

26850 Haggerty Road,
Farmington Hills, Michigan 48331
United States
www.ghd.com



GHD Reference No: 11208058

July 29, 2021

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

**Semi-Annual Compliance Report (January 1 to June 30, 2021)
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 January 1 to June 30, 2021 for RACER's 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 the semi-annual period with the exception of short periods when the system was down for maintenance or as a result of an alarm condition.

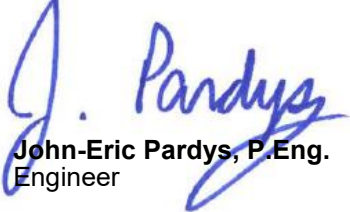
Table 1 presents the results of the required semi-annual effluent sample collected from the RACER groundwater extraction and treatment system on June 23, 2021. Attachment 1 presents a copy of the laboratory analytical report. The analytical results did not identify an exceedance of the daily maximum discharge levels specified in the permit, and there were no other conditions, events or circumstances identified that did not meet other permit requirements. Table 2 presents the flow readings collected periodically from the flow meter.

The RACER groundwater extraction and treatment system is operated and maintained by Steve Hoevermeyer (GHD) who maintains the designation of Waste Treatment Plant Operator – Industrial or Commercial (A-1d Impoundment, A-2b Filtration of Wastewater, B-2c Oil-Water Separation, and B-3b Carbon Adsorption).

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

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

Sincerely,



John-Eric Pardys, P.Eng.
Engineer

+1 519 340-4316
john-eric.pardys@ghd.com

JEP/kf/4

cc: Grant Trigger (RACER)
Dave Favero (RACER)

Encl. Table 1 – Effluent Results Summary
Table 2 – Flow Meter Readings
Attachment 1 - Laboratory Analytical Report
Attachment 2 – Certification Statement

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

Sample Location:

Sample ID:

Sample Date:

effluent-GWTS

W-11208058-062321-SSH-10121

6/23/21

Parameters VOAs	Units	Daily Maximum (Bay City Industrial User Permit)	
Vinyl chloride	mg/L	0.002	0.001 U
Metals			
Cadmium	mg/L	0.057	0.013
Chromium	mg/L	6.812	0.005 U
Copper	mg/L	1.476	0.008 J
Iron	mg/L		0.1 U
Lead	mg/L	0.632	0.003 U
Mercury	mg/L	ND	0.0002 U
Nickel	mg/L	2.548	0.0057 J
Silver	mg/L	0.2	0.005 U
Pesticides			
Aroclor-1016 (PCB-1016)	mg/L	ND	0.000096 U
Aroclor-1221 (PCB-1221)	mg/L	ND	0.000096 U
Aroclor-1232 (PCB-1232)	mg/L	ND	0.000096 U
Aroclor-1242 (PCB-1242)	mg/L	ND	0.000096 U
Aroclor-1248 (PCB-1248)	mg/L	ND	0.000096 U
Aroclor-1254 (PCB-1254)	mg/L	ND	0.000096 U
Aroclor-1260 (PCB-1260)	mg/L	ND	0.000096 U
Wet			
Ammonia	mg/L	30	3.8
Biochemical oxygen demand (BOD)	mg/L	835	2.0 U
Chemical oxygen demand (COD)	mg/L	1670	10
Oil and grease (HEM), polar	mg/L	100	4.0 U
pH, lab	s.u.	6.5 to 11.0	8.1 HF
Phosphorus	mg/L	13.8	0.14
Total suspended solids (TSS)	mg/L	1336	4.0 U

Notes:

