

OBG | There's a way

July 14, 2016

Mr. Tom Hutchings

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

RE: ***Discharge Permit Submittal-April 2016 through June 2016***

Permit No.: 6-08-04-04-GML1

FILE: 15388/62658/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 April 1, 2016 to June 30, 2016 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 June 6, 2016
- 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.

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

I:\Racer-Trust.15388\62658.Coldwater-Rd-LF\Docs\Reports\PRCC\2nd Qrt - June\PRCC Cover Letter Qtr2 2016.docx



37000 Grand River Avenue, Suite 260
Farmington Hills, MI 48335



p 248-477-5701
f 248-477-5962



OBG
www.obg.com

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: April 1, 2016 through June 30, 2016


Average Volume of Daily Discharge (during reporting period): 4,262.5 gallons.
(Two 1-day events)

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: 7/14/16

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
Second Quarter - 2016
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	7.21	0.02	10.60	1	1.00	1	7.45	0.01	0.10	0.01	55	1
Test Method	4500-NH3 D		10360		1664A		4500-H+ B		4500-PE		2540 D	
Test Date	10-Jun-16		08-Jun-16		09-Jun-16		06-Jun-16		09-Jun-16		09-Jun-16	
Sample Date	06-Jun-16		06-Jun-16		06-Jun-16		06-Jun-16		06-Jun-16		06-Jun-16	
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.	7.210		10.600		1.000		7.450		0.100		55.000	
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
Second Quarter - 2016
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	0.015	0.002	0.106	0.005	0.856	0.004	0.000	0.0002	0.201	0.005	0.024	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	10-Jun-16		10-Jun-16		10-Jun-16		07-Jun-16		10-Jun-16		10-Jun-16		08-Jun-16	
Sample Date	06-Jun-16		06-Jun-16		06-Jun-16		06-Jun-16		06-Jun-16		06-Jun-16		06-Jun-16	
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.	0.015		0.106		0.856		0.000		0.201		0.024		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
Second Quarter - 2016
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)	
6/27/2016	514,883	518,579	3,696	15:20	17:30	28.4	23.0	73.3	7.55
6/28/2016	518,579	523,408	4,829	9:48	13:29	21.9	23.6	74.5	8.36

Total Discharge Volume: 8,525



Analytical Laboratory Report

Report ID: S73884.01(01)
Generated on 06/13/2016

Report to

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

Phone: 248-477-5701 FAX: 248-477-5962
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): S73884.01
Project: RACER Coldwater Rd Landfill
Collected Date: 06/06/2016
Submitted Date/Time: 06/06/2016 13:15
Sampled by: Kevin Schneider
P.O. #: 11600279

Table of Contents

Cover Page (Page 1)
General Report Notes (Page 2)
Report Narrative (Page 2)
Laboratory Certifications (Page 3)
Qualifier Descriptions (Page 3)
Glossary of Abbreviations (Page 3)
Method Summary (Page 4)
Sample Summary (Page 5)

A handwritten signature in black ink, reading "Maya Murshak".

Maya Murshak
Technical Director



Analytical Laboratory Report

General Report Notes

Results relate only to items tested as received by 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).

40 CFR Part 136 Table II Required Containers, Preservation Techniques and Holding Times for the Clean Water Act specify that samples for acrolein and acrylonitrile need to be preserved at a pH in the range of 4 to 5 or if not preserved, analyzed within 3 days of sampling.

QA/QC corresponding to this analytical report is a separate document with the same Merit ID reference and is available upon request.

Full accreditation certificates are available upon request.

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.

Report Narrative

There is no additional narrative for this analytical report



Analytical Laboratory Report

Laboratory Certifications

Authority	Certification ID
Michigan DEQ	#9956
DOD ELAP/ISO 17025	#69699
WBENC	#2005110032
Ohio VAP	#CL0002
Indiana DOH	#C-MI-07
New York NELAC	#11814
North Carolina DENR	#680
North Carolina DOH	#26702

