



Memorandum

August 13, 2020

To: Peter Ramanauskas/U.S. EPA

Ref. No.: 017322A

From: *SB*
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**Subject: First and Second Quarter 2020 Groundwater Sampling Results
RACER Trust PCC-Validation
Pontiac, Michigan**

1. Introduction

GHD is providing this memorandum on behalf of Revitalizing Auto Communities Environmental Response (RACER) Trust for the former PCC-Validation property in Pontiac, Michigan (Site) (Figure 1). The purpose of this memorandum is to provide the results from the first and second quarter 2020 groundwater sampling events. The sampling activities were conducted as per the March 5, 2018 Interim Groundwater Monitoring Plan (IGWMP). The IGWMP amended the Sampling and Analysis (SAP) submitted to the U.S. EPA on July 25, 2014 and Supplemental SAP submitted to the U.S. EPA on January 13, 2015. A reduced groundwater monitoring plan was submitted to EPA on May 15, 2020 and was partially approved on June 4, 2020. As part of the revised groundwater monitoring plan, starting in the third quarter of 2020 monitoring wells MW-79I-19 and MW-79D-19 will be sampled quarterly and the remaining installed wells will be sampled annually in the second quarter. The six wells that are tentatively planned to be installed during the second quarter of 2021 will be sampled for at least four quarters following install. The current and revised groundwater monitoring plan is summarized on Table 1. The description of work completed below includes the first and second quarter 2020 sampling and analysis.

2. First and Second Quarter 2020 Groundwater Sampling and Analytical Results

2.1 Sampling Methodology

Quarterly sampling events were conducted on March 4 through 6, 2020 and June 22 through 24, 2020. During the March 2020 and June 2020 quarterly events, 15 monitoring wells were sampled (MW-02-07, MW-10-07, MW-33-07, MW-38-07, MW-64-08, MW-68-08, MW-79I-12, MW-79D-12, MW-80-12, MW-81-12, MW-85-12, MW-87-12, MW-92S-13, MW-92I-13, and MW-93I-13). MW-21-07 was dry during both sampling events; therefore, could not be sampled.

Prior to groundwater sample collection, static groundwater elevations were measured and recorded. Groundwater samples were collected from the monitoring wells using low-flow sampling techniques with a peristaltic pump and dedicated tubing. Field parameters collected during purging included pH, temperature,



conductivity, oxidation/reduction potential (ORP), dissolved oxygen (DO), and turbidity. Groundwater samples were collected after the field parameters stabilized.

MW-10-07 has historically not produced and samples have often been collected as the well is near dry when turbidity is elevated. As a result, during the second quarter sampling event, MW-10-07 was purged until it was dry at the start of the day and the samples were collected at the end of the work day to allow for as much recharge and settling of solids as possible to get a more representative groundwater sample.

Groundwater samples were analyzed using USEPA Method 8260 for VOCs and/or Method 6020 for total and dissolved Aluminum, Lead, and Vanadium. Samples were analyzed for dissolved parameters to allow for consideration of the impact of suspended solids on the results. The March and June 2020 groundwater samples were shipped under chain-of-custody protocol via courier to Eurofins-TestAmerica Laboratories in North Canton, Ohio for analysis. Table 3 presents the sample analysis summary.

2.2 Analytical Results

Groundwater results exceeding criteria or screening levels during the last four quarters of sampling are shown on Figure 2. The first and second quarter results compared against the criteria and screening levels outlined below are provided on Table 4. Laboratory Analytical Reports are presented in Attachment A.

Groundwater analytical results were compared to all Michigan Environment, Great Lakes & Energy (EGLE) Cleanup Criteria Requirements for Response Activity (RRA) (Formerly the Part 201 Generic Cleanup Criteria and Screening Levels). The following is a summary of the results:

- Aluminum exceeded the EGLE Cleanup Criteria RRA Nonresidential and Residential Aesthetic Drinking Water criteria (DWC) during both quarters at MW-10-07.
- Aluminum also exceeded the EGLE Residential Health-Based DWC at MW-10-07 during the March sampling event.
- All other analyzed constituents were not detected or detected at concentrations below EGLE Cleanup Criteria RRA.

Additionally, the results were compared to the May 2020 EGLE Proposed Volatilization to Indoor Air (VIAP) Screening Levels (SLs) and the EGLE and Michigan Department of Health and Human Services (MDHHS) Recommended Interim Action Levels (RIASLs). These screening levels are not promulgated rules and are only utilized to evaluate risk, not compliance. The following is a summary of the results:

- Bromodichloromethane exceeded the EGLE Proposed VIAP SL for Residential Shallow Groundwater during the March sampling event at MW-87-12.
- Chloroform (Trichloromethane) exceeded the EGLE Proposed VIAP SL for Residential and Nonresidential Shallow Groundwater, Shallow Groundwater Residential and Nonresidential RIASL, and Groundwater Residential RIASL during the March sampling at MW-87-12.
- Trichloroethene exceeded the EGLE Proposed VIAP SL for Residential and Nonresidential Shallow Groundwater and the Shallow Groundwater Residential and Nonresidential RIASL during both quarterly sampling events at MW-79I-19.



However, based on the depth to groundwater observed at the wells during the sampling events, only the following exceedances of the May 2020 EGLE VIAP SLs and EGLE/MDHHS RIASLs are applicable:

- The bromodichloromethane exceedance of the EGLE Proposed VIAP SL for Residential Shallow Groundwater during the March sampling event at MW-87-12.
- The chloroform (Trichloromethane) exceedance of the EGLE Proposed VIAP SL for Residential Shallow Groundwater, Shallow Groundwater Residential and Nonresidential RIASL, and Groundwater Residential RIASL during the March sampling at MW-87-12.

The applicable screening levels are further discussed in Section 3.

3. Discussion

Groundwater levels were collected during the first and second quarter 2020 sampling events; groundwater elevation contour maps are provided on Figures 3 and 4. Groundwater levels generally decreased between the first and second quarter across the Site, but the groundwater flow direction was generally the same as prior events, moving across the Site in a northwest direction. It is noted that the contours are based on a limited well distribution and saturated units that are generally limited in connectivity. MW-21-07 was dry during both sampling events; therefore, could not be sampled.

During the first and second quarter 2020 sampling events, VOCs were not detected above EGLE Cleanup Criteria RRA. Results were generally consistent with prior VOC concentrations since the wells were reinstalled, with the exception of the detections of chloroform and bromodichloromethane at MW-87-12. Note that chloroform and bromodichloromethane are two common disinfection byproducts found in municipal water.

VOCs were detected above the Proposed EGLE VIAP SL and EGLE/MDHHS RIASLs at two locations on-Site. However, only certain screening levels are applicable depending on the current groundwater elevations at a monitoring well. The EGLE/MDHHS RIASLs classify groundwater encountered 3 meters (~10 feet) or less below ground surface (bgs) to be shallow. The May 2020 EGLE Proposed VIAP SLs considers groundwater encountered 10 feet or less bgs to be shallow for residential structures with a basement and 5 feet or less bgs to be shallow for nonresidential structures without a basement.

Depth to groundwater at MW-79I-19 ranged from 12.11 to 14.05 feet bgs during the two quarterly events, which means exceedances of the vapor screening levels are not applicable. Depth to groundwater at MW-87-12 ranged from 7.28 to 8.65 feet bgs during the two quarterly events, therefore, with the exception of the 2020 EGLE Proposed VIAP SLs for nonresidential shallow groundwater, the listed screening level exceedances are applicable for MW-87-12.

The on-Site exceedances are mitigated through the existing Declaration of Restrictive Covenant for the property that limits the Site to nonresidential uses and requires the property owner to perform a vapor intrusion evaluation or to install mitigation prior to constructing new Site buildings. One off-Site well, MW-92I-13, had low levels of vinyl chloride detected during both quarters, but at levels below the EGLE required target detection limit (TDL). Note that the EGLE and MDHHS proposed and recommended



screening levels for many VOCs, including vinyl chloride, are at levels below the required TDLs. In accordance with Section 324.20120a(10) of 1994 PA 451, as amended, when the TDL for a hazardous substance is greater than the developed vapor intrusion screening level, the TDL is used to evaluate the risk posed from the pathway.

Total Aluminum in monitoring well MW-10-07 exceeded the EGLE Cleanup Criteria RRA Residential and Nonresidential Aesthetic DWC, which is consistent with previous groundwater data. Dissolved aluminum in MW-10-07 exceeded the EGLE Cleanup Criteria RRA Residential and Nonresidential Aesthetic DWC during the first quarter, but not the second quarter when sampling procedures were adjusted, as noted in Section 2.1. The revised sampling procedures will be utilized during future sampling events at MW-10-07. Total Aluminum in monitoring well MW-10-07 exceeded the EGLE Residential Health-Based Drinking Water Criteria during the first quarter of 2020. The EGLE (formerly MDEQ) Part 201 Drinking Water Criteria for aluminum is based on the aesthetic drinking water value, as required by Section 20120a(5) of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA). The applicable health-based drinking water values are provided as an alternate criteria as identified in Footnote E of EGLE Cleanup Criteria RRA. Per the March 3, 2016 U.S. EPA approved CA750, the health-based drinking water values were determined to be more appropriate than the aesthetic drinking water values.

It is anticipated the final round of groundwater monitoring well installation will be conducted in 2021, once construction of the new structures on the southern-central portion of M1's property is complete. The proposed monitoring well locations are included on Figure 1. Proposed monitoring well locations are subject to change based on final placement of on-Site structures and utilities.

4. Schedule

The following schedule is dependent upon access to the property and subcontractor availability.

Task:

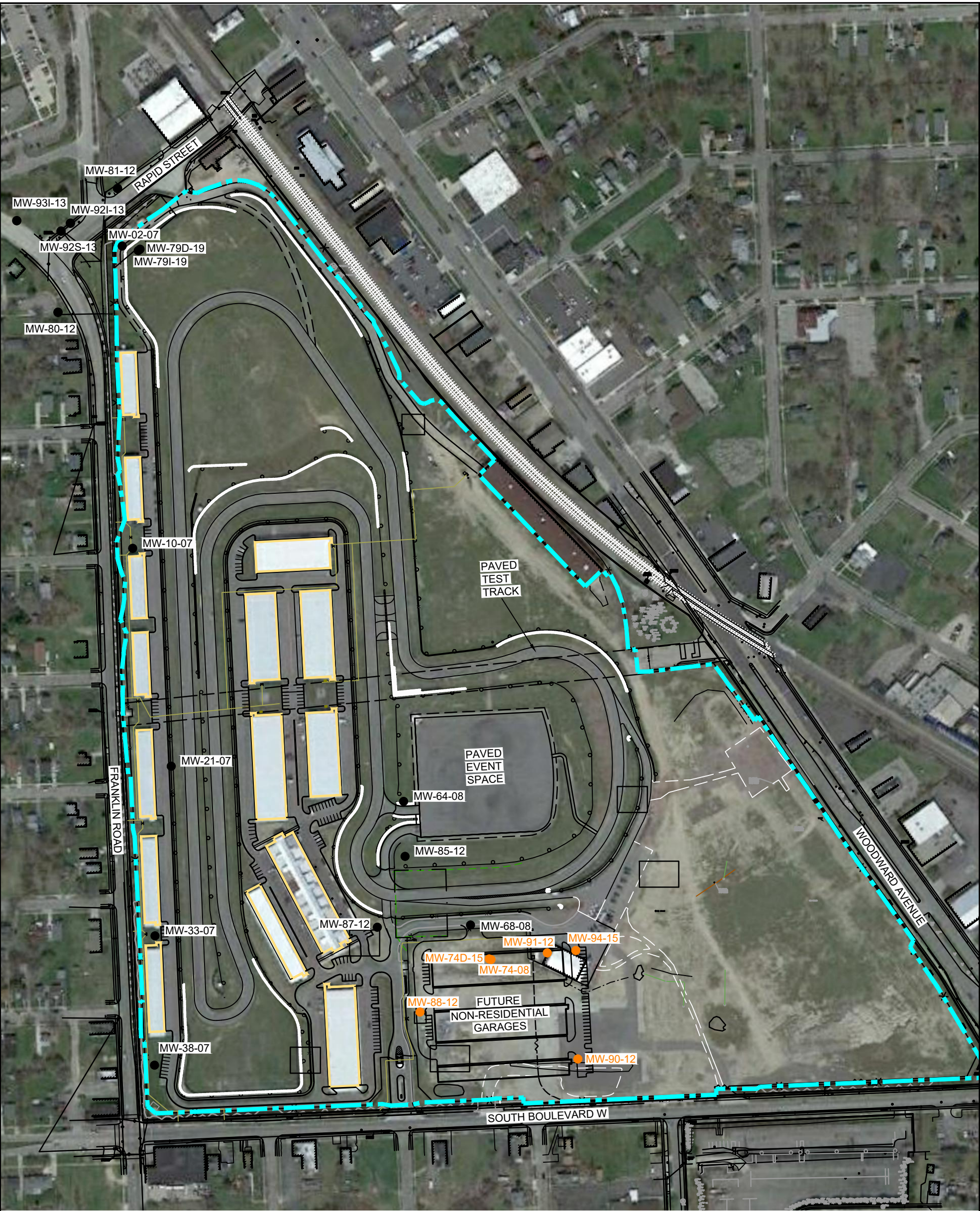
First and Second Quarter 2019 Sampling Results
Quarterly Groundwater Monitoring
Quarterly Groundwater Monitoring
Third and Fourth Quarter 2019 Sampling Results
Quarterly Groundwater Monitoring
Quarterly Groundwater Monitoring
Quarterly Groundwater Monitoring
First and Second Quarter 2020 Sampling Results
Limited Quarterly Groundwater Monitoring
Limited Quarterly Groundwater Monitoring
Limited Quarterly Groundwater Monitoring
Annual Groundwater Monitoring
Annual Groundwater Sampling Results
Third Phase of Monitoring Well Installation

Approximate Timeline:

August 2019 - *Completed*
September 2019 - *Completed*
Dec. 2019 – *Completed Nov. 2019*
January 2020 – *Completed*
Feb. 2020 – *Completed Mar. 2020*
June 2020 - *Completed*
August 2020
September 2020
December 2020
March 2021
June 2021
August 2021
Tentatively Second Quarter of 2021



Encl:	Figure 1:	Site Plan with Current and Proposed Monitoring Well Locations
	Figure 2:	Site Map with VOC and Metals Results
	Figure 3:	Site Map with First Quarter 2020 Groundwater Elevation Contours
	Figure 4:	Site Map with Second Quarter 2020 Groundwater Elevation Contours
	Figure 5:	Site Map with Cross-Section Transect Locations
	Figure 6:	Cross-Section A-A'
	Figure 7:	Cross Section B-B'
	Table 1:	Groundwater Monitoring Plan
	Table 2:	Groundwater Elevation Summary
	Table 3:	Sample Analysis Summary
	Table 4:	First and Second Quarter 2020 Groundwater Analytical Results
	Attachment A:	Laboratory Analytical Reports



LEGEND

- APPROXIMATE PROPERTY BOUNDARY
- - - RAILROAD
- MW-80-12 MONITORING WELL LOCATION - □1 AND □2 2020
- MW-90-12 PROPOSED MONITORING WELL LOCATION
- PRIVATE NON-RESIDENTIAL GARAGES

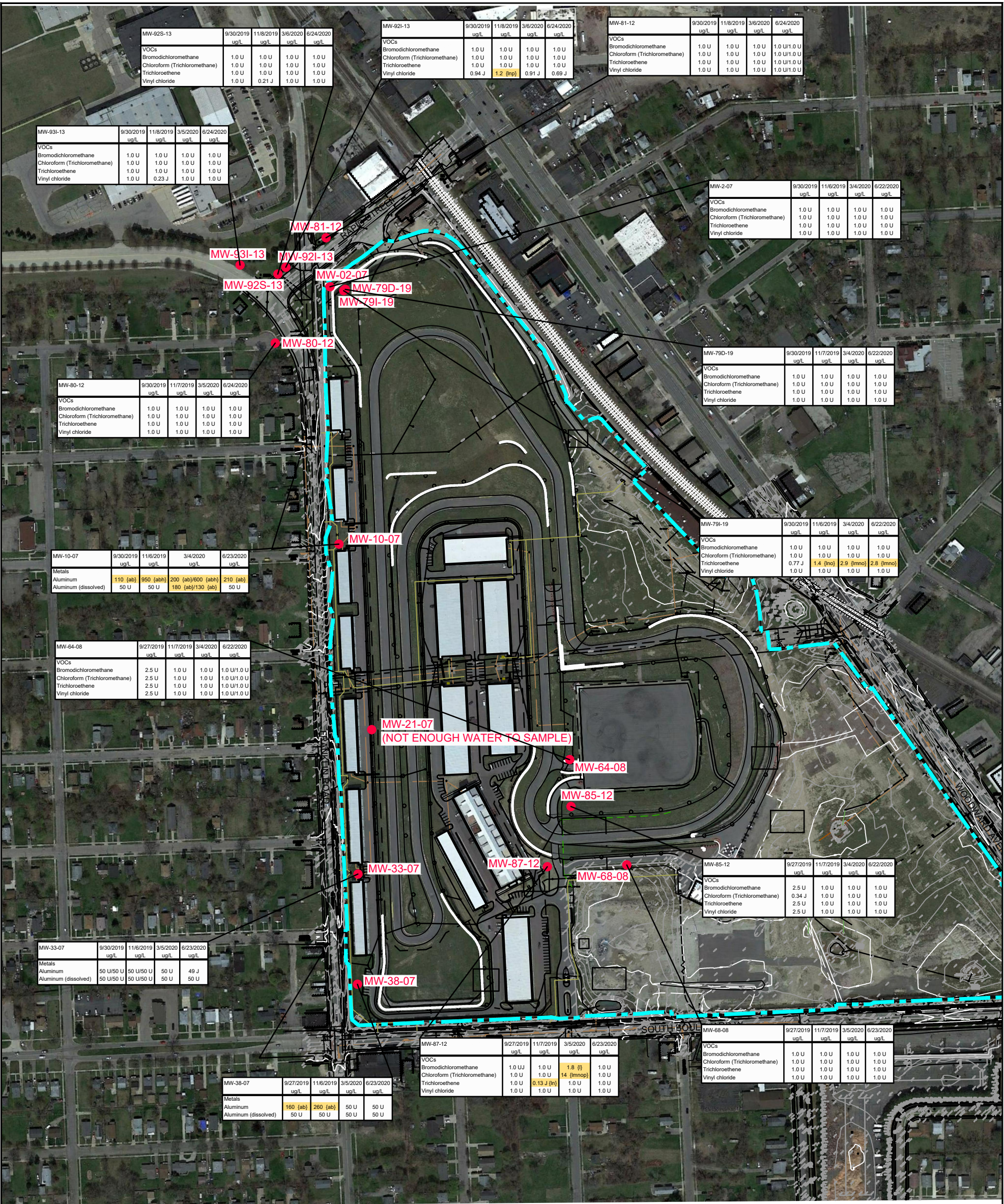
Source: GOOGLE EARTH (DIGITAL GLOBE 4/23/2019)



RACER
1 CONCOURSE DRIVE
PONTIAC, MICHIGAN
CURRENT SITE PLAN WITH EXISTING AND PROPOSED
MONITORING LOCATIONS

017322A-2020
Jul 22, 2020

FIGURE 1



LEGEND	EGLE RRD (1)		EGLE Generic Groundwater Cleanup Criteria: Residential and Nonresidential (2)					EGLE VIAP SL 2020 (3, 5)		EGLE and MDHHS (4, 5)		
	Target Detection Limit		Residential Drinking Water	Non-Residential Drinking Water	Groundwater Surface Water Interface	Residential Health-Based Drinking Water	Non-Residential Health-Based Drinking Water	Residential Shallow Groundwater	Nonresidential Shallow Groundwater	Shallow Residential RIASL	Shallow NonResidential RIASL	Residential RIASL
			a	b	c	h	i	l	m	n	o	p
Volatile Organic Compounds (VOCs) (ug/L)												
Bromodichloromethane	1		80	80	ID			1.2	4.9			
Chloroform (Trichloromethane)	1		80	80	350			0.49	3.1	0.49	1.3	7.6
Trichloroethene	1		5	5	200			0.073	1.6	0.073	0.21	6.1
Vinyl chloride	1		2	2	13			0.12	10	0.12	1.8	0.96
Metals (ug/L)												
Aluminum	50		50	50		300	4100					
Aluminum (dissolved)			50	50		300	4100					

Notes:

(1) EGLE Remediation and Redevelopment Division, EGLE Published List of Target Detection Limits Designated Analytical Methods, March 2016.

(2) EGLE - Michigan Department of Environment, Great Lakes and Energy (EGLE). Generic cleanup criteria for residential and nonresidential category, administrative rule R 269.44 effective December 30, 2013, pursuant to Part 201 of 1994 PA 451 as amended. Criteria table dated January 10, 2018; GSI Criteria updated June 25, 2018.

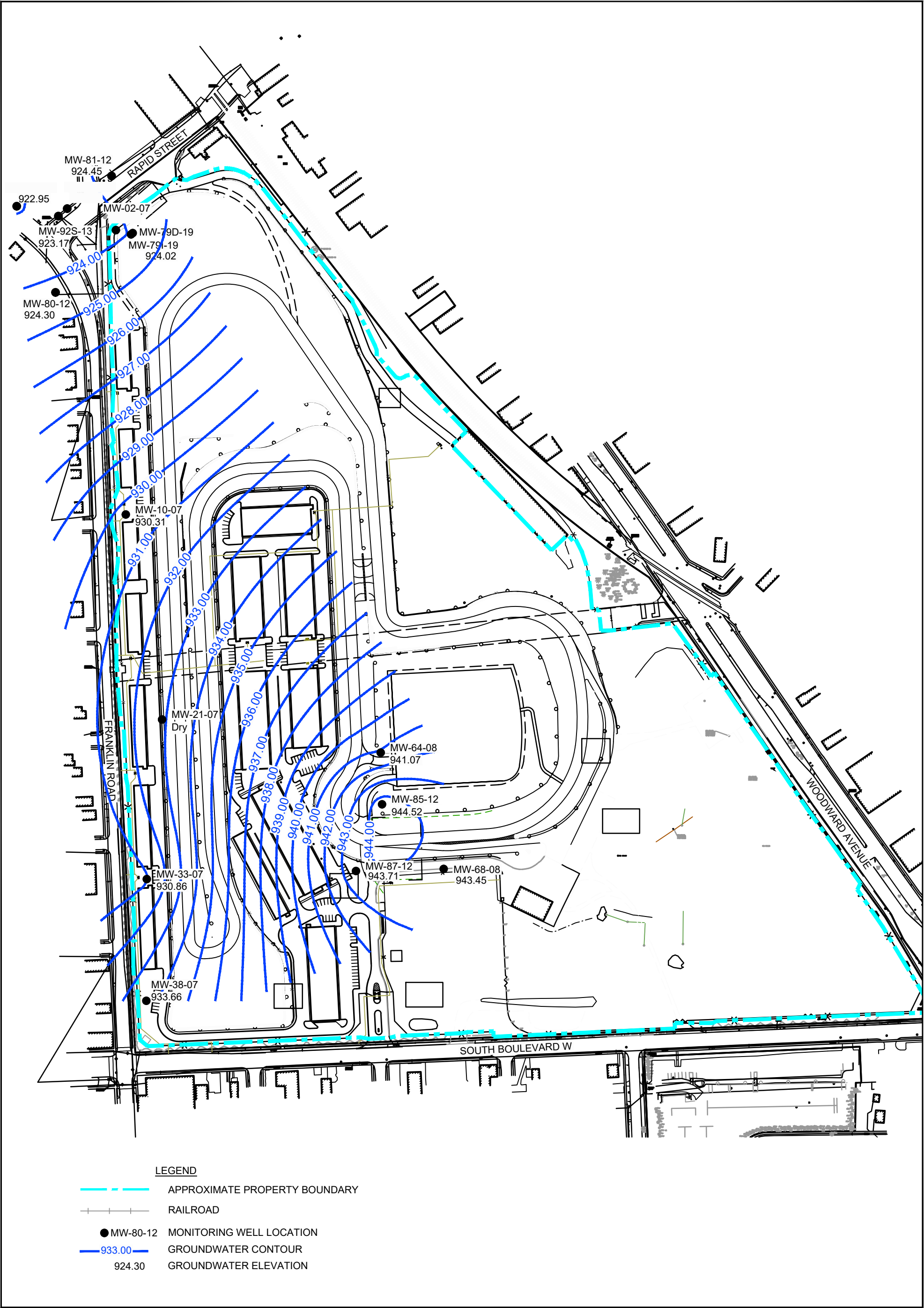
(3) EGLE VIAP SL: Michigan Department of Environment, Great Lakes and Energy (EGLE). Proposed Volatilization to Indoor Air (VIAP) Screening Levels (SL), Draft May 2020.

(4) EGLE and Michigan Department of Health and Human Services (MDHHS) Media-Specific Volatilization to Indoor Air Interim Action Screening Levels (MSSL), Recommended Interim Action Screening Levels (RIASL), August 2017.

(5) In accordance with Section 324.202a(10) of 1994 PA 451, as amended, when the target detection limit (TDL) for a hazardous substance is greater than the developed VI screening level, the TDL is used to evaluate the risk posed from the pathway.

J - Estimated concentration.

U - Not detected at the associated reporting limit.



Source: GOOGLE EARTH (DIGITAL GLOBE 4/7/2017)

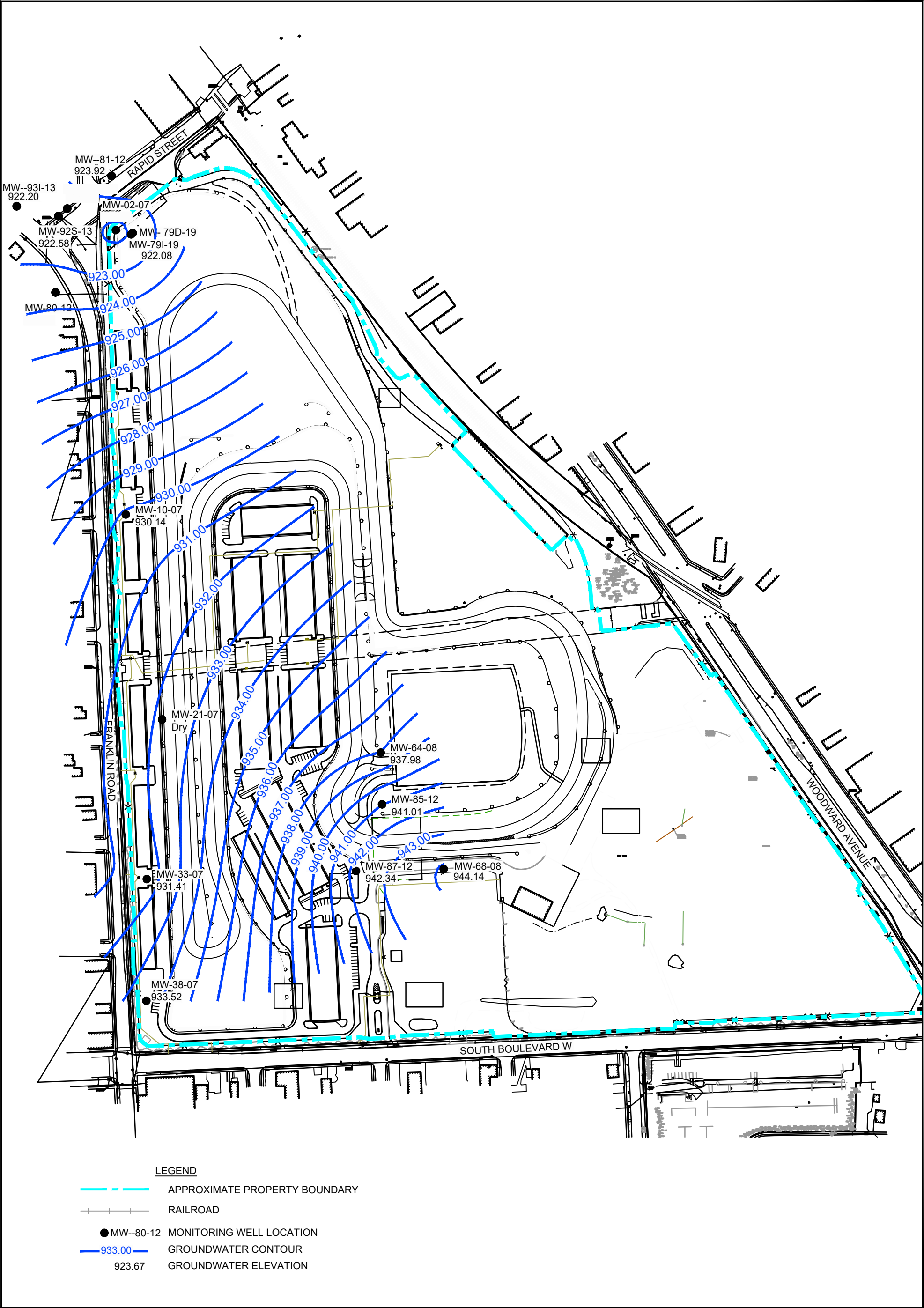
0 125 250ft



RACER
1 CONCOURSE DRIVE
PONTIAC, MICHIGAN
SITE MAP WITH SHALLOW GROUNDWATER
CONTOURS - MARCH 2020

017322A-2020
Jul 29, 2020

FIGURE 3



Source: GOOGLE EARTH (DIGITAL GLOBE 4/7/2017)

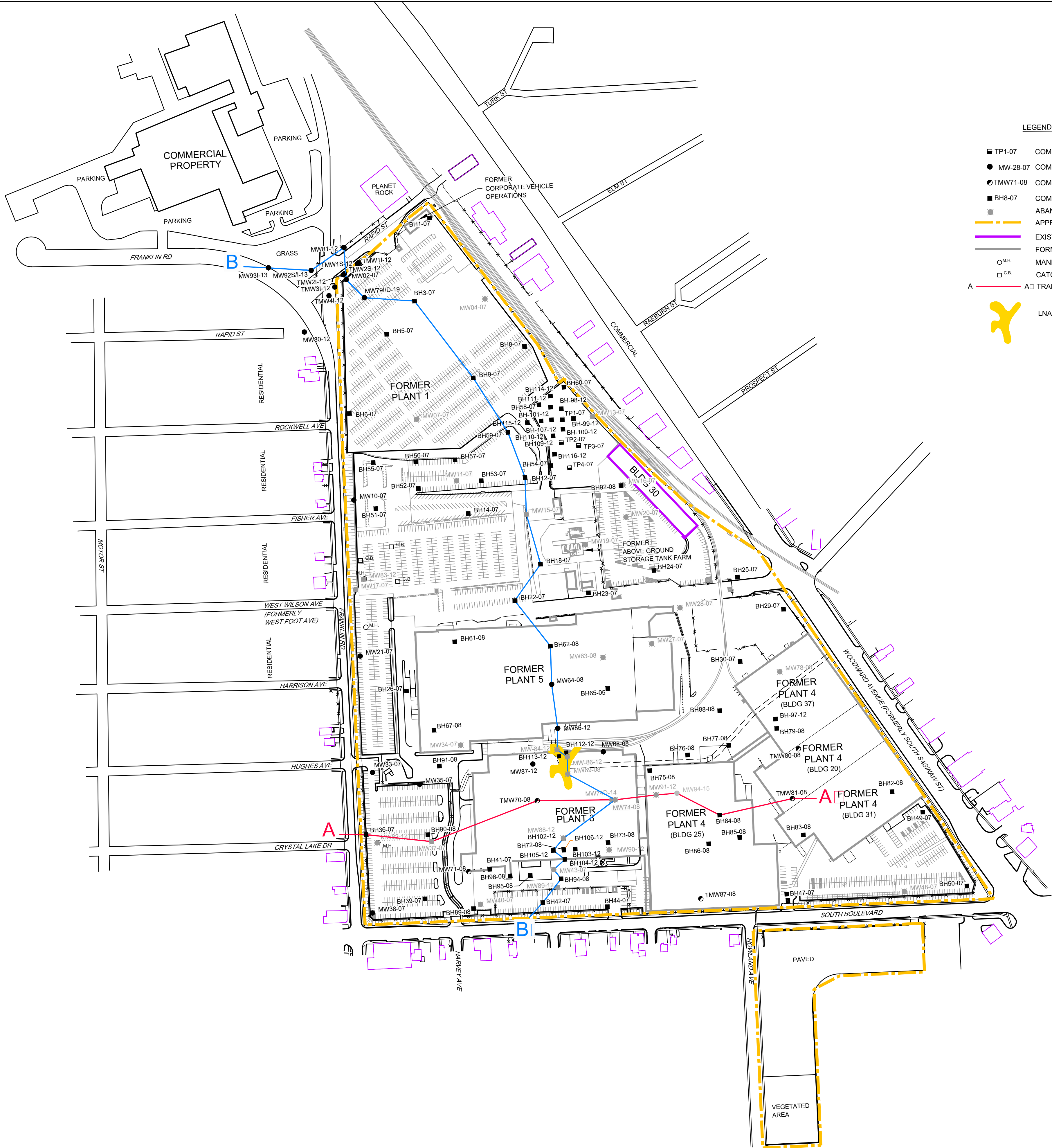
0 125 250ft



RACER
1 CONCOURSE DRIVE
PONTIAC, MICHIGAN
SITE MAP WITH SHALLOW GROUNDWATER
CONTOURS - JUNE 2020

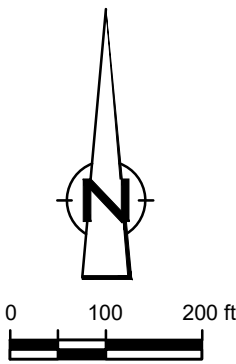
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FIGURE 4