- 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
 J Estimated value

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

Date	Flow Meter reading (gallons)	Cumulative Total: (gallons)	Volume to be invoiced annually (July to June 30)	Comments
23-Jun-21	409045	1155143	139856	- Collected effluent sample and City invoiced for discharge
27-May-21	400420	1146518		
29-Apr-21	397390	1143488		
23-Mar-21	371797	1117895		
22-Feb-21	348776	1094874		
21-Dec-20	308935	1055033		
10-Dec-20				- Collected effluent sample
9-Dec-20	304649	1050747		
12-Oct-20	278099	1024197		
10-Sep-20	277899	1023997		
25-Aug-20	277020	1023118		
22-Jul-20	274190	1020288		
22-Jun-20	270975	1017073		
4-Jun-20	269189	1015287	124809	- City invoiced for discharge
28-May-20	268089	1014187		- Collected effluent sample
28-Apr-20	263922	1010020		
25-Mar-20	248006	994104		
20-Feb-20	227965	974063		
27-Jan-20	220321	966419		
5-Dec-19	200031	946129		- Collected PFAS effluent sample
25-Nov-19	192582	938680		
29-Oct-19	176533	922631		
28-Aug-19	168508	914606		
17-Jul-19	159490	905588		
17-Jun-19	144380	890478	122047	- City invoiced for discharge
31-May-19				- Collected effluent sample
17-May-19	123482	869580		
19-Apr-19	105745	851843		
22-Mar-19	81364	827462		
28-Feb-19	77720	823818		
29-Jan-19	77720	823818		
20-Jan-19				- Collected effluent sample
12-Dec-18	77570	823668		- Collected effluent sample
29-Nov-18	76972	823070		
26-Sep-18	59303	805401		
30-Aug-18	53199	799297		
30-Jul-18	52454	798552		
20-Jun-18	35274	781372		
1-Jun-18				- Collected effluent sample
1-Jun-18	22333	768431	88271	- City invoiced for discharge
31-May-18	20490	766588		
30-Apr-18	18529	764627		
29-Mar-18	11243	757341		
8-Mar-18	122667	746098		- Last reading before
8-Mar-18	0	746098		- New Flow meter installed
30-Nov-17				- Collected effluent sample
25-Oct-17	73702	697133		
12-Jul-17	60991	684422		
28-Jun-17	56911	680342		

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

Date	Flow Meter reading (gallons)	Cumulative Total: (gallons)	Volume to be invoiced annually (July to June 30)	Comments
13-Jun-17	56729	680160	137544	- City invoiced for discharge
22-May-17	56722	680153		
9-May-17				- Collected effluent sample
27-Apr-17	55126	678557		
2-Feb-17	5813	629244		
16-Jan-17				- Collected effluent sample
14-Jan-17	609074	623431		
14-Jan-17	0	623431		
16-Dec-16	609074	623431		
11-Nov-16	608980	623337		
28-Oct-16	608865	623222		
30-Sep-16	607717	622074		
31-Aug-16	607298	621655		
20-Jul-16	561893	576250		
29-Jun-16	556457	570814		
14-Jun-16	528259	542616	523666	- Collected effluent sample,
31-May-16	521920	536277		
27-Apr-16	462204	476561		
21-Mar-16	409836	424193		
29-Feb-16	394550	408907		
10-Feb-16	387410	401767		
30-Dec-15	351550	365907		
10-Dec-15				- Collected effluent sample
23-Nov-15	289731	304088		
30-Oct-15	260771	275128		
29-Sep-15	252638	266995		
28-Aug-15	241397	255754		
29-Jul-15	232315	246672		
30-Jun-15	232315	246672		
25-Jun-15	232315	246672		
18-Jun-15	224490	238847		
6-May-15	197766	212123		
30-Apr-15	175234	189591		
19-Mar-15	67425	81782		
16-Mar-15				- Collected effluent sample
13-Feb-15	46303	60660		
27-Jan-15	31004	45361		
29-Dec-14	31004	45361		
26-Nov-14	31004	45361		
23-Oct-14	31004	45361		
23-Sep-14	11504	25861		
5-Sep-14	6337	20694		- Collected effluent sample
18-Aug-14	4593	18950		
28-Jul-14	4593	18950		
16-Jun-14	4593	18950	18950	- City invoiced for discharge

Attachments

Attachment 1

ANALYTICAL REPORT

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

Laboratory Job ID: 240-151732-1
Client Project/Site: 11208058, RACER Bay City

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

Attn: Ms. Ruth Mickle



Authorized for release by:
7/6/2021 12:23:08 PM

Denise Heckler, Project Manager II
(330)966-9477
Denise.Heckler@Eurofinset.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: 11208058, RACER Bay City

Job ID: 240-151732-1

Job ID: 240-151732-1

Laboratory: Eurofins TestAmerica, Canton

Narrative

Job Narrative 240-151732-1

Comments

No additional comments.

Receipt

The sample was received on 6/24/2021 9:50 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 was 1.5° C.

GC/MS VOA

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

GC Semi VOA

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

Metals

Method 245.1: The hot block take out temperature was 96 degrees C. The analysis of the QC in preparation batch 240-492411 shows acceptable recoveries and therefore validates the results of the associated samples: W-11208058-062321-SSH-10121 (240-151732-1)

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

General Chemistry

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

Organic Prep

Methods 3510C, 608: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 240-492378.

Methods 3510C, 608: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 240-492799.

