

# NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

## Division of Environmental Remediation

625 Broadway, 12th Floor, Albany, New York 12233-7011  
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[www.dec.ny.gov](http://www.dec.ny.gov)

February 28, 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 February 14, 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 six and 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 the sampling data associated with the 6 PFAS list was provided to the Town under separate letter in December 2019 after receipt and review by DEC and the New York State Department of Health (DOH).

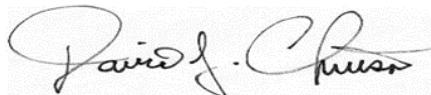
During this event, sampling for the 21 PFAS list was conducted at 9 locations:

- 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.

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

cc: 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

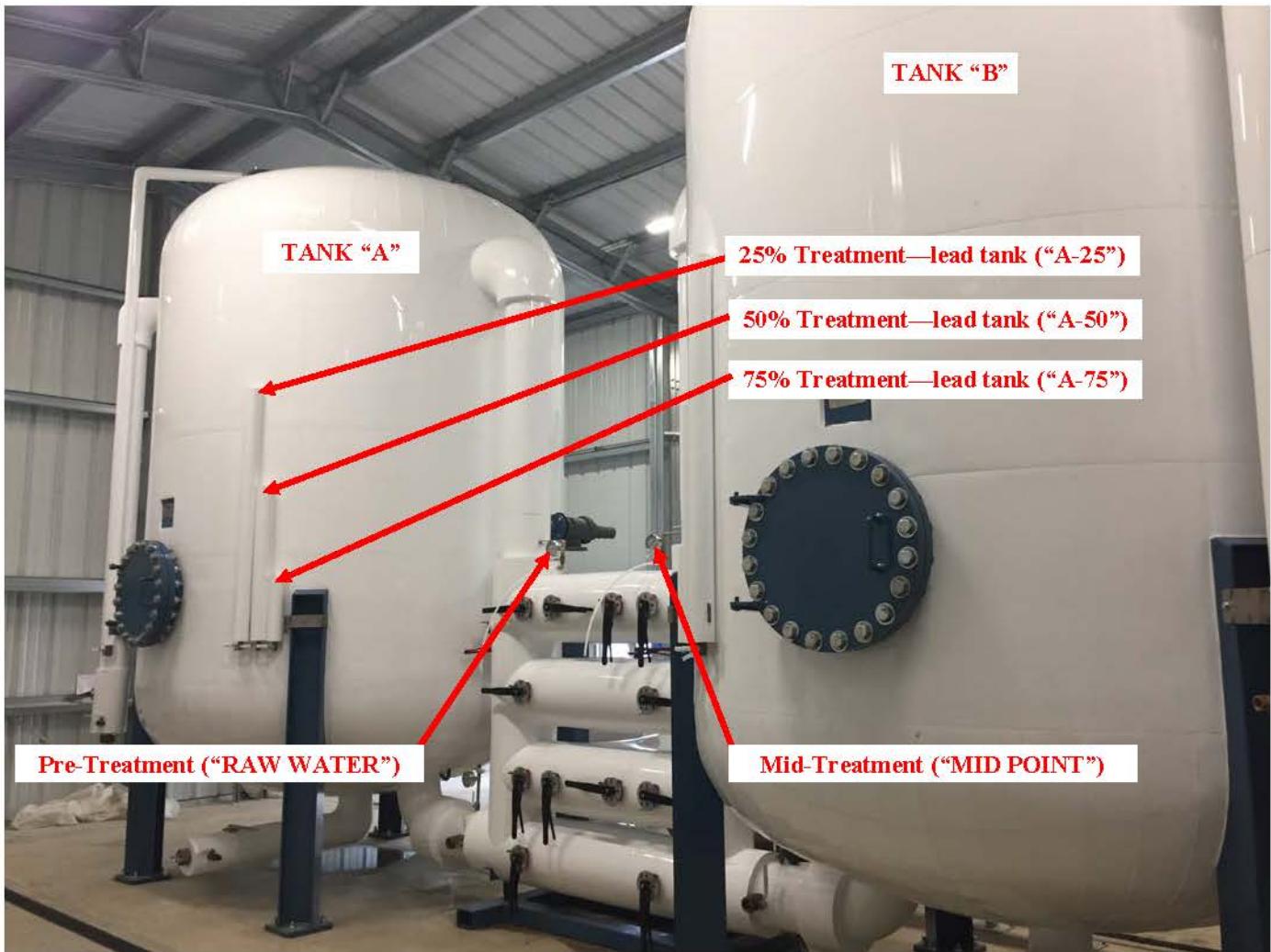


Figure 1—Kroll Well GAC Treatment System  
Sampling Locations

**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
<b>September 2019 (Based on 21 PFAS Analysis Data only)</b>	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>
<b>October 2019 (Based on 21 PFAS Analysis Data only)</b>	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>
<b>November 2019 (Based on 21 PFAS Analysis Data only)</b>	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>
<b>December 2019 (Based on 21 PFAS Analysis Data only)</b>	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>
<b>January 2020 (Based on 21 PFAS Analysis Data only)</b>	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>
<b>February 2020 (Based on 21 PFAS Analysis Data only)</b>	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.

## 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.



# Environment Testing TestAmerica



## ANALYTICAL REPORT

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

Laboratory Job ID: 200-52663-1

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:  
2/27/2020 5:15:06 PM

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

### LINKS

Review your project  
results through

**Total Access**

Have a Question?

Ask  
The  
Expert

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[www.testamericainc.com](http://www.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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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  
2/27/2020 5:15:06 PM

# Table of Contents

Cover Page .....	1
Table of Contents .....	3
Definitions/Glossary .....	4
Case Narrative .....	5
Detection Summary .....	6
Client Sample Results .....	8
Isotope Dilution Summary .....	18
QC Sample Results .....	20
QC Association Summary .....	24
Lab Chronicle .....	25
Certification Summary .....	27
Method Summary .....	28
Sample Summary .....	29
Chain of Custody .....	30
Receipt Checklists .....	31

# Definitions/Glossary

Client: New York State D.E.C.

Project/Site: Stewart ANG Base #336089 Kroll Well

Job ID: 200-52663-1

## 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	1
%R	Percent Recovery	2
CFL	Contains Free Liquid	3
CNF	Contains No Free Liquid	4
DER	Duplicate Error Ratio (normalized absolute difference)	5
Dil Fac	Dilution Factor	6
DL	Detection Limit (DoD/DOE)	7
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample	8
DLC	Decision Level Concentration (Radiochemistry)	9
EDL	Estimated Detection Limit (Dioxin)	10
LOD	Limit of Detection (DoD/DOE)	11
LOQ	Limit of Quantitation (DoD/DOE)	12
MDA	Minimum Detectable Activity (Radiochemistry)	13
MDC	Minimum Detectable Concentration (Radiochemistry)	14
MDL	Method Detection Limit	15
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)	

# Case Narrative

Client: New York State D.E.C.

Project/Site: Stewart ANG Base #336089 Kroll Well

Job ID: 200-52663-1

## Job ID: 200-52663-1

Laboratory: Eurofins TestAmerica, Burlington

### Narrative

#### Job Narrative 200-52663-1

### Receipt

The samples were received on 2/15/2020 10:10 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.6° C.

### LCMS

Method 537 (modified): The low level continuing calibration verification (CCVL) associated with batch 200-152693 recovered above the upper control limit for Perfluoroheptanesulfonic Acid (PFHpS). The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported.

Method 537 (modified): The continuing calibration verification (CCV) associated with batch 200-152745 recovered above the upper control limit for Perfluorotetradecanoic acid (PFTeA). The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported.

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

# Detection Summary

Client: New York State D.E.C.

Job ID: 200-52663-1

Project/Site: Stewart ANG Base #336089 Kroll Well

## **Client Sample ID: EFFLUENT**

**Lab Sample ID: 200-52663-1**

No Detections.

## **Client Sample ID: MID POINT**

**Lab Sample ID: 200-52663-2**

No Detections.

## **Client Sample ID: RAW WATER**

**Lab Sample ID: 200-52663-3**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	4.5		1.8		ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	4.3		1.8		ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	3.9		1.8		ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	2.8		1.8		ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	11		1.8		ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	6.2		1.8		ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	2.2		1.8		ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	9.7		1.8		ng/L	1		537 (modified)	Total/NA

## **Client Sample ID: DUPLICATE**

**Lab Sample ID: 200-52663-4**

No Detections.

## **Client Sample ID: A-25**

**Lab Sample ID: 200-52663-5**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	4.7		1.8		ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	3.7		1.8		ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	3.8		1.8		ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	2.7		1.8		ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	9.9		1.8		ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	6.7		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)	8.4		1.8		ng/L	1		537 (modified)	Total/NA

## **Client Sample ID: A-50**

**Lab Sample ID: 200-52663-6**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	4.8		1.8		ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	4.0		1.8		ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	2.6		1.8		ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	3.3		1.8		ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	3.5		1.8		ng/L	1		537 (modified)	Total/NA

## **Client Sample ID: A-75**

**Lab Sample ID: 200-52663-7**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	5.3		1.8		ng/L	1		537 (modified)	Total/NA

## **Client Sample ID: B-25**

**Lab Sample ID: 200-52663-8**

No Detections.

## **Client Sample ID: B-50**

**Lab Sample ID: 200-52663-9**

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Burlington

## Detection Summary

Client: New York State D.E.C.

Project/Site: Stewart ANG Base #336089 Kroll Well

Job ID: 200-52663-1

**Client Sample ID: B-75**

**Lab Sample ID: 200-52663-10**

No Detections.

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This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Burlington

# Client Sample Results

Client: New York State D.E.C.

