



Via Electronic Mail: heidi.dudek@dec.ny.gov

May 10, 2019

Heidi-Marie Dudek, P.E. Project Manager Division of Environmental Remediation NYS Department of Environmental Conservation 625 Broadway, Albany, NY 12233

### Re: Groundwater Sampling Report of Findings Granite Pointe Subdivision – OFF SITE 144 Route 118 Somers, New York NYSDEC Site No: C360107A

Dear Ms. Dudek;

This letter serves as the report of findings for Groundwater Monitoring and Sampling conducted at the above referenced site on October 31<sup>st</sup>, 2018. The attached Figure 1 provides site location details. Activities consisted of developing, gauging, purging, monitoring parameters and sampling of 3 accessible and functioning monitoring wells for Perfluorinated Alkyl Substances via Method 537 Modified and 1,4 Dioxane via method 8270 SIM.

### 1.0 Well Development and Gauging Summary:

The three (3) monitoring wells: MW-1AR, MW-2R and MW-3R, which were recently installed by others, were developed on October 31<sup>st</sup>, 2018 using mechanical methods with a surge block. Well location detail has been included in the attached Figure 2. Each well was also gauged to determine the depth to groundwater at each location. The observed depth to water measurements ranged from 7.50-feet to 14.46-feet (as measured from top of casing). Groundwater elevations were determined by subtracting the depth to groundwater from each well's respective top of casing elevation. The calculated groundwater elevations within surveyed wells ranged from 399.02 to 403.08-feet. The well gauging data for the event is summarized in the attached Table 1 (Groundwater Monitoring Well Gauging Data). *Note: Top of Casing height was determined using a well construction report provided to PES by ARCADIS.* 

### 2.0 Groundwater Sampling Protocols and Laboratory Analytical Results:

Following development each well was purged using low flow methods until a minimum of three well volumes was removed or when equilibrium was reached with respect to the following physical parameter: including pH, Temperature, Total Dissolved Solids, Dissolved Oxygen, Turbidity, Oxidation Reduction Potential and Conductivity. Purging was completed using dedicated high-density polyethylene (HDPE) tubing and a peristaltic pump. Following purge, the wells were allowed to recharge and sampled for laboratory analysis by Method 537 Modified and 8270 SIM. Purge water was containerized in a 55-gallon drum and stored

at the site. A sample of the drum contents was collected for site specific contaminants (lead) via method 6010D - Metals for future disposal consideration.

All stabilized physical parameters were recorded prior to sampling (see attached Table 2 -Summary of Physical Field Parameters for details). PFAS samples were collected under both NYSDEC Sampling Guidelines and Protocols and PFC Groundwater Samples from Monitoring Wells Sample Protocol, which includes but is not limited to the use of HDPE or Polypropylene bottles, separate coolers, HDPE tubing, nitrile gloves and non-waterproof clothing. Please see PFAs Sampling Checklist in Attachment 1 for additional details. 1,4 Dioxane samples were obtained by aseptic techniques, placed into clean glassware provided by the analytical laboratory, labeled, and placed on iced storage for subsequent submission under chain of custody to TestAmerica Laboratories, Inc.

The data report provided by TestAmerica, which has been included as Attachment 2, for the samples submitted in October 31<sup>st</sup>, 2018 is equivalent to an Analytical Services Protocol Category B deliverable package. As such, a Data Usability Summary Report, which was prepared by an independent third party, has been generated. There are no data that were qualified as either estimated (J) or rejected, unusable (R) in the data pack. Please see Attachment 3 - Data Usability Summary Report for detail.

Table 3 includes a summary of laboratory analytical results for the 8270 SIM analysis. As shown in this table, 1,4 Dioxane was not detected in any of the sampled wells.

As the attached Table 4 indicates, all sampled monitoring wells contained constituents of concern above laboratory detection limits for analysis 537 Modified.

There currently are no published groundwater standards for PFAS compounds. However, the NYSDEC does have internal screening values of 10 parts per trillion (ppt) for PFOA and PFOS each respectively. There are also screening values of 100 ppt for other individual PFAS compounds along with a screening value of 500 ppt for the total sum of all PFAS family compounds present. Of the three (3) groundwater well samples none demonstrated concentrated of PFAS compounds in exceedance of any internal screening values.

In addition, and for comparative purposes, the EPA drinking water standard of 70 parts per trillion for individual and combined concentrations of PFAS compounds can be used. The EPA has established the health advisory level at 70 parts per trillion (ppt) or nanograms per liter (ng/l) for a lifetime exposure to PFAS substances. None of the three (3) wells had PFAS sample concentrations reported with individual or combined PFAS of greater than 70 parts per trillion.

### 3.0 Discussion

On October 31<sup>st</sup>, 2018 groundwater monitoring and sampling occurred at the subject site. The event consisted of developing, gauging, purging, monitoring parameters and sampling of three (3) onsite monitoring wells for Perfluorinated Alkyl Substances via Method 537 Modified and 1,4 Dioxane via method 8270 SIM. Each well was purged of a minimum of three well volumes or when equilibrium was reached with respect to physical parameter values. Wells were allowed to recharge to equilibration prior to sampling.

All sampled monitoring wells (3) reported PFAS concentrations above the laboratory minimum detection limits. PFOA and PFOS combined compounds ranged from 0.89 ppt (MW-3R) to 58.10 (MW-1A). Of these three wells, none (0) contained a combined concentration of PFOS and PFAS above the EPA health advisory level of 70 parts per trillion for drinking water. Of these three wells none (0) exceeded screening levels established by NYSDEC. All wells reported Non Detect for the 8270 SIM analysis for 1,4 Dioxane.

If you have any questions or comments regarding the above information, please contact the undersigned at (518) 885-4399.

### Sincerely; Precision Environmental Services, Inc.

Shrathan Robinson

John Robinson Project Manager / Environmental Scientist

Stephen M. Phelps, P.G. Operations Manager

### FIGURES

Figure 1 – Site Map Figure 2 – Well Location Map

### TABLES

- Table 1 Groundwater Monitoring Well Gauging Data
- Table 2 Field Parameters
- Table 3 Summary of Groundwater Analytical Results: 1,4-Dioxane

Table 4 – Summary of Groundwater Analytical Results: PFAS

### ATTACHMENTS

Attachment 1 – PFAS Sampling Checklist Attachment 2 – Laboratory Results Attachment 3 – DUSR Report **FIGURES** 



Image Courtesy of Google Earth





TABLES

### Groundwater Monitoring Well Gauging Data

Table 1

Well	Top of Casing	Measured Depth to Water	Measued Depth to Bottom	Relative GW Elevation		
MW-1AR	410.568	9.65	22.32	400.92		
MW-2R	410.900	11.88	22.98	399.02		
MW-3R	<b>MW-3R</b> 410.576 7.50 22.48 403.08					
Date or gauging event - October 31st, 2018 Elevations as reported by Arcadis in Appendix C of Provious Study						
Elevations as reported by Arcadis in Appendix C of Previous Study						

### **Field Parameters**

### Table 2

Groundwater Analytical Summary							
	Sa	mple Designat	ion				
Parameter	MW-1AR	MW-2R	MW-3R				
рН	7.43	7.09	7.16				
Temp (°C)	17.79	17.41	17.21				
TDS (g/l)	0.503	0.298	0.393				
Disolved Oxygen (mg/L)	90.1	0.0	1.3				
Turbidity (NTU)	44.2	48.2	42.3				
ORP (mV)	-6	4	7				
Conductivity (mS/cm)	0.786	0.451	0.612				
NOTES:							
- Parameters observed prior to sampl	ing						
- NA = No parameters taken (metal or	- NA = No parameters taken (metal only samples)						
- DMG = Well damaged, no samples	or parameters t	aken					
- Samples obtained on October 31st, 2018							

### Summary of Groundwater Analytical Results: 1,4-Dioxane

### Table 3

Compound	MW-1AR	MW-2R	MW-3R	NIXSDEC Proposed MCI			
Method: 8270D SIM	10/31/2018	10/31/2018	10/31/2018	NTSDEC Proposed MCL			
1,4-Dioxane	ND	ND	ND	1.0 ppb			
NOTES:							
- All results reported in ug/L (Parts per billion)							
- Analysis performed by TestAmerica Environmental Laboratories, Inc via Eurofins Lancaster Laboratory							
- R = Data Validation Flag. Data is considered Un-usable due to very low spike recoveries							
- ND = Not Detected above method detection limit (0.20 ppb)							

Summary of Groundwater Analytical Results: PFAS

Table 4

Compound	Sit	Site Sample Locations			lity Control Sam	NYSDEC Internal		
Compound	MW-1AR	MW-2R	MW-3R	Duplicate	Field Blank	Equipment Blank	EC Standards are	
Sample Date	10/31/2018	10/31/2018	10/31/2018	10/31/2018	10/31/2018	10/31/2018	Filializeu)	
Perfluorinated Alkyl Substances (Method 537, 1.1 Modified)		-	-	_	-			
6:2-Fts	ND	ND	ND	ND	ND	ND	100	
8:2-Fts	ND	ND	ND	ND	ND	ND	100	
N-ethyl perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	ND	ND	ND	ND	ND	100	
N-methyl perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	ND	ND	ND	ND	ND	100	
Perfluorobutanesulfonic Acid (PFBS)	1.4	ND	ND	ND	ND	ND	100	
Perfluorobutanoic Acid (PFBA)	31	ND	ND	ND	ND	ND	100	
Perfluorodecanesulfonic acid (PFDS)	ND	ND	ND	ND	ND	ND	100	
Perfluorodecanoic acid (PFDA)	ND	ND	ND	ND	ND	ND	100	
Perfluorododecanoic acid (PFDoA)	ND	ND	ND	ND	ND	ND	100	
Perfluoroheptanesulfonic Acid (PFHpS)	ND	ND	ND	ND	ND	ND	100	
Perfluoroheptanoic acid (PFHpA)	3.3	0.28	ND	0.3	ND	ND	100	
Perfluorohexanesulfonic acid (PFHxS)	ND	ND	ND	0.23	ND	ND	100	
Perfluorohexanoic acid (PFHxA)	6.9	1.3	0.22	0.7	ND	ND	100	
Perfluorononanoic acid (PFNA)	ND	ND	ND	ND	ND	ND	100	
Perfluorooctanesulfonamide (FOSA)	ND	ND	ND	ND	ND	ND	100	
Perfluorooctanesulfonate Acid (PFOS)	ND	ND	ND	0.64	ND	ND	10	
Perfluorooctanoic acid (PFOA)	4.5	0.91	0.47	1.2	0.26	ND	10	
Perfluoropentanoic acid (PFPeA)	11	ND	ND	ND	ND	ND	100	
Perfluorotetradecanoic acid (PFTeA)	ND	ND	ND	ND	ND	ND	100	
Perfluorotridecanoic ((PFTriA)	ND	ND	ND	ND	ND	ND	100	
Perfluoroundecanoic acid (PFUnA)	ND	0.2	0.2	0.27	ND	0.29	100	
EPA Health Advisory Level for Drinking Water (For Comparision, Combined PFOS and PFOA)	4.50	0.91	0.47	1.84	0.26	0.00	70.00 PPT	
Total PFAS (incl. PFOA/PFOS)	58.10	2.69	0.89	3.34	0.26	0.29	500.00 PPT	
NOTES								

- All results reported in ng/L (Parts Per Trillion, PPT)

- Highlighted Sections equal values above NYSDEC's Internal "Screening Levels"

- ND = Not Detected above method detection limit

ATTACHMENT - 1

**PFCs Sampling Checklist** 

PFOA

Date:

Weather (temp./precipitation): [AKTLY CL-way ~ 70°F Site Name: \_\_\_\_\_ GRANITE 102416

### Field Clothing and PPE:



If any applicable boxes cannot be checked, the Field Lead shall describe the noncompliance issues below and work with field personnel to address noncompliance issues prior to commencement of that day's work. Corrective action shall include removal of noncompliance items from the site or removal of worker offsite until in compliance.

Describe the noncompliance issues (include personnel not in compliance) and action/outcome of noncompliance:

100% COMPLEANCE NO IS	Sec 5
Field Lead Name: John KTHAN RODINS	oW
Field Lead Signature: John M. Pohan	Time: <u>9:30 AM</u>

## ATTACHMENT - 2



THE LEADER IN ENVIRONMENTAL TESTING

# **ANALYTICAL REPORT**

## TestAmerica Laboratories, Inc.

TestAmerica Burlington 30 Community Drive Suite 11 South Burlington, VT 05403 Tel: (802)660-1990

TestAmerica Job ID: 200-46033-1 Client Project/Site: Granite Pte Subdiv-Off Site #C360107A

## For:

..... Links

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Expert

New York State D.E.C. 625 Broadway 11th Floor Albany, New York 12233-3256

Attn: Ms. Heide-Marie Dudek

Judy Stone

Authorized for release by: 11/19/2018 11:16:02 AM

Judy Stone, Senior Project Manager (484)685-0868 judy.stone@testamericainc.com

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

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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## **Definitions/Glossary**

### Client: New York State D.E.C. Project/Site: Granite Pte Subdiv-Off Site #C360107A

# 1 2 3 4 5 6 7 8

# Qualifiers

GC/MS Se	mi VOA	
Qualifier	Qualifier Description	
F1	MS and/or MSD Recovery is outside acceptance limits.	
F2	MS/MSD RPD exceeds control limits	
LCMS		
Qualifier	Qualifier Description	
*	Isotope Dilution analyte is outside acceptance limits.	
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.	
В	Compound was found in the blank and sample.	
Metals		
Qualifier	Qualifier Description	
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.	

## Glossary

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

### Job ID: 200-46033-1

### Laboratory: TestAmerica Burlington

Narrative

Job Narrative 200-46033-1

### Receipt

The samples were received on 11/2/2018 10:10 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.7° C.

### GC/MS Semi VOA

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

### Metals

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

### LCMS

Method(s) 537 (modified): Internal standard (ISTD) response for the IDAs for the following samples were outside acceptance criteria: MW-1AR (200-46033-1), FIELD BLANK (200-46033-2), EQUIPMENT BLANK (200-46033-5), MW-3R (200-46033-6[MS]), (LCS 200-136595/2-A) and (MB 200-136595/1-A). The IDA recoveries are all within acceptance criteria; therefore, the data have been reported.

Method(s) 537 (modified): The Isotope Dilution Analyte (IDA) recovery of 13C4 PFBA associated with the following sample is below the method recommended limit: MW-1AR (200-46033-1). 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. All detection limits are below the lower calibration.

Method(s) 537 (modified): Isotope Dilution Analyte (IDA) recovery of M2-6:2 FTS and/or M2-8:2 FTS is above the method recommended limit for the following samples: MW-1AR (200-46033-1), MW-2R (200-46033-3) and DUPLICATE (200-46033-4). Quantitation by isotope dilution generally precludes any adverse effect on data quality due to elevated IDA recoveries. These two IDAs have shown to behave differently than their internal standard, often resulting in elevated recoveries in certain matrices. The associated target compounds (1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2) and 1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)) appear to follow the same elevated responses based on results.

Method(s) 537 (modified): The method blank for preparation batch 200-136595 and analytical batch 200-136651 contained Perfluorobutanoic acid (PFBA) above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

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

### **Organic Prep**

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

Client: New York State D.E.C. Project/Site: Granite Pte Subdiv-Off Site #C360107A

