



July 29, 2016

Reference No. 012610

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 (January 1 to June 30, 2016)  
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 January 1 to June 30, 2016 for RACER's groundwater treatment system located at the north end of Crotty Street in Bay City, Michigan (Site).

The groundwater treatment system operated consistently between January 1 and June 30, 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 treatment system on June 14, 2016. 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 treatment system is operated and maintained by Steve Hoevemeyer (GHD) who maintains the designation of Waste Treatment Plan 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 black ink, appearing to read "J. Pardys". The signature is fluid and cursive, with a large initial "J" and a long, sweeping underline.

John-Eric Pardys P. Eng.

JEP/wg/5

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

Table 1

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

**Sample Location:**  
**Sample ID:**  
**Sample Date:**

**effluent-GWTS  
W-12610-061416-SSH-1603  
06/14/2016**

Parameters VOAs	Units	Daily Maximum (Bay City Industrial User Permit)	
Vinyl chloride	mg/L	0.002	0.001 U
<b>Metals</b>			
Cadmium	mg/L	0.057	0.002 U
Chromium	mg/L	6.812	0.005 U
Copper	mg/L	1.476	0.02 U
Iron	mg/L		390
Lead	mg/L	0.632	0.003 U
Mercury	mg/L	ND	0.0002 U
Nickel	mg/L	2.548	0.02 U
Silver	mg/L	0.2	0.005 U
<b>Polychlorinated Biphenyls</b>			
Aroclor-1016 (PCB-1016)	mg/L	ND	0.000095 U
Aroclor-1221 (PCB-1221)	mg/L	ND	0.000095 U
Aroclor-1232 (PCB-1232)	mg/L	ND	0.000095 U
Aroclor-1242 (PCB-1242)	mg/L	ND	0.000095 U
Aroclor-1248 (PCB-1248)	mg/L	ND	0.000095 U
Aroclor-1254 (PCB-1254)	mg/L	ND	0.000095 U
Aroclor-1260 (PCB-1260)	mg/L	ND	0.000095 U
<b>Wet</b>			
Ammonia	mg/L	30	2.0 U
Biochemical oxygen demand (BOD)	mg/L	835	2.0 U
Chemical oxygen demand (COD)	mg/L	1670	18
Oil and grease (HEM), polar	mg/L	100	4.7 U
pH, lab	s.u.	6.5 to 11.0	7.54 HF
Phosphorus	mg/L	13.8	0.10 U
Total suspended solids (TSS)	mg/L	1336	4.0 U

## Footnotes:

- b Result Detected in the Unseeded Control blank (USB).  
 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.

Table 2

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

<b>Date</b>	<b>Flow Meter reading (gallons)</b>	<b>Cumulative Total: (gallons)</b>	<b>Volume to be invoiced annually (July to June 30)</b>	<b>Comments</b>
16-Jun-14	4593	18950	<b>18950</b>	- 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	<b>523666</b>	- Collected effluent sample, City invoiced for discharge
29-Jun-16	556457	570814		

# Attachment 1

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Canton

4101 Shuffel Street NW

North Canton, OH 44720

Tel: (330)497-9396

TestAmerica Job ID: 240-66028-1

Client Project/Site: 12610-T03, RACER Bay City

For:

GHD Services Inc.

14496 Sheldon Road, Suite 200

Plymouth, Michigan 48170

Attn: Rawa Fleisher



Authorized for release by:

6/23/2016 7:13:30 AM

Denise Heckler, Project Manager II

(330)966-9477

[denise.heckler@testamericainc.com](mailto:denise.heckler@testamericainc.com)



### LINKS

Review your project  
results through

**TotalAccess**

Have a Question?



Visit us at:

[www.testamericainc.com](http://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: 12610-T03, RACER Bay City

TestAmerica Job ID: 240-66028-1

**Job ID: 240-66028-1**

**Laboratory: TestAmerica Canton**

## Narrative

### Job Narrative 240-66028-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 6/15/2016 9:10 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.1° 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(s) 200.7 Rev 4.4, 6010B: Some requested practical quantitation limits (PQLs) on the following samples fall below the laboratory's verified standard quantitation limit: W-12610-061416-SSH-1603 (240-66028-1). 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(s) SM 5210B: The USB dilution water D.O. depletion was greater than 0.2 mg/L. The associated sample results in batch 234644 are qualified and reported.

