2-Dichloroethylene	48.0	1.0	ug/L	50.00	ND	96.0	70-130			04/19/2019	
trans-1,3-Dichloropropylene	48.3	1.0	ug/L	50.00	ND	96.7	70-130			04/19/2019	
Trichloroethylene	50.8	1.0	ug/L	50.00	ND	102	70-130			04/19/2019	
Trichlorofluoromethane	62.0	1.0	ug/L	50.00	ND	124	70-130			04/19/2019	
Vinyl chloride	53.7	1.0	ug/L	50.00	ND	107	70-130			04/19/2019	
Surrogate: Bromofluorobenzene	*49.8*		ug/L	*50.00*		*99.6*	*85-115*			04/19/2019	
Surrogate: Dibromofluoromethane	*48.8*		ug/L	*50.00*		*97.6*	*82.7-115*			04/19/2019	
Surrogate: Toluene-d8	*49.9*		ug/L	*50.00*		*99.9*	*85-115*			04/19/2019	
Matrix Spike Dup (B9D1910-MSD1)	**Source: 1904139-02**										
1,1,1,2-Tetrachloroethane	49.3	1.0	ug/L	50.00	ND	98.6	70-130	2.88	30	04/19/2019	
1,1,1-Trichloroethane	47.3	1.0	ug/L	50.00	ND	94.6	70-130	6.81	30	04/19/2019	
1,1,2,2-Tetrachloroethane	50.9	1.0	ug/L	50.00	ND	102	70-130	1.47	30	04/19/2019	
1,1,2-Trichloroethane	46.5	1.0	ug/L	50.00	ND	93.0	70-130	6.79	30	04/19/2019	
1,1-Dichloroethane	45.2	1.0	ug/L	50.00	ND	90.4	70-130	7.31	30	04/19/2019	
1,1-Dichloroethylene	50.9	1.0	ug/L	50.00	ND	102	70-130	7.45	30	04/19/2019	
1,2,3-Trichlorobenzene	52.5	5.0	ug/L	50.00	ND	105	70-130	1.07	30	04/19/2019	
1,2,3-Trichloropropane	46.0	1.0	ug/L	50.00	ND	91.9	70-130	2.40	30	04/19/2019	
1,2,3-Trimethylbenzene	50.3	1.0	ug/L	50.00	ND	101	70-130	5.26	30	04/19/2019	
1,2,4-Trichlorobenzene	49.6	5.0	ug/L	50.00	ND	99.3	70-130	3.91	30	04/19/2019	
1,2,4-Trimethylbenzene	47.9	1.0	ug/L	50.00	ND	95.9	70-130	8.93	30	04/19/2019	
1,2-Dibromoethane	47.6	1.0	ug/L	50.00	ND	95.3	70-130	2.02	30	04/19/2019	
1,2-Dichlorobenzene	49.8	1.0	ug/L	50.00	ND	99.5	70-130	4.15	30	04/19/2019	
1,2-Dichloroethane	47.8	1.0	ug/L	50.00	ND	95.6	70-130	1.13	30	04/19/2019	
1,2-Dichloropropane	48.6	1.0	ug/L	50.00	ND	97.2	70-130	2.99	30	04/19/2019	
1,3,5-Trimethylbenzene	49.5	1.0	ug/L	50.00	ND	99.1	70-130	5.71	30	04/19/2019	

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9D1910 - Method: 5030				**Prepared: 04/19/2019**							
Matrix Spike Dup (B9D1910-MSD1)	**Source: 1904139-02**										
1,3-Dichlorobenzene	49.1	1.0	ug/L	50.00	ND	98.1	70-130	3.94	30	04/19/2019	
1,4-Dichlorobenzene	47.2	1.0	ug/L	50.00	ND	94.5	70-130	4.22	30	04/19/2019	
2,2,4-Trimethylpentane	47.2	5.0	ug/L	50.00	ND	94.3	70-130	12.4	30	04/19/2019	
2-Butanone (MEK)	49.3	5.0	ug/L	50.00	ND	98.6	70-130	2.50	30	04/19/2019	
2-Methylnaphthalene	48.7	5.0	ug/L	50.00	ND	97.3	70-130	1.37	30	04/19/2019	X
2-Propanone (acetone)	54.8	20	ug/L	50.00	ND	110	70-130	2.62	30	04/19/2019	
4-Methyl-2-pentanone (MIBK)	48.7	5.0	ug/L	50.00	ND	97.5	70-130	2.49	30	04/19/2019	
Acrylonitrile	45.6	5.0	ug/L	50.00	ND	91.1	70-130	3.42	30	04/19/2019	
Benzene	47.8	1.0	ug/L	50.00	ND	95.5	70-130	3.90	30	04/19/2019	
Bromochloromethane	51.1	1.0	ug/L	50.00	ND	102	70-130	3.35	30	04/19/2019	
Bromodichloromethane	48.6	1.0	ug/L	50.00	ND	97.3	70-130	3.43	30	04/19/2019	
Bromoform	47.3	1.0	ug/L	50.00	ND	94.6	70-130	4.72	30	04/19/2019	
Bromomethane	49.6	5.0	ug/L	50.00	ND	99.1	70-130	9.01	30	04/19/2019	
Carbon disulfide	47.9	1.0	ug/L	50.00	ND	95.9	70-130	11.8	30	04/19/2019	
Carbon tetrachloride	48.6	1.0	ug/L	50.00	ND	97.2	70-130	9.14	30	04/19/2019	
Chlorobenzene	49.3	1.0	ug/L	50.00	ND	98.6	70-130	5.41	30	04/19/2019	
Chloroethane	52.0	5.0	ug/L	50.00	ND	104	70-130	4.21	30	04/19/2019	
Chloroform	44.8	1.0	ug/L	50.00	ND	89.7	70-130	7.22	30	04/19/2019	
Chloromethane	50.0	5.0	ug/L	50.00	ND	100	70-130	8.76	30	04/19/2019	
cis-1,2-Dichloroethylene	45.9	1.0	ug/L	50.00	ND	91.8	70-130	6.46	30	04/19/2019	
cis-1,3-Dichloropropylene	47.9	1.0	ug/L	50.00	ND	95.8	70-130	3.71	30	04/19/2019	
Cyclohexane	52.6	5.0	ug/L	50.00	ND	105	70-130	8.31	30	04/19/2019	
Dibromochloromethane	50.6	1.0	ug/L	50.00	ND	101	70-130	0.560	30	04/19/2019	
Dibromomethane	48.4	1.0	ug/L	50.00	ND	96.8	70-130	0.909	30	04/19/2019	
Dichlorodifluoromethane	60.2	5.0	ug/L	50.00	ND	120	70-130	7.94	30	04/19/2019	A06
Diethyl ether	50.3	5.0	ug/L	50.00	ND	101	70-130	6.16	30	04/19/2019	
Diisopropyl Ether	44.5	5.0	ug/L	50.00	ND	89.0	70-130	3.35	30	04/19/2019	
Ethylbenzene	48.6	1.0	ug/L	50.00	ND	97.2	70-130	7.57	30	04/19/2019	
Ethyltertiarybutylether	45.8	5.0	ug/L	50.00	ND	91.6	70-130	0.227	30	04/19/2019	
Hexachloroethane	47.4	5.0	ug/L	50.00	ND	94.8	70-130	4.99	30	04/19/2019	
Hexane	39.9	1.0	ug/L	50.00	ND	79.8	70-130	16.8	30	04/19/2019	
Isopropylbenzene	49.6	1.0	ug/L	50.00	ND	99.2	70-130	6.38	30	04/19/2019	
m & p - Xylene	99.9	2.0	ug/L	100.0	ND	99.9	70-130	5.91	30	04/19/2019	
Methylene chloride	45.0	5.0	ug/L	50.00	ND	90.0	70-130	7.42	30	04/19/2019	
Methyltertiarybutylether	47.4	1.0	ug/L	50.00	ND	94.7	70-130	1.39	30	04/19/2019	
Naphthalene	52.3	5.0	ug/L	50.00	ND	105	70-130	1.96	30	04/19/2019	X
n-Butylbenzene	49.2	1.0	ug/L	50.00	ND	98.4	70-130	7.42	30	04/19/2019	
n-Propylbenzene	48.2	1.0	ug/L	50.00	ND	96.4	70-130	7.87	30	04/19/2019	
o-Xylene	50.2	1.0	ug/L	50.00	ND	100	70-130	6.77	30	04/19/2019	
sec-Butylbenzene	54.5	1.0	ug/L	50.00	ND	109	70-130	6.60	30	04/19/2019	
Styrene	52.6	1.0	ug/L	50.00	ND	105	70-130	5.31	30	04/19/2019	
tert-Butylbenzene	50.4	1.0	ug/L	50.00	ND	101	70-130	8.80	30	04/19/2019	
tertiary Butyl Alcohol	213	50	ug/L	250.0	ND	85.3	70-130	2.07	30	04/19/2019	
tertiaryAmylmethylether	48.3	5.0	ug/L	50.00	ND	96.6	70-130	0.888	30	04/19/2019	
Tetrachloroethylene	47.5	1.0	ug/L	50.00	ND	95.0	70-130	7.19	30	04/19/2019	
Tetrahydrofuran	46.4	5.0	ug/L	50.00	ND	92.7	70-130	1.09	30	04/19/2019	
Toluene	48.4	1.0	ug/L	50.00	ND	96.8	70-130	4.89	30	04/19/2019	

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9D1910 - Method: 5030				**Prepared: 04/19/2019**							
Matrix Spike Dup (B9D1910-MSD1)	**Source: 1904139-02**										
trans-1,2-Dichloroethylene	43.8	1.0	ug/L	50.00	ND	87.5	70-130	9.27	30	04/19/2019	
trans-1,3-Dichloropropylene	47.6	1.0	ug/L	50.00	ND	95.1	70-130	1.59	30	04/19/2019	
Trichloroethylene	48.3	1.0	ug/L	50.00	ND	96.6	70-130	5.08	30	04/19/2019	
Trichlorofluoromethane	54.8	1.0	ug/L	50.00	ND	110	70-130	12.5	30	04/19/2019	
Vinyl chloride	49.1	1.0	ug/L	50.00	ND	98.3	70-130	8.80	30	04/19/2019	
Surrogate: Bromofluorobenzene	*47.7*		ug/L	*50.00*		*95.5*	*85-115*			04/19/2019	
Surrogate: Dibromofluoromethane	*49.1*		ug/L	*50.00*		*98.2*	*82.7-115*			04/19/2019	
Surrogate: Toluene-d8	*49.7*		ug/L	*50.00*		*99.4*	*85-115*			04/19/2019	
Batch B9D2202 - Method: 5030				**Prepared: 04/22/2019**							
Blank (B9D2202-BLK1)											
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L							04/22/2019	
1,1,1-Trichloroethane	ND	1.0	ug/L							04/22/2019	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L							04/22/2019	
1,1,2-Trichloroethane	ND	1.0	ug/L							04/22/2019	
1,1-Dichloroethane	ND	1.0	ug/L							04/22/2019	
1,1-Dichloroethylene	ND	1.0	ug/L							04/22/2019	
1,2,3-Trichlorobenzene	ND	5.0	ug/L							04/22/2019	
1,2,3-Trichloropropane	ND	1.0	ug/L							04/22/2019	
1,2,3-Trimethylbenzene	ND	1.0	ug/L							04/22/2019	
1,2,4-Trichlorobenzene	ND	5.0	ug/L							04/22/2019	
1,2,4-Trimethylbenzene	ND	1.0	ug/L							04/22/2019	
1,2-Dibromoethane	ND	1.0	ug/L							04/22/2019	
1,2-Dichlorobenzene	ND	1.0	ug/L							04/22/2019	
1,2-Dichloroethane	ND	1.0	ug/L							04/22/2019	
1,2-Dichloropropane	ND	1.0	ug/L							04/22/2019	
1,3,5-Trimethylbenzene	ND	1.0	ug/L							04/22/2019	
1,3-Dichlorobenzene	ND	1.0	ug/L							04/22/2019	
1,4-Dichlorobenzene	ND	1.0	ug/L							04/22/2019	
2,2,4-Trimethylpentane	ND	5.0	ug/L							04/22/2019	
2-Butanone (MEK)	ND	5.0	ug/L							04/22/2019	
2-Methylnaphthalene	ND	5.0	ug/L							04/22/2019	X
2-Propanone (acetone)	ND	20	ug/L							04/22/2019	
4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L							04/22/2019	
Acrylonitrile	ND	5.0	ug/L							04/22/2019	
Benzene	ND	1.0	ug/L							04/22/2019	
Bromochloromethane	ND	1.0	ug/L							04/22/2019	
Bromodichloromethane	ND	1.0	ug/L							04/22/2019	
Bromoform	ND	1.0	ug/L							04/22/2019	
Bromomethane	ND	5.0	ug/L							04/22/2019	
Carbon disulfide	ND	1.0	ug/L							04/22/2019	
Carbon tetrachloride	ND	1.0	ug/L							04/22/2019	
Chlorobenzene	ND	1.0	ug/L							04/22/2019	
Chloroethane	ND	5.0	ug/L							04/22/2019	

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9D2202 - Method: 5030				**Prepared: 04/22/2019**							
Blank (B9D2202-BLK1)											
Chloroform	ND	1.0	ug/L							04/22/2019	
Chloromethane	ND	5.0	ug/L							04/22/2019	
cis-1,2-Dichloroethylene	ND	1.0	ug/L							04/22/2019	
cis-1,3-Dichloropropylene	ND	1.0	ug/L							04/22/2019	
Cyclohexane	ND	5.0	ug/L							04/22/2019	
Dibromochloromethane	ND	1.0	ug/L							04/22/2019	
Dibromomethane	ND	1.0	ug/L							04/22/2019	
Dichlorodifluoromethane	ND	5.0	ug/L							04/22/2019	
Diethyl ether	ND	5.0	ug/L							04/22/2019	
Diisopropyl Ether	ND	5.0	ug/L							04/22/2019	
Ethylbenzene	ND	1.0	ug/L							04/22/2019	
Ethyltertiarybutylether	ND	5.0	ug/L							04/22/2019	
Hexachloroethane	ND	5.0	ug/L							04/22/2019	
Hexane	ND	1.0	ug/L							04/22/2019	
Isopropylbenzene	ND	1.0	ug/L							04/22/2019	
m & p - Xylene	ND	2.0	ug/L							04/22/2019	
Methylene chloride	ND	5.0	ug/L							04/22/2019	
Methyltertiarybutylether	ND	1.0	ug/L							04/22/2019	
Naphthalene	ND	5.0	ug/L							04/22/2019	X
n-Butylbenzene	ND	1.0	ug/L							04/22/2019	
n-Propylbenzene	ND	1.0	ug/L							04/22/2019	
o-Xylene	ND	1.0	ug/L							04/22/2019	
sec-Butylbenzene	ND	1.0	ug/L							04/22/2019	
Styrene	ND	1.0	ug/L							04/22/2019	
tert-Butylbenzene	ND	1.0	ug/L							04/22/2019	
tertiary Butyl Alcohol	ND	50	ug/L							04/22/2019	
tertiaryAmylmethylether	ND	5.0	ug/L							04/22/2019	
Tetrachloroethylene	ND	1.0	ug/L							04/22/2019	
Tetrahydrofuran	ND	5.0	ug/L							04/22/2019	
Toluene	ND	1.0	ug/L							04/22/2019	
trans-1,2-Dichloroethylene	ND	1.0	ug/L							04/22/2019	
trans-1,3-Dichloropropylene	ND	1.0	ug/L							04/22/2019	
Trichloroethylene	ND	1.0	ug/L							04/22/2019	
Trichlorofluoromethane	ND	1.0	ug/L							04/22/2019	
Vinyl chloride	ND	1.0	ug/L							04/22/2019	
Surrogate: Bromofluorobenzene	*48.1*		ug/L	*50.00*		*96.3*	*85-115*			04/22/2019	
Surrogate: Dibromofluoromethane	*52.4*		ug/L	*50.00*		*105*	*82.7-115*			04/22/2019	
Surrogate: Toluene-d8	*52.2*		ug/L	*50.00*		*104*	*85-115*			04/22/2019	
LCS (B9D2202-BS1)											
1,1,1,2-Tetrachloroethane	50.0	1.0	ug/L	50.00		100	70-130			04/22/2019	
1,1,1-Trichloroethane	48.6	1.0	ug/L	50.00		97.1	70-130			04/22/2019	
1,1,2,2-Tetrachloroethane	50.3	1.0	ug/L	50.00		101	70-130			04/22/2019	
1,1,2-Trichloroethane	52.3	1.0	ug/L	50.00		105	70-130			04/22/2019	
1,1-Dichloroethane	52.5	1.0	ug/L	50.00		105	70-130			04/22/2019	
1,1-Dichloroethylene	51.3	1.0	ug/L	50.00		103	70-130			04/22/2019	
1,2,3-Trichlorobenzene	46.5	5.0	ug/L	50.00		93.0	70-130			04/22/2019	

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9D2202 - Method: 5030				**Prepared: 04/22/2019**							
LCS (B9D2202-BS1)											
1,2,3-Trichloropropane	46.6	1.0	ug/L	50.00		93.3	70-130			04/22/2019	
1,2,3-Trimethylbenzene	46.9	1.0	ug/L	50.00		93.9	70-130			04/22/2019	
1,2,4-Trichlorobenzene	46.5	5.0	ug/L	50.00		93.0	70-130			04/22/2019	
1,2,4-Trimethylbenzene	46.3	1.0	ug/L	50.00		92.7	70-130			04/22/2019	
1,2-Dibromoethane	46.9	1.0	ug/L	50.00		93.8	70-130			04/22/2019	
1,2-Dichlorobenzene	52.9	1.0	ug/L	50.00		106	70-130			04/22/2019	
1,2-Dichloroethane	48.8	1.0	ug/L	50.00		97.5	70-130			04/22/2019	
1,2-Dichloropropane	50.4	1.0	ug/L	50.00		101	70-130			04/22/2019	
1,3,5-Trimethylbenzene	46.6	1.0	ug/L	50.00		93.3	70-130			04/22/2019	
1,3-Dichlorobenzene	51.6	1.0	ug/L	50.00		103	70-130			04/22/2019	
1,4-Dichlorobenzene	52.4	1.0	ug/L	50.00		105	70-130			04/22/2019	
2,2,4-Trimethylpentane	48.3	5.0	ug/L	50.00		96.6	70-130			04/22/2019	
2-Butanone (MEK)	43.7	5.0	ug/L	50.00		87.5	70-130			04/22/2019	
2-Methylnaphthalene	48.4	5.0	ug/L	50.00		96.7	70-130			04/22/2019	X
2-Propanone (acetone)	48.6	20	ug/L	50.00		97.3	70-130			04/22/2019	
4-Methyl-2-pentanone (MIBK)	44.0	5.0	ug/L	50.00		88.0	70-130			04/22/2019	
Acrylonitrile	57.2	5.0	ug/L	50.00		114	70-130			04/22/2019	
Benzene	52.2	1.0	ug/L	50.00		104	70-130			04/22/2019	
Bromochloromethane	52.1	1.0	ug/L	50.00		104	70-130			04/22/2019	
Bromodichloromethane	49.7	1.0	ug/L	50.00		99.4	70-130			04/22/2019	
Bromoform	46.0	1.0	ug/L	50.00		92.0	70-130			04/22/2019	
Bromomethane	77.4	5.0	ug/L	50.00		155	70-130			04/22/2019	A09
Carbon disulfide	54.1	1.0	ug/L	50.00		108	70-130			04/22/2019	
Carbon tetrachloride	55.4	1.0	ug/L	50.00		111	70-130			04/22/2019	
Chlorobenzene	50.5	1.0	ug/L	50.00		101	70-130			04/22/2019	
Chloroethane	49.6	5.0	ug/L	50.00		99.3	70-130			04/22/2019	
Chloroform	52.1	1.0	ug/L	50.00		104	70-130			04/22/2019	
Chloromethane	56.6	5.0	ug/L	50.00		113	70-130			04/22/2019	
cis-1,2-Dichloroethylene	50.7	1.0	ug/L	50.00		101	70-130			04/22/2019	
cis-1,3-Dichloropropylene	49.9	1.0	ug/L	50.00		99.7	70-130			04/22/2019	
Cyclohexane	50.1	5.0	ug/L	50.00		100	70-130			04/22/2019	
Dibromochloromethane	48.8	1.0	ug/L	50.00		97.6	70-130			04/22/2019	
Dibromomethane	51.8	1.0	ug/L	50.00		104	70-130			04/22/2019	
Dichlorodifluoromethane	48.1	5.0	ug/L	50.00		96.2	70-130			04/22/2019	
Diethyl ether	53.9	5.0	ug/L	50.00		108	70-130			04/22/2019	
Diisopropyl Ether	55.1	5.0	ug/L	50.00		110	70-130			04/22/2019	
Ethylbenzene	51.7	1.0	ug/L	50.00		103	70-130			04/22/2019	
Ethyltertiarybutylether	50.9	5.0	ug/L	50.00		102	70-130			04/22/2019	
Hexachloroethane	44.5	5.0	ug/L	50.00		89.1	70-130			04/22/2019	
Hexane	49.9	1.0	ug/L	50.00		99.8	70-130			04/22/2019	
Isopropylbenzene	46.5	1.0	ug/L	50.00		93.1	70-130			04/22/2019	
m & p - Xylene	101	2.0	ug/L	100.0		101	70-130			04/22/2019	
Methylene chloride	57.1	5.0	ug/L	50.00		114	70-130			04/22/2019	
Methyltertiarybutylether	50.6	1.0	ug/L	50.00		101	70-130			04/22/2019	
Naphthalene	46.4	5.0	ug/L	50.00		92.7	70-130			04/22/2019	X
n-Butylbenzene	51.0	1.0	ug/L	50.00		102	70-130			04/22/2019	
n-Propylbenzene	49.7	1.0	ug/L	50.00		99.5	70-130			04/22/2019	

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9D2202 - Method: 5030				**Prepared: 04/22/2019**							
LCS (B9D2202-BS1)											
o-Xylene	52.4	1.0	ug/L	50.00		105	70-130			04/22/2019	
sec-Butylbenzene	47.1	1.0	ug/L	50.00		94.1	70-130			04/22/2019	
Styrene	49.2	1.0	ug/L	50.00		98.4	70-130			04/22/2019	
tert-Butylbenzene	47.1	1.0	ug/L	50.00		94.3	70-130			04/22/2019	
tertiary Butyl Alcohol	254	50	ug/L	250.0		102	70-130			04/22/2019	
tertiaryAmylmethylether	48.5	5.0	ug/L	50.00		97.1	70-130			04/22/2019	
Tetrachloroethylene	47.5	1.0	ug/L	50.00		94.9	70-130			04/22/2019	
Tetrahydrofuran	47.1	5.0	ug/L	50.00		94.1	70-130			04/22/2019	
Toluene	52.5	1.0	ug/L	50.00		105	70-130			04/22/2019	
trans-1,2-Dichloroethylene	53.0	1.0	ug/L	50.00		106	70-130			04/22/2019	
trans-1,3-Dichloropropylene	48.6	1.0	ug/L	50.00		97.2	70-130			04/22/2019	
Trichloroethylene	51.5	1.0	ug/L	50.00		103	70-130			04/22/2019	
Trichlorofluoromethane	52.5	1.0	ug/L	50.00		105	70-130			04/22/2019	
Vinyl chloride	53.5	1.0	ug/L	50.00		107	70-130			04/22/2019	
Surrogate: Bromofluorobenzene	*47.3*		ug/L	*50.00*		*94.6*	*85-115*			04/22/2019	
Surrogate: Dibromofluoromethane	*49.2*		ug/L	*50.00*		*98.4*	*82.7-115*			04/22/2019	
Surrogate: Toluene-d8	*51.5*		ug/L	*50.00*		*103*	*85-115*			04/22/2019	
Matrix Spike (B9D2202-MS1)	**Source: 1904148-06**										
1,1,1,2-Tetrachloroethane	47.8	1.0	ug/L	50.00	ND	95.6	70-130			04/22/2019	
1,1,1-Trichloroethane	51.2	1.0	ug/L	50.00	ND	102	70-130			04/22/2019	
1,1,2,2-Tetrachloroethane	46.8	1.0	ug/L	50.00	ND	93.6	70-130			04/22/2019	
1,1,2-Trichloroethane	49.2	1.0	ug/L	50.00	ND	98.3	70-130			04/22/2019	
1,1-Dichloroethane	53.8	1.0	ug/L	50.00	ND	108	70-130			04/22/2019	
1,1-Dichloroethylene	57.5	1.0	ug/L	50.00	ND	115	70-130			04/22/2019	
1,2,3-Trichlorobenzene	44.1	5.0	ug/L	50.00	ND	88.1	70-130			04/22/2019	
1,2,3-Trichloropropane	42.5	1.0	ug/L	50.00	ND	85.0	70-130			04/22/2019	
1,2,3-Trimethylbenzene	46.6	1.0	ug/L	50.00	ND	93.3	70-130			04/22/2019	
1,2,4-Trichlorobenzene	44.1	5.0	ug/L	50.00	ND	88.1	70-130			04/22/2019	
1,2,4-Trimethylbenzene	47.5	1.0	ug/L	50.00	ND	95.1	70-130			04/22/2019	
1,2-Dibromoethane	43.3	1.0	ug/L	50.00	ND	86.6	70-130			04/22/2019	
1,2-Dichlorobenzene	51.4	1.0	ug/L	50.00	ND	103	70-130			04/22/2019	
1,2-Dichloroethane	43.7	1.0	ug/L	50.00	ND	87.4	70-130			04/22/2019	
1,2-Dichloropropane	51.3	1.0	ug/L	50.00	ND	103	70-130			04/22/2019	
1,3,5-Trimethylbenzene	48.4	1.0	ug/L	50.00	ND	96.7	70-130			04/22/2019	
1,3-Dichlorobenzene	51.1	1.0	ug/L	50.00	ND	102	70-130			04/22/2019	
1,4-Dichlorobenzene	51.1	1.0	ug/L	50.00	ND	102	70-130			04/22/2019	
2,2,4-Trimethylpentane	54.2	5.0	ug/L	50.00	ND	108	70-130			04/22/2019	
2-Butanone (MEK)	41.3	5.0	ug/L	50.00	ND	82.5	70-130			04/22/2019	
2-Methylnaphthalene	42.2	5.0	ug/L	50.00	ND	84.4	70-130			04/22/2019	X
2-Propanone (acetone)	47.4	20	ug/L	50.00	ND	94.7	70-130			04/22/2019	
4-Methyl-2-pentanone (MIBK)	43.5	5.0	ug/L	50.00	ND	87.0	70-130			04/22/2019	
Acrylonitrile	51.1	5.0	ug/L	50.00	ND	102	70-130			04/22/2019	
Benzene	55.1	1.0	ug/L	50.00	ND	110	70-130			04/22/2019	
Bromochloromethane	50.5	1.0	ug/L	50.00	ND	101	70-130			04/22/2019	
Bromodichloromethane	47.5	1.0	ug/L	50.00	ND	95.0	70-130			04/22/2019	
Bromoform	40.8	1.0	ug/L	50.00	ND	81.6	70-130			04/22/2019	

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9D2202 - Method: 5030				**Prepared: 04/22/2019**							
Matrix Spike (B9D2202-MS1)	**Source: 1904148-06**										
Bromomethane	40.3	5.0	ug/L	50.00	ND	80.6	70-130			04/22/2019	
Carbon disulfide	63.3	1.0	ug/L	50.00	ND	127	70-130			04/22/2019	
Carbon tetrachloride	64.7	1.0	ug/L	50.00	ND	129	70-130			04/22/2019	
Chlorobenzene	50.9	1.0	ug/L	50.00	ND	102	70-130			04/22/2019	
Chloroethane	51.2	5.0	ug/L	50.00	ND	102	70-130			04/22/2019	
Chloroform	50.9	1.0	ug/L	50.00	ND	102	70-130			04/22/2019	
Chloromethane	59.6	5.0	ug/L	50.00	ND	119	70-130			04/22/2019	
cis-1,2-Dichloroethylene	51.7	1.0	ug/L	50.00	ND	103	70-130			04/22/2019	
cis-1,3-Dichloropropylene	48.7	1.0	ug/L	50.00	ND	97.4	70-130			04/22/2019	
Cyclohexane	61.3	5.0	ug/L	50.00	ND	123	70-130			04/22/2019	
Dibromochloromethane	44.6	1.0	ug/L	50.00	ND	89.1	70-130			04/22/2019	
Dibromomethane	49.4	1.0	ug/L	50.00	ND	98.9	70-130			04/22/2019	
Dichlorodifluoromethane	57.3	5.0	ug/L	50.00	ND	115	70-130			04/22/2019	
Diethyl ether	51.7	5.0	ug/L	50.00	ND	103	70-130			04/22/2019	
Diisopropyl Ether	54.2	5.0	ug/L	50.00	ND	108	70-130			04/22/2019	
Ethylbenzene	54.9	1.0	ug/L	50.00	ND	110	70-130			04/22/2019	
Ethyltertiarybutylether	48.3	5.0	ug/L	50.00	ND	96.5	70-130			04/22/2019	
Hexachloroethane	42.8	5.0	ug/L	50.00	ND	85.7	70-130			04/22/2019	
Hexane	60.3	1.0	ug/L	50.00	ND	121	70-130			04/22/2019	
Isopropylbenzene	49.7	1.0	ug/L	50.00	ND	99.4	70-130			04/22/2019	
m & p - Xylene	106	2.0	ug/L	100.0	ND	106	70-130			04/22/2019	
Methylene chloride	56.9	5.0	ug/L	50.00	ND	114	70-130			04/22/2019	
Methyltertiarybutylether	45.7	1.0	ug/L	50.00	ND	91.4	70-130			04/22/2019	
Naphthalene	42.3	5.0	ug/L	50.00	ND	84.6	70-130			04/22/2019	X
n-Butylbenzene	55.2	1.0	ug/L	50.00	ND	110	70-130			04/22/2019	
n-Propylbenzene	53.1	1.0	ug/L	50.00	ND	106	70-130			04/22/2019	
o-Xylene	53.4	1.0	ug/L	50.00	ND	107	70-130			04/22/2019	
sec-Butylbenzene	51.1	1.0	ug/L	50.00	ND	102	70-130			04/22/2019	
Styrene	50.3	1.0	ug/L	50.00	ND	101	70-130			04/22/2019	
tert-Butylbenzene	49.3	1.0	ug/L	50.00	ND	98.7	70-130			04/22/2019	
tertiary Butyl Alcohol	241	50	ug/L	250.0	ND	96.5	70-130			04/22/2019	
tertiaryAmylmethylether	45.3	5.0	ug/L	50.00	ND	90.6	70-130			04/22/2019	
Tetrachloroethylene	53.3	1.0	ug/L	50.00	ND	107	70-130			04/22/2019	
Tetrahydrofuran	46.6	5.0	ug/L	50.00	ND	93.2	70-130			04/22/2019	
Toluene	55.4	1.0	ug/L	50.00	ND	111	70-130			04/22/2019	
trans-1,2-Dichloroethylene	56.2	1.0	ug/L	50.00	ND	112	70-130			04/22/2019	
trans-1,3-Dichloropropylene	44.8	1.0	ug/L	50.00	ND	89.5	70-130			04/22/2019	
Trichloroethylene	55.4	1.0	ug/L	50.00	ND	111	70-130			04/22/2019	
Trichlorofluoromethane	62.8	1.0	ug/L	50.00	ND	126	70-130			04/22/2019	
Vinyl chloride	60.8	1.0	ug/L	50.00	ND	122	70-130			04/22/2019	
Surrogate: Bromofluorobenzene	*44.9*		ug/L	*50.00*		*89.8*	*85-115*			04/22/2019	
Surrogate: Dibromofluoromethane	*46.8*		ug/L	*50.00*		*93.7*	*82.7-115*			04/22/2019	
Surrogate: Toluene-d8	*48.8*		ug/L	*50.00*		*97.6*	*85-115*			04/22/2019	
Matrix Spike Dup (B9D2202-MSD1)	**Source: 1904148-06**										
1,1,1,2-Tetrachloroethane	45.2	1.0	ug/L	50.00	ND	90.5	70-130	5.51	30	04/22/2019	
1,1,1-Trichloroethane	46.6	1.0	ug/L	50.00	ND	93.2	70-130	9.46	30	04/22/2019	

