April 24, 2017

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

RE: ***Discharge Permit Submittal–January 2017 through March 2017***
Permit No.: 6-08-04-04-GML1

FILE: 15388/64737/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 January 1, 2017 to March 31, 2017 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 February 15, 2017
- 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.

The accumulation tank water was also sampled for per- and polyfluorinated substances (PFAS) on February 15, 2017 during the routine tank sampling due to the discovery of PFAS in the leachate at the site in December 2016, as discussed with you on February 7, 2017 in a phone conversation. The analytical report for that analysis is attached. Perfluorooctanesulfonic acid (PFOS) was detected at the highest concentration at 4 µg/l (or 4,000 ng/l). These compounds are not regulated by the Sewer Use Permit; however, RACER Trust wanted to make the City of Flint aware of their detection in the water discharged from the site.

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

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

OBG
www.obg.com

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

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: January 1, 2017 through March 31, 2017

Average Volume of Daily Discharge (during reporting period): 2,404 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: Clifford Scott Yantz

Date Signed by Authorized Representative: 4/24/17

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
Periodic Report on Continued Compliance
City of Flint Sewer User Self-Monitoring Report
First Quarter - 2017

RACER Trust - Coldwater Road Landfill Facility
Permit Number 6-08-04-04-GML1
6220 Horton Avenue

Analytical Parameter	Ammonia-N	BOD5	HEM	pH @ 25°C	Phosphorus	TSS
Units	mg/L	mg/L	mg/L	SU	mg/L	mg/L
Sampling Frequency	Per Batch	Per Batch	Per Batch	Per Batch	Per Batch	Per Batch
Sampling Procedure	Grab sample	Grab sample	Grab sample	Grab sample	Grab sample	Grab sample
Daily Maximum Limit	110	1196	100	NA	14	570
Maximum Limit	NA	NA	NA	10.5	NA	NA
Minimum Limit	NA	NA	NA	6	NA	NA
Test Result	3.8	17	0	7.7	0.06	70
Test Method	4500-NH3 D	10360	1664A	4500-H+ B	4500-PE	2540 D
Test Date	2/22/2017	2/21/2017	2/16/2017	2/15/2017	2/21/2017	2/21/2017
Sample Date	2/15/2017	2/15/2017	2/15/2017	2/15/2017	2/15/2017	2/15/2017
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.						
No. of Samples						
Number of Limit Exceedances						

Table 1
Periodic Report on Continued Compliance
City of Flint Sewer User Self-Monitoring Report
First Quarter - 2017

RACER Trust - Coldwater Road Landfill Facility
Permit Number 6-08-04-04-GML1
6220 Horton Avenue

Analytical Parameter	Arsenic	Chromium	Copper	Mercury	Nickel	Zinc	Cyanide, available
Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Sampling Frequency	Per Batch	Per Batch	Per Batch	Per Batch	Per Batch	Per Batch	Per Batch
Sampling Procedure	Grab sample	Grab sample	Grab sample	Grab sample	Grab sample	Grab sample	Grab sample
Daily Maximum Limit	0.051	1.273	1.797	0.000012	0.543	2.626	0.165
Maximum Limit	NA	NA	NA	NA	NA	NA	NA
Minimum Limit	NA	NA	NA	NA	NA	NA	NA
Test Result	0.011	0.043	0.664	0.0000	0.204	0.036	0.000
Test Method	200.8	200.8	200.8	245.1	200.8	200.8	1677
Test Date	2/16/2017	2/16/2017	2/16/2017	2/20/2017	2/16/2017	2/16/2017	2/21/2017
Sample Date	2/15/2017	2/15/2017	2/15/2017	2/15/2017	2/15/2017	2/15/2017	2/15/2017
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.							
No. of Samples							
Number of Limit Exceedances							

Table 2
Coldwater Road Landfill
Daily Discharge Summary Table
First Quarter - 2017
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 (C)	(F)	pH
1/11/2017	529,465	529,613	**148**	9:40	9:47	21.1	8.8	47.8	8.50
3/31/2017	529,613	534,273	**4,660**	9:15	12:30	23.9	10.0	50.0	7.30

Total Discharge Volume (2 Events): **4,808**
Average Discharge Volume (2 Events): **2,404**

NOTES :

Analytical Laboratory Report

Report ID: S79361.01(01)
Generated on 02/23/2017

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

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:
John Laverty (johnlaverty@meritlabs.com)
Barbara Ball (bball@meritlabs.com)

Report Summary

Lab Sample ID(s): S79361.01
Project: RACER Coldwater Rd Landfill
Collected Date: 02/15/2017
Submitted Date/Time: 02/15/2017 14:15
Sampled by: Kevin Schneider
P.O. #: 11700139

Table of Contents

Maya Murshak
Technical Director

General Report Notes

Analytical results relate only to the samples tested, in the condition 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).
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. Starred (*) analytes are not NELAP accredited.
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 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

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
HACH 10360	HACH 10360
OIA-1677	EPA Method OIA-1677
SM2540D	Standard Method 2540 D 20th Edition
SM2550B	Standard Method 2550 B 20th Edition
SM4500-H+ B	Standard Method 4500 H + B 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

Sample Summary (1 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S79361.01	01-PRCC-17	Wastewater	02/15/17 12:50

Analytical Laboratory Report

Lab Sample ID: S79361.01
Sample Tag: 01-PRCC-17
Collected Date/Time: 02/15/2017 12:50
Matrix: Wastewater
COC Reference: 72546

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	125ml Plastic	HNO3	Yes	4.2	IR
1	250ml Plastic	H2SO4	Yes	4.2	IR
1	125ml Amber	PbCO3/NaOH	Yes	4.2	IR
1	1L Plastic	None	Yes	4.2	IR
1	32oz Glass	HCL	Yes	4.2	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
Extraction / Prep.								
Mercury Digestion	Completed			E245.1	02/20/17 10:00	RGS		
Metal Digestion	Completed			SW3015A	02/16/17 11:00	CCM		
Inorganics								
Ammonia-N (Undistilled)	3.8	mg/L	0.1	SM4500-NH3 D	02/22/17 15:00	MJC	7664-41-7	
Field pH*	7.7	STD Units	0.1	SM4500-H+ B	02/15/17 12:50	KS		
Field Temperature*	46	oF	1	SM2550B	02/15/17 12:50	KS		
Oil & Grease n-Hexane Extract.	Not detected	mg/L	2	E1664A	02/16/17 12:12	PLB		
TBOD5 - Set*	Completed	mg/L		HACH 10360	02/16/17 18:20	ASB		
TBOD5*	17	mg/L	3	HACH 10360	02/21/17 18:00	ASB		
Total Phosphorus	0.06	mg/L	0.01	SM4500-PE	02/21/17 15:22	MJC	7723-14-0	
Total Suspended Solids	70	mg/L	3	SM2540D	02/21/17 13:50	ASB		
Metals								
Arsenic	0.011	mg/L	0.002	E200.8	02/16/17 12:53	CCM	7440-38-2	
Chromium	0.043	mg/L	0.005	E200.8	02/16/17 12:53	CCM	7440-47-3	
Copper	0.664	mg/L	0.005	E200.8	02/16/17 12:53	CCM	7440-50-8	
Mercury	Not detected	mg/L	0.0002	E245.1	02/20/17 13:03	RGS	7439-97-6	
Nickel	0.204	mg/L	0.005	E200.8	02/16/17 12:53	CCM	7440-02-0	
Zinc	0.036	mg/L	0.005	E200.8	02/16/17 12:53	CCM	7440-66-6	
Other / Misc.								
Available Cyanide	Not detected	mg/L	0.002	OIA-1677	02/21/17 10:45	JDP	57-12-5	

Merit Laboratories, Inc.