Qualifier Descriptions

Qualifier	Description
!	Result is outside of stated limit criteria
B	Compound also found in associated method blank
E	Concentration exceeds calibration range
F	Analysis run outside of holding time
G	Estimated result due to extraction run outside of holding time
H	Sample submitted and run outside of holding time
I	Matrix interference with internal standard
J	Estimated value less than reporting limit, but greater than MDL
L	Elevated reporting limit due to low sample amount
M	Result reported to MDL not RDL
O	Analysis performed by outside laboratory. See attached report.
R	Preliminary result
S	Surrogate recovery outside of control limits
T	No correction for total solids
X	Elevated reporting limit due to matrix interference
Y	Elevated reporting limit due to high target concentration
b	Value detected less than reporting limit, but greater than MDL
e	Reported value estimated due to interference
j	Analyte also found in associated method blank
p	Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak.
x	Preserved from bulk sample

Glossary of Abbreviations

Abbreviation	Description
RL/RDL	Reporting Limit
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
SW	EPA SW 846 (Soil and Wastewater) Methods
E	EPA Methods
SM	Standard Methods



Analytical Laboratory Report

Method Summary

Method	Version
E1664A	EPA Method 1664 Revision A February 1999
E200.8	EPA Method 200.8 Revision 5.4
E245.1	EPA Method 245.1 Revision 3.0
E335.4/SM4500-CN	EPA Method 335.4 Revision 1.0 / Standard Method 4500-CN E 20th Edition
HACH 10360	HACH 10360
SM2540D	Standard Method 2540 D 20th Edition
SM4500-NH3 D	Standard Method 4500 NH3 D 20th Edition
SM4500-PE	Standard Method 4500 P E 20th Edition
SW3015A	SW 846 Method 3015A Revision 1 February 2007



Analytical Laboratory Report

Sample Summary (1 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S73884.01	02-PRCC-16	Wastewater	06/06/16 10:10



Analytical Laboratory Report

Lab Sample ID: S73884.01
Sample Tag: 02-PRCC-16
Collected Date/Time: 06/06/2016 10:10
Matrix: Wastewater
COC Reference: 100464

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	1L Plastic	None	Yes	16.3	IR
1	125ml Plastic	NaOH	Yes	16.3	IR
1	125ml Plastic	HNO3	Yes	16.3	IR
1	250ml Plastic	H2SO4	Yes	16.3	IR
1	32oz Glass	HCL	Yes	16.3	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
----------	---------	-------	----	--------	---------------	------	-------	-------

Extraction / Prep.

Mercury Digestion	Completed			E245.1	06/07/16 10:00	RGS		
Metal Digestion	Completed			SW3015A	06/10/16 09:00	CCM		

Inorganics

Amenable Cyanide	Not detected	mg/L	0.005	E335.4/SM4500-CN	06/08/16 10:56	JDP	57-12-5AM	1
Ammonia-N (Undistilled)	7.21	mg/L	0.04	SM4500-NH3 D	06/10/16 13:40	MJC	7664-41-7	
Oil & Grease n-Hexane Extract.	1	mg/L	1	E1664A	06/09/16 12:26	PLB		
TBOD5 - Set	Completed	mg/L		HACH 10360	06/08/16 08:00	ASB		
TBOD5	10.6	mg/L	3	HACH 10360	06/13/16 10:30	ASB		
Total Phosphorus	0.10	mg/L	0.01	SM4500-PE	06/09/16 15:42	MJC	7723-14-0	
Total Suspended Solids	55	mg/L	3	SM2540D	06/09/16 18:45	ASB		

Metals

Arsenic	0.015	mg/L	0.002	E200.8	06/10/16 13:31	CCM	7440-38-2	
Chromium	0.106	mg/L	0.005	E200.8	06/10/16 13:31	CCM	7440-47-3	
Copper	0.856	mg/L	0.005	E200.8	06/10/16 13:31	CCM	7440-50-8	
Mercury	Not detected	mg/L	0.0002	E245.1	06/07/16 16:05	RGS	7439-97-6	
Nickel	0.201	mg/L	0.005	E200.8	06/10/16 13:31	CCM	7440-02-0	
Zinc	0.024	mg/L	0.005	E200.8	06/10/16 13:31	CCM	7440-66-6	

1-* Total CN- = < 0.005 mg/L

REPORT TO

CONTACT NAME			Cliff Yantz / Kevin Schneider		
COMPANY			O'Brien & Gere		
ADDRESS			37000 Grand River Stg 260		
CITY			STATE	ZIP CODE	
Farmington Hills			MI	48335	
PHONE NO.		FAX NO.		P.O. NO.	
248-477-5701				11600279	
E-MAIL ADDRESS				QUOTE NO.	
clifford.yantz@obg.com					