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: 11208058, RACER Bay City

Job ID: 240-151732-1

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
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.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
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, RACER Bay City

Job ID: 240-151732-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
240-151732-1	W-11208058-062321-SSH-10121	Water	06/23/21 11:30	06/24/21 09:50	

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Detection Summary

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

Job ID: 240-151732-1

Client Sample ID: W-11208058-062321-SSH-10121

Lab Sample ID: 240-151732-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	13		2.0	0.20	ug/L	1		200.7 Rev 4.4	Total Recoverable
Copper	8.0	J	20	3.5	ug/L	1		200.7 Rev 4.4	Total Recoverable
Nickel	5.7	J	20	2.2	ug/L	1		200.7 Rev 4.4	Total Recoverable
Chemical Oxygen Demand	10		10	1.8	mg/L	1		410.4	Total/NA
pH	8.1	HF	0.1	0.1	SU	1		4500 H+ B-2000	Total/NA
Ammonia	3.8		0.20	0.076	mg/L	1		4500 NH3 H	Total/NA
Total Phosphorus as P	0.14		0.10	0.017	mg/L	1		SM4500 P E-1999	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Canton



Method Summary

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

Job ID: 240-151732-1

Method	Method Description	Protocol	Laboratory
624	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL CAN
608	Polychlorinated Biphenyls (PCBs) (GC)	40CFR136A	TAL CAN
200.7 Rev 4.4	Metals (ICP)	EPA	TAL CAN
245.1	Mercury (CVAA)	EPA	TAL CAN
1664A	HEM and SGT-HEM	1664A	TAL PEN
410.4	COD	MCAWW	TAL CAN
4500 H+ B-2000	pH	SM	TAL CAN
4500 NH3 H	Ammonia	SM	TAL CAN
5210B-2001	BOD, 5-Day	SM	TAL CAN
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL CAN
SM4500 P E-1999	Phosphorus	SM	TAL CAN
1664A	HEM and SGT-HEM (Aqueous)	1664A	TAL PEN
200.7	Preparation, Total Recoverable Metals	EPA	TAL CAN
245.1	Preparation, Mercury	EPA	TAL CAN
608	Liquid-Liquid Extraction (Separatory Funnel)	40CFR136A	TAL CAN

Protocol References:

1664A = EPA-821-98-002

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

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

TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Client Sample Results

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

Job ID: 240-151732-1

Method: 624 - Volatile Organic Compounds (GC/MS)

Client Sample ID: W-11208058-062321-SSH-10121

Date Collected: 06/23/21 11:30

Date Received: 06/24/21 09:50

Lab Sample ID: 240-151732-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	1.0	U	1.0	0.45	ug/L			06/26/21 03:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		47 - 134					06/26/21 03:05	1
1,2-Dichloroethane-d4 (Surr)	89		75 - 130					06/26/21 03:05	1
Toluene-d8 (Surr)	93		69 - 122					06/26/21 03:05	1

Client Sample Results

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

Job ID: 240-151732-1

Method: 608 - Polychlorinated Biphenyls (PCBs) (GC)

Client Sample ID: W-11208058-062321-SSH-10121

Lab Sample ID: 240-151732-1

Date Collected: 06/23/21 11:30

Matrix: Water

Date Received: 06/24/21 09:50

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.096	U	0.096	0.054	ug/L		06/29/21 08:15	06/30/21 13:42	1
Aroclor-1221	0.096	U	0.096	0.055	ug/L		06/29/21 08:15	06/30/21 13:42	1
Aroclor-1232	0.096	U	0.096	0.071	ug/L		06/29/21 08:15	06/30/21 13:42	1
Aroclor-1242	0.096	U	0.096	0.073	ug/L		06/29/21 08:15	06/30/21 13:42	1
Aroclor-1248	0.096	U	0.096	0.048	ug/L		06/29/21 08:15	06/30/21 13:42	1
Aroclor-1254	0.096	U	0.096	0.038	ug/L		06/29/21 08:15	06/30/21 13:42	1
Aroclor-1260	0.096	U	0.096	0.044	ug/L		06/29/21 08:15	06/30/21 13:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	62		10 - 114	06/29/21 08:15	06/30/21 13:42	1
Tetrachloro-m-xylene	76		15 - 131	06/29/21 08:15	06/30/21 13:42	1

Client Sample Results

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

Job ID: 240-151732-1

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

Client Sample ID: W-11208058-062321-SSH-10121

Lab Sample ID: 240-151732-1

Date Collected: 06/23/21 11:30

Matrix: Water

Date Received: 06/24/21 09:50

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	5.0	U	5.0	0.62	ug/L		06/25/21 14:00	06/28/21 12:41	1
Cadmium	13		2.0	0.20	ug/L		06/25/21 14:00	06/28/21 12:41	1
Chromium	5.0	U	5.0	4.0	ug/L		06/25/21 14:00	06/28/21 12:41	1
Copper	8.0	J	20	3.5	ug/L		06/25/21 14:00	06/28/21 12:41	1
Iron	100	U	100	83	ug/L		06/25/21 14:00	06/28/21 12:41	1
Nickel	5.7	J	20	2.2	ug/L		06/25/21 14:00	06/28/21 12:41	1
Lead	3.0	U	3.0	2.8	ug/L		06/25/21 14:00	06/28/21 12:41	1