## Client Sample ID: MW-1AR

Date Collected: 10/31/18 15:30 Date Received: 11/02/18 10:10

### Lab Sample ID: 200-46033-1 Matrix: Water

5

Analyte         Result         Cualifier         RL         MoL         Unit         D         Prepared         Analyzed         Differed           1.4-Distance         ND         0.00         ugither         Limits         0.016         ugither         Prepared         Analyzed         Differed           1.4-Distance dif         277         Qualifier         Limits         10.150         Prepared         Analyzed         Differed           Analyzed         Result         Qualifier         Rs         MDL         Unit         D         Prepared         Analyzed         Differed           Perfluorobitancic acid (PFPA)         11         16         0.50         ngl.         1109/18 1130         11/1118 01:29         1           Perfluorobitancic acid (PFPA)         3.3         1.6         0.25         ngl.         1109/18 1130         11/1118 01:29         1           Perfluorobitancic acid (PFDA)         ND         1.6         0.30         ngl.         1109/18 1130         11/1118 01:29         1           Perfluorobitancic acid (PFDA)         ND         1.6         0.28         ngl.         1109/18 1130         11/1118 01:29         1           Perfluorobitancic acid (PFDA)         ND         1.6         0.28 <th>Method: 8270D SIM ID - Semiv</th> <th>olatile Orga</th> <th>anic Comp</th> <th>ounds (GC/N</th> <th>IS SIM /</th> <th>Isotope Dil</th> <th>utio</th> <th>on)</th> <th></th> <th></th>	Method: 8270D SIM ID - Semiv	olatile Orga	anic Comp	ounds (GC/N	IS SIM /	Isotope Dil	utio	on)		
1.4-Lioxane         ND         0.20         0.016         ugit         1104/18 (02.6)         1104/18 (02.6)         DI Analyzed         DI Fac           1.4-Dioxane-d8         27         10-150         1104/18 (02.6)         1104/18 (02.6)         1104/18 (02.6)         1104/18 (02.6)         1104/18 (02.6)         1104/18 (02.6)         1104/18 (02.6)         1104/18 (02.6)         11           Method:         537 (modified) - Fluorinated Alkyl Substances         Analyto         Dill Fac         ND         Onl Fac         ND         1109/18 (13.0)         11/1118 (01.2)         11/1118 (01.2)         11	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isctope Diurition         Frequency Qualifier         Limits         Prepared         Analyzed         Diffee           T-4-Distance-38         T10-01150         T10-01150         T10-0118 2038         T10-0118	1,4-Dioxane	ND		0.20	0.016	ug/L		11/04/18 08:26	11/04/18 20:38	1
1.4-Biologene-dB         27         10-150         1104/18 08:26         1104/18 02:38         1           Method: 537 (modified) - Fluorinated Alkyl Substances Analyte         Result Qualifier         RL         MDL         Unit         D         Prepared Prepared         Analyzed Analyte         Diffac           Perfluoropetanolo: acid (PFEA)         31         B         1.6         0.32 mgL         1109/18 11:30         111/118 01:29         1           Perfluoropetanolo: acid (PFEA)         6.9         1.6         0.18 mgL         1109/18 11:30         111/118 01:29         1           Perfluoropetanolo: acid (PFDA)         5.3         1.6         0.25 mgL         1109/18 11:30         111/118 01:29         1           Perfluorodecanol caid (PFDA)         ND         1.6         0.30 mgL         1109/18 11:30         111/118 01:29         1           Perfluorodecanol caid (PFDA)         ND         1.6         0.28 mgL         1109/18 11:30         111/118 01:29         1           Perfluoroptaneol caid (PFDA)         ND         1.6         0.28 mgL         1109/18 11:30         111/118 01:29         1           Perfluoroptaneol caid (PFTA)         ND         1.6         0.48 mgL         1109/18 11:30         111/118 01:29         1           Perfluoroptaneol cai	Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Method: 537 (modified) - Fluorinated Alkyl Substances Analyte         Result Qualitier         RL         MDL         Unit         D         Prepared         Analyze         Dil Fac Dil Fac           Perfluorobutanoic acid (PFPA)         11         1.6         0.52         ng/L         11/00/18 11:30         11/11/18 01:29         1           Perfluorobutanoic acid (PFPA)         6.9         1.6         0.19         ng/L         11/00/18 11:30         11/11/18 01:29         1           Perfluorobutanoic acid (PFPA)         4.5         1.6         0.25         ng/L         11/00/18 11:30         11/11/18 01:29         1           Perfluorobutanoic acid (PFDA)         ND         1.6         0.30         ng/L         11/00/18 11:30         11/11/18 01:29         1           Perfluorobutanoic acid (PFDA)         ND         1.6         0.30         ng/L         11/00/18 11:30         11/11/18 01:29         1           Perfluorobutanoic acid (PFDA)         ND         1.6         0.28         ng/L         11/00/18 11:30         11/11/18 01:29         1           Perfluorobutanoic acid (PFDA)         ND         1.6         0.36         ng/L         11/00/18 11:30         11/11/18 01:29         1           Perfluorobutanoic acid (PFDA)         ND         1.6         <	1,4-Dioxane-d8 	27		10 - 150				11/04/18 08:26	11/04/18 20:38	1
Analyte         Result         Qualifier         RL         MDL         Unit         D         Prepared         Analyzed         Dill           Perfluoropentanoic acid (PFPA)         11         1.6         0.32 ngL         1100/16113.0         111/118 012.9         1           Perfluorophanoic acid (PFPA)         6.9         1.6         0.18 ngL         1100/16113.0         111/118 012.9         1           Perfluorohpanoic acid (PFPA)         4.5         1.6         0.25 ngL         1100/16113.0         111/118 012.9         1           Perfluorohpanoic acid (PFPA)         ND         1.6         0.30 ngL         1100/16113.0         111/118 012.9         1           Perfluorohezanoic acid (PFDA)         ND         1.6         0.30 ngL         1100/16113.0         111/118 012.9         1           Perfluorohezanoic acid (PFDA)         ND         1.6         0.26 ngL         1100/16113.0         111/118 012.9         1           Perfluorohezanoic acid (PFDA)         ND         1.6         0.26 ngL         1100/16113.0         111/118 012.9         1           Perfluorohezanoic acid (PFDA)         ND         1.6         0.46 ngL         1100/16113.0         111/118 012.9         1           Perfluorohezanesulonic acid (PFDA)         ND	Method: 537 (modified) - Fluor	rinated Alky	/I Substand	ces						
Pertfluorophatnoic acid (PFBA)         31         B         1.6         0.32         ngL         1109/18 11:30         11/11/18 01:29         1           Pertfluorophaznoic acid (PFPA)         6.9         1.6         0.19         ngL         1109/18 11:30         11/11/18 01:29         1           Pertfluorobezanoic acid (PFPA)         3.3         1.6         0.25         ngL         1109/18 11:30         11/11/18 01:29         1           Pertfluoroctanoic acid (PFDA)         ND         1.6         0.30         ngL         1109/18 11:30         11/11/18 01:29         1           Pertfluoroctanoic acid (PFDA)         ND         1.6         0.30         ngL         1109/18 11:30         11/11/18 01:29         1           Pertfluoroctanoic acid (PFDA)         ND         1.6         0.28         ngL         1109/18 11:30         11/11/18 01:29         1           Pertfluorottradecanoic acid (PFDA)         ND         1.6         0.45         ngL         1109/18 11:30         11/11/18 01:29         1           Pertfluorottradecanoic acid (PFTA)         ND         1.6         0.45         ngL         1109/18 11:30         11/11/18 01:29         1           Pertfluorottradecanoic acid (PFLA)         ND         1.6         0.42         ngL	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoropentanoic acid (PFPA)         11         1.6         0.59 npL         1109/18 11:30         11/11/18 01:29         1           Perfluoroschanoic acid (PFNA)         6.9         1.6         0.25 npL         1109/18 11:30         11/11/18 01:29         1           Perfluoroschanoic acid (PFNA)         A.5         1.6         0.25 npL         1109/18 11:30         11/11/18 01:29         1           Perfluoroschanoic acid (PFDA)         ND         1.6         0.30 npL         1109/18 11:30         11/11/18 01:29         1           Perfluoroschanoic acid (PFDA)         ND         1.6         0.20 npL         1109/18 11:30         11/11/18 01:29         1           Perfluoroschanoic acid (PFDA)         ND         1.6         0.20 npL         1109/18 11:30         11/11/18 01:29         1           Perfluorobicacanoic acid (PFDA)         ND         1.6         0.19 ngL         1109/18 11:30         11/11/18 01:29         1           Perfluorobicacanoic acid (PFTA)         ND         1.6         0.35 ngL         1109/18 11:30         11/11/18 01:29         1           Perfluorobicacanosulfonic acid         ND         1.6         0.42 ngL         1109/18 11:30         11/11/18 01:29         1           Perfluorobicacanesulfonic acid (PFOS)         ND         1.6 </td <td>Perfluorobutanoic acid (PFBA)</td> <td>31</td> <td>В</td> <td>1.6</td> <td>0.32</td> <td>ng/L</td> <td></td> <td>11/09/18 11:30</td> <td>11/11/18 01:29</td> <td>1</td>	Perfluorobutanoic acid (PFBA)	31	В	1.6	0.32	ng/L		11/09/18 11:30	11/11/18 01:29	1
Perfluorohexanoic acid (PFHA)         6.9         1.6         0.19         npl         1109/18 11:30         11/11/18 01:29         1           Perfluorohexanoic acid (PFDA)         4.5         1.6         0.25         npL         1109/18 11:30         11/11/18 01:29         1           Perfluorohexanoic acid (PFDA)         ND         1.6         0.30         npL         1109/18 11:30         11/11/18 01:29         1           Perfluorohexanoic acid (PFDA)         ND         1.6         0.20         npL         1109/18 11:30         11/11/18 01:29         1           Perfluorohexanoic acid (PFDA)         ND         1.6         0.20         npL         1109/18 11:30         11/11/18 01:29         1           Perfluorohexanoic acid (PFTA)         ND         1.6         0.35         npL         1109/18 11:30         11/11/18 01:29         1           Perfluorohexanoic acid (PFTA)         ND         1.6         0.35         npL         1109/18 11:30         11/11/18 01:29         1           Perfluorohexanosulfonic acid (PFTA)         ND         1.6         0.21         ngL         1109/18 11:30         11/11/18 01:29         1           Perfluorohexanosulfonic acid (PFTA)         ND         1.6         0.21         ngL         1109/18 11:30	Perfluoropentanoic acid (PFPeA)	11		1.6	0.59	ng/L		11/09/18 11:30	11/11/18 01:29	1
Perflucorbiptanolic acid (PFNA)         3.3         1.6         0.25 ng/L         1109/18 11:30         11/11/8 01:29         1           Perflucorocanolic acid (PFNA)         ND         1.6         0.25 ng/L         1109/18 11:30         11/11/8 01:29         1           Perflucorocanolic acid (PFNA)         ND         1.6         0.30 ng/L         1109/18 11:30         11/11/8 01:29         1           Perflucorocanolic acid (PFDA)         ND         1.6         0.20 ng/L         1109/18 11:30         11/11/8 01:29         1           Perflucorocanolic acid (PFDA)         ND         1.6         0.28 ng/L         1109/18 11:30         11/11/8 01:29         1           Perflucorobicanolic acid (PFTA)         ND         1.6         0.36 ng/L         1109/18 11:30         11/11/8 01:29         1           Perflucorobicanesulfonic acid         1.4         J         1.6         0.35 ng/L         1109/18 11:30         11/11/18 01:29         1           Perflucorobicanesulfonic acid (PFHA)         ND         1.6         0.42 ng/L         1109/18 11:30         11/11/18 01:29         1           Perflucorobicanesulfonic acid (PFHA)         ND         1.6         0.55 ng/L         1109/18 11:30         11/11/18 01:29         1           Perflucorocanesulfonic acid (PFOS)	Perfluorohexanoic acid (PFHxA)	6.9		1.6	0.19	ng/L		11/09/18 11:30	11/11/18 01:29	1
Perflucroactanoic acid (PFCA)         4.5         1.6         0.25 ng/L         1100/16 11:30         11/1/18 01:29         1           Perflucroandecanoic acid (PFDA)         ND         1.6         0.30 ng/L         1100/16 11:30         11/1/18 01:29         1           Perflucroandecanoic acid (PFDA)         ND         1.6         0.20 ng/L         1100/16 11:30         11/1/18 01:29         1           Perflucroandecanoic acid (PFDA)         ND         1.6         0.28 ng/L         1100/16 11:30         11/1/18 01:29         1           Perflucroandecanoic acid (PFTA)         ND         1.6         0.36 ng/L         1100/16 11:30         11/1/18 01:29         1           Perflucroandecanoic acid (PFTA)         ND         1.6         0.35 ng/L         1100/16 11:30         11/1/18 01:29         1           Perflucroandecanoic acid (PFTA)         ND         1.6         0.42 ng/L         1100/16 11:30         11/1/18 01:29         1           Perflucroandecanoic acid (PFTA)         ND         1.6         0.42 ng/L         1100/16 11:30         11/1/18 01:29         1           Perflucroandecanoic acid (PFTA)         ND         1.6         0.44 ng/L         1100/16 11:30         11/1/18 01:29         1           Perflucroandecanesulfona midoa         ND         1.6	Perfluoroheptanoic acid (PFHpA)	3.3		1.6	0.25	ng/L		11/09/18 11:30	11/11/18 01:29	1
Perfluorobecanoic add (PFNA)         ND         1.6         0.30         ng/L         11/09/18 11:30         11/11/18 01:29         1           Perfluorobecanoic add (PFDA)         ND         1.6         0.30         ng/L         11/09/18 11:30         11/11/18 01:29         1           Perfluorobecanoic add (PFDA)         ND         1.6         0.28         ng/L         11/09/18 11:30         11/11/18 01:29         1           Perfluorobecanoic add (PFDA)         ND         1.6         0.28         ng/L         11/09/18 11:30         11/11/18 01:29         1           Perfluorobetaresulfonic add         1.4         J         1.6         0.36         ng/L         11/09/18 11:30         11/11/18 01:29         1           Perfluorobetaresulfonic add (PFTeA)         ND         1.6         0.21         ng/L         11/09/18 11:30         11/11/18 01:29         1           Perfluorobetaresulfonic add (PFDS)         ND         1.6         0.65         ng/L         11/09/18 11:30         11/11/18 01:29         1           Perfluorobetaresulfonic add (PFOS)         ND         1.6         0.42         ng/L         11/09/18 11:30         11/11/18 01:29         1           Perfluorobetaresulfonic add (PFOS)         ND         1.6         0.42         ng/L </td <td>Perfluorooctanoic acid (PFOA)</td> <td>4.5</td> <td></td> <td>1.6</td> <td>0.25</td> <td>ng/L</td> <td></td> <td>11/09/18 11:30</td> <td>11/11/18 01:29</td> <td>1</td>	Perfluorooctanoic acid (PFOA)	4.5		1.6	0.25	ng/L		11/09/18 11:30	11/11/18 01:29	1
Perfluorodecanoic acid (PFDA)         ND         1.6         0.30         ng/L         11/09/18 11:30         11/11/18 01:29         1           Perfluorodecanoic acid (PFDA)         ND         1.6         0.20         ng/L         11/09/18 11:30         11/11/18 01:29         1           Perfluorodecanoic acid (PFDA)         ND         1.6         0.28         ng/L         11/09/18 11:30         11/11/18 01:29         1           Perfluorodecanoic acid (PFTA)         ND         1.6         0.36         ng/L         11/09/18 11:30         11/11/18 01:29         1           Perfluorobetanesulfonic acid         1.4         J         1.6         0.35         ng/L         11/09/18 11:30         11/11/18 01:29         1           Perfluorobetanesulfonic acid (PFTA)         ND         1.6         0.21         ng/L         11/09/18 11:30         11/11/18 01:29         1           Perfluorobetanesulfonic acid (PFTA)         ND         1.6         0.42         ng/L         11/09/18 11:30         11/11/18 01:29         1           Perfluorobetanesulfonic acid (PFDS)         ND         1.6         0.42         ng/L         11/09/18 11:30         11/11/18 01:29         1           Perfluorobetanesulfonamidoa         ND         1.6         0.44         ng/L </td <td>Perfluorononanoic acid (PFNA)</td> <td>ND</td> <td></td> <td>1.6</td> <td>0.30</td> <td>ng/L</td> <td></td> <td>11/09/18 11:30</td> <td>11/11/18 01:29</td> <td>1</td>	Perfluorononanoic acid (PFNA)	ND		1.6	0.30	ng/L		11/09/18 11:30	11/11/18 01:29	1
Perfluoroundecanoic acid (PFUnA)         ND         1.6         0.20         ng/L         11/09/18 11:30         11/11/18 01:29         1           Perfluorotidecanoic acid (PFTA)         ND         1.6         0.28         ng/L         11/09/18 11:30         11/11/18 01:29         1           Perfluorotidecanoic acid (PFTA)         ND         1.6         0.35         ng/L         11/09/18 11:30         11/11/18 01:29         1           Perfluorotidecanoic acid (PFTA)         ND         1.6         0.35         ng/L         11/09/18 11:30         11/11/18 01:29         1           Perfluorotidecanesulfonic acid (PFTA)         ND         1.6         0.35         ng/L         11/09/18 11:30         11/11/18 01:29         1           Perfluorotidecanesulfonic acid (PFDS)         ND         1.6         0.42         ng/L         11/09/18 11:30         11/11/18 01:29         1           Perfluoroctanesulfonic acid (PFOS)         ND         1.6         0.42         ng/L         11/09/18 11:30         11/11/18 01:29         1           Perfluoroctanesulfonic acid (PFOS)         ND         1.6         0.44         ng/L         11/09/18 11:30         11/11/18 01:29         1           Perfluoroctanesulfonic acid (NEFOSA)         ND         16         0.55	Perfluorodecanoic acid (PFDA)	ND		1.6	0.30	ng/L		11/09/18 11:30	11/11/18 01:29	1
Perfluorodcanoiz acid (PFDoA)         ND         1.6         0.28         ng/L         11/09/18 11:30         11/11/18 01:29         1           Perfluorotidecanoic acid (PFTrA)         ND         1.6         0.36         ng/L         11/09/18 11:30         11/11/18 01:29         1           Perfluorotidaceanoic acid (PFTrA)         ND         1.6         0.35         ng/L         11/09/18 11:30         11/11/18 01:29         1           Perfluorotidaceanoic acid (PFTrA)         ND         1.6         0.21         ng/L         11/09/18 11:30         11/11/18 01:29         1           Perfluorotidaceanoic acid (PFTrA)         ND         1.6         0.21         ng/L         11/09/18 11:30         11/11/18 01:29         1           Perfluoroctanesulfonic acid (PFDS)         ND         1.6         0.42         ng/L         11/09/18 11:30         11/11/18 01:29         1           Perfluoroctanesulfonamido         FOS         ND         1.6         0.44         ng/L         11/09/18 11:30         11/11/18 01:29         1           Perfluoroctanesulfonamidoa         ND         1.6         0.44         ng/L         11/09/18 11:30         11/11/18 01:29         1           N=thylperfluoroctanesulfonamidoa         ND         16         0.55         ng/L<	Perfluoroundecanoic acid (PFUnA)	ND		1.6	0.20	ng/L		11/09/18 11:30	11/11/18 01:29	1
Perfluorotidecanoic acid (PFTrA)         ND         1.6         0.19         ng/L         11/09/18 11:30         11/11/18 01:29         1           Perfluorobutanesulfonic acid         1.4         J         1.6         0.36         ng/L         11/09/18 11:30         11/11/18 01:29         1           Perfluorobutanesulfonic acid         1.4         J         1.6         0.36         ng/L         11/09/18 11:30         11/11/18 01:29         1           Perfluorobutanesulfonic acid         ND         1.6         0.65         ng/L         11/09/18 11:30         11/11/18 01:29         1           Perfluorobecanesulfonic acid (PFDS)         ND         1.6         0.42         ng/L         11/09/18 11:30         11/11/18 01:29         1           Perfluorooctanesulfonic acid (PFOS)         ND         1.6         0.44         ng/L         11/09/18 11:30         11/11/18 01:29         1           N=methyperfluorooctanesulfonamidoa         ND         1.6         0.44         ng/L         11/09/18 11:30         11/11/18 01:29         1           N=thyperfluorooctanesulfonamidoa         ND         1.6         0.55         ng/L         11/09/18 11:30         11/11/18 01:29         1           N=thyperfluorooctanesulfonamidoae         ND         16 <td< td=""><td>Perfluorododecanoic acid (PFDoA)</td><td>ND</td><td></td><td>1.6</td><td>0.28</td><td>ng/L</td><td></td><td>11/09/18 11:30</td><td>11/11/18 01:29</td><td>1</td></td<>	Perfluorododecanoic acid (PFDoA)	ND		1.6	0.28	ng/L		11/09/18 11:30	11/11/18 01:29	1
Perfluorolatradecanic acid (PFTEA)         ND         1.6         0.36         ng/L         1109/18 11:30         11/11/18 01:29         1           Perfluorobutanesulfonic acid (PFHxS)         ND         1.6         0.21         ng/L         1109/18 11:30         11/11/18 01:29         1           Perfluorobexanesulfonic acid (PFHxS)         ND         1.6         0.21         ng/L         1109/18 11:30         11/11/18 01:29         1           Perfluorobexanesulfonic acid (PFDS)         ND         1.6         0.42         ng/L         1109/18 11:30         11/11/18 01:29         1           Perfluorobexanesulfonic acid (PFDS)         ND         1.6         0.42         ng/L         1109/18 11:30         11/11/18 01:29         1           Perfluorobctanesulfonic acid (PFOS)         ND         1.6         0.44         ng/L         1109/18 11:30         11/11/18 01:29         1           Perfluorobctanesulfonamidoz         ND         1.6         0.55         ng/L         1109/18 11:30         11/11/18 01:29         1           Perfluorobctanesulfonamidoz         ND         1.6         0.55         ng/L         1109/18 11:30         11/11/18 01:29         1           Rectic acid (NRFCSAA)         ND         1.6         0.55         ng/L         11	Perfluorotridecanoic acid (PFTriA)	ND		1.6	0.19	ng/L		11/09/18 11:30	11/11/18 01:29	1
Perfluorobutanesulfonic acid         1.4         J         1.6         0.35         ng/L         11/09/18         11/11/18	Perfluorotetradecanoic acid (PFTeA)	ND		1.6	0.36	ng/L		11/09/18 11:30	11/11/18 01:29	1
International constraints         ND         1.6         0.21         ng/L         11/09/18 11:30         11/11/18 01:29         1           Perfluoroheptanesulfonic acid (PFDS)         ND         1.6         0.65         ng/L         11/09/18 11:30         11/11/18 01:29         1           Perfluorodecanesulfonic acid (PFDS)         ND         1.6         0.42         ng/L         11/09/18 11:30         11/11/18 01:29         1           Perfluorodecanesulfonic acid (PFOS)         ND         1.6         0.44         ng/L         11/09/18 11:30         11/11/18 01:29         1           Perfluorodecanesulfonamidoa         ND         1.6         0.44         ng/L         11/09/18 11:30         11/11/18 01:29         1           N-methyperfluorocctanesulfonamidoa         ND         16         0.75         ng/L         11/09/18 11:30         11/11/18 01:29         1           etic acid (NEFOSAA)         ND         16         0.79         ng/L         11/09/18 11:30         11/11/18 01:29         1           Isotope Dilution         %Recovery         Qualifier         Limits         Prepared         Analyzed         DI Fac           13C4 PFBA         19<*	Perfluorobutanesulfonic acid	1.4	J	1.6	0.35	ng/L		11/09/18 11:30	11/11/18 01:29	1
Instruction         Instruction <thinstruction< th=""> <thinstruction< th=""></thinstruction<></thinstruction<>	(PFBS) Perfluorobexanesulfonic acid (PEHxS)	ND		1.6	0.21	na/l		11/09/18 11:30	11/11/18 01.29	1
Perilicitolity partes unified         Instruction of the second seco	Porfluerohentenegulfenie Acid	ND		1.0	0.65	ng/L		11/00/18 11:30	11/11/18 01:20	1
Perfluorodecanesulfonic acid (PFDS)       ND       1.6       0.42 ng/L       11/09/18 11:30       11/11/18 01:29       1         Perfluorooctanesulfonic acid (PFOS)       ND       1.6       0.60 ng/L       11/09/18 11:30       11/11/18 01:29       1         Perfluorooctanesulfonamide (FOSA)       ND       1.6       0.44 ng/L       11/09/18 11:30       11/11/18 01:29       1         N-methylperfluorooctanesulfonamidoa       ND       16       0.36 ng/L       11/09/18 11:30       11/11/18 01:29       1         Nethylperfluorooctanesulfonamidoac       ND       16       0.55 ng/L       11/09/18 11:30       11/11/18 01:29       1         Nethylperfluorooctanesulfonamidoac       ND       16       0.79 ng/L       11/09/18 11:30       11/11/18 01:29       1         etic acid (NEIFOSAA)       ND       16       0.79 ng/L       11/09/18 11:30       11/11/18 01:29       1         Isotope Dilution <b>%Recovery Qualifier</b> Limits       Prepared       Analyzed       DI Fac         13C4 PFBA       19       25 -150       11/09/18 11:30       11/11/18 01:29       1       1         13C2 PFHxA       44       25 -150       11/09/18 11:30       11/11/18 01:29       1       1       1       1       1       1 <td>(PFHpS)</td> <td>ND</td> <td></td> <td>1.0</td> <td>0.00</td> <td>ng/L</td> <td></td> <td>11/00/10 11:00</td> <td>11/11/10 01.23</td> <td></td>	(PFHpS)	ND		1.0	0.00	ng/L		11/00/10 11:00	11/11/10 01.23	
Perfluorooctanesulfonic acid (PFOS)         ND         1.6         0.60         ng/L         11/09/18 11:30         11/11/18 01:29         1           Perfluorooctanesulfonamide (FOSA)         ND         1.6         0.44 ng/L         11/09/18 11:30         11/11/18 01:29         1           N-methylperfluorooctanesulfonamidoa         ND         16         0.36 ng/L         11/09/18 11:30         11/11/18 01:29         1           Nethylperfluorooctanesulfonamidoa         ND         16         0.55 ng/L         11/09/18 11:30         11/11/18 01:29         1           Nethylperfluorooctanesulfonamidoa         ND         16         0.79 ng/L         11/09/18 11:30         11/11/18 01:29         1           8:2 FTS         ND         16         0.79 ng/L         11/09/18 11:30         11/11/18 01:29         1           Isotope Dilution <b>%Recovery Qualifier</b> Limits         Prepared         Analyzed         DI Fac           13C4 PFBA         19<*	Perfluorodecanesulfonic acid (PFDS)	ND		1.6	0.42	ng/L		11/09/18 11:30	11/11/18 01:29	1
Perfluoroctanesulfonamide (FOSA)         ND         1.6         0.44         ng/L         11/09/18         11:30         11/1/18         01/29         1           N-methylperfluorooctanesulfonamidoa         ND         16         0.36         ng/L         11/09/18         11:30         11/11/18         01:29         1           N-ethylperfluorooctanesulfonamidoac         ND         16         0.55         ng/L         11/09/18         11:30         11/11/18         01:29         1           etic acid (NEIFOSAA)         ND         16         0.79         ng/L         11/09/18         11:30         11/11/18         01:29         1           8:2 FTS         ND         16         0.79         ng/L         11/09/18         11:30         11/11/18         01:29         1           13C4 PFBA         72         25         150         11/09/18         11:30         11/11/18         01:29         1           13C4 PFBA         19         25         150         11/09/18         11:30         11/11/18         01:29         1           13C4 PFDA         60         25         150         11/09/18         11:30         11/11/18         01:29         1           13C4 PFDA         60 <td>Perfluorooctanesulfonic acid (PFOS)</td> <td>ND</td> <td></td> <td>1.6</td> <td>0.60</td> <td>ng/L</td> <td></td> <td>11/09/18 11:30</td> <td>11/11/18 01:29</td> <td>1</td>	Perfluorooctanesulfonic acid (PFOS)	ND		1.6	0.60	ng/L		11/09/18 11:30	11/11/18 01:29	1
N-methylperfluoroctanesulfonamidoa         ND         16         0.36 ng/L         11/09/18 11:30         11/11/18 01:29         1           cetic acid (NMeFOSAA)         ND         16         0.55 ng/L         11/09/18 11:30         11/11/18 01:29         1           hettylperfluoroctanesulfonamidoac         ND         16         0.79 ng/L         11/09/18 11:30         11/11/18 01:29         1           6:2 FTS         ND         16         0.79 ng/L         11/09/18 11:30         11/11/18 01:29         1           Isotope Dilution         %Recovery         Qualifier         Limits         Prepared         Analyzed         1           13C8 FOSA         72         25 - 150         11/09/18 11:30         11/11/18 01:29         1           13C4 PFBA         19         *         25 - 150         11/09/18 11:30         11/11/18 01:29         1           13C4 PFbA         44         25 - 150         11/09/18 11:30         11/11/18 01:29         1           13C4 PFbA         60         25 - 150         11/09/18 11:30         11/11/18 01:29         1           13C2 PFbA         91         25 - 150         11/09/18 11:30         11/11/18 01:29         1           13C2 PFbA         92         25 - 150         11/09/18 11	Perfluorooctanesulfonamide (FOSA)	ND		1.6	0.44	ng/L		11/09/18 11:30	11/11/18 01:29	1
N-ethylperfluorooctanesulfonamidoac etic acid (NEIFOSAA)         ND         16         0.55 ng/L         11/10/18 11:30         11/11/18 01:29         1           62: FTS         ND         16         0.79 ng/L         11/09/18 11:30         11/11/18 01:29         1           8:2 FTS         ND         16         0.79 ng/L         11/09/18 11:30         11/11/18 01:29         1           Isotope Dilution         %Recovery         Qualifier         Limits         Prepared         Analyzed         Dil Fac           13C8 FOSA         72         25-150         11/09/18 11:30         11/11/18 01:29         1           13C4 PFBA         19         25-150         11/09/18 11:30         11/11/18 01:29         1           13C2 FFHxA         44         25-150         11/09/18 11:30         11/11/18 01:29         1           13C4 PFDA         60         25-150         11/09/18 11:30         11/11/18 01:29         1           13C4 PFDA         60         25-150         11/09/18 11:30         11/11/18 01:29         1           13C2 PFLA         44         25-150         11/09/18 11:30         11/11/18 01:29         1           13C2 PFLA         86         25-150         11/09/18 11:30         11/11/18 01:29         1	N-methylperfluorooctanesulfonamidoa cetic acid (NMeFOSAA)	ND		16	0.36	ng/L		11/09/18 11:30	11/11/18 01:29	1
6:2 FTS         ND         16         0.79 ng/L         11/09/18 11:30         11/11/18 01:29         1           8:2 FTS         ND         16         0.44 ng/L         11/09/18 11:30         11/11/18 01:29         1           Isotope Dilution         %Recovery         Qualifier         Limits         Prepared         Analyzed         Dil Fac           13C8 FOSA         72         25 - 150         11/09/18 11:30         11/11/18 01:29         1           13C4 PFBA         19         *         25 - 150         11/09/18 11:30         11/11/18 01:29         1           13C4 PFBA         19         *         25 - 150         11/09/18 11:30         11/11/18 01:29         1           13C4 PFHpA         60         25 - 150         11/09/18 11:30         11/11/18 01:29         1           13C4 PFDA         60         25 - 150         11/09/18 11:30         11/11/18 01:29         1           13C4 PFDA         60         25 - 150         11/09/18 11:30         11/11/18 01:29         1           13C4 PFDA         91         25 - 150         11/09/18 11:30         11/11/18 01:29         1           13C2 PFDA         91         25 - 150         11/09/18 11:30         11/11/18 01:29         1	N-ethylperfluorooctanesulfonamidoac etic acid (NEtEOSAA)	ND		16	0.55	ng/L		11/09/18 11:30	11/11/18 01:29	1
B:2 FTS         ND         16         0.44 ng/L         11/09/18 11:30         11/11/18 01:29         1           Isotope Dilution         %Recovery         Qualifier         Limits         Prepared         Analyzed         Dil Fac           13C8 FOSA         72         25-150         11/09/18 11:30         11/11/18 01:29         1           13C4 PFBA         19         *         25-150         11/09/18 11:30         11/11/18 01:29         1           13C5 PFPeA DNU         39         25-150         11/09/18 11:30         11/11/18 01:29         1           13C4 PFBA         44         25-150         11/09/18 11:30         11/11/18 01:29         1           13C4 PFDA         60         25-150         11/09/18 11:30         11/11/18 01:29         1           13C4 PFDA         60         25-150         11/09/18 11:30         11/11/18 01:29         1           13C4 PFDA         86         25-150         11/09/18 11:30         11/11/18 01:29         1           13C2 PFDA         91         25-150         11/09/18 11:30         11/11/18 01:29         1           13C2 PFDA         92         25-150         11/09/18 11:30         11/11/18 01:29         1           13C2 PFDA         89	6:2 FTS	ND		16	0.79	ng/L		11/09/18 11:30	11/11/18 01:29	1
Isotope Dilution%Recovery (13C8 FOSA)Qualifier (13C8 FOSA)LimitsPrepared (11/09/18 11:30)Analyzed (11/11/18 01:29)Dil Fac (11/09/18 11:30)13C4 PFBA19*25.15011/09/18 11:30)11/11/18 01:29113C5-PFPeA DNU3925.15011/09/18 11:30)11/11/18 01:29113C2 PFHxA4425.15011/09/18 11:3011/11/18 01:29113C4 PFHpA6025.15011/09/18 11:3011/11/18 01:29113C4 PFHpA6025.15011/09/18 11:3011/11/18 01:29113C4 PFOA7425.15011/09/18 11:3011/11/18 01:29113C2 PFDA8625.15011/09/18 11:3011/11/18 01:29113C2 PFDA9125.15011/09/18 11:3011/11/18 01:29113C2 PFDA8925.15011/09/18 11:3011/11/18 01:29113C2 PFDA8925.15011/09/18 11:3011/11/18 01:29113C2 PFDA8925.15011/09/18 11:3011/11/18 01:29113C2 PFDA8925.15011/09/18 11:3011/11/18 01:29113C3 PFES5925.15011/09/18 11:3011/11/18 01:29113C3 PFES7425.15011/09/18 11:3011/11/18 01:29113C3 PFES7425.15011/09/18 11:3011/11/18 01:29113C3 PFES7925.15011/09/18 11:3011/11/18 01:29113C4 PFOS7925.150<	8:2 FTS	ND		16	0.44	ng/L		11/09/18 11:30	11/11/18 01:29	1
13C8 FOSA       72       25.150       11/09/18 11:30       11/11/18 01:29       1         13C4 PFBA       19 *       25.150       11/09/18 11:30       11/11/18 01:29       1         13C5-PFPA DNU       39       25.150       11/09/18 11:30       11/11/18 01:29       1         13C5 PFPA DNU       39       25.150       11/09/18 11:30       11/11/18 01:29       1         13C4 PFHAA       44       25.150       11/09/18 11:30       11/11/18 01:29       1         13C4 PFDA       60       25.150       11/09/18 11:30       11/11/18 01:29       1         13C4 PFOA       74       25.150       11/09/18 11:30       11/11/18 01:29       1         13C5 PFNA       86       25.150       11/09/18 11:30       11/11/18 01:29       1         13C2 PFDA       91       25.150       11/09/18 11:30       11/11/18 01:29       1         13C2 PFDA       92       25.150       11/09/18 11:30       11/11/18 01:29       1         13C2 PFDA       92       25.150       11/09/18 11:30       11/11/18 01:29       1         13C2 PFDA       89       25.150       11/09/18 11:30       11/11/18 01:29       1         13C2 PFDA       89       25.150       11/09/1	Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PEBA19 *25.15011/09/18 11:3011/11/18 01:29113C5-PFPeA DNU3925.15011/09/18 11:3011/11/18 01:29113C2 PFHxA4425.15011/09/18 11:3011/11/18 01:29113C4 PFHpA6025.15011/09/18 11:3011/11/18 01:29113C4 PFOA7425.15011/09/18 11:3011/11/18 01:29113C5 PFNA8625.15011/09/18 11:3011/11/18 01:29113C2 PFDA9125.15011/09/18 11:3011/11/18 01:29113C2 PFDA9125.15011/09/18 11:3011/11/18 01:29113C2 PFUnA9225.15011/09/18 11:3011/11/18 01:29113C2 PFDAA8425.15011/09/18 11:3011/11/18 01:29113C2 PFTeDA8925.15011/09/18 11:3011/11/18 01:29113C2 PFTeDA8925.15011/09/18 11:3011/11/18 01:29113C2 PFTeDA8925.15011/09/18 11:3011/11/18 01:29113C4 PFOS7425.15011/09/18 11:3011/11/18 01:29113C4 PFOS7925.15011/09/18 11:3011/11/18 01:29113C4 PFOS7425.15011/09/18 11:3011/11/18 01:29113C4 PFOS7425.15011/09/18 11:3011/11/18 01:29113C4 PFOS7425.15011/09/18 11:3011/11/18 01:29113C4 PFOS7425.15011/09/1	13C8 FOSA	72		25 - 150				11/09/18 11:30	11/11/18 01:29	1
13C5-PFPeA DNU3925.15011/09/18 11:3011/11/18 01:29113C2 PFHxA4425.15011/09/18 11:3011/11/18 01:29113C4 PFHpA6025.15011/09/18 11:3011/11/18 01:29113C4 PFOA7425.15011/09/18 11:3011/11/18 01:29113C5 PFNA8625.15011/09/18 11:3011/11/18 01:29113C2 PFDA9125.15011/09/18 11:3011/11/18 01:29113C2 PFDA9225.15011/09/18 11:3011/11/18 01:29113C2 PFDA9225.15011/09/18 11:3011/11/18 01:29113C2 PFDA8425.15011/09/18 11:3011/11/18 01:29113C2 PFTeDA8925.15011/09/18 11:3011/11/18 01:29113C4 PFOS7925.15011/09/18 11:3011/11/18 01:29113C4 PFOS7425.15011/09/18 11:3011/11/18 01:29113C4 PFOS7425.15011/09/18 11:3011/11/18 01:29113C4 PFOS7425.15011/09/18 11:3011/11/18 01:29113C4 PFOS7425.15011/09/1	13C4 PFBA	19	*	25 - 150				11/09/18 11:30	11/11/18 01:29	1
13C2 PFHxA4425.15011/09/18 11:3011/11/18 01:29113C4 PFHpA6025.15011/09/18 11:3011/11/18 01:29113C4 PFOA7425.15011/09/18 11:3011/11/18 01:29113C5 PFNA8625.15011/09/18 11:3011/11/18 01:29113C2 PFDA9125.15011/09/18 11:3011/11/18 01:29113C2 PFDA9225.15011/09/18 11:3011/11/18 01:29113C2 PFDA9225.15011/09/18 11:3011/11/18 01:29113C2 PFDoA8425.15011/09/18 11:3011/11/18 01:29113C2 PFTeDA8925.15011/09/18 11:3011/11/18 01:29113C3 PFBS5925.15011/09/18 11:3011/11/18 01:29113C4 PFOS7425.15011/09/18 11:3011/11/18 01:29113C4 PFOS7925.15011/09/18 11:3011/11/18 01:29113C4 PFOS7925.15011/09/18 11:3011/11/18 01:29113C4 PFOS7925.15011/09/18 11:3011/11/18 01:29113C4 PFOS7425.15011/09/18 11:3011/11/18 01:29113C4 PFOS7925.15011/09/18 11:3011/11/18 01:29113C4 PFOS7425.15011/09/18 11:3011/11/18 01:29113C4 PFOS7425.15011/09/18 11:3011/11/18 01:29113C4 PFOS7425.15011/09/18 11:30	13C5-PFPeA DNU	39		25 - 150				11/09/18 11:30	11/11/18 01:29	1
13C4 PFHpA6025 . 15011/09/18 11:3011/11/18 01:29113C4 PFOA7425 . 15011/09/18 11:3011/11/18 01:29113C5 PFNA8625 . 15011/09/18 11:3011/11/18 01:29113C2 PFDA9125 . 15011/09/18 11:3011/11/18 01:29113C2 PFDA9225 . 15011/09/18 11:3011/11/18 01:29113C2 PFUnA9225 . 15011/09/18 11:3011/11/18 01:29113C2 PFDoA8425 . 15011/09/18 11:3011/11/18 01:29113C2 PFTeDA8925 . 15011/09/18 11:3011/11/18 01:29113C3 PFBS5925 . 15011/09/18 11:3011/11/18 01:29113C4 PFOS7425 . 15011/09/18 11:3011/11/18 01:29113C4 PFOS7925 . 15011/09/18 11:3011/11/18 01:29113C4 PFOS7425 . 15011/09/18 11:3011/11/18 01:29113C4 PFOS7925 . 15011/09/18 11:3011/11/18 01:291145-NEtFOSAA8225 . 15011/09/18 11:3011/11/18 01:291M2-6:2 FTS185 *25 . 15011/09/18 11:3011/11/18 01:291M2-8:2 FTS1	13C2 PFHxA	44		25 - 150				11/09/18 11:30	11/11/18 01:29	1
13C4 PFOA7425 - 15011/09/18 11:3011/11/18 01:29113C5 PFNA8625 - 15011/09/18 11:3011/11/18 01:29113C2 PFDA9125 - 15011/09/18 11:3011/11/18 01:29113C2 PFUnA9225 - 15011/09/18 11:3011/11/18 01:29113C2 PFDoA8425 - 15011/09/18 11:3011/11/18 01:29113C2 PFTeDA8925 - 15011/09/18 11:3011/11/18 01:29113C3 PFBS5925 - 15011/09/18 11:3011/11/18 01:29118O2 PFHxS7425 - 15011/09/18 11:3011/11/18 01:29113C4 PFOS7925 - 15011/09/18 11:3011/11/18 01:29113C4 PFOS7925 - 15011/09/18 11:3011/11/18 01:29113C4 PFOS7425 - 15011/09/18 11:3011/11/18 01:29113C4 PFOS7925 - 15011/09/18 11:3011/11/18 01:29113C4 PFOS7425 - 15011/09/18 11:3011/11/18 01:29113C4 PFOS7425 - 15011/09/18 11:3011/11/18 01:29113C5 PFNA8225 - 15011/09/18 11:3011/11/18 01:29113C5 PFNA8225 - 15011/09/18 11:3011/11/18 01:291145-NEtFOSAA8225 - 15011/09/18 11:3011/11/18 01:291M2-6:2 FTS185 *25 - 15011/09/18 11:3011/11/18 01:291M2-8:2 FTS1	13C4 PFHpA	60		25 - 150				11/09/18 11:30	11/11/18 01:29	1
13C5 PFNA8625 - 15011/09/18 11:3011/11/18 01:29113C2 PFDA9125 - 15011/09/18 11:3011/11/18 01:29113C2 PFUnA9225 - 15011/09/18 11:3011/11/18 01:29113C2 PFDoA8425 - 15011/09/18 11:3011/11/18 01:29113C2 PFTeDA8925 - 15011/09/18 11:3011/11/18 01:29113C3 PFBS5925 - 15011/09/18 11:3011/11/18 01:29118O2 PFHxS7425 - 15011/09/18 11:3011/11/18 01:29113C4 PFOS7925 - 15011/09/18 11:3011/11/18 01:29113C4 PFOS7925 - 15011/09/18 11:3011/11/18 01:291d3-NMeFOSAA7425 - 15011/09/18 11:3011/11/18 01:291d5-NEtFOSAA8225 - 15011/09/18 11:3011/11/18 01:291M2-6:2 FTS185 *25 - 15011/09/18 11:3011/11/18 01:291M2-8:2 FTS11125 - 15011/09/18 11:3011/11/18 01:291	13C4 PFOA	74		25 - 150				11/09/18 11:30	11/11/18 01:29	1
13C2 PFDA9125-15011/09/18 11:3011/11/18 01:29113C2 PFUnA9225-15011/09/18 11:3011/11/18 01:29113C2 PFDoA8425-15011/09/18 11:3011/11/18 01:29113C2 PFTeDA8925-15011/09/18 11:3011/11/18 01:29113C3 PFBS5925-15011/09/18 11:3011/11/18 01:29118O2 PFHxS7425-15011/09/18 11:3011/11/18 01:29113C4 PFOS7925-15011/09/18 11:3011/11/18 01:291d3-NMeFOSAA7425-15011/09/18 11:3011/11/18 01:291d5-NEtFOSAA8225-15011/09/18 11:3011/11/18 01:291M2-6:2 FTS185 *25-15011/09/18 11:3011/11/18 01:291M2-8:2 FTS11125-15011/09/18 11:3011/11/18 01:291	13C5 PFNA	86		25 - 150				11/09/18 11:30	11/11/18 01:29	1
13C2 PFUnA9225 - 15011/09/18 11:3011/11/18 01:29113C2 PFDoA8425 - 15011/09/18 11:3011/11/18 01:29113C2 PFTeDA8925 - 15011/09/18 11:3011/11/18 01:29113C3 PFBS5925 - 15011/09/18 11:3011/11/18 01:29118O2 PFHxS7425 - 15011/09/18 11:3011/11/18 01:29113C4 PFOS7925 - 15011/09/18 11:3011/11/18 01:291d3-NMeFOSAA7425 - 15011/09/18 11:3011/11/18 01:291d5-NEtFOSAA8225 - 15011/09/18 11:3011/11/18 01:291M2-6:2 FTS185 *25 - 15011/09/18 11:3011/11/18 01:291M2-8:2 FTS11125 - 15011/09/18 11:3011/11/18 01:291	13C2 PFDA	91		25 - 150				11/09/18 11:30	11/11/18 01:29	1
13C2 PFDoA8425 - 15011/09/18 11:3011/11/18 01:29113C2 PFTeDA8925 - 15011/09/18 11:3011/11/18 01:29113C3 PFBS5925 - 15011/09/18 11:3011/11/18 01:29118O2 PFHxS7425 - 15011/09/18 11:3011/11/18 01:29113C4 PFOS7925 - 15011/09/18 11:3011/11/18 01:291d3-NMeFOSAA7425 - 15011/09/18 11:3011/11/18 01:291d5-NEtFOSAA8225 - 15011/09/18 11:3011/11/18 01:291M2-6:2 FTS185 *25 - 15011/09/18 11:3011/11/18 01:291M2-8:2 FTS11125 - 15011/09/18 11:3011/11/18 01:291	13C2 PFUnA	92		25 - 150				11/09/18 11:30	11/11/18 01:29	1
13C2 PFTeDA8925-15011/09/18 11:3011/11/18 01:29113C3 PFBS5925-15011/09/18 11:3011/11/18 01:29118O2 PFHxS7425-15011/09/18 11:3011/11/18 01:29113C4 PFOS7925-15011/09/18 11:3011/11/18 01:291d3-NMeFOSAA7425-15011/09/18 11:3011/11/18 01:291d5-NEtFOSAA8225-15011/09/18 11:3011/11/18 01:291M2-6:2 FTS185 *25-15011/09/18 11:3011/11/18 01:291M2-8:2 FTS11125-15011/09/18 11:3011/11/18 01:291	13C2 PFDoA	84		25 - 150				11/09/18 11:30	11/11/18 01:29	1
13C3 PFBS5925 - 15011/09/18 11:3011/11/18 01:29118O2 PFHxS7425 - 15011/09/18 11:3011/11/18 01:29113C4 PFOS7925 - 15011/09/18 11:3011/11/18 01:291d3-NMeFOSAA7425 - 15011/09/18 11:3011/11/18 01:291d5-NEtFOSAA8225 - 15011/09/18 11:3011/11/18 01:291M2-6:2 FTS185 *25 - 15011/09/18 11:3011/11/18 01:291M2-8:2 FTS11125 - 15011/09/18 11:3011/11/18 01:291	13C2 PFTeDA	89		25 - 150				11/09/18 11:30	11/11/18 01:29	1
1802 PFHxS       74       25 - 150       11/09/18 11:30       11/11/18 01:29       1         13C4 PFOS       79       25 - 150       11/09/18 11:30       11/11/18 01:29       1         d3-NMeFOSAA       74       25 - 150       11/09/18 11:30       11/11/18 01:29       1         d5-NEtFOSAA       82       25 - 150       11/09/18 11:30       11/11/18 01:29       1         M2-6:2 FTS       185 *       25 - 150       11/09/18 11:30       11/11/18 01:29       1         M2-8:2 FTS       111       25 - 150       11/09/18 11:30       11/11/18 01:29       1	13C3 PFBS	59		25 - 150				11/09/18 11:30	11/11/18 01:29	1
13C4 PFOS       79       25 - 150       11/09/18 11:30       11/11/18 01:29       1         d3-NMeFOSAA       74       25 - 150       11/09/18 11:30       11/11/18 01:29       1         d5-NEtFOSAA       82       25 - 150       11/09/18 11:30       11/11/18 01:29       1         M2-6:2 FTS       185 *       25 - 150       11/09/18 11:30       11/11/18 01:29       1         M2-8:2 FTS       111       25 - 150       11/09/18 11:30       11/11/18 01:29       1	18O2 PFHxS	74		25 - 150				11/09/18 11:30	11/11/18 01:29	1
d3-NMeFOSAA7425 - 15011/09/18 11:3011/11/18 01:291d5-NEtFOSAA8225 - 15011/09/18 11:3011/11/18 01:291M2-6:2 FTS185 *25 - 15011/09/18 11:3011/11/18 01:291M2-8:2 FTS11125 - 15011/09/18 11:3011/11/18 01:291	13C4 PFOS	79		25 - 150				11/09/18 11:30	11/11/18 01:29	1
d5-NEtFOSAA       82       25 - 150       11/09/18 11:30       11/11/18 01:29       1         M2-6:2 FTS       185 *       25 - 150       11/09/18 11:30       11/11/18 01:29       1         M2-8:2 FTS       111       25 - 150       11/09/18 11:30       11/11/18 01:29       1	d3-NMeFOSAA	74		25 - 150				11/09/18 11:30	11/11/18 01:29	1
M2-6:2 FTS       185 *       25 - 150       11/09/18 11:30       11/11/18 01:29       1         M2-8:2 FTS       111       25 - 150       11/09/18 11:30       11/11/18 01:29       1	d5-NEtFOSAA	82		25 - 150				11/09/18 11:30	11/11/18 01:29	1
M2-8:2 FTS 111 25 - 150 11/09/18 11:30 11/11/18 01:29 1	M2-6:2 FTS	185	*	25 - 150				11/09/18 11:30	11/11/18 01:29	1
	M2-8:2 FTS	111		25 - 150				11/09/18 11:30	11/11/18 01:29	1