Job ID: 200-52663-1

Project/Site: Stewart ANG Base #336089 Kroll Well

## Client Sample ID: EFFLUENT

Date Collected: 02/14/20 09:27

Lab Sample ID: 200-52663-1

Matrix: Water

Date Received: 02/15/20 10:10

### 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	02/24/20 09:37	02/26/20 17:45		1
Perfluoropentanoic acid (PFPeA)	ND		1.7		ng/L	02/24/20 09:37	02/26/20 17:45		1
Perfluorohexanoic acid (PFHxA)	ND		1.7		ng/L	02/24/20 09:37	02/26/20 17:45		1
Perfluoroheptanoic acid (PFHpA)	ND		1.7		ng/L	02/24/20 09:37	02/26/20 17:45		1
Perfluorooctanoic acid (PFOA)	ND		1.7		ng/L	02/24/20 09:37	02/26/20 17:45		1
Perfluorononanoic acid (PFNA)	ND		1.7		ng/L	02/24/20 09:37	02/26/20 17:45		1
Perfluorodecanoic acid (PFDA)	ND		1.7		ng/L	02/24/20 09:37	02/26/20 17:45		1
Perfluoroundecanoic acid (PFUnA)	ND		1.7		ng/L	02/24/20 09:37	02/26/20 17:45		1
Perfluorododecanoic acid (PFDoA)	ND		1.7		ng/L	02/24/20 09:37	02/26/20 17:45		1
Perfluorotridecanoic acid (PFTriA)	ND		1.7		ng/L	02/24/20 09:37	02/26/20 17:45		1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7		ng/L	02/24/20 09:37	02/26/20 17:45		1
Perfluorobutanesulfonic acid (PFBS)	ND		1.7		ng/L	02/24/20 09:37	02/26/20 17:45		1
Perfluorohexamersulfonic acid (PFHxS)	ND		1.7		ng/L	02/24/20 09:37	02/26/20 17:45		1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7		ng/L	02/24/20 09:37	02/26/20 17:45		1
Perfluorodecanesulfonic acid (PFDS)	ND		1.7		ng/L	02/24/20 09:37	02/26/20 17:45		1
Perfluorooctanesulfonic acid (PFOS)	ND		1.7		ng/L	02/24/20 09:37	02/26/20 17:45		1
Perfluorooctanesulfonamide (FOSA)	ND		8.5		ng/L	02/24/20 09:37	02/26/20 17:45		1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		17		ng/L	02/24/20 09:37	02/26/20 17:45		1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		17		ng/L	02/24/20 09:37	02/26/20 17:45		1
6:2 FTS	ND		17		ng/L	02/24/20 09:37	02/26/20 17:45		1
8:2 FTS	ND		17		ng/L	02/24/20 09:37	02/26/20 17:45		1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 FOSA	86		25 - 150				02/24/20 09:37	02/26/20 17:45	1
13C4 PFBA	102		25 - 150				02/24/20 09:37	02/26/20 17:45	1
13C5-PFPeA DNU	111		25 - 150				02/24/20 09:37	02/26/20 17:45	1
13C2 PFHxA	91		50 - 150				02/24/20 09:37	02/26/20 17:45	1
13C4 PFHpA	94		50 - 150				02/24/20 09:37	02/26/20 17:45	1
13C4 PFOA	96		50 - 150				02/24/20 09:37	02/26/20 17:45	1
13C5 PFNA	95		50 - 150				02/24/20 09:37	02/26/20 17:45	1
13C2 PFDA	88		50 - 150				02/24/20 09:37	02/26/20 17:45	1
13C2 PFUnA	74		50 - 150				02/24/20 09:37	02/26/20 17:45	1
13C2 PFDoA	79		50 - 150				02/24/20 09:37	02/26/20 17:45	1
13C2 PFTeDA	77		50 - 150				02/24/20 09:37	02/26/20 17:45	1
13C3 PFBS	90		50 - 150				02/24/20 09:37	02/26/20 17:45	1
18O2 PFHxS	92		50 - 150				02/24/20 09:37	02/26/20 17:45	1
13C4 PFOS	89		50 - 150				02/24/20 09:37	02/26/20 17:45	1
d3-NMeFOSAA	101		50 - 150				02/24/20 09:37	02/26/20 17:45	1
d5-NEtFOSAA	80		50 - 150				02/24/20 09:37	02/26/20 17:45	1
M2-6:2 FTS	96		25 - 150				02/24/20 09:37	02/26/20 17:45	1
M2-8:2 FTS	84		25 - 150				02/24/20 09:37	02/26/20 17:45	1

Eurofins TestAmerica, Burlington

# Client Sample Results

Client: New York State D.E.C.

Job ID: 200-52663-1

Project/Site: Stewart ANG Base #336089 Kroll Well

**Client Sample ID: MID POINT**

**Lab Sample ID: 200-52663-2**

**Matrix: Water**

Date Collected: 02/14/20 09:47

Date Received: 02/15/20 10:10

## 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	02/24/20 09:37	02/25/20 16:01		1
Perfluoropentanoic acid (PFPeA)	ND		1.7		ng/L	02/24/20 09:37	02/25/20 16:01		1
Perfluorohexanoic acid (PFHxA)	ND		1.7		ng/L	02/24/20 09:37	02/25/20 16:01		1
Perfluoroheptanoic acid (PFHpA)	ND		1.7		ng/L	02/24/20 09:37	02/25/20 16:01		1
Perfluorooctanoic acid (PFOA)	ND		1.7		ng/L	02/24/20 09:37	02/25/20 16:01		1
Perfluorononanoic acid (PFNA)	ND		1.7		ng/L	02/24/20 09:37	02/25/20 16:01		1
Perfluorodecanoic acid (PFDA)	ND		1.7		ng/L	02/24/20 09:37	02/25/20 16:01		1
Perfluoroundecanoic acid (PFUnA)	ND		1.7		ng/L	02/24/20 09:37	02/25/20 16:01		1
Perfluorododecanoic acid (PFDoA)	ND		1.7		ng/L	02/24/20 09:37	02/25/20 16:01		1
Perfluorotridecanoic acid (PFTriA)	ND		1.7		ng/L	02/24/20 09:37	02/25/20 16:01		1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7		ng/L	02/24/20 09:37	02/25/20 16:01		1
Perfluorobutanesulfonic acid (PFBS)	ND		1.7		ng/L	02/24/20 09:37	02/25/20 16:01		1
Perfluorohexamersulfonic acid (PFHxS)	ND		1.7		ng/L	02/24/20 09:37	02/25/20 16:01		1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7		ng/L	02/24/20 09:37	02/25/20 16:01		1
Perfluorodecanesulfonic acid (PFDS)	ND		1.7		ng/L	02/24/20 09:37	02/25/20 16:01		1
Perfluorooctanesulfonic acid (PFOS)	ND		1.7		ng/L	02/24/20 09:37	02/25/20 16:01		1
Perfluorooctanesulfonamide (FOSA)	ND		8.7		ng/L	02/24/20 09:37	02/25/20 16:01		1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		17		ng/L	02/24/20 09:37	02/25/20 16:01		1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		17		ng/L	02/24/20 09:37	02/25/20 16:01		1
6:2 FTS	ND		17		ng/L	02/24/20 09:37	02/25/20 16:01		1
8:2 FTS	ND		17		ng/L	02/24/20 09:37	02/25/20 16:01		1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 FOSA	89		25 - 150				02/24/20 09:37	02/25/20 16:01	1
13C4 PFBA	104		25 - 150				02/24/20 09:37	02/25/20 16:01	1
13C5-PFPeA DNU	112		25 - 150				02/24/20 09:37	02/25/20 16:01	1
13C2 PFHxA	92		50 - 150				02/24/20 09:37	02/25/20 16:01	1
13C4 PFHpA	100		50 - 150				02/24/20 09:37	02/25/20 16:01	1
13C4 PFOA	96		50 - 150				02/24/20 09:37	02/25/20 16:01	1
13C5 PFNA	102		50 - 150				02/24/20 09:37	02/25/20 16:01	1
13C2 PFDA	88		50 - 150				02/24/20 09:37	02/25/20 16:01	1
13C2 PFUnA	87		50 - 150				02/24/20 09:37	02/25/20 16:01	1
13C2 PFDoA	86		50 - 150				02/24/20 09:37	02/25/20 16:01	1
13C2 PFTeDA	97		50 - 150				02/24/20 09:37	02/25/20 16:01	1
13C3 PFBS	98		50 - 150				02/24/20 09:37	02/25/20 16:01	1
18O2 PFHxS	100		50 - 150				02/24/20 09:37	02/25/20 16:01	1
13C4 PFOS	96		50 - 150				02/24/20 09:37	02/25/20 16:01	1
d3-NMeFOSAA	91		50 - 150				02/24/20 09:37	02/25/20 16:01	1
d5-NEtFOSAA	97		50 - 150				02/24/20 09:37	02/25/20 16:01	1
M2-6:2 FTS	103		25 - 150				02/24/20 09:37	02/25/20 16:01	1
M2-8:2 FTS	94		25 - 150				02/24/20 09:37	02/25/20 16:01	1

Eurofins TestAmerica, Burlington

# Client Sample Results

Client: New York State D.E.C.