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Client
**1 CONCOURSE DRIVE
PONTIAC, MICHIGAN**
Project
**RACER
PCC-VALIDATION**

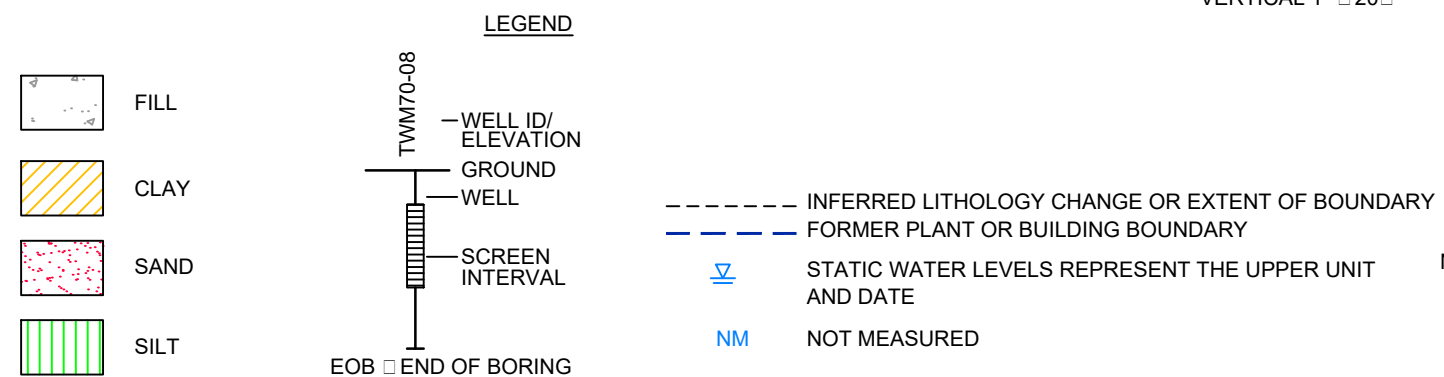
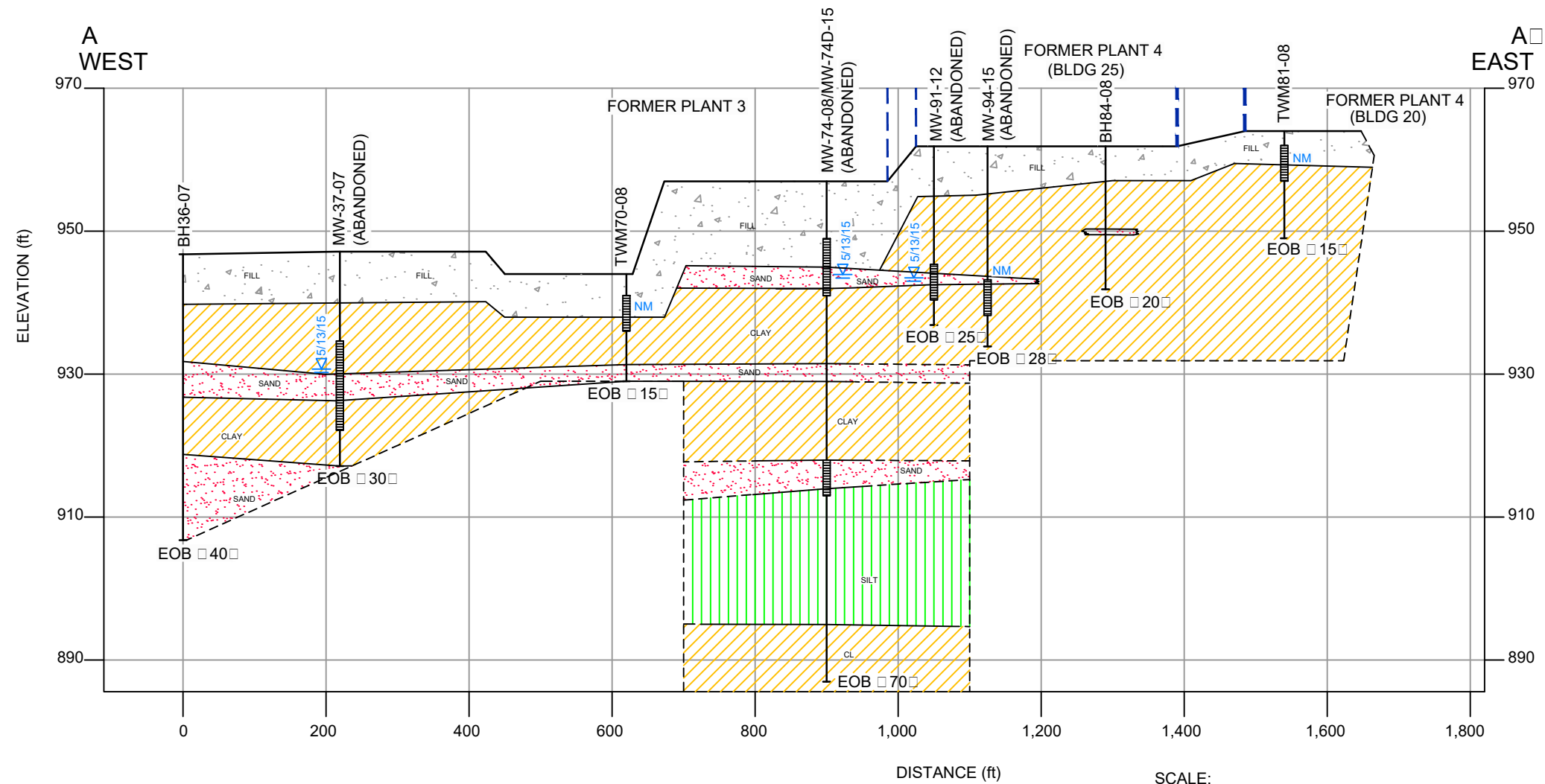
No.	issue	Drawn	Approved	Date
Drawn	DRAWN	Designer	DESIGNED	
Drafting	Check	Design	K.T.	
Project	T.K.	Date	Jul 22, 2020	
This document shall not be used for construction unless signed and sealed for construction.		Scale	AS SHOWN	
Original Size	Bar is one inch on original size drawing 0 1"			
ANSI D				

Project No. 017322A-2020

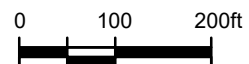
Title
**SITE MAP
WITH CROSS-SECTION
TRANSECT LOCATIONS**

Sheet No.

FIGURE 5



NOTE: GROUND SURFACE ELEVATIONS REFLECT MOST RECENTLY SURVEYED CONDITIONS AT SOIL BORING AND MONITORING WELL LOCATIONS, RANGING FROM DECEMBER 20, 2007 TO MARCH 21, 2019. ELEVATIONS BETWEEN POINTS HAVE NOT BEEN SURVEYED.

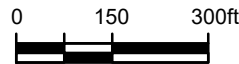
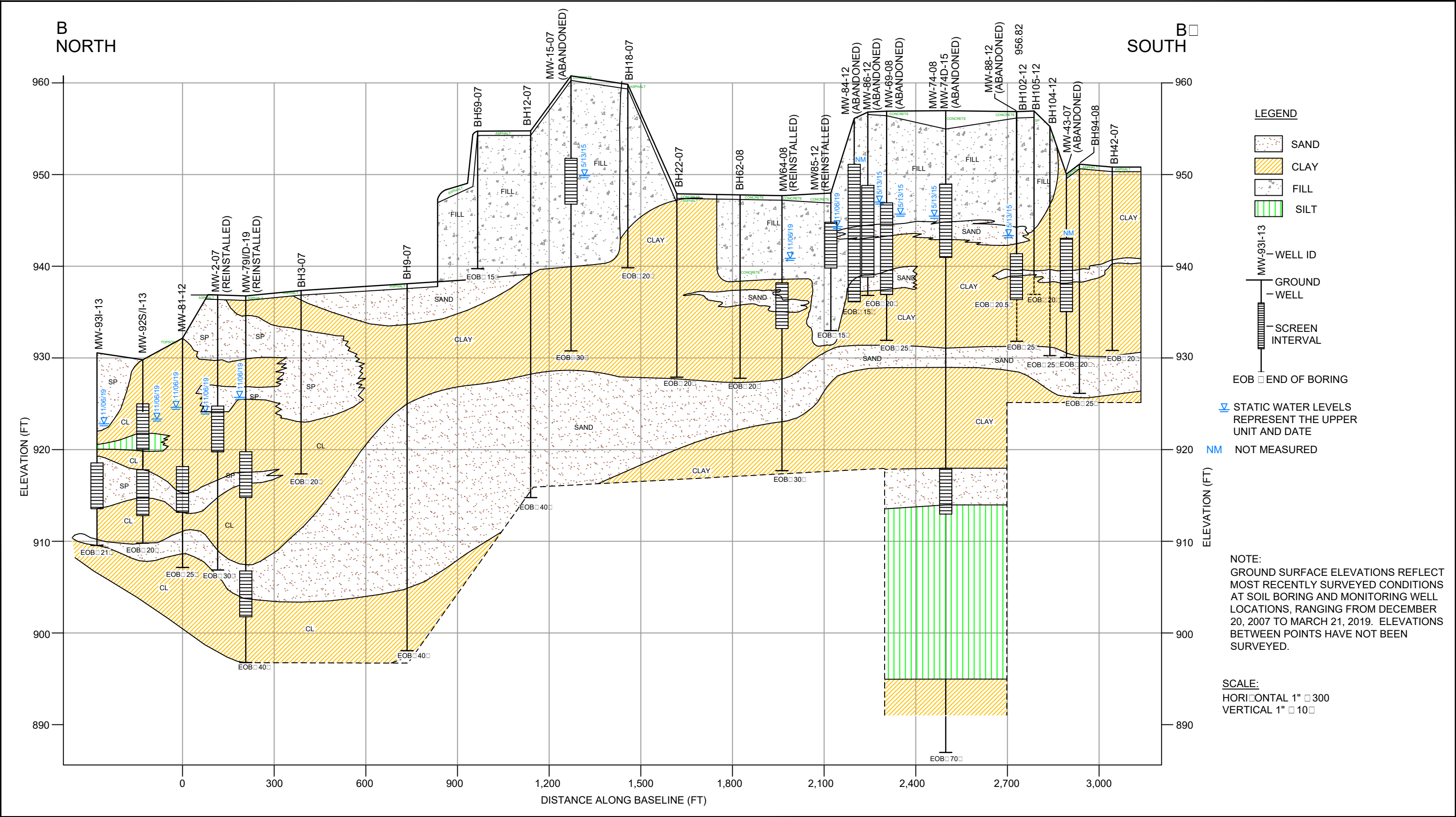


RACER
 1 CONCOURSE DRIVE
 PONTIAC, MICHIGAN
CROSS-SECTION A-A
PCC-VALIDATION

017322A-2020

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FIGURE 6



RACER
1 CONCOURSE DRIVE
PONTIAC, MICHIGAN
CROSS-SECTION B-B
PCC-VALIDATION

017322A-2020
Jul 22, 2020

FIGURE 7

Table 1

**Current and Revised Groundwater Monitoring Plan Summary
RACER PCC - Validation
Pontiac, Michigan**

Well ID	Most Recent Install Date	Sampling Parameters	Current Monitoring Frequency	Revised Monitoring Frequency (1)
MW-02-07	6/4/2018	TCL VOCs	Quarterly	Annually (2)
MW-10-07	6/1/2018	Al, Pb, V (Total+Dissolved)	Quarterly	Annually (2)
MW-21-07	5/22/2019	Al, Pb, V (Total+Dissolved)	Quarterly	Annually (2)
MW-33-07	5/31/2018	Al, Pb, V (Total+Dissolved)	Quarterly	Annually (2)
MW-38-07	5/30/2018	Al, Pb, V (Total+Dissolved)	Quarterly	Annually (2)
MW-64-08	5/29/2018	TCL VOCs	Quarterly	Annually (2)
MW-68-08	5/24/2019	TCL VOCs	Quarterly	Annually (2)
MW-79D-19	5/21/2019	TCL VOCs	Quarterly	Quarterly
MW-79I-19	5/21/2019	TCL VOCs	Quarterly	Quarterly
MW-80-12	8/28/2012	TCL VOCs	Quarterly	Annually (2)
MW-81-12	8/28/2012	TCL VOCs	Quarterly	Annually (2)
MW-85-12	5/28/2018	TCL VOCs	Quarterly	Annually (2)
MW-87-12	5/22/2019	TCL VOCs	Quarterly	Annually (2)
MW-92I-12	1/23/2013	TCL VOCs	Quarterly	Annually (2)
MW-92S-12	1/24/2013	TCL VOCs	Quarterly	Annually (2)
MW-93I-13	7/26/2013	TCL VOCs	Quarterly	Annually (2)
MW-74-08	Tentatively Second Quarter of 2021	TCL VOCs & 1,4-Dioxane (initial event only unless detected)	NA	To be sampled quarterly following install
MW-74D-15	Tentatively Second Quarter of 2021	TCL VOCs	NA	To be sampled quarterly following install
MW-88-12	Tentatively Second Quarter of 2021	TCL VOCs	NA	To be sampled quarterly following install
MW-90-12	Tentatively Second Quarter of 2021	TCL VOCs	NA	To be sampled quarterly following install
MW-91-12	Tentatively Second Quarter of 2021	TCL VOCs	NA	To be sampled quarterly following install
MW-94-15	Tentatively Second Quarter of 2021	TCL VOCs	NA	To be sampled quarterly following install

Notes:

(1) Revised monitoring schedule will start the third quarter of 2020.

(2) Annual sampling event will occur in the same quarter as the most recent VOC exceedance of Michigan EGLE Generic Groundwater Cleanup Criteria (Part 201).

Table 2

**Groundwater Elevation Summary
RACER PCC- Validation
Pontiac, Michigan**

Sample Location	Date Installed	Current Ground Elevation (FT AMSL)	Current Screen Interval (FT BGS)			First Quarter 2020 Depth To Groundwater (FT BGS)	First Quarter 2020 Groundwater Elevation (FT AMSL)	Change in Groundwater Elevation: Q4 2019 Vs. Q1 2020 (FT)	Second Quarter 2020 Depth To Groundwater (FT BGS)	Second Quarter 2020 Groundwater Elevation (FT AMSL)	Change in Groundwater Elevation: Q1 2020 Vs. Q2 2020 (FT)
MW-02-07	6/4/2018	936.15	11.40	-	16.40	11.74	923.89	-0.22	13.98	921.65	-2.24
MW-10-07	6/1/2018	943.34	12.55	-	17.55	12.78	930.31	0.33	12.95	930.14	-0.17
MW-21-07	5/22/2019	950.67	11.00	-	16.00	Dry	Dry	Dry	Dry	Dry	Dry
MW-33-07	5/31/2018	947.89	17.24	-	22.24	16.64	930.86	0.55	16.09	931.41	0.55
MW-38-07	5/30/2018	948.99	12.20	-	17.20	14.84	933.66	0.75	14.98	933.52	-0.14
MW-64-08	5/29/2018	947.31	10.25	-	15.25	5.96	941.07	0.20	9.05	937.98	-3.09
MW-68-08	5/24/2019	956.34	10.00	-	15.00	12.6	943.45	0.62	11.91	944.14	0.69
MW-79I-19	5/21/2019	936.43	17.00	-	22.00	12.11	924.02	-0.23	14.05	922.08	-1.94
MW-79D-19	5/21/2019	936.45	30.00	-	35.00	10.22	925.99	0.28	13.02	923.19	-2.80
MW-80-12	8/28/2012	930.14	7.00	-	12.00	5.42	924.30	-0.01	6.05	923.67	-0.63
MW-81-12	8/28/2012	932.16	14.00	-	19.00	7.09	924.45	-0.17	7.62	923.92	-0.53
MW-85-12	5/29/2018	948.00	3.20	-	8.20	3.2	944.52	0.19	6.71	941.01	-3.51
MW-87-12	5/22/2019	951.29	10.00	-	15.00	7.28	943.71	1.97	8.65	942.34	-1.37
MW-92S-13	1/24/2013	929.85	4.80	-	9.80	6.15	923.33	-0.01	6.75	922.73	-0.60
MW-92I-13	1/24/2013	929.80	12.00	-	17.00	6.05	923.17	0.02	6.64	922.58	-0.59
MW-93I-13	7/26/2013	930.55	12.00	-	17.00	7.05	922.95	0.12	7.80	922.20	-0.75

Notes:

FT AMSL - Feet above mean sea level

FT BGS - Feet below ground surface

NA - No data available

Dry - No groundwater encountered

Table 3

**Sample Analysis Summary
RACER PCC- Validation
Pontiac, Michigan**

Matrix	Sample ID	Sample Location	Date	QA/QC	Analysis
March 2020 Groundwater Sampling Event (First Quarter)					
Groundwater	GW-17322-030420-JY-001	MW-64-08	3/4/2020	MS/MSD	TCL VOCs
Groundwater	GW-17322-030420-JY-002	MW-85-12	3/4/2020	NA	TCL VOCs
Groundwater	GW-17322-030420-JY-003	MW-79I19	3/4/2020	NA	TCL VOCs
Groundwater	GW-17322-030420-JY-004	MW-79D-19	3/4/2020	NA	TCL VOCs
Groundwater	GW-17322-030420-JY-005	MW-02-07	3/4/2020	NA	TCL VOCs
Groundwater	GW-17322-030420-JY-006	MW-10-07	3/4/2020	NA	Al, Pb, V (Total+Dissolved)
Groundwater	GW-17322-030420-JY-007	MW-10-07	3/4/2020	Duplicate	TCL VOCs
Groundwater	GW-17322-030520-JY-008	MW-68-08	3/5/2020	NA	TCL VOCs
Groundwater	GW-17322-030520-JY-009	MW-87-12	3/5/2020	NA	TCL VOCs
Groundwater	GW-17322-030520-JY-010	MW-38-07	3/5/2020	NA	Al, Pb, V (Total+Dissolved)
Groundwater	GW-17322-030520-JY-011	MW-33-07	3/5/2020	NA	Al, Pb, V (Total+Dissolved)
Groundwater	GW-17322-030520-JY-012	MW-80-12	3/5/2020	NA	TCL VOCs
Groundwater	GW-17322-030520-JY-013	MW-93I-13	3/5/2020	NA	TCL VOCs
Groundwater	GW-17322-030620-JY-014	MW-81-12	3/6/2020	NA	TCL VOCs
Groundwater	GW-17322-030620-JY-015	MW-92I-13	3/6/2020	NA	TCL VOCs
Groundwater	GW-17322-030620-JY-016	MW-92S-13	3/6/2020	NA	TCL VOCs
June 2020 Groundwater Sampling Event (Second Quarter)					
Groundwater	GW-17322-062220-DA-001	MW-85-12	6/22/2020	NA	TCL VOCs
Groundwater	GW-17322-062220-DA-002	MW-64-08	6/22/2020	NA	TCL VOCs
Groundwater	GW-17322-062220-DA-003	MW-64-08	6/22/2020	Duplicate	TCL VOCs
Groundwater	GW-17322-062220-DA-004	MW-02-07	6/22/2020	NA	TCL VOCs
Groundwater	GW-17322-062220-DA-005	MW-79D-19	6/22/2020	MS/MSD	TCL VOCs
Groundwater	GW-17322-062220-DA-006	MW-79I-19	6/22/2020	NA	TCL VOCs
Groundwater	GW-17323-062320-DA-007	MW-33-07	6/23/2020	NA	Al, Pb, V (Total+Dissolved)
Groundwater	GW-17323-062320-DA-008	MW-38-07	6/23/2020	NA	Al, Pb, V (Total+Dissolved)
Groundwater	GW-17323-062320-DA-009	MW-10-07	6/23/2020	NA	Al, Pb, V (Total+Dissolved)
Groundwater	GW-17323-062320-DA-010	MW-87-12	6/23/2020	NA	TCL VOCs
Groundwater	GW-17323-062320-DA-011	MW-68-08	6/23/2020	NA	TCL VOCs
Groundwater	GW-17323-062420-DA-012	MW-80-12	6/24/2020	NA	TCL VOCs
Groundwater	GW-17323-062420-DA-013	MW-93I-13	6/24/2020	NA	TCL VOCs
Groundwater	GW-17323-062420-DA-014	MW-92S-13	6/24/2020	NA	TCL VOCs
Groundwater	GW-17323-062420-DA-015	MW-92I-13	6/24/2020	NA	TCL VOCs
Groundwater	GW-17323-062420-DA-016	MW-81-12	6/24/2020	NA	TCL VOCs
Groundwater	GW-17323-062420-DA-017	MW-81-12	6/24/2020	Duplicate	TCL VOCs

Notes:

ft bgs - Feet below ground surface

MW - Monitoring well

NA - Not applicable

TCL VOCS - Target Compound List Volatile Organic Compounds

AL, PB, V - Aluminum, lead, and vanadium

Table 4
Groundwater Analytical Results
RACER PCC- Validation
Pontiac, Michigan

Sample Location:		EGLE RRD ⁽¹⁾						EGLE Generic Groundwater Cleanup Criteria: Residential and Nonresidential ⁽²⁾						EGLE VIAP SL 2020 ⁽³⁾				MDHHS/EGLE ⁽⁴⁾						MW-2-07		MW-2-07		MW-10-07		MW-10-07	
Sample Identification:		Target	Residential	Non-Residential	Groundwater	Residential	Non-Residential	Residential	Non-Residential	Residential	Non-Residential	Shallow	Shallow	Residential	Residential	NonResidential	NonResidential	NonResidential	GW-17322-030420-JY-005	GW-17322-030420-DA-004	GW-17322-030420-JY-006	GW-17322-030420-JY-007									
Sample Date:		Detection Limit	Drinking Water	Drinking Water	Surface Water Interface	Health-Based Drinking Water	Health-Based Drinking Water	Groundwater Not In Contact	Groundwater Not In Contact	Shallow Groundwater	Shallow Groundwater	RIASL	NonRIASL	RIASL	TSRIASL	RIASL	RIASL ₁₂	TSRIASL ₁₂	3/4/2020	6/22/2020	3/4/2020	3/4/2020									
Sample Type:		Units	a	b	c	h	i	j	k	l	m	n	o	p	q	r	s	t				Duplicate									
Parameters																															
Volatile Organic Compounds (VOCs)																															
1,1,1-Trichloroethane	ug/L	1	200	200	89			14000	19000	180	5900	180	750	8600	8600	41000	41000	120000	1.0 U		--	--									
1,1,2,2-Tetrachloroethane	ug/L	1	8.5	35	78			71	170	2.4	6.7								1.0 U		--	--									
1,1,2-Trichloroethane	ug/L	1	5		330			14	20	0.47	0.95								1.0 U.J		--	--									
1,1-Dichloroethane	ug/L	1	880	2500	740			130	300	4.7	40	4.7	14	67	670	540	1100	34000	1.0 U		--	--									
1,1-Dichloroethene	ug/L	1	7	7	130			330	480	18	250	18	45	170	510	860	1700	16000	1.0 U		--	--									
1,2,4-Trichlorobenzene	ug/L	5	70	70	99			110	160	3.8	0.021	3.8	5.8	95	290	460	920	8100	1.0 U		--	--									
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	0.2	0.2	0.2				0.00045	0.021	0.00045	0.021								1.0 U		--	--									
1,2-Dibromoethane (Ethylene dibromide)	ug/L	0.05	0.05	0.05	5.7			3.8	8.9	0.13	0.39								1.0 U		--	--									
1,2-Dichlorobenzene	ug/L	1	600	600	13			11000	16000	370	950								1.0 U		--	--									
1,2-Dichloroethane	ug/L	1	5	5	360			41	97	1.4	5.1								1.0 U		--	--									
1,2-Dichloropropane	ug/L	1	5	5	230			74	110	2.6	8.9								1.0 U		--	--									
1,2-Dichlorobenzene	ug/L	1	6.6		19			75	110	2.6	7.9								1.0 U		--	--									
1,4-Dichlorobenzene	ug/L	1	75	75	17			170	400	5.9	28	2.6	4.2	52	150	250	510	4600	1.0 U		--	--									
2-Butanone (Methyl ethyl ketone) (MEK)	ug/L	25	13000	38000	2200			4300000	4300000	2600	12000			120	1200	930	1900	57000	10 U		--	--									
2-Hexanone	ug/L	50	1000	2900	ID			20000	29000	660	1100								10 U		--	--									
4-Methyl-2-pentanone (Methyl isobutyl keto	ug/L	50	1800	5200	ID			3300000	330000	200	1400								10 U		--	--									
Acetone	ug/L	50	730	2100	1700			40000000	40000000	50000	200000	50000	62000	12000000	12000000	47000000	47000000	160000000	10 U		--	--									
Benzene	ug/L	1	5	5	200			28	66	1.0	8.4	1	3	14	82	120	230	2600	1.0 U		--	--									
Bromodichloromethane	ug/L	1	80	80	ID			34	73	1.2	4.9								1.0 U		--	--									
Bromoform	ug/L	1	80	80	ID			2700	6200	89	260								1.0 U		--	--									
Bromomethane (Methyl bromide)	ug/L	5	10	29	5			55	80	2.1	13								1.0 U		--	--									
Carbon disulfide	ug/L	5	800	2300	ID			2100	3100	92	840								5.0 U		--	--									
Carbon tetrachloride	ug/L	1	5	5	38			7.7	18	0.41	9.5								1.0 U		--	--									
Chlorobenzene	ug/L	1	100	100	25			940	1400	33	110	33	54	540	1600	2700	5400	50000	1.0 U		--	--									
Chloroethane	ug/L	5	430	1700	1100			15000	22000	620	5200	620	1300	6700	20000	35000	69000	670000	1.0 U		--	--									
Chloroform (Trichloromethane)	ug/L	1	80	80	350			14	32	0.49	3.1	0.49	1.3	7.6	76	61	120	3800	1.0 U		--	--									
Chloromethane (Methyl chloride)	ug/L	5	260	1100	ID			380	560	15	110	15	30	160	470	810	1600	8000	1.0 U		--	--									
cis-1,2-Dichloroethene	ug/L	1	70	70	620			95	140	3.4	14	3.4	5.8	48	140	240	490	4600	1.0 U		--	--									
cis-1,3-Dichloropropene	ug/L																		1.0 U		--	--									
Cyclohexane	ug/L	10						2000	8100	290	8100								1.0 U		--	--									
Dibromochloromethane	ug/L	5	80		ID			23	130	0.78	6.7								1.0 U.J		--	--									
Dichlorodifluoromethane (CFC-12)	ug/L	5	1700	4800	ID			49	410	13	410								1.0 U		--	--									
Ethylbenzene	ug/L	1	74		18			74	170	2.8	28	2.8		45	450	360	710	22000	1.0 U		--	--									
Isopropyl benzene	ug/L	5	800	2300	28			15	36	0.80	6.7								1.0 U		--	--									
Methyl acetate	ug/L																		10 U		--	--									
Methyl cyclohexane	ug/L																		1.0 U		--	--									
Methyl tert butyl ether (MTBE)	ug/L	5	40	40	7100			7400	17000	250	810	250	610	4000	40000	32000	65000	2000000	1.0 U		--	--									
Methylene chloride	ug/L	5	5	5	1500			8400	12000	79	1100	79	490	3900	6200	20000	40000	200000	5.0 U		--	--									
Styrene	ug/L	1	100	100	80			960	2300	33	170								1.0 U		--	--									
Tetrachloroethene	ug/L	1	5	5	60			130	130	1.5	35	1.5	4.4	96	96	320	640	1900	1.0 U		--	--									
Toluene	ug/L	1	5		130			41000	59000	300	6600	300	850	23000	33000	110000	110000	350000	1.0 U		--	--									
trans-1,2-Dichloroethene	ug/L	1	790	790	270			390	580	16	110	27	78	650	1900	6500	6500	21000	1.0 U		--	--									
trans-1,3-Dichloropropene	ug/L																		1.0 U		--	--									
Trichloroethene	ug/L	1	5	5	200			10	10	0.073	1.6	0.073	0.21	6.1	18	21	41	380	1.0 U		--	--									
Trichlorofluoromethane (CFC-11)	ug/L	1	2600	7300				190	560	22	560								1.0 U		--	--									
Trifluorotrichloroethane (CFC-113)	ug/L	1	170000	170000	32			2700	26000	840	26000								1.0 U		--	--									
Vinyl chloride	ug/L	1	2	2	18			2.1	10	0.12	10	0.12							1.0 U		--	--									
Xylenes (total)	ug/L	3	280	280	49			2000	3000	75	410	75	140	1200	3600	6000	12000	110000	2.0 U		--	--									
Metals																															
Aluminum	ug/L	50	50	50		300	4100												--	--											
Aluminum (dissolved)	ug/L		50	50		300	4100												--	--											
Lead	ug/L	3	4	4	58														--	--	1.0 U	1.0 U									
Lead (dissolved)	ug/L		4	4	58														--	--	1.0 U	1.0 U									
Vanadium	ug/L	4	4.5	62	27														--	--	4.0 U	1.6 J									
Vanadium (dissolved)	ug/L		4.5	62	27														--	--	4.0 U	0.83 J									

Notes:

(1) EGLE Remediation and Redevelopment Division, EGLE Published List of Target Detection Limits Designated Analytical Methods, March 2016.

(2) EGLE - Michigan Department of Environment, Great Lakes and Energy (EGLE) Generic cleanup criteria for residential and nonresidential category, administrative rule R 299.44 effective December 30 2013, pursuant to Part 201 of 1994 PA 451 as amended

(3) EGLE VIAP SL: Michigan Department of Environment, Great Lakes and Energy (EGLE) Proposed Volatilization to Indoor Air (VIAP) Screening Levels (SL), Draft May 2020

(4) MDHHS/EGLE Media-Specific Volatilization to Indoor Air Interim Action Screening Levels (MSSL), Time-Sensitive (TS), Recommended Interim Action Screening Levels (RIASL), 12-appropriate for exposures less than 12 hours- August 2017

Boxed cell denotes exceedance of

'7.4ab	cleanup criteria or screening level
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U - Not detected at the associated reporting limit.

J - Estimated concentration.

UJ - Not detected; associated reporting limit is

estimated.