TestAmerica Burlington

RL

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Limits

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25 - 150

MDL Unit

0.26 ng/L

0.26 ng/L

0.30 ng/L

0.19 ng/L

0.36 ng/L

0.35 ng/L

0.21 ng/L

0.66 ng/L

0.42 ng/L

0.33 ng/L

0.60 ng/L

0.19 ng/L

0.30 ng/L

0.20 ng/L

0.28 ng/L D

Prepared

Client: New York State D.E.C. Project/Site: Granite Pte Subdiv-Off Site #C360107A

Method: 537 (modified) - Fluorinated Alkyl Substances

**Result Qualifier** 

J

ND

ND

ND

ND

0.26

ND

54

63

70

70

77

76

81

89

88

83

80

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77

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103

88

Qualifier

%Recovery

### Client Sample ID: FIELD BLANK Date Collected: 10/31/18 13:30 Date Received: 11/02/18 10:10

Analyte

(PFHpS)

6:2 FTS

8:2 FTS

Perfluorobutanoic acid (PFBA)

Perfluoropentanoic acid (PFPeA)

Perfluorohexanoic acid (PFHxA)

Perfluoroheptanoic acid (PFHpA)

Perfluorononanoic acid (PFNA)

Perfluorodecanoic acid (PFDA)

Perfluorooctanoic acid (PFOA)

Perfluoroundecanoic acid (PFUnA)

Perfluorododecanoic acid (PFDoA)

Perfluorotridecanoic acid (PFTriA)

Perfluorotetradecanoic acid (PFTeA)

Perfluorobutanesulfonic acid (PFBS)

Perfluoroheptanesulfonic Acid

cetic acid (NMeFOSAA)

etic acid (NEtFOSAA)

Isotope Dilution

13C5-PFPeA DNU

13C8 FOSA

13C4 PFBA

13C2 PFHxA

13C4 PFHpA

13C4 PFOA

13C5 PFNA

13C2 PFDA

13C2 PFUnA

13C2 PFDoA

13C3 PFBS

1802 PFHxS

13C4 PFOS

d3-NMeFOSAA

d5-NEtFOSAA

M2-6:2 FTS

M2-8:2 FTS

13C2 PFTeDA

Perfluorohexanesulfonic acid (PFHxS)

Perfluorodecanesulfonic acid (PFDS)

Perfluorooctanesulfonic acid (PFOS)

Perfluorooctanesulfonamide (FOSA)

N-methylperfluorooctanesulfonamidoa

N-ethylperfluorooctanesulfonamidoac

TootAmoriaa	lah	ın.	200 46022	
restAmerica	JOD	ID.	200-40033	,-

### Lab Sample ID: 200-46033-2 Matrix: Water

11/09/18 11:30 11/11/18 01:45

11/09/18 11:30 11/11/18 01:45

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11/09/18 11:30 11/11/18 01:45

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0.61	ng/L	11/09/18 11:30	11/11/18 01:45	1
0.45	ng/L	11/09/18 11:30	11/11/18 01:45	1
0.36	ng/L	11/09/18 11:30	11/11/18 01:45	1
0.56	ng/L	11/09/18 11:30	11/11/18 01:45	1
0.80	ng/L	11/09/18 11:30	11/11/18 01:45	1
0.45	ng/L	11/09/18 11:30	11/11/18 01:45	1
		Prepared	Analyzed	Dil Fac
		11/09/18 11:30	11/11/18 01:45	1
		11/09/18 11:30	11/11/18 01:45	1
		11/09/18 11:30	11/11/18 01:45	1
		11/09/18 11:30	11/11/18 01:45	1
		11/09/18 11:30	11/11/18 01:45	1
		11/09/18 11:30	11/11/18 01:45	1
		11/09/18 11:30	11/11/18 01:45	1
		11/09/18 11:30	11/11/18 01:45	1
		11/09/18 11:30	11/11/18 01:45	1
		11/09/18 11:30	11/11/18 01:45	1

11/09/18 11:30 11/11/18 01:45

11/09/18 11:30 11/11/18 01:45

11/09/18 11:30 11/11/18 01:45

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11/09/18 11:30 11/11/18 01:45

11/09/18 11:30 11/11/18 01:45

Client: New York State D.E.C. Project/Site: Granite Pte Subdiv-Off Site #C360107A

### Lab Sample ID: 200-46033-3 Matrix: Water

5

Date Collected: 10/31/18 15:20 Date Received: 11/02/18 10:10

Client Sample ID: MW-2R

Analyte         Result         Qualifier         RL         MDL         Unit         D         Prepared         Analyzed         Dil Fac           1,4-Dioxane         ND         0.20         0.016         ug/L         11/04/18 08:26         11/04/18 20:55         1           Isotope Dilution         %Recovery         Qualifier         Limits         Prepared         Analyzed         Dil Fac           1,4-Dioxane-d8         29         10-150         10-150         Prepared         Analyzed         Dil Fac           Method: 537 (modified) - Fluorinated Alkyl Substances         Analyzed         Dil Fac         11/04/18 20:55         1           Perfluorobutanoic acid (PFBA)         ND         1.6         0.33         ng/L         11/09/18 11:30         11/11/18 02:01         1           Perfluorohexanoic acid (PFPA)         ND         1.6         0.99 ng/L         11/09/18 11:30         11/11/18 02:01         1           Perfluorohexanoic acid (PFHA)         0.28         J         1.6         0.26 ng/L         11/09/18 11:30         11/11/18 02:01         1           Perfluorooctanoic acid (PFDA)         0.91         J         1.6         0.26 ng/L         11/09/18 11:30         11/11/18 02:01         1           Perfluorooctanoic acid (PFDA
Isotope Dilution       %Recovery       Qualifier       Limits       Prepared       Analyzed       Dil Fac         1,4-Dioxane-d8       29       10.150       10.150       11/04/18 08:26       11/04/18 02:35       1         Method: 537 (modified) - Fluorinated Alkyl Substances       MDL       Unit       D       Prepared       Analyzed       Dil Fac         Method: 537 (modified) - Fluorinated Alkyl Substances       MDL       Unit       D       Prepared       Analyzed       Dil Fac         Perfluorobutanoic acid (PFBA)       ND       1.6       0.33       ng/L       11/09/18 11:30       11/11/18 02:01       1         Perfluorohexanoic acid (PFPA)       ND       1.6       0.40       ng/L       11/09/18 11:30       11/11/18 02:01       1         Perfluorohexanoic acid (PFHA)       1.3       J       1.6       0.26       ng/L       11/09/18 11:30       11/11/18 02:01       1         Perfluorohexanoic acid (PFHA)       0.28       J       1.6       0.26       ng/L       11/09/18 11:30       11/11/18 02:01       1         Perfluorohexanoic acid (PFDA)       0.91       J       1.6       0.26       ng/L       11/09/18 11:30       11/11/18 02:01       1         Perfluorodecanoic acid (PFDA)       ND
Isotope Dilution         %Recovery         Qualifier         Limits         Prepared         Analyzed         Dil Fac           1,4-Dioxane-d8         29         10-150         11/04/18 08:26         11/04/18 08:26         Dil Fac           Method:         537 (modified) - Fluorinated Alkyl Substances         Result         Qualifier         RL         MDL         Unit         D         Prepared         Analyzed         Dil Fac           Perfluorobutanoic acid (PFBA)         ND         1.6         0.33         ng/L         11/09/18 11:30         11/11/18 02:01         1           Perfluorobentanoic acid (PFPA)         ND         1.6         0.60 ng/L         11/09/18 11:30         11/11/18 02:01         1           Perfluorohexanoic acid (PFHA)         1.3         J         1.6         0.26 ng/L         11/09/18 11:30         11/11/18 02:01         1           Perfluoroheptanoic acid (PFHA)         0.28         J         1.6         0.26 ng/L         11/09/18 11:30         11/11/18 02:01         1           Perfluorononanoic acid (PFOA)         0.91         J         1.6         0.30 ng/L         11/09/18 11:30         11/11/18 02:01         1           Perfluorodecanoic acid (PFDA)         ND         1.6         0.30 ng/L         11/09/18 11:30         1
1,4-Dioxane-d8       29       10 - 150       11/04/18 08:26       11/04/18 20:55       1         Method:       537 (modified) - Fluorinated Alkyl Substances       Result Qualifier       RL       MDL       Unit       D       Prepared       Analyzed       Dil Fac         Perfluorobutanoic acid (PFBA)       ND       1.6       0.33       ng/L       11/09/18 11:30       11/11/18 02:01       1         Perfluorobexanoic acid (PFPA)       ND       1.6       0.60       ng/L       11/09/18 11:30       11/11/18 02:01       1         Perfluorohexanoic acid (PFHAA)       1.3       J       1.6       0.26       ng/L       11/09/18 11:30       11/11/18 02:01       1         Perfluorohexanoic acid (PFHAA)       0.28       J       1.6       0.26       ng/L       11/09/18 11:30       11/11/18 02:01       1         Perfluorooctanoic acid (PFDA)       0.91       J       1.6       0.26       ng/L       11/109/18 11:30       11/11/18 02:01       1         Perfluorodecanoic acid (PFDA)       ND       1.6       0.30       ng/L       11/09/18 11:30       11/11/18 02:01       1         Perfluorodecanoic acid (PFDA)       ND       1.6       0.30       ng/L       11/09/18 11:30       11/11/11/18 02:01       1
Method: 537 (modified) - Fluorinated Alkyl Substances           Analyte         Result         Qualifier         RL         MDL         Unit         D         Prepared         Analyzed         Dil Fac           Perfluorobutanoic acid (PFBA)         ND         1.6         0.33         ng/L         11/09/18 11:30         11/11/18 02:01         1           Perfluoropentanoic acid (PFPeA)         ND         1.6         0.60         ng/L         11/09/18 11:30         11/11/18 02:01         1           Perfluorohexanoic acid (PFHxA)         1.3         J         1.6         0.19         ng/L         11/09/18 11:30         11/11/18 02:01         1           Perfluorohexanoic acid (PFHxA)         0.28         J         1.6         0.26         ng/L         11/09/18 11:30         11/11/18 02:01         1           Perfluorooctanoic acid (PFOA)         0.91         J         1.6         0.26         ng/L         11/09/18 11:30         11/11/18 02:01         1           Perfluorooctanoic acid (PFOA)         0.91         J         1.6         0.30         ng/L         11/09/18 11:30         11/11/18 02:01         1           Perfluorodecanoic acid (PFDA)         ND         1.6         0.30         ng/L         11/09/18 11:30         11/11/18 02:01
Analyte         Result         Qualifier         RL         MDL         Unit         D         Prepared         Analyzed         Dil Fac           Perfluorobutanoic acid (PFBA)         ND         1.6         0.33         ng/L         11/09/18 11:30         11/11/18 02:01         1           Perfluoropentanoic acid (PFPeA)         ND         1.6         0.60         ng/L         11/09/18 11:30         11/11/18 02:01         1           Perfluorohexanoic acid (PFHxA)         1.3         J         1.6         0.19         ng/L         11/09/18 11:30         11/11/18 02:01         1           Perfluorohexanoic acid (PFHpA)         0.28         J         1.6         0.26         ng/L         11/09/18 11:30         11/11/18 02:01         1           Perfluorooctanoic acid (PFOA)         0.91         J         1.6         0.26         ng/L         11/09/18 11:30         11/11/18 02:01         1           Perfluorooctanoic acid (PFOA)         0.91         J         1.6         0.30         ng/L         11/09/18 11:30         11/11/18 02:01         1           Perfluorodecanoic acid (PFDA)         ND         1.6         0.30         ng/L         11/09/18 11:30         11/11/18 02:01         1           Perfluorodecanoic acid (PFDA)         <
Perfluorobutanoic acid (PFBA)       ND       1.6       0.33       ng/L       11/09/18       11.30       11/11/18       02:01       1         Perfluorobutanoic acid (PFPeA)       ND       1.6       0.60       ng/L       11/09/18       11.30       11/11/18       02:01       1         Perfluorobexanoic acid (PFHxA)       1.3       J       1.6       0.19       ng/L       11/09/18       11.30       11/11/18       02:01       1         Perfluorohexanoic acid (PFHxA)       1.3       J       1.6       0.19       ng/L       11/09/18       11:30       11/11/18       02:01       1         Perfluorohexanoic acid (PFHxA)       0.28       J       1.6       0.26       ng/L       11/09/18       11:30       11/11/18       02:01       1         Perfluorooctanoic acid (PFOA)       0.91       J       1.6       0.26       ng/L       11/09/18       11:30       11/11/18       02:01       1         Perfluorodecanoic acid (PFNA)       ND       1.6       0.30       ng/L       11/09/18       11:30       11/11/18       02:01       1         Perfluorodecanoic acid (PFDA)       ND       1.6       0.30       ng/L       11/09/18       11:30       11/11/18       02:01
Perfluoropentanoic acid (PFPeA)       ND       1.6       0.60 ng/L       11/09/18 11:30 11/11/18 02:01       1         Perfluorohexanoic acid (PFHxA)       1.3 J       1.6       0.19 ng/L       11/09/18 11:30 11/11/18 02:01       1         Perfluoroheptanoic acid (PFHpA)       0.28 J       1.6       0.26 ng/L       11/09/18 11:30 11/11/18 02:01       1         Perfluorooctanoic acid (PFOA)       0.91 J       1.6       0.26 ng/L       11/09/18 11:30 11/11/18 02:01       1         Perfluorooctanoic acid (PFNA)       0.91 J       1.6       0.26 ng/L       11/09/18 11:30 11/11/18 02:01       1         Perfluorooctanoic acid (PFNA)       ND       1.6       0.30 ng/L       11/09/18 11:30 11/11/18 02:01       1         Perfluorodecanoic acid (PFDA)       ND       1.6       0.30 ng/L       11/09/18 11:30 11/11/18 02:01       1         Perfluorodecanoic acid (PFDA)       ND       1.6       0.30 ng/L       11/09/18 11:30 11/11/18 02:01       1         Perfluorodecanoic acid (PFDA)       ND       1.6       0.20 ng/L       11/09/18 11:30 11/11/18 02:01       1         Perfluorododecanoic acid (PFDA)       ND       1.6       0.28 ng/L       11/09/18 11:30 11/11/18 02:01       1         Perfluorotidecanoic acid (PFDA)       ND       1.6       0.28 ng/L       11/0
Perfluorohexanoic acid (PFHxA)       1.3 J       1.6       0.19 ng/L       11/09/18 11:30       11/11/18 02:01       1         Perfluoroheptanoic acid (PFHpA)       0.28 J       1.6       0.26 ng/L       11/09/18 11:30       11/11/18 02:01       1         Perfluorooctanoic acid (PFOA)       0.91 J       1.6       0.26 ng/L       11/09/18 11:30       11/11/18 02:01       1         Perfluorooctanoic acid (PFOA)       0.91 J       1.6       0.26 ng/L       11/09/18 11:30       11/11/18 02:01       1         Perfluorooctanoic acid (PFNA)       ND       1.6       0.30 ng/L       11/09/18 11:30       11/11/18 02:01       1         Perfluorodecanoic acid (PFDA)       ND       1.6       0.30 ng/L       11/09/18 11:30       11/11/18 02:01       1         Perfluorodecanoic acid (PFDA)       ND       1.6       0.30 ng/L       11/09/18 11:30       11/11/18 02:01       1         Perfluoroundecanoic acid (PFDA)       ND       1.6       0.20 ng/L       11/09/18 11:30       11/11/18 02:01       1         Perfluorododecanoic acid (PFDoA)       ND       1.6       0.28 ng/L       11/09/18 11:30       11/11/18 02:01       1         Perfluorotidecanoic acid (PFDoA)       ND       1.6       0.28 ng/L       11/09/18 11:30       11/11/18 02:01
Perfluoroheptanoic acid (PFHpA)       0.28 J       1.6       0.26 ng/L       11/09/18 11:30 11/11/18 02:01       1         Perfluorooctanoic acid (PFOA)       0.91 J       1.6       0.26 ng/L       11/09/18 11:30 11/11/18 02:01       1         Perfluorooctanoic acid (PFOA)       0.91 J       1.6       0.26 ng/L       11/09/18 11:30 11/11/18 02:01       1         Perfluorononanoic acid (PFNA)       ND       1.6       0.30 ng/L       11/09/18 11:30 11/11/18 02:01       1         Perfluorodecanoic acid (PFDA)       ND       1.6       0.30 ng/L       11/09/18 11:30 11/11/18 02:01       1         Perfluoroundecanoic acid (PFDA)       ND       1.6       0.20 ng/L       11/09/18 11:30 11/11/18 02:01       1         Perfluoroundecanoic acid (PFDA)       ND       1.6       0.20 ng/L       11/09/18 11:30 11/11/18 02:01       1         Perfluorododecanoic acid (PFDA)       ND       1.6       0.28 ng/L       11/09/18 11:30 11/11/18 02:01       1         Perfluorododecanoic acid (PFDA)       ND       1.6       0.28 ng/L       11/09/18 11:30 11/11/18 02:01       1         Perfluorotoidecanoic acid (PFDA)       ND       1.6       0.28 ng/L       11/09/18 11:30 11/11/18 02:01       1         Perfluorotidecanoic acid (PFDA)       ND       1.6       0.19 ng/L       1
Perfluorooctanoic acid (PFOA)         0.91 J         1.6         0.26 ng/L         11/09/18 11:30         11/11/18 02:01         1           Perfluorononanoic acid (PFNA)         ND         1.6         0.30 ng/L         11/09/18 11:30         11/11/18 02:01         1           Perfluorodecanoic acid (PFDA)         ND         1.6         0.30 ng/L         11/09/18 11:30         11/11/18 02:01         1           Perfluoroundecanoic acid (PFDA)         ND         1.6         0.20 ng/L         11/09/18 11:30         11/11/18 02:01         1           Perfluoroundecanoic acid (PFDA)         ND         1.6         0.20 ng/L         11/09/18 11:30         11/11/18 02:01         1           Perfluoroundecanoic acid (PFDA)         ND         1.6         0.28 ng/L         11/09/18 11:30         11/11/18 02:01         1           Perfluorotidecanoic acid (PFDA)         ND         1.6         0.28 ng/L         11/09/18 11:30         11/11/18 02:01         1           Perfluorotidecanoic acid (PFDA)         ND         1.6         0.28 ng/L         11/09/18 11:30         11/11/18 02:01         1
Perfluorononanoic acid (PFNA)         ND         1.6         0.30 ng/L         11/09/18 11:30 11/11/18 02:01         1           Perfluorodecanoic acid (PFDA)         ND         1.6         0.30 ng/L         11/09/18 11:30 11/11/18 02:01         1           Perfluoroundecanoic acid (PFDA)         ND         1.6         0.20 ng/L         11/09/18 11:30 11/11/18 02:01         1           Perfluoroundecanoic acid (PFDA)         0.20 J         1.6         0.20 ng/L         11/09/18 11:30 11/11/18 02:01         1           (PFUnA)         Perfluorododecanoic acid (PFDoA)         ND         1.6         0.28 ng/L         11/09/18 11:30 11/11/18 02:01         1           Perfluorotridecanoic acid (PFDoA)         ND         1.6         0.28 ng/L         11/09/18 11:30 11/11/18 02:01         1
Perfluorodecanoic acid (PFDA)         ND         1.6         0.30 ng/L         11/09/18 11:30 11/11/18 02:01         1           Perfluoroundecanoic acid         0.20 J         1.6         0.20 ng/L         11/09/18 11:30 11/11/18 02:01         1           Perfluoroundecanoic acid         0.20 J         1.6         0.20 ng/L         11/09/18 11:30 11/11/18 02:01         1           Perfluorododecanoic acid (PFDoA)         ND         1.6         0.28 ng/L         11/09/18 11:30 11/11/18 02:01         1           Perfluorotridecanoic acid (PFDoA)         ND         1.6         0.28 ng/L         11/09/18 11:30 11/11/18 02:01         1
Perfluoroundecanoic acid         0.20 J         1.6         0.20 ng/L         11/09/18 11:30         11/11/18 02:01         1           (PFUnA)         Perfluorododecanoic acid (PFDoA)         ND         1.6         0.28 ng/L         11/09/18 11:30         11/11/18 02:01         1           Perfluorotidecanoic acid (PFDoA)         ND         1.6         0.28 ng/L         11/09/18 11:30         11/11/18 02:01         1           Perfluorotidecanoic acid (PETriA)         ND         1.6         0.19 ng/L         11/09/18 11:30         11/11/18 02:01         1
(PFUnA)         ND         1.6         0.28 ng/L         11/09/18 11:30         11/11/18 02:01         1           Perfluorotodecanoic acid (PFDoA)         ND         1.6         0.19 ng/L         11/09/18 11:30         11/11/18 02:01         1
Perfluorododecanoic acid (PFDoA)         ND         1.6         0.28 ng/L         11/09/18 11:30         11/11/18 02:01         1           Perfluorotridecanoic acid (PETriA)         ND         1.6         0.19 ng/L         11/09/18 11:30         11/11/18 02:01         1
Perfluorotridecanoic acid (PETriΔ) ND 16 0.10 pg/l 11/00/18 11/30 11/11/19 02/01 1
Perfluorotetradecanoic acid (PFTeA)         ND         1.6         0.36 ng/L         11/09/18 11:30         11/11/18 02:01         1
Perfluorobutanesulfonic acid (PFBS) ND 1.6 0.35 ng/L 11/09/18 11:30 11/11/18 02:01 1
Perfluorohexanesulfonic acid (PFHxS)         ND         1.6         0.21 ng/L         11/09/18 11:30         11/11/18 02:01         1
Perfluoroheptanesulfonic Acid ND 1.6 0.66 ng/L 11/09/18 11:30 11/11/18 02:01 1 (PFHpS)
Perfluorodecanesulfonic acid (PFDS)         ND         1.6         0.42 ng/L         11/09/18 11:30 11/11/18 02:01         1
Perfluorooctanesulfonic acid (PFOS)         ND         1.6         0.61 ng/L         11/09/18 11:30         11/11/18 02:01         1
Perfluorooctanesulfonamide (FOSA)         ND         1.6         0.45 ng/L         11/09/18 11:30         11/11/18 02:01         1
N-methylperfluorooctanesulfonamidoa ND 16 0.36 ng/L 11/09/18 11:30 11/11/18 02:01 1 cetic acid (NMeFOSAA)
N-ethylperfluorooctanesulfonamidoac ND 16 0.56 ng/L 11/09/18 11:30 11/11/18 02:01 1 etic acid (NEtFOSAA)
6:2 FTS ND 16 0.80 ng/L 11/09/18 11:30 11/11/18 02:01 1
8:2 FTS ND 16 0.45 ng/L 11/09/18 11:30 11/11/18 02:01 1
Isotope Dilution %Recovery Qualifier Limits Prepared Analyzed Dil Fac
13C8 FOSA         62         25 - 150         11/09/18 11:30         11/11/18 02:01         1
13C4 PFBA 44 25 - 150 11/09/18 11:30 11/11/18 02:01 1
13C5-PFPeA DNU 50 25 - 150 11/09/18 11:30 11/11/18 02:01 1
13C2 PFHxA 42 25 - 150 11/09/18 11:30 11/11/18 02:01 1
13C4 PFHpA 56 25 - 150 11/09/18 11:30 11/11/18 02:01 1
13C4 PFOA 74 25 - 150 11/09/18 11:30 11/11/18 02:01 1
13C5 PFNA 88 25 - 150 11/09/18 11:30 11/11/18 02:01 1
13C2 PFDA 84 25 - 150 11/09/18 11:30 11/11/18 02:01 1
13C2 PFUnA 90 25 - 150 11/09/18 11:30 11/11/18 02:01 1
13C2 PFDoA 87 25 - 150 11/09/18 11:30 11/11/18 02:01 1
13C2 PFTeDA 87 25 - 150 11/09/18 11:30 11/11/18 02:01 1
13C3 PFBS         72         25 - 150         11/09/18 11:30         11/11/18 02:01         1
1802 PFHxS 74 25 - 150 11/09/18 11:30 11/11/18 02:01 1
13C4 PFOS         80         25 - 150         11/09/18 11:30         11/11/18 02:01         1
d3-NMeFOSAA 79 25-150 11/09/18 11:30 11/11/18 02:01 1
d5-NEtFOSAA 90 25 - 150 11/09/18 11:30 11/11/18 02:01 1
M2-6:2 FTS 213 * 25 - 150 11/09/18 11:30 11/11/18 02:01 1
M2-8:2 FTS         113         25 - 150         11/09/18 11:30         11/11/18 02:01         1

