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Farmington Hills, Michigan 48331
United States
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GHD Reference No: 11208058Whom-12

January 29, 2025

**City of Bay City WWTP
Attn: IPP Coordinator
2905 North Water Street
Bay City, Michigan, 48708**

**Semi-Annual Compliance Report (July 1 to Dec 31, 2024)
RACER Bay City Industrial Land
Bay City, Michigan**

To Whom It May Concern,

The following letter has been prepared by GHD on behalf of Revitalizing Auto Communities Environmental Response Trust (RACER) in accordance with Part 4 Section 3 of Industrial User (IU) permit No. 120807 as the semi-annual compliance report for the period July 1 to December 31, 2024, for RACER's discharge from a groundwater extraction and treatment system located at the north end of Crotty Street in Bay City, Michigan (Site).

The groundwater extraction and treatment system operated consistently for this semi-annual period with the exception of short periods when the system was down for maintenance or as a result of an alarm condition, and during 2024 system cleanout, which is described at the end of this letter.

Table 1 presents the results of the required semi-annual effluent samples collected from the RACER groundwater extraction and treatment system, for this reporting period. Attachment 1 presents the laboratory analytical report. The analytical results did not identify an exceedance of the daily maximum discharge levels specified in the permit requirements.

Table 2 presents the flow readings collected periodically from the flow meter. No flow readings were taken in August during the treatment system cleanout.

The RACER groundwater extraction and treatment system is operated and maintained by John York (GHD).

See Attachment 2 for the certification statement prepared in accordance with Section 106-23(d) of the Bay City sewer ordinance.

2024 Treatment System Cleanout

The treatment system required cleaning to remove sludge and sediments that has accumulated in the sludge tank and other system components. Job Site Services (JSS) was contracted by GHD to perform part of the cleaning in July 2024. The cleaning process proceeded as follows:

The groundwater extraction system was shut down on July 12, 2024, approximately 1 week prior to cleaning, to allow settling of the water in the tanks. Over the next several days, water was decanted from the sludge tank, settling chamber, and clear well via submersible pump by GHD personnel. Decanted water was treated through the treatment system. The granular activated carbon (GAC) was backwashed to improve water treatment efficiency.

On July 17, 2024, JSS operated a vacuum truck and utilized a pressure washer, as necessary, to remove the sludge from the tanks. Water was drained from the vacuum truck. The remaining sludge material from the vacuum truck was emptied into double-lined rolloff box which resided on a secondary containment pad. Equipment decontamination was performed using isopropyl alcohol (as it would not damage the GAC for wastewater treatment) and rinsed with clean water. Confirmation equipment wipe samples were collected from all non-disposable parts and analyzed for polychlorinated biphenyls (PCB) analysis, presented in Attachment 3. Wipe results were either non-detect or below 100 micrograms per 100 centimeters squared (100 ug/100 cm²) PCBs and therefore the equipment is confirmed to be decontaminated. All decanted/drained water and decontamination water was treated through the treatment system.

For approximately the next two weeks, excess water was decanted from the rolloff box via submersible (trash) pump by GHD personnel. Decanted water was treated through the treatment system. The treatment system filter bags were changed out, new GAC units were installed, and the system was prepped for restart. The groundwater extraction and treatment system was restarted on August 29, 2024.

Prior to cleaning the groundwater extraction and treatment system, a sample of the sludge/sediment was collected on April 9, 2024 for waste characterization. PCBs were detected at a concentration of 2.8 milligrams per kilogram (mg/kg), and therefore the material was characterized as TSCA. The material was profiled with Republic Services under GHD's waste profile approval number E24-8292-WDI dated May 8, 2024. On August 8, 2024, the roll-off box was transported off-Site for TSCA disposal at Republic's Wayne Disposal, Inc. Site #2 Landfill located at 49350 N I-94 Service Drive, Belleville, MI 48111. Waste characterization results are presented in Attachment 4.

Should you have any questions on the above, please do not hesitate to contact us.

Sincerely,



John-Eric Pardys, P.Eng.
Engineer

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john-eric.pardys@ghd.com

JG/we/12

cc: Brendan Mullen (RACER)
Dave Favero (RACER)
Jessica Gallaway (GHD)

Encl. Table 1 – Effluent Results Summary
Table 2 – Flow Meter Readings
Attachment 1 – Laboratory Analytical Report
Attachment 2 – Certification Statement
Attachment 3 – PCB Wipe Sample Results
Attachment 4 – Sludge Waste Characterization Results

**Analytical Results Summary
Sampling
Bay City Industrial Land
Bay City, Michigan**

Sample Location:			
Sample ID:	effluent-GWTS		
Sample Date:	W-11208058-121124-JY-002		
			12/11/2024
			Composite
Parameters	Unit	Daily Maximum(1)	
VOAs			
Vinyl chloride	mg/L	2	1 U
Metals			
Cadmium	mg/L	57	2 U
Chromium	mg/L	6812	5 U
Copper	mg/L	1476	20 U
Iron	mg/L	--	100 U
Lead	mg/L	632	3 U
Mercury	mg/L	ND	0.2 U
Nickel	mg/L	2548	20 U
Silver	mg/L	200	5 U
PCBs			
Aroclor-1016 (PCB-1016)	mg/L	ND	0.49 U
Aroclor-1221 (PCB-1221)	mg/L	ND	0.49 U
Aroclor-1232 (PCB-1232)	mg/L	ND	0.49 U
Aroclor-1242 (PCB-1242)	mg/L	ND	0.49 U
Aroclor-1248 (PCB-1248)	mg/L	ND	0.49 U
Aroclor-1254 (PCB-1254)	mg/L	ND	0.49 U
Aroclor-1260 (PCB-1260)	mg/L	ND	0.49 U
Wet			
Ammonia-N	mg/L	30,000	16
Biochemical oxygen demand (BOD)	mg/L	835,000	2 U
Chemical oxygen demand (COD)	mg/L	1,670,000	13
Oil and grease (HEM), total	mg/L	100,000	1.3 J
pH, lab	s.u.	6.5 to 11.0	7.3 HF
Phosphorus	mg/L	13,800	0.1 U
Total suspended solids (TSS)	mg/L	1,336,000	2.4 J

Notes:

- (1) - Bay City Industrial User Discharge Permit (120807)
- b - Result detected in the Unseeded Control blank (USB)
- J - Estimated concentration
- HF - Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
- U - Not detected at the associated reporting limit.

**Flow Meter Readings
Bay City Industrial Land
Bay City, Michigan**

Date	Flow Meter Totalized Reading (gallons)	Cumulative Total: (gallons)	Volume to be Invoiced Annually (July to June 30)	Comments
11-Dec-24	968,518	1,714,616		- Collected effluent sample
19-Nov-24	959,030	1,705,128		
7-Oct-24	958,047	1,704,145		
3-Sep-24	952,079	1,698,177		
1-Jul-24	946,509	1,692,607	119,943	- City invoiced for discharge
11-Jun-24	938,316	1,684,414		- Collected effluent sample
3-Jun-24	935,412	1,681,510		
6-May-24	930,927	1,677,025		
1-Apr-24	916,525	1,662,623		
7-Mar-24	901,303	1,647,401		
5-Feb-24	892,261	1,638,359		
16-Jan-24				- Collected effluent sample
8-Jan-24	889,564	1,635,662		
22-Dec-23	889,370	1,635,468		
7-Nov-23	836,099	1,582,197		- City collecting sample
27-Oct-23	833,943	1,580,041		- System start-up
17-Oct-23				- Collected effluent sample, shutdown
16-Oct-23	833,137	1,579,235		- Start system for effluent sample
11-Sep-23	833,113	1,579,211		- System not operating
7-Aug-23				- System shut down
2-Aug-23	832,734	1,578,832		
7-Jul-23	828,158	1,574,256		
30-Jun-23	826,566	1,572,664	213,090	- Collected effluent sample, City invoiced for discharge
12-Jun-23	813,114	1,559,212		
5-May-23	784,200	1,530,298		
10-Apr-23	783,184	1,529,282		
20-Mar-23	777,866	1,523,964		
14-Feb-23	762,917	1,509,015		
16-Jan-23	757,367	1,503,465		- Collected effluent sample
5-Dec-22	700,568	1,446,666		
21-Nov-22	689,378	1,435,476		
25-Oct-22	688,227	1,434,325		
12-Sep-22	684,028	1,430,126		
23-Aug-22	672,428	1,418,526		- Collected effluent sample
17-Jun-22	619,110	1,365,208		
13-Jun-22	613,476	1,359,574	204,431	- City invoiced for discharge
26-May-22				- Collected effluent sample
24-May-22	610,180	1,356,278		
26-Apr-22	592,790	1,338,888		
23-Mar-22	592,060	1,338,158		
1-Mar-22	580,971	1,327,069		
24-Jan-22	580,938	1,327,036		
27-Dec-21	553,735	1,299,833		
23-Dec-21				- Collected effluent sample
29-Nov-21	533,997	1,280,095		
27-Sep-21	475,843	1,221,941		
20-Aug-21	436,048	1,182,146		
30-Jul-21	421,003	1,167,101		
23-Jun-21	409,045	1,155,143	139,856	- Collected effluent sample and City invoiced for discharge
27-May-21	400,420	1,146,518		
29-Apr-21	397,390	1,143,488		
23-Mar-21	371,797	1,117,895		
22-Feb-21	348,776	1,094,874		