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9D2202 - Method: 5030				**Prepared: 04/22/2019**							
Matrix Spike Dup (B9D2202-MSD1)	**Source: 1904148-06**										
1,1,2,2-Tetrachloroethane	47.1	1.0	ug/L	50.00	ND	94.3	70-130	0.771	30	04/22/2019	
1,1,2-Trichloroethane	48.3	1.0	ug/L	50.00	ND	96.7	70-130	1.67	30	04/22/2019	
1,1-Dichloroethane	49.6	1.0	ug/L	50.00	ND	99.3	70-130	8.12	30	04/22/2019	
1,1-Dichloroethylene	52.5	1.0	ug/L	50.00	ND	105	70-130	9.00	30	04/22/2019	
1,2,3-Trichlorobenzene	41.6	5.0	ug/L	50.00	ND	83.3	70-130	5.65	30	04/22/2019	
1,2,3-Trichloropropane	43.0	1.0	ug/L	50.00	ND	86.1	70-130	1.27	30	04/22/2019	
1,2,3-Trimethylbenzene	44.5	1.0	ug/L	50.00	ND	89.0	70-130	4.70	30	04/22/2019	
1,2,4-Trichlorobenzene	41.6	5.0	ug/L	50.00	ND	83.3	70-130	5.65	30	04/22/2019	
1,2,4-Trimethylbenzene	44.7	1.0	ug/L	50.00	ND	89.5	70-130	6.10	30	04/22/2019	
1,2-Dibromoethane	43.0	1.0	ug/L	50.00	ND	86.0	70-130	0.713	30	04/22/2019	
1,2-Dichlorobenzene	49.7	1.0	ug/L	50.00	ND	99.3	70-130	3.46	30	04/22/2019	
1,2-Dichloroethane	42.6	1.0	ug/L	50.00	ND	85.3	70-130	2.40	30	04/22/2019	
1,2-Dichloropropane	49.5	1.0	ug/L	50.00	ND	99.0	70-130	3.56	30	04/22/2019	
1,3,5-Trimethylbenzene	45.2	1.0	ug/L	50.00	ND	90.3	70-130	6.84	30	04/22/2019	
1,3-Dichlorobenzene	48.6	1.0	ug/L	50.00	ND	97.2	70-130	5.03	30	04/22/2019	
1,4-Dichlorobenzene	48.3	1.0	ug/L	50.00	ND	96.7	70-130	5.62	30	04/22/2019	
2,2,4-Trimethylpentane	47.5	5.0	ug/L	50.00	ND	95.0	70-130	13.1	30	04/22/2019	
2-Butanone (MEK)	44.3	5.0	ug/L	50.00	ND	88.6	70-130	7.11	30	04/22/2019	
2-Methylnaphthalene	43.0	5.0	ug/L	50.00	ND	86.0	70-130	1.86	30	04/22/2019	X
2-Propanone (acetone)	50.5	20	ug/L	50.00	ND	101	70-130	6.46	30	04/22/2019	
4-Methyl-2-pentanone (MIBK)	49.3	5.0	ug/L	50.00	ND	98.6	70-130	12.6	30	04/22/2019	
Acrylonitrile	56.4	5.0	ug/L	50.00	ND	113	70-130	9.99	30	04/22/2019	
Benzene	51.3	1.0	ug/L	50.00	ND	103	70-130	7.27	30	04/22/2019	
Bromochloromethane	49.5	1.0	ug/L	50.00	ND	99.1	70-130	2.04	30	04/22/2019	
Bromodichloromethane	45.4	1.0	ug/L	50.00	ND	90.7	70-130	4.65	30	04/22/2019	
Bromoform	40.5	1.0	ug/L	50.00	ND	81.0	70-130	0.750	30	04/22/2019	
Bromomethane	39.8	5.0	ug/L	50.00	ND	79.6	70-130	1.27	30	04/22/2019	
Carbon disulfide	56.9	1.0	ug/L	50.00	ND	114	70-130	10.6	30	04/22/2019	
Carbon tetrachloride	58.8	1.0	ug/L	50.00	ND	118	70-130	9.64	30	04/22/2019	
Chlorobenzene	47.9	1.0	ug/L	50.00	ND	95.8	70-130	6.10	30	04/22/2019	
Chloroethane	57.6	5.0	ug/L	50.00	ND	115	70-130	11.9	30	04/22/2019	
Chloroform	47.9	1.0	ug/L	50.00	ND	95.9	70-130	6.03	30	04/22/2019	
Chloromethane	54.7	5.0	ug/L	50.00	ND	109	70-130	8.54	30	04/22/2019	
cis-1,2-Dichloroethylene	48.1	1.0	ug/L	50.00	ND	96.3	70-130	7.05	30	04/22/2019	
cis-1,3-Dichloropropylene	46.9	1.0	ug/L	50.00	ND	93.9	70-130	3.72	30	04/22/2019	
Cyclohexane	55.3	5.0	ug/L	50.00	ND	111	70-130	10.2	30	04/22/2019	
Dibromochloromethane	43.2	1.0	ug/L	50.00	ND	86.5	70-130	3.00	30	04/22/2019	
Dibromomethane	48.5	1.0	ug/L	50.00	ND	97.1	70-130	1.81	30	04/22/2019	
Dichlorodifluoromethane	50.8	5.0	ug/L	50.00	ND	102	70-130	11.9	30	04/22/2019	
Diethyl ether	51.8	5.0	ug/L	50.00	ND	104	70-130	0.127	30	04/22/2019	
Diisopropyl Ether	52.8	5.0	ug/L	50.00	ND	106	70-130	2.53	30	04/22/2019	
Ethylbenzene	50.5	1.0	ug/L	50.00	ND	101	70-130	8.42	30	04/22/2019	
Ethyltertiarybutylether	47.6	5.0	ug/L	50.00	ND	95.3	70-130	1.31	30	04/22/2019	
Hexachloroethane	40.3	5.0	ug/L	50.00	ND	80.5	70-130	6.18	30	04/22/2019	
Hexane	54.1	1.0	ug/L	50.00	ND	108	70-130	10.9	30	04/22/2019	
Isopropylbenzene	46.0	1.0	ug/L	50.00	ND	92.0	70-130	7.72	30	04/22/2019	
m & p - Xylene	99.1	2.0	ug/L	100.0	ND	99.1	70-130	6.53	30	04/22/2019	

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9D2202 - Method: 5030				**Prepared: 04/22/2019**							
Matrix Spike Dup (B9D2202-MSD1)	**Source: 1904148-06**										
Methylene chloride	54.8	5.0	ug/L	50.00	ND	110	70-130	3.72	30	04/22/2019	
Methyltertiarybutylether	46.5	1.0	ug/L	50.00	ND	93.0	70-130	1.76	30	04/22/2019	
Naphthalene	41.6	5.0	ug/L	50.00	ND	83.2	70-130	1.61	30	04/22/2019	X
n-Butylbenzene	51.2	1.0	ug/L	50.00	ND	102	70-130	7.53	30	04/22/2019	
n-Propylbenzene	49.4	1.0	ug/L	50.00	ND	98.9	70-130	7.22	30	04/22/2019	
o-Xylene	50.0	1.0	ug/L	50.00	ND	100	70-130	6.51	30	04/22/2019	
sec-Butylbenzene	47.9	1.0	ug/L	50.00	ND	95.7	70-130	6.55	30	04/22/2019	
Styrene	48.1	1.0	ug/L	50.00	ND	96.1	70-130	4.49	30	04/22/2019	
tert-Butylbenzene	46.5	1.0	ug/L	50.00	ND	93.0	70-130	5.97	30	04/22/2019	
tertiary Butyl Alcohol	238	50	ug/L	250.0	ND	95.3	70-130	1.30	30	04/22/2019	
tertiaryAmylmethylether	46.1	5.0	ug/L	50.00	ND	92.3	70-130	1.82	30	04/22/2019	
Tetrachloroethylene	47.9	1.0	ug/L	50.00	ND	95.8	70-130	10.7	30	04/22/2019	
Tetrahydrofuran	50.7	5.0	ug/L	50.00	ND	101	70-130	8.53	30	04/22/2019	
Toluene	51.3	1.0	ug/L	50.00	ND	103	70-130	7.83	30	04/22/2019	
trans-1,2-Dichloroethylene	51.5	1.0	ug/L	50.00	ND	103	70-130	8.77	30	04/22/2019	
trans-1,3-Dichloropropylene	44.0	1.0	ug/L	50.00	ND	88.0	70-130	1.78	30	04/22/2019	
Trichloroethylene	51.0	1.0	ug/L	50.00	ND	102	70-130	8.14	30	04/22/2019	
Trichlorofluoromethane	56.7	1.0	ug/L	50.00	ND	113	70-130	10.3	30	04/22/2019	
Vinyl chloride	55.2	1.0	ug/L	50.00	ND	110	70-130	9.70	30	04/22/2019	
Surrogate: Bromofluorobenzene	*43.7*		ug/L	*50.00*		*87.5*	*85-115*			04/22/2019	
Surrogate: Dibromofluoromethane	*46.1*		ug/L	*50.00*		*92.3*	*82.7-115*			04/22/2019	
Surrogate: Toluene-d8	*47.8*		ug/L	*50.00*		*95.6*	*85-115*			04/22/2019	

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Organics-Dioxane - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9D2212 - Method: 5030				**Prepared: 04/19/2019**							
Blank (B9D2212-BLK1)											
1,4-dioxane	ND	1.0	ug/L							04/19/2019	
LCS (B9D2212-BS1)											
1,4-dioxane	10.5	1.0	ug/L	10.00		105	70-130			04/19/2019	
Matrix Spike (B9D2212-MS1)	**Source: 1904148-02**										
1,4-dioxane	21.9	1.0	ug/L	10.00	10.4	115	70-130			04/19/2019	
Matrix Spike Dup (B9D2212-MSD1)	**Source: 1904148-02**										**A03**
1,4-dioxane	17.2	1.0	ug/L	10.00	10.4	67.8	70-130	24.1	30	04/19/2019	

Michigan Department of Environmental Quality
Laboratory Services Section

Analysis Request Sheet

Lab Work Order Number	Project Name	Matrix
1904148	Gelman Sciences	WATER

Site Code/Project Number: 81000018/Location 6130	AY: 19	CC Email 1: lundk@michigan.gov	Project TAT Days:	Sample Collector: Sara Nedrich	
Dept-Division-District: DEQ-RRD-Jackson	Index:	CC Email 2: NedrichS@michigan.gov	Project Due Date:	Sample Collector Phone: 517-281-1510	
State Project Manager: Dan Hamel	PCA:	CC Email 3:		Contract Firm:	
State Project Manager Email: hameld@michigan.gov	Project: Location-6130	Overflow Lab Choice 1:	Accept Analysis hold time codes:	Contract Firm Primary Contact:	
State Project Manager Phone: 517-745-6595	Phase:	Overflow Lab Choice 2:		Primary Contact Phone:	

	Lab Use Only	Field Sample Identification	Collection Date	Collection Time	Container Count	Comments
1	01	Allen Creek/West Park SW	4/18/19	9:49	5	Please include QA/QC with Lab Data Report(s)
2	02	Allen Creek/Chapin-West Park	4/18/19	9:38	5	✓
3	03	Allen Creek/Maple Ridge-Arborview	4/18/19	10:00	3	✓
4	04	Allen Creek/Wildwood-Arborview	4/18/19	10:15	3	✓
5	05	Allen Creek/Murray-Washington	4/18/19	10:55	5	✓
6	06	Allen Creek/Eighth-Waterworks	4/18/19	10:45	3	✓
7	07	Allen Creek-Maryfield-Wildwood Park	4/18/19	10:30	5	✓
8						
9						
10						

ORGANIC 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
METH - Methane, Ethane, Ethene	
Methane, Ethane, Ethene	1 2 3 4 5 6 7 8 9 10
ON - 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
Chlordane	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
Benzidines	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
Acids 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

METALS CHEMISTRY PACKAGES

OpMemo2 - Total	1 2 3 4 5 6 7 8 9 10
OpMemo2 - Dissolved	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
Michigan10 - Dissolved	1 2 3 4 5 6 7 8 9 10
(As,Ba,Cd,Cr,Cu,Pb,Hg,Se,Ag,Zn)	

MAD - DISSOLVED METALS

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

MA - TOTAL METALS

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

GENERAL CHEMISTRY

GB	Total Cyanide - CN	1 2 3 4 5 6 7 8 9 10
GB	Amenable 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
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	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 (includes Total Alkalinity)	1 2 3 4 5 6 7 8 9 10
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 - SO4	1 2 3 4 5 6 7 8 9 10
MN	Chromium 6 - Cr+6	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 (FF) (Field - Filtered & Preserved)	1 2 3 4 5 6 7 8 9 10
GN	Diss Org Carbon - DOC (LF) (Lab - Filtered & Preserved)	1 2 3 4 5 6 7 8 9 10
GA	Total Org Carbon - TOC	1 2 3 4 5 6 7 8 9 10
GA	Ammonia - NH3	1 2 3 4 5 6 7 8 9 10
GA	Nitrate+Nitrite - NO3+NO2	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.	Caitlin Bates	Melissa Smith	
Signature:	Caitlin Bates		4/18/19 1605
Print Name & Org.			
Signature:			
Print Name & Org.			
Signature:			

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

11 June 2019

Work Order: 1905292

Price: $1,080.00

Dan Hamel
MDEQ-RRD-JACKSON
301 E. Louis Glick Highway
Jackson, MI 49201-1556

RE: GELMAN SCIENCES, INC

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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MDEQ-RRD-JACKSON
301 E. Louis Glick Highway
Jackson MI, 49201-1556

Project: GELMAN SCIENCES, INC
Site Code: 81000018/Location 6130
Project Manager: Dan Hamel

Reported:
06/11/2019

Analytical Report for Samples

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Qualifier
Allen Creek/West Park SW	1905292-01	Water	05/28/2019	05/29/2019	
Allen Creek/Chapin-West Park	1905292-02	Water	05/28/2019	05/29/2019	
Allen Creek/Maple Ridge-Arborview	1905292-03	Water	05/28/2019	05/29/2019	
Allen Creek/Murray-Washington	1905292-04	Water	05/28/2019	05/29/2019	
Allen Creek/Eighth-Waterworks	1905292-05	Water	05/28/2019	05/29/2019	
Allen Creek-Maryfield-Wildwood Park	1905292-06	Water	05/28/2019	05/29/2019	

Notes and Definitions

Y28	1,4-dioxane analysis is performed using selective ion monitoring (SIM). Results reported below 5 ug/L (aqueous) or 1000 ug/Kg (solids) are estimated.
X	Methods 8260 & 624 are used to analyze volatile organics that have boiling points below 200 ºC. 2-Methylnaphthalene & naphthalene have boiling points above 200 ºC and are better suited to analysis by methods 8270 & 625 as semivolatile organics.
ND	Indicates compound analyzed for but not detected at or above the reporting limit (RL).
RL	Reporting Limit
NA	Not Applicable

Lab Work Order # 1905292

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TEL: (517) 335-9800
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Client ID: Allen Creek/West Park SW

Lab ID: 1905292-01

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
540-84-1	2,2,4-Trimethylpentane	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	05/30/19	B9E3008	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
74-95-3	Dibromomethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	

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

Client ID: Allen Creek/West Park SW

Lab ID: 1905292-01

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
110-54-3	Hexane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	05/30/19	B9E3008	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	05/30/19	B9E3008	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
Surrogate: Bromofluorobenzene			*98.2 %*	*85-115*		*05/30/19*	B9E3008	*8260*	
Surrogate: Dibromofluoromethane			*99.3 %*	*82.7-115*		*05/30/19*	B9E3008	*8260*	
Surrogate: Toluene-d8			*97.8 %*	*85-115*		*05/30/19*	B9E3008	*8260*	

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Client ID: Allen Creek/West Park SW

Lab ID: 1905292-01

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Dioxane									
123-91-1	**1,4-dioxane**	**16**	1.0	ug/L	1	06/04/19	B9F0506	8260 Modified	

Lab Work Order # 1905292

MICHIGAN DEPARTMENT OF
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Client ID: Allen Creek/Chapin-West Park

Lab ID: 1905292-02

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
540-84-1	2,2,4-Trimethylpentane	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	05/30/19	B9E3008	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
74-95-3	Dibromomethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	

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: Allen Creek/Chapin-West Park

Lab ID: 1905292-02

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
110-54-3	Hexane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	05/30/19	B9E3008	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	05/30/19	B9E3008	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
Surrogate: Bromofluorobenzene			*101 %*	*85-115*		*05/30/19*	B9E3008	*8260*	
Surrogate: Dibromofluoromethane			*102 %*	*82.7-115*		*05/30/19*	B9E3008	*8260*	
Surrogate: Toluene-d8			*97.7 %*	*85-115*		*05/30/19*	B9E3008	*8260*	

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: Allen Creek/Maple Ridge-Arborview

Lab ID: 1905292-03

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
540-84-1	2,2,4-Trimethylpentane	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	05/30/19	B9E3008	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
74-95-3	Dibromomethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	

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

Client ID: Allen Creek/Maple Ridge-Arborview

Lab ID: 1905292-03

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
110-54-3	Hexane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	05/30/19	B9E3008	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	05/30/19	B9E3008	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
Surrogate: Bromofluorobenzene			*103 %*	*85-115*		*05/30/19*	B9E3008	*8260*	
Surrogate: Dibromofluoromethane			*101 %*	*82.7-115*		*05/30/19*	B9E3008	*8260*	
Surrogate: Toluene-d8			*99.7 %*	*85-115*		*05/30/19*	B9E3008	*8260*	

Lab Work Order # 1905292

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: Allen Creek/Maple Ridge-Arborview

Lab ID: 1905292-03

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Dioxane									**See note Y28**
123-91-1	1,4-dioxane	ND	1.0	ug/L	1	06/04/19	B9F0506	8260 Modified	

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

Client ID: Allen Creek/Murray-Washington

Lab ID: 1905292-04

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
540-84-1	2,2,4-Trimethylpentane	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	05/30/19	B9E3008	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
74-95-3	Dibromomethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	

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: Allen Creek/Murray-Washington

Lab ID: 1905292-04

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
110-54-3	Hexane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	05/30/19	B9E3008	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	05/30/19	B9E3008	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
79-01-6	**Trichloroethylene**	**1.0**	1.0	ug/L	1	05/30/19	B9E3008	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
Surrogate: Bromofluorobenzene			*99.7 %*	*85-115*		*05/30/19*	B9E3008	*8260*	
Surrogate: Dibromofluoromethane			*101 %*	*82.7-115*		*05/30/19*	B9E3008	*8260*	
Surrogate: Toluene-d8			*97.6 %*	*85-115*		*05/30/19*	B9E3008	*8260*	

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: Allen Creek/Eighth-Waterworks

Lab ID: 1905292-05

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
540-84-1	2,2,4-Trimethylpentane	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	05/30/19	B9E3008	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
74-95-3	Dibromomethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	

MICHIGAN DEPARTMENT OF
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P.O. Box 30270
Lansing, MI 48909
TEL: (517) 335-9800
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Client ID: Allen Creek/Eighth-Waterworks

Lab ID: 1905292-05

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
110-54-3	Hexane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	05/30/19	B9E3008	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	05/30/19	B9E3008	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
Surrogate: Bromofluorobenzene			*98.3 %*	*85-115*		*05/30/19*	B9E3008	*8260*	
Surrogate: Dibromofluoromethane			*102 %*	*82.7-115*		*05/30/19*	B9E3008	*8260*	
Surrogate: Toluene-d8			*97.2 %*	*85-115*		*05/30/19*	B9E3008	*8260*	

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: Allen Creek/Eighth-Waterworks

Lab ID: 1905292-05

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Dioxane									**See note Y28**
123-91-1	1,4-dioxane	ND	1.0	ug/L	1	06/04/19	B9F0506	8260 Modified	

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Client ID: Allen Creek-Maryfield-Wildwood Park

Lab ID: 1905292-06

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
540-84-1	2,2,4-Trimethylpentane	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	05/30/19	B9E3008	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
74-95-3	Dibromomethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	

MICHIGAN DEPARTMENT OF
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ENVIRONMENTAL LABORATORY**

P.O. Box 30270
Lansing, MI 48909
TEL: (517) 335-9800
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Client ID: Allen Creek-Maryfield-Wildwood Park

Lab ID: 1905292-06

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
100-41-4	**Ethylbenzene**	**13**	1.0	ug/L	1	05/30/19	B9E3008	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
110-54-3	Hexane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	05/30/19	B9E3008	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
100-42-5	**Styrene**	**12**	1.0	ug/L	1	05/30/19	B9E3008	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	05/30/19	B9E3008	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	05/30/19	B9E3008	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	05/30/19	B9E3008	8260	
Surrogate: Bromofluorobenzene			*107 %*	*85-115*		*05/30/19*	B9E3008	*8260*	
Surrogate: Dibromofluoromethane			*102 %*	*82.7-115*		*05/30/19*	B9E3008	*8260*	
Surrogate: Toluene-d8			*101 %*	*85-115*		*05/30/19*	B9E3008	*8260*	

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9E3008 - Method: 5030				**Prepared: 05/30/2019**							
Blank (B9E3008-BLK1)											
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L							05/30/2019	
1,1,1-Trichloroethane	ND	1.0	ug/L							05/30/2019	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L							05/30/2019	
1,1,2-Trichloroethane	ND	1.0	ug/L							05/30/2019	
1,1-Dichloroethane	ND	1.0	ug/L							05/30/2019	
1,1-Dichloroethylene	ND	1.0	ug/L							05/30/2019	
1,2,3-Trichlorobenzene	ND	5.0	ug/L							05/30/2019	
1,2,3-Trichloropropane	ND	1.0	ug/L							05/30/2019	
1,2,3-Trimethylbenzene	ND	1.0	ug/L							05/30/2019	
1,2,4-Trichlorobenzene	ND	5.0	ug/L							05/30/2019	
1,2,4-Trimethylbenzene	ND	1.0	ug/L							05/30/2019	
1,2-Dibromoethane	ND	1.0	ug/L							05/30/2019	
1,2-Dichlorobenzene	ND	1.0	ug/L							05/30/2019	
1,2-Dichloroethane	ND	1.0	ug/L							05/30/2019	
1,2-Dichloropropane	ND	1.0	ug/L							05/30/2019	
1,3,5-Trimethylbenzene	ND	1.0	ug/L							05/30/2019	
1,3-Dichlorobenzene	ND	1.0	ug/L							05/30/2019	
1,4-Dichlorobenzene	ND	1.0	ug/L							05/30/2019	
2,2,4-Trimethylpentane	ND	5.0	ug/L							05/30/2019	
2-Butanone (MEK)	ND	5.0	ug/L							05/30/2019	
2-Methylnaphthalene	ND	5.0	ug/L							05/30/2019	X
2-Propanone (acetone)	ND	20	ug/L							05/30/2019	
4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L							05/30/2019	
Acrylonitrile	ND	5.0	ug/L							05/30/2019	
Benzene	ND	1.0	ug/L							05/30/2019	
Bromochloromethane	ND	1.0	ug/L							05/30/2019	
Bromodichloromethane	ND	1.0	ug/L							05/30/2019	
Bromoform	ND	1.0	ug/L							05/30/2019	
Bromomethane	ND	5.0	ug/L							05/30/2019	
Carbon disulfide	ND	1.0	ug/L							05/30/2019	
Carbon tetrachloride	ND	1.0	ug/L							05/30/2019	
Chlorobenzene	ND	1.0	ug/L							05/30/2019	
Chloroethane	ND	5.0	ug/L							05/30/2019	
Chloroform	ND	1.0	ug/L							05/30/2019	
Chloromethane	ND	5.0	ug/L							05/30/2019	
cis-1,2-Dichloroethylene	ND	1.0	ug/L							05/30/2019	
cis-1,3-Dichloropropylene	ND	1.0	ug/L							05/30/2019	
Cyclohexane	ND	5.0	ug/L							05/30/2019	
Dibromochloromethane	ND	1.0	ug/L							05/30/2019	
Dibromomethane	ND	1.0	ug/L							05/30/2019	
Dichlorodifluoromethane	ND	5.0	ug/L							05/30/2019	
Diethyl ether	ND	5.0	ug/L							05/30/2019	
Diisopropyl Ether	ND	5.0	ug/L							05/30/2019	
Ethylbenzene	ND	1.0	ug/L							05/30/2019	
Ethyltertiarybutylether	ND	5.0	ug/L							05/30/2019	
Hexachloroethane	ND	5.0	ug/L							05/30/2019	
Hexane	ND	1.0	ug/L							05/30/2019	

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
Batch B9E3008 - Method: 5030				**Prepared: 05/30/2019**							
Blank (B9E3008-BLK1)											
Isopropylbenzene	ND	1.0	ug/L							05/30/2019	
m & p - Xylene	ND	2.0	ug/L							05/30/2019	
Methylene chloride	ND	5.0	ug/L							05/30/2019	
Methyltertiarybutylether	ND	1.0	ug/L							05/30/2019	
Naphthalene	ND	5.0	ug/L							05/30/2019	X
n-Butylbenzene	ND	1.0	ug/L							05/30/2019	
n-Propylbenzene	ND	1.0	ug/L							05/30/2019	
o-Xylene	ND	1.0	ug/L							05/30/2019	
sec-Butylbenzene	ND	1.0	ug/L							05/30/2019	
Styrene	ND	1.0	ug/L							05/30/2019	
tert-Butylbenzene	ND	1.0	ug/L							05/30/2019	
tertiary Butyl Alcohol	ND	50	ug/L							05/30/2019	
tertiaryAmylmethylether	ND	5.0	ug/L							05/30/2019	
Tetrachloroethylene	ND	1.0	ug/L							05/30/2019	
Tetrahydrofuran	ND	5.0	ug/L							05/30/2019	
Toluene	ND	1.0	ug/L							05/30/2019	
trans-1,2-Dichloroethylene	ND	1.0	ug/L							05/30/2019	
trans-1,3-Dichloropropylene	ND	1.0	ug/L							05/30/2019	
Trichloroethylene	ND	1.0	ug/L							05/30/2019	
Trichlorofluoromethane	ND	1.0	ug/L							05/30/2019	
Vinyl chloride	ND	1.0	ug/L							05/30/2019	
Surrogate: Bromofluorobenzene	*50.4*		ug/L	*50.00*		*101*	*85-115*			05/30/2019	
Surrogate: Dibromofluoromethane	*50.5*		ug/L	*50.00*		*101*	*82.7-115*			05/30/2019	
Surrogate: Toluene-d8	*49.2*		ug/L	*50.00*		*98.4*	*85-115*			05/30/2019	
LCS (B9E3008-BS1)											
1,1,1,2-Tetrachloroethane	54.3	1.0	ug/L	50.00		109	70-130			05/30/2019	
1,1,1-Trichloroethane	48.9	1.0	ug/L	50.00		97.8	70-130			05/30/2019	
1,1,2,2-Tetrachloroethane	52.6	1.0	ug/L	50.00		105	70-130			05/30/2019	
1,1,2-Trichloroethane	49.1	1.0	ug/L	50.00		98.2	70-130			05/30/2019	
1,1-Dichloroethane	49.9	1.0	ug/L	50.00		99.8	70-130			05/30/2019	
1,1-Dichloroethylene	48.1	1.0	ug/L	50.00		96.2	70-130			05/30/2019	
1,2,3-Trichlorobenzene	49.3	5.0	ug/L	50.00		98.5	70-130			05/30/2019	
1,2,3-Trichloropropane	47.7	1.0	ug/L	50.00		95.3	70-130			05/30/2019	
1,2,3-Trimethylbenzene	50.0	1.0	ug/L	50.00		100	70-130			05/30/2019	
1,2,4-Trichlorobenzene	49.1	5.0	ug/L	50.00		98.3	70-130			05/30/2019	
1,2,4-Trimethylbenzene	49.9	1.0	ug/L	50.00		99.8	70-130			05/30/2019	
1,2-Dibromoethane	49.8	1.0	ug/L	50.00		99.5	70-130			05/30/2019	
1,2-Dichlorobenzene	49.8	1.0	ug/L	50.00		99.5	70-130			05/30/2019	
1,2-Dichloroethane	46.8	1.0	ug/L	50.00		93.5	70-130			05/30/2019	
1,2-Dichloropropane	51.7	1.0	ug/L	50.00		103	70-130			05/30/2019	
1,3,5-Trimethylbenzene	50.0	1.0	ug/L	50.00		100	70-130			05/30/2019	
1,3-Dichlorobenzene	49.7	1.0	ug/L	50.00		99.4	70-130			05/30/2019	
1,4-Dichlorobenzene	47.9	1.0	ug/L	50.00		95.8	70-130			05/30/2019	
2,2,4-Trimethylpentane	47.9	5.0	ug/L	50.00		95.8	70-130			05/30/2019	
2-Butanone (MEK)	53.8	5.0	ug/L	50.00		108	70-130			05/30/2019	
2-Methylnaphthalene	44.2	5.0	ug/L	50.00		88.5	70-130			05/30/2019	X