Table 4
Groundwater Analytical Results
RACER PCC- Validation
Pontiac, Michigan

Sample Location:	MW-10-07	MW-33-07	MW-33-07	MW-38-07	MW-38-07	MW-64-08	MW-64-08	MW-64-08	MW-68-08	MW-68-08	MW-68-08	MW-79D-19	MW-79D-19	MW-79i-19	MW-79i-19	MW-80-12
Sample Identification:	GW-17322-062320-DA-009	GW-17322-030520-JY-011	GW-17322-062320-DA-007	GW-17322-030520-JY-010	GW-17322-062320-DA-008	GW-17322-030420-JY-001	GW-17322-062220-DA-002	GW-17322-062220-DA-003	GW-17322-030520-JY-008	GW-17322-062320-DA-011	GW-17322-030420-JY-004	GW-17322-062220-DA-005	GW-17322-030420-JY-003	GW-17322-062220-DA-006	GW-17322-030520-JY-012	
Sample Date:	6/23/2020	3/5/2020	6/23/2020	3/5/2020	6/23/2020	3/4/2020	6/22/2020	6/22/2020	3/5/2020	6/23/2020	3/4/2020	6/22/2020	3/4/2020	6/22/2020	3/5/2020	
Sample Type:	Duplicate															
Parameters	Units															
Volatile Organic Compounds (VOCs)																
1,1,1-Trichloroethane	ug/L	--	--	--	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
1,1,2,2-Tetrachloroethane	ug/L	--	--	--	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
1,1,2-Trichloroethane	ug/L	--	--	--	--	1.0 UJ	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 UJ	1.0 U	1.0 UJ	1.0 U	1.0 UJ	
1,1-Dichloroethane	ug/L	--	--	--	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
1,1-Dichloroethene	ug/L	--	--	--	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
1,2,4-Trichlorobenzene	ug/L	--	--	--	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	--	--	--	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
1,2-Dibromoethane (Ethylene dibromide)	ug/L	--	--	--	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
1,2-Dichlorobenzene	ug/L	--	--	--	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
1,2-Dichloroethane	ug/L	--	--	--	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
1,2-Dichloropropane	ug/L	--	--	--	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
1,3-Dichlorobenzene	ug/L	--	--	--	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
1,4-Dichlorobenzene	ug/L	--	--	--	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
2-Butanone (Methyl ethyl ketone) (MEK)	ug/L	--	--	--	--	10 U	5.0 U	5.0 U	10 U	5.0 U	10 U	5.0 U	10 U	5.0 U	10 U	
2-Hexanone	ug/L	--	--	--	--	10 U	5.0 U	5.0 U	10 U	5.0 U	10 U	5.0 U	10 U	5.0 U	10 U	
4-Methyl-2-pentanone (Methyl isobutyl keto	ug/L	--	--	--	--	10 U	5.0 U	5.0 U	10 U	5.0 U	10 U	5.0 U	10 U	5.0 U	10 U	
Acetone	ug/L	--	--	--	--	10 U	5.0 U	5.0 U	10 U	5.0 U	10 U	5.0 U	10 U	5.0 U	10 U	
Benzene	ug/L	--	--	--	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Bromodichloromethane	ug/L	--	--	--	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Bromoform	ug/L	--	--	--	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Bromomethane (Methyl bromide)	ug/L	--	--	--	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Carbon disulfide	ug/L	--	--	--	--	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
Carbon tetrachloride	ug/L	--	--	--	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Chlorobenzene	ug/L	--	--	--	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Chloroethane	ug/L	--	--	--	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Chloroform (Trichloromethane)	ug/L	--	--	--	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Chloromethane (Methyl chloride)	ug/L	--	--	--	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
cis-1,2-Dichloroethene	ug/L	--	--	--	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.9	2.3	1.0 U	
cis-1,3-Dichloropropene	ug/L	--	--	--	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Cyclohexane	ug/L	--	--	--	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Dibromochloromethane	ug/L	--	--	--	--	1.0 UJ	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 UJ	1.0 U	1.0 UJ	1.0 U	1.0 UJ	
Dichlorodifluoromethane (CFC-12)	ug/L	--	--	--	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Ethylbenzene	ug/L	--	--	--	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Isopropyl benzene	ug/L	--	--	--	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Methyl acetate	ug/L	--	--	--	--	10 U	5.0 U	5.0 U	10 U	5.0 U	10 U	5.0 U	10 U	5.0 U	10 U	
Methyl cyclohexane	ug/L	--	--	--	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Methyl tert butyl ether (MTBE)	ug/L	--	--	--	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Methylene chloride	ug/L	--	--	--	--	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
Styrene	ug/L	--	--	--	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Tetrachloroethene	ug/L	--	--	--	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Toluene	ug/L	--	--	--	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
trans-1,2-Dichloroethene	ug/L	--	--	--	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
trans-1,3-Dichloropropene	ug/L	--	--	--	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Trichloroethene	ug/L	--	--	--	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Trichlorofluoromethane (CFC-11)	ug/L	--	--	--	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Trifluorotrichloroethane (CFC-113)	ug/L	--	--	--	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Vinyl chloride	ug/L	--	--	--	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Xylenes (total)	ug/L	--	--	--	--	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	
Metals																
Aluminum	ug/L	210 ^{ab}	50 U	49 J	50 U	50 U	--	--	--	--	--	--	--	--	--	
Aluminum (dissolved)	ug/L	50 U	50 U	50 U	50 U	50 U	--	--	--	--	--	--	--	--	--	
Lead	ug/L	1.1	0.74 J	1.0 U	1.0 U	1.0 U	--	--	--	--	--	--	--	--	--	
Lead (dissolved)	ug/L	1.0 U	0.53 J	1.0 U	1.0 U	1.0 U	--	--	--	--	--	--	--	--	--	
Vanadium	ug/L	0.92 J	4.0 U	4.0 U	4.0 U	4.0 U	--	--	--	--	--	--	--	--	--	
Vanadium (dissolved)	ug/L	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	--	--	--	--	--	--	--	--	--	

Notes:

⁽¹⁾ EGLE Remediation and Redevelopment Division, EGLE Published List of Target Detection Limits Designated Analytical Methods, March 2016.

⁽²⁾ EGLE - Michigan Department of Environment, Great Lakes and Energy (EGLE) Generic cleanup criteria for residential and nonresidential category, administrative rule R 299.44 effective December 30, 2013, pursuant to Part 201 of 1994 PA 451 as amended

⁽³⁾ EGLE VIAP SL: Michigan Department of Environment, Great Lakes and Energy (EGLE) Proposed Volatilization to Indoor Air (VIAP) Screening Levels (SL), Draft May 2020

⁽⁴⁾ MDHHS/EGLE Media-Specific Volatilization to Indoor Air Interim Action Screening Levels (MSSL), Time-Sensitive (TS), Recommended Interim Action Screening Levels (RIASL), 12-appropriate for exposures less than 12 hours- August 2017

^a Boxed cell denotes exceedance of cleanup criteria or screening level

U - Not detected at the associated reporting limit.

J - Estimated concentration.

UJ - Not detected; associated reporting limit is estimated.

Table 4
Groundwater Analytical Results
RACER PCC- Validation
Pontiac, Michigan

Sample Location:	MW-80-12	MW-81-12	MW-81-12	MW-81-12	MW-81-12	MW-85-12	MW-85-12	MW-87-12	MW-87-12	MW-92i-13	MW-92i-13	MW-92S-13	MW-92S-13	MW-93i-13	MW-93i-13
Sample Identification:	GW-17322-062420-DA-012	GW-17322-030620-JY-014	GW-17322-062420-DA-016	GW-17322-062420-DA-016	GW-17322-062420-DA-017	GW-17322-030420-JY-002	GW-17322-062220-DA-001	GW-17322-030520-JY-009	GW-17322-062320-DA-010	GW-17322-030620-JY-015	GW-17322-062420-DA-015	GW-17322-030620-JY-016	GW-17322-062420-DA-014	GW-17322-030520-JY-013	GW-17322-062420-DA-013
Sample Date:	6/24/2020	3/6/2020	6/24/2020	6/24/2020	6/24/2020	3/4/2020	6/22/2020	3/5/2020	6/23/2020	3/6/2020	6/24/2020	3/6/2020	6/24/2020	3/5/2020	6/24/2020
Sample Type:	Duplicate														
Parameters	Units														
Volatile Organic Compounds (VOCs)															
1,1,1-Trichloroethane	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	ug/L	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 UJ	1.0 U	1.0 UJ	1.0 U	1.0 UJ	1.0 U	1.0 UJ	1.0 U
1,1-Dichloroethane	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene dibromide)	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	ug/L	5.0 U	10 U	5.0 U	5.0 U	10 U	5.0 U	10 U	5.0 U	10 U	5.0 U	10 U	5.0 U	10 U	5.0 U
2-Hexanone	ug/L	5.0 U	10 U	5.0 U	5.0 U	10 U	5.0 U	10 U	5.0 U	10 U	5.0 U	10 U	5.0 U	10 U	5.0 U
4-Methyl-2-pentanone (Methyl isobutyl keto	ug/L	5.0 U	10 U	5.0 U	5.0 U	10 U	5.0 U	10 U	5.0 U	10 U	5.0 U	10 U	5.0 U	10 U	5.0 U
Acetone	ug/L	5.0 U	10 U	5.0 U	5.0 U	10 U	5.0 U	12	5.6	10 U	5.0 U	10 U	5.0 U	10 U	5.0 U
Benzene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.8 ^l	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	0.35 J	5.0 U	0.29 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	14 ^{lmop}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane (Methyl chloride)	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.18 J	0.24 J	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	ug/L	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 UJ	1.0 U	1.0 UJ	1.0 U	1.0 UJ	1.0 U	1.0 UJ	1.0 U
Dichlorodifluoromethane (CFC-12)	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.39 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropyl benzene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl acetate	ug/L	5.0 U	10 U	5.0 U	5.0 U	10 U	5.0 U	10 U	5.0 U	10 U	5.0 U	10 U	5.0 U	10 U	5.0 U
Methyl cyclohexane	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl tert butyl ether (MTBE)	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene chloride	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	0.37 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.15 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trifluorotrichloroethane (CFC-113)	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.91 J	0.91 J	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes (total)	ug/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.2	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Metals															
Aluminum	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aluminum (dissolved)	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead (dissolved)	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium (dissolved)	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
(1) EGLE Remediation and Redevelopment Division, EGLE Published List of Target Detection Limits Designated Analytical Methods, March 2016.
(2) EGLE - Michigan Department of Environment, Great Lakes and Energy (EGLE) Generic cleanup criteria for residential and nonresidential category, administrative rule R 299.44 effective December 30, 2013, pursuant to Part 201 of 1994 PA 451 as amended
(3) EGLE VIAP SL: Michigan Department of Environment, Great Lakes and Energy (EGLE) Proposed Volatilization to Indoor Air (VIAP) Screening Levels (SL), Draft May 2020
(4) MDHHS/EGLE Media-Specific Volatilization to Indoor Air Interim Action Screening Levels (MSSL), Time-Sensitive (TS), Recommended Interim Action Screening Levels (RIASL), 12-appropriate for exposures less than 12 hours- August 2017
'7.4ab ' Boxed cell denotes exceedance of cleanup criteria or screening level
U - Not detected at the associated reporting limit.
J - Estimated concentration.
UJ - Not detected; associated reporting limit is estimated.

Attachment A

Laboratory Analytical Reports

ANALYTICAL REPORT

Eurofins TestAmerica, Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

Laboratory Job ID: 240-127334-1
Client Project/Site: 17322, PCC Validation

For:
GHD Services Inc.
26850 Haggerty Rd.
Farmington Hills, Michigan 48331

Attn: Mr. James Abston



Authorized for release by:
3/16/2020 2:13:00 PM

Denise Heckler, Project Manager II
(330)966-9477
denise.heckler@testamericainc.com

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: GHD Services Inc.
Project/Site: 17322, PCC Validation

Job ID: 240-127334-1

Job ID: 240-127334-1

Laboratory: Eurofins TestAmerica, Canton

Narrative

Job Narrative 240-127334-1

Comments

No additional comments.

Receipt

The samples were received on 3/7/2020 9:40 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.9° C.

GC/MS VOA

Method 8260B: The laboratory control sample (LCS) for analytical batch 240-426432 recovered outside control limits for multiple analytes: These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260B: The laboratory control sample (LCS) analyzed in batch 240-426432 was below the recovery control criteria for multiple analyte(s): This variance only affects results measured above the reporting limit. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. This demonstrates the analyte reporting limit is valid, and it is acceptable to report ND results (non-detects). The samples associated with the LCS were non-detects for the affected analytes; therefore, the results were reported. The following samples are impacted:

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

Metals

Methods 6020: Some requested practical quantitation limits (PQLs) fall below the laboratory's verified standard quantitation limit. The continuing calibration blanks and method blanks may not support the lower PQL.

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

Definitions/Glossary

Client: GHD Services Inc.
Project/Site: 17322, PCC Validation

Job ID: 240-127334-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

Sample Summary

Client: GHD Services Inc.
Project/Site: 17322, PCC Validation

Job ID: 240-127334-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
240-127334-1	TB-17322A-030420	Water	03/04/20 00:00	03/07/20 09:40	
240-127334-2	GW-17322-030420-JY-001	Water	03/04/20 09:15	03/07/20 09:40	
240-127334-3	GW-17322-030420-JY-002	Water	03/04/20 10:15	03/07/20 09:40	
240-127334-4	GW-17322-030420-JY-003	Water	03/04/20 11:05	03/07/20 09:40	
240-127334-5	GW-17322-030420-JY-004	Water	03/04/20 12:05	03/07/20 09:40	
240-127334-6	GW-17322-030420-JY-005	Water	03/04/20 13:20	03/07/20 09:40	
240-127334-7	GW-17322-030420-JY-006	Water	03/04/20 14:50	03/07/20 09:40	
240-127334-8	GW-17322-030420-JY-007	Water	03/04/20 14:55	03/07/20 09:40	
240-127334-9	GW-17322-030520-JY-008	Water	03/05/20 09:15	03/07/20 09:40	
240-127334-10	GW-17322-030520-JY-009	Water	03/05/20 09:55	03/07/20 09:40	
240-127334-11	GW-17322-030520-JY-010	Water	03/05/20 12:20	03/07/20 09:40	
240-127334-12	GW-17322-030520-JY-011	Water	03/05/20 11:55	03/07/20 09:40	
240-127334-13	GW-17322-030520-JY-012	Water	03/05/20 14:00	03/07/20 09:40	
240-127334-14	GW-17322-030520-JY-013	Water	03/05/20 15:00	03/07/20 09:40	
240-127334-15	GW-17322-030620-JY-014	Water	03/06/20 08:50	03/07/20 09:40	
240-127334-16	GW-17322-030620-JY-015	Water	03/06/20 09:30	03/07/20 09:40	
240-127334-17	GW-17322-030620-JY-016	Water	03/06/20 10:10	03/07/20 09:40	

Detection Summary

Client: GHD Services Inc.
Project/Site: 17322, PCC Validation

Job ID: 240-127334-1

Client Sample ID: TB-17322A-030420

Lab Sample ID: 240-127334-1

No Detections.

Client Sample ID: GW-17322-030420-JY-001

Lab Sample ID: 240-127334-2

No Detections.

Client Sample ID: GW-17322-030420-JY-002

Lab Sample ID: 240-127334-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	0.35	J	5.0	0.28	ug/L	1		8260B	Total/NA

Client Sample ID: GW-17322-030420-JY-003

Lab Sample ID: 240-127334-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	2.9		1.0	0.10	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	2.9		1.0	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: GW-17322-030420-JY-004

Lab Sample ID: 240-127334-5

No Detections.

Client Sample ID: GW-17322-030420-JY-005

Lab Sample ID: 240-127334-6

No Detections.

Client Sample ID: GW-17322-030420-JY-006

Lab Sample ID: 240-127334-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	200		50	34	ug/L	1		6020	Total
Aluminum	130		50	34	ug/L	1		6020	Recoverable Dissolved

Client Sample ID: GW-17322-030420-JY-007

Lab Sample ID: 240-127334-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	600		50	34	ug/L	1		6020	Total
Vanadium	1.6	J	4.0	0.82	ug/L	1		6020	Recoverable Total
Aluminum	180		50	34	ug/L	1		6020	Recoverable Dissolved
Vanadium	0.83	J	4.0	0.82	ug/L	1		6020	Dissolved

Client Sample ID: GW-17322-030520-JY-008

Lab Sample ID: 240-127334-9

No Detections.

Client Sample ID: GW-17322-030520-JY-009

Lab Sample ID: 240-127334-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	12		10	5.4	ug/L	1		8260B	Total/NA
Bromodichloromethane	1.8		1.0	0.17	ug/L	1		8260B	Total/NA
Carbon disulfide	0.29	J	5.0	0.28	ug/L	1		8260B	Total/NA
Chloroform	14		1.0	0.13	ug/L	1		8260B	Total/NA
Ethylbenzene	0.39	J	1.0	0.11	ug/L	1		8260B	Total/NA
Toluene	0.15	J	1.0	0.14	ug/L	1		8260B	Total/NA
Xylenes, Total	2.2		2.0	0.15	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Canton

Detection Summary

Client: GHD Services Inc.
Project/Site: 17322, PCC Validation

Job ID: 240-127334-1

Client Sample ID: GW-17322-030520-JY-010

Lab Sample ID: 240-127334-11

No Detections.

Client Sample ID: GW-17322-030520-JY-011

Lab Sample ID: 240-127334-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.74	J	1.0	0.45	ug/L	1		6020	Total
Lead	0.53	J	1.0	0.45	ug/L	1		6020	Recoverable Dissolved

Client Sample ID: GW-17322-030520-JY-012

Lab Sample ID: 240-127334-13

No Detections.

Client Sample ID: GW-17322-030520-JY-013

Lab Sample ID: 240-127334-14

No Detections.

Client Sample ID: GW-17322-030620-JY-014

Lab Sample ID: 240-127334-15

No Detections.

Client Sample ID: GW-17322-030620-JY-015

Lab Sample ID: 240-127334-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	0.91	J	1.0	0.20	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	0.18	J	1.0	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: GW-17322-030620-JY-016

Lab Sample ID: 240-127334-17

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Canton

Method Summary

Client: GHD Services Inc.
Project/Site: 17322, PCC Validation

Job ID: 240-127334-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
6020	Metals (ICP/MS)	SW846	TAL CAN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL CAN
5030B	Purge and Trap	SW846	TAL CAN

Protocol References:

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

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322, PCC Validation

Job ID: 240-127334-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: TB-17322A-030420

Date Collected: 03/04/20 00:00

Date Received: 03/07/20 09:40

Lab Sample ID: 240-127334-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	5.4	ug/L			03/12/20 17:57	1
Benzene	1.0	U	1.0	0.13	ug/L			03/12/20 17:57	1
Bromodichloromethane	1.0	U	1.0	0.17	ug/L			03/12/20 17:57	1
Bromoform	1.0	U	1.0	0.76	ug/L			03/12/20 17:57	1
Bromomethane	1.0	U	1.0	0.42	ug/L			03/12/20 17:57	1
2-Butanone (MEK)	10	U	10	1.2	ug/L			03/12/20 17:57	1
Carbon disulfide	5.0	U	5.0	0.28	ug/L			03/12/20 17:57	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			03/12/20 17:57	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			03/12/20 17:57	1
Chloroethane	1.0	U	1.0	0.83	ug/L			03/12/20 17:57	1
Chloroform	1.0	U	1.0	0.13	ug/L			03/12/20 17:57	1
Chloromethane	1.0	U	1.0	0.20	ug/L			03/12/20 17:57	1
1,1-Dichloroethane	1.0	U	1.0	0.17	ug/L			03/12/20 17:57	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			03/12/20 17:57	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			03/12/20 17:57	1
1,2-Dichloropropane	1.0	U	1.0	0.15	ug/L			03/12/20 17:57	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			03/12/20 17:57	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			03/12/20 17:57	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			03/12/20 17:57	1
2-Hexanone	10	U	10	0.54	ug/L			03/12/20 17:57	1
Methylene Chloride	5.0	U	5.0	2.6	ug/L			03/12/20 17:57	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.42	ug/L			03/12/20 17:57	1
Styrene	1.0	U	1.0	0.10	ug/L			03/12/20 17:57	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13	ug/L			03/12/20 17:57	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			03/12/20 17:57	1
Toluene	1.0	U	1.0	0.14	ug/L			03/12/20 17:57	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			03/12/20 17:57	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			03/12/20 17:57	1
Xylenes, Total	2.0	U	2.0	0.15	ug/L			03/12/20 17:57	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			03/12/20 17:57	1
1,1,2-Trichloroethane	1.0	U *	1.0	0.090	ug/L			03/12/20 17:57	1
Cyclohexane	1.0	U *	1.0	0.24	ug/L			03/12/20 17:57	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.91	ug/L			03/12/20 17:57	1
1,2-Dibromoethane	1.0	U	1.0	0.12	ug/L			03/12/20 17:57	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			03/12/20 17:57	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			03/12/20 17:57	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			03/12/20 17:57	1
Isopropylbenzene	1.0	U	1.0	0.090	ug/L			03/12/20 17:57	1
Methyl acetate	10	U	10	1.7	ug/L			03/12/20 17:57	1
Methyl tert-butyl ether	1.0	U	1.0	0.070	ug/L			03/12/20 17:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			03/12/20 17:57	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.26	ug/L			03/12/20 17:57	1
1,2-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			03/12/20 17:57	1
1,3-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			03/12/20 17:57	1
1,4-Dichlorobenzene	1.0	U	1.0	0.16	ug/L			03/12/20 17:57	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			03/12/20 17:57	1
Dibromochloromethane	1.0	U *	1.0	0.39	ug/L			03/12/20 17:57	1
Methylcyclohexane	1.0	U *	1.0	0.33	ug/L			03/12/20 17:57	1

Eurofins TestAmerica, Canton

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322, PCC Validation

Job ID: 240-127334-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	93		75 - 130		03/12/20 17:57	1
4-Bromofluorobenzene (Surr)	109		47 - 134		03/12/20 17:57	1
Toluene-d8 (Surr)	89		69 - 122		03/12/20 17:57	1
Dibromofluoromethane (Surr)	92		78 - 129		03/12/20 17:57	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322, PCC Validation

Job ID: 240-127334-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17322-030420-JY-001

Date Collected: 03/04/20 09:15

Date Received: 03/07/20 09:40

Lab Sample ID: 240-127334-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	5.4	ug/L			03/12/20 18:22	1
Benzene	1.0	U	1.0	0.13	ug/L			03/12/20 18:22	1
Bromodichloromethane	1.0	U	1.0	0.17	ug/L			03/12/20 18:22	1
Bromoform	1.0	U	1.0	0.76	ug/L			03/12/20 18:22	1
Bromomethane	1.0	U	1.0	0.42	ug/L			03/12/20 18:22	1
2-Butanone (MEK)	10	U	10	1.2	ug/L			03/12/20 18:22	1
Carbon disulfide	5.0	U	5.0	0.28	ug/L			03/12/20 18:22	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			03/12/20 18:22	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			03/12/20 18:22	1
Chloroethane	1.0	U	1.0	0.83	ug/L			03/12/20 18:22	1
Chloroform	1.0	U	1.0	0.13	ug/L			03/12/20 18:22	1
Chloromethane	1.0	U	1.0	0.20	ug/L			03/12/20 18:22	1
1,1-Dichloroethane	1.0	U	1.0	0.17	ug/L			03/12/20 18:22	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			03/12/20 18:22	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			03/12/20 18:22	1
1,2-Dichloropropane	1.0	U	1.0	0.15	ug/L			03/12/20 18:22	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			03/12/20 18:22	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			03/12/20 18:22	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			03/12/20 18:22	1
2-Hexanone	10	U	10	0.54	ug/L			03/12/20 18:22	1
Methylene Chloride	5.0	U	5.0	2.6	ug/L			03/12/20 18:22	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.42	ug/L			03/12/20 18:22	1
Styrene	1.0	U	1.0	0.10	ug/L			03/12/20 18:22	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13	ug/L			03/12/20 18:22	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			03/12/20 18:22	1
Toluene	1.0	U	1.0	0.14	ug/L			03/12/20 18:22	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			03/12/20 18:22	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			03/12/20 18:22	1
Xylenes, Total	2.0	U	2.0	0.15	ug/L			03/12/20 18:22	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			03/12/20 18:22	1
1,1,2-Trichloroethane	1.0	U *	1.0	0.090	ug/L			03/12/20 18:22	1
Cyclohexane	1.0	U * F1	1.0	0.24	ug/L			03/12/20 18:22	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.91	ug/L			03/12/20 18:22	1
1,2-Dibromoethane	1.0	U	1.0	0.12	ug/L			03/12/20 18:22	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			03/12/20 18:22	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			03/12/20 18:22	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			03/12/20 18:22	1
Isopropylbenzene	1.0	U F1	1.0	0.090	ug/L			03/12/20 18:22	1
Methyl acetate	10	U	10	1.7	ug/L			03/12/20 18:22	1
Methyl tert-butyl ether	1.0	U	1.0	0.070	ug/L			03/12/20 18:22	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U F1	1.0	0.41	ug/L			03/12/20 18:22	1
1,2,4-Trichlorobenzene	1.0	U F1	1.0	0.26	ug/L			03/12/20 18:22	1
1,2-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			03/12/20 18:22	1
1,3-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			03/12/20 18:22	1
1,4-Dichlorobenzene	1.0	U	1.0	0.16	ug/L			03/12/20 18:22	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			03/12/20 18:22	1
Dibromochloromethane	1.0	U *	1.0	0.39	ug/L			03/12/20 18:22	1
Methylcyclohexane	1.0	U * F1	1.0	0.33	ug/L			03/12/20 18:22	1

Eurofins TestAmerica, Canton

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322, PCC Validation

Job ID: 240-127334-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	94		75 - 130		03/12/20 18:22	1
4-Bromofluorobenzene (Surr)	110		47 - 134		03/12/20 18:22	1
Toluene-d8 (Surr)	91		69 - 122		03/12/20 18:22	1
Dibromofluoromethane (Surr)	90		78 - 129		03/12/20 18:22	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322, PCC Validation

Job ID: 240-127334-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17322-030420-JY-002

Date Collected: 03/04/20 10:15

Date Received: 03/07/20 09:40

Lab Sample ID: 240-127334-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	5.4	ug/L			03/12/20 19:36	1
Benzene	1.0	U	1.0	0.13	ug/L			03/12/20 19:36	1
Bromodichloromethane	1.0	U	1.0	0.17	ug/L			03/12/20 19:36	1
Bromoform	1.0	U	1.0	0.76	ug/L			03/12/20 19:36	1
Bromomethane	1.0	U	1.0	0.42	ug/L			03/12/20 19:36	1
2-Butanone (MEK)	10	U	10	1.2	ug/L			03/12/20 19:36	1
Carbon disulfide	0.35	J	5.0	0.28	ug/L			03/12/20 19:36	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			03/12/20 19:36	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			03/12/20 19:36	1
Chloroethane	1.0	U	1.0	0.83	ug/L			03/12/20 19:36	1
Chloroform	1.0	U	1.0	0.13	ug/L			03/12/20 19:36	1
Chloromethane	1.0	U	1.0	0.20	ug/L			03/12/20 19:36	1
1,1-Dichloroethane	1.0	U	1.0	0.17	ug/L			03/12/20 19:36	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			03/12/20 19:36	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			03/12/20 19:36	1
1,2-Dichloropropane	1.0	U	1.0	0.15	ug/L			03/12/20 19:36	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			03/12/20 19:36	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			03/12/20 19:36	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			03/12/20 19:36	1
2-Hexanone	10	U	10	0.54	ug/L			03/12/20 19:36	1
Methylene Chloride	5.0	U	5.0	2.6	ug/L			03/12/20 19:36	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.42	ug/L			03/12/20 19:36	1
Styrene	1.0	U	1.0	0.10	ug/L			03/12/20 19:36	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13	ug/L			03/12/20 19:36	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			03/12/20 19:36	1
Toluene	1.0	U	1.0	0.14	ug/L			03/12/20 19:36	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			03/12/20 19:36	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			03/12/20 19:36	1
Xylenes, Total	2.0	U	2.0	0.15	ug/L			03/12/20 19:36	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			03/12/20 19:36	1
1,1,2-Trichloroethane	1.0	U *	1.0	0.090	ug/L			03/12/20 19:36	1
Cyclohexane	1.0	U *	1.0	0.24	ug/L			03/12/20 19:36	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.91	ug/L			03/12/20 19:36	1
1,2-Dibromoethane	1.0	U	1.0	0.12	ug/L			03/12/20 19:36	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			03/12/20 19:36	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			03/12/20 19:36	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			03/12/20 19:36	1
Isopropylbenzene	1.0	U	1.0	0.090	ug/L			03/12/20 19:36	1
Methyl acetate	10	U	10	1.7	ug/L			03/12/20 19:36	1
Methyl tert-butyl ether	1.0	U	1.0	0.070	ug/L			03/12/20 19:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			03/12/20 19:36	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.26	ug/L			03/12/20 19:36	1
1,2-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			03/12/20 19:36	1
1,3-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			03/12/20 19:36	1
1,4-Dichlorobenzene	1.0	U	1.0	0.16	ug/L			03/12/20 19:36	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			03/12/20 19:36	1
Dibromochloromethane	1.0	U *	1.0	0.39	ug/L			03/12/20 19:36	1
Methylcyclohexane	1.0	U *	1.0	0.33	ug/L			03/12/20 19:36	1

Eurofins TestAmerica, Canton

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322, PCC Validation

Job ID: 240-127334-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	92		75 - 130		03/12/20 19:36	1
4-Bromofluorobenzene (Surr)	107		47 - 134		03/12/20 19:36	1
Toluene-d8 (Surr)	89		69 - 122		03/12/20 19:36	1
Dibromofluoromethane (Surr)	91		78 - 129		03/12/20 19:36	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322, PCC Validation

Job ID: 240-127334-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17322-030420-JY-003

Date Collected: 03/04/20 11:05

Date Received: 03/07/20 09:40

Lab Sample ID: 240-127334-4

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	5.4	ug/L			03/12/20 20:02	1
Benzene	1.0	U	1.0	0.13	ug/L			03/12/20 20:02	1
Bromodichloromethane	1.0	U	1.0	0.17	ug/L			03/12/20 20:02	1
Bromoform	1.0	U	1.0	0.76	ug/L			03/12/20 20:02	1
Bromomethane	1.0	U	1.0	0.42	ug/L			03/12/20 20:02	1
2-Butanone (MEK)	10	U	10	1.2	ug/L			03/12/20 20:02	1
Carbon disulfide	5.0	U	5.0	0.28	ug/L			03/12/20 20:02	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			03/12/20 20:02	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			03/12/20 20:02	1
Chloroethane	1.0	U	1.0	0.83	ug/L			03/12/20 20:02	1
Chloroform	1.0	U	1.0	0.13	ug/L			03/12/20 20:02	1
Chloromethane	1.0	U	1.0	0.20	ug/L			03/12/20 20:02	1
1,1-Dichloroethane	1.0	U	1.0	0.17	ug/L			03/12/20 20:02	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			03/12/20 20:02	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			03/12/20 20:02	1
1,2-Dichloropropane	1.0	U	1.0	0.15	ug/L			03/12/20 20:02	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			03/12/20 20:02	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			03/12/20 20:02	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			03/12/20 20:02	1
2-Hexanone	10	U	10	0.54	ug/L			03/12/20 20:02	1
Methylene Chloride	5.0	U	5.0	2.6	ug/L			03/12/20 20:02	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.42	ug/L			03/12/20 20:02	1
Styrene	1.0	U	1.0	0.10	ug/L			03/12/20 20:02	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13	ug/L			03/12/20 20:02	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			03/12/20 20:02	1
Toluene	1.0	U	1.0	0.14	ug/L			03/12/20 20:02	1
Trichloroethene	2.9		1.0	0.10	ug/L			03/12/20 20:02	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			03/12/20 20:02	1
Xylenes, Total	2.0	U	2.0	0.15	ug/L			03/12/20 20:02	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			03/12/20 20:02	1
1,1,2-Trichloroethane	1.0	U *	1.0	0.090	ug/L			03/12/20 20:02	1
Cyclohexane	1.0	U *	1.0	0.24	ug/L			03/12/20 20:02	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.91	ug/L			03/12/20 20:02	1
1,2-Dibromoethane	1.0	U	1.0	0.12	ug/L			03/12/20 20:02	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			03/12/20 20:02	1
cis-1,2-Dichloroethene	2.9		1.0	0.16	ug/L			03/12/20 20:02	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			03/12/20 20:02	1
Isopropylbenzene	1.0	U	1.0	0.090	ug/L			03/12/20 20:02	1
Methyl acetate	10	U	10	1.7	ug/L			03/12/20 20:02	1
Methyl tert-butyl ether	1.0	U	1.0	0.070	ug/L			03/12/20 20:02	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			03/12/20 20:02	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.26	ug/L			03/12/20 20:02	1
1,2-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			03/12/20 20:02	1
1,3-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			03/12/20 20:02	1
1,4-Dichlorobenzene	1.0	U	1.0	0.16	ug/L			03/12/20 20:02	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			03/12/20 20:02	1
Dibromochloromethane	1.0	U *	1.0	0.39	ug/L			03/12/20 20:02	1
Methylcyclohexane	1.0	U *	1.0	0.33	ug/L			03/12/20 20:02	1

Eurofins TestAmerica, Canton

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322, PCC Validation

Job ID: 240-127334-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	95		75 - 130		03/12/20 20:02	1
4-Bromofluorobenzene (Surr)	107		47 - 134		03/12/20 20:02	1
Toluene-d8 (Surr)	86		69 - 122		03/12/20 20:02	1
Dibromofluoromethane (Surr)	91		78 - 129		03/12/20 20:02	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322, PCC Validation

Job ID: 240-127334-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17322-030420-JY-004

Date Collected: 03/04/20 12:05

Date Received: 03/07/20 09:40

Lab Sample ID: 240-127334-5

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	5.4	ug/L			03/12/20 20:27	1
Benzene	1.0	U	1.0	0.13	ug/L			03/12/20 20:27	1
Bromodichloromethane	1.0	U	1.0	0.17	ug/L			03/12/20 20:27	1
Bromoform	1.0	U	1.0	0.76	ug/L			03/12/20 20:27	1
Bromomethane	1.0	U	1.0	0.42	ug/L			03/12/20 20:27	1
2-Butanone (MEK)	10	U	10	1.2	ug/L			03/12/20 20:27	1
Carbon disulfide	5.0	U	5.0	0.28	ug/L			03/12/20 20:27	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			03/12/20 20:27	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			03/12/20 20:27	1
Chloroethane	1.0	U	1.0	0.83	ug/L			03/12/20 20:27	1
Chloroform	1.0	U	1.0	0.13	ug/L			03/12/20 20:27	1
Chloromethane	1.0	U	1.0	0.20	ug/L			03/12/20 20:27	1
1,1-Dichloroethane	1.0	U	1.0	0.17	ug/L			03/12/20 20:27	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			03/12/20 20:27	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			03/12/20 20:27	1
1,2-Dichloropropane	1.0	U	1.0	0.15	ug/L			03/12/20 20:27	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			03/12/20 20:27	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			03/12/20 20:27	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			03/12/20 20:27	1
2-Hexanone	10	U	10	0.54	ug/L			03/12/20 20:27	1
Methylene Chloride	5.0	U	5.0	2.6	ug/L			03/12/20 20:27	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.42	ug/L			03/12/20 20:27	1
Styrene	1.0	U	1.0	0.10	ug/L			03/12/20 20:27	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13	ug/L			03/12/20 20:27	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			03/12/20 20:27	1
Toluene	1.0	U	1.0	0.14	ug/L			03/12/20 20:27	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			03/12/20 20:27	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			03/12/20 20:27	1
Xylenes, Total	2.0	U	2.0	0.15	ug/L			03/12/20 20:27	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			03/12/20 20:27	1
1,1,2-Trichloroethane	1.0	U *	1.0	0.090	ug/L			03/12/20 20:27	1
Cyclohexane	1.0	U *	1.0	0.24	ug/L			03/12/20 20:27	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.91	ug/L			03/12/20 20:27	1
1,2-Dibromoethane	1.0	U	1.0	0.12	ug/L			03/12/20 20:27	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			03/12/20 20:27	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			03/12/20 20:27	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			03/12/20 20:27	1
Isopropylbenzene	1.0	U	1.0	0.090	ug/L			03/12/20 20:27	1
Methyl acetate	10	U	10	1.7	ug/L			03/12/20 20:27	1
Methyl tert-butyl ether	1.0	U	1.0	0.070	ug/L			03/12/20 20:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			03/12/20 20:27	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.26	ug/L			03/12/20 20:27	1
1,2-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			03/12/20 20:27	1
1,3-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			03/12/20 20:27	1
1,4-Dichlorobenzene	1.0	U	1.0	0.16	ug/L			03/12/20 20:27	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			03/12/20 20:27	1
Dibromochloromethane	1.0	U *	1.0	0.39	ug/L			03/12/20 20:27	1
Methylcyclohexane	1.0	U *	1.0	0.33	ug/L			03/12/20 20:27	1

