



January 30, 2020

Reference No. 11208058

City of Bay City WWTP
Attn: IPP Coordinator
2905 North Water Street
Bay City, Michigan
U.S.A. 48708

To Whom It May Concern:

**Re: Semi-Annual Compliance Report (July 1 to December 31, 2019)
RACER Bay City Industrial Land
Bay City, Michigan**

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, 2019 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 January 20, 2020. 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.

On December 5, 2019, a sample was collected from the groundwater treatment system effluent at the request of a representative of the City of Bay City Waste Water Treatment Plant, and submitted for analysis for per- and polyfluoroalkyl substances (PFAS). Table 3 presents the analytical results for this sample, which reported no detections. The laboratory data report is provided in Attachment 1.

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,

GHD

A handwritten signature in blue ink that reads "J. Pardys". The signature is fluid and cursive, with a long, sweeping underline that extends to the right.

John-Eric Pardys, P.Eng.

JEP/kf/1

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

Encl. Table 1 – Effluent Results Summary
Table 2 – Flow Meter Readings
Table 3 – Analytical Results Summary – Additional Sampling
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-12610-012020-SSH-00120
1/20/20**

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	0.002 U
Chromium	mg/L	6.812	0.0012 J
Copper	mg/L	1.476	0.0074 J
Iron	mg/L		0.028 J
Lead	mg/L	0.632	0.003 U
Mercury	mg/L	ND	0.0002 U
Nickel	mg/L	2.548	0.0025 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	0.20 U
Biochemical oxygen demand (BOD)	mg/L	835	2.0 U
Chemical oxygen demand (COD)	mg/L	1670	10 U
Oil and grease (HEM), polar	mg/L	100	4.8 U
pH, lab	s.u.	6.5 to 11.0	8.0 HF
Phosphorus	mg/L	13.8	0.10 U
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
16-Jun-14	4593	18950	18950	- City invoiced for discharge
28-Jul-14	4593	18950		
18-Aug-14	4593	18950		
5-Sep-14	6337	20694		- Collected effluent sample
23-Sep-14	11504	25861		
23-Oct-14	31004	45361		
26-Nov-14	31004	45361		
29-Dec-14	31004	45361		
27-Jan-15	31004	45361		
13-Feb-15	46303	60660		
16-Mar-15				- Collected effluent sample
19-Mar-15	67425	81782		
30-Apr-15	175234	189591		
6-May-15	197766	212123		
18-Jun-15	224490	238847		
25-Jun-15	232315	246672		
30-Jun-15	232315	246672		
29-Jul-15	232315	246672		
28-Aug-15	241397	255754		
29-Sep-15	252638	266995		
30-Oct-15	260771	275128		
23-Nov-15	289731	304088		
10-Dec-15				- Collected effluent sample
30-Dec-15	351550	365907		
10-Feb-16	387410	401767		
29-Feb-16	394550	408907		
21-Mar-16	409836	424193		
27-Apr-16	462204	476561		
31-May-16	521920	536277		
14-Jun-16	528259	542616	523666	- Collected effluent sample, City invoiced for discharge
29-Jun-16	556457	570814		
20-Jul-16	561893	576250		
31-Aug-16	607298	621655		
30-Sep-16	607717	622074		
28-Oct-16	608865	623222		
11-Nov-16	608980	623337		
16-Dec-16	609074	623431		
14-Jan-17	609074	623431		
14-Jan-17	0	623431		
16-Jan-17				- Collected effluent sample
2-Feb-17	5813	629244		

**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
27-Apr-17	55126	678557		
9-May-17				- Collected effluent sample
22-May-17	56722	680153		
13-Jun-17	56729	680160	137544	- City invoiced for discharge
28-Jun-17	56911	680342		
12-Jul-17	60991	684422		
25-Oct-17	73702	697133		
30-Nov-17				- Collected effluent sample
8-Mar-18	122667	746098		- Last reading before replacing flow meter
8-Mar-18	0	746098		- New Flow meter installed
29-Mar-18	11243	757341		
30-Apr-18	18529	764627		
31-May-18	20490	766588		
1-Jun-18				- Collected effluent sample
1-Jun-18	22333	768431	88271	- City invoiced for discharge
20-Jun-18	35274	781372		
30-Jul-18	52454	798552		
30-Aug-18	53199	799297		
26-Sep-18	59303	805401		
29-Nov-18	76972	823070		
12-Dec-18	77570	823668		- Collected effluent sample
29-Jan-19	77720	823818		
28-Feb-19	77720	823818		
22-Mar-19	81364	827462		
19-Apr-19	105745	851843		
17-May-19	123482	869580		
31-May-19				- Collected effluent sample
17-Jun-19	144380	890478	122047	- City invoiced for discharge
17-Jul-19	159490	905588		
28-Aug-19	168508	914606		
29-Oct-19	176533	922631		
25-Nov-19	192582	938680		
5-Dec-19	200031	946129		- Collected PFAS effluent sample
20-Jan-19				- Collected effluent sample
27-Jan-20	220321	966419		

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

Sample Location:	effluent-GWTS
Sample ID:	W-12610-012020-SSH-00120
Sample Date:	1/20/20

Parameters	Units	
PFAS		
Perfluorooctanic acid (PFOA)	ng/L	1.8 U
Perfluorooctane sulfonate (PFOS)	ng/L	1.8 U

Notes:

U Not detected at the associated reporting limit

Attachment 1

ANALYTICAL REPORT

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Tel: (916)373-5600

Laboratory Job ID: 320-56836-1
Client Project/Site: 12610A, RACER Bay City

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

Attn: Ms. Ruth Mickle



Authorized for release by:
12/17/2019 11:55:00 AM

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

LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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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Definitions/Glossary

Client: GHD Services Inc.
Project/Site: 12610A, RACER Bay City

Job ID: 320-56836-1

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
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: GHD Services Inc.
Project/Site: 12610A, RACER Bay City

Job ID: 320-56836-1

Job ID: 320-56836-1

Laboratory: Eurofins TestAmerica, Sacramento

Narrative

Job Narrative
320-56836-1

Comments

No additional comments.

