



January 15, 2014

**Mr. Tom Hutchings**

City of Flint Water Pollution  
Water Pollution Control Facilities  
G4652 Beecher Rd.  
Flint, MI, 48532

RE: ***Discharge Permit Submittal-September 2013 through December 2013***  
*Permit No.: 6-08-04-04-GML1*

FILE: 15388/50137/Docs

Dear Mr. Hutchings:

In accordance with requirements of the above referenced discharge permit, we are providing you with the following discharge information for the period September 1, 2013 to December 31, 2013 for the Coldwater Road Landfill facility, located at 6220 Horton Avenue, Flint, Michigan.

- Periodic Report on Continued Compliance, certification
- Periodic Report on Continued Compliance (Table 1)
- Daily Discharge Summary Table (Table 2)
- Analytical Reports provided by Merit Laboratories, Inc. for samples from the on-site, above ground collection tank collected on December 3, 2013
- Copy of Chain-of-Custody forms.

The laboratory analytical results indicate concentrations were below the Sewer Use Permit limits for the parameters analyzed for the water discharged to the POTW during the discharge period.

Please call me at 248-477-5701 x16 if you have any questions.

Very truly yours,

**O'BRIEN & GERE ENGINEERS, INC.**

A handwritten signature in blue ink that reads 'Clifford Scott Yantz'.

Clifford S. Yantz  
Scientist-3

cc: Mr. Kevin Forbes – Beecher Metropolitan District, Flint, MI  
Mr. Grant Trigger – RACER Trust  
Mr. David Favero – RACER Trust  
Mr. Kevin Schneider – O'Brien & Gere

**City of Flint  
Industrial Pretreatment Program**

**Periodic Report on Continued Compliance**

Company Name: RACER Trust, Coldwater Road  
Street Address: 6220 Horton Avenue, Flint, Michigan  
Permit Number: 6-08-04-04-GML1  
Outfall Number: 001

Reporting Period: September 1, 2013 through December 31, 2013

Average Volume of Daily Discharge (during reporting period): 2,086 gallons.  
(1 day)

Complete the following:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the 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."

Name of Authorized Representative: Clifford Yantz

Title of Authorized Representative: Scientist-3, O'Brien & Gere Engineers, Inc.  
As agent for the RACER Trust

Signature of Authorized Representative: 

Date Signed by Authorized Representative: 1/15/14

If required to implement a Toxic Organics Management Plan (TOMP), complete the following:

"Based on my inquiry of the person or persons directly responsible for managing compliance with the pretreatment standard for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing of the last Periodic Report on Continued Compliance. I further certify that, this facility is implementing the toxic organic management plan submitted to the control authority."

Name of Authorized Representative: N/A

Title of Authorized Representative: N/A

Signature of Authorized Representative: N/A

Date Signed by Authorized Representative: N/A

# City of Flint Industrial Pretreatment Program

## Periodic Report on Continued Compliance

Company Name: RACER Trust, Coldwater Road  
Street Address: 6220 Horton Avenue, Flint, Michigan  
Permit Number: 6-08-04-04-GML1  
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Name of Authorized Representative: Clifford Yantz

Title of Authorized Representative: Technical Associate, O'Brien & Gere Engineers, Inc.  
As agent for the RACER Trust

Signature of Authorized Representative: \_\_\_\_\_

Date Signed by Authorized Representative: \_\_\_\_\_

If required to implement a Toxic Organics Management Plan (TOMP), complete the following:

"Based on my inquiry of the person or persons directly responsible for managing compliance with the pretreatment standard for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing of the last Periodic Report on Continued Compliance. I further certify that, this facility is implementing the toxic organic management plan submitted to the control authority."

Name of Authorized Representative: \_\_\_\_\_ N/A

Title of Authorized Representative: \_\_\_\_\_ N/A

Signature of Authorized Representative: \_\_\_\_\_ N/A

Date Signed by Authorized Representative: \_\_\_\_\_ N/A

**Table 1**  
**Coldwater Road Landfill**  
**City of Flint Sewer User Self-Monitoring Report**  
**Fourth Quarter - 2013**  
**6-08-04-04-GML1**