Eurofins TestAmerica, Canton

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322, PCC Validation

Job ID: 240-127334-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	92		75 - 130		03/12/20 20:27	1
4-Bromofluorobenzene (Surr)	108		47 - 134		03/12/20 20:27	1
Toluene-d8 (Surr)	89		69 - 122		03/12/20 20:27	1
Dibromofluoromethane (Surr)	91		78 - 129		03/12/20 20:27	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322, PCC Validation

Job ID: 240-127334-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17322-030420-JY-005

Date Collected: 03/04/20 13:20

Date Received: 03/07/20 09:40

Lab Sample ID: 240-127334-6

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	5.4	ug/L			03/12/20 20:52	1
Benzene	1.0	U	1.0	0.13	ug/L			03/12/20 20:52	1
Bromodichloromethane	1.0	U	1.0	0.17	ug/L			03/12/20 20:52	1
Bromoform	1.0	U	1.0	0.76	ug/L			03/12/20 20:52	1
Bromomethane	1.0	U	1.0	0.42	ug/L			03/12/20 20:52	1
2-Butanone (MEK)	10	U	10	1.2	ug/L			03/12/20 20:52	1
Carbon disulfide	5.0	U	5.0	0.28	ug/L			03/12/20 20:52	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			03/12/20 20:52	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			03/12/20 20:52	1
Chloroethane	1.0	U	1.0	0.83	ug/L			03/12/20 20:52	1
Chloroform	1.0	U	1.0	0.13	ug/L			03/12/20 20:52	1
Chloromethane	1.0	U	1.0	0.20	ug/L			03/12/20 20:52	1
1,1-Dichloroethane	1.0	U	1.0	0.17	ug/L			03/12/20 20:52	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			03/12/20 20:52	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			03/12/20 20:52	1
1,2-Dichloropropane	1.0	U	1.0	0.15	ug/L			03/12/20 20:52	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			03/12/20 20:52	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			03/12/20 20:52	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			03/12/20 20:52	1
2-Hexanone	10	U	10	0.54	ug/L			03/12/20 20:52	1
Methylene Chloride	5.0	U	5.0	2.6	ug/L			03/12/20 20:52	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.42	ug/L			03/12/20 20:52	1
Styrene	1.0	U	1.0	0.10	ug/L			03/12/20 20:52	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13	ug/L			03/12/20 20:52	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			03/12/20 20:52	1
Toluene	1.0	U	1.0	0.14	ug/L			03/12/20 20:52	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			03/12/20 20:52	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			03/12/20 20:52	1
Xylenes, Total	2.0	U	2.0	0.15	ug/L			03/12/20 20:52	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			03/12/20 20:52	1
1,1,2-Trichloroethane	1.0	U *	1.0	0.090	ug/L			03/12/20 20:52	1
Cyclohexane	1.0	U *	1.0	0.24	ug/L			03/12/20 20:52	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.91	ug/L			03/12/20 20:52	1
1,2-Dibromoethane	1.0	U	1.0	0.12	ug/L			03/12/20 20:52	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			03/12/20 20:52	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			03/12/20 20:52	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			03/12/20 20:52	1
Isopropylbenzene	1.0	U	1.0	0.090	ug/L			03/12/20 20:52	1
Methyl acetate	10	U	10	1.7	ug/L			03/12/20 20:52	1
Methyl tert-butyl ether	1.0	U	1.0	0.070	ug/L			03/12/20 20:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			03/12/20 20:52	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.26	ug/L			03/12/20 20:52	1
1,2-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			03/12/20 20:52	1
1,3-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			03/12/20 20:52	1
1,4-Dichlorobenzene	1.0	U	1.0	0.16	ug/L			03/12/20 20:52	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			03/12/20 20:52	1
Dibromochloromethane	1.0	U *	1.0	0.39	ug/L			03/12/20 20:52	1
Methylcyclohexane	1.0	U *	1.0	0.33	ug/L			03/12/20 20:52	1

Eurofins TestAmerica, Canton

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322, PCC Validation

Job ID: 240-127334-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	93		75 - 130		03/12/20 20:52	1
4-Bromofluorobenzene (Surr)	106		47 - 134		03/12/20 20:52	1
Toluene-d8 (Surr)	87		69 - 122		03/12/20 20:52	1
Dibromofluoromethane (Surr)	91		78 - 129		03/12/20 20:52	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322, PCC Validation

Job ID: 240-127334-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17322-030520-JY-008

Date Collected: 03/05/20 09:15

Date Received: 03/07/20 09:40

Lab Sample ID: 240-127334-9

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	5.4	ug/L			03/12/20 21:16	1
Benzene	1.0	U	1.0	0.13	ug/L			03/12/20 21:16	1
Bromodichloromethane	1.0	U	1.0	0.17	ug/L			03/12/20 21:16	1
Bromoform	1.0	U	1.0	0.76	ug/L			03/12/20 21:16	1
Bromomethane	1.0	U	1.0	0.42	ug/L			03/12/20 21:16	1
2-Butanone (MEK)	10	U	10	1.2	ug/L			03/12/20 21:16	1
Carbon disulfide	5.0	U	5.0	0.28	ug/L			03/12/20 21:16	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			03/12/20 21:16	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			03/12/20 21:16	1
Chloroethane	1.0	U	1.0	0.83	ug/L			03/12/20 21:16	1
Chloroform	1.0	U	1.0	0.13	ug/L			03/12/20 21:16	1
Chloromethane	1.0	U	1.0	0.20	ug/L			03/12/20 21:16	1
1,1-Dichloroethane	1.0	U	1.0	0.17	ug/L			03/12/20 21:16	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			03/12/20 21:16	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			03/12/20 21:16	1
1,2-Dichloropropane	1.0	U	1.0	0.15	ug/L			03/12/20 21:16	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			03/12/20 21:16	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			03/12/20 21:16	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			03/12/20 21:16	1
2-Hexanone	10	U	10	0.54	ug/L			03/12/20 21:16	1
Methylene Chloride	5.0	U	5.0	2.6	ug/L			03/12/20 21:16	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.42	ug/L			03/12/20 21:16	1
Styrene	1.0	U	1.0	0.10	ug/L			03/12/20 21:16	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13	ug/L			03/12/20 21:16	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			03/12/20 21:16	1
Toluene	1.0	U	1.0	0.14	ug/L			03/12/20 21:16	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			03/12/20 21:16	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			03/12/20 21:16	1
Xylenes, Total	2.0	U	2.0	0.15	ug/L			03/12/20 21:16	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			03/12/20 21:16	1
1,1,2-Trichloroethane	1.0	U *	1.0	0.090	ug/L			03/12/20 21:16	1
Cyclohexane	1.0	U *	1.0	0.24	ug/L			03/12/20 21:16	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.91	ug/L			03/12/20 21:16	1
1,2-Dibromoethane	1.0	U	1.0	0.12	ug/L			03/12/20 21:16	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			03/12/20 21:16	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			03/12/20 21:16	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			03/12/20 21:16	1
Isopropylbenzene	1.0	U	1.0	0.090	ug/L			03/12/20 21:16	1
Methyl acetate	10	U	10	1.7	ug/L			03/12/20 21:16	1
Methyl tert-butyl ether	1.0	U	1.0	0.070	ug/L			03/12/20 21:16	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			03/12/20 21:16	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.26	ug/L			03/12/20 21:16	1
1,2-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			03/12/20 21:16	1
1,3-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			03/12/20 21:16	1
1,4-Dichlorobenzene	1.0	U	1.0	0.16	ug/L			03/12/20 21:16	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			03/12/20 21:16	1
Dibromochloromethane	1.0	U *	1.0	0.39	ug/L			03/12/20 21:16	1
Methylcyclohexane	1.0	U *	1.0	0.33	ug/L			03/12/20 21:16	1

Eurofins TestAmerica, Canton

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322, PCC Validation

Job ID: 240-127334-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	91		75 - 130		03/12/20 21:16	1
4-Bromofluorobenzene (Surr)	108		47 - 134		03/12/20 21:16	1
Toluene-d8 (Surr)	88		69 - 122		03/12/20 21:16	1
Dibromofluoromethane (Surr)	93		78 - 129		03/12/20 21:16	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322, PCC Validation

Job ID: 240-127334-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17322-030520-JY-009

Date Collected: 03/05/20 09:55

Date Received: 03/07/20 09:40

Lab Sample ID: 240-127334-10

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	12		10	5.4	ug/L			03/12/20 21:41	1
Benzene	1.0	U	1.0	0.13	ug/L			03/12/20 21:41	1
Bromodichloromethane	1.8		1.0	0.17	ug/L			03/12/20 21:41	1
Bromoform	1.0	U	1.0	0.76	ug/L			03/12/20 21:41	1
Bromomethane	1.0	U	1.0	0.42	ug/L			03/12/20 21:41	1
2-Butanone (MEK)	10	U	10	1.2	ug/L			03/12/20 21:41	1
Carbon disulfide	0.29	J	5.0	0.28	ug/L			03/12/20 21:41	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			03/12/20 21:41	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			03/12/20 21:41	1
Chloroethane	1.0	U	1.0	0.83	ug/L			03/12/20 21:41	1
Chloroform	14		1.0	0.13	ug/L			03/12/20 21:41	1
Chloromethane	1.0	U	1.0	0.20	ug/L			03/12/20 21:41	1
1,1-Dichloroethane	1.0	U	1.0	0.17	ug/L			03/12/20 21:41	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			03/12/20 21:41	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			03/12/20 21:41	1
1,2-Dichloropropane	1.0	U	1.0	0.15	ug/L			03/12/20 21:41	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			03/12/20 21:41	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			03/12/20 21:41	1
Ethylbenzene	0.39	J	1.0	0.11	ug/L			03/12/20 21:41	1
2-Hexanone	10	U	10	0.54	ug/L			03/12/20 21:41	1
Methylene Chloride	5.0	U	5.0	2.6	ug/L			03/12/20 21:41	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.42	ug/L			03/12/20 21:41	1
Styrene	1.0	U	1.0	0.10	ug/L			03/12/20 21:41	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13	ug/L			03/12/20 21:41	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			03/12/20 21:41	1
Toluene	0.15	J	1.0	0.14	ug/L			03/12/20 21:41	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			03/12/20 21:41	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			03/12/20 21:41	1
Xylenes, Total	2.2		2.0	0.15	ug/L			03/12/20 21:41	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			03/12/20 21:41	1
1,1,2-Trichloroethane	1.0	U *	1.0	0.090	ug/L			03/12/20 21:41	1
Cyclohexane	1.0	U *	1.0	0.24	ug/L			03/12/20 21:41	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.91	ug/L			03/12/20 21:41	1
1,2-Dibromoethane	1.0	U	1.0	0.12	ug/L			03/12/20 21:41	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			03/12/20 21:41	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			03/12/20 21:41	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			03/12/20 21:41	1
Isopropylbenzene	1.0	U	1.0	0.090	ug/L			03/12/20 21:41	1
Methyl acetate	10	U	10	1.7	ug/L			03/12/20 21:41	1
Methyl tert-butyl ether	1.0	U	1.0	0.070	ug/L			03/12/20 21:41	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			03/12/20 21:41	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.26	ug/L			03/12/20 21:41	1
1,2-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			03/12/20 21:41	1
1,3-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			03/12/20 21:41	1
1,4-Dichlorobenzene	1.0	U	1.0	0.16	ug/L			03/12/20 21:41	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			03/12/20 21:41	1
Dibromochloromethane	1.0	U *	1.0	0.39	ug/L			03/12/20 21:41	1
Methylcyclohexane	1.0	U *	1.0	0.33	ug/L			03/12/20 21:41	1

Eurofins TestAmerica, Canton

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322, PCC Validation

Job ID: 240-127334-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	95		75 - 130		03/12/20 21:41	1
4-Bromofluorobenzene (Surr)	109		47 - 134		03/12/20 21:41	1
Toluene-d8 (Surr)	89		69 - 122		03/12/20 21:41	1
Dibromofluoromethane (Surr)	93		78 - 129		03/12/20 21:41	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322, PCC Validation

Job ID: 240-127334-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17322-030520-JY-012

Date Collected: 03/05/20 14:00

Date Received: 03/07/20 09:40

Lab Sample ID: 240-127334-13

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	5.4	ug/L			03/12/20 22:06	1
Benzene	1.0	U	1.0	0.13	ug/L			03/12/20 22:06	1
Bromodichloromethane	1.0	U	1.0	0.17	ug/L			03/12/20 22:06	1
Bromoform	1.0	U	1.0	0.76	ug/L			03/12/20 22:06	1
Bromomethane	1.0	U	1.0	0.42	ug/L			03/12/20 22:06	1
2-Butanone (MEK)	10	U	10	1.2	ug/L			03/12/20 22:06	1
Carbon disulfide	5.0	U	5.0	0.28	ug/L			03/12/20 22:06	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			03/12/20 22:06	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			03/12/20 22:06	1
Chloroethane	1.0	U	1.0	0.83	ug/L			03/12/20 22:06	1
Chloroform	1.0	U	1.0	0.13	ug/L			03/12/20 22:06	1
Chloromethane	1.0	U	1.0	0.20	ug/L			03/12/20 22:06	1
1,1-Dichloroethane	1.0	U	1.0	0.17	ug/L			03/12/20 22:06	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			03/12/20 22:06	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			03/12/20 22:06	1
1,2-Dichloropropane	1.0	U	1.0	0.15	ug/L			03/12/20 22:06	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			03/12/20 22:06	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			03/12/20 22:06	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			03/12/20 22:06	1
2-Hexanone	10	U	10	0.54	ug/L			03/12/20 22:06	1
Methylene Chloride	5.0	U	5.0	2.6	ug/L			03/12/20 22:06	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.42	ug/L			03/12/20 22:06	1
Styrene	1.0	U	1.0	0.10	ug/L			03/12/20 22:06	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13	ug/L			03/12/20 22:06	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			03/12/20 22:06	1
Toluene	1.0	U	1.0	0.14	ug/L			03/12/20 22:06	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			03/12/20 22:06	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			03/12/20 22:06	1
Xylenes, Total	2.0	U	2.0	0.15	ug/L			03/12/20 22:06	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			03/12/20 22:06	1
1,1,2-Trichloroethane	1.0	U *	1.0	0.090	ug/L			03/12/20 22:06	1
Cyclohexane	1.0	U *	1.0	0.24	ug/L			03/12/20 22:06	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.91	ug/L			03/12/20 22:06	1
1,2-Dibromoethane	1.0	U	1.0	0.12	ug/L			03/12/20 22:06	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			03/12/20 22:06	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			03/12/20 22:06	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			03/12/20 22:06	1
Isopropylbenzene	1.0	U	1.0	0.090	ug/L			03/12/20 22:06	1
Methyl acetate	10	U	10	1.7	ug/L			03/12/20 22:06	1
Methyl tert-butyl ether	1.0	U	1.0	0.070	ug/L			03/12/20 22:06	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			03/12/20 22:06	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.26	ug/L			03/12/20 22:06	1
1,2-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			03/12/20 22:06	1
1,3-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			03/12/20 22:06	1
1,4-Dichlorobenzene	1.0	U	1.0	0.16	ug/L			03/12/20 22:06	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			03/12/20 22:06	1
Dibromochloromethane	1.0	U *	1.0	0.39	ug/L			03/12/20 22:06	1
Methylcyclohexane	1.0	U *	1.0	0.33	ug/L			03/12/20 22:06	1

Eurofins TestAmerica, Canton

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322, PCC Validation

Job ID: 240-127334-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	93		75 - 130		03/12/20 22:06	1
4-Bromofluorobenzene (Surr)	104		47 - 134		03/12/20 22:06	1
Toluene-d8 (Surr)	88		69 - 122		03/12/20 22:06	1
Dibromofluoromethane (Surr)	91		78 - 129		03/12/20 22:06	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322, PCC Validation

Job ID: 240-127334-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17322-030520-JY-013

Date Collected: 03/05/20 15:00

Date Received: 03/07/20 09:40

Lab Sample ID: 240-127334-14

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	5.4	ug/L			03/12/20 22:31	1
Benzene	1.0	U	1.0	0.13	ug/L			03/12/20 22:31	1
Bromodichloromethane	1.0	U	1.0	0.17	ug/L			03/12/20 22:31	1
Bromoform	1.0	U	1.0	0.76	ug/L			03/12/20 22:31	1
Bromomethane	1.0	U	1.0	0.42	ug/L			03/12/20 22:31	1
2-Butanone (MEK)	10	U	10	1.2	ug/L			03/12/20 22:31	1
Carbon disulfide	5.0	U	5.0	0.28	ug/L			03/12/20 22:31	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			03/12/20 22:31	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			03/12/20 22:31	1
Chloroethane	1.0	U	1.0	0.83	ug/L			03/12/20 22:31	1
Chloroform	1.0	U	1.0	0.13	ug/L			03/12/20 22:31	1
Chloromethane	1.0	U	1.0	0.20	ug/L			03/12/20 22:31	1
1,1-Dichloroethane	1.0	U	1.0	0.17	ug/L			03/12/20 22:31	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			03/12/20 22:31	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			03/12/20 22:31	1
1,2-Dichloropropane	1.0	U	1.0	0.15	ug/L			03/12/20 22:31	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			03/12/20 22:31	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			03/12/20 22:31	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			03/12/20 22:31	1
2-Hexanone	10	U	10	0.54	ug/L			03/12/20 22:31	1
Methylene Chloride	5.0	U	5.0	2.6	ug/L			03/12/20 22:31	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.42	ug/L			03/12/20 22:31	1
Styrene	1.0	U	1.0	0.10	ug/L			03/12/20 22:31	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13	ug/L			03/12/20 22:31	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			03/12/20 22:31	1
Toluene	1.0	U	1.0	0.14	ug/L			03/12/20 22:31	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			03/12/20 22:31	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			03/12/20 22:31	1
Xylenes, Total	2.0	U	2.0	0.15	ug/L			03/12/20 22:31	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			03/12/20 22:31	1
1,1,2-Trichloroethane	1.0	U *	1.0	0.090	ug/L			03/12/20 22:31	1
Cyclohexane	1.0	U *	1.0	0.24	ug/L			03/12/20 22:31	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.91	ug/L			03/12/20 22:31	1
1,2-Dibromoethane	1.0	U	1.0	0.12	ug/L			03/12/20 22:31	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			03/12/20 22:31	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			03/12/20 22:31	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			03/12/20 22:31	1
Isopropylbenzene	1.0	U	1.0	0.090	ug/L			03/12/20 22:31	1
Methyl acetate	10	U	10	1.7	ug/L			03/12/20 22:31	1
Methyl tert-butyl ether	1.0	U	1.0	0.070	ug/L			03/12/20 22:31	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			03/12/20 22:31	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.26	ug/L			03/12/20 22:31	1
1,2-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			03/12/20 22:31	1
1,3-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			03/12/20 22:31	1
1,4-Dichlorobenzene	1.0	U	1.0	0.16	ug/L			03/12/20 22:31	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			03/12/20 22:31	1
Dibromochloromethane	1.0	U *	1.0	0.39	ug/L			03/12/20 22:31	1
Methylcyclohexane	1.0	U *	1.0	0.33	ug/L			03/12/20 22:31	1

Eurofins TestAmerica, Canton

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322, PCC Validation

Job ID: 240-127334-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	92		75 - 130		03/12/20 22:31	1
4-Bromofluorobenzene (Surr)	106		47 - 134		03/12/20 22:31	1
Toluene-d8 (Surr)	88		69 - 122		03/12/20 22:31	1
Dibromofluoromethane (Surr)	90		78 - 129		03/12/20 22:31	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322, PCC Validation

Job ID: 240-127334-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17322-030620-JY-014

Date Collected: 03/06/20 08:50

Date Received: 03/07/20 09:40

Lab Sample ID: 240-127334-15

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	5.4	ug/L			03/12/20 22:56	1
Benzene	1.0	U	1.0	0.13	ug/L			03/12/20 22:56	1
Bromodichloromethane	1.0	U	1.0	0.17	ug/L			03/12/20 22:56	1
Bromoform	1.0	U	1.0	0.76	ug/L			03/12/20 22:56	1
Bromomethane	1.0	U	1.0	0.42	ug/L			03/12/20 22:56	1
2-Butanone (MEK)	10	U	10	1.2	ug/L			03/12/20 22:56	1
Carbon disulfide	5.0	U	5.0	0.28	ug/L			03/12/20 22:56	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			03/12/20 22:56	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			03/12/20 22:56	1
Chloroethane	1.0	U	1.0	0.83	ug/L			03/12/20 22:56	1
Chloroform	1.0	U	1.0	0.13	ug/L			03/12/20 22:56	1
Chloromethane	1.0	U	1.0	0.20	ug/L			03/12/20 22:56	1
1,1-Dichloroethane	1.0	U	1.0	0.17	ug/L			03/12/20 22:56	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			03/12/20 22:56	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			03/12/20 22:56	1
1,2-Dichloropropane	1.0	U	1.0	0.15	ug/L			03/12/20 22:56	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			03/12/20 22:56	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			03/12/20 22:56	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			03/12/20 22:56	1
2-Hexanone	10	U	10	0.54	ug/L			03/12/20 22:56	1
Methylene Chloride	5.0	U	5.0	2.6	ug/L			03/12/20 22:56	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.42	ug/L			03/12/20 22:56	1
Styrene	1.0	U	1.0	0.10	ug/L			03/12/20 22:56	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13	ug/L			03/12/20 22:56	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			03/12/20 22:56	1
Toluene	1.0	U	1.0	0.14	ug/L			03/12/20 22:56	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			03/12/20 22:56	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			03/12/20 22:56	1
Xylenes, Total	2.0	U	2.0	0.15	ug/L			03/12/20 22:56	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			03/12/20 22:56	1
1,1,2-Trichloroethane	1.0	U *	1.0	0.090	ug/L			03/12/20 22:56	1
Cyclohexane	1.0	U *	1.0	0.24	ug/L			03/12/20 22:56	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.91	ug/L			03/12/20 22:56	1
1,2-Dibromoethane	1.0	U	1.0	0.12	ug/L			03/12/20 22:56	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			03/12/20 22:56	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			03/12/20 22:56	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			03/12/20 22:56	1
Isopropylbenzene	1.0	U	1.0	0.090	ug/L			03/12/20 22:56	1
Methyl acetate	10	U	10	1.7	ug/L			03/12/20 22:56	1
Methyl tert-butyl ether	1.0	U	1.0	0.070	ug/L			03/12/20 22:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			03/12/20 22:56	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.26	ug/L			03/12/20 22:56	1
1,2-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			03/12/20 22:56	1
1,3-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			03/12/20 22:56	1
1,4-Dichlorobenzene	1.0	U	1.0	0.16	ug/L			03/12/20 22:56	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			03/12/20 22:56	1
Dibromochloromethane	1.0	U *	1.0	0.39	ug/L			03/12/20 22:56	1
Methylcyclohexane	1.0	U *	1.0	0.33	ug/L			03/12/20 22:56	1

Eurofins TestAmerica, Canton

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322, PCC Validation

Job ID: 240-127334-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	91		75 - 130		03/12/20 22:56	1
4-Bromofluorobenzene (Surr)	107		47 - 134		03/12/20 22:56	1
Toluene-d8 (Surr)	90		69 - 122		03/12/20 22:56	1
Dibromofluoromethane (Surr)	91		78 - 129		03/12/20 22:56	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322, PCC Validation

Job ID: 240-127334-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17322-030620-JY-015

Date Collected: 03/06/20 09:30

Date Received: 03/07/20 09:40

Lab Sample ID: 240-127334-16

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	5.4	ug/L			03/12/20 23:21	1
Benzene	1.0	U	1.0	0.13	ug/L			03/12/20 23:21	1
Bromodichloromethane	1.0	U	1.0	0.17	ug/L			03/12/20 23:21	1
Bromoform	1.0	U	1.0	0.76	ug/L			03/12/20 23:21	1
Bromomethane	1.0	U	1.0	0.42	ug/L			03/12/20 23:21	1
2-Butanone (MEK)	10	U	10	1.2	ug/L			03/12/20 23:21	1
Carbon disulfide	5.0	U	5.0	0.28	ug/L			03/12/20 23:21	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			03/12/20 23:21	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			03/12/20 23:21	1
Chloroethane	1.0	U	1.0	0.83	ug/L			03/12/20 23:21	1
Chloroform	1.0	U	1.0	0.13	ug/L			03/12/20 23:21	1
Chloromethane	1.0	U	1.0	0.20	ug/L			03/12/20 23:21	1
1,1-Dichloroethane	1.0	U	1.0	0.17	ug/L			03/12/20 23:21	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			03/12/20 23:21	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			03/12/20 23:21	1
1,2-Dichloropropane	1.0	U	1.0	0.15	ug/L			03/12/20 23:21	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			03/12/20 23:21	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			03/12/20 23:21	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			03/12/20 23:21	1
2-Hexanone	10	U	10	0.54	ug/L			03/12/20 23:21	1
Methylene Chloride	5.0	U	5.0	2.6	ug/L			03/12/20 23:21	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.42	ug/L			03/12/20 23:21	1
Styrene	1.0	U	1.0	0.10	ug/L			03/12/20 23:21	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13	ug/L			03/12/20 23:21	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			03/12/20 23:21	1
Toluene	1.0	U	1.0	0.14	ug/L			03/12/20 23:21	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			03/12/20 23:21	1
Vinyl chloride	0.91	J	1.0	0.20	ug/L			03/12/20 23:21	1
Xylenes, Total	2.0	U	2.0	0.15	ug/L			03/12/20 23:21	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			03/12/20 23:21	1
1,1,2-Trichloroethane	1.0	U *	1.0	0.090	ug/L			03/12/20 23:21	1
Cyclohexane	1.0	U *	1.0	0.24	ug/L			03/12/20 23:21	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.91	ug/L			03/12/20 23:21	1
1,2-Dibromoethane	1.0	U	1.0	0.12	ug/L			03/12/20 23:21	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			03/12/20 23:21	1
cis-1,2-Dichloroethene	0.18	J	1.0	0.16	ug/L			03/12/20 23:21	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			03/12/20 23:21	1
Isopropylbenzene	1.0	U	1.0	0.090	ug/L			03/12/20 23:21	1
Methyl acetate	10	U	10	1.7	ug/L			03/12/20 23:21	1
Methyl tert-butyl ether	1.0	U	1.0	0.070	ug/L			03/12/20 23:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			03/12/20 23:21	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.26	ug/L			03/12/20 23:21	1
1,2-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			03/12/20 23:21	1
1,3-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			03/12/20 23:21	1
1,4-Dichlorobenzene	1.0	U	1.0	0.16	ug/L			03/12/20 23:21	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			03/12/20 23:21	1
Dibromochloromethane	1.0	U *	1.0	0.39	ug/L			03/12/20 23:21	1
Methylcyclohexane	1.0	U *	1.0	0.33	ug/L			03/12/20 23:21	1

Eurofins TestAmerica, Canton

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322, PCC Validation

Job ID: 240-127334-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	95		75 - 130		03/12/20 23:21	1
4-Bromofluorobenzene (Surr)	109		47 - 134		03/12/20 23:21	1
Toluene-d8 (Surr)	91		69 - 122		03/12/20 23:21	1
Dibromofluoromethane (Surr)	92		78 - 129		03/12/20 23:21	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322, PCC Validation

Job ID: 240-127334-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17322-030620-JY-016

Date Collected: 03/06/20 10:10

Date Received: 03/07/20 09:40

Lab Sample ID: 240-127334-17

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	5.4	ug/L			03/12/20 23:46	1
Benzene	1.0	U	1.0	0.13	ug/L			03/12/20 23:46	1
Bromodichloromethane	1.0	U	1.0	0.17	ug/L			03/12/20 23:46	1
Bromoform	1.0	U	1.0	0.76	ug/L			03/12/20 23:46	1
Bromomethane	1.0	U	1.0	0.42	ug/L			03/12/20 23:46	1
2-Butanone (MEK)	10	U	10	1.2	ug/L			03/12/20 23:46	1
Carbon disulfide	5.0	U	5.0	0.28	ug/L			03/12/20 23:46	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			03/12/20 23:46	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			03/12/20 23:46	1
Chloroethane	1.0	U	1.0	0.83	ug/L			03/12/20 23:46	1
Chloroform	1.0	U	1.0	0.13	ug/L			03/12/20 23:46	1
Chloromethane	1.0	U	1.0	0.20	ug/L			03/12/20 23:46	1
1,1-Dichloroethane	1.0	U	1.0	0.17	ug/L			03/12/20 23:46	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			03/12/20 23:46	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			03/12/20 23:46	1
1,2-Dichloropropane	1.0	U	1.0	0.15	ug/L			03/12/20 23:46	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			03/12/20 23:46	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			03/12/20 23:46	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			03/12/20 23:46	1
2-Hexanone	10	U	10	0.54	ug/L			03/12/20 23:46	1
Methylene Chloride	5.0	U	5.0	2.6	ug/L			03/12/20 23:46	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.42	ug/L			03/12/20 23:46	1
Styrene	1.0	U	1.0	0.10	ug/L			03/12/20 23:46	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13	ug/L			03/12/20 23:46	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			03/12/20 23:46	1
Toluene	1.0	U	1.0	0.14	ug/L			03/12/20 23:46	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			03/12/20 23:46	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			03/12/20 23:46	1
Xylenes, Total	2.0	U	2.0	0.15	ug/L			03/12/20 23:46	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			03/12/20 23:46	1
1,1,2-Trichloroethane	1.0	U *	1.0	0.090	ug/L			03/12/20 23:46	1
Cyclohexane	1.0	U *	1.0	0.24	ug/L			03/12/20 23:46	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.91	ug/L			03/12/20 23:46	1
1,2-Dibromoethane	1.0	U	1.0	0.12	ug/L			03/12/20 23:46	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			03/12/20 23:46	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			03/12/20 23:46	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			03/12/20 23:46	1
Isopropylbenzene	1.0	U	1.0	0.090	ug/L			03/12/20 23:46	1
Methyl acetate	10	U	10	1.7	ug/L			03/12/20 23:46	1
Methyl tert-butyl ether	1.0	U	1.0	0.070	ug/L			03/12/20 23:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			03/12/20 23:46	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.26	ug/L			03/12/20 23:46	1
1,2-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			03/12/20 23:46	1
1,3-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			03/12/20 23:46	1
1,4-Dichlorobenzene	1.0	U	1.0	0.16	ug/L			03/12/20 23:46	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			03/12/20 23:46	1
Dibromochloromethane	1.0	U *	1.0	0.39	ug/L			03/12/20 23:46	1
Methylcyclohexane	1.0	U *	1.0	0.33	ug/L			03/12/20 23:46	1

Eurofins TestAmerica, Canton

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322, PCC Validation

Job ID: 240-127334-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	94		75 - 130		03/12/20 23:46	1
4-Bromofluorobenzene (Surr)	104		47 - 134		03/12/20 23:46	1
Toluene-d8 (Surr)	87		69 - 122		03/12/20 23:46	1
Dibromofluoromethane (Surr)	86		78 - 129		03/12/20 23:46	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322, PCC Validation

Job ID: 240-127334-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17322-030420-JY-006

Date Collected: 03/04/20 14:50

Date Received: 03/07/20 09:40

Lab Sample ID: 240-127334-7

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	200		50	34	ug/L		03/11/20 18:00	03/12/20 11:27	1
Lead	1.0	U	1.0	0.45	ug/L		03/11/20 18:00	03/12/20 11:27	1
Vanadium	4.0	U	4.0	0.82	ug/L		03/11/20 18:00	03/12/20 11:27	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322, PCC Validation

Job ID: 240-127334-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17322-030420-JY-007

Date Collected: 03/04/20 14:55

Date Received: 03/07/20 09:40

Lab Sample ID: 240-127334-8

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	600		50	34	ug/L		03/11/20 18:00	03/12/20 11:32	1
Lead	1.0	U	1.0	0.45	ug/L		03/11/20 18:00	03/12/20 11:32	1
Vanadium	1.6	J	4.0	0.82	ug/L		03/11/20 18:00	03/12/20 11:32	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322, PCC Validation