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9E3008 - Method: 5030				**Prepared: 05/30/2019**							
LCS (B9E3008-BS1)											
2-Propanone (acetone)	48.1	20	ug/L	50.00		96.3	70-130			05/30/2019	
4-Methyl-2-pentanone (MIBK)	49.0	5.0	ug/L	50.00		98.0	70-130			05/30/2019	
Acrylonitrile	47.7	5.0	ug/L	50.00		95.3	70-130			05/30/2019	
Benzene	48.7	1.0	ug/L	50.00		97.4	70-130			05/30/2019	
Bromochloromethane	50.9	1.0	ug/L	50.00		102	70-130			05/30/2019	
Bromodichloromethane	50.7	1.0	ug/L	50.00		101	70-130			05/30/2019	
Bromoform	54.7	1.0	ug/L	50.00		109	70-130			05/30/2019	
Bromomethane	53.2	5.0	ug/L	50.00		106	70-130			05/30/2019	
Carbon disulfide	58.3	1.0	ug/L	50.00		117	70-130			05/30/2019	
Carbon tetrachloride	51.7	1.0	ug/L	50.00		103	70-130			05/30/2019	
Chlorobenzene	48.8	1.0	ug/L	50.00		97.6	70-130			05/30/2019	
Chloroethane	55.6	5.0	ug/L	50.00		111	70-130			05/30/2019	
Chloroform	49.7	1.0	ug/L	50.00		99.4	70-130			05/30/2019	
Chloromethane	56.9	5.0	ug/L	50.00		114	70-130			05/30/2019	
cis-1,2-Dichloroethylene	51.8	1.0	ug/L	50.00		104	70-130			05/30/2019	
cis-1,3-Dichloropropylene	51.3	1.0	ug/L	50.00		103	70-130			05/30/2019	
Cyclohexane	51.0	5.0	ug/L	50.00		102	70-130			05/30/2019	
Dibromochloromethane	55.0	1.0	ug/L	50.00		110	70-130			05/30/2019	
Dibromomethane	49.7	1.0	ug/L	50.00		99.4	70-130			05/30/2019	
Dichlorodifluoromethane	55.6	5.0	ug/L	50.00		111	70-130			05/30/2019	
Diethyl ether	50.2	5.0	ug/L	50.00		100	70-130			05/30/2019	
Diisopropyl Ether	51.3	5.0	ug/L	50.00		103	70-130			05/30/2019	
Ethylbenzene	49.6	1.0	ug/L	50.00		99.3	70-130			05/30/2019	
Ethyltertiarybutylether	47.7	5.0	ug/L	50.00		95.5	70-130			05/30/2019	
Hexachloroethane	55.2	5.0	ug/L	50.00		110	70-130			05/30/2019	
Hexane	48.3	1.0	ug/L	50.00		96.7	70-130			05/30/2019	
Isopropylbenzene	48.8	1.0	ug/L	50.00		97.5	70-130			05/30/2019	
m & p - Xylene	101	2.0	ug/L	100.0		101	70-130			05/30/2019	
Methylene chloride	50.0	5.0	ug/L	50.00		100	70-130			05/30/2019	
Methyltertiarybutylether	50.2	1.0	ug/L	50.00		100	70-130			05/30/2019	
Naphthalene	47.6	5.0	ug/L	50.00		95.1	70-130			05/30/2019	X
n-Butylbenzene	51.9	1.0	ug/L	50.00		104	70-130			05/30/2019	
n-Propylbenzene	50.7	1.0	ug/L	50.00		101	70-130			05/30/2019	
o-Xylene	50.4	1.0	ug/L	50.00		101	70-130			05/30/2019	
sec-Butylbenzene	54.0	1.0	ug/L	50.00		108	70-130			05/30/2019	
Styrene	50.1	1.0	ug/L	50.00		100	70-130			05/30/2019	
tert-Butylbenzene	50.0	1.0	ug/L	50.00		100	70-130			05/30/2019	
tertiary Butyl Alcohol	233	50	ug/L	250.0		93.3	70-130			05/30/2019	
tertiaryAmylmethylether	48.4	5.0	ug/L	50.00		96.9	70-130			05/30/2019	
Tetrachloroethylene	47.9	1.0	ug/L	50.00		95.8	70-130			05/30/2019	
Tetrahydrofuran	49.1	5.0	ug/L	50.00		98.3	70-130			05/30/2019	
Toluene	50.2	1.0	ug/L	50.00		100	70-130			05/30/2019	
trans-1,2-Dichloroethylene	49.4	1.0	ug/L	50.00		98.7	70-130			05/30/2019	
trans-1,3-Dichloropropylene	50.9	1.0	ug/L	50.00		102	70-130			05/30/2019	
Trichloroethylene	46.9	1.0	ug/L	50.00		93.8	70-130			05/30/2019	
Trichlorofluoromethane	51.7	1.0	ug/L	50.00		103	70-130			05/30/2019	
Vinyl chloride	53.5	1.0	ug/L	50.00		107	70-130			05/30/2019	

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9E3008 - Method: 5030				**Prepared: 05/30/2019**							
LCS (B9E3008-BS1)											
Surrogate: Bromofluorobenzene	*48.8*		ug/L	*50.00*		*97.6*	*85-115*			05/30/2019	
Surrogate: Dibromofluoromethane	*49.2*		ug/L	*50.00*		*98.5*	*82.7-115*			05/30/2019	
Surrogate: Toluene-d8	*50.4*		ug/L	*50.00*		*101*	*85-115*			05/30/2019	
Matrix Spike (B9E3008-MS1)	**Source: 1905284-11**										
1,1,1,2-Tetrachloroethane	53.1	1.0	ug/L	50.00	ND	106	70-130			05/30/2019	
1,1,1-Trichloroethane	53.0	1.0	ug/L	50.00	ND	106	70-130			05/30/2019	
1,1,2,2-Tetrachloroethane	56.0	1.0	ug/L	50.00	ND	112	70-130			05/30/2019	
1,1,2-Trichloroethane	48.3	1.0	ug/L	50.00	ND	96.7	70-130			05/30/2019	
1,1-Dichloroethane	51.2	1.0	ug/L	50.00	ND	102	70-130			05/30/2019	
1,1-Dichloroethylene	51.5	1.0	ug/L	50.00	ND	103	70-130			05/30/2019	
1,2,3-Trichlorobenzene	50.5	5.0	ug/L	50.00	ND	101	70-130			05/30/2019	
1,2,3-Trichloropropane	49.6	1.0	ug/L	50.00	ND	99.3	70-130			05/30/2019	
1,2,3-Trimethylbenzene	51.5	1.0	ug/L	50.00	ND	103	70-130			05/30/2019	
1,2,4-Trichlorobenzene	49.0	5.0	ug/L	50.00	ND	97.9	70-130			05/30/2019	
1,2,4-Trimethylbenzene	52.6	1.0	ug/L	50.00	ND	105	70-130			05/30/2019	
1,2-Dibromoethane	49.1	1.0	ug/L	50.00	ND	98.1	70-130			05/30/2019	
1,2-Dichlorobenzene	49.7	1.0	ug/L	50.00	ND	99.4	70-130			05/30/2019	
1,2-Dichloroethane	47.9	1.0	ug/L	50.00	ND	95.7	70-130			05/30/2019	
1,2-Dichloropropane	53.0	1.0	ug/L	50.00	ND	106	70-130			05/30/2019	
1,3,5-Trimethylbenzene	52.7	1.0	ug/L	50.00	ND	105	70-130			05/30/2019	
1,3-Dichlorobenzene	50.1	1.0	ug/L	50.00	ND	100	70-130			05/30/2019	
1,4-Dichlorobenzene	48.4	1.0	ug/L	50.00	ND	96.9	70-130			05/30/2019	
2,2,4-Trimethylpentane	54.0	5.0	ug/L	50.00	ND	108	70-130			05/30/2019	
2-Butanone (MEK)	53.0	5.0	ug/L	50.00	ND	106	70-130			05/30/2019	
2-Methylnaphthalene	46.3	5.0	ug/L	50.00	ND	92.7	70-130			05/30/2019	X
2-Propanone (acetone)	48.3	20	ug/L	50.00	ND	96.7	70-130			05/30/2019	
4-Methyl-2-pentanone (MIBK)	49.6	5.0	ug/L	50.00	ND	99.3	70-130			05/30/2019	
Acrylonitrile	48.8	5.0	ug/L	50.00	ND	97.6	70-130			05/30/2019	
Benzene	51.1	1.0	ug/L	50.00	ND	102	70-130			05/30/2019	
Bromochloromethane	51.2	1.0	ug/L	50.00	ND	102	70-130			05/30/2019	
Bromodichloromethane	50.1	1.0	ug/L	50.00	ND	100	70-130			05/30/2019	
Bromoform	51.5	1.0	ug/L	50.00	ND	103	70-130			05/30/2019	
Bromomethane	55.0	5.0	ug/L	50.00	ND	110	70-130			05/30/2019	
Carbon disulfide	62.0	1.0	ug/L	50.00	ND	124	70-130			05/30/2019	
Carbon tetrachloride	54.8	1.0	ug/L	50.00	ND	110	70-130			05/30/2019	
Chlorobenzene	50.1	1.0	ug/L	50.00	ND	100	70-130			05/30/2019	
Chloroethane	55.4	5.0	ug/L	50.00	ND	111	70-130			05/30/2019	
Chloroform	50.4	1.0	ug/L	50.00	ND	101	70-130			05/30/2019	
Chloromethane	58.6	5.0	ug/L	50.00	ND	117	70-130			05/30/2019	
cis-1,2-Dichloroethylene	51.7	1.0	ug/L	50.00	ND	103	70-130			05/30/2019	
cis-1,3-Dichloropropylene	49.2	1.0	ug/L	50.00	ND	98.4	70-130			05/30/2019	
Cyclohexane	57.7	5.0	ug/L	50.00	ND	115	70-130			05/30/2019	
Dibromochloromethane	52.1	1.0	ug/L	50.00	ND	104	70-130			05/30/2019	
Dibromomethane	49.9	1.0	ug/L	50.00	ND	99.8	70-130			05/30/2019	
Dichlorodifluoromethane	60.9	5.0	ug/L	50.00	ND	122	70-130			05/30/2019	
Diethyl ether	49.9	5.0	ug/L	50.00	ND	99.9	70-130			05/30/2019	

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9E3008 - Method: 5030				**Prepared: 05/30/2019**							
Matrix Spike (B9E3008-MS1)	**Source: 1905284-11**										
Diisopropyl Ether	50.5	5.0	ug/L	50.00	ND	101	70-130			05/30/2019	
Ethylbenzene	50.8	1.0	ug/L	50.00	ND	102	70-130			05/30/2019	
Ethyltertiarybutylether	45.8	5.0	ug/L	50.00	ND	91.6	70-130			05/30/2019	
Hexachloroethane	52.5	5.0	ug/L	50.00	ND	105	70-130			05/30/2019	
Hexane	53.9	1.0	ug/L	50.00	ND	108	70-130			05/30/2019	
Isopropylbenzene	51.8	1.0	ug/L	50.00	ND	104	70-130			05/30/2019	
m & p - Xylene	103	2.0	ug/L	100.0	ND	103	70-130			05/30/2019	
Methylene chloride	51.0	5.0	ug/L	50.00	ND	102	70-130			05/30/2019	
Methyltertiarybutylether	48.6	1.0	ug/L	50.00	ND	97.1	70-130			05/30/2019	
Naphthalene	47.4	5.0	ug/L	50.00	ND	94.8	70-130			05/30/2019	X
n-Butylbenzene	54.8	1.0	ug/L	50.00	ND	110	70-130			05/30/2019	
n-Propylbenzene	53.5	1.0	ug/L	50.00	ND	107	70-130			05/30/2019	
o-Xylene	49.9	1.0	ug/L	50.00	ND	99.8	70-130			05/30/2019	
sec-Butylbenzene	57.7	1.0	ug/L	50.00	ND	115	70-130			05/30/2019	
Styrene	51.5	1.0	ug/L	50.00	ND	103	70-130			05/30/2019	
tert-Butylbenzene	52.3	1.0	ug/L	50.00	ND	105	70-130			05/30/2019	
tertiary Butyl Alcohol	230	50	ug/L	250.0	ND	91.9	70-130			05/30/2019	
tertiaryAmylmethylether	47.6	5.0	ug/L	50.00	ND	95.3	70-130			05/30/2019	
Tetrachloroethylene	52.1	1.0	ug/L	50.00	ND	104	70-130			05/30/2019	
Tetrahydrofuran	46.9	5.0	ug/L	50.00	ND	93.7	70-130			05/30/2019	
Toluene	51.5	1.0	ug/L	50.00	ND	103	70-130			05/30/2019	
trans-1,2-Dichloroethylene	51.3	1.0	ug/L	50.00	ND	103	70-130			05/30/2019	
trans-1,3-Dichloropropylene	48.1	1.0	ug/L	50.00	ND	96.1	70-130			05/30/2019	
Trichloroethylene	49.0	1.0	ug/L	50.00	ND	98.0	70-130			05/30/2019	
Trichlorofluoromethane	57.4	1.0	ug/L	50.00	ND	115	70-130			05/30/2019	
Vinyl chloride	56.4	1.0	ug/L	50.00	ND	113	70-130			05/30/2019	
Surrogate: Bromofluorobenzene	*51.0*		ug/L	*50.00*		*102*	*85-115*			05/30/2019	
Surrogate: Dibromofluoromethane	*51.7*		ug/L	*50.00*		*103*	*82.7-115*			05/30/2019	
Surrogate: Toluene-d8	*50.7*		ug/L	*50.00*		*101*	*85-115*			05/30/2019	
Matrix Spike Dup (B9E3008-MSD1)	**Source: 1905284-11**										
1,1,1,2-Tetrachloroethane	51.7	1.0	ug/L	50.00	ND	103	70-130	2.72	30	05/30/2019	
1,1,1-Trichloroethane	48.6	1.0	ug/L	50.00	ND	97.3	70-130	8.66	30	05/30/2019	
1,1,2,2-Tetrachloroethane	55.1	1.0	ug/L	50.00	ND	110	70-130	1.70	30	05/30/2019	
1,1,2-Trichloroethane	47.7	1.0	ug/L	50.00	ND	95.5	70-130	1.25	30	05/30/2019	
1,1-Dichloroethane	48.5	1.0	ug/L	50.00	ND	97.0	70-130	5.38	30	05/30/2019	
1,1-Dichloroethylene	47.1	1.0	ug/L	50.00	ND	94.1	70-130	8.92	30	05/30/2019	
1,2,3-Trichlorobenzene	48.5	5.0	ug/L	50.00	ND	97.1	70-130	3.97	30	05/30/2019	
1,2,3-Trichloropropane	49.7	1.0	ug/L	50.00	ND	99.4	70-130	0.0964	30	05/30/2019	
1,2,3-Trimethylbenzene	49.3	1.0	ug/L	50.00	ND	98.5	70-130	4.44	30	05/30/2019	
1,2,4-Trichlorobenzene	47.4	5.0	ug/L	50.00	ND	94.8	70-130	3.28	30	05/30/2019	
1,2,4-Trimethylbenzene	49.0	1.0	ug/L	50.00	ND	97.9	70-130	7.13	30	05/30/2019	
1,2-Dibromoethane	48.5	1.0	ug/L	50.00	ND	97.1	70-130	1.08	30	05/30/2019	
1,2-Dichlorobenzene	48.8	1.0	ug/L	50.00	ND	97.7	70-130	1.72	30	05/30/2019	
1,2-Dichloroethane	46.4	1.0	ug/L	50.00	ND	92.9	70-130	3.01	30	05/30/2019	
1,2-Dichloropropane	49.7	1.0	ug/L	50.00	ND	99.4	70-130	6.42	30	05/30/2019	
1,3,5-Trimethylbenzene	49.5	1.0	ug/L	50.00	ND	99.0	70-130	6.33	30	05/30/2019	

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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

Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9E3008 - Method: 5030				**Prepared: 05/30/2019**							
Matrix Spike Dup (B9E3008-MSD1)	**Source: 1905284-11**										
1,3-Dichlorobenzene	48.7	1.0	ug/L	50.00	ND	97.3	70-130	2.84	30	05/30/2019	
1,4-Dichlorobenzene	46.8	1.0	ug/L	50.00	ND	93.6	70-130	3.40	30	05/30/2019	
2,2,4-Trimethylpentane	45.9	5.0	ug/L	50.00	ND	91.8	70-130	16.2	30	05/30/2019	
2-Butanone (MEK)	54.0	5.0	ug/L	50.00	ND	108	70-130	1.78	30	05/30/2019	
2-Methylnaphthalene	46.3	5.0	ug/L	50.00	ND	92.5	70-130	0.200	30	05/30/2019	X
2-Propanone (acetone)	46.6	20	ug/L	50.00	ND	93.2	70-130	3.71	30	05/30/2019	
4-Methyl-2-pentanone (MIBK)	48.6	5.0	ug/L	50.00	ND	97.1	70-130	2.21	30	05/30/2019	
Acrylonitrile	46.9	5.0	ug/L	50.00	ND	93.8	70-130	3.94	30	05/30/2019	
Benzene	47.0	1.0	ug/L	50.00	ND	94.0	70-130	8.42	30	05/30/2019	
Bromochloromethane	48.4	1.0	ug/L	50.00	ND	96.9	70-130	5.49	30	05/30/2019	
Bromodichloromethane	47.5	1.0	ug/L	50.00	ND	95.1	70-130	5.25	30	05/30/2019	
Bromoform	51.3	1.0	ug/L	50.00	ND	103	70-130	0.420	30	05/30/2019	
Bromomethane	52.1	5.0	ug/L	50.00	ND	104	70-130	5.34	30	05/30/2019	
Carbon disulfide	57.5	1.0	ug/L	50.00	ND	115	70-130	7.43	30	05/30/2019	
Carbon tetrachloride	49.2	1.0	ug/L	50.00	ND	98.4	70-130	10.8	30	05/30/2019	
Chlorobenzene	48.1	1.0	ug/L	50.00	ND	96.3	70-130	4.10	30	05/30/2019	
Chloroethane	51.6	5.0	ug/L	50.00	ND	103	70-130	7.08	30	05/30/2019	
Chloroform	48.3	1.0	ug/L	50.00	ND	96.6	70-130	4.26	30	05/30/2019	
Chloromethane	54.9	5.0	ug/L	50.00	ND	110	70-130	6.44	30	05/30/2019	
cis-1,2-Dichloroethylene	49.9	1.0	ug/L	50.00	ND	99.8	70-130	3.47	30	05/30/2019	
cis-1,3-Dichloropropylene	47.7	1.0	ug/L	50.00	ND	95.5	70-130	3.04	30	05/30/2019	
Cyclohexane	51.7	5.0	ug/L	50.00	ND	103	70-130	11.0	30	05/30/2019	
Dibromochloromethane	51.2	1.0	ug/L	50.00	ND	102	70-130	1.74	30	05/30/2019	
Dibromomethane	48.1	1.0	ug/L	50.00	ND	96.3	70-130	3.60	30	05/30/2019	
Dichlorodifluoromethane	56.3	5.0	ug/L	50.00	ND	113	70-130	7.87	30	05/30/2019	
Diethyl ether	48.8	5.0	ug/L	50.00	ND	97.6	70-130	2.26	30	05/30/2019	
Diisopropyl Ether	49.8	5.0	ug/L	50.00	ND	99.7	70-130	1.29	30	05/30/2019	
Ethylbenzene	48.2	1.0	ug/L	50.00	ND	96.5	70-130	5.14	30	05/30/2019	
Ethyltertiarybutylether	45.4	5.0	ug/L	50.00	ND	90.8	70-130	0.870	30	05/30/2019	
Hexachloroethane	49.6	5.0	ug/L	50.00	ND	99.2	70-130	5.80	30	05/30/2019	
Hexane	45.5	1.0	ug/L	50.00	ND	91.0	70-130	16.8	30	05/30/2019	
Isopropylbenzene	49.3	1.0	ug/L	50.00	ND	98.5	70-130	4.99	30	05/30/2019	
m & p - Xylene	96.9	2.0	ug/L	100.0	ND	96.9	70-130	6.25	30	05/30/2019	
Methylene chloride	48.2	5.0	ug/L	50.00	ND	96.5	70-130	5.58	30	05/30/2019	
Methyltertiarybutylether	48.7	1.0	ug/L	50.00	ND	97.4	70-130	0.305	30	05/30/2019	
Naphthalene	47.3	5.0	ug/L	50.00	ND	94.6	70-130	0.189	30	05/30/2019	X
n-Butylbenzene	51.0	1.0	ug/L	50.00	ND	102	70-130	7.24	30	05/30/2019	
n-Propylbenzene	50.5	1.0	ug/L	50.00	ND	101	70-130	5.72	30	05/30/2019	
o-Xylene	48.0	1.0	ug/L	50.00	ND	96.0	70-130	3.86	30	05/30/2019	
sec-Butylbenzene	54.5	1.0	ug/L	50.00	ND	109	70-130	5.66	30	05/30/2019	
Styrene	49.1	1.0	ug/L	50.00	ND	98.3	70-130	4.79	30	05/30/2019	
tert-Butylbenzene	49.6	1.0	ug/L	50.00	ND	99.2	70-130	5.35	30	05/30/2019	
tertiary Butyl Alcohol	232	50	ug/L	250.0	ND	92.7	70-130	0.863	30	05/30/2019	
tertiaryAmylmethylether	46.8	5.0	ug/L	50.00	ND	93.6	70-130	1.82	30	05/30/2019	
Tetrachloroethylene	47.9	1.0	ug/L	50.00	ND	95.9	70-130	8.34	30	05/30/2019	
Tetrahydrofuran	49.7	5.0	ug/L	50.00	ND	99.4	70-130	5.86	30	05/30/2019	
Toluene	48.5	1.0	ug/L	50.00	ND	97.0	70-130	5.93	30	05/30/2019	

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9E3008 - Method: 5030				**Prepared: 05/30/2019**							
Matrix Spike Dup (B9E3008-MSD1)	**Source: 1905284-11**										
trans-1,2-Dichloroethylene	47.2	1.0	ug/L	50.00	ND	94.4	70-130	8.23	30	05/30/2019	
trans-1,3-Dichloropropylene	46.2	1.0	ug/L	50.00	ND	92.4	70-130	3.95	30	05/30/2019	
Trichloroethylene	45.6	1.0	ug/L	50.00	ND	91.2	70-130	7.22	30	05/30/2019	
Trichlorofluoromethane	53.0	1.0	ug/L	50.00	ND	106	70-130	7.87	30	05/30/2019	
Vinyl chloride	52.2	1.0	ug/L	50.00	ND	104	70-130	7.75	30	05/30/2019	
Surrogate: Bromofluorobenzene	*50.8*		ug/L	*50.00*		*102*	*85-115*			05/30/2019	
Surrogate: Dibromofluoromethane	*50.7*		ug/L	*50.00*		*101*	*82.7-115*			05/30/2019	
Surrogate: Toluene-d8	*49.7*		ug/L	*50.00*		*99.4*	*85-115*			05/30/2019	

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Organics-Dioxane - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9F0506 - Method: 5030				**Prepared: 06/04/2019**							
Blank (B9F0506-BLK1)											
1,4-dioxane	ND	1.0	ug/L							06/04/2019	
LCS (B9F0506-BS1)											
1,4-dioxane	8.19	1.0	ug/L	10.00		81.9	70-130			06/04/2019	
Matrix Spike (B9F0506-MS1)	**Source: 1905292-03**										
1,4-dioxane	9.43	1.0	ug/L	10.00	ND	94.3	70-130			06/04/2019	
Matrix Spike Dup (B9F0506-MSD1)	**Source: 1905292-03**										
1,4-dioxane	9.77	1.0	ug/L	10.00	ND	97.7	70-130	3.54	30	06/04/2019	

Michigan Department of Environmental Quality
Laboratory Services Section

Analysis Request Sheet

Lab Work Order Number	Project Name	Matrix
1905273 (92)	Gelman Sciences	WATER

Site Code/Project Number	AY	CC Email 1	Project TAT Days	Sample Collector
81000018/Location 6130	19	lundk@michigan.gov		Dan Hamel
Dept-Division-District	**Index**	**CC Email 2**	**Project Due Date**	**Sample Collector Phone**
DEQ-RRD-Jackson				517-754-6595
State Project Manager	**PCA**	**CC Email 3**		**Contract Firm**
Dan Hamel				
State Project Manager Email	**Project**	**Overflow Lab Choice 1**	**Accept Analysis hold time codes**	**Contract Firm Primary Contact**
hameld@michigan.gov	Location-6130			
State Project Manager Phone	**Phase**	**Overflow Lab Choice 2**		**Primary Contact Phone**
517-745-6595				

	Lab Use Only	Field Sample Identification	Collection Date	Collection Time	Container Count	Comments
1	01	Allen Creek/West Park SW	5/28/19	0945	5	Please include QA/QC with Lab Data Report(s)
2	02	Allen Creek/Chapin-West Park	5/28/19	0929	3	↓ ↓
3	03	Allen Creek/Maple Ridge-Arborview	5/28/19	0956	5	↓ ↓
4	—	Allen Creek/Wildwood-Arborview	5/28/19		5	NO WATER = NO SAMPLE
5	04	Allen Creek/Murray-Washington	5/28/19	1028	3	↓ ↓
6	05	Allen Creek/Eighth-Waterworks	5/28/19	1030	5	↓ ↓
7	06	Allen Creek-Maryfield-Wildwood Park	5/28/19	1015	3	↓ ↓
8						
9						
10						

ORGANIC 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
METH - Methane, Ethane, Ethene	
Methane, Ethane, Ethene	1 2 3 4 5 6 7 8 9 10
ON - 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
Chlordane	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
Benzidines	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
Acids 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

METALS CHEMISTRY PACKAGES

OpMemo2 - Total	1 2 3 4 5 6 7 8 9 10
OpMemo2 - Dissolved	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
Michigan10 - Dissolved	1 2 3 4 5 6 7 8 9 10
(As,Ba,Cd,Cr,Cu,Pb,Hg,Se,Ag,Zn)	

MAD - DISSOLVED METALS

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

MA - TOTAL METALS

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

GENERAL CHEMISTRY

GB	Total Cyanide - CN	1 2 3 4 5 6 7 8 9 10
GB	Amenable 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
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	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 (Includes Total Alkalinity)	1 2 3 4 5 6 7 8 9 10
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 - SO4	1 2 3 4 5 6 7 8 9 10
MN	Chromium 6 - Cr+6	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 (FF) (Field - Filtered & Preserved)	1 2 3 4 5 6 7 8 9 10
GN	Diss Org Carbon - DOC (LF) (Lab - Filtered & Preserved)	1 2 3 4 5 6 7 8 9 10
GA	Total Org Carbon - TOC	1 2 3 4 5 6 7 8 9 10
GA	Ammonia - NH3	1 2 3 4 5 6 7 8 9 10
GA	Nitrate+Nitrite - NO3+NO2	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.	Dan Hamel EGLE-RRD	Melissa Smith	
Signature:	Dan Hamel		5/29/19 1650
Print Name & Org.			
Signature:			
Print Name & Org.			
Signature:			

SAFETY INFORMATION

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

03 July 2019

Work Order: 1906161

Price: $1,210.00

Dan Hamel
MDEQ-RRD-JACKSON
301 E. Louis Glick Highway
Jackson, MI 49201-1556

RE: GELMAN SCIENCES, INC

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
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

MDEQ-RRD-JACKSON
301 E. Louis Glick Highway
Jackson MI, 49201-1556

Project: GELMAN SCIENCES, INC
Site Code: 81000018
Project Manager: Dan Hamel

Reported:
07/03/2019

Analytical Report for Samples

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Qualifier
Allen Creek/West Park SW	1906161-01	Water	06/18/2019	06/18/2019	
Allen Creek/Chapin-West Park	1906161-02	Water	06/18/2019	06/18/2019	
Allen Creek/Maple Ridge-Arborview	1906161-03	Water	06/18/2019	06/18/2019	
Allen Creek/Murray Washington	1906161-04	Water	06/18/2019	06/18/2019	
Allen Creek/Eighth-Waterworks	1906161-05	Water	06/18/2019	06/18/2019	
Allen Creek-Maryfield-Wildwood Park	1906161-06	Water	06/18/2019	06/18/2019	

Notes and Definitions

Y28	1,4-dioxane analysis is performed using selective ion monitoring (SIM). Results reported below 5 ug/L (aqueous) or 1000 ug/Kg (solids) are estimated.
X	Methods 8260 & 624 are used to analyze volatile organics that have boiling points below 200 ºC. 2-Methylnaphthalene & naphthalene have boiling points above 200 ºC and are better suited to analysis by methods 8270 & 625 as semivolatile organics.
ND	Indicates compound analyzed for but not detected at or above the reporting limit (RL).
RL	Reporting Limit
NA	Not Applicable

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Client ID: Allen Creek/West Park SW

Lab ID: 1906161-01

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	06/19/19	B9F1906	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	06/19/19	B9F1906	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
540-84-1	2,2,4-Trimethylpentane	ND	5.0	ug/L	1	06/19/19	B9F1906	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	06/19/19	B9F1906	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	06/19/19	B9F1906	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	06/19/19	B9F1906	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	06/19/19	B9F1906	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	06/19/19	B9F1906	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	06/19/19	B9F1906	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	06/19/19	B9F1906	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	06/19/19	B9F1906	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	06/19/19	B9F1906	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
74-95-3	Dibromomethane	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	

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Lab ID: 1906161-01

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	06/19/19	B9F1906	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	06/19/19	B9F1906	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	06/19/19	B9F1906	8260	
100-41-4	**Ethylbenzene**	**1.0**	1.0	ug/L	1	06/19/19	B9F1906	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	06/19/19	B9F1906	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	06/19/19	B9F1906	8260	
110-54-3	Hexane	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	06/19/19	B9F1906	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	06/19/19	B9F1906	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	06/19/19	B9F1906	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	06/19/19	B9F1906	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	06/19/19	B9F1906	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	06/19/19	B9F1906	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
Surrogate: Bromofluorobenzene			*99.2 %*	*85-115*		*06/19/19*	B9F1906	*8260*	
Surrogate: Dibromofluoromethane			*98.1 %*	*82.7-115*		*06/19/19*	B9F1906	*8260*	
Surrogate: Toluene-d8			*97.3 %*	*85-115*		*06/19/19*	B9F1906	*8260*	

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Lab ID: 1906161-01

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Dioxane									
123-91-1	**1,4-dioxane**	**15**	1.0	ug/L	1	06/19/19	B9F2009	8260 Modified	

Lab Work Order # 1906161

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Client ID: Allen Creek/Chapin-West Park

Lab ID: 1906161-02

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	06/19/19	B9F1906	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	06/19/19	B9F1906	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
540-84-1	2,2,4-Trimethylpentane	ND	5.0	ug/L	1	06/19/19	B9F1906	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	06/19/19	B9F1906	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	06/19/19	B9F1906	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	06/19/19	B9F1906	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	06/19/19	B9F1906	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	06/19/19	B9F1906	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	06/19/19	B9F1906	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	06/19/19	B9F1906	8260	
67-66-3	**Chloroform**	**2.6**	1.0	ug/L	1	06/19/19	B9F1906	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	06/19/19	B9F1906	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	06/19/19	B9F1906	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
74-95-3	Dibromomethane	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	

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Client ID: Allen Creek/Chapin-West Park