City of Flint Sewer User Self-Monitoring Report Coldwater Road Facility												
Analytical Parameter	Ammonia-N	QL*	BOD	QL*	HEM	QL*	pH	QL*	TP	QL*	TSS	QL*
Units	mg/L		mg/L		mg/L		SU		mg/L		mg/L	
Sampling Frequency	Sample one (1) batch of accumulated wastewater prior to discharge, once every three (3) months.		Sample one (1) batch of accumulated wastewater prior to discharge, once every three (3) months.		Sample one (1) batch of accumulated wastewater prior to discharge, once every three (3) months.		Sample one (1) batch of accumulated wastewater prior to discharge, once every three (3) months.		Sample one (1) batch of accumulated wastewater prior to discharge, once every three (3) months.		Sample one (1) batch of accumulated wastewater prior to discharge, once every three (3) months.	
Daily Maximum Limit	37		427		100		N/A		7		305	
Maximum Limit	N/A		N/A		N/A		10.5		N/A		N/A	
Minimum Limit	N/A		N/A		N/A		6.0		N/A		N/A	
Monthly Average Limit	N/A		N/A		N/A		N/A		N/A		N/A	
Test Result	1.32	0.02	15	1	1	1	7.95	0.01	0.11	0.01	144	1
Test Method	4500-NH3 D		10360		1664A		4500-H+ B		4500-PE		2540 D	
Test Date	04-Dec-13		04-Dec-13		04-Dec-13		03-Dec-13		04-Dec-13		06-Dec-13	
Sample Date	03-Dec-13		03-Dec-13		03-Dec-13		03-Dec-13		03-Dec-13		03-Dec-13	
Sample Type	wastewater		wastewater		wastewater		wastewater		wastewater		wastewater	
Test Result												
Test Method												
Test Date												
Sample Date												
Sample Type												
Test Result												
Test Method												
Test Date												
Sample Date												
Sample Type												
Test Result												
Test Method												
Test Date												
Sample Date												
Sample Type												
Average Daily Conc.	1.320		15.000		1.000		7.950		0.110		144.000	
Monthly Average Conc.	N/A		N/A		N/A		N/A		N/A		N/A	
No. of Samples	1		1		1		1		1		1	
Number of Limit Exceedances	0		0		0		0		0		0	

**Notes: \* Quantification Level:** The lowest level at which the test result is reported by the analytical laboratory as a quantitative numerical value, below which test results are reported as "less than" (<) that value.

**E1** = Limit Exceedance; **E2** = Sample Expired

**Table 1**  
**Coldwater Road Landfill**  
**City of Flint Sewer User Self-Monitoring Report**  
**Fourth Quarter - 2013**  
**6-08-04-04-GML1**

City of Flint Sewer User Self-Monitoring Report Coldwater Road Facility														
Analytical Parameter	Arsenic	QL*	Chromium	QL*	Copper	QL*	Mercury	QL*	Nickel	QL*	Zinc	QL*	Amenable Cyanide	QL*
Units	mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L	
Sampling Frequency	Sample one (1) batch of accumulated wastewater prior to discharge, once every three (3) months.		Sample one (1) batch of accumulated wastewater prior to discharge, once every three (3) months.		Sample one (1) batch of accumulated wastewater prior to discharge, once every three (3) months.		Sample one (1) batch of accumulated wastewater prior to discharge, once every three (3) months.		Sample one (1) batch of accumulated wastewater prior to discharge, once every three (3) months.		Sample one (1) batch of accumulated wastewater prior to discharge, once every three (3) months.		Sample one (1) batch of accumulated wastewater prior to discharge, once every three (3) months.	
Daily Maximum Limit	0.048		0.319		3.12		0.000012		0.795		0.445		N/A	
Maximum Limit	N/A		N/A		N/A		N/A		N/A		N/A		0.087	
Minimum Limit	N/A		N/A		N/A		N/A		N/A		N/A		N/A	
Monthly Average Limit	N/A		N/A		N/A		N/A		N/A		N/A		N/A	
Test Result	0.023	0.002	0.050	0.005	1.16	0.004	0.000	0.0002	0.281	0.005	0.005	0.005	0.000	0.005
Test Method	200.8		200.8		200.8		245.1		200.8		200.8		335.4/4500-CN-G	
Test Date	13-Dec-13		13-Dec-13		13-Dec-13		06-Dec-13		13-Dec-13		13-Dec-13		09-Dec-13	
Sample Date	03-Dec-13		03-Dec-13		03-Dec-13		03-Dec-13		03-Dec-13		03-Dec-13		03-Dec-13	
Sample Type	wastewater		wastewater		wastewater		wastewater		wastewater		wastewater		wastewater	
Test Result														
Test Method														
Test Date														
Sample Date														
Sample Type														
Test Result														
Test Method														
Test Date														
Sample Date														
Sample Type														
Test Result														
Test Method														
Test Date														
Sample Date														
Sample Type														
Average Daily Conc.	0.023		0.050		1.160		0.000		0.281		0.005		0.000	
Monthly Average Conc.	N/A		N/A		N/A		N/A		N/A		N/A		N/A	
No. of Samples	1		1		1		1		1		1		1	
Number of Limit Exceedances	0		0		0		0		0		0		0	

**Notes:** \* **Quantification Level:** The lowest level at which the test result is reported by the analytical laboratory as a quantitative numerical value, below which test results are reported as "less than" (<) that value.

**E1** = Limit Exceedance; **E2** = Sample Expired

**Table 2**  
**Coldwater Road Landfill**  
**Daily Discharge Summary Table**  
**Fourth Quarter - 2013**  
**6-08-04-04-GML1**

Date	Beginning Flow Meter Reading	End Flow Meter Reading	Gallons Discharged	Begin Time of Discharge	End Time of Discharge	Average Flow (gal/min)	Temperature at Discharge		pH
							(C)	(F)	
12/13/2013	486,005	488,091	2,086	9:00	10:45	19.9	8.9	48.0	7.95

Total Discharge Volume:     **2,086**  
Average Volume per Discharge:     **2,086**

NOTES :



## Analytical Laboratory Report

Report ID: S59214.01(01)  
Generated on 12/16/2013

### Report to

Attention: Clifford Yantz  
O'Brien & Gere Engineers, Inc.  
37000 Grand River Ave.  
Suite 260  
Farmington, MI 48335

Phone: 248-477-5701 FAX:  
Email: Clifford.Yantz@obg.com

Additional Contacts: Kevin Schneider

### Report produced by

Merit Laboratories, Inc.  
2680 East Lansing Drive  
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

### Contacts for report questions:

Kevin George (kgeorge@meritlabs.com)  
Barbara Ball (bball@meritlabs.com)

### Report Summary

Lab Sample ID(s): S59214.01  
Project: Coldwater Rd Landfill  
Collected Date: 12/03/2013  
Submitted Date/Time: 12/03/2013 14:15  
Sampled by: Kevin Schneider  
P.O. #: 11311200

### Report Notes

Results relate only to items tested as received by the laboratory.  
Methods may be modified for improved performance.  
Results reported on a dry weight basis where applicable.  
'Not detected' indicates that parameter was not found at a level equal to or greater than the reporting limit (RL).  
Samples are held by the lab for 30 days from the final report date unless a written request to hold longer is provided by the client.  
Report shall not be reproduced except in full, without the written approval of Merit Laboratories, Inc..

### Laboratory Certifications:

Michigan DNRE (#9956), DOD/ISO 17025 (#69699), WBENC (#2005110032), Ohio EPA (#CL0002)  
IN Drinking Water (#C-MI-07), NELAC NY (#11814), NCDENR (#680), NC Drinking Water (#26702)  
Some analytes reported may not be certified. Full certification lists are available upon request.

Violetta F. Murshak  
Laboratory Director



## Analytical Laboratory Report

Sample Summary (1 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S59214.01	04-PRCC-13	Wastewater	12/03/2013 09:30





# Analytical Laboratory Report

Lab Sample ID: S59214.01  
Sample Tag: 04-PRCC-13  
Collected Date/Time: 12/03/2013 09:30  
Matrix: Wastewater  
COC Reference: 78132

## Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	500ml Plastic	None	Yes	4.9	IR
1	250ml Plastic	H2SO4	Yes	4.9	IR
1	125ml Plastic	HNO3	Yes	4.9	IR
1	32oz Glass	HCL	Yes	4.9	IR
1	125ml Plastic	NaOH	Yes	4.9	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
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### Extraction / Prep.

Mercury Digestion	Completed			E245.1	12/06/13 09:30	CCM		
Metal Digestion	Completed			SW3015A	12/13/13 13:00	PER		

### Inorganics

Amenable Cyanide	Not detected	mg/L	0.005	E335.4/SM4500-CN	12/09/13 13:08	JDP	57-12-5AM	
Ammonia-N (Undistilled)	1.32	mg/L	0.02	SM4500-NH3 D	12/04/13 16:47	MJC	7664-41-7	
Oil & Grease n-Hexane Extract.	1	mg/L	1	E1664A	12/04/13 12:00	RGS		
TBOD5 - Set	Completed	mg/L		10360	12/04/13 10:00	ASB		
TBOD5	15	mg/L	1	10360	12/09/13 11:30	ASB		
Total Phosphorus	0.11	mg/L	0.01	SM4500-PE	12/04/13 12:31	MJC	7723-14-0	
Total Suspended Solids	144	mg/L	1	SM2540D	12/06/13 18:30	ASB		

### Metals

Arsenic	0.023	mg/L	0.002	E200.8	12/13/13 15:40	PER	7440-38-2	
Chromium	0.050	mg/L	0.005	E200.8	12/13/13 15:40	PER	7440-47-3	
Copper	1.16	mg/L	0.005	E200.8	12/13/13 15:40	PER	7440-50-8	
Mercury	Not detected	mg/L	0.0002	E245.1	12/06/13 14:42	CCM	7439-97-6	
Nickel	0.281	mg/L	0.005	E200.8	12/13/13 15:40	PER	7440-02-0	
Zinc	0.005	mg/L	0.005	E200.8	12/13/13 15:40	PER	7440-66-6	



## REPORT TO

## CHAIN OF CUSTODY RECORD

**INVOICE TO**

CONTACT NAME				cliff Yantz / Kevin Schneider			
COMPANY				O'Brien & Gere			
ADDRESS				37000 Grand River			
CITY				STATE		ZIP CODE	
Farmington Hills				MI		48335	
PHONE NO.		FAX NO.		P.O. NO.			
248-477-5701							
E-MAIL ADDRESS				QUOTE NO.			
clifford.yantz@obg.com							

CONTACT NAME		<input checked="" type="checkbox"/> SAME	
COMPANY			
ADDRESS			
CITY		STATE	ZIP CODE
PHONE NO.	E-MAIL ADDRESS		

## ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

PROJECT NO./NAME <i>Coldwater Rd Landfill</i>	SAMPLER(S) - PLEASE PRINT/SIGN NAME <i>Kevin Schneider</i> <i>[Signature]</i>
TURNAROUND TIME REQUIRED <input type="checkbox"/> 1 DAY <input type="checkbox"/> 2 DAYS <input type="checkbox"/> 3 DAYS <input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> OTHER _____	
DELIVERABLES REQUIRED <input type="checkbox"/> STD <input checked="" type="checkbox"/> LEVEL II <input type="checkbox"/> LEVEL III <input type="checkbox"/> LEVEL IV <input type="checkbox"/> EDD <input type="checkbox"/> OTHER _____	

MATRIX	GW=GROUNDWATER	WW=WASTEWATER	S=SOIL	L=LIQUID	SD=SOLID
CODE:	SL=SLUDGE	DW=DRINKING WATER	O=OIL	WP=WIPE	A=AIR
					W=WASTE

Certifications		Project Locations		Special Instructions	
<input type="checkbox"/> OHIO VAP	<input type="checkbox"/> Drinking Water	<input type="checkbox"/> Detroit	<input type="checkbox"/> New York		
<input type="checkbox"/> DoD	<input type="checkbox"/> NPDES	<input type="checkbox"/> Other			
<div># Containers &amp; Preservatives</div> <div> <div>NONE</div> <div>HCl</div> <div>HNO<sub>3</sub></div> <div>H<sub>2</sub>SO<sub>4</sub></div> <div>NaOH</div> <div>MeOH</div> <div>OTHER</div> </div>		<div>Total Metals</div> <div> <div>Ammoniac Cyanide</div> <div>BOD, TSS</div> <div>Ammonia-Nitrogen</div> <div>Total phosphorus</div> <div>FOG (Hex-EXT)</div> </div>		<div>Metals Are: As, Cr, Cu, Hg, Ni, Zn</div> <div>Analysis per City of Flint permit</div> <div>Field pH: 8.14</div> <div>Field Temp: 52.2°F</div>	

RELINQUISHED BY:	<i>[Signature]</i>	<i>OGN</i>	<i>Sample</i>	DATE	TIME
SIGNATURE/ORGANIZATION				12/3/13	1140
RECEIVED BY:	<i>[Signature]</i>	<i>MLT</i>		DATE	TIME
SIGNATURE/ORGANIZATION				12-3-13	1640
RELINQUISHED BY:				DATE	TIME
SIGNATURE/ORGANIZATION					
RECEIVED BY:				DATE	TIME
SIGNATURE/ORGANIZATION					

RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE 12/31/13		TIME 1415	
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE 12/31/13		TIME 1415	
SEAL NO.	SEAL INTACT YES <input type="checkbox"/> NO <input type="checkbox"/>	INITIALS	NOTES:	TEMP. ON ARRIVAL	19
SEAL NO.	SEAL INTACT YES <input type="checkbox"/> NO <input type="checkbox"/>	INITIALS			



## Quality Control Report

Report ID: QC-S59214.01(01)

Generated on 12/16/2013

Report to

Attention: Clifford Yantz  
O'Brien & Gere Engineers, Inc.  
37000 Grand River Ave.  
Suite 260  
Farmington, MI 48335

Phone: 248-477-5701 FAX:

Report Produced by

Merit Laboratories  
2680 East Lansing Drive  
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Report Summary

Lab Sample ID(s): S59214.01  
Project: Coldwater Rd Landfill  
Submitted Date/Time: 12/03/2013 14:15  
Sampled by: Kevin Schneider  
P.O. #: 11311200

Report Sections

Cover Page (Page 1)  
Analysis Summary (Page 2)  
Prep Batch Summary (Page 3)  
Batch QC Results (Pages 4-10)

Report Flag Descriptions

\*: QC result is outside of indicated control limits  
W: Surrogate result not applicable due to sample dilution

Report Notes

Results relate only to items tested as received by the laboratory.  
Methods may be modified for improved performance.  
Results reported on a dry weight basis where applicable.  
"Not detected" indicates that parameter was not found at a level equal to or greater than the RDL.  
Report shall not be reproduced except in full, without the written approval of Merit Laboratories.

Laboratory Certifications:

Michigan DNRE (#9956), DOD/ISO 17025 (#69699), WBENC (#2005110032), Ohio EPA (#CL0002), IN Drinking Water (#C-MI-07), NELAC NY (#11814)  
Some analytes reported may not be certified. Full certification lists are available upon request.

Barbara Ball  
Quality Assurance Manager

## QC Report - Analysis Summary

**Lab Sample ID: S59214.01**

Sample Tag: 04-PRCC-13

Collected Date/Time: 12/03/2013 09:30

Matrix: Wastewater

COC Reference: 78132

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
<b><i>Inorganics</i></b>						
Amenable Cyanide	E335.4/SM4500-CN	12/09/13 13:08	CN131209-W1	CN131209-W1	No	BLK/LCS/MS/MSD/DUP
Ammonia-N (Undistilled)	SM4500-NH3 D	12/04/13 16:47	AMN131204	AMN131204	No	BLK/LCS/MS/DUP
Oil & Grease n-Hexane Extract.	E1664A	12/04/13 12:00	OGHEX131204W01	OGHEX131204W01	No	BLK/LCS
Total Phosphorus	SM4500-PE	12/04/13 12:31	PHS131204	PHS131204	No	BLK/LCS/MS/DUP
Total Suspended Solids	SM2540D	12/06/13 18:30	TSS131206	TSS131206	No	BLK/LCS/DUP
<b><i>Metals</i></b>						
Arsenic	E200.8	12/13/13 15:40	MT2-13-1213A	MTD-121313-4	No	LCS/BLK/MS/MSD
Chromium	E200.8	12/13/13 15:40	MT2-13-1213A	MTD-121313-4	No	LCS/BLK/MS/MSD
Copper	E200.8	12/13/13 15:40	MT2-13-1213A	MTD-121313-4	No	LCS/BLK/MS/MSD
Mercury	E245.1	12/06/13 14:42	HG2-13-1206A	HGD-120613-1	No	LCS/BLK/MS/MSD/DUP
Nickel	E200.8	12/13/13 15:40	MT2-13-1213A	MTD-121313-4	No	LCS/BLK/MS/MSD
Zinc	E200.8	12/13/13 15:40	MT2-13-1213A	MTD-121313-4	No	LCS/BLK/MS/MSD

## QC Report - Prep Batch Summary

### Inorganics, Prep Batch ID: AMN131204

Surrogates: No, QC Types: BLK/LCS/MS/DUP

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S59214.01	Ammonia-N (Undistilled)	SM4500-NH3 D	12/04/13 16:47	AMN131204

### Inorganics, Prep Batch ID: CN131209-W1

Surrogates: No, QC Types: BLK/LCS/MS/MSD/DUP

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S59214.01	Amenable Cyanide	E335.4/SM4500-CN	12/09/13 13:08	CN131209-W1

### Inorganics, Prep Batch ID: OGHEX131204W01

Surrogates: No, QC Types: BLK/LCS

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S59214.01	Oil & Grease n-Hexane Extract.	E1664A	12/04/13 12:00	OGHEX131204W01

### Inorganics, Prep Batch ID: PHS131204

Surrogates: No, QC Types: BLK/LCS/MS/DUP

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S59214.01	Total Phosphorus	SM4500-PE	12/04/13 12:31	PHS131204

### Inorganics, Prep Batch ID: TSS131206

Surrogates: No, QC Types: BLK/LCS/DUP

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S59214.01	Total Suspended Solids	SM2540D	12/06/13 18:30	TSS131206

### Metals, Prep Batch ID: HGD-120613-1

Surrogates: No, QC Types: LCS/BLK/MS/MSD/DUP

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S59214.01	Mercury	E245.1	12/06/13 14:42	HG2-13-1206A

### Metals, Prep Batch ID: MTD-121313-4

Surrogates: No, QC Types: LCS/BLK/MS/MSD

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S59214.01	Arsenic	E200.8	12/13/13 15:40	MT2-13-1213A
S59214.01	Chromium	E200.8	12/13/13 15:40	MT2-13-1213A
S59214.01	Copper	E200.8	12/13/13 15:40	MT2-13-1213A
S59214.01	Nickel	E200.8	12/13/13 15:40	MT2-13-1213A
S59214.01	Zinc	E200.8	12/13/13 15:40	MT2-13-1213A

## QC Report - Batch QC Results

### Inorganics, Prep Batch ID: AMN131204

Surrogates: No, QC Types: BLK/LCS/MS/DUP

#### Blank (BLK)

Lab Sample ID: AMN131204.LRB1

Run in Batch: AMN131204, Run Date: 12/04/2013 09:34, Prep Date: 12/04/2013, Matrix: Liquid, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Ammonia-N (Undistilled)		ND	0.02	mg/L

#### Laboratory Control Sample (LCS)

Lab Sample ID: AMN131204.LCS1

Run in Batch: AMN131204, Run Date: 12/04/2013 10:10, Prep Date: 12/04/2013, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Ammonia-N (Undistilled)		101	90	110

#### Matrix Spike (MS)

Lab Sample ID: AMN131204.MS1, Parent Sample ID: S59203.01

Run in Batch: AMN131204, Run Date: 12/04/2013 10:45, Prep Date: 12/04/2013, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Ammonia-N (Undistilled)		103	80	120

#### Matrix Spike (MS)

Lab Sample ID: AMN131204.MS2, Parent Sample ID: S59210.03

Run in Batch: AMN131204, Run Date: 12/04/2013 13:12, Prep Date: 12/04/2013, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Ammonia-N (Undistilled)		102	80	120

#### Duplicate (DUP)

Lab Sample ID: AMN131204.DP1, Parent Sample ID: S59210.01

Run in Batch: AMN131204, Run Date: 12/04/2013 12:08, Prep Date: 12/04/2013, Matrix: Liquid, Dilution: 1

Analyte	Flags	RPD	RPD CL
Ammonia-N (Undistilled)		3.9	20

## QC Report - Batch QC Results

### Inorganics, Prep Batch ID: CN131209-W1

Surrogates: No, QC Types: BLK/LCS/MS/MSD/DUP

#### Blank (BLK)

Lab Sample ID: CN131209-W1.LRB1

Run in Batch: CN131209-W1, Run Date: 12/09/2013 13:00, Prep Date: 12/09/2013, Matrix: Liquid, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Amenable Cyanide		ND	0.005	mg/L

#### Laboratory Control Sample (LCS)

Lab Sample ID: CN131209-W1.LCS1

Run in Batch: CN131209-W1, Run Date: 12/09/2013 13:06, Prep Date: 12/09/2013, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Amenable Cyanide		98	90	110

#### Matrix Spike (MS)

Lab Sample ID: CN131209-W1.MS1, Parent Sample ID: S59214.01

Run in Batch: CN131209-W1, Run Date: 12/09/2013 13:12, Prep Date: 12/09/2013, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Amenable Cyanide		93	90	110

#### Matrix Spike Duplicate (MSD)

Lab Sample ID: CN131209-W1.MSD1, Parent Sample ID: CN131209-W1.MS1

Run in Batch: CN131209-W1, Run Date: 12/09/2013 13:14, Prep Date: 12/09/2013, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Amenable Cyanide		92	80	120	1	15