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

#### Organic Prep

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

# Definitions/Glossary

Client: GHD Services Inc.  
Project/Site: 12610-T03, RACER Bay City

TestAmerica Job ID: 240-66028-1

## 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
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.
s	Seeded Control Blank (SCB) Recovery High

## 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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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: 12610-T03, RACER Bay City

TestAmerica Job ID: 240-66028-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-66028-1	W-12610-061416-SSH-1603	Water	06/14/16 09:30	06/15/16 09:10
240-66028-2	TB-12610-061416-SSH-1604	Water	06/14/16 09:35	06/15/16 09:10

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# Detection Summary

Client: GHD Services Inc.  
Project/Site: 12610-T03, RACER Bay City

TestAmerica Job ID: 240-66028-1

## Client Sample ID: W-12610-061416-SSH-1603

## Lab Sample ID: 240-66028-1

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Iron	390		100	ug/L	1		200.7 Rev 4.4	Total
Chemical Oxygen Demand	18		10	mg/L	1		410.4	Recoverable Total/NA
pH	7.54	HF	0.100	SU	1		4500 H+ B-2000	Total/NA

## Client Sample ID: TB-12610-061416-SSH-1604

## Lab Sample ID: 240-66028-2

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Canton



# Method Summary

Client: GHD Services Inc.  
Project/Site: 12610-T03, RACER Bay City

TestAmerica Job ID: 240-66028-1

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
350.2	Nitrogen, Ammonia, Distillation	MCAWW	TAL CAN
410.4	COD	MCAWW	TAL CAN
4500 H+ B-2000	pH	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

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

# Client Sample Results

Client: GHD Services Inc.  
Project/Site: 12610-T03, RACER Bay City

TestAmerica Job ID: 240-66028-1

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

Client Sample ID: W-12610-061416-SSH-1603

Date Collected: 06/14/16 09:30

Date Received: 06/15/16 09:10

Lab Sample ID: 240-66028-1

Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	1.0	U	1.0	ug/L			06/17/16 02:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		61 - 120				06/17/16 02:43	1
1,2-Dichloroethane-d4 (Surr)	94		78 - 125				06/17/16 02:43	1
Toluene-d8 (Surr)	98		80 - 120				06/17/16 02:43	1

# Client Sample Results

Client: GHD Services Inc.  
 Project/Site: 12610-T03, RACER Bay City

TestAmerica Job ID: 240-66028-1

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

**Client Sample ID: TB-12610-061416-SSH-1604**

**Date Collected: 06/14/16 09:35**

**Date Received: 06/15/16 09:10**

**Lab Sample ID: 240-66028-2**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	1.0	U	1.0	ug/L			06/17/16 03:06	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		61 - 120				06/17/16 03:06	1
1,2-Dichloroethane-d4 (Surr)	89		78 - 125				06/17/16 03:06	1
Toluene-d8 (Surr)	90		80 - 120				06/17/16 03:06	1

# Client Sample Results

Client: GHD Services Inc.  
 Project/Site: 12610-T03, RACER Bay City

TestAmerica Job ID: 240-66028-1

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

**Client Sample ID: W-12610-061416-SSH-1603**

**Date Collected: 06/14/16 09:30**

**Date Received: 06/15/16 09:10**

**Lab Sample ID: 240-66028-1**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.095	U	0.095	ug/L		06/16/16 05:16	06/18/16 12:49	1
Aroclor-1221	0.095	U	0.095	ug/L		06/16/16 05:16	06/18/16 12:49	1
Aroclor-1232	0.095	U	0.095	ug/L		06/16/16 05:16	06/18/16 12:49	1
Aroclor-1242	0.095	U	0.095	ug/L		06/16/16 05:16	06/18/16 12:49	1
Aroclor-1248	0.095	U	0.095	ug/L		06/16/16 05:16	06/18/16 12:49	1
Aroclor-1254	0.095	U	0.095	ug/L		06/16/16 05:16	06/18/16 12:49	1
Aroclor-1260	0.095	U	0.095	ug/L		06/16/16 05:16	06/18/16 12:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	49		10 - 114	06/16/16 05:16	06/18/16 12:49	1
Tetrachloro-m-xylene	50		15 - 131	06/16/16 05:16	06/18/16 12:49	1

# Client Sample Results

Client: GHD Services Inc.  
 Project/Site: 12610-T03, RACER Bay City

TestAmerica Job ID: 240-66028-1

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

**Client Sample ID: W-12610-061416-SSH-1603**

**Date Collected: 06/14/16 09:30**

**Date Received: 06/15/16 09:10**

**Lab Sample ID: 240-66028-1**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	5.0	U	5.0	ug/L		06/16/16 11:10	06/17/16 23:18	1
Cadmium	2.0	U	2.0	ug/L		06/16/16 11:10	06/17/16 23:18	1
Chromium	5.0	U	5.0	ug/L		06/16/16 11:10	06/17/16 23:18	1
Copper	20	U	20	ug/L		06/16/16 11:10	06/17/16 23:18	1
<b>Iron</b>	<b>390</b>		100	ug/L		06/16/16 11:10	06/17/16 23:18	1
Nickel	20	U	20	ug/L		06/16/16 11:10	06/17/16 23:18	1
Lead	3.0	U	3.0	ug/L		06/16/16 11:10	06/17/16 23:18	1