Lab ID: 1906161-02

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	06/19/19	B9F1906	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	06/19/19	B9F1906	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	06/19/19	B9F1906	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	06/19/19	B9F1906	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	06/19/19	B9F1906	8260	
110-54-3	Hexane	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	06/19/19	B9F1906	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	06/19/19	B9F1906	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	06/19/19	B9F1906	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	06/19/19	B9F1906	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	06/19/19	B9F1906	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	06/19/19	B9F1906	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
Surrogate: Bromofluorobenzene			*100 %*	*85-115*		*06/19/19*	B9F1906	*8260*	
Surrogate: Dibromofluoromethane			*99.0 %*	*82.7-115*		*06/19/19*	B9F1906	*8260*	
Surrogate: Toluene-d8			*97.5 %*	*85-115*		*06/19/19*	B9F1906	*8260*	

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Lab ID: 1906161-02

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Dioxane									
123-91-1	**1,4-dioxane**	**6.5**	1.0	ug/L	1	06/19/19	B9F2009	8260 Modified	

Lab Work Order # 1906161

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Client ID: Allen Creek/Maple Ridge-Arborview

Lab ID: 1906161-03

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	06/19/19	B9F1906	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	06/19/19	B9F1906	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
540-84-1	2,2,4-Trimethylpentane	ND	5.0	ug/L	1	06/19/19	B9F1906	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	06/19/19	B9F1906	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	06/19/19	B9F1906	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	06/19/19	B9F1906	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	06/19/19	B9F1906	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	06/19/19	B9F1906	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
75-27-4	**Bromodichloromethane**	**3.7**	1.0	ug/L	1	06/19/19	B9F1906	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	06/19/19	B9F1906	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	06/19/19	B9F1906	8260	
67-66-3	**Chloroform**	**17**	1.0	ug/L	1	06/19/19	B9F1906	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	06/19/19	B9F1906	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	06/19/19	B9F1906	8260	
124-48-1	**Dibromochloromethane**	**1.1**	1.0	ug/L	1	06/19/19	B9F1906	8260	
74-95-3	Dibromomethane	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	

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: Allen Creek/Maple Ridge-Arborview

Lab ID: 1906161-03

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	06/19/19	B9F1906	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	06/19/19	B9F1906	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	06/19/19	B9F1906	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	06/19/19	B9F1906	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	06/19/19	B9F1906	8260	
110-54-3	Hexane	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	06/19/19	B9F1906	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	06/19/19	B9F1906	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	06/19/19	B9F1906	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	06/19/19	B9F1906	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	06/19/19	B9F1906	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	06/19/19	B9F1906	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	06/19/19	B9F1906	8260	
Surrogate: Bromofluorobenzene			*98.1 %*	*85-115*		*06/19/19*	B9F1906	*8260*	
Surrogate: Dibromofluoromethane			*100 %*	*82.7-115*		*06/19/19*	B9F1906	*8260*	
Surrogate: Toluene-d8			*97.6 %*	*85-115*		*06/19/19*	B9F1906	*8260*	

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: Allen Creek/Murray Washington

Lab ID: 1906161-04

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	06/20/19	B9F1908	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	06/20/19	B9F1908	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
540-84-1	2,2,4-Trimethylpentane	ND	5.0	ug/L	1	06/20/19	B9F1908	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	06/20/19	B9F1908	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	06/20/19	B9F1908	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	06/20/19	B9F1908	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	06/20/19	B9F1908	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	06/20/19	B9F1908	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	06/20/19	B9F1908	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	06/20/19	B9F1908	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	06/20/19	B9F1908	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	06/20/19	B9F1908	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
74-95-3	Dibromomethane	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	

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: Allen Creek/Murray Washington

Lab ID: 1906161-04

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	06/20/19	B9F1908	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	06/20/19	B9F1908	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	06/20/19	B9F1908	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	06/20/19	B9F1908	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	06/20/19	B9F1908	8260	
110-54-3	Hexane	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	06/20/19	B9F1908	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	06/20/19	B9F1908	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	06/20/19	B9F1908	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	06/20/19	B9F1908	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	06/20/19	B9F1908	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	06/20/19	B9F1908	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
Surrogate: Bromofluorobenzene			*101 %*	*85-115*		*06/20/19*	B9F1908	*8260*	
Surrogate: Dibromofluoromethane			*99.6 %*	*82.7-115*		*06/20/19*	B9F1908	*8260*	
Surrogate: Toluene-d8			*97.8 %*	*85-115*		*06/20/19*	B9F1908	*8260*	

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: Allen Creek/Murray Washington

Lab ID: 1906161-04

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Dioxane									
123-91-1	1,4-dioxane	ND	1.0	ug/L	1	06/19/19	B9F2009	8260 Modified	Y28

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: Allen Creek/Eighth-Waterworks

Lab ID: 1906161-05

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	06/20/19	B9F1908	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	06/20/19	B9F1908	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
540-84-1	2,2,4-Trimethylpentane	ND	5.0	ug/L	1	06/20/19	B9F1908	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	06/20/19	B9F1908	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	06/20/19	B9F1908	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	06/20/19	B9F1908	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	06/20/19	B9F1908	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	06/20/19	B9F1908	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	06/20/19	B9F1908	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	06/20/19	B9F1908	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	06/20/19	B9F1908	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	06/20/19	B9F1908	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
74-95-3	Dibromomethane	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	

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: Allen Creek/Eighth-Waterworks

Lab ID: 1906161-05

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	06/20/19	B9F1908	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	06/20/19	B9F1908	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	06/20/19	B9F1908	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	06/20/19	B9F1908	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	06/20/19	B9F1908	8260	
110-54-3	Hexane	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	06/20/19	B9F1908	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	06/20/19	B9F1908	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	06/20/19	B9F1908	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	06/20/19	B9F1908	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	06/20/19	B9F1908	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	06/20/19	B9F1908	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
Surrogate: Bromofluorobenzene			*100 %*	*85-115*		*06/20/19*	B9F1908	*8260*	
Surrogate: Dibromofluoromethane			*96.8 %*	*82.7-115*		*06/20/19*	B9F1908	*8260*	
Surrogate: Toluene-d8			*97.8 %*	*85-115*		*06/20/19*	B9F1908	*8260*	

MICHIGAN DEPARTMENT OF
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Lansing, MI 48909
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FAX: (517) 335-9600

Client ID: Allen Creek/Eighth-Waterworks

Lab ID: 1906161-05

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Dioxane									
123-91-1	**1,4-dioxane**	**1.0**	1.0	ug/L	1	06/19/19	B9F2009	8260 Modified	Y28

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Client ID: Allen Creek-Maryfield-Wildwood Park

Lab ID: 1906161-06

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	06/20/19	B9F1908	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	06/20/19	B9F1908	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
540-84-1	2,2,4-Trimethylpentane	ND	5.0	ug/L	1	06/20/19	B9F1908	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	06/20/19	B9F1908	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	06/20/19	B9F1908	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	06/20/19	B9F1908	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	06/20/19	B9F1908	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	06/20/19	B9F1908	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	06/20/19	B9F1908	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	06/20/19	B9F1908	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	06/20/19	B9F1908	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	06/20/19	B9F1908	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
74-95-3	Dibromomethane	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	

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P.O. Box 30270
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TEL: (517) 335-9800
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Client ID: Allen Creek-Maryfield-Wildwood Park

Lab ID: 1906161-06

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	06/20/19	B9F1908	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	06/20/19	B9F1908	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	06/20/19	B9F1908	8260	
100-41-4	**Ethylbenzene**	**21**	1.0	ug/L	1	06/20/19	B9F1908	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	06/20/19	B9F1908	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	06/20/19	B9F1908	8260	
110-54-3	Hexane	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	06/20/19	B9F1908	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	06/20/19	B9F1908	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	06/20/19	B9F1908	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
100-42-5	**Styrene**	**14**	1.0	ug/L	1	06/20/19	B9F1908	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	06/20/19	B9F1908	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	06/20/19	B9F1908	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	06/20/19	B9F1908	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	06/20/19	B9F1908	8260	
Surrogate: Bromofluorobenzene			*103 %*	*85-115*		*06/20/19*	B9F1908	*8260*	
Surrogate: Dibromofluoromethane			*98.9 %*	*82.7-115*		*06/20/19*	B9F1908	*8260*	
Surrogate: Toluene-d8			*97.7 %*	*85-115*		*06/20/19*	B9F1908	*8260*	

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P.O. Box 30270
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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9F1906 - Method: 5030				**Prepared: 06/19/2019**							
Blank (B9F1906-BLK1)											
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L							06/19/2019	
1,1,1-Trichloroethane	ND	1.0	ug/L							06/19/2019	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L							06/19/2019	
1,1,2-Trichloroethane	ND	1.0	ug/L							06/19/2019	
1,1-Dichloroethane	ND	1.0	ug/L							06/19/2019	
1,1-Dichloroethylene	ND	1.0	ug/L							06/19/2019	
1,2,3-Trichlorobenzene	ND	5.0	ug/L							06/19/2019	
1,2,3-Trichloropropane	ND	1.0	ug/L							06/19/2019	
1,2,3-Trimethylbenzene	ND	1.0	ug/L							06/19/2019	
1,2,4-Trichlorobenzene	ND	5.0	ug/L							06/19/2019	
1,2,4-Trimethylbenzene	ND	1.0	ug/L							06/19/2019	
1,2-Dibromoethane	ND	1.0	ug/L							06/19/2019	
1,2-Dichlorobenzene	ND	1.0	ug/L							06/19/2019	
1,2-Dichloroethane	ND	1.0	ug/L							06/19/2019	
1,2-Dichloropropane	ND	1.0	ug/L							06/19/2019	
1,3,5-Trimethylbenzene	ND	1.0	ug/L							06/19/2019	
1,3-Dichlorobenzene	ND	1.0	ug/L							06/19/2019	
1,4-Dichlorobenzene	ND	1.0	ug/L							06/19/2019	
2,2,4-Trimethylpentane	ND	5.0	ug/L							06/19/2019	
2-Butanone (MEK)	ND	5.0	ug/L							06/19/2019	
2-Methylnaphthalene	ND	5.0	ug/L							06/19/2019	X
2-Propanone (acetone)	ND	20	ug/L							06/19/2019	
4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L							06/19/2019	
Acrylonitrile	ND	5.0	ug/L							06/19/2019	
Benzene	ND	1.0	ug/L							06/19/2019	
Bromochloromethane	ND	1.0	ug/L							06/19/2019	
Bromodichloromethane	ND	1.0	ug/L							06/19/2019	
Bromoform	ND	1.0	ug/L							06/19/2019	
Bromomethane	ND	5.0	ug/L							06/19/2019	
Carbon disulfide	ND	1.0	ug/L							06/19/2019	
Carbon tetrachloride	ND	1.0	ug/L							06/19/2019	
Chlorobenzene	ND	1.0	ug/L							06/19/2019	
Chloroethane	ND	5.0	ug/L							06/19/2019	
Chloroform	ND	1.0	ug/L							06/19/2019	
Chloromethane	ND	5.0	ug/L							06/19/2019	
cis-1,2-Dichloroethylene	ND	1.0	ug/L							06/19/2019	
cis-1,3-Dichloropropylene	ND	1.0	ug/L							06/19/2019	
Cyclohexane	ND	5.0	ug/L							06/19/2019	
Dibromochloromethane	ND	1.0	ug/L							06/19/2019	
Dibromomethane	ND	1.0	ug/L							06/19/2019	
Dichlorodifluoromethane	ND	5.0	ug/L							06/19/2019	
Diethyl ether	ND	5.0	ug/L							06/19/2019	
Diisopropyl Ether	ND	5.0	ug/L							06/19/2019	
Ethylbenzene	ND	1.0	ug/L							06/19/2019	
Ethyltertiarybutylether	ND	5.0	ug/L							06/19/2019	
Hexachloroethane	ND	5.0	ug/L							06/19/2019	
Hexane	ND	1.0	ug/L							06/19/2019	

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9F1906 - Method: 5030				**Prepared: 06/19/2019**							
Blank (B9F1906-BLK1)											
Isopropylbenzene	ND	1.0	ug/L							06/19/2019	
m & p - Xylene	ND	2.0	ug/L							06/19/2019	
Methylene chloride	ND	5.0	ug/L							06/19/2019	
Methyltertiarybutylether	ND	1.0	ug/L							06/19/2019	
Naphthalene	ND	5.0	ug/L							06/19/2019	X
n-Butylbenzene	ND	1.0	ug/L							06/19/2019	
n-Propylbenzene	ND	1.0	ug/L							06/19/2019	
o-Xylene	ND	1.0	ug/L							06/19/2019	
sec-Butylbenzene	ND	1.0	ug/L							06/19/2019	
Styrene	ND	1.0	ug/L							06/19/2019	
tert-Butylbenzene	ND	1.0	ug/L							06/19/2019	
tertiary Butyl Alcohol	ND	50	ug/L							06/19/2019	
tertiaryAmylmethylether	ND	5.0	ug/L							06/19/2019	
Tetrachloroethylene	ND	1.0	ug/L							06/19/2019	
Tetrahydrofuran	ND	5.0	ug/L							06/19/2019	
Toluene	ND	1.0	ug/L							06/19/2019	
trans-1,2-Dichloroethylene	ND	1.0	ug/L							06/19/2019	
trans-1,3-Dichloropropylene	ND	1.0	ug/L							06/19/2019	
Trichloroethylene	ND	1.0	ug/L							06/19/2019	
Trichlorofluoromethane	ND	1.0	ug/L							06/19/2019	
Vinyl chloride	ND	1.0	ug/L							06/19/2019	
Surrogate: Bromofluorobenzene	*50.4*		ug/L	*50.00*		*101*	*85-115*			06/19/2019	
Surrogate: Dibromofluoromethane	*47.9*		ug/L	*50.00*		*95.8*	*82.7-115*			06/19/2019	
Surrogate: Toluene-d8	*48.8*		ug/L	*50.00*		*97.7*	*85-115*			06/19/2019	
LCS (B9F1906-BS1)											
1,1,1,2-Tetrachloroethane	50.4	1.0	ug/L	50.00		101	70-130			06/19/2019	
1,1,1-Trichloroethane	47.3	1.0	ug/L	50.00		94.7	70-130			06/19/2019	
1,1,2,2-Tetrachloroethane	49.7	1.0	ug/L	50.00		99.4	70-130			06/19/2019	
1,1,2-Trichloroethane	49.4	1.0	ug/L	50.00		98.8	70-130			06/19/2019	
1,1-Dichloroethane	47.8	1.0	ug/L	50.00		95.7	70-130			06/19/2019	
1,1-Dichloroethylene	45.3	1.0	ug/L	50.00		90.6	70-130			06/19/2019	
1,2,3-Trichlorobenzene	52.9	5.0	ug/L	50.00		106	70-130			06/19/2019	
1,2,3-Trichloropropane	49.7	1.0	ug/L	50.00		99.5	70-130			06/19/2019	
1,2,3-Trimethylbenzene	50.3	1.0	ug/L	50.00		101	70-130			06/19/2019	
1,2,4-Trichlorobenzene	51.3	5.0	ug/L	50.00		103	70-130			06/19/2019	
1,2,4-Trimethylbenzene	50.3	1.0	ug/L	50.00		101	70-130			06/19/2019	
1,2-Dibromoethane	51.4	1.0	ug/L	50.00		103	70-130			06/19/2019	
1,2-Dichlorobenzene	50.4	1.0	ug/L	50.00		101	70-130			06/19/2019	
1,2-Dichloroethane	50.5	1.0	ug/L	50.00		101	70-130			06/19/2019	
1,2-Dichloropropane	49.3	1.0	ug/L	50.00		98.6	70-130			06/19/2019	
1,3,5-Trimethylbenzene	50.4	1.0	ug/L	50.00		101	70-130			06/19/2019	
1,3-Dichlorobenzene	50.6	1.0	ug/L	50.00		101	70-130			06/19/2019	
1,4-Dichlorobenzene	49.5	1.0	ug/L	50.00		99.0	70-130			06/19/2019	
2,2,4-Trimethylpentane	44.6	5.0	ug/L	50.00		89.2	70-130			06/19/2019	
2-Butanone (MEK)	51.7	5.0	ug/L	50.00		103	70-130			06/19/2019	
2-Methylnaphthalene	48.6	5.0	ug/L	50.00		97.1	70-130			06/19/2019	X

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9F1906 - Method: 5030				**Prepared: 06/19/2019**							
LCS (B9F1906-BS1)											
2-Propanone (acetone)	49.4	20	ug/L	50.00		98.8	70-130			06/19/2019	
4-Methyl-2-pentanone (MIBK)	49.8	5.0	ug/L	50.00		99.6	70-130			06/19/2019	
Acrylonitrile	46.8	5.0	ug/L	50.00		93.6	70-130			06/19/2019	
Benzene	49.4	1.0	ug/L	50.00		98.7	70-130			06/19/2019	
Bromochloromethane	51.9	1.0	ug/L	50.00		104	70-130			06/19/2019	
Bromodichloromethane	48.8	1.0	ug/L	50.00		97.6	70-130			06/19/2019	
Bromoform	47.6	1.0	ug/L	50.00		95.1	70-130			06/19/2019	
Bromomethane	60.5	5.0	ug/L	50.00		121	70-130			06/19/2019	
Carbon disulfide	43.9	1.0	ug/L	50.00		87.9	70-130			06/19/2019	
Carbon tetrachloride	49.7	1.0	ug/L	50.00		99.4	70-130			06/19/2019	
Chlorobenzene	50.1	1.0	ug/L	50.00		100	70-130			06/19/2019	
Chloroethane	48.7	5.0	ug/L	50.00		97.5	70-130			06/19/2019	
Chloroform	48.3	1.0	ug/L	50.00		96.6	70-130			06/19/2019	
Chloromethane	51.6	5.0	ug/L	50.00		103	70-130			06/19/2019	
cis-1,2-Dichloroethylene	48.3	1.0	ug/L	50.00		96.7	70-130			06/19/2019	
cis-1,3-Dichloropropylene	50.6	1.0	ug/L	50.00		101	70-130			06/19/2019	
Cyclohexane	52.7	5.0	ug/L	50.00		105	70-130			06/19/2019	
Dibromochloromethane	49.8	1.0	ug/L	50.00		99.6	70-130			06/19/2019	
Dibromomethane	51.0	1.0	ug/L	50.00		102	70-130			06/19/2019	
Dichlorodifluoromethane	55.3	5.0	ug/L	50.00		111	70-130			06/19/2019	
Diethyl ether	48.0	5.0	ug/L	50.00		95.9	70-130			06/19/2019	
Diisopropyl Ether	48.5	5.0	ug/L	50.00		97.1	70-130			06/19/2019	
Ethylbenzene	49.6	1.0	ug/L	50.00		99.1	70-130			06/19/2019	
Ethyltertiarybutylether	47.7	5.0	ug/L	50.00		95.4	70-130			06/19/2019	
Hexachloroethane	45.4	5.0	ug/L	50.00		90.8	70-130			06/19/2019	
Hexane	48.0	1.0	ug/L	50.00		96.0	70-130			06/19/2019	
Isopropylbenzene	49.8	1.0	ug/L	50.00		99.7	70-130			06/19/2019	
m & p - Xylene	101	2.0	ug/L	100.0		101	70-130			06/19/2019	
Methylene chloride	47.3	5.0	ug/L	50.00		94.7	70-130			06/19/2019	
Methyltertiarybutylether	51.6	1.0	ug/L	50.00		103	70-130			06/19/2019	
Naphthalene	53.4	5.0	ug/L	50.00		107	70-130			06/19/2019	X
n-Butylbenzene	50.7	1.0	ug/L	50.00		101	70-130			06/19/2019	
n-Propylbenzene	49.5	1.0	ug/L	50.00		99.1	70-130			06/19/2019	
o-Xylene	50.3	1.0	ug/L	50.00		101	70-130			06/19/2019	
sec-Butylbenzene	54.9	1.0	ug/L	50.00		110	70-130			06/19/2019	
Styrene	52.4	1.0	ug/L	50.00		105	70-130			06/19/2019	
tert-Butylbenzene	50.8	1.0	ug/L	50.00		102	70-130			06/19/2019	
tertiary Butyl Alcohol	246	50	ug/L	250.0		98.3	70-130			06/19/2019	
tertiaryAmylmethylether	50.4	5.0	ug/L	50.00		101	70-130			06/19/2019	
Tetrachloroethylene	48.8	1.0	ug/L	50.00		97.6	70-130			06/19/2019	
Tetrahydrofuran	49.4	5.0	ug/L	50.00		98.8	70-130			06/19/2019	
Toluene	48.8	1.0	ug/L	50.00		97.6	70-130			06/19/2019	
trans-1,2-Dichloroethylene	46.4	1.0	ug/L	50.00		92.8	70-130			06/19/2019	
trans-1,3-Dichloropropylene	47.2	1.0	ug/L	50.00		94.4	70-130			06/19/2019	
Trichloroethylene	49.2	1.0	ug/L	50.00		98.4	70-130			06/19/2019	
Trichlorofluoromethane	49.6	1.0	ug/L	50.00		99.2	70-130			06/19/2019	
Vinyl chloride	50.1	1.0	ug/L	50.00		100	70-130			06/19/2019	

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9F1906 - Method: 5030				**Prepared: 06/19/2019**							
LCS (B9F1906-BS1)											
Surrogate: Bromofluorobenzene	*49.2*		ug/L	*50.00*		*98.4*	*85-115*			06/19/2019	
Surrogate: Dibromofluoromethane	*49.2*		ug/L	*50.00*		*98.4*	*82.7-115*			06/19/2019	
Surrogate: Toluene-d8	*49.7*		ug/L	*50.00*		*99.3*	*85-115*			06/19/2019	
Matrix Spike (B9F1906-MS1)	**Source: 1906161-01**										
1,1,1,2-Tetrachloroethane	52.8	1.0	ug/L	50.00	ND	106	70-130			06/19/2019	
1,1,1-Trichloroethane	52.7	1.0	ug/L	50.00	ND	105	70-130			06/19/2019	
1,1,2,2-Tetrachloroethane	51.2	1.0	ug/L	50.00	ND	102	70-130			06/19/2019	
1,1,2-Trichloroethane	50.1	1.0	ug/L	50.00	ND	100	70-130			06/19/2019	
1,1-Dichloroethane	51.2	1.0	ug/L	50.00	ND	102	70-130			06/19/2019	
1,1-Dichloroethylene	51.4	1.0	ug/L	50.00	ND	103	70-130			06/19/2019	
1,2,3-Trichlorobenzene	53.1	5.0	ug/L	50.00	ND	106	70-130			06/19/2019	
1,2,3-Trichloropropane	51.2	1.0	ug/L	50.00	ND	102	70-130			06/19/2019	
1,2,3-Trimethylbenzene	53.3	1.0	ug/L	50.00	ND	107	70-130			06/19/2019	
1,2,4-Trichlorobenzene	53.1	5.0	ug/L	50.00	ND	106	70-130			06/19/2019	
1,2,4-Trimethylbenzene	54.0	1.0	ug/L	50.00	ND	108	70-130			06/19/2019	
1,2-Dibromoethane	51.2	1.0	ug/L	50.00	ND	102	70-130			06/19/2019	
1,2-Dichlorobenzene	52.8	1.0	ug/L	50.00	ND	106	70-130			06/19/2019	
1,2-Dichloroethane	52.6	1.0	ug/L	50.00	ND	105	70-130			06/19/2019	
1,2-Dichloropropane	51.7	1.0	ug/L	50.00	ND	103	70-130			06/19/2019	
1,3,5-Trimethylbenzene	54.6	1.0	ug/L	50.00	ND	109	70-130			06/19/2019	
1,3-Dichlorobenzene	53.4	1.0	ug/L	50.00	ND	107	70-130			06/19/2019	
1,4-Dichlorobenzene	51.6	1.0	ug/L	50.00	ND	103	70-130			06/19/2019	
2,2,4-Trimethylpentane	53.3	5.0	ug/L	50.00	ND	107	70-130			06/19/2019	
2-Butanone (MEK)	54.7	5.0	ug/L	50.00	ND	109	70-130			06/19/2019	
2-Methylnaphthalene	48.5	5.0	ug/L	50.00	ND	97.1	70-130			06/19/2019	X
2-Propanone (acetone)	52.4	20	ug/L	50.00	ND	105	70-130			06/19/2019	
4-Methyl-2-pentanone (MIBK)	50.4	5.0	ug/L	50.00	ND	101	70-130			06/19/2019	
Acrylonitrile	46.2	5.0	ug/L	50.00	ND	92.3	70-130			06/19/2019	
Benzene	52.2	1.0	ug/L	50.00	ND	104	70-130			06/19/2019	
Bromochloromethane	52.7	1.0	ug/L	50.00	ND	105	70-130			06/19/2019	
Bromodichloromethane	50.8	1.0	ug/L	50.00	ND	102	70-130			06/19/2019	
Bromoform	47.9	1.0	ug/L	50.00	ND	95.7	70-130			06/19/2019	
Bromomethane	43.3	5.0	ug/L	50.00	ND	86.6	70-130			06/19/2019	
Carbon disulfide	48.4	1.0	ug/L	50.00	ND	96.8	70-130			06/19/2019	
Carbon tetrachloride	55.1	1.0	ug/L	50.00	ND	110	70-130			06/19/2019	
Chlorobenzene	53.4	1.0	ug/L	50.00	ND	107	70-130			06/19/2019	
Chloroethane	53.8	5.0	ug/L	50.00	ND	108	70-130			06/19/2019	
Chloroform	51.5	1.0	ug/L	50.00	ND	103	70-130			06/19/2019	
Chloromethane	54.5	5.0	ug/L	50.00	ND	109	70-130			06/19/2019	
cis-1,2-Dichloroethylene	50.5	1.0	ug/L	50.00	ND	101	70-130			06/19/2019	
cis-1,3-Dichloropropylene	51.9	1.0	ug/L	50.00	ND	104	70-130			06/19/2019	
Cyclohexane	61.6	5.0	ug/L	50.00	ND	123	70-130			06/19/2019	
Dibromochloromethane	51.4	1.0	ug/L	50.00	ND	103	70-130			06/19/2019	
Dibromomethane	51.3	1.0	ug/L	50.00	ND	103	70-130			06/19/2019	
Dichlorodifluoromethane	64.5	5.0	ug/L	50.00	ND	129	70-130			06/19/2019	
Diethyl ether	48.9	5.0	ug/L	50.00	ND	97.8	70-130			06/19/2019	

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9F1906 - Method: 5030				**Prepared: 06/19/2019**							
Matrix Spike (B9F1906-MS1)	**Source: 1906161-01**										
Diisopropyl Ether	49.6	5.0	ug/L	50.00	ND	99.2	70-130			06/19/2019	
Ethylbenzene	55.1	1.0	ug/L	50.00	1.05	108	70-130			06/19/2019	
Ethyltertiarybutylether	50.0	5.0	ug/L	50.00	ND	99.9	70-130			06/19/2019	
Hexachloroethane	48.3	5.0	ug/L	50.00	ND	96.5	70-130			06/19/2019	
Hexane	54.3	1.0	ug/L	50.00	ND	109	70-130			06/19/2019	
Isopropylbenzene	55.3	1.0	ug/L	50.00	ND	111	70-130			06/19/2019	
m & p - Xylene	109	2.0	ug/L	100.0	ND	109	70-130			06/19/2019	
Methylene chloride	48.5	5.0	ug/L	50.00	ND	97.0	70-130			06/19/2019	
Methyltertiarybutylether	53.0	1.0	ug/L	50.00	ND	106	70-130			06/19/2019	
Naphthalene	54.1	5.0	ug/L	50.00	ND	108	70-130			06/19/2019	X
n-Butylbenzene	54.8	1.0	ug/L	50.00	ND	110	70-130			06/19/2019	
n-Propylbenzene	53.7	1.0	ug/L	50.00	ND	107	70-130			06/19/2019	
o-Xylene	53.1	1.0	ug/L	50.00	ND	106	70-130			06/19/2019	
sec-Butylbenzene	59.9	1.0	ug/L	50.00	ND	120	70-130			06/19/2019	
Styrene	55.8	1.0	ug/L	50.00	ND	112	70-130			06/19/2019	
tert-Butylbenzene	55.4	1.0	ug/L	50.00	ND	111	70-130			06/19/2019	
tertiary Butyl Alcohol	242	50	ug/L	250.0	ND	96.7	70-130			06/19/2019	
tertiaryAmylmethylether	51.4	5.0	ug/L	50.00	ND	103	70-130			06/19/2019	
Tetrachloroethylene	55.2	1.0	ug/L	50.00	ND	110	70-130			06/19/2019	
Tetrahydrofuran	47.6	5.0	ug/L	50.00	ND	95.2	70-130			06/19/2019	
Toluene	52.3	1.0	ug/L	50.00	ND	105	70-130			06/19/2019	
trans-1,2-Dichloroethylene	50.7	1.0	ug/L	50.00	ND	101	70-130			06/19/2019	
trans-1,3-Dichloropropylene	46.3	1.0	ug/L	50.00	ND	92.6	70-130			06/19/2019	
Trichloroethylene	54.0	1.0	ug/L	50.00	ND	108	70-130			06/19/2019	
Trichlorofluoromethane	57.1	1.0	ug/L	50.00	ND	114	70-130			06/19/2019	
Vinyl chloride	54.3	1.0	ug/L	50.00	ND	109	70-130			06/19/2019	
Surrogate: Bromofluorobenzene	*51.3*		ug/L	*50.00*		*103*	*85-115*			06/19/2019	
Surrogate: Dibromofluoromethane	*50.6*		ug/L	*50.00*		*101*	*82.7-115*			06/19/2019	
Surrogate: Toluene-d8	*51.0*		ug/L	*50.00*		*102*	*85-115*			06/19/2019	
Matrix Spike Dup (B9F1906-MSD1)	**Source: 1906161-01**										
1,1,1,2-Tetrachloroethane	51.1	1.0	ug/L	50.00	ND	102	70-130	3.26	30	06/19/2019	
1,1,1-Trichloroethane	50.3	1.0	ug/L	50.00	ND	101	70-130	4.70	30	06/19/2019	
1,1,2,2-Tetrachloroethane	51.5	1.0	ug/L	50.00	ND	103	70-130	0.646	30	06/19/2019	
1,1,2-Trichloroethane	50.2	1.0	ug/L	50.00	ND	100	70-130	0.153	30	06/19/2019	
1,1-Dichloroethane	48.8	1.0	ug/L	50.00	ND	97.5	70-130	4.89	30	06/19/2019	
1,1-Dichloroethylene	47.4	1.0	ug/L	50.00	ND	94.8	70-130	8.20	30	06/19/2019	
1,2,3-Trichlorobenzene	53.1	5.0	ug/L	50.00	ND	106	70-130	0.00791	30	06/19/2019	
1,2,3-Trichloropropane	51.3	1.0	ug/L	50.00	ND	103	70-130	0.191	30	06/19/2019	
1,2,3-Trimethylbenzene	51.2	1.0	ug/L	50.00	ND	102	70-130	4.06	30	06/19/2019	
1,2,4-Trichlorobenzene	52.9	5.0	ug/L	50.00	ND	106	70-130	0.374	30	06/19/2019	
1,2,4-Trimethylbenzene	53.0	1.0	ug/L	50.00	ND	106	70-130	1.99	30	06/19/2019	
1,2-Dibromoethane	52.1	1.0	ug/L	50.00	ND	104	70-130	1.79	30	06/19/2019	
1,2-Dichlorobenzene	51.7	1.0	ug/L	50.00	ND	103	70-130	2.04	30	06/19/2019	
1,2-Dichloroethane	51.9	1.0	ug/L	50.00	ND	104	70-130	1.49	30	06/19/2019	
1,2-Dichloropropane	50.3	1.0	ug/L	50.00	ND	101	70-130	2.80	30	06/19/2019	
1,3,5-Trimethylbenzene	52.3	1.0	ug/L	50.00	ND	105	70-130	4.28	30	06/19/2019	