#### Duplicate (DUP)

Lab Sample ID: CN131209-W1.DP1, Parent Sample ID: S59214.01

Run in Batch: CN131209-W1, Run Date: 12/09/2013 13:10, Prep Date: 12/09/2013, Matrix: Liquid, Dilution: 1

Analyte	Flags	RPD	RPD CL
Amenable Cyanide		<1	15

## QC Report - Batch QC Results

### Inorganics, Prep Batch ID: OGHEx131204W01

Surrogates: No, QC Types: BLK/LCS

#### Blank (BLK)

Lab Sample ID: OGHEx131204W01.LRB1

Run in Batch: OGHEx131204W01, Run Date: 12/04/2013 12:00, Prep Date: 12/04/2013, Matrix: Liquid, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Oil & Grease n-Hexane Extract.		ND	1	mg/L

#### Laboratory Control Sample (LCS)

Lab Sample ID: OGHEx131204W01.LCS1

Run in Batch: OGHEx131204W01, Run Date: 12/04/2013 12:00, Prep Date: 12/04/2013, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Oil & Grease n-Hexane Extract.		98	78	114

#### Laboratory Control Sample (LCS)

Lab Sample ID: OGHEx131204W01.LCS2

Run in Batch: OGHEx131204W01, Run Date: 12/04/2013 12:00, Prep Date: 12/04/2013, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Oil & Grease n-Hexane Extract.		92	78	114



## QC Report - Batch QC Results

### Inorganics, Prep Batch ID: PHS131204

Surrogates: No, QC Types: BLK/LCS/MS/DUP

#### Blank (BLK)

Lab Sample ID: PHS131204.LRB1

Run in Batch: PHS131204, Run Date: 12/04/2013 11:43, Prep Date: 12/04/2013, Matrix: Liquid, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Total Phosphorus		ND	0.01	mg/L

#### Blank (BLK)

Lab Sample ID: PHS131204.LRB2

Run in Batch: PHS131204, Run Date: 12/04/2013 11:59, Prep Date: 12/04/2013, Matrix: Liquid, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Total Phosphorus		ND	0.01	mg/L

#### Laboratory Control Sample (LCS)

Lab Sample ID: PHS131204.LCS1

Run in Batch: PHS131204, Run Date: 12/04/2013 12:05, Prep Date: 12/04/2013, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Total Phosphorus		106	90	110

#### Matrix Spike (MS)

Lab Sample ID: PHS131204.MS1, Parent Sample ID: S59193.01

Run in Batch: PHS131204, Run Date: 12/04/2013 16:42, Prep Date: 12/04/2013, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Total Phosphorus		102	80	120

#### Matrix Spike (MS)

Lab Sample ID: PHS131204.MS2, Parent Sample ID: S59214.01

Run in Batch: PHS131204, Run Date: 12/04/2013 16:49, Prep Date: 12/04/2013, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Total Phosphorus		93	80	120

#### Duplicate (DUP)

Lab Sample ID: PHS131204.DP1, Parent Sample ID: S59203.01

Run in Batch: PHS131204, Run Date: 12/04/2013 16:46, Prep Date: 12/04/2013, Matrix: Liquid, Dilution: 1

Analyte	Flags	RPD	RPD CL
Total Phosphorus		6.7	20

## QC Report - Batch QC Results

### Inorganics, Prep Batch ID: TSS131206

Surrogates: No, QC Types: BLK/LCS/DUP

#### Blank (BLK)

Lab Sample ID: TSS131206.LRB1

Run in Batch: TSS131206, Run Date: 12/06/2013 18:30, Prep Date: 12/06/2013, Matrix: Liquid, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Total Suspended Solids		ND	1	mg/L

#### Laboratory Control Sample (LCS)

Lab Sample ID: TSS131206.LCS1

Run in Batch: TSS131206, Run Date: 12/06/2013 18:30, Prep Date: 12/06/2013, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Total Suspended Solids		98	75	116

#### Duplicate (DUP)

Lab Sample ID: TSS131206.DP1, Parent Sample ID: S59284.01

Run in Batch: TSS131206, Run Date: 12/06/2013 18:30, Prep Date: 12/06/2013, Matrix: Liquid, Dilution: 1

