NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation
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www.dec.ny.gov

August 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 August 19, 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. During this event, sampling for the 21 PFAS list was conducted at 9 locations:

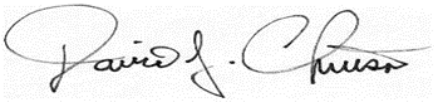
- pre-treatment (raw untreated water), which has a “RAW WATER” identifier in the Client Sample ID;
- 25 % treatment – lead tank (A-25 identifier);
- 50 % treatment – lead tank (A-50 identifier);
- 75 % treatment – lead tank (A-75 identifier);
- mid-treatment (after the first GAC canister and prior to 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 around November 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 . 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 .

Sincerely,



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

Enclosures

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D. Zagon, Town of New Windsor
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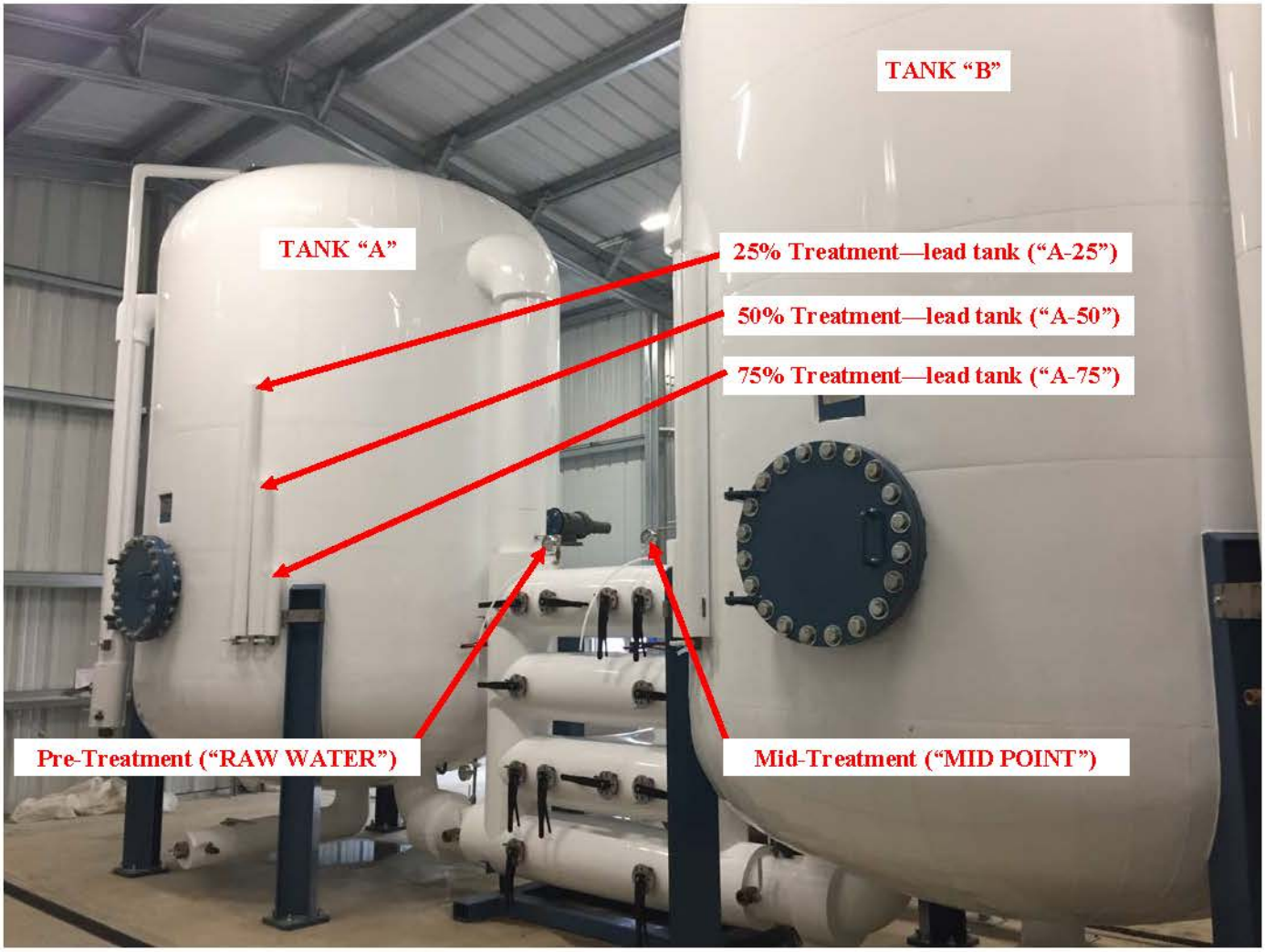
D. Harrington, NYSDEC



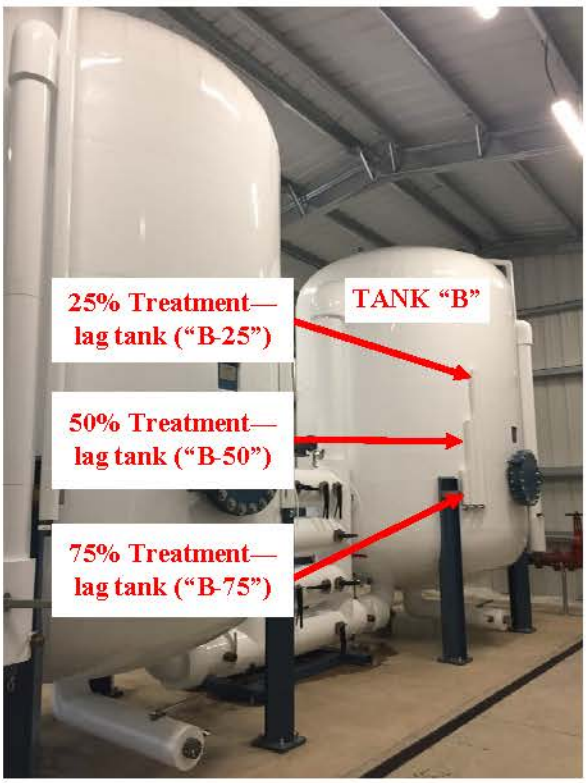


Figure 1—Kroll Well GAC Treatment System Sampling Locations

Town of New Windsor

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

(Last updated: August 2020)

Date	Analyte	Result [1] Raw Water	Result A25	Result[2] 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[4]	10[5]
	PFOS	14	ND	7.8	ND	ND	ND	ND	ND	ND	70[4]	10[5]
October 2019 (Based on 21 PFAS Analysis Data only)	PFOA	7.9	6.5	ND	ND	ND	ND	ND	ND	ND	70[4]	10[5]
	PFOS	13	8.7	ND	ND	ND	ND	ND	ND	ND	70[4]	10[5]
November 2019 (Based on 21 PFAS Analysis Data only)	PFOA	12	10	ND	ND	ND	ND	ND	ND	ND	70[4]	10[5]
	PFOS	10	8.4	ND	ND	ND	ND	ND	ND	ND	70[4]	10[5]
December 2019 (Based on 21 PFAS Analysis Data only)	PFOA	12	10	ND	ND	ND	ND	ND	ND	ND	70[4]	10[5]
	PFOS	10	8.7	ND	ND	ND	ND	ND	ND	ND	70[4]	10[5]
January 2020 (Based on 21 PFAS Analysis Data only)	PFOA	11	10	2.2	ND	ND	ND	ND	ND	ND	70[4]	10[5]
	PFOS	10	8.7	ND	ND	ND	ND	ND	ND	ND	70[4]	10[5]
February 2020 (Based on 21 PFAS Analysis Data only)	PFOA	11	9.9	3.3	ND	ND	ND	ND	ND	ND	70[4]	10[5]
	PFOS	9.7	8.4	ND	ND	ND	ND	ND	ND	ND	70[4]	10[5]

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

(Last updated: August 2020)

Date	Analyte	Result [1] Raw Water	Result A25	Result[2] 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[4]	10[5]
	PFOS	9.6	11	ND	ND	ND	ND	ND	ND	ND	70[4]	10[5]
April 2020 (Based on 21 PFAS Analysis Data only)	PFOA	8.7	8.4	4.3	ND	ND	ND	ND	ND	ND	70[4]	10[5]
	PFOS	8.9	7.7	1.9	ND	ND	ND	ND	ND	ND	70[4]	10[5]
May 2020 (Based on 21 PFAS Analysis Data only)	PFOA	ND	7.9	4.8	ND	ND	ND	ND	ND	ND	70[4]	10[5]
	PFOS	11.0	7.7	2.0	ND	ND	ND	ND	ND	ND	70[4]	10[5]
August 2020 (Based on 21 PFAS Analysis Data only)	PFOA	9.4	9.2	6.8	ND	ND	ND	ND	ND	ND	70[4]	10[5]
	PFOS	11.0	11.0	4.5	ND	ND	ND	ND	ND	ND	70[4]	10[5]

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 I 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.