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9F1906 - Method: 5030				**Prepared: 06/19/2019**							
Matrix Spike Dup (B9F1906-MSD1)	**Source: 1906161-01**										
1,3-Dichlorobenzene	52.5	1.0	ug/L	50.00	ND	105	70-130	1.73	30	06/19/2019	
1,4-Dichlorobenzene	50.9	1.0	ug/L	50.00	ND	102	70-130	1.33	30	06/19/2019	
2,2,4-Trimethylpentane	50.0	5.0	ug/L	50.00	ND	100	70-130	6.38	30	06/19/2019	
2-Butanone (MEK)	54.0	5.0	ug/L	50.00	ND	108	70-130	1.23	30	06/19/2019	
2-Methylnaphthalene	49.2	5.0	ug/L	50.00	ND	98.3	70-130	1.31	30	06/19/2019	X
2-Propanone (acetone)	51.2	20	ug/L	50.00	ND	102	70-130	2.37	30	06/19/2019	
4-Methyl-2-pentanone (MIBK)	50.8	5.0	ug/L	50.00	ND	102	70-130	0.798	30	06/19/2019	
Acrylonitrile	47.8	5.0	ug/L	50.00	ND	95.5	70-130	3.42	30	06/19/2019	
Benzene	50.3	1.0	ug/L	50.00	ND	101	70-130	3.70	30	06/19/2019	
Bromochloromethane	53.0	1.0	ug/L	50.00	ND	106	70-130	0.445	30	06/19/2019	
Bromodichloromethane	50.2	1.0	ug/L	50.00	ND	100	70-130	1.15	30	06/19/2019	
Bromoform	48.1	1.0	ug/L	50.00	ND	96.2	70-130	0.544	30	06/19/2019	
Bromomethane	53.2	5.0	ug/L	50.00	ND	106	70-130	20.6	30	06/19/2019	
Carbon disulfide	45.5	1.0	ug/L	50.00	ND	91.1	70-130	6.13	30	06/19/2019	
Carbon tetrachloride	52.8	1.0	ug/L	50.00	ND	106	70-130	4.30	30	06/19/2019	
Chlorobenzene	52.0	1.0	ug/L	50.00	ND	104	70-130	2.67	30	06/19/2019	
Chloroethane	51.4	5.0	ug/L	50.00	ND	103	70-130	4.60	30	06/19/2019	
Chloroform	48.7	1.0	ug/L	50.00	ND	97.4	70-130	5.56	30	06/19/2019	
Chloromethane	53.2	5.0	ug/L	50.00	ND	106	70-130	2.42	30	06/19/2019	
cis-1,2-Dichloroethylene	48.4	1.0	ug/L	50.00	ND	96.9	70-130	4.20	30	06/19/2019	
cis-1,3-Dichloropropylene	50.7	1.0	ug/L	50.00	ND	101	70-130	2.24	30	06/19/2019	
Cyclohexane	57.8	5.0	ug/L	50.00	ND	116	70-130	6.27	30	06/19/2019	
Dibromochloromethane	50.5	1.0	ug/L	50.00	ND	101	70-130	1.73	30	06/19/2019	
Dibromomethane	51.0	1.0	ug/L	50.00	ND	102	70-130	0.620	30	06/19/2019	
Dichlorodifluoromethane	60.3	5.0	ug/L	50.00	ND	121	70-130	6.73	30	06/19/2019	
Diethyl ether	49.1	5.0	ug/L	50.00	ND	98.2	70-130	0.433	30	06/19/2019	
Diisopropyl Ether	49.2	5.0	ug/L	50.00	ND	98.3	70-130	0.882	30	06/19/2019	
Ethylbenzene	52.9	1.0	ug/L	50.00	1.05	104	70-130	4.02	30	06/19/2019	
Ethyltertiarybutylether	49.7	5.0	ug/L	50.00	ND	99.5	70-130	0.449	30	06/19/2019	
Hexachloroethane	46.1	5.0	ug/L	50.00	ND	92.3	70-130	4.48	30	06/19/2019	
Hexane	49.9	1.0	ug/L	50.00	ND	99.8	70-130	8.37	30	06/19/2019	
Isopropylbenzene	53.1	1.0	ug/L	50.00	ND	106	70-130	4.02	30	06/19/2019	
m & p - Xylene	105	2.0	ug/L	100.0	ND	105	70-130	4.06	30	06/19/2019	
Methylene chloride	47.7	5.0	ug/L	50.00	ND	95.4	70-130	1.64	30	06/19/2019	
Methyltertiarybutylether	52.7	1.0	ug/L	50.00	ND	105	70-130	0.580	30	06/19/2019	
Naphthalene	53.9	5.0	ug/L	50.00	ND	108	70-130	0.508	30	06/19/2019	X
n-Butylbenzene	52.7	1.0	ug/L	50.00	ND	105	70-130	3.75	30	06/19/2019	
n-Propylbenzene	52.2	1.0	ug/L	50.00	ND	104	70-130	2.83	30	06/19/2019	
o-Xylene	51.6	1.0	ug/L	50.00	ND	103	70-130	2.91	30	06/19/2019	
sec-Butylbenzene	57.6	1.0	ug/L	50.00	ND	115	70-130	3.99	30	06/19/2019	
Styrene	53.9	1.0	ug/L	50.00	ND	108	70-130	3.54	30	06/19/2019	
tert-Butylbenzene	53.6	1.0	ug/L	50.00	ND	107	70-130	3.21	30	06/19/2019	
tertiary Butyl Alcohol	245	50	ug/L	250.0	ND	97.9	70-130	1.14	30	06/19/2019	
tertiaryAmylmethylether	51.7	5.0	ug/L	50.00	ND	103	70-130	0.670	30	06/19/2019	
Tetrachloroethylene	53.1	1.0	ug/L	50.00	ND	106	70-130	3.89	30	06/19/2019	
Tetrahydrofuran	49.8	5.0	ug/L	50.00	ND	99.6	70-130	4.60	30	06/19/2019	
Toluene	50.7	1.0	ug/L	50.00	ND	101	70-130	3.25	30	06/19/2019	

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9F1906 - Method: 5030				**Prepared: 06/19/2019**							
Matrix Spike Dup (B9F1906-MSD1)	**Source: 1906161-01**										
trans-1,2-Dichloroethylene	48.4	1.0	ug/L	50.00	ND	96.8	70-130	4.68	30	06/19/2019	
trans-1,3-Dichloropropylene	46.5	1.0	ug/L	50.00	ND	93.0	70-130	0.430	30	06/19/2019	
Trichloroethylene	51.9	1.0	ug/L	50.00	ND	104	70-130	3.90	30	06/19/2019	
Trichlorofluoromethane	53.1	1.0	ug/L	50.00	ND	106	70-130	7.37	30	06/19/2019	
Vinyl chloride	51.5	1.0	ug/L	50.00	ND	103	70-130	5.39	30	06/19/2019	
Surrogate: Bromofluorobenzene	*49.2*		ug/L	*50.00*		*98.4*	*85-115*			06/19/2019	
Surrogate: Dibromofluoromethane	*49.1*		ug/L	*50.00*		*98.3*	*82.7-115*			06/19/2019	
Surrogate: Toluene-d8	*49.4*		ug/L	*50.00*		*98.9*	*85-115*			06/19/2019	
Batch B9F1908 - Method: 5030				**Prepared: 06/19/2019**							
Blank (B9F1908-BLK1)											
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L							06/19/2019	
1,1,1-Trichloroethane	ND	1.0	ug/L							06/19/2019	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L							06/19/2019	
1,1,2-Trichloroethane	ND	1.0	ug/L							06/19/2019	
1,1-Dichloroethane	ND	1.0	ug/L							06/19/2019	
1,1-Dichloroethylene	ND	1.0	ug/L							06/19/2019	
1,2,3-Trichlorobenzene	ND	5.0	ug/L							06/19/2019	
1,2,3-Trichloropropane	ND	1.0	ug/L							06/19/2019	
1,2,3-Trimethylbenzene	ND	1.0	ug/L							06/19/2019	
1,2,4-Trichlorobenzene	ND	5.0	ug/L							06/19/2019	
1,2,4-Trimethylbenzene	ND	1.0	ug/L							06/19/2019	
1,2-Dibromoethane	ND	1.0	ug/L							06/19/2019	
1,2-Dichlorobenzene	ND	1.0	ug/L							06/19/2019	
1,2-Dichloroethane	ND	1.0	ug/L							06/19/2019	
1,2-Dichloropropane	ND	1.0	ug/L							06/19/2019	
1,3,5-Trimethylbenzene	ND	1.0	ug/L							06/19/2019	
1,3-Dichlorobenzene	ND	1.0	ug/L							06/19/2019	
1,4-Dichlorobenzene	ND	1.0	ug/L							06/19/2019	
2,2,4-Trimethylpentane	ND	5.0	ug/L							06/19/2019	
2-Butanone (MEK)	ND	5.0	ug/L							06/19/2019	
2-Methylnaphthalene	ND	5.0	ug/L							06/19/2019	X
2-Propanone (acetone)	ND	20	ug/L							06/19/2019	
4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L							06/19/2019	
Acrylonitrile	ND	5.0	ug/L							06/19/2019	
Benzene	ND	1.0	ug/L							06/19/2019	
Bromochloromethane	ND	1.0	ug/L							06/19/2019	
Bromodichloromethane	ND	1.0	ug/L							06/19/2019	
Bromoform	ND	1.0	ug/L							06/19/2019	
Bromomethane	ND	5.0	ug/L							06/19/2019	
Carbon disulfide	ND	1.0	ug/L							06/19/2019	
Carbon tetrachloride	ND	1.0	ug/L							06/19/2019	
Chlorobenzene	ND	1.0	ug/L							06/19/2019	
Chloroethane	ND	5.0	ug/L							06/19/2019	

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9F1908 - Method: 5030				**Prepared: 06/19/2019**							
Blank (B9F1908-BLK1)											
Chloroform	ND	1.0	ug/L							06/19/2019	
Chloromethane	ND	5.0	ug/L							06/19/2019	
cis-1,2-Dichloroethylene	ND	1.0	ug/L							06/19/2019	
cis-1,3-Dichloropropylene	ND	1.0	ug/L							06/19/2019	
Cyclohexane	ND	5.0	ug/L							06/19/2019	
Dibromochloromethane	ND	1.0	ug/L							06/19/2019	
Dibromomethane	ND	1.0	ug/L							06/19/2019	
Dichlorodifluoromethane	ND	5.0	ug/L							06/19/2019	
Diethyl ether	ND	5.0	ug/L							06/19/2019	
Diisopropyl Ether	ND	5.0	ug/L							06/19/2019	
Ethylbenzene	ND	1.0	ug/L							06/19/2019	
Ethyltertiarybutylether	ND	5.0	ug/L							06/19/2019	
Hexachloroethane	ND	5.0	ug/L							06/19/2019	
Hexane	ND	1.0	ug/L							06/19/2019	
Isopropylbenzene	ND	1.0	ug/L							06/19/2019	
m & p - Xylene	ND	2.0	ug/L							06/19/2019	
Methylene chloride	ND	5.0	ug/L							06/19/2019	
Methyltertiarybutylether	ND	1.0	ug/L							06/19/2019	
Naphthalene	ND	5.0	ug/L							06/19/2019	X
n-Butylbenzene	ND	1.0	ug/L							06/19/2019	
n-Propylbenzene	ND	1.0	ug/L							06/19/2019	
o-Xylene	ND	1.0	ug/L							06/19/2019	
sec-Butylbenzene	ND	1.0	ug/L							06/19/2019	
Styrene	ND	1.0	ug/L							06/19/2019	
tert-Butylbenzene	ND	1.0	ug/L							06/19/2019	
tertiary Butyl Alcohol	ND	50	ug/L							06/19/2019	
tertiaryAmylmethylether	ND	5.0	ug/L							06/19/2019	
Tetrachloroethylene	ND	1.0	ug/L							06/19/2019	
Tetrahydrofuran	ND	5.0	ug/L							06/19/2019	
Toluene	ND	1.0	ug/L							06/19/2019	
trans-1,2-Dichloroethylene	ND	1.0	ug/L							06/19/2019	
trans-1,3-Dichloropropylene	ND	1.0	ug/L							06/19/2019	
Trichloroethylene	ND	1.0	ug/L							06/19/2019	
Trichlorofluoromethane	ND	1.0	ug/L							06/19/2019	
Vinyl chloride	ND	1.0	ug/L							06/19/2019	
Surrogate: Bromofluorobenzene	*49.2*		ug/L	*50.00*		*98.5*	*85-115*			06/19/2019	
Surrogate: Dibromofluoromethane	*49.2*		ug/L	*50.00*		*98.4*	*82.7-115*			06/19/2019	
Surrogate: Toluene-d8	*47.5*		ug/L	*50.00*		*94.9*	*85-115*			06/19/2019	
LCS (B9F1908-BS1)											
1,1,1,2-Tetrachloroethane	50.6	1.0	ug/L	50.00		101	70-130			06/19/2019	
1,1,1-Trichloroethane	48.0	1.0	ug/L	50.00		96.0	70-130			06/19/2019	
1,1,2,2-Tetrachloroethane	50.5	1.0	ug/L	50.00		101	70-130			06/19/2019	
1,1,2-Trichloroethane	49.0	1.0	ug/L	50.00		97.9	70-130			06/19/2019	
1,1-Dichloroethane	47.2	1.0	ug/L	50.00		94.3	70-130			06/19/2019	
1,1-Dichloroethylene	45.9	1.0	ug/L	50.00		91.9	70-130			06/19/2019	
1,2,3-Trichlorobenzene	54.0	5.0	ug/L	50.00		108	70-130			06/19/2019	

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9F1908 - Method: 5030				**Prepared: 06/19/2019**							
LCS (B9F1908-BS1)											
1,2,3-Trichloropropane	50.3	1.0	ug/L	50.00		101	70-130			06/19/2019	
1,2,3-Trimethylbenzene	51.4	1.0	ug/L	50.00		103	70-130			06/19/2019	
1,2,4-Trichlorobenzene	52.5	5.0	ug/L	50.00		105	70-130			06/19/2019	
1,2,4-Trimethylbenzene	52.5	1.0	ug/L	50.00		105	70-130			06/19/2019	
1,2-Dibromoethane	50.7	1.0	ug/L	50.00		101	70-130			06/19/2019	
1,2-Dichlorobenzene	51.7	1.0	ug/L	50.00		103	70-130			06/19/2019	
1,2-Dichloroethane	50.1	1.0	ug/L	50.00		100	70-130			06/19/2019	
1,2-Dichloropropane	49.8	1.0	ug/L	50.00		99.7	70-130			06/19/2019	
1,3,5-Trimethylbenzene	51.4	1.0	ug/L	50.00		103	70-130			06/19/2019	
1,3-Dichlorobenzene	51.5	1.0	ug/L	50.00		103	70-130			06/19/2019	
1,4-Dichlorobenzene	50.5	1.0	ug/L	50.00		101	70-130			06/19/2019	
2,2,4-Trimethylpentane	47.2	5.0	ug/L	50.00		94.4	70-130			06/19/2019	
2-Butanone (MEK)	52.3	5.0	ug/L	50.00		105	70-130			06/19/2019	
2-Methylnaphthalene	49.6	5.0	ug/L	50.00		99.2	70-130			06/19/2019	X
2-Propanone (acetone)	48.6	20	ug/L	50.00		97.1	70-130			06/19/2019	
4-Methyl-2-pentanone (MIBK)	49.7	5.0	ug/L	50.00		99.3	70-130			06/19/2019	
Acrylonitrile	47.3	5.0	ug/L	50.00		94.5	70-130			06/19/2019	
Benzene	48.6	1.0	ug/L	50.00		97.2	70-130			06/19/2019	
Bromochloromethane	51.6	1.0	ug/L	50.00		103	70-130			06/19/2019	
Bromodichloromethane	48.5	1.0	ug/L	50.00		96.9	70-130			06/19/2019	
Bromoform	48.1	1.0	ug/L	50.00		96.3	70-130			06/19/2019	
Bromomethane	53.0	5.0	ug/L	50.00		106	70-130			06/19/2019	
Carbon disulfide	44.8	1.0	ug/L	50.00		89.5	70-130			06/19/2019	
Carbon tetrachloride	50.1	1.0	ug/L	50.00		100	70-130			06/19/2019	
Chlorobenzene	50.5	1.0	ug/L	50.00		101	70-130			06/19/2019	
Chloroethane	48.6	5.0	ug/L	50.00		97.1	70-130			06/19/2019	
Chloroform	47.2	1.0	ug/L	50.00		94.5	70-130			06/19/2019	
Chloromethane	51.2	5.0	ug/L	50.00		102	70-130			06/19/2019	
cis-1,2-Dichloroethylene	47.5	1.0	ug/L	50.00		95.1	70-130			06/19/2019	
cis-1,3-Dichloropropylene	50.4	1.0	ug/L	50.00		101	70-130			06/19/2019	
Cyclohexane	52.8	5.0	ug/L	50.00		106	70-130			06/19/2019	
Dibromochloromethane	50.5	1.0	ug/L	50.00		101	70-130			06/19/2019	
Dibromomethane	50.0	1.0	ug/L	50.00		100	70-130			06/19/2019	
Dichlorodifluoromethane	55.4	5.0	ug/L	50.00		111	70-130			06/19/2019	
Diethyl ether	46.9	5.0	ug/L	50.00		93.8	70-130			06/19/2019	
Diisopropyl Ether	47.5	5.0	ug/L	50.00		95.0	70-130			06/19/2019	
Ethylbenzene	50.6	1.0	ug/L	50.00		101	70-130			06/19/2019	
Ethyltertiarybutylether	47.9	5.0	ug/L	50.00		95.8	70-130			06/19/2019	
Hexachloroethane	46.3	5.0	ug/L	50.00		92.7	70-130			06/19/2019	
Hexane	47.5	1.0	ug/L	50.00		95.0	70-130			06/19/2019	
Isopropylbenzene	51.3	1.0	ug/L	50.00		103	70-130			06/19/2019	
m & p - Xylene	102	2.0	ug/L	100.0		102	70-130			06/19/2019	
Methylene chloride	46.0	5.0	ug/L	50.00		92.1	70-130			06/19/2019	
Methyltertiarybutylether	51.7	1.0	ug/L	50.00		103	70-130			06/19/2019	
Naphthalene	54.1	5.0	ug/L	50.00		108	70-130			06/19/2019	X
n-Butylbenzene	51.8	1.0	ug/L	50.00		104	70-130			06/19/2019	
n-Propylbenzene	50.5	1.0	ug/L	50.00		101	70-130			06/19/2019	

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9F1908 - Method: 5030				**Prepared: 06/19/2019**							
LCS (B9F1908-BS1)											
o-Xylene	50.2	1.0	ug/L	50.00		100	70-130			06/19/2019	
sec-Butylbenzene	55.7	1.0	ug/L	50.00		111	70-130			06/19/2019	
Styrene	49.3	1.0	ug/L	50.00		98.5	70-130			06/19/2019	
tert-Butylbenzene	51.3	1.0	ug/L	50.00		103	70-130			06/19/2019	
tertiary Butyl Alcohol	239	50	ug/L	250.0		95.4	70-130			06/19/2019	
tertiaryAmylmethylether	50.4	5.0	ug/L	50.00		101	70-130			06/19/2019	
Tetrachloroethylene	50.6	1.0	ug/L	50.00		101	70-130			06/19/2019	
Tetrahydrofuran	48.7	5.0	ug/L	50.00		97.3	70-130			06/19/2019	
Toluene	48.5	1.0	ug/L	50.00		96.9	70-130			06/19/2019	
trans-1,2-Dichloroethylene	46.4	1.0	ug/L	50.00		92.8	70-130			06/19/2019	
trans-1,3-Dichloropropylene	46.3	1.0	ug/L	50.00		92.5	70-130			06/19/2019	
Trichloroethylene	49.1	1.0	ug/L	50.00		98.2	70-130			06/19/2019	
Trichlorofluoromethane	49.3	1.0	ug/L	50.00		98.6	70-130			06/19/2019	
Vinyl chloride	50.3	1.0	ug/L	50.00		101	70-130			06/19/2019	
Surrogate: Bromofluorobenzene	*50.0*		ug/L	*50.00*		*100*	*85-115*			06/19/2019	
Surrogate: Dibromofluoromethane	*49.4*		ug/L	*50.00*		*98.8*	*82.7-115*			06/19/2019	
Surrogate: Toluene-d8	*49.6*		ug/L	*50.00*		*99.1*	*85-115*			06/19/2019	
Matrix Spike (B9F1908-MS1)	**Source: 1906163-01**										
1,1,1,2-Tetrachloroethane	51.9	1.0	ug/L	50.00	ND	104	70-130			06/20/2019	
1,1,1-Trichloroethane	52.0	1.0	ug/L	50.00	ND	104	70-130			06/20/2019	
1,1,2,2-Tetrachloroethane	51.2	1.0	ug/L	50.00	ND	102	70-130			06/20/2019	
1,1,2-Trichloroethane	49.0	1.0	ug/L	50.00	ND	98.0	70-130			06/20/2019	
1,1-Dichloroethane	49.7	1.0	ug/L	50.00	ND	99.4	70-130			06/20/2019	
1,1-Dichloroethylene	49.1	1.0	ug/L	50.00	ND	98.2	70-130			06/20/2019	
1,2,3-Trichlorobenzene	53.5	5.0	ug/L	50.00	ND	107	70-130			06/20/2019	
1,2,3-Trichloropropane	50.7	1.0	ug/L	50.00	ND	101	70-130			06/20/2019	
1,2,3-Trimethylbenzene	52.7	1.0	ug/L	50.00	ND	105	70-130			06/20/2019	
1,2,4-Trichlorobenzene	51.8	5.0	ug/L	50.00	ND	104	70-130			06/20/2019	
1,2,4-Trimethylbenzene	53.3	1.0	ug/L	50.00	ND	107	70-130			06/20/2019	
1,2-Dibromoethane	51.0	1.0	ug/L	50.00	ND	102	70-130			06/20/2019	
1,2-Dichlorobenzene	52.2	1.0	ug/L	50.00	ND	104	70-130			06/20/2019	
1,2-Dichloroethane	51.9	1.0	ug/L	50.00	ND	104	70-130			06/20/2019	
1,2-Dichloropropane	50.8	1.0	ug/L	50.00	ND	102	70-130			06/20/2019	
1,3,5-Trimethylbenzene	53.7	1.0	ug/L	50.00	ND	107	70-130			06/20/2019	
1,3-Dichlorobenzene	53.5	1.0	ug/L	50.00	ND	107	70-130			06/20/2019	
1,4-Dichlorobenzene	51.7	1.0	ug/L	50.00	ND	103	70-130			06/20/2019	
2,2,4-Trimethylpentane	48.9	5.0	ug/L	50.00	ND	97.9	70-130			06/20/2019	
2-Butanone (MEK)	54.7	5.0	ug/L	50.00	ND	109	70-130			06/20/2019	
2-Methylnaphthalene	48.2	5.0	ug/L	50.00	ND	96.4	70-130			06/20/2019	X
2-Propanone (acetone)	53.7	20	ug/L	50.00	ND	107	70-130			06/20/2019	
4-Methyl-2-pentanone (MIBK)	51.9	5.0	ug/L	50.00	ND	104	70-130			06/20/2019	
Acrylonitrile	48.3	5.0	ug/L	50.00	ND	96.5	70-130			06/20/2019	
Benzene	51.7	1.0	ug/L	50.00	ND	103	70-130			06/20/2019	
Bromochloromethane	52.9	1.0	ug/L	50.00	ND	106	70-130			06/20/2019	
Bromodichloromethane	50.0	1.0	ug/L	50.00	ND	100	70-130			06/20/2019	
Bromoform	49.5	1.0	ug/L	50.00	ND	99.0	70-130			06/20/2019	

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9F1908 - Method: 5030				**Prepared: 06/20/2019**							
Matrix Spike (B9F1908-MS1)	**Source: 1906163-01**										
Bromomethane	59.2	5.0	ug/L	50.00	ND	118	70-130			06/20/2019	
Carbon disulfide	49.9	1.0	ug/L	50.00	ND	99.8	70-130			06/20/2019	
Carbon tetrachloride	55.1	1.0	ug/L	50.00	ND	110	70-130			06/20/2019	
Chlorobenzene	52.4	1.0	ug/L	50.00	ND	105	70-130			06/20/2019	
Chloroethane	53.5	5.0	ug/L	50.00	ND	107	70-130			06/20/2019	
Chloroform	50.7	1.0	ug/L	50.00	ND	101	70-130			06/20/2019	
Chloromethane	54.0	5.0	ug/L	50.00	ND	108	70-130			06/20/2019	
cis-1,2-Dichloroethylene	50.3	1.0	ug/L	50.00	ND	101	70-130			06/20/2019	
cis-1,3-Dichloropropylene	49.5	1.0	ug/L	50.00	ND	99.0	70-130			06/20/2019	
Cyclohexane	58.5	5.0	ug/L	50.00	ND	117	70-130			06/20/2019	
Dibromochloromethane	50.7	1.0	ug/L	50.00	ND	101	70-130			06/20/2019	
Dibromomethane	51.0	1.0	ug/L	50.00	ND	102	70-130			06/20/2019	
Dichlorodifluoromethane	60.3	5.0	ug/L	50.00	ND	121	70-130			06/20/2019	
Diethyl ether	47.9	5.0	ug/L	50.00	ND	95.8	70-130			06/20/2019	
Diisopropyl Ether	48.1	5.0	ug/L	50.00	ND	96.3	70-130			06/20/2019	
Ethylbenzene	52.6	1.0	ug/L	50.00	ND	105	70-130			06/20/2019	
Ethyltertiarybutylether	47.6	5.0	ug/L	50.00	ND	95.3	70-130			06/20/2019	
Hexachloroethane	49.1	5.0	ug/L	50.00	ND	98.2	70-130			06/20/2019	
Hexane	49.8	1.0	ug/L	50.00	ND	99.5	70-130			06/20/2019	
Isopropylbenzene	54.6	1.0	ug/L	50.00	ND	109	70-130			06/20/2019	
m & p - Xylene	107	2.0	ug/L	100.0	ND	107	70-130			06/20/2019	
Methylene chloride	47.6	5.0	ug/L	50.00	ND	95.2	70-130			06/20/2019	
Methyltertiarybutylether	51.3	1.0	ug/L	50.00	ND	103	70-130			06/20/2019	
Naphthalene	53.7	5.0	ug/L	50.00	ND	107	70-130			06/20/2019	X
n-Butylbenzene	54.7	1.0	ug/L	50.00	ND	109	70-130			06/20/2019	
n-Propylbenzene	53.4	1.0	ug/L	50.00	ND	107	70-130			06/20/2019	
o-Xylene	52.4	1.0	ug/L	50.00	ND	105	70-130			06/20/2019	
sec-Butylbenzene	59.5	1.0	ug/L	50.00	ND	119	70-130			06/20/2019	
Styrene	54.3	1.0	ug/L	50.00	ND	109	70-130			06/20/2019	
tert-Butylbenzene	55.1	1.0	ug/L	50.00	ND	110	70-130			06/20/2019	
tertiary Butyl Alcohol	235	50	ug/L	250.0	ND	94.0	70-130			06/20/2019	
tertiaryAmylmethylether	49.6	5.0	ug/L	50.00	ND	99.2	70-130			06/20/2019	
Tetrachloroethylene	54.1	1.0	ug/L	50.00	ND	108	70-130			06/20/2019	
Tetrahydrofuran	47.5	5.0	ug/L	50.00	ND	95.1	70-130			06/20/2019	
Toluene	51.4	1.0	ug/L	50.00	ND	103	70-130			06/20/2019	
trans-1,2-Dichloroethylene	50.2	1.0	ug/L	50.00	ND	100	70-130			06/20/2019	
trans-1,3-Dichloropropylene	45.3	1.0	ug/L	50.00	ND	90.7	70-130			06/20/2019	
Trichloroethylene	53.6	1.0	ug/L	50.00	ND	107	70-130			06/20/2019	
Trichlorofluoromethane	55.9	1.0	ug/L	50.00	ND	112	70-130			06/20/2019	
Vinyl chloride	54.9	1.0	ug/L	50.00	ND	110	70-130			06/20/2019	
Surrogate: Bromofluorobenzene	*50.2*		ug/L	*50.00*		*100*	*85-115*			06/20/2019	
Surrogate: Dibromofluoromethane	*50.0*		ug/L	*50.00*		*100*	*82.7-115*			06/20/2019	
Surrogate: Toluene-d8	*50.4*		ug/L	*50.00*		*101*	*85-115*			06/20/2019	
Matrix Spike Dup (B9F1908-MSD1)	**Source: 1906163-01**										
1,1,1,2-Tetrachloroethane	49.8	1.0	ug/L	50.00	ND	99.5	70-130	4.11	30	06/20/2019	
1,1,1-Trichloroethane	49.7	1.0	ug/L	50.00	ND	99.4	70-130	4.38	30	06/20/2019	