2680 East Lansing Dr., East Lansing, MI 48823
Phone (517) 332-0167 Fax (517) 332-4034
www.meritlabs.com

C.O.C. PAGE # 1 OF 1

72546

CHAIN OF CUSTODY RECORD

REPORT TO

CONTACT NAME: Clifford Yantz
COMPANY: O'Brien & Gere
ADDRESS: 37000 Grand River st 260
CITY: Farmington Hills STATE: MI ZIP CODE: 48335
PHONE NO.: 248-477-5701 FAX NO.:
P.O. NO.: 11700139
E-MAIL ADDRESS: clifford.yantz@OBG.com QUOTE NO.:

INVOICE TO

CONTACT NAME: ☒ SAME
COMPANY:
ADDRESS:
CITY: STATE: ZIP CODE:
PHONE NO.: E-MAIL ADDRESS:

PROJECT NO./NAME: RACER Coldwater Rd Landfill
SAMPLER(S) - PLEASE PRINT/SIGN NAME: Kevin Schrader

TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER

DELIVERABLES REQUIRED ☐ STD ☒ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☐ OTHER

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

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

Certifications
☐ OHIO VAP ☐ Drinking Water
☐ DoD ☐ NPDES

Project Locations
☐ Detroit ☐ New York
☐ Other

Special Instructions

MERIT LAB NO. (FOR LAB USE ONLY)	YEAR DATE	TIME	SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	# Containers & Preservatives: NONE	HCl	HNO_3	H_2SO_4	NaOH	MeOH	OTHER	Total Metals	Available Cyanide	BOD/TSS	Ammonia - Nitrogen	Total Phosphorus	FOG (Hex-Ext)
79361.01	2/15/17	1250	01-PRCC-17	WW	5	1	1	1	1			1	X	X	X	X	X	X

Metals Are:
As, Cr, Cu, Hg, Ni, Zn

Analysis Per City of Flint Permit

Field pH - 7.7
Field Temp - 8.0°C

RELINQUISHED BY: SIGNATURE/ORGANIZATION	☒ Sampler	DATE	TIME
Z Schrader OBG		2/15/17	1315
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE	TIME
[illegible]		2/15/17	13:15
RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE	TIME
[illegible]		2/15/17	14:15
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE	TIME
M Chicote		2/15/17	1415

RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE	TIME
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE	TIME

SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS
SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS

NOTES: TEMP. ON ARRIVAL 4.2

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

Rev. 5.18.12

Quality Control Report

Report ID: QC-S79361-01
Generated on 02/23/2017

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): S79361.01
Project: RACER Coldwater Rd Landfill
Submitted Date/Time: 02/15/2017 14:15
Sampled by: Kevin Schneider
P.O. #: 11700139

QC Report Sections

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.

Barbara Ball

Barbara Ball
Quality Assurance Manager

QC Report - Analysis Summary

Lab Sample ID: S79361.01
Sample Tag: 01-PRCC-17
Collected Date/Time: 02/15/2017 12:50
Matrix: Wastewater
COC Reference: 72546

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Inorganics						
Ammonia-N (Undistilled)	SM4500-NH3 D	02/22/17 15:00	AMN170222QC	AMN170222QC	No	BLK/LCS/MS/DUP
Oil & Grease n-Hexane Extract.	E1664A	02/16/17 12:12	OGHEX170216W01	OGHEX170216W01	No	BLK/LCS
Total Phosphorus	SM4500-PE	02/21/17 15:22	PHS170221QC	PHS170221QC	No	BLK/LCS/MS/DUP
Total Suspended Solids	SM2540D	02/21/17 13:50	TSS170220A	TSS170220A	No	BLK/LCS/DUP
Metals						
Arsenic	E200.8	02/16/17 12:53	MT4-17-0216A	MTD-021617-1	No	LCS/BLK/MS/MSD
Chromium	E200.8	02/16/17 12:53	MT4-17-0216A	MTD-021617-1	No	LCS/BLK/MS/MSD
Copper	E200.8	02/16/17 12:53	MT4-17-0216A	MTD-021617-1	No	LCS/BLK/MS/MSD
Mercury	E245.1	02/20/17 13:03	HG2-17-0220A	HGD-022017-2	No	LCS/BLK/MS/MSD
Nickel	E200.8	02/16/17 12:53	MT4-17-0216A	MTD-021617-1	No	LCS/BLK/MS/MSD
Zinc	E200.8	02/16/17 12:53	MT4-17-0216A	MTD-021617-1	No	LCS/BLK/MS/MSD
Other / Misc.						
Available Cyanide	OIA-1677	02/21/17 10:45	ACN170221-W1	ACN170221-W1	No	BLK/LCS/MS/MSD/DUP

QC Report - Prep Batch Summary

Inorganics, Prep Batch ID: AMN170222QC

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

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S79361.01	Ammonia-N (Undistilled)	SM4500-NH3 D	02/22/17 15:00	AMN170222QC

Inorganics, Prep Batch ID: OGHEX170216W01

Surrogates: No, QC Types: BLK/LCS

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S79361.01	Oil & Grease n-Hexane Extract.	E1664A	02/16/17 12:12	OGHEX170216W01

Inorganics, Prep Batch ID: PHS170221QC

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

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S79361.01	Total Phosphorus	SM4500-PE	02/21/17 15:22	PHS170221QC

Inorganics, Prep Batch ID: TSS170220A

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

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S79361.01	Total Suspended Solids	SM2540D	02/21/17 13:50	TSS170220A

Metals, Prep Batch ID: HGD-022017-2

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

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S79361.01	Mercury	E245.1	02/20/17 13:03	HG2-17-0220A

Metals, Prep Batch ID: MTD-021617-1

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

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S79361.01	Arsenic	E200.8	02/16/17 12:53	MT4-17-0216A
S79361.01	Chromium	E200.8	02/16/17 12:53	MT4-17-0216A
S79361.01	Copper	E200.8	02/16/17 12:53	MT4-17-0216A
S79361.01	Nickel	E200.8	02/16/17 12:53	MT4-17-0216A
S79361.01	Zinc	E200.8	02/16/17 12:53	MT4-17-0216A

Other / Misc., Prep Batch ID: ACN170221-W1

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

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S79361.01	Available Cyanide	OIA-1677	02/21/17 10:45	ACN170221-W1

Inorganics, Prep Batch ID: AMN170222QC

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

Blank (BLK)

Lab Sample ID: AMN170222QC.LRB1

Run in Batch: AMN170222QC, Run Date: 02/22/2017 10:04, Prep Date: 02/22/2017, Matrix: Liquid, Dilution: 1

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

Laboratory Control Sample (LCS)