Job ID: 240-127334-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17322-030520-JY-010

Date Collected: 03/05/20 12:20

Date Received: 03/07/20 09:40

Lab Sample ID: 240-127334-11

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	50	U	50	34	ug/L		03/11/20 18:00	03/12/20 11:37	1
Lead	1.0	U	1.0	0.45	ug/L		03/11/20 18:00	03/12/20 11:37	1
Vanadium	4.0	U	4.0	0.82	ug/L		03/11/20 18:00	03/12/20 11:37	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322, PCC Validation

Job ID: 240-127334-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17322-030520-JY-011

Date Collected: 03/05/20 11:55

Date Received: 03/07/20 09:40

Lab Sample ID: 240-127334-12

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	50	U	50	34	ug/L		03/11/20 18:00	03/12/20 11:42	1
Lead	0.74	J	1.0	0.45	ug/L		03/11/20 18:00	03/12/20 11:42	1
Vanadium	4.0	U	4.0	0.82	ug/L		03/11/20 18:00	03/12/20 11:42	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322, PCC Validation

Job ID: 240-127334-1

Method: 6020 - Metals (ICP/MS) - Dissolved

Client Sample ID: GW-17322-030420-JY-006

Date Collected: 03/04/20 14:50

Date Received: 03/07/20 09:40

Lab Sample ID: 240-127334-7

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	130		50	34	ug/L		03/11/20 18:00	03/12/20 11:30	1
Lead	1.0	U	1.0	0.45	ug/L		03/11/20 18:00	03/12/20 11:30	1
Vanadium	4.0	U	4.0	0.82	ug/L		03/11/20 18:00	03/12/20 11:30	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322, PCC Validation

Job ID: 240-127334-1

Method: 6020 - Metals (ICP/MS) - Dissolved

Client Sample ID: GW-17322-030420-JY-007

Date Collected: 03/04/20 14:55

Date Received: 03/07/20 09:40

Lab Sample ID: 240-127334-8

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	180		50	34	ug/L		03/11/20 18:00	03/12/20 11:35	1
Lead	1.0	U	1.0	0.45	ug/L		03/11/20 18:00	03/12/20 11:35	1
Vanadium	0.83	J	4.0	0.82	ug/L		03/11/20 18:00	03/12/20 11:35	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322, PCC Validation

Job ID: 240-127334-1

Method: 6020 - Metals (ICP/MS) - Dissolved

Client Sample ID: GW-17322-030520-JY-010

Date Collected: 03/05/20 12:20

Date Received: 03/07/20 09:40

Lab Sample ID: 240-127334-11

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	50	U	50	34	ug/L		03/11/20 18:00	03/12/20 11:40	1
Lead	1.0	U	1.0	0.45	ug/L		03/11/20 18:00	03/12/20 11:40	1
Vanadium	4.0	U	4.0	0.82	ug/L		03/11/20 18:00	03/12/20 11:40	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322, PCC Validation

Job ID: 240-127334-1

Method: 6020 - Metals (ICP/MS) - Dissolved

Client Sample ID: GW-17322-030520-JY-011

Date Collected: 03/05/20 11:55

Date Received: 03/07/20 09:40

Lab Sample ID: 240-127334-12

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	50	U	50	34	ug/L		03/11/20 18:00	03/12/20 11:50	1
Lead	0.53	J	1.0	0.45	ug/L		03/11/20 18:00	03/12/20 11:50	1
Vanadium	4.0	U	4.0	0.82	ug/L		03/11/20 18:00	03/12/20 11:50	1

QC Association Summary

Client: GHD Services Inc.
Project/Site: 17322, PCC Validation

Job ID: 240-127334-1

GC/MS VOA

Analysis Batch: 426432

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-127334-1	TB-17322A-030420	Total/NA	Water	8260B	
240-127334-2	GW-17322-030420-JY-001	Total/NA	Water	8260B	
240-127334-3	GW-17322-030420-JY-002	Total/NA	Water	8260B	
240-127334-4	GW-17322-030420-JY-003	Total/NA	Water	8260B	
240-127334-5	GW-17322-030420-JY-004	Total/NA	Water	8260B	
240-127334-6	GW-17322-030420-JY-005	Total/NA	Water	8260B	
240-127334-9	GW-17322-030520-JY-008	Total/NA	Water	8260B	
240-127334-10	GW-17322-030520-JY-009	Total/NA	Water	8260B	
240-127334-13	GW-17322-030520-JY-012	Total/NA	Water	8260B	
240-127334-14	GW-17322-030520-JY-013	Total/NA	Water	8260B	
240-127334-15	GW-17322-030620-JY-014	Total/NA	Water	8260B	
240-127334-16	GW-17322-030620-JY-015	Total/NA	Water	8260B	
240-127334-17	GW-17322-030620-JY-016	Total/NA	Water	8260B	
MB 240-426432/7	Method Blank	Total/NA	Water	8260B	
LCS 240-426432/4	Lab Control Sample	Total/NA	Water	8260B	
240-127334-2 MS	GW-17322-030420-JY-001	Total/NA	Water	8260B	
240-127334-2 MSD	GW-17322-030420-JY-001	Total/NA	Water	8260B	

Metals

Prep Batch: 426264

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-127334-7	GW-17322-030420-JY-006	Dissolved	Water	3005A	
240-127334-7	GW-17322-030420-JY-006	Total Recoverable	Water	3005A	
240-127334-8	GW-17322-030420-JY-007	Dissolved	Water	3005A	
240-127334-8	GW-17322-030420-JY-007	Total Recoverable	Water	3005A	
240-127334-11	GW-17322-030520-JY-010	Dissolved	Water	3005A	
240-127334-11	GW-17322-030520-JY-010	Total Recoverable	Water	3005A	
240-127334-12	GW-17322-030520-JY-011	Dissolved	Water	3005A	
240-127334-12	GW-17322-030520-JY-011	Total Recoverable	Water	3005A	
MB 240-426264/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-426264/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 426492

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-127334-7	GW-17322-030420-JY-006	Dissolved	Water	6020	426264
240-127334-7	GW-17322-030420-JY-006	Total Recoverable	Water	6020	426264
240-127334-8	GW-17322-030420-JY-007	Dissolved	Water	6020	426264
240-127334-8	GW-17322-030420-JY-007	Total Recoverable	Water	6020	426264
240-127334-11	GW-17322-030520-JY-010	Dissolved	Water	6020	426264
240-127334-11	GW-17322-030520-JY-010	Total Recoverable	Water	6020	426264
240-127334-12	GW-17322-030520-JY-011	Dissolved	Water	6020	426264
240-127334-12	GW-17322-030520-JY-011	Total Recoverable	Water	6020	426264
MB 240-426264/1-A	Method Blank	Total Recoverable	Water	6020	426264
LCS 240-426264/2-A	Lab Control Sample	Total Recoverable	Water	6020	426264

QC Sample Results

Client: GHD Services Inc.
Project/Site: 17322, PCC Validation

Job ID: 240-127334-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-426432/7

Matrix: Water

Analysis Batch: 426432

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	5.4	ug/L			03/12/20 14:59	1
Benzene	1.0	U	1.0	0.13	ug/L			03/12/20 14:59	1
Bromodichloromethane	1.0	U	1.0	0.17	ug/L			03/12/20 14:59	1
Bromoform	1.0	U	1.0	0.76	ug/L			03/12/20 14:59	1
Bromomethane	1.0	U	1.0	0.42	ug/L			03/12/20 14:59	1
2-Butanone (MEK)	10	U	10	1.2	ug/L			03/12/20 14:59	1
Carbon disulfide	5.0	U	5.0	0.28	ug/L			03/12/20 14:59	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			03/12/20 14:59	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			03/12/20 14:59	1
Chloroethane	1.0	U	1.0	0.83	ug/L			03/12/20 14:59	1
Chloroform	1.0	U	1.0	0.13	ug/L			03/12/20 14:59	1
Chloromethane	1.0	U	1.0	0.20	ug/L			03/12/20 14:59	1
1,1-Dichloroethane	1.0	U	1.0	0.17	ug/L			03/12/20 14:59	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			03/12/20 14:59	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			03/12/20 14:59	1
1,2-Dichloropropane	1.0	U	1.0	0.15	ug/L			03/12/20 14:59	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			03/12/20 14:59	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			03/12/20 14:59	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			03/12/20 14:59	1
2-Hexanone	10	U	10	0.54	ug/L			03/12/20 14:59	1
Methylene Chloride	5.0	U	5.0	2.6	ug/L			03/12/20 14:59	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.42	ug/L			03/12/20 14:59	1
Styrene	1.0	U	1.0	0.10	ug/L			03/12/20 14:59	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13	ug/L			03/12/20 14:59	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			03/12/20 14:59	1
Toluene	1.0	U	1.0	0.14	ug/L			03/12/20 14:59	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			03/12/20 14:59	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			03/12/20 14:59	1
Xylenes, Total	2.0	U	2.0	0.15	ug/L			03/12/20 14:59	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			03/12/20 14:59	1
1,1,2-Trichloroethane	1.0	U	1.0	0.090	ug/L			03/12/20 14:59	1
Cyclohexane	1.0	U	1.0	0.24	ug/L			03/12/20 14:59	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.91	ug/L			03/12/20 14:59	1
1,2-Dibromoethane	1.0	U	1.0	0.12	ug/L			03/12/20 14:59	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			03/12/20 14:59	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			03/12/20 14:59	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			03/12/20 14:59	1
Isopropylbenzene	1.0	U	1.0	0.090	ug/L			03/12/20 14:59	1
Methyl acetate	10	U	10	1.7	ug/L			03/12/20 14:59	1
Methyl tert-butyl ether	1.0	U	1.0	0.070	ug/L			03/12/20 14:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			03/12/20 14:59	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.26	ug/L			03/12/20 14:59	1
1,2-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			03/12/20 14:59	1
1,3-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			03/12/20 14:59	1
1,4-Dichlorobenzene	1.0	U	1.0	0.16	ug/L			03/12/20 14:59	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			03/12/20 14:59	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			03/12/20 14:59	1
Methylcyclohexane	1.0	U	1.0	0.33	ug/L			03/12/20 14:59	1

Eurofins TestAmerica, Canton

QC Sample Results

Client: GHD Services Inc.
Project/Site: 17322, PCC Validation

Job ID: 240-127334-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-426432/7

Matrix: Water

Analysis Batch: 426432

Client Sample ID: Method Blank

Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		75 - 130		03/12/20 14:59	1
4-Bromofluorobenzene (Surr)	112		47 - 134		03/12/20 14:59	1
Toluene-d8 (Surr)	91		69 - 122		03/12/20 14:59	1
Dibromofluoromethane (Surr)	95		78 - 129		03/12/20 14:59	1

Lab Sample ID: LCS 240-426432/4

Matrix: Water

Analysis Batch: 426432

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	20.0	18.0		ug/L		90	33 - 155
Benzene	10.0	9.23		ug/L		92	77 - 123
Bromodichloromethane	10.0	9.24		ug/L		92	73 - 122
Bromoform	10.0	6.97		ug/L		70	47 - 133
Bromomethane	10.0	11.6		ug/L		116	48 - 144
2-Butanone (MEK)	20.0	16.8		ug/L		84	41 - 151
Carbon disulfide	10.0	10.5		ug/L		105	67 - 127
Carbon tetrachloride	10.0	10.3		ug/L		103	61 - 142
Chlorobenzene	10.0	9.08		ug/L		91	80 - 120
Chloroethane	10.0	12.7		ug/L		127	41 - 147
Chloroform	10.0	9.32		ug/L		93	74 - 127
Chloromethane	10.0	11.0		ug/L		110	46 - 148
1,1-Dichloroethane	10.0	9.81		ug/L		98	74 - 126
1,2-Dichloroethane	10.0	9.01		ug/L		90	66 - 129
1,1-Dichloroethene	10.0	10.3		ug/L		103	73 - 129
1,2-Dichloropropane	10.0	8.88		ug/L		89	79 - 127
cis-1,3-Dichloropropene	10.0	8.46		ug/L		85	68 - 128
trans-1,3-Dichloropropene	10.0	7.22		ug/L		72	64 - 120
Ethylbenzene	10.0	9.35		ug/L		94	80 - 120
2-Hexanone	20.0	15.7		ug/L		78	43 - 142
Methylene Chloride	10.0	9.86		ug/L		99	63 - 134
4-Methyl-2-pentanone (MIBK)	20.0	16.3		ug/L		82	43 - 145
Styrene	10.0	9.47		ug/L		95	75 - 121
1,1,2,2-Tetrachloroethane	10.0	7.37		ug/L		74	45 - 151
Tetrachloroethene	10.0	9.95		ug/L		100	70 - 125
Toluene	10.0	8.55		ug/L		86	79 - 122
Trichloroethene	10.0	9.04		ug/L		90	71 - 121
Vinyl chloride	10.0	11.8		ug/L		118	61 - 134
Xylenes, Total	20.0	20.3		ug/L		101	78 - 122
1,1,1-Trichloroethane	10.0	11.6		ug/L		116	65 - 141
1,1,2-Trichloroethane	10.0	7.34	*	ug/L		73	79 - 121
Cyclohexane	10.0	14.1	*	ug/L		141	69 - 133
1,2-Dibromo-3-Chloropropane	10.0	5.11		ug/L		51	34 - 136
1,2-Dibromoethane	10.0	7.92		ug/L		79	73 - 120
Dichlorodifluoromethane	10.0	12.1		ug/L		121	35 - 137
cis-1,2-Dichloroethene	10.0	9.61		ug/L		96	75 - 124
trans-1,2-Dichloroethene	10.0	9.50		ug/L		95	74 - 130
Isopropylbenzene	10.0	11.3		ug/L		113	73 - 123

Eurofins TestAmerica, Canton

QC Sample Results

Client: GHD Services Inc.
Project/Site: 17322, PCC Validation

Job ID: 240-127334-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-426432/4

Matrix: Water

Analysis Batch: 426432

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl acetate	20.0	16.1		ug/L		81	47 - 140
Methyl tert-butyl ether	10.0	9.48		ug/L		95	57 - 127
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	13.8		ug/L		138	54 - 148
1,2,4-Trichlorobenzene	10.0	11.1		ug/L		111	47 - 120
1,2-Dichlorobenzene	10.0	9.41		ug/L		94	74 - 120
1,3-Dichlorobenzene	10.0	9.64		ug/L		96	74 - 120
1,4-Dichlorobenzene	10.0	9.72		ug/L		97	75 - 120
Trichlorofluoromethane	10.0	13.1		ug/L		131	52 - 148
Dibromochloromethane	10.0	7.25	*	ug/L		72	75 - 120
Methylcyclohexane	10.0	15.0	*	ug/L		150	64 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	92		75 - 130
4-Bromofluorobenzene (Surr)	113		47 - 134
Toluene-d8 (Surr)	90		69 - 122
Dibromofluoromethane (Surr)	96		78 - 129

Lab Sample ID: 240-127334-2 MS

Matrix: Water

Analysis Batch: 426432

Client Sample ID: GW-17322-030420-JY-001

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	10	U	20.0	17.4		ug/L		87	32 - 157
Benzene	1.0	U	10.0	10.7		ug/L		107	70 - 121
Bromodichloromethane	1.0	U	10.0	10.6		ug/L		106	69 - 120
Bromoform	1.0	U	10.0	7.55		ug/L		76	41 - 128
Bromomethane	1.0	U	10.0	12.2		ug/L		122	41 - 136
2-Butanone (MEK)	10	U	20.0	17.2		ug/L		86	40 - 147
Carbon disulfide	5.0	U	10.0	12.0		ug/L		120	54 - 131
Carbon tetrachloride	1.0	U	10.0	11.7		ug/L		117	53 - 142
Chlorobenzene	1.0	U	10.0	10.7		ug/L		107	73 - 120
Chloroethane	1.0	U	10.0	14.1		ug/L		141	37 - 142
Chloroform	1.0	U	10.0	11.2		ug/L		112	66 - 126
Chloromethane	1.0	U	10.0	12.8		ug/L		128	33 - 146
1,1-Dichloroethane	1.0	U	10.0	11.5		ug/L		115	71 - 121
1,2-Dichloroethane	1.0	U	10.0	11.1		ug/L		111	65 - 127
1,1-Dichloroethene	1.0	U	10.0	11.6		ug/L		116	64 - 132
1,2-Dichloropropane	1.0	U	10.0	10.8		ug/L		108	73 - 125
cis-1,3-Dichloropropene	1.0	U	10.0	9.90		ug/L		99	56 - 121
trans-1,3-Dichloropropene	1.0	U	10.0	7.76		ug/L		78	53 - 120
Ethylbenzene	1.0	U	10.0	10.8		ug/L		108	66 - 122
2-Hexanone	10	U	20.0	17.1		ug/L		86	44 - 142
Methylene Chloride	5.0	U	10.0	11.4		ug/L		114	59 - 127
4-Methyl-2-pentanone (MIBK)	10	U	20.0	18.8		ug/L		94	40 - 147
Styrene	1.0	U	10.0	11.0		ug/L		110	57 - 126
1,1,2,2-Tetrachloroethane	1.0	U	10.0	8.51		ug/L		85	37 - 149
Tetrachloroethene	1.0	U	10.0	11.4		ug/L		114	52 - 129
Toluene	1.0	U	10.0	9.70		ug/L		97	68 - 124

Eurofins TestAmerica, Canton

QC Sample Results

Client: GHD Services Inc.
Project/Site: 17322, PCC Validation

Job ID: 240-127334-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-127334-2 MS

Matrix: Water

Analysis Batch: 426432

Client Sample ID: GW-17322-030420-JY-001

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Trichloroethene	1.0	U	10.0	10.0		ug/L		100	56 - 124
Vinyl chloride	1.0	U	10.0	13.6		ug/L		136	49 - 136
Xylenes, Total	2.0	U	20.0	22.9		ug/L		115	64 - 124
1,1,1-Trichloroethane	1.0	U	10.0	13.1		ug/L		131	62 - 135
1,1,2-Trichloroethane	1.0	U *	10.0	8.52		ug/L		85	73 - 122
Cyclohexane	1.0	U * F1	10.0	14.8	F1	ug/L		148	48 - 136
1,2-Dibromo-3-Chloropropane	1.0	U	10.0	6.05		ug/L		61	31 - 130
1,2-Dibromoethane	1.0	U	10.0	8.61		ug/L		86	66 - 120
Dichlorodifluoromethane	1.0	U	10.0	11.8		ug/L		118	27 - 132
cis-1,2-Dichloroethene	1.0	U	10.0	11.2		ug/L		112	68 - 121
trans-1,2-Dichloroethene	1.0	U	10.0	11.1		ug/L		111	69 - 126
Isopropylbenzene	1.0	U F1	10.0	12.8	F1	ug/L		128	56 - 122
Methyl acetate	10	U	20.0	18.0		ug/L		90	41 - 137
Methyl tert-butyl ether	1.0	U	10.0	10.9		ug/L		109	50 - 126
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U F1	10.0	15.3	F1	ug/L		153	41 - 145
1,2,4-Trichlorobenzene	1.0	U F1	10.0	13.6	F1	ug/L		136	37 - 120
1,2-Dichlorobenzene	1.0	U	10.0	11.3		ug/L		113	65 - 120
1,3-Dichlorobenzene	1.0	U	10.0	11.5		ug/L		115	64 - 120
1,4-Dichlorobenzene	1.0	U	10.0	11.3		ug/L		113	65 - 120
Trichlorofluoromethane	1.0	U	10.0	14.1		ug/L		141	45 - 152
Dibromochloromethane	1.0	U *	10.0	8.94		ug/L		89	66 - 120
Methylcyclohexane	1.0	U * F1	10.0	15.9	F1	ug/L		159	40 - 125

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	91		75 - 130
4-Bromofluorobenzene (Surr)	107		47 - 134
Toluene-d8 (Surr)	86		69 - 122
Dibromofluoromethane (Surr)	93		78 - 129

Lab Sample ID: 240-127334-2 MSD

Matrix: Water

Analysis Batch: 426432

Client Sample ID: GW-17322-030420-JY-001

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	10	U	20.0	15.0		ug/L		75	32 - 157	15	35
Benzene	1.0	U	10.0	10.8		ug/L		108	70 - 121	1	35
Bromodichloromethane	1.0	U	10.0	10.5		ug/L		105	69 - 120	1	35
Bromoform	1.0	U	10.0	7.47		ug/L		75	41 - 128	1	35
Bromomethane	1.0	U	10.0	12.1		ug/L		121	41 - 136	1	35
2-Butanone (MEK)	10	U	20.0	17.7		ug/L		88	40 - 147	2	35
Carbon disulfide	5.0	U	10.0	11.9		ug/L		119	54 - 131	1	35
Carbon tetrachloride	1.0	U	10.0	11.2		ug/L		112	53 - 142	5	35
Chlorobenzene	1.0	U	10.0	10.6		ug/L		106	73 - 120	0	35
Chloroethane	1.0	U	10.0	13.5		ug/L		135	37 - 142	4	35
Chloroform	1.0	U	10.0	10.7		ug/L		107	66 - 126	5	35
Chloromethane	1.0	U	10.0	12.7		ug/L		127	33 - 146	1	35
1,1-Dichloroethane	1.0	U	10.0	11.2		ug/L		112	71 - 121	3	35
1,2-Dichloroethane	1.0	U	10.0	10.7		ug/L		107	65 - 127	4	35

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QC Sample Results

Client: GHD Services Inc.
Project/Site: 17322, PCC Validation

Job ID: 240-127334-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-127334-2 MSD

Matrix: Water

Analysis Batch: 426432

Client Sample ID: GW-17322-030420-JY-001

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	1.0	U	10.0	11.3		ug/L		113	64 - 132	2	35
1,2-Dichloropropane	1.0	U	10.0	10.9		ug/L		109	73 - 125	1	35
cis-1,3-Dichloropropene	1.0	U	10.0	10.0		ug/L		100	56 - 121	1	35
trans-1,3-Dichloropropene	1.0	U	10.0	8.55		ug/L		85	53 - 120	10	35
Ethylbenzene	1.0	U	10.0	10.8		ug/L		108	66 - 122	0	35
2-Hexanone	10	U	20.0	17.7		ug/L		88	44 - 142	3	35
Methylene Chloride	5.0	U	10.0	11.1		ug/L		111	59 - 127	3	32
4-Methyl-2-pentanone (MIBK)	10	U	20.0	18.5		ug/L		92	40 - 147	2	35
Styrene	1.0	U	10.0	11.5		ug/L		115	57 - 126	5	35
1,1,2,2-Tetrachloroethane	1.0	U	10.0	8.45		ug/L		85	37 - 149	1	35
Tetrachloroethene	1.0	U	10.0	10.9		ug/L		109	52 - 129	5	35
Toluene	1.0	U	10.0	10.0		ug/L		100	68 - 124	3	35
Trichloroethene	1.0	U	10.0	10.5		ug/L		105	56 - 124	5	35
Vinyl chloride	1.0	U	10.0	12.2		ug/L		122	49 - 136	11	35
Xylenes, Total	2.0	U	20.0	23.8		ug/L		119	64 - 124	4	35
1,1,1-Trichloroethane	1.0	U	10.0	12.4		ug/L		124	62 - 135	6	35
1,1,2-Trichloroethane	1.0	U *	10.0	8.94		ug/L		89	73 - 122	5	35
Cyclohexane	1.0	U * F1	10.0	14.6	F1	ug/L		146	48 - 136	1	35
1,2-Dibromo-3-Chloropropane	1.0	U	10.0	5.64		ug/L		56	31 - 130	7	35
1,2-Dibromoethane	1.0	U	10.0	9.19		ug/L		92	66 - 120	6	35
Dichlorodifluoromethane	1.0	U	10.0	11.5		ug/L		115	27 - 132	3	35
cis-1,2-Dichloroethene	1.0	U	10.0	11.1		ug/L		111	68 - 121	1	35
trans-1,2-Dichloroethene	1.0	U	10.0	10.9		ug/L		109	69 - 126	1	35
Isopropylbenzene	1.0	U F1	10.0	13.2	F1	ug/L		132	56 - 122	3	20
Methyl acetate	10	U	20.0	17.6		ug/L		88	41 - 137	2	16
Methyl tert-butyl ether	1.0	U	10.0	10.7		ug/L		107	50 - 126	2	17
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U F1	10.0	14.3		ug/L		143	41 - 145	7	35
1,2,4-Trichlorobenzene	1.0	U F1	10.0	13.2	F1	ug/L		132	37 - 120	3	25
1,2-Dichlorobenzene	1.0	U	10.0	11.0		ug/L		110	65 - 120	3	35
1,3-Dichlorobenzene	1.0	U	10.0	11.4		ug/L		114	64 - 120	1	35
1,4-Dichlorobenzene	1.0	U	10.0	11.5		ug/L		115	65 - 120	2	35
Trichlorofluoromethane	1.0	U	10.0	13.2		ug/L		132	45 - 152	7	35
Dibromochloromethane	1.0	U *	10.0	8.23		ug/L		82	66 - 120	8	35
Methylcyclohexane	1.0	U * F1	10.0	15.0	F1	ug/L		150	40 - 125	6	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	90		75 - 130
4-Bromofluorobenzene (Surr)	111		47 - 134
Toluene-d8 (Surr)	90		69 - 122
Dibromofluoromethane (Surr)	94		78 - 129

QC Sample Results

Client: GHD Services Inc.
Project/Site: 17322, PCC Validation

Job ID: 240-127334-1

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 240-426264/1-A
Matrix: Water
Analysis Batch: 426492

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 426264

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	50	U	50	34	ug/L		03/11/20 18:00	03/12/20 10:51	1
Lead	1.0	U	1.0	0.45	ug/L		03/11/20 18:00	03/12/20 10:51	1
Vanadium	4.0	U	4.0	0.82	ug/L		03/11/20 18:00	03/12/20 10:51	1

Lab Sample ID: LCS 240-426264/2-A
Matrix: Water
Analysis Batch: 426492

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 426264

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	5000	4750		ug/L		95	80 - 120
Lead	500	491		ug/L		98	80 - 120
Vanadium	500	523		ug/L		105	80 - 120

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 17322, PCC Validation

Job ID: 240-127334-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (75-130)	BFB (47-134)	TOL (69-122)	DBFM (78-129)
240-127334-1	TB-17322A-030420	93	109	89	92
240-127334-2	GW-17322-030420-JY-001	94	110	91	90
240-127334-2 MS	GW-17322-030420-JY-001	91	107	86	93
240-127334-2 MSD	GW-17322-030420-JY-001	90	111	90	94
240-127334-3	GW-17322-030420-JY-002	92	107	89	91
240-127334-4	GW-17322-030420-JY-003	95	107	86	91
240-127334-5	GW-17322-030420-JY-004	92	108	89	91
240-127334-6	GW-17322-030420-JY-005	93	106	87	91
240-127334-9	GW-17322-030520-JY-008	91	108	88	93
240-127334-10	GW-17322-030520-JY-009	95	109	89	93
240-127334-13	GW-17322-030520-JY-012	93	104	88	91
240-127334-14	GW-17322-030520-JY-013	92	106	88	90
240-127334-15	GW-17322-030620-JY-014	91	107	90	91
240-127334-16	GW-17322-030620-JY-015	95	109	91	92
240-127334-17	GW-17322-030620-JY-016	94	104	87	86
LCS 240-426432/4	Lab Control Sample	92	113	90	96
MB 240-426432/7	Method Blank	93	112	91	95

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

TOL = Toluene-d8 (Surr)

DBFM = Dibromofluoromethane (Surr)

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17322, PCC Validation

Job ID: 240-127334-1

Client Sample ID: TB-17322A-030420

Lab Sample ID: 240-127334-1

Date Collected: 03/04/20 00:00

Matrix: Water

Date Received: 03/07/20 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	426432	03/12/20 17:57	LRW	TAL CAN

Client Sample ID: GW-17322-030420-JY-001

Lab Sample ID: 240-127334-2

Date Collected: 03/04/20 09:15

Matrix: Water

Date Received: 03/07/20 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	426432	03/12/20 18:22	LRW	TAL CAN

Client Sample ID: GW-17322-030420-JY-002

Lab Sample ID: 240-127334-3

Date Collected: 03/04/20 10:15

Matrix: Water

Date Received: 03/07/20 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	426432	03/12/20 19:36	LRW	TAL CAN

Client Sample ID: GW-17322-030420-JY-003

Lab Sample ID: 240-127334-4

Date Collected: 03/04/20 11:05

Matrix: Water

Date Received: 03/07/20 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	426432	03/12/20 20:02	LRW	TAL CAN

Client Sample ID: GW-17322-030420-JY-004

Lab Sample ID: 240-127334-5

Date Collected: 03/04/20 12:05

Matrix: Water

Date Received: 03/07/20 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	426432	03/12/20 20:27	LRW	TAL CAN

Client Sample ID: GW-17322-030420-JY-005

Lab Sample ID: 240-127334-6

Date Collected: 03/04/20 13:20

Matrix: Water

Date Received: 03/07/20 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	426432	03/12/20 20:52	LRW	TAL CAN

Client Sample ID: GW-17322-030420-JY-006

Lab Sample ID: 240-127334-7

Date Collected: 03/04/20 14:50

Matrix: Water

Date Received: 03/07/20 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			426264	03/11/20 18:00	MRL	TAL CAN
Dissolved	Analysis	6020		1	426492	03/12/20 11:30	DSH	TAL CAN
Total Recoverable	Prep	3005A			426264	03/11/20 18:00	MRL	TAL CAN
Total Recoverable	Analysis	6020		1	426492	03/12/20 11:27	DSH	TAL CAN

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Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17322, PCC Validation

Job ID: 240-127334-1

Client Sample ID: GW-17322-030420-JY-007

Lab Sample ID: 240-127334-8

Date Collected: 03/04/20 14:55

Matrix: Water

Date Received: 03/07/20 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			426264	03/11/20 18:00	MRL	TAL CAN
Dissolved	Analysis	6020		1	426492	03/12/20 11:35	DSH	TAL CAN
Total Recoverable	Prep	3005A			426264	03/11/20 18:00	MRL	TAL CAN
Total Recoverable	Analysis	6020		1	426492	03/12/20 11:32	DSH	TAL CAN

Client Sample ID: GW-17322-030520-JY-008

Lab Sample ID: 240-127334-9

Date Collected: 03/05/20 09:15

Matrix: Water

Date Received: 03/07/20 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	426432	03/12/20 21:16	LRW	TAL CAN

Client Sample ID: GW-17322-030520-JY-009

Lab Sample ID: 240-127334-10

Date Collected: 03/05/20 09:55

Matrix: Water

Date Received: 03/07/20 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	426432	03/12/20 21:41	LRW	TAL CAN

Client Sample ID: GW-17322-030520-JY-010

Lab Sample ID: 240-127334-11

Date Collected: 03/05/20 12:20

Matrix: Water

Date Received: 03/07/20 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			426264	03/11/20 18:00	MRL	TAL CAN
Dissolved	Analysis	6020		1	426492	03/12/20 11:40	DSH	TAL CAN
Total Recoverable	Prep	3005A			426264	03/11/20 18:00	MRL	TAL CAN
Total Recoverable	Analysis	6020		1	426492	03/12/20 11:37	DSH	TAL CAN

Client Sample ID: GW-17322-030520-JY-011

Lab Sample ID: 240-127334-12

Date Collected: 03/05/20 11:55

Matrix: Water

Date Received: 03/07/20 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			426264	03/11/20 18:00	MRL	TAL CAN
Dissolved	Analysis	6020		1	426492	03/12/20 11:50	DSH	TAL CAN
Total Recoverable	Prep	3005A			426264	03/11/20 18:00	MRL	TAL CAN
Total Recoverable	Analysis	6020		1	426492	03/12/20 11:42	DSH	TAL CAN

Client Sample ID: GW-17322-030520-JY-012

Lab Sample ID: 240-127334-13

Date Collected: 03/05/20 14:00

Matrix: Water

Date Received: 03/07/20 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	426432	03/12/20 22:06	LRW	TAL CAN

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Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17322, PCC Validation

Job ID: 240-127334-1

Client Sample ID: GW-17322-030520-JY-013

Lab Sample ID: 240-127334-14

Date Collected: 03/05/20 15:00

Matrix: Water

Date Received: 03/07/20 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	426432	03/12/20 22:31	LRW	TAL CAN

Client Sample ID: GW-17322-030620-JY-014

Lab Sample ID: 240-127334-15

Date Collected: 03/06/20 08:50

Matrix: Water

Date Received: 03/07/20 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	426432	03/12/20 22:56	LRW	TAL CAN

Client Sample ID: GW-17322-030620-JY-015

Lab Sample ID: 240-127334-16

Date Collected: 03/06/20 09:30

Matrix: Water

Date Received: 03/07/20 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	426432	03/12/20 23:21	LRW	TAL CAN

Client Sample ID: GW-17322-030620-JY-016

Lab Sample ID: 240-127334-17

Date Collected: 03/06/20 10:10

Matrix: Water

Date Received: 03/07/20 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	426432	03/12/20 23:46	LRW	TAL CAN

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Accreditation/Certification Summary

Client: GHD Services Inc.
Project/Site: 17322, PCC Validation

Job ID: 240-127334-1

Laboratory: Eurofins TestAmerica, Canton

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

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-23-21
Connecticut	State	PH-0590	12-31-19 *
Florida	NELAP	E87225	06-30-20
Georgia	State	4062	02-23-20 *
Illinois	NELAP	004498	07-31-20
Iowa	State	421	06-01-21
Kansas	NELAP	E-10336	04-30-20
Kentucky (WW)	State	KY98016	12-31-20
Minnesota	NELAP	OH00048	12-31-20
Minnesota (Petrofund)	State	3506	08-01-21
New Jersey	NELAP	OH001	06-30-20
New York	NELAP	10975	03-31-20
Ohio VAP	State	CL0024	06-05-21
Oregon	NELAP	4062	02-24-21
Pennsylvania	NELAP	68-00340	08-31-20
Texas	NELAP	T104704517-18-10	08-31-20
USDA	US Federal Programs	P330-16-00404	12-28-19 *
Virginia	NELAP	010101	09-14-20
Washington	State	C971	01-12-21
West Virginia DEP	State	210	12-31-20

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

Eurofins TestAmerica, Canton

240-127334 Chain of Custody

A standard 1D barcode with vertical black bars of varying widths on a white background, used for library identification.