Client Sample Results

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

Job ID: 240-151732-1

Method: 245.1 - Mercury (CVAA)

Client Sample ID: W-11208058-062321-SSH-10121

Date Collected: 06/23/21 11:30

Date Received: 06/24/21 09:50

Lab Sample ID: 240-151732-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.13	ug/L		06/25/21 14:00	06/28/21 14:38	1

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Client Sample Results

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

Job ID: 240-151732-1

General Chemistry

Client Sample ID: W-11208058-062321-SSH-10121

Date Collected: 06/23/21 11:30

Date Received: 06/24/21 09:50

Lab Sample ID: 240-151732-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM	4.0	U	4.0	1.4	mg/L		07/02/21 09:23	07/02/21 14:57	1
Chemical Oxygen Demand	10		10	1.8	mg/L			06/25/21 08:58	1
pH	8.1	HF	0.1	0.1	SU			06/25/21 13:02	1
Ammonia	3.8		0.20	0.076	mg/L			07/01/21 12:56	1
Biochemical Oxygen Demand	2.0	U	2.0	1.2	mg/L			06/24/21 17:11	1
Total Suspended Solids	4.0	U	4.0	1.0	mg/L			06/30/21 09:43	1
Total Phosphorus as P	0.14		0.10	0.017	mg/L			06/30/21 13:27	1

QC Association Summary

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

Job ID: 240-151732-1

GC/MS VOA

Analysis Batch: 492390

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-151732-1	W-11208058-062321-SSH-10121	Total/NA	Water	624	
MB 240-492390/32	Method Blank	Total/NA	Water	624	
LCS 240-492390/33	Lab Control Sample	Total/NA	Water	624	

GC Semi VOA

Prep Batch: 492799

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-151732-1	W-11208058-062321-SSH-10121	Total/NA	Water	608	
MB 240-492799/21-A	Method Blank	Total/NA	Water	608	
LCS 240-492799/22-A	Lab Control Sample	Total/NA	Water	608	

Analysis Batch: 492945

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-151732-1	W-11208058-062321-SSH-10121	Total/NA	Water	608	492799
MB 240-492799/21-A	Method Blank	Total/NA	Water	608	492799
LCS 240-492799/22-A	Lab Control Sample	Total/NA	Water	608	492799

Metals

Prep Batch: 492400

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-151732-1	W-11208058-062321-SSH-10121	Total Recoverable	Water	200.7	
MB 240-492400/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 240-492400/2-A	Lab Control Sample	Total Recoverable	Water	200.7	

Prep Batch: 492411

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-151732-1	W-11208058-062321-SSH-10121	Total/NA	Water	245.1	
MB 240-492411/1-A	Method Blank	Total/NA	Water	245.1	
LCS 240-492411/2-A	Lab Control Sample	Total/NA	Water	245.1	

Analysis Batch: 492786

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-151732-1	W-11208058-062321-SSH-10121	Total Recoverable	Water	200.7 Rev 4.4	492400
MB 240-492400/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	492400
LCS 240-492400/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	492400

Analysis Batch: 492790

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-151732-1	W-11208058-062321-SSH-10121	Total/NA	Water	245.1	492411
MB 240-492411/1-A	Method Blank	Total/NA	Water	245.1	492411
LCS 240-492411/2-A	Lab Control Sample	Total/NA	Water	245.1	492411

General Chemistry

Analysis Batch: 492211

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-151732-1	W-11208058-062321-SSH-10121	Total/NA	Water	5210B-2001	
SCB 240-492211/2	Method Blank	Total/NA	Water	5210B-2001	
USB 240-492211/1	Method Blank	Total/NA	Water	5210B-2001	
LCS 240-492211/3	Lab Control Sample	Total/NA	Water	5210B-2001	

Eurofins TestAmerica, Canton

QC Association Summary

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

Job ID: 240-151732-1

General Chemistry

Analysis Batch: 492306

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-151732-1	W-11208058-062321-SSH-10121	Total/NA	Water	410.4	
MB 240-492306/9	Method Blank	Total/NA	Water	410.4	
LCS 240-492306/10	Lab Control Sample	Total/NA	Water	410.4	