Lab Work Order # 1906161

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9F1908 - Method: 5030				**Prepared: 06/20/2019**							
Matrix Spike Dup (B9F1908-MSD1)	**Source: 1906163-01**										
1,1,2,2-Tetrachloroethane	50.3	1.0	ug/L	50.00	ND	101	70-130	1.66	30	06/20/2019	
1,1,2-Trichloroethane	47.7	1.0	ug/L	50.00	ND	95.4	70-130	2.72	30	06/20/2019	
1,1-Dichloroethane	47.5	1.0	ug/L	50.00	ND	94.9	70-130	4.64	30	06/20/2019	
1,1-Dichloroethylene	47.4	1.0	ug/L	50.00	ND	94.8	70-130	3.54	30	06/20/2019	
1,2,3-Trichlorobenzene	52.5	5.0	ug/L	50.00	ND	105	70-130	1.87	30	06/20/2019	
1,2,3-Trichloropropane	49.9	1.0	ug/L	50.00	ND	99.8	70-130	1.66	30	06/20/2019	
1,2,3-Trimethylbenzene	49.6	1.0	ug/L	50.00	ND	99.1	70-130	6.15	30	06/20/2019	
1,2,4-Trichlorobenzene	49.8	5.0	ug/L	50.00	ND	99.6	70-130	3.90	30	06/20/2019	
1,2,4-Trimethylbenzene	50.0	1.0	ug/L	50.00	ND	100	70-130	6.43	30	06/20/2019	
1,2-Dibromoethane	50.0	1.0	ug/L	50.00	ND	100	70-130	2.07	30	06/20/2019	
1,2-Dichlorobenzene	50.1	1.0	ug/L	50.00	ND	100	70-130	4.20	30	06/20/2019	
1,2-Dichloroethane	50.2	1.0	ug/L	50.00	ND	100	70-130	3.45	30	06/20/2019	
1,2-Dichloropropane	48.7	1.0	ug/L	50.00	ND	97.3	70-130	4.20	30	06/20/2019	
1,3,5-Trimethylbenzene	51.1	1.0	ug/L	50.00	ND	102	70-130	4.93	30	06/20/2019	
1,3-Dichlorobenzene	50.2	1.0	ug/L	50.00	ND	100	70-130	6.36	30	06/20/2019	
1,4-Dichlorobenzene	49.0	1.0	ug/L	50.00	ND	97.9	70-130	5.37	30	06/20/2019	
2,2,4-Trimethylpentane	39.1	5.0	ug/L	50.00	ND	78.2	70-130	22.4	30	06/20/2019	
2-Butanone (MEK)	55.5	5.0	ug/L	50.00	ND	111	70-130	1.39	30	06/20/2019	
2-Methylnaphthalene	47.5	5.0	ug/L	50.00	ND	95.1	70-130	1.38	30	06/20/2019	X
2-Propanone (acetone)	53.7	20	ug/L	50.00	ND	107	70-130	0.0756	30	06/20/2019	
4-Methyl-2-pentanone (MIBK)	51.2	5.0	ug/L	50.00	ND	102	70-130	1.38	30	06/20/2019	
Acrylonitrile	45.6	5.0	ug/L	50.00	ND	91.2	70-130	5.65	30	06/20/2019	
Benzene	48.4	1.0	ug/L	50.00	ND	96.8	70-130	6.65	30	06/20/2019	
Bromochloromethane	52.6	1.0	ug/L	50.00	ND	105	70-130	0.661	30	06/20/2019	
Bromodichloromethane	48.1	1.0	ug/L	50.00	ND	96.3	70-130	3.83	30	06/20/2019	
Bromoform	47.1	1.0	ug/L	50.00	ND	94.1	70-130	5.03	30	06/20/2019	
Bromomethane	59.5	5.0	ug/L	50.00	ND	119	70-130	0.354	30	06/20/2019	
Carbon disulfide	45.5	1.0	ug/L	50.00	ND	91.0	70-130	9.16	30	06/20/2019	
Carbon tetrachloride	52.1	1.0	ug/L	50.00	ND	104	70-130	5.69	30	06/20/2019	
Chlorobenzene	50.1	1.0	ug/L	50.00	ND	100	70-130	4.50	30	06/20/2019	
Chloroethane	50.5	5.0	ug/L	50.00	ND	101	70-130	5.79	30	06/20/2019	
Chloroform	48.0	1.0	ug/L	50.00	ND	95.9	70-130	5.53	30	06/20/2019	
Chloromethane	51.8	5.0	ug/L	50.00	ND	104	70-130	4.13	30	06/20/2019	
cis-1,2-Dichloroethylene	48.0	1.0	ug/L	50.00	ND	96.1	70-130	4.60	30	06/20/2019	
cis-1,3-Dichloropropylene	48.4	1.0	ug/L	50.00	ND	96.9	70-130	2.16	30	06/20/2019	
Cyclohexane	52.9	5.0	ug/L	50.00	ND	106	70-130	10.0	30	06/20/2019	
Dibromochloromethane	48.9	1.0	ug/L	50.00	ND	97.7	70-130	3.62	30	06/20/2019	
Dibromomethane	50.2	1.0	ug/L	50.00	ND	100	70-130	1.60	30	06/20/2019	
Dichlorodifluoromethane	54.2	5.0	ug/L	50.00	ND	108	70-130	10.6	30	06/20/2019	
Diethyl ether	46.9	5.0	ug/L	50.00	ND	93.8	70-130	2.10	30	06/20/2019	
Diisopropyl Ether	47.4	5.0	ug/L	50.00	ND	94.8	70-130	1.58	30	06/20/2019	
Ethylbenzene	49.9	1.0	ug/L	50.00	ND	99.8	70-130	5.31	30	06/20/2019	
Ethyltertiarybutylether	46.1	5.0	ug/L	50.00	ND	92.2	70-130	3.28	30	06/20/2019	
Hexachloroethane	46.5	5.0	ug/L	50.00	ND	93.0	70-130	5.49	30	06/20/2019	
Hexane	41.0	1.0	ug/L	50.00	ND	81.9	70-130	19.4	30	06/20/2019	
Isopropylbenzene	51.1	1.0	ug/L	50.00	ND	102	70-130	6.49	30	06/20/2019	
m & p - Xylene	100	2.0	ug/L	100.0	ND	100	70-130	6.43	30	06/20/2019	

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9F1908 - Method: 5030				**Prepared: 06/20/2019**							
Matrix Spike Dup (B9F1908-MSD1)	**Source: 1906163-01**										
Methylene chloride	46.2	5.0	ug/L	50.00	ND	92.4	70-130	3.00	30	06/20/2019	
Methyltertiarybutylether	51.0	1.0	ug/L	50.00	ND	102	70-130	0.693	30	06/20/2019	
Naphthalene	52.0	5.0	ug/L	50.00	ND	104	70-130	3.24	30	06/20/2019	X
n-Butylbenzene	49.2	1.0	ug/L	50.00	ND	98.3	70-130	10.7	30	06/20/2019	
n-Propylbenzene	49.2	1.0	ug/L	50.00	ND	98.3	70-130	8.34	30	06/20/2019	
o-Xylene	49.9	1.0	ug/L	50.00	ND	99.8	70-130	4.97	30	06/20/2019	
sec-Butylbenzene	55.8	1.0	ug/L	50.00	ND	112	70-130	6.43	30	06/20/2019	
Styrene	51.5	1.0	ug/L	50.00	ND	103	70-130	5.23	30	06/20/2019	
tert-Butylbenzene	51.7	1.0	ug/L	50.00	ND	103	70-130	6.39	30	06/20/2019	
tertiary Butyl Alcohol	241	50	ug/L	250.0	ND	96.3	70-130	2.43	30	06/20/2019	
tertiaryAmylmethylether	49.0	5.0	ug/L	50.00	ND	98.0	70-130	1.21	30	06/20/2019	
Tetrachloroethylene	49.3	1.0	ug/L	50.00	ND	98.6	70-130	9.20	30	06/20/2019	
Tetrahydrofuran	50.0	5.0	ug/L	50.00	ND	100	70-130	5.08	30	06/20/2019	
Toluene	48.4	1.0	ug/L	50.00	ND	96.8	70-130	6.07	30	06/20/2019	
trans-1,2-Dichloroethylene	47.4	1.0	ug/L	50.00	ND	94.8	70-130	5.78	30	06/20/2019	
trans-1,3-Dichloropropylene	44.7	1.0	ug/L	50.00	ND	89.5	70-130	1.35	30	06/20/2019	
Trichloroethylene	49.7	1.0	ug/L	50.00	ND	99.4	70-130	7.55	30	06/20/2019	
Trichlorofluoromethane	51.3	1.0	ug/L	50.00	ND	103	70-130	8.63	30	06/20/2019	
Vinyl chloride	52.5	1.0	ug/L	50.00	ND	105	70-130	4.32	30	06/20/2019	
Surrogate: Bromofluorobenzene	*50.0*		ug/L	*50.00*		*100*	*85-115*			06/20/2019	
Surrogate: Dibromofluoromethane	*50.1*		ug/L	*50.00*		*100*	*82.7-115*			06/20/2019	
Surrogate: Toluene-d8	*49.8*		ug/L	*50.00*		*99.6*	*85-115*			06/20/2019	

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Organics-Dioxane - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9F2009 - Method: 5030				**Prepared: 06/19/2019**							
Blank (B9F2009-BLK1)											
1,4-dioxane	ND	1.0	ug/L							06/19/2019	
LCS (B9F2009-BS1)											
1,4-dioxane	10.8	1.0	ug/L	10.00		108	70-130			06/19/2019	
Matrix Spike (B9F2009-MS1)	**Source: 1906161-05**										
1,4-dioxane	11.0	1.0	ug/L	10.00	1.01	99.7	70-130			06/19/2019	
Matrix Spike Dup (B9F2009-MSD1)	**Source: 1906161-05**										
1,4-dioxane	10.4	1.0	ug/L	10.00	1.01	94.0	70-130	5.33	30	06/19/2019	

DEQ

Michigan Department of Environmental Quality
Laboratory Services Section

Analysis Request Sheet

Lab Work Order Number	Project Name	Matrix
19 06161	**Gelman Sciences**	**WATER**

Site Code/Project Number: 81000018/Location 6130	AY: 19	CC Email 1: lundk@michigan.gov	Project TAT Days:	Sample Collector: Kevin Lund
Dept-Division-District: DEQ-RRD-Jackson	Index:	CC Email 2: NedrichS@michigan.gov	Project Due Date:	Sample Collector Phone: 517-5131846
State Project Manager: Dan Hamel	PCA:	CC Email 3:		Contract Firm:
State Project Manager Email: hameld@michigan.gov	Project: Location-6130	Overflow Lab Choice 1:	Accept Analysis hold time codes:	Contract Firm Primary Contact:
State Project Manager Phone: 517-745-6595	Phase:	Overflow Lab Choice 2:		Primary Contact Phone:

	Lab Use Only	Field Sample Identification	Collection Date	Collection Time	Container Count	Comments
1	01	Allen Creek/West Park SW	6/18/19	9:56	5	Please include QA/QC with Lab Data Report(s)
2	02	Allen Creek/Chapin-West Park	6/18/19	9:35	5	
3	03	Allen Creek/Maple Ridge-Arborview	6/18/19	10:00	3	
4	—	Allen Creek/Wildwood-Arborview	6/18/19	—	3	DRY-NO SAMPLE
5	04	Allen Creek/Murray-Washington	6/18/19	11:00	5	
6	05	Allen Creek/Eighth-Waterworks	6/18/19	10:45	5	
7	06	Allen Creek-Maryfield-Wildwood Park	6/18/19	10:25	3	
8						
9						
10						

ORGANIC CHEMISTRY

VOA - Volatile Organic Acidic
- Volatiles - Full List 1 2 3 4 5 6 7 8 9 10 (2 3 4 5 6 circled)
- 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 (2 3 4 5 6 circled)

METH - Methane, Ethane, Ethene
- Methane, Ethane, Ethene 1 2 3 4 5 6 7 8 9 10

ON - 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
- Chlordane 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
- Benzidines 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
- Acids 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

METALS CHEMISTRY PACKAGES
- OpMemo2 - Total 1 2 3 4 5 6 7 8 9 10
- OpMemo2 - Dissolved 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
- Michigan10 - Dissolved 1 2 3 4 5 6 7 8 9 10
  (As,Ba,Cd,Cr,Cu,Pb,Hg,Se,Ag,Zn)

MAD - DISSOLVED METALS
- 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

MA - TOTAL METALS
- 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

GENERAL CHEMISTRY
- GB Total Cyanide - CN 1 2 3 4 5 6 7 8 9 10
- GB Amenable 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
- 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 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 - SO4 1 2 3 4 5 6 7 8 9 10
- MN Chromium 6 - Cr+6 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 (FF) 1 2 3 4 5 6 7 8 9 10
  (Field - Filtered & Preserved)
- GN Diss Org Carbon - DOC (LF) 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 - NH3 1 2 3 4 5 6 7 8 9 10
- GA Nitrate+Nitrite - NO3+NO2 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. / Signature: KEVIN LUND	Melissa Smith	6/18/19 1533
Print Name & Org. / Signature:		
Print Name & Org. / Signature:		

SAFETY INFORMATION

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

19 August 2019

Work Order: 1907223

Price: $1,210.00

Dan Hamel
MDEQ-RRD-JACKSON
301 E. Louis Glick Highway
Jackson, MI 49201-1556

RE: GELMAN SCIENCES, INC

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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MDEQ-RRD-JACKSON
301 E. Louis Glick Highway
Jackson MI, 49201-1556

Project: GELMAN SCIENCES, INC
Site Code: 81000018/Location 6130
Project Manager: Dan Hamel

Reported:
08/19/2019

Analytical Report for Samples

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Qualifier
Allen Creek/West Park SW	1907223-01	Water	07/24/2019	07/24/2019	
Allen Creek/chapin-West Park	1907223-02	Water	07/24/2019	07/24/2019	
Allen Creek/Maple Ridge-Arborview	1907223-03	Water	07/24/2019	07/24/2019	
Allen Creek/Murry-Washington	1907223-04	Water	07/24/2019	07/24/2019	
Allen Creek/Eighth-Waterworks	1907223-05	Water	07/24/2019	07/24/2019	
Allen Creek/Maryfield-Wildwood	1907223-06	Water	07/24/2019	07/24/2019	

Notes and Definitions

Y28	1,4-dioxane analysis is performed using selective ion monitoring (SIM). Results reported below 5 ug/L (aqueous) or 1000 ug/Kg (solids) are estimated.
X	Methods 8260 & 624 are used to analyze volatile organics that have boiling points below 200 ºC. 2-Methylnaphthalene & naphthalene have boiling points above 200 ºC and are better suited to analysis by methods 8270 & 625 as semivolatile organics.
T	Reported value is less than the reporting limit (RL). Result is estimated.
A11	Result is estimated due to high initial verification standard criteria failure.
A09	Result is estimated due to high recovery of batch quality control.
A06	Result is estimated due to high continuing calibration standard criteria failure.
A05	Result and reporting limit are estimated due to low 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

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Client ID: Allen Creek/West Park SW

Lab ID: 1907223-01

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	07/25/19	B9G2501	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	07/25/19	B9G2501	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
540-84-1	2,2,4-Trimethylpentane	ND	5.0	ug/L	1	07/25/19	B9G2501	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	07/25/19	B9G2501	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	07/25/19	B9G2501	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	07/25/19	B9G2501	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	07/25/19	B9G2501	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	07/25/19	B9G2501	8260	A05
71-43-2	Benzene	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	07/25/19	B9G2501	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	07/25/19	B9G2501	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	07/25/19	B9G2501	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	07/25/19	B9G2501	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
74-95-3	Dibromomethane	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	

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

Client ID: Allen Creek/West Park SW

Lab ID: 1907223-01

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	07/25/19	B9G2501	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	07/25/19	B9G2501	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	07/25/19	B9G2501	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	07/25/19	B9G2501	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	07/25/19	B9G2501	8260	
110-54-3	Hexane	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	07/25/19	B9G2501	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	07/25/19	B9G2501	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	07/25/19	B9G2501	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	07/25/19	B9G2501	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	07/25/19	B9G2501	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	07/25/19	B9G2501	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
Surrogate: Bromofluorobenzene			*103 %*	*85-115*		*07/25/19*	B9G2501	*8260*	
Surrogate: Dibromofluoromethane			*96.6 %*	*82.7-115*		*07/25/19*	B9G2501	*8260*	
Surrogate: Toluene-d8			*102 %*	*85-115*		*07/25/19*	B9G2501	*8260*	

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Client ID: Allen Creek/West Park SW

Lab ID: 1907223-01

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Dioxane									
123-91-1	**1,4-dioxane**	**22**	1.0	ug/L	1	07/26/19	B9G2906	8260 Modified	

Lab Work Order # 1907223

MICHIGAN DEPARTMENT OF
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Client ID: Allen Creek/chapin-West Park

Lab ID: 1907223-02

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
540-84-1	2,2,4-Trimethylpentane	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	07/26/19	B9G2501	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	A05
71-43-2	Benzene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
74-95-3	Dibromomethane	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	

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: Allen Creek/chapin-West Park

Lab ID: 1907223-02

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
110-54-3	Hexane	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	07/26/19	B9G2501	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	07/26/19	B9G2501	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
Surrogate: Bromofluorobenzene			*110 %*	*85-115*		*07/26/19*	B9G2501	*8260*	
Surrogate: Dibromofluoromethane			*105 %*	*82.7-115*		*07/26/19*	B9G2501	*8260*	
Surrogate: Toluene-d8			*109 %*	*85-115*		*07/26/19*	B9G2501	*8260*	

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: Allen Creek/chapin-West Park

Lab ID: 1907223-02

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Dioxane									
123-91-1	**1,4-dioxane**	**11**	1.0	ug/L	1	07/26/19	B9G2906	8260 Modified	

MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

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

Client ID: Allen Creek/Maple Ridge-Arborview

Lab ID: 1907223-03

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
540-84-1	2,2,4-Trimethylpentane	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	07/26/19	B9G2501	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	A05
71-43-2	Benzene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
74-95-3	Dibromomethane	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	

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

Client ID: Allen Creek/Maple Ridge-Arborview

Lab ID: 1907223-03

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
110-54-3	Hexane	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	07/26/19	B9G2501	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	07/26/19	B9G2501	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
Surrogate: Bromofluorobenzene			*105 %*	*85-115*		*07/26/19*	B9G2501	*8260*	
Surrogate: Dibromofluoromethane			*101 %*	*82.7-115*		*07/26/19*	B9G2501	*8260*	
Surrogate: Toluene-d8			*104 %*	*85-115*		*07/26/19*	B9G2501	*8260*	

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: Allen Creek/Murry-Washington

Lab ID: 1907223-04

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
540-84-1	2,2,4-Trimethylpentane	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	07/26/19	B9G2602	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	A05
71-43-2	Benzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
74-95-3	Dibromomethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	

MICHIGAN DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY

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Client ID: Allen Creek/Murry-Washington

Lab ID: 1907223-04

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
110-54-3	Hexane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	07/26/19	B9G2602	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	07/26/19	B9G2602	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
79-01-6	**Trichloroethylene**	**1.4**	1.0	ug/L	1	07/26/19	B9G2602	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
Surrogate: Bromofluorobenzene			*102 %*	*85-115*		*07/26/19*	B9G2602	*8260*	
Surrogate: Dibromofluoromethane			*97.1 %*	*82.7-115*		*07/26/19*	B9G2602	*8260*	
Surrogate: Toluene-d8			*101 %*	*85-115*		*07/26/19*	B9G2602	*8260*	

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: Allen Creek/Murry-Washington

Lab ID: 1907223-04

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Dioxane									
123-91-1	**1,4-dioxane**	**1.4**	1.0	ug/L	1	07/26/19	B9G2906	8260 Modified	Y28

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

Client ID: Allen Creek/Eighth-Waterworks

Lab ID: 1907223-05

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
540-84-1	2,2,4-Trimethylpentane	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	07/26/19	B9G2602	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	A05
71-43-2	Benzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
74-95-3	Dibromomethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	

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

Client ID: Allen Creek/Eighth-Waterworks

Lab ID: 1907223-05

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
110-54-3	Hexane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	07/26/19	B9G2602	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	07/26/19	B9G2602	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
Surrogate: Bromofluorobenzene			*109 %*	*85-115*		*07/26/19*	B9G2602	*8260*	
Surrogate: Dibromofluoromethane			*103 %*	*82.7-115*		*07/26/19*	B9G2602	*8260*	
Surrogate: Toluene-d8			*108 %*	*85-115*		*07/26/19*	B9G2602	*8260*	

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: Allen Creek/Eighth-Waterworks

Lab ID: 1907223-05

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Dioxane									
123-91-1	**1,4-dioxane**	**0.96**	1.0	ug/L	1	07/26/19	B9G2906	8260 Modified	T, Y28

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

Client ID: Allen Creek/Maryfield-Wildwood

Lab ID: 1907223-06

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
540-84-1	2,2,4-Trimethylpentane	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	07/26/19	B9G2602	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	A05
71-43-2	Benzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
74-95-3	Dibromomethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	

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

Client ID: Allen Creek/Maryfield-Wildwood

Lab ID: 1907223-06

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
100-41-4	**Ethylbenzene**	**5.1**	1.0	ug/L	1	07/26/19	B9G2602	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
110-54-3	Hexane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	07/26/19	B9G2602	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
100-42-5	**Styrene**	**1.5**	1.0	ug/L	1	07/26/19	B9G2602	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	07/26/19	B9G2602	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
Surrogate: Bromofluorobenzene			*103 %*	*85-115*		*07/26/19*	B9G2602	*8260*	
Surrogate: Dibromofluoromethane			*97.4 %*	*82.7-115*		*07/26/19*	B9G2602	*8260*	
Surrogate: Toluene-d8			*102 %*	*85-115*		*07/26/19*	B9G2602	*8260*	

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9G2501 - Method: 5030				**Prepared: 07/25/2019**							
Blank (B9G2501-BLK1)											
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L							07/25/2019	
1,1,1-Trichloroethane	ND	1.0	ug/L							07/25/2019	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L							07/25/2019	
1,1,2-Trichloroethane	ND	1.0	ug/L							07/25/2019	
1,1-Dichloroethane	ND	1.0	ug/L							07/25/2019	
1,1-Dichloroethylene	ND	1.0	ug/L							07/25/2019	
1,2,3-Trichlorobenzene	ND	5.0	ug/L							07/25/2019	
1,2,3-Trichloropropane	ND	1.0	ug/L							07/25/2019	
1,2,3-Trimethylbenzene	ND	1.0	ug/L							07/25/2019	
1,2,4-Trichlorobenzene	ND	5.0	ug/L							07/25/2019	
1,2,4-Trimethylbenzene	ND	1.0	ug/L							07/25/2019	
1,2-Dibromoethane	ND	1.0	ug/L							07/25/2019	
1,2-Dichlorobenzene	ND	1.0	ug/L							07/25/2019	
1,2-Dichloroethane	ND	1.0	ug/L							07/25/2019	
1,2-Dichloropropane	ND	1.0	ug/L							07/25/2019	
1,3,5-Trimethylbenzene	ND	1.0	ug/L							07/25/2019	
1,3-Dichlorobenzene	ND	1.0	ug/L							07/25/2019	
1,4-Dichlorobenzene	ND	1.0	ug/L							07/25/2019	
2,2,4-Trimethylpentane	ND	5.0	ug/L							07/25/2019	
2-Butanone (MEK)	ND	5.0	ug/L							07/25/2019	
2-Methylnaphthalene	ND	5.0	ug/L							07/25/2019	X
2-Propanone (acetone)	ND	20	ug/L							07/25/2019	
4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L							07/25/2019	
Acrylonitrile	ND	5.0	ug/L							07/25/2019	A05
Benzene	ND	1.0	ug/L							07/25/2019	
Bromochloromethane	ND	1.0	ug/L							07/25/2019	
Bromodichloromethane	ND	1.0	ug/L							07/25/2019	
Bromoform	ND	1.0	ug/L							07/25/2019	
Bromomethane	ND	5.0	ug/L							07/25/2019	
Carbon disulfide	ND	1.0	ug/L							07/25/2019	
Carbon tetrachloride	ND	1.0	ug/L							07/25/2019	
Chlorobenzene	ND	1.0	ug/L							07/25/2019	
Chloroethane	ND	5.0	ug/L							07/25/2019	
Chloroform	ND	1.0	ug/L							07/25/2019	
Chloromethane	ND	5.0	ug/L							07/25/2019	
cis-1,2-Dichloroethylene	ND	1.0	ug/L							07/25/2019	
cis-1,3-Dichloropropylene	ND	1.0	ug/L							07/25/2019	
Cyclohexane	ND	5.0	ug/L							07/25/2019	
Dibromochloromethane	ND	1.0	ug/L							07/25/2019	
Dibromomethane	ND	1.0	ug/L							07/25/2019	
Dichlorodifluoromethane	ND	5.0	ug/L							07/25/2019	
Diethyl ether	ND	5.0	ug/L							07/25/2019	
Diisopropyl Ether	ND	5.0	ug/L							07/25/2019	
Ethylbenzene	ND	1.0	ug/L							07/25/2019	
Ethyltertiarybutylether	ND	5.0	ug/L							07/25/2019	
Hexachloroethane	ND	5.0	ug/L							07/25/2019	
Hexane	ND	1.0	ug/L							07/25/2019	

Lab Work Order # 1907223

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
Batch B9G2501 - Method: 5030				**Prepared: 07/25/2019**							
Blank (B9G2501-BLK1)											
Isopropylbenzene	ND	1.0	ug/L							07/25/2019	
m & p - Xylene	ND	2.0	ug/L							07/25/2019	
Methylene chloride	ND	5.0	ug/L							07/25/2019	
Methyltertiarybutylether	ND	1.0	ug/L							07/25/2019	
Naphthalene	ND	5.0	ug/L							07/25/2019	X
n-Butylbenzene	ND	1.0	ug/L							07/25/2019	
n-Propylbenzene	ND	1.0	ug/L							07/25/2019	
o-Xylene	ND	1.0	ug/L							07/25/2019	
sec-Butylbenzene	ND	1.0	ug/L							07/25/2019	
Styrene	ND	1.0	ug/L							07/25/2019	
tert-Butylbenzene	ND	1.0	ug/L							07/25/2019	
tertiary Butyl Alcohol	ND	50	ug/L							07/25/2019	
tertiaryAmylmethylether	ND	5.0	ug/L							07/25/2019	
Tetrachloroethylene	ND	1.0	ug/L							07/25/2019	
Tetrahydrofuran	ND	5.0	ug/L							07/25/2019	
Toluene	ND	1.0	ug/L							07/25/2019	
trans-1,2-Dichloroethylene	ND	1.0	ug/L							07/25/2019	
trans-1,3-Dichloropropylene	ND	1.0	ug/L							07/25/2019	
Trichloroethylene	ND	1.0	ug/L							07/25/2019	
Trichlorofluoromethane	ND	1.0	ug/L							07/25/2019	
Vinyl chloride	ND	1.0	ug/L							07/25/2019	
Surrogate: Bromofluorobenzene	*52.0*		ug/L	*50.00*		*104*	*85-115*			07/25/2019	
Surrogate: Dibromofluoromethane	*50.8*		ug/L	*50.00*		*102*	*82.7-115*			07/25/2019	
Surrogate: Toluene-d8	*52.3*		ug/L	*50.00*		*105*	*85-115*			07/25/2019	
LCS (B9G2501-BS1)											
1,1,1,2-Tetrachloroethane	48.6	1.0	ug/L	50.00		97.2	70-130			07/25/2019	
1,1,1-Trichloroethane	47.1	1.0	ug/L	50.00		94.3	70-130			07/25/2019	
1,1,2,2-Tetrachloroethane	48.6	1.0	ug/L	50.00		97.1	70-130			07/25/2019	
1,1,2-Trichloroethane	47.0	1.0	ug/L	50.00		94.0	70-130			07/25/2019	
1,1-Dichloroethane	44.5	1.0	ug/L	50.00		88.9	70-130			07/25/2019	
1,1-Dichloroethylene	44.2	1.0	ug/L	50.00		88.4	70-130			07/25/2019	
1,2,3-Trichlorobenzene	53.9	5.0	ug/L	50.00		108	70-130			07/25/2019	
1,2,3-Trichloropropane	46.2	1.0	ug/L	50.00		92.3	70-130			07/25/2019	
1,2,3-Trimethylbenzene	48.6	1.0	ug/L	50.00		97.2	70-130			07/25/2019	
1,2,4-Trichlorobenzene	55.2	5.0	ug/L	50.00		110	70-130			07/25/2019	
1,2,4-Trimethylbenzene	48.2	1.0	ug/L	50.00		96.4	70-130			07/25/2019	
1,2-Dibromoethane	47.3	1.0	ug/L	50.00		94.6	70-130			07/25/2019	
1,2-Dichlorobenzene	50.8	1.0	ug/L	50.00		102	70-130			07/25/2019	
1,2-Dichloroethane	45.5	1.0	ug/L	50.00		91.0	70-130			07/25/2019	
1,2-Dichloropropane	47.9	1.0	ug/L	50.00		95.8	70-130			07/25/2019	
1,3,5-Trimethylbenzene	48.6	1.0	ug/L	50.00		97.1	70-130			07/25/2019	
1,3-Dichlorobenzene	49.1	1.0	ug/L	50.00		98.2	70-130			07/25/2019	
1,4-Dichlorobenzene	47.6	1.0	ug/L	50.00		95.2	70-130			07/25/2019	
2,2,4-Trimethylpentane	49.9	5.0	ug/L	50.00		99.8	70-130			07/25/2019	
2-Butanone (MEK)	42.0	5.0	ug/L	50.00		84.1	70-130			07/25/2019	
2-Methylnaphthalene	54.8	5.0	ug/L	50.00		110	70-130			07/25/2019	X