22/2.9

Ver: 01/16/2019

Eurofins TestAmerica Canton Sample Receipt Form/Narrative
Canton Facility

Login # : 127334

Client <u>GHD</u>		Site Name _____		Cooler unpacked by: <u>DS</u>	
Cooler Received on <u>03/07/20</u>		Opened on <u>03/07/20</u>			
FedEx: 1 st Grd <u>EXP</u> UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____					
Receipt After-hours: Drop-off Date/Time _____			Storage Location _____		
TestAmerica Cooler # <u>14C</u>		Foam Box	Client Cooler	Box	Other _____
Packing material used: <u>Bubble Wrap</u>		Foam	Plastic Bag	None	Other _____
COOLANT: <u>Wet Ice</u>		Blue Ice	Dry Ice	Water	None
1. Cooler temperature upon receipt		☐ See Multiple Cooler Form			
IR GUN# IR-10 (CF +0.7 °C)		Observed Cooler Temp. <u>2.2</u> °C	Corrected Cooler Temp. <u>2.9</u> °C		
IR GUN #IR-11 (CF +0.9°C)		Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C		
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity <u>1</u>		Yes	No		
-Were the seals on the outside of the cooler(s) signed & dated?		Yes	No NA		
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?		Yes	No		
-Were tamper/custody seals intact and uncompromised?		Yes	No NA		
3. Shippers' packing slip attached to the cooler(s)?		Yes	No		
4. Did custody papers accompany the sample(s)?		Yes	No		
5. Were the custody papers relinquished & signed in the appropriate place?		Yes	No		
6. Was/were the person(s) who collected the samples clearly identified on the COC?		Yes	No		
7. Did all bottles arrive in good condition (Unbroken)?		Yes	No		
8. Could all bottle labels be reconciled with the COC?		Yes	No		
9. Were correct bottle(s) used for the test(s) indicated?		Yes	No		
10. Sufficient quantity received to perform indicated analyses?		Yes	No		
11. Are these work share samples?		Yes	No		
If yes, Questions 12-16 have been checked at the originating laboratory.					
12. Were all preserved sample(s) at the correct pH upon receipt?		Yes	No NA	pH Strip Lot# <u>HC995364</u>	
13. Were VOAs on the COC?		Yes	No		
14. Were air bubbles >6 mm in any VOA vials? Larger than this.		Yes	No NA		
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # <u>N/A</u>		Yes	No		
16. Was a LL Hg or Me Hg trip blank present?		Yes	No		
Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other _____					
Concerning _____					

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by: AG

18. SAMPLE CONDITION

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

19. SAMPLE PRESERVATION

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

VOA Sample Preservation - Date/Time VOAs Frozen: _____

Temperature readings: _____

Client Sample ID	Lab ID	Container Type	Container		Preservative	
			pH	Temp	Added (mls)	Lot #
GW-17322-030420-JY-006	240-127334-A-7	Plastic 250ml - with Nitric Acid	<2	_____	_____	_____
GW-17322-030420-JY-006	240-127334-B-7	Plastic 250ml - w/nitric - dis	<2	_____	_____	_____
GW-17322-030420-JY-007	240-127334-A-8	Plastic 250ml - with Nitric Acid	<2	_____	_____	_____
GW-17322-030420-JY-007	240-127334-B-8	Plastic 250ml - w/nitric - dis	<2	_____	_____	_____
GW-17322-030520-JY-010	240-127334-A-11	Plastic 250ml - with Nitric Acid	<2	_____	_____	_____
GW-17322-030520-JY-010	240-127334-B-11	Plastic 250ml - w/nitric - dis	<2	_____	_____	_____
GW-17322-030520-JY-011	240-127334-A-12	Plastic 250ml - with Nitric Acid	<2	_____	_____	_____
GW-17322-030520-JY-011	240-127334-B-12	Plastic 250ml - w/nitric - dis	<2	_____	_____	_____

ANALYTICAL REPORT

Eurofins TestAmerica, Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

Laboratory Job ID: 240-132483-1

Client Project/Site: 17322A-012, PCC Validation

For:

GHD Services Inc.
26850 Haggerty Rd.
Farmington Hills, Michigan 48331

Attn: Mr. James Abston



Authorized for release by:
7/6/2020 7:34:13 AM

Denise Heckler, Project Manager II
(330)966-9477
denise.heckler@testamericainc.com

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results through

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: GHD Services Inc.
Project/Site: 17322A-012, PCC Validation

Job ID: 240-132483-1

Job ID: 240-132483-1

Laboratory: Eurofins TestAmerica, Canton

Narrative

Job Narrative 240-132483-1

Comments

No additional comments.

Receipt

The samples were received on 6/25/2020 10:40 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 4.5° C.

GC/MS VOA

Method 8260C: The continuing calibration verification (CCV) analyzed in batch 460-705825 was outside the method criteria for Dichlorodifluoromethane. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated.

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

Metals

Method 6020: The requested practical quantitation limits (PQL) on the following samples fall below the laboratory's verified standard quantitation limit: GW-17322-062320-DA-007 (240-132483-7), GW-17322-062320-DA-008 (240-132483-8) and GW-17322-062320-DA-009 (240-132483-9). The continuing calibration blanks and method blanks may not support the lower PQL.

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

Definitions/Glossary

Client: GHD Services Inc.
Project/Site: 17322A-012, PCC Validation

Job ID: 240-132483-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

Sample Summary

Client: GHD Services Inc.
Project/Site: 17322A-012, PCC Validation

Job ID: 240-132483-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
240-132483-1	GW-17322-062220-DA-001	Water	06/22/20 09:30	06/25/20 10:40	
240-132483-2	GW-17322-062220-DA-002	Water	06/22/20 10:20	06/25/20 10:40	
240-132483-3	GW-17322-062220-DA-003	Water	06/22/20 10:30	06/25/20 10:40	
240-132483-4	GW-17322-062220-DA-004	Water	06/22/20 11:30	06/25/20 10:40	
240-132483-5	GW-17322-062220-DA-005	Water	06/22/20 12:25	06/25/20 10:40	
240-132483-6	GW-17322-062220-DA-006	Water	06/22/20 13:55	06/25/20 10:40	
240-132483-7	GW-17322-062320-DA-007	Water	06/23/20 10:35	06/25/20 10:40	
240-132483-8	GW-17322-062320-DA-008	Water	06/23/20 11:30	06/25/20 10:40	
240-132483-9	GW-17322-062320-DA-009	Water	06/23/20 14:15	06/25/20 10:40	
240-132483-10	GW-17322-062320-DA-010	Water	06/23/20 12:45	06/25/20 10:40	
240-132483-11	GW-17322-062320-DA-011	Water	06/23/20 13:45	06/25/20 10:40	
240-132483-12	GW-17322-062420-DA-012	Water	06/24/20 08:00	06/25/20 10:40	
240-132483-13	GW-17322-062420-DA-013	Water	06/24/20 09:15	06/25/20 10:40	
240-132483-14	GW-17322-062420-DA-014	Water	06/24/20 10:10	06/25/20 10:40	
240-132483-15	GW-17322-062420-DA-015	Water	06/24/20 11:05	06/25/20 10:40	
240-132483-16	GW-17322-062420-DA-016	Water	06/24/20 12:00	06/25/20 10:40	
240-132483-17	TB-17322-062420	Water	06/24/20 00:00	06/25/20 10:40	
240-132483-18	GW-17322-062420-DA-017	Water	06/24/20 12:10	06/25/20 10:40	

Detection Summary

Client: GHD Services Inc.
Project/Site: 17322A-012, PCC Validation

Job ID: 240-132483-1

Client Sample ID: GW-17322-062220-DA-001

Lab Sample ID: 240-132483-1

No Detections.

Client Sample ID: GW-17322-062220-DA-002

Lab Sample ID: 240-132483-2

No Detections.

Client Sample ID: GW-17322-062220-DA-003

Lab Sample ID: 240-132483-3

No Detections.

Client Sample ID: GW-17322-062220-DA-004

Lab Sample ID: 240-132483-4

No Detections.

Client Sample ID: GW-17322-062220-DA-005

Lab Sample ID: 240-132483-5

No Detections.

Client Sample ID: GW-17322-062220-DA-006

Lab Sample ID: 240-132483-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	2.3		1.0	0.22	ug/L	1		8260C	Total/NA
Trichloroethene	2.8		1.0	0.31	ug/L	1		8260C	Total/NA

Client Sample ID: GW-17322-062320-DA-007

Lab Sample ID: 240-132483-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	49	J	50	34	ug/L	1		6020	Total Recoverable

Client Sample ID: GW-17322-062320-DA-008

Lab Sample ID: 240-132483-8

No Detections.

Client Sample ID: GW-17322-062320-DA-009

Lab Sample ID: 240-132483-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	210		50	34	ug/L	1		6020	Total Recoverable
Lead	1.1		1.0	0.45	ug/L	1		6020	Total Recoverable
Vanadium	0.92	J	4.0	0.82	ug/L	1		6020	Total Recoverable

Client Sample ID: GW-17322-062320-DA-010

Lab Sample ID: 240-132483-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	5.6		5.0	4.4	ug/L	1		8260C	Total/NA
Methylene Chloride	0.37	J	5.0	0.32	ug/L	1		8260C	Total/NA

Client Sample ID: GW-17322-062320-DA-011

Lab Sample ID: 240-132483-11

No Detections.

Client Sample ID: GW-17322-062420-DA-012

Lab Sample ID: 240-132483-12

No Detections.

Client Sample ID: GW-17322-062420-DA-013

Lab Sample ID: 240-132483-13

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Canton

Detection Summary

Client: GHD Services Inc.
Project/Site: 17322A-012, PCC Validation

Job ID: 240-132483-1

Client Sample ID: GW-17322-062420-DA-014

Lab Sample ID: 240-132483-14

No Detections.

Client Sample ID: GW-17322-062420-DA-015

Lab Sample ID: 240-132483-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.24	J	1.0	0.22	ug/L	1			8260C	Total/NA
Vinyl chloride	0.69	J	1.0	0.17	ug/L	1			8260C	Total/NA

Client Sample ID: GW-17322-062420-DA-016

Lab Sample ID: 240-132483-16

No Detections.

Client Sample ID: TB-17322-062420

Lab Sample ID: 240-132483-17

No Detections.

Client Sample ID: GW-17322-062420-DA-017

Lab Sample ID: 240-132483-18

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Canton

Method Summary

Client: GHD Services Inc.
Project/Site: 17322A-012, PCC Validation

Job ID: 240-132483-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL EDI
6020	Metals (ICP/MS)	SW846	TAL CAN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL CAN
5030C	Purge and Trap	SW846	TAL EDI
FILTRATION	Sample Filtration	None	TAL CAN

Protocol References:

None = None

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

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL EDI = Eurofins TestAmerica, Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322A-012, PCC Validation

Job ID: 240-132483-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Client Sample ID: GW-17322-062220-DA-001

Date Collected: 06/22/20 09:30

Date Received: 06/25/20 10:40

Lab Sample ID: 240-132483-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			07/03/20 22:31	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			07/03/20 22:31	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			07/03/20 22:31	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			07/03/20 22:31	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			07/03/20 22:31	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			07/03/20 22:31	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			07/03/20 22:31	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			07/03/20 22:31	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			07/03/20 22:31	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			07/03/20 22:31	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			07/03/20 22:31	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			07/03/20 22:31	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			07/03/20 22:31	1
2-Hexanone	5.0	U	5.0	1.1	ug/L			07/03/20 22:31	1
Acetone	5.0	U	5.0	4.4	ug/L			07/03/20 22:31	1
Benzene	1.0	U	1.0	0.20	ug/L			07/03/20 22:31	1
Bromoform	1.0	U	1.0	0.54	ug/L			07/03/20 22:31	1
Bromomethane	1.0	U	1.0	0.55	ug/L			07/03/20 22:31	1
Carbon disulfide	5.0	U	5.0	0.82	ug/L			07/03/20 22:31	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			07/03/20 22:31	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			07/03/20 22:31	1
Chloroethane	1.0	U	1.0	0.32	ug/L			07/03/20 22:31	1
Chloroform	1.0	U	1.0	0.33	ug/L			07/03/20 22:31	1
Chloromethane	1.0	U	1.0	0.40	ug/L			07/03/20 22:31	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			07/03/20 22:31	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			07/03/20 22:31	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			07/03/20 22:31	1
Bromodichloromethane	1.0	U	1.0	0.34	ug/L			07/03/20 22:31	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			07/03/20 22:31	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			07/03/20 22:31	1
1,2-Dibromoethane	1.0	U	1.0	0.50	ug/L			07/03/20 22:31	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			07/03/20 22:31	1
Methyl acetate	5.0	U	5.0	0.79	ug/L			07/03/20 22:31	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			07/03/20 22:31	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	1.3	ug/L			07/03/20 22:31	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			07/03/20 22:31	1
Methylene Chloride	5.0	U	5.0	0.32	ug/L			07/03/20 22:31	1
Styrene	1.0	U	1.0	0.42	ug/L			07/03/20 22:31	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			07/03/20 22:31	1
Toluene	1.0	U	1.0	0.38	ug/L			07/03/20 22:31	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			07/03/20 22:31	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			07/03/20 22:31	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			07/03/20 22:31	1
Trichlorofluoromethane	1.0	U	1.0	0.32	ug/L			07/03/20 22:31	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			07/03/20 22:31	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			07/03/20 22:31	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			07/03/20 22:31	1
Dibromochloromethane	1.0	U	1.0	0.28	ug/L			07/03/20 22:31	1

Eurofins TestAmerica, Canton

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322A-012, PCC Validation

Job ID: 240-132483-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
4-Bromofluorobenzene	94		76 - 120		07/03/20 22:31	1
1,2-Dichloroethane-d4 (Surr)	94		75 - 123		07/03/20 22:31	1
Toluene-d8 (Surr)	89		80 - 120		07/03/20 22:31	1
Dibromofluoromethane (Surr)	89		77 - 124		07/03/20 22:31	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322A-012, PCC Validation

Job ID: 240-132483-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Client Sample ID: GW-17322-062220-DA-002

Date Collected: 06/22/20 10:20

Date Received: 06/25/20 10:40

Lab Sample ID: 240-132483-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			07/03/20 22:56	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			07/03/20 22:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			07/03/20 22:56	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			07/03/20 22:56	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			07/03/20 22:56	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			07/03/20 22:56	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			07/03/20 22:56	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			07/03/20 22:56	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			07/03/20 22:56	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			07/03/20 22:56	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			07/03/20 22:56	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			07/03/20 22:56	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			07/03/20 22:56	1
2-Hexanone	5.0	U	5.0	1.1	ug/L			07/03/20 22:56	1
Acetone	5.0	U	5.0	4.4	ug/L			07/03/20 22:56	1
Benzene	1.0	U	1.0	0.20	ug/L			07/03/20 22:56	1
Bromoform	1.0	U	1.0	0.54	ug/L			07/03/20 22:56	1
Bromomethane	1.0	U	1.0	0.55	ug/L			07/03/20 22:56	1
Carbon disulfide	5.0	U	5.0	0.82	ug/L			07/03/20 22:56	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			07/03/20 22:56	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			07/03/20 22:56	1
Chloroethane	1.0	U	1.0	0.32	ug/L			07/03/20 22:56	1
Chloroform	1.0	U	1.0	0.33	ug/L			07/03/20 22:56	1
Chloromethane	1.0	U	1.0	0.40	ug/L			07/03/20 22:56	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			07/03/20 22:56	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			07/03/20 22:56	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			07/03/20 22:56	1
Bromodichloromethane	1.0	U	1.0	0.34	ug/L			07/03/20 22:56	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			07/03/20 22:56	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			07/03/20 22:56	1
1,2-Dibromoethane	1.0	U	1.0	0.50	ug/L			07/03/20 22:56	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			07/03/20 22:56	1
Methyl acetate	5.0	U	5.0	0.79	ug/L			07/03/20 22:56	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			07/03/20 22:56	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	1.3	ug/L			07/03/20 22:56	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			07/03/20 22:56	1
Methylene Chloride	5.0	U	5.0	0.32	ug/L			07/03/20 22:56	1
Styrene	1.0	U	1.0	0.42	ug/L			07/03/20 22:56	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			07/03/20 22:56	1
Toluene	1.0	U	1.0	0.38	ug/L			07/03/20 22:56	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			07/03/20 22:56	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			07/03/20 22:56	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			07/03/20 22:56	1
Trichlorofluoromethane	1.0	U	1.0	0.32	ug/L			07/03/20 22:56	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			07/03/20 22:56	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			07/03/20 22:56	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			07/03/20 22:56	1
Dibromochloromethane	1.0	U	1.0	0.28	ug/L			07/03/20 22:56	1

Eurofins TestAmerica, Canton

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322A-012, PCC Validation

Job ID: 240-132483-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
4-Bromofluorobenzene	92		76 - 120		07/03/20 22:56	1
1,2-Dichloroethane-d4 (Surr)	95		75 - 123		07/03/20 22:56	1
Toluene-d8 (Surr)	91		80 - 120		07/03/20 22:56	1
Dibromofluoromethane (Surr)	91		77 - 124		07/03/20 22:56	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322A-012, PCC Validation

Job ID: 240-132483-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Client Sample ID: GW-17322-062220-DA-003

Date Collected: 06/22/20 10:30

Date Received: 06/25/20 10:40

Lab Sample ID: 240-132483-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			07/03/20 23:22	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			07/03/20 23:22	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			07/03/20 23:22	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			07/03/20 23:22	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			07/03/20 23:22	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			07/03/20 23:22	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			07/03/20 23:22	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			07/03/20 23:22	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			07/03/20 23:22	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			07/03/20 23:22	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			07/03/20 23:22	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			07/03/20 23:22	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			07/03/20 23:22	1
2-Hexanone	5.0	U	5.0	1.1	ug/L			07/03/20 23:22	1
Acetone	5.0	U	5.0	4.4	ug/L			07/03/20 23:22	1
Benzene	1.0	U	1.0	0.20	ug/L			07/03/20 23:22	1
Bromoform	1.0	U	1.0	0.54	ug/L			07/03/20 23:22	1
Bromomethane	1.0	U	1.0	0.55	ug/L			07/03/20 23:22	1
Carbon disulfide	5.0	U	5.0	0.82	ug/L			07/03/20 23:22	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			07/03/20 23:22	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			07/03/20 23:22	1
Chloroethane	1.0	U	1.0	0.32	ug/L			07/03/20 23:22	1
Chloroform	1.0	U	1.0	0.33	ug/L			07/03/20 23:22	1
Chloromethane	1.0	U	1.0	0.40	ug/L			07/03/20 23:22	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			07/03/20 23:22	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			07/03/20 23:22	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			07/03/20 23:22	1
Bromodichloromethane	1.0	U	1.0	0.34	ug/L			07/03/20 23:22	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			07/03/20 23:22	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			07/03/20 23:22	1
1,2-Dibromoethane	1.0	U	1.0	0.50	ug/L			07/03/20 23:22	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			07/03/20 23:22	1
Methyl acetate	5.0	U	5.0	0.79	ug/L			07/03/20 23:22	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			07/03/20 23:22	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	1.3	ug/L			07/03/20 23:22	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			07/03/20 23:22	1
Methylene Chloride	5.0	U	5.0	0.32	ug/L			07/03/20 23:22	1
Styrene	1.0	U	1.0	0.42	ug/L			07/03/20 23:22	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			07/03/20 23:22	1
Toluene	1.0	U	1.0	0.38	ug/L			07/03/20 23:22	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			07/03/20 23:22	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			07/03/20 23:22	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			07/03/20 23:22	1
Trichlorofluoromethane	1.0	U	1.0	0.32	ug/L			07/03/20 23:22	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			07/03/20 23:22	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			07/03/20 23:22	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			07/03/20 23:22	1
Dibromochloromethane	1.0	U	1.0	0.28	ug/L			07/03/20 23:22	1

Eurofins TestAmerica, Canton

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322A-012, PCC Validation

Job ID: 240-132483-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
4-Bromofluorobenzene	97		76 - 120		07/03/20 23:22	1
1,2-Dichloroethane-d4 (Surr)	93		75 - 123		07/03/20 23:22	1
Toluene-d8 (Surr)	91		80 - 120		07/03/20 23:22	1
Dibromofluoromethane (Surr)	88		77 - 124		07/03/20 23:22	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322A-012, PCC Validation

Job ID: 240-132483-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Client Sample ID: GW-17322-062220-DA-004

Date Collected: 06/22/20 11:30

Date Received: 06/25/20 10:40

Lab Sample ID: 240-132483-4

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			07/03/20 23:48	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			07/03/20 23:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			07/03/20 23:48	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			07/03/20 23:48	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			07/03/20 23:48	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			07/03/20 23:48	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			07/03/20 23:48	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			07/03/20 23:48	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			07/03/20 23:48	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			07/03/20 23:48	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			07/03/20 23:48	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			07/03/20 23:48	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			07/03/20 23:48	1
2-Hexanone	5.0	U	5.0	1.1	ug/L			07/03/20 23:48	1
Acetone	5.0	U	5.0	4.4	ug/L			07/03/20 23:48	1
Benzene	1.0	U	1.0	0.20	ug/L			07/03/20 23:48	1
Bromoform	1.0	U	1.0	0.54	ug/L			07/03/20 23:48	1
Bromomethane	1.0	U	1.0	0.55	ug/L			07/03/20 23:48	1
Carbon disulfide	5.0	U	5.0	0.82	ug/L			07/03/20 23:48	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			07/03/20 23:48	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			07/03/20 23:48	1
Chloroethane	1.0	U	1.0	0.32	ug/L			07/03/20 23:48	1
Chloroform	1.0	U	1.0	0.33	ug/L			07/03/20 23:48	1
Chloromethane	1.0	U	1.0	0.40	ug/L			07/03/20 23:48	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			07/03/20 23:48	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			07/03/20 23:48	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			07/03/20 23:48	1
Bromodichloromethane	1.0	U	1.0	0.34	ug/L			07/03/20 23:48	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			07/03/20 23:48	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			07/03/20 23:48	1
1,2-Dibromoethane	1.0	U	1.0	0.50	ug/L			07/03/20 23:48	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			07/03/20 23:48	1
Methyl acetate	5.0	U	5.0	0.79	ug/L			07/03/20 23:48	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			07/03/20 23:48	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	1.3	ug/L			07/03/20 23:48	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			07/03/20 23:48	1
Methylene Chloride	5.0	U	5.0	0.32	ug/L			07/03/20 23:48	1
Styrene	1.0	U	1.0	0.42	ug/L			07/03/20 23:48	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			07/03/20 23:48	1
Toluene	1.0	U	1.0	0.38	ug/L			07/03/20 23:48	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			07/03/20 23:48	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			07/03/20 23:48	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			07/03/20 23:48	1
Trichlorofluoromethane	1.0	U	1.0	0.32	ug/L			07/03/20 23:48	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			07/03/20 23:48	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			07/03/20 23:48	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			07/03/20 23:48	1
Dibromochloromethane	1.0	U	1.0	0.28	ug/L			07/03/20 23:48	1

Eurofins TestAmerica, Canton

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322A-012, PCC Validation

Job ID: 240-132483-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
4-Bromofluorobenzene	95		76 - 120		07/03/20 23:48	1
1,2-Dichloroethane-d4 (Surr)	94		75 - 123		07/03/20 23:48	1
Toluene-d8 (Surr)	89		80 - 120		07/03/20 23:48	1
Dibromofluoromethane (Surr)	90		77 - 124		07/03/20 23:48	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322A-012, PCC Validation

Job ID: 240-132483-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Client Sample ID: GW-17322-062220-DA-005

Date Collected: 06/22/20 12:25

Date Received: 06/25/20 10:40

Lab Sample ID: 240-132483-5

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			07/04/20 00:14	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			07/04/20 00:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			07/04/20 00:14	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			07/04/20 00:14	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			07/04/20 00:14	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			07/04/20 00:14	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			07/04/20 00:14	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			07/04/20 00:14	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			07/04/20 00:14	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			07/04/20 00:14	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			07/04/20 00:14	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			07/04/20 00:14	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			07/04/20 00:14	1
2-Hexanone	5.0	U	5.0	1.1	ug/L			07/04/20 00:14	1
Acetone	5.0	U	5.0	4.4	ug/L			07/04/20 00:14	1
Benzene	1.0	U	1.0	0.20	ug/L			07/04/20 00:14	1
Bromoform	1.0	U	1.0	0.54	ug/L			07/04/20 00:14	1
Bromomethane	1.0	U	1.0	0.55	ug/L			07/04/20 00:14	1
Carbon disulfide	5.0	U	5.0	0.82	ug/L			07/04/20 00:14	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			07/04/20 00:14	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			07/04/20 00:14	1
Chloroethane	1.0	U	1.0	0.32	ug/L			07/04/20 00:14	1
Chloroform	1.0	U	1.0	0.33	ug/L			07/04/20 00:14	1
Chloromethane	1.0	U	1.0	0.40	ug/L			07/04/20 00:14	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			07/04/20 00:14	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			07/04/20 00:14	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			07/04/20 00:14	1
Bromodichloromethane	1.0	U	1.0	0.34	ug/L			07/04/20 00:14	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			07/04/20 00:14	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			07/04/20 00:14	1
1,2-Dibromoethane	1.0	U	1.0	0.50	ug/L			07/04/20 00:14	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			07/04/20 00:14	1
Methyl acetate	5.0	U	5.0	0.79	ug/L			07/04/20 00:14	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			07/04/20 00:14	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	1.3	ug/L			07/04/20 00:14	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			07/04/20 00:14	1
Methylene Chloride	5.0	U	5.0	0.32	ug/L			07/04/20 00:14	1
Styrene	1.0	U	1.0	0.42	ug/L			07/04/20 00:14	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			07/04/20 00:14	1
Toluene	1.0	U	1.0	0.38	ug/L			07/04/20 00:14	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			07/04/20 00:14	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			07/04/20 00:14	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			07/04/20 00:14	1
Trichlorofluoromethane	1.0	U	1.0	0.32	ug/L			07/04/20 00:14	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			07/04/20 00:14	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			07/04/20 00:14	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			07/04/20 00:14	1
Dibromochloromethane	1.0	U	1.0	0.28	ug/L			07/04/20 00:14	1

Eurofins TestAmerica, Canton

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322A-012, PCC Validation

Job ID: 240-132483-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
4-Bromofluorobenzene	93		76 - 120		07/04/20 00:14	1
1,2-Dichloroethane-d4 (Surr)	95		75 - 123		07/04/20 00:14	1
Toluene-d8 (Surr)	90		80 - 120		07/04/20 00:14	1
Dibromofluoromethane (Surr)	89		77 - 124		07/04/20 00:14	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322A-012, PCC Validation

Job ID: 240-132483-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Client Sample ID: GW-17322-062220-DA-006

Date Collected: 06/22/20 13:55

Date Received: 06/25/20 10:40

Lab Sample ID: 240-132483-6

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			07/04/20 00:40	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			07/04/20 00:40	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			07/04/20 00:40	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			07/04/20 00:40	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			07/04/20 00:40	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			07/04/20 00:40	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			07/04/20 00:40	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			07/04/20 00:40	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			07/04/20 00:40	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			07/04/20 00:40	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			07/04/20 00:40	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			07/04/20 00:40	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			07/04/20 00:40	1
2-Hexanone	5.0	U	5.0	1.1	ug/L			07/04/20 00:40	1
Acetone	5.0	U	5.0	4.4	ug/L			07/04/20 00:40	1
Benzene	1.0	U	1.0	0.20	ug/L			07/04/20 00:40	1
Bromoform	1.0	U	1.0	0.54	ug/L			07/04/20 00:40	1
Bromomethane	1.0	U	1.0	0.55	ug/L			07/04/20 00:40	1
Carbon disulfide	5.0	U	5.0	0.82	ug/L			07/04/20 00:40	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			07/04/20 00:40	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			07/04/20 00:40	1
Chloroethane	1.0	U	1.0	0.32	ug/L			07/04/20 00:40	1
Chloroform	1.0	U	1.0	0.33	ug/L			07/04/20 00:40	1
Chloromethane	1.0	U	1.0	0.40	ug/L			07/04/20 00:40	1
cis-1,2-Dichloroethene	2.3		1.0	0.22	ug/L			07/04/20 00:40	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			07/04/20 00:40	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			07/04/20 00:40	1
Bromodichloromethane	1.0	U	1.0	0.34	ug/L			07/04/20 00:40	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			07/04/20 00:40	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			07/04/20 00:40	1
1,2-Dibromoethane	1.0	U	1.0	0.50	ug/L			07/04/20 00:40	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			07/04/20 00:40	1
Methyl acetate	5.0	U	5.0	0.79	ug/L			07/04/20 00:40	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			07/04/20 00:40	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	1.3	ug/L			07/04/20 00:40	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			07/04/20 00:40	1
Methylene Chloride	5.0	U	5.0	0.32	ug/L			07/04/20 00:40	1
Styrene	1.0	U	1.0	0.42	ug/L			07/04/20 00:40	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			07/04/20 00:40	1
Toluene	1.0	U	1.0	0.38	ug/L			07/04/20 00:40	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			07/04/20 00:40	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			07/04/20 00:40	1
Trichloroethene	2.8		1.0	0.31	ug/L			07/04/20 00:40	1
Trichlorofluoromethane	1.0	U	1.0	0.32	ug/L			07/04/20 00:40	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			07/04/20 00:40	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			07/04/20 00:40	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			07/04/20 00:40	1
Dibromochloromethane	1.0	U	1.0	0.28	ug/L			07/04/20 00:40	1

Eurofins TestAmerica, Canton

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322A-012, PCC Validation

Job ID: 240-132483-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
4-Bromofluorobenzene	96		76 - 120		07/04/20 00:40	1
1,2-Dichloroethane-d4 (Surr)	92		75 - 123		07/04/20 00:40	1
Toluene-d8 (Surr)	90		80 - 120		07/04/20 00:40	1
Dibromofluoromethane (Surr)	89		77 - 124		07/04/20 00:40	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322A-012, PCC Validation

Job ID: 240-132483-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Client Sample ID: GW-17322-062320-DA-010

Date Collected: 06/23/20 12:45

Date Received: 06/25/20 10:40

Lab Sample ID: 240-132483-10

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			07/04/20 01:05	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			07/04/20 01:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			07/04/20 01:05	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			07/04/20 01:05	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			07/04/20 01:05	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			07/04/20 01:05	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			07/04/20 01:05	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			07/04/20 01:05	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			07/04/20 01:05	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			07/04/20 01:05	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			07/04/20 01:05	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			07/04/20 01:05	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			07/04/20 01:05	1
2-Hexanone	5.0	U	5.0	1.1	ug/L			07/04/20 01:05	1
Acetone	5.6		5.0	4.4	ug/L			07/04/20 01:05	1
Benzene	1.0	U	1.0	0.20	ug/L			07/04/20 01:05	1
Bromoform	1.0	U	1.0	0.54	ug/L			07/04/20 01:05	1
Bromomethane	1.0	U	1.0	0.55	ug/L			07/04/20 01:05	1
Carbon disulfide	5.0	U	5.0	0.82	ug/L			07/04/20 01:05	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			07/04/20 01:05	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			07/04/20 01:05	1
Chloroethane	1.0	U	1.0	0.32	ug/L			07/04/20 01:05	1
Chloroform	1.0	U	1.0	0.33	ug/L			07/04/20 01:05	1
Chloromethane	1.0	U	1.0	0.40	ug/L			07/04/20 01:05	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			07/04/20 01:05	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			07/04/20 01:05	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			07/04/20 01:05	1
Bromodichloromethane	1.0	U	1.0	0.34	ug/L			07/04/20 01:05	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			07/04/20 01:05	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			07/04/20 01:05	1
1,2-Dibromoethane	1.0	U	1.0	0.50	ug/L			07/04/20 01:05	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			07/04/20 01:05	1
Methyl acetate	5.0	U	5.0	0.79	ug/L			07/04/20 01:05	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			07/04/20 01:05	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	1.3	ug/L			07/04/20 01:05	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			07/04/20 01:05	1
Methylene Chloride	0.37	J	5.0	0.32	ug/L			07/04/20 01:05	1
Styrene	1.0	U	1.0	0.42	ug/L			07/04/20 01:05	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			07/04/20 01:05	1
Toluene	1.0	U	1.0	0.38	ug/L			07/04/20 01:05	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			07/04/20 01:05	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			07/04/20 01:05	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			07/04/20 01:05	1
Trichlorofluoromethane	1.0	U	1.0	0.32	ug/L			07/04/20 01:05	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			07/04/20 01:05	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			07/04/20 01:05	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			07/04/20 01:05	1
Dibromochloromethane	1.0	U	1.0	0.28	ug/L			07/04/20 01:05	1