**Flow Meter Readings
Bay City Industrial Land
Bay City, Michigan**

Date	Flow Meter Totalized Reading (gallons)	Cumulative Total: (gallons)	Volume to be Invoiced Annually (July to June 30)	Comments
11-Dec-24	968,518	1,714,616		- Collected effluent sample
19-Nov-24	959,030	1,705,128		
7-Oct-24	958,047	1,704,145		
3-Sep-24	952,079	1,698,177		
21-Dec-20	308,935	1,055,033		
10-Dec-20				- Collected effluent sample
9-Dec-20	304,649	1,050,747		
12-Oct-20	278,099	1,024,197		
10-Sep-20	277,899	1,023,997		
25-Aug-20	277,020	1,023,118		
22-Jul-20	274,190	1,020,288		
22-Jun-20	270,975	1,017,073		
4-Jun-20	269,189	1,015,287	124,809	- City invoiced for discharge
28-May-20	268,089	1,014,187		- Collected effluent sample
28-Apr-20	263,922	1,010,020		
25-Mar-20	248,006	994,104		
20-Feb-20	227,965	974,063		
27-Jan-20	220,321	966,419		
5-Dec-19	200,031	946,129		- Collected PFAS effluent sample
25-Nov-19	192,582	938,680		
29-Oct-19	176,533	922,631		
28-Aug-19	168,508	914,606		
17-Jul-19	159,490	905,588		
17-Jun-19	144,380	890,478	122,047	- City invoiced for discharge
31-May-19				- Collected effluent sample
17-May-19	123,482	869,580		
19-Apr-19	105,745	851,843		
22-Mar-19	81,364	827,462		
28-Feb-19	77,720	823,818		
29-Jan-19	77,720	823,818		
20-Jan-19				- Collected effluent sample
12-Dec-18	77,570	823,668		- Collected effluent sample
29-Nov-18	76,972	823,070		
26-Sep-18	59,303	805,401		
30-Aug-18	53,199	799,297		
30-Jul-18	52,454	798,552		
20-Jun-18	35,274	781,372		
1-Jun-18				- Collected effluent sample
1-Jun-18	22,333	768,431	88,271	- City invoiced for discharge
31-May-18	20,490	766,588		
30-Apr-18	18,529	764,627		
29-Mar-18	11,243	757,341		
8-Mar-18	122,667	746,098		- Last reading before
8-Mar-18	0	746,098		- New Flow meter installed
30-Nov-17				- Collected effluent sample
25-Oct-17	73,702	697,133		
12-Jul-17	60,991	684,422		
28-Jun-17	56,911	680,342		
13-Jun-17	56,729	680,160	137,544	- City invoiced for discharge
22-May-17	56,722	680,153		
9-May-17				- Collected effluent sample
27-Apr-17	55,126	678,557		
2-Feb-17	5,813	629,244		

**Flow Meter Readings
Bay City Industrial Land
Bay City, Michigan**

Date	Flow Meter Totalized Reading (gallons)	Cumulative Total: (gallons)	Volume to be Invoiced Annually (July to June 30)	Comments
11-Dec-24	968,518	1,714,616		- Collected effluent sample
19-Nov-24	959,030	1,705,128		
7-Oct-24	958,047	1,704,145		
3-Sep-24	952,079	1,698,177		
16-Jan-17				- Collected effluent sample
14-Jan-17	609,074	623,431		
14-Jan-17	0	623,431		
16-Dec-16	609,074	623,431		
11-Nov-16	608,980	623,337		
28-Oct-16	608,865	623,222		
30-Sep-16	607,717	622,074		
31-Aug-16	607,298	621,655		
20-Jul-16	561,893	576,250		
29-Jun-16	556,457	570,814		
14-Jun-16	528,259	542,616	523,666	- Collected effluent sample,
31-May-16	521,920	536,277		
27-Apr-16	462,204	476,561		
21-Mar-16	409,836	424,193		
29-Feb-16	394,550	408,907		
10-Feb-16	387,410	401,767		
30-Dec-15	351,550	365,907		
10-Dec-15				- Collected effluent sample
23-Nov-15	289,731	304,088		
30-Oct-15	260,771	275,128		
29-Sep-15	252,638	266,995		
28-Aug-15	241,397	255,754		
29-Jul-15	232,315	246,672		
30-Jun-15	232,315	246,672		
25-Jun-15	232,315	246,672		
18-Jun-15	224,490	238,847		
6-May-15	197,766	212,123		
30-Apr-15	175,234	189,591		
19-Mar-15	67,425	81,782		
16-Mar-15				- Collected effluent sample
13-Feb-15	46,303	60,660		
27-Jan-15	31,004	45,361		
29-Dec-14	31,004	45,361		
26-Nov-14	31,004	45,361		
23-Oct-14	31,004	45,361		
23-Sep-14	11,504	25,861		
5-Sep-14	6,337	20,694		- Collected effluent sample
18-Aug-14	4,593	18,950		
28-Jul-14	4,593	18,950		
16-Jun-14	4,593	18,950	18,950	- City invoiced for discharge

Attachments

Attachment 1

Laboratory Analytical Report

 **ANALYTICAL REPORT****PREPARED FOR**

Attn: Ms. Ruth Mickle
GHD Services Inc.
26850 Haggerty Rd.
Farmington Hills, Michigan 48331

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JOB DESCRIPTION

11208058, RACER Bay City

JOB NUMBER

240-216491-1

Eurofins Cleveland

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

Authorization



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Authorized for release by
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Table of Contents

Cover Page	1
Table of Contents	3
Case Narrative	4
Definitions/Glossary	5
Sample Summary	6
Detection Summary	7
Method Summary	8
Client Sample Results	9
QC Association Summary	16
QC Sample Results	19
Surrogate Summary	25
Lab Chronicle	26
Certification Summary	27
Chain of Custody	28

Case Narrative

Client: GHD Services Inc.
Project: 11208058, RACER Bay City

Job ID: 240-216491-1

Job ID: 240-216491-1

Eurofins Cleveland

Job Narrative 240-216491-1

Receipt

The samples were received on 12/12/2024 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.1°C.

GC/MS VOA

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

PCBs

Method 608.3_PCB_PREC: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 240-638861.

Method 608.3_PCB_PREC: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: W-11208058-121124-JY-001 (240-216491-1) and W-11208058-121124-JY-002 (240-216491-3).

Method 608.3_PCB_PREC: The following sample was diluted due to the nature of the sample matrix: W-11208058-121124-JY-002 (240-216491-3). Elevated reporting limits (RLs) are provided.

Method 608.3_PCB_PREC: The following sample appears to contain polychlorinated biphenyls (PCBs); however, due to weathering or other environmental processes, the PCBs in the sample do not directly match any of the laboratory's Aroclor standards used for instrument calibration: W-11208058-121124-JY-001 (240-216491-1). The sample has been quantified and reported using the best overall Aroclor/standard pattern match relative to the reference standards.

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

Metals

Method 200.7 - Total Recoverable: Some requested practical quantitation limits (PQLs) on the following samples fall below the laboratory's verified standard quantitation limit: W-11208058-121124-JY-002 (240-216491-3). 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.

General Chemistry

Method 2540D: Insufficient sample volume was provided to produce results within the specifications of SM 2540D which requires at least 2.5 mg dried residue with a sample volume not to exceed 1L. A sample volume less than 1L, that yielded less than 2.5 mg dried residue, was provided for the following sample: W-11208058-121124-JY-002 (240-216491-3).

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

Eurofins Cleveland

Definitions/Glossary

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-216491-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.
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
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: 11208058, RACER Bay City

Job ID: 240-216491-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-216491-1	W-11208058-121124-JY-001	Water	12/11/24 08:30	12/12/24 08:00
240-216491-2	W-11208058-121124-JY-002	Water	12/11/24 08:45	12/12/24 08:00
240-216491-3	W-11208058-121124-JY-002	Water	12/11/24 09:00	12/12/24 08:00

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Detection Summary

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-216491-1

Client Sample ID: W-11208058-121124-JY-001

Lab Sample ID: 240-216491-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aroclor-1221	13		0.98	0.56	ug/L	10		608.3	Total/NA

Client Sample ID: W-11208058-121124-JY-002

Lab Sample ID: 240-216491-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HEM	1.3	J	4.8	0.98	mg/L	1		1664B	Total/NA
pH	7.3	HF	0.1	0.1	SU	1		4500-H+ B-2021	Total/NA

Client Sample ID: W-11208058-121124-JY-002

Lab Sample ID: 240-216491-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Solids	2.4	J	16	1.6	mg/L	1		2540D-2020	Total/NA
Chemical Oxygen Demand	13		10	1.8	mg/L	1		410.4	Total/NA
Ammonia	16		2.0	0.76	mg/L	10		4500-NH3H-202 1	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cleveland

Method Summary

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-216491-1

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	EPA	EET CLE
608.3	Polychlorinated Biphenyls (PCBs) (GC)	EPA	EET CLE
200.7 Rev 4.4	Metals (ICP)	EPA	EET CLE
245.1	Mercury (CVAA)	EPA	EET CLE
1664B	HEM and SGT-HEM	1664B	EET CLE
2540D-2020	Solids, Total Suspended (TSS)	SM	EET CLE
410.4	COD	EPA	EET CLE
4500-H+ B-2021	pH	SM	EET CLE
4500-NH3H-2021	Ammonia	SM	EET CLE
4500-P E-2021	Phosphorus	SM	EET CLE
5210B-2001	BOD, 5-Day	SM	EET CLE
200.7	Preparation, Total Recoverable Metals	EPA	EET CLE
245.1	Preparation, Mercury	EPA	EET CLE
608	Liquid-Liquid Extraction (Separatory Funnel)	EPA	EET CLE

Protocol References:

- 1664B = EPA-821-98-002
- EPA = US Environmental Protection Agency
- SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

- EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Client Sample Results

Client: GHD Services Inc.
 Project/Site: 11208058, RACER Bay City

Job ID: 240-216491-1

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Client Sample ID: W-11208058-121124-JY-002

Date Collected: 12/11/24 08:45

Date Received: 12/12/24 08:00

Lab Sample ID: 240-216491-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	1.0	U	1.0	0.45	ug/L			12/13/24 23:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	81		62 - 137					12/13/24 23:53	1
4-Bromofluorobenzene (Surr)	91		56 - 136					12/13/24 23:53	1
Toluene-d8 (Surr)	96		78 - 122					12/13/24 23:53	1

Client Sample Results

Client: GHD Services Inc.
 Project/Site: 11208058, RACER Bay City

Job ID: 240-216491-1

Method: EPA 608.3 - Polychlorinated Biphenyls (PCBs) (GC)

Client Sample ID: W-11208058-121124-JY-001

Date Collected: 12/11/24 08:30

Date Received: 12/12/24 08:00

Lab Sample ID: 240-216491-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.98	U	0.98	0.55	ug/L		12/16/24 08:45	12/19/24 09:52	10
Aroclor-1221	13		0.98	0.56	ug/L		12/16/24 08:45	12/19/24 09:52	10
Aroclor-1232	0.98	U	0.98	0.73	ug/L		12/16/24 08:45	12/19/24 09:52	10
Aroclor-1242	0.98	U	0.98	0.75	ug/L		12/16/24 08:45	12/19/24 09:52	10
Aroclor-1248	0.98	U	0.98	0.49	ug/L		12/16/24 08:45	12/19/24 09:52	10
Aroclor-1254	0.98	U	0.98	0.39	ug/L		12/16/24 08:45	12/19/24 09:52	10
Aroclor-1260	0.98	U	0.98	0.45	ug/L		12/16/24 08:45	12/19/24 09:52	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>DCB Decachlorobiphenyl</i>	23		10 - 174				12/16/24 08:45	12/19/24 09:52	10
<i>Tetrachloro-m-xylene</i>	48		10 - 149				12/16/24 08:45	12/19/24 09:52	10