# Client Sample Results

Client: GHD Services Inc.  
Project/Site: 12610-T03, RACER Bay City

TestAmerica Job ID: 240-66028-1

## Method: 245.1 - Mercury (CVAA)

Client Sample ID: W-12610-061416-SSH-1603

Date Collected: 06/14/16 09:30

Date Received: 06/15/16 09:10

Lab Sample ID: 240-66028-1

Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	ug/L		06/20/16 12:00	06/21/16 09:08	1

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# Client Sample Results

Client: GHD Services Inc.  
 Project/Site: 12610-T03, RACER Bay City

TestAmerica Job ID: 240-66028-1

## General Chemistry

**Client Sample ID: W-12610-061416-SSH-1603**

**Date Collected: 06/14/16 09:30**

**Date Received: 06/15/16 09:10**

**Lab Sample ID: 240-66028-1**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
HEM	4.7	U	4.7	mg/L			06/21/16 13:58	1
Ammonia (as N)	2.0	U	2.0	mg/L		06/22/16 09:00	06/22/16 13:57	1
<b>Chemical Oxygen Demand</b>	<b>18</b>		10	mg/L			06/20/16 11:05	1
<b>pH</b>	<b>7.54</b>	<b>HF</b>	0.100	SU			06/15/16 14:30	1
Biochemical Oxygen Demand	2.0	U	2.0	mg/L			06/15/16 14:17	1
Total Suspended Solids	4.0	U	4.0	mg/L			06/20/16 10:47	1
Total Phosphorus as P	0.10	U	0.10	mg/L			06/17/16 12:14	1

# QC Association Summary

Client: GHD Services Inc.  
Project/Site: 12610-T03, RACER Bay City

TestAmerica Job ID: 240-66028-1

## GC/MS VOA

### Analysis Batch: 234858

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-66028-1	W-12610-061416-SSH-1603	Total/NA	Water	624	
240-66028-2	TB-12610-061416-SSH-1604	Total/NA	Water	624	
LCS 240-234858/6	Lab Control Sample	Total/NA	Water	624	
MB 240-234858/7	Method Blank	Total/NA	Water	624	

## GC Semi VOA

### Prep Batch: 234711

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-66028-1	W-12610-061416-SSH-1603	Total/NA	Water	608	
LCS 240-234711/8-A	Lab Control Sample	Total/NA	Water	608	
MB 240-234711/7-A	Method Blank	Total/NA	Water	608	

### Analysis Batch: 235052

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-66028-1	W-12610-061416-SSH-1603	Total/NA	Water	608	234711
LCS 240-234711/8-A	Lab Control Sample	Total/NA	Water	608	234711
MB 240-234711/7-A	Method Blank	Total/NA	Water	608	234711

## Metals

### Prep Batch: 234790

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-66028-1	W-12610-061416-SSH-1603	Total Recoverable	Water	200.7	
240-66028-1 MS	W-12610-061416-SSH-1603	Total Recoverable	Water	200.7	
240-66028-1 MSD	W-12610-061416-SSH-1603	Total Recoverable	Water	200.7	
LCS 240-234790/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
MB 240-234790/1-A	Method Blank	Total Recoverable	Water	200.7	

### Analysis Batch: 234992

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-66028-1	W-12610-061416-SSH-1603	Total Recoverable	Water	200.7 Rev 4.4	234790
240-66028-1 MS	W-12610-061416-SSH-1603	Total Recoverable	Water	200.7 Rev 4.4	234790
240-66028-1 MSD	W-12610-061416-SSH-1603	Total Recoverable	Water	200.7 Rev 4.4	234790
LCS 240-234790/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	234790
MB 240-234790/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	234790

### Prep Batch: 235199

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-66028-1	W-12610-061416-SSH-1603	Total/NA	Water	245.1	
LCS 240-235199/2-A	Lab Control Sample	Total/NA	Water	245.1	
MB 240-235199/1-A	Method Blank	Total/NA	Water	245.1	

### Analysis Batch: 235323

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-66028-1	W-12610-061416-SSH-1603	Total/NA	Water	245.1	235199
LCS 240-235199/2-A	Lab Control Sample	Total/NA	Water	245.1	235199
MB 240-235199/1-A	Method Blank	Total/NA	Water	245.1	235199

TestAmerica Canton

# QC Association Summary

Client: GHD Services Inc.  
Project/Site: 12610-T03, RACER Bay City

TestAmerica Job ID: 240-66028-1

## General Chemistry

### Analysis Batch: 234638

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-66028-1	W-12610-061416-SSH-1603	Total/NA	Water	4500 H+ B-2000	
240-66028-1 DU	W-12610-061416-SSH-1603	Total/NA	Water	4500 H+ B-2000	
LCS 240-234638/2	Lab Control Sample	Total/NA	Water	4500 H+ B-2000	

### Analysis Batch: 234644

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-66028-1	W-12610-061416-SSH-1603	Total/NA	Water	5210B-2001	
LCS 240-234644/3	Lab Control Sample	Total/NA	Water	5210B-2001	
SCB 240-234644/2	Method Blank	Total/NA	Water	5210B-2001	
USB 240-234644/1	Method Blank	Total/NA	Water	5210B-2001	

### Analysis Batch: 234993

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-66028-1	W-12610-061416-SSH-1603	Total/NA	Water	SM4500 P E-1999	
LCS 240-234993/4	Lab Control Sample	Total/NA	Water	SM4500 P E-1999	
MB 240-234993/3	Method Blank	Total/NA	Water	SM4500 P E-1999	

### Analysis Batch: 235127

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-66028-1	W-12610-061416-SSH-1603	Total/NA	Water	410.4	
LCS 240-235127/10	Lab Control Sample	Total/NA	Water	410.4	
LCS 240-235127/38	Lab Control Sample	Total/NA	Water	410.4	
MB 240-235127/37	Method Blank	Total/NA	Water	410.4	
MB 240-235127/9	Method Blank	Total/NA	Water	410.4	

### Analysis Batch: 235168

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-66028-1	W-12610-061416-SSH-1603	Total/NA	Water	SM 2540D	
LCS 240-235168/2	Lab Control Sample	Total/NA	Water	SM 2540D	
MB 240-235168/1	Method Blank	Total/NA	Water	SM 2540D	

### Analysis Batch: 235337

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-66028-1	W-12610-061416-SSH-1603	Total/NA	Water	1664A	
LCS 240-235337/25	Lab Control Sample	Total/NA	Water	1664A	
MB 240-235337/24	Method Blank	Total/NA	Water	1664A	

### Prep Batch: 235552

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-66028-1	W-12610-061416-SSH-1603	Total/NA	Water	Distill/Ammonia	
LCS 240-235552/2-A	Lab Control Sample	Total/NA	Water	Distill/Ammonia	
MB 240-235552/1-A	Method Blank	Total/NA	Water	Distill/Ammonia	

### Analysis Batch: 235557

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-66028-1	W-12610-061416-SSH-1603	Total/NA	Water	350.2	235552
LCS 240-235552/2-A	Lab Control Sample	Total/NA	Water	350.2	235552
MB 240-235552/1-A	Method Blank	Total/NA	Water	350.2	235552

TestAmerica Canton

# QC Sample Results

Client: GHD Services Inc.  
Project/Site: 12610-T03, RACER Bay City

TestAmerica Job ID: 240-66028-1

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

**Lab Sample ID: MB 240-234858/7**

**Matrix: Water**

**Analysis Batch: 234858**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	1.0	U	1.0	ug/L			06/16/16 18:40	1
Surrogate	%Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	80		61 - 120				06/16/16 18:40	1
1,2-Dichloroethane-d4 (Surr)	87		78 - 125				06/16/16 18:40	1
Toluene-d8 (Surr)	86		80 - 120				06/16/16 18:40	1

**Lab Sample ID: LCS 240-234858/6**

**Matrix: Water**

**Analysis Batch: 234858**

**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	23.1		ug/L		115	10 - 251
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	92		61 - 120				
1,2-Dichloroethane-d4 (Surr)	101		78 - 125				
Toluene-d8 (Surr)	99		80 - 120				

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

**Lab Sample ID: MB 240-234711/7-A**

**Matrix: Water**

**Analysis Batch: 235052**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 234711**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.10	U	0.10	ug/L		06/16/16 05:16	06/18/16 14:20	1
Aroclor-1221	0.10	U	0.10	ug/L		06/16/16 05:16	06/18/16 14:20	1
Aroclor-1232	0.10	U	0.10	ug/L		06/16/16 05:16	06/18/16 14:20	1
Aroclor-1242	0.10	U	0.10	ug/L		06/16/16 05:16	06/18/16 14:20	1
Aroclor-1248	0.10	U	0.10	ug/L		06/16/16 05:16	06/18/16 14:20	1
Aroclor-1254	0.10	U	0.10	ug/L		06/16/16 05:16	06/18/16 14:20	1
Aroclor-1260	0.10	U	0.10	ug/L		06/16/16 05:16	06/18/16 14:20	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	61		10 - 114			06/16/16 05:16	06/18/16 14:20	1
Tetrachloro-m-xylene	62		15 - 131			06/16/16 05:16	06/18/16 14:20	1