CHAIN OF CUSTODY RECORD

CONTACT NAME		X N SAME	
COMPANY			
ADDRESS			
CITY		STATE	ZIP CODE
PHONE NO.	E-MAIL ADDRESS		

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

[illegible]

RELINQUISHED BY:	<i>Z. S. C. OBE</i>	<input checked="" type="checkbox"/> Sampler	DATE	TIME
SIGNATURE/ORGANIZATION			6/6/16	10:20
RECEIVED BY:	<i>J. A. Smith</i>		DATE	TIME
SIGNATURE/ORGANIZATION			6/6/16	10:20
RELINQUISHED BY:	<i>J. A. Smith</i>		DATE	TIME
SIGNATURE/ORGANIZATION			6/6/16	13:15
RECEIVED BY:	<i>Travis Moore</i>		DATE	TIME
SIGNATURE/ORGANIZATION			6/6/16	13:15

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

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE



Quality Control Report

Report ID: QC-S73884.01(01)

Generated on 07/08/2016

Report to

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

Phone: 248-477-5701 FAX: 248-477-5962

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): S73884.01
Project: RACER Coldwater Rd Landfill
Submitted Date/Time: 06/06/2016 13:15
Sampled by: Kevin Schneider
P.O. #: 11600279

QC Report Sections

Cover Page (Page 1)
Analysis Summary (Page 2)
Prep Batch Summary (Page 3)
Batch QC Results (Pages 4-11)

Report Flag Descriptions

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

I certify that this data package is in compliance with the terms and conditions of the program, and project, and contractual requirements both technically and for completeness. Release of the data contained in this hardcopy data package and its computer-readable data submitted has been authorized by the Quality Assurance Manager and his/her designee, as verified by the following signature.

A handwritten signature in cursive script that reads "Barbara Ball".

Barbara Ball
Quality Assurance Manager

QC Report - Analysis Summary

Lab Sample ID: S73884.01

Sample Tag: 02-PRCC-16

Collected Date/Time: 06/06/2016 10:10

Matrix: Wastewater

COC Reference: 100464

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
<i>Inorganics</i>						
Amenable Cyanide	E335.4/SM4500-CN	06/08/16 10:56	CN160608-W1	CN160608-W1	No	BLK/LCS/MS/MSD/DUP
Ammonia-N (Undistilled)	SM4500-NH3 D	06/10/16 13:40	AMN160610QC	AMN160610QC	No	BLK/LCS/MS/DUP
Oil & Grease n-Hexane Extract.	E1664A	06/09/16 12:26	OGHEX160609W01	OGHEX160609W01	No	BLK/LCS
Total Phosphorus	SM4500-PE	06/09/16 15:42	PHS160609QC	PHS160609QC	No	BLK/LCS/MS/DUP
Total Suspended Solids	SM2540D	06/09/16 18:45	TSS160609A	TSS160609A	No	BLK/LCS/DUP
<i>Metals</i>						
Arsenic	E200.8	06/10/16 13:31	MT3-16-0610A	MTD-061016-4	No	LCS/BLK/MS/MSD
Chromium	E200.8	06/10/16 13:31	MT3-16-0610A	MTD-061016-4	No	LCS/BLK/MS/MSD
Copper	E200.8	06/10/16 13:31	MT3-16-0610A	MTD-061016-4	No	LCS/BLK/MS/MSD
Mercury	E245.1	06/07/16 16:05	HG2-16-0607A	HGD-060716-1	No	LCS/BLK/MS/MSD
Nickel	E200.8	06/10/16 13:31	MT3-16-0610A	MTD-061016-4	No	LCS/BLK/MS/MSD
Zinc	E200.8	06/10/16 13:31	MT3-16-0610A	MTD-061016-4	No	LCS/BLK/MS/MSD

QC Report - Prep Batch Summary

Inorganics, Prep Batch ID: AMN160610QC

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

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S73884.01	Ammonia-N (Undistilled)	SM4500-NH3 D	06/10/16 13:40	AMN160610QC

Inorganics, Prep Batch ID: CN160608-W1

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

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S73884.01	Amenable Cyanide	E335.4/SM4500-CN	06/08/16 10:56	CN160608-W1

Inorganics, Prep Batch ID: OGHEX160609W01

Surrogates: No, QC Types: BLK/LCS

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S73884.01	Oil & Grease n-Hexane Extract.	E1664A	06/09/16 12:26	OGHEX160609W01