Analysis Batch: 492403

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-151732-1	W-11208058-062321-SSH-10121	Total/NA	Water	4500 H+ B-2000	
LCS 240-492403/11	Lab Control Sample	Total/NA	Water	4500 H+ B-2000	

Analysis Batch: 493032

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-151732-1	W-11208058-062321-SSH-10121	Total/NA	Water	SM 2540D	
MB 240-493032/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 240-493032/2	Lab Control Sample	Total/NA	Water	SM 2540D	
240-151732-1 DU	W-11208058-062321-SSH-10121	Total/NA	Water	SM 2540D	

Analysis Batch: 493088

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-151732-1	W-11208058-062321-SSH-10121	Total/NA	Water	SM4500 P E-1999	
MB 240-493088/3	Method Blank	Total/NA	Water	SM4500 P E-1999	
LCS 240-493088/4	Lab Control Sample	Total/NA	Water	SM4500 P E-1999	

Analysis Batch: 493336

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-151732-1	W-11208058-062321-SSH-10121	Total/NA	Water	4500 NH3 H	
MB 240-493336/14	Method Blank	Total/NA	Water	4500 NH3 H	
LCS 240-493336/25	Lab Control Sample	Total/NA	Water	4500 NH3 H	

Prep Batch: 538013

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-151732-1	W-11208058-062321-SSH-10121	Total/NA	Water	1664A	
MB 400-538013/1-A	Method Blank	Total/NA	Water	1664A	
LCS 400-538013/2-A	Lab Control Sample	Total/NA	Water	1664A	

Analysis Batch: 538095

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-151732-1	W-11208058-062321-SSH-10121	Total/NA	Water	1664A	538013
MB 400-538013/1-A	Method Blank	Total/NA	Water	1664A	538013
LCS 400-538013/2-A	Lab Control Sample	Total/NA	Water	1664A	538013

QC Sample Results

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

Job ID: 240-151732-1

Method: 624 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-492390/32
Matrix: Water
Analysis Batch: 492390

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Vinyl chloride	1.0	U	1.0	0.45	ug/L			06/25/21 22:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		47 - 134					06/25/21 22:34	1
1,2-Dichloroethane-d4 (Surr)	88		75 - 130					06/25/21 22:34	1
Toluene-d8 (Surr)	93		69 - 122					06/25/21 22:34	1

Lab Sample ID: LCS 240-492390/33
Matrix: Water
Analysis Batch: 492390

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

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
Vinyl chloride	20.0	17.5		ug/L		88	10 - 251
Surrogate	%Recovery	Qualifier	Limits				
4-Bromofluorobenzene (Surr)	103		47 - 134				
1,2-Dichloroethane-d4 (Surr)	82		75 - 130				
Toluene-d8 (Surr)	96		69 - 122				

Method: 608 - Polychlorinated Biphenyls (PCBs) (GC)

Lab Sample ID: MB 240-492799/21-A
Matrix: Water
Analysis Batch: 492945

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 492799

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Aroclor-1016	0.10	U	0.10	0.056	ug/L		06/29/21 08:15	06/30/21 11:38	1
Aroclor-1221	0.10	U	0.10	0.057	ug/L		06/29/21 08:15	06/30/21 11:38	1
Aroclor-1232	0.10	U	0.10	0.074	ug/L		06/29/21 08:15	06/30/21 11:38	1
Aroclor-1242	0.10	U	0.10	0.076	ug/L		06/29/21 08:15	06/30/21 11:38	1
Aroclor-1248	0.10	U	0.10	0.050	ug/L		06/29/21 08:15	06/30/21 11:38	1
Aroclor-1254	0.10	U	0.10	0.040	ug/L		06/29/21 08:15	06/30/21 11:38	1
Aroclor-1260	0.10	U	0.10	0.046	ug/L		06/29/21 08:15	06/30/21 11:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	69		10 - 114				06/29/21 08:15	06/30/21 11:38	1
Tetrachloro-m-xylene	72		15 - 131				06/29/21 08:15	06/30/21 11:38	1

Lab Sample ID: LCS 240-492799/22-A
Matrix: Water
Analysis Batch: 492945

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 492799

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
Aroclor-1016	2.50	2.03		ug/L		81	50 - 114
Aroclor-1260	2.50	2.06		ug/L		82	8 - 127

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QC Sample Results

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

Job ID: 240-151732-1

Method: 608 - Polychlorinated Biphenyls (PCBs) (GC) (Continued)

Lab Sample ID: LCS 240-492799/22-A
Matrix: Water
Analysis Batch: 492945

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 492799

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
DCB Decachlorobiphenyl	71		10 - 114
Tetrachloro-m-xylene	76		15 - 131