**Lab Sample ID: LCS 240-234711/8-A**

**Matrix: Water**

**Analysis Batch: 235052**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 234711**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	2.50	1.59		ug/L		64	50 - 114
Aroclor-1260	2.50	1.55		ug/L		62	8 - 127

TestAmerica Canton

# QC Sample Results

Client: GHD Services Inc.  
Project/Site: 12610-T03, RACER Bay City

TestAmerica Job ID: 240-66028-1

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

**Lab Sample ID: LCS 240-234711/8-A**  
**Matrix: Water**  
**Analysis Batch: 235052**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 234711**

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	61		10 - 114
Tetrachloro-m-xylene	63		15 - 131

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

**Lab Sample ID: MB 240-234790/1-A**  
**Matrix: Water**  
**Analysis Batch: 234992**

**Client Sample ID: Method Blank**  
**Prep Type: Total Recoverable**  
**Prep Batch: 234790**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	5.0	U	5.0	ug/L		06/16/16 11:10	06/17/16 23:10	1
Cadmium	2.0	U	2.0	ug/L		06/16/16 11:10	06/17/16 23:10	1
Chromium	5.0	U	5.0	ug/L		06/16/16 11:10	06/17/16 23:10	1
Copper	20	U	20	ug/L		06/16/16 11:10	06/17/16 23:10	1
Iron	100	U	100	ug/L		06/16/16 11:10	06/17/16 23:10	1
Nickel	20	U	20	ug/L		06/16/16 11:10	06/17/16 23:10	1
Lead	3.0	U	3.0	ug/L		06/16/16 11:10	06/17/16 23:10	1

**Lab Sample ID: LCS 240-234790/2-A**  
**Matrix: Water**  
**Analysis Batch: 234992**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total Recoverable**  
**Prep Batch: 234790**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits %Rec.
Silver	50.0	49.5		ug/L		99	85 - 115
Cadmium	50.0	51.7		ug/L		103	85 - 115
Chromium	200	197		ug/L		98	85 - 115
Copper	250	235		ug/L		94	85 - 115
Iron	1000	1040		ug/L		104	85 - 115
Nickel	500	508		ug/L		102	85 - 115
Lead	500	493		ug/L		99	85 - 115

**Lab Sample ID: 240-66028-1 MS**  
**Matrix: Water**  
**Analysis Batch: 234992**

**Client Sample ID: W-12610-061416-SSH-1603**  
**Prep Type: Total Recoverable**  
**Prep Batch: 234790**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits %Rec.
Silver	5.0	U	50.0	49.0		ug/L		98	75 - 125
Cadmium	2.0	U	50.0	51.0		ug/L		102	75 - 125
Chromium	5.0	U	200	192		ug/L		96	75 - 125
Copper	20	U	250	242		ug/L		97	75 - 125
Iron	390		1000	1380		ug/L		99	75 - 125
Nickel	20	U	500	507		ug/L		100	75 - 125
Lead	3.0	U	500	480		ug/L		96	75 - 125

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# QC Sample Results

Client: GHD Services Inc.  
Project/Site: 12610-T03, RACER Bay City

TestAmerica Job ID: 240-66028-1

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

**Lab Sample ID: 240-66028-1 MSD**  
**Matrix: Water**  
**Analysis Batch: 234992**

**Client Sample ID: W-12610-061416-SSH-1603**  
**Prep Type: Total Recoverable**  
**Prep Batch: 234790**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
Silver	5.0	U	50.0	49.1		ug/L		98	75 - 125	0	20
Cadmium	2.0	U	50.0	50.9		ug/L		102	75 - 125	0	20
Chromium	5.0	U	200	193		ug/L		96	75 - 125	0	20
Copper	20	U	250	246		ug/L		98	75 - 125	1	20
Iron	390		1000	1380		ug/L		99	75 - 125	0	20
Nickel	20	U	500	506		ug/L		100	75 - 125	0	20
Lead	3.0	U	500	478		ug/L		96	75 - 125	0	20

## Method: 245.1 - Mercury (CVAA)

**Lab Sample ID: MB 240-235199/1-A**  
**Matrix: Water**  
**Analysis Batch: 235323**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 235199**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	ug/L		06/20/16 11:59	06/21/16 08:08	1

**Lab Sample ID: LCS 240-235199/2-A**  
**Matrix: Water**  
**Analysis Batch: 235323**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 235199**

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

## Method: 1664A - HEM and SGT-HEM

**Lab Sample ID: MB 240-235337/24**  
**Matrix: Water**  
**Analysis Batch: 235337**

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
HEM	5.0	U	5.0	mg/L			06/21/16 13:58	1