Inorganics, Prep Batch ID: PHS160609QC

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

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S73884.01	Total Phosphorus	SM4500-PE	06/09/16 15:42	PHS160609QC

Inorganics, Prep Batch ID: TSS160609A

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

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S73884.01	Total Suspended Solids	SM2540D	06/09/16 18:45	TSS160609A

Metals, Prep Batch ID: HGD-060716-1

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

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S73884.01	Mercury	E245.1	06/07/16 16:05	HG2-16-0607A

Metals, Prep Batch ID: MTD-061016-4

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

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S73884.01	Arsenic	E200.8	06/10/16 13:31	MT3-16-0610A
S73884.01	Chromium	E200.8	06/10/16 13:31	MT3-16-0610A
S73884.01	Copper	E200.8	06/10/16 13:31	MT3-16-0610A
S73884.01	Nickel	E200.8	06/10/16 13:31	MT3-16-0610A
S73884.01	Zinc	E200.8	06/10/16 13:31	MT3-16-0610A

QC Report - Batch QC Results

Inorganics, Prep Batch ID: AMN160610QC

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

Blank (BLK)

Lab Sample ID: AMN160610QC.LRB1

Run in Batch: AMN160610QC, Run Date: 06/10/2016 10:43, Prep Date: 06/10/2016, Matrix: Liquid, Dilution: 1

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

Laboratory Control Sample (LCS)

Lab Sample ID: AMN160610QC.LCS1

Run in Batch: AMN160610QC, Run Date: 06/10/2016 11:33, Prep Date: 06/10/2016, Matrix: Liquid, Dilution: 1

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

Matrix Spike (MS)

Lab Sample ID: AMN160610QC.MS1, Parent Sample ID: S73856.01

Run in Batch: AMN160610QC, Run Date: 06/10/2016 13:27, Prep Date: 06/10/2016, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Ammonia-N (Undistilled)		96	80	120

Duplicate (DUP)

Lab Sample ID: AMN160610QC.DP1, Parent Sample ID: S73953.01

Run in Batch: AMN160610QC, Run Date: 06/10/2016 12:10, Prep Date: 06/10/2016, Matrix: Liquid, Dilution: 1

Analyte	Flags	RPD	RPD CL
Ammonia-N (Undistilled)		0.4	20

QC Report - Batch QC Results

Inorganics, Prep Batch ID: CN160608-W1

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

Blank (BLK)

Lab Sample ID: CN160608-W1.LRB1

Run in Batch: CN160608-W1, Run Date: 06/08/2016 10:30, Prep Date: 06/08/2016, Matrix: Liquid, Dilution: 1

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

Laboratory Control Sample (LCS)

Lab Sample ID: CN160608-W1.LCS1

Run in Batch: CN160608-W1, Run Date: 06/08/2016 10:36, Prep Date: 06/08/2016, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Amenable Cyanide		102	90	110

Matrix Spike (MS)

Lab Sample ID: CN160608-W1.MS1, Parent Sample ID: S73843.01

Run in Batch: CN160608-W1, Run Date: 06/08/2016 10:42, Prep Date: 06/08/2016, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Amenable Cyanide		95	80	120

Matrix Spike Duplicate (MSD)

Lab Sample ID: CN160608-W1.MSD1, Parent Sample ID: CN160608-W1.MS1

Run in Batch: CN160608-W1, Run Date: 06/08/2016 10:44, Prep Date: 06/08/2016, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Amenable Cyanide		93	80	120	2	15

Duplicate (DUP)

Lab Sample ID: CN160608-W1.DP1, Parent Sample ID: S73843.01

Run in Batch: CN160608-W1, Run Date: 06/08/2016 10:40, Prep Date: 06/08/2016, Matrix: Liquid, Dilution: 1

Analyte	Flags	RPD	RPD CL
Amenable Cyanide		<1	15

QC Report - Batch QC Results

Inorganics, Prep Batch ID: OGHEX160609W01

Surrogates: No, QC Types: BLK/LCS

Blank (BLK)

Lab Sample ID: OGHEX160609W01.LRB1

Run in Batch: OGHEX160609W01, Run Date: 06/09/2016 12:26, Prep Date: 06/09/2016, 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: OGHEX160609W01.LCS1

Run in Batch: OGHEX160609W01, Run Date: 06/09/2016 12:26, Prep Date: 06/09/2016, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Oil & Grease n-Hexane Extract.		96	78	114