Eurofins TestAmerica, Canton

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322A-012, PCC Validation

Job ID: 240-132483-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
4-Bromofluorobenzene	95		76 - 120		07/04/20 01:05	1
1,2-Dichloroethane-d4 (Surr)	93		75 - 123		07/04/20 01:05	1
Toluene-d8 (Surr)	91		80 - 120		07/04/20 01:05	1
Dibromofluoromethane (Surr)	90		77 - 124		07/04/20 01:05	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322A-012, PCC Validation

Job ID: 240-132483-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Client Sample ID: GW-17322-062320-DA-011

Date Collected: 06/23/20 13:45

Date Received: 06/25/20 10:40

Lab Sample ID: 240-132483-11

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			07/04/20 01:31	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			07/04/20 01:31	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			07/04/20 01:31	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			07/04/20 01:31	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			07/04/20 01:31	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			07/04/20 01:31	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			07/04/20 01:31	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			07/04/20 01:31	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			07/04/20 01:31	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			07/04/20 01:31	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			07/04/20 01:31	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			07/04/20 01:31	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			07/04/20 01:31	1
2-Hexanone	5.0	U	5.0	1.1	ug/L			07/04/20 01:31	1
Acetone	5.0	U	5.0	4.4	ug/L			07/04/20 01:31	1
Benzene	1.0	U	1.0	0.20	ug/L			07/04/20 01:31	1
Bromoform	1.0	U	1.0	0.54	ug/L			07/04/20 01:31	1
Bromomethane	1.0	U	1.0	0.55	ug/L			07/04/20 01:31	1
Carbon disulfide	5.0	U	5.0	0.82	ug/L			07/04/20 01:31	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			07/04/20 01:31	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			07/04/20 01:31	1
Chloroethane	1.0	U	1.0	0.32	ug/L			07/04/20 01:31	1
Chloroform	1.0	U	1.0	0.33	ug/L			07/04/20 01:31	1
Chloromethane	1.0	U	1.0	0.40	ug/L			07/04/20 01:31	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			07/04/20 01:31	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			07/04/20 01:31	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			07/04/20 01:31	1
Bromodichloromethane	1.0	U	1.0	0.34	ug/L			07/04/20 01:31	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			07/04/20 01:31	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			07/04/20 01:31	1
1,2-Dibromoethane	1.0	U	1.0	0.50	ug/L			07/04/20 01:31	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			07/04/20 01:31	1
Methyl acetate	5.0	U	5.0	0.79	ug/L			07/04/20 01:31	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			07/04/20 01:31	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	1.3	ug/L			07/04/20 01:31	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			07/04/20 01:31	1
Methylene Chloride	5.0	U	5.0	0.32	ug/L			07/04/20 01:31	1
Styrene	1.0	U	1.0	0.42	ug/L			07/04/20 01:31	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			07/04/20 01:31	1
Toluene	1.0	U	1.0	0.38	ug/L			07/04/20 01:31	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			07/04/20 01:31	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			07/04/20 01:31	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			07/04/20 01:31	1
Trichlorofluoromethane	1.0	U	1.0	0.32	ug/L			07/04/20 01:31	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			07/04/20 01:31	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			07/04/20 01:31	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			07/04/20 01:31	1
Dibromochloromethane	1.0	U	1.0	0.28	ug/L			07/04/20 01:31	1

Eurofins TestAmerica, Canton

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322A-012, PCC Validation

Job ID: 240-132483-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
4-Bromofluorobenzene	95		76 - 120		07/04/20 01:31	1
1,2-Dichloroethane-d4 (Surr)	92		75 - 123		07/04/20 01:31	1
Toluene-d8 (Surr)	90		80 - 120		07/04/20 01:31	1
Dibromofluoromethane (Surr)	91		77 - 124		07/04/20 01:31	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322A-012, PCC Validation

Job ID: 240-132483-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Client Sample ID: GW-17322-062420-DA-012

Date Collected: 06/24/20 08:00

Date Received: 06/25/20 10:40

Lab Sample ID: 240-132483-12

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			07/04/20 01:57	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			07/04/20 01:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			07/04/20 01:57	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			07/04/20 01:57	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			07/04/20 01:57	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			07/04/20 01:57	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			07/04/20 01:57	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			07/04/20 01:57	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			07/04/20 01:57	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			07/04/20 01:57	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			07/04/20 01:57	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			07/04/20 01:57	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			07/04/20 01:57	1
2-Hexanone	5.0	U	5.0	1.1	ug/L			07/04/20 01:57	1
Acetone	5.0	U	5.0	4.4	ug/L			07/04/20 01:57	1
Benzene	1.0	U	1.0	0.20	ug/L			07/04/20 01:57	1
Bromoform	1.0	U	1.0	0.54	ug/L			07/04/20 01:57	1
Bromomethane	1.0	U	1.0	0.55	ug/L			07/04/20 01:57	1
Carbon disulfide	5.0	U	5.0	0.82	ug/L			07/04/20 01:57	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			07/04/20 01:57	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			07/04/20 01:57	1
Chloroethane	1.0	U	1.0	0.32	ug/L			07/04/20 01:57	1
Chloroform	1.0	U	1.0	0.33	ug/L			07/04/20 01:57	1
Chloromethane	1.0	U	1.0	0.40	ug/L			07/04/20 01:57	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			07/04/20 01:57	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			07/04/20 01:57	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			07/04/20 01:57	1
Bromodichloromethane	1.0	U	1.0	0.34	ug/L			07/04/20 01:57	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			07/04/20 01:57	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			07/04/20 01:57	1
1,2-Dibromoethane	1.0	U	1.0	0.50	ug/L			07/04/20 01:57	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			07/04/20 01:57	1
Methyl acetate	5.0	U	5.0	0.79	ug/L			07/04/20 01:57	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			07/04/20 01:57	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	1.3	ug/L			07/04/20 01:57	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			07/04/20 01:57	1
Methylene Chloride	5.0	U	5.0	0.32	ug/L			07/04/20 01:57	1
Styrene	1.0	U	1.0	0.42	ug/L			07/04/20 01:57	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			07/04/20 01:57	1
Toluene	1.0	U	1.0	0.38	ug/L			07/04/20 01:57	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			07/04/20 01:57	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			07/04/20 01:57	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			07/04/20 01:57	1
Trichlorofluoromethane	1.0	U	1.0	0.32	ug/L			07/04/20 01:57	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			07/04/20 01:57	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			07/04/20 01:57	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			07/04/20 01:57	1
Dibromochloromethane	1.0	U	1.0	0.28	ug/L			07/04/20 01:57	1

Eurofins TestAmerica, Canton

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322A-012, PCC Validation

Job ID: 240-132483-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
4-Bromofluorobenzene	98		76 - 120		07/04/20 01:57	1
1,2-Dichloroethane-d4 (Surr)	93		75 - 123		07/04/20 01:57	1
Toluene-d8 (Surr)	90		80 - 120		07/04/20 01:57	1
Dibromofluoromethane (Surr)	89		77 - 124		07/04/20 01:57	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322A-012, PCC Validation

Job ID: 240-132483-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Client Sample ID: GW-17322-062420-DA-013

Date Collected: 06/24/20 09:15

Date Received: 06/25/20 10:40

Lab Sample ID: 240-132483-13

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			07/04/20 02:23	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			07/04/20 02:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			07/04/20 02:23	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			07/04/20 02:23	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			07/04/20 02:23	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			07/04/20 02:23	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			07/04/20 02:23	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			07/04/20 02:23	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			07/04/20 02:23	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			07/04/20 02:23	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			07/04/20 02:23	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			07/04/20 02:23	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			07/04/20 02:23	1
2-Hexanone	5.0	U	5.0	1.1	ug/L			07/04/20 02:23	1
Acetone	5.0	U	5.0	4.4	ug/L			07/04/20 02:23	1
Benzene	1.0	U	1.0	0.20	ug/L			07/04/20 02:23	1
Bromoform	1.0	U	1.0	0.54	ug/L			07/04/20 02:23	1
Bromomethane	1.0	U	1.0	0.55	ug/L			07/04/20 02:23	1
Carbon disulfide	5.0	U	5.0	0.82	ug/L			07/04/20 02:23	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			07/04/20 02:23	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			07/04/20 02:23	1
Chloroethane	1.0	U	1.0	0.32	ug/L			07/04/20 02:23	1
Chloroform	1.0	U	1.0	0.33	ug/L			07/04/20 02:23	1
Chloromethane	1.0	U	1.0	0.40	ug/L			07/04/20 02:23	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			07/04/20 02:23	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			07/04/20 02:23	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			07/04/20 02:23	1
Bromodichloromethane	1.0	U	1.0	0.34	ug/L			07/04/20 02:23	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			07/04/20 02:23	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			07/04/20 02:23	1
1,2-Dibromoethane	1.0	U	1.0	0.50	ug/L			07/04/20 02:23	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			07/04/20 02:23	1
Methyl acetate	5.0	U	5.0	0.79	ug/L			07/04/20 02:23	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			07/04/20 02:23	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	1.3	ug/L			07/04/20 02:23	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			07/04/20 02:23	1
Methylene Chloride	5.0	U	5.0	0.32	ug/L			07/04/20 02:23	1
Styrene	1.0	U	1.0	0.42	ug/L			07/04/20 02:23	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			07/04/20 02:23	1
Toluene	1.0	U	1.0	0.38	ug/L			07/04/20 02:23	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			07/04/20 02:23	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			07/04/20 02:23	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			07/04/20 02:23	1
Trichlorofluoromethane	1.0	U	1.0	0.32	ug/L			07/04/20 02:23	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			07/04/20 02:23	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			07/04/20 02:23	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			07/04/20 02:23	1
Dibromochloromethane	1.0	U	1.0	0.28	ug/L			07/04/20 02:23	1

Eurofins TestAmerica, Canton

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322A-012, PCC Validation

Job ID: 240-132483-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
4-Bromofluorobenzene	93		76 - 120		07/04/20 02:23	1
1,2-Dichloroethane-d4 (Surr)	97		75 - 123		07/04/20 02:23	1
Toluene-d8 (Surr)	90		80 - 120		07/04/20 02:23	1
Dibromofluoromethane (Surr)	90		77 - 124		07/04/20 02:23	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322A-012, PCC Validation

Job ID: 240-132483-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Client Sample ID: GW-17322-062420-DA-014

Date Collected: 06/24/20 10:10

Date Received: 06/25/20 10:40

Lab Sample ID: 240-132483-14

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			07/04/20 02:48	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			07/04/20 02:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			07/04/20 02:48	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			07/04/20 02:48	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			07/04/20 02:48	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			07/04/20 02:48	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			07/04/20 02:48	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			07/04/20 02:48	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			07/04/20 02:48	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			07/04/20 02:48	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			07/04/20 02:48	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			07/04/20 02:48	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			07/04/20 02:48	1
2-Hexanone	5.0	U	5.0	1.1	ug/L			07/04/20 02:48	1
Acetone	5.0	U	5.0	4.4	ug/L			07/04/20 02:48	1
Benzene	1.0	U	1.0	0.20	ug/L			07/04/20 02:48	1
Bromoform	1.0	U	1.0	0.54	ug/L			07/04/20 02:48	1
Bromomethane	1.0	U	1.0	0.55	ug/L			07/04/20 02:48	1
Carbon disulfide	5.0	U	5.0	0.82	ug/L			07/04/20 02:48	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			07/04/20 02:48	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			07/04/20 02:48	1
Chloroethane	1.0	U	1.0	0.32	ug/L			07/04/20 02:48	1
Chloroform	1.0	U	1.0	0.33	ug/L			07/04/20 02:48	1
Chloromethane	1.0	U	1.0	0.40	ug/L			07/04/20 02:48	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			07/04/20 02:48	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			07/04/20 02:48	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			07/04/20 02:48	1
Bromodichloromethane	1.0	U	1.0	0.34	ug/L			07/04/20 02:48	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			07/04/20 02:48	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			07/04/20 02:48	1
1,2-Dibromoethane	1.0	U	1.0	0.50	ug/L			07/04/20 02:48	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			07/04/20 02:48	1
Methyl acetate	5.0	U	5.0	0.79	ug/L			07/04/20 02:48	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			07/04/20 02:48	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	1.3	ug/L			07/04/20 02:48	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			07/04/20 02:48	1
Methylene Chloride	5.0	U	5.0	0.32	ug/L			07/04/20 02:48	1
Styrene	1.0	U	1.0	0.42	ug/L			07/04/20 02:48	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			07/04/20 02:48	1
Toluene	1.0	U	1.0	0.38	ug/L			07/04/20 02:48	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			07/04/20 02:48	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			07/04/20 02:48	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			07/04/20 02:48	1
Trichlorofluoromethane	1.0	U	1.0	0.32	ug/L			07/04/20 02:48	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			07/04/20 02:48	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			07/04/20 02:48	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			07/04/20 02:48	1
Dibromochloromethane	1.0	U	1.0	0.28	ug/L			07/04/20 02:48	1

Eurofins TestAmerica, Canton

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322A-012, PCC Validation

Job ID: 240-132483-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
4-Bromofluorobenzene	93		76 - 120		07/04/20 02:48	1
1,2-Dichloroethane-d4 (Surr)	92		75 - 123		07/04/20 02:48	1
Toluene-d8 (Surr)	89		80 - 120		07/04/20 02:48	1
Dibromofluoromethane (Surr)	87		77 - 124		07/04/20 02:48	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322A-012, PCC Validation

Job ID: 240-132483-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Client Sample ID: GW-17322-062420-DA-015

Date Collected: 06/24/20 11:05

Date Received: 06/25/20 10:40

Lab Sample ID: 240-132483-15

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			07/04/20 03:14	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			07/04/20 03:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			07/04/20 03:14	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			07/04/20 03:14	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			07/04/20 03:14	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			07/04/20 03:14	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			07/04/20 03:14	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			07/04/20 03:14	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			07/04/20 03:14	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			07/04/20 03:14	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			07/04/20 03:14	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			07/04/20 03:14	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			07/04/20 03:14	1
2-Hexanone	5.0	U	5.0	1.1	ug/L			07/04/20 03:14	1
Acetone	5.0	U	5.0	4.4	ug/L			07/04/20 03:14	1
Benzene	1.0	U	1.0	0.20	ug/L			07/04/20 03:14	1
Bromoform	1.0	U	1.0	0.54	ug/L			07/04/20 03:14	1
Bromomethane	1.0	U	1.0	0.55	ug/L			07/04/20 03:14	1
Carbon disulfide	5.0	U	5.0	0.82	ug/L			07/04/20 03:14	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			07/04/20 03:14	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			07/04/20 03:14	1
Chloroethane	1.0	U	1.0	0.32	ug/L			07/04/20 03:14	1
Chloroform	1.0	U	1.0	0.33	ug/L			07/04/20 03:14	1
Chloromethane	1.0	U	1.0	0.40	ug/L			07/04/20 03:14	1
cis-1,2-Dichloroethene	0.24	J	1.0	0.22	ug/L			07/04/20 03:14	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			07/04/20 03:14	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			07/04/20 03:14	1
Bromodichloromethane	1.0	U	1.0	0.34	ug/L			07/04/20 03:14	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			07/04/20 03:14	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			07/04/20 03:14	1
1,2-Dibromoethane	1.0	U	1.0	0.50	ug/L			07/04/20 03:14	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			07/04/20 03:14	1
Methyl acetate	5.0	U	5.0	0.79	ug/L			07/04/20 03:14	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			07/04/20 03:14	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	1.3	ug/L			07/04/20 03:14	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			07/04/20 03:14	1
Methylene Chloride	5.0	U	5.0	0.32	ug/L			07/04/20 03:14	1
Styrene	1.0	U	1.0	0.42	ug/L			07/04/20 03:14	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			07/04/20 03:14	1
Toluene	1.0	U	1.0	0.38	ug/L			07/04/20 03:14	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			07/04/20 03:14	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			07/04/20 03:14	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			07/04/20 03:14	1
Trichlorofluoromethane	1.0	U	1.0	0.32	ug/L			07/04/20 03:14	1
Vinyl chloride	0.69	J	1.0	0.17	ug/L			07/04/20 03:14	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			07/04/20 03:14	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			07/04/20 03:14	1
Dibromochloromethane	1.0	U	1.0	0.28	ug/L			07/04/20 03:14	1

Eurofins TestAmerica, Canton

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322A-012, PCC Validation

Job ID: 240-132483-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
4-Bromofluorobenzene	100		76 - 120		07/04/20 03:14	1
1,2-Dichloroethane-d4 (Surr)	98		75 - 123		07/04/20 03:14	1
Toluene-d8 (Surr)	92		80 - 120		07/04/20 03:14	1
Dibromofluoromethane (Surr)	92		77 - 124		07/04/20 03:14	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322A-012, PCC Validation

Job ID: 240-132483-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Client Sample ID: GW-17322-062420-DA-016

Date Collected: 06/24/20 12:00

Date Received: 06/25/20 10:40

Lab Sample ID: 240-132483-16

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			07/04/20 03:40	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			07/04/20 03:40	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			07/04/20 03:40	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			07/04/20 03:40	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			07/04/20 03:40	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			07/04/20 03:40	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			07/04/20 03:40	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			07/04/20 03:40	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			07/04/20 03:40	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			07/04/20 03:40	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			07/04/20 03:40	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			07/04/20 03:40	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			07/04/20 03:40	1
2-Hexanone	5.0	U	5.0	1.1	ug/L			07/04/20 03:40	1
Acetone	5.0	U	5.0	4.4	ug/L			07/04/20 03:40	1
Benzene	1.0	U	1.0	0.20	ug/L			07/04/20 03:40	1
Bromoform	1.0	U	1.0	0.54	ug/L			07/04/20 03:40	1
Bromomethane	1.0	U	1.0	0.55	ug/L			07/04/20 03:40	1
Carbon disulfide	5.0	U	5.0	0.82	ug/L			07/04/20 03:40	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			07/04/20 03:40	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			07/04/20 03:40	1
Chloroethane	1.0	U	1.0	0.32	ug/L			07/04/20 03:40	1
Chloroform	1.0	U	1.0	0.33	ug/L			07/04/20 03:40	1
Chloromethane	1.0	U	1.0	0.40	ug/L			07/04/20 03:40	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			07/04/20 03:40	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			07/04/20 03:40	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			07/04/20 03:40	1
Bromodichloromethane	1.0	U	1.0	0.34	ug/L			07/04/20 03:40	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			07/04/20 03:40	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			07/04/20 03:40	1
1,2-Dibromoethane	1.0	U	1.0	0.50	ug/L			07/04/20 03:40	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			07/04/20 03:40	1
Methyl acetate	5.0	U	5.0	0.79	ug/L			07/04/20 03:40	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			07/04/20 03:40	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	1.3	ug/L			07/04/20 03:40	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			07/04/20 03:40	1
Methylene Chloride	5.0	U	5.0	0.32	ug/L			07/04/20 03:40	1
Styrene	1.0	U	1.0	0.42	ug/L			07/04/20 03:40	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			07/04/20 03:40	1
Toluene	1.0	U	1.0	0.38	ug/L			07/04/20 03:40	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			07/04/20 03:40	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			07/04/20 03:40	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			07/04/20 03:40	1
Trichlorofluoromethane	1.0	U	1.0	0.32	ug/L			07/04/20 03:40	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			07/04/20 03:40	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			07/04/20 03:40	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			07/04/20 03:40	1
Dibromochloromethane	1.0	U	1.0	0.28	ug/L			07/04/20 03:40	1

Eurofins TestAmerica, Canton

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322A-012, PCC Validation

Job ID: 240-132483-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
4-Bromofluorobenzene	94		76 - 120		07/04/20 03:40	1
1,2-Dichloroethane-d4 (Surr)	92		75 - 123		07/04/20 03:40	1
Toluene-d8 (Surr)	91		80 - 120		07/04/20 03:40	1
Dibromofluoromethane (Surr)	91		77 - 124		07/04/20 03:40	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322A-012, PCC Validation

Job ID: 240-132483-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Client Sample ID: TB-17322-062420

Date Collected: 06/24/20 00:00

Date Received: 06/25/20 10:40

Lab Sample ID: 240-132483-17

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			07/04/20 04:06	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			07/04/20 04:06	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			07/04/20 04:06	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			07/04/20 04:06	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			07/04/20 04:06	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			07/04/20 04:06	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			07/04/20 04:06	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			07/04/20 04:06	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			07/04/20 04:06	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			07/04/20 04:06	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			07/04/20 04:06	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			07/04/20 04:06	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			07/04/20 04:06	1
2-Hexanone	5.0	U	5.0	1.1	ug/L			07/04/20 04:06	1
Acetone	5.0	U	5.0	4.4	ug/L			07/04/20 04:06	1
Benzene	1.0	U	1.0	0.20	ug/L			07/04/20 04:06	1
Bromoform	1.0	U	1.0	0.54	ug/L			07/04/20 04:06	1
Bromomethane	1.0	U	1.0	0.55	ug/L			07/04/20 04:06	1
Carbon disulfide	5.0	U	5.0	0.82	ug/L			07/04/20 04:06	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			07/04/20 04:06	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			07/04/20 04:06	1
Chloroethane	1.0	U	1.0	0.32	ug/L			07/04/20 04:06	1
Chloroform	1.0	U	1.0	0.33	ug/L			07/04/20 04:06	1
Chloromethane	1.0	U	1.0	0.40	ug/L			07/04/20 04:06	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			07/04/20 04:06	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			07/04/20 04:06	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			07/04/20 04:06	1
Bromodichloromethane	1.0	U	1.0	0.34	ug/L			07/04/20 04:06	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			07/04/20 04:06	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			07/04/20 04:06	1
1,2-Dibromoethane	1.0	U	1.0	0.50	ug/L			07/04/20 04:06	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			07/04/20 04:06	1
Methyl acetate	5.0	U	5.0	0.79	ug/L			07/04/20 04:06	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			07/04/20 04:06	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	1.3	ug/L			07/04/20 04:06	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			07/04/20 04:06	1
Methylene Chloride	5.0	U	5.0	0.32	ug/L			07/04/20 04:06	1
Styrene	1.0	U	1.0	0.42	ug/L			07/04/20 04:06	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			07/04/20 04:06	1
Toluene	1.0	U	1.0	0.38	ug/L			07/04/20 04:06	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			07/04/20 04:06	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			07/04/20 04:06	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			07/04/20 04:06	1
Trichlorofluoromethane	1.0	U	1.0	0.32	ug/L			07/04/20 04:06	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			07/04/20 04:06	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			07/04/20 04:06	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			07/04/20 04:06	1
Dibromochloromethane	1.0	U	1.0	0.28	ug/L			07/04/20 04:06	1

Eurofins TestAmerica, Canton

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322A-012, PCC Validation

Job ID: 240-132483-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
4-Bromofluorobenzene	93		76 - 120		07/04/20 04:06	1
1,2-Dichloroethane-d4 (Surr)	93		75 - 123		07/04/20 04:06	1
Toluene-d8 (Surr)	90		80 - 120		07/04/20 04:06	1
Dibromofluoromethane (Surr)	92		77 - 124		07/04/20 04:06	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322A-012, PCC Validation

Job ID: 240-132483-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Client Sample ID: GW-17322-062420-DA-017

Date Collected: 06/24/20 12:10

Date Received: 06/25/20 10:40

Lab Sample ID: 240-132483-18

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			07/04/20 04:32	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			07/04/20 04:32	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			07/04/20 04:32	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			07/04/20 04:32	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			07/04/20 04:32	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			07/04/20 04:32	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			07/04/20 04:32	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			07/04/20 04:32	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			07/04/20 04:32	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			07/04/20 04:32	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			07/04/20 04:32	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			07/04/20 04:32	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			07/04/20 04:32	1
2-Hexanone	5.0	U	5.0	1.1	ug/L			07/04/20 04:32	1
Acetone	5.0	U	5.0	4.4	ug/L			07/04/20 04:32	1
Benzene	1.0	U	1.0	0.20	ug/L			07/04/20 04:32	1
Bromoform	1.0	U	1.0	0.54	ug/L			07/04/20 04:32	1
Bromomethane	1.0	U	1.0	0.55	ug/L			07/04/20 04:32	1
Carbon disulfide	5.0	U	5.0	0.82	ug/L			07/04/20 04:32	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			07/04/20 04:32	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			07/04/20 04:32	1
Chloroethane	1.0	U	1.0	0.32	ug/L			07/04/20 04:32	1
Chloroform	1.0	U	1.0	0.33	ug/L			07/04/20 04:32	1
Chloromethane	1.0	U	1.0	0.40	ug/L			07/04/20 04:32	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			07/04/20 04:32	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			07/04/20 04:32	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			07/04/20 04:32	1
Bromodichloromethane	1.0	U	1.0	0.34	ug/L			07/04/20 04:32	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			07/04/20 04:32	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			07/04/20 04:32	1
1,2-Dibromoethane	1.0	U	1.0	0.50	ug/L			07/04/20 04:32	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			07/04/20 04:32	1
Methyl acetate	5.0	U	5.0	0.79	ug/L			07/04/20 04:32	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			07/04/20 04:32	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	1.3	ug/L			07/04/20 04:32	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			07/04/20 04:32	1
Methylene Chloride	5.0	U	5.0	0.32	ug/L			07/04/20 04:32	1
Styrene	1.0	U	1.0	0.42	ug/L			07/04/20 04:32	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			07/04/20 04:32	1
Toluene	1.0	U	1.0	0.38	ug/L			07/04/20 04:32	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			07/04/20 04:32	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			07/04/20 04:32	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			07/04/20 04:32	1
Trichlorofluoromethane	1.0	U	1.0	0.32	ug/L			07/04/20 04:32	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			07/04/20 04:32	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			07/04/20 04:32	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			07/04/20 04:32	1
Dibromochloromethane	1.0	U	1.0	0.28	ug/L			07/04/20 04:32	1

Eurofins TestAmerica, Canton

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322A-012, PCC Validation

Job ID: 240-132483-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
4-Bromofluorobenzene	97		76 - 120		07/04/20 04:32	1
1,2-Dichloroethane-d4 (Surr)	91		75 - 123		07/04/20 04:32	1
Toluene-d8 (Surr)	91		80 - 120		07/04/20 04:32	1
Dibromofluoromethane (Surr)	92		77 - 124		07/04/20 04:32	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322A-012, PCC Validation

Job ID: 240-132483-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17322-062320-DA-007

Date Collected: 06/23/20 10:35

Date Received: 06/25/20 10:40

Lab Sample ID: 240-132483-7

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	49	J	50	34	ug/L		06/26/20 14:00	06/30/20 12:10	1
Lead	1.0	U	1.0	0.45	ug/L		06/26/20 14:00	06/30/20 12:10	1
Vanadium	4.0	U	4.0	0.82	ug/L		06/26/20 14:00	06/30/20 12:10	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322A-012, PCC Validation

Job ID: 240-132483-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17322-062320-DA-008

Date Collected: 06/23/20 11:30

Date Received: 06/25/20 10:40

Lab Sample ID: 240-132483-8

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	50	U	50	34	ug/L		06/26/20 14:00	06/30/20 12:15	1
Lead	1.0	U	1.0	0.45	ug/L		06/26/20 14:00	06/30/20 12:15	1
Vanadium	4.0	U	4.0	0.82	ug/L		06/26/20 14:00	06/30/20 12:15	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322A-012, PCC Validation

Job ID: 240-132483-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17322-062320-DA-009

Date Collected: 06/23/20 14:15

Date Received: 06/25/20 10:40

Lab Sample ID: 240-132483-9

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	210		50	34	ug/L		06/26/20 14:00	06/30/20 12:19	1
Lead	1.1		1.0	0.45	ug/L		06/26/20 14:00	06/30/20 12:19	1
Vanadium	0.92	J	4.0	0.82	ug/L		06/26/20 14:00	06/30/20 12:19	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322A-012, PCC Validation

Job ID: 240-132483-1

Method: 6020 - Metals (ICP/MS) - Dissolved

Client Sample ID: GW-17322-062320-DA-007

Date Collected: 06/23/20 10:35

Date Received: 06/25/20 10:40

Lab Sample ID: 240-132483-7

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	50	U	50	34	ug/L		06/26/20 14:00	06/30/20 12:50	1
Lead	1.0	U	1.0	0.45	ug/L		06/26/20 14:00	06/30/20 12:50	1
Vanadium	4.0	U	4.0	0.82	ug/L		06/26/20 14:00	06/30/20 12:50	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322A-012, PCC Validation

Job ID: 240-132483-1

Method: 6020 - Metals (ICP/MS) - Dissolved

Client Sample ID: GW-17322-062320-DA-008

Date Collected: 06/23/20 11:30

Date Received: 06/25/20 10:40

Lab Sample ID: 240-132483-8

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	50	U	50	34	ug/L		06/26/20 14:00	06/30/20 12:54	1
Lead	1.0	U	1.0	0.45	ug/L		06/26/20 14:00	06/30/20 12:54	1
Vanadium	4.0	U	4.0	0.82	ug/L		06/26/20 14:00	06/30/20 12:54	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17322A-012, PCC Validation

Job ID: 240-132483-1

Method: 6020 - Metals (ICP/MS) - Dissolved

Client Sample ID: GW-17322-062320-DA-009

Date Collected: 06/23/20 14:15

Date Received: 06/25/20 10:40

Lab Sample ID: 240-132483-9

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	50	U	50	34	ug/L		06/26/20 14:00	06/30/20 12:59	1
Lead	1.0	U	1.0	0.45	ug/L		06/26/20 14:00	06/30/20 12:59	1
Vanadium	4.0	U	4.0	0.82	ug/L		06/26/20 14:00	06/30/20 12:59	1

QC Association Summary

Client: GHD Services Inc.
Project/Site: 17322A-012, PCC Validation

Job ID: 240-132483-1

GC/MS VOA

Analysis Batch: 705825

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-132483-1	GW-17322-062220-DA-001	Total/NA	Water	8260C	
240-132483-2	GW-17322-062220-DA-002	Total/NA	Water	8260C	
240-132483-3	GW-17322-062220-DA-003	Total/NA	Water	8260C	
240-132483-4	GW-17322-062220-DA-004	Total/NA	Water	8260C	
240-132483-5	GW-17322-062220-DA-005	Total/NA	Water	8260C	
240-132483-6	GW-17322-062220-DA-006	Total/NA	Water	8260C	
240-132483-10	GW-17322-062320-DA-010	Total/NA	Water	8260C	
240-132483-11	GW-17322-062320-DA-011	Total/NA	Water	8260C	
240-132483-12	GW-17322-062420-DA-012	Total/NA	Water	8260C	
240-132483-13	GW-17322-062420-DA-013	Total/NA	Water	8260C	
240-132483-14	GW-17322-062420-DA-014	Total/NA	Water	8260C	
240-132483-15	GW-17322-062420-DA-015	Total/NA	Water	8260C	
240-132483-16	GW-17322-062420-DA-016	Total/NA	Water	8260C	
240-132483-17	TB-17322-062420	Total/NA	Water	8260C	
240-132483-18	GW-17322-062420-DA-017	Total/NA	Water	8260C	
MB 460-705825/7	Method Blank	Total/NA	Water	8260C	
LCS 460-705825/3	Lab Control Sample	Total/NA	Water	8260C	
240-132483-5 MS	GW-17322-062220-DA-005	Total/NA	Water	8260C	
240-132483-5 MSD	GW-17322-062220-DA-005	Total/NA	Water	8260C	

Metals

Filtration Batch: 440217

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-132483-7	GW-17322-062320-DA-007	Dissolved	Water	FILTRATION	
240-132483-8	GW-17322-062320-DA-008	Dissolved	Water	FILTRATION	
240-132483-9	GW-17322-062320-DA-009	Dissolved	Water	FILTRATION	

Prep Batch: 440219

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-132483-7	GW-17322-062320-DA-007	Dissolved	Water	3005A	440217
240-132483-8	GW-17322-062320-DA-008	Dissolved	Water	3005A	440217
240-132483-9	GW-17322-062320-DA-009	Dissolved	Water	3005A	440217
MB 240-440219/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-440219/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 440228

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-132483-7	GW-17322-062320-DA-007	Total Recoverable	Water	3005A	
240-132483-8	GW-17322-062320-DA-008	Total Recoverable	Water	3005A	
240-132483-9	GW-17322-062320-DA-009	Total Recoverable	Water	3005A	
MB 240-440228/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-440228/3-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 440636

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-440219/1-A	Method Blank	Total Recoverable	Water	6020	440219
LCS 240-440219/2-A	Lab Control Sample	Total Recoverable	Water	6020	440219