TestAmerica Burlington

Client: New York State D.E.C. Project/Site: Granite Pte Subdiv-Off Site #C360107A

### Client Sample ID: DUPLICATE Date Collected: 10/31/18 15:22 Date Received: 11/02/18 10:10

### Lab Sample ID: 200-46033-4 Matrix: Water

5

Method: 8270D SIM ID - Semiv Analyte	volatile Orga Result	anic Comp Qualifier	ounds (GC/N RL	<mark>/IS SIM</mark> / MDL	<mark>Isotope Dilι</mark> Unit	<mark>ition)</mark> D Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.016	ug/L		6 11/04/18 21:11	1
Isotope Dilution	%Recovery	Qualifier	l imits		-	Prenared	Analyzed	Dil Fac
1 4-Dioxane-d8	33		10 - 150			11/04/18 08.2	$\overline{6}  \overline{11/04/18}  21.11$	1
-								·
Method: 537 (modified) - Fluor Analyte	rinated Alky Result	/I Substan Qualifier	ces RL	MDL	Unit	D Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		1.6	0.33	ng/L	- <u>.</u> 11/09/18 11:3	0 11/11/18 02:17	1
Perfluoropentanoic acid (PFPeA)	ND		1.6	0.59	ng/L	11/09/18 11:3	0 11/11/18 02:17	1
Perfluorohexanoic acid (PFHxA)	0.70	J	1.6	0.19	ng/L	11/09/18 11:3	0 11/11/18 02:17	1
Perfluoroheptanoic acid (PFHpA)	0.30	J	1.6	0.25	ng/L	11/09/18 11:3	0 11/11/18 02:17	1
Perfluorooctanoic acid (PFOA)	1.2	J	1.6	0.25	ng/L	11/09/18 11:3	0 11/11/18 02:17	1
Perfluorononanoic acid (PFNA)	ND	-	1.6	0.30	ng/L	11/09/18 11:3	0 11/11/18 02:17	1
Perfluorodecanoic acid (PFDA)	ND		1.6	0.30	ng/L	11/09/18 11:3	0 11/11/18 02:17	1
Perfluoroundecanoic acid (PFUnA)	0.27	J	1.6	0.20	ng/L	11/09/18 11:3	0 11/11/18 02:17	1
Perfluorododecanoic acid (PFDoA)	ND		1.6	0.28	ng/L	11/09/18 11:3	0 11/11/18 02:17	1
Perfluorotridecanoic acid (PFTriA)	ND		1.6	0.19	ng/L	11/09/18 11:3	0 11/11/18 02:17	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.6	0.36	ng/L	11/09/18 11:3	0 11/11/18 02:17	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.6	0.35	ng/L	11/09/18 11:3	0 11/11/18 02:17	1
Perfluorohexanesulfonic acid	0.23	J	1.6	0.21	ng/L	11/09/18 11:3	0 11/11/18 02:17	1
(PFHxS) Perfluoroheptanesulfonic Acid	ND		1.6	0.65	ng/L	11/09/18 11:3	0 11/11/18 02:17	1
(PFHpS)			4.0	o 40				
Perfluorodecanesulfonic acid (PFDS)	ND		1.6	0.42	ng/L	11/09/18 11:3	0 11/11/18 02:17	1
Perfluorooctanesulfonic acid (PFOS)	0.64	J	1.6	0.60	ng/L	11/09/18 11:3	0 11/11/18 02:17	1
Perfluorooctanesulfonamide (FOSA)	ND		1.6	0.44	ng/L	11/09/18 11:3	0 11/11/18 02:17	1
N-methylperfluorooctanesulfonamidoa cetic acid (NMeFOSAA)	ND		16	0.36	ng/∟	11/09/18 11:3	0 11/11/18 02:17	1
N-ethylperfluorooctanesulfonamidoac etic acid (NEtFOSAA)			10	0.50	ng/L	11/09/18 11:3	0 11/11/18 02:17	1
0.2 F13			10	0.79	ng/L	11/09/10 11.3	0 11/11/10 02.17	1
0.2 F 13	ND		10	0.44	ng/L	11/09/16 11.3	0 11/11/10 02.17	I
Isotope Dilution	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
13C8 FOSA	56		25 - 150			11/09/18 11:3	0 11/11/18 02:17	1
13C4 PFBA	40		25 - 150			11/09/18 11:3	0 11/11/18 02:17	1
13C5-PFPeA DNU	49		25 - 150			11/09/18 11:3	0 11/11/18 02:17	1
13C2 PFHxA	41		25 - 150			11/09/18 11:3	0 11/11/18 02:17	1
13C4 PFHpA	55		25 - 150			11/09/18 11:3	0 11/11/18 02:17	1
13C4 PFOA	72		25 - 150			11/09/18 11:3	0 11/11/18 02:17	1
13C5 PFNA	76		25 - 150			11/09/18 11:3	0 11/11/18 02:17	1
13C2 PFDA	79		25 - 150			11/09/18 11:3	0 11/11/18 02:17	1
13C2 PFUnA	78		25 - 150			11/09/18 11:3	0 11/11/18 02:17	1
13C2 PFDoA	73		25 - 150			11/09/18 11:3	0 11/11/18 02:17	1
13C2 PFTeDA	72		25 - 150			11/09/18 11:3	0 11/11/18 02:17	1
13C3 PFBS	62		25 - 150			11/09/18 11:3	0 11/11/18 02:17	1
18O2 PFHxS	68		25 - 150			11/09/18 11:3	0 11/11/18 02:17	1
13C4 PFOS	73		25 - 150			11/09/18 11:3	0 11/11/18 02:17	1
d3-NMeFOSAA	65		25 - 150			11/09/18 11:3	0 11/11/18 02:17	1
d5-NEtFOSAA	77		25 - 150			11/09/18 11:3	0 11/11/18 02:17	1
M2-6:2 FTS	151	*	25 - 150			11/09/18 11:3	0 11/11/18 02.17	1

TestAmerica Burlington

### Client: New York State D.E.C. Project/Site: Granite Pte Subdiv-Off Site #C360107A

### Client Sample ID: DUPLICATE Date Collected: 10/31/18 15:22 Date Received: 11/02/18 10:10

Method: 537 (modified) - Fluor	inated Alky	VI Substand	ces (Continued)			
Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
M2-8:2 FTS	100		25 - 150	11/09/18 11:30	11/11/18 02:17	1

### Client Sample ID: EQUIPMENT BLANK Date Collected: 10/31/18 14:15 Date Received: 11/02/18 10:10

Method: 537 (modified) - Fluo Analyte	<mark>rinated Alky</mark> Result	<mark>/I Substan</mark> Qualifier	<mark>ces</mark> RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		1.6	0.33	ng/L		11/09/18 11:30	11/11/18 02:33	1
Perfluoropentanoic acid (PFPeA)	ND		1.6	0.61	ng/L		11/09/18 11:30	11/11/18 02:33	1
Perfluorohexanoic acid (PFHxA)	ND		1.6	0.19	ng/L		11/09/18 11:30	11/11/18 02:33	1
Perfluoroheptanoic acid (PFHpA)	ND		1.6	0.26	ng/L		11/09/18 11:30	11/11/18 02:33	1
Perfluorooctanoic acid (PFOA)	ND		1.6	0.26	ng/L		11/09/18 11:30	11/11/18 02:33	1
Perfluorononanoic acid (PFNA)	ND		1.6	0.31	ng/L		11/09/18 11:30	11/11/18 02:33	1
Perfluorodecanoic acid (PFDA)	ND		1.6	0.31	ng/L		11/09/18 11:30	11/11/18 02:33	1
Perfluoroundecanoic acid (PFUnA)	0.29	J	1.6	0.20	ng/L		11/09/18 11:30	11/11/18 02:33	1
Perfluorododecanoic acid (PFDoA)	ND		1.6	0.28	ng/L		11/09/18 11:30	11/11/18 02:33	1
Perfluorotridecanoic acid (PFTriA)	ND		1.6	0.19	ng/L		11/09/18 11:30	11/11/18 02:33	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.6	0.36	ng/L		11/09/18 11:30	11/11/18 02:33	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.6	0.36	ng/L		11/09/18 11:30	11/11/18 02:33	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.6	0.21	ng/L		11/09/18 11:30	11/11/18 02:33	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.6	0.66	ng/L		11/09/18 11:30	11/11/18 02:33	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.6	0.43	ng/L		11/09/18 11:30	11/11/18 02:33	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.6	0.61	ng/L		11/09/18 11:30	11/11/18 02:33	1
Perfluorooctanesulfonamide (FOSA)	ND		1.6	0.45	ng/L		11/09/18 11:30	11/11/18 02:33	1
N-methylperfluorooctanesulfonamidoa cetic acid (NMeFOSAA)	ND		16	0.36	ng/L		11/09/18 11:30	11/11/18 02:33	1
N-ethylperfluorooctanesulfonamidoac etic acid (NEtFOSAA)	ND		16	0.57	ng/L		11/09/18 11:30	11/11/18 02:33	1
6:2 FTS	ND		16	0.81	ng/L		11/09/18 11:30	11/11/18 02:33	1
8:2 FTS	ND		16	0.45	ng/L		11/09/18 11:30	11/11/18 02:33	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 FOSA	53		25 - 150				11/09/18 11:30	11/11/18 02:33	1
13C4 PFBA	70		25 - 150				11/09/18 11:30	11/11/18 02:33	1
13C5-PFPeA DNU	77		25 - 150				11/09/18 11:30	11/11/18 02:33	1
13C2 PFHxA	76		25 - 150				11/09/18 11:30	11/11/18 02:33	1
13C4 PFHpA	77		25 - 150				11/09/18 11:30	11/11/18 02:33	1
13C4 PFOA	82		25 - 150				11/09/18 11:30	11/11/18 02:33	1
13C5 PFNA	84		25 - 150				11/09/18 11:30	11/11/18 02:33	1
13C2 PFDA	91		25 - 150				11/09/18 11:30	11/11/18 02:33	1
13C2 PFUnA	85		25 - 150				11/09/18 11:30	11/11/18 02:33	1
13C2 PFDoA	79		25 - 150				11/09/18 11:30	11/11/18 02:33	1
13C2 PFTeDA	73		25 - 150				11/09/18 11:30	11/11/18 02:33	1
13C3 PFBS	69		25 - 150				11/09/18 11:30	11/11/18 02:33	1
1802 PFHxS	76		25 - 150				11/09/18 11:30	11/11/18 02:33	1
13C4 PFOS	78		25 - 150				11/09/18 11:30	11/11/18 02:33	1
d3-NMeFOSAA	74		25 - 150				11/09/18 11:30	11/11/18 02:33	1
d5-NEtFOSAA	87		25 - 150				11/09/18 11:30	11/11/18 02:33	1

TestAmerica Job ID: 200-46033-1

Lab Sample ID: 200-46033-4

Lab Sample ID: 200-46033-5

Matrix: Water

Matrix: Water

Client: New York State D.E.C. Project/Site: Granite Pte Subdiv-Off Site #C360107A

### Client Sample ID: EQUIPMENT BLANK Date Collected: 10/31/18 14:15 Date Received: 11/02/18 10:10

Method: 537 (modified) - Fluc	orinated Alkyl	Substances (Contin	ued)	
Isotope Dilution	%Recovery Q	ualifier Limits	Prepared	Analyzed
M2-6:2 FTS	125	25 - 150	11/09/18 11:30	11/11/18 02:33
M2-8:2 FTS	94	25 - 150	11/09/18 11:30	11/11/18 02:33

### **Client Sample ID: MW-3R** Date Collected: 10/31/18 15:15 Date Received: 11/02/18 10:10

### 02:33 1 Lab Sample ID: 200-46033-6

Matrix: Water

ND %Recovery 31 ated Alky Result ND 0.22 ND 0.47 ND 0.47 ND 0.20 ND	F1 F2 Qualifier (I Substan Qualifier J J J	0.20 Limits 10-150 Ces RL 1.6 1.6 1.6 1.6 1.6 1.6 1.6 1.6	0.016 MDL 0.33 0.61 0.26 0.26 0.31 0.31	Unit ng/L ng/L ng/L ng/L ng/L ng/L	D	I1/04/18 08:26           Prepared           11/04/18 08:26           Prepared           11/09/18 11:30           11/09/18 11:30           11/09/18 11:30           11/09/18 11:30           11/09/18 11:30           11/09/18 11:30           11/09/18 11:30           11/09/18 11:30           11/09/18 11:30           11/09/18 11:30	Analyzed           11/04/18 18:58           Analyzed           11/04/18 18:58           Analyzed           11/11/18 02:49           11/11/18 02:49           11/11/18 02:49           11/11/18 02:49           11/11/18 02:49           11/11/18 02:49           11/11/18 02:49           11/11/18 02:49           11/11/18 02:49           11/11/18 02:49	1 <i>Dil Fac</i> 1 Dil Fac 1 1 1 1
6Recovery 31 ated Alky Result ND 0.22 ND 0.47 ND 0.20 ND 0.20 ND	Qualifier A Substan Qualifier J J J	Limits 10-150 Ces RL 1.6 1.6 1.6 1.6 1.6 1.6 1.6 1.6	MDL 0.33 0.61 0.19 0.26 0.26 0.31 0.31	Unit ng/L ng/L ng/L ng/L ng/L ng/L	<u>D</u>	Prepared 11/04/18 08:26 Prepared 11/09/18 11:30 11/09/18 11:30 11/09/18 11:30 11/09/18 11:30 11/09/18 11:30 11/09/18 11:30	Analyzed 11/04/18 18:58 Analyzed 11/11/18 02:49 11/11/18 02:49 11/11/18 02:49 11/11/18 02:49 11/11/18 02:49	Dil Fac 1 Dil Fac 1 1 1 1
31 ated Alky Result ND 0.22 ND 0.47 ND 0.47 ND 0.20 ND	/ <mark>I Substan</mark> Qualifier J J J	IO - 150           RL           1.6	MDL 0.33 0.61 0.19 0.26 0.26 0.31 0.31	Unit ng/L ng/L ng/L ng/L ng/L	<u>D</u>	Prepared           11/04/18 08:26           Prepared           11/09/18 11:30           11/09/18 11:30           11/09/18 11:30           11/09/18 11:30           11/09/18 11:30           11/09/18 11:30           11/09/18 11:30	Analyzed 11/04/18 18:58 Analyzed 11/11/18 02:49 11/11/18 02:49 11/11/18 02:49 11/11/18 02:49 11/11/18 02:49	1 Dil Fac 1 1 1 1
ated Alky Result ND 0.22 ND 0.47 ND 0.20 ND	<mark>/I Substan</mark> Qualifier J J J	RL	MDL 0.33 0.61 0.19 0.26 0.26 0.31 0.31	Unit ng/L ng/L ng/L ng/L ng/L	<u>D</u>	Prepared 11/09/18 11:30 11/09/18 11:30 11/09/18 11:30 11/09/18 11:30 11/09/18 11:30 11/09/18 11:30	Analyzed 11/11/18 02:49 11/11/18 02:49 11/11/18 02:49 11/11/18 02:49 11/11/18 02:49	Dil Fac 1 1 1 1
Result ND ND 0.22 ND 0.47 ND ND 0.20 ND	Qualifier J J J	RL           1.6           1.6           1.6           1.6           1.6           1.6           1.6           1.6           1.6           1.6           1.6           1.6           1.6           1.6           1.6           1.6           1.6           1.6           1.6	MDL 0.33 0.61 0.19 0.26 0.26 0.31 0.31	ng/L ng/L ng/L ng/L ng/L ng/L	<u>D</u>	Prepared 11/09/18 11:30 11/09/18 11:30 11/09/18 11:30 11/09/18 11:30 11/09/18 11:30 11/09/18 11:30	Analyzed 11/11/18 02:49 11/11/18 02:49 11/11/18 02:49 11/11/18 02:49 11/11/18 02:49	Dil Fac 1 1 1
ND ND 0.22 ND 0.47 ND ND 0.20 ND	J J	1.6 1.6 1.6 1.6 1.6 1.6 1.6 1.6	0.33 0.61 0.19 0.26 0.26 0.31 0.31	ng/L ng/L ng/L ng/L ng/L ng/L		11/09/18 11:30 11/09/18 11:30 11/09/18 11:30 11/09/18 11:30 11/09/18 11:30 11/09/18 11:30	11/11/18 02:49 11/11/18 02:49 11/11/18 02:49 11/11/18 02:49 11/11/18 02:49	1 1 1
ND 0.22 ND 0.47 ND ND 0.20 ND	J	1.6 1.6 1.6 1.6 1.6 1.6 1.6	0.61 0.19 0.26 0.26 0.31 0.31	ng/L ng/L ng/L ng/L ng/L		11/09/18 11:30 11/09/18 11:30 11/09/18 11:30 11/09/18 11:30 11/09/18 11:30	11/11/18 02:49 11/11/18 02:49 11/11/18 02:49 11/11/18 02:49 11/11/18 02:49	1 1 1
0.22 ND 0.47 ND ND 0.20 ND	J	1.6 1.6 1.6 1.6 1.6 1.6	0.19 0.26 0.26 0.31 0.31	ng/L ng/L ng/L ng/L		11/09/18 11:30 11/09/18 11:30 11/09/18 11:30 11/09/18 11:30	11/11/18 02:49 11/11/18 02:49 11/11/18 02:49	1
ND 0.47 ND 0.20 ND	J	1.6 1.6 1.6 1.6 1.6	0.26 0.26 0.31 0.31	ng/L ng/L ng/L		11/09/18 11:30 11/09/18 11:30 11/09/18 11:30	11/11/18 02:49 11/11/18 02:49	1
0.47 ND ND 0.20 ND	J	1.6 1.6 1.6 1.6	0.26 0.31 0.31	ng/L ng/L		11/09/18 11:30 11/09/18 11:30	11/11/18 02:49	-
ND ND 0.20 ND	J	1.6 1.6 1.6	0.31 0.31	ng/L		11/09/18 11.30		1
ND 0.20 ND	J	1.6 1.6	0.31				11/11/18 02:49	1
0.20 ND	J	1.6		ng/L		11/09/18 11:30	11/11/18 02:49	1
			0.20	ng/L		11/09/18 11:30	11/11/18 02:49	1
		1.6	0.28	ng/L		11/09/18 11:30	11/11/18 02:49	1
שא		1.6	0.19	ng/L		11/09/18 11:30	11/11/18 02:49	1
ND		1.6	0.37	ng/L		11/09/18 11:30	11/11/18 02:49	1
ND		1.6	0.36	ng/L		11/09/18 11:30	11/11/18 02:49	1
ND		1.6	0.21	ng/L		11/09/18 11:30	11/11/18 02:49	1
ND		1.6	0.67	ng/L		11/09/18 11:30	11/11/18 02:49	1
ND		1.6	0.43	ng/L		11/09/18 11:30	11/11/18 02:49	1
ND		1.6	0.62	ng/L		11/09/18 11:30	11/11/18 02:49	1
ND		1.6	0.45	ng/L		11/09/18 11:30	11/11/18 02:49	1
ND		16	0.37	ng/L		11/09/18 11:30	11/11/18 02:49	1
ND		16	0.57	ng/L		11/09/18 11:30	11/11/18 02:49	1
ND		16	0.81	ng/L		11/09/18 11:30	11/11/18 02:49	1
ND		16	0.45	ng/L		11/09/18 11:30	11/11/18 02:49	1
%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
67		25 - 150				11/09/18 11:30	11/11/18 02:49	1
58		25 - 150				11/09/18 11:30	11/11/18 02:49	1
62		25 - 150				11/09/18 11:30	11/11/18 02:49	1
69		25 - 150				11/09/18 11:30	11/11/18 02:49	1
72		25 - 150				11/09/18 11:30	11/11/18 02:49	1
82		25 - 150				11/09/18 11:30	11/11/18 02:49	1
85		25 - 150				11/09/18 11:30	11/11/18 02:49	1
91		25 - 150				11/09/18 11:30	11/11/18 02:49	1
80		25 - 150				11/09/18 11:30	11/11/18 02:49	1
	NU ND ND ND ND ND ND ND ND ND ND SRecovery 67 58 62 69 72 88 62 69 72 82 85 91 89	ND         SRecovery         Qualifier         67         58         62         69         72         82         85         91         89	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	ND         1.6         0.28         ng/L           ND         1.6         0.19         ng/L           ND         1.6         0.37         ng/L           ND         1.6         0.36         ng/L           ND         1.6         0.36         ng/L           ND         1.6         0.21         ng/L           ND         1.6         0.67         ng/L           ND         1.6         0.62         ng/L           ND         1.6         0.43         ng/L           ND         1.6         0.43         ng/L           ND         1.6         0.45         ng/L           ND         1.6         0.45         ng/L           ND         1.6         0.37         ng/L           ND         16         0.37         ng/L           ND         16         0.45         ng/L           ND         16         0.45         ng/L           ND         16         0.45         ng/L           SRecovery         Qualifier         Limits         -           67         25 - 150         -         -           69         25 - 150	ND         1.6         0.28         ng/L         11/09/18         11:30           ND         1.6         0.19         ng/L         11/09/18         11:30           ND         1.6         0.37         ng/L         11/09/18         11:30           ND         1.6         0.36         ng/L         11/09/18         11:30           ND         1.6         0.21         ng/L         11/09/18         11:30           ND         1.6         0.67         ng/L         11/09/18         11:30           ND         1.6         0.62         ng/L         11/09/18         11:30           ND         1.6         0.62         ng/L         11/09/18         11:30           ND         1.6         0.62         ng/L         11/09/18         11:30           ND         1.6         0.43         ng/L         11/09/18         11:30           ND         1.6         0.45         ng/L         11/09/18         11:30           ND         1.6         0.81         ng/L         11/09/18         11:30           ND         1.6         0.81         ng/L         11/09/18         11:30           SRecovery         Qualif	ND         1.6         0.28         ng/L         11/09/18         11:30         11/11/18         02:49           ND         1.6         0.19         ng/L         11/09/18         11:30         11/11/18         02:49           ND         1.6         0.37         ng/L         11/09/18         11:30         11/11/18         02:49           ND         1.6         0.36         ng/L         11/09/18         11:30         11/11/18         02:49           ND         1.6         0.21         ng/L         11/09/18         11:30         11/11/18         02:49           ND         1.6         0.67         ng/L         11/09/18         11:30         11/11/18         02:49           ND         1.6         0.67         ng/L         11/09/18         11:30         11/11/18         02:49           ND         1.6         0.45         ng/L         11/09/18         11:30         11/11/18         02:49           ND         1.6         0.45         ng/L         11/09/18         11:30         11/11/18         02:49           ND         1.6         0.81         ng/L         11/09/18         11:30         11/11/18         02:49           ND<