Lab Sample ID: AMN170222QC.LCS1

Run in Batch: AMN170222QC, Run Date: 02/22/2017 10:57, Prep Date: 02/22/2017, Matrix: Liquid, Dilution: 1

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

Matrix Spike (MS)

Lab Sample ID: AMN170222QC.MS1, Parent Sample ID: S79348.01

Run in Batch: AMN170222QC, Run Date: 02/22/2017 11:57, Prep Date: 02/22/2017, Matrix: Liquid, Dilution: 1

Analyte	Flags	**% Rec**	LCL	UCL
Ammonia-N (Undistilled)		**106**	80	120

Duplicate (DUP)

Lab Sample ID: AMN170222QC.DP1, Parent Sample ID: S79460.01

Run in Batch: AMN170222QC, Run Date: 02/22/2017 11:26, Prep Date: 02/22/2017, Matrix: Liquid, Dilution: 1

Analyte	Flags	**RPD**	RPD CL
Ammonia-N (Undistilled)		**1.6**	20

Inorganics, Prep Batch ID: OGHEX170216W01

Surrogates: No, QC Types: BLK/LCS

Blank (BLK)

Lab Sample ID: OGHEX170216W01.LRB1

Run in Batch: OGHEX170216W01, Run Date: 02/16/2017 12:13, Prep Date: 02/16/2017, 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: OGHEX170216W01.LCS1

Run in Batch: OGHEX170216W01, Run Date: 02/16/2017 12:13, Prep Date: 02/16/2017, Matrix: Liquid, Dilution: 1

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

Laboratory Control Sample (LCS)

Lab Sample ID: OGHEX170216W01.LCS2

Run in Batch: OGHEX170216W01, Run Date: 02/16/2017 12:13, Prep Date: 02/16/2017, Matrix: Liquid, Dilution: 1

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

Inorganics, Prep Batch ID: PHS170221QC

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

Blank (BLK)

Lab Sample ID: PHS170221QC.LRB1

Run in Batch: PHS170221QC, Run Date: 02/21/2017 12:01, Prep Date: 02/21/2017, Matrix: Liquid, Dilution: 1

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

Blank (BLK)

Lab Sample ID: PHS170221QC.LRB2

Run in Batch: PHS170221QC, Run Date: 02/21/2017 12:35, Prep Date: 02/21/2017, Matrix: Liquid, Dilution: 1

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

Laboratory Control Sample (LCS)

Lab Sample ID: PHS170221QC.LCS1

Run in Batch: PHS170221QC, Run Date: 02/21/2017 12:09, Prep Date: 02/21/2017, Matrix: Liquid, Dilution: 1

Analyte	Flags	**% Rec**	LCL	UCL
Total Phosphorus		**96**	90	110

Matrix Spike (MS)

Lab Sample ID: PHS170221QC.MS1, Parent Sample ID: S79336.03

Run in Batch: PHS170221QC, Run Date: 02/21/2017 16:14, Prep Date: 02/21/2017, Matrix: Liquid, Dilution: 1

Analyte	Flags	**% Rec**	LCL	UCL
Total Phosphorus		**91**	80	120

Duplicate (DUP)

Lab Sample ID: PHS170221QC.DP1, Parent Sample ID: S79439.01

Run in Batch: PHS170221QC, Run Date: 02/21/2017 16:11, Prep Date: 02/21/2017, Matrix: Liquid, Dilution: 1

Analyte	Flags	**RPD**	RPD CL
Total Phosphorus		**12.1**	20

Inorganics, Prep Batch ID: TSS170220A

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

Blank (BLK)

Lab Sample ID: TSS170220A.LRB1

Run in Batch: TSS170220A, Run Date: 02/20/2017 13:50, Prep Date: 02/20/2017, Matrix: Liquid, Dilution: 1

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

Laboratory Control Sample (LCS)

Lab Sample ID: TSS170220A.LCS1

Run in Batch: TSS170220A, Run Date: 02/20/2017 13:50, Prep Date: 02/20/2017, Matrix: Liquid, Dilution: 1

Analyte	Flags	**% Rec**	LCL	UCL
Total Suspended Solids		**106**	82.0	111

Duplicate (DUP)

Lab Sample ID: TSS170220A.DP1, Parent Sample ID: S79360.01

Run in Batch: TSS170220A, Run Date: 02/20/2017 13:50, Prep Date: 02/20/2017, Matrix: Liquid, Dilution: 1

Analyte	Flags	**RPD**	RPD CL
Total Suspended Solids		**1**	5

Metals, Prep Batch ID: HGD-022017-2

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

Laboratory Control Sample (LCS)

Lab Sample ID: HG2-17-0220A.049.LCS

Run in Batch: HG2-17-0220A, Run Date: 02/20/2017 12:46, Prep Date: 02/20/2017, Matrix: Liquid, Dilution: 1

Analyte	Flags	**% Rec**	LCL	UCL
Mercury		**94**	85	115

Blank (BLK)

Lab Sample ID: HG2-17-0220A.050.LRB

Run in Batch: HG2-17-0220A, Run Date: 02/20/2017 12:48, Prep Date: 02/20/2017, Matrix: Liquid, Dilution: 1

Analyte	Flags	**Conc**	RDL	Units
Mercury		**ND**	0.03	ug/L

Matrix Spike (MS)

Lab Sample ID: HG2-17-0220A.061.MS, Parent Sample ID: S79391.01

Run in Batch: HG2-17-0220A, Run Date: 02/20/2017 13:08, Prep Date: 02/20/2017, Matrix: Liquid, Dilution: 1

Analyte	Flags	**% Rec**	LCL	UCL
Mercury		**98**	75	125

Matrix Spike (MS)

Lab Sample ID: HG2-17-0220A.071.MS, Parent Sample ID: S79434.16

Run in Batch: HG2-17-0220A, Run Date: 02/20/2017 13:27, Prep Date: 02/20/2017, Matrix: Liquid, Dilution: 1

Analyte	Flags	**% Rec**	LCL	UCL
Mercury		**106**	75	125

Matrix Spike Duplicate (MSD)

Lab Sample ID: HG2-17-0220A.062.MSD, Parent Sample ID: HG2-17-0220A.061.MS

Run in Batch: HG2-17-0220A, Run Date: 02/20/2017 13:10, Prep Date: 02/20/2017, Matrix: Liquid, Dilution: 1

Analyte	Flags	**% Rec**	LCL	UCL	**RPD**	RPD CL
Mercury		**96**	75	125	**3**	20

Matrix Spike Duplicate (MSD)

Lab Sample ID: HG2-17-0220A.072.MSD, Parent Sample ID: HG2-17-0220A.071.MS

Run in Batch: HG2-17-0220A, Run Date: 02/20/2017 13:31, Prep Date: 02/20/2017, Matrix: Liquid, Dilution: 1

Analyte	Flags	**% Rec**	LCL	UCL	**RPD**	RPD CL
Mercury		**106**	75	125	**0**	20

Metals, Prep Batch ID: MTD-021617-1

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

Laboratory Control Sample (LCS)

Lab Sample ID: MT4-17-0216A.019.LCS

Run in Batch: MT4-17-0216A, Run Date: 02/16/2017 11:55, Prep Date: 02/16/2017, Matrix: Liquid, Dilution: 1