**Lab Sample ID: LCS 240-235337/25**  
**Matrix: Water**  
**Analysis Batch: 235337**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
HEM	40.0	33.8		mg/L		85	78 - 114

## Method: 350.2 - Nitrogen, Ammonia, Distillation

**Lab Sample ID: MB 240-235552/1-A**  
**Matrix: Water**  
**Analysis Batch: 235557**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 235552**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	2.0	U	2.0	mg/L		06/22/16 09:00	06/22/16 13:06	1

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# QC Sample Results

Client: GHD Services Inc.  
Project/Site: 12610-T03, RACER Bay City

TestAmerica Job ID: 240-66028-1

## Method: 350.2 - Nitrogen, Ammonia, Distillation (Continued)

Lab Sample ID: LCS 240-235552/2-A  
Matrix: Water  
Analysis Batch: 235557

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 235552

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia (as N)	11.1	10.6		mg/L		96	85 - 114

## Method: 410.4 - COD

Lab Sample ID: MB 240-235127/37  
Matrix: Water  
Analysis Batch: 235127

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	10	U	10	mg/L			06/20/16 11:06	1

Lab Sample ID: MB 240-235127/9  
Matrix: Water  
Analysis Batch: 235127

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	10	U	10	mg/L			06/20/16 10:54	1

Lab Sample ID: LCS 240-235127/10  
Matrix: Water  
Analysis Batch: 235127

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	36.6	37.8		mg/L		103	90 - 110

Lab Sample ID: LCS 240-235127/38  
Matrix: Water  
Analysis Batch: 235127

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	36.6	37.8		mg/L		103	90 - 110

## Method: 4500 H+ B-2000 - pH

Lab Sample ID: LCS 240-234638/2  
Matrix: Water  
Analysis Batch: 234638

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
pH	6.15	6.260		SU		102	97 - 103

Lab Sample ID: 240-66028-1 DU  
Matrix: Water  
Analysis Batch: 234638

Client Sample ID: W-12610-061416-SSH-1603  
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	7.54	HF	7.550		SU		0.1	20

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# QC Sample Results

Client: GHD Services Inc.  
Project/Site: 12610-T03, RACER Bay City

TestAmerica Job ID: 240-66028-1

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

**Lab Sample ID: SCB 240-234644/2**  
**Matrix: Water**  
**Analysis Batch: 234644**

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

Analyte	SCB Result	SCB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	2.0	U s	2.0	mg/L			06/15/16 13:00	1

**Lab Sample ID: USB 240-234644/1**  
**Matrix: Water**  
**Analysis Batch: 234644**

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

Analyte	USB Result	USB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	2.0	U	2.0	mg/L			06/15/16 13:01	1

**Lab Sample ID: LCS 240-234644/3**  
**Matrix: Water**  
**Analysis Batch: 234644**

**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	194		mg/L		98	85 - 115

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

**Lab Sample ID: MB 240-235168/1**  
**Matrix: Water**  
**Analysis Batch: 235168**

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	4.0	U	4.0	mg/L			06/20/16 10:47	1

**Lab Sample ID: LCS 240-235168/2**  
**Matrix: Water**  
**Analysis Batch: 235168**

**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	82.3	82.0		mg/L		100	73 - 113

## Method: SM4500 P E-1999 - Phosphorus

**Lab Sample ID: MB 240-234993/3**  
**Matrix: Water**  
**Analysis Batch: 234993**

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Phosphorus as P	0.10	U	0.10	mg/L			06/17/16 12:14	1

**Lab Sample ID: LCS 240-234993/4**  
**Matrix: Water**  
**Analysis Batch: 234993**

**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	0.266	0.267		mg/L		100	53 - 134

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# Surrogate Summary

Client: GHD Services Inc.  
Project/Site: 12610-T03, RACER Bay City

TestAmerica Job ID: 240-66028-1

## 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 (61-120)	12DCE (78-125)	TOL (80-120)
240-66028-1	W-12610-061416-SSH-1603	87	94	98
240-66028-2	TB-12610-061416-SSH-1604	86	89	90
LCS 240-234858/6	Lab Control Sample	92	101	99
MB 240-234858/7	Method Blank	80	87	86

#### Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

12DCE = 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	DCB2 (10-114)	TCX2 (15-131)
240-66028-1	W-12610-061416-SSH-1603	49	50
LCS 240-234711/8-A	Lab Control Sample	61	63
MB 240-234711/7-A	Method Blank	61	62

#### Surrogate Legend

DCB = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

# Lab Chronicle

Client: GHD Services Inc.  
Project/Site: 12610-T03, RACER Bay City

TestAmerica Job ID: 240-66028-1

**Client Sample ID: W-12610-061416-SSH-1603**

**Lab Sample ID: 240-66028-1**

**Date Collected: 06/14/16 09:30**

**Matrix: Water**

**Date Received: 06/15/16 09:10**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	234858	06/17/16 02:43	TJL1	TAL CAN
Total/NA	Prep	608			234711	06/16/16 05:16	CSC	TAL CAN
Total/NA	Analysis	608		1	235052	06/18/16 12:49	LSH	TAL CAN
Total Recoverable	Prep	200.7			234790	06/16/16 11:10	AJC	TAL CAN
Total Recoverable	Analysis	200.7 Rev 4.4		1	234992	06/17/16 23:18	RKT	TAL CAN
Total/NA	Prep	245.1			235199	06/20/16 12:00	AJC	TAL CAN
Total/NA	Analysis	245.1		1	235323	06/21/16 09:08	DSH	TAL CAN
Total/NA	Analysis	1664A		1	235337	06/21/16 13:58	DTN	TAL CAN
Total/NA	Prep	Distill/Ammonia			235552	06/22/16 09:00	JAS	TAL CAN
Total/NA	Analysis	350.2		1	235557	06/22/16 13:57	JAS	TAL CAN
Total/NA	Analysis	410.4		1	235127	06/20/16 11:05	TPH	TAL CAN
Total/NA	Analysis	4500 H+ B-2000		1	234638	06/15/16 14:30	JWW	TAL CAN
Total/NA	Analysis	5210B-2001		1	234644	06/15/16 14:17	LCN	TAL CAN
Total/NA	Analysis	SM 2540D		1	235168	06/20/16 10:47	GNR	TAL CAN
Total/NA	Analysis	SM4500 P E-1999		1	234993	06/17/16 12:14	JWW	TAL CAN

**Client Sample ID: TB-12610-061416-SSH-1604**

**Lab Sample ID: 240-66028-2**

**Date Collected: 06/14/16 09:35**

**Matrix: Water**

**Date Received: 06/15/16 09:10**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	234858	06/17/16 03:06	TJL1	TAL CAN

**Laboratory References:**

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

# Certification Summary

Client: GHD Services Inc.  
Project/Site: 12610-T03, RACER Bay City

TestAmerica Job ID: 240-66028-1

## Laboratory: TestAmerica Canton

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

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14 *
California	State Program	9	2927	04-30-17
Connecticut	State Program	1	PH-0590	12-31-17
Florida	NELAP	4	E87225	06-30-16 *
Illinois	NELAP	5	200004	07-31-16 *
Kansas	NELAP	7	E-10336	07-31-16 *
Kentucky (UST)	State Program	4	58	02-23-17
Kentucky (WW)	State Program	4	98016	12-31-16
L-A-B	DoD ELAP		L2315	07-18-16
Minnesota	NELAP	5	039-999-348	12-31-16
Nevada	State Program	9	OH-000482008A	07-31-16 *
New Jersey	NELAP	2	OH001	06-30-16 *
New York	NELAP	2	10975	03-31-17
Ohio VAP	State Program	5	CL0024	09-14-17
Oregon	NELAP	10	4062	02-23-17
Pennsylvania	NELAP	3	68-00340	08-31-16 *
Texas	NELAP	6	T104704517-15-5	08-31-16 *
USDA	Federal		P330-13-00319	11-26-16
Virginia	NELAP	3	460175	09-14-16
Washington	State Program	10	C971	01-12-17
West Virginia DEP	State Program	3	210	12-31-16
Wisconsin	State Program	5	999518190	08-31-16 *

\* Certification renewal pending - certification considered valid.

TestAmerica Canton

TestAmerica Michigan 0.8/2.1  
 10448 Citation Drive  
 Suite 200  
 Brighton, MI 48116  
 Phone: 810.229.2763 Fax:

Chain of Custody Record

149055

TestAmerica  
 THE LEADER IN ENVIRONMENTAL TESTING  
 TestAmerica Laboratories, Inc.  
 TAL-8210 (0713)

Regulatory Program:  DW  NPDES  RCRA  Other:

Project Manager: M. Tomka  
 Tel/Fax: 519 884 0510  
 Analysis Turnaround Time:  WORKING DAYS  
 CALENDAR DAYS  
 TAT if different from Below:  2 weeks  1 week  2 days  1 day

Client Contact  
 Company Name: GHD Services  
 Address: 14496 N. Sheldon Rd. #200  
 City/State/Zip: Plymouth, MI 48170  
 Phone: 734 453 5123  
 Project Name: Racor Trust Bay City  
 Site: S50W 12610-103-013  
 PO # LAST# 24006288

Site Contact: SE Parlys  
 Lab Contact: D Hucker  
 Date: 6/14/16  
 Carrier: FEDEX  
 COC No: 149055  
 1 of 1 COCs