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 240-492400/1-A
Matrix: Water
Analysis Batch: 492786

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 492400

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Silver	5.0	U	5.0	0.62	ug/L		06/25/21 14:00	06/28/21 12:03	1
Cadmium	2.0	U	2.0	0.20	ug/L		06/25/21 14:00	06/28/21 12:03	1
Chromium	5.0	U	5.0	4.0	ug/L		06/25/21 14:00	06/28/21 12:03	1
Copper	20	U	20	3.5	ug/L		06/25/21 14:00	06/28/21 12:03	1
Iron	100	U	100	83	ug/L		06/25/21 14:00	06/28/21 12:03	1
Nickel	20	U	20	2.2	ug/L		06/25/21 14:00	06/28/21 12:03	1
Lead	3.0	U	3.0	2.8	ug/L		06/25/21 14:00	06/28/21 12:03	1

Lab Sample ID: LCS 240-492400/2-A
Matrix: Water
Analysis Batch: 492786

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 492400

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec.	Limits
		Result	Qualifier					
Silver	100	97.4		ug/L		97		85 - 115
Cadmium	1000	1050		ug/L		105		85 - 115
Chromium	1000	941		ug/L		94		85 - 115
Copper	1000	922		ug/L		92		85 - 115
Iron	10000	9300		ug/L		93		85 - 115
Nickel	1000	1000		ug/L		100		85 - 115
Lead	1000	932		ug/L		93		85 - 115

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 240-492411/1-A
Matrix: Water
Analysis Batch: 492790

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 492411

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	0.20	U	0.20	0.13	ug/L		06/25/21 14:00	06/28/21 14:27	1

Lab Sample ID: LCS 240-492411/2-A
Matrix: Water
Analysis Batch: 492790

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 492411

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec.	Limits
		Result	Qualifier					
Mercury	5.00	4.85		ug/L		97		85 - 115

QC Sample Results

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

Job ID: 240-151732-1

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 400-538013/1-A
Matrix: Water
Analysis Batch: 538095

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 538013

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM	4.0	U	4.0	1.4	mg/L		07/02/21 09:22	07/02/21 14:57	1

Lab Sample ID: LCS 400-538013/2-A
Matrix: Water
Analysis Batch: 538095

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 538013

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM	40.4	35.10		mg/L		87	78 - 114

Method: 410.4 - COD

Lab Sample ID: MB 240-492306/9
Matrix: Water
Analysis Batch: 492306

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			06/25/21 08:37	1

Lab Sample ID: LCS 240-492306/10
Matrix: Water
Analysis Batch: 492306

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	61.3	62.8		mg/L		102	90 - 110

Method: 4500 H+ B-2000 - pH

Lab Sample ID: LCS 240-492403/11
Matrix: Water
Analysis Batch: 492403

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
pH	8.47	8.5		SU		100	97 - 103

Method: 4500 NH3 H - Ammonia

Lab Sample ID: MB 240-493336/14
Matrix: Water
Analysis Batch: 493336

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			07/01/21 11:53	1

Lab Sample ID: LCS 240-493336/25
Matrix: Water
Analysis Batch: 493336

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	6.90	6.66		mg/L		97	90 - 110

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QC Sample Results

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

Job ID: 240-151732-1

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

Lab Sample ID: SCB 240-492211/2
Matrix: Water
Analysis Batch: 492211

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	1.2	mg/L			06/24/21 11:03	1

Lab Sample ID: USB 240-492211/1
Matrix: Water
Analysis Batch: 492211

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	1.2	mg/L			06/24/21 11:02	1

Lab Sample ID: LCS 240-492211/3
Matrix: Water
Analysis Batch: 492211

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	182		mg/L		92	85 - 115

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

Lab Sample ID: MB 240-493032/1
Matrix: Water
Analysis Batch: 493032

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	1.0	mg/L			06/30/21 09:43	1

Lab Sample ID: LCS 240-493032/2
Matrix: Water
Analysis Batch: 493032

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	61.5	49.0		mg/L		80	64 - 120

Lab Sample ID: 240-151732-1 DU
Matrix: Water
Analysis Batch: 493032

Client Sample ID: W-11208058-062321-SSH-10121
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	4.0	U	4.0	U	mg/L		NC	10

Method: SM4500 P E-1999 - Phosphorus

Lab Sample ID: MB 240-493088/3
Matrix: Water
Analysis Batch: 493088

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	0.017	mg/L			06/30/21 13:27	1

Eurofins TestAmerica, Canton

QC Sample Results

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

Job ID: 240-151732-1

Method: SM4500 P E-1999 - Phosphorus (Continued)