Analyte	Flags	**% Rec**	LCL	UCL
Arsenic		**98**	85	115
Chromium		**98**	85	115
Copper		**101**	85	115
Nickel		**101**	85	115
Zinc		**104**	85	115

Blank (BLK)

Lab Sample ID: MT4-17-0216A.020.LRB

Run in Batch: MT4-17-0216A, Run Date: 02/16/2017 11:57, Prep Date: 02/16/2017, Matrix: Liquid, Dilution: 1

Analyte	Flags	**Conc**	RDL	Units
Arsenic		**ND**	0.0006	mg/L
Chromium		**ND**	0.001	mg/L
Copper		**ND**	0.001	mg/L
Nickel		**ND**	0.001	mg/L
Zinc		**ND**	0.002	mg/L

Matrix Spike (MS)

Lab Sample ID: MT4-17-0216A.031.MS, Parent Sample ID: S79361.01

Run in Batch: MT4-17-0216A, Run Date: 02/16/2017 12:54, Prep Date: 02/16/2017, Matrix: Liquid, Dilution: 5

Analyte	Flags	**% Rec**	LCL	UCL
Arsenic		**104**	75	125
Chromium		**101**	75	125
Copper		**95**	75	125
Nickel		**105**	75	125
Zinc		**97**	75	125

Matrix Spike Duplicate (MSD)

Lab Sample ID: MT4-17-0216A.032.MSD, Parent Sample ID: MT4-17-0216A.031.MS

Run in Batch: MT4-17-0216A, Run Date: 02/16/2017 12:55, Prep Date: 02/16/2017, Matrix: Liquid, Dilution: 5

Analyte	Flags	**% Rec**	LCL	UCL	**RPD**	RPD CL
Arsenic		**108**	75	125	**3**	20
Chromium		**98**	75	125	**3**	20
Copper		**102**	75	125	**2**	20
Nickel		**102**	75	125	**1**	20
Zinc		**98**	75	125	**1**	20

Other / Misc., Prep Batch ID: ACN170221-W1

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

Blank (BLK)

Lab Sample ID: ACN170221-W1.LRB1

Run in Batch: ACN170221-W1, Run Date: 02/21/2017 10:29, Prep Date: 02/21/2017, Matrix: Liquid, Dilution: 1

Analyte	Flags	**Conc**	RDL	Units
Available Cyanide		**ND**	0.002	mg/L

Blank (BLK)

Lab Sample ID: ACN170221-W1.LRB2

Run in Batch: ACN170221-W1, Run Date: 02/21/2017 10:51, Prep Date: 02/21/2017, Matrix: Liquid, Dilution: 1

Analyte	Flags	**Conc**	RDL	Units
Available Cyanide		**ND**	0.002	mg/L

Laboratory Control Sample (LCS)

Lab Sample ID: ACN170221-W1.LCS1

Run in Batch: ACN170221-W1, Run Date: 02/21/2017 10:33, Prep Date: 02/21/2017, Matrix: Liquid, Dilution: 1

Analyte	Flags	**% Rec**	LCL	UCL
Available Cyanide		**99**	88	109

Matrix Spike (MS)

Lab Sample ID: ACN170221-W1.MS1, Parent Sample ID: S79348.02

Run in Batch: ACN170221-W1, Run Date: 02/21/2017 10:41, Prep Date: 02/21/2017, Matrix: Liquid, Dilution: 1

Analyte	Flags	**% Rec**	LCL	UCL
Available Cyanide		**104**	82	130

Matrix Spike Duplicate (MSD)

Lab Sample ID: ACN170221-W1.MSD1, Parent Sample ID: ACN170221-W1.MS1

Run in Batch: ACN170221-W1, Run Date: 02/21/2017 10:43, Prep Date: 02/21/2017, Matrix: Liquid, Dilution: 1

Analyte	Flags	**% Rec**	LCL	UCL	**RPD**	RPD CL
Available Cyanide		**100**	82	130	**4**	15

Duplicate (DUP)

Lab Sample ID: ACN170221-W1.DP1, Parent Sample ID: S79348.02

Run in Batch: ACN170221-W1, Run Date: 02/21/2017 10:39, Prep Date: 02/21/2017, Matrix: Liquid, Dilution: 1

Analyte	Flags	**RPD**	RPD CL
Available Cyanide		**15**	15

Merit Laboratories, Inc.

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C.O.C. PAGE # 1 OF 1

72546

CHAIN OF CUSTODY RECORD

REPORT TO

CONTACT NAME: Clifford Yantz
COMPANY: O'Brien & Gere
ADDRESS: 37000 Grand River st 260
CITY: Farmington Hills STATE: MI ZIP CODE: 48335
PHONE NO.: 248-477-5701 FAX NO.:
P.O. NO.: 11700139
E-MAIL ADDRESS: clifford.yantz@OBG.com QUOTE NO.:

INVOICE TO

CONTACT NAME: ☒ SAME
COMPANY:
ADDRESS:
CITY: STATE: ZIP CODE:
PHONE NO.: E-MAIL ADDRESS:

PROJECT NO./NAME: RACER Coldwater Rd Landfill
SAMPLER(S) - PLEASE PRINT/SIGN NAME: Kevin Schrader

TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER

DELIVERABLES REQUIRED ☐ STD ☒ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☐ OTHER

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

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

Certifications
☐ OHIO VAP ☐ Drinking Water
☐ DoD ☐ NPDES

Project Locations
☐ Detroit ☐ New York
☐ Other

Special Instructions

MERIT LAB NO. (FOR LAB USE ONLY)	YEAR DATE	TIME	SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	# Containers & Preservatives: NONE	HCl	HNO_3	H_2SO_4	NaOH	MeOH	OTHER	Total Metals	Available Cyanide	BOD/TSS	Ammonia - Nitrogen	Total Phosphorus	FOG (Hex-Ext)
79361.01	2/15/17	1250	01-PRCC-17	WW	5	1	1	1	1			1	X	X	X	X	X	X

Metals Are:
As, Cr, Cu, Hg, Ni, Zn

Analysis Per City of Flint Permit

Field pH - 7.7
Field Temp - 8.0°C

RELINQUISHED BY: SIGNATURE/ORGANIZATION	☒ Sampler	DATE	TIME
Z Schrader OBG		2/15/17	1315
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE	TIME
[illegible]		2/15/17	13:15
RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE	TIME
[illegible]		2/15/17	14:15
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE	TIME
M Chicote		2/15/17	1415

RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE	TIME
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE	TIME

SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS
SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS

NOTES: TEMP. ON ARRIVAL 4.2

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

Rev. 5.18.12

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 320-25843-1
Client Project/Site: PFC Analysis

For:
O'Brien & Gere Inc of North America
37000 Grand River Ave
Suite 260
Farmington Hills, Michigan 48335

Attn: Mr. Clifford Yantz

Authorized for release by:
3/9/2017 9:53:53 AM

Jill Kellmann, Manager of Project Management
(916)374-4402
jill.kellmann@testamericainc.com

Table of Contents

Definitions/Glossary

Client: O'Brien & Gere Inc of North America
Project/Site: PFC Analysis

TestAmerica Job ID: 320-25843-1

Qualifiers

LCMS

Qualifier	Qualifier Description
*	Isotope Dilution analyte is outside acceptance limits.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, 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)

Job ID: 320-25843-1

Laboratory: TestAmerica Sacramento

Narrative

Receipt
The samples were received on 2/16/2017 9:40 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.2º C.

LCMS
Method(s) 537 (modified): The following sample was diluted to bring the concentration of target analytes within the calibration range: 01-PRCC-17 (320-25843-1). Elevated reporting limits (RLs) are provided.

Method(s) 537 (modified): The Isotope Dilution Analyte (IDA) recovery for Perfluorobutanoic acid (PFBA) in the following sample is below the method recommended limit: 01-PRCC-17 (320-25843-1). Generally, data quality is not considered affected if the IDA signal-to-noise ratio is greater than 10:1, which is achieved for all IDA in the sample.

Method(s) 537 (modified): The Isotope Dilution Analyte (IDA) recoveries for several analytes are above the method recommended limit for the following samples: Field Blank-1 (320-25843-2), (LCS 320-152744/2-A), (LCSD 320-152744/3-A) and (MB 320-152744/1-A). Quantitation by isotope dilution generally precludes any adverse effect on data quality due to elevated IDA recoveries.

Method(s) 537 (modified): The continuing calibration verification (CCV) associated with batch 320-153012 recovered above the upper control limit for M2-6:2FTS. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported.

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

Organic Prep
Method(s) 3535: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 320-152744.

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

Detection Summary

Client: O'Brien & Gere Inc of North America
Project/Site: PFC Analysis

TestAmerica Job ID: 320-25843-1

Client Sample ID: 01-PRCC-17 — Lab Sample ID: 320-25843-1

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanoic acid (PFOA)	53		18	6.6	ng/L	10		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	100		18	8.0	ng/L	10		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	260		18	7.6	ng/L	10		537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	63		18	6.2	ng/L	10		537 (modified)	Total/NA
Perfluorooctane Sulfonamide (FOSA)	12	J B	18	5.6	ng/L	10		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS) - DL	4000		180	110	ng/L	100		537 (modified)	Total/NA

Client Sample ID: Field Blank-1 — Lab Sample ID: 320-25843-2

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctane Sulfonamide (FOSA)	0.76	J B	1.8	0.58	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 01-PRCC-17

Date Collected: 02/15/17 12:00
Date Received: 02/16/17 09:40

Lab Sample ID: 320-25843-1

Matrix: Water

Method: 537 (modified) - Perfluorinated Hydrocarbons

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		18	4.0	ng/L		03/01/17 14:04	03/06/17 14:30	10
Perfluoropentanoic acid (PFPeA)	ND		18	8.7	ng/L		03/01/17 14:04	03/06/17 14:30	10
Perfluorohexanoic acid (PFHxA)	ND		18	6.9	ng/L		03/01/17 14:04	03/06/17 14:30	10
Perfluoroheptanoic acid (PFHpA)	ND		18	7.0	ng/L		03/01/17 14:04	03/06/17 14:30	10
Perfluorooctanoic acid (PFOA)	**53**		18	6.6	ng/L		03/01/17 14:04	03/06/17 14:30	10
Perfluorononanoic acid (PFNA)	ND		18	5.7	ng/L		03/01/17 14:04	03/06/17 14:30	10
Perfluorodecanoic acid (PFDA)	ND		18	3.9	ng/L		03/01/17 14:04	03/06/17 14:30	10
Perfluoroundecanoic acid (PFUnA)	ND		18	6.6	ng/L		03/01/17 14:04	03/06/17 14:30	10
Perfluorododecanoic acid (PFDoA)	ND		18	5.1	ng/L		03/01/17 14:04	03/06/17 14:30	10
Perfluorotridecanoic Acid (PFTriA)	ND		18	4.8	ng/L		03/01/17 14:04	03/06/17 14:30	10
Perfluorotetradecanoic acid (PFTeA)	ND		18	1.7	ng/L		03/01/17 14:04	03/06/17 14:30	10
Perfluorobutanesulfonic acid (PFBS)	**100**		18	8.0	ng/L		03/01/17 14:04	03/06/17 14:30	10
Perfluorohexanesulfonic acid (PFHxS)	**260**		18	7.6	ng/L		03/01/17 14:04	03/06/17 14:30	10
Perfluoroheptanesulfonic Acid (PFHpS)	**63**		18	6.2	ng/L		03/01/17 14:04	03/06/17 14:30	10
Perfluorodecanesulfonic acid (PFDS)	ND		18	11	ng/L		03/01/17 14:04	03/06/17 14:30	10
Perfluorooctane Sulfonamide (FOSA)	**12**	**J B**	18	5.6	ng/L		03/01/17 14:04	03/06/17 14:30	10
6:2FTS	ND		180	33	ng/L		03/01/17 14:04	03/06/17 14:30	10

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C8 FOSA	*27*		*25 - 150*	*03/01/17 14:04*	*03/06/17 14:30*	*10*
13C4 PFBA	*22*	*	*25 - 150*	*03/01/17 14:04*	*03/06/17 14:30*	*10*
13C2 PFHxA	*64*		*25 - 150*	*03/01/17 14:04*	*03/06/17 14:30*	*10*
13C4 PFOA	*70*		*25 - 150*	*03/01/17 14:04*	*03/06/17 14:30*	*10*
13C5 PFNA	*81*		*25 - 150*	*03/01/17 14:04*	*03/06/17 14:30*	*10*
13C2 PFDA	*86*		*25 - 150*	*03/01/17 14:04*	*03/06/17 14:30*	*10*
13C2 PFUnA	*85*		*25 - 150*	*03/01/17 14:04*	*03/06/17 14:30*	*10*
13C2 PFDoA	*82*		*25 - 150*	*03/01/17 14:04*	*03/06/17 14:30*	*10*
18O2 PFHxS	*81*		*25 - 150*	*03/01/17 14:04*	*03/06/17 14:30*	*10*
13C4-PFHpA	*64*		*25 - 150*	*03/01/17 14:04*	*03/06/17 14:30*	*10*
13C5 PFPeA	*43*		*25 - 150*	*03/01/17 14:04*	*03/06/17 14:30*	*10*
M2-6:2FTS	*114*		*25 - 150*	*03/01/17 14:04*	*03/06/17 14:30*	*10*

Method: 537 (modified) - Perfluorinated Hydrocarbons - DL

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	**4000**		180	110	ng/L		03/01/17 14:04	03/06/17 14:22	100

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFOS	*128*		*25 - 150*	*03/01/17 14:04*	*03/06/17 14:22*	*100*

Client Sample ID: Field Blank-1

Date Collected: 02/15/17 12:10
Date Received: 02/16/17 09:40

Lab Sample ID: 320-25843-2

Matrix: Water

Method: 537 (modified) - Perfluorinated Hydrocarbons

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		1.8	0.42	ng/L		03/01/17 14:04	03/02/17 22:28	1
Perfluoropentanoic acid (PFPeA)	ND		1.8	0.90	ng/L		03/01/17 14:04	03/02/17 22:28	1

Client Sample ID: Field Blank-1
Date Collected: 02/15/17 12:10
Date Received: 02/16/17 09:40