Laboratory Control Sample (LCS)

Lab Sample ID: OGHEX160609W01.LCS2

Run in Batch: OGHEX160609W01, Run Date: 06/09/2016 12:26, Prep Date: 06/09/2016, Matrix: Liquid, Dilution: 1

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

QC Report - Batch QC Results

Inorganics, Prep Batch ID: PHS160609QC

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

Blank (BLK)

Lab Sample ID: PHS160609QC.LRB1

Run in Batch: PHS160609QC, Run Date: 06/09/2016 14:46, Prep Date: 06/09/2016, Matrix: Liquid, Dilution: 1

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

Blank (BLK)

Lab Sample ID: PHS160609QC.LRB2

Run in Batch: PHS160609QC, Run Date: 06/09/2016 14:53, Prep Date: 06/09/2016, Matrix: Liquid, Dilution: 1

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

Laboratory Control Sample (LCS)

Lab Sample ID: PHS160609QC.LCS1

Run in Batch: PHS160609QC, Run Date: 06/09/2016 15:00, Prep Date: 06/09/2016, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Total Phosphorus		95	90	110

Matrix Spike (MS)

Lab Sample ID: PHS160609QC.MS1, Parent Sample ID: S73884.01

Run in Batch: PHS160609QC, Run Date: 06/09/2016 20:17, Prep Date: 06/09/2016, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Total Phosphorus		82	80	120

Duplicate (DUP)

Lab Sample ID: PHS160609QC.DP1, Parent Sample ID: S73779.01

Run in Batch: PHS160609QC, Run Date: 06/09/2016 20:14, Prep Date: 06/09/2016, Matrix: Liquid, Dilution: 1

Analyte	Flags	RPD	RPD CL
Total Phosphorus		0.9	20

QC Report - Batch QC Results

Inorganics, Prep Batch ID: TSS160609A

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

Blank (BLK)

Lab Sample ID: TSS160609A.LRB1

Run in Batch: TSS160609A, Run Date: 06/09/2016 18:45, Prep Date: 06/09/2016, Matrix: Liquid, Dilution: 1

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

Laboratory Control Sample (LCS)

Lab Sample ID: TSS160609A.LCS1

Run in Batch: TSS160609A, Run Date: 06/09/2016 18:45, Prep Date: 06/09/2016, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Total Suspended Solids		107	75.1	116

Duplicate (DUP)

Lab Sample ID: TSS160609A.DP1, Parent Sample ID: S73898.02

Run in Batch: TSS160609A, Run Date: 06/09/2016 18:45, Prep Date: 06/09/2016, Matrix: Liquid, Dilution: 1

Analyte	Flags	RPD	RPD CL
Total Suspended Solids	*	10	5

QC Report - Batch QC Results

Metals, Prep Batch ID: HGD-060716-1

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

Laboratory Control Sample (LCS)

Lab Sample ID: HG2-16-0607A.015.LCS

Run in Batch: HG2-16-0607A, Run Date: 06/07/2016 15:53, Prep Date: 06/07/2016, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Mercury		99	85	115

Blank (BLK)

Lab Sample ID: HG2-16-0607A.017.LRB

Run in Batch: HG2-16-0607A, Run Date: 06/07/2016 15:57, Prep Date: 06/07/2016, Matrix: Liquid, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Mercury		ND	0.03	ug/L

Matrix Spike (MS)

Lab Sample ID: HG2-16-0607A.028.MS, Parent Sample ID: S73891.07

Run in Batch: HG2-16-0607A, Run Date: 06/07/2016 16:19, Prep Date: 06/07/2016, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Mercury		116	75	125

Matrix Spike (MS)

Lab Sample ID: HG2-16-0607A.044.MS, Parent Sample ID: S73896.08

Run in Batch: HG2-16-0607A, Run Date: 06/07/2016 16:51, Prep Date: 06/07/2016, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Mercury		114	75	125

Matrix Spike Duplicate (MSD)

Lab Sample ID: HG2-16-0607A.032.MSD, Parent Sample ID: HG2-16-0607A.028.MS

Run in Batch: HG2-16-0607A, Run Date: 06/07/2016 16:27, Prep Date: 06/07/2016, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Mercury		109	75	125	7	20

Matrix Spike Duplicate (MSD)