QC Association Summary

Client: GHD Services Inc.
Project/Site: 17322A-012, PCC Validation

Job ID: 240-132483-1

Metals

Analysis Batch: 440829

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-132483-7	GW-17322-062320-DA-007	Dissolved	Water	6020	440219
240-132483-7	GW-17322-062320-DA-007	Total Recoverable	Water	6020	440228
240-132483-8	GW-17322-062320-DA-008	Dissolved	Water	6020	440219
240-132483-8	GW-17322-062320-DA-008	Total Recoverable	Water	6020	440228
240-132483-9	GW-17322-062320-DA-009	Dissolved	Water	6020	440219
240-132483-9	GW-17322-062320-DA-009	Total Recoverable	Water	6020	440228
MB 240-440228/1-A	Method Blank	Total Recoverable	Water	6020	440228
LCS 240-440228/3-A	Lab Control Sample	Total Recoverable	Water	6020	440228

QC Sample Results

Client: GHD Services Inc.
Project/Site: 17322A-012, PCC Validation

Job ID: 240-132483-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 460-705825/7

Matrix: Water

Analysis Batch: 705825

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			07/03/20 22:05	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			07/03/20 22:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			07/03/20 22:05	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			07/03/20 22:05	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			07/03/20 22:05	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			07/03/20 22:05	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			07/03/20 22:05	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			07/03/20 22:05	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			07/03/20 22:05	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			07/03/20 22:05	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			07/03/20 22:05	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			07/03/20 22:05	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			07/03/20 22:05	1
2-Hexanone	5.0	U	5.0	1.1	ug/L			07/03/20 22:05	1
Acetone	5.0	U	5.0	4.4	ug/L			07/03/20 22:05	1
Benzene	1.0	U	1.0	0.20	ug/L			07/03/20 22:05	1
Bromoform	1.0	U	1.0	0.54	ug/L			07/03/20 22:05	1
Bromomethane	1.0	U	1.0	0.55	ug/L			07/03/20 22:05	1
Carbon disulfide	5.0	U	5.0	0.82	ug/L			07/03/20 22:05	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			07/03/20 22:05	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			07/03/20 22:05	1
Chloroethane	1.0	U	1.0	0.32	ug/L			07/03/20 22:05	1
Chloroform	1.0	U	1.0	0.33	ug/L			07/03/20 22:05	1
Chloromethane	1.0	U	1.0	0.40	ug/L			07/03/20 22:05	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			07/03/20 22:05	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			07/03/20 22:05	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			07/03/20 22:05	1
Bromodichloromethane	1.0	U	1.0	0.34	ug/L			07/03/20 22:05	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			07/03/20 22:05	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			07/03/20 22:05	1
1,2-Dibromoethane	1.0	U	1.0	0.50	ug/L			07/03/20 22:05	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			07/03/20 22:05	1
Methyl acetate	5.0	U	5.0	0.79	ug/L			07/03/20 22:05	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			07/03/20 22:05	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	1.3	ug/L			07/03/20 22:05	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			07/03/20 22:05	1
Methylene Chloride	5.0	U	5.0	0.32	ug/L			07/03/20 22:05	1
Styrene	1.0	U	1.0	0.42	ug/L			07/03/20 22:05	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			07/03/20 22:05	1
Toluene	1.0	U	1.0	0.38	ug/L			07/03/20 22:05	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			07/03/20 22:05	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			07/03/20 22:05	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			07/03/20 22:05	1
Trichlorofluoromethane	1.0	U	1.0	0.32	ug/L			07/03/20 22:05	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			07/03/20 22:05	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			07/03/20 22:05	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			07/03/20 22:05	1
Dibromochloromethane	1.0	U	1.0	0.28	ug/L			07/03/20 22:05	1

Eurofins TestAmerica, Canton

QC Sample Results

Client: GHD Services Inc.
Project/Site: 17322A-012, PCC Validation

Job ID: 240-132483-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 460-705825/7

Matrix: Water

Analysis Batch: 705825

Client Sample ID: Method Blank

Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	98		76 - 120		07/03/20 22:05	1
1,2-Dichloroethane-d4 (Surr)	92		75 - 123		07/03/20 22:05	1
Toluene-d8 (Surr)	91		80 - 120		07/03/20 22:05	1
Dibromofluoromethane (Surr)	91		77 - 124		07/03/20 22:05	1

Lab Sample ID: LCS 460-705825/3

Matrix: Water

Analysis Batch: 705825

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	18.5		ug/L		93	68 - 128
1,1,1,2-Tetrachloroethane	20.0	21.5		ug/L		107	63 - 139
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	16.0		ug/L		80	59 - 142
1,1,2-Trichloroethane	20.0	19.4		ug/L		97	74 - 125
1,1-Dichloroethane	20.0	18.0		ug/L		90	73 - 130
1,1-Dichloroethene	20.0	16.2		ug/L		81	68 - 133
1,2,4-Trichlorobenzene	20.0	19.4		ug/L		97	64 - 132
1,2-Dibromo-3-Chloropropane	20.0	19.0		ug/L		95	41 - 143
1,2-Dichlorobenzene	20.0	19.4		ug/L		97	79 - 122
1,2-Dichloroethane	20.0	18.3		ug/L		91	75 - 121
1,2-Dichloropropane	20.0	18.5		ug/L		92	76 - 126
1,3-Dichlorobenzene	20.0	19.0		ug/L		95	80 - 121
1,4-Dichlorobenzene	20.0	18.3		ug/L		91	80 - 118
2-Hexanone	100	97.3		ug/L		97	74 - 127
Acetone	100	79.5		ug/L		80	61 - 134
Benzene	20.0	20.1		ug/L		101	78 - 126
Bromoform	20.0	20.5		ug/L		102	38 - 144
Bromomethane	20.0	16.1		ug/L		81	10 - 150
Carbon disulfide	20.0	15.3		ug/L		76	64 - 138
Carbon tetrachloride	20.0	17.2		ug/L		86	56 - 131
Chlorobenzene	20.0	18.6		ug/L		93	80 - 119
Chloroethane	20.0	18.8		ug/L		94	29 - 150
Chloroform	20.0	18.8		ug/L		94	78 - 125
Chloromethane	20.0	18.4		ug/L		92	38 - 150
cis-1,2-Dichloroethene	20.0	17.4		ug/L		87	78 - 121
cis-1,3-Dichloropropene	20.0	19.1		ug/L		96	74 - 125
Cyclohexane	20.0	16.0		ug/L		80	67 - 133
Bromodichloromethane	20.0	18.8		ug/L		94	72 - 121
Dichlorodifluoromethane	20.0	12.5		ug/L		63	31 - 150
Ethylbenzene	20.0	18.9		ug/L		95	78 - 120
1,2-Dibromoethane	20.0	19.6		ug/L		98	69 - 126
Isopropylbenzene	20.0	18.8		ug/L		94	79 - 125
Methyl acetate	40.0	34.2		ug/L		86	70 - 127
2-Butanone (MEK)	100	85.9		ug/L		86	69 - 128
4-Methyl-2-pentanone (MIBK)	100	102		ug/L		102	78 - 125
Methyl tert-butyl ether	20.0	18.5		ug/L		93	65 - 131
Methylene Chloride	20.0	17.0		ug/L		85	74 - 127
Styrene	20.0	18.8		ug/L		94	75 - 127

Eurofins TestAmerica, Canton

QC Sample Results

Client: GHD Services Inc.
Project/Site: 17322A-012, PCC Validation

Job ID: 240-132483-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 460-705825/3

Matrix: Water

Analysis Batch: 705825

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Tetrachloroethene	20.0	17.0		ug/L		85	70 - 127
Toluene	20.0	18.9		ug/L		95	78 - 119
trans-1,2-Dichloroethene	20.0	17.0		ug/L		85	74 - 126
trans-1,3-Dichloropropene	20.0	20.1		ug/L		100	66 - 127
Trichloroethene	20.0	17.4		ug/L		87	71 - 121
Trichlorofluoromethane	20.0	18.6		ug/L		93	61 - 140
Vinyl chloride	20.0	17.2		ug/L		86	61 - 144
Xylenes, Total	40.0	36.0		ug/L		90	78 - 122
Methylcyclohexane	20.0	16.5		ug/L		82	60 - 139
Dibromochloromethane	20.0	19.3		ug/L		97	58 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	100		76 - 120
1,2-Dichloroethane-d4 (Surr)	96		75 - 123
Toluene-d8 (Surr)	92		80 - 120
Dibromofluoromethane (Surr)	88		77 - 124

Lab Sample ID: 240-132483-5 MS

Matrix: Water

Analysis Batch: 705825

Client Sample ID: GW-17322-062220-DA-005

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	1.0	U	20.0	19.7		ug/L		99	68 - 128
1,1,2,2-Tetrachloroethane	1.0	U	20.0	20.9		ug/L		105	63 - 139
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	20.0	18.0		ug/L		90	59 - 142
1,1,2-Trichloroethane	1.0	U	20.0	19.7		ug/L		98	74 - 125
1,1-Dichloroethane	1.0	U	20.0	19.3		ug/L		96	73 - 130
1,1-Dichloroethene	1.0	U	20.0	18.3		ug/L		92	68 - 133
1,2,4-Trichlorobenzene	1.0	U	20.0	16.5		ug/L		83	64 - 132
1,2-Dibromo-3-Chloropropane	1.0	U	20.0	20.1		ug/L		101	41 - 143
1,2-Dichlorobenzene	1.0	U	20.0	19.5		ug/L		98	79 - 122
1,2-Dichloroethane	1.0	U	20.0	19.4		ug/L		97	75 - 121
1,2-Dichloropropane	1.0	U	20.0	19.1		ug/L		95	76 - 126
1,3-Dichlorobenzene	1.0	U	20.0	18.1		ug/L		91	80 - 121
1,4-Dichlorobenzene	1.0	U	20.0	18.2		ug/L		91	80 - 118
2-Hexanone	5.0	U	100	95.8		ug/L		96	74 - 127
Acetone	5.0	U	100	88.3		ug/L		88	61 - 134
Benzene	1.0	U	20.0	20.3		ug/L		102	78 - 126
Bromoform	1.0	U	20.0	20.9		ug/L		105	38 - 144
Bromomethane	1.0	U	20.0	14.2		ug/L		71	10 - 150
Carbon disulfide	5.0	U	20.0	17.4		ug/L		87	64 - 138
Carbon tetrachloride	1.0	U	20.0	18.5		ug/L		92	56 - 131
Chlorobenzene	1.0	U	20.0	19.5		ug/L		97	80 - 119
Chloroethane	1.0	U	20.0	20.0		ug/L		100	29 - 150
Chloroform	1.0	U	20.0	20.4		ug/L		102	78 - 125
Chloromethane	1.0	U	20.0	19.2		ug/L		96	38 - 150
cis-1,2-Dichloroethene	1.0	U	20.0	18.7		ug/L		93	78 - 121
cis-1,3-Dichloropropene	1.0	U	20.0	18.2		ug/L		91	74 - 125

Eurofins TestAmerica, Canton

QC Sample Results

Client: GHD Services Inc.
Project/Site: 17322A-012, PCC Validation

Job ID: 240-132483-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 240-132483-5 MS

Matrix: Water

Analysis Batch: 705825

Client Sample ID: GW-17322-062220-DA-005

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyclohexane	1.0	U	20.0	18.0		ug/L		90	67 - 133
Bromodichloromethane	1.0	U	20.0	18.8		ug/L		94	72 - 121
Dichlorodifluoromethane	1.0	U	20.0	13.8		ug/L		69	31 - 150
Ethylbenzene	1.0	U	20.0	19.5		ug/L		98	78 - 120
1,2-Dibromoethane	1.0	U	20.0	19.0		ug/L		95	69 - 126
Isopropylbenzene	1.0	U	20.0	18.9		ug/L		94	79 - 125
Methyl acetate	5.0	U	40.0	37.4		ug/L		94	70 - 127
2-Butanone (MEK)	5.0	U	100	84.6		ug/L		85	69 - 128
4-Methyl-2-pentanone (MIBK)	5.0	U	100	99.7		ug/L		100	78 - 125
Methyl tert-butyl ether	1.0	U	20.0	19.2		ug/L		96	65 - 131
Methylene Chloride	5.0	U	20.0	19.1		ug/L		95	74 - 127
Styrene	1.0	U	20.0	18.2		ug/L		91	75 - 127
Tetrachloroethene	1.0	U	20.0	18.2		ug/L		91	70 - 127
Toluene	1.0	U	20.0	19.2		ug/L		96	78 - 119
trans-1,2-Dichloroethene	1.0	U	20.0	18.7		ug/L		93	74 - 126
trans-1,3-Dichloropropene	1.0	U	20.0	18.9		ug/L		95	66 - 127
Trichloroethene	1.0	U	20.0	18.0		ug/L		90	71 - 121
Trichlorofluoromethane	1.0	U	20.0	21.4		ug/L		107	61 - 140
Vinyl chloride	1.0	U	20.0	18.3		ug/L		91	61 - 144
Xylenes, Total	2.0	U	40.0	35.9		ug/L		90	78 - 122
Methylcyclohexane	1.0	U	20.0	17.7		ug/L		89	60 - 139
Dibromochloromethane	1.0	U	20.0	19.3		ug/L		96	58 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene	99		76 - 120
1,2-Dichloroethane-d4 (Surr)	93		75 - 123
Toluene-d8 (Surr)	88		80 - 120
Dibromofluoromethane (Surr)	89		77 - 124

Lab Sample ID: 240-132483-5 MSD

Matrix: Water

Analysis Batch: 705825

Client Sample ID: GW-17322-062220-DA-005

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	1.0	U	20.0	20.3		ug/L		101	68 - 128	3	30
1,1,2,2-Tetrachloroethane	1.0	U	20.0	22.6		ug/L		113	63 - 139	8	30
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	20.0	18.5		ug/L		92	59 - 142	3	30
1,1,2-Trichloroethane	1.0	U	20.0	20.1		ug/L		101	74 - 125	2	30
1,1-Dichloroethane	1.0	U	20.0	19.9		ug/L		100	73 - 130	3	30
1,1-Dichloroethene	1.0	U	20.0	18.9		ug/L		94	68 - 133	3	30
1,2,4-Trichlorobenzene	1.0	U	20.0	20.2		ug/L		101	64 - 132	20	30
1,2-Dibromo-3-Chloropropane	1.0	U	20.0	21.8		ug/L		109	41 - 143	8	30
1,2-Dichlorobenzene	1.0	U	20.0	20.7		ug/L		103	79 - 122	6	30
1,2-Dichloroethane	1.0	U	20.0	19.6		ug/L		98	75 - 121	1	30
1,2-Dichloropropane	1.0	U	20.0	19.4		ug/L		97	76 - 126	2	30
1,3-Dichlorobenzene	1.0	U	20.0	19.6		ug/L		98	80 - 121	8	30
1,4-Dichlorobenzene	1.0	U	20.0	19.0		ug/L		95	80 - 118	4	30
2-Hexanone	5.0	U	100	97.3		ug/L		97	74 - 127	2	30

Eurofins TestAmerica, Canton

QC Sample Results

Client: GHD Services Inc.
Project/Site: 17322A-012, PCC Validation

Job ID: 240-132483-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 240-132483-5 MSD

Matrix: Water

Analysis Batch: 705825

Client Sample ID: GW-17322-062220-DA-005

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	5.0	U	100	86.1		ug/L		86	61 - 134	2	30
Benzene	1.0	U	20.0	20.8		ug/L		104	78 - 126	2	30
Bromoform	1.0	U	20.0	21.1		ug/L		106	38 - 144	1	30
Bromomethane	1.0	U	20.0	14.6		ug/L		73	10 - 150	3	30
Carbon disulfide	5.0	U	20.0	18.3		ug/L		91	64 - 138	5	30
Carbon tetrachloride	1.0	U	20.0	19.1		ug/L		96	56 - 131	4	30
Chlorobenzene	1.0	U	20.0	19.0		ug/L		95	80 - 119	2	30
Chloroethane	1.0	U	20.0	18.5		ug/L		92	29 - 150	8	30
Chloroform	1.0	U	20.0	19.5		ug/L		97	78 - 125	5	30
Chloromethane	1.0	U	20.0	19.0		ug/L		95	38 - 150	1	30
cis-1,2-Dichloroethene	1.0	U	20.0	18.5		ug/L		92	78 - 121	1	30
cis-1,3-Dichloropropene	1.0	U	20.0	17.8		ug/L		89	74 - 125	2	30
Cyclohexane	1.0	U	20.0	18.3		ug/L		92	67 - 133	2	30
Bromodichloromethane	1.0	U	20.0	18.8		ug/L		94	72 - 121	0	30
Dichlorodifluoromethane	1.0	U	20.0	13.9		ug/L		69	31 - 150	1	30
Ethylbenzene	1.0	U	20.0	18.0		ug/L		90	78 - 120	8	30
1,2-Dibromoethane	1.0	U	20.0	19.1		ug/L		96	69 - 126	1	30
Isopropylbenzene	1.0	U	20.0	18.9		ug/L		94	79 - 125	0	30
Methyl acetate	5.0	U	40.0	30.6		ug/L		77	70 - 127	20	30
2-Butanone (MEK)	5.0	U	100	84.2		ug/L		84	69 - 128	1	30
4-Methyl-2-pentanone (MIBK)	5.0	U	100	98.7		ug/L		99	78 - 125	1	30
Methyl tert-butyl ether	1.0	U	20.0	20.0		ug/L		100	65 - 131	4	30
Methylene Chloride	5.0	U	20.0	19.5		ug/L		97	74 - 127	2	30
Styrene	1.0	U	20.0	18.8		ug/L		94	75 - 127	4	30
Tetrachloroethene	1.0	U	20.0	17.6		ug/L		88	70 - 127	4	30
Toluene	1.0	U	20.0	19.3		ug/L		96	78 - 119	0	30
trans-1,2-Dichloroethene	1.0	U	20.0	19.0		ug/L		95	74 - 126	2	30
trans-1,3-Dichloropropene	1.0	U	20.0	19.5		ug/L		97	66 - 127	3	30
Trichloroethene	1.0	U	20.0	18.4		ug/L		92	71 - 121	2	30
Trichlorofluoromethane	1.0	U	20.0	20.2		ug/L		101	61 - 140	6	30
Vinyl chloride	1.0	U	20.0	18.4		ug/L		92	61 - 144	1	30
Xylenes, Total	2.0	U	40.0	36.2		ug/L		91	78 - 122	1	30
Methylcyclohexane	1.0	U	20.0	18.6		ug/L		93	60 - 139	5	30
Dibromochloromethane	1.0	U	20.0	20.0		ug/L		100	58 - 130	4	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene	98		76 - 120
1,2-Dichloroethane-d4 (Surr)	90		75 - 123
Toluene-d8 (Surr)	87		80 - 120
Dibromofluoromethane (Surr)	89		77 - 124

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 240-440219/1-A

Matrix: Water

Analysis Batch: 440636

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 440219

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	50	U	50	34	ug/L		06/26/20 14:00	06/29/20 13:57	1

Eurofins TestAmerica, Canton

QC Sample Results

Client: GHD Services Inc.
Project/Site: 17322A-012, PCC Validation

Job ID: 240-132483-1

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 240-440219/1-A

Matrix: Water

Analysis Batch: 440636

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 440219

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	1.0	U	1.0	0.45	ug/L		06/26/20 14:00	06/29/20 13:57	1
Vanadium	4.0	U	4.0	0.82	ug/L		06/26/20 14:00	06/29/20 13:57	1

Lab Sample ID: LCS 240-440219/2-A

Matrix: Water

Analysis Batch: 440636

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 440219

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	5000	5100		ug/L		102	80 - 120
Lead	500	515		ug/L		103	80 - 120
Vanadium	500	529		ug/L		106	80 - 120

Lab Sample ID: MB 240-440228/1-A

Matrix: Water

Analysis Batch: 440829

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 440228

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	50	U	50	34	ug/L		06/26/20 14:00	06/30/20 11:53	1
Lead	1.0	U	1.0	0.45	ug/L		06/26/20 14:00	06/30/20 11:53	1
Vanadium	4.0	U	4.0	0.82	ug/L		06/26/20 14:00	06/30/20 11:53	1

Lab Sample ID: LCS 240-440228/3-A

Matrix: Water

Analysis Batch: 440829

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 440228

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	5000	4760		ug/L		95	80 - 120
Lead	500	498		ug/L		100	80 - 120
Vanadium	500	491		ug/L		98	80 - 120

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 17322A-012, PCC Validation

Job ID: 240-132483-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		BFB (76-120)	DCA (75-123)	TOL (80-120)	DBFM (77-124)
240-132483-1	GW-17322-062220-DA-001	94	94	89	89
240-132483-2	GW-17322-062220-DA-002	92	95	91	91
240-132483-3	GW-17322-062220-DA-003	97	93	91	88
240-132483-4	GW-17322-062220-DA-004	95	94	89	90
240-132483-5	GW-17322-062220-DA-005	93	95	90	89
240-132483-5 MS	GW-17322-062220-DA-005	99	93	88	89
240-132483-5 MSD	GW-17322-062220-DA-005	98	90	87	89
240-132483-6	GW-17322-062220-DA-006	96	92	90	89
240-132483-10	GW-17322-062320-DA-010	95	93	91	90
240-132483-11	GW-17322-062320-DA-011	95	92	90	91
240-132483-12	GW-17322-062420-DA-012	98	93	90	89
240-132483-13	GW-17322-062420-DA-013	93	97	90	90
240-132483-14	GW-17322-062420-DA-014	93	92	89	87
240-132483-15	GW-17322-062420-DA-015	100	98	92	92
240-132483-16	GW-17322-062420-DA-016	94	92	91	91
240-132483-17	TB-17322-062420	93	93	90	92
240-132483-18	GW-17322-062420-DA-017	97	91	91	92
LCS 460-705825/3	Lab Control Sample	100	96	92	88
MB 460-705825/7	Method Blank	98	92	91	91

Surrogate Legend

BFB = 4-Bromofluorobenzene

DCA = 1,2-Dichloroethane-d4 (Surr)

TOL = Toluene-d8 (Surr)

DBFM = Dibromofluoromethane (Surr)

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17322A-012, PCC Validation

Job ID: 240-132483-1

Client Sample ID: GW-17322-062220-DA-001

Lab Sample ID: 240-132483-1

Date Collected: 06/22/20 09:30

Matrix: Water

Date Received: 06/25/20 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	705825	07/03/20 22:31	KLB	TAL EDI

Client Sample ID: GW-17322-062220-DA-002

Lab Sample ID: 240-132483-2

Date Collected: 06/22/20 10:20

Matrix: Water

Date Received: 06/25/20 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	705825	07/03/20 22:56	KLB	TAL EDI

Client Sample ID: GW-17322-062220-DA-003

Lab Sample ID: 240-132483-3

Date Collected: 06/22/20 10:30

Matrix: Water

Date Received: 06/25/20 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	705825	07/03/20 23:22	KLB	TAL EDI

Client Sample ID: GW-17322-062220-DA-004

Lab Sample ID: 240-132483-4

Date Collected: 06/22/20 11:30

Matrix: Water

Date Received: 06/25/20 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	705825	07/03/20 23:48	KLB	TAL EDI

Client Sample ID: GW-17322-062220-DA-005

Lab Sample ID: 240-132483-5

Date Collected: 06/22/20 12:25

Matrix: Water

Date Received: 06/25/20 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	705825	07/04/20 00:14	KLB	TAL EDI

Client Sample ID: GW-17322-062220-DA-006

Lab Sample ID: 240-132483-6

Date Collected: 06/22/20 13:55

Matrix: Water

Date Received: 06/25/20 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	705825	07/04/20 00:40	KLB	TAL EDI

Client Sample ID: GW-17322-062320-DA-007

Lab Sample ID: 240-132483-7

Date Collected: 06/23/20 10:35

Matrix: Water

Date Received: 06/25/20 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Filtration	FILTRATION			440217	06/26/20 10:15	MRL	TAL CAN
Dissolved	Prep	3005A			440219	06/26/20 14:00	MRL	TAL CAN
Dissolved	Analysis	6020		1	440829	06/30/20 12:50	DTN	TAL CAN

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Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17322A-012, PCC Validation

Job ID: 240-132483-1

Client Sample ID: GW-17322-062320-DA-007

Lab Sample ID: 240-132483-7

Date Collected: 06/23/20 10:35

Matrix: Water

Date Received: 06/25/20 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			440228	06/26/20 14:00	MRL	TAL CAN
Total Recoverable	Analysis	6020		1	440829	06/30/20 12:10	DTN	TAL CAN

Client Sample ID: GW-17322-062320-DA-008

Lab Sample ID: 240-132483-8

Date Collected: 06/23/20 11:30

Matrix: Water

Date Received: 06/25/20 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Filtration	FILTRATION			440217	06/26/20 10:15	MRL	TAL CAN
Dissolved	Prep	3005A			440219	06/26/20 14:00	MRL	TAL CAN
Dissolved	Analysis	6020		1	440829	06/30/20 12:54	DTN	TAL CAN
Total Recoverable	Prep	3005A			440228	06/26/20 14:00	MRL	TAL CAN
Total Recoverable	Analysis	6020		1	440829	06/30/20 12:15	DTN	TAL CAN

Client Sample ID: GW-17322-062320-DA-009

Lab Sample ID: 240-132483-9

Date Collected: 06/23/20 14:15

Matrix: Water

Date Received: 06/25/20 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Filtration	FILTRATION			440217	06/26/20 10:15	MRL	TAL CAN
Dissolved	Prep	3005A			440219	06/26/20 14:00	MRL	TAL CAN
Dissolved	Analysis	6020		1	440829	06/30/20 12:59	DTN	TAL CAN
Total Recoverable	Prep	3005A			440228	06/26/20 14:00	MRL	TAL CAN
Total Recoverable	Analysis	6020		1	440829	06/30/20 12:19	DTN	TAL CAN

Client Sample ID: GW-17322-062320-DA-010

Lab Sample ID: 240-132483-10

Date Collected: 06/23/20 12:45

Matrix: Water

Date Received: 06/25/20 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	705825	07/04/20 01:05	KLB	TAL EDI

Client Sample ID: GW-17322-062320-DA-011

Lab Sample ID: 240-132483-11

Date Collected: 06/23/20 13:45

Matrix: Water

Date Received: 06/25/20 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	705825	07/04/20 01:31	KLB	TAL EDI

Client Sample ID: GW-17322-062420-DA-012

Lab Sample ID: 240-132483-12

Date Collected: 06/24/20 08:00

Matrix: Water

Date Received: 06/25/20 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	705825	07/04/20 01:57	KLB	TAL EDI

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Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17322A-012, PCC Validation

Job ID: 240-132483-1

Client Sample ID: GW-17322-062420-DA-013

Lab Sample ID: 240-132483-13

Date Collected: 06/24/20 09:15

Matrix: Water

Date Received: 06/25/20 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	705825	07/04/20 02:23	KLB	TAL EDI

Client Sample ID: GW-17322-062420-DA-014

Lab Sample ID: 240-132483-14

Date Collected: 06/24/20 10:10

Matrix: Water

Date Received: 06/25/20 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	705825	07/04/20 02:48	KLB	TAL EDI

Client Sample ID: GW-17322-062420-DA-015

Lab Sample ID: 240-132483-15

Date Collected: 06/24/20 11:05

Matrix: Water

Date Received: 06/25/20 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	705825	07/04/20 03:14	KLB	TAL EDI

Client Sample ID: GW-17322-062420-DA-016

Lab Sample ID: 240-132483-16

Date Collected: 06/24/20 12:00

Matrix: Water

Date Received: 06/25/20 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	705825	07/04/20 03:40	KLB	TAL EDI

Client Sample ID: TB-17322-062420

Lab Sample ID: 240-132483-17

Date Collected: 06/24/20 00:00

Matrix: Water

Date Received: 06/25/20 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	705825	07/04/20 04:06	KLB	TAL EDI

Client Sample ID: GW-17322-062420-DA-017

Lab Sample ID: 240-132483-18

Date Collected: 06/24/20 12:10

Matrix: Water

Date Received: 06/25/20 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	705825	07/04/20 04:32	KLB	TAL EDI

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL EDI = Eurofins TestAmerica, Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Eurofins TestAmerica, Canton

Accreditation/Certification Summary

Client: GHD Services Inc.
Project/Site: 17322A-012, PCC Validation

Job ID: 240-132483-1

Laboratory: Eurofins TestAmerica, Canton

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

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-23-21
Connecticut	State	PH-0590	12-31-21
Florida	NELAP	E87225	06-30-20
Georgia	State	4062	02-23-21
Illinois	NELAP	004498	07-31-20
Iowa	State	421	06-01-21
Kansas	NELAP	E-10336	04-30-21
Kentucky (UST)	State	112225	02-23-21
Kentucky (WW)	State	KY98016	12-31-20
Minnesota	NELAP	OH00048	12-31-20
Minnesota (Petrofund)	State	3506	08-01-21
New Jersey	NELAP	OH001	06-30-20
New York	NELAP	10975	03-31-21
Ohio VAP	State	CL0024	06-05-21
Oregon	NELAP	4062	02-24-21
Pennsylvania	NELAP	68-00340	08-31-20
Texas	NELAP	T104704517-18-10	08-31-20
USDA	US Federal Programs	P330-18-00281	09-17-21
Virginia	NELAP	010101	09-14-20
Washington	State	C971	01-12-21
West Virginia DEP	State	210	12-31-20

Laboratory: Eurofins TestAmerica, Edison

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

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0200	09-30-20
DE Haz. Subst. Cleanup Act (HSCA)	State	<cert No.>	12-31-21
Massachusetts	State	M-NJ312	06-30-21
New Jersey	NELAP	12028	06-30-21
New York	NELAP	11452	04-01-21
Pennsylvania	NELAP	68-00522	02-28-21
Rhode Island	State	LAO00132	12-31-20
USDA	US Federal Programs	P330-18-00135	05-03-21

TAL-8210

Temperature readings: _____

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u>		<u>Preservative</u>	
			<u>pH</u>	<u>Temp</u>	<u>Added (mls)</u>	<u>Lot #</u>
GW-17322-062320-DA-007	240-132483-B-7	Plastic 250ml - with Nitric Acid	<2	_____	_____	_____
GW-17322-062320-DA-008	240-132483-B-8	Plastic 250ml - with Nitric Acid	<2	_____	_____	_____
GW-17322-062320-DA-009	240-132483-B-9	Plastic 250ml - with Nitric Acid	<2	_____	_____	_____

Eurofins TestAmerica, Canton

4101 Shuffel Street NW

North Canton, OH 44720

Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record



Eurofins

Environment Testing
America

Client Information (Sub Contract Lab)		Sampler:		Lab PM:		240-132483 Chain of Custody		2330.1	
Client Contact: Shipping/Receiving		Phone:		E-Mail: denise.heckler@testamericainc.com		State of Origin: Michigan		Page: Page 1 of 2	
Company: TestAmerica Laboratories, Inc.				Accreditations Required (See note):				Job #: 240-132483-1	
Address: 777 New Durham Road,		Due Date Requested: 7/8/2020		Analysis Requested				Preservation Codes: A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Z - other (specify)	
City: Edison		TAT Requested (days):							
State, Zip: NJ, 08817		PO #:		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		Total Number of containers	
Phone: 732-549-3900(Tel) 732-549-3679(Fax)		WO #:		8260C/5030C (MOD) VOCs					
Email:									
Project Name: 17322A-T06, PCC Validation		Project #: 24020174							
Site:		SSOW#:							
Sample Identification - Client ID (Lab ID)		Sample Date		Sample Time		Sample Type (C=comp, G=grab)		Matrix (W=water, S=solid, O=waste/oli, BT=Tissue, A-Air)	
						Preservation Code:			
GW-17322-062220-DA-001 (240-132483-1)		6/22/20		09:30 Eastern		Water		X	
GW-17322-062220-DA-002 (240-132483-2)		6/22/20		10:20 Eastern		Water		X	
GW-17322-062220-DA-003 (240-132483-3)		6/22/20		10:30 Eastern		Water		X	
GW-17322-062220-DA-004 (240-132483-4)		6/22/20		11:30 Eastern		Water		X	
GW-17322-062220-DA-005 (240-132483-5)		6/22/20		12:25 Eastern		Water		X	
GW-17322-062220-DA-006 (240-132483-6)		6/22/20		13:55 Eastern		Water		X	
GW-17322-062320-DA-010 (240-132483-10)		6/23/20		12:45 Eastern		Water		X	
GW-17322-062320-DA-011 (240-132483-11)		6/23/20		13:45 Eastern		Water		X	
GW-17322-062420-DA-012 (240-132483-12)		6/24/20		08:00 Eastern		Water		X	
Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins TestAmerica.									
Possible Hazard Identification					Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)				
Unconfirmed					☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months				
Deliverable Requested: I, II, III, IV, Other (specify)					Primary Deliverable Rank: 2				
Empty Kit Relinquished by:					Special Instructions/QC Requirements:				
Relinquished by:		Date/Time:		Time:		Method of Shipment:			
Relinquished by:		Date/Time:		Time:		Method of Shipment:			
Relinquished by:		Date/Time:		Time:		Method of Shipment:			
Custody Seals Intact:		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:					
Δ Yes Δ No									

Ver: 01/16/2019

eurolins Environment Testing America

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 240-132483-1

Login Number: 132483

List Number: 2

Creator: Meyers, Gary

List Source: Eurofins TestAmerica, Edison

List Creation: 06/29/20 03:17 PM

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	