Job ID: 200-52663-1

Project/Site: Stewart ANG Base #336089 Kroll Well

## Client Sample ID: RAW WATER

Date Collected: 02/14/20 10:07

Lab Sample ID: 200-52663-3

Matrix: Water

Date Received: 02/15/20 10:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	4.5		1.8		ng/L	02/24/20 09:37	02/25/20 16:09		1
Perfluoropentanoic acid (PFPeA)	4.3		1.8		ng/L	02/24/20 09:37	02/25/20 16:09		1
Perfluorohexanoic acid (PFHxA)	3.9		1.8		ng/L	02/24/20 09:37	02/25/20 16:09		1
Perfluoroheptanoic acid (PFHpA)	2.8		1.8		ng/L	02/24/20 09:37	02/25/20 16:09		1
Perfluorooctanoic acid (PFOA)	11		1.8		ng/L	02/24/20 09:37	02/25/20 16:09		1
Perfluorononanoic acid (PFNA)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:09		1
Perfluorodecanoic acid (PFDA)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:09		1
Perfluoroundecanoic acid (PFUnA)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:09		1
Perfluorododecanoic acid (PFDoA)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:09		1
Perfluorotridecanoic acid (PFTriA)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:09		1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:09		1
<b>Perfluorobutanesulfonic acid (PFBS)</b>	<b>6.2</b>		1.8		ng/L	02/24/20 09:37	02/25/20 16:09		1
<b>Perfluorohexanesulfonic acid (PFHxS)</b>	<b>2.2</b>		1.8		ng/L	02/24/20 09:37	02/25/20 16:09		1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:09		1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:09		1
<b>Perfluorooctanesulfonic acid (PFOS)</b>	<b>9.7</b>		1.8		ng/L	02/24/20 09:37	02/25/20 16:09		1
Perfluorooctanesulfonamide (FOSA)	ND		9.0		ng/L	02/24/20 09:37	02/25/20 16:09		1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		18		ng/L	02/24/20 09:37	02/25/20 16:09		1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		18		ng/L	02/24/20 09:37	02/25/20 16:09		1
6:2 FTS	ND		18		ng/L	02/24/20 09:37	02/25/20 16:09		1
8:2 FTS	ND		18		ng/L	02/24/20 09:37	02/25/20 16:09		1
Isotope Dilution	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
13C8 FOSA	91		25 - 150			02/24/20 09:37	02/25/20 16:09		1
13C4 PFBA	102		25 - 150			02/24/20 09:37	02/25/20 16:09		1
13C5-PFPeA DNU	99		25 - 150			02/24/20 09:37	02/25/20 16:09		1
13C2 PFHxA	90		50 - 150			02/24/20 09:37	02/25/20 16:09		1
13C4 PFHpA	97		50 - 150			02/24/20 09:37	02/25/20 16:09		1
13C4 PFOA	96		50 - 150			02/24/20 09:37	02/25/20 16:09		1
13C5 PFNA	97		50 - 150			02/24/20 09:37	02/25/20 16:09		1
13C2 PFDA	97		50 - 150			02/24/20 09:37	02/25/20 16:09		1
13C2 PFUnA	91		50 - 150			02/24/20 09:37	02/25/20 16:09		1
13C2 PFDoA	83		50 - 150			02/24/20 09:37	02/25/20 16:09		1
13C2 PFTeDA	98		50 - 150			02/24/20 09:37	02/25/20 16:09		1
13C3 PFBS	90		50 - 150			02/24/20 09:37	02/25/20 16:09		1
18O2 PFHxS	98		50 - 150			02/24/20 09:37	02/25/20 16:09		1
13C4 PFOS	97		50 - 150			02/24/20 09:37	02/25/20 16:09		1
d3-NMeFOSAA	94		50 - 150			02/24/20 09:37	02/25/20 16:09		1
d5-NEtFOSAA	102		50 - 150			02/24/20 09:37	02/25/20 16:09		1
M2-6:2 FTS	103		25 - 150			02/24/20 09:37	02/25/20 16:09		1
M2-8:2 FTS	100		25 - 150			02/24/20 09:37	02/25/20 16:09		1

Eurofins TestAmerica, Burlington

# Client Sample Results

Client: New York State D.E.C.

Job ID: 200-52663-1

Project/Site: Stewart ANG Base #336089 Kroll Well

## Client Sample ID: DUPLICATE

Date Collected: 02/14/20 00:00

Lab Sample ID: 200-52663-4

Matrix: Water

Date Received: 02/15/20 10:10

### 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	02/24/20 09:37	02/25/20 16:17		1
Perfluoropentanoic acid (PFPeA)	ND		1.7		ng/L	02/24/20 09:37	02/25/20 16:17		1
Perfluorohexanoic acid (PFHxA)	ND		1.7		ng/L	02/24/20 09:37	02/25/20 16:17		1
Perfluoroheptanoic acid (PFHpA)	ND		1.7		ng/L	02/24/20 09:37	02/25/20 16:17		1
Perfluorooctanoic acid (PFOA)	ND		1.7		ng/L	02/24/20 09:37	02/25/20 16:17		1
Perfluorononanoic acid (PFNA)	ND		1.7		ng/L	02/24/20 09:37	02/25/20 16:17		1
Perfluorodecanoic acid (PFDA)	ND		1.7		ng/L	02/24/20 09:37	02/25/20 16:17		1
Perfluoroundecanoic acid (PFUnA)	ND		1.7		ng/L	02/24/20 09:37	02/25/20 16:17		1
Perfluorododecanoic acid (PFDoA)	ND		1.7		ng/L	02/24/20 09:37	02/25/20 16:17		1
Perfluorotridecanoic acid (PFTriA)	ND		1.7		ng/L	02/24/20 09:37	02/25/20 16:17		1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7		ng/L	02/24/20 09:37	02/25/20 16:17		1
Perfluorobutanesulfonic acid (PFBS)	ND		1.7		ng/L	02/24/20 09:37	02/25/20 16:17		1
Perfluorohexamersulfonic acid (PFHxS)	ND		1.7		ng/L	02/24/20 09:37	02/25/20 16:17		1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7		ng/L	02/24/20 09:37	02/25/20 16:17		1
Perfluorodecanesulfonic acid (PFDS)	ND		1.7		ng/L	02/24/20 09:37	02/25/20 16:17		1
Perfluorooctanesulfonic acid (PFOS)	ND		1.7		ng/L	02/24/20 09:37	02/25/20 16:17		1
Perfluorooctanesulfonamide (FOSA)	ND		8.6		ng/L	02/24/20 09:37	02/25/20 16:17		1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		17		ng/L	02/24/20 09:37	02/25/20 16:17		1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		17		ng/L	02/24/20 09:37	02/25/20 16:17		1
6:2 FTS	ND		17		ng/L	02/24/20 09:37	02/25/20 16:17		1
8:2 FTS	ND		17		ng/L	02/24/20 09:37	02/25/20 16:17		1
Isotope Dilution	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
13C8 FOSA	97		25 - 150			02/24/20 09:37	02/25/20 16:17		1
13C4 PFBA	104		25 - 150			02/24/20 09:37	02/25/20 16:17		1
13C5-PFPeA DNU	107		25 - 150			02/24/20 09:37	02/25/20 16:17		1
13C2 PFHxA	100		50 - 150			02/24/20 09:37	02/25/20 16:17		1
13C4 PFHpA	101		50 - 150			02/24/20 09:37	02/25/20 16:17		1
13C4 PFOA	93		50 - 150			02/24/20 09:37	02/25/20 16:17		1
13C5 PFNA	95		50 - 150			02/24/20 09:37	02/25/20 16:17		1
13C2 PFDA	100		50 - 150			02/24/20 09:37	02/25/20 16:17		1
13C2 PFUnA	91		50 - 150			02/24/20 09:37	02/25/20 16:17		1
13C2 PFDoA	89		50 - 150			02/24/20 09:37	02/25/20 16:17		1
13C2 PFTeDA	97		50 - 150			02/24/20 09:37	02/25/20 16:17		1
13C3 PFBS	97		50 - 150			02/24/20 09:37	02/25/20 16:17		1
18O2 PFHxS	93		50 - 150			02/24/20 09:37	02/25/20 16:17		1
13C4 PFOS	102		50 - 150			02/24/20 09:37	02/25/20 16:17		1
d3-NMeFOSAA	99		50 - 150			02/24/20 09:37	02/25/20 16:17		1
d5-NEtFOSAA	95		50 - 150			02/24/20 09:37	02/25/20 16:17		1
M2-6:2 FTS	104		25 - 150			02/24/20 09:37	02/25/20 16:17		1
M2-8:2 FTS	114		25 - 150			02/24/20 09:37	02/25/20 16:17		1

Eurofins TestAmerica, Burlington

# Client Sample Results

Client: New York State D.E.C.

Job ID: 200-52663-1

Project/Site: Stewart ANG Base #336089 Kroll Well

**Client Sample ID: A-25**

Date Collected: 02/14/20 10:02

**Lab Sample ID: 200-52663-5**

Matrix: Water

Date Received: 02/15/20 10:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	4.7		1.8		ng/L	02/24/20 09:37	02/25/20 16:26		1
Perfluoropentanoic acid (PFPeA)	3.7		1.8		ng/L	02/24/20 09:37	02/25/20 16:26		1
Perfluorohexanoic acid (PFHxA)	3.8		1.8		ng/L	02/24/20 09:37	02/25/20 16:26		1
Perfluoroheptanoic acid (PFHpA)	2.7		1.8		ng/L	02/24/20 09:37	02/25/20 16:26		1
Perfluorooctanoic acid (PFOA)	9.9		1.8		ng/L	02/24/20 09:37	02/25/20 16:26		1
Perfluorononanoic acid (PFNA)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:26		1
Perfluorodecanoic acid (PFDA)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:26		1
Perfluoroundecanoic acid (PFUnA)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:26		1
Perfluorododecanoic acid (PFDoA)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:26		1
Perfluorotridecanoic acid (PFTriA)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:26		1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:26		1
<b>Perfluorobutanesulfonic acid (PFBS)</b>	<b>6.7</b>		1.8		ng/L	02/24/20 09:37	02/25/20 16:26		1
<b>Perfluorohexanesulfonic acid (PFHxS)</b>	<b>2.0</b>		1.8		ng/L	02/24/20 09:37	02/25/20 16:26		1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:26		1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:26		1
<b>Perfluorooctanesulfonic acid (PFOS)</b>	<b>8.4</b>		1.8		ng/L	02/24/20 09:37	02/25/20 16:26		1
Perfluoroctanesulfonamide (FOSA)	ND		9.0		ng/L	02/24/20 09:37	02/25/20 16:26		1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		18		ng/L	02/24/20 09:37	02/25/20 16:26		1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		18		ng/L	02/24/20 09:37	02/25/20 16:26		1
6:2 FTS	ND		18		ng/L	02/24/20 09:37	02/25/20 16:26		1
8:2 FTS	ND		18		ng/L	02/24/20 09:37	02/25/20 16:26		1
Isotope Dilution	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
13C8 FOSA	101		25 - 150			02/24/20 09:37	02/25/20 16:26		1
13C4 PFBA	106		25 - 150			02/24/20 09:37	02/25/20 16:26		1
13C5-PFPeA DNU	112		25 - 150			02/24/20 09:37	02/25/20 16:26		1
13C2 PFHxA	96		50 - 150			02/24/20 09:37	02/25/20 16:26		1
13C4 PFHpA	104		50 - 150			02/24/20 09:37	02/25/20 16:26		1
13C4 PFOA	102		50 - 150			02/24/20 09:37	02/25/20 16:26		1
13C5 PFNA	109		50 - 150			02/24/20 09:37	02/25/20 16:26		1
13C2 PFDA	108		50 - 150			02/24/20 09:37	02/25/20 16:26		1
13C2 PFUnA	93		50 - 150			02/24/20 09:37	02/25/20 16:26		1
13C2 PFDoA	96		50 - 150			02/24/20 09:37	02/25/20 16:26		1
13C2 PFTeDA	104		50 - 150			02/24/20 09:37	02/25/20 16:26		1
13C3 PFBS	95		50 - 150			02/24/20 09:37	02/25/20 16:26		1
18O2 PFHxS	106		50 - 150			02/24/20 09:37	02/25/20 16:26		1
13C4 PFOS	113		50 - 150			02/24/20 09:37	02/25/20 16:26		1
d3-NMeFOSAA	117		50 - 150			02/24/20 09:37	02/25/20 16:26		1
d5-NEtFOSAA	101		50 - 150			02/24/20 09:37	02/25/20 16:26		1
M2-6:2 FTS	106		25 - 150			02/24/20 09:37	02/25/20 16:26		1
M2-8:2 FTS	105		25 - 150			02/24/20 09:37	02/25/20 16:26		1

Eurofins TestAmerica, Burlington

# Client Sample Results

Client: New York State D.E.C.

Job ID: 200-52663-1

Project/Site: Stewart ANG Base #336089 Kroll Well

**Client Sample ID: A-50**

Date Collected: 02/14/20 09:57

Date Received: 02/15/20 10:10

**Lab Sample ID: 200-52663-6**

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	4.8		1.8		ng/L	02/24/20 09:37	02/25/20 16:34		1
Perfluoropentanoic acid (PFPeA)	4.0		1.8		ng/L	02/24/20 09:37	02/25/20 16:34		1
Perfluorohexanoic acid (PFHxA)	2.6		1.8		ng/L	02/24/20 09:37	02/25/20 16:34		1
Perfluoroheptanoic acid (PFHpA)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:34		1
Perfluorooctanoic acid (PFOA)	3.3		1.8		ng/L	02/24/20 09:37	02/25/20 16:34		1
Perfluorononanoic acid (PFNA)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:34		1
Perfluorodecanoic acid (PFDA)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:34		1
Perfluoroundecanoic acid (PFUnA)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:34		1
Perfluorododecanoic acid (PFDoA)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:34		1
Perfluorotridecanoic acid (PFTriA)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:34		1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:34		1
<b>Perfluorobutanesulfonic acid (PFBS)</b>	<b>3.5</b>		1.8		ng/L	02/24/20 09:37	02/25/20 16:34		1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:34		1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:34		1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:34		1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:34		1
Perfluorooctanesulfonamide (FOSA)	ND		8.8		ng/L	02/24/20 09:37	02/25/20 16:34		1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		18		ng/L	02/24/20 09:37	02/25/20 16:34		1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		18		ng/L	02/24/20 09:37	02/25/20 16:34		1
6:2 FTS	ND		18		ng/L	02/24/20 09:37	02/25/20 16:34		1
8:2 FTS	ND		18		ng/L	02/24/20 09:37	02/25/20 16:34		1
Isotope Dilution	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
13C8 FOSA	95		25 - 150			02/24/20 09:37	02/25/20 16:34		1
13C4 PFBA	104		25 - 150			02/24/20 09:37	02/25/20 16:34		1
13C5-PFPeA DNU	104		25 - 150			02/24/20 09:37	02/25/20 16:34		1
13C2 PFHxA	96		50 - 150			02/24/20 09:37	02/25/20 16:34		1
13C4 PFHpA	100		50 - 150			02/24/20 09:37	02/25/20 16:34		1
13C4 PFOA	94		50 - 150			02/24/20 09:37	02/25/20 16:34		1
13C5 PFNA	100		50 - 150			02/24/20 09:37	02/25/20 16:34		1
13C2 PFDA	99		50 - 150			02/24/20 09:37	02/25/20 16:34		1
13C2 PFUnA	88		50 - 150			02/24/20 09:37	02/25/20 16:34		1
13C2 PFDoA	85		50 - 150			02/24/20 09:37	02/25/20 16:34		1
13C2 PFTeDA	93		50 - 150			02/24/20 09:37	02/25/20 16:34		1
13C3 PFBS	90		50 - 150			02/24/20 09:37	02/25/20 16:34		1
18O2 PFHxS	103		50 - 150			02/24/20 09:37	02/25/20 16:34		1
13C4 PFOS	100		50 - 150			02/24/20 09:37	02/25/20 16:34		1
d3-NMeFOSAA	107		50 - 150			02/24/20 09:37	02/25/20 16:34		1
d5-NEtFOSAA	89		50 - 150			02/24/20 09:37	02/25/20 16:34		1
M2-6:2 FTS	103		25 - 150			02/24/20 09:37	02/25/20 16:34		1
M2-8:2 FTS	101		25 - 150			02/24/20 09:37	02/25/20 16:34		1

Eurofins TestAmerica, Burlington

# Client Sample Results

Client: New York State D.E.C.

Job ID: 200-52663-1

Project/Site: Stewart ANG Base #336089 Kroll Well

**Client Sample ID: A-75**

**Lab Sample ID: 200-52663-7**

**Matrix: Water**

Date Collected: 02/14/20 09:52

Date Received: 02/15/20 10:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	5.3		1.8		ng/L	02/24/20 09:37	02/25/20 16:42		1
Perfluoropentanoic acid (PFPeA)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:42		1
Perfluorohexanoic acid (PFHxA)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:42		1
Perfluoroheptanoic acid (PFHpA)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:42		1
Perfluorooctanoic acid (PFOA)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:42		1
Perfluorononanoic acid (PFNA)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:42		1
Perfluorodecanoic acid (PFDA)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:42		1
Perfluoroundecanoic acid (PFUnA)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:42		1
Perfluorododecanoic acid (PFDoA)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:42		1
Perfluorotridecanoic acid (PFTriA)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:42		1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:42		1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:42		1
Perfluorohexamersulfonic acid (PFHxS)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:42		1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:42		1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:42		1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:42		1
Perfluorooctanesulfonamide (FOSA)	ND		8.8		ng/L	02/24/20 09:37	02/25/20 16:42		1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		18		ng/L	02/24/20 09:37	02/25/20 16:42		1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		18		ng/L	02/24/20 09:37	02/25/20 16:42		1
6:2 FTS	ND		18		ng/L	02/24/20 09:37	02/25/20 16:42		1
8:2 FTS	ND		18		ng/L	02/24/20 09:37	02/25/20 16:42		1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 FOSA	101		25 - 150				02/24/20 09:37	02/25/20 16:42	1
13C4 PFBA	104		25 - 150				02/24/20 09:37	02/25/20 16:42	1
13C5-PFPeA DNU	114		25 - 150				02/24/20 09:37	02/25/20 16:42	1
13C2 PFHxA	95		50 - 150				02/24/20 09:37	02/25/20 16:42	1
13C4 PFHpA	104		50 - 150				02/24/20 09:37	02/25/20 16:42	1
13C4 PFOA	98		50 - 150				02/24/20 09:37	02/25/20 16:42	1
13C5 PFNA	108		50 - 150				02/24/20 09:37	02/25/20 16:42	1
13C2 PFDA	100		50 - 150				02/24/20 09:37	02/25/20 16:42	1
13C2 PFUnA	98		50 - 150				02/24/20 09:37	02/25/20 16:42	1
13C2 PFDoA	94		50 - 150				02/24/20 09:37	02/25/20 16:42	1
13C2 PFTeDA	99		50 - 150				02/24/20 09:37	02/25/20 16:42	1
13C3 PFBS	93		50 - 150				02/24/20 09:37	02/25/20 16:42	1
18O2 PFHxS	99		50 - 150				02/24/20 09:37	02/25/20 16:42	1
13C4 PFOS	107		50 - 150				02/24/20 09:37	02/25/20 16:42	1
d3-NMeFOSAA	107		50 - 150				02/24/20 09:37	02/25/20 16:42	1
d5-NEtFOSAA	90		50 - 150				02/24/20 09:37	02/25/20 16:42	1
M2-6:2 FTS	104		25 - 150				02/24/20 09:37	02/25/20 16:42	1
M2-8:2 FTS	96		25 - 150				02/24/20 09:37	02/25/20 16:42	1

Eurofins TestAmerica, Burlington

# Client Sample Results

Client: New York State D.E.C.