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ANALYTICAL REPORT

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

Laboratory Job ID: 200-54839-1
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

Judy Stone

Authorized for release by:
8/28/2020 11:40:17 AM

Judy Stone, Senior Project Manager
(484)685-0868
Judy.Stone@Eurofinset.com

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.

Judy Stone
Senior Project Manager
8/28/2020 11:40:17 AM

Table of Contents

Definitions/Glossary

Client: New York State D.E.C. Job ID: 200-54839-1
Project/Site: Stewart ANG Base #336089 Kroll Well

Qualifiers

LCMS

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control 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
CFU	Colony Forming Unit
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)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
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)
TNTC	Too Numerous To Count

Job ID: 200-54839-1

Laboratory: Eurofins TestAmerica, Burlington

Narrative

Job Narrative
200-54839-1

Receipt
The samples were received on 8/21/2020 10:35 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.2º C.

LCMS
Method 537 (modified): The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 200-158205 and analytical batch 200-158242 was outside control limits for N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA). Sample matrix interference and/or non-homogeneity are suspected.

Method 537 (modified): 13C3 HFPO-DA Isotope Dilution Analyte (IDA) recovery is above the method recommended limit for the following samples: EFFLUENT (200-54839-1), EFFLUENT (200-54839-1[MS]), EFFLUENT (200-54839-1[MSD]), (CCV 200-158242/1), (CCV 200-158242/16), (CCV 200-158242/29), (LCS 200-158205/2-A) and (MB 200-158205/1-A). Quantitation by isotope dilution generally precludes any adverse effect on data quality due to elevated IDA recoveries.

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: 200-54839-1
Project/Site: Stewart ANG Base #336089 Kroll Well

Client Sample ID: EFFLUENT — Lab Sample ID: 200-54839-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	2.4		1.7		ng/L	1		537 (modified)	Total/NA

Client Sample ID: MID POINT — Lab Sample ID: 200-54839-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	6.2		1.7		ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	1.9		1.7		ng/L	1		537 (modified)	Total/NA

Client Sample ID: RAW WATER — Lab Sample ID: 200-54839-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	3.9		1.7		ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	3.8		1.7		ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	3.8		1.7		ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	2.6		1.7		ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	9.4		1.7		ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	6.7		1.7		ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	2.0		1.7		ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	11		1.7		ng/L	1		537 (modified)	Total/NA

Client Sample ID: DUPLICATE — Lab Sample ID: 200-54839-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	2.4		1.7		ng/L	1		537 (modified)	Total/NA

Client Sample ID: A-25 — Lab Sample ID: 200-54839-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	4.1		1.7		ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	3.9		1.7		ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	3.8		1.7		ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	2.4		1.7		ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	9.2		1.7		ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	6.9		1.7		ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	2.2		1.7		ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	11		1.7		ng/L	1		537 (modified)	Total/NA

Client Sample ID: A-50 — Lab Sample ID: 200-54839-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	4.3		1.7		ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	4.4		1.7		ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	3.8		1.7		ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	2.3		1.7		ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	6.8		1.7		ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	5.8		1.7		ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	4.5		1.7		ng/L	1		537 (modified)	Total/NA

Client Sample ID: A-75 — Lab Sample ID: 200-54839-7

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)	4.7		1.8		ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	2.7		1.8		ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Burlington

Client Sample ID: A-75 (Continued)
Lab Sample ID: 200-54839-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanesulfonic acid (PFBS)	3.3		1.8		ng/L	1		537 (modified)	Total/NA

Client Sample ID: B-25
Lab Sample ID: 200-54839-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	6.7		1.6		ng/L	1		537 (modified)	Total/NA

Client Sample ID: B-50
Lab Sample ID: 200-54839-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	7.2		1.7		ng/L	1		537 (modified)	Total/NA

Client Sample ID: B-75
Lab Sample ID: 200-54839-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	4.9		1.6		ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Client: New York State D.E.C.
Job ID: 200-54839-1
Project/Site: Stewart ANG Base #336089 Kroll Well

Client Sample ID: EFFLUENT
Lab Sample ID: 200-54839-1
Date Collected: 08/19/20 10:30
Matrix: Water
Date Received: 08/21/20 10:35

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**2.4**		1.7		ng/L		08/24/20 17:08	08/25/20 19:46	1
Perfluoropentanoic acid (PFPeA)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 19:46	1
Perfluorohexanoic acid (PFHxA)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 19:46	1
Perfluoroheptanoic acid (PFHpA)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 19:46	1
Perfluorooctanoic acid (PFOA)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 19:46	1
Perfluorononanoic acid (PFNA)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 19:46	1
Perfluorodecanoic acid (PFDA)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 19:46	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 19:46	1
Perfluorododecanoic acid (PFDoA)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 19:46	1
Perfluorotridecanoic acid (PFTriA)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 19:46	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 19:46	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 19:46	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 19:46	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 19:46	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 19:46	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 19:46	1
Perfluorooctanesulfonamide (FOSA)	ND		8.4		ng/L		08/24/20 17:08	08/25/20 19:46	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND	F2	17		ng/L		08/24/20 17:08	08/25/20 19:46	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		17		ng/L		08/24/20 17:08	08/25/20 19:46	1
6:2 FTS	ND		17		ng/L		08/24/20 17:08	08/25/20 19:46	1
8:2 FTS	ND		17		ng/L		08/24/20 17:08	08/25/20 19:46	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C8 FOSA	*66*		*25 - 150*	*08/24/20 17:08*	*08/25/20 19:46*	*1*
13C4 PFBA	*110*		*25 - 150*	*08/24/20 17:08*	*08/25/20 19:46*	*1*
13C5-PFPeA DNU	*101*		*25 - 150*	*08/24/20 17:08*	*08/25/20 19:46*	*1*
13C2 PFHxA	*106*		*50 - 150*	*08/24/20 17:08*	*08/25/20 19:46*	*1*
13C4 PFHpA	*102*		*50 - 150*	*08/24/20 17:08*	*08/25/20 19:46*	*1*
13C4 PFOA	*97*		*50 - 150*	*08/24/20 17:08*	*08/25/20 19:46*	*1*
13C5 PFNA	*90*		*50 - 150*	*08/24/20 17:08*	*08/25/20 19:46*	*1*
13C2 PFDA	*94*		*50 - 150*	*08/24/20 17:08*	*08/25/20 19:46*	*1*
13C2 PFUnA	*77*		*50 - 150*	*08/24/20 17:08*	*08/25/20 19:46*	*1*
13C2 PFDoA	*85*		*50 - 150*	*08/24/20 17:08*	*08/25/20 19:46*	*1*
13C2 PFTeDA	*75*		*50 - 150*	*08/24/20 17:08*	*08/25/20 19:46*	*1*
13C3 PFBS	*92*		*50 - 150*	*08/24/20 17:08*	*08/25/20 19:46*	*1*
18O2 PFHxS	*98*		*50 - 150*	*08/24/20 17:08*	*08/25/20 19:46*	*1*
13C4 PFOS	*78*		*50 - 150*	*08/24/20 17:08*	*08/25/20 19:46*	*1*
d3-NMeFOSAA	*64*		*50 - 150*	*08/24/20 17:08*	*08/25/20 19:46*	*1*
d5-NEtFOSAA	*76*		*50 - 150*	*08/24/20 17:08*	*08/25/20 19:46*	*1*
M2-6:2 FTS	*85*		*25 - 150*	*08/24/20 17:08*	*08/25/20 19:46*	*1*
M2-8:2 FTS	*84*		*25 - 150*	*08/24/20 17:08*	*08/25/20 19:46*	*1*

Client: New York State D.E.C.
Job ID: 200-54839-1
Project/Site: Stewart ANG Base #336089 Kroll Well

Client Sample ID: MID POINT
Lab Sample ID: 200-54839-2
Date Collected: 08/19/20 10:50
Matrix: Water
Date Received: 08/21/20 10:35

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**6.2**		1.7		ng/L		08/24/20 17:08	08/25/20 20:19	1
Perfluoropentanoic acid (PFPeA)	**1.9**		1.7		ng/L		08/24/20 17:08	08/25/20 20:19	1
Perfluorohexanoic acid (PFHxA)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 20:19	1
Perfluoroheptanoic acid (PFHpA)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 20:19	1
Perfluorooctanoic acid (PFOA)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 20:19	1
Perfluorononanoic acid (PFNA)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 20:19	1
Perfluorodecanoic acid (PFDA)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 20:19	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 20:19	1
Perfluorododecanoic acid (PFDoA)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 20:19	1
Perfluorotridecanoic acid (PFTriA)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 20:19	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 20:19	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 20:19	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 20:19	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 20:19	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 20:19	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 20:19	1
Perfluorooctanesulfonamide (FOSA)	ND		8.5		ng/L		08/24/20 17:08	08/25/20 20:19	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		17		ng/L		08/24/20 17:08	08/25/20 20:19	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		17		ng/L		08/24/20 17:08	08/25/20 20:19	1
6:2 FTS	ND		17		ng/L		08/24/20 17:08	08/25/20 20:19	1
8:2 FTS	ND		17		ng/L		08/24/20 17:08	08/25/20 20:19	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C8 FOSA	*70*		*25 - 150*	*08/24/20 17:08*	*08/25/20 20:19*	*1*
13C4 PFBA	*115*		*25 - 150*	*08/24/20 17:08*	*08/25/20 20:19*	*1*
13C5-PFPeA DNU	*108*		*25 - 150*	*08/24/20 17:08*	*08/25/20 20:19*	*1*
13C2 PFHxA	*112*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:19*	*1*
13C4 PFHpA	*104*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:19*	*1*
13C4 PFOA	*99*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:19*	*1*
13C5 PFNA	*99*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:19*	*1*
13C2 PFDA	*95*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:19*	*1*
13C2 PFUnA	*85*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:19*	*1*
13C2 PFDoA	*92*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:19*	*1*
13C2 PFTeDA	*73*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:19*	*1*
13C3 PFBS	*88*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:19*	*1*
18O2 PFHxS	*88*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:19*	*1*
13C4 PFOS	*83*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:19*	*1*
d3-NMeFOSAA	*69*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:19*	*1*
d5-NEtFOSAA	*84*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:19*	*1*
M2-6:2 FTS	*94*		*25 - 150*	*08/24/20 17:08*	*08/25/20 20:19*	*1*
M2-8:2 FTS	*90*		*25 - 150*	*08/24/20 17:08*	*08/25/20 20:19*	*1*

Client: New York State D.E.C.
Job ID: 200-54839-1
Project/Site: Stewart ANG Base #336089 Kroll Well

Client Sample ID: RAW WATER
Lab Sample ID: 200-54839-3
Date Collected: 08/19/20 11:10
Matrix: Water
Date Received: 08/21/20 10:35

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**3.9**		1.7		ng/L		08/24/20 17:08	08/25/20 20:28	1
Perfluoropentanoic acid (PFPeA)	**3.8**		1.7		ng/L		08/24/20 17:08	08/25/20 20:28	1
Perfluorohexanoic acid (PFHxA)	**3.8**		1.7		ng/L		08/24/20 17:08	08/25/20 20:28	1
Perfluoroheptanoic acid (PFHpA)	**2.6**		1.7		ng/L		08/24/20 17:08	08/25/20 20:28	1
Perfluorooctanoic acid (PFOA)	**9.4**		1.7		ng/L		08/24/20 17:08	08/25/20 20:28	1
Perfluorononanoic acid (PFNA)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 20:28	1
Perfluorodecanoic acid (PFDA)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 20:28	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 20:28	1
Perfluorododecanoic acid (PFDoA)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 20:28	1
Perfluorotridecanoic acid (PFTriA)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 20:28	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 20:28	1
Perfluorobutanesulfonic acid (PFBS)	**6.7**		1.7		ng/L		08/24/20 17:08	08/25/20 20:28	1
Perfluorohexanesulfonic acid (PFHxS)	**2.0**		1.7		ng/L		08/24/20 17:08	08/25/20 20:28	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 20:28	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 20:28	1
Perfluorooctanesulfonic acid (PFOS)	**11**		1.7		ng/L		08/24/20 17:08	08/25/20 20:28	1
Perfluorooctanesulfonamide (FOSA)	ND		8.7		ng/L		08/24/20 17:08	08/25/20 20:28	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		17		ng/L		08/24/20 17:08	08/25/20 20:28	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		17		ng/L		08/24/20 17:08	08/25/20 20:28	1
6:2 FTS	ND		17		ng/L		08/24/20 17:08	08/25/20 20:28	1
8:2 FTS	ND		17		ng/L		08/24/20 17:08	08/25/20 20:28	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C8 FOSA	*71*		*25 - 150*	*08/24/20 17:08*	*08/25/20 20:28*	*1*
13C4 PFBA	*100*		*25 - 150*	*08/24/20 17:08*	*08/25/20 20:28*	*1*
13C5-PFPeA DNU	*98*		*25 - 150*	*08/24/20 17:08*	*08/25/20 20:28*	*1*
13C2 PFHxA	*102*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:28*	*1*
13C4 PFHpA	*101*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:28*	*1*
13C4 PFOA	*98*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:28*	*1*
13C5 PFNA	*101*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:28*	*1*
13C2 PFDA	*93*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:28*	*1*
13C2 PFUnA	*94*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:28*	*1*
13C2 PFDoA	*79*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:28*	*1*
13C2 PFTeDA	*76*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:28*	*1*
13C3 PFBS	*92*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:28*	*1*
18O2 PFHxS	*95*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:28*	*1*
13C4 PFOS	*85*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:28*	*1*
d3-NMeFOSAA	*78*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:28*	*1*
d5-NEtFOSAA	*78*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:28*	*1*
M2-6:2 FTS	*94*		*25 - 150*	*08/24/20 17:08*	*08/25/20 20:28*	*1*
M2-8:2 FTS	*97*		*25 - 150*	*08/24/20 17:08*	*08/25/20 20:28*	*1*

Client: New York State D.E.C.
Job ID: 200-54839-1
Project/Site: Stewart ANG Base #336089 Kroll Well

Client Sample ID: DUPLICATE
Lab Sample ID: 200-54839-4
Date Collected: 08/19/20 00:00
Matrix: Water
Date Received: 08/21/20 10:35

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**2.4**		1.7		ng/L		08/24/20 17:08	08/25/20 20:36	1
Perfluoropentanoic acid (PFPeA)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 20:36	1
Perfluorohexanoic acid (PFHxA)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 20:36	1
Perfluoroheptanoic acid (PFHpA)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 20:36	1
Perfluorooctanoic acid (PFOA)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 20:36	1
Perfluorononanoic acid (PFNA)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 20:36	1
Perfluorodecanoic acid (PFDA)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 20:36	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 20:36	1
Perfluorododecanoic acid (PFDoA)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 20:36	1
Perfluorotridecanoic acid (PFTriA)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 20:36	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 20:36	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 20:36	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 20:36	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 20:36	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 20:36	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 20:36	1
Perfluorooctanesulfonamide (FOSA)	ND		8.7		ng/L		08/24/20 17:08	08/25/20 20:36	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		17		ng/L		08/24/20 17:08	08/25/20 20:36	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		17		ng/L		08/24/20 17:08	08/25/20 20:36	1
6:2 FTS	ND		17		ng/L		08/24/20 17:08	08/25/20 20:36	1
8:2 FTS	ND		17		ng/L		08/24/20 17:08	08/25/20 20:36	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C8 FOSA	*70*		*25 - 150*	*08/24/20 17:08*	*08/25/20 20:36*	*1*
13C4 PFBA	*115*		*25 - 150*	*08/24/20 17:08*	*08/25/20 20:36*	*1*
13C5-PFPeA DNU	*107*		*25 - 150*	*08/24/20 17:08*	*08/25/20 20:36*	*1*
13C2 PFHxA	*107*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:36*	*1*
13C4 PFHpA	*99*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:36*	*1*
13C4 PFOA	*98*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:36*	*1*
13C5 PFNA	*96*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:36*	*1*
13C2 PFDA	*89*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:36*	*1*
13C2 PFUnA	*79*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:36*	*1*
13C2 PFDoA	*82*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:36*	*1*
13C2 PFTeDA	*71*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:36*	*1*
13C3 PFBS	*94*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:36*	*1*
18O2 PFHxS	*96*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:36*	*1*
13C4 PFOS	*86*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:36*	*1*
d3-NMeFOSAA	*68*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:36*	*1*
d5-NEtFOSAA	*82*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:36*	*1*
M2-6:2 FTS	*83*		*25 - 150*	*08/24/20 17:08*	*08/25/20 20:36*	*1*
M2-8:2 FTS	*81*		*25 - 150*	*08/24/20 17:08*	*08/25/20 20:36*	*1*

Client: New York State D.E.C.
Job ID: 200-54839-1
Project/Site: Stewart ANG Base #336089 Kroll Well

Client Sample ID: A-25
Date Collected: 08/19/20 11:05
Date Received: 08/21/20 10:35

Lab Sample ID: 200-54839-5
Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**4.1**		1.7		ng/L		08/24/20 17:08	08/25/20 20:44	1
Perfluoropentanoic acid (PFPeA)	**3.9**		1.7		ng/L		08/24/20 17:08	08/25/20 20:44	1
Perfluorohexanoic acid (PFHxA)	**3.8**		1.7		ng/L		08/24/20 17:08	08/25/20 20:44	1
Perfluoroheptanoic acid (PFHpA)	**2.4**		1.7		ng/L		08/24/20 17:08	08/25/20 20:44	1
Perfluorooctanoic acid (PFOA)	**9.2**		1.7		ng/L		08/24/20 17:08	08/25/20 20:44	1
Perfluorononanoic acid (PFNA)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 20:44	1
Perfluorodecanoic acid (PFDA)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 20:44	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 20:44	1
Perfluorododecanoic acid (PFDoA)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 20:44	1
Perfluorotridecanoic acid (PFTriA)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 20:44	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 20:44	1
Perfluorobutanesulfonic acid (PFBS)	**6.9**		1.7		ng/L		08/24/20 17:08	08/25/20 20:44	1
Perfluorohexanesulfonic acid (PFHxS)	**2.2**		1.7		ng/L		08/24/20 17:08	08/25/20 20:44	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 20:44	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 20:44	1
Perfluorooctanesulfonic acid (PFOS)	**11**		1.7		ng/L		08/24/20 17:08	08/25/20 20:44	1
Perfluorooctanesulfonamide (FOSA)	ND		8.5		ng/L		08/24/20 17:08	08/25/20 20:44	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		17		ng/L		08/24/20 17:08	08/25/20 20:44	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		17		ng/L		08/24/20 17:08	08/25/20 20:44	1
6:2 FTS	ND		17		ng/L		08/24/20 17:08	08/25/20 20:44	1
8:2 FTS	ND		17		ng/L		08/24/20 17:08	08/25/20 20:44	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C8 FOSA	*66*		*25 - 150*	*08/24/20 17:08*	*08/25/20 20:44*	*1*
13C4 PFBA	*101*		*25 - 150*	*08/24/20 17:08*	*08/25/20 20:44*	*1*
13C5-PFPeA DNU	*99*		*25 - 150*	*08/24/20 17:08*	*08/25/20 20:44*	*1*
13C2 PFHxA	*102*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:44*	*1*
13C4 PFHpA	*102*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:44*	*1*
13C4 PFOA	*102*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:44*	*1*
13C5 PFNA	*94*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:44*	*1*
13C2 PFDA	*96*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:44*	*1*
13C2 PFUnA	*86*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:44*	*1*
13C2 PFDoA	*81*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:44*	*1*
13C2 PFTeDA	*78*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:44*	*1*
13C3 PFBS	*89*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:44*	*1*
18O2 PFHxS	*92*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:44*	*1*
13C4 PFOS	*79*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:44*	*1*
d3-NMeFOSAA	*71*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:44*	*1*
d5-NEtFOSAA	*86*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:44*	*1*
M2-6:2 FTS	*89*		*25 - 150*	*08/24/20 17:08*	*08/25/20 20:44*	*1*
M2-8:2 FTS	*84*		*25 - 150*	*08/24/20 17:08*	*08/25/20 20:44*	*1*

Client: New York State D.E.C.
Job ID: 200-54839-1
Project/Site: Stewart ANG Base #336089 Kroll Well

Client Sample ID: A-50
Lab Sample ID: 200-54839-6
Date Collected: 08/19/20 11:00
Matrix: Water
Date Received: 08/21/20 10:35

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**4.3**		1.7		ng/L		08/24/20 17:08	08/25/20 20:53	1
Perfluoropentanoic acid (PFPeA)	**4.4**		1.7		ng/L		08/24/20 17:08	08/25/20 20:53	1
Perfluorohexanoic acid (PFHxA)	**3.8**		1.7		ng/L		08/24/20 17:08	08/25/20 20:53	1
Perfluoroheptanoic acid (PFHpA)	**2.3**		1.7		ng/L		08/24/20 17:08	08/25/20 20:53	1
Perfluorooctanoic acid (PFOA)	**6.8**		1.7		ng/L		08/24/20 17:08	08/25/20 20:53	1
Perfluorononanoic acid (PFNA)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 20:53	1
Perfluorodecanoic acid (PFDA)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 20:53	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 20:53	1
Perfluorododecanoic acid (PFDoA)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 20:53	1
Perfluorotridecanoic acid (PFTriA)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 20:53	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 20:53	1
Perfluorobutanesulfonic acid (PFBS)	**5.8**		1.7		ng/L		08/24/20 17:08	08/25/20 20:53	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 20:53	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 20:53	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 20:53	1
Perfluorooctanesulfonic acid (PFOS)	**4.5**		1.7		ng/L		08/24/20 17:08	08/25/20 20:53	1
Perfluorooctanesulfonamide (FOSA)	ND		8.5		ng/L		08/24/20 17:08	08/25/20 20:53	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		17		ng/L		08/24/20 17:08	08/25/20 20:53	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		17		ng/L		08/24/20 17:08	08/25/20 20:53	1
6:2 FTS	ND		17		ng/L		08/24/20 17:08	08/25/20 20:53	1
8:2 FTS	ND		17		ng/L		08/24/20 17:08	08/25/20 20:53	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C8 FOSA	*75*		*25 - 150*	*08/24/20 17:08*	*08/25/20 20:53*	*1*
13C4 PFBA	*104*		*25 - 150*	*08/24/20 17:08*	*08/25/20 20:53*	*1*
13C5-PFPeA DNU	*100*		*25 - 150*	*08/24/20 17:08*	*08/25/20 20:53*	*1*
13C2 PFHxA	*106*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:53*	*1*
13C4 PFHpA	*101*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:53*	*1*
13C4 PFOA	*98*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:53*	*1*
13C5 PFNA	*101*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:53*	*1*
13C2 PFDA	*90*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:53*	*1*
13C2 PFUnA	*81*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:53*	*1*
13C2 PFDoA	*78*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:53*	*1*
13C2 PFTeDA	*73*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:53*	*1*
13C3 PFBS	*89*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:53*	*1*
18O2 PFHxS	*91*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:53*	*1*
13C4 PFOS	*80*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:53*	*1*
d3-NMeFOSAA	*68*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:53*	*1*
d5-NEtFOSAA	*78*		*50 - 150*	*08/24/20 17:08*	*08/25/20 20:53*	*1*
M2-6:2 FTS	*90*		*25 - 150*	*08/24/20 17:08*	*08/25/20 20:53*	*1*
M2-8:2 FTS	*84*		*25 - 150*	*08/24/20 17:08*	*08/25/20 20:53*	*1*

Client: New York State D.E.C.
Job ID: 200-54839-1
Project/Site: Stewart ANG Base #336089 Kroll Well

Client Sample ID: A-75
Date Collected: 08/19/20 10:55
Date Received: 08/21/20 10:35

Lab Sample ID: 200-54839-7
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		08/24/20 17:08	08/25/20 21:01	1
Perfluoropentanoic acid (PFPeA)	**4.7**		1.8		ng/L		08/24/20 17:08	08/25/20 21:01	1
Perfluorohexanoic acid (PFHxA)	**2.7**		1.8		ng/L		08/24/20 17:08	08/25/20 21:01	1
Perfluoroheptanoic acid (PFHpA)	ND		1.8		ng/L		08/24/20 17:08	08/25/20 21:01	1
Perfluorooctanoic acid (PFOA)	ND		1.8		ng/L		08/24/20 17:08	08/25/20 21:01	1
Perfluorononanoic acid (PFNA)	ND		1.8		ng/L		08/24/20 17:08	08/25/20 21:01	1
Perfluorodecanoic acid (PFDA)	ND		1.8		ng/L		08/24/20 17:08	08/25/20 21:01	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8		ng/L		08/24/20 17:08	08/25/20 21:01	1
Perfluorododecanoic acid (PFDoA)	ND		1.8		ng/L		08/24/20 17:08	08/25/20 21:01	1
Perfluorotridecanoic acid (PFTriA)	ND		1.8		ng/L		08/24/20 17:08	08/25/20 21:01	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8		ng/L		08/24/20 17:08	08/25/20 21:01	1
Perfluorobutanesulfonic acid (PFBS)	**3.3**		1.8		ng/L		08/24/20 17:08	08/25/20 21:01	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8		ng/L		08/24/20 17:08	08/25/20 21:01	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8		ng/L		08/24/20 17:08	08/25/20 21:01	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8		ng/L		08/24/20 17:08	08/25/20 21:01	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8		ng/L		08/24/20 17:08	08/25/20 21:01	1
Perfluorooctanesulfonamide (FOSA)	ND		9.0		ng/L		08/24/20 17:08	08/25/20 21:01	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		18		ng/L		08/24/20 17:08	08/25/20 21:01	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		18		ng/L		08/24/20 17:08	08/25/20 21:01	1
6:2 FTS	ND		18		ng/L		08/24/20 17:08	08/25/20 21:01	1
8:2 FTS	ND		18		ng/L		08/24/20 17:08	08/25/20 21:01	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C8 FOSA	*71*		*25 - 150*	*08/24/20 17:08*	*08/25/20 21:01*	*1*
13C4 PFBA	*119*		*25 - 150*	*08/24/20 17:08*	*08/25/20 21:01*	*1*
13C5-PFPeA DNU	*108*		*25 - 150*	*08/24/20 17:08*	*08/25/20 21:01*	*1*
13C2 PFHxA	*119*		*50 - 150*	*08/24/20 17:08*	*08/25/20 21:01*	*1*
13C4 PFHpA	*107*		*50 - 150*	*08/24/20 17:08*	*08/25/20 21:01*	*1*
13C4 PFOA	*104*		*50 - 150*	*08/24/20 17:08*	*08/25/20 21:01*	*1*
13C5 PFNA	*109*		*50 - 150*	*08/24/20 17:08*	*08/25/20 21:01*	*1*
13C2 PFDA	*98*		*50 - 150*	*08/24/20 17:08*	*08/25/20 21:01*	*1*
13C2 PFUnA	*77*		*50 - 150*	*08/24/20 17:08*	*08/25/20 21:01*	*1*
13C2 PFDoA	*80*		*50 - 150*	*08/24/20 17:08*	*08/25/20 21:01*	*1*
13C2 PFTeDA	*74*		*50 - 150*	*08/24/20 17:08*	*08/25/20 21:01*	*1*
13C3 PFBS	*99*		*50 - 150*	*08/24/20 17:08*	*08/25/20 21:01*	*1*
18O2 PFHxS	*96*		*50 - 150*	*08/24/20 17:08*	*08/25/20 21:01*	*1*
13C4 PFOS	*89*		*50 - 150*	*08/24/20 17:08*	*08/25/20 21:01*	*1*
d3-NMeFOSAA	*66*		*50 - 150*	*08/24/20 17:08*	*08/25/20 21:01*	*1*
d5-NEtFOSAA	*85*		*50 - 150*	*08/24/20 17:08*	*08/25/20 21:01*	*1*
M2-6:2 FTS	*91*		*25 - 150*	*08/24/20 17:08*	*08/25/20 21:01*	*1*
M2-8:2 FTS	*77*		*25 - 150*	*08/24/20 17:08*	*08/25/20 21:01*	*1*

Client: New York State D.E.C.
Job ID: 200-54839-1
Project/Site: Stewart ANG Base #336089 Kroll Well

Client Sample ID: B-25
Lab Sample ID: 200-54839-8
Date Collected: 08/19/20 10:45
Matrix: Water
Date Received: 08/21/20 10:35

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**6.7**		1.6		ng/L		08/24/20 17:08	08/25/20 21:09	1
Perfluoropentanoic acid (PFPeA)	ND		1.6		ng/L		08/24/20 17:08	08/25/20 21:09	1
Perfluorohexanoic acid (PFHxA)	ND		1.6		ng/L		08/24/20 17:08	08/25/20 21:09	1
Perfluoroheptanoic acid (PFHpA)	ND		1.6		ng/L		08/24/20 17:08	08/25/20 21:09	1
Perfluorooctanoic acid (PFOA)	ND		1.6		ng/L		08/24/20 17:08	08/25/20 21:09	1
Perfluorononanoic acid (PFNA)	ND		1.6		ng/L		08/24/20 17:08	08/25/20 21:09	1
Perfluorodecanoic acid (PFDA)	ND		1.6		ng/L		08/24/20 17:08	08/25/20 21:09	1
Perfluoroundecanoic acid (PFUnA)	ND		1.6		ng/L		08/24/20 17:08	08/25/20 21:09	1
Perfluorododecanoic acid (PFDoA)	ND		1.6		ng/L		08/24/20 17:08	08/25/20 21:09	1
Perfluorotridecanoic acid (PFTriA)	ND		1.6		ng/L		08/24/20 17:08	08/25/20 21:09	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.6		ng/L		08/24/20 17:08	08/25/20 21:09	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.6		ng/L		08/24/20 17:08	08/25/20 21:09	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.6		ng/L		08/24/20 17:08	08/25/20 21:09	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.6		ng/L		08/24/20 17:08	08/25/20 21:09	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.6		ng/L		08/24/20 17:08	08/25/20 21:09	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.6		ng/L		08/24/20 17:08	08/25/20 21:09	1
Perfluorooctanesulfonamide (FOSA)	ND		8.2		ng/L		08/24/20 17:08	08/25/20 21:09	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		16		ng/L		08/24/20 17:08	08/25/20 21:09	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		16		ng/L		08/24/20 17:08	08/25/20 21:09	1
6:2 FTS	ND		16		ng/L		08/24/20 17:08	08/25/20 21:09	1
8:2 FTS	ND		16		ng/L		08/24/20 17:08	08/25/20 21:09	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C8 FOSA	*74*		*25 - 150*	*08/24/20 17:08*	*08/25/20 21:09*	*1*
13C4 PFBA	*117*		*25 - 150*	*08/24/20 17:08*	*08/25/20 21:09*	*1*
13C5-PFPeA DNU	*106*		*25 - 150*	*08/24/20 17:08*	*08/25/20 21:09*	*1*
13C2 PFHxA	*114*		*50 - 150*	*08/24/20 17:08*	*08/25/20 21:09*	*1*
13C4 PFHpA	*110*		*50 - 150*	*08/24/20 17:08*	*08/25/20 21:09*	*1*
13C4 PFOA	*100*		*50 - 150*	*08/24/20 17:08*	*08/25/20 21:09*	*1*
13C5 PFNA	*102*		*50 - 150*	*08/24/20 17:08*	*08/25/20 21:09*	*1*
13C2 PFDA	*92*		*50 - 150*	*08/24/20 17:08*	*08/25/20 21:09*	*1*
13C2 PFUnA	*91*		*50 - 150*	*08/24/20 17:08*	*08/25/20 21:09*	*1*
13C2 PFDoA	*81*		*50 - 150*	*08/24/20 17:08*	*08/25/20 21:09*	*1*
13C2 PFTeDA	*77*		*50 - 150*	*08/24/20 17:08*	*08/25/20 21:09*	*1*
13C3 PFBS	*95*		*50 - 150*	*08/24/20 17:08*	*08/25/20 21:09*	*1*
18O2 PFHxS	*94*		*50 - 150*	*08/24/20 17:08*	*08/25/20 21:09*	*1*
13C4 PFOS	*89*		*50 - 150*	*08/24/20 17:08*	*08/25/20 21:09*	*1*
d3-NMeFOSAA	*74*		*50 - 150*	*08/24/20 17:08*	*08/25/20 21:09*	*1*
d5-NEtFOSAA	*83*		*50 - 150*	*08/24/20 17:08*	*08/25/20 21:09*	*1*
M2-6:2 FTS	*91*		*25 - 150*	*08/24/20 17:08*	*08/25/20 21:09*	*1*
M2-8:2 FTS	*85*		*25 - 150*	*08/24/20 17:08*	*08/25/20 21:09*	*1*

Client: New York State D.E.C.
Job ID: 200-54839-1
Project/Site: Stewart ANG Base #336089 Kroll Well

Client Sample ID: B-50
Lab Sample ID: 200-54839-9
Date Collected: 08/19/20 10:40
Matrix: Water
Date Received: 08/21/20 10:35

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**7.2**		1.7		ng/L		08/24/20 17:08	08/25/20 21:17	1
Perfluoropentanoic acid (PFPeA)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 21:17	1
Perfluorohexanoic acid (PFHxA)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 21:17	1
Perfluoroheptanoic acid (PFHpA)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 21:17	1
Perfluorooctanoic acid (PFOA)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 21:17	1
Perfluorononanoic acid (PFNA)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 21:17	1
Perfluorodecanoic acid (PFDA)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 21:17	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 21:17	1
Perfluorododecanoic acid (PFDoA)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 21:17	1
Perfluorotridecanoic acid (PFTriA)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 21:17	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 21:17	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 21:17	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 21:17	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 21:17	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 21:17	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.7		ng/L		08/24/20 17:08	08/25/20 21:17	1
Perfluorooctanesulfonamide (FOSA)	ND		8.4		ng/L		08/24/20 17:08	08/25/20 21:17	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		17		ng/L		08/24/20 17:08	08/25/20 21:17	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		17		ng/L		08/24/20 17:08	08/25/20 21:17	1
6:2 FTS	ND		17		ng/L		08/24/20 17:08	08/25/20 21:17	1
8:2 FTS	ND		17		ng/L		08/24/20 17:08	08/25/20 21:17	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C8 FOSA	*70*		*25 - 150*	*08/24/20 17:08*	*08/25/20 21:17*	*1*
13C4 PFBA	*113*		*25 - 150*	*08/24/20 17:08*	*08/25/20 21:17*	*1*
13C5-PFPeA DNU	*108*		*25 - 150*	*08/24/20 17:08*	*08/25/20 21:17*	*1*
13C2 PFHxA	*111*		*50 - 150*	*08/24/20 17:08*	*08/25/20 21:17*	*1*
13C4 PFHpA	*100*		*50 - 150*	*08/24/20 17:08*	*08/25/20 21:17*	*1*
13C4 PFOA	*102*		*50 - 150*	*08/24/20 17:08*	*08/25/20 21:17*	*1*
13C5 PFNA	*101*		*50 - 150*	*08/24/20 17:08*	*08/25/20 21:17*	*1*
13C2 PFDA	*91*		*50 - 150*	*08/24/20 17:08*	*08/25/20 21:17*	*1*
13C2 PFUnA	*81*		*50 - 150*	*08/24/20 17:08*	*08/25/20 21:17*	*1*
13C2 PFDoA	*80*		*50 - 150*	*08/24/20 17:08*	*08/25/20 21:17*	*1*
13C2 PFTeDA	*73*		*50 - 150*	*08/24/20 17:08*	*08/25/20 21:17*	*1*
13C3 PFBS	*97*		*50 - 150*	*08/24/20 17:08*	*08/25/20 21:17*	*1*
18O2 PFHxS	*97*		*50 - 150*	*08/24/20 17:08*	*08/25/20 21:17*	*1*
13C4 PFOS	*87*		*50 - 150*	*08/24/20 17:08*	*08/25/20 21:17*	*1*
d3-NMeFOSAA	*74*		*50 - 150*	*08/24/20 17:08*	*08/25/20 21:17*	*1*
d5-NEtFOSAA	*77*		*50 - 150*	*08/24/20 17:08*	*08/25/20 21:17*	*1*
M2-6:2 FTS	*86*		*25 - 150*	*08/24/20 17:08*	*08/25/20 21:17*	*1*
M2-8:2 FTS	*80*		*25 - 150*	*08/24/20 17:08*	*08/25/20 21:17*	*1*

Client: New York State D.E.C.
Job ID: 200-54839-1
Project/Site: Stewart ANG Base #336089 Kroll Well

Client Sample ID: B-75
Date Collected: 08/19/20 10:35
Date Received: 08/21/20 10:35