Lab Sample ID: LCS 240-493088/4
Matrix: Water
Analysis Batch: 493088

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	0.631	0.569		mg/L		90	77 - 120

- 1
- 2
- 3
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- 14
- 15

Surrogate Summary

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

Job ID: 240-151732-1

Method: 624 - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB	DCA	TOL
		(47-134)	(75-130)	(69-122)
240-151732-1	W-11208058-062321-SSH-1012	109	89	93
LCS 240-492390/33	Lab Control Sample	103	82	96
MB 240-492390/32	Method Blank	107	88	93

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

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

TOL = Toluene-d8 (Surr)

Method: 608 - Polychlorinated Biphenyls (PCBs) (GC)

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCBP2	TCX2
		(10-114)	(15-131)
240-151732-1	W-11208058-062321-SSH-1012	62	76
LCS 240-492799/22-A	Lab Control Sample	71	76
MB 240-492799/21-A	Method Blank	69	72

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Lab Chronicle

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

Job ID: 240-151732-1

Client Sample ID: W-11208058-062321-SSH-10121

Lab Sample ID: 240-151732-1

Date Collected: 06/23/21 11:30

Matrix: Water

Date Received: 06/24/21 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	492390	06/26/21 03:05	HMB	TAL CAN
Total/NA	Prep	608			492799	06/29/21 08:15	BMB	TAL CAN
Total/NA	Analysis	608		1	492945	06/30/21 13:42	KMG	TAL CAN
Total Recoverable	Prep	200.7			492400	06/25/21 14:00	MRL	TAL CAN
Total Recoverable	Analysis	200.7 Rev 4.4		1	492786	06/28/21 12:41	KLC	TAL CAN
Total/NA	Prep	245.1			492411	06/25/21 14:00	MRL	TAL CAN
Total/NA	Analysis	245.1		1	492790	06/28/21 14:38	AJC	TAL CAN
Total/NA	Prep	1664A			538013	07/02/21 09:23	BAW	TAL PEN
Total/NA	Analysis	1664A		1	538095	07/02/21 14:57	BAW	TAL PEN
Total/NA	Analysis	410.4		1	492306	06/25/21 08:58	TPH	TAL CAN
Total/NA	Analysis	4500 H+ B-2000		1	492403	06/25/21 13:02	KLR	TAL CAN
Total/NA	Analysis	4500 NH3 H		1	493336	07/01/21 12:56	JMR	TAL CAN
Total/NA	Analysis	5210B-2001		1	492211	06/24/21 17:11	JR	TAL CAN
Total/NA	Analysis	SM 2540D		1	493032	06/30/21 09:43	AJ	TAL CAN
Total/NA	Analysis	SM4500 P E-1999		1	493088	06/30/21 13:27	KLR	TAL CAN

Laboratory References:

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

TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Accreditation/Certification Summary

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

Job ID: 240-151732-1

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	02-23-22
Connecticut	State	PH-0590	12-31-21
Florida	NELAP	E87225	06-30-22
Georgia	State	4062	02-23-22
Illinois	NELAP	200004	07-31-21
Iowa	State	421	06-01-21 *
Kansas	NELAP	E-10336	04-30-22
Kentucky (UST)	State	112225	02-23-22
Kentucky (WW)	State	KY98016	12-31-21
Minnesota	NELAP	OH00048	12-31-21
Minnesota (Petrofund)	State	3506	08-01-21
New Jersey	NELAP	OH001	06-30-22
New York	NELAP	10975	03-31-22
Ohio VAP	State	CL0024	12-21-23
Oregon	NELAP	4062	02-23-22
Pennsylvania	NELAP	68-00340	08-31-21
Texas	NELAP	T104704517-18-10	08-31-21
USDA	US Federal Programs	P330-18-00281	09-17-21
Virginia	NELAP	010101	09-14-21
Washington	State	C971	01-12-22
West Virginia DEP	State	210	12-31-21

Laboratory: Eurofins TestAmerica, Pensacola

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

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	06-30-22
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-12-22
Arkansas DEQ	State	88-0689	09-02-21
California	State	2510	06-30-22
Florida	NELAP	E81010	06-30-22
Georgia	State	E81010(FL)	06-30-22
Illinois	NELAP	200041	10-09-21
Iowa	State	367	08-01-22
Kansas	NELAP	E-10253	10-31-21
Kentucky (UST)	State	53	06-30-22
Kentucky (WW)	State	KY98030	12-31-21
Louisiana	NELAP	30976	06-30-22
Louisiana (DW)	State	LA017	12-31-21
Maryland	State	233	09-30-21
Massachusetts	State	M-FL094	06-30-22
Michigan	State	9912	06-30-22
New Jersey	NELAP	FL006	06-30-22
North Carolina (WW/SW)	State	314	12-31-21
Oklahoma	State	9810	08-31-21
Pennsylvania	NELAP	68-00467	01-31-22
Rhode Island	State	LAO00307	12-30-21
South Carolina	State	96026	06-30-22
Tennessee	State	TN02907	06-30-22