Client Sample Results

Client: GHD Services Inc.
 Project/Site: 11208058, RACER Bay City

Job ID: 240-216491-1

Method: EPA 608.3 - Polychlorinated Biphenyls (PCBs) (GC)

Client Sample ID: W-11208058-121124-JY-002

Date Collected: 12/11/24 09:00

Date Received: 12/12/24 08:00

Lab Sample ID: 240-216491-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.49	U	0.49	0.27	ug/L	-	12/16/24 08:45	12/19/24 10:04	5
Aroclor-1221	0.49	U	0.49	0.28	ug/L	-	12/16/24 08:45	12/19/24 10:04	5
Aroclor-1232	0.49	U	0.49	0.36	ug/L	-	12/16/24 08:45	12/19/24 10:04	5
Aroclor-1242	0.49	U	0.49	0.37	ug/L	-	12/16/24 08:45	12/19/24 10:04	5
Aroclor-1248	0.49	U	0.49	0.25	ug/L	-	12/16/24 08:45	12/19/24 10:04	5
Aroclor-1254	0.49	U	0.49	0.20	ug/L	-	12/16/24 08:45	12/19/24 10:04	5
Aroclor-1260	0.49	U	0.49	0.23	ug/L	-	12/16/24 08:45	12/19/24 10:04	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>DCB Decachlorobiphenyl</i>	43	-	10 - 174	12/16/24 08:45	12/19/24 10:04	5
<i>Tetrachloro-m-xylene</i>	40	-	10 - 149	12/16/24 08:45	12/19/24 10:04	5

Client Sample Results

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-216491-1

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Client Sample ID: W-11208058-121124-JY-002

Date Collected: 12/11/24 09:00

Date Received: 12/12/24 08:00

Lab Sample ID: 240-216491-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	5.0	U F2	5.0	1.4	ug/L		12/13/24 14:00	12/16/24 13:22	1
Cadmium	2.0	U	2.0	0.45	ug/L		12/13/24 14:00	12/16/24 13:22	1
Chromium	5.0	U	5.0	0.76	ug/L		12/13/24 14:00	12/16/24 13:22	1
Copper	20	U	20	3.5	ug/L		12/13/24 14:00	12/16/24 13:22	1
Iron	100	U	100	83	ug/L		12/13/24 14:00	12/16/24 13:22	1
Nickel	20	U	20	2.2	ug/L		12/13/24 14:00	12/16/24 13:22	1
Lead	3.0	U	3.0	2.8	ug/L		12/13/24 14:00	12/16/24 13:22	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-216491-1

Method: EPA 245.1 - Mercury (CVAA)

Client Sample ID: W-11208058-121124-JY-002

Date Collected: 12/11/24 09:00

Date Received: 12/12/24 08:00

Lab Sample ID: 240-216491-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.13	ug/L		12/13/24 14:00	12/16/24 14:21	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Client Sample Results

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-216491-1

General Chemistry

Client Sample ID: W-11208058-121124-JY-002

Date Collected: 12/11/24 08:45

Date Received: 12/12/24 08:00

Lab Sample ID: 240-216491-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (1664B)	1.3	J	4.8	0.98	mg/L			12/20/24 09:31	1
pH (SM 4500-H+ B-2021)	7.3	HF	0.1	0.1	SU			12/16/24 09:32	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Client Sample Results

Client: GHD Services Inc.
 Project/Site: 11208058, RACER Bay City

Job ID: 240-216491-1

General Chemistry

Client Sample ID: W-11208058-121124-JY-002

Date Collected: 12/11/24 09:00

Date Received: 12/12/24 08:00

Lab Sample ID: 240-216491-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (SM 2540D-2020)	2.4	J	16	1.6	mg/L			12/17/24 09:36	1
Chemical Oxygen Demand (EPA 410.4)	13		10	1.8	mg/L			12/17/24 12:30	1
Ammonia (SM 4500-NH3H-2021)	16		2.0	0.76	mg/L			12/19/24 11:06	10
Total Phosphorus as P (SM 4500-P E-2021)	0.10	U	0.10	0.076	mg/L			12/26/24 08:10	1
Biochemical Oxygen Demand (SM 5210B-2001)	2.0	U	2.0	2.0	mg/L			12/12/24 12:32	1



QC Association Summary

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-216491-1

GC/MS VOA

Analysis Batch: 638705

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-216491-2	W-11208058-121124-JY-002	Total/NA	Water	624.1	
MB 240-638705/10	Method Blank	Total/NA	Water	624.1	
LCS 240-638705/5	Lab Control Sample	Total/NA	Water	624.1	

GC Semi VOA

Prep Batch: 638861

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-216491-1	W-11208058-121124-JY-001	Total/NA	Water	608	
240-216491-3	W-11208058-121124-JY-002	Total/NA	Water	608	
MB 240-638861/1-A	Method Blank	Total/NA	Water	608	
LCS 240-638861/2-A	Lab Control Sample	Total/NA	Water	608	

Analysis Batch: 639016

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-638861/1-A	Method Blank	Total/NA	Water	608.3	638861
LCS 240-638861/2-A	Lab Control Sample	Total/NA	Water	608.3	638861

Analysis Batch: 639396

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-216491-1	W-11208058-121124-JY-001	Total/NA	Water	608.3	638861
240-216491-3	W-11208058-121124-JY-002	Total/NA	Water	608.3	638861

Metals

Prep Batch: 638679

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-216491-3	W-11208058-121124-JY-002	Total Recoverable	Water	200.7	
MB 240-638679/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 240-638679/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
240-216491-3 MS	W-11208058-121124-JY-002	Total Recoverable	Water	200.7	
240-216491-3 MSD	W-11208058-121124-JY-002	Total Recoverable	Water	200.7	

Prep Batch: 638685

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-216491-3	W-11208058-121124-JY-002	Total/NA	Water	245.1	
MB 240-638685/1-A	Method Blank	Total/NA	Water	245.1	
LCS 240-638685/2-A	Lab Control Sample	Total/NA	Water	245.1	
240-216491-3 MS	W-11208058-121124-JY-002	Total/NA	Water	245.1	
240-216491-3 MSD	W-11208058-121124-JY-002	Total/NA	Water	245.1	

Analysis Batch: 638990

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-216491-3	W-11208058-121124-JY-002	Total/NA	Water	245.1	638685
MB 240-638685/1-A	Method Blank	Total/NA	Water	245.1	638685
LCS 240-638685/2-A	Lab Control Sample	Total/NA	Water	245.1	638685
240-216491-3 MS	W-11208058-121124-JY-002	Total/NA	Water	245.1	638685
240-216491-3 MSD	W-11208058-121124-JY-002	Total/NA	Water	245.1	638685

Analysis Batch: 639007

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-216491-3	W-11208058-121124-JY-002	Total Recoverable	Water	200.7 Rev 4.4	638679

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QC Association Summary

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-216491-1

Metals (Continued)

Analysis Batch: 639007 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-638679/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	638679
LCS 240-638679/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	638679
240-216491-3 MS	W-11208058-121124-JY-002	Total Recoverable	Water	200.7 Rev 4.4	638679
240-216491-3 MSD	W-11208058-121124-JY-002	Total Recoverable	Water	200.7 Rev 4.4	638679

General Chemistry

Analysis Batch: 638564

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-216491-3	W-11208058-121124-JY-002	Total/NA	Water	5210B-2001	
SCB 240-638564/2	Method Blank	Total/NA	Water	5210B-2001	
USB 240-638564/1	Method Blank	Total/NA	Water	5210B-2001	
LCS 240-638564/3	Lab Control Sample	Total/NA	Water	5210B-2001	
240-216491-3 DU	W-11208058-121124-JY-002	Total/NA	Water	5210B-2001	

Analysis Batch: 638881

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-216491-2	W-11208058-121124-JY-002	Total/NA	Water	4500-H+ B-2021	
LCS 240-638881/26	Lab Control Sample	Total/NA	Water	4500-H+ B-2021	

Analysis Batch: 639070

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-216491-3	W-11208058-121124-JY-002	Total/NA	Water	2540D-2020	
MB 240-639070/1	Method Blank	Total/NA	Water	2540D-2020	
LCS 240-639070/2	Lab Control Sample	Total/NA	Water	2540D-2020	

Analysis Batch: 639131

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-216491-3	W-11208058-121124-JY-002	Total/NA	Water	410.4	
MB 240-639131/3	Method Blank	Total/NA	Water	410.4	
LCS 240-639131/4	Lab Control Sample	Total/NA	Water	410.4	

Analysis Batch: 639484

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-216491-3	W-11208058-121124-JY-002	Total/NA	Water	4500-NH3H-202 1	
MB 240-639484/14	Method Blank	Total/NA	Water	4500-NH3H-202 1	
LCS 240-639484/15	Lab Control Sample	Total/NA	Water	4500-NH3H-202 1	

Analysis Batch: 639592

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-216491-2	W-11208058-121124-JY-002	Total/NA	Water	1664B	
MB 240-639592/1	Method Blank	Total/NA	Water	1664B	
LCS 240-639592/2	Lab Control Sample	Total/NA	Water	1664B	
240-216491-2 MS	W-11208058-121124-JY-002	Total/NA	Water	1664B	

Analysis Batch: 639891

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-216491-3	W-11208058-121124-JY-002	Total/NA	Water	4500-P E-2021	
MB 240-639891/3	Method Blank	Total/NA	Water	4500-P E-2021	

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QC Association Summary

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-216491-1

General Chemistry (Continued)

Analysis Batch: 639891 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 240-639891/4	Lab Control Sample	Total/NA	Water	4500-P E-2021	

- 1
- 2
- 3
- 4
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- 13
- 14

QC Sample Results

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-216491-1

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-638705/10
Matrix: Water
Analysis Batch: 638705