Lab Sample ID: 320-25843-2
Matrix: Water

Method: 537 (modified) - Perfluorinated Hydrocarbons (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid (PFHxA)	ND		1.8	0.71	ng/L		03/01/17 14:04	03/02/17 22:28	1
Perfluoroheptanoic acid (PFHpA)	ND		1.8	0.73	ng/L		03/01/17 14:04	03/02/17 22:28	1
Perfluorooctanoic acid (PFOA)	ND		1.8	0.68	ng/L		03/01/17 14:04	03/02/17 22:28	1
Perfluorononanoic acid (PFNA)	ND		1.8	0.59	ng/L		03/01/17 14:04	03/02/17 22:28	1
Perfluorodecanoic acid (PFDA)	ND		1.8	0.40	ng/L		03/01/17 14:04	03/02/17 22:28	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	0.68	ng/L		03/01/17 14:04	03/02/17 22:28	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	0.53	ng/L		03/01/17 14:04	03/02/17 22:28	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.8	0.50	ng/L		03/01/17 14:04	03/02/17 22:28	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.18	ng/L		03/01/17 14:04	03/02/17 22:28	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8	0.83	ng/L		03/01/17 14:04	03/02/17 22:28	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	0.79	ng/L		03/01/17 14:04	03/02/17 22:28	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	0.65	ng/L		03/01/17 14:04	03/02/17 22:28	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	1.1	ng/L		03/01/17 14:04	03/02/17 22:28	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8	1.2	ng/L		03/01/17 14:04	03/02/17 22:28	1
Perfluorooctane Sulfonamide (FOSA)	**0.76**	**J B**	1.8	0.58	ng/L		03/01/17 14:04	03/02/17 22:28	1
6:2FTS	ND		18	3.5	ng/L		03/01/17 14:04	03/02/17 22:28	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C8 FOSA	*89*		*25 - 150*	*03/01/17 14:04*	*03/02/17 22:28*	*1*
13C4 PFBA	*140*		*25 - 150*	*03/01/17 14:04*	*03/02/17 22:28*	*1*
13C2 PFHxA	*145*		*25 - 150*	*03/01/17 14:04*	*03/02/17 22:28*	*1*
13C4 PFOA	*157*	*	*25 - 150*	*03/01/17 14:04*	*03/02/17 22:28*	*1*
13C5 PFNA	*138*		*25 - 150*	*03/01/17 14:04*	*03/02/17 22:28*	*1*
13C2 PFDA	*137*		*25 - 150*	*03/01/17 14:04*	*03/02/17 22:28*	*1*
13C2 PFUnA	*136*		*25 - 150*	*03/01/17 14:04*	*03/02/17 22:28*	*1*
13C2 PFDoA	*128*		*25 - 150*	*03/01/17 14:04*	*03/02/17 22:28*	*1*
18O2 PFHxS	*149*		*25 - 150*	*03/01/17 14:04*	*03/02/17 22:28*	*1*
13C4 PFOS	*139*		*25 - 150*	*03/01/17 14:04*	*03/02/17 22:28*	*1*
13C4-PFHpA	*161*	*	*25 - 150*	*03/01/17 14:04*	*03/02/17 22:28*	*1*
13C5 PFPeA	*150*		*25 - 150*	*03/01/17 14:04*	*03/02/17 22:28*	*1*
M2-6:2FTS	*186*	*	*25 - 150*	*03/01/17 14:04*	*03/02/17 22:28*	*1*

Isotope Dilution Summary

Client: O'Brien & Gere Inc of North America
Project/Site: PFC Analysis

TestAmerica Job ID: 320-25843-1

Method: 537 (modified) - Perfluorinated Hydrocarbons

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	3C8 FOSA (25-150)	3C4 PFBA (25-150)	3C2 PFHxA (25-150)	3C4 PFOA (25-150)	3C5 PFNA (25-150)	3C2 PFDA (25-150)	3C2 PFUnA (25-150)	3C2 PFDoA (25-150)
320-25843-1	01-PRCC-17	27	22 *	64	70	81	86	85	82
320-25843-1 - DL	01-PRCC-17								
320-25843-2	Field Blank-1	89	140	145	157 *	138	137	136	128
LCS 320-152744/2-A	Lab Control Sample	101	152 *	165 *	159 *	147	145	147	145
LCSD 320-152744/3-A	Lab Control Sample Dup	68	153 *	162 *	164 *	148	150	142	146
MB 320-152744/1-A	Method Blank	86	153 *	160 *	166 *	152 *	153 *	149	146

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	18O2 PFHxS (25-150)	13C4 PFOS (25-150)	13C4-PFHpA (25-150)	13C5 PFPeA (25-150)	M2-6:2FTS (25-150)			
320-25843-1	01-PRCC-17	81		64	43	114			
320-25843-1 - DL	01-PRCC-17		128						
320-25843-2	Field Blank-1	149	139	161 *	150	186 *			
LCS 320-152744/2-A	Lab Control Sample	151 *	149	171 *	158 *	209 *			
LCSD 320-152744/3-A	Lab Control Sample Dup	154 *	146	169 *	158 *	209 *			
MB 320-152744/1-A	Method Blank	153 *	146	177 *	154 *	224 *			

Surrogate Legend

13C8 FOSA = 13C8 FOSA
13C4 PFBA = 13C4 PFBA
13C2 PFHxA = 13C2 PFHxA
13C4 PFOA = 13C4 PFOA
13C5 PFNA = 13C5 PFNA
13C2 PFDA = 13C2 PFDA
13C2 PFUnA = 13C2 PFUnA
13C2 PFDoA = 13C2 PFDoA
18O2 PFHxS = 18O2 PFHxS
13C4 PFOS = 13C4 PFOS
13C4-PFHpA = 13C4-PFHpA
13C5 PFPeA = 13C5 PFPeA
M2-6:2FTS = M2-6:2FTS