Job ID: 200-52663-1

Project/Site: Stewart ANG Base #336089 Kroll Well

**Client Sample ID: B-25**

Date Collected: 02/14/20 09:42

Date Received: 02/15/20 10:10

**Lab Sample ID: 200-52663-8**

Matrix: Water

**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	02/24/20 09:37	02/25/20 16:50		1
Perfluoropentanoic acid (PFPeA)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:50		1
Perfluorohexanoic acid (PFHxA)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:50		1
Perfluoroheptanoic acid (PFHpA)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:50		1
Perfluorooctanoic acid (PFOA)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:50		1
Perfluorononanoic acid (PFNA)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:50		1
Perfluorodecanoic acid (PFDA)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:50		1
Perfluoroundecanoic acid (PFUnA)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:50		1
Perfluorododecanoic acid (PFDoA)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:50		1
Perfluorotridecanoic acid (PFTriA)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:50		1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:50		1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:50		1
Perfluorohexamersulfonic acid (PFHxS)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:50		1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:50		1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:50		1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:50		1
Perfluorooctanesulfonamide (FOSA)	ND		8.9		ng/L	02/24/20 09:37	02/25/20 16:50		1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		18		ng/L	02/24/20 09:37	02/25/20 16:50		1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		18		ng/L	02/24/20 09:37	02/25/20 16:50		1
6:2 FTS	ND		18		ng/L	02/24/20 09:37	02/25/20 16:50		1
8:2 FTS	ND		18		ng/L	02/24/20 09:37	02/25/20 16:50		1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 FOSA	97		25 - 150				02/24/20 09:37	02/25/20 16:50	1
13C4 PFBA	103		25 - 150				02/24/20 09:37	02/25/20 16:50	1
13C5-PFPeA DNU	112		25 - 150				02/24/20 09:37	02/25/20 16:50	1
13C2 PFHxA	91		50 - 150				02/24/20 09:37	02/25/20 16:50	1
13C4 PFHpA	101		50 - 150				02/24/20 09:37	02/25/20 16:50	1
13C4 PFOA	96		50 - 150				02/24/20 09:37	02/25/20 16:50	1
13C5 PFNA	96		50 - 150				02/24/20 09:37	02/25/20 16:50	1
13C2 PFDA	105		50 - 150				02/24/20 09:37	02/25/20 16:50	1
13C2 PFUnA	95		50 - 150				02/24/20 09:37	02/25/20 16:50	1
13C2 PFDoA	92		50 - 150				02/24/20 09:37	02/25/20 16:50	1
13C2 PFTeDA	98		50 - 150				02/24/20 09:37	02/25/20 16:50	1
13C3 PFBS	97		50 - 150				02/24/20 09:37	02/25/20 16:50	1
18O2 PFHxS	103		50 - 150				02/24/20 09:37	02/25/20 16:50	1
13C4 PFOS	99		50 - 150				02/24/20 09:37	02/25/20 16:50	1
d3-NMeFOSAA	109		50 - 150				02/24/20 09:37	02/25/20 16:50	1
d5-NEtFOSAA	97		50 - 150				02/24/20 09:37	02/25/20 16:50	1
M2-6:2 FTS	107		25 - 150				02/24/20 09:37	02/25/20 16:50	1
M2-8:2 FTS	107		25 - 150				02/24/20 09:37	02/25/20 16:50	1

Eurofins TestAmerica, Burlington

# Client Sample Results

Client: New York State D.E.C.

Job ID: 200-52663-1

Project/Site: Stewart ANG Base #336089 Kroll Well

**Client Sample ID: B-50**

**Lab Sample ID: 200-52663-9**

**Matrix: Water**

Date Collected: 02/14/20 09:37

Date Received: 02/15/20 10:10

## 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	02/24/20 09:37	02/25/20 16:59		1
Perfluoropentanoic acid (PFPeA)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:59		1
Perfluorohexanoic acid (PFHxA)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:59		1
Perfluoroheptanoic acid (PFHpA)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:59		1
Perfluorooctanoic acid (PFOA)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:59		1
Perfluorononanoic acid (PFNA)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:59		1
Perfluorodecanoic acid (PFDA)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:59		1
Perfluoroundecanoic acid (PFUnA)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:59		1
Perfluorododecanoic acid (PFDoA)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:59		1
Perfluorotridecanoic acid (PFTriA)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:59		1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:59		1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:59		1
Perfluorohexamersulfonic acid (PFHxS)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:59		1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:59		1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:59		1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8		ng/L	02/24/20 09:37	02/25/20 16:59		1
Perfluorooctanesulfonamide (FOSA)	ND		9.0		ng/L	02/24/20 09:37	02/25/20 16:59		1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		18		ng/L	02/24/20 09:37	02/25/20 16:59		1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		18		ng/L	02/24/20 09:37	02/25/20 16:59		1
6:2 FTS	ND		18		ng/L	02/24/20 09:37	02/25/20 16:59		1
8:2 FTS	ND		18		ng/L	02/24/20 09:37	02/25/20 16:59		1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 FOSA	90		25 - 150				02/24/20 09:37	02/25/20 16:59	1
13C4 PFBA	105		25 - 150				02/24/20 09:37	02/25/20 16:59	1
13C5-PFPeA DNU	108		25 - 150				02/24/20 09:37	02/25/20 16:59	1
13C2 PFHxA	95		50 - 150				02/24/20 09:37	02/25/20 16:59	1
13C4 PFHpA	99		50 - 150				02/24/20 09:37	02/25/20 16:59	1
13C4 PFOA	100		50 - 150				02/24/20 09:37	02/25/20 16:59	1
13C5 PFNA	98		50 - 150				02/24/20 09:37	02/25/20 16:59	1
13C2 PFDA	99		50 - 150				02/24/20 09:37	02/25/20 16:59	1
13C2 PFUnA	79		50 - 150				02/24/20 09:37	02/25/20 16:59	1
13C2 PFDoA	87		50 - 150				02/24/20 09:37	02/25/20 16:59	1
13C2 PFTeDA	96		50 - 150				02/24/20 09:37	02/25/20 16:59	1
13C3 PFBS	93		50 - 150				02/24/20 09:37	02/25/20 16:59	1
18O2 PFHxS	99		50 - 150				02/24/20 09:37	02/25/20 16:59	1
13C4 PFOS	94		50 - 150				02/24/20 09:37	02/25/20 16:59	1
d3-NMeFOSAA	94		50 - 150				02/24/20 09:37	02/25/20 16:59	1
d5-NEtFOSAA	93		50 - 150				02/24/20 09:37	02/25/20 16:59	1
M2-6:2 FTS	97		25 - 150				02/24/20 09:37	02/25/20 16:59	1
M2-8:2 FTS	96		25 - 150				02/24/20 09:37	02/25/20 16:59	1

Eurofins TestAmerica, Burlington

# Client Sample Results

Client: New York State D.E.C.

Job ID: 200-52663-1

Project/Site: Stewart ANG Base #336089 Kroll Well

**Client Sample ID: B-75**

**Lab Sample ID: 200-52663-10**

Date Collected: 02/14/20 09:33

Matrix: Water

Date Received: 02/15/20 10:10

## 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	02/24/20 09:37	02/25/20 17:07		1
Perfluoropentanoic acid (PFPeA)	ND		1.7		ng/L	02/24/20 09:37	02/25/20 17:07		1
Perfluorohexanoic acid (PFHxA)	ND		1.7		ng/L	02/24/20 09:37	02/25/20 17:07		1
Perfluoroheptanoic acid (PFHpA)	ND		1.7		ng/L	02/24/20 09:37	02/25/20 17:07		1
Perfluorooctanoic acid (PFOA)	ND		1.7		ng/L	02/24/20 09:37	02/25/20 17:07		1
Perfluorononanoic acid (PFNA)	ND		1.7		ng/L	02/24/20 09:37	02/25/20 17:07		1
Perfluorodecanoic acid (PFDA)	ND		1.7		ng/L	02/24/20 09:37	02/25/20 17:07		1
Perfluoroundecanoic acid (PFUnA)	ND		1.7		ng/L	02/24/20 09:37	02/25/20 17:07		1
Perfluorododecanoic acid (PFDoA)	ND		1.7		ng/L	02/24/20 09:37	02/25/20 17:07		1
Perfluorotridecanoic acid (PFTriA)	ND		1.7		ng/L	02/24/20 09:37	02/25/20 17:07		1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7		ng/L	02/24/20 09:37	02/25/20 17:07		1
Perfluorobutanesulfonic acid (PFBS)	ND		1.7		ng/L	02/24/20 09:37	02/25/20 17:07		1
Perfluorohexamersulfonic acid (PFHxS)	ND		1.7		ng/L	02/24/20 09:37	02/25/20 17:07		1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7		ng/L	02/24/20 09:37	02/25/20 17:07		1
Perfluorodecanesulfonic acid (PFDS)	ND		1.7		ng/L	02/24/20 09:37	02/25/20 17:07		1
Perfluorooctanesulfonic acid (PFOS)	ND		1.7		ng/L	02/24/20 09:37	02/25/20 17:07		1
Perfluorooctanesulfonamide (FOSA)	ND		8.5		ng/L	02/24/20 09:37	02/25/20 17:07		1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		17		ng/L	02/24/20 09:37	02/25/20 17:07		1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		17		ng/L	02/24/20 09:37	02/25/20 17:07		1
6:2 FTS	ND		17		ng/L	02/24/20 09:37	02/25/20 17:07		1
8:2 FTS	ND		17		ng/L	02/24/20 09:37	02/25/20 17:07		1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 FOSA	79		25 - 150				02/24/20 09:37	02/25/20 17:07	1
13C4 PFBA	101		25 - 150				02/24/20 09:37	02/25/20 17:07	1
13C5-PFPeA DNU	105		25 - 150				02/24/20 09:37	02/25/20 17:07	1
13C2 PFHxA	88		50 - 150				02/24/20 09:37	02/25/20 17:07	1
13C4 PFHpA	101		50 - 150				02/24/20 09:37	02/25/20 17:07	1
13C4 PFOA	98		50 - 150				02/24/20 09:37	02/25/20 17:07	1
13C5 PFNA	90		50 - 150				02/24/20 09:37	02/25/20 17:07	1
13C2 PFDA	86		50 - 150				02/24/20 09:37	02/25/20 17:07	1
13C2 PFUnA	79		50 - 150				02/24/20 09:37	02/25/20 17:07	1
13C2 PFDoA	78		50 - 150				02/24/20 09:37	02/25/20 17:07	1
13C2 PFTeDA	84		50 - 150				02/24/20 09:37	02/25/20 17:07	1
13C3 PFBS	90		50 - 150				02/24/20 09:37	02/25/20 17:07	1
18O2 PFHxS	94		50 - 150				02/24/20 09:37	02/25/20 17:07	1
13C4 PFOS	83		50 - 150				02/24/20 09:37	02/25/20 17:07	1
d3-NMeFOSAA	99		50 - 150				02/24/20 09:37	02/25/20 17:07	1
d5-NEtFOSAA	90		50 - 150				02/24/20 09:37	02/25/20 17:07	1
M2-6:2 FTS	98		25 - 150				02/24/20 09:37	02/25/20 17:07	1
M2-8:2 FTS	93		25 - 150				02/24/20 09:37	02/25/20 17:07	1

Eurofins TestAmerica, Burlington

# Isotope Dilution Summary

Client: New York State D.E.C.