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

Accreditation/Certification Summary

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

Job ID: 240-151732-1

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704286	09-30-21
US Fish & Wildlife	US Federal Programs	058448	07-31-21
USDA	US Federal Programs	P330-21-00056	05-17-24
Virginia	NELAP	460166	06-14-22
Washington	State	C915	05-15-22

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Chain of Custody Record

Client Information
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 Carrier Tracking No(s):
 Page: Page 1 of 1
 Job #: PWSID:

Address: 26850 Haggerty Rd.
 City: Farmington Hills
 State, Zip: MI, 48331
 Phone: 248 893 3400
 Email: ruth.mickle@ghd.com
 Project Name: 11208058, RACER Bay City
 Site:

Due Date Requested:
 TAT Requested (days): 14
 Compliance Project: Yes No
 PO #: Purchase Order Requested
 WO #: 11208058
 Project #: 24006288
 SSOW#:

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Preservation Code	Matrix (Water, Solid, Other)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.7 - Select Metals	64.4, 4500_P, E, SM4500NH3.D	608_PCB - PCBs	52108 - BOD	2540D, SM4500_H+	1664A_NP - HEM	Total Number of Containers	Special Instructions/Note:
<u>W-11208058-062321-SSH-10121</u>	<u>6/23/21</u>	<u>1130</u>	<u>G</u>	<u>6</u>	<u>Water</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For _____ Months
 Special Instructions/QC Requirements:

Possible Hazard Identification
 Non-Hazard Flammable Skin Irritant Poison B Unknown Radiological
 Deliverable Requested: I, II, III, IV, Other (specify)

Empty Kit Relinquished by: AAA Date: 6/23/21 1400
 Relinquished by: AAA Date/Time: 6/23/21 1400
 Relinquished by: AAA Date/Time: 6/23/21 1400
 Relinquished by: AAA Date/Time: 6/23/21 1400

Method of Shipment: FedEx
 Received by: AAA Date/Time: 6-24-21 9:50
 Received by: AAA Date/Time: 6-24-21 9:50
 Received by: AAA Date/Time: 6-24-21 9:50
 Received by: AAA Date/Time: 6-24-21 9:50

Company: GHG
 Company: GHG
 Company: GHG
 Company: GHG

Custody Seals Intact: 1441656 1441657
 Yes No
 Custody Seal No.: 1441656 1441657
 Cooler Temperature(s) °C and Other Remarks:



**Eurofins TestAmerica Canton Sample Receipt Form/Narrative
Canton Facility**

Login # : 151732

Client GHD Services Inc. Site Name _____

Cooler unpacked by:

Cooler Received on 6-24-21 Opened on 6-24-21

Justin H

FedEx: 1st Grd UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # TA 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# IR-11 (CF +0.1 °C) Observed Cooler Temp. 1.4 °C Corrected Cooler Temp. 1.5 °C
 IR GUN #IR-12 (CF +0.2 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °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
 -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)?
 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# HC022887
 14. Were VOAs on the COC? Yes No
 15. Were air bubbles >6 mm in any VOA vials? Yes No NA  ← Larger than this.
 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: _____

<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>
W-112080SB-062321-SSH-1012 1	240-151732-E-1	Plastic 500ml - with Sulfuric Acid	<2	_____	_____	_____
W-112080SB-062321-SSH-1012 1	240-151732-F-1	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
W-112080SB-062321-SSH-1012 1	240-151732-J-1	Amber Glass 1 liter - Sulfuric Acid	_____	_____	_____	_____
W-112080SB-062321-SSH-1012 1	240-151732-K-1	Amber Glass 1 liter - Sulfuric Acid	_____	_____	_____	_____

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 240-151732-1

Login Number: 151732

List Number: 2

Creator: Avery, Kathy R

List Source: Eurofins TestAmerica, Pensacola

List Creation: 06/25/21 11:25 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
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	3.4°C IR 8
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.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Attachment 2

Certification Statement

"I, David Favero, certify under penalty of law that this document (July 30, 2021 GHD Semi-Annual Compliance Report (January 1 to June 30, 2021)), and all attachments were prepared under by 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."

David Favero

July 29, 2021

RACER, Deputy Cleanup Manager – Michigan (Date)