TestAmerica Burlington

11/19/2018

TestAmerica Job ID: 200-46033-1 Lab Sample ID: 200-46033-5 Matrix: Water

Dil Fac

1

Limits

25 - 150

25 - 150

25 - 150

25 - 150

25 - 150

25 - 150

25 - 150

25 - 150

Client: New York State D.E.C. Project/Site: Granite Pte Subdiv-Off Site #C360107A

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

%Recovery Qualifier

76

80

72

86

78

66

83

139

TestAmerica Job ID: 200-46033-1

### Client Sample ID: MW-3R Date Collected: 10/31/18 15:15 Date Received: 11/02/18 10:10

Isotope Dilution

13C2 PFDoA

13C3 PFBS

1802 PFHxS

13C4 PFOS

d3-NMeFOSAA

d5-NEtFOSAA

M2-6:2 FTS

13C2 PFTeDA

Lab Sample	ID:	200-46033-6
		Matrix: Water

Matrix:	Water	
Analyzed	Dil Fac	5
11/11/18 02:49	1	
11/11/18 02:49	1	
11/11/18 02:49	1	
11/11/18 02:49	1	
11/11/18 02:49	1	
11/11/18 02:49	1	Q
11/11/18 02:49	1	0
11/11/18 02:49	1	0
11/11/18 02:49	1	9
	Matrix: <u>Analyzed</u> 11/11/18 02:49 11/11/18 02:49 11/11/18 02:49 11/11/18 02:49 11/11/18 02:49 11/11/18 02:49 11/11/18 02:49 11/11/18 02:49 11/11/18 02:49 11/11/18 02:49	Analyzed         Dil Fac           11/11/18 02:49         1           11/11/18 02:49         1           11/11/18 02:49         1           11/11/18 02:49         1           11/11/18 02:49         1           11/11/18 02:49         1           11/11/18 02:49         1           11/11/18 02:49         1           11/11/18 02:49         1           11/11/18 02:49         1           11/11/18 02:49         1           11/11/18 02:49         1           11/11/18 02:49         1           11/11/18 02:49         1           11/11/18 02:49         1

M2-8:2 FTS	116	25 - 150	11/09/18 11:30 11/11/18 02:49	1
Client Sample ID: DRU	M WASTE CHAR		Lab Sample ID: 200-4603	3-7
Date Collected: 10/31/18 15:	35		Matrix: Wa	ater

Date Received: 11/02/18 10:10

Method: 6010D - Metals (ICP)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	6.7	J	10.0	2.5	ug/L		11/09/18 01:00	11/09/18 17:23	1

Client: New York State D.E.C. Project/Site: Granite Pte Subdiv-Off Site #C360107A

537 (modified)

Client Sam Date Collecte Date Receive	ple ID: MW d: 10/31/18 1 d: 11/02/18 1	/-1AR 15:30 0:10					Lab S	ample ID	: 200-46033-1 Matrix: Water
Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab	
Total/NA	Prep	3510C			565693	11/04/18 08:26	KMH	TAL EDI	
Total/NA	Analysis	8270D SIM ID		1	565750	11/04/18 20:38	YAH	TAL EDI	
Total/NA	Prep	3535			136595	11/09/18 11:30	JM1	TAL BUR	
Total/NA	Analysis	537 (modified)		1	136651	11/11/18 01:29	BWC	TAL BUR	
Client Sam	ple ID: FIE	LD BLANK					Lab S	Sample ID	: 200-46033-2
Date Collecte	d: 10/31/18 1	3:30							Matrix: Water
Date Receive	d: 11/02/18 1	0:10							
	Batch	Batch		Dilution	Batch	Prepared			
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab	
Total/NA	Prep	3535			136595	11/09/18 11:30	JM1	TAL BUR	

136651 11/11/18 01:45 BWC

### **Client Sample ID: MW-2R** Date Collected: 10/31/18 15:20 Date Received: 11/02/18 10:10

Analysis

Prep Type Total/NA Total/NA

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			565693	11/04/18 08:26	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	565750	11/04/18 20:55	YAH	TAL EDI
Total/NA	Prep	3535			136595	11/09/18 11:30	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	136651	11/11/18 02:01	BWC	TAL BUR

### **Client Sample ID: DUPLICATE** Date Collected: 10/31/18 15:22 Date Received: 11/02/18 10:10

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			565693	11/04/18 08:26	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	565750	11/04/18 21:11	YAH	TAL EDI
Total/NA	Prep	3535			136595	11/09/18 11:30	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	136651	11/11/18 02:17	BWC	TAL BUR

### **Client Sample ID: EQUIPMENT BLANK** Date Collected: 10/31/18 14:15 Date Received: 11/02/18 10:10

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			136595	11/09/18 11:30	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	136651	11/11/18 02:33	BWC	TAL BUR

## Lab Sample ID: 200-46033-3 Matrix: Water

TAL BUR

# Lab Sample ID: 200-46033-4

Lab Sample ID: 200-46033-5

## Matrix: Water

**TestAmerica Burlington** 

Matrix: Water

Client: New York State D.E.C. Project/Site: Granite Pte Subdiv-Off Site #C360107A

Lab Sample ID: 200-46033-6

Lab Sample ID: 200-46033-7

Matrix: Water

Matrix: Water

# 2 3 4 5 6 7 8 9

10

## Client Sample ID: MW-3R Date Collected: 10/31/18 15:15

Γ	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			565693	11/04/18 08:26	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	565750	11/04/18 18:58	YAH	TAL EDI
Total/NA	Prep	3535			136595	11/09/18 11:30	JM1	TAL BUR
Total/NA	Analysis	537 (modified)		1	136651	11/11/18 02:49	BWC	TAL BUR

### Client Sample ID: DRUM WASTE CHAR Date Collected: 10/31/18 15:35 Date Received: 11/02/18 10:10

-	Batch	Batch		Dilution	Batch	Prepared		
Prep Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			566968	11/09/18 01:00	GAE	TAL EDI
Total/NA	Analysis	6010D		1	567138	11/09/18 17:23	YZH	TAL EDI

### Laboratory References:

TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990 TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

**TestAmerica Burlington** 

## Accreditation/Certification Summary

Client: New York State D.E.C. Project/Site: Granite Pte Subdiv-Off Site #C360107A

### Laboratory: TestAmerica Burlington

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

Authority	Program		FPA Region	Identification Numbe	r Expiration Date
New York			$\frac{1}{2}$	10391	<u>04-01-19</u>
The following analyte the agency does not o	s are included in this repo offer certification.	rt, but the laboratory	y is not certified by th	ne governing authority. Th	his list may include analytes for which
Analysis Method	Prep Method	Matrix	Analy	rte	
537 (modified)	3535	Water	6:2 F	TS	
537 (modified)	3535	Water	8:2 F	TS	
537 (modified)	3535	Water	N-eth acid (	ylperfluorooctanesulfonar NEtFOSAA)	nidoacetic
537 (modified)	3535	Water	N-me acid (	thylperfluorooctanesulfon	amidoacetic
537 (modified)	3535	Water	Perflu	uorobutanesulfonic acid (F	PFBS)
537 (modified)	3535	Water	Perflu	orobutanoic acid (PFBA)	
537 (modified)	3535	Water	Perflu	orodecanesulfonic acid (I	PFDS)
537 (modified)	3535	Water	Perflu	uorodecanoic acid (PFDA)	)
537 (modified)	3535	Water	Perflu	uorododecanoic acid (PFD	DoA)
537 (modified)	3535	Water	Perflu	oroheptanesulfonic Acid	(PFHpS)
537 (modified)	3535	Water	Perflu	Joroheptanoic acid (PFHp	A)
537 (modified)	3535	Water	Perflu	uorohexanesulfonic acid (I	PFHxS)
537 (modified)	3535	Water	Perflu	uorohexanoic acid (PFHxA	A)
537 (modified)	3535	Water	Perflu	uorononanoic acid (PFNA)	)
537 (modified)	3535	Water	Perflu	uorooctanesulfonamide (F	OSA)
537 (modified)	3535	Water	Perflu	uorooctanesulfonic acid (F	PFOS)
537 (modified)	3535	Water	Perflu	uorooctanoic acid (PFOA)	
537 (modified)	3535	Water	Perflu	oropentanoic acid (PFPe	A)
537 (modified)	3535	Water	Perflu	uorotetradecanoic acid (Pl	FTeA)
537 (modified)	3535	Water	Perflu	uorotridecanoic acid (PFT)	riA)
537 (modified)	3535	Water	Perflu	oroundecanoic acid (PFL	JnA)

### Laboratory: TestAmerica Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority New York	Program NELAP	EPA Region	Identification Number	Expiration Date 03-31-19	
Laboratory: TestAm The accreditations/certifications	erica Edison isted below are applicable to this	report.			

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	11452	04-01-19

## **Method Summary**

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

### Client: New York State D.E.C. Project/Site: Granite Pte Subdiv-Off Site #C360107A

**Method Description** 

Metals (ICP)

EPA = US Environmental Protection Agency

Fluorinated Alkyl Substances

Solid-Phase Extraction (SPE)

Liquid-Liquid Extraction (Separatory Funnel)

Preparation, Total Metals

Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Method

6010D

3010A

3510C

3535

8270D SIM ID

537 (modified)

**Protocol References:** 

Laboratory References:

Laboratory

TAL EDI TAL BUR

TAL EDI

TAL EDI

TAL EDI

TAL BUR

Protocol

SW846

SW846

SW846

SW846

SW846

EPA

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8

9 1(

TestAmerica Burlington

## **Sample Summary**

TestAmerica Job ID: 200-46033-1

### Client: New York State D.E.C. Project/Site: Granite Pte Subdiv-Off Site #C360107A

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	
200-46033-1	MW-1AR	Water	10/31/18 15:30	11/02/18 10:10	
200-46033-2	FIELD BLANK	Water	10/31/18 13:30	11/02/18 10:10	
200-46033-3	MW-2R	Water	10/31/18 15:20	11/02/18 10:10	E
200-46033-4	DUPLICATE	Water	10/31/18 15:22	11/02/18 10:10	
200-46033-5	EQUIPMENT BLANK	Water	10/31/18 14:15	11/02/18 10:10	
200-46033-6	MW-3R	Water	10/31/18 15:15	11/02/18 10:10	
200-46033-7	DRUM WASTE CHAR	Water	10/31/18 15:35	11/02/18 10:10	
					8
					9

**TestAmerica Burlington** 

Testamerica The leader in environmental testing	COC No: 480-120873-27768,1	Page: Page 1 of 1	Job #:	Kaservation Codes:	A - HCL M - Hexane B - MOH N - None 7 20 20044 O 20 2015	D - Nithe Acid P - Na2O45 E - NaHC Acid P - Na2O45 E - NaHSO4 Q - Na2SO3	F - MeOH R - Na2S2O3 G - Amchior S - H2SO4 H - Accordia Acid T - T2D Dodoco-hurden	1 - Ice	Per K - EDTA W - PH 4-5 State Z - other (specify)	Other: Other: Cther:	> yedmú/V	Decial Instructions/Note:	CAT 8 020 "					leeforn ms/men				oles are retained longer than 1 month)		pment:	tte/Time:	1-1-1-18 OT20 Company	12/2/18 10/0 Company two-1		Ver: 08/04/2016
Record	PM: 200-40033 Chain of Custody ine, Judy L	alt: y.stone@testamericainc.com	Analysis Requested			DU (50	ý <u>l</u> ená trosib	N) 100 (0) N 100 N 10 N 1	κο. 20 χοία-4 Δ breb	וקותהבל אווי פולי אווי פולי של אווי של אווי של אווי של אווי של אוויים של אווייב של אוויים של או	; bejeti(3, 2.2	e01000	XXX	×	× ×	×××	×	XXX	×			Sample Disposal ( A fee may bedassessed if samp Return To Client Disposal By Lab	Special Instructions/QC Requirements:	Time: Method of Shir	Received by:	Received by Da	Redeved by K HOULL Pa	Cooler Lemperature(s) C and Other Remarks:	
t∗Atbany Chain of Custody F	Sampler: JoHN R. P. Sw Sev Stor	Phone: 512- 898-6254 E-ME		Due Date Requested:	TAT Requested (days):	10 DAY STANDARD	Po#: Callout: 136369	WO #:	Project #: 48010852	SSOW#:	Sample Matrix Type (weveen	Sample (C=comp, 0=watevol, Sample Date Time G=grab) BT=TIssue, A=Atr	10/31/18 15:30 G Water	b/J1/18 13:30 G Water	16/31/18 15:20 G Water	10/31/18 15:22 G Water	10/31/18 14:15 G Water	10/31/18 15 215 6 Water	10/31/13 15-35 G Water	-		oison B 🖌 Unknown 🔲 Radiological	CATEGOLY "B" DELLUE AATLE	Date:	Date/Time: 18:30 10/31/18 Company	Date/Time: // Company	Date/Time: Company		
<b>TestAmerica Burlington</b> 30 Community Drive Suite 11 South Burlington, VT 05403 Phone (802) 660-1990 Fax (802) 660-1919	<u>Client Information</u>	HEIDI DUDER (DEC)	company: NYSDEC RECION 产3	Address. 21 Sowry PWTY CORNERS RD	CIVY NEW PAUZ, NY	oter, 210: NY 12 KI	phone: (845) 256 - 30 00	Email: jrobinson@pesnyinc.com / HEIDI, WER WEC.NY.I	Project Name: Granite Pte Subdiv-Off Site #C360107A	SILE: (GRANZJE POZN) & 144 NY RT 118		Sample Identification	mu - IAR	FIEN RLANK	MW - 28	BLASCING	EQUERTIN BLANK	mw-3R	PRUM WASZE CHAR			 Possible Hazard Identification	Deliverable Requested: I, II, III, IV, Other (specify)	Empty Kit Relinquished by:	Relinquished by: 	rempulsion (sellings	Reinguistiga by: Cuestrois Seals lateore Cuestrois Seal No :	Δ Yes Δ No	



Custody Seals Infact: Custody Seal No:: 743340	Reinquisted by Lach	rent with a sellings	Relinguished by:	Empty Kit Relinquished by:	Deliverable Requested: I, II, III, IV, Other (specify)	Non-Hazard Flammable Skin Irritant Poiso	Possible Hazard Identification			PRUM WASZE CHAR	mw-38	EQualmen Schut	D JILLON CA	my - 28	FIRD BLANK	m- 12R		Sample Identification .	(GRAWITE POIN & 144 NY RT 118	Project Name: Granite Pte Subdiv-Off Site #C360107A	Email: jrobinson@pesnyinc.com / HETNL WOEL WELL NY. 64	Phone: (845) 256 - 3000	NY 1256	NEW NEW NALIZ, NY	Address 21 Sowall INTY CORNERS NO	COMPANY NYSDEC RECION #3	HEIDI DWER (ME)	Client Information	TestAmerica Burlington 30 Community Drive Suite 11 South Burlington, VT 05403 Phone (802) 660-1990 Fax (802) 660-1919
	Date/Ime:	Uate/Ime: /	Date/lime: /8:30 /o	Date:	ATE6027 "B"	n B Unknown	K		-	10/1/10 15:31	10/31/18 15:21	10/01/18 14:15	10/21/18 15:22	10/31/18 15:20	52:21 81/12-32	1-13-118 15:30	N	Sample Date Time	-	Project #: 48010852	VC #	PO#: Callout: 136369	JU JUR	TAT Requested (days):	Due Date Requested:		Phone: 518- 888- 6	Sampler. John R.72	Isany Chain
	70 company	720 Company	3./18 Company		DELLVERAILE	Radiological				G Water	G Water	- G Water	. G Water	G Water	G Water	G Water	Preservation Code:	Sample Matrix Type (viewater, sesolid, e (C=Comp, oewaste/oli, G=grab) bT=Tissue, A=A						CTANDARD			254 jud	v J& V Sto	ı of Custody I
Cooler Temperature(s) <sup>®</sup> C and Other Re	Received by:	Received by Hadner	Received by: 	• Time:	Special Instructions/QC Requiremen	Return To Client	Sample Disposal ( A fee may be			×	XXX	X	× ×	XX	X	XX	XX Z Z Z Z	5 Field Filtere Perform MS i 8270D_SIM_I PFC_IDA - PI 6010C - Lead	vis_iD - 	ple (Yes of Yes of 1,4-Dia andard	xane (	Edisor	(tos) //	η <i>ε</i> Η ο	n53	Analysis Req	<sup>naii:</sup> ly.stone@testamericainc.com	o PM: one, Judy L	Record 3.4°C A
marks:	Redox 11/2/18 C	Date/Time:	Date/Time:	Method of Shipment:	15.	Disposal By Lab Archive For	ssessed if samples are retained long											Total Nu	46033 Chain of Custody			G-Am		B - Na C - Zn	Preset	uested	Page: Page	Carrier Tracking No(s): 480-1	Ie Ie
Ver: 08/04/2016	MIC Company AEU	Company	Company			Months	ger than 1 month)		N		toom ms/men					" CAT B DEU"		Special Instructions/Note:		Z - other (specify)	U - Acetone V - MCAA	chlor S - H2SO4	nc Acid P - Na204S 4S04 Q - Na2S03 0H R - Na2S03	OH N - None Acetate O - AsNaO2	rvation Codes:	100-16037	1 of 1	o: 20873-27768.1	stAmerica

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11/19/2018

Client: New York State D.E.C.

### Login Number: 46033 List Number: 1 Creator: Johnson, Eleanor E

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	NA: Lab does not accept radioactive samples
The cooler's custody seal, if present, is intact.	True	743339
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	2.7°C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	JR
There are no discrepancies between the sample IDs on the containers 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.	N/A	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	NA: No analysis requiring residual chlorine check assigned

11

List Source: TestAmerica Burlington

Client: New York State D.E.C.

### Login Number: 46033 List Number: 2 Creator: Rivera, Kenneth

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td></td>	N/A	
The cooler's custody seal, if present, is intact.	True	743340
Sample custody seals, if present, are intact.	True	
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	3.4°C, IR #9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	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.	True	
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	

List Source: TestAmerica Edison

List Creation: 11/03/18 03:45 PM

## ATTACHMENT - 3



November 30, 2018

Mr. John Robinson Precision Environmental Services, Inc. Curtis Industrial Park 831 Rt. 67, Lot 38 Ballston Spa, New York 12020

Re: Data Usability Summary Reports Granite Point Site #C360107A October 2018 Ground Water Sampling Event

Dear Mr. Robinson:

The data usability summary report (DUSR) and data validation summaries are attached to this letter for the Granite Point Site, October 2018 ground water sampling event. The data for TestAmerica job number 200-46033-1 were acceptable with some minor issues that are identified and discussed in the validation summaries and DUSR. There were no data that were qualified as rejected, unusable (R) in the data pack.

A list of common data validation acronyms and data validation qualifers is attached to this letter to assist you interpreting the validation summaries. If you have any questions concerning the work performed, please contact me at (518) 348-6995. Thank you for the opportunity to assist Precision Environmental Services, Inc.

Sincerely, Alpha Geoscience

Donald Anne

Donald Anné Senior Chemist

DCA:dca attachments

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## Data Validation Qualifiers Used in the QA/QC Reviews for USEPA Region II

U	1	Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.
R	Ξ	Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample. Supporting data or information is necessary to confirm the result.
3.T	122-	
N		needed to confirm its presence or absence during future sampling efforts.
J		Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method
		, source of the second state of the second sta
J-	=	Analyte is present. Reported value may be biased low and associated with a higher level of uncertainty than is normally expected with the analytical method.
J+-	=	Analyte is present. Reported value may be biased high and associated with a higher level of uncertainty than is normally expected with the analytical method.
UJ	¥3	Not detected, quantitation limit may be inaccurate or imprecise.

-

Note: These qualifiers are used for data validation purposes. The data validation qualifiers may differ from the qualifiers that the laboratory assigns to the data. Refer to the laboratory analytical report for the definitions of the laboratory qualifiers.

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# Polyfluorinated Alkyl Substances (PFAS) Acronyms

PFBA	Perfluorobutanoic acid
PFPeA	Perfluoropentanoic acid
PFHxA	Perfluorohexanoic acid
PFHpA	Perfluoroheptanoic acid
PFOA	Perfluorooctanoic acid
PFNA	Perfluorononanoic acid
PFDA	Perfluorodecanoic acid
PFUnA	Perfluoroundecanoic acid
-PFDoA	<sup>—</sup> Perfluorododecanoic acid
PFTriA or PFTrDA	Perfluorotridecanoic acid
PFTeA or PFTA	Perfluorotetradecanoic acid
PFBS	Perfluorobutanesulfonic acid
PFPeS	Perfluoropentanesulfonic acid
PFHxS	Perfluorohexanesulfonic acid
PFHpS	Perfluoroheptanesulfonic acid
PFOS	Perfluorooctanesulfonic acid
PFNS	Perfluorononanesulfonic acid
PFDS	Perfluorodecanesulfonic acid
FOSA	Perfluorooctane Sulfonamide
NMeFOSAA	N-methyl perfluorooctane sulfonamidoacetic acid
NEtFOSAA	N-ethyl perfluorooctane sulfonamidoacetic acid
4:2 FTS or 4:2	1H, 1H, 2H, 2H-perfluorohexanesulfonic acid
6:2 FTS or 6:2	1H, 1H, 2H, 2H-perfluorooctanesulfonic acid
8:2 FTS or 8:2	1H, 1H, 2H, 2H-perfluorodecanesulfonic acid

## **Data Validation Acronyms**

	AA	Atomic absorption, flame technique	
	BHC	Hexachlorocyclohexane	
	BFB	Bromofluorobenzene	
	CCB	Continuing calibration blank	
	CCC	Calibration check compound	
	CCV	Continuing calibration verification	
	CN	Cyanide	
	CRDL	Contract required detection limit	
	CRQL	Contract required quantitation limit	
	CVAA	Atomic adsorption, cold vapor technique	
-	DCAA	2,4-Dichlophenylacetic acid	ŝ
	DCB	Decachlorobiphenyl	
	DFTPP	Decafluorotriphenyl phosphine	
	ECD	Electron capture detector	
	FAA	Atomic absorption, furnace technique	
	FID	Flame ionization detector	
	FNP	1-Fluoronaphthalene	
	GC	Gas chromatography	
	GC/MS	Gas chromatography/mass spectrometry	
	GPC	Gel permeation chromatography	
	ICB	Initial calibration blank	
	ICP	Inductively coupled plasma-atomic emission spectrometer	
	ICV	Initial calibration verification	
	ĨDL	Instrument detection limit	
	IS	Internal standard	
	LCS	Laboratory control sample	
	LCS/LCSD	Laboratory control sample/laboratory control sample duplicate	
	MSA	Method of standard additions	
	MS/MSD	Matrix spike/matrix spike duplicate	
	PID	Photo ionization detector	
	PCB	Polychlorinated biphenyl	
	PCDD	Polychlorinated dibenzodioxins	
	PCDF	Polychlorinated dibenzofurans	
	QA	Quality assurance	
	QC	Quality control	
	RF	Response factor	
	RPD	Relative percent difference	
	RRF	Relative response factor	
	RRF(number)	Relative response factor at concentration of the number following	
	RT	Retention time	
	RRT	Relative retention time	
	SDG	Sample delivery group	
	SPCC	System performance check compound	
	TCX	Tetrachloro-m-xylene	
	%D	Percent difference	
	%R	Percent recovery	
	%RSD	Percent relative standard deviation	



Data Usability Summary Report for TestAmerica, Job No: 200-46033-1

3 Ground Water Samples, 1 Field Duplicate, 1 Field Blank, and 1 Equipment Blank Collected October 31, 2018

> Prepared by: Donald Anné November 30, 2018

The data packages contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results for 3 ground water samples and 1 field duplicate analyzed for for 1,4-dioxane and 3 ground water samples, 1 field duplicate, 1 field blank, and 1 equipment blank analyzed for PFAS compounds.

The overall performances of the analyses are acceptable. TestAmerica Burlington and Edison did fulfill the requirements of the analytical methods.

The data are mostly acceptable with some issues that are identified in the accompanying data validation reviews. The following data were qualified:

- Positive PFAS results for PFOA were qualified as "not detected" (U) for samples MW-2R, DUPLICATE, and MW-3R because the level reported in the samples were not significantly greater than (more than 5 times) the associated method blank level.
- The PFAS results for 6 compounds were qualified as estimated, biased low (J-) in sample MW-1AR because internal standard area was above control limits in the sample.
- The PFAS result for PFOA was qualified as estimated, biased low (J-) in sample FIELD BLANK because internal standard area was above control limits in the sample.
- The PFAS result for PFUnA was qualified as estimated, biased low (J-) in sample EQUIPMENT BLANK because internal standard area was above control limits in the sample.

All data are considered usable with estimated (J-) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.

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## QA/QC Review of Method 8270D SIM 1,4-Dioxane Data for TestAmerica Edison, Job No: 200-46033-1

**3** Ground Water Samples and 1 Field Duplicate Collected October 31, 2018

> Prepared by: Donald Anné November 30, 2018

Holding Times: The sample was analyzed within USEPA SW-846 holding times.

GC/MS Tuning and Mass Calibration: The DFTPP tuning criteria were within control limits.

- Initial Calibration: The average RRF for 1,4-dioxane was above the allowable minimum (0.010) and the %RSD was below the allowable maximum (30%), as required.
- Continuing Calibration: The RRF for 1,4-dioxane was above the allowable minimum (0.010) and the %D was below the allowable maximum (25%), as required.

Blanks: The analysis of the method blank reported 1,4-dioxane as not detected.

- Internal Standard Area Summary: The internal standard areas and retention times were within control limits.
- Surrogate Recovery: The surrogate recoveries were within control limits for the ground water samples.
- Matrix Spike/Matrix Spike Duplicate: The relative percent difference for 1,4-dioxane was above the allowable maximum and 1 of 2 percent recoveries was above QC limits for aqueous MS/MSD sample MW-3R. Positive results for 1,4-dioxane should be considered estimated, biased high (J+). Sample MW-3R reported 1,4-dioxane as "not detected"; therefore, no action is taken.
- Laboratory Control Sample: The percent recovery for 1,4-dioxane was within QC limits for aqueous sample LCS 460-565693/2-A.