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	1.0	U	1.0	0.45	ug/L			12/13/24 15:35	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		62 - 137					12/13/24 15:35	1
4-Bromofluorobenzene (Surr)	106		56 - 136					12/13/24 15:35	1
Toluene-d8 (Surr)	109		78 - 122					12/13/24 15:35	1

Lab Sample ID: LCS 240-638705/5
Matrix: Water
Analysis Batch: 638705

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Vinyl chloride	20.0	17.6		ug/L		88	5 - 195
Surrogate	%Recovery	LCS Qualifier	Limits				
1,2-Dichloroethane-d4 (Surr)	87		62 - 137				
4-Bromofluorobenzene (Surr)	92		56 - 136				
Toluene-d8 (Surr)	97		78 - 122				

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC)

Lab Sample ID: MB 240-638861/1-A
Matrix: Water
Analysis Batch: 639016

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 638861

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.10	U	0.10	0.056	ug/L		12/16/24 08:44	12/17/24 09:03	1
Aroclor-1221	0.10	U	0.10	0.057	ug/L		12/16/24 08:44	12/17/24 09:03	1
Aroclor-1232	0.10	U	0.10	0.074	ug/L		12/16/24 08:44	12/17/24 09:03	1
Aroclor-1242	0.10	U	0.10	0.076	ug/L		12/16/24 08:44	12/17/24 09:03	1
Aroclor-1248	0.10	U	0.10	0.050	ug/L		12/16/24 08:44	12/17/24 09:03	1
Aroclor-1254	0.10	U	0.10	0.040	ug/L		12/16/24 08:44	12/17/24 09:03	1
Aroclor-1260	0.10	U	0.10	0.046	ug/L		12/16/24 08:44	12/17/24 09:03	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	80		10 - 174				12/16/24 08:44	12/17/24 09:03	1
Tetrachloro-m-xylene	63		10 - 149				12/16/24 08:44	12/17/24 09:03	1

Lab Sample ID: LCS 240-638861/2-A
Matrix: Water
Analysis Batch: 639016

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 638861

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aroclor-1016	2.50	1.29		ug/L		52	50 - 140
Aroclor-1260	2.50	2.07		ug/L		83	8 - 140

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QC Sample Results

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-216491-1

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC) (Continued)

Lab Sample ID: LCS 240-638861/2-A
Matrix: Water
Analysis Batch: 639016

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 638861

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
DCB Decachlorobiphenyl	60		10 - 174
Tetrachloro-m-xylene	38		10 - 149

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 240-638679/1-A
Matrix: Water
Analysis Batch: 639007

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 638679

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil	Fac
	Result	Qualifier								
Silver	5.0	U	5.0	1.4	ug/L		12/13/24 14:00	12/16/24 13:05		1
Cadmium	2.0	U	2.0	0.45	ug/L		12/13/24 14:00	12/16/24 13:05		1
Chromium	5.0	U	5.0	0.76	ug/L		12/13/24 14:00	12/16/24 13:05		1
Copper	20	U	20	3.5	ug/L		12/13/24 14:00	12/16/24 13:05		1
Iron	100	U	100	83	ug/L		12/13/24 14:00	12/16/24 13:05		1
Nickel	20	U	20	2.2	ug/L		12/13/24 14:00	12/16/24 13:05		1
Lead	3.0	U	3.0	2.8	ug/L		12/13/24 14:00	12/16/24 13:05		1

Lab Sample ID: LCS 240-638679/2-A
Matrix: Water
Analysis Batch: 639007

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 638679

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec	Limits
		Result	Qualifier					
Silver	100	100		ug/L		100		85 - 115
Cadmium	1000	973		ug/L		97		85 - 115
Chromium	1000	972		ug/L		97		85 - 115
Copper	1000	961		ug/L		96		85 - 115
Iron	10000	9470		ug/L		95		85 - 115
Nickel	1000	978		ug/L		98		85 - 115
Lead	1000	932		ug/L		93		85 - 115

Lab Sample ID: 240-216491-3 MS
Matrix: Water
Analysis Batch: 639007

Client Sample ID: W-11208058-121124-JY-002
Prep Type: Total Recoverable
Prep Batch: 638679

Analyte	Sample Sample		Spike Added	MS MS		Unit	D	%Rec	%Rec	Limits
	Result	Qualifier		Result	Qualifier					
Silver	5.0	U F2	100	103		ug/L		103		70 - 130
Cadmium	2.0	U	1000	988		ug/L		99		70 - 130
Chromium	5.0	U	1000	981		ug/L		98		70 - 130
Copper	20	U	1000	976		ug/L		98		70 - 130
Iron	100	U	10000	9630		ug/L		96		70 - 130
Nickel	20	U	1000	991		ug/L		99		70 - 130
Lead	3.0	U	1000	932		ug/L		93		70 - 130

QC Sample Results

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-216491-1

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: 240-216491-3 MSD
Matrix: Water
Analysis Batch: 639007

Client Sample ID: W-11208058-121124-JY-002
Prep Type: Total Recoverable
Prep Batch: 638679

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD	
Silver	5.0	U F2	100	82.4	F2	ug/L		82	70 - 130	22	20
Cadmium	2.0	U	1000	993		ug/L		99	70 - 130	1	20
Chromium	5.0	U	1000	982		ug/L		98	70 - 130	0	20
Copper	20	U	1000	975		ug/L		98	70 - 130	0	20
Iron	100	U	10000	9560		ug/L		96	70 - 130	1	20
Nickel	20	U	1000	990		ug/L		99	70 - 130	0	20
Lead	3.0	U	1000	937		ug/L		94	70 - 130	1	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 240-638685/1-A
Matrix: Water
Analysis Batch: 638990

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 638685

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	0.20	U	0.20	0.13	ug/L		12/13/24 14:00	12/16/24 14:14	1

Lab Sample ID: LCS 240-638685/2-A
Matrix: Water
Analysis Batch: 638990

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 638685

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec	Limits
		Result	Qualifier				Limits	
Mercury	5.00	4.65		ug/L		93	85 - 115	

Lab Sample ID: 240-216491-3 MS
Matrix: Water
Analysis Batch: 638990

Client Sample ID: W-11208058-121124-JY-002
Prep Type: Total/NA
Prep Batch: 638685

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD	
Mercury	0.20	U	1.00	0.999		ug/L		100	70 - 130		

Lab Sample ID: 240-216491-3 MSD
Matrix: Water
Analysis Batch: 638990

Client Sample ID: W-11208058-121124-JY-002
Prep Type: Total/NA
Prep Batch: 638685

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD	
Mercury	0.20	U	1.00	0.992		ug/L		99	70 - 130	1	20

Method: 1664B - HEM and SGT-HEM

Lab Sample ID: MB 240-639592/1
Matrix: Water
Analysis Batch: 639592

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
HEM	5.0	U	5.0	1.0	mg/L			12/20/24 09:31	1

Eurofins Cleveland

QC Sample Results

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-216491-1

Method: 1664B - HEM and SGT-HEM (Continued)

Lab Sample ID: LCS 240-639592/2
Matrix: Water
Analysis Batch: 639592

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
HEM	40.0	32.3		mg/L		81	78 - 114

Lab Sample ID: 240-216491-2 MS
Matrix: Water
Analysis Batch: 639592

Client Sample ID: W-11208058-121124-JY-002
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
HEM	1.3	J	41.1	34.5		mg/L		81	78 - 114

Method: 2540D-2020 - Solids, Total Suspended (TSS)

Lab Sample ID: MB 240-639070/1
Matrix: Water
Analysis Batch: 639070

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	4.0	U	4.0	0.40	mg/L			12/17/24 09:36	1

Lab Sample ID: LCS 240-639070/2
Matrix: Water
Analysis Batch: 639070

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	72.7	72.0		mg/L		99	64 - 120

Method: 410.4 - COD

Lab Sample ID: MB 240-639131/3
Matrix: Water
Analysis Batch: 639131

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	10	U	10	1.8	mg/L			12/17/24 12:30	1

Lab Sample ID: LCS 240-639131/4
Matrix: Water
Analysis Batch: 639131

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	27.0	24.4		mg/L		90	90 - 110

Method: 4500-H+ B-2021 - pH

Lab Sample ID: LCS 240-638881/26
Matrix: Water
Analysis Batch: 638881

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
pH	9.14	9.1		SU		99	97 - 103

Eurofins Cleveland

QC Sample Results

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-216491-1

Method: 4500-NH3H-2021 - Ammonia

Lab Sample ID: MB 240-639484/14
Matrix: Water
Analysis Batch: 639484

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	0.20	U	0.20	0.076	mg/L			12/19/24 10:06	1

Lab Sample ID: LCS 240-639484/15
Matrix: Water
Analysis Batch: 639484

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia	8.50	8.14		mg/L		96	90 - 110

Method: 4500-P E-2021 - Phosphorus

Lab Sample ID: MB 240-639891/3
Matrix: Water
Analysis Batch: 639891

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Phosphorus as P	0.10	U	0.10	0.076	mg/L			12/26/24 08:10	1

Lab Sample ID: LCS 240-639891/4
Matrix: Water
Analysis Batch: 639891

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Phosphorus as P	0.448	0.394		mg/L		88	77 - 120

Method: 5210B-2001 - BOD, 5-Day

Lab Sample ID: SCB 240-638564/2
Matrix: Water
Analysis Batch: 638564

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	SCB Result	SCB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	2.0	U	2.0	2.0	mg/L			12/12/24 12:06	1

Lab Sample ID: USB 240-638564/1
Matrix: Water
Analysis Batch: 638564

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	USB Result	USB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	2.0	U	2.0	2.0	mg/L			12/12/24 12:04	1

Lab Sample ID: LCS 240-638564/3
Matrix: Water
Analysis Batch: 638564

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Biochemical Oxygen Demand	198	187		mg/L		95	85 - 115

Eurofins Cleveland

QC Sample Results

Client: GHD Services Inc.
 Project/Site: 11208058, RACER Bay City

Job ID: 240-216491-1

Method: 5210B-2001 - BOD, 5-Day (Continued)

Lab Sample ID: 240-216491-3 DU
 Matrix: Water
 Analysis Batch: 638564

Client Sample ID: W-11208058-121124-JY-002
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Biochemical Oxygen Demand	2.0	U	2.0	U	mg/L		NC	15

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Surrogate Summary

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-216491-1

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCA (62-137)	BFB (56-136)	TOL (78-122)
240-216491-2	W-11208058-121124-JY-002	81	91	96
LCS 240-638705/5	Lab Control Sample	87	92	97
MB 240-638705/10	Method Blank	97	106	109

Surrogate Legend

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

BFB = 4-Bromofluorobenzene (Surr)

TOL = Toluene-d8 (Surr)

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC)

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCBP2 (10-174)	TCX2 (10-149)
240-216491-1	W-11208058-121124-JY-001	23	48
240-216491-3	W-11208058-121124-JY-002	43	40

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC)

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCBP1 (10-174)	TCX1 (10-149)
LCS 240-638861/2-A	Lab Control Sample	60	38
MB 240-638861/1-A	Method Blank	80	63

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Lab Chronicle

Client: GHD Services Inc.
 Project/Site: 11208058, RACER Bay City

Job ID: 240-216491-1

Client Sample ID: W-11208058-121124-JY-001

Lab Sample ID: 240-216491-1

Date Collected: 12/11/24 08:30

Matrix: Water

Date Received: 12/12/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	608			638861	CR2J	EET CLE	12/16/24 08:45
Total/NA	Analysis	608.3		10	639396	LSH	EET CLE	12/19/24 09:52

Client Sample ID: W-11208058-121124-JY-002

Lab Sample ID: 240-216491-2

Date Collected: 12/11/24 08:45

Matrix: Water

Date Received: 12/12/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	638705	HMB	EET CLE	12/13/24 23:53
Total/NA	Analysis	1664B		1	639592	AAP	EET CLE	12/20/24 09:31
Total/NA	Analysis	4500-H+ B-2021		1	638881	SC3B	EET CLE	12/16/24 09:32

Client Sample ID: W-11208058-121124-JY-002

Lab Sample ID: 240-216491-3

Date Collected: 12/11/24 09:00

Matrix: Water

Date Received: 12/12/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	608			638861	CR2J	EET CLE	12/16/24 08:45
Total/NA	Analysis	608.3		5	639396	LSH	EET CLE	12/19/24 10:04
Total Recoverable	Prep	200.7			638679	GK	EET CLE	12/13/24 14:00
Total Recoverable	Analysis	200.7 Rev 4.4		1	639007	KLC	EET CLE	12/16/24 13:22
Total/NA	Prep	245.1			638685	GK	EET CLE	12/13/24 14:00
Total/NA	Analysis	245.1		1	638990	GK	EET CLE	12/16/24 14:21
Total/NA	Analysis	2540D-2020		1	639070	TAV2	EET CLE	12/17/24 09:36
Total/NA	Analysis	410.4		1	639131	AAP	EET CLE	12/17/24 12:30
Total/NA	Analysis	4500-NH3H-2021		10	639484	AJ	EET CLE	12/19/24 11:06
Total/NA	Analysis	4500-P E-2021		1	639891	BLW	EET CLE	12/26/24 08:10
Total/NA	Analysis	5210B-2001		1	638564	C5SV	EET CLE	12/12/24 12:32

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Accreditation/Certification Summary

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-216491-1

Laboratory: Eurofins Cleveland

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	02-28-25
Connecticut	State	PH-0806	12-31-26
Georgia	State	4062	02-27-25
Illinois	NELAP	200004	08-31-25
Iowa	State	421	06-01-25
Kentucky (UST)	State	112225	02-27-25
Kentucky (WW)	State	KY98016	12-30-24
Minnesota	NELAP	039-999-348	12-31-25
New Hampshire	NELAP	225024	09-30-25
New Jersey	NELAP	OH001	07-03-25
New York	NELAP	10975	04-02-25
Ohio VAP	State	ORELAP 4062	02-27-25
Oregon	NELAP	4062	02-27-25
Pennsylvania	NELAP	68-00340	08-31-25
Texas	NELAP	T104704517-22-19	08-31-25
USDA	US Federal Programs	P330-18-00281	01-05-27
Virginia	NELAP	460175	09-14-25
West Virginia DEP	State	210	12-31-24
Wisconsin	State	399167560	08-31-25

Eurofins - Cleveland Sample Receipt Form/Narrative Login # _____
 Barberton Facility Cooler unpacked by JMOROSCO

Client GHF Site Name _____
 Cooler Received on 12/12/24 Opened on 12/12/24

FedEx: 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other _____
 Receipt After-hours Drop-off Date/Time _____ Storage Location _____

Eurofins Cooler # EC Foam Box Client Cooler Box Other _____
 Packing material used. Bubble Wrap Foam Plastic Bag None Other _____
 COOLANT Wet Ice Blue Ice Dry Ice Water None _____
 1 Cooler temperature upon receipt See Multiple Cooler Form

IR GUN # 17 (CF TD | °C) Observed Cooler Temp. 10 °C Corrected Cooler Temp 11 °C
 2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 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 NA
 -Were tamper/custody seals intact and uncompromised? Yes No NA

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

3 Shippers' packing slip attached to the cooler(s)? Yes No
 4 Did custody papers accompany the sample(s)? Yes No
 5 Were the custody papers relinquished & signed in the appropriate place? Yes No
 6 Was/were the person(s) who collected the samples clearly identified on the COC? Yes No
 7 Did all bottles arrive in good condition (Unbroken)? Yes No
 8. Could all bottle labels (ID/Date/Time) be reconciled with the COC? Yes No
 9 For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)? Yes No
 10 Were correct bottle(s) used for the test(s) indicated? Yes No
 11 Sufficient quantity received to perform indicated analyses? Yes No
 12. Are these work share samples and all listed on the COC? Yes No
 If yes, Questions 13-17 have been checked at the originating laboratory
 13 Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC450408
 14 Were VOAs on the COC? Yes No NA
 15 Were air bubbles >6 mm in any VOA vials? Larger than this Yes No NA
 16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____ Yes No
 17 Was a LL Hg or Me Hg trip blank present? _____ Yes No

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

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES additional next page Samples processed by: _____

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

20. SAMPLE PRESERVATION
 Sample(s) _____ were further preserved in the laboratory
 Time preserved. _____ Preservative(s) added/Lot number(s) _____
 VOA Sample Preservation - Date/Time VOAs Frozen _____

Temperature readings _____

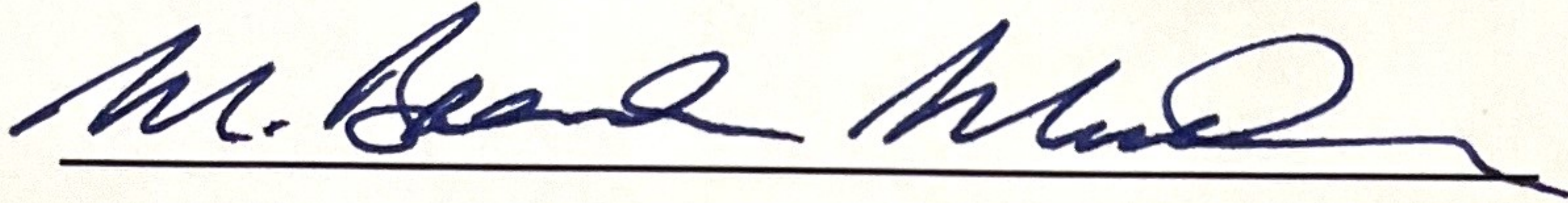
Client Sample ID	Lab ID	Container Type	Container pH	Preservation Temp	Preservation Added	Preservation Lot Number
W-11208058-121124-JY-001	240-216491-A-1	Amber Glass 1 liter - unpreserved	_____	_____	_____	_____
W-11208058-121124-JY-001	240-216491-B-1	Amber Glass 1 liter - unpreserved	_____	_____	_____	_____
W-11208058-121124-JY-002	240-216491-A-2	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
W-11208058-121124-JY-002	240-216491-B-2	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
W-11208058-121124-JY-002	240-216491-C-2	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
W-11208058-121124-JY-002	240-216491-D-2	Plastic 125mL - unpreserved	_____	_____	_____	_____
W-11208058-121124-JY-002	240-216491-E-2	Amber Glass 1 liter - Sulfuric Acid	_____	_____	_____	_____
W-11208058-121124-JY-002	240-216491-F-2	Amber Glass 1 liter - Sulfuric Acid	_____	_____	_____	_____
W-11208058-121124-JY-002	240-216491-A-3	Plastic 250ml - with Sulfuric Acid	<2	_____	_____	_____
W-11208058-121124-JY-002	240-216491-B-3	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
W-11208058-121124-JY-002	240-216491-C-3	Plastic 1 liter - unpreserved	_____	_____	_____	_____
W-11208058-121124-JY-002	240-216491-D-3	Plastic 1 liter - unpreserved	_____	_____	_____	_____
W-11208058-121124-JY-002	240-216491-E-3	Amber Glass 1 liter - unpreserved	_____	_____	_____	_____
W-11208058-121124-JY-002	240-216491-F-3	Amber Glass 1 liter - unpreserved	_____	_____	_____	_____

Attachment 2

Certification Statement

Certification Statement

"I, M. Brendan Mullen, certify under penalty of law that this document (January 31, 2024, GHD Semi-Annual Compliance Report (July 1 to December 31, 2024)), and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."



RACER Trust, Cleanup Manager

1/29/2025

(Date)

Attachment 3

PCB Wipe Sample Results

ANALYTICAL REPORT

PREPARED FOR

Attn: Ms. Ruth Mickle
GHD Services Inc.
26850 Haggerty Rd.
Farmington Hills, Michigan 48331

Generated 7/25/2024 10:24:49 AM

JOB DESCRIPTION

11208058-E04-001Y24-001, RACER Bay City

JOB NUMBER

240-208161-1

Eurofins Cleveland

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

Authorization



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7/25/2024 10:24:49 AM

Authorized for release by
Denise Heckler, Project Manager II
Denise.Heckler@et.eurofinsus.com
(330)966-9477



Table of Contents

Cover Page	1
Table of Contents	3
Case Narrative	4
Definitions/Glossary	5
Sample Summary	6
Detection Summary	7
Method Summary	8
Client Sample Results	9
QC Association Summary	14
QC Sample Results	15
Surrogate Summary	16
Lab Chronicle	17
Certification Summary	18
Chain of Custody	19

Case Narrative

Client: GHD Services Inc.
Project: 11208058-E04-001Y24-001, RACER Bay City

Job ID: 240-208161-1

Job ID: 240-208161-1

Eurofins Cleveland

Job Narrative 240-208161-1

Receipt

The samples were received on 7/23/2024 9:30 AM. Unless otherwise noted below, the samples arrived in good condition. The temperature of the cooler at receipt was 11.3° C.