Receipt

The samples were received on 12/6/2019 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.3° C.

LCMS

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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Detection Summary

Client: GHD Services Inc.
Project/Site: 12610A, RACER Bay City

Job ID: 320-56836-1

Client Sample ID: W-12610-120519-SSH-1519

Lab Sample ID: 320-56836-1

No Detections.

Client Sample ID: W-12610-120519-SSH-1619

Lab Sample ID: 320-56836-2

No Detections.

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This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Sacramento

Client Sample Results

Client: GHD Services Inc.
Project/Site: 12610A, RACER Bay City

Job ID: 320-56836-1

Client Sample ID: W-12610-120519-SSH-1519

Lab Sample ID: 320-56836-1

Date Collected: 12/05/19 08:20

Matrix: Water

Date Received: 12/06/19 09:30

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	ND		1.8	0.78	ng/L		12/12/19 05:20	12/14/19 19:52	1
Perfluorooctane sulfonate (PFOS)	ND		1.8	0.49	ng/L		12/12/19 05:20	12/14/19 19:52	1
<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>13C4 PFOS</i>	<i>91</i>		<i>25 - 150</i>				<i>12/12/19 05:20</i>	<i>12/14/19 19:52</i>	<i>1</i>
<i>13C4 PFOA</i>	<i>103</i>		<i>25 - 150</i>				<i>12/12/19 05:20</i>	<i>12/14/19 19:52</i>	<i>1</i>

Client Sample ID: W-12610-120519-SSH-1619

Lab Sample ID: 320-56836-2

Date Collected: 12/05/19 08:25

Matrix: Water

Date Received: 12/06/19 09:30

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	ND		1.8	0.77	ng/L		12/12/19 05:20	12/14/19 20:01	1
Perfluorooctane sulfonate (PFOS)	ND		1.8	0.49	ng/L		12/12/19 05:20	12/14/19 20:01	1
<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>13C4 PFOS</i>	<i>85</i>		<i>25 - 150</i>				<i>12/12/19 05:20</i>	<i>12/14/19 20:01</i>	<i>1</i>
<i>13C4 PFOA</i>	<i>98</i>		<i>25 - 150</i>				<i>12/12/19 05:20</i>	<i>12/14/19 20:01</i>	<i>1</i>

Isotope Dilution Summary

Client: GHD Services Inc.
Project/Site: 12610A, RACER Bay City

Job ID: 320-56836-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Water

Prep Type: Total/NA

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PFOS	PFOA
		(25-150)	(25-150)
320-56836-1	W-12610-120519-SSH-1519	91	103
320-56836-2	W-12610-120519-SSH-1619	85	98
LCS 320-344879/2-A	Lab Control Sample	91	92
MB 320-344879/1-A	Method Blank	93	97

Surrogate Legend

PFOS = 13C4 PFOS

PFOA = 13C4 PFOA

QC Sample Results

Client: GHD Services Inc.
 Project/Site: 12610A, RACER Bay City

Job ID: 320-56836-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 320-344879/1-A
Matrix: Water
Analysis Batch: 345512

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 344879

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Perfluorooctanoic acid (PFOA)	ND		2.0	0.85	ng/L		12/12/19 05:20	12/14/19 19:14	1
Perfluorooctane sulfonate (PFOS)	ND		2.0	0.54	ng/L		12/12/19 05:20	12/14/19 19:14	1
Isotope Dilution	MB	MB	Limits			D	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier							
13C4 PFOS	93		25 - 150				12/12/19 05:20	12/14/19 19:14	1
13C4 PFOA	97		25 - 150				12/12/19 05:20	12/14/19 19:14	1

Lab Sample ID: LCS 320-344879/2-A
Matrix: Water
Analysis Batch: 345512

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 344879

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits		
								%Rec	Limits
Perfluorooctanoic acid (PFOA)	40.0	40.8		ng/L		102	70 - 130		
Perfluorooctane sulfonate (PFOS)	37.1	35.1		ng/L		95	70 - 130		
Isotope Dilution	LCS	LCS	Limits			D	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier							
13C4 PFOS	91		25 - 150						
13C4 PFOA	92		25 - 150						

QC Association Summary

Client: GHD Services Inc.
Project/Site: 12610A, RACER Bay City

Job ID: 320-56836-1

LCMS

Prep Batch: 344879

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-56836-1	W-12610-120519-SSH-1519	Total/NA	Water	3535	
320-56836-2	W-12610-120519-SSH-1619	Total/NA	Water	3535	
MB 320-344879/1-A	Method Blank	Total/NA	Water	3535	
LCS 320-344879/2-A	Lab Control Sample	Total/NA	Water	3535	

Analysis Batch: 345512

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-56836-1	W-12610-120519-SSH-1519	Total/NA	Water	537 (modified)	344879
320-56836-2	W-12610-120519-SSH-1619	Total/NA	Water	537 (modified)	344879
MB 320-344879/1-A	Method Blank	Total/NA	Water	537 (modified)	344879
LCS 320-344879/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	344879

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 12610A, RACER Bay City

Job ID: 320-56836-1

Client Sample ID: W-12610-120519-SSH-1519

Lab Sample ID: 320-56836-1

Date Collected: 12/05/19 08:20

Matrix: Water

Date Received: 12/06/19 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			274 mL	10.0 mL	344879	12/12/19 05:20	MTN	TAL SAC
Total/NA	Analysis	537 (modified)		1			345512	12/14/19 19:52	RS1	TAL SAC

Client Sample ID: W-12610-120519-SSH-1619

Lab Sample ID: 320-56836-2

Date Collected: 12/05/19 08:25

Matrix: Water

Date Received: 12/06/19 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			276 mL	10.0 mL	344879	12/12/19 05:20	MTN	TAL SAC
Total/NA	Analysis	537 (modified)		1			345512	12/14/19 20:01	RS1	TAL SAC

Laboratory References:

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Accreditation/Certification Summary

Client: GHD Services Inc.
Project/Site: 12610A, RACER Bay City

Job ID: 320-56836-1

Laboratory: Eurofins TestAmerica, Sacramento

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

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	17-020	01-20-21
ANAB	Dept. of Defense ELAP	L2468	01-20-21
ANAB	Dept. of Energy	L2468.01	01-20-21
ANAB	ISO/IEC 17025	L2468	01-20-21
Arizona	State	AZ0708	08-11-20
Arkansas DEQ	State	19-042-0	06-17-20
California	State	2897	01-31-20
Colorado	State	CA0004	08-31-20
Connecticut	State	PH-0691	06-30-21
Florida	NELAP	E87570	06-30-20
Georgia	State	4040	01-29-20
Hawaii	State	<cert No.>	01-29-20
Illinois	NELAP	200060	03-17-20
Kansas	NELAP	E-10375	10-31-20 *
Louisiana	NELAP	01944	06-30-20
Maine	State	2018009	04-14-20
Michigan	State	9947	01-29-20
Michigan	State Program	9947	01-31-20
Nevada	State	CA000442020-1	07-31-20
New Hampshire	NELAP	2997	04-18-20
New Jersey	NELAP	CA005	06-30-20
New York	NELAP	11666	04-01-20
Oregon	NELAP	4040	01-29-20
Pennsylvania	NELAP	68-01272	03-31-20
Texas	NELAP	T104704399-19-13	05-31-20
US Fish & Wildlife	US Federal Programs	58448	07-31-20
USDA	US Federal Programs	P330-18-00239	07-31-21
Utah	NELAP	CA000442019-01	02-29-20
Vermont	State	VT-4040	04-16-20
Virginia	NELAP	460278	03-14-20
Washington	State	C581	05-05-20
West Virginia (DW)	State	9930C	12-31-19
Wyoming	State Program	8TMS-L	01-28-19 *

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

Accreditation/Certification Summary

Client: GHD Services Inc.
Project/Site: 12610A, RACER Bay City

Job ID: 320-56836-1

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	02-23-20
Connecticut	State	PH-0590	12-31-19
Florida	NELAP	E87225	06-30-20
Georgia	State	4062	02-23-20
Illinois	NELAP	004498	07-31-20
Iowa	State	421	06-01-20
Kansas	NELAP	E-10336	04-30-20
Kentucky (UST)	State	112225	02-23-20
Kentucky (WW)	State	KY98016	12-31-19
Minnesota	NELAP	OH00048	12-31-19
Minnesota (Petrofund)	State Program	3506	07-31-21
New Jersey	NELAP	OH001	06-30-20
New York	NELAP	10975	03-31-20
Ohio VAP	State	CL0024	06-05-21
Oregon	NELAP	4062	02-23-20
Pennsylvania	NELAP	68-00340	08-31-20
Texas	NELAP	T104704517-18-10	08-31-20
Virginia	NELAP	010101	09-14-20
Washington	State	C971	01-12-20
West Virginia DEP	State	210	12-31-19

Method Summary

Client: GHD Services Inc.
Project/Site: 12610A, RACER Bay City

Job ID: 320-56836-1

Method	Method Description	Protocol	Laboratory
537 (modified)	Fluorinated Alkyl Substances	EPA	TAL SAC
3535	Solid-Phase Extraction (SPE)	SW846	TAL SAC

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:

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

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Sample Summary

Client: GHD Services Inc.
Project/Site: 12610A, RACER Bay City

Job ID: 320-56836-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
320-56836-1	W-12610-120519-SSH-1519	Water	12/05/19 08:20	12/06/19 09:30	
320-56836-2	W-12610-120519-SSH-1619	Water	12/05/19 08:25	12/06/19 09:30	

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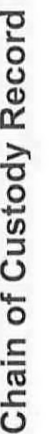
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Chain of Custody Record

373878



Environment Testing
TestAmerica

Address: North Canton, OH

TAL-8210

Client Contact: **GHHD**
 Project Manager: **JE Pordys**
 Site Contact: **R. Mickle**
 Lab Contact: **D. Hecker**
 Date: **12/5/19**
 Carrier: **FedEx**
 COC No.: **373878**
 of **1** COCs
 Sampler: **S. Howenmyer**
 For Lab Use Only:
 Walk-in Client:
 Lab Sampling:
 Job / SDG No.:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Analysis Turnaround Time		Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	Sample Specific Notes:
						CALENDAR DAYS	WORKING DAYS			
-12610-020519-SSH-1519	12/5/19	0820	G	GW	2					
-12610-120519-SSH-1619	12/5/19	0825	G	W	2					



Regulatory Program: DW NPDES RCRA Other:
 Project Manager: **JE Pordys**
 Tell/Email: **515 370 4316**
 Analysis Turnaround Time: CALENDAR DAYS WORKING DAYS
 TAT if different from Below: 2 weeks 1 week 2 days 1 day
 Sample Disposal (A fee may be assessed if samples are retained longer than 1 month):
 Return to Client Disposal by Lab Archive for _____ Months

Sample Hazard Identification: 1= Ice, 2= HCl, 3= H2SO4, 4= HNO3, 5= NaOH, 6= Other
 Please List any EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Hazardous Waste Section if the lab is to dispose of the sample.
 Flammable Skin Irritant Unknown Poison B
 Custody Seal No.: **1196703/1196D3**
 Cooler Temp. (°C): Obs'd: **1.3°C** Corr'd: **1.3°C** Therm ID No.: **ARK10**
 Received by: **GHHD** Date/Time: **12/5/19 1400**
 Company: **GHHD**
 Received by: **[Signature]** Date/Time: **12/6/19 930**
 Company: **EVA-SPC**
 Received by: **[Signature]** Date/Time: **[Blank]**
 Company: **[Blank]**



Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 320-56836-1

Login Number: 56836

List Source: Eurofins TestAmerica, Sacramento

List Number: 1

Creator: Kintaudi, Pauline W

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	1196903/119602
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	
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.	False	Refer to Job Narrative for details.
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").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

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

Laboratory Job ID: 240-125232-1
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:
1/29/2020 12:35:35 PM

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

LINKS

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results through
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www.testamericainc.com

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: 240-125232-1

Job ID: 240-125232-1

Laboratory: Eurofins TestAmerica, Canton

Narrative

Job Narrative 240-125232-1

Comments

No additional comments.

Receipt

The samples were received on 1/22/2020 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.0° 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

Methods 200.7: Some requested practical quantitation limits (PQLs) fall below the laboratory's verified standard quantitation limit. The continuing calibration blanks and method blanks may not support the lower PQL.

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

General Chemistry

Method SM 5210B: The following sample(s) was received with less than 2 days remaining on the holding time or less than one shift (8 hours) remaining on a test with a holding time of 48 hours or less. As such, the laboratory had insufficient time remaining to perform the analysis within holding time: W-12610-012020-SSH-00120 (240-125232-1).

No additional analytical or quality issues were noted, other than those described above or 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 240-419990.

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: 240-125232-1

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
H	Sample was prepped or analyzed beyond the specified holding time
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

Sample Summary

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

Job ID: 240-125232-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
240-125232-1	W-12610-012020-SSH-00120	Water	01/20/20 13:35	01/22/20 09:30	
240-125232-2	W-12610-012020-SSH-00220	Water	01/20/20 13:30	01/22/20 09:30	
240-125232-3	W-12610-012020-SSH-00320	Water	01/20/20 13:40	01/22/20 09:30	

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Detection Summary

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

Job ID: 240-125232-1

Client Sample ID: W-12610-012020-SSH-00120

Lab Sample ID: 240-125232-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	1.2	J	5.0	0.63	ug/L	1		200.7 Rev 4.4	Total Recoverable
Copper	7.4	J	20	3.5	ug/L	1		200.7 Rev 4.4	Total Recoverable
Iron	28	J	100	26	ug/L	1		200.7 Rev 4.4	Total Recoverable
Nickel	2.5	J	20	2.2	ug/L	1		200.7 Rev 4.4	Total Recoverable
pH	8.0	HF	0.1	0.1	SU	1		4500 H+ B-2000	Total/NA

Client Sample ID: W-12610-012020-SSH-00220

Lab Sample ID: 240-125232-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aroclor-1242	0.20		0.096	0.073	ug/L	1		608	Total/NA

Client Sample ID: W-12610-012020-SSH-00320

Lab Sample ID: 240-125232-3

No Detections.

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: 240-125232-1

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 CAN
410.4	COD	MCAWW	TAL CAN
4500 H+ B-2000	pH	SM	TAL CAN
4500 NH3 D-2011	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
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

Client Sample Results

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

Job ID: 240-125232-1

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

Client Sample ID: W-12610-012020-SSH-00120

Date Collected: 01/20/20 13:35

Date Received: 01/22/20 09:30

Lab Sample ID: 240-125232-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	1.0	U	1.0	0.20	ug/L			01/25/20 01:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		47 - 134					01/25/20 01:09	1
1,2-Dichloroethane-d4 (Surr)	91		75 - 130					01/25/20 01:09	1
Toluene-d8 (Surr)	94		69 - 122					01/25/20 01:09	1

Client Sample Results

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

Job ID: 240-125232-1

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

Client Sample ID: W-12610-012020-SSH-00320

Date Collected: 01/20/20 13:40

Date Received: 01/22/20 09:30

Lab Sample ID: 240-125232-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	1.0	U	1.0	0.20	ug/L			01/25/20 01:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		47 - 134					01/25/20 01:32	1
1,2-Dichloroethane-d4 (Surr)	89		75 - 130					01/25/20 01:32	1
Toluene-d8 (Surr)	95		69 - 122					01/25/20 01:32	1

Client Sample Results

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

Job ID: 240-125232-1

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

Client Sample ID: W-12610-012020-SSH-00120

Lab Sample ID: 240-125232-1

Date Collected: 01/20/20 13:35

Matrix: Water

Date Received: 01/22/20 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.096	U	0.096	0.054	ug/L	-	01/23/20 07:00	01/24/20 12:21	1
Aroclor-1221	0.096	U	0.096	0.055	ug/L	-	01/23/20 07:00	01/24/20 12:21	1
Aroclor-1232	0.096	U	0.096	0.071	ug/L	-	01/23/20 07:00	01/24/20 12:21	1
Aroclor-1242	0.096	U	0.096	0.073	ug/L	-	01/23/20 07:00	01/24/20 12:21	1
Aroclor-1248	0.096	U	0.096	0.048	ug/L	-	01/23/20 07:00	01/24/20 12:21	1
Aroclor-1254	0.096	U	0.096	0.038	ug/L	-	01/23/20 07:00	01/24/20 12:21	1
Aroclor-1260	0.096	U	0.096	0.044	ug/L	-	01/23/20 07:00	01/24/20 12:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>DCB Decachlorobiphenyl</i>	91		10 - 114				01/23/20 07:00	01/24/20 12:21	1
<i>Tetrachloro-m-xylene</i>	81		15 - 131				01/23/20 07:00	01/24/20 12:21	1

Client Sample Results

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

Job ID: 240-125232-1

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

Client Sample ID: W-12610-012020-SSH-00220

Lab Sample ID: 240-125232-2

Date Collected: 01/20/20 13:30

Matrix: Water

Date Received: 01/22/20 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.096	U	0.096	0.054	ug/L	-	01/23/20 07:00	01/24/20 12:42	1
Aroclor-1221	0.096	U	0.096	0.055	ug/L	-	01/23/20 07:00	01/24/20 12:42	1
Aroclor-1232	0.096	U	0.096	0.071	ug/L	-	01/23/20 07:00	01/24/20 12:42	1
Aroclor-1242	0.20		0.096	0.073	ug/L	-	01/23/20 07:00	01/24/20 12:42	1
Aroclor-1248	0.096	U	0.096	0.048	ug/L	-	01/23/20 07:00	01/24/20 12:42	1
Aroclor-1254	0.096	U	0.096	0.038	ug/L	-	01/23/20 07:00	01/24/20 12:42	1
Aroclor-1260	0.096	U	0.096	0.044	ug/L	-	01/23/20 07:00	01/24/20 12:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>DCB Decachlorobiphenyl</i>	90		10 - 114				01/23/20 07:00	01/24/20 12:42	1
<i>Tetrachloro-m-xylene</i>	83		15 - 131				01/23/20 07:00	01/24/20 12:42	1

Client Sample Results

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

Job ID: 240-125232-1

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

Client Sample ID: W-12610-012020-SSH-00120

Date Collected: 01/20/20 13:35

Date Received: 01/22/20 09:30

Lab Sample ID: 240-125232-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	5.0	U	5.0	0.62	ug/L		01/23/20 14:00	01/24/20 12:35	1
Cadmium	2.0	U	2.0	0.20	ug/L		01/23/20 14:00	01/24/20 12:35	1
Chromium	1.2	J	5.0	0.63	ug/L		01/23/20 14:00	01/24/20 12:35	1
Copper	7.4	J	20	3.5	ug/L		01/23/20 14:00	01/24/20 12:35	1
Iron	28	J	100	26	ug/L		01/23/20 14:00	01/24/20 12:35	1
Nickel	2.5	J	20	2.2	ug/L		01/23/20 14:00	01/24/20 12:35	1
Lead	3.0	U	3.0	2.8	ug/L		01/23/20 14:00	01/24/20 12:35	1

Client Sample Results

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

Job ID: 240-125232-1

Method: 245.1 - Mercury (CVAA)

Client Sample ID: W-12610-012020-SSH-00120

Date Collected: 01/20/20 13:35

Date Received: 01/22/20 09:30

Lab Sample ID: 240-125232-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.13	ug/L		01/23/20 12:00	01/23/20 15:17	1

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Client Sample Results

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

Job ID: 240-125232-1

General Chemistry

Client Sample ID: W-12610-012020-SSH-00120

Date Collected: 01/20/20 13:35

Date Received: 01/22/20 09:30

Lab Sample ID: 240-125232-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM	4.8	U	4.8	0.98	mg/L			01/29/20 08:23	1
Chemical Oxygen Demand	10	U	10	4.1	mg/L			01/28/20 06:30	1
pH	8.0	HF	0.1	0.1	SU			01/22/20 11:29	1
Ammonia	0.20	U	0.20	0.093	mg/L			01/28/20 15:30	1
Biochemical Oxygen Demand	2.0	U H	2.0	1.2	mg/L			01/22/20 15:11	1
Total Suspended Solids	4.0	U	4.0	2.2	mg/L			01/24/20 10:19	1
Total Phosphorus as P	0.10	U	0.10	0.037	mg/L			01/27/20 08:38	1

QC Association Summary

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

Job ID: 240-125232-1

GC/MS VOA

Analysis Batch: 420227

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-125232-1	W-12610-012020-SSH-00120	Total/NA	Water	624	
240-125232-3	W-12610-012020-SSH-00320	Total/NA	Water	624	
MB 240-420227/8	Method Blank	Total/NA	Water	624	
LCS 240-420227/5	Lab Control Sample	Total/NA	Water	624	

GC Semi VOA

Prep Batch: 419990

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-125232-1	W-12610-012020-SSH-00120	Total/NA	Water	608	
240-125232-2	W-12610-012020-SSH-00220	Total/NA	Water	608	
MB 240-419990/4-A	Method Blank	Total/NA	Water	608	
LCS 240-419990/5-A	Lab Control Sample	Total/NA	Water	608	

Analysis Batch: 420113

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-125232-1	W-12610-012020-SSH-00120	Total/NA	Water	608	419990
240-125232-2	W-12610-012020-SSH-00220	Total/NA	Water	608	419990
MB 240-419990/4-A	Method Blank	Total/NA	Water	608	419990
LCS 240-419990/5-A	Lab Control Sample	Total/NA	Water	608	419990

Metals

Prep Batch: 420006

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-125232-1	W-12610-012020-SSH-00120	Total Recoverable	Water	200.7	
MB 240-420006/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 240-420006/2-A	Lab Control Sample	Total Recoverable	Water	200.7	

Prep Batch: 420023

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-125232-1	W-12610-012020-SSH-00120	Total/NA	Water	245.1	
MB 240-420023/1-A	Method Blank	Total/NA	Water	245.1	
LCS 240-420023/2-A	Lab Control Sample	Total/NA	Water	245.1	

Analysis Batch: 420138

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-125232-1	W-12610-012020-SSH-00120	Total/NA	Water	245.1	420023
MB 240-420023/1-A	Method Blank	Total/NA	Water	245.1	420023
LCS 240-420023/2-A	Lab Control Sample	Total/NA	Water	245.1	420023

Analysis Batch: 420280

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-125232-1	W-12610-012020-SSH-00120	Total Recoverable	Water	200.7 Rev 4.4	420006
MB 240-420006/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	420006
LCS 240-420006/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	420006

General Chemistry

Analysis Batch: 419883

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-125232-1	W-12610-012020-SSH-00120	Total/NA	Water	4500 H+ B-2000	

Eurofins TestAmerica, Canton

QC Association Summary

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

Job ID: 240-125232-1

General Chemistry (Continued)

Analysis Batch: 419883 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 240-419883/2	Lab Control Sample	Total/NA	Water	4500 H+ B-2000	

Analysis Batch: 419936

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-125232-1	W-12610-012020-SSH-00120	Total/NA	Water	5210B-2001	
SCB 240-419936/2	Method Blank	Total/NA	Water	5210B-2001	
USB 240-419936/1	Method Blank	Total/NA	Water	5210B-2001	
LCS 240-419936/3	Lab Control Sample	Total/NA	Water	5210B-2001	

Analysis Batch: 420180

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-125232-1	W-12610-012020-SSH-00120	Total/NA	Water	SM 2540D	
MB 240-420180/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 240-420180/2	Lab Control Sample	Total/NA	Water	SM 2540D	

Analysis Batch: 420279

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-125232-1	W-12610-012020-SSH-00120	Total/NA	Water	SM4500 P E-1999	
MB 240-420279/3	Method Blank	Total/NA	Water	SM4500 P E-1999	
LCS 240-420279/4	Lab Control Sample	Total/NA	Water	SM4500 P E-1999	

Analysis Batch: 420454

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-125232-1	W-12610-012020-SSH-00120	Total/NA	Water	410.4	
MB 240-420454/9	Method Blank	Total/NA	Water	410.4	
LCS 240-420454/10	Lab Control Sample	Total/NA	Water	410.4	
240-125232-1 MS	W-12610-012020-SSH-00120	Total/NA	Water	410.4	
240-125232-1 MSD	W-12610-012020-SSH-00120	Total/NA	Water	410.4	

Analysis Batch: 420585

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-125232-1	W-12610-012020-SSH-00120	Total/NA	Water	4500 NH3 D-2011	
MB 240-420585/7	Method Blank	Total/NA	Water	4500 NH3 D-2011	
LCS 240-420585/8	Lab Control Sample	Total/NA	Water	4500 NH3 D-2011	

Analysis Batch: 420638

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-125232-1	W-12610-012020-SSH-00120	Total/NA	Water	1664A	
MB 240-420638/1	Method Blank	Total/NA	Water	1664A	
LCS 240-420638/2	Lab Control Sample	Total/NA	Water	1664A	
240-125232-1 MS	W-12610-012020-SSH-00120	Total/NA	Water	1664A	

QC Sample Results

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

Job ID: 240-125232-1

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

Lab Sample ID: MB 240-420227/8
Matrix: Water
Analysis Batch: 420227

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	0.20	ug/L			01/24/20 18:21	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		47 - 134					01/24/20 18:21	1
1,2-Dichloroethane-d4 (Surr)	87		75 - 130					01/24/20 18:21	1
Toluene-d8 (Surr)	94		69 - 122					01/24/20 18:21	1

Lab Sample ID: LCS 240-420227/5
Matrix: Water
Analysis Batch: 420227

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	20.5		ug/L		103	10 - 251
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	95		47 - 134				
1,2-Dichloroethane-d4 (Surr)	89		75 - 130				
Toluene-d8 (Surr)	96		69 - 122				

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

Lab Sample ID: MB 240-419990/4-A
Matrix: Water
Analysis Batch: 420113

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 419990

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.10	U	0.10	0.056	ug/L		01/23/20 07:00	01/24/20 11:17	1
Aroclor-1221	0.10	U	0.10	0.057	ug/L		01/23/20 07:00	01/24/20 11:17	1
Aroclor-1232	0.10	U	0.10	0.074	ug/L		01/23/20 07:00	01/24/20 11:17	1
Aroclor-1242	0.10	U	0.10	0.076	ug/L		01/23/20 07:00	01/24/20 11:17	1
Aroclor-1248	0.10	U	0.10	0.050	ug/L		01/23/20 07:00	01/24/20 11:17	1
Aroclor-1254	0.10	U	0.10	0.040	ug/L		01/23/20 07:00	01/24/20 11:17	1
Aroclor-1260	0.10	U	0.10	0.046	ug/L		01/23/20 07:00	01/24/20 11:17	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	98		10 - 114				01/23/20 07:00	01/24/20 11:17	1
Tetrachloro-m-xylene	77		15 - 131				01/23/20 07:00	01/24/20 11:17	1

Lab Sample ID: LCS 240-419990/5-A
Matrix: Water
Analysis Batch: 420113

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 419990

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	2.50	1.67		ug/L		67	50 - 114
Aroclor-1260	2.50	1.66		ug/L		66	8 - 127

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QC Sample Results

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

Job ID: 240-125232-1

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

Lab Sample ID: LCS 240-419990/5-A
Matrix: Water
Analysis Batch: 420113

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 419990

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
DCB Decachlorobiphenyl	75		10 - 114
Tetrachloro-m-xylene	69		15 - 131

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 240-420006/1-A
Matrix: Water
Analysis Batch: 420280

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 420006

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Silver	5.0	U	5.0	0.62	ug/L		01/23/20 14:00	01/24/20 11:40	1
Cadmium	2.0	U	2.0	0.20	ug/L		01/23/20 14:00	01/24/20 11:40	1
Chromium	5.0	U	5.0	0.63	ug/L		01/23/20 14:00	01/24/20 11:40	1
Copper	20	U	20	3.5	ug/L		01/23/20 14:00	01/24/20 11:40	1
Iron	100	U	100	26	ug/L		01/23/20 14:00	01/24/20 11:40	1
Nickel	20	U	20	2.2	ug/L		01/23/20 14:00	01/24/20 11:40	1
Lead	3.0	U	3.0	2.8	ug/L		01/23/20 14:00	01/24/20 11:40	1

Lab Sample ID: LCS 240-420006/2-A
Matrix: Water
Analysis Batch: 420280

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 420006

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	Limits
		Result	Qualifier				
Silver	100	101		ug/L		101	85 - 115
Cadmium	1000	1030		ug/L		103	85 - 115
Chromium	1000	1050		ug/L		105	85 - 115
Copper	1000	1010		ug/L		101	85 - 115
Iron	10000	10000		ug/L		100	85 - 115
Nickel	1000	1040		ug/L		104	85 - 115
Lead	1000	1010		ug/L		101	85 - 115

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 240-420023/1-A
Matrix: Water
Analysis Batch: 420138

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 420023

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	0.20	U	0.20	0.13	ug/L		01/23/20 12:00	01/23/20 15:02	1

Lab Sample ID: LCS 240-420023/2-A
Matrix: Water
Analysis Batch: 420138

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 420023

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	Limits
		Result	Qualifier				
Mercury	5.00	5.03		ug/L		101	85 - 115

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QC Sample Results

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

Job ID: 240-125232-1

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 240-420638/1
Matrix: Water
Analysis Batch: 420638

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM	1.10	J	5.0	1.0	mg/L			01/29/20 08:23	1

Lab Sample ID: LCS 240-420638/2
Matrix: Water
Analysis Batch: 420638

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	37.50		mg/L		94	78 - 114

Lab Sample ID: 240-125232-1 MS
Matrix: Water
Analysis Batch: 420638

Client Sample ID: W-12610-012020-SSH-00120
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM	4.8	U	38.3	36.69		mg/L		96	78 - 114

Method: 410.4 - COD

Lab Sample ID: MB 240-420454/9
Matrix: Water
Analysis Batch: 420454

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	4.1	mg/L			01/28/20 06:30	1

Lab Sample ID: LCS 240-420454/10
Matrix: Water
Analysis Batch: 420454

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	68.4	67.1		mg/L		98	90 - 110

Lab Sample ID: 240-125232-1 MS
Matrix: Water
Analysis Batch: 420454

Client Sample ID: W-12610-012020-SSH-00120
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	10	U	50.0	46.3		mg/L		93	90 - 110

Lab Sample ID: 240-125232-1 MSD
Matrix: Water
Analysis Batch: 420454

Client Sample ID: W-12610-012020-SSH-00120
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chemical Oxygen Demand	10	U	50.0	49.5		mg/L		99	90 - 110	7	20

QC Sample Results

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

Job ID: 240-125232-1

Method: 4500 H+ B-2000 - pH

Lab Sample ID: LCS 240-419883/2
Matrix: Water
Analysis Batch: 419883

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
pH	6.00	6.0		SU		101	97 - 103

Method: 4500 NH3 D-2011 - Ammonia

Lab Sample ID: MB 240-420585/7
Matrix: Water
Analysis Batch: 420585

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	0.093	mg/L			01/28/20 11:31	1

Lab Sample ID: LCS 240-420585/8
Matrix: Water
Analysis Batch: 420585

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	15.2	14.6		mg/L		96	85 - 114

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

Lab Sample ID: SCB 240-419936/2
Matrix: Water
Analysis Batch: 419936

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			01/22/20 14:19	1

Lab Sample ID: USB 240-419936/1
Matrix: Water
Analysis Batch: 419936

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			01/22/20 14:18	1

Lab Sample ID: LCS 240-419936/3
Matrix: Water
Analysis Batch: 419936

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	168		mg/L		85	85 - 115

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

Lab Sample ID: MB 240-420180/1
Matrix: Water
Analysis Batch: 420180

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	2.2	mg/L			01/24/20 10:19	1

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QC Sample Results

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

Job ID: 240-125232-1

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

Lab Sample ID: LCS 240-420180/2
Matrix: Water
Analysis Batch: 420180

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	44.1	41.0		mg/L		93	64 - 120

Method: SM4500 P E-1999 - Phosphorus

Lab Sample ID: MB 240-420279/3
Matrix: Water
Analysis Batch: 420279

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	0.037	mg/L			01/27/20 07:54	1

Lab Sample ID: LCS 240-420279/4
Matrix: Water
Analysis Batch: 420279

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	0.405	0.384		mg/L		95	77 - 120

Surrogate Summary

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

Job ID: 240-125232-1

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)
240-125232-1	W-12610-012020-SSH-00120	95	91	94
240-125232-3	W-12610-012020-SSH-00320	93	89	95
LCS 240-420227/5	Lab Control Sample	95	89	96
MB 240-420227/8	Method Blank	94	87	94

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	DCBP1	TCX1
		(10-114)	(15-131)
240-125232-1	W-12610-012020-SSH-00120	91	81
240-125232-2	W-12610-012020-SSH-00220	90	83
LCS 240-419990/5-A	Lab Control Sample	75	69
MB 240-419990/4-A	Method Blank	98	77

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Lab Chronicle

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

Job ID: 240-125232-1

Client Sample ID: W-12610-012020-SSH-00120

Lab Sample ID: 240-125232-1

Date Collected: 01/20/20 13:35

Matrix: Water

Date Received: 01/22/20 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	420227	01/25/20 01:09	TJL1	TAL CAN
Total/NA	Prep	608			419990	01/23/20 07:00	SDE	TAL CAN
Total/NA	Analysis	608		1	420113	01/24/20 12:21	CSC	TAL CAN
Total Recoverable	Prep	200.7			420006	01/23/20 14:00	MRL	TAL CAN
Total Recoverable	Analysis	200.7 Rev 4.4		1	420280	01/24/20 12:35	WKD	TAL CAN
Total/NA	Prep	245.1			420023	01/23/20 12:00	MRL	TAL CAN
Total/NA	Analysis	245.1		1	420138	01/23/20 15:17	SLD	TAL CAN
Total/NA	Analysis	1664A		1	420638	01/29/20 08:23	BLW	TAL CAN
Total/NA	Analysis	410.4		1	420454	01/28/20 06:30	TPH	TAL CAN
Total/NA	Analysis	4500 H+ B-2000		1	419883	01/22/20 11:29	AMT	TAL CAN
Total/NA	Analysis	4500 NH3 D-2011		1	420585	01/28/20 15:30	JMB	TAL CAN
Total/NA	Analysis	5210B-2001		1	419936	01/22/20 15:11	JR	TAL CAN
Total/NA	Analysis	SM 2540D		1	420180	01/24/20 10:19	JR	TAL CAN
Total/NA	Analysis	SM4500 P E-1999		1	420279	01/27/20 08:38	TPH	TAL CAN

Client Sample ID: W-12610-012020-SSH-00220

Lab Sample ID: 240-125232-2

Date Collected: 01/20/20 13:30

Matrix: Water

Date Received: 01/22/20 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	608			419990	01/23/20 07:00	SDE	TAL CAN
Total/NA	Analysis	608		1	420113	01/24/20 12:42	CSC	TAL CAN

Client Sample ID: W-12610-012020-SSH-00320

Lab Sample ID: 240-125232-3

Date Collected: 01/20/20 13:40

Matrix: Water

Date Received: 01/22/20 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	420227	01/25/20 01:32	TJL1	TAL CAN

Laboratory References:

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

Accreditation/Certification Summary

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

Job ID: 240-125232-1

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	02-23-20
Connecticut	State	PH-0590	12-31-19 *
Florida	NELAP	E87225	06-30-20
Georgia	State	4062	02-23-20
Illinois	NELAP	004498	07-31-20
Iowa	State	421	06-01-20
Kansas	NELAP	E-10336	04-30-20
Kentucky (UST)	State	112225	02-23-20
Kentucky (WW)	State	KY98016	12-31-20
Minnesota	NELAP	OH00048	12-31-20
Minnesota (Petrofund)	State Program	3506	07-31-21
New Jersey	NELAP	OH001	06-30-20
New York	NELAP	10975	03-31-20
Ohio VAP	State	CL0024	06-05-21
Oregon	NELAP	4062	02-23-20
Pennsylvania	NELAP	68-00340	08-31-20
Texas	NELAP	T104704517-18-10	08-31-20
USDA	US Federal Programs	P330-16-00404	12-28-19 *
Virginia	NELAP	010101	09-14-20
West Virginia DEP	State	210	12-31-20

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

Eurofins TestAmerica, Canton

Chain of Custody Record

MICHIGAN 190



Environment Testing
 TestAmerica

3.5/4.0

Client Information Client Contact: Ms. Ruth Mickle Company: GHD Services Inc. Address: 26850 Haggerty Rd. City: Farmington Hills State, Zip: MI, 48331 Phone: Email: ruth.mickle@ghd.com Project #: 12610 Project Name: 12610 - RACER Bay City Site:		Lab P/N: Heckler, Denise D E-Mail: denise.heckler@lestamericainc.com Sampler: S. Hoevermeyer Phone: 616 437 7734 Carner Tracking No(s): COC No: 240-68313-28189.1 Page: Page 1 of 1 Job #:																																																													
Due Date Requested: 1/28/2020 TAT Requested (days): 1 week PO #: Purchase Order Requested WO #: Project #: 24006288 SSO#: 12610A-2019-01		Analysis Requested <table border="1"> <tr> <th>Sample Identification</th> <th>Sample Date</th> <th>Sample Time</th> <th>Sample Type (C=Comp, G=grab)</th> <th>Matrix (Water, Solid, On-surface, BI-Tissue, Air)</th> <th>Field Filtered Sample (Yes or No)</th> <th>Perform MS/MSD (Yes or No)</th> <th>2007 - Select Metals</th> <th>410 A, 4500 P, E, SM4500NH3 D</th> <th>624 LL - Vinyl chloride</th> <th>608 PCB - PCBs</th> <th>52108 - BOD</th> <th>25400, SM4500_H+</th> <th>1664A NP - HEM</th> <th>Special Instructions/Note:</th> </tr> <tr> <td>W-12610-012020-SSH-00120</td> <td>1/20/20</td> <td>1335</td> <td>G</td> <td>Water</td> <td>W</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td></td> </tr> <tr> <td>W-12610-012020-SSH-00220</td> <td>1/20/20</td> <td>1330</td> <td>G</td> <td>Water</td> <td>W</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>W-12610-012020-SSH-00320</td> <td>1/20/20</td> <td>1340</td> <td>G</td> <td>Water</td> <td>W</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>		Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Solid, On-surface, BI-Tissue, Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	2007 - Select Metals	410 A, 4500 P, E, SM4500NH3 D	624 LL - Vinyl chloride	608 PCB - PCBs	52108 - BOD	25400, SM4500_H+	1664A NP - HEM	Special Instructions/Note:	W-12610-012020-SSH-00120	1/20/20	1335	G	Water	W	X	X	X	X	X	X	X	X		W-12610-012020-SSH-00220	1/20/20	1330	G	Water	W										W-12610-012020-SSH-00320	1/20/20	1340	G	Water	W									
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Solid, On-surface, BI-Tissue, Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	2007 - Select Metals	410 A, 4500 P, E, SM4500NH3 D	624 LL - Vinyl chloride	608 PCB - PCBs	52108 - BOD	25400, SM4500_H+	1664A NP - HEM	Special Instructions/Note:																																																	
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Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input checked="" type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Deliverable Requested: I, II, III, IV, Other (specify)																																																													
Empty Kit Relinquished by: Relinquished by: Relinquished by: Relinquished by:		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months																																																													
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Cooler Temperature(s) °C and Other Remarks:																																																													



Ver: 01/16/2019
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Eurofins TestAmerica Canton Sample Receipt Form/Narrative
Canton Facility


Login # : 125232

Client CHD Site Name _____
 Cooler Received on 1-22-20 Opened on 1-22-20
 FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other

Cooler unpacked by:
Adam Gannett

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

TestAmerica Cooler # FA 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-10 (CF +0.7 °C) Observed Cooler Temp. 33 °C Corrected Cooler Temp. 40 °C
 IR GUN #IR-11 (CF +0.9 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 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
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes No
7. Did all bottles arrive in good condition (Unbroken)? Yes No
8. Could all bottle labels be reconciled with the COC? Yes No
9. Were correct bottle(s) used for the test(s) indicated? Yes No
10. Sufficient quantity received to perform indicated analyses? Yes No
11. Are these work share samples? Yes No
12. Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC995364
13. Were VOAs on the COC? Yes No
14. Were air bubbles >6 mm in any VOA vials? Yes No NA  Larger than this.
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____ Yes No
16. Was a LL Hg or Me Hg trip blank present? _____ Yes No

Tests that are not checked for pH by Receiving:

 VOAs
 Oil and Grease
 TOC

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

Concerning _____

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by: _____

18. SAMPLE CONDITION

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

19. SAMPLE PRESERVATION

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

Temperature readings: _____

<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-12610-012020-SSH-00120	240-125232-E-1	Plastic 500ml - with Sulfuric Acid	<2	_____	_____	_____
W-12610-012020-SSH-00120	240-125232-F-1	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
W-12610-012020-SSH-00120	240-125232-J-1	Amber Glass 1 liter - Sulfuric Acid	_____	_____	_____	_____
W-12610-012020-SSH-00120	240-125232-K-1	Amber Glass 1 liter - Sulfuric Acid	_____	_____	_____	_____

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Attachment 2

Certification Statement

"I, David Favero, certify under penalty of law that this document (January 30, 2020 GHD Semi-Annual Compliance Report (July 1 to December 31, 2019)), 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."



RACER, Deputy Cleanup Manager – Michigan

January 29, 2020

(Date)