Page 1 of 2

<u>Field Duplicates</u>: The analyses of aqueous field duplicate pair MW-2R/DUPLICATE reported 1,4dioxane as not detected; therefore, a valid relative percent difference could not be calculated. The analyses for the field duplicate pair were acceptable.

<u>Compound ID</u>: Checked surrogates were within GC quantitation limits. The analyses of the ground — water samples reported 1,4-dioxane as not detected.

Page 2 of 2

### FORM III GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Edi	Job No.: 200-46033-1							
SDG No.:								
Matrix: Water	Lab File ID: C31900.D							
Lab ID: 200-46033-6 MS	Client ID: MW-3R MS							
	SPIKE	SAMPLE	MS	MS	oc	]		
	ADDED	CONCENTRATION	CONCENTRATION	&	LIMITS	#		
COMPOUND	(ug/L)	(ug/L)	(ug/L)	REC	REC			
1,4-Dioxane	1.60	) ND	1.44	90	70-130			

32.0

10

1.44

11.3

90

35

70-130

10-150

 $\ensuremath{\texttt{\#}}$  Column to be used to flag recovery and RPD values FORM III 8270D SIM ID

1,4-Dioxane-d8

### FORM III GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Edis	on	Job No.: 200-46033-1							
SDG No.:									
Matrix: Water	Level: Low	Lab File I	Lab File ID: C31901.D						
Lab ID: 200-46033-6 MSD		Client ID: MW-3R MSD							
	SPIKE	MSD CONCENTRATION	MSD *	Q.	QC LI	IMITS	#		
COMPOUND	(ug/L)	(ug/L)	REC	RPD	RPD	REC	π		
1,4-Dioxane	1.60	2.71	170	61	20	70-130	F1 F2		

11.3

35

32.Ū

70-130 F1 F2

10-150

 $\ensuremath{\texttt{\#}}$  Column to be used to flag recovery and RPD values FORM III 8270D SIM ID

1,4-Dioxane-d8



## QA/QC Review of Method 537 (Modified) PFAS Data for TestAmerica Burlington, Job No: 200-46033-1

3 Ground Water Samples, 1 Field Duplicate, 1 Field Blank, and 1 Equipment Blank Collected October 31, 2018

> Prepared by: Donald Anné November 30, 2018

Holding Times: Samples were analyzed within USEPA holding times.

- Initial Calibration (External Standard): The %RSDs for applicable PFAS compounds were below the method maximums, as required.
- <u>Continuing Calibration</u>: The %Ds for applicable PFAS compounds were below the allowable maximums, as required
- Blanks: Method blank MB 200-136595/1-A contained a trace of PFBA (0.543 ng/L). The field blank contained a trace of PFOA (0.26 ng/L). The equipment blank contained a trace of PFUnA (0.29 ng/L). Positive results for these compounds that are less than 5 times the highest blank level should be reported as not detected (U) in associated samples.
- <u>Surrogate Recovery</u>: The surrogate recoveries for M262FTS in samples MW-1AR, MW-2R, and DUPLICATE were above QC limits. Positive results for compounds associated with M262FTS should be considered estimated, biased low (J-) in samples MW-1AR, MW-2R, and DUPLICATE

The surrogate recovery for PFBA in sample MW-1AR was below QC limits, but not below 10%. Positive results for compounds associated with PFBA should be considered estimated, biased high (J+) and "not detected" results estimated (UJ) in sample MW-1AR.

Internal Standard Area Summary: The internal standard retention times were within control limits.

The internal standard areas for samples MW-1AR, FIELD BLANK, and EQUIPMENT BLANK were above control limits. Positive results for samples MW-1AR, FIELD BLANK, and EQUIPMENT BLANK should be considered estimated, biased low (J-).

- <u>Matrix Spike/Matrix Spike Duplicate</u>: The relative percent differences for spiked PFAS compounds were below the allowable maximum and percent recoveries were within QC limits for aqueous MS/MSD sample MW-3R.
- Laboratory Control Sample: The percent recoveries for spiked compounds were within QC limits for aqueous sample LCS 200-136595/2-A.
- <u>Field Duplicates</u>: The analyses of aqueous field duplicate pair MW-2R/DUPLICATE reported target PFAS as either not detected or below the lowest standard; therefore, valid relative percent differences could not be calculated. The analyses for the field duplicate pair were acceptable.

Compound ID: Checked compounds and surrogates were within LC quantitation limits.

### FORM II LCMS SURROGATE RECOVERY

Lab Name: TestAme		Job No.: 200-46033-1							
SDG No.:					-				
Matrix: Water		Level: Low							
GC Column (1): C-	-18 ID:	4.6 (mm	.)						· · · · ·
Client Sample ID	Lab Sample ID	PFBA #	PFPeA #	PFBS #	PFHXA #	PFHpA #	PFHxS	# M262FTS #	PFOA #
MW-1AR	200-46033-1	19 }	39	59	44	60	74	195 +	

MM-TAK	200-46033-1	1 49 7	r 39	59	44	60	74	185 / *	74
FIELD BLANK	200-46033-2	63	70	- 66	- 70	77	79	103	76
MW-2R	200-46033-3	44	_ 50	72	42	56	- 74	(213)	- 74 -
DUPLICATE	200-46033-4	40	49	62	41	55	68	151 *	72
QUIPMENT BLANK	200-46033-5	70	77	69	76	77	76	125	82
MW-3R	200-46033-6	58	62	72	69	72	86	139	82
	MB 200-136595/1-A	55	70	73	70	65	77	143	74
	LCS 200-136595/2-A	61	75	73	70	67	81	139	81
MW-3R MS	200-46033-6 MS	55	56	63	63	72	79 -	132	76
W-3R MSD	200-46033-6 MSD	53	59	70	62	69	80	127	75

	QC LIMITS
PFBA = 13C4 PFBA	25-150
PFPeA = 13C5-PFPeA DNU	25-150
PFBS = 13C3 PFBS	25-150
PFHxA = 13C2 PFHxA	25-150
PFHpA = 13C4 PFHpA	25-150
PFHxS = 1802 PFHxS	25-150
M262FTS = M2-6:2 FTS	25-150
PFOA = 13C4 PFOA	25-150
# Column to be used to flag recovery values	

FORM II 537 (modified)

### FORM II LCMS SURROGATE RECOVERY

\_\_\_\_\_

Lab Name: TestAmerica Burlington

Job No.: 200-46033-1

\_\_\_\_

SDG No.:

Matrix: Water

Level: Low

GC Column (1): C-18 ID: 4.6 (mm)

\_\_\_\_

Client Sample ID	Lab Sample ID	PFNA #	PFOS	# M282FTS #	PFDA	# d3NMFOS #	d5nefos #	PFUnA #	PFOSA #	
MW-1AR	200-46033-1	86	79	111	91	74	82	92	72	-
FIELD BLANK	200-46033-2	61	79		- 89 -	77	89	88	54	
MW-2R	200-46033-3	88	80	113	84	79	90	- 90	62 =	
DUPLICATE	200-46033-4	76	73	100	79	65	77 -	78	56	
EQUIPMENT BLANK	200-46033-5	84	78	94	91	74	87	85	53	
MW-3R	200-46033-6	85	78	116	91	66	83	89	67	
	MB 200-136595/1-A	71	78	93	81	67	79	78	57	
	LCS 200-136595/2-A	80	89	97	84	75	82	84	67	
MW-3R MS	200-46033-6 MS	79	80	99	84	71	74	80	67	
MW-3R MSD	200-46033-6 MSD	86	81	98	83	77	78	87	68	

	QC LIMITS
PFNA = 13C5 PFNA	25-150
PFOS = 13C4 PFOS	25-150
M282FTS = M2-8:2 FTS	25-150
PFDA = 13C2 PFDA	25-150
d3NMFOS = d3-NMeFOSAA	25-150
d5NEFOS = d5-NEtFOSAA	25-150
PFUnA = 13C2 PFUnA	25-150
PFOSA = 13C8 FOSA	25-150
# Column to be used to flag recovery values	

\_\_\_\_\_

FORM II 537 (modified)

### FORM II LCMS SURROGATE RECOVERY

Lab Name: TestAmerica Burlington		Job No.: 200-46033-1				
SDG No.:						
Matrix: Water				Level: Low		
GC Column (1): <u>C</u> -	-18 ID:	4.6 (mm	n)			
Client Sample ID	Lab Sample ID	PFDoA #	PFTDA	ŧ.		
MW-1AR	200-46033-1	84	89	-		
FIELD ELANK	200 45033 2	63	60			
MW-2R	200-46033-3	87	87	-		
DUPLICATE	200-46033-4	73	72			
EQUIPMENT BLANK	200-46033-5	79	73	-		
MW-3R	200-46033-6	76	80	-		
	MB 200-136595/1-A	73	69			
	LCS 200-136595/2-A	. 80	78	-		
MW-3R MS	200-46033-6 MS	69	74			
MW-3R MSD	200-46033-6 MSD	78	81			

PFDoA = 13C2 PFDoA PFTDA = 13C2 PFTeDA QC LIMITS 25-150 25-150

# Column to be used to flag recovery values

FORM II 537 (modified)

### FORM VIII

LCMS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington	Job No.: 200-46033-1	
SDG No.:		
Sample No.: CCVIS 200-136651/6	Date Analyzed: 11/10/2018	12:00
Instrument ID: LC410	GC Column: C-18	ID: 4.6(mm)
Lab File ID (Standard): PF111018A06.d	Heated Purge: (Y/N) N	
Calibration ID: 40218	2:	

		13PFO	A					
		AREA #	RT #	AREA #	RT #	AREA #	RT #	
12/24 HOUR STD		576204	4.41		<u>_</u>			
UPPER LIMIT		864306	4.61					
LOWER LIMIT		288102	4.21					
LAB SAMPLE ID	CLIENT SAMPLE ID							
CCVL 200-136651/7		659896	4.41					
CCV 200-136651/43		737123	4.41					
MB 200-136595/1-A		1081313*	4.39				- 5	
LCS 200-136595/2-A		938016*	4.39				_	
CCV 200-136651/56		687378	4.39					
200-46033-1	MW-1AR	887620*)	4.37				-	
200-46033-2	FIELD BLANK	979939*	4.39				_	
200-46033-3	MW-2R	812816	4.37					
200-46033-4	DUPLICATE	852319	4.39		— <u> </u>		_	
200-46033-5	EQUIPMENT BLANK	919001*)	4.39					
200-46033-6	MW-3R	785224	4.41					
200-46033-6 MS	MW-3R MS	865723*	4.39					
200-46033-6 MSD	MW-3R MSD	854234	4.39					
CCV 200-136651/69		736627	4.41				·	

13PFOA = 13C2 PFOA

Area Limit = 50%-150% of internal standard area RT Limit =  $\pm$  0.2 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII 537 (MODIFIED)

FORM I LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington	Job No.: 200-46033-1				
SDG No.:					
Client Sample ID:	Lab Sample ID: MB 200-136595/1-A				
Matrix: Water	Lab File ID: PF111018A44.d				
Analysis Method: 537 (modified)	Date Collected:				
Extraction Method: 3535	Date Extracted: 11/09/2018 11:30				
Sample wt/vol: 250(mL)	Date Analyzed: 11/10/2018 22:03				
Con. Extract Vol.; 0.5(mL)	Dilution Factor: 1				
Injection Volume: 20(uL)	GC Column: C-18 ID: 4.6(mm)				
<pre>% Moisture:</pre>	GPC Cleanup:(Y/N) N				
Analysis Batch No.: 136651	Units: ng/L				

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	0.543	J	2.0	0.41
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		2.0	0.75
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		2.0	0.24
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.32
335-67-1	Perfluorooctanoic acid (PFOA)	ND		2.0	0.32
375-95-1	Perfluorononanoic acid (PFNA)	ND		2.0	0.38
335-76-2	Perfluorodecanoic acid (PFDA)	ND		2.0	0.38
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		2.0	0.25
307-55-1	Perfluorododecanoic acid (PFDoA)	ND	_	2.0	0.35
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		2.0	0.24
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.45
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND	·	2.0	0.44
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.26
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.82
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.53
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.76
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		2.0	0.56
2355-31-9	N-methylperfluorooctanesulfonamidoac etic acid (NMeFOSAA)	ND		20	0.45
2991-50-6	N-ethylperfluorooctanesulfonamidoace tic acid (NEtFOSAA)	ND		20	0.70
27619-97-2	6:2 FTS	ND			
39108-34-4	8:2 FTS	ND		20	0.56

### Client Sample ID: MW-1AR Date Collected: 10/31/18 15:30 Date Received: 11/02/18 10:10

### Lab Sample ID: 200-46033-1 Matrix: Water

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)										
Analyte	Result	Qualifler	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
1,4-Dioxane	ND		0.20	0.016	ug/L	-	11/04/18 08:26	11/04/18 20:38	1	
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
1,4-Dioxane-d8	27		10 - 150				11/04/18 08:26	11/04/18 20:38	1	

## Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier -		MDL.	Unit	D Prepared	Analyzed	Dil Fac	1
Partiuorobutanois acid (PFBA)	31	_B <u>3</u>	1.6	0.32	ng/L	11/09/18 11:30	11/11/18 01:29		-
Perfluoropentanoic acid (PFPeA)	11	3-	1.6	0.59	ng/L	11/09/18 11:30	11/11/18 01:29	1	
Perfluorohexanoic acid (PFHxA)	6.9	2-	1.6	0.19	ng/L	11/09/18 11:30	11/11/18 01:29	1	
Perfluoroheptanoic acid (PFHpA)	3.3	J.	1.6	0.25	ng/L	11/09/18 11:30	11/11/18 01:29	1	
Perfluorooctanoic acid (PFOA)	4.5	<b>J</b> _	1.6	0.25	ng/L	11/09/18 11:30	11/11/18 01:29	1	
Perfluorononanoic acid (PFNA)	ND		1.6	0.30	ng/L	11/09/18 11:30	11/11/18 01:29	1	
Perfluorodecanoic acid (PFDA)	ND		1.6	0.30	ng/L	11/09/18 11:30	11/11/18 01:29	1	
Perfluoroundecanoic acid (PFUnA)	ND		1.6	0.20	ng/L	11/09/18 11:30	11/11/18 01:29	1	
Perfluorododecanoic acid (PFDoA)	ND		1.6	0.28	ng/L	11/09/18 11:30	11/11/18 01:29	1	
Perfluorotridecanoic acid (PFTriA)	ND		1.6	0.19	ng/L	11/09/18 11:30	11/11/18 01:29	1	
Perfluorotetradecanoic acid (PFTeA)	ND		1.6	0.36	ng/L	11/09/18 11:30	11/11/18 01:29	1	
Perfluorobutanesulfonic acid (PFBS)	1.4	1.2	1.6	0.35	ng/L	11/09/18 11:30	11/11/18 01:29	1	
Perfluorohexanesulfonic acid (PFHxS)	ND		1.6	0.21	ng/L	11/09/18 11:30	11/11/18 01:29	1	
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.6	0.65	ng/L	11/09/18 11:30	11/11/18 01:29	1	
Perfluorodecanesulfonic acid (PFDS)	ND		1.6	0.42	ng/L	11/09/18 11:30	11/11/18 01:29	1	
Perfluorooctanesulfonic acid (PFOS)	ND		1.6	0.60	ng/L	11/09/18 11:30	11/11/18 01:29	1	
Perfluorooctanesulfonamide (FOSA)	ND		1.6	0.44	ng/L	11/09/18 11:30	11/11/18 01:29	1	
N-methylperfluorooctanesulfonamidoa cetic acid (NMeFOSAA)	ND		16	0.36	ng/L	11/09/18 11:30	11/11/18 01:29	1	
N-ethylperfluorooctanesulfonamidoac etic acid (NEtFOSAA)	ND		16	0.55	ng/L	11/09/18 11:30	11/11/18 01:29	1	
6:2 FTS	ND		16	0.79	ng/L	11/09/18 11:30	11/11/18 01:29	1	
8:2 FTS	ND		16	0.44	ng/L	11/09/18 11:30	11/11/18 01:29	1	
Isotope Dilution	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Esc	
13C8 FOSA	72		25-150			11/09/18 11:30	11/11/18 01:29	1	
13C4 PFBA	19	*	25 - 150			11/09/18 11:30	11/11/18 01:29	1	
13C5-PFPeA DNU	39		25 - 150			11/09/18 11:30	11/11/18 01:29	1	
13C2 PFHxA	44		25 - 150			11/09/18 11:30	11/11/18 01:29	1	
13C4 PFHpA	60		25-150			11/09/18 11:30	11/11/18 01:29	1	
13C4 PFOA	74		25 - 150			11/09/18 11:30	11/11/18 01:29	1	
13C5 PFNA	86		25 - 150			11/09/18 11:30	11/11/18 01:29	1	
13C2 PFDA	91		25 - 150			11/09/18 11:30	11/11/18 01:29	1	
13C2 PFUnA	92		25 - 150			11/09/18 11:30	11/11/18 01:29	1	
13C2 PFDoA	84		25 - 150			11/09/18 11:30	11/11/18 01:29	1	
13C2 PFTeDA	89		25 - 150			11/09/18 11:30	11/11/18 01:29	1	
13C3 PFBS	59		25 - 150			11/09/18 11:30	11/11/18 01:20	1	
18O2 PFHxS	74		25 - 150			11/09/18 11:30	11/11/18 01:20	1	
13C4 PFOS	79		25 - 150			11/09/18 11:30	11/11/18 01:20	1	
d3-NMeFOSAA	74		25 - 150			11/09/18 11:30	11/11/18 01-20	, 1	
d5-NEtFOSAA	82		25-150			11/09/18 11:30	11/11/18 01:20	1	
M2-6:2 FTS	185	•	25 - 150			11/09/18 11:30	11/11/18 01:20	1	
M2-8:2 FTS	111		25 - 150			11/09/18 11:30	11/11/18 01:29	1	
								•	

**TestAmerica Burlington** 

### Client: New York State D.E.C. Project/Site: Granite Pte Subdiv-Off Site #C360107A

### Client Sample ID: FIELD BLANK Date Collected: 10/31/18 13:30 Date Received: 11/02/18 10:10

### Lab Sample ID: 200-46033-2 Matrix: Water

Method: 537 (modified) - Fluor	rinated Alky	i Substan	ces						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		1.6	0.33	ng/L	1	11/09/18 11:30	11/11/18 01:45	1
Perfluoropentanoic acid (PFPeA)	ND		1.6	0.60	ng/L		11/09/18 11:30	11/11/18 01:45	1
Perfluorohexanoic acid (PFHxA)	ND		1.6	0.19	ng/L		11/09/18 11:30	11/11/18 01:45	1
Perfluoroheptanoic acid (PFHpA)	ND		1.6	0.26	ng/L		11/09/18 11:30	11/11/18 01:45	1
Perfluorooctanoic acid (PFOA)	0.26	J J-	1.6	0.26	ng/L		11/09/18 11:30	11/11/18 01:45	1
Periluorononanoic acid (PFNA)	-ND-		-1:6-	0.30	ng/L		11/09/18 11:30	11/11/18 01:45	1
Perfluorodecanoic acid (PFDA)	ND		1.6	0.30	ng/L.		-11/09/18 11:30	11/11/18 01:45	
Perfluoroundecanoic acid (PFUnA)	ND		1.6	0.20	ng/L		11/09/18 11:30	11/11/18 01:45	1
Perfluorododecanoic acid (PFDoA)	ND		1.6	0.28	ng/L		11/09/18 11:30	11/11/18 01:45	1
Perfluorotridecanoic acid (PFTriA)	ND		1.6	0.19	ng/L		11/09/18 11:30	11/11/18 01:45	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.6	0.36	ng/L		11/09/18 11:30	11/11/18 01:45	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.6	0.35	ng/L		11/09/18 11:30	11/11/18 01:45	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.6	0.21	ng/L		11/09/18 11:30	11/11/18 01:45	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.6	0.66	ng/L		11/09/18 11:30	11/11/18 01:45	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.6	0.42	ng/L		11/09/18 11:30	11/11/18 01:45	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.6	0.61	ng/L		11/09/18 11:30	11/11/18 01:45	1
Perfluorooctanesulfonamide (FOSA)	ND		1.6	0.45	ng/L		11/09/18 11:30	11/11/18 01:45	1
N-methylperfluorooctanesulfonamidoa cetic acid (NMeFOSAA)	ND		16	0.36	ng/L		11/09/18 11:30	11/11/18 01:45	1
N-ethylperfluorooctanesulfonamidoac etic acid (NEtFOSAA)	ND		16	0.56	ng/L		11/09/18 11:30	11/11/18 01:45	1
6:2 FTS	ND		16	0.80	ng/L		11/09/18 11:30	11/11/18 01:45	1
8:2 FTS	ND		16	0.45	ng/L		11/09/18 11:30	11/11/18 01:45	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 FOSA	54		25 150				11/09/18 11:30	11/11/18 01:45	
13C4 PFBA	63		25 - 150				11/09/18 11:30	11/11/18 01:45	1
13C5-PFPeA DNU	70		25_150				11/09/18 11:30	11/11/18 01:45	1
13C2 PFHxA	70		25 - 150				11/09/18 11:30	11/11/18 01:45	1
13C4 PFHpA	77		25-150				11/09/18 11:30	11/11/18 01:45	1
13C4 PFOA	76		25 - 150				11/09/18 11:30	11/11/18 01:45	1
13C5 PFNA	81		25 - 150				11/09/18 11:30	11/11/18 01:45	1
13C2 PFDA	89		25 - 150				11/09/18 11:30	11/11/18 01:45	1
13C2 PFUnA	88		25 - 150				11/09/18 11:30	11/11/18 01:45	1
13C2 PFDoA	83		25 - 150				11/09/18 11:30	11/11/18 01:45	1
13C2 PFTeDA	80		25 - 150				11/09/18 11:30	11/11/18 01:45	1
13C3 PFBS	66		25-150				11/09/18 11:30	11/11/18 01:45	1
1802 PFHxS	79		25-150				11/09/18 11:30	11/11/18 01:45	1
13C4 PFOS	79		25 - 150				11/09/18 11:30	11/11/18 01:45	1
d3-NMeFOSAA	77		25 - 150				11/09/18 11:30	11/11/18 01:45	1
d5-NEtFOSAA	89		25 - 150				11/09/18 11:30	11/11/18 01:45	, 1
M2-6:2 FTS	103		25_150				11/09/18 11:30	11/11/18 01:45	1
M2-8:2 FTS	88		25 - 150				11/09/18 11:30	11/11/18 01:45	1

### Client: New York State D.E.C. Project/Site: Granite Pte Subdiv-Off Site #C360107A

### Lab Sample ID: 200-46033-3 Matrix: Water

Client Sample ID: MW-2R Date Collected: 10/31/18 15:20 Date Received: 11/02/18 10:10

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
1,4-Dioxane	ND		0.20	0.016	ug/L	0	11/04/18 08:26	11/04/18 20:55	1	
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
1,4-Dioxane-d8	29		10-150				11/04/18 08:26	11/04/18 20:55	1	

### Method: 537 (modified) - Fluorinated Alkyl Substances

Апаную	Resur	Quaimer	RL.	MDE	-Unit-	D Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		1.6	0.33	ng/L .	11/09/18 11:30	11/11/18 02:01	
Perfluoropentanoic acid (PFPeA)	ND		1.6	0.60	ng/L	11/09/18 11:30	11/11/18 02:01	1
Perfluorohexanoic acid (PFHxA)	1.3	J	1.6	0.19	ng/L	11/09/18 11:30	11/11/18 02:01	1
Perfluoroheptanoic acid (PFHpA)	0.28	J	1.6	0.26	ng/L	11/09/18 11:30	11/11/18 02:01	1
Perfluorooctanoic acid (PFOA)	0.91	J 🚺	1.6	0.26	ng/L	11/09/18 11:30	11/11/18 02:01	1
Perfluorononanoic acid (PFNA)	ND		1.6	0.30	ng/L	11/09/18 11:30	11/11/18 02:01	1
Perfluorodecanoic acid (PFDA)	ND		1.6	0.30	ng/L	11/09/18 11:30	11/11/18 02:01	1
Perfluoroundecanoic acid (PFUnA)	0.20	J	1.6	0.20	ng/L	11/09/18 11:30	11/11/18 02:01	1
Perfluorododecanoic acid (PFDoA)	ND		1.6	0.28	ng/L	11/09/18 11:30	11/11/18 02:01	1
Perfluorotridecanoic acid (PFTriA)	ND		1.6	0.19	ng/L	11/09/18 11:30	11/11/18 02:01	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.6	0.36	ng/L	11/09/18 11:30	11/11/18 02:01	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.6	0,35	ng/L	11/09/18 11:30	11/11/18 02:01	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.6	0.21	ng/L	11/09/18 11:30	11/11/18 02:01	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.6	0.66	ng/L	11/09/18 11:30	11/11/18 02:01	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.6	0.42	na/L	11/09/18 11:30	11/11/18 02:01	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.6	0.61	na/L	11/09/18 11:30	11/11/18 02:01	1
Perfluorooctanesulfonamide (FOSA)	ND		1.6	0.45	ng/L	11/09/18 11:30	11/11/18 02:01	1
N-methylperfluorooctanesulfonamidoa cetic acid (NMeFOSAA)	ND		16	0.36	ng/L	11/09/18 11:30	11/11/18 02:01	1
N-ethylperfluorooctanesulfonamidoac etic acid (NEtEOSAA)	ND		16	0.56	ng/L	11/09/18 11:30	11/11/18 02:01	1
6:2 FTS	ND		16	0.80	na/)	11/00/18 11:30	11/11/19 02:04	4
8:2 FTS	ND		16	0.45	ng/L	11/00/18 11:30	11/11/18 02:01	1
Isotone Dilution	%Recovery	Qualifier	l insite	0110				1
13C8 FOSA			25 150			Prepared	Analyzed	Dil Fac
13C4 PERA	02		23-150			11/09/18 11:30	11/11/18 02:01	1
	50		25-150			11/09/18 11:30	11/11/18 02:01	1
13C2 PEHvA	42		25-150			11/09/18 11:30	11/11/18 02:01	1
13C4 PEHnA	-72 56		25-150			11/09/18 11:30	11/11/18 02:01	1
13C4 PEOA			25-150			11/09/18 11:30	11/11/18 02:01	1
13C5 PENA	/ <del>1</del> 99		25-150			11/09/18 11:30	11/11/18 02:01	1
13C2 PEDA	00 84		23-100			11/09/18 11:30	11/11/18 02:01	1
13C2 PELIDA	04		25-150			11/09/18 11:30	11/11/18 02:01	1
1302 FF0/A	90		25-150			11/09/18 11:30	11/11/18 02:01	1
	67 67		25-150			11/09/18 11:30	11/11/18 02:01	1
1302 FF 16DA 1303 DEDO	8/		25-150			11/09/18 11:30	11/11/18 02:01	1
	72		25-150			11/09/18 11:30	11/11/18 02:01	1
	/4		25 - 150			11/09/18 11:30	11/11/18 02:01	1
	80		25 - 150			11/09/18 11:30	11/11/18 02:01	1
	79		25-150			11/09/18 11:30	11/11/18 02:01	1
	90	0	25 - 150			11/09/18 11:30	11/11/18 02:01	1
M2-0:2 F1S	213	5	25 - 150			11/09/18 11:30	11/11/18 02:01	1
VIZ-0:2 F1S	113		25 - 150			11/09/18 11:30	11/11/18 02:01	1