Analyte	Flags	RPD	RPD CL
Total Suspended Solids		2	15

## QC Report - Batch QC Results

### Metals, Prep Batch ID: HGD-120613-1

Surrogates: No, QC Types: LCS/BLK/MS/MSD/DUP

#### Laboratory Control Sample (LCS)

Lab Sample ID: HG2-13-1206A.016.LCS

Run in Batch: HG2-13-1206A, Run Date: 12/06/2013 14:03, Prep Date: 12/06/2013, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Mercury		106	85	115

#### Blank (BLK)

Lab Sample ID: HG2-13-1206A.017.LRB

Run in Batch: HG2-13-1206A, Run Date: 12/06/2013 14:05, Prep Date: 12/06/2013, Matrix: Liquid, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Mercury		ND	0.03	ug/L

#### Matrix Spike (MS)

Lab Sample ID: HG2-13-1206A.030.MS, Parent Sample ID: S59202.01

Run in Batch: HG2-13-1206A, Run Date: 12/06/2013 14:30, Prep Date: 12/06/2013, Matrix: Liquid, Dilution: 2

Analyte	Flags	% Rec	LCL	UCL
Mercury		103	80	120

#### Matrix Spike (MS)

Lab Sample ID: HG2-13-1206A.044.MS, Parent Sample ID: S59232.02

Run in Batch: HG2-13-1206A, Run Date: 12/06/2013 14:58, Prep Date: 12/06/2013, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Mercury		100	80	120

#### Matrix Spike Duplicate (MSD)

Lab Sample ID: HG2-13-1206A.031.MSD, Parent Sample ID: HG2-13-1206A.030.MS

Run in Batch: HG2-13-1206A, Run Date: 12/06/2013 14:32, Prep Date: 12/06/2013, Matrix: Liquid, Dilution: 2

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Mercury		105	80	120	1	20

#### Matrix Spike Duplicate (MSD)

Lab Sample ID: HG2-13-1206A.045.MSD, Parent Sample ID: HG2-13-1206A.044.MS

Run in Batch: HG2-13-1206A, Run Date: 12/06/2013 15:00, Prep Date: 12/06/2013, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Mercury		100	80	120	0	20

## QC Report - Batch QC Results

### Metals, Prep Batch ID: MTD-121313-4

Surrogates: No, QC Types: LCS/BLK/MS/MSD

#### Laboratory Control Sample (LCS)

Lab Sample ID: MT2-13-1213A.018.LCS

Run in Batch: MT2-13-1213A, Run Date: 12/13/2013 14:53, Prep Date: 12/13/2013, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Arsenic		98	85	115
Chromium		100	85	115
Copper		99	85	115
Nickel		97	85	115
Zinc		99	85	115

#### Blank (BLK)

Lab Sample ID: MT2-13-1213A.019.LRB

Run in Batch: MT2-13-1213A, Run Date: 12/13/2013 15:03, Prep Date: 12/13/2013, Matrix: Liquid, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Arsenic		ND	0.0004	mg/L
Chromium		ND	0.001	mg/L
Copper		ND	0.002	mg/L
Nickel		ND	0.001	mg/L
Zinc		ND	0.001	mg/L

#### Matrix Spike (MS)

Lab Sample ID: MT2-13-1213A.031.MS, Parent Sample ID: S59147.02

Run in Batch: MT2-13-1213A, Run Date: 12/13/2013 15:57, Prep Date: 12/13/2013, Matrix: Liquid, Dilution: 5

Analyte	Flags	% Rec	LCL	UCL
Arsenic		98	75	125
Chromium		98	75	125
Copper		98	75	125
Nickel		99	75	125
Zinc		98	75	125

#### Matrix Spike Duplicate (MSD)

Lab Sample ID: MT2-13-1213A.032.MSD, Parent Sample ID: MT2-13-1213A.031.MS

Run in Batch: MT2-13-1213A, Run Date: 12/13/2013 15:59, Prep Date: 12/13/2013, Matrix: Liquid, Dilution: 5

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Arsenic		101	75	125	3	20
Chromium		93	75	125	5	20
Copper		94	75	125	4	20
Nickel		96	75	125	3	20
Zinc		96	75	125	2	20



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**INVOICE TO**ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

**Certifications**

☐ OHIO VAP      ☐ Drinking Water

☐ DoD              ☐ NPDES

**Project Locations**

☐ Detroit            ☐ New York

☐ Other \_\_\_\_\_

**Special Instructions**

Rev. 5.18.12