GC Semi VOA

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

Organic Prep

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

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Definitions/Glossary

Client: GHD Services Inc.
Project/Site: 11208058-E04-001Y24-001, RACER Bay City

Job ID: 240-208161-1

Qualifiers

GC Semi 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.

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: 11208058-E04-001Y24-001, RACER Bay City

Job ID: 240-208161-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-208161-1	W-11208058-071724-JY-001	Wipe	07/17/24 15:40	07/23/24 09:30
240-208161-2	W-11208058-071724-JY-002	Wipe	07/17/24 15:45	07/23/24 09:30
240-208161-3	W-11208058-071724-JY-003	Wipe	07/17/24 15:50	07/23/24 09:30
240-208161-4	W-11208058-071724-JY-004	Wipe	07/17/24 15:55	07/23/24 09:30
240-208161-5	W-11208058-071724-JY-005	Wipe	07/17/24 16:00	07/23/24 09:30

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Detection Summary

Client: GHD Services Inc.
Project/Site: 11208058-E04-001Y24-001, RACER Bay City

Job ID: 240-208161-1

Client Sample ID: W-11208058-071724-JY-001

Lab Sample ID: 240-208161-1

No Detections.

Client Sample ID: W-11208058-071724-JY-002

Lab Sample ID: 240-208161-2

No Detections.

Client Sample ID: W-11208058-071724-JY-003

Lab Sample ID: 240-208161-3

No Detections.

Client Sample ID: W-11208058-071724-JY-004

Lab Sample ID: 240-208161-4

No Detections.

Client Sample ID: W-11208058-071724-JY-005

Lab Sample ID: 240-208161-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aroclor-1242	0.42	J	0.50	0.19	ug/Wipe	1		8082A	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cleveland

Method Summary

Client: GHD Services Inc.
Project/Site: 11208058-E04-001Y24-001, RACER Bay City

Job ID: 240-208161-1

Method	Method Description	Protocol	Laboratory
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET CLE
3546	Microwave Extraction	SW846	EET CLE

Protocol References:

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

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396



Client Sample Results

Client: GHD Services Inc.
 Project/Site: 11208058-E04-001Y24-001, RACER Bay City

Job ID: 240-208161-1

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: W-11208058-071724-JY-001

Lab Sample ID: 240-208161-1

Date Collected: 07/17/24 15:40

Matrix: Wipe

Date Received: 07/23/24 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.50	U	0.50	0.25	ug/Wipe		07/24/24 08:35	07/24/24 23:58	1
Aroclor-1221	0.50	U	0.50	0.30	ug/Wipe		07/24/24 08:35	07/24/24 23:58	1
Aroclor-1232	0.50	U	0.50	0.21	ug/Wipe		07/24/24 08:35	07/24/24 23:58	1
Aroclor-1242	0.50	U	0.50	0.19	ug/Wipe		07/24/24 08:35	07/24/24 23:58	1
Aroclor-1248	0.50	U	0.50	0.17	ug/Wipe		07/24/24 08:35	07/24/24 23:58	1
Aroclor-1254	0.50	U	0.50	0.21	ug/Wipe		07/24/24 08:35	07/24/24 23:58	1
Aroclor-1260	0.50	U	0.50	0.21	ug/Wipe		07/24/24 08:35	07/24/24 23:58	1
Aroclor-1262	0.50	U	0.50	0.22	ug/Wipe		07/24/24 08:35	07/24/24 23:58	1
Aroclor-1268	0.50	U	0.50	0.16	ug/Wipe		07/24/24 08:35	07/24/24 23:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	84		10 - 149	07/24/24 08:35	07/24/24 23:58	1
DCB Decachlorobiphenyl	84		10 - 174	07/24/24 08:35	07/24/24 23:58	1

Client Sample Results

Client: GHD Services Inc.
 Project/Site: 11208058-E04-001Y24-001, RACER Bay City

Job ID: 240-208161-1

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: W-11208058-071724-JY-002

Lab Sample ID: 240-208161-2

Date Collected: 07/17/24 15:45

Matrix: Wipe

Date Received: 07/23/24 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.50	U	0.50	0.25	ug/Wipe		07/24/24 08:35	07/25/24 00:13	1
Aroclor-1221	0.50	U	0.50	0.30	ug/Wipe		07/24/24 08:35	07/25/24 00:13	1
Aroclor-1232	0.50	U	0.50	0.21	ug/Wipe		07/24/24 08:35	07/25/24 00:13	1
Aroclor-1242	0.50	U	0.50	0.19	ug/Wipe		07/24/24 08:35	07/25/24 00:13	1
Aroclor-1248	0.50	U	0.50	0.17	ug/Wipe		07/24/24 08:35	07/25/24 00:13	1
Aroclor-1254	0.50	U	0.50	0.21	ug/Wipe		07/24/24 08:35	07/25/24 00:13	1
Aroclor-1260	0.50	U	0.50	0.21	ug/Wipe		07/24/24 08:35	07/25/24 00:13	1
Aroclor-1262	0.50	U	0.50	0.22	ug/Wipe		07/24/24 08:35	07/25/24 00:13	1
Aroclor-1268	0.50	U	0.50	0.16	ug/Wipe		07/24/24 08:35	07/25/24 00:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	87		10 - 149	07/24/24 08:35	07/25/24 00:13	1
DCB Decachlorobiphenyl	86		10 - 174	07/24/24 08:35	07/25/24 00:13	1

Client Sample Results

Client: GHD Services Inc.
 Project/Site: 11208058-E04-001Y24-001, RACER Bay City

Job ID: 240-208161-1

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: W-11208058-071724-JY-003

Lab Sample ID: 240-208161-3

Date Collected: 07/17/24 15:50

Matrix: Wipe

Date Received: 07/23/24 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.50	U	0.50	0.25	ug/Wipe		07/24/24 08:35	07/25/24 00:29	1
Aroclor-1221	0.50	U	0.50	0.30	ug/Wipe		07/24/24 08:35	07/25/24 00:29	1
Aroclor-1232	0.50	U	0.50	0.21	ug/Wipe		07/24/24 08:35	07/25/24 00:29	1
Aroclor-1242	0.50	U	0.50	0.19	ug/Wipe		07/24/24 08:35	07/25/24 00:29	1
Aroclor-1248	0.50	U	0.50	0.17	ug/Wipe		07/24/24 08:35	07/25/24 00:29	1
Aroclor-1254	0.50	U	0.50	0.21	ug/Wipe		07/24/24 08:35	07/25/24 00:29	1
Aroclor-1260	0.50	U	0.50	0.21	ug/Wipe		07/24/24 08:35	07/25/24 00:29	1
Aroclor-1262	0.50	U	0.50	0.22	ug/Wipe		07/24/24 08:35	07/25/24 00:29	1
Aroclor-1268	0.50	U	0.50	0.16	ug/Wipe		07/24/24 08:35	07/25/24 00:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	83		10 - 149	07/24/24 08:35	07/25/24 00:29	1
DCB Decachlorobiphenyl	83		10 - 174	07/24/24 08:35	07/25/24 00:29	1

Client Sample Results

Client: GHD Services Inc.
 Project/Site: 11208058-E04-001Y24-001, RACER Bay City

Job ID: 240-208161-1

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: W-11208058-071724-JY-004

Lab Sample ID: 240-208161-4

Date Collected: 07/17/24 15:55

Matrix: Wipe

Date Received: 07/23/24 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.50	U	0.50	0.25	ug/Wipe		07/24/24 08:35	07/25/24 00:45	1
Aroclor-1221	0.50	U	0.50	0.30	ug/Wipe		07/24/24 08:35	07/25/24 00:45	1
Aroclor-1232	0.50	U	0.50	0.21	ug/Wipe		07/24/24 08:35	07/25/24 00:45	1
Aroclor-1242	0.50	U	0.50	0.19	ug/Wipe		07/24/24 08:35	07/25/24 00:45	1
Aroclor-1248	0.50	U	0.50	0.17	ug/Wipe		07/24/24 08:35	07/25/24 00:45	1
Aroclor-1254	0.50	U	0.50	0.21	ug/Wipe		07/24/24 08:35	07/25/24 00:45	1
Aroclor-1260	0.50	U	0.50	0.21	ug/Wipe		07/24/24 08:35	07/25/24 00:45	1
Aroclor-1262	0.50	U	0.50	0.22	ug/Wipe		07/24/24 08:35	07/25/24 00:45	1
Aroclor-1268	0.50	U	0.50	0.16	ug/Wipe		07/24/24 08:35	07/25/24 00:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	71		10 - 149				07/24/24 08:35	07/25/24 00:45	1
DCB Decachlorobiphenyl	70		10 - 174				07/24/24 08:35	07/25/24 00:45	1

Client Sample Results

Client: GHD Services Inc.
 Project/Site: 11208058-E04-001Y24-001, RACER Bay City

Job ID: 240-208161-1

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: W-11208058-071724-JY-005

Lab Sample ID: 240-208161-5

Date Collected: 07/17/24 16:00

Matrix: Wipe

Date Received: 07/23/24 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.50	U	0.50	0.25	ug/Wipe		07/24/24 08:35	07/25/24 01:01	1
Aroclor-1221	0.50	U	0.50	0.30	ug/Wipe		07/24/24 08:35	07/25/24 01:01	1
Aroclor-1232	0.50	U	0.50	0.21	ug/Wipe		07/24/24 08:35	07/25/24 01:01	1
Aroclor-1242	0.42	J	0.50	0.19	ug/Wipe		07/24/24 08:35	07/25/24 01:01	1
Aroclor-1248	0.50	U	0.50	0.17	ug/Wipe		07/24/24 08:35	07/25/24 01:01	1
Aroclor-1254	0.50	U	0.50	0.21	ug/Wipe		07/24/24 08:35	07/25/24 01:01	1
Aroclor-1260	0.50	U	0.50	0.21	ug/Wipe		07/24/24 08:35	07/25/24 01:01	1
Aroclor-1262	0.50	U	0.50	0.22	ug/Wipe		07/24/24 08:35	07/25/24 01:01	1
Aroclor-1268	0.50	U	0.50	0.16	ug/Wipe		07/24/24 08:35	07/25/24 01:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>Tetrachloro-m-xylene</i>	84		10 - 149				07/24/24 08:35	07/25/24 01:01	1
<i>DCB Decachlorobiphenyl</i>	79		10 - 174				07/24/24 08:35	07/25/24 01:01	1