**TestAmerica Burlington** 

### Client Sample ID: DUPLICATE Date Collected: 10/31/18 15:22 Date Received: 11/02/18 10:10

### Lab Sample ID: 200-46033-4 Matrix: Water

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)										
Analyte	Result	Qualifier	RL	MDL	Unit D	Prepared	Analyzed	Dil Fac		
1,4-Dioxane	ND		0.20	0.016	ug/L =	11/04/18 08:26	11/04/18 21:11	1		
Isotope Dilution	%Recovery	Qualifler	Limits			Prepared	Analyzed	Dil Fac		
1,4-Dioxane-d8	33		10-150			11/04/18 08:26	11/04/18 21.11			

### Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D Prepared	- Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND	-	1.6	0.33	ng/L	11/09/18 11:30	11/11/18 02:17	
Perfluoropentanoic acid (PFPeA)	ND		1.6	0.59	ng/L	11/09/18 11:30	11/11/18 02:17	1
Perfluorohexanoic acid (PFHxA)	0.70	J	1.6	0.19	ng/L	11/09/18 11:30	11/11/18 02:17	1
Perfluoroheptanoic acid (PFHpA)	0.30	J	1.6	0.25	ng/L	11/09/18 11:30	11/11/18 02:17	1
Perfluorooctanoic acid (PFOA)	1.2	J 🔰	1.6	0.25	ng/L	11/09/18 11:30	11/11/18 02:17	1
Perfluorononanoic acid (PFNA)	ND		1.6	0.30	ng/L	11/09/18 11:30	11/11/18 02:17	1
Perfluorodecanoic acid (PFDA)	ND		1.6	0.30	ng/L	11/09/18 11:30	11/11/18 02:17	1
Perfluoroundecanoic acid (PFUnA)	0.27	J	1.6	0.20	ng/L	11/09/18 11:30	11/11/18 02:17	1
Perfluorododecanoic acid (PFDoA)	ND		1.6	0.28	ng/L	11/09/18 11:30	11/11/18 02:17	1
Perfluorotridecanoic acid (PFTriA)	ND		1.6	0.19	ng/L	11/09/18 11:30	11/11/18 02:17	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.6	0.36	ng/L	11/09/18 11:30	11/11/18 02:17	1
Perfluorobutanesulfonic acid (PFBS)	ND		1,6	0.35	ng/L	11/09/18 11:30	11/11/18 02:17	1
Perfluorohexanesulfonic acid (PFHxS)	0.23	J	1.6	0.21	ng/L	11/09/18 11:30	11/11/18 02:17	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.6	0.65	ng/L	11/09/18 11:30	11/11/18 02:17	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.6	0.42	ng/L	11/09/18 11:30	11/11/18 02.17	1
Perfluorooctanesulfonic acid (PFOS)	0.64	J	1.6	0.60	ng/L	11/09/18 11:30	11/11/18 02:17	1
Perfluorooctanesulfonamide (FOSA)	ND		1.6	0.44	ng/L	11/09/18 11:30	11/11/18 02.17	1
N-methylperfluorooctanesulfonamidoa cetic acid (NMeFOSAA)	ND		16	0.36	ng/L	11/09/18 11:30	11/11/18 02:17	1
N-ethylperfluorooctanesulfonamidoac etic acid (NEtFOSAA)	ND		16	0.56	ng/L	11/09/18 11:30	11/11/18 02:17	1
6:2 FTS	ND		16	0.79	ng/L	11/09/18 11:30	11/11/18 02:17	1
8:2 FTS	ND		16	0.44	ng/L	11/09/18 11:30	11/11/18 02:17	1
Isotope Dilution	%Recovery	Qualifier	Limits		-	Prepared	Analyzed	Dil Fac
13C8 FOSA	56		25 - 150			11/09/18 11:30	11/11/18 02:17	1
13C4 PFBA	40		25 - 150			11/09/18 11:30	11/11/18 02:17	1
13C5-PFPeA DNU	49		25 - 150			11/09/18 11:30	11/11/18 02:17	1
13C2 PFHxA	41		25 - 150			11/09/18 11:30	11/11/18 02:17	1
13C4 PFHpA	55		25 - 150			11/09/18 11:30	11/11/18 02:17	1
13C4 PFOA	72		25 - 150			11/09/18 11:30	11/11/18 02:17	1
13C5 PFNA	76		25 - 150			11/09/18 11:30	11/11/18 02:17	1
13C2 PFDA	79		25 - 150			11/09/18 11:30	11/11/18 02:17	1
13C2 PFUnA	78		25 - 150			11/09/18 11:30	11/11/18 02:17	1
13C2 PFDoA	73		25 - 150			11/09/18 11:30	11/11/18 02:17	1
13C2 PFTeDA	72		25 - 150			11/09/18 11:30	11/11/18 02:17	1
13C3 PFBS	62		25 - 150			11/09/18 11:30	11/11/18 02:17	1
18O2 PFHxS	68		25 - 150			11/09/18 11:30	11/11/18 02.17	1
13C4 PFOS	73		25 - 150			11/09/18 11:30	11/11/18 02:17	1
d3-NMeFOSAA	65		25 - 150			11/09/18 11:30	11/11/18 02:17	1
d5-NEtFOSAA	77		25 - 150			11/09/18 11:30	11/11/18 02.17	1
M2-6:2 FTS	151	*	25 - 150			11/09/18 11:30	11/11/18 02:17	1

### Client Sample ID: DUPLICATE Date Collected: 10/31/18 15:22 Date Received: 11/02/18 10:10

Method: 537 (modified)	- Fluorinated Alkyl Substand	ces (Continued)	
Isotope Dilution	%Recovery Qualifier	Limits	Prep
M2-8:2 FTS	100	25-150	11/09/1

### Client Sample ID: EQUIPMENT BLANK Date Collected: 10/31/18 14:15 Date Received: 11/02/18 10:10

Lab	Sample	ID:	200-46	033-4
			Matrix:	Water

Prepared	Analyzed	Dil Fac
11/09/18 11:30	11/11/18 02:17	1

### Lab Sample ID: 200-46033-5 Matrix: Water

Method: 537 (modified) - Fluo	rinated Alk	yl Substar	ICes						
Analyte	Result	Qualifier	RL,	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		1.6	0.33	ng/L	_	11/09/18 11:30	11/11/18 02:33	1
Perfluoropentanoic acid (PFPeA)	ND		1.6	0.61	ng/L		11/09/18 11:30	11/11/18 02:33	1
Perfluorohexanoic acid (PFHxA)	ND		1.6	0.19	ng/L		11/09/18 11:30	11/11/18 02:33	1
Perfluoroheptanoic acid (PFHpA)	ND		1.6	0.26	ng/L		11/09/18 11:30	11/11/18 02:33	1
Perfluorooctanoic acid (PFOA)	ND		1.6	0.26	ng/L		11/09/18 11:30	11/11/18 02:33	1
Perfluorononanoic acid (PFNA)	ND		1.6	0.31	ng/L		11/09/18 11:30	11/11/18 02:33	1
Perfluorodecanoic acid (PFDA)	ND	-	1.6	0.31	ng/L		11/09/18 11:30	11/11/18 02:33	1
Perfluoroundecanoic acid (PFUnA)	0.29	J J-	1.6	0.20	ng/L		11/09/18 11:30	11/11/18 02:33	1
Perfluorododecanoic acid (PFDoA)	ND		1.6	0.28	ng/L		11/09/18 11:30	11/11/18 02:33	1
Perfluorotridecanoic acid (PFTriA)	ND		1.6	0.19	ng/L		11/09/18 11:30	11/11/18 02:33	. 1
Perfluorotetradecanoic acid (PFTeA)	ND		1.6	0.36	ng/L		11/09/18 11:30	11/11/18 02:33	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.6	0.36	ng/L		11/09/18 11:30	11/11/18 02:33	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.6	0.21	ng/L		11/09/18 11:30	11/11/18 02:33	1
Perfluoroheptanesulfonic Acid (PEHoS)	ND		1.6	0.66	ng/L		11/09/18 11:30	11/11/18 02:33	1
Perfluorodecanesulfonic acid (PFDS)	ND		16	0.43	no/l		11/00/18 11:20	11/11/18 00.00	
Perfluorooctanesulfonic acid (PFOS)	ND		1.6	0.40	ng/L		11/00/19 11:30	11/11/10 02:33	1
Perfluorooctanesulfonamide (FOSA)	ND		16	0.45	ng/L		11/00/19 11:30	11/11/10 02.33	1
N-methylperfluorooctanesulfonamidoa	ND		16	0.36	ng/L		11/09/19 11:30	11/11/10 02:33	1
cetic acid (NMeFOSAA)				0.00	ng/L		11/08/10 11.30	11/11/16 02:33	1
N-ethylperfluorooctanesulfonamidoac	ND		16	0.57	ng/L		11/09/18 11:30	11/11/18 02:33	1
etic acid (NEtFOSAA)					-				
6:2 FIS	ND		16	0.81	ng/L		11/09/18 11:30	11/11/18 02:33	1
8:2 FTS	ND		16	0.45	ng/L		11/09/18 11:30	11/11/18 02:33	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 FOSA	53		25-150				11/09/18 11:30	11/11/18 02:33	1
13C4 PFBA	70		25 - 150				11/09/18 11:30	11/11/18 02:33	1
13C5-PFPeA DNU	77		25 - 150				11/09/18 11:30	11/11/18 02:33	1
13C2 PFHxA	76		25 - 150				11/09/18 11:30	11/11/18 02:33	1
13C4 PFHpA	77		25 - 150				11/09/18 11:30	11/11/18 02:33	1
13C4 PFOA	82		25 - 150				11/09/18 11:30	11/11/18 02:33	1
13C5 PFNA	84		25 - 150				11/09/18 11:30	11/11/18 02:33	1
13C2 PFDA	91		25 - 1 <b>50</b>				11/09/18 11:30	11/11/18 02:33	1
13C2 PFUnA	85		25 - 150				11/09/18 11:30	11/11/18 02:33	1
13C2 PFDoA	79		25 - 150				11/09/18 11:30	11/11/18 02:33	1
13C2 PFTeDA	73		25 - 150				11/09/18 11:30	11/11/18 02:33	1
13C3 PFBS	69		25 - 150				11/09/18 11:30	11/11/18 02:33	1
18O2 PFHxS	76		25 - 150				11/09/18 11:30	11/11/18 02:33	1
13C4 PFOS	78		25_150				11/09/18 11:30	11/11/18 02:33	1
d3-NMeFOSAA	74		25 - 150				11/09/18 11:30	11/11/18 02:33	1
d5-NEtFOSAA	87		25-150				11/09/18 11:30	11/11/18 02:33	1

**TestAmerica Burlington** 

### **Client Sample ID: EQUIPMENT BLANK** Date Collected: 10/31/18 14:15 Date Received: 11/02/18 10:10

Method: 537 (modified) - Fluo	rinated Alky	l Substan	ces (Continued)			
Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
M2-6:2 FTS	125		25-150	11/09/18 11:30	11/11/18 02:33	
M2-8:2 FTS	94		25-150	11/09/18 11:30	11/11/18 02:33	1