Job ID: 200-52663-1

Project/Site: Stewart ANG Base #336089 Kroll Well

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Isotope Dilution Recovery (Acceptance Limits)							
		PFOSA (25-150)	PFBA (25-150)	PFPeA (25-150)	PFHxA (50-150)	PFHpA (50-150)	PFOA (50-150)	PFNA (50-150)	PFDA (50-150)
200-52663-1	EFFLUENT	86	102	111	91	94	96	95	88
200-52663-2	MID POINT	89	104	112	92	100	96	102	88
200-52663-3	RAW WATER	91	102	99	90	97	96	97	97
200-52663-4	DUPLICATE	97	104	107	100	101	93	95	100
200-52663-5	A-25	101	106	112	96	104	102	109	108
200-52663-6	A-50	95	104	104	96	100	94	100	99
200-52663-7	A-75	101	104	114	95	104	98	108	100
200-52663-8	B-25	97	103	112	91	101	96	96	105
200-52663-9	B-50	90	105	108	95	99	100	98	99
200-52663-10	B-75	79	101	105	88	101	98	90	86
LCS 200-152634/2-A	Lab Control Sample	83	102	102	88	92	92	98	95
LCSD 200-152634/3-A	Lab Control Sample Dup	80	101	103	85	97	94	98	102
MB 200-152634/1-A	Method Blank	84	101	106	92	97	94	98	98
Lab Sample ID	Client Sample ID	Percent Isotope Dilution Recovery (Acceptance Limits)							
		PFUnA (50-150)	PFDoA (50-150)	PFTDA (50-150)	3C3-PFB <sup>b</sup> (50-150)	PFHxS (50-150)	PFOS (50-150)	-NMeFOS <sup>a</sup> (50-150)	-NEtFOS <sup>a</sup> (50-150)
200-52663-1	EFFLUENT	74	79	77	90	92	89	101	80
200-52663-2	MID POINT	87	86	97	98	100	96	91	97
200-52663-3	RAW WATER	91	83	98	90	98	97	94	102
200-52663-4	DUPLICATE	91	89	97	97	93	102	99	95
200-52663-5	A-25	93	96	104	95	106	113	117	101
200-52663-6	A-50	88	85	93	90	103	100	107	89
200-52663-7	A-75	98	94	99	93	99	107	107	90
200-52663-8	B-25	95	92	98	97	103	99	109	97
200-52663-9	B-50	79	87	96	93	99	94	94	93
200-52663-10	B-75	79	78	84	90	94	83	99	90
LCS 200-152634/2-A	Lab Control Sample	82	82	84	91	92	93	106	97
LCSD 200-152634/3-A	Lab Control Sample Dup	88	87	91	94	98	99	102	101
MB 200-152634/1-A	Method Blank	94	87	102	92	94	95	111	105
Percent Isotope Dilution Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	M262FTS (25-150)	M282FTS (25-150)						
200-52663-1	EFFLUENT	96	84						
200-52663-2	MID POINT	103	94						
200-52663-3	RAW WATER	103	100						
200-52663-4	DUPLICATE	104	114						
200-52663-5	A-25	106	105						
200-52663-6	A-50	103	101						
200-52663-7	A-75	104	96						
200-52663-8	B-25	107	107						
200-52663-9	B-50	97	96						
200-52663-10	B-75	98	93						
LCS 200-152634/2-A	Lab Control Sample	111	96						
LCSD 200-152634/3-A	Lab Control Sample Dup	95	101						
MB 200-152634/1-A	Method Blank	109	94						

### Surrogate Legend

PFOSA = 13C8 FOSA

PFBA = 13C4 PFBA

Eurofins TestAmerica, Burlington

## Isotope Dilution Summary

Client: New York State D.E.C.

Project/Site: Stewart ANG Base #336089 Kroll Well

Job ID: 200-52663-1

PFPeA = 13C5-PFPeA DNU

PFHxA = 13C2 PFHxA

PFHpA = 13C4 PFHpA

PFOA = 13C4 PFOA

PFNA = 13C5 PFNA

PFDA = 13C2 PFDA

PFUnA = 13C2 PFUnA

PFDoA = 13C2 PFDoA

PFTDA = 13C2 PFTeDA

13C3-PFBS = 13C3 PFBS

PFHxS = 18O2 PFHxS

PFOS = 13C4 PFOS

d3-NMeFOSAA = d3-NMeFOSAA

d5-NEtFOSAA = d5-NEtFOSAA

M262FTS = M2-6:2 FTS

M282FTS = M2-8:2 FTS

1

2

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# QC Sample Results

Client: New York State D.E.C.

Job ID: 200-52663-1

Project/Site: Stewart ANG Base #336089 Kroll Well

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

**Lab Sample ID:** MB 200-152634/1-A

**Matrix:** Water

**Analysis Batch:** 152695

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Prep Batch:** 152634

Analyte	MB	MB	D	Prepared	Analyzed	Dil Fac	
	Result	Qualifier					
Perfluorobutanoic acid (PFBA)	ND		2.0	ng/L	02/24/20 09:37	02/25/20 15:28	1
Perfluoropentanoic acid (PFPeA)	ND		2.0	ng/L	02/24/20 09:37	02/25/20 15:28	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	ng/L	02/24/20 09:37	02/25/20 15:28	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0	ng/L	02/24/20 09:37	02/25/20 15:28	1
Perfluorooctanoic acid (PFOA)	ND		2.0	ng/L	02/24/20 09:37	02/25/20 15:28	1
Perfluorononanoic acid (PFNA)	ND		2.0	ng/L	02/24/20 09:37	02/25/20 15:28	1
Perfluorodecanoic acid (PFDA)	ND		2.0	ng/L	02/24/20 09:37	02/25/20 15:28	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	ng/L	02/24/20 09:37	02/25/20 15:28	1
Perfluorododecanoic acid (PFDaO)	ND		2.0	ng/L	02/24/20 09:37	02/25/20 15:28	1
Perfluorotridecanoic acid (PFTriA)	ND		2.0	ng/L	02/24/20 09:37	02/25/20 15:28	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	ng/L	02/24/20 09:37	02/25/20 15:28	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	ng/L	02/24/20 09:37	02/25/20 15:28	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	ng/L	02/24/20 09:37	02/25/20 15:28	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	ng/L	02/24/20 09:37	02/25/20 15:28	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	ng/L	02/24/20 09:37	02/25/20 15:28	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	ng/L	02/24/20 09:37	02/25/20 15:28	1
Perfluorooctanesulfonamide (FOSA)	ND		10	ng/L	02/24/20 09:37	02/25/20 15:28	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		20	ng/L	02/24/20 09:37	02/25/20 15:28	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		20	ng/L	02/24/20 09:37	02/25/20 15:28	1
6:2 FTS	ND		20	ng/L	02/24/20 09:37	02/25/20 15:28	1
8:2 FTS	ND		20	ng/L	02/24/20 09:37	02/25/20 15:28	1

Isotope Dilution	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
13C8 FOSA	84		25 - 150	02/24/20 09:37	02/25/20 15:28	1
13C4 PFBA	101		25 - 150	02/24/20 09:37	02/25/20 15:28	1
13C5-PFPeA DNU	106		25 - 150	02/24/20 09:37	02/25/20 15:28	1
13C2 PFHxA	92		50 - 150	02/24/20 09:37	02/25/20 15:28	1
13C4 PFHpA	97		50 - 150	02/24/20 09:37	02/25/20 15:28	1
13C4 PFOA	94		50 - 150	02/24/20 09:37	02/25/20 15:28	1
13C5 PFNA	98		50 - 150	02/24/20 09:37	02/25/20 15:28	1
13C2 PFDA	98		50 - 150	02/24/20 09:37	02/25/20 15:28	1
13C2 PFUnA	94		50 - 150	02/24/20 09:37	02/25/20 15:28	1
13C2 PFDaO	87		50 - 150	02/24/20 09:37	02/25/20 15:28	1
13C2 PFTeDA	102		50 - 150	02/24/20 09:37	02/25/20 15:28	1
13C3 PFBS	92		50 - 150	02/24/20 09:37	02/25/20 15:28	1
18O2 PFHxS	94		50 - 150	02/24/20 09:37	02/25/20 15:28	1
13C4 PFOS	95		50 - 150	02/24/20 09:37	02/25/20 15:28	1
d3-NMeFOSAA	111		50 - 150	02/24/20 09:37	02/25/20 15:28	1
d5-NEtFOSAA	105		50 - 150	02/24/20 09:37	02/25/20 15:28	1
M2-6:2 FTS	109		25 - 150	02/24/20 09:37	02/25/20 15:28	1
M2-8:2 FTS	94		25 - 150	02/24/20 09:37	02/25/20 15:28	1

Eurofins TestAmerica, Burlington

# QC Sample Results

Client: New York State D.E.C.

Job ID: 200-52663-1

Project/Site: Stewart ANG Base #336089 Kroll Well

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

**Lab Sample ID: LCS 200-152634/2-A**

**Matrix: Water**

**Analysis Batch: 152745**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 152634**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits
Perfluorobutanoic acid (PFBA)	40.0	40.7		ng/L		102	50 - 150	
Perfluoropentanoic acid (PFPeA)	40.0	39.1		ng/L		98	50 - 150	
Perfluorohexanoic acid (PFHxA)	40.0	43.4		ng/L		109	70 - 130	
Perfluoroheptanoic acid (PFHpA)	40.0	40.9		ng/L		102	70 - 130	
Perfluorooctanoic acid (PFOA)	40.0	44.8		ng/L		112	70 - 130	
Perfluorononanoic acid (PFNA)	40.0	33.4		ng/L		83	70 - 130	
Perfluorodecanoic acid (PFDA)	40.0	35.4		ng/L		88	70 - 130	
Perfluoroundecanoic acid (PFUnA)	40.0	45.2		ng/L		113	70 - 130	
Perfluorododecanoic acid (PFDoA)	40.0	41.9		ng/L		105	70 - 130	
Perfluorotridecanoic acid (PFTriA)	40.0	40.9		ng/L		102	70 - 130	
Perfluorotetradecanoic acid (PFTeA)	40.0	46.6		ng/L		117	70 - 130	
Perfluorobutanesulfonic acid (PFBS)		35.4	37.8	ng/L		107	70 - 130	
Perfluorohexanesulfonic acid (PFHxS)		36.4	34.2	ng/L		94	70 - 130	
Perfluoroheptanesulfonic Acid (PFHpS)		38.1	42.7	ng/L		112	50 - 150	
Perfluorodecanesulfonic acid (PFDS)		38.6	37.4	ng/L		97	50 - 150	
Perfluorooctanesulfonic acid (PFOS)		37.1	40.1	ng/L		108	70 - 130	
Perfluorooctanesulfonamide (FOSA)		40.0	38.0	ng/L		95	50 - 150	
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)		40.0	49.8	ng/L		125	70 - 130	
6:2 FTS		37.9	31.7	ng/L		84	50 - 150	
8:2 FTS		38.3	33.0	ng/L		86	50 - 150	

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
13C8 FOSA	83		25 - 150
13C4 PFBA	102		25 - 150
13C5-PFPeA DNU	102		25 - 150
13C2 PFHxA	88		50 - 150
13C4 PFHpA	92		50 - 150
13C4 PFOA	92		50 - 150
13C5 PFNA	98		50 - 150
13C2 PFDA	95		50 - 150
13C2 PFUnA	82		50 - 150
13C2 PFDoA	82		50 - 150
13C2 PFTeDA	84		50 - 150
13C3 PFBS	91		50 - 150
18O2 PFHxS	92		50 - 150
13C4 PFOS	93		50 - 150
d3-NMeFOSAA	106		50 - 150
d5-NEtFOSAA	97		50 - 150

Eurofins TestAmerica, Burlington

# QC Sample Results

Client: New York State D.E.C.

Job ID: 200-52663-1

Project/Site: Stewart ANG Base #336089 Kroll Well

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

**Lab Sample ID:** LCS 200-152634/2-A

**Matrix:** Water

**Analysis Batch:** 152745

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

**Prep Batch:** 152634

<b>Isotope Dilution</b>	<b>LCS</b>	<b>LCS</b>	<b>Limits</b>
	<b>%Recovery</b>	<b>Qualifier</b>	
M2-6:2 FTS	111		25 - 150
M2-8:2 FTS	96		25 - 150

**Lab Sample ID:** LCSD 200-152634/3-A

**Matrix:** Water

**Analysis Batch:** 152695

**Client Sample ID:** Lab Control Sample Dup

**Prep Type:** Total/NA

**Prep Batch:** 152634

<b>Analyte</b>	<b>Spike Added</b>	<b>LCSD Result</b>	<b>LCSD Qualifier</b>	<b>Unit</b>	<b>D</b>	<b>%Rec</b>	<b>Limits</b>	<b>RPD</b>	<b>Limit</b>
Perfluorobutanoic acid (PFBA)	40.0	40.2		ng/L		100	50 - 150	1	30
Perfluoropentanoic acid (PFPeA)	40.0	37.9		ng/L		95	50 - 150	3	30
Perfluorohexanoic acid (PFHxA)	40.0	42.2		ng/L		106	70 - 130	3	20
Perfluoroheptanoic acid (PFHpA)	40.0	39.8		ng/L		100	70 - 130	3	20
Perfluorooctanoic acid (PFOA)	40.0	42.4		ng/L		106	70 - 130	5	20
Perfluorononanoic acid (PFNA)	40.0	39.1		ng/L		98	70 - 130	16	20
Perfluorodecanoic acid (PFDA)	40.0	38.5		ng/L		96	70 - 130	8	20
Perfluoroundecanoic acid (PFUnA)	40.0	41.1		ng/L		103	70 - 130	9	20
Perfluorododecanoic acid (PFDoA)	40.0	41.4		ng/L		103	70 - 130	1	20
Perfluorotridecanoic acid (PFTriA)	40.0	38.1		ng/L		95	70 - 130	7	20
Perfluorotetradecanoic acid (PFTeA)	40.0	47.2		ng/L		118	70 - 130	1	20
Perfluorobutanesulfonic acid (PFBS)	35.4	37.0		ng/L		105	70 - 130	2	20
Perfluorohexanesulfonic acid (PFHxS)	36.4	33.3		ng/L		91	70 - 130	3	20
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	38.4		ng/L		101	50 - 150	11	30
Perfluorodecanesulfonic acid (PFDS)	38.6	36.8		ng/L		95	50 - 150	2	30
Perfluoroctanesulfonic acid (PFOS)	37.1	38.8		ng/L		104	70 - 130	3	20
Perfluorooctanesulfonamide (FOSA)	40.0	36.2		ng/L		91	50 - 150	5	30
N-methylperfluorooctanesulfona midoacetic acid (NMeFOSAA)	40.0	50.9		ng/L		127	70 - 130	2	20
N-ethylperfluorooctanesulfonami doacetic acid (NEtFOSAA)	40.0	46.5		ng/L		116	70 - 130	9	20
6:2 FTS	37.9	33.8		ng/L		89	50 - 150	6	30
8:2 FTS	38.3	32.3		ng/L		84	50 - 150	2	30

<b>Isotope Dilution</b>	<b>LCS</b>	<b>LCS</b>	<b>Limits</b>
	<b>%Recovery</b>	<b>Qualifier</b>	
13C8 FOSA	80		25 - 150
13C4 PFBA	101		25 - 150
13C5-PFPeA DNU	103		25 - 150
13C2 PFHxA	85		50 - 150
13C4 PFHpA	97		50 - 150
13C4 PFOA	94		50 - 150
13C5 PFNA	98		50 - 150
13C2 PFDA	102		50 - 150
13C2 PFUnA	88		50 - 150

Eurofins TestAmerica, Burlington

# QC Sample Results

Client: New York State D.E.C.

Job ID: 200-52663-1

Project/Site: Stewart ANG Base #336089 Kroll Well

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

Lab Sample ID: LCSD 200-152634/3-A

Client Sample ID: Lab Control Sample Dup

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 152695

Prep Batch: 152634

Isotope Dilution	LCSD	LCSD	Limits
	%Recovery	Qualifier	
13C2 PFDoA	87		50 - 150
13C2 PFTeDA	91		50 - 150
13C3 PFBS	94		50 - 150
18O2 PFHxS	98		50 - 150
13C4 PFOS	99		50 - 150
d3-NMeFOSAA	102		50 - 150
d5-NEtFOSAA	101		50 - 150
M2-6:2 FTS	95		25 - 150
M2-8:2 FTS	101		25 - 150

# QC Association Summary

Client: New York State D.E.C.

Project/Site: Stewart ANG Base #336089 Kroll Well

Job ID: 200-52663-1

## LCMS

### Prep Batch: 152634

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
200-52663-1	EFFLUENT	Total/NA	Water	3535	1
200-52663-2	MID POINT	Total/NA	Water	3535	2
200-52663-3	RAW WATER	Total/NA	Water	3535	3
200-52663-4	DUPLICATE	Total/NA	Water	3535	4
200-52663-5	A-25	Total/NA	Water	3535	5
200-52663-6	A-50	Total/NA	Water	3535	6
200-52663-7	A-75	Total/NA	Water	3535	7
200-52663-8	B-25	Total/NA	Water	3535	8
200-52663-9	B-50	Total/NA	Water	3535	9
200-52663-10	B-75	Total/NA	Water	3535	10
MB 200-152634/1-A	Method Blank	Total/NA	Water	3535	11
LCS 200-152634/2-A	Lab Control Sample	Total/NA	Water	3535	12
LCSD 200-152634/3-A	Lab Control Sample Dup	Total/NA	Water	3535	13

### Analysis Batch: 152695

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
200-52663-2	MID POINT	Total/NA	Water	537 (modified)	152634
200-52663-3	RAW WATER	Total/NA	Water	537 (modified)	152634
200-52663-4	DUPLICATE	Total/NA	Water	537 (modified)	152634
200-52663-5	A-25	Total/NA	Water	537 (modified)	152634
200-52663-6	A-50	Total/NA	Water	537 (modified)	152634
200-52663-7	A-75	Total/NA	Water	537 (modified)	152634
200-52663-8	B-25	Total/NA	Water	537 (modified)	152634
200-52663-9	B-50	Total/NA	Water	537 (modified)	152634
200-52663-10	B-75	Total/NA	Water	537 (modified)	152634
MB 200-152634/1-A	Method Blank	Total/NA	Water	537 (modified)	152634
LCSD 200-152634/3-A	Lab Control Sample Dup	Total/NA	Water	537 (modified)	152634

### Analysis Batch: 152745

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
200-52663-1	EFFLUENT	Total/NA	Water	537 (modified)	152634
LCS 200-152634/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	152634

# Lab Chronicle

Client: New York State D.E.C.

Job ID: 200-52663-1

Project/Site: Stewart ANG Base #336089 Kroll Well

## **Client Sample ID: EFFLUENT**

Date Collected: 02/14/20 09:27

Date Received: 02/15/20 10:10

## **Lab Sample ID: 200-52663-1**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			152634	02/24/20 09:37	ND	TAL BUR
Total/NA	Analysis	537 (modified)		1	152745	02/26/20 17:45	ND	TAL BUR

## **Client Sample ID: MID POINT**

Date Collected: 02/14/20 09:47

Date Received: 02/15/20 10:10

## **Lab Sample ID: 200-52663-2**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			152634	02/24/20 09:37	ND	TAL BUR
Total/NA	Analysis	537 (modified)		1	152695	02/25/20 16:01	MBM	TAL BUR

## **Client Sample ID: RAW WATER**

Date Collected: 02/14/20 10:07

Date Received: 02/15/20 10:10

## **Lab Sample ID: 200-52663-3**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			152634	02/24/20 09:37	ND	TAL BUR
Total/NA	Analysis	537 (modified)		1	152695	02/25/20 16:09	MBM	TAL BUR

## **Client Sample ID: DUPLICATE**

Date Collected: 02/14/20 00:00

Date Received: 02/15/20 10:10

## **Lab Sample ID: 200-52663-4**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			152634	02/24/20 09:37	ND	TAL BUR
Total/NA	Analysis	537 (modified)		1	152695	02/25/20 16:17	MBM	TAL BUR

## **Client Sample ID: A-25**

Date Collected: 02/14/20 10:02

Date Received: 02/15/20 10:10

## **Lab Sample ID: 200-52663-5**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			152634	02/24/20 09:37	ND	TAL BUR
Total/NA	Analysis	537 (modified)		1	152695	02/25/20 16:26	MBM	TAL BUR

## **Client Sample ID: A-50**

Date Collected: 02/14/20 09:57

Date Received: 02/15/20 10:10

## **Lab Sample ID: 200-52663-6**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			152634	02/24/20 09:37	ND	TAL BUR
Total/NA	Analysis	537 (modified)		1	152695	02/25/20 16:34	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: 200-52663-1

## Client Sample ID: A-75

Date Collected: 02/14/20 09:52

Date Received: 02/15/20 10:10

## Lab Sample ID: 200-52663-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			152634	02/24/20 09:37	ND	TAL BUR
Total/NA	Analysis	537 (modified)		1	152695	02/25/20 16:42	MBM	TAL BUR

## Client Sample ID: B-25

Date Collected: 02/14/20 09:42

Date Received: 02/15/20 10:10

## Lab Sample ID: 200-52663-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			152634	02/24/20 09:37	ND	TAL BUR
Total/NA	Analysis	537 (modified)		1	152695	02/25/20 16:50	MBM	TAL BUR

## Client Sample ID: B-50

Date Collected: 02/14/20 09:37

Date Received: 02/15/20 10:10

## Lab Sample ID: 200-52663-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			152634	02/24/20 09:37	ND	TAL BUR
Total/NA	Analysis	537 (modified)		1	152695	02/25/20 16:59	MBM	TAL BUR

## Client Sample ID: B-75

Date Collected: 02/14/20 09:33

Date Received: 02/15/20 10:10

## Lab Sample ID: 200-52663-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			152634	02/24/20 09:37	ND	TAL BUR
Total/NA	Analysis	537 (modified)		1	152695	02/25/20 17:07	MBM	TAL BUR

### Laboratory References:

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

Eurofins TestAmerica, Burlington

# Accreditation/Certification Summary

Client: New York State D.E.C.

Job ID: 200-52663-1

Project/Site: Stewart ANG Base #336089 Kroll Well

## 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	03-31-20

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 (PPeA)
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	04-01-20 *

\* Accreditation/Certification renewal pending - accreditation/certification considered valid.

## Method Summary

Client: New York State D.E.C.

Project/Site: Stewart ANG Base #336089 Kroll Well

Job ID: 200-52663-1

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

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## Sample Summary

Client: New York State D.E.C.

Project/Site: Stewart ANG Base #336089 Kroll Well

Job ID: 200-52663-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
200-52663-1	EFFLUENT	Water	02/14/20 09:27	02/15/20 10:10	
200-52663-2	MID POINT	Water	02/14/20 09:47	02/15/20 10:10	
200-52663-3	RAW WATER	Water	02/14/20 10:07	02/15/20 10:10	
200-52663-4	DUPLICATE	Water	02/14/20 00:00	02/15/20 10:10	
200-52663-5	A-25	Water	02/14/20 10:02	02/15/20 10:10	
200-52663-6	A-50	Water	02/14/20 09:57	02/15/20 10:10	
200-52663-7	A-75	Water	02/14/20 09:52	02/15/20 10:10	
200-52663-8	B-25	Water	02/14/20 09:42	02/15/20 10:10	
200-52663-9	B-50	Water	02/14/20 09:37	02/15/20 10:10	
200-52663-10	B-75	Water	02/14/20 09:33	02/15/20 10:10	

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**Eurofins TestAmerica, Burlington**

30 Community Drive Suite 11  
South Burlington, VT 05403  
Phone: 802-660-1990 Fax: 802-660-1919

**Albany**

**Chain of Custody Record**

**#224**

<b>Client Information</b>		Sampler: <u>Peter L. Schatzk</u>	Lab P.M.: <u>Stone, Judy L.</u>																																																																								
Client Contact: Stephen Phelps	Phone: <u>518-358-0595</u>	E-Mail: <u>judy.stone@testamericainc.com</u>	Job #:																																																																								
<b>Analysis Requested</b> <input checked="" type="checkbox"/> Total Number of containers <input checked="" type="checkbox"/> Preservation Codes: M - Hexane A - HCL B - NaOH C - Zn Acetate D - NaO4S E - NaHSO4 F - MeOH G - Ammonium H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other: _____  <input checked="" type="checkbox"/> Special Instructions/Note: 2 Did not have enough bottles to fit																																																																											
Address: 831 State Route 67 Ste 38 City: Ballston Spa State, Zip: NY, 12020 Phone: 518-402-9813 (Tel) Email: sphelps@pesnyinc.com Project #: 48020467 Site: SSON#:																																																																											
Due Date Requested: TAT Requested (days): <u>Standard (10 day)</u> PO #: Callout ID: 137132 WO #: Field Filtered Sample (Yes or No): <input checked="" type="checkbox"/> Perform MS/MSD (Yes or No): <input checked="" type="checkbox"/> PFC - IDA - PFAS, Standard List (21 Analytes) - Bulk																																																																											
Sample Identification <table border="1"> <thead> <tr> <th>Sample Identification</th> <th>Sample Date</th> <th>Sample Time</th> <th>Matrix (W=water, S=solvent, O=waste oil, B=tissue, A=air)</th> <th>Sample Type (C=comp, G=grab)</th> <th>Preservation Code:</th> </tr> </thead> <tbody> <tr> <td>Effluent</td> <td>2-14-2020</td> <td>0927</td> <td>Water</td> <td>Y</td> <td>X</td> </tr> <tr> <td>Mid Point</td> <td></td> <td>0747</td> <td>Water</td> <td></td> <td>1</td> </tr> <tr> <td>Raw Water</td> <td></td> <td>1507</td> <td>Water</td> <td></td> <td>2</td> </tr> <tr> <td>Duplicate</td> <td></td> <td></td> <td>Water</td> <td></td> <td>2</td> </tr> <tr> <td>A-25</td> <td></td> <td>1002</td> <td>Water</td> <td></td> <td>2</td> </tr> <tr> <td>A-50</td> <td></td> <td>0452</td> <td>Water</td> <td></td> <td>2</td> </tr> <tr> <td>A-75</td> <td></td> <td>0852</td> <td>Water</td> <td></td> <td>2</td> </tr> <tr> <td>B-25</td> <td></td> <td>042</td> <td>Water</td> <td></td> <td>2</td> </tr> <tr> <td>B-50</td> <td></td> <td>0137</td> <td>Water</td> <td></td> <td>2</td> </tr> <tr> <td>B-75</td> <td></td> <td>0833</td> <td>Water</td> <td></td> <td>2</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td>2-10-2020</td> </tr> </tbody> </table>				Sample Identification	Sample Date	Sample Time	Matrix (W=water, S=solvent, O=waste oil, B=tissue, A=air)	Sample Type (C=comp, G=grab)	Preservation Code:	Effluent	2-14-2020	0927	Water	Y	X	Mid Point		0747	Water		1	Raw Water		1507	Water		2	Duplicate			Water		2	A-25		1002	Water		2	A-50		0452	Water		2	A-75		0852	Water		2	B-25		042	Water		2	B-50		0137	Water		2	B-75		0833	Water		2						2-10-2020
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Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify): <u>C, L, B, D, I, C, N, B</u> Empty Kit Relinquished by: <u>Tim Kwohlmyer</u>																																																																											
Relinquished by: <u>Tim Kwohlmyer</u> Date/Time: <u>2-14-2020 1235</u> Relinquished by: <u>Tim Kwohlmyer</u> Date/Time: <u>2-14-2020 1700</u> Relinquished by: <u>Tim Kwohlmyer</u> Date/Time: <u>2-15-2020 1010</u> Relinquished by: <u>Tim Kwohlmyer</u> Date/Time: <u>2-15-2020 1010</u>																																																																											
Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For Months																																																																											
Special Instructions/QC Requirements: Method of Shipment: Received by: <u>Tim Kwohlmyer</u> Date/Time: <u>2-14-2020 1235</u> Company: <u>Eurofins</u> Received by: <u>Tim Kwohlmyer</u> Date/Time: <u>2-15-2020 1010</u> Company: <u>Eurofins</u> Received by: <u>Tim Kwohlmyer</u> Date/Time: <u>2-15-2020 1010</u> Company: <u>Eurofins</u>																																																																											
Cooler Temperature(s) °C and Other Remarks: <u>1.6</u>																																																																											

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

## Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 200-52663-1

**Login Number:** 52663

**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	6
The cooler's custody seal, if present, is intact.	True	1321578	7
The cooler or samples do not appear to have been compromised or tampered with.	True		8
Samples were received on ice.	True		9
Cooler Temperature is acceptable.	True		10
Cooler Temperature is recorded.	True	1.6°C	11
COC is present.	True		12
COC is filled out in ink and legible.	True		13
COC is filled out with all pertinent information.	True		14
Is the Field Sampler's name present on COC?	True	PS	15
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		