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9G2501 - Method: 5030				**Prepared: 07/25/2019**							
LCS (B9G2501-BS1)											
2-Propanone (acetone)	41.5	20	ug/L	50.00		83.1	70-130			07/25/2019	
4-Methyl-2-pentanone (MIBK)	46.1	5.0	ug/L	50.00		92.3	70-130			07/25/2019	
Acrylonitrile	37.9	5.0	ug/L	50.00		75.7	70-130			07/25/2019	A05
Benzene	47.5	1.0	ug/L	50.00		95.1	70-130			07/25/2019	
Bromochloromethane	49.0	1.0	ug/L	50.00		98.0	70-130			07/25/2019	
Bromodichloromethane	48.1	1.0	ug/L	50.00		96.2	70-130			07/25/2019	
Bromoform	47.9	1.0	ug/L	50.00		95.8	70-130			07/25/2019	
Bromomethane	53.6	5.0	ug/L	50.00		107	70-130			07/25/2019	
Carbon disulfide	43.7	1.0	ug/L	50.00		87.4	70-130			07/25/2019	
Carbon tetrachloride	48.0	1.0	ug/L	50.00		95.9	70-130			07/25/2019	
Chlorobenzene	48.9	1.0	ug/L	50.00		97.8	70-130			07/25/2019	
Chloroethane	62.9	5.0	ug/L	50.00		126	70-130			07/25/2019	
Chloroform	45.7	1.0	ug/L	50.00		91.5	70-130			07/25/2019	
Chloromethane	55.7	5.0	ug/L	50.00		111	70-130			07/25/2019	
cis-1,2-Dichloroethylene	45.2	1.0	ug/L	50.00		90.3	70-130			07/25/2019	
cis-1,3-Dichloropropylene	49.9	1.0	ug/L	50.00		99.7	70-130			07/25/2019	
Cyclohexane	49.5	5.0	ug/L	50.00		99.0	70-130			07/25/2019	
Dibromochloromethane	48.8	1.0	ug/L	50.00		97.6	70-130			07/25/2019	
Dibromomethane	47.0	1.0	ug/L	50.00		94.0	70-130			07/25/2019	
Dichlorodifluoromethane	66.4	5.0	ug/L	50.00		133	70-130			07/25/2019	A09, A11
Diethyl ether	42.3	5.0	ug/L	50.00		84.5	70-130			07/25/2019	
Diisopropyl Ether	41.3	5.0	ug/L	50.00		82.5	70-130			07/25/2019	
Ethylbenzene	47.9	1.0	ug/L	50.00		95.8	70-130			07/25/2019	
Ethyltertiarybutylether	43.1	5.0	ug/L	50.00		86.1	70-130			07/25/2019	
Hexachloroethane	46.6	5.0	ug/L	50.00		93.2	70-130			07/25/2019	
Hexane	45.0	1.0	ug/L	50.00		90.0	70-130			07/25/2019	
Isopropylbenzene	47.8	1.0	ug/L	50.00		95.6	70-130			07/25/2019	
m & p - Xylene	94.6	2.0	ug/L	100.0		94.6	70-130			07/25/2019	
Methylene chloride	45.2	5.0	ug/L	50.00		90.4	70-130			07/25/2019	
Methyltertiarybutylether	45.4	1.0	ug/L	50.00		90.8	70-130			07/25/2019	
Naphthalene	53.2	5.0	ug/L	50.00		106	70-130			07/25/2019	X
n-Butylbenzene	51.6	1.0	ug/L	50.00		103	70-130			07/25/2019	
n-Propylbenzene	48.5	1.0	ug/L	50.00		97.1	70-130			07/25/2019	
o-Xylene	48.4	1.0	ug/L	50.00		96.8	70-130			07/25/2019	
sec-Butylbenzene	52.9	1.0	ug/L	50.00		106	70-130			07/25/2019	
Styrene	49.3	1.0	ug/L	50.00		98.5	70-130			07/25/2019	
tert-Butylbenzene	48.4	1.0	ug/L	50.00		96.8	70-130			07/25/2019	
tertiary Butyl Alcohol	215	50	ug/L	250.0		86.1	70-130			07/25/2019	
tertiaryAmylmethylether	45.4	5.0	ug/L	50.00		90.8	70-130			07/25/2019	
Tetrachloroethylene	46.0	1.0	ug/L	50.00		92.0	70-130			07/25/2019	
Tetrahydrofuran	42.2	5.0	ug/L	50.00		84.4	70-130			07/25/2019	
Toluene	47.3	1.0	ug/L	50.00		94.6	70-130			07/25/2019	
trans-1,2-Dichloroethylene	45.4	1.0	ug/L	50.00		90.8	70-130			07/25/2019	
trans-1,3-Dichloropropylene	48.5	1.0	ug/L	50.00		96.9	70-130			07/25/2019	
Trichloroethylene	48.7	1.0	ug/L	50.00		97.4	70-130			07/25/2019	
Trichlorofluoromethane	47.0	1.0	ug/L	50.00		94.0	70-130			07/25/2019	
Vinyl chloride	50.7	1.0	ug/L	50.00		101	70-130			07/25/2019	

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9G2501 - Method: 5030				**Prepared: 07/25/2019**							
LCS (B9G2501-BS1)											
Surrogate: Bromofluorobenzene	*47.4*		ug/L	*50.00*		*94.7*	*85-115*			07/25/2019	
Surrogate: Dibromofluoromethane	*48.0*		ug/L	*50.00*		*96.1*	*82.7-115*			07/25/2019	
Surrogate: Toluene-d8	*48.5*		ug/L	*50.00*		*97.0*	*85-115*			07/25/2019	
Matrix Spike (B9G2501-MS1)	**Source: 1907223-03**										
1,1,1,2-Tetrachloroethane	49.9	1.0	ug/L	50.00	ND	99.7	70-130			07/26/2019	
1,1,1-Trichloroethane	50.3	1.0	ug/L	50.00	ND	101	70-130			07/26/2019	
1,1,2,2-Tetrachloroethane	49.4	1.0	ug/L	50.00	ND	98.9	70-130			07/26/2019	
1,1,2-Trichloroethane	48.9	1.0	ug/L	50.00	ND	97.8	70-130			07/26/2019	
1,1-Dichloroethane	48.1	1.0	ug/L	50.00	ND	96.2	70-130			07/26/2019	
1,1-Dichloroethylene	49.3	1.0	ug/L	50.00	ND	98.6	70-130			07/26/2019	
1,2,3-Trichlorobenzene	51.6	5.0	ug/L	50.00	ND	103	70-130			07/26/2019	
1,2,3-Trichloropropane	47.6	1.0	ug/L	50.00	ND	95.1	70-130			07/26/2019	
1,2,3-Trimethylbenzene	49.3	1.0	ug/L	50.00	ND	98.5	70-130			07/26/2019	
1,2,4-Trichlorobenzene	52.3	5.0	ug/L	50.00	ND	105	70-130			07/26/2019	
1,2,4-Trimethylbenzene	48.8	1.0	ug/L	50.00	ND	97.6	70-130			07/26/2019	
1,2-Dibromoethane	48.3	1.0	ug/L	50.00	ND	96.7	70-130			07/26/2019	
1,2-Dichlorobenzene	50.6	1.0	ug/L	50.00	ND	101	70-130			07/26/2019	
1,2-Dichloroethane	47.7	1.0	ug/L	50.00	ND	95.4	70-130			07/26/2019	
1,2-Dichloropropane	49.8	1.0	ug/L	50.00	ND	99.7	70-130			07/26/2019	
1,3,5-Trimethylbenzene	49.7	1.0	ug/L	50.00	ND	99.3	70-130			07/26/2019	
1,3-Dichlorobenzene	49.1	1.0	ug/L	50.00	ND	98.3	70-130			07/26/2019	
1,4-Dichlorobenzene	48.1	1.0	ug/L	50.00	ND	96.2	70-130			07/26/2019	
2,2,4-Trimethylpentane	52.2	5.0	ug/L	50.00	ND	104	70-130			07/26/2019	
2-Butanone (MEK)	44.4	5.0	ug/L	50.00	ND	88.7	70-130			07/26/2019	
2-Methylnaphthalene	46.1	5.0	ug/L	50.00	ND	92.2	70-130			07/26/2019	X
2-Propanone (acetone)	47.1	20	ug/L	50.00	ND	94.3	70-130			07/26/2019	
4-Methyl-2-pentanone (MIBK)	48.7	5.0	ug/L	50.00	ND	97.4	70-130			07/26/2019	
Acrylonitrile	40.2	5.0	ug/L	50.00	ND	80.4	70-130			07/26/2019	A05
Benzene	49.7	1.0	ug/L	50.00	ND	99.3	70-130			07/26/2019	
Bromochloromethane	49.7	1.0	ug/L	50.00	ND	99.4	70-130			07/26/2019	
Bromodichloromethane	48.8	1.0	ug/L	50.00	ND	97.5	70-130			07/26/2019	
Bromoform	46.6	1.0	ug/L	50.00	ND	93.2	70-130			07/26/2019	
Bromomethane	56.3	5.0	ug/L	50.00	ND	113	70-130			07/26/2019	
Carbon disulfide	46.5	1.0	ug/L	50.00	ND	92.9	70-130			07/26/2019	
Carbon tetrachloride	51.7	1.0	ug/L	50.00	ND	103	70-130			07/26/2019	
Chlorobenzene	51.2	1.0	ug/L	50.00	ND	102	70-130			07/26/2019	
Chloroethane	66.9	5.0	ug/L	50.00	ND	134	70-130			07/26/2019	A04
Chloroform	48.5	1.0	ug/L	50.00	ND	96.9	70-130			07/26/2019	
Chloromethane	59.3	5.0	ug/L	50.00	ND	119	70-130			07/26/2019	
cis-1,2-Dichloroethylene	48.5	1.0	ug/L	50.00	ND	97.1	70-130			07/26/2019	
cis-1,3-Dichloropropylene	50.3	1.0	ug/L	50.00	ND	101	70-130			07/26/2019	
Cyclohexane	53.3	5.0	ug/L	50.00	ND	107	70-130			07/26/2019	
Dibromochloromethane	49.1	1.0	ug/L	50.00	ND	98.3	70-130			07/26/2019	
Dibromomethane	48.0	1.0	ug/L	50.00	ND	96.0	70-130			07/26/2019	
Dichlorodifluoromethane	69.8	5.0	ug/L	50.00	ND	140	70-130			07/26/2019	A04, A11
Diethyl ether	46.9	5.0	ug/L	50.00	ND	93.7	70-130			07/26/2019	

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9G2501 - Method: 5030				**Prepared: 07/26/2019**							
Matrix Spike (B9G2501-MS1)	**Source: 1907223-03**										
Diisopropyl Ether	43.0	5.0	ug/L	50.00	ND	86.0	70-130			07/26/2019	
Ethylbenzene	51.0	1.0	ug/L	50.00	ND	102	70-130			07/26/2019	
Ethyltertiarybutylether	44.0	5.0	ug/L	50.00	ND	88.0	70-130			07/26/2019	
Hexachloroethane	47.7	5.0	ug/L	50.00	ND	95.3	70-130			07/26/2019	
Hexane	48.3	1.0	ug/L	50.00	ND	96.6	70-130			07/26/2019	
Isopropylbenzene	49.7	1.0	ug/L	50.00	ND	99.4	70-130			07/26/2019	
m & p - Xylene	100	2.0	ug/L	100.0	ND	100	70-130			07/26/2019	
Methylene chloride	50.1	5.0	ug/L	50.00	ND	100	70-130			07/26/2019	
Methyltertiarybutylether	46.0	1.0	ug/L	50.00	ND	92.0	70-130			07/26/2019	
Naphthalene	48.8	5.0	ug/L	50.00	ND	97.7	70-130			07/26/2019	X
n-Butylbenzene	52.6	1.0	ug/L	50.00	ND	105	70-130			07/26/2019	
n-Propylbenzene	50.5	1.0	ug/L	50.00	ND	101	70-130			07/26/2019	
o-Xylene	51.3	1.0	ug/L	50.00	ND	103	70-130			07/26/2019	
sec-Butylbenzene	54.3	1.0	ug/L	50.00	ND	109	70-130			07/26/2019	
Styrene	52.1	1.0	ug/L	50.00	ND	104	70-130			07/26/2019	
tert-Butylbenzene	49.5	1.0	ug/L	50.00	ND	98.9	70-130			07/26/2019	
tertiary Butyl Alcohol	220	50	ug/L	250.0	ND	88.0	70-130			07/26/2019	
tertiaryAmylmethylether	45.4	5.0	ug/L	50.00	ND	90.9	70-130			07/26/2019	
Tetrachloroethylene	48.1	1.0	ug/L	50.00	ND	96.3	70-130			07/26/2019	
Tetrahydrofuran	45.0	5.0	ug/L	50.00	ND	90.0	70-130			07/26/2019	
Toluene	51.0	1.0	ug/L	50.00	ND	102	70-130			07/26/2019	
trans-1,2-Dichloroethylene	48.6	1.0	ug/L	50.00	ND	97.3	70-130			07/26/2019	
trans-1,3-Dichloropropylene	47.5	1.0	ug/L	50.00	ND	95.1	70-130			07/26/2019	
Trichloroethylene	50.9	1.0	ug/L	50.00	ND	102	70-130			07/26/2019	
Trichlorofluoromethane	51.4	1.0	ug/L	50.00	ND	103	70-130			07/26/2019	
Vinyl chloride	55.7	1.0	ug/L	50.00	ND	111	70-130			07/26/2019	
Surrogate: Bromofluorobenzene	*46.0*		ug/L	*50.00*		*92.0*	*85-115*			07/26/2019	
Surrogate: Dibromofluoromethane	*47.4*		ug/L	*50.00*		*94.9*	*82.7-115*			07/26/2019	
Surrogate: Toluene-d8	*48.9*		ug/L	*50.00*		*97.8*	*85-115*			07/26/2019	
Matrix Spike Dup (B9G2501-MSD1)	**Source: 1907223-03**										
1,1,1,2-Tetrachloroethane	45.6	1.0	ug/L	50.00	ND	91.1	70-130	9.04	30	07/26/2019	
1,1,1-Trichloroethane	44.1	1.0	ug/L	50.00	ND	88.2	70-130	13.2	30	07/26/2019	
1,1,2,2-Tetrachloroethane	48.7	1.0	ug/L	50.00	ND	97.4	70-130	1.45	30	07/26/2019	
1,1,2-Trichloroethane	46.6	1.0	ug/L	50.00	ND	93.2	70-130	4.78	30	07/26/2019	
1,1-Dichloroethane	43.2	1.0	ug/L	50.00	ND	86.5	70-130	10.7	30	07/26/2019	
1,1-Dichloroethylene	43.0	1.0	ug/L	50.00	ND	85.9	70-130	13.8	30	07/26/2019	
1,2,3-Trichlorobenzene	49.4	5.0	ug/L	50.00	ND	98.8	70-130	4.31	30	07/26/2019	
1,2,3-Trichloropropane	46.5	1.0	ug/L	50.00	ND	92.9	70-130	2.37	30	07/26/2019	
1,2,3-Trimethylbenzene	45.6	1.0	ug/L	50.00	ND	91.1	70-130	7.81	30	07/26/2019	
1,2,4-Trichlorobenzene	49.0	5.0	ug/L	50.00	ND	98.0	70-130	6.54	30	07/26/2019	
1,2,4-Trimethylbenzene	45.3	1.0	ug/L	50.00	ND	90.6	70-130	7.51	30	07/26/2019	
1,2-Dibromoethane	46.3	1.0	ug/L	50.00	ND	92.6	70-130	4.32	30	07/26/2019	
1,2-Dichlorobenzene	47.1	1.0	ug/L	50.00	ND	94.2	70-130	7.30	30	07/26/2019	
1,2-Dichloroethane	45.3	1.0	ug/L	50.00	ND	90.5	70-130	5.26	30	07/26/2019	
1,2-Dichloropropane	46.1	1.0	ug/L	50.00	ND	92.2	70-130	7.78	30	07/26/2019	
1,3,5-Trimethylbenzene	45.1	1.0	ug/L	50.00	ND	90.3	70-130	9.56	30	07/26/2019	

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9G2501 - Method: 5030				**Prepared: 07/26/2019**							
Matrix Spike Dup (B9G2501-MSD1)	**Source: 1907223-03**										
1,3-Dichlorobenzene	45.5	1.0	ug/L	50.00	ND	90.9	70-130	7.76	30	07/26/2019	
1,4-Dichlorobenzene	44.7	1.0	ug/L	50.00	ND	89.4	70-130	7.32	30	07/26/2019	
2,2,4-Trimethylpentane	44.2	5.0	ug/L	50.00	ND	88.4	70-130	16.6	30	07/26/2019	
2-Butanone (MEK)	46.3	5.0	ug/L	50.00	ND	92.5	70-130	4.23	30	07/26/2019	
2-Methylnaphthalene	46.7	5.0	ug/L	50.00	ND	93.4	70-130	1.25	30	07/26/2019	X
2-Propanone (acetone)	49.9	20	ug/L	50.00	ND	99.8	70-130	5.72	30	07/26/2019	
4-Methyl-2-pentanone (MIBK)	47.7	5.0	ug/L	50.00	ND	95.4	70-130	1.99	30	07/26/2019	
Acrylonitrile	40.2	5.0	ug/L	50.00	ND	80.5	70-130	0.0679	30	07/26/2019	A05
Benzene	45.1	1.0	ug/L	50.00	ND	90.3	70-130	9.53	30	07/26/2019	
Bromochloromethane	46.7	1.0	ug/L	50.00	ND	93.4	70-130	6.18	30	07/26/2019	
Bromodichloromethane	44.9	1.0	ug/L	50.00	ND	89.8	70-130	8.23	30	07/26/2019	
Bromoform	45.2	1.0	ug/L	50.00	ND	90.4	70-130	3.08	30	07/26/2019	
Bromomethane	49.8	5.0	ug/L	50.00	ND	99.5	70-130	12.3	30	07/26/2019	
Carbon disulfide	39.8	1.0	ug/L	50.00	ND	79.6	70-130	15.4	30	07/26/2019	
Carbon tetrachloride	45.0	1.0	ug/L	50.00	ND	89.9	70-130	14.0	30	07/26/2019	
Chlorobenzene	46.3	1.0	ug/L	50.00	ND	92.6	70-130	10.2	30	07/26/2019	
Chloroethane	57.1	5.0	ug/L	50.00	ND	114	70-130	15.8	30	07/26/2019	
Chloroform	44.2	1.0	ug/L	50.00	ND	88.4	70-130	9.23	30	07/26/2019	
Chloromethane	51.1	5.0	ug/L	50.00	ND	102	70-130	15.0	30	07/26/2019	
cis-1,2-Dichloroethylene	43.7	1.0	ug/L	50.00	ND	87.4	70-130	10.5	30	07/26/2019	
cis-1,3-Dichloropropylene	46.2	1.0	ug/L	50.00	ND	92.5	70-130	8.39	30	07/26/2019	
Cyclohexane	46.1	5.0	ug/L	50.00	ND	92.1	70-130	14.5	30	07/26/2019	
Dibromochloromethane	46.5	1.0	ug/L	50.00	ND	92.9	70-130	5.59	30	07/26/2019	
Dibromomethane	46.0	1.0	ug/L	50.00	ND	92.0	70-130	4.23	30	07/26/2019	
Dichlorodifluoromethane	57.7	5.0	ug/L	50.00	ND	115	70-130	18.9	30	07/26/2019	A11
Diethyl ether	45.5	5.0	ug/L	50.00	ND	91.0	70-130	3.02	30	07/26/2019	
Diisopropyl Ether	40.6	5.0	ug/L	50.00	ND	81.2	70-130	5.73	30	07/26/2019	
Ethylbenzene	45.1	1.0	ug/L	50.00	ND	90.1	70-130	12.4	30	07/26/2019	
Ethyltertiarybutylether	42.5	5.0	ug/L	50.00	ND	85.0	70-130	3.48	30	07/26/2019	
Hexachloroethane	42.9	5.0	ug/L	50.00	ND	85.7	70-130	10.6	30	07/26/2019	
Hexane	40.3	1.0	ug/L	50.00	ND	80.6	70-130	18.2	30	07/26/2019	
Isopropylbenzene	44.8	1.0	ug/L	50.00	ND	89.6	70-130	10.4	30	07/26/2019	
m & p - Xylene	89.6	2.0	ug/L	100.0	ND	89.6	70-130	11.3	30	07/26/2019	
Methylene chloride	44.8	5.0	ug/L	50.00	ND	89.7	70-130	11.1	30	07/26/2019	
Methyltertiarybutylether	44.7	1.0	ug/L	50.00	ND	89.3	70-130	3.00	30	07/26/2019	
Naphthalene	49.5	5.0	ug/L	50.00	ND	98.9	70-130	1.25	30	07/26/2019	X
n-Butylbenzene	46.9	1.0	ug/L	50.00	ND	93.7	70-130	11.5	30	07/26/2019	
n-Propylbenzene	45.2	1.0	ug/L	50.00	ND	90.4	70-130	11.1	30	07/26/2019	
o-Xylene	45.9	1.0	ug/L	50.00	ND	91.8	70-130	11.1	30	07/26/2019	
sec-Butylbenzene	49.0	1.0	ug/L	50.00	ND	98.1	70-130	10.2	30	07/26/2019	
Styrene	46.9	1.0	ug/L	50.00	ND	93.9	70-130	10.4	30	07/26/2019	
tert-Butylbenzene	45.3	1.0	ug/L	50.00	ND	90.6	70-130	8.79	30	07/26/2019	
tertiary Butyl Alcohol	213	50	ug/L	250.0	ND	85.0	70-130	3.48	30	07/26/2019	
tertiaryAmylmethylether	43.6	5.0	ug/L	50.00	ND	87.2	70-130	4.16	30	07/26/2019	
Tetrachloroethylene	42.2	1.0	ug/L	50.00	ND	84.3	70-130	13.2	30	07/26/2019	
Tetrahydrofuran	45.1	5.0	ug/L	50.00	ND	90.1	70-130	0.0655	30	07/26/2019	
Toluene	45.3	1.0	ug/L	50.00	ND	90.7	70-130	11.8	30	07/26/2019	

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9G2501 - Method: 5030				**Prepared: 07/26/2019**							
Matrix Spike Dup (B9G2501-MSD1)	**Source: 1907223-03**										
trans-1,2-Dichloroethylene	42.4	1.0	ug/L	50.00	ND	84.7	70-130	13.8	30	07/26/2019	
trans-1,3-Dichloropropylene	44.9	1.0	ug/L	50.00	ND	89.8	70-130	5.73	30	07/26/2019	
Trichloroethylene	45.0	1.0	ug/L	50.00	ND	90.0	70-130	12.3	30	07/26/2019	
Trichlorofluoromethane	44.0	1.0	ug/L	50.00	ND	88.0	70-130	15.6	30	07/26/2019	
Vinyl chloride	48.5	1.0	ug/L	50.00	ND	97.0	70-130	13.8	30	07/26/2019	
Surrogate: Bromofluorobenzene	*45.9*		ug/L	*50.00*		*91.9*	*85-115*			07/26/2019	
Surrogate: Dibromofluoromethane	*46.5*		ug/L	*50.00*		*93.1*	*82.7-115*			07/26/2019	
Surrogate: Toluene-d8	*47.2*		ug/L	*50.00*		*94.4*	*85-115*			07/26/2019	
Batch B9G2602 - Method: 5030				**Prepared: 07/26/2019**							
Blank (B9G2602-BLK1)											
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L							07/26/2019	
1,1,1-Trichloroethane	ND	1.0	ug/L							07/26/2019	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L							07/26/2019	
1,1,2-Trichloroethane	ND	1.0	ug/L							07/26/2019	
1,1-Dichloroethane	ND	1.0	ug/L							07/26/2019	
1,1-Dichloroethylene	ND	1.0	ug/L							07/26/2019	
1,2,3-Trichlorobenzene	ND	5.0	ug/L							07/26/2019	
1,2,3-Trichloropropane	ND	1.0	ug/L							07/26/2019	
1,2,3-Trimethylbenzene	ND	1.0	ug/L							07/26/2019	
1,2,4-Trichlorobenzene	ND	5.0	ug/L							07/26/2019	
1,2,4-Trimethylbenzene	ND	1.0	ug/L							07/26/2019	
1,2-Dibromoethane	ND	1.0	ug/L							07/26/2019	
1,2-Dichlorobenzene	ND	1.0	ug/L							07/26/2019	
1,2-Dichloroethane	ND	1.0	ug/L							07/26/2019	
1,2-Dichloropropane	ND	1.0	ug/L							07/26/2019	
1,3,5-Trimethylbenzene	ND	1.0	ug/L							07/26/2019	
1,3-Dichlorobenzene	ND	1.0	ug/L							07/26/2019	
1,4-Dichlorobenzene	ND	1.0	ug/L							07/26/2019	
2,2,4-Trimethylpentane	ND	5.0	ug/L							07/26/2019	
2-Butanone (MEK)	ND	5.0	ug/L							07/26/2019	
2-Methylnaphthalene	ND	5.0	ug/L							07/26/2019	X
2-Propanone (acetone)	ND	20	ug/L							07/26/2019	
4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L							07/26/2019	
Acrylonitrile	ND	5.0	ug/L							07/26/2019	A05
Benzene	ND	1.0	ug/L							07/26/2019	
Bromochloromethane	ND	1.0	ug/L							07/26/2019	
Bromodichloromethane	ND	1.0	ug/L							07/26/2019	
Bromoform	ND	1.0	ug/L							07/26/2019	
Bromomethane	ND	5.0	ug/L							07/26/2019	
Carbon disulfide	ND	1.0	ug/L							07/26/2019	
Carbon tetrachloride	ND	1.0	ug/L							07/26/2019	
Chlorobenzene	ND	1.0	ug/L							07/26/2019	
Chloroethane	ND	5.0	ug/L							07/26/2019	

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9G2602 - Method: 5030				**Prepared: 07/26/2019**							
Blank (B9G2602-BLK1)											
Chloroform	ND	1.0	ug/L							07/26/2019	
Chloromethane	ND	5.0	ug/L							07/26/2019	
cis-1,2-Dichloroethylene	ND	1.0	ug/L							07/26/2019	
cis-1,3-Dichloropropylene	ND	1.0	ug/L							07/26/2019	
Cyclohexane	ND	5.0	ug/L							07/26/2019	
Dibromochloromethane	ND	1.0	ug/L							07/26/2019	
Dibromomethane	ND	1.0	ug/L							07/26/2019	
Dichlorodifluoromethane	ND	5.0	ug/L							07/26/2019	
Diethyl ether	ND	5.0	ug/L							07/26/2019	
Diisopropyl Ether	ND	5.0	ug/L							07/26/2019	
Ethylbenzene	ND	1.0	ug/L							07/26/2019	
Ethyltertiarybutylether	ND	5.0	ug/L							07/26/2019	
Hexachloroethane	ND	5.0	ug/L							07/26/2019	
Hexane	ND	1.0	ug/L							07/26/2019	
Isopropylbenzene	ND	1.0	ug/L							07/26/2019	
m & p - Xylene	ND	2.0	ug/L							07/26/2019	
Methylene chloride	ND	5.0	ug/L							07/26/2019	
Methyltertiarybutylether	ND	1.0	ug/L							07/26/2019	
Naphthalene	ND	5.0	ug/L							07/26/2019	X
n-Butylbenzene	ND	1.0	ug/L							07/26/2019	
n-Propylbenzene	ND	1.0	ug/L							07/26/2019	
o-Xylene	ND	1.0	ug/L							07/26/2019	
sec-Butylbenzene	ND	1.0	ug/L							07/26/2019	
Styrene	ND	1.0	ug/L							07/26/2019	
tert-Butylbenzene	ND	1.0	ug/L							07/26/2019	
tertiary Butyl Alcohol	ND	50	ug/L							07/26/2019	
tertiaryAmylmethylether	ND	5.0	ug/L							07/26/2019	
Tetrachloroethylene	ND	1.0	ug/L							07/26/2019	
Tetrahydrofuran	ND	5.0	ug/L							07/26/2019	
Toluene	ND	1.0	ug/L							07/26/2019	
trans-1,2-Dichloroethylene	ND	1.0	ug/L							07/26/2019	
trans-1,3-Dichloropropylene	ND	1.0	ug/L							07/26/2019	
Trichloroethylene	ND	1.0	ug/L							07/26/2019	
Trichlorofluoromethane	ND	1.0	ug/L							07/26/2019	
Vinyl chloride	ND	1.0	ug/L							07/26/2019	
Surrogate: Bromofluorobenzene	*49.0*		ug/L	*50.00*		*98.0*	*85-115*			07/26/2019	
Surrogate: Dibromofluoromethane	*46.7*		ug/L	*50.00*		*93.5*	*82.7-115*			07/26/2019	
Surrogate: Toluene-d8	*49.1*		ug/L	*50.00*		*98.1*	*85-115*			07/26/2019	
LCS (B9G2602-BS1)											
1,1,1,2-Tetrachloroethane	47.5	1.0	ug/L	50.00		95.1	70-130			07/26/2019	
1,1,1-Trichloroethane	45.9	1.0	ug/L	50.00		91.8	70-130			07/26/2019	
1,1,2,2-Tetrachloroethane	48.3	1.0	ug/L	50.00		96.5	70-130			07/26/2019	
1,1,2-Trichloroethane	47.0	1.0	ug/L	50.00		94.1	70-130			07/26/2019	
1,1-Dichloroethane	44.5	1.0	ug/L	50.00		89.0	70-130			07/26/2019	
1,1-Dichloroethylene	45.5	1.0	ug/L	50.00		90.9	70-130			07/26/2019	
1,2,3-Trichlorobenzene	52.0	5.0	ug/L	50.00		104	70-130			07/26/2019	

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9G2602 - Method: 5030				**Prepared: 07/26/2019**							
LCS (B9G2602-BS1)											
1,2,3-Trichloropropane	46.4	1.0	ug/L	50.00		92.8	70-130			07/26/2019	
1,2,3-Trimethylbenzene	47.0	1.0	ug/L	50.00		94.1	70-130			07/26/2019	
1,2,4-Trichlorobenzene	52.3	5.0	ug/L	50.00		105	70-130			07/26/2019	
1,2,4-Trimethylbenzene	47.0	1.0	ug/L	50.00		94.1	70-130			07/26/2019	
1,2-Dibromoethane	47.2	1.0	ug/L	50.00		94.3	70-130			07/26/2019	
1,2-Dichlorobenzene	49.2	1.0	ug/L	50.00		98.4	70-130			07/26/2019	
1,2-Dichloroethane	44.7	1.0	ug/L	50.00		89.3	70-130			07/26/2019	
1,2-Dichloropropane	46.8	1.0	ug/L	50.00		93.6	70-130			07/26/2019	
1,3,5-Trimethylbenzene	47.4	1.0	ug/L	50.00		94.9	70-130			07/26/2019	
1,3-Dichlorobenzene	47.7	1.0	ug/L	50.00		95.4	70-130			07/26/2019	
1,4-Dichlorobenzene	47.1	1.0	ug/L	50.00		94.2	70-130			07/26/2019	
2,2,4-Trimethylpentane	50.1	5.0	ug/L	50.00		100	70-130			07/26/2019	
2-Butanone (MEK)	44.6	5.0	ug/L	50.00		89.2	70-130			07/26/2019	
2-Methylnaphthalene	48.9	5.0	ug/L	50.00		97.8	70-130			07/26/2019	X
2-Propanone (acetone)	44.4	20	ug/L	50.00		88.9	70-130			07/26/2019	
4-Methyl-2-pentanone (MIBK)	45.5	5.0	ug/L	50.00		91.0	70-130			07/26/2019	
Acrylonitrile	39.4	5.0	ug/L	50.00		78.8	70-130			07/26/2019	A05
Benzene	46.2	1.0	ug/L	50.00		92.4	70-130			07/26/2019	
Bromochloromethane	47.5	1.0	ug/L	50.00		94.9	70-130			07/26/2019	
Bromodichloromethane	46.2	1.0	ug/L	50.00		92.5	70-130			07/26/2019	
Bromoform	46.4	1.0	ug/L	50.00		92.8	70-130			07/26/2019	
Bromomethane	53.9	5.0	ug/L	50.00		108	70-130			07/26/2019	
Carbon disulfide	43.2	1.0	ug/L	50.00		86.3	70-130			07/26/2019	
Carbon tetrachloride	47.3	1.0	ug/L	50.00		94.7	70-130			07/26/2019	
Chlorobenzene	48.4	1.0	ug/L	50.00		96.8	70-130			07/26/2019	
Chloroethane	60.9	5.0	ug/L	50.00		122	70-130			07/26/2019	A06
Chloroform	45.3	1.0	ug/L	50.00		90.5	70-130			07/26/2019	
Chloromethane	57.2	5.0	ug/L	50.00		114	70-130			07/26/2019	
cis-1,2-Dichloroethylene	45.2	1.0	ug/L	50.00		90.3	70-130			07/26/2019	
cis-1,3-Dichloropropylene	47.9	1.0	ug/L	50.00		95.7	70-130			07/26/2019	
Cyclohexane	48.6	5.0	ug/L	50.00		97.1	70-130			07/26/2019	
Dibromochloromethane	47.7	1.0	ug/L	50.00		95.4	70-130			07/26/2019	
Dibromomethane	46.6	1.0	ug/L	50.00		93.2	70-130			07/26/2019	
Dichlorodifluoromethane	69.3	5.0	ug/L	50.00		139	70-130			07/26/2019	A06, A09, A11
Diethyl ether	44.4	5.0	ug/L	50.00		88.8	70-130			07/26/2019	
Diisopropyl Ether	40.8	5.0	ug/L	50.00		81.5	70-130			07/26/2019	
Ethylbenzene	47.4	1.0	ug/L	50.00		94.9	70-130			07/26/2019	
Ethyltertiarybutylether	42.8	5.0	ug/L	50.00		85.7	70-130			07/26/2019	
Hexachloroethane	45.5	5.0	ug/L	50.00		90.9	70-130			07/26/2019	
Hexane	46.1	1.0	ug/L	50.00		92.1	70-130			07/26/2019	
Isopropylbenzene	47.3	1.0	ug/L	50.00		94.7	70-130			07/26/2019	
m & p - Xylene	94.2	2.0	ug/L	100.0		94.2	70-130			07/26/2019	
Methylene chloride	46.1	5.0	ug/L	50.00		92.2	70-130			07/26/2019	
Methyltertiarybutylether	44.4	1.0	ug/L	50.00		88.9	70-130			07/26/2019	
Naphthalene	51.2	5.0	ug/L	50.00		102	70-130			07/26/2019	X
n-Butylbenzene	50.5	1.0	ug/L	50.00		101	70-130			07/26/2019	