Method: 537 (modified) - Perfluorinated Hydrocarbons

Lab Sample ID: MB 320-152744/1-A
Matrix: Water
Analysis Batch: 153012

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 152744

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		2.0	0.46	ng/L		03/01/17 14:04	03/02/17 21:58	1
Perfluoropentanoic acid (PFPeA)	ND		2.0	0.99	ng/L		03/01/17 14:04	03/02/17 21:58	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	0.79	ng/L		03/01/17 14:04	03/02/17 21:58	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.80	ng/L		03/01/17 14:04	03/02/17 21:58	1
Perfluorooctanoic acid (PFOA)	ND		2.0	0.75	ng/L		03/01/17 14:04	03/02/17 21:58	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.65	ng/L		03/01/17 14:04	03/02/17 21:58	1
Perfluorodecanoic acid (PFDA)	ND		2.0	0.44	ng/L		03/01/17 14:04	03/02/17 21:58	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	0.75	ng/L		03/01/17 14:04	03/02/17 21:58	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.58	ng/L		03/01/17 14:04	03/02/17 21:58	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	0.55	ng/L		03/01/17 14:04	03/02/17 21:58	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.20	ng/L		03/01/17 14:04	03/02/17 21:58	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.92	ng/L		03/01/17 14:04	03/02/17 21:58	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.87	ng/L		03/01/17 14:04	03/02/17 21:58	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.71	ng/L		03/01/17 14:04	03/02/17 21:58	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	1.2	ng/L		03/01/17 14:04	03/02/17 21:58	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	1.3	ng/L		03/01/17 14:04	03/02/17 21:58	1
Perfluorooctane Sulfonamide (FOSA)	0.683	J	2.0	0.64	ng/L		03/01/17 14:04	03/02/17 21:58	1
6:2FTS	ND		20	3.8	ng/L		03/01/17 14:04	03/02/17 21:58	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C8 FOSA	*86*		*25 - 150*	*03/01/17 14:04*	*03/02/17 21:58*	*1*
13C4 PFBA	*153*	*	*25 - 150*	*03/01/17 14:04*	*03/02/17 21:58*	*1*
13C2 PFHxA	*160*	*	*25 - 150*	*03/01/17 14:04*	*03/02/17 21:58*	*1*
13C4 PFOA	*166*	*	*25 - 150*	*03/01/17 14:04*	*03/02/17 21:58*	*1*
13C5 PFNA	*152*	*	*25 - 150*	*03/01/17 14:04*	*03/02/17 21:58*	*1*
13C2 PFDA	*153*	*	*25 - 150*	*03/01/17 14:04*	*03/02/17 21:58*	*1*
13C2 PFUnA	*149*		*25 - 150*	*03/01/17 14:04*	*03/02/17 21:58*	*1*
13C2 PFDoA	*146*		*25 - 150*	*03/01/17 14:04*	*03/02/17 21:58*	*1*
18O2 PFHxS	*153*	*	*25 - 150*	*03/01/17 14:04*	*03/02/17 21:58*	*1*
13C4 PFOS	*146*		*25 - 150*	*03/01/17 14:04*	*03/02/17 21:58*	*1*
13C4-PFHpA	*177*	*	*25 - 150*	*03/01/17 14:04*	*03/02/17 21:58*	*1*
13C5 PFPeA	*154*	*	*25 - 150*	*03/01/17 14:04*	*03/02/17 21:58*	*1*
M2-6:2FTS	*224*	*	*25 - 150*	*03/01/17 14:04*	*03/02/17 21:58*	*1*

Lab Sample ID: LCS 320-152744/2-A
Matrix: Water
Analysis Batch: 153012

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 152744

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorobutanoic acid (PFBA)	40.0	41.7		ng/L		104	74 - 138
Perfluoropentanoic acid (PFPeA)	40.0	40.7		ng/L		102	69 - 134
Perfluorohexanoic acid (PFHxA)	40.0	38.9		ng/L		97	70 - 136
Perfluoroheptanoic acid (PFHpA)	40.0	37.9		ng/L		95	63 - 135
Perfluorooctanoic acid (PFOA)	40.0	39.2		ng/L		98	63 - 141
Perfluorononanoic acid (PFNA)	40.0	39.1		ng/L		98	71 - 140
Perfluorodecanoic acid (PFDA)	40.0	39.6		ng/L		99	66 - 141
Perfluoroundecanoic acid (PFUnA)	40.0	33.2		ng/L		83	68 - 139

Method: 537 (modified) - Perfluorinated Hydrocarbons (Continued)

Lab Sample ID: LCS 320-152744/2-A
Matrix: Water
Analysis Batch: 153012

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 152744

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorododecanoic acid (PFDoA)	40.0	36.1		ng/L		90	71 - 139
Perfluorotridecanoic Acid (PFTriA)	40.0	38.3		ng/L		96	51 - 139
Perfluorotetradecanoic acid (PFTeA)	40.0	41.9		ng/L		105	47 - 130
Perfluorobutanesulfonic acid (PFBS)	35.4	39.7		ng/L		112	55 - 147
Perfluorohexanesulfonic acid (PFHxS)	36.4	34.4		ng/L		95	58 - 138
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	38.8		ng/L		102	32 - 170
Perfluorodecanesulfonic acid (PFDS)	38.6	35.9		ng/L		93	35 - 157
Perfluorooctanesulfonic acid (PFOS)	37.1	35.1		ng/L		95	47 - 162
Perfluorooctane Sulfonamide (FOSA)	40.0	39.8		ng/L		99	59 - 163
6:2FTS	37.9	41.3		ng/L		109	60 - 140

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C8 FOSA	*101*		*25 - 150*
13C4 PFBA	*152*	*	*25 - 150*
13C2 PFHxA	*165*	*	*25 - 150*
13C4 PFOA	*159*	*	*25 - 150*
13C5 PFNA	*147*		*25 - 150*
13C2 PFDA	*145*		*25 - 150*
13C2 PFUnA	*147*		*25 - 150*
13C2 PFDoA	*145*		*25 - 150*
18O2 PFHxS	*151*	*	*25 - 150*
13C4 PFOS	*149*		*25 - 150*
13C4-PFHpA	*171*	*	*25 - 150*
13C5 PFPeA	*158*	*	*25 - 150*
M2-6:2FTS	*209*	*	*25 - 150*

Lab Sample ID: LCSD 320-152744/3-A
Matrix: Water
Analysis Batch: 153012

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 152744

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluorobutanoic acid (PFBA)	40.0	42.5		ng/L		106	74 - 138	2	30
Perfluoropentanoic acid (PFPeA)	40.0	41.7		ng/L		104	69 - 134	2	30
Perfluorohexanoic acid (PFHxA)	40.0	39.2		ng/L		98	70 - 136	1	30
Perfluoroheptanoic acid (PFHpA)	40.0	38.5		ng/L		96	63 - 135	2	30
Perfluorooctanoic acid (PFOA)	40.0	38.1		ng/L		95	63 - 141	3	30
Perfluorononanoic acid (PFNA)	40.0	40.0		ng/L		100	71 - 140	2	30
Perfluorodecanoic acid (PFDA)	40.0	39.9		ng/L		100	66 - 141	1	30
Perfluoroundecanoic acid (PFUnA)	40.0	35.0		ng/L		88	68 - 139	5	30
Perfluorododecanoic acid (PFDoA)	40.0	36.8		ng/L		92	71 - 139	2	30

Method: 537 (modified) - Perfluorinated Hydrocarbons (Continued)

Lab Sample ID: LCSD 320-152744/3-A
Matrix: Water
Analysis Batch: 153012

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 152744

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluorotridecanoic Acid (PFTriA)			40.0	38.4		ng/L		96	51 - 139	0	30
Perfluorotetradecanoic acid (PFTeA)			40.0	41.8		ng/L		104	47 - 130	0	30
Perfluorobutanesulfonic acid (PFBS)			35.4	39.5		ng/L		112	55 - 147	0	30
Perfluorohexanesulfonic acid (PFHxS)			36.4	34.3		ng/L		94	58 - 138	0	30
Perfluoroheptanesulfonic Acid (PFHpS)			38.1	39.8		ng/L		105	32 - 170	3	30
Perfluorodecanesulfonic acid (PFDS)			38.6	36.6		ng/L		95	35 - 157	2	30
Perfluorooctanesulfonic acid (PFOS)			37.1	36.4		ng/L		98	47 - 162	4	30
Perfluorooctane Sulfonamide (FOSA)			40.0	39.0		ng/L		98	59 - 163	2	30
6:2FTS			37.9	40.5		ng/L		107	60 - 140	2	30