QC Association Summary

Client: GHD Services Inc.
Project/Site: 11208058-E04-001Y24-001, RACER Bay City

Job ID: 240-208161-1

GC Semi VOA

Prep Batch: 620969

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-208161-1	W-11208058-071724-JY-001	Total/NA	Wipe	3546	
240-208161-2	W-11208058-071724-JY-002	Total/NA	Wipe	3546	
240-208161-3	W-11208058-071724-JY-003	Total/NA	Wipe	3546	
240-208161-4	W-11208058-071724-JY-004	Total/NA	Wipe	3546	
240-208161-5	W-11208058-071724-JY-005	Total/NA	Wipe	3546	
MB 240-620969/1-A	Method Blank	Total/NA	Wipe	3546	
LCS 240-620969/2-A	Lab Control Sample	Total/NA	Wipe	3546	

Analysis Batch: 621053

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-208161-1	W-11208058-071724-JY-001	Total/NA	Wipe	8082A	620969
240-208161-2	W-11208058-071724-JY-002	Total/NA	Wipe	8082A	620969
240-208161-3	W-11208058-071724-JY-003	Total/NA	Wipe	8082A	620969
240-208161-4	W-11208058-071724-JY-004	Total/NA	Wipe	8082A	620969
240-208161-5	W-11208058-071724-JY-005	Total/NA	Wipe	8082A	620969
MB 240-620969/1-A	Method Blank	Total/NA	Wipe	8082A	620969
LCS 240-620969/2-A	Lab Control Sample	Total/NA	Wipe	8082A	620969

QC Sample Results

Client: GHD Services Inc.
 Project/Site: 11208058-E04-001Y24-001, RACER Bay City

Job ID: 240-208161-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 240-620969/1-A
Matrix: Wipe
Analysis Batch: 621053

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 620969

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Aroclor-1016	0.50	U	0.50	0.25	ug/Wipe		07/24/24 08:35	07/24/24 23:25	1
Aroclor-1221	0.50	U	0.50	0.30	ug/Wipe		07/24/24 08:35	07/24/24 23:25	1
Aroclor-1232	0.50	U	0.50	0.21	ug/Wipe		07/24/24 08:35	07/24/24 23:25	1
Aroclor-1242	0.50	U	0.50	0.19	ug/Wipe		07/24/24 08:35	07/24/24 23:25	1
Aroclor-1248	0.50	U	0.50	0.17	ug/Wipe		07/24/24 08:35	07/24/24 23:25	1
Aroclor-1254	0.50	U	0.50	0.21	ug/Wipe		07/24/24 08:35	07/24/24 23:25	1
Aroclor-1260	0.50	U	0.50	0.21	ug/Wipe		07/24/24 08:35	07/24/24 23:25	1
Aroclor-1262	0.50	U	0.50	0.22	ug/Wipe		07/24/24 08:35	07/24/24 23:25	1
Aroclor-1268	0.50	U	0.50	0.16	ug/Wipe		07/24/24 08:35	07/24/24 23:25	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Tetrachloro-m-xylene	86		10 - 149	07/24/24 08:35	07/24/24 23:25	1
DCB Decachlorobiphenyl	82		10 - 174	07/24/24 08:35	07/24/24 23:25	1

Lab Sample ID: LCS 240-620969/2-A
Matrix: Wipe
Analysis Batch: 621053

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 620969

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Aroclor-1016	10.0	6.12		ug/Wipe		61	28 - 140
Aroclor-1260	10.0	6.98		ug/Wipe		70	39 - 153

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	65		10 - 149
DCB Decachlorobiphenyl	86		10 - 174

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 11208058-E04-001Y24-001, RACER Bay City

Job ID: 240-208161-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Wipe

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCX1	DCBP1
		(10-149)	(10-174)
240-208161-1	W-11208058-071724-JY-001	84	84
240-208161-2	W-11208058-071724-JY-002	87	86
240-208161-3	W-11208058-071724-JY-003	83	83
240-208161-4	W-11208058-071724-JY-004	71	70
240-208161-5	W-11208058-071724-JY-005	84	79
LCS 240-620969/2-A	Lab Control Sample	65	86
MB 240-620969/1-A	Method Blank	86	82

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCBP = DCB Decachlorobiphenyl

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 11208058-E04-001Y24-001, RACER Bay City

Job ID: 240-208161-1

Client Sample ID: W-11208058-071724-JY-001

Lab Sample ID: 240-208161-1

Date Collected: 07/17/24 15:40

Matrix: Wipe

Date Received: 07/23/24 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3546			620969	NPR	EET CLE	07/24/24 08:35
Total/NA	Analysis	8082A		1	621053	LSH	EET CLE	07/24/24 23:58

Client Sample ID: W-11208058-071724-JY-002

Lab Sample ID: 240-208161-2

Date Collected: 07/17/24 15:45

Matrix: Wipe

Date Received: 07/23/24 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3546			620969	NPR	EET CLE	07/24/24 08:35
Total/NA	Analysis	8082A		1	621053	LSH	EET CLE	07/25/24 00:13

Client Sample ID: W-11208058-071724-JY-003

Lab Sample ID: 240-208161-3

Date Collected: 07/17/24 15:50

Matrix: Wipe

Date Received: 07/23/24 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3546			620969	NPR	EET CLE	07/24/24 08:35
Total/NA	Analysis	8082A		1	621053	LSH	EET CLE	07/25/24 00:29

Client Sample ID: W-11208058-071724-JY-004

Lab Sample ID: 240-208161-4

Date Collected: 07/17/24 15:55

Matrix: Wipe

Date Received: 07/23/24 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3546			620969	NPR	EET CLE	07/24/24 08:35
Total/NA	Analysis	8082A		1	621053	LSH	EET CLE	07/25/24 00:45

Client Sample ID: W-11208058-071724-JY-005

Lab Sample ID: 240-208161-5

Date Collected: 07/17/24 16:00

Matrix: Wipe

Date Received: 07/23/24 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3546			620969	NPR	EET CLE	07/24/24 08:35
Total/NA	Analysis	8082A		1	621053	LSH	EET CLE	07/25/24 01:01

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Accreditation/Certification Summary

Client: GHD Services Inc.
Project/Site: 11208058-E04-001Y24-001, RACER Bay City

Job ID: 240-208161-1

Laboratory: Eurofins Cleveland

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	02-28-25
Georgia	State	4062	02-27-25
Illinois	NELAP	200004	08-31-25
Iowa	State	421	06-01-25
Kentucky (UST)	State	112225	02-27-25
Kentucky (WW)	State	KY98016	12-30-24
Minnesota	NELAP	039-999-348	12-31-24
New Jersey	NELAP	OH001	07-03-25
New York	NELAP	10975	04-02-25
Ohio VAP	State	ORELAP 4062	02-27-25
Oregon	NELAP	4062	02-28-25
Pennsylvania	NELAP	68-00340	08-31-25
Texas	NELAP	T104704517-22-19	08-31-24
USDA	US Federal Programs	P330-18-00281	01-05-27
Virginia	NELAP	460175	09-14-24
West Virginia DEP	State	210	12-31-24

Eurofins - Cleveland Sample Receipt Form/Narrative
 Barborton Facility

Client GHD Site Name Racer Bay City Cooler unpacked by: JESSICA RIGDON
 Login # _____

Cooler Received on 7-23-24 Opened on 7-23-24
 FedEx 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other _____

Receipt After-hours Drop-off Date/Time _____ Storage Location _____
 Eurofins Cooler # EL Foam Box Client Cooler Box Other _____

Packing material used. Bubble Wrap Foam Plastic Bag None Other _____
Wet Ice Blue Ice Dry Ice Water None

1 Cooler temperature upon receipt See Multiple Cooler Form
 IR GUN # 19 (CF 41.0 °C) Observed Cooler Temp. 10.3 °C Corrected Cooler Temp 11.3 °C

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

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1
 - 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 NA
 - Were tamper/custody seals intact and uncompromised? Yes No NA
 - 3 Shippers' packing slip attached to the cooler(s)? Yes No NA
 4. Did custody papers accompany the sample(s)? Yes No NA
 - 5 Were the custody papers relinquished & signed in the appropriate place? Yes No NA
 6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes No NA
 - 7 Did all bottles arrive in good condition (Unbroken)? Yes No NA
 - 8 Could all bottle labels (ID/Date/Time) be reconciled with the COC? Yes No NA
 - 9 For each sample, does the COC specify preservatives (Y/N) # of containers (Y/N), and sample type of grab/comp (Y/N)? Yes No NA
 - 10 Were correct bottle(s) used for the test(s) indicated? Yes No NA
 - 11 Sufficient quantity received to perform indicated analyses? Yes No NA
 12. Are these work share samples and all listed on the COC? Yes No NA
 - If yes, Questions 13-17 have been checked at the originating laboratory
 - 13 Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC442471
 - 14 Were VOAs on the COC? Yes No NA
 - 15 Were air bubbles >6 mm in any VOA vials? Larger than this Yes No NA
 - 16 Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____ Yes No NA
 - 17 Was a LL Hg or Me Hg trip blank present? Yes No NA
- Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other _____
 Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES additional next page Samples processed by: _____
The lids were replaced on 001, 002, 003 close to them being loose and could not be secured. On 7-23-24

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

20. SAMPLE PRESERVATION
 Sample(s) _____ were further preserved in the laboratory
 Time preserved. _____ Preservative(s) added/Lot number(s) _____
 VOA Sample Preservation - Date/Time VOAs Frozen _____