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9G2602 - Method: 5030				**Prepared: 07/26/2019**							
LCS (B9G2602-BS1)											
n-Propylbenzene	48.0	1.0	ug/L	50.00		96.0	70-130			07/26/2019	
o-Xylene	48.1	1.0	ug/L	50.00		96.2	70-130			07/26/2019	
sec-Butylbenzene	51.0	1.0	ug/L	50.00		102	70-130			07/26/2019	
Styrene	48.8	1.0	ug/L	50.00		97.5	70-130			07/26/2019	
tert-Butylbenzene	47.4	1.0	ug/L	50.00		94.8	70-130			07/26/2019	
tertiary Butyl Alcohol	214	50	ug/L	250.0		85.7	70-130			07/26/2019	
tertiaryAmylmethylether	43.4	5.0	ug/L	50.00		86.8	70-130			07/26/2019	
Tetrachloroethylene	45.3	1.0	ug/L	50.00		90.6	70-130			07/26/2019	
Tetrahydrofuran	43.1	5.0	ug/L	50.00		86.2	70-130			07/26/2019	
Toluene	47.1	1.0	ug/L	50.00		94.1	70-130			07/26/2019	
trans-1,2-Dichloroethylene	44.9	1.0	ug/L	50.00		89.8	70-130			07/26/2019	
trans-1,3-Dichloropropylene	46.5	1.0	ug/L	50.00		93.1	70-130			07/26/2019	
Trichloroethylene	47.2	1.0	ug/L	50.00		94.4	70-130			07/26/2019	
Trichlorofluoromethane	45.9	1.0	ug/L	50.00		91.9	70-130			07/26/2019	
Vinyl chloride	52.3	1.0	ug/L	50.00		105	70-130			07/26/2019	
Surrogate: Bromofluorobenzene	*46.5*		ug/L	*50.00*		*93.0*	*85-115*			07/26/2019	
Surrogate: Dibromofluoromethane	*46.7*		ug/L	*50.00*		*93.3*	*82.7-115*			07/26/2019	
Surrogate: Toluene-d8	*47.8*		ug/L	*50.00*		*95.7*	*85-115*			07/26/2019	
Matrix Spike (B9G2602-MS1)	**Source: 1907226-09**										
1,1,1,2-Tetrachloroethane	51.5	1.0	ug/L	50.00	ND	103	70-130			07/26/2019	
1,1,1-Trichloroethane	52.2	1.0	ug/L	50.00	ND	104	70-130			07/26/2019	
1,1,2,2-Tetrachloroethane	52.0	1.0	ug/L	50.00	ND	104	70-130			07/26/2019	
1,1,2-Trichloroethane	50.4	1.0	ug/L	50.00	ND	101	70-130			07/26/2019	
1,1-Dichloroethane	50.2	1.0	ug/L	50.00	ND	100	70-130			07/26/2019	
1,1-Dichloroethylene	52.3	1.0	ug/L	50.00	ND	105	70-130			07/26/2019	
1,2,3-Trichlorobenzene	54.3	5.0	ug/L	50.00	ND	109	70-130			07/26/2019	
1,2,3-Trichloropropane	49.5	1.0	ug/L	50.00	ND	98.9	70-130			07/26/2019	
1,2,3-Trimethylbenzene	51.9	1.0	ug/L	50.00	ND	104	70-130			07/26/2019	
1,2,4-Trichlorobenzene	54.1	5.0	ug/L	50.00	ND	108	70-130			07/26/2019	
1,2,4-Trimethylbenzene	51.8	1.0	ug/L	50.00	ND	104	70-130			07/26/2019	
1,2-Dibromoethane	50.3	1.0	ug/L	50.00	ND	101	70-130			07/26/2019	
1,2-Dichlorobenzene	52.2	1.0	ug/L	50.00	ND	104	70-130			07/26/2019	
1,2-Dichloroethane	50.7	1.0	ug/L	50.00	ND	101	70-130			07/26/2019	
1,2-Dichloropropane	52.2	1.0	ug/L	50.00	ND	104	70-130			07/26/2019	
1,3,5-Trimethylbenzene	52.6	1.0	ug/L	50.00	ND	105	70-130			07/26/2019	
1,3-Dichlorobenzene	51.6	1.0	ug/L	50.00	ND	103	70-130			07/26/2019	
1,4-Dichlorobenzene	50.6	1.0	ug/L	50.00	ND	101	70-130			07/26/2019	
2,2,4-Trimethylpentane	55.6	5.0	ug/L	50.00	ND	111	70-130			07/26/2019	
2-Butanone (MEK)	50.5	5.0	ug/L	50.00	ND	101	70-130			07/26/2019	
2-Methylnaphthalene	46.7	5.0	ug/L	50.00	ND	93.3	70-130			07/26/2019	X
2-Propanone (acetone)	53.0	20	ug/L	50.00	ND	106	70-130			07/26/2019	
4-Methyl-2-pentanone (MIBK)	49.7	5.0	ug/L	50.00	ND	99.3	70-130			07/26/2019	
Acrylonitrile	42.3	5.0	ug/L	50.00	ND	84.7	70-130			07/26/2019	A05
Benzene	52.1	1.0	ug/L	50.00	ND	104	70-130			07/26/2019	
Bromochloromethane	51.6	1.0	ug/L	50.00	ND	103	70-130			07/26/2019	
Bromodichloromethane	51.0	1.0	ug/L	50.00	ND	102	70-130			07/26/2019	

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9G2602 - Method: 5030				**Prepared: 07/26/2019**							
Matrix Spike (B9G2602-MS1)	**Source: 1907226-09**										
Bromoform	47.9	1.0	ug/L	50.00	ND	95.7	70-130			07/26/2019	
Bromomethane	59.9	5.0	ug/L	50.00	ND	120	70-130			07/26/2019	
Carbon disulfide	48.7	1.0	ug/L	50.00	ND	97.5	70-130			07/26/2019	
Carbon tetrachloride	54.6	1.0	ug/L	50.00	ND	109	70-130			07/26/2019	
Chlorobenzene	53.6	1.0	ug/L	50.00	ND	107	70-130			07/26/2019	
Chloroethane	71.3	5.0	ug/L	50.00	ND	143	70-130			07/26/2019	A04, A06
Chloroform	51.0	1.0	ug/L	50.00	ND	102	70-130			07/26/2019	
Chloromethane	64.9	5.0	ug/L	50.00	ND	130	70-130			07/26/2019	
cis-1,2-Dichloroethylene	50.9	1.0	ug/L	50.00	ND	102	70-130			07/26/2019	
cis-1,3-Dichloropropylene	51.1	1.0	ug/L	50.00	ND	102	70-130			07/26/2019	
Cyclohexane	56.3	5.0	ug/L	50.00	ND	113	70-130			07/26/2019	
Dibromochloromethane	49.9	1.0	ug/L	50.00	ND	99.7	70-130			07/26/2019	
Dibromomethane	50.8	1.0	ug/L	50.00	ND	102	70-130			07/26/2019	
Dichlorodifluoromethane	79.0	5.0	ug/L	50.00	ND	158	70-130			07/26/2019	A04, A06, A11
Diethyl ether	49.3	5.0	ug/L	50.00	ND	98.6	70-130			07/26/2019	
Diisopropyl Ether	45.2	5.0	ug/L	50.00	ND	90.3	70-130			07/26/2019	
Ethylbenzene	52.8	1.0	ug/L	50.00	ND	106	70-130			07/26/2019	
Ethyltertiarybutylether	45.4	5.0	ug/L	50.00	ND	90.9	70-130			07/26/2019	
Hexachloroethane	49.2	5.0	ug/L	50.00	ND	98.4	70-130			07/26/2019	
Hexane	52.3	1.0	ug/L	50.00	ND	105	70-130			07/26/2019	
Isopropylbenzene	52.1	1.0	ug/L	50.00	ND	104	70-130			07/26/2019	
m & p - Xylene	104	2.0	ug/L	100.0	ND	104	70-130			07/26/2019	
Methylene chloride	52.4	5.0	ug/L	50.00	ND	105	70-130			07/26/2019	
Methyltertiarybutylether	47.8	1.0	ug/L	50.00	ND	95.7	70-130			07/26/2019	
Naphthalene	50.5	5.0	ug/L	50.00	ND	101	70-130			07/26/2019	X
n-Butylbenzene	55.5	1.0	ug/L	50.00	ND	111	70-130			07/26/2019	
n-Propylbenzene	53.5	1.0	ug/L	50.00	ND	107	70-130			07/26/2019	
o-Xylene	53.1	1.0	ug/L	50.00	ND	106	70-130			07/26/2019	
sec-Butylbenzene	57.3	1.0	ug/L	50.00	ND	115	70-130			07/26/2019	
Styrene	53.5	1.0	ug/L	50.00	ND	107	70-130			07/26/2019	
tert-Butylbenzene	51.8	1.0	ug/L	50.00	ND	104	70-130			07/26/2019	
tertiary Butyl Alcohol	227	50	ug/L	250.0	ND	90.9	70-130			07/26/2019	
tertiaryAmylmethylether	46.6	5.0	ug/L	50.00	ND	93.2	70-130			07/26/2019	
Tetrachloroethylene	50.4	1.0	ug/L	50.00	ND	101	70-130			07/26/2019	
Tetrahydrofuran	46.2	5.0	ug/L	50.00	ND	92.4	70-130			07/26/2019	
Toluene	52.3	1.0	ug/L	50.00	ND	105	70-130			07/26/2019	
trans-1,2-Dichloroethylene	52.1	1.0	ug/L	50.00	ND	104	70-130			07/26/2019	
trans-1,3-Dichloropropylene	49.2	1.0	ug/L	50.00	ND	98.4	70-130			07/26/2019	
Trichloroethylene	52.7	1.0	ug/L	50.00	ND	105	70-130			07/26/2019	
Trichlorofluoromethane	54.1	1.0	ug/L	50.00	ND	108	70-130			07/26/2019	
Vinyl chloride	61.2	1.0	ug/L	50.00	ND	122	70-130			07/26/2019	
Surrogate: Bromofluorobenzene	*47.9*		ug/L	*50.00*		*95.9*	*85-115*			07/26/2019	
Surrogate: Dibromofluoromethane	*49.9*		ug/L	*50.00*		*99.8*	*82.7-115*			07/26/2019	
Surrogate: Toluene-d8	*50.2*		ug/L	*50.00*		*100*	*85-115*			07/26/2019	
Matrix Spike Dup (B9G2602-MSD1)	**Source: 1907226-09**										

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9G2602 - Method: 5030				**Prepared: 07/26/2019**							
Matrix Spike Dup (B9G2602-MSD1)	**Source: 1907226-09**										
1,1,1,2-Tetrachloroethane	46.9	1.0	ug/L	50.00	ND	93.8	70-130	9.43	30	07/26/2019	
1,1,1-Trichloroethane	45.4	1.0	ug/L	50.00	ND	90.7	70-130	14.1	30	07/26/2019	
1,1,2,2-Tetrachloroethane	50.0	1.0	ug/L	50.00	ND	100	70-130	3.94	30	07/26/2019	
1,1,2-Trichloroethane	46.9	1.0	ug/L	50.00	ND	93.8	70-130	7.32	30	07/26/2019	
1,1-Dichloroethane	43.9	1.0	ug/L	50.00	ND	87.8	70-130	13.4	30	07/26/2019	
1,1-Dichloroethylene	44.6	1.0	ug/L	50.00	ND	89.3	70-130	15.8	30	07/26/2019	
1,2,3-Trichlorobenzene	50.8	5.0	ug/L	50.00	ND	102	70-130	6.59	30	07/26/2019	
1,2,3-Trichloropropane	47.7	1.0	ug/L	50.00	ND	95.3	70-130	3.67	30	07/26/2019	
1,2,3-Trimethylbenzene	47.5	1.0	ug/L	50.00	ND	95.1	70-130	8.88	30	07/26/2019	
1,2,4-Trichlorobenzene	51.1	5.0	ug/L	50.00	ND	102	70-130	5.68	30	07/26/2019	
1,2,4-Trimethylbenzene	46.7	1.0	ug/L	50.00	ND	93.3	70-130	10.4	30	07/26/2019	
1,2-Dibromoethane	47.9	1.0	ug/L	50.00	ND	95.8	70-130	4.97	30	07/26/2019	
1,2-Dichlorobenzene	49.0	1.0	ug/L	50.00	ND	98.0	70-130	6.42	30	07/26/2019	
1,2-Dichloroethane	46.4	1.0	ug/L	50.00	ND	92.8	70-130	8.80	30	07/26/2019	
1,2-Dichloropropane	46.9	1.0	ug/L	50.00	ND	93.9	70-130	10.5	30	07/26/2019	
1,3,5-Trimethylbenzene	46.8	1.0	ug/L	50.00	ND	93.7	70-130	11.5	30	07/26/2019	
1,3-Dichlorobenzene	46.9	1.0	ug/L	50.00	ND	93.7	70-130	9.62	30	07/26/2019	
1,4-Dichlorobenzene	46.6	1.0	ug/L	50.00	ND	93.1	70-130	8.37	30	07/26/2019	
2,2,4-Trimethylpentane	46.4	5.0	ug/L	50.00	ND	92.8	70-130	18.1	30	07/26/2019	
2-Butanone (MEK)	47.6	5.0	ug/L	50.00	ND	95.1	70-130	5.94	30	07/26/2019	
2-Methylnaphthalene	48.2	5.0	ug/L	50.00	ND	96.3	70-130	3.17	30	07/26/2019	X
2-Propanone (acetone)	49.8	20	ug/L	50.00	ND	99.5	70-130	6.22	30	07/26/2019	
4-Methyl-2-pentanone (MIBK)	49.0	5.0	ug/L	50.00	ND	98.1	70-130	1.27	30	07/26/2019	
Acrylonitrile	40.6	5.0	ug/L	50.00	ND	81.2	70-130	4.14	30	07/26/2019	A05
Benzene	45.8	1.0	ug/L	50.00	ND	91.5	70-130	13.0	30	07/26/2019	
Bromochloromethane	48.4	1.0	ug/L	50.00	ND	96.8	70-130	6.31	30	07/26/2019	
Bromodichloromethane	45.5	1.0	ug/L	50.00	ND	91.1	70-130	11.2	30	07/26/2019	
Bromoform	45.4	1.0	ug/L	50.00	ND	90.8	70-130	5.34	30	07/26/2019	
Bromomethane	53.0	5.0	ug/L	50.00	ND	106	70-130	12.1	30	07/26/2019	
Carbon disulfide	40.9	1.0	ug/L	50.00	ND	81.9	70-130	17.4	30	07/26/2019	
Carbon tetrachloride	46.2	1.0	ug/L	50.00	ND	92.5	70-130	16.5	30	07/26/2019	
Chlorobenzene	48.0	1.0	ug/L	50.00	ND	95.9	70-130	11.1	30	07/26/2019	
Chloroethane	61.4	5.0	ug/L	50.00	ND	123	70-130	15.0	30	07/26/2019	A06
Chloroform	45.1	1.0	ug/L	50.00	ND	90.2	70-130	12.3	30	07/26/2019	
Chloromethane	56.6	5.0	ug/L	50.00	ND	113	70-130	13.7	30	07/26/2019	
cis-1,2-Dichloroethylene	45.4	1.0	ug/L	50.00	ND	90.8	70-130	11.4	30	07/26/2019	
cis-1,3-Dichloropropylene	47.2	1.0	ug/L	50.00	ND	94.3	70-130	8.06	30	07/26/2019	
Cyclohexane	47.7	5.0	ug/L	50.00	ND	95.4	70-130	16.5	30	07/26/2019	
Dibromochloromethane	47.1	1.0	ug/L	50.00	ND	94.3	70-130	5.62	30	07/26/2019	
Dibromomethane	47.4	1.0	ug/L	50.00	ND	94.8	70-130	6.89	30	07/26/2019	
Dichlorodifluoromethane	66.8	5.0	ug/L	50.00	ND	134	70-130	16.7	30	07/26/2019	A04, A06, A11
Diethyl ether	46.5	5.0	ug/L	50.00	ND	93.0	70-130	5.80	30	07/26/2019	
Diisopropyl Ether	41.0	5.0	ug/L	50.00	ND	82.1	70-130	9.55	30	07/26/2019	
Ethylbenzene	46.5	1.0	ug/L	50.00	ND	92.9	70-130	12.8	30	07/26/2019	
Ethyltertiarybutylether	43.5	5.0	ug/L	50.00	ND	86.9	70-130	4.43	30	07/26/2019	
Hexachloroethane	42.6	5.0	ug/L	50.00	ND	85.2	70-130	14.3	30	07/26/2019	

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9G2602 - Method: 5030				**Prepared: 07/26/2019**							
Matrix Spike Dup (B9G2602-MSD1)	**Source: 1907226-09**										
Hexane	43.1	1.0	ug/L	50.00	ND	86.2	70-130	19.2	30	07/26/2019	
Isopropylbenzene	46.3	1.0	ug/L	50.00	ND	92.5	70-130	11.8	30	07/26/2019	
m & p - Xylene	92.0	2.0	ug/L	100.0	ND	92.0	70-130	12.4	30	07/26/2019	
Methylene chloride	47.3	5.0	ug/L	50.00	ND	94.5	70-130	10.3	30	07/26/2019	
Methyltertiarybutylether	45.5	1.0	ug/L	50.00	ND	90.9	70-130	5.11	30	07/26/2019	
Naphthalene	51.1	5.0	ug/L	50.00	ND	102	70-130	1.18	30	07/26/2019	X
n-Butylbenzene	49.8	1.0	ug/L	50.00	ND	99.6	70-130	10.9	30	07/26/2019	
n-Propylbenzene	47.2	1.0	ug/L	50.00	ND	94.4	70-130	12.5	30	07/26/2019	
o-Xylene	47.3	1.0	ug/L	50.00	ND	94.5	70-130	11.6	30	07/26/2019	
sec-Butylbenzene	50.5	1.0	ug/L	50.00	ND	101	70-130	12.6	30	07/26/2019	
Styrene	48.4	1.0	ug/L	50.00	ND	96.8	70-130	10.1	30	07/26/2019	
tert-Butylbenzene	46.1	1.0	ug/L	50.00	ND	92.2	70-130	11.8	30	07/26/2019	
tertiary Butyl Alcohol	217	50	ug/L	250.0	ND	86.9	70-130	4.43	30	07/26/2019	
tertiaryAmylmethylether	44.7	5.0	ug/L	50.00	ND	89.4	70-130	4.16	30	07/26/2019	
Tetrachloroethylene	44.0	1.0	ug/L	50.00	ND	88.0	70-130	13.6	30	07/26/2019	
Tetrahydrofuran	45.9	5.0	ug/L	50.00	ND	91.8	70-130	0.691	30	07/26/2019	
Toluene	46.5	1.0	ug/L	50.00	ND	93.0	70-130	11.8	30	07/26/2019	
trans-1,2-Dichloroethylene	44.6	1.0	ug/L	50.00	ND	89.1	70-130	15.7	30	07/26/2019	
trans-1,3-Dichloropropylene	45.5	1.0	ug/L	50.00	ND	90.9	70-130	7.88	30	07/26/2019	
Trichloroethylene	46.0	1.0	ug/L	50.00	ND	92.0	70-130	13.6	30	07/26/2019	
Trichlorofluoromethane	45.8	1.0	ug/L	50.00	ND	91.7	70-130	16.5	30	07/26/2019	
Vinyl chloride	50.3	1.0	ug/L	50.00	ND	101	70-130	19.5	30	07/26/2019	
Surrogate: Bromofluorobenzene	*46.5*		ug/L	*50.00*		*93.1*	*85-115*			07/26/2019	
Surrogate: Dibromofluoromethane	*47.5*		ug/L	*50.00*		*94.9*	*82.7-115*			07/26/2019	
Surrogate: Toluene-d8	*48.5*		ug/L	*50.00*		*97.0*	*85-115*			07/26/2019	

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

Organics-Dioxane - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9G2906 - Method: 5030				**Prepared: 07/26/2019**							
Blank (B9G2906-BLK1)											
1,4-dioxane	ND	1.0	ug/L							07/26/2019	
LCS (B9G2906-BS1)											
1,4-dioxane	10.5	1.0	ug/L	10.00		105	70-130			07/26/2019	
Matrix Spike (B9G2906-MS1)	**Source: 1907223-04**										
1,4-dioxane	11.5	1.0	ug/L	10.00	1.40	101	70-130			07/26/2019	
Matrix Spike Dup (B9G2906-MSD1)	**Source: 1907223-04**										
1,4-dioxane	11.6	1.0	ug/L	10.00	1.40	102	70-130	0.605	30	07/26/2019	

Michigan Department of Environmental Quality
Laboratory Services Section

Analysis Request Sheet

Lab Work Order Number	Project Name	Matrix
1907225	Gelman Sciences	WATER

Site Code/Project Number: 81000018/Location 6130	AY: 19	CC Email 1: lundk@michigan.gov	Project TAT Days:	Sample Collector: Dan Hamel	
Dept-Division-District: DEQ-RRD-Jackson	Index:	CC Email 2: nedrichs@michigan.gov	Project Due Date:	Sample Collector Phone: 517-745-6595	
State Project Manager: Dan Hamel	PCA:	CC Email 3:		Contract Firm:	
State Project Manager Email: hameld@michigan.gov	Project: Location-6130	Overflow Lab Choice 1:	Accept Analysis hold time codes:	Contract Firm Primary Contact:	
State Project Manager Phone: (517)745-6595	Phase:	Overflow Lab Choice 2:		Primary Contact Phone:	

	Lab Use Only	Field Sample Identification	Collection Date	Collection Time	Container Count	Comments
1	01	Allen Creek/West Park SW	7/24/2019	0956	5	Please include QA/QC with Lab Data Report(s)
2	02	Allen Creek/chapin-West Park	7/24/2019	0923	5	
3	03	Allen Creek/Maple Ridge-Arborview	7/24/2019	1000	3	
4		Allen Creek/Wildwood-Arborview	7/24/2019		~~3~~	DRY - NO SAMPLE
5	04	Allen Creek/Murry-Washington	7/24/2019	1040	5	
6	05	Allen Creek/Eighth-Waterworks	7/24/2019	1028	5	
7	06	Allen Creek/Maryfield-Wildwood	7/24/2019	1015	3	
8						
9						
10						

ORGANIC 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
METH - Methane, Ethane, Ethene	
Methane, Ethane, Ethene	1 2 3 4 5 6 7 8 9 10
ON - 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
Chlordane	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
Benzidines	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
Acids 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

METALS CHEMISTRY PACKAGES

OpMemo2 - Total	1 2 3 4 5 6 7 8 9 10
OpMemo2 - Dissolved	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
Michigan10 - Dissolved	1 2 3 4 5 6 7 8 9 10
(As,Ba,Cd,Cr,Cu,Pb,Hg,Se,Ag,Zn)	

MAD - DISSOLVED METALS

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

MA - TOTAL METALS

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

GENERAL CHEMISTRY

GB	Total Cyanide - CN	1 2 3 4 5 6 7 8 9 10
GCN	Available Cyanide - CN (Amenable / Weak Acid Dissociable)	1 2 3 4 5 6 7 8 9 10
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	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 (includes Total Alkalinity)	1 2 3 4 5 6 7 8 9 10
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 - SO4	1 2 3 4 5 6 7 8 9 10
MN	Chromium 6 - Cr+6	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 (FF) (Field - Filtered & Preserved)	1 2 3 4 5 6 7 8 9 10
GN	Diss Org Carbon - DOC (LF) (Lab - Filtered & Preserved)	1 2 3 4 5 6 7 8 9 10
GA	Total Org Carbon - TOC	1 2 3 4 5 6 7 8 9 10
GA	Ammonia - NH3	1 2 3 4 5 6 7 8 9 10
GA	Nitrate+Nitrite - NO3+NO2	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.: DAN HAMEL DEQ-JACKSON DISTRICT	Melissa Smith	
Signature:		7/24/19 1653
Print Name & Org.:		
Signature:		
Print Name & Org.:		
Signature:		

GELMAN DATA

Sample Analysis Report

Sample #	Sample Name - Date/Time Sampled	1,4-Dioxane Results (ppb)	R.L. (ppb)	Date Analyzed	Time Analyzed
	Surface Water				
1	Allen Creek-Chapin-West Park-02-07-19-09:41-1	8.8	1.0	02/09/2019	09:27
2	Allen Creek-West Park SW-02-07-19-10:04-1	16	1.0	02/11/2019	19:56
3	Allen Creek-Maple Ridge-Arborview-02-07-19-10:20-1	nd	1.0	02/11/2019	18:47
4	Allen Creek-Wildwood-Arborview-02-07-19-10:36-1	nd	1.0	02/11/2019	23:23
5	Allen Creek-Maryfield-Wildwood Park-02-07-19-10:51-1	nd	1.0	02/11/2019	22:14
6	Allen Creek-Eighth-Waterworks-02-07-19-11:10-1	nd	1.0	02/11/2019	21:05
7	Allen Creek-Murray-Washington-02-07-19-11:30-1	nd	1.0	02/09/2019	08:20

Samples Analyzed by Gelman Sciences Inc.

Sample #	Sample Name - Date/Time Sampled	1,4-Dioxane Results (ppb)	R.L. (ppb)	Date Analyzed
	Surface Water			
1	Allen Creek-Chapin-West Park-03-19-19-09:40-1	9.8	1	3/22/2019
2	Allen Creek-West Park SW-03-19-19-10:02-1	18	1	3/22/2019
3	Allen Creek-Maple Ridge-Arborview-03-19-19-10:16-1	nd	1	3/22/2019
4	Allen Creek-Wildwood-Arborview-03-19-19-10:30-1	nd	1	3/22/2019
5	Allen Creek-Maryfield-Wildwood Park-03-19-19-10:40-1	nd	1	3/22/2019
6	Allen Creek-Eighth-Waterworks-03-19-19-11:06-1	nd	1	3/22/2019
7	Allen Creek-Murray-Washington-03-19-19-11:20-1	1.3	1	3/27/2019

PLS Analysis Data-Surface Water- Sampled 04/18/2019

Sample #	Sample Name - Date/Time Sampled	1,4-Dioxane Results (ppb)	R.L. (ppb)	Date Analyzed	Time Analyzed
	Surface Water				
1	Allen Creek-Chapin-West Park	8.6	1	4/26/2019	23:54
2	Allen Creek-West Park SW	15	1	4/27/2019	0:28
3	Allen Creek-Maple Ridge-Arborview	nd	1	4/26/2019	22:09
4	Allen Creek-Wildwood-Arborview	nd	1	4/26/2019	22:20
5	Allen Creek-Maryfield-Wildwood Park	nd	1	4/26/2019	22:44
6	Allen Creek-Eighth-Waterworks	nd	1	4/26/2019	21:00
7	Allen Creek-Murray-Washington	nd	1	4/26/2019	23:19

Analysis Performed at PLS laboratory, no qualifiers necessary.

PLS Analysis Data-Surface Water- Sampled 05/28/2019

Sample #	Sample Name - Date/Time Sampled	1,4-Dioxane Results (ppb)	R.L. (ppb)	Date Analyzed	Time Analyzed
	Surface Water				
1	Allen Creek-Chapin-West Park	9.1	1	5/31/2019	9:29
2	Allen Creek-West Park SW	16	1	5/31/2019	9:45
3	Allen Creek-Maple Ridge-Arborview	nd	1	5/31/2019	9:56
5	Allen Creek-Maryfield-Wildwood Park	nd	1	5/31/2019	10:15
6	Allen Creek-Eighth-Waterworks	nd	1	5/31/2019	10:30
7	Allen Creek-Murray-Washington	1.3	1	5/31/2019	10:38

PLS Analysis Data-Surface Water- Sampled 06/18/2019

Sample #	Sample Name - Date/Time Sampled	1,4-Dioxane Results (ppb)	R.L. (ppb)	Date Analyzed	Time Analyzed
	Surface Water				
1	Allen Creek-Chapin-West Park	5.8	1	6/27/2019	21:33
2	Allen Creek-West Park SW	14	1	6/27/2019	22:07
3	Allen Creek-Maple Ridge-Arborview	nd	1	6/27/2019	20:58
5	Allen Creek-Maryfield-Wildwood Park	nd	1	6/27/2019	20:24
6	Allen Creek-Eighth-Waterworks	nd	1	6/27/2019	19:49
7	Allen Creek-Murray-Washington	nd	1	6/27/2019	19:15

PLS Analysis Data-Surface Water- Sampled 07/24/2019

Sample #	Sample Name - Date/Time Sampled	1,4-Dioxane Results (ppb)	R.L. (ppb)	Date Analyzed	Time Analyzed
	Surface Water				
1	Allen Creek-Chapin-West Park	9.8	1.0	7/29/2019	22:24
2	Allen Creek-West Park SW	16	1.0	7/29/2019	22:57
3	Allen Creek-Maple Ridge-Arborview	nd	1.0	7/29/2019	19:35
5	Allen Creek-Maryfield-Wildwood Park	nd	1.0	7/29/2019	20:43
6	Allen Creek-Eighth-Waterworks	1.0	1.0	7/29/2019	21:17
7	Allen Creek-Murray-Washington	1.3	1.0	7/29/2019	20:09