### **Client Sample ID: MW-3R** Date Collected: 10/31/18 15:15 Date Received: 11/02/18 10:10

Lab Sample ID: 200-46033-6 **Matrix: Water** 

ND         F1 F2         0.20         0.016         ug/L         11/04/18 08:26	Analyte	Result	Qualifier	RL	MDL	Unit	Diluci D	Prepared	Analyzed	<b>Dil Fac</b>
Isotope Dilution         Screeovery         Qualifier         Limits         Prepared         Analyzed         Industry           1.4-Dixame-d8         31         10-150         11/04/18 08:26         11/04/18 08:26         11/04/18 08:26         1           Method: 537 (modified) - Fluorinated Alkyl Substances         Result         Qualifier         RL         MDL         Unit         D         Prepared         Analyzed         I           Perfluorobutanoic acid (PFPA)         ND         1.6         0.33         ng/L         11/09/18 11:30         11/11/18 02:49         Prepared         Analyzed         Prepared         Prepared         Prepared	1,4-Dioxane	ND	F1 F2	0.20	0.016	ug/L		11/04/18 08:26	11/04/18 18:58	1
T.4-Dioxane-de         31         T0-150         T10-478 08:26         T170478 18:58           Method:         537 (modified) - Fluorinated Alkyl Substances         Mult         Unit         D         Prepared         Analyzed         D           Perfluorobuancic acid (PFEA)         ND         1.6         0.33 ng/L         11/09/18 11:30         11/11/18 02:49         Perfluorobuancic acid (PFHxA)         0.22 J         1.8         0.91 ng/L         11/09/18 11:30         11/11/18 02:49           Perfluorobacanic acid (PFHxA)         0.22 J         1.8         0.91 ng/L         11/09/18 11:30         11/11/18 02:49           Perfluorobacanic acid (PFNA)         0.47 J         J         1.8         0.26 ng/L         11/09/18 11:30         11/11/18 02:49           Perfluorobacancic acid (PFNA)         ND         1.6         0.31 ng/L         11/09/18 11:30         11/11/18 02:49           Perfluorobacancic acid (PFNA)         ND         1.6         0.21 ng/L         11/09/18 11:30         11/11/18 02:49           Perfluorobacancic acid (PFDA)         ND         1.6         0.28 ng/L         11/09/18 11:30         11/11/18 02:49           Perfluorobacancic acid (PFDA)         ND         1.6         0.26 ng/L         11/09/18 11:30         11/11/18 02:49           Perfluorobacanesulcic acid (PFD	Isotope Dilution	%Recovery	Qualifier	Limits		•		Prepared	Analyzed	Dil Fac
Method:         S37 (modified) - Fluorinated Alkyl Substances           Analyze         Result         Qualitier         RL         MDL         Unit         D         Prepared         Analyzed         D           Perfluorobutanoic acid (PFBA)         ND         1.6         0.33         ng/L         11/09/18 11:30         11/11/18 02:49           Perfluorobexanoic acid (PFNA)         0.22         J         1.6         0.26         ng/L         11/09/18 11:30         11/11/18 02:49           Perfluorobexanoic acid (PFNA)         ND         1.6         0.26         ng/L         11/09/18 11:30         11/11/18 02:49           Perfluorobexanoic acid (PFNA)         ND         1.6         0.31         ng/L         11/09/18 11:30         11/11/18 02:49           Perfluorodecanoic acid (PFNA)         ND         1.6         0.31         ng/L         11/09/18 11:30         11/11/18 02:49           Perfluorodecanoic acid (PFDA)         ND         1.6         0.31         ng/L         11/09/18 11:30         11/11/18 02:49           Perfluorotidecanoic acid (PFDA)         ND         1.6         0.37         ng/L         11/09/18 11:30         11/11/18 02:49           Perfluorotidecanoic acid (PFDA)         ND         1.6         0.37         ng/L         11/09/	1,4-Dioxane-d8	31		10 - 150				11/04/18 08:26	11/04/18 18:58	1
Analyte         Result         Qualifier         RL         MDL         Unit         D         Propared         Analyzed         L           Perfluorobutancic acid (PFBA)         ND         1.6         0.33         ng/L         11/09/18 11:30         11/1/11/18 02:49         P           Perfluorobetanoic acid (PFHA)         0.22         J         1.6         0.61         ng/L         11/09/18 11:30         11/11/18 02:49           Perfluorobetanoic acid (PFPA)         ND         1.6         0.26         ng/L         11/09/18 11:30         11/11/18 02:49           Perfluorobetanoic acid (PFDA)         ND         1.6         0.26         ng/L         11/09/18 11:30         11/11/18 02:49           Perfluorodecanoic acid (PFDA)         ND         1.6         0.21         ng/L         11/09/18 11:30         11/11/18 02:49           Perfluorodecanoic acid (PFDA)         ND         1.6         0.20         ng/L         11/09/18 11:30         11/11/18 02:49           Perfluorobutanesulfonic acid (PFDA)         ND         1.6         0.27         ng/L         11/09/18 11:30         11/11/18 02:49           Perfluorobutanesulfonic acid (PFDA)         ND         1.6         0.37         ng/L         11/09/18 11:30         11/11/18 02:49           P	Method: 537 (modified) - Fluo	rinated Alko	vI Substan	200						
Perfluorobutanoic acid (PFBA)         ND         1.6         0.33         ng/L         11/09/18 11:30         11/11/18 02:49           Perfluorobetxanoic acid (PFPAA)         ND         1.6         0.19         ng/L         11/09/18 11:30         11/11/18 02:49           Perfluorobetxanoic acid (PFHAA)         ND         1.6         0.19         ng/L         11/09/18 11:30         11/11/18 02:49           Perfluorobetxanoic acid (PFHAA)         ND         1.6         0.26         ng/L         11/09/18 11:30         11/11/18 02:49           Perfluorobetxanoic acid (PFDA)         0.47         J         1.6         0.26         ng/L         11/09/18 11:30         11/11/18 02:49           Perfluorobecanoic acid (PFDA)         ND         1.6         0.31         ng/L         11/09/18 11:30         11/11/18 02:49           Perfluorobecanoic acid (PFDA)         ND         1.6         0.28         ng/L         11/09/18 11:30         11/11/18 02:49           Perfluorobecanoic acid (PFDA)         ND         1.6         0.28         ng/L         11/09/18 11:30         11/11/18 02:49           Perfluorobetxaesufforic acid (PFDA)         ND         1.6         0.37         ng/L         11/09/18 11:30         11/11/18 02:49           Perfluorobetxaesufforic acid (PFDS)         N	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Anslyzod	Dil Eac
Perfluoropentanoic acid (PFPaA)       ND       1.6       0.61       ng/L       11/09/18       11/11/18       02:49         Perfluoropentanoic acid (PFPAA)       0.22       J       1.6       0.19       ng/L       11/09/18       11/11/18       02:49         Perfluoropentanoic acid (PFDA)       0.47       J       1.6       0.26       ng/L       11/09/18       11/11/18       02:49         Perfluoropentanoic acid (PFDA)       0.47       J       1.6       0.26       ng/L       11/09/18       11/11/18       02:49         Perfluoropentanoic acid (PFDA)       ND       1.6       0.31       ng/L       11/09/18       11/11/18       02:49         Perfluorodecanoic acid (PFDA)       ND       1.6       0.31       ng/L       11/09/18       11/11/18       02:49         Perfluorodecanoic acid (PFDA)       ND       1.6       0.28       ng/L       11/09/18       11/11/18       02:49         Perfluorobetanoic acid (PFTA)       ND       1.6       0.27       ng/L       11/09/18       11/11/18       02:49         Perfluorobetanoic acid (PFTA)       ND       1.6       0.37       ng/L       11/09/18       11/11/18       02:49         Perfluorobetanesulfonic acid (PFDS)       ND	Perfluorobutanoic acid (PFBA)	ND		1.6	0.33	na/L	1.4	11/09/18 11:30	11/11/18 02:40	1
Perfluorohexanoic acid (PFHxA)         0.22         J         1.6         0.19         ngL         11/09/18         11/30         11/11/18         02/24           Perfluorochezanoic acid (PFHpA)         ND         1.6         0.26         ngL         11/09/18         11/11/18         02/24           Perfluoroctanoic acid (PFNA)         ND         1.6         0.26         ngL         11/09/18         11/11/18         02/24           Perfluoroctanoic acid (PFNA)         ND         1.6         0.31         ngL         11/09/18         11/11/18         02/49           Perfluorodecanoic acid (PFDA)         ND         1.6         0.31         ngL         11/09/18         11/11/18         02/49           Perfluorodecanoic acid (PFDA)         ND         1.6         0.31         ngL         11/09/18         11/11/18         02/49           Perfluorodecanoic acid (PFDA)         ND         1.6         0.28         ngL         11/09/18         11/11/18         02/49           Perfluorodecanoic acid (PFTA)         ND         1.6         0.37         ngL         11/09/18         11/11/18         02/49           Perfluorobaresuffonic acid (PFTA)         ND         1.6         0.37         ngL         11/09/18         11/11/11/18	Perfluoropentanoic acid (PFPeA)	ND		1.6	0.61	na/L		11/09/18 11:30	11/11/18 02:40	1
Perfluoroheptanoic acid (PFHpA)       ND       1.6       0.26 ng/L       11/09/18 11:30       11/11/18 02:49         Perfluoroctanoic acid (PFDA)       0.47       J       J       1.6       0.26 ng/L       11/09/18 11:30       11/11/18 02:49         Perfluoronanoic acid (PFDA)       ND       1.6       0.31 ng/L       11/09/18 11:30       11/11/18 02:49         Perfluorodecanoic acid (PFDA)       ND       1.6       0.31 ng/L       11/09/18 11:30       11/11/18 02:49         Perfluorodecanoic acid (PFDA)       ND       1.6       0.28 ng/L       11/09/18 11:30       11/11/18 02:49         Perfluoroindecanoic acid (PFDA)       ND       1.6       0.28 ng/L       11/09/18 11:30       11/11/18 02:49         Perfluoroindecanoic acid (PFTA)       ND       1.6       0.37 ng/L       11/09/18 11:30       11/11/18 02:49         Perfluoroindecanoic acid (PFTA)       ND       1.6       0.37 ng/L       11/09/18 11:30       11/11/18 02:49         Perfluorohexanesulfonic acid (PFES)       ND       1.6       0.67 ng/L       11/09/18 11:30       11/11/18 02:49         Perfluoroctanesulfonic acid (PFDS)       ND       1.6       0.67 ng/L       11/09/18 11:30       11/11/18 02:49         Perfluoroctanesulfonic acid (PFDS)       ND       1.6       0.67 ng/L	Perfluorohexanoic acid (PFHxA)	0.22	J	1.6	0.19	na/L		11/09/18 11:30	11/11/18 02:49	1
Perfluoroctanoic acid (PFOA)         0.47         J         1.6         0.26         ng/L         11/09/18         11:30         11/11/18         02:49           Perfluoronancic acid (PFNA)         ND         1.6         0.31         ng/L         11/09/18         11:30         11/11/18         02:49           Perfluorodecanoic acid (PFNA)         ND         1.6         0.31         ng/L         11/09/18         11:30         11/11/18         02:49           Perfluoroundecanoic acid (PFDA)         ND         1.6         0.20         ng/L         11/09/18         11:30         11/11/18         02:49           Perfluoroundecanoic acid (PFDA)         ND         1.6         0.28         ng/L         11/09/18         11:30         11/11/18         02:49           Perfluorobtanesulfonic acid (PFDA)         ND         1.6         0.37         ng/L         11/09/18         11:30         11/11/18         02:49           Perfluorobtanesulfonic acid (PFDA)         ND         1.6         0.21         ng/L         11/09/18         11:30         11/11/18         02:49           Perfluorobtanesulfonic acid (PFDA)         ND         1.6         0.47         ng/L         11/09/18         11:30         11/11/18         0:41	Perfluoroheptanoic acid (PFHpA)	ND		1.6	0.26	na/L		11/09/18 11:30	11/11/18 02:49	1
Perfluoronanoic acid (PFNA)         ND         1.6         0.31         ng/L         11/09/18 11:30         11/11/18 02:49           Perfluorodecanoic acid (PFDA)         ND         1.6         0.31         ng/L         11/09/18 11:30         11/11/18 02:49           Perfluoroundecanoic acid         0.20         J         1.6         0.20         ng/L         11/09/18 11:30         11/11/18 02:49           Perfluoroundecanoic acid (PFDA)         ND         1.6         0.28         ng/L         11/09/18 11:30         11/11/18 02:49           Perfluorothdecanoic acid (PFDA)         ND         1.6         0.28         ng/L         11/09/18 11:30         11/11/18 02:49           Perfluorothdecanoic acid (PFTrA)         ND         1.6         0.37         ng/L         11/09/18 11:30         11/11/18 02:49           Perfluorobutanesulfonic acid (PFDS)         ND         1.6         0.37         ng/L         11/09/18 11:30         11/11/18 02:49           Perfluorobatanesulfonic acid (PFDS)         ND         1.6         0.43         ng/L         11/09/18 11:30         11/11/18 02:49           Perfluorobatanesulfonic acid (PFDS)         ND         1.6         0.43         ng/L         11/09/18 11:30         11/11/18 02:49           Perfluoroctanesulfonic acid (PFDS)         <	Perfluorooctanoic acid (PFOA)	0.47	JU	1.6	0.26	na/L		11/09/18 11:30	11/11/18 02:49	1
Perfluorodecanoic acid (PFDA)         ND         1.6         0.31         ng/L         11/09/18         11.30         11/11/18         02:49           Perfluoroundecanoic acid         0.20         J         1.6         0.20         ng/L         11/09/18         11:30         11/11/18         02:49           Perfluoroundecanoic acid         0.20         J         1.6         0.20         ng/L         11/09/18         11:30         11/11/18         02:49           Perfluoroundecanoic acid (PFDA)         ND         1.6         0.37         ng/L         11/09/18         11:30         11/11/18         02:49           Perfluorobtanesulfonic acid (PFTA)         ND         1.6         0.36         ng/L         11/09/18         11:30         11/11/18         02:49           Perfluorobtanesulfonic acid (PFTA)         ND         1.6         0.36         ng/L         11/09/18         11:30         11/11/18         02:49           Perfluorobtanesulfonic acid (PFTA)         ND         1.6         0.37         ng/L         11/09/18         11:30         11/11/18         02:49           Perfluorobtanesulfonic acid (PFDS)         ND         1.6         0.43         ng/L         11/09/18         11:30         11/11/18         02:49 <td>Perfluorononanoic acid (PFNA)</td> <td>ND</td> <td>The second se</td> <td>1.6</td> <td>0.31</td> <td>na/L</td> <td></td> <td>11/09/18 11:30</td> <td>11/11/18 02:49</td> <td>1</td>	Perfluorononanoic acid (PFNA)	ND	The second se	1.6	0.31	na/L		11/09/18 11:30	11/11/18 02:49	1
Perfluoroundecanoic acid         0.20         J         1.6         0.20         ng/L         11/09/18 11:30         11/11/18 02:49           Perfluoroddecanoic acid (PFDoA)         ND         1.6         0.28         ng/L         11/09/18 11:30         11/11/18 02:49           Perfluoroddecanoic acid (PFTrA)         ND         1.6         0.19         ng/L         11/09/18 11:30         11/11/18 02:49           Perfluorotetradecanoic acid (PFTeA)         ND         1.6         0.37         ng/L         11/09/18 11:30         11/11/18 02:49           Perfluorobetranesulfonic acid (PFBS)         ND         1.6         0.36         ng/L         11/09/18 11:30         11/11/18 02:49           Perfluorobetranesulfonic acid (PFBS)         ND         1.6         0.67         ng/L         11/09/18 11:30         11/11/18 02:49           Perfluoroctanesulfonic acid (PFDS)         ND         1.6         0.67         ng/L         11/09/18 11:30         11/11/18 02:49           Perfluoroctanesulfonic acid (PFDS)         ND         1.6         0.43         ng/L         11/09/18 11:30         11/11/18 02:49           Perfluoroctanesulfonic acid (PFOS)         ND         1.6         0.45         ng/L         11/09/18 11:30         11/11/18 02:49           Perfluoroctanesulfonamidoa	Perfluorodecanoic acid (PFDA)	ND		1.6	0.31	ng/L		11/09/18 11:30	11/11/18 02:49	1
(PFUnA)         ND         1.6         0.28         ng/L         11/0010 11/00 11/01 11/00           Perfluorotridecanoic acid (PFTrA)         ND         1.6         0.28         ng/L         11/09/18 11:30         11/11/18 02:49           Perfluorotridecanoic acid (PFTrA)         ND         1.6         0.37         ng/L         11/09/18 11:30         11/11/18 02:49           Perfluorotetradecanoic acid (PFTeA)         ND         1.6         0.37         ng/L         11/09/18 11:30         11/11/18 02:49           Perfluorotetradecanoic acid (PFTeA)         ND         1.6         0.36         ng/L         11/09/18 11:30         11/11/18 02:49           Perfluorotexanesulfonic acid (PFDS)         ND         1.6         0.67         ng/L         11/09/18 11:30         11/11/18 02:49           Perfluorocotanesulfonic acid (PFDS)         ND         1.6         0.43         ng/L         11/09/18 11:30         11/11/18 02:49           Perfluoroctanesulfonic acid (PFOS)         ND         1.6         0.43         ng/L         11/09/18 11:30         11/11/18 02:49           Perfluoroctanesulfonamido         ND         1.6         0.45         ng/L         11/09/18 11:30         11/11/18 02:49           N-methylperfluoroctanesulfonamidoac         ND         1.6         0.45	Perfluoroundecanoic acid	0.20	J	1.6	0.20	no/l		11/09/18 11:30	11/11/18 02:49	1
Perfluorododecanoic acid (PFDoA)       ND       1.6       0.28       ng/L       11/09/18 11:30       11/11/18 02:49         Perfluorotetradecanoic acid (PFTriA)       ND       1.6       0.19       ng/L       11/09/18 11:30       11/11/18 02:49         Perfluorotetradecanoic acid (PFTeA)       ND       1.6       0.37       ng/L       11/09/18 11:30       11/11/18 02:49         Perfluorobutanesulfonic acid (PFBS)       ND       1.6       0.36       ng/L       11/09/18 11:30       11/11/18 02:49         Perfluorobutanesulfonic acid (PFBS)       ND       1.6       0.67       ng/L       11/09/18 11:30       11/11/18 02:49         Perfluorodecanesulfonic acid (PFDS)       ND       1.6       0.67       ng/L       11/09/18 11:30       11/11/18 02:49         Perfluorooctanesulfonic acid (PFDS)       ND       1.6       0.43       ng/L       11/09/18 11:30       11/11/18 02:49         Perfluorooctanesulfonic acid (PFOS)       ND       1.6       0.45       ng/L       11/09/18 11:30       11/11/18 02:49         Perfluorooctanesulfonamidoa       ND       1.6       0.45       ng/L       11/09/18 11:30       11/11/18 02:49         N-methylperfluorooctanesulfonamidoa       ND       16       0.57       ng/L       11/09/18 11:30       11/11	(PFUnA)								1011/10 02.43	,
Perfluorotridecanoic acid (PFTriA)       ND       1.6       0.19 ng/L       11/09/18 11:30       11/11/18 02:49         Perfluorotetradecanoic acid (PFTeA)       ND       1.6       0.37 ng/L       11/09/18 11:30       11/11/18 02:49         Perfluorobutanesulfonic acid (PFBS)       ND       1.6       0.36 ng/L       11/09/18 11:30       11/11/18 02:49         Perfluorobetanesulfonic acid (PFHxS)       ND       1.6       0.21 ng/L       11/09/18 11:30       11/11/18 02:49         Perfluorobetanesulfonic acid (PFHxS)       ND       1.6       0.67 ng/L       11/09/18 11:30       11/11/18 02:49         Perfluorobetanesulfonic acid (PFDS)       ND       1.6       0.43 ng/L       11/09/18 11:30       11/11/18 02:49         Perfluoroctanesulfonic acid (PFDS)       ND       1.6       0.43 ng/L       11/09/18 11:30       11/11/18 02:49         Perfluoroctanesulfonamide (FOSA)       ND       1.6       0.45 ng/L       11/09/18 11:30       11/11/18 02:49         N-methylperfluoroctanesulfonamidoa       ND       1.6       0.45 ng/L       11/09/18 11:30       11/11/18 02:49         Nethylperfluoroctanesulfonamidoa       ND       16       0.57 ng/L       11/09/18 11:30       11/11/18 02:49         Stotpe Dilution       */*Recovery       Qualifier       Limits <t< td=""><td>Perfluorododecanoic acid (PFDoA)</td><td>ND</td><td></td><td>1.6</td><td>0.28</td><td>ng/L</td><td></td><td>11/09/18 11:30</td><td>11/11/18 02:49</td><td>1</td></t<>	Perfluorododecanoic acid (PFDoA)	ND		1.6	0.28	ng/L		11/09/18 11:30	11/11/18 02:49	1
Perfluorotetradecanoic acid (PFTeA)       ND       1.6       0.37 ng/L       11/09/18 11:30       11/11/18 02:49         Perfluorobutanesulfonic acid (PFBS)       ND       1.6       0.36 ng/L       11/09/18 11:30       11/11/18 02:49         Perfluorobutanesulfonic acid (PFHxS)       ND       1.6       0.21 ng/L       11/09/18 11:30       11/11/18 02:49         Perfluorobutanesulfonic acid (PFHxS)       ND       1.6       0.67 ng/L       11/09/18 11:30       11/11/18 02:49         Perfluorobetanesulfonic acid (PFDS)       ND       1.6       0.43 ng/L       11/09/18 11:30       11/11/18 02:49         Perfluoroctanesulfonic acid (PFOS)       ND       1.6       0.43 ng/L       11/09/18 11:30       11/11/18 02:49         Perfluoroctanesulfonamidea (FOSA)       ND       1.6       0.45 ng/L       11/09/18 11:30       11/11/18 02:49         N-methylperfluoroctanesulfonamidoa       ND       1.6       0.45 ng/L       11/09/18 11:30       11/11/18 02:49         etic acid (NBeFOSAA)       ND       1.6       0.57 ng/L       11/09/18 11:30       11/11/18 02:49         N-methylperfluoroctanesulfonamidoac       ND       16       0.57 ng/L       11/09/18 11:30       11/11/18 02:49         8:2 FTS       ND       16       0.57 ng/L       11/09/18 11:30 <td< td=""><td>Perfluorotridecanoic acid (PFTriA)</td><td>ND</td><td></td><td>1.6</td><td>0.19</td><td>ng/L</td><td></td><td>11/09/18 11:30</td><td>11/11/18 02:49</td><td>1</td></td<>	Perfluorotridecanoic acid (PFTriA)	ND		1.6	0.19	ng/L		11/09/18 11:30	11/11/18 02:49	1
Perfluorobutanesulfonic acid (PFBS)       ND       1.6       0.36 ng/L       11/09/18 11:30       11/11/18 02:49         Perfluorohexanesulfonic acid (PFHxS)       ND       1.6       0.21 ng/L       11/09/18 11:30       11/11/18 02:49         Perfluorohexanesulfonic acid (PFHxS)       ND       1.6       0.67 ng/L       11/09/18 11:30       11/11/18 02:49         Perfluorodecanesulfonic acid (PFDS)       ND       1.6       0.43 ng/L       11/09/18 11:30       11/11/18 02:49         Perfluorodecanesulfonic acid (PFOS)       ND       1.6       0.43 ng/L       11/09/18 11:30       11/11/18 02:49         Perfluoroctanesulfonic acid (PFOS)       ND       1.6       0.45 ng/L       11/09/18 11:30       11/11/18 02:49         Perfluoroctanesulfonamidoa       ND       1.6       0.45 ng/L       11/09/18 11:30       11/11/18 02:49         N=methylperfluoroctanesulfonamidoa       ND       1.6       0.57 ng/L       11/09/18 11:30       11/11/18 02:49         etic acid (NMeFOSAA)       ND       16       0.57 ng/L       11/09/18 11:30       11/11/18 02:49         etic acid (NEFOSAA)       ND       16       0.81 ng/L       11/09/18 11:30       11/11/18 02:49         8:2 FTS       ND       16       0.81 ng/L       11/09/18 11:30       11/11/18 02:49	Perfluorotetradecanoic acid (PFTeA)	ND		1.6	0.37	ng/L		11/09/18 11:30	11/11/18 02:49	1
Perfluorohexanesulfonic acid (PFHxS)       ND       1.6       0.21       ng/L       11/09/18 11:30       11/11/18 02:49         Perfluoroheptanesulfonic Acid       ND       1.6       0.67       ng/L       11/09/18 11:30       11/11/18 02:49         Perfluoroheptanesulfonic acid (PFDS)       ND       1.6       0.67       ng/L       11/09/18 11:30       11/11/18 02:49         Perfluorodecanesulfonic acid (PFDS)       ND       1.6       0.43       ng/L       11/09/18 11:30       11/11/18 02:49         Perfluoroctanesulfonic acid (PFOS)       ND       1.6       0.45       ng/L       11/09/18 11:30       11/11/18 02:49         Perfluoroctanesulfonamide (FOSA)       ND       1.6       0.45       ng/L       11/09/18 11:30       11/11/18 02:49         N-methylperfluoroctanesulfonamidoa       ND       16       0.37       ng/L       11/09/18 11:30       11/11/18 02:49         etic acid (NMeFOSAA)       ND       16       0.81       ng/L       11/09/18 11:30       11/11/18 02:49         etic acid (NEtFOSAA)       ND       16       0.81       ng/L       11/09/18 11:30       11/11/18 02:49         sotope Dilution       */Recovery       Qualifier       Limits       */Pepared       Analyzed       D         13C4	Perfluorobutanesulfonic acid (PFBS)	ND		1.6	0.36	ng/L		11/09/18 11:30	11/11/18 02:49	. 1
Perfluoroheptanesulfonic Acid         ND         1.6         0.67         ng/L         11/09/18         11/11/18         02:49           Perfluorodecanesulfonic acid (PFDS)         ND         1.6         0.43         ng/L         11/09/18         11/11/18         02:49           Perfluorodecanesulfonic acid (PFOS)         ND         1.6         0.62         ng/L         11/09/18         11/11/18         02:49           Perfluoroctanesulfonamide (FOSA)         ND         1.6         0.43         ng/L         11/09/18         11/11/18         02:49           Perfluoroctanesulfonamide (FOSA)         ND         1.6         0.45         ng/L         11/09/18         11/11/18         02:49           N=ethylperfluoroctanesulfonamidoac         ND         16         0.37         ng/L         11/09/18         11/10         11/11/18         02:49           etic acid (NMeFOSAA)         ND         16         0.57         ng/L         11/09/18         11/30         11/11/18         02:49           8:2 FTS         ND         16         0.81         ng/L         11/09/18         11/30         11/11/18         02:49           13C8 FOSA         67         25 - 150         11/09/18         11/30         11/11/18         02:49 <td>Perfluorohexanesulfonic acid (PFHxS)</td> <td>ND</td> <td></td> <td>1.6</td> <td>0.21</td> <td>ng/L</td> <td></td> <td>11/09/18 11:30</td> <td>11/11/18 02:49</td> <td>. 1</td>	Perfluorohexanesulfonic acid (PFHxS)	ND		1.6	0.21	ng/L		11/09/18 11:30	11/11/18 02:49	. 1
(PFR)S)       Perfluorodecanesulfonic acid (PFDS)       ND       1.6       0.43 ng/L       11/09/18 11:30       11/11/18 02:49         Perfluorooctanesulfonic acid (PFOS)       ND       1.6       0.62 ng/L       11/09/18 11:30       11/11/18 02:49         Perfluorooctanesulfonamide (FOSA)       ND       1.6       0.45 ng/L       11/09/18 11:30       11/11/18 02:49         N-methylperfluorooctanesulfonamidoa       ND       16       0.37 ng/L       11/09/18 11:30       11/11/18 02:49         ectic acid (NMeFOSAA)       ND       16       0.37 ng/L       11/09/18 11:30       11/11/18 02:49         N-methylperfluorooctanesulfonamidoac       ND       16       0.57 ng/L       11/09/18 11:30       11/11/18 02:49         etic acid (NEFOSAA)       ND       16       0.81 ng/L       11/09/18 11:30       11/11/18 02:49         8:2 FTS       ND       16       0.81 ng/L       11/09/18 11:30       11/11/18 02:49         isotope Dilution       %Recovery       Qualifier       Limits       11/09/18 11:30       11/11/18 02:49         13C3 FOSA       67       25 - 150       11/09/18 11:30       11/11/18 02:49       11/09/18 11:30         13C4 PFBA       58       25 - 150       11/09/18 11:30       11/11/18 02:49         13C4 PFDA	Perfluoroheptanesulfonic Acid	ND		1.6	0.67	ng/L		11/09/18 11:30	11/11/18 02:49	1
Perfluorooctanesulfonic acid (PFOS)       ND       1.6       0.43 rg/L       11/09/18 11:30       11/11/18 02:49         Perfluorooctanesulfonamide (FOSA)       ND       1.6       0.45 rg/L       11/09/18 11:30       11/11/18 02:49         N-methylperfluorooctanesulfonamidoa       ND       1.6       0.45 rg/L       11/09/18 11:30       11/11/18 02:49         N-methylperfluorooctanesulfonamidoa       ND       16       0.37 rg/L       11/09/18 11:30       11/11/18 02:49         ectic acid (NMeFOSAA)       ND       16       0.57 rg/L       11/09/18 11:30       11/11/18 02:49         N-ethylperfluorooctanesulfonamidoac       ND       16       0.57 rg/L       11/09/18 11:30       11/11/18 02:49         etic acid (NEFOSAA)       ND       16       0.57 rg/L       11/09/18 11:30       11/11/18 02:49         8:2 FTS       ND       16       0.45 rg/L       11/09/18 11:30       11/11/18 02:49         stotpe Dilution       %Recovery       Qualifier       Limits       11/10/18 11:30       11/11/18 02:49         13C4 PFBA       58       25 - 150       11/09/18 11:30       11/11/18 02:49       13C2 #9         13C4 PFBA       69       25 - 150       11/09/18 11:30       11/11/18 02:49       13C2 #9         13C4 PFBA <td< td=""><td>Perfluorodecanesulfonic acid (PEDS)</td><td>ND</td><td></td><td>10</td><td>0.42</td><td></td><td></td><td>44100/40 44 00</td><td></td><td></td></td<>	Perfluorodecanesulfonic acid (PEDS)	ND		10	0.42			44100/40 44 00		
Non-occurrent of the occurrent of the occur	Perfluorooctanesulfonic acid (PEOS)			1.0	0.43	ng/L		11/09/18 11:30	11/11/18 02:49	1
N-methylperfluorooctanesulfonamidoa       ND       1.6       0.45 hg/L       11/09/18 11:30       11/11/18 02:49         N-methylperfluorooctanesulfonamidoa       ND       16       0.37 ng/L       11/09/18 11:30       11/11/18 02:49         vetic acid (NMeFOSAA)       ND       16       0.57 ng/L       11/09/18 11:30       11/11/18 02:49         N-ethylperfluorooctanesulfonamidoac       ND       16       0.57 ng/L       11/09/18 11:30       11/11/18 02:49         etic acid (NEtFOSAA)       ND       16       0.81 ng/L       11/09/18 11:30       11/11/18 02:49         6:2 FTS       ND       16       0.81 ng/L       11/09/18 11:30       11/11/18 02:49         8:2 FTS       ND       16       0.45 ng/L       11/09/18 11:30       11/11/18 02:49         Isotope Dilution       %Recovery       Qualifier       Limits       Prepared       Analyzed       D         13C4 PFBA       58       25 - 150       11/09/18 11:30       11/11/18 02:49       11/11/18 02:49       11/09/18 11:30       11/11/18 02:49       13/249         13C2 PFhxA       69       25 - 150       11/09/18 11:30       11/11/18 02:49       13/249         13C4 PFDA       72       25 - 150       11/09/18 11:30       11/11/11/18 02:49 <t< td=""><td>Perfluorooctanesulfonamide (EOSA)</td><td>ND</td><td></td><td>1.0</td><td>0.62</td><td>ng/L</td><td></td><td>11/09/18 11:30</td><td>11/11/18 02:49</td><td>1</td></t<>	Perfluorooctanesulfonamide (EOSA)	ND		1.0	0.62	ng/L		11/09/18 11:30	11/11/18 02:49	1
Number (NMeFOSAA)       ND       16       0.37 ng/L       11/09/18 11:30       11/11/18 02:49         vetic acid (NMeFOSAA)       ND       16       0.57 ng/L       11/09/18 11:30       11/11/18 02:49         etic acid (NEtFOSAA)       ND       16       0.81 ng/L       11/09/18 11:30       11/11/18 02:49         etic acid (NEtFOSAA)       ND       16       0.81 ng/L       11/09/18 11:30       11/11/18 02:49         8:2 FTS       ND       16       0.45 ng/L       11/09/18 11:30       11/11/18 02:49         Isotope Dilution       %Recovery       Qualifier       Limits       Prepared       Analyzed       D         13C4 PFBA       58       25 - 150       11/09/18 11:30       11/11/18 02:49       D         13C2 PFHxA       69       25 - 150       11/09/18 11:30       11/11/18 02:49       D         13C4 PFBA       58       25 - 150       11/09/18 11:30       11/11/18 02:49       D         13C2 PFHxA       69       25 - 150       11/09/18 11:30       11/11/18 02:49       D         13C4 PFAA       69       25 - 150       11/09/18 11:30       11/11/18 02:49       D         13C4 PFHpA       72       25 - 150       11/09/18 11:30       11/11/18 02:49       D		ND		1.6	0.45	ng/L		11/09/18 11:30	11/11/18 02:49	1
N-ethylperfluorooctanesulfonamidoac         ND         16         0.57         ng/L         11/09/18         11:30         11/11/18         02:49           etic acid (NEtFOSAA)         ND         16         0.81         ng/L         11/09/18         11:30         11/11/18         02:49           6:2 FTS         ND         16         0.81         ng/L         11/09/18         11:30         11/11/18         02:49           8:2 FTS         ND         16         0.45         ng/L         11/09/18         11:30         11/11/18         02:49           Isotope Dilution         %Recovery         Qualifier         Limits         Prepared         Analyzed         D           13C4 PFBA         67         25 - 150         11/09/18         11:30         11/11/18         02:49           13C5-PFPeA DNU         62         25 - 150         11/09/18         11:30         11/11/18         02:49           13C2 PFHxA         69         25 - 150         11/09/18         11:30         11/11/18         02:49           13C4 PFBA         72         25 - 150         11/09/18         11:30         11/11/18         02:49           13C4 PFHpA         72         25 - 150         11/09/18         11:30	cetic acid (NMeFOSAA)	NU		16	0.37	ng/L		11/09/18 11:30	11/11/18 02:49	1
6:2 FTS       ND       16       0.81 ng/L       11/09/18 11:30       11/11/18 02:49         8:2 FTS       ND       16       0.45 ng/L       11/09/18 11:30       11/11/18 02:49         Isotope Dilution       %Recovery       Qualifier       Limits       Prepared       Analyzed       D         13C8 FOSA       67       25 - 150       11/09/18 11:30       11/11/18 02:49       D         13C4 PFBA       58       25 - 150       11/09/18 11:30       11/11/18 02:49       D         13C5 PFPeA DNU       62       25 - 150       11/09/18 11:30       11/11/18 02:49       D         13C2 PFHxA       69       25 - 150       11/09/18 11:30       11/11/18 02:49       D         13C4 PFBA       58       25 - 150       11/09/18 11:30       11/11/18 02:49       D         13C2 PFHxA       69       25 - 150       11/09/18 11:30       11/11/18 02:49       D         13C4 PFDA       72       25 - 150       11/09/18 11:30       11/11/18 02:49       D         13C4 PFDA       82       25 - 150       11/09/18 11:30       11/11/18 02:49       D         13C4 PFDA       82       25 - 150       11/09/18 11:30       11/11/18 02:49       D         13C4 PFDA       85	N-ethylperfluorooctanesulfonamidoac etic acid (NEtFOSAA)	ND		16	0.57	ng/L		11/09/18 11:30	11/11/18 02:49	1
ND       16       0.45       ng/L       11/09/18       11.10       11/11/18       02.14         Isotope Dilution       %Recovery       Qualifier       Limits       Prepared       Analyzed       D         13C8 FOSA       67       25 - 150       11/09/18       11/11/18       02:49       D         13C4 PFBA       58       25 - 150       11/09/18       11/11/18       02:49       D         13C5 PFPeA DNU       62       25 - 150       11/09/18       11:30       11/11/18       02:49         13C2 PFHxA       69       25 - 150       11/09/18       11:30       11/11/18       02:49         13C4 PFBA       69       25 - 150       11/09/18       11:30       11/11/18       02:49         13C2 PFHxA       69       25 - 150       11/09/18       11:30       11/11/18       02:49         13C4 PFDA       72       25 - 150       11/09/18       11:30       11/11/18       02:49         13C4 PFDA       82       25 - 150       11/09/18       11:30       11/11/18       02:49         13C4 PFDA       82       25 - 150       11/09/18       11:30       11/11/18       02:49         13C5 PFNA       85       25 - 150	6:2 FTS	ND		16	0.81	na/L		11/09/18 11:30	11/11/18 02:40	1
Isotope Dilution         %Recovery         Qualifier         Limits         Prepared         Analyzed         D           13C8 FOSA         67         25 - 150         11/09/18 11:30         11/11/18 02:49         D           13C4 PFBA         58         25 - 150         11/09/18 11:30         11/11/18 02:49         D           13C5 PFPeA DNU         62         25 - 150         11/09/18 11:30         11/11/18 02:49         D           13C2 PFHxA         69         25 - 150         11/09/18 11:30         11/11/18 02:49         D           13C4 PFBA         72         25 - 150         11/09/18 11:30         11/11/18 02:49         D           13C4 PFHpA         72         25 - 150         11/09/18 11:30         11/11/18 02:49         D           13C4 PFOA         82         25 - 150         11/09/18 11:30         11/11/18 02:49         D           13C4 PFOA         82         25 - 150         11/09/18 11:30         11/11/18 02:49         D           13C5 PFNA         85         25 - 150         11/09/18 11:30         11/11/18 02:49         D           13C5 PFNA         85         25 - 150         11/09/18 11:30         11/11/18 02:49         D           13C2 PFNA         85         25 - 150	8:2 FTS	ND		16	0.45	ng/L		11/09/18 11:30	11/11/18 02:49	1
13C8 FOSA       67       25-150       11/09/18 11:30       11/11/18 02:49         13C4 PFBA       58       25-150       11/09/18 11:30       11/11/18 02:49         13C5-PFPeA DNU       62       25-150       11/09/18 11:30       11/11/18 02:49         13C2 PFHxA       69       25-150       11/09/18 11:30       11/11/18 02:49         13C4 PFHpA       72       25-150       11/09/18 11:30       11/11/18 02:49         13C4 PFHpA       72       25-150       11/09/18 11:30       11/11/18 02:49         13C4 PFOA       82       25-150       11/09/18 11:30       11/11/18 02:49         13C5 PFNA       85       25-150       11/09/18 11:30       11/11/18 02:49         13C5 PFNA       85       25-150       11/09/18 11:30       11/11/18 02:49         13C5 PFNA       85       25-150       11/09/18 11:30       11/11/18 02:49         13C2 PEDA       01       25-150       11/09/18 11:30       11/11/18 02:49	Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA       58       25 - 150       11/09/18 11:30       11/11/18 02:49         13C5-PFPeA DNU       62       25 - 150       11/09/18 11:30       11/11/18 02:49         13C2 PFHxA       69       25 - 150       11/09/18 11:30       11/11/18 02:49         13C4 PFHpA       72       25 - 150       11/09/18 11:30       11/11/18 02:49         13C4 PFHpA       72       25 - 150       11/09/18 11:30       11/11/18 02:49         13C4 PFOA       82       25 - 150       11/09/18 11:30       11/11/18 02:49         13C5 PFNA       85       25 - 150       11/09/18 11:30       11/11/18 02:49         13C2 PEDA       01       25 - 150       11/09/18 11:30       11/11/18 02:49	13C8 FOSA	67		25_150				11/09/18 11.30	11/11/18 02:49	1
13C5-PFPeA DNU       62       25 - 150       11/09/18 11:30       11/11/18 02:49         13C2 PFHxA       69       25 - 150       11/09/18 11:30       11/11/18 02:49         13C4 PFHpA       72       25 - 150       11/09/18 11:30       11/11/18 02:49         13C4 PFOA       82       25 - 150       11/09/18 11:30       11/11/18 02:49         13C5 PFNA       82       25 - 150       11/09/18 11:30       11/11/18 02:49         13C5 PFNA       85       25 - 150       11/09/18 11:30       11/11/18 02:49         13C2 PEDA       01       25 - 150       11/09/18 11:30       11/11/18 02:49	13C4 PFBA	58		25 - 150				11/09/18 11:30	11/11/18 02:49	1
13C2 PFHxA         69         25 - 150         11/09/18 11:30         11/11/18 02:49           13C4 PFHpA         72         25 - 150         11/09/18 11:30         11/11/18 02:49           13C4 PFOA         82         25 - 150         11/09/18 11:30         11/11/18 02:49           13C5 PFNA         82         25 - 150         11/09/18 11:30         11/11/18 02:49           13C5 PFNA         85         25 - 150         11/09/18 11:30         11/11/18 02:49           13C2 PEDA         01         05         450         11/09/18 11:30         11/11/18 02:49	13C5-PFPeA DNU	62		25-150				11/09/18 11:30	11/11/18 02:49	1
13C4 PFHpA         72         25 - 150         11/09/18 11:30         11/11/18 02:49           13C4 PFOA         82         25 - 150         11/09/18 11:30         11/11/18 02:49           13C5 PFNA         85         25 - 150         11/09/18 11:30         11/11/18 02:49           13C2 PFDA         85         25 - 150         11/09/18 11:30         11/11/18 02:49           13C2 PFDA         85         25 - 150         11/09/18 11:30         11/11/18 02:49	13C2 PFHxA	69		25 - 150				11/09/18 11:30	11/11/18 02:49	1
13C4 PFOA         82         25 - 150         11/09/18 11:30         11/11/18 02:49           13C5 PFNA         85         25 - 150         11/09/18 11:30         11/11/18 02:49           13C2 PFDA         01         05         450         11/09/18 11:30         11/11/18 02:49	13C4 PFHpA	72		25-150				11/09/18 11:30	11/11/18 02:49	4
13C5 PFNA 85 25 - 150 11/09/18 11:30 11/11/18 02:49	13C4 PFOA	82		25_150				11/09/18 11:30	11/11/18 02:40	1
13C2 PEDA 01 05 450	13C5 PFNA	85		25_150				11/09/18 11:20	11/11/18 02.45	1
	13C2 PFDA	91		25-150				11/00/18 11:20	11/11/10 02.49	
13C2 PFUnA 89 25_150 11/00/08 11:30 11/11/18 02:49	13C2 PFUnA	89		25_150				11/00/12 11:00	11/11/10 02:45	1

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**TestAmerica Burlington** 

Lab Sample ID: 200-46033-5

Matrix: Water

### Client: New York State D.E.C. Project/Site: Granite Pte Subdiv-Off Site #C360107A

Lab Sample ID: 200-46033-6

Lab Sample ID: 200-46033-7

**Matrix: Water** 

**Matrix: Water** 

### Client Sample ID: MW-3R Date Collected: 10/31/18 15:15 Date Received: 11/02/18 10:10

sotope Dilution	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFDoA	76	25 - 150	11/09/18 11:30	11/11/18 02:49	1
13C2 PFTeDA	80	25 - 150	11/09/18 11:30	11/11/18 02:49	1
I3C3 PFBS	72	25 - 150	11/09/18 11:30	11/11/18 02:49	1
8O2 PFHxS	86	25 - 150	11/09/18 11:30	11/11/18 02:49	1
3C4 PFOS	78	25 - 150	11/09/18 11:30	11/11/18 02:49	1
3 MMoFORAA	- 66	<u> 25 - 150</u>	11/09/18 11:30	11/11/18 02:49	1
5-NEtFOSAA	83	25-150	11/09/18 11:30	11/1/18 02:40	4
12-6:2 FTS	139	25 - 150	11/09/18 11:30	11/11/18 02:49	1
12-8:2 FTS	116	25 - 150	11/09/18 11:30	11/11/18 02:40	4

### Client Sample ID: DRUM WASTE CHAR Date Collected: 10/31/18 15:35

## Date Received: 11/02/18 10:10

Method: 6010D - Metals (ICP)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	DII Fac
Lead	6.7	J	10.0	2.5	ug/L		11/09/18 01:00	11/09/18 17:23	1

## TestAmerica Burlington