Lab Sample ID: 200-54839-10
Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**4.9**		1.6		ng/L		08/24/20 17:08	08/25/20 21:26	1
Perfluoropentanoic acid (PFPeA)	ND		1.6		ng/L		08/24/20 17:08	08/25/20 21:26	1
Perfluorohexanoic acid (PFHxA)	ND		1.6		ng/L		08/24/20 17:08	08/25/20 21:26	1
Perfluoroheptanoic acid (PFHpA)	ND		1.6		ng/L		08/24/20 17:08	08/25/20 21:26	1
Perfluorooctanoic acid (PFOA)	ND		1.6		ng/L		08/24/20 17:08	08/25/20 21:26	1
Perfluorononanoic acid (PFNA)	ND		1.6		ng/L		08/24/20 17:08	08/25/20 21:26	1
Perfluorodecanoic acid (PFDA)	ND		1.6		ng/L		08/24/20 17:08	08/25/20 21:26	1
Perfluoroundecanoic acid (PFUnA)	ND		1.6		ng/L		08/24/20 17:08	08/25/20 21:26	1
Perfluorododecanoic acid (PFDoA)	ND		1.6		ng/L		08/24/20 17:08	08/25/20 21:26	1
Perfluorotridecanoic acid (PFTriA)	ND		1.6		ng/L		08/24/20 17:08	08/25/20 21:26	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.6		ng/L		08/24/20 17:08	08/25/20 21:26	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.6		ng/L		08/24/20 17:08	08/25/20 21:26	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.6		ng/L		08/24/20 17:08	08/25/20 21:26	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.6		ng/L		08/24/20 17:08	08/25/20 21:26	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.6		ng/L		08/24/20 17:08	08/25/20 21:26	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.6		ng/L		08/24/20 17:08	08/25/20 21:26	1
Perfluorooctanesulfonamide (FOSA)	ND		8.1		ng/L		08/24/20 17:08	08/25/20 21:26	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		16		ng/L		08/24/20 17:08	08/25/20 21:26	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		16		ng/L		08/24/20 17:08	08/25/20 21:26	1
6:2 FTS	ND		16		ng/L		08/24/20 17:08	08/25/20 21:26	1
8:2 FTS	ND		16		ng/L		08/24/20 17:08	08/25/20 21:26	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C8 FOSA	*63*		*25 - 150*	*08/24/20 17:08*	*08/25/20 21:26*	*1*
13C4 PFBA	*112*		*25 - 150*	*08/24/20 17:08*	*08/25/20 21:26*	*1*
13C5-PFPeA DNU	*107*		*25 - 150*	*08/24/20 17:08*	*08/25/20 21:26*	*1*
13C2 PFHxA	*108*		*50 - 150*	*08/24/20 17:08*	*08/25/20 21:26*	*1*
13C4 PFHpA	*107*		*50 - 150*	*08/24/20 17:08*	*08/25/20 21:26*	*1*
13C4 PFOA	*96*		*50 - 150*	*08/24/20 17:08*	*08/25/20 21:26*	*1*
13C5 PFNA	*91*		*50 - 150*	*08/24/20 17:08*	*08/25/20 21:26*	*1*
13C2 PFDA	*90*		*50 - 150*	*08/24/20 17:08*	*08/25/20 21:26*	*1*
13C2 PFUnA	*77*		*50 - 150*	*08/24/20 17:08*	*08/25/20 21:26*	*1*
13C2 PFDoA	*70*		*50 - 150*	*08/24/20 17:08*	*08/25/20 21:26*	*1*
13C2 PFTeDA	*65*		*50 - 150*	*08/24/20 17:08*	*08/25/20 21:26*	*1*
13C3 PFBS	*90*		*50 - 150*	*08/24/20 17:08*	*08/25/20 21:26*	*1*
18O2 PFHxS	*99*		*50 - 150*	*08/24/20 17:08*	*08/25/20 21:26*	*1*
13C4 PFOS	*84*		*50 - 150*	*08/24/20 17:08*	*08/25/20 21:26*	*1*
d3-NMeFOSAA	*58*		*50 - 150*	*08/24/20 17:08*	*08/25/20 21:26*	*1*
d5-NEtFOSAA	*73*		*50 - 150*	*08/24/20 17:08*	*08/25/20 21:26*	*1*
M2-6:2 FTS	*98*		*25 - 150*	*08/24/20 17:08*	*08/25/20 21:26*	*1*
M2-8:2 FTS	*78*		*25 - 150*	*08/24/20 17:08*	*08/25/20 21:26*	*1*

Isotope Dilution Summary

Client: New York State D.E.C.
Job ID: 200-54839-1
Project/Site: Stewart ANG Base #336089 Kroll Well

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)
200-54839-1	EFFLUENT	66	110	101	106	102	97	90	94
200-54839-1 MS	EFFLUENT	70	111	106	104	97	96	96	82
200-54839-1 MSD	EFFLUENT	65	113	99	106	99	93	89	84
200-54839-2	MID POINT	70	115	108	112	104	99	99	95
200-54839-3	RAW WATER	71	100	98	102	101	98	101	93
200-54839-4	DUPLICATE	70	115	107	107	99	98	96	89
200-54839-5	A-25	66	101	99	102	102	102	94	96
200-54839-6	A-50	75	104	100	106	101	98	101	90
200-54839-7	A-75	71	119	108	119	107	104	109	98
200-54839-8	B-25	74	117	106	114	110	100	102	92
200-54839-9	B-50	70	113	108	111	100	102	101	91
200-54839-10	B-75	63	112	107	108	107	96	91	90
LCS 200-158205/2-A	Lab Control Sample	44	114	105	100	102	98	100	97
MB 200-158205/1-A	Method Blank	64	117	106	114	103	104	102	101

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)
200-54839-1	EFFLUENT	77	85	75	92	98	78	64	76
200-54839-1 MS	EFFLUENT	79	81	72	92	94	74	67	70
200-54839-1 MSD	EFFLUENT	69	72	67	93	89	79	64	68
200-54839-2	MID POINT	85	92	73	88	88	83	69	84
200-54839-3	RAW WATER	94	79	76	92	95	85	78	78
200-54839-4	DUPLICATE	79	82	71	94	96	86	68	82
200-54839-5	A-25	86	81	78	89	92	79	71	86
200-54839-6	A-50	81	78	73	89	91	80	68	78
200-54839-7	A-75	77	80	74	99	96	89	66	85
200-54839-8	B-25	91	81	77	95	94	89	74	83
200-54839-9	B-50	81	80	73	97	97	87	74	77
200-54839-10	B-75	77	70	65	90	99	84	58	73
LCS 200-158205/2-A	Lab Control Sample	82	64	52	94	91	87	72	67
MB 200-158205/1-A	Method Blank	87	78	80	96	100	97	79	88

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	M262FTS (25-150)	M282FTS (25-150)
200-54839-1	EFFLUENT	85	84
200-54839-1 MS	EFFLUENT	87	71
200-54839-1 MSD	EFFLUENT	84	68
200-54839-2	MID POINT	94	90
200-54839-3	RAW WATER	94	97
200-54839-4	DUPLICATE	83	81
200-54839-5	A-25	89	84
200-54839-6	A-50	90	84
200-54839-7	A-75	91	77
200-54839-8	B-25	91	85
200-54839-9	B-50	86	80
200-54839-10	B-75	98	78
LCS 200-158205/2-A	Lab Control Sample	94	86
MB 200-158205/1-A	Method Blank	95	90

Isotope Dilution Summary

Client: New York State D.E.C.
Job ID: 200-54839-1
Project/Site: Stewart ANG Base #336089 Kroll Well

Surrogate Legend

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

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 200-158205/1-A
Matrix: Water
Analysis Batch: 158242

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 158205

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		2.0		ng/L		08/24/20 17:08	08/25/20 18:15	1
Perfluoropentanoic acid (PFPeA)	ND		2.0		ng/L		08/24/20 17:08	08/25/20 18:15	1
Perfluorohexanoic acid (PFHxA)	ND		2.0		ng/L		08/24/20 17:08	08/25/20 18:15	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0		ng/L		08/24/20 17:08	08/25/20 18:15	1
Perfluorooctanoic acid (PFOA)	ND		2.0		ng/L		08/24/20 17:08	08/25/20 18:15	1
Perfluorononanoic acid (PFNA)	ND		2.0		ng/L		08/24/20 17:08	08/25/20 18:15	1
Perfluorodecanoic acid (PFDA)	ND		2.0		ng/L		08/24/20 17:08	08/25/20 18:15	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0		ng/L		08/24/20 17:08	08/25/20 18:15	1
Perfluorododecanoic acid (PFDoA)	ND		2.0		ng/L		08/24/20 17:08	08/25/20 18:15	1
Perfluorotridecanoic acid (PFTriA)	ND		2.0		ng/L		08/24/20 17:08	08/25/20 18:15	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0		ng/L		08/24/20 17:08	08/25/20 18:15	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0		ng/L		08/24/20 17:08	08/25/20 18:15	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0		ng/L		08/24/20 17:08	08/25/20 18:15	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0		ng/L		08/24/20 17:08	08/25/20 18:15	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0		ng/L		08/24/20 17:08	08/25/20 18:15	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0		ng/L		08/24/20 17:08	08/25/20 18:15	1
Perfluorooctanesulfonamide (FOSA)	ND		10		ng/L		08/24/20 17:08	08/25/20 18:15	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		20		ng/L		08/24/20 17:08	08/25/20 18:15	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		20		ng/L		08/24/20 17:08	08/25/20 18:15	1
6:2 FTS	ND		20		ng/L		08/24/20 17:08	08/25/20 18:15	1
8:2 FTS	ND		20		ng/L		08/24/20 17:08	08/25/20 18:15	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C8 FOSA	*64*		*25 - 150*	*08/24/20 17:08*	*08/25/20 18:15*	*1*
13C4 PFBA	*117*		*25 - 150*	*08/24/20 17:08*	*08/25/20 18:15*	*1*
13C5-PFPeA DNU	*106*		*25 - 150*	*08/24/20 17:08*	*08/25/20 18:15*	*1*
13C2 PFHxA	*114*		*50 - 150*	*08/24/20 17:08*	*08/25/20 18:15*	*1*
13C4 PFHpA	*103*		*50 - 150*	*08/24/20 17:08*	*08/25/20 18:15*	*1*
13C4 PFOA	*104*		*50 - 150*	*08/24/20 17:08*	*08/25/20 18:15*	*1*
13C5 PFNA	*102*		*50 - 150*	*08/24/20 17:08*	*08/25/20 18:15*	*1*
13C2 PFDA	*101*		*50 - 150*	*08/24/20 17:08*	*08/25/20 18:15*	*1*
13C2 PFUnA	*87*		*50 - 150*	*08/24/20 17:08*	*08/25/20 18:15*	*1*
13C2 PFDoA	*78*		*50 - 150*	*08/24/20 17:08*	*08/25/20 18:15*	*1*
13C2 PFTeDA	*80*		*50 - 150*	*08/24/20 17:08*	*08/25/20 18:15*	*1*
13C3 PFBS	*96*		*50 - 150*	*08/24/20 17:08*	*08/25/20 18:15*	*1*
18O2 PFHxS	*100*		*50 - 150*	*08/24/20 17:08*	*08/25/20 18:15*	*1*
13C4 PFOS	*97*		*50 - 150*	*08/24/20 17:08*	*08/25/20 18:15*	*1*
d3-NMeFOSAA	*79*		*50 - 150*	*08/24/20 17:08*	*08/25/20 18:15*	*1*
d5-NEtFOSAA	*88*		*50 - 150*	*08/24/20 17:08*	*08/25/20 18:15*	*1*
M2-6:2 FTS	*95*		*25 - 150*	*08/24/20 17:08*	*08/25/20 18:15*	*1*
M2-8:2 FTS	*90*		*25 - 150*	*08/24/20 17:08*	*08/25/20 18:15*	*1*

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

Lab Sample ID: LCS 200-158205/2-A
Matrix: Water
Analysis Batch: 158242

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 158205

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorobutanoic acid (PFBA)	40.0	41.8		ng/L		104	50 - 150
Perfluoropentanoic acid (PFPeA)	40.0	42.9		ng/L		107	50 - 150
Perfluorohexanoic acid (PFHxA)	40.0	42.9		ng/L		107	70 - 130
Perfluoroheptanoic acid (PFHpA)	40.0	43.8		ng/L		110	70 - 130
Perfluorooctanoic acid (PFOA)	40.0	46.3		ng/L		116	70 - 130
Perfluorononanoic acid (PFNA)	40.0	39.1		ng/L		98	70 - 130
Perfluorodecanoic acid (PFDA)	40.0	42.1		ng/L		105	70 - 130
Perfluoroundecanoic acid (PFUnA)	40.0	40.8		ng/L		102	70 - 130
Perfluorododecanoic acid (PFDoA)	40.0	42.0		ng/L		105	70 - 130
Perfluorotridecanoic acid (PFTriA)	40.0	33.5		ng/L		84	70 - 130
Perfluorotetradecanoic acid (PFTeA)	40.0	44.4		ng/L		111	70 - 130
Perfluorobutanesulfonic acid (PFBS)	35.4	39.5		ng/L		112	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	36.4	41.2		ng/L		113	70 - 130
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	45.6		ng/L		120	50 - 150
Perfluorodecanesulfonic acid (PFDS)	38.6	31.7		ng/L		82	50 - 150
Perfluorooctanesulfonic acid (PFOS)	37.1	43.3		ng/L		117	70 - 130
Perfluorooctanesulfonamide (FOSA)	40.0	45.1		ng/L		113	50 - 150
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	40.0	44.5		ng/L		111	70 - 130
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	40.0	45.4		ng/L		113	70 - 130
6:2 FTS	37.9	37.1		ng/L		98	50 - 150
8:2 FTS	38.3	47.0		ng/L		123	50 - 150

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C8 FOSA	*44*		*25 - 150*
13C4 PFBA	*114*		*25 - 150*
13C5-PFPeA DNU	*105*		*25 - 150*
13C2 PFHxA	*100*		*50 - 150*
13C4 PFHpA	*102*		*50 - 150*
13C4 PFOA	*98*		*50 - 150*
13C5 PFNA	*100*		*50 - 150*
13C2 PFDA	*97*		*50 - 150*
13C2 PFUnA	*82*		*50 - 150*
13C2 PFDoA	*64*		*50 - 150*
13C2 PFTeDA	*52*		*50 - 150*
13C3 PFBS	*94*		*50 - 150*
18O2 PFHxS	*91*		*50 - 150*
13C4 PFOS	*87*		*50 - 150*
d3-NMeFOSAA	*72*		*50 - 150*
d5-NEtFOSAA	*67*		*50 - 150*

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

Lab Sample ID: LCS 200-158205/2-A
Matrix: Water
Analysis Batch: 158242

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 158205

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
M2-6:2 FTS	*94*		*25 - 150*
M2-8:2 FTS	*86*		*25 - 150*

Lab Sample ID: 200-54839-1 MS
Matrix: Water
Analysis Batch: 158242

Client Sample ID: EFFLUENT
Prep Type: Total/NA
Prep Batch: 158205

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorobutanoic acid (PFBA)	2.4		34.6	40.2		ng/L		109	40 - 160
Perfluoropentanoic acid (PFPeA)	ND		34.6	36.6		ng/L		103	40 - 160
Perfluorohexanoic acid (PFHxA)	ND		34.6	38.1		ng/L		110	40 - 160
Perfluoroheptanoic acid (PFHpA)	ND		34.6	39.3		ng/L		113	40 - 160
Perfluorooctanoic acid (PFOA)	ND		34.6	40.7		ng/L		118	40 - 160
Perfluorononanoic acid (PFNA)	ND		34.6	34.5		ng/L		100	40 - 160
Perfluorodecanoic acid (PFDA)	ND		34.6	41.1		ng/L		119	40 - 160
Perfluoroundecanoic acid (PFUnA)	ND		34.6	38.1		ng/L		110	40 - 160
Perfluorododecanoic acid (PFDoA)	ND		34.6	37.6		ng/L		109	40 - 160
Perfluorotridecanoic acid (PFTriA)	ND		34.6	37.6		ng/L		109	40 - 160
Perfluorotetradecanoic acid (PFTeA)	ND		34.6	41.8		ng/L		121	40 - 160
Perfluorobutanesulfonic acid (PFBS)	ND		30.6	35.4		ng/L		116	40 - 160
Perfluorohexanesulfonic acid (PFHxS)	ND		31.5	32.2		ng/L		102	40 - 160
Perfluoroheptanesulfonic Acid (PFHpS)	ND		32.9	46.5		ng/L		141	40 - 160
Perfluorodecanesulfonic acid (PFDS)	ND		33.4	35.3		ng/L		106	40 - 160
Perfluorooctanesulfonic acid (PFOS)	ND		32.1	41.7		ng/L		130	40 - 160
Perfluorooctanesulfonamide (FOSA)	ND		34.6	37.6		ng/L		109	40 - 160
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND	F2	34.6	35.5		ng/L		102	40 - 160
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		34.6	37.2		ng/L		107	40 - 160
6:2 FTS	ND		32.8	35.7		ng/L		92	40 - 160
8:2 FTS	ND		33.1	36.2		ng/L		109	40 - 160

Isotope Dilution	MS %Recovery	MS Qualifier	Limits
13C8 FOSA	*70*		*25 - 150*
13C4 PFBA	*111*		*25 - 150*
13C5-PFPeA DNU	*106*		*25 - 150*
13C2 PFHxA	*104*		*50 - 150*
13C4 PFHpA	*97*		*50 - 150*
13C4 PFOA	*96*		*50 - 150*
13C5 PFNA	*96*		*50 - 150*
13C2 PFDA	*82*		*50 - 150*
13C2 PFUnA	*79*		