LogIn Container Summary Report

240-208161

Temperature readings

7/25/2024

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u>	<u>Preservation</u>	<u>Preservation</u>
			<u>pH</u>	<u>Temp</u>	<u>Added</u>
					<u>Lot Number</u>
W-11208058-071724-JY-001	240-208161-A-1	Wipe Kit 2oz jar - PCB's			
W-11208058-071724-JY-002	240-208161-A-2	Wipe Kit 2oz jar - PCB's			
W-11208058-071724-JY-003	240-208161-A-3	Wipe Kit 2oz jar - PCB's			
W-11208058-071724-JY-004	240-208161-A-4	Wipe Kit 2oz jar - PCB's			
W-11208058-071724-JY-005	240-208161-A-5	Wipe Kit 2oz jar - PCB's			

Attachment 4

Sludge Waste Characterization Results

ANALYTICAL REPORT

PREPARED FOR

Attn: Ms. Ruth Mickle
GHD Services Inc.
26850 Haggerty Rd.
Farmington Hills, Michigan 48331

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JOB DESCRIPTION

11208058-E04-001Y24-001, RACER Bay City

JOB NUMBER

240-202595-1

Eurofins Cleveland

Job Notes

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

Authorization



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Authorized for release by
Denise Heckler, Project Manager II
Denise.Heckler@et.eurofinsus.com
(330)966-9477



Table of Contents

Cover Page	1
Table of Contents	3
Case Narrative	4
Definitions/Glossary	5
Sample Summary	6
Detection Summary	7
Method Summary	8
Client Sample Results	9
QC Association Summary	11
QC Sample Results	12
Surrogate Summary	13
Lab Chronicle	14
Certification Summary	15
Chain of Custody	16

Case Narrative

Client: GHD Services Inc.
Project: 11208058-E04-001Y24-001, RACER Bay City

Job ID: 240-202595-1

Job ID: 240-202595-1

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Job Narrative 240-202595-1

Receipt

The sample was received on 4/10/2024 9:40 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.0°C.

PCBs

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

General Chemistry

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

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Definitions/Glossary

Client: GHD Services Inc.
Project/Site: 11208058-E04-001Y24-001, RACER Bay City

Job ID: 240-202595-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
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: 11208058-E04-001Y24-001, RACER Bay City

Job ID: 240-202595-1

<u>Lab Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Collected</u>	<u>Received</u>
240-202595-1	SL-11208058-040924-JY-001	Solid	04/09/24 09:00	04/10/24 09:40

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Detection Summary

Client: GHD Services Inc.

Job ID: 240-202595-1

Project/Site: 11208058-E04-001Y24-001, RACER Bay City

Client Sample ID: SL-11208058-040924-JY-001

Lab Sample ID: 240-202595-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aroclor-1242	2800		210	80	ug/Kg	1	✱	8082A	Total/NA
Free Liquid	CFL		0.10	0.10	NONE	1		9095B	Total/NA

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This Detection Summary does not include radiochemical test results.

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Method Summary

Client: GHD Services Inc.
Project/Site: 11208058-E04-001Y24-001, RACER Bay City

Job ID: 240-202595-1

Method	Method Description	Protocol	Laboratory
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET CLE
9095B	Paint Filter	SW846	EET CLE
Moisture	Percent Moisture	EPA	EET CLE
3546	Microwave Extraction	SW846	EET CLE

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396



Client Sample Results

Client: GHD Services Inc.
 Project/Site: 11208058-E04-001Y24-001, RACER Bay City

Job ID: 240-202595-1

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: SL-11208058-040924-JY-001

Date Collected: 04/09/24 09:00

Date Received: 04/10/24 09:40

Lab Sample ID: 240-202595-1

Matrix: Solid

Percent Solids: 23.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	210	U	210	100	ug/Kg	☼	04/15/24 08:37	04/15/24 22:17	1
Aroclor-1221	210	U	210	130	ug/Kg	☼	04/15/24 08:37	04/15/24 22:17	1
Aroclor-1232	210	U	210	88	ug/Kg	☼	04/15/24 08:37	04/15/24 22:17	1
Aroclor-1242	2800		210	80	ug/Kg	☼	04/15/24 08:37	04/15/24 22:17	1
Aroclor-1248	210	U	210	71	ug/Kg	☼	04/15/24 08:37	04/15/24 22:17	1
Aroclor-1254	210	U	210	88	ug/Kg	☼	04/15/24 08:37	04/15/24 22:17	1
Aroclor-1260	210	U	210	88	ug/Kg	☼	04/15/24 08:37	04/15/24 22:17	1
Aroclor-1262	210	U	210	92	ug/Kg	☼	04/15/24 08:37	04/15/24 22:17	1
Aroclor-1268	210	U	210	67	ug/Kg	☼	04/15/24 08:37	04/15/24 22:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>Tetrachloro-m-xylene</i>	75		10 - 149	04/15/24 08:37	04/15/24 22:17	1
<i>DCB Decachlorobiphenyl</i>	74		10 - 174	04/15/24 08:37	04/15/24 22:17	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: 11208058-E04-001Y24-001, RACER Bay City

Job ID: 240-202595-1

General Chemistry

Client Sample ID: SL-11208058-040924-JY-001

Date Collected: 04/09/24 09:00

Date Received: 04/10/24 09:40

Lab Sample ID: 240-202595-1

Matrix: Solid

Percent Solids: 23.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Free Liquid (SW846 9095B)	CFL		0.10	0.10	NONE			04/15/24 14:00	1
Percent Solids (EPA Moisture)	23.2		0.1	0.1	%			04/10/24 16:36	1
Percent Moisture (EPA Moisture)	76.8		0.1	0.1	%			04/10/24 16:36	1

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QC Association Summary

Client: GHD Services Inc.
Project/Site: 11208058-E04-001Y24-001, RACER Bay City

Job ID: 240-202595-1

GC Semi VOA

Prep Batch: 609568

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-202595-1	SL-11208058-040924-JY-001	Total/NA	Solid	3546	
MB 240-609568/1-A	Method Blank	Total/NA	Solid	3546	
LCS 240-609568/2-A	Lab Control Sample	Total/NA	Solid	3546	

Analysis Batch: 609687

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-202595-1	SL-11208058-040924-JY-001	Total/NA	Solid	8082A	609568
MB 240-609568/1-A	Method Blank	Total/NA	Solid	8082A	609568
LCS 240-609568/2-A	Lab Control Sample	Total/NA	Solid	8082A	609568

General Chemistry

Analysis Batch: 609179

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-202595-1	SL-11208058-040924-JY-001	Total/NA	Solid	Moisture	

Analysis Batch: 609668

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-202595-1	SL-11208058-040924-JY-001	Total/NA	Solid	9095B	

QC Sample Results

Client: GHD Services Inc.
 Project/Site: 11208058-E04-001Y24-001, RACER Bay City

Job ID: 240-202595-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 240-609568/1-A
Matrix: Solid
Analysis Batch: 609687

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 609568

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	50	U	50	25	ug/Kg	-	04/15/24 08:37	04/15/24 19:01	1
Aroclor-1221	50	U	50	30	ug/Kg	-	04/15/24 08:37	04/15/24 19:01	1
Aroclor-1232	50	U	50	21	ug/Kg	-	04/15/24 08:37	04/15/24 19:01	1
Aroclor-1242	50	U	50	19	ug/Kg	-	04/15/24 08:37	04/15/24 19:01	1
Aroclor-1248	50	U	50	17	ug/Kg	-	04/15/24 08:37	04/15/24 19:01	1
Aroclor-1254	50	U	50	21	ug/Kg	-	04/15/24 08:37	04/15/24 19:01	1
Aroclor-1260	50	U	50	21	ug/Kg	-	04/15/24 08:37	04/15/24 19:01	1
Aroclor-1262	50	U	50	22	ug/Kg	-	04/15/24 08:37	04/15/24 19:01	1
Aroclor-1268	50	U	50	16	ug/Kg	-	04/15/24 08:37	04/15/24 19:01	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	96	-	10 - 149	04/15/24 08:37	04/15/24 19:01	1
DCB Decachlorobiphenyl	95	-	10 - 174	04/15/24 08:37	04/15/24 19:01	1

Lab Sample ID: LCS 240-609568/2-A
Matrix: Solid
Analysis Batch: 609687

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 609568

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Aroclor-1016	1000	851	-	ug/Kg	-	85	28 - 140
Aroclor-1260	1000	868	-	ug/Kg	-	87	39 - 153

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	82	-	10 - 149
DCB Decachlorobiphenyl	91	-	10 - 174

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 11208058-E04-001Y24-001, RACER Bay City

Job ID: 240-202595-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCX2	DCBP2
		(10-149)	(10-174)
240-202595-1	SL-11208058-040924-JY-001	75	74
LCS 240-609568/2-A	Lab Control Sample	82	91
MB 240-609568/1-A	Method Blank	96	95

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCBP = DCB Decachlorobiphenyl

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 11208058-E04-001Y24-001, RACER Bay City

Job ID: 240-202595-1

Client Sample ID: SL-11208058-040924-JY-001

Lab Sample ID: 240-202595-1

Date Collected: 04/09/24 09:00

Matrix: Solid

Date Received: 04/10/24 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9095B		1	609668	JWW	EET CLE	04/15/24 14:00
Total/NA	Analysis	Moisture		1	609179	QUY8	EET CLE	04/10/24 16:36

Client Sample ID: SL-11208058-040924-JY-001

Lab Sample ID: 240-202595-1

Date Collected: 04/09/24 09:00

Matrix: Solid

Date Received: 04/10/24 09:40

Percent Solids: 23.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3546			609568	BV1	EET CLE	04/15/24 08:37
Total/NA	Analysis	8082A		1	609687	MBB	EET CLE	04/15/24 22:17

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396



Accreditation/Certification Summary

Client: GHD Services Inc.
Project/Site: 11208058-E04-001Y24-001, RACER Bay City

Job ID: 240-202595-1

Laboratory: Eurofins Cleveland

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	02-28-25
Georgia	State	4062	02-27-25
Illinois	NELAP	200004	07-31-24
Iowa	State	421	06-01-25
Kentucky (WW)	State	KY98016	12-30-24
Minnesota	NELAP	039-999-348	12-31-24
New Jersey	NELAP	OH001	06-30-24
New York	NELAP	10975	04-02-25
Ohio VAP	State	ORELAP 4062	02-27-25
Oregon	NELAP	4062	02-27-25
Pennsylvania	NELAP	68-00340	08-31-24
Texas	NELAP	T104704517-22-19	08-31-24
USDA	US Federal Programs	P330-18-00281	01-05-27
Virginia	NELAP	460175	09-14-24
West Virginia DEP	State	210	12-31-24