Lab Sample ID: HG2-16-0607A.045.MSD, Parent Sample ID: HG2-16-0607A.044.MS

Run in Batch: HG2-16-0607A, Run Date: 06/07/2016 16:52, Prep Date: 06/07/2016, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Mercury		95	75	125	18	20

QC Report - Batch QC Results

Metals, Prep Batch ID: MTD-061016-4

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

Laboratory Control Sample (LCS)

Lab Sample ID: MT3-16-0610A.023.LCS

Run in Batch: MT3-16-0610A, Run Date: 06/10/2016 12:11, Prep Date: 06/10/2016, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Arsenic		101	85	115
Chromium		101	85	115
Copper		99	85	115
Nickel		97	85	115
Zinc		102	85	115

Blank (BLK)

Lab Sample ID: MT3-16-0610A.025.LRB

Run in Batch: MT3-16-0610A, Run Date: 06/10/2016 12:22, Prep Date: 06/10/2016, Matrix: Liquid, Dilution: 1

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

Matrix Spike (MS)

Lab Sample ID: MT3-16-0610A.037.MS, Parent Sample ID: S73847.03

Run in Batch: MT3-16-0610A, Run Date: 06/10/2016 13:04, Prep Date: 06/10/2016, Matrix: Liquid, Dilution: 5

Analyte	Flags	% Rec	LCL	UCL
Arsenic		101	75	125
Chromium		100	75	125
Copper		98	75	125
Nickel		96	75	125
Zinc		98	75	125

Matrix Spike (MS)

Lab Sample ID: MT3-16-0610A.051.MS, Parent Sample ID: S73927.01

Run in Batch: MT3-16-0610A, Run Date: 06/10/2016 14:19, Prep Date: 06/10/2016, Matrix: Liquid, Dilution: 5

Analyte	Flags	% Rec	LCL	UCL
Arsenic		101	75	125
Chromium		100	75	125
Copper		97	75	125
Nickel		96	75	125
Zinc		102	75	125

Matrix Spike Duplicate (MSD)

Lab Sample ID: MT3-16-0610A.038.MSD, Parent Sample ID: MT3-16-0610A.037.MS

Run in Batch: MT3-16-0610A, Run Date: 06/10/2016 13:08, Prep Date: 06/10/2016, Matrix: Liquid, Dilution: 5

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Arsenic		101	75	125	0	20
Chromium		100	75	125	0	20
Copper		98	75	125	1	20
Nickel		96	75	125	0	20
Zinc		100	75	125	1	20

QC Report - Batch QC Results

Metals, Prep Batch ID: MTD-061016-4 (continued)

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

Matrix Spike Duplicate (MSD)

Lab Sample ID: MT3-16-0610A.052.MSD, Parent Sample ID: MT3-16-0610A.051.MS

Run in Batch: MT3-16-0610A, Run Date: 06/10/2016 14:26, Prep Date: 06/10/2016, Matrix: Liquid, Dilution: 5

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Arsenic		102	75	125	1	20
Chromium		100	75	125	0	20
Copper		97	75	125	0	20
Nickel		96	75	125	0	20
Zinc		103	75	125	1	20

REPORT TO

CONTACT NAME			Cliff Yantz / Kevin Schneider		
COMPANY			O'Brien & Gere		
ADDRESS			37000 Grand River Stg 260		
CITY			STATE	ZIP CODE	
Farmington Hills			MI	48335	
PHONE NO.		FAX NO.		P.O. NO.	
248-477-5701				11600279	
E-MAIL ADDRESS				QUOTE NO.	
clifford.yantz@obg.com					

CHAIN OF CUSTODY RECORD

CONTACT NAME		X N SAME	
COMPANY			
ADDRESS			
CITY		STATE	ZIP CODE
PHONE NO.	E-MAIL ADDRESS		

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

[illegible]

RELINQUISHED BY:	<i>Z. S. C. OBE</i>	<input checked="" type="checkbox"/> Sampler	DATE	TIME
SIGNATURE/ORGANIZATION			6/6/16	10:20
RECEIVED BY:	<i>J. A. Smith</i>		DATE	TIME
SIGNATURE/ORGANIZATION			6/6/16	10:20
RELINQUISHED BY:	<i>J. A. Smith</i>		DATE	TIME
SIGNATURE/ORGANIZATION			6/6/16	13:15
RECEIVED BY:	<i>Travis Moore</i>		DATE	TIME
SIGNATURE/ORGANIZATION			6/6/16	13:15

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

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE