

# NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

## Division of Environmental Remediation

625 Broadway, 12th Floor, Albany, New York 12233-7011

P: (518) 402-9706 | F: (518) 402-9020

www.dec.ny.gov

May 26, 2020

Mr. George Meyers, Supervisor  
Town of New Windsor  
555 Union Avenue  
New Windsor, New York 12553

Re: New Windsor Public Water Supply Well Sample Results  
Kroll Well, New Windsor (T), Orange County

Dear Supervisor Meyers:

The New York State Department of Environmental Conservation (DEC) is providing you with a copy of analytical results derived from the May 15, 2020 sampling of the granular activated carbon (GAC) water treatment system by DEC representatives that was installed on the Town of New Windsor (Town) Kroll Well located at 354 Mount Airy Road.

**No PFOS or PFOA was detected in the Kroll Well GAC-treated water. The U.S. Environmental Protection Agency (EPA) lifetime health advisory level (HAL) is 70 parts per trillion (ppt) for PFOA, PFOS, or the combination of PFOA and PFOS. The proposed NYS maximum contaminant levels (MCLs) are 10 ppt for PFOS and 10 ppt for PFOA.**

Specifically, the samples were analyzed for a total of twenty-one per- and polyfluoroalkyl substances (PFAS), including Perfluorooctanoic acid (PFOA) and Perfluorooctanesulfonic acid (PFOS). Data received for the 21 PFAS list analysis has been attached. Please note that, starting in April 2020, sampling and analysis for the 6 PFAS list has been discontinued due to redundancy in the data generated. During this event, sampling for the 21 PFAS list was conducted at 9 locations:

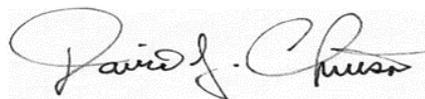
- pre-treatment (raw untreated water), which has a "RAW WATER" identifier in the Client Sample ID;
- 25 % treatment – lead tank (A-25 identifier);
- 50 % treatment – lead tank (A-50 identifier);
- 75 % treatment – lead tank (A-75 identifier);
- mid-treatment (after the first GAC canister and prior to the second GAC canister), which has a "MID POINT" identifier in the Client Sample ID;
- 25 % treatment – lag tank (B-25 identifier);
- 50 % treatment – lag tank (B-50 identifier);
- 75 % treatment – lag tank (B-75 identifier); and
- post-treatment (after the entire treatment system), which has a "EFFLUENT" identifier in the Client Sample ID.

The 9 locations sampled (and their associated identifiers) are depicted in Figure 1.

Please note that, with New York State Department of Health concurrence, GAC treatment system sample frequency moving forward has become quarterly. Therefore, the next sampling event will be scheduled for August 2020.

If you have any technical questions regarding the analytical results or on the operation and performance of the GAC treatment system, please feel free to contact me or Jim Hayward, EA Science and Technology (DEC's Project Engineer) at (315) 431-4610 (ext.1857) or [jhayward@eaest.com](mailto:jhayward@eaest.com) . For weekday or off hour / weekend emergency repair issues, please call DEC's contractor, Brian Neumann of Precision Environmental Services at (518) 441-1520 (cell). For questions regarding site-related health concerns, please contact Steve Gagnon of the Orange County DOH at (845) 291-2331 or Dr. Min-Sook Kim of the NYSDOH Bureau of Water Supply Protection at (518) 402-7650; email: [min-sook.kim@health.ny.gov](mailto:min-sook.kim@health.ny.gov) .

Sincerely,



David J. Chiusano  
Environmental Engineer/Project Manager  
Remedial Section A, Remedial Bureau E  
Division of Environmental Remediation

#### Enclosures

ec: w/enclosures  
D. Zagon, Town of New Windsor  
J. Egitto, Town of New Windsor  
M. Weeks, MHE  
W. Gilday, NYSDOH  
Dr. Kim, NYSDOH  
S. Gladding, NYSDOH  
S. Gagnon, OCDOH  
M. Andersen, OCDOH  
J. Hayward, EA Engineering  
B. Neumann, PES  
M. Cruden, NYSDEC  
D. Bendell, Region 3 RHWRE  
D. Harrington, NYSDEC

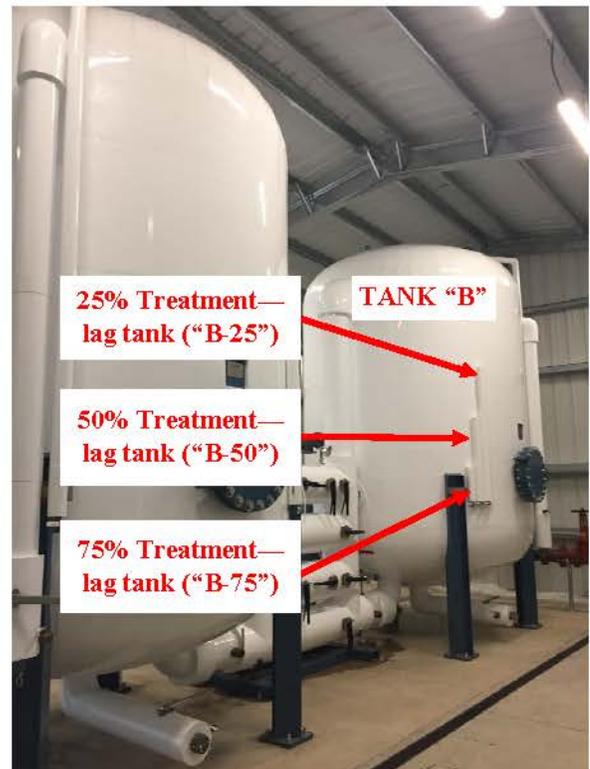
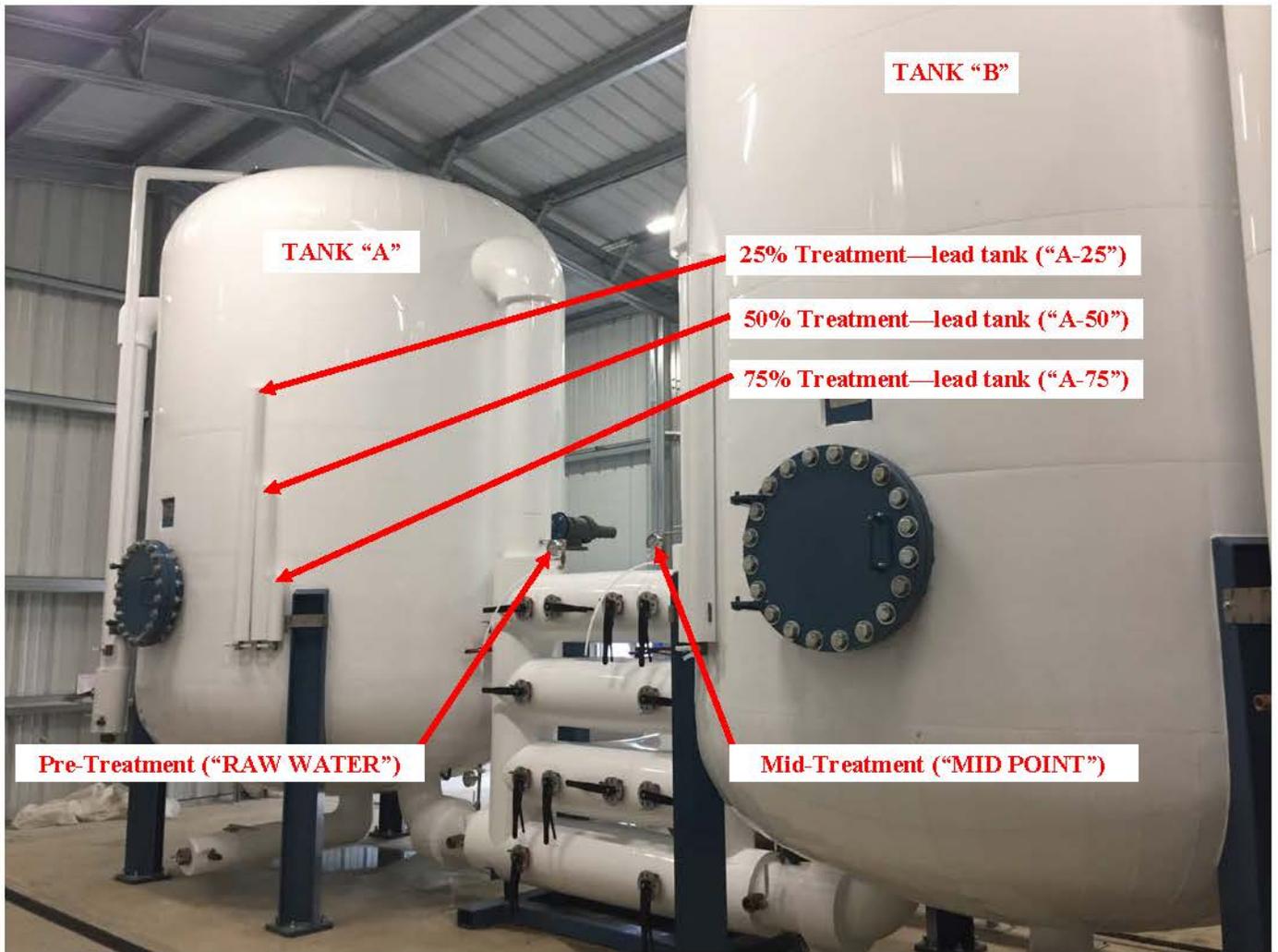


Figure 1—Kroll Well GAC Treatment System  
Sampling Locations

**Town of New Windsor**

**Kroll Well GAC Operation and Maintenance PFOA and PFOS Sampling Results \*\* (Parts Per Trillion (PPT))**

Date	Analyte	Result <sup>1</sup> Raw Water	Result A25	Result <sup>2</sup> A50	Result A75	Result Mid-Point	Result B25	Result B50	Result B75	Treated Effluent	USEPA Drinking Water Health Advisory Guidance Value	Proposed NYS MCLs
September 2019 (Based on 21 PFAS Analysis Data only)	PFOA	8.4	ND	6.1	ND	ND	ND	ND	ND	ND	70 <sup>4</sup>	10 <sup>5</sup>
	PFOS	14	ND	7.8	ND	ND	ND	ND	ND	ND	70 <sup>4</sup>	10 <sup>5</sup>
October 2019 (Based on 21 PFAS Analysis Data only)	PFOA	7.9	6.5	ND	ND	ND	ND	ND	ND	ND	70 <sup>4</sup>	10 <sup>5</sup>
	PFOS	13	8.7	ND	ND	ND	ND	ND	ND	ND	70 <sup>4</sup>	10 <sup>5</sup>
November 2019 (Based on 21 PFAS Analysis Data only)	PFOA	12	10	ND	ND	ND	ND	ND	ND	ND	70 <sup>4</sup>	10 <sup>5</sup>
	PFOS	10	8.4	ND	ND	ND	ND	ND	ND	ND	70 <sup>4</sup>	10 <sup>5</sup>
December 2019 (Based on 21 PFAS Analysis Data only)	PFOA	12	10	ND	ND	ND	ND	ND	ND	ND	70 <sup>4</sup>	10 <sup>5</sup>
	PFOS	10	8.7	ND	ND	ND	ND	ND	ND	ND	70 <sup>4</sup>	10 <sup>5</sup>
January 2020 (Based on 21 PFAS Analysis Data only)	PFOA	11	10	2.2	ND	ND	ND	ND	ND	ND	70 <sup>4</sup>	10 <sup>5</sup>
	PFOS	10	8.7	ND	ND	ND	ND	ND	ND	ND	70 <sup>4</sup>	10 <sup>5</sup>
February 2020 (Based on 21 PFAS Analysis Data only)	PFOA	11	9.9	3.3	ND	ND	ND	ND	ND	ND	70 <sup>4</sup>	10 <sup>5</sup>
	PFOS	9.7	8.4	ND	ND	ND	ND	ND	ND	ND	70 <sup>4</sup>	10 <sup>5</sup>

**Notes:**

\*\* 21 PFAS List Analysis.

1. PFOS and PFOA results and comparison values are reported in parts per trillion (ppt, nanograms per liter, ng/l).
2. "ND" means non-detect. The analyte was not detected in the sample.
3. MCL (Maximum Contaminant Level, mg/l) is the maximum permissible level of a contaminant in water delivered by a public water system.
4. Guidance: USEPA Drinking Water Health Advisory guidance value is currently 70 ppt.
5. The proposed NYS maximum contaminant levels (MCLs) are 10 ppt for PFOS and 10 ppt for PFOA.

**Town of New Windsor**

**Kroll Well GAC Operation and Maintenance PFOA and PFOS Sampling Results \*\* (Parts Per Trillion (PPT)) Continued**

Date	Analyte	Result <sup>1</sup> Raw Water	Result A25	Result <sup>2</sup> A50	Result A75	Result Mid-Point	Result B25	Result B50	Result B75	Treated Effluent	USEPA Drinking Water Health Advisory Guidance Value	Proposed NYS MCLs
March 2020 (Based on 21 PFAS Analysis Data only)	PFOA	9.3	9.2	4.2	ND	ND	ND	ND	ND	ND	70 <sup>4</sup>	10 <sup>5</sup>
	PFOS	9.6	11	ND	ND	ND	ND	ND	ND	ND	70 <sup>4</sup>	10 <sup>5</sup>
April 2020 (Based on 21 PFAS Analysis Data only)	PFOA	8.7	8.4	4.3	ND	ND	ND	ND	ND	ND	70 <sup>4</sup>	10 <sup>5</sup>
	PFOS	8.9	7.7	1.9	ND	ND	ND	ND	ND	ND	70 <sup>4</sup>	10 <sup>5</sup>
May 2020 (Based on 21 PFAS Analysis Data only)	PFOA	ND	7.9	4.8	ND	ND	ND	ND	ND	ND	70 <sup>4</sup>	10 <sup>5</sup>
	PFOS	11.0	7.7	2.0	ND	ND	ND	ND	ND	ND	70 <sup>4</sup>	10 <sup>5</sup>

**Notes:**

\*\* 21 PFAS List Analysis.

1. PFOS and PFOA results and comparison values are reported in parts per trillion (ppt, nanograms per liter, ng/l).
2. "ND" means non-detect. The analyte was not detected in the sample.
3. MCL (Maximum Contaminant Level, mg/l) is the maximum permissible level of a contaminant in water delivered by a public water system.
4. Guidance: USEPA Drinking Water Health Advisory guidance value is currently 70 ppt.
5. The proposed NYS maximum contaminant levels (MCLs) are 10 ppt for PFOS and 10 ppt for PFOA.

## How to Read Your Laboratory Reports

### **PFOA and PFOS Results:**

- Analyte is the term used to describe what the laboratory was testing for, in this case PFOS and PFOA.
- Conc. (ng/l) is your result for PFOS and PFOA. In your case, no PFOS and PFOA were detected, thus ND or “non-detect” or <2.0 ng/l was reported. (ng/l = ppt)
- RL = reporting limit or RDL = reportable detection limit is the lowest level at which this specific testing protocol and laboratory has confidence in measuring the given analyte.
- Qualifiers are added information to help understand the quality of the data. Often, if something about the results or the calibration of the testing equipment was irregular, it would be reported here.

All other columns represent laboratory quality control information. The laboratory calibrates its equipment against a precise quantity of the chemical in order to ensure that the equipment is functioning properly. Some laboratory reports may not have all this information.

- Labeled Standard or Surrogate is the lab’s specific name for an individual control sample.
- %R is the percent of the control sample that was detected by the equipment. A 100% reading represents perfect equipment alignment.
- LCL-UCL is the lower concentration limit (LCL) and upper concentration limit (UCL). The LCL represents the lowest acceptable %R value and the UCL represent the highest acceptable %R value required to ensure your result is accurate.
- Qualifiers: If a result quality control variance is noted or if the %R value of any of the control samples were outside the allowable range that would have been noted in this last column. This gives the analyst less confidence in the measured value.

The analysis for PFOS and PFOA is performed using modified EPA Method 537. The laboratory may report a detection of PFOS and PFOA down to approximately 2.0 nanograms per liter (ng/l) or parts per trillion (ppt).

### **Inorganic Results:**

- Parameter is the same as “analyte” above – it is the chemical being tested.
- Result is the concentration of that chemical detected.
- RL/PQL is the lowest level at which the specific laboratory test can reliably quantify the concentration. Below that number, the result is considered unreliable.
- DIL is the number of times the sample was diluted (necessary because the test has a certain range that it is accurate for).
- Units: mg/l is milligrams per liter or parts per million; ug/l is micrograms per liter or parts per billion.
- DW MCL stands for drinking water (DW) and “maximum contaminant level” (MCL). All chemicals that have a “maximum contaminant level” (MCL) established for drinking water (DW) have a level reported in this column.

- Sec Goal is the EPA nomenclature for all contaminants that have regulatory levels set based on aesthetics (for example, taste or color). DOH recognizes these EPA secondary goals as primary standards and enforces its drinking water quality program accordingly.
- Date/Time represents the date and time of the analysis at the lab.
- By refers to the technician who ran the test.
- Reference indicates the EPA method used in the test.

## ANALYTICAL REPORT

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

Laboratory Job ID: 200-53691-1

Client Project/Site: Stewart ANG Base #336089 Kroll Well

**For:**

New York State D.E.C.  
625 Broadway  
12th Floor  
Albany, New York 12233-7017

Attn: Mr. Dave Chiusano



Authorized for release by:  
5/22/2020 4:16:50 PM

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

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

*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.*

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed within the body of this report. Release of the data contained in this sample data package and in the electronic data deliverable has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.



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Judy Stone  
Senior Project Manager  
5/22/2020 4:16:50 PM

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# Definitions/Glossary

Client: New York State D.E.C.  
Project/Site: Stewart ANG Base #336089 Kroll Well

Job ID: 200-53691-1

## Qualifiers

### LCMS

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.

## 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)
MQL	Method Quantitation Limit
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)

# Case Narrative

Client: New York State D.E.C.  
Project/Site: Stewart ANG Base #336089 Kroll Well

Job ID: 200-53691-1

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**Job ID: 200-53691-1**

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**Laboratory: Eurofins TestAmerica, Burlington**

## Narrative

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**Job Narrative**  
**200-53691-1**

### Receipt

The samples were received on 5/16/2020 10:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.2° C.

### LCMS

Method 3535: A deviation from the Standard Operating Procedure (SOP) occurred. Details are as follows: Due to concerns about sample matrix, the following sample was diluted 5-fold prior to extraction: RAW WATER (200-53691-3).

Method 537 (modified): The laboratory control sample (LCS) associated with preparation batch 200-155065 and analytical batch 200-155083 was outside acceptance criteria for Perfluorotridecanoic acid (PFTriA). The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

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



# Detection Summary

Client: New York State D.E.C.  
Project/Site: Stewart ANG Base #336089 Kroll Well

Job ID: 200-53691-1

## Client Sample ID: EFFLUENT

Lab Sample ID: 200-53691-1

No Detections.

## Client Sample ID: MID POINT

Lab Sample ID: 200-53691-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	4.0		1.8		ng/L	1		537 (modified)	Total/NA

## Client Sample ID: RAW WATER

Lab Sample ID: 200-53691-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanesulfonic acid (PFOS)	11		9.7		ng/L	1		537 (modified)	Total/NA

## Client Sample ID: DUPLICATE

Lab Sample ID: 200-53691-4

No Detections.

## Client Sample ID: A-25

Lab Sample ID: 200-53691-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	3.7		1.8		ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	3.3		1.8		ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	3.2		1.8		ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	2.3		1.8		ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	7.9		1.8		ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	6.1		1.8		ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	2.0		1.8		ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	7.7		1.8		ng/L	1		537 (modified)	Total/NA

## Client Sample ID: A-50

Lab Sample ID: 200-53691-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	3.8		1.7		ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	3.4		1.7		ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	2.7		1.7		ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	1.7		1.7		ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	4.8		1.7		ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	4.8		1.7		ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.0		1.7		ng/L	1		537 (modified)	Total/NA

## Client Sample ID: A-75

Lab Sample ID: 200-53691-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	4.6		1.7		ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	3.4		1.7		ng/L	1		537 (modified)	Total/NA

## Client Sample ID: B-25

Lab Sample ID: 200-53691-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	3.3		1.7		ng/L	1		537 (modified)	Total/NA

## Client Sample ID: B-50

Lab Sample ID: 200-53691-9

No Detections.

## Client Sample ID: B-75

Lab Sample ID: 200-53691-10

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Burlington

# Client Sample Results

Client: New York State D.E.C.  
Project/Site: Stewart ANG Base #336089 Kroll Well

Job ID: 200-53691-1

**Client Sample ID: EFFLUENT**

**Lab Sample ID: 200-53691-1**

**Date Collected: 05/15/20 11:05**

**Matrix: Water**

**Date Received: 05/16/20 10:00**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 16:59	1
Perfluoropentanoic acid (PFPeA)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 16:59	1
Perfluorohexanoic acid (PFHxA)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 16:59	1
Perfluoroheptanoic acid (PFHpA)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 16:59	1
Perfluorooctanoic acid (PFOA)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 16:59	1
Perfluorononanoic acid (PFNA)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 16:59	1
Perfluorodecanoic acid (PFDA)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 16:59	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 16:59	1
Perfluorododecanoic acid (PFDoA)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 16:59	1
Perfluorotridecanoic acid (PFTriA)	ND *		1.7		ng/L		05/19/20 11:21	05/19/20 16:59	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 16:59	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 16:59	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 16:59	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 16:59	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 16:59	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 16:59	1
Perfluorooctanesulfonamide (FOSA)	ND		8.6		ng/L		05/19/20 11:21	05/19/20 16:59	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		17		ng/L		05/19/20 11:21	05/19/20 16:59	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		17		ng/L		05/19/20 11:21	05/19/20 16:59	1
6:2 FTS	ND		17		ng/L		05/19/20 11:21	05/19/20 16:59	1
8:2 FTS	ND		17		ng/L		05/19/20 11:21	05/19/20 16:59	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	86		25 - 150	05/19/20 11:21	05/19/20 16:59	1
13C4 PFBA	114		25 - 150	05/19/20 11:21	05/19/20 16:59	1
13C5-PFPeA DNU	115		25 - 150	05/19/20 11:21	05/19/20 16:59	1
13C2 PFHxA	117		50 - 150	05/19/20 11:21	05/19/20 16:59	1
13C4 PFHpA	112		50 - 150	05/19/20 11:21	05/19/20 16:59	1
13C4 PFOA	105		50 - 150	05/19/20 11:21	05/19/20 16:59	1
13C5 PFNA	94		50 - 150	05/19/20 11:21	05/19/20 16:59	1
13C2 PFDA	84		50 - 150	05/19/20 11:21	05/19/20 16:59	1
13C2 PFUnA	71		50 - 150	05/19/20 11:21	05/19/20 16:59	1
13C2 PFDoA	77		50 - 150	05/19/20 11:21	05/19/20 16:59	1
13C2 PFTeDA	68		50 - 150	05/19/20 11:21	05/19/20 16:59	1
13C3 PFBS	109		50 - 150	05/19/20 11:21	05/19/20 16:59	1
18O2 PFHxS	116		50 - 150	05/19/20 11:21	05/19/20 16:59	1
13C4 PFOS	102		50 - 150	05/19/20 11:21	05/19/20 16:59	1
d3-NMeFOSAA	67		50 - 150	05/19/20 11:21	05/19/20 16:59	1
d5-NEtFOSAA	67		50 - 150	05/19/20 11:21	05/19/20 16:59	1
M2-6:2 FTS	106		25 - 150	05/19/20 11:21	05/19/20 16:59	1
M2-8:2 FTS	82		25 - 150	05/19/20 11:21	05/19/20 16:59	1

Eurofins TestAmerica, Burlington

# Client Sample Results

Client: New York State D.E.C.  
Project/Site: Stewart ANG Base #336089 Kroll Well

Job ID: 200-53691-1

**Client Sample ID: MID POINT**

**Lab Sample ID: 200-53691-2**

Date Collected: 05/15/20 11:25

Matrix: Water

Date Received: 05/16/20 10:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Perfluorobutanoic acid (PFBA)</b>	<b>4.0</b>		1.8		ng/L		05/19/20 11:21	05/19/20 17:24	1
Perfluoropentanoic acid (PFPeA)	ND		1.8		ng/L		05/19/20 11:21	05/19/20 17:24	1
Perfluorohexanoic acid (PFHxA)	ND		1.8		ng/L		05/19/20 11:21	05/19/20 17:24	1
Perfluoroheptanoic acid (PFHpA)	ND		1.8		ng/L		05/19/20 11:21	05/19/20 17:24	1
Perfluorooctanoic acid (PFOA)	ND		1.8		ng/L		05/19/20 11:21	05/19/20 17:24	1
Perfluorononanoic acid (PFNA)	ND		1.8		ng/L		05/19/20 11:21	05/19/20 17:24	1
Perfluorodecanoic acid (PFDA)	ND		1.8		ng/L		05/19/20 11:21	05/19/20 17:24	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8		ng/L		05/19/20 11:21	05/19/20 17:24	1
Perfluorododecanoic acid (PFDoA)	ND		1.8		ng/L		05/19/20 11:21	05/19/20 17:24	1
Perfluorotridecanoic acid (PFTriA)	ND *		1.8		ng/L		05/19/20 11:21	05/19/20 17:24	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8		ng/L		05/19/20 11:21	05/19/20 17:24	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8		ng/L		05/19/20 11:21	05/19/20 17:24	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8		ng/L		05/19/20 11:21	05/19/20 17:24	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8		ng/L		05/19/20 11:21	05/19/20 17:24	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8		ng/L		05/19/20 11:21	05/19/20 17:24	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8		ng/L		05/19/20 11:21	05/19/20 17:24	1
Perfluorooctanesulfonamide (FOSA)	ND		8.8		ng/L		05/19/20 11:21	05/19/20 17:24	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		18		ng/L		05/19/20 11:21	05/19/20 17:24	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		18		ng/L		05/19/20 11:21	05/19/20 17:24	1
6:2 FTS	ND		18		ng/L		05/19/20 11:21	05/19/20 17:24	1
8:2 FTS	ND		18		ng/L		05/19/20 11:21	05/19/20 17:24	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	85		25 - 150	05/19/20 11:21	05/19/20 17:24	1
13C4 PFBA	120		25 - 150	05/19/20 11:21	05/19/20 17:24	1
13C5-PFPeA DNU	116		25 - 150	05/19/20 11:21	05/19/20 17:24	1
13C2 PFHxA	123		50 - 150	05/19/20 11:21	05/19/20 17:24	1
13C4 PFHpA	121		50 - 150	05/19/20 11:21	05/19/20 17:24	1
13C4 PFOA	108		50 - 150	05/19/20 11:21	05/19/20 17:24	1
13C5 PFNA	97		50 - 150	05/19/20 11:21	05/19/20 17:24	1
13C2 PFDA	81		50 - 150	05/19/20 11:21	05/19/20 17:24	1
13C2 PFUnA	73		50 - 150	05/19/20 11:21	05/19/20 17:24	1
13C2 PFDoA	81		50 - 150	05/19/20 11:21	05/19/20 17:24	1
13C2 PFTeDA	75		50 - 150	05/19/20 11:21	05/19/20 17:24	1
13C3 PFBS	118		50 - 150	05/19/20 11:21	05/19/20 17:24	1
18O2 PFHxS	120		50 - 150	05/19/20 11:21	05/19/20 17:24	1
13C4 PFOS	99		50 - 150	05/19/20 11:21	05/19/20 17:24	1
d3-NMeFOSAA	68		50 - 150	05/19/20 11:21	05/19/20 17:24	1
d5-NEtFOSAA	66		50 - 150	05/19/20 11:21	05/19/20 17:24	1
M2-6:2 FTS	113		25 - 150	05/19/20 11:21	05/19/20 17:24	1
M2-8:2 FTS	86		25 - 150	05/19/20 11:21	05/19/20 17:24	1

# Client Sample Results

Client: New York State D.E.C.  
Project/Site: Stewart ANG Base #336089 Kroll Well

Job ID: 200-53691-1

**Client Sample ID: RAW WATER**

**Lab Sample ID: 200-53691-3**

**Date Collected: 05/15/20 11:45**

**Matrix: Water**

**Date Received: 05/16/20 10:00**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		9.7		ng/L		05/19/20 11:21	05/19/20 17:32	1
Perfluoropentanoic acid (PFPeA)	ND		9.7		ng/L		05/19/20 11:21	05/19/20 17:32	1
Perfluorohexanoic acid (PFHxA)	ND		9.7		ng/L		05/19/20 11:21	05/19/20 17:32	1
Perfluoroheptanoic acid (PFHpA)	ND		9.7		ng/L		05/19/20 11:21	05/19/20 17:32	1
Perfluorooctanoic acid (PFOA)	ND		9.7		ng/L		05/19/20 11:21	05/19/20 17:32	1
Perfluorononanoic acid (PFNA)	ND		9.7		ng/L		05/19/20 11:21	05/19/20 17:32	1
Perfluorodecanoic acid (PFDA)	ND		9.7		ng/L		05/19/20 11:21	05/19/20 17:32	1
Perfluoroundecanoic acid (PFUnA)	ND		9.7		ng/L		05/19/20 11:21	05/19/20 17:32	1
Perfluorododecanoic acid (PFDoA)	ND		9.7		ng/L		05/19/20 11:21	05/19/20 17:32	1
Perfluorotridecanoic acid (PFTriA)	ND *		9.7		ng/L		05/19/20 11:21	05/19/20 17:32	1
Perfluorotetradecanoic acid (PFTeA)	ND		9.7		ng/L		05/19/20 11:21	05/19/20 17:32	1
Perfluorobutanesulfonic acid (PFBS)	ND		9.7		ng/L		05/19/20 11:21	05/19/20 17:32	1
Perfluorohexanesulfonic acid (PFHxS)	ND		9.7		ng/L		05/19/20 11:21	05/19/20 17:32	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		9.7		ng/L		05/19/20 11:21	05/19/20 17:32	1
Perfluorodecanesulfonic acid (PFDS)	ND		9.7		ng/L		05/19/20 11:21	05/19/20 17:32	1
<b>Perfluorooctanesulfonic acid (PFOS)</b>	<b>11</b>		9.7		ng/L		05/19/20 11:21	05/19/20 17:32	1
Perfluorooctanesulfonamide (FOSA)	ND		49		ng/L		05/19/20 11:21	05/19/20 17:32	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		97		ng/L		05/19/20 11:21	05/19/20 17:32	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		97		ng/L		05/19/20 11:21	05/19/20 17:32	1
6:2 FTS	ND		97		ng/L		05/19/20 11:21	05/19/20 17:32	1
8:2 FTS	ND		97		ng/L		05/19/20 11:21	05/19/20 17:32	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	74		25 - 150	05/19/20 11:21	05/19/20 17:32	1
13C4 PFBA	106		25 - 150	05/19/20 11:21	05/19/20 17:32	1
13C5-PFPeA DNU	111		25 - 150	05/19/20 11:21	05/19/20 17:32	1
13C2 PFHxA	110		50 - 150	05/19/20 11:21	05/19/20 17:32	1
13C4 PFHpA	109		50 - 150	05/19/20 11:21	05/19/20 17:32	1
13C4 PFOA	101		50 - 150	05/19/20 11:21	05/19/20 17:32	1
13C5 PFNA	91		50 - 150	05/19/20 11:21	05/19/20 17:32	1
13C2 PFDA	68		50 - 150	05/19/20 11:21	05/19/20 17:32	1
13C2 PFUnA	61		50 - 150	05/19/20 11:21	05/19/20 17:32	1
13C2 PFDoA	64		50 - 150	05/19/20 11:21	05/19/20 17:32	1
13C2 PFTeDA	61		50 - 150	05/19/20 11:21	05/19/20 17:32	1
13C3 PFBS	103		50 - 150	05/19/20 11:21	05/19/20 17:32	1
18O2 PFHxS	110		50 - 150	05/19/20 11:21	05/19/20 17:32	1
13C4 PFOS	89		50 - 150	05/19/20 11:21	05/19/20 17:32	1
d3-NMeFOSAA	55		50 - 150	05/19/20 11:21	05/19/20 17:32	1
d5-NEtFOSAA	56		50 - 150	05/19/20 11:21	05/19/20 17:32	1
M2-6:2 FTS	109		25 - 150	05/19/20 11:21	05/19/20 17:32	1
M2-8:2 FTS	78		25 - 150	05/19/20 11:21	05/19/20 17:32	1

Eurofins TestAmerica, Burlington

# Client Sample Results

Client: New York State D.E.C.  
Project/Site: Stewart ANG Base #336089 Kroll Well

Job ID: 200-53691-1

**Client Sample ID: DUPLICATE**

**Lab Sample ID: 200-53691-4**

**Date Collected: 05/15/20 00:00**

**Matrix: Water**

**Date Received: 05/16/20 10:00**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 17:41	1
Perfluoropentanoic acid (PFPeA)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 17:41	1
Perfluorohexanoic acid (PFHxA)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 17:41	1
Perfluoroheptanoic acid (PFHpA)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 17:41	1
Perfluorooctanoic acid (PFOA)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 17:41	1
Perfluorononanoic acid (PFNA)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 17:41	1
Perfluorodecanoic acid (PFDA)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 17:41	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 17:41	1
Perfluorododecanoic acid (PFDoA)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 17:41	1
Perfluorotridecanoic acid (PFTriA)	ND *		1.7		ng/L		05/19/20 11:21	05/19/20 17:41	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 17:41	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 17:41	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 17:41	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 17:41	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 17:41	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 17:41	1
Perfluorooctanesulfonamide (FOSA)	ND		8.4		ng/L		05/19/20 11:21	05/19/20 17:41	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		17		ng/L		05/19/20 11:21	05/19/20 17:41	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		17		ng/L		05/19/20 11:21	05/19/20 17:41	1
6:2 FTS	ND		17		ng/L		05/19/20 11:21	05/19/20 17:41	1
8:2 FTS	ND		17		ng/L		05/19/20 11:21	05/19/20 17:41	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 FOSA	96		25 - 150				05/19/20 11:21	05/19/20 17:41	1
13C4 PFBA	119		25 - 150				05/19/20 11:21	05/19/20 17:41	1
13C5-PFPeA DNU	118		25 - 150				05/19/20 11:21	05/19/20 17:41	1
13C2 PFHxA	122		50 - 150				05/19/20 11:21	05/19/20 17:41	1
13C4 PFHpA	115		50 - 150				05/19/20 11:21	05/19/20 17:41	1
13C4 PFOA	106		50 - 150				05/19/20 11:21	05/19/20 17:41	1
13C5 PFNA	96		50 - 150				05/19/20 11:21	05/19/20 17:41	1
13C2 PFDA	86		50 - 150				05/19/20 11:21	05/19/20 17:41	1
13C2 PFUnA	78		50 - 150				05/19/20 11:21	05/19/20 17:41	1
13C2 PFDoA	86		50 - 150				05/19/20 11:21	05/19/20 17:41	1
13C2 PFTeDA	78		50 - 150				05/19/20 11:21	05/19/20 17:41	1
13C3 PFBS	116		50 - 150				05/19/20 11:21	05/19/20 17:41	1
18O2 PFHxS	119		50 - 150				05/19/20 11:21	05/19/20 17:41	1
13C4 PFOS	110		50 - 150				05/19/20 11:21	05/19/20 17:41	1
d3-NMeFOSAA	73		50 - 150				05/19/20 11:21	05/19/20 17:41	1
d5-NEtFOSAA	71		50 - 150				05/19/20 11:21	05/19/20 17:41	1
M2-6:2 FTS	112		25 - 150				05/19/20 11:21	05/19/20 17:41	1
M2-8:2 FTS	93		25 - 150				05/19/20 11:21	05/19/20 17:41	1

# Client Sample Results

Client: New York State D.E.C.  
Project/Site: Stewart ANG Base #336089 Kroll Well

Job ID: 200-53691-1

**Client Sample ID: A-25**

**Lab Sample ID: 200-53691-5**

Date Collected: 05/15/20 11:40

Matrix: Water

Date Received: 05/16/20 10:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	3.7		1.8		ng/L		05/19/20 11:21	05/19/20 17:49	1
Perfluoropentanoic acid (PFPeA)	3.3		1.8		ng/L		05/19/20 11:21	05/19/20 17:49	1
Perfluorohexanoic acid (PFHxA)	3.2		1.8		ng/L		05/19/20 11:21	05/19/20 17:49	1
Perfluoroheptanoic acid (PFHpA)	2.3		1.8		ng/L		05/19/20 11:21	05/19/20 17:49	1
Perfluorooctanoic acid (PFOA)	7.9		1.8		ng/L		05/19/20 11:21	05/19/20 17:49	1
Perfluorononanoic acid (PFNA)	ND		1.8		ng/L		05/19/20 11:21	05/19/20 17:49	1
Perfluorodecanoic acid (PFDA)	ND		1.8		ng/L		05/19/20 11:21	05/19/20 17:49	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8		ng/L		05/19/20 11:21	05/19/20 17:49	1
Perfluorododecanoic acid (PFDoA)	ND		1.8		ng/L		05/19/20 11:21	05/19/20 17:49	1
Perfluorotridecanoic acid (PFTriA)	ND *		1.8		ng/L		05/19/20 11:21	05/19/20 17:49	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8		ng/L		05/19/20 11:21	05/19/20 17:49	1
Perfluorobutanesulfonic acid (PFBS)	6.1		1.8		ng/L		05/19/20 11:21	05/19/20 17:49	1
Perfluorohexanesulfonic acid (PFHxS)	2.0		1.8		ng/L		05/19/20 11:21	05/19/20 17:49	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8		ng/L		05/19/20 11:21	05/19/20 17:49	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8		ng/L		05/19/20 11:21	05/19/20 17:49	1
Perfluorooctanesulfonic acid (PFOS)	7.7		1.8		ng/L		05/19/20 11:21	05/19/20 17:49	1
Perfluorooctanesulfonamide (FOSA)	ND		8.9		ng/L		05/19/20 11:21	05/19/20 17:49	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		18		ng/L		05/19/20 11:21	05/19/20 17:49	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		18		ng/L		05/19/20 11:21	05/19/20 17:49	1
6:2 FTS	ND		18		ng/L		05/19/20 11:21	05/19/20 17:49	1
8:2 FTS	ND		18		ng/L		05/19/20 11:21	05/19/20 17:49	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<sup>13</sup> C8 FOSA	91		25 - 150	05/19/20 11:21	05/19/20 17:49	1
<sup>13</sup> C4 PFBA	108		25 - 150	05/19/20 11:21	05/19/20 17:49	1
<sup>13</sup> C5-PFPeA DNU	120		25 - 150	05/19/20 11:21	05/19/20 17:49	1
<sup>13</sup> C2 PFHxA	120		50 - 150	05/19/20 11:21	05/19/20 17:49	1
<sup>13</sup> C4 PFHpA	117		50 - 150	05/19/20 11:21	05/19/20 17:49	1
<sup>13</sup> C4 PFOA	105		50 - 150	05/19/20 11:21	05/19/20 17:49	1
<sup>13</sup> C5 PFNA	99		50 - 150	05/19/20 11:21	05/19/20 17:49	1
<sup>13</sup> C2 PFDA	82		50 - 150	05/19/20 11:21	05/19/20 17:49	1
<sup>13</sup> C2 PFUnA	73		50 - 150	05/19/20 11:21	05/19/20 17:49	1
<sup>13</sup> C2 PFDoA	82		50 - 150	05/19/20 11:21	05/19/20 17:49	1
<sup>13</sup> C2 PFTeDA	72		50 - 150	05/19/20 11:21	05/19/20 17:49	1
<sup>13</sup> C3 PFBS	111		50 - 150	05/19/20 11:21	05/19/20 17:49	1
<sup>18</sup> O2 PFHxS	121		50 - 150	05/19/20 11:21	05/19/20 17:49	1
<sup>13</sup> C4 PFOS	106		50 - 150	05/19/20 11:21	05/19/20 17:49	1
d3-NMeFOSAA	69		50 - 150	05/19/20 11:21	05/19/20 17:49	1
d5-NEtFOSAA	70		50 - 150	05/19/20 11:21	05/19/20 17:49	1
M2-6:2 FTS	119		25 - 150	05/19/20 11:21	05/19/20 17:49	1
M2-8:2 FTS	86		25 - 150	05/19/20 11:21	05/19/20 17:49	1

Eurofins TestAmerica, Burlington

# Client Sample Results

Client: New York State D.E.C.  
Project/Site: Stewart ANG Base #336089 Kroll Well

Job ID: 200-53691-1

**Client Sample ID: A-50**

**Lab Sample ID: 200-53691-6**

Date Collected: 05/15/20 11:35

Matrix: Water

Date Received: 05/16/20 10:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	3.8		1.7		ng/L		05/19/20 11:21	05/19/20 17:57	1
Perfluoropentanoic acid (PFPeA)	3.4		1.7		ng/L		05/19/20 11:21	05/19/20 17:57	1
Perfluorohexanoic acid (PFHxA)	2.7		1.7		ng/L		05/19/20 11:21	05/19/20 17:57	1
Perfluoroheptanoic acid (PFHpA)	1.7		1.7		ng/L		05/19/20 11:21	05/19/20 17:57	1
Perfluorooctanoic acid (PFOA)	4.8		1.7		ng/L		05/19/20 11:21	05/19/20 17:57	1
Perfluorononanoic acid (PFNA)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 17:57	1
Perfluorodecanoic acid (PFDA)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 17:57	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 17:57	1
Perfluorododecanoic acid (PFDoA)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 17:57	1
Perfluorotridecanoic acid (PFTriA)	ND *		1.7		ng/L		05/19/20 11:21	05/19/20 17:57	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 17:57	1
Perfluorobutanesulfonic acid (PFBS)	4.8		1.7		ng/L		05/19/20 11:21	05/19/20 17:57	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 17:57	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 17:57	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 17:57	1
Perfluorooctanesulfonic acid (PFOS)	2.0		1.7		ng/L		05/19/20 11:21	05/19/20 17:57	1
Perfluorooctanesulfonamide (FOSA)	ND		8.6		ng/L		05/19/20 11:21	05/19/20 17:57	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		17		ng/L		05/19/20 11:21	05/19/20 17:57	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		17		ng/L		05/19/20 11:21	05/19/20 17:57	1
6:2 FTS	ND		17		ng/L		05/19/20 11:21	05/19/20 17:57	1
8:2 FTS	ND		17		ng/L		05/19/20 11:21	05/19/20 17:57	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	91		25 - 150	05/19/20 11:21	05/19/20 17:57	1
13C4 PFBA	105		25 - 150	05/19/20 11:21	05/19/20 17:57	1
13C5-PFPeA DNU	117		25 - 150	05/19/20 11:21	05/19/20 17:57	1
13C2 PFHxA	114		50 - 150	05/19/20 11:21	05/19/20 17:57	1
13C4 PFHpA	114		50 - 150	05/19/20 11:21	05/19/20 17:57	1
13C4 PFOA	102		50 - 150	05/19/20 11:21	05/19/20 17:57	1
13C5 PFNA	97		50 - 150	05/19/20 11:21	05/19/20 17:57	1
13C2 PFDA	83		50 - 150	05/19/20 11:21	05/19/20 17:57	1
13C2 PFUnA	71		50 - 150	05/19/20 11:21	05/19/20 17:57	1
13C2 PFDoA	82		50 - 150	05/19/20 11:21	05/19/20 17:57	1
13C2 PFTeDA	71		50 - 150	05/19/20 11:21	05/19/20 17:57	1
13C3 PFBS	109		50 - 150	05/19/20 11:21	05/19/20 17:57	1
18O2 PFHxS	118		50 - 150	05/19/20 11:21	05/19/20 17:57	1
13C4 PFOS	103		50 - 150	05/19/20 11:21	05/19/20 17:57	1
d3-NMeFOSAA	68		50 - 150	05/19/20 11:21	05/19/20 17:57	1
d5-NEtFOSAA	65		50 - 150	05/19/20 11:21	05/19/20 17:57	1
M2-6:2 FTS	104		25 - 150	05/19/20 11:21	05/19/20 17:57	1
M2-8:2 FTS	90		25 - 150	05/19/20 11:21	05/19/20 17:57	1

Eurofins TestAmerica, Burlington

# Client Sample Results

Client: New York State D.E.C.  
Project/Site: Stewart ANG Base #336089 Kroll Well

Job ID: 200-53691-1

**Client Sample ID: A-75**

**Lab Sample ID: 200-53691-7**

**Date Collected: 05/15/20 11:30**

**Matrix: Water**

**Date Received: 05/16/20 10:00**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	4.6		1.7		ng/L		05/19/20 11:21	05/19/20 18:05	1
Perfluoropentanoic acid (PFPeA)	3.4		1.7		ng/L		05/19/20 11:21	05/19/20 18:05	1
Perfluorohexanoic acid (PFHxA)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 18:05	1
Perfluoroheptanoic acid (PFHpA)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 18:05	1
Perfluorooctanoic acid (PFOA)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 18:05	1
Perfluorononanoic acid (PFNA)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 18:05	1
Perfluorodecanoic acid (PFDA)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 18:05	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 18:05	1
Perfluorododecanoic acid (PFDoA)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 18:05	1
Perfluorotridecanoic acid (PFTriA)	ND *		1.7		ng/L		05/19/20 11:21	05/19/20 18:05	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 18:05	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 18:05	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 18:05	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 18:05	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 18:05	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 18:05	1
Perfluorooctanesulfonamide (FOSA)	ND		8.7		ng/L		05/19/20 11:21	05/19/20 18:05	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		17		ng/L		05/19/20 11:21	05/19/20 18:05	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		17		ng/L		05/19/20 11:21	05/19/20 18:05	1
6:2 FTS	ND		17		ng/L		05/19/20 11:21	05/19/20 18:05	1
8:2 FTS	ND		17		ng/L		05/19/20 11:21	05/19/20 18:05	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	88		25 - 150	05/19/20 11:21	05/19/20 18:05	1
13C4 PFBA	112		25 - 150	05/19/20 11:21	05/19/20 18:05	1
13C5-PFPeA DNU	118		25 - 150	05/19/20 11:21	05/19/20 18:05	1
13C2 PFHxA	115		50 - 150	05/19/20 11:21	05/19/20 18:05	1
13C4 PFHpA	113		50 - 150	05/19/20 11:21	05/19/20 18:05	1
13C4 PFOA	107		50 - 150	05/19/20 11:21	05/19/20 18:05	1
13C5 PFNA	97		50 - 150	05/19/20 11:21	05/19/20 18:05	1
13C2 PFDA	86		50 - 150	05/19/20 11:21	05/19/20 18:05	1
13C2 PFUnA	74		50 - 150	05/19/20 11:21	05/19/20 18:05	1
13C2 PFDoA	85		50 - 150	05/19/20 11:21	05/19/20 18:05	1
13C2 PFTeDA	74		50 - 150	05/19/20 11:21	05/19/20 18:05	1
13C3 PFBS	113		50 - 150	05/19/20 11:21	05/19/20 18:05	1
18O2 PFHxS	119		50 - 150	05/19/20 11:21	05/19/20 18:05	1
13C4 PFOS	101		50 - 150	05/19/20 11:21	05/19/20 18:05	1
d3-NMeFOSAA	78		50 - 150	05/19/20 11:21	05/19/20 18:05	1
d5-NEtFOSAA	71		50 - 150	05/19/20 11:21	05/19/20 18:05	1
M2-6:2 FTS	104		25 - 150	05/19/20 11:21	05/19/20 18:05	1
M2-8:2 FTS	82		25 - 150	05/19/20 11:21	05/19/20 18:05	1

# Client Sample Results

Client: New York State D.E.C.  
Project/Site: Stewart ANG Base #336089 Kroll Well

Job ID: 200-53691-1

**Client Sample ID: B-25**

**Lab Sample ID: 200-53691-8**

**Date Collected: 05/15/20 11:20**

**Matrix: Water**

**Date Received: 05/16/20 10:00**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Perfluorobutanoic acid (PFBA)</b>	<b>3.3</b>		1.7		ng/L		05/19/20 11:21	05/19/20 18:14	1
Perfluoropentanoic acid (PFPeA)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 18:14	1
Perfluorohexanoic acid (PFHxA)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 18:14	1
Perfluoroheptanoic acid (PFHpA)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 18:14	1
Perfluorooctanoic acid (PFOA)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 18:14	1
Perfluorononanoic acid (PFNA)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 18:14	1
Perfluorodecanoic acid (PFDA)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 18:14	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 18:14	1
Perfluorododecanoic acid (PFDoA)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 18:14	1
Perfluorotridecanoic acid (PFTriA)	ND *		1.7		ng/L		05/19/20 11:21	05/19/20 18:14	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 18:14	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 18:14	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 18:14	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 18:14	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 18:14	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 18:14	1
Perfluorooctanesulfonamide (FOSA)	ND		8.5		ng/L		05/19/20 11:21	05/19/20 18:14	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		17		ng/L		05/19/20 11:21	05/19/20 18:14	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		17		ng/L		05/19/20 11:21	05/19/20 18:14	1
6:2 FTS	ND		17		ng/L		05/19/20 11:21	05/19/20 18:14	1
8:2 FTS	ND		17		ng/L		05/19/20 11:21	05/19/20 18:14	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	83		25 - 150	05/19/20 11:21	05/19/20 18:14	1
13C4 PFBA	114		25 - 150	05/19/20 11:21	05/19/20 18:14	1
13C5-PFPeA DNU	116		25 - 150	05/19/20 11:21	05/19/20 18:14	1
13C2 PFHxA	122		50 - 150	05/19/20 11:21	05/19/20 18:14	1
13C4 PFHpA	118		50 - 150	05/19/20 11:21	05/19/20 18:14	1
13C4 PFOA	104		50 - 150	05/19/20 11:21	05/19/20 18:14	1
13C5 PFNA	93		50 - 150	05/19/20 11:21	05/19/20 18:14	1
13C2 PFDA	79		50 - 150	05/19/20 11:21	05/19/20 18:14	1
13C2 PFUnA	73		50 - 150	05/19/20 11:21	05/19/20 18:14	1
13C2 PFDoA	83		50 - 150	05/19/20 11:21	05/19/20 18:14	1
13C2 PFTeDA	71		50 - 150	05/19/20 11:21	05/19/20 18:14	1
13C3 PFBS	113		50 - 150	05/19/20 11:21	05/19/20 18:14	1
18O2 PFHxS	116		50 - 150	05/19/20 11:21	05/19/20 18:14	1
13C4 PFOS	97		50 - 150	05/19/20 11:21	05/19/20 18:14	1
d3-NMeFOSAA	67		50 - 150	05/19/20 11:21	05/19/20 18:14	1
d5-NEtFOSAA	63		50 - 150	05/19/20 11:21	05/19/20 18:14	1
M2-6:2 FTS	103		25 - 150	05/19/20 11:21	05/19/20 18:14	1
M2-8:2 FTS	76		25 - 150	05/19/20 11:21	05/19/20 18:14	1

# Client Sample Results

Client: New York State D.E.C.  
Project/Site: Stewart ANG Base #336089 Kroll Well

Job ID: 200-53691-1

**Client Sample ID: B-50**

**Lab Sample ID: 200-53691-9**

**Date Collected: 05/15/20 11:15**

**Matrix: Water**

**Date Received: 05/16/20 10:00**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		1.8		ng/L		05/19/20 11:21	05/19/20 18:22	1
Perfluoropentanoic acid (PFPeA)	ND		1.8		ng/L		05/19/20 11:21	05/19/20 18:22	1
Perfluorohexanoic acid (PFHxA)	ND		1.8		ng/L		05/19/20 11:21	05/19/20 18:22	1
Perfluoroheptanoic acid (PFHpA)	ND		1.8		ng/L		05/19/20 11:21	05/19/20 18:22	1
Perfluorooctanoic acid (PFOA)	ND		1.8		ng/L		05/19/20 11:21	05/19/20 18:22	1
Perfluorononanoic acid (PFNA)	ND		1.8		ng/L		05/19/20 11:21	05/19/20 18:22	1
Perfluorodecanoic acid (PFDA)	ND		1.8		ng/L		05/19/20 11:21	05/19/20 18:22	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8		ng/L		05/19/20 11:21	05/19/20 18:22	1
Perfluorododecanoic acid (PFDoA)	ND		1.8		ng/L		05/19/20 11:21	05/19/20 18:22	1
Perfluorotridecanoic acid (PFTriA)	ND *		1.8		ng/L		05/19/20 11:21	05/19/20 18:22	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8		ng/L		05/19/20 11:21	05/19/20 18:22	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8		ng/L		05/19/20 11:21	05/19/20 18:22	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8		ng/L		05/19/20 11:21	05/19/20 18:22	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8		ng/L		05/19/20 11:21	05/19/20 18:22	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8		ng/L		05/19/20 11:21	05/19/20 18:22	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8		ng/L		05/19/20 11:21	05/19/20 18:22	1
Perfluorooctanesulfonamide (FOSA)	ND		9.0		ng/L		05/19/20 11:21	05/19/20 18:22	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		18		ng/L		05/19/20 11:21	05/19/20 18:22	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		18		ng/L		05/19/20 11:21	05/19/20 18:22	1
6:2 FTS	ND		18		ng/L		05/19/20 11:21	05/19/20 18:22	1
8:2 FTS	ND		18		ng/L		05/19/20 11:21	05/19/20 18:22	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 FOSA	96		25 - 150				05/19/20 11:21	05/19/20 18:22	1
13C4 PFBA	111		25 - 150				05/19/20 11:21	05/19/20 18:22	1
13C5-PFPeA DNU	115		25 - 150				05/19/20 11:21	05/19/20 18:22	1
13C2 PFHxA	117		50 - 150				05/19/20 11:21	05/19/20 18:22	1
13C4 PFHpA	112		50 - 150				05/19/20 11:21	05/19/20 18:22	1
13C4 PFOA	104		50 - 150				05/19/20 11:21	05/19/20 18:22	1
13C5 PFNA	96		50 - 150				05/19/20 11:21	05/19/20 18:22	1
13C2 PFDA	86		50 - 150				05/19/20 11:21	05/19/20 18:22	1
13C2 PFUnA	80		50 - 150				05/19/20 11:21	05/19/20 18:22	1
13C2 PFDoA	89		50 - 150				05/19/20 11:21	05/19/20 18:22	1
13C2 PFTeDA	79		50 - 150				05/19/20 11:21	05/19/20 18:22	1
13C3 PFBS	109		50 - 150				05/19/20 11:21	05/19/20 18:22	1
18O2 PFHxS	115		50 - 150				05/19/20 11:21	05/19/20 18:22	1
13C4 PFOS	103		50 - 150				05/19/20 11:21	05/19/20 18:22	1
d3-NMeFOSAA	73		50 - 150				05/19/20 11:21	05/19/20 18:22	1
d5-NEtFOSAA	77		50 - 150				05/19/20 11:21	05/19/20 18:22	1
M2-6:2 FTS	102		25 - 150				05/19/20 11:21	05/19/20 18:22	1
M2-8:2 FTS	101		25 - 150				05/19/20 11:21	05/19/20 18:22	1

# Client Sample Results

Client: New York State D.E.C.  
Project/Site: Stewart ANG Base #336089 Kroll Well

Job ID: 200-53691-1

**Client Sample ID: B-75**

**Lab Sample ID: 200-53691-10**

**Date Collected: 05/15/20 11:10**

**Matrix: Water**

**Date Received: 05/16/20 10:00**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 18:30	1
Perfluoropentanoic acid (PFPeA)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 18:30	1
Perfluorohexanoic acid (PFHxA)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 18:30	1
Perfluoroheptanoic acid (PFHpA)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 18:30	1
Perfluorooctanoic acid (PFOA)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 18:30	1
Perfluorononanoic acid (PFNA)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 18:30	1
Perfluorodecanoic acid (PFDA)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 18:30	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 18:30	1
Perfluorododecanoic acid (PFDoA)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 18:30	1
Perfluorotridecanoic acid (PFTriA)	ND	*	1.7		ng/L		05/19/20 11:21	05/19/20 18:30	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 18:30	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 18:30	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 18:30	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 18:30	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 18:30	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.7		ng/L		05/19/20 11:21	05/19/20 18:30	1
Perfluorooctanesulfonamide (FOSA)	ND		8.3		ng/L		05/19/20 11:21	05/19/20 18:30	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		17		ng/L		05/19/20 11:21	05/19/20 18:30	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		17		ng/L		05/19/20 11:21	05/19/20 18:30	1
6:2 FTS	ND		17		ng/L		05/19/20 11:21	05/19/20 18:30	1
8:2 FTS	ND		17		ng/L		05/19/20 11:21	05/19/20 18:30	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 FOSA	97		25 - 150				05/19/20 11:21	05/19/20 18:30	1
13C4 PFBA	117		25 - 150				05/19/20 11:21	05/19/20 18:30	1
13C5-PFPeA DNU	124		25 - 150				05/19/20 11:21	05/19/20 18:30	1
13C2 PFHxA	124		50 - 150				05/19/20 11:21	05/19/20 18:30	1
13C4 PFHpA	119		50 - 150				05/19/20 11:21	05/19/20 18:30	1
13C4 PFOA	107		50 - 150				05/19/20 11:21	05/19/20 18:30	1
13C5 PFNA	101		50 - 150				05/19/20 11:21	05/19/20 18:30	1
13C2 PFDA	84		50 - 150				05/19/20 11:21	05/19/20 18:30	1
13C2 PFUnA	82		50 - 150				05/19/20 11:21	05/19/20 18:30	1
13C2 PFDoA	87		50 - 150				05/19/20 11:21	05/19/20 18:30	1
13C2 PFTeDA	76		50 - 150				05/19/20 11:21	05/19/20 18:30	1
13C3 PFBS	115		50 - 150				05/19/20 11:21	05/19/20 18:30	1
18O2 PFHxS	126		50 - 150				05/19/20 11:21	05/19/20 18:30	1
13C4 PFOS	116		50 - 150				05/19/20 11:21	05/19/20 18:30	1
d3-NMeFOSAA	75		50 - 150				05/19/20 11:21	05/19/20 18:30	1
d5-NEtFOSAA	73		50 - 150				05/19/20 11:21	05/19/20 18:30	1
M2-6:2 FTS	111		25 - 150				05/19/20 11:21	05/19/20 18:30	1
M2-8:2 FTS	86		25 - 150				05/19/20 11:21	05/19/20 18:30	1

# Isotope Dilution Summary

Client: New York State D.E.C.  
 Project/Site: Stewart ANG Base #336089 Kroll Well

Job ID: 200-53691-1

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

Matrix: Water

Prep Type: Total/NA

### Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PFOSA (25-150)	PFBA (25-150)	PFPeA (25-150)	PFHxA (50-150)	C4PFHA (50-150)	PFOA (50-150)	PFNA (50-150)	PFDA (50-150)
200-53691-1	EFFLUENT	86	114	115	117	112	105	94	84
200-53691-1 MS	EFFLUENT	80	113	117	114	112	100	98	82
200-53691-1 MSD	EFFLUENT	89	120	124	121	117	110	102	86
200-53691-2	MID POINT	85	120	116	123	121	108	97	81
200-53691-3	RAW WATER	74	106	111	110	109	101	91	68
200-53691-4	DUPLICATE	96	119	118	122	115	106	96	86
200-53691-5	A-25	91	108	120	120	117	105	99	82
200-53691-6	A-50	91	105	117	114	114	102	97	83
200-53691-7	A-75	88	112	118	115	113	107	97	86
200-53691-8	B-25	83	114	116	122	118	104	93	79
200-53691-9	B-50	96	111	115	117	112	104	96	86
200-53691-10	B-75	97	117	124	124	119	107	101	84
LCS 200-155065/2-A	Lab Control Sample	63	121	125	122	117	109	102	100
MB 200-155065/1-A	Method Blank	62	117	122	126	117	100	103	91

### Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PFUnA (50-150)	PFDoA (50-150)	PFTDA (50-150)	C3PFBS (50-150)	PFHxS (50-150)	PFOS (50-150)	d3NMFOS (50-150)	d5NEFOS (50-150)
200-53691-1	EFFLUENT	71	77	68	109	116	102	67	67
200-53691-1 MS	EFFLUENT	74	81	72	112	114	94	67	65
200-53691-1 MSD	EFFLUENT	74	82	75	115	119	99	72	70
200-53691-2	MID POINT	73	81	75	118	120	99	68	66
200-53691-3	RAW WATER	61	64	61	103	110	89	55	56
200-53691-4	DUPLICATE	78	86	78	116	119	110	73	71
200-53691-5	A-25	73	82	72	111	121	106	69	70
200-53691-6	A-50	71	82	71	109	118	103	68	65
200-53691-7	A-75	74	85	74	113	119	101	78	71
200-53691-8	B-25	73	83	71	113	116	97	67	63
200-53691-9	B-50	80	89	79	109	115	103	73	77
200-53691-10	B-75	82	87	76	115	126	116	75	73
LCS 200-155065/2-A	Lab Control Sample	79	75	63	120	124	115	74	70
MB 200-155065/1-A	Method Blank	74	66	54	117	127	114	73	63

### Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	M262FTS (25-150)	M282FTS (25-150)
200-53691-1	EFFLUENT	106	82
200-53691-1 MS	EFFLUENT	107	81
200-53691-1 MSD	EFFLUENT	114	79
200-53691-2	MID POINT	113	86
200-53691-3	RAW WATER	109	78
200-53691-4	DUPLICATE	112	93
200-53691-5	A-25	119	86
200-53691-6	A-50	104	90
200-53691-7	A-75	104	82
200-53691-8	B-25	103	76
200-53691-9	B-50	102	101
200-53691-10	B-75	111	86
LCS 200-155065/2-A	Lab Control Sample	114	108
MB 200-155065/1-A	Method Blank	114	101

# Isotope Dilution Summary

Client: New York State D.E.C.

Project/Site: Stewart ANG Base #336089 Kroll Well

Job ID: 200-53691-1

## Surrogate Legend

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PFOSA = 13C8 FOSA  
PFBA = 13C4 PFBA  
PFPeA = 13C5-PFPeA DNU  
PFHxA = 13C2 PFHxA  
C4PFHA = 13C4 PFHpA  
PFOA = 13C4 PFOA  
PFNA = 13C5 PFNA  
PFDA = 13C2 PFDA  
PFUnA = 13C2 PFUnA  
PFDoA = 13C2 PFDoA  
PFTDA = 13C2 PFTeDA  
C3PFBS = 13C3 PFBS  
PFHxS = 18O2 PFHxS  
PFOS = 13C4 PFOS  
d3NMFOS = d3-NMeFOSAA  
d5NEFOS = d5-NEtFOSAA  
M262FTS = M2-6:2 FTS  
M282FTS = M2-8:2 FTS

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# QC Sample Results

Client: New York State D.E.C.  
 Project/Site: Stewart ANG Base #336089 Kroll Well

Job ID: 200-53691-1

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

**Lab Sample ID: MB 200-155065/1-A**  
**Matrix: Water**  
**Analysis Batch: 155083**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 155065**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Perfluorobutanoic acid (PFBA)	ND		2.0		ng/L		05/19/20 11:21	05/19/20 16:43	1
Perfluoropentanoic acid (PFPeA)	ND		2.0		ng/L		05/19/20 11:21	05/19/20 16:43	1
Perfluorohexanoic acid (PFHxA)	ND		2.0		ng/L		05/19/20 11:21	05/19/20 16:43	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0		ng/L		05/19/20 11:21	05/19/20 16:43	1
Perfluorooctanoic acid (PFOA)	ND		2.0		ng/L		05/19/20 11:21	05/19/20 16:43	1
Perfluorononanoic acid (PFNA)	ND		2.0		ng/L		05/19/20 11:21	05/19/20 16:43	1
Perfluorodecanoic acid (PFDA)	ND		2.0		ng/L		05/19/20 11:21	05/19/20 16:43	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0		ng/L		05/19/20 11:21	05/19/20 16:43	1
Perfluorododecanoic acid (PFDoA)	ND		2.0		ng/L		05/19/20 11:21	05/19/20 16:43	1
Perfluorotridecanoic acid (PFTriA)	ND		2.0		ng/L		05/19/20 11:21	05/19/20 16:43	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0		ng/L		05/19/20 11:21	05/19/20 16:43	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0		ng/L		05/19/20 11:21	05/19/20 16:43	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0		ng/L		05/19/20 11:21	05/19/20 16:43	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0		ng/L		05/19/20 11:21	05/19/20 16:43	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0		ng/L		05/19/20 11:21	05/19/20 16:43	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0		ng/L		05/19/20 11:21	05/19/20 16:43	1
Perfluorooctanesulfonamide (FOSA)	ND		10		ng/L		05/19/20 11:21	05/19/20 16:43	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		20		ng/L		05/19/20 11:21	05/19/20 16:43	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		20		ng/L		05/19/20 11:21	05/19/20 16:43	1
6:2 FTS	ND		20		ng/L		05/19/20 11:21	05/19/20 16:43	1
8:2 FTS	ND		20		ng/L		05/19/20 11:21	05/19/20 16:43	1

Isotope Dilution	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
13C8 FOSA	62		25 - 150	05/19/20 11:21	05/19/20 16:43	1
13C4 PFBA	117		25 - 150	05/19/20 11:21	05/19/20 16:43	1
13C5-PFPeA DNU	122		25 - 150	05/19/20 11:21	05/19/20 16:43	1
13C2 PFHxA	126		50 - 150	05/19/20 11:21	05/19/20 16:43	1
13C4 PFHpA	117		50 - 150	05/19/20 11:21	05/19/20 16:43	1
13C4 PFOA	100		50 - 150	05/19/20 11:21	05/19/20 16:43	1
13C5 PFNA	103		50 - 150	05/19/20 11:21	05/19/20 16:43	1
13C2 PFDA	91		50 - 150	05/19/20 11:21	05/19/20 16:43	1
13C2 PFUnA	74		50 - 150	05/19/20 11:21	05/19/20 16:43	1
13C2 PFDoA	66		50 - 150	05/19/20 11:21	05/19/20 16:43	1
13C2 PFTeDA	54		50 - 150	05/19/20 11:21	05/19/20 16:43	1
13C3 PFBS	117		50 - 150	05/19/20 11:21	05/19/20 16:43	1
18O2 PFHxS	127		50 - 150	05/19/20 11:21	05/19/20 16:43	1
13C4 PFOS	114		50 - 150	05/19/20 11:21	05/19/20 16:43	1
d3-NMeFOSAA	73		50 - 150	05/19/20 11:21	05/19/20 16:43	1
d5-NEtFOSAA	63		50 - 150	05/19/20 11:21	05/19/20 16:43	1
M2-6:2 FTS	114		25 - 150	05/19/20 11:21	05/19/20 16:43	1
M2-8:2 FTS	101		25 - 150	05/19/20 11:21	05/19/20 16:43	1

Eurofins TestAmerica, Burlington

# QC Sample Results

Client: New York State D.E.C.  
 Project/Site: Stewart ANG Base #336089 Kroll Well

Job ID: 200-53691-1

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

**Lab Sample ID: LCS 200-155065/2-A**  
**Matrix: Water**  
**Analysis Batch: 155083**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 155065**  
**%Rec.**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Perfluorobutanoic acid (PFBA)	40.0	38.6		ng/L		96	50 - 150
Perfluoropentanoic acid (PFPeA)	40.0	35.6		ng/L		89	50 - 150
Perfluorohexanoic acid (PFHxA)	40.0	37.7		ng/L		94	70 - 130
Perfluoroheptanoic acid (PFHpA)	40.0	37.3		ng/L		93	70 - 130
Perfluorooctanoic acid (PFOA)	40.0	37.7		ng/L		94	70 - 130
Perfluorononanoic acid (PFNA)	40.0	38.9		ng/L		97	70 - 130
Perfluorodecanoic acid (PFDA)	40.0	37.5		ng/L		94	70 - 130
Perfluoroundecanoic acid (PFUnA)	40.0	35.8		ng/L		89	70 - 130
Perfluorododecanoic acid (PFDoA)	40.0	37.3		ng/L		93	70 - 130
Perfluorotridecanoic acid (PFTriA)	40.0	25.2	*	ng/L		63	70 - 130
Perfluorotetradecanoic acid (PFTeA)	40.0	34.4		ng/L		86	70 - 130
Perfluorobutanesulfonic acid (PFBS)	35.4	33.6		ng/L		95	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	36.4	33.3		ng/L		92	70 - 130
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	37.9		ng/L		99	50 - 150
Perfluorodecanesulfonic acid (PFDS)	38.6	28.6		ng/L		74	50 - 150
Perfluorooctanesulfonic acid (PFOS)	37.1	33.7		ng/L		91	70 - 130
Perfluorooctanesulfonamide (FOSA)	40.0	33.8		ng/L		85	50 - 150
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	40.0	42.8		ng/L		107	70 - 130
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	40.0	37.2		ng/L		93	70 - 130
6:2 FTS	37.9	34.9		ng/L		92	50 - 150
8:2 FTS	38.3	30.4		ng/L		79	50 - 150

Isotope Dilution	LCS LCS		Limits
	%Recovery	Qualifier	
13C8 FOSA	63		25 - 150
13C4 PFBA	121		25 - 150
13C5-PFPeA DNU	125		25 - 150
13C2 PFHxA	122		50 - 150
13C4 PFHpA	117		50 - 150
13C4 PFOA	109		50 - 150
13C5 PFNA	102		50 - 150
13C2 PFDA	100		50 - 150
13C2 PFUnA	79		50 - 150
13C2 PFDoA	75		50 - 150
13C2 PFTeDA	63		50 - 150
13C3 PFBS	120		50 - 150
18O2 PFHxS	124		50 - 150
13C4 PFOS	115		50 - 150
d3-NMeFOSAA	74		50 - 150
d5-NEtFOSAA	70		50 - 150

# QC Sample Results

Client: New York State D.E.C.  
Project/Site: Stewart ANG Base #336089 Kroll Well

Job ID: 200-53691-1

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

**Lab Sample ID: LCS 200-155065/2-A**  
**Matrix: Water**  
**Analysis Batch: 155083**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 155065**

<i>Isotope Dilution</i>	<i>LCS LCS</i>		<i>Limits</i>
	<i>%Recovery</i>	<i>Qualifier</i>	
M2-6:2 FTS	114		25 - 150
M2-8:2 FTS	108		25 - 150

**Lab Sample ID: 200-53691-1 MS**  
**Matrix: Water**  
**Analysis Batch: 155083**

**Client Sample ID: EFFLUENT**  
**Prep Type: Total/NA**  
**Prep Batch: 155065**

<i>Analyte</i>	<i>Sample Result</i>	<i>Sample Qualifier</i>	<i>Spike Added</i>	<i>MS MS</i>		<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>Limits</i>
				<i>Result</i>	<i>Qualifier</i>				
Perfluorobutanoic acid (PFBA)	ND		33.3	32.4		ng/L		97	40 - 160
Perfluoropentanoic acid (PFPeA)	ND		33.3	31.0		ng/L		93	40 - 160
Perfluorohexanoic acid (PFHxA)	ND		33.3	32.8		ng/L		99	40 - 160
Perfluoroheptanoic acid (PFHpA)	ND		33.3	32.2		ng/L		97	40 - 160
Perfluorooctanoic acid (PFOA)	ND		33.3	33.0		ng/L		99	40 - 160
Perfluorononanoic acid (PFNA)	ND		33.3	30.9		ng/L		93	40 - 160
Perfluorodecanoic acid (PFDA)	ND		33.3	33.2		ng/L		100	40 - 160
Perfluoroundecanoic acid (PFUnA)	ND		33.3	31.4		ng/L		94	40 - 160
Perfluorododecanoic acid (PFDoA)	ND		33.3	31.2		ng/L		94	40 - 160
Perfluorotridecanoic acid (PFTriA)	ND *		33.3	24.6		ng/L		74	40 - 160
Perfluorotetradecanoic acid (PFTeA)	ND		33.3	29.6		ng/L		89	40 - 160
Perfluorobutanesulfonic acid (PFBS)	ND		29.4	28.1		ng/L		96	40 - 160
Perfluorohexanesulfonic acid (PFHxS)	ND		30.3	27.9		ng/L		92	40 - 160
Perfluoroheptanesulfonic Acid (PFHpS)	ND		31.7	34.8		ng/L		110	40 - 160
Perfluorodecanesulfonic acid (PFDS)	ND		32.1	28.5		ng/L		89	40 - 160
Perfluorooctanesulfonic acid (PFOS)	ND		30.9	31.3		ng/L		101	40 - 160
Perfluorooctanesulfonamide (FOSA)	ND		33.3	32.9		ng/L		99	40 - 160
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		33.3	30.0		ng/L		90	40 - 160
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		33.3	36.1		ng/L		108	40 - 160
6:2 FTS	ND		31.5	29.0		ng/L		92	40 - 160
8:2 FTS	ND		31.9	31.1		ng/L		98	40 - 160

<i>Isotope Dilution</i>	<i>MS MS</i>		<i>Limits</i>
	<i>%Recovery</i>	<i>Qualifier</i>	
13C8 FOSA	80		25 - 150
13C4 PFBA	113		25 - 150
13C5-PFPeA DNU	117		25 - 150
13C2 PFHxA	114		50 - 150
13C4 PFHpA	112		50 - 150
13C4 PFOA	100		50 - 150
13C5 PFNA	98		50 - 150
13C2 PFDA	82		50 - 150
13C2 PFUnA	74		50 - 150

Eurofins TestAmerica, Burlington

# QC Sample Results

Client: New York State D.E.C.  
Project/Site: Stewart ANG Base #336089 Kroll Well

Job ID: 200-53691-1

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

**Lab Sample ID: 200-53691-1 MS**  
**Matrix: Water**  
**Analysis Batch: 155083**

**Client Sample ID: EFFLUENT**  
**Prep Type: Total/NA**  
**Prep Batch: 155065**

<i>Isotope Dilution</i>	<i>MS</i> <i>%Recovery</i>	<i>MS</i> <i>Qualifier</i>	<i>Limits</i>
13C2 PFDoA	81		50 - 150
13C2 PFTeDA	72		50 - 150
13C3 PFBS	112		50 - 150
18O2 PFHxS	114		50 - 150
13C4 PFOS	94		50 - 150
d3-NMeFOSAA	67		50 - 150
d5-NEtFOSAA	65		50 - 150
M2-6:2 FTS	107		25 - 150
M2-8:2 FTS	81		25 - 150

**Lab Sample ID: 200-53691-1 MSD**  
**Matrix: Water**  
**Analysis Batch: 155083**

**Client Sample ID: EFFLUENT**  
**Prep Type: Total/NA**  
**Prep Batch: 155065**

<i>Analyte</i>	<i>Sample</i> <i>Result</i>	<i>Sample</i> <i>Qualifier</i>	<i>Spike</i> <i>Added</i>	<i>MSD</i> <i>Result</i>	<i>MSD</i> <i>Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec.</i> <i>Limits</i>	<i>RPD</i>	<i>RPD</i> <i>Limit</i>
Perfluorobutanoic acid (PFBA)	ND		35.3	34.9		ng/L		99	40 - 160	7	30
Perfluoropentanoic acid (PFPeA)	ND		35.3	32.1		ng/L		91	40 - 160	4	30
Perfluorohexanoic acid (PFHxA)	ND		35.3	34.6		ng/L		98	40 - 160	5	20
Perfluoroheptanoic acid (PFHpA)	ND		35.3	34.7		ng/L		98	40 - 160	7	20
Perfluorooctanoic acid (PFOA)	ND		35.3	34.0		ng/L		96	40 - 160	3	20
Perfluorononanoic acid (PFNA)	ND		35.3	35.9		ng/L		102	40 - 160	15	20
Perfluorodecanoic acid (PFDA)	ND		35.3	38.4		ng/L		109	40 - 160	14	20
Perfluoroundecanoic acid (PFUnA)	ND		35.3	35.8		ng/L		101	40 - 160	13	20
Perfluorododecanoic acid (PFDoA)	ND		35.3	35.8		ng/L		101	40 - 160	14	20
Perfluorotridecanoic acid (PFTriA)	ND	*	35.3	27.6		ng/L		78	40 - 160	11	20
Perfluorotetradecanoic acid (PFTeA)	ND		35.3	35.4		ng/L		100	40 - 160	18	20
Perfluorobutanesulfonic acid (PFBS)	ND		31.2	31.3		ng/L		100	40 - 160	11	20
Perfluorohexanesulfonic acid (PFHxS)	ND		32.1	31.3		ng/L		98	40 - 160	12	20
Perfluoroheptanesulfonic Acid (PFHpS)	ND		33.6	37.1		ng/L		111	40 - 160	7	30
Perfluorodecanesulfonic acid (PFDS)	ND		34.0	31.7		ng/L		93	40 - 160	11	30
Perfluorooctanesulfonic acid (PFOS)	ND		32.7	32.5		ng/L		99	40 - 160	4	20
Perfluorooctanesulfonamide (FOSA)	ND		35.3	32.4		ng/L		92	40 - 160	2	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		35.3	34.8		ng/L		99	40 - 160	15	20
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		35.3	38.0		ng/L		108	40 - 160	5	20
6:2 FTS	ND		33.5	30.1		ng/L		90	40 - 160	4	30
8:2 FTS	ND		33.8	34.1		ng/L		101	40 - 160	9	30
<i>Isotope Dilution</i>	<i>MSD</i> <i>%Recovery</i>	<i>MSD</i> <i>Qualifier</i>	<i>Limits</i>								
13C8 FOSA	89		25 - 150								
13C4 PFBA	120		25 - 150								

# QC Sample Results

Client: New York State D.E.C.  
 Project/Site: Stewart ANG Base #336089 Kroll Well

Job ID: 200-53691-1

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

Lab Sample ID: 200-53691-1 MSD

Matrix: Water

Analysis Batch: 155083

Client Sample ID: EFFLUENT

Prep Type: Total/NA

Prep Batch: 155065

<i>Isotope Dilution</i>	<i>MSD</i> <i>%Recovery</i>	<i>MSD</i> <i>Qualifier</i>	<i>Limits</i>
13C5-PFPeA DNU	124		25 - 150
13C2 PFHxA	121		50 - 150
13C4 PFHpA	117		50 - 150
13C4 PFOA	110		50 - 150
13C5 PFNA	102		50 - 150
13C2 PFDA	86		50 - 150
13C2 PFUnA	74		50 - 150
13C2 PFDoA	82		50 - 150
13C2 PFTeDA	75		50 - 150
13C3 PFBS	115		50 - 150
18O2 PFHxS	119		50 - 150
13C4 PFOS	99		50 - 150
d3-NMeFOSAA	72		50 - 150
d5-NEtFOSAA	70		50 - 150
M2-6:2 FTS	114		25 - 150
M2-8:2 FTS	79		25 - 150

# QC Association Summary

Client: New York State D.E.C.  
 Project/Site: Stewart ANG Base #336089 Kroll Well

Job ID: 200-53691-1

## LCMS

### Prep Batch: 155065

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
200-53691-1	EFFLUENT	Total/NA	Water	3535	
200-53691-2	MID POINT	Total/NA	Water	3535	
200-53691-3	RAW WATER	Total/NA	Water	3535	
200-53691-4	DUPLICATE	Total/NA	Water	3535	
200-53691-5	A-25	Total/NA	Water	3535	
200-53691-6	A-50	Total/NA	Water	3535	
200-53691-7	A-75	Total/NA	Water	3535	
200-53691-8	B-25	Total/NA	Water	3535	
200-53691-9	B-50	Total/NA	Water	3535	
200-53691-10	B-75	Total/NA	Water	3535	
MB 200-155065/1-A	Method Blank	Total/NA	Water	3535	
LCS 200-155065/2-A	Lab Control Sample	Total/NA	Water	3535	
200-53691-1 MS	EFFLUENT	Total/NA	Water	3535	
200-53691-1 MSD	EFFLUENT	Total/NA	Water	3535	

### Analysis Batch: 155083

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
200-53691-1	EFFLUENT	Total/NA	Water	537 (modified)	155065
200-53691-2	MID POINT	Total/NA	Water	537 (modified)	155065
200-53691-3	RAW WATER	Total/NA	Water	537 (modified)	155065
200-53691-4	DUPLICATE	Total/NA	Water	537 (modified)	155065
200-53691-5	A-25	Total/NA	Water	537 (modified)	155065
200-53691-6	A-50	Total/NA	Water	537 (modified)	155065
200-53691-7	A-75	Total/NA	Water	537 (modified)	155065
200-53691-8	B-25	Total/NA	Water	537 (modified)	155065
200-53691-9	B-50	Total/NA	Water	537 (modified)	155065
200-53691-10	B-75	Total/NA	Water	537 (modified)	155065
MB 200-155065/1-A	Method Blank	Total/NA	Water	537 (modified)	155065
LCS 200-155065/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	155065
200-53691-1 MS	EFFLUENT	Total/NA	Water	537 (modified)	155065
200-53691-1 MSD	EFFLUENT	Total/NA	Water	537 (modified)	155065

# Lab Chronicle

Client: New York State D.E.C.  
Project/Site: Stewart ANG Base #336089 Kroll Well

Job ID: 200-53691-1

## Client Sample ID: EFFLUENT

Date Collected: 05/15/20 11:05

Date Received: 05/16/20 10:00

Lab Sample ID: 200-53691-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			155065	05/19/20 11:21	MBM	TAL BUR
Total/NA	Analysis	537 (modified)		1	155083	05/19/20 16:59	MBM	TAL BUR

## Client Sample ID: MID POINT

Date Collected: 05/15/20 11:25

Date Received: 05/16/20 10:00

Lab Sample ID: 200-53691-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			155065	05/19/20 11:21	MBM	TAL BUR
Total/NA	Analysis	537 (modified)		1	155083	05/19/20 17:24	MBM	TAL BUR

## Client Sample ID: RAW WATER

Date Collected: 05/15/20 11:45

Date Received: 05/16/20 10:00

Lab Sample ID: 200-53691-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			155065	05/19/20 11:21	MBM	TAL BUR
Total/NA	Analysis	537 (modified)		1	155083	05/19/20 17:32	MBM	TAL BUR

## Client Sample ID: DUPLICATE

Date Collected: 05/15/20 00:00

Date Received: 05/16/20 10:00

Lab Sample ID: 200-53691-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			155065	05/19/20 11:21	MBM	TAL BUR
Total/NA	Analysis	537 (modified)		1	155083	05/19/20 17:41	MBM	TAL BUR

## Client Sample ID: A-25

Date Collected: 05/15/20 11:40

Date Received: 05/16/20 10:00

Lab Sample ID: 200-53691-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			155065	05/19/20 11:21	MBM	TAL BUR
Total/NA	Analysis	537 (modified)		1	155083	05/19/20 17:49	MBM	TAL BUR

## Client Sample ID: A-50

Date Collected: 05/15/20 11:35

Date Received: 05/16/20 10:00

Lab Sample ID: 200-53691-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			155065	05/19/20 11:21	MBM	TAL BUR
Total/NA	Analysis	537 (modified)		1	155083	05/19/20 17:57	MBM	TAL BUR

Eurofins TestAmerica, Burlington

# Lab Chronicle

Client: New York State D.E.C.  
 Project/Site: Stewart ANG Base #336089 Kroll Well

Job ID: 200-53691-1

## Client Sample ID: A-75

Date Collected: 05/15/20 11:30

Date Received: 05/16/20 10:00

Lab Sample ID: 200-53691-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			155065	05/19/20 11:21	MBM	TAL BUR
Total/NA	Analysis	537 (modified)		1	155083	05/19/20 18:05	MBM	TAL BUR

## Client Sample ID: B-25

Date Collected: 05/15/20 11:20

Date Received: 05/16/20 10:00

Lab Sample ID: 200-53691-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			155065	05/19/20 11:21	MBM	TAL BUR
Total/NA	Analysis	537 (modified)		1	155083	05/19/20 18:14	MBM	TAL BUR

## Client Sample ID: B-50

Date Collected: 05/15/20 11:15

Date Received: 05/16/20 10:00

Lab Sample ID: 200-53691-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			155065	05/19/20 11:21	MBM	TAL BUR
Total/NA	Analysis	537 (modified)		1	155083	05/19/20 18:22	MBM	TAL BUR

## Client Sample ID: B-75

Date Collected: 05/15/20 11:10

Date Received: 05/16/20 10:00

Lab Sample ID: 200-53691-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			155065	05/19/20 11:21	MBM	TAL BUR
Total/NA	Analysis	537 (modified)		1	155083	05/19/20 18:30	MBM	TAL BUR

### Laboratory References:

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

# Accreditation/Certification Summary

Client: New York State D.E.C.  
 Project/Site: Stewart ANG Base #336089 Kroll Well

Job ID: 200-53691-1

## Laboratory: Eurofins TestAmerica, Burlington

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

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10391	04-01-21

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
537 (modified)	3535	Water	6:2 FTS
537 (modified)	3535	Water	8:2 FTS
537 (modified)	3535	Water	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)
537 (modified)	3535	Water	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)
537 (modified)	3535	Water	Perfluorobutanesulfonic acid (PFBS)
537 (modified)	3535	Water	Perfluorobutanoic acid (PFBA)
537 (modified)	3535	Water	Perfluorodecanesulfonic acid (PFDS)
537 (modified)	3535	Water	Perfluorodecanoic acid (PFDA)
537 (modified)	3535	Water	Perfluorododecanoic acid (PFDoA)
537 (modified)	3535	Water	Perfluoroheptanesulfonic Acid (PFHpS)
537 (modified)	3535	Water	Perfluoroheptanoic acid (PFHpA)
537 (modified)	3535	Water	Perfluorohexanesulfonic acid (PFHxS)
537 (modified)	3535	Water	Perfluorohexanoic acid (PFHxA)
537 (modified)	3535	Water	Perfluorononanoic acid (PFNA)
537 (modified)	3535	Water	Perfluorooctanesulfonamide (FOSA)
537 (modified)	3535	Water	Perfluorooctanesulfonic acid (PFOS)
537 (modified)	3535	Water	Perfluorooctanoic acid (PFOA)
537 (modified)	3535	Water	Perfluoropentanoic acid (PFPeA)
537 (modified)	3535	Water	Perfluorotetradecanoic acid (PFTeA)
537 (modified)	3535	Water	Perfluorotridecanoic acid (PFTriA)
537 (modified)	3535	Water	Perfluoroundecanoic acid (PFUnA)

## Laboratory: Eurofins TestAmerica, Buffalo

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

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	04-02-21

# Method Summary

Client: New York State D.E.C.  
Project/Site: Stewart ANG Base #336089 Kroll Well

Job ID: 200-53691-1

Method	Method Description	Protocol	Laboratory
537 (modified)	Fluorinated Alkyl Substances	EPA	TAL BUR
3535	Solid-Phase Extraction (SPE)	SW846	TAL BUR

**Protocol References:**

EPA = US Environmental Protection Agency

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

**Laboratory References:**

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



# Sample Summary

Client: New York State D.E.C.  
Project/Site: Stewart ANG Base #336089 Kroll Well

Job ID: 200-53691-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
200-53691-1	EFFLUENT	Water	05/15/20 11:05	05/16/20 10:00	
200-53691-2	MID POINT	Water	05/15/20 11:25	05/16/20 10:00	
200-53691-3	RAW WATER	Water	05/15/20 11:45	05/16/20 10:00	
200-53691-4	DUPLICATE	Water	05/15/20 00:00	05/16/20 10:00	
200-53691-5	A-25	Water	05/15/20 11:40	05/16/20 10:00	
200-53691-6	A-50	Water	05/15/20 11:35	05/16/20 10:00	
200-53691-7	A-75	Water	05/15/20 11:30	05/16/20 10:00	
200-53691-8	B-25	Water	05/15/20 11:20	05/16/20 10:00	
200-53691-9	B-50	Water	05/15/20 11:15	05/16/20 10:00	
200-53691-10	B-75	Water	05/15/20 11:10	05/16/20 10:00	



ORIGIN ID: SCHA (518) 438-8140  
TIM KNOLLMEYER  
TESTAMERICA LAB INC  
25 KRAFT AVE

SHIP DATE: 15MAY20  
ACTWGT: 39.95 LB  
CAD: 0439821/CAFE3211

ALBANY, NY 12205  
UNITED STATES US

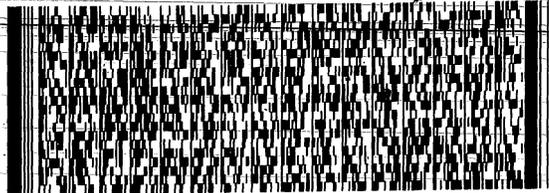
BILL THIRD PARTY

TO **SAMPLE RECEIVING**  
**TESTAMERICA - BURLINGTON**  
**30 COMMUNITY DRIVE, SUITE 11**

**BURLINGTON VT 05403**

(802) 660-1990

REF: AZTECH



**FedEx**  
Express



J1B11106050109

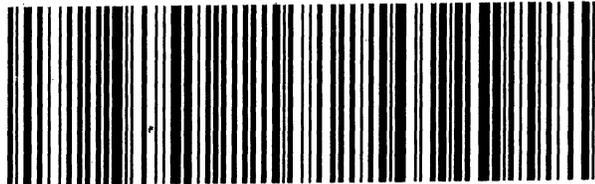
**SATURDAY 12:00P**  
**PRIORITY OVERNIGHT**

TRK# 1496 4445 7720  
0201

**XO BTVA**

05403  
VT-US BTV

Part # 156148-434 RIT EXP 09/19



## Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 200-53691-1

**Login Number: 53691**

**List Source: Eurofins TestAmerica, Burlington**

**List Number: 1**

**Creator: Khudaier, Zahraa**

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	1214428
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	0.2°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	
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	