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
13C8 FOSA	*68*		*25 - 150*
13C4 PFBA	*153*	*	*25 - 150*
13C2 PFHxA	*162*	*	*25 - 150*
13C4 PFOA	*164*	*	*25 - 150*
13C5 PFNA	*148*		*25 - 150*
13C2 PFDA	*150*		*25 - 150*
13C2 PFUnA	*142*		*25 - 150*
13C2 PFDoA	*146*		*25 - 150*
18O2 PFHxS	*154*	*	*25 - 150*
13C4 PFOS	*146*		*25 - 150*
13C4-PFHpA	*169*	*	*25 - 150*
13C5 PFPeA	*158*	*	*25 - 150*
M2-6:2FTS	*209*	*	*25 - 150*

QC Association Summary

Client: O'Brien & Gere Inc of North America
Project/Site: PFC Analysis

TestAmerica Job ID: 320-25843-1

LCMS

Prep Batch: 152744

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-25843-1 - DL	01-PRCC-17	Total/NA	Water	3535	
320-25843-1	01-PRCC-17	Total/NA	Water	3535	
320-25843-2	Field Blank-1	Total/NA	Water	3535	
MB 320-152744/1-A	Method Blank	Total/NA	Water	3535	
LCS 320-152744/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 320-152744/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

Analysis Batch: 153012

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-25843-2	Field Blank-1	Total/NA	Water	537 (modified)	152744
MB 320-152744/1-A	Method Blank	Total/NA	Water	537 (modified)	152744
LCS 320-152744/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	152744
LCSD 320-152744/3-A	Lab Control Sample Dup	Total/NA	Water	537 (modified)	152744

Analysis Batch: 153464

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-25843-1 - DL	01-PRCC-17	Total/NA	Water	537 (modified)	152744
320-25843-1	01-PRCC-17	Total/NA	Water	537 (modified)	152744

Lab Chronicle

Client: O'Brien & Gere Inc of North America
Project/Site: PFC Analysis

TestAmerica Job ID: 320-25843-1

Client Sample ID: 01-PRCC-17

Lab Sample ID: 320-25843-1

Date Collected: 02/15/17 12:00

Matrix: Water

Date Received: 02/16/17 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535	DL		285.3 mL	0.50 mL	152744	03/01/17 14:04	JER	TAL SAC
Total/NA	Analysis	537 (modified)	DL	100			153464	03/06/17 14:22	SBC	TAL SAC
Total/NA	Prep	3535			285.3 mL	0.50 mL	152744	03/01/17 14:04	JER	TAL SAC
Total/NA	Analysis	537 (modified)		10			153464	03/06/17 14:30	SBC	TAL SAC

Client Sample ID: Field Blank-1

Lab Sample ID: 320-25843-2

Date Collected: 02/15/17 12:10

Matrix: Water

Date Received: 02/16/17 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			275.8 mL	0.50 mL	152744	03/01/17 14:04	JER	TAL SAC
Total/NA	Analysis	537 (modified)		1			153012	03/02/17 22:28	SBC	TAL SAC

Laboratory References:

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

Certification Summary

Client: O'Brien & Gere Inc of North America
Project/Site: PFC Analysis

TestAmerica Job ID: 320-25843-1

Laboratory: TestAmerica Sacramento

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
Oregon	NELAP	10	4040	01-28-18

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
537 (modified)	3535	Water	6:2FTS
537 (modified)	3535	Water	Perfluorobutanesulfonic acid (PFBS)
537 (modified)	3535	Water	Perfluorobutanoic acid (PFBA)
537 (modified)	3535	Water	Perfluorodecanesulfonic acid (PFDS)
537 (modified)	3535	Water	Perfluorodecanoic acid (PFDA)
537 (modified)	3535	Water	Perfluorododecanoic acid (PFDoA)
537 (modified)	3535	Water	Perfluoroheptanesulfonic Acid (PFHpS)
537 (modified)	3535	Water	Perfluoroheptanoic acid (PFHpA)
537 (modified)	3535	Water	Perfluorohexanesulfonic acid (PFHxS)
537 (modified)	3535	Water	Perfluorohexanoic acid (PFHxA)
537 (modified)	3535	Water	Perfluorononanoic acid (PFNA)
537 (modified)	3535	Water	Perfluorooctane Sulfonamide (FOSA)
537 (modified)	3535	Water	Perfluorooctanesulfonic acid (PFOS)
537 (modified)	3535	Water	Perfluorooctanoic acid (PFOA)
537 (modified)	3535	Water	Perfluoropentanoic acid (PFPeA)
537 (modified)	3535	Water	Perfluorotetradecanoic acid (PFTeA)
537 (modified)	3535	Water	Perfluorotridecanoic Acid (PFTriA)
537 (modified)	3535	Water	Perfluoroundecanoic acid (PFUnA)

Method Summary

Client: O'Brien & Gere Inc of North America
Project/Site: PFC Analysis

TestAmerica Job ID: 320-25843-1

Method	Method Description	Protocol	Laboratory
537 (modified)	Perfluorinated Hydrocarbons	EPA	TAL SAC

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

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

Sample Summary

Client: O'Brien & Gere Inc of North America
Project/Site: PFC Analysis

TestAmerica Job ID: 320-25843-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-25843-1	01-PRCC-17	Water	02/15/17 12:00	02/16/17 09:40
320-25843-2	Field Blank-1	Water	02/15/17 12:10	02/16/17 09:40

TestAmerica Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916.373.5600 Fax:

Chain of Custody Record

167364

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

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Clifford Yantz	Site Contact: Kevin Schneider	Date: 2/15/17	COC No:
Company Name: O'Brien & Gere	Tel/Fax: 248-477-5701	Lab Contact: Pat Abe	Carrier: FEDEX	1 of 1 COCs
Address: 37000 Grand River ste 260	Analysis Turnaround Time			Sampler:
City/State/Zip: Farmington Hills, MI 48335	☒ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 248-477-5701	TAT if different from Below _____			Walk-in Client:
Fax: 248-477-5960	☒ 2 weeks			Sampling:
Project Name: RACER Trust	☐ 1 week			
Site: Coldwater Rd Landfill	☐ 2 days			/ SDG No.:
PO# 11700138	☐ 1 day			

320-25843 Chain of Custody

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	PFCs	Sample Specific Notes:
01-PRCC-17	2/15/17	1200	G	WW	2	N	M	X	
Field Blank-1	2/15/17	1210	G	QC	2	N	M	X	

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

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

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments: PFAs / PFOs Tracking # 785621491752

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: 1.2 Corr'd: _____ | Therm ID No.: AC

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	O'Brien & Gere	2/15/17 1528	FEDEX OVERNIGHT	FEDEX	2/15/17 1528
Relinquished by:	Company:	Date/Time: 2/15/17 FBS	Received by: [signature]	Company: [signature]	Date/Time: 2/16/17 940
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Login Sample Receipt Checklist

Client: O'Brien & Gere Inc of North America

Job Number: 320-25843-1

Login Number: 25843
List Number: 1
Creator: Nelson, Kym D

List Source: TestAmerica Sacramento

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	