Sampler: S Hovemeyer  
 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.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	Analysis	PH	PCBs	HEM	WVY Chloride	TSS	COD	BOD	Metals	N-NH3
6/14/16	0930	C	WT 15	15	NW	NW	X	X	X	X	X	X	X	X	X	X
6/14/16	0935	G	TB 1	1	NW	NW	X	X	X	X	X	X	X	X	X	X

Sample Specific Notes:

240-66028 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4= HNO3; 5= NaOH; 6= Other 129

Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.  
 Non-Hazard  Flammable  Skin Irritant  Poison B  Unknown

Special Instructions/QC Requirements & Comments:  
 +Cd, Cr, Cu, Hg, Pb, Ni, Ag, Fe

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)  
 Return to Client  Disposal by Lab  Archive for \_\_\_\_\_ Months

Custody Seal No.: 738739  
 Relinquished by: J.A. Novak  
 Date/Time: 6/14/16 1500  
 Company: GHD  
 Received by: Regen Tendam  
 Date/Time: 6-15-16 910  
 Company: JA  
 Received by:  
 Date/Time:  
 Company:  
 Received in Laboratory by:  
 Date/Time:  
 Company:



Login # : 66028

**TestAmerica Canton Sample Receipt Form/Narrative**

**Canton Facility**

Client GTH Site Name \_\_\_\_\_ Cooler unpacked by: Ryan Henderson

Cooler Received on 6-15-16 Opened on 6-15-16

FedEx: 1<sup>st</sup> Grd  Exp UPS FAS Stetson Client Drop Off TestAmerica Courier Other \_\_\_\_\_

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

TestAmerica Cooler # \_\_\_\_\_ 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-8 (CF +1.3 °C) Observed Cooler Temp 0.8 °C Corrected Cooler Temp 2.1 °C  
 IR GUN #36 (CF +1.0 °C) Observed Cooler Temp \_\_\_\_\_ °C Corrected Cooler Temp \_\_\_\_\_ °C

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 1  Yes No  
 -Were custody seals on the outside of the cooler(s) signed & dated?  Yes No NA  
 -Were custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?  Yes No

3. Shippers' packing slip attached to the cooler(s)?  Yes No

4. Did custody papers accompany the sample(s)?  Yes No

5. Were the custody papers relinquished & signed in the appropriate place?  Yes No

6. Was/were the person(s) who collected the samples clearly identified on the COC?  Yes No

7. Did all bottles arrive in good condition (Unbroken)?  Yes No

8. Could all bottle labels be reconciled with the COC?  Yes No

9. Were correct bottle(s) used for the test(s) indicated?  Yes No

10. Sufficient quantity received to perform indicated analyses?  Yes No

11. Are these work share samples?  Yes  No  
 If yes, Questions 11-15 have been checked at the originating laboratory.

11. Were sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC574756

12. Were VOAs on the COC?  Yes No

13. Were air bubbles >6 mm in any VOA vials? Yes  No NA

14. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # B607501VB  Yes No

15. Was a LL Hg or Me Hg trip blank present?  Yes  No

Contacted PM \_\_\_\_\_ Date \_\_\_\_\_ by \_\_\_\_\_ via Verbal Voice Mail Other \_\_\_\_\_

Concerning \_\_\_\_\_

**14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES** Samples processed by: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**15. 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)

**16. SAMPLE PRESERVATION**

Sample(s) \_\_\_\_\_ were further preserved in the laboratory.

Time preserved: \_\_\_\_\_ Preservative(s) added/Lot number(s): \_\_\_\_\_

Ref: SOP NC-SC-0005, Sample Receiving

L:\QAQC\QA Department\QA TARDIS\Document Control\Work Instructions\In Revision\W1-NC-099-061316 Cooler Receipt Form.doc djf

Temperature readings: \_\_\_\_\_

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container pH</u>	<u>Preservative Added (mls)</u>	<u>Lot #</u>
W-12610-061416-SSH-1603	240-66028-I-1	Plastic 500ml - with Sulfuric Acid	<2	_____	_____
W-12610-061416-SSH-1603	240-66028-J-1	Plastic 500ml - with Nitric Acid	<2	_____	_____
W-12610-061416-SSH-1603	240-66028-N-1	Amber Glass 1 liter - Sulfuric Acid	_____	_____	_____
W-12610-061416-SSH-1603	240-66028-O-1	Amber Glass 1 liter - Sulfuric Acid	_____	_____	_____

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

# Attachment 2

## Certification Statement

"I, David Favero, certify under penalty of law that this document (July 29, 2016 GHD Semi-Annual Compliance Report [January 1 to June 30, 2016]), 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*

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RACER, Deputy Cleanup Manager – Michigan

July 29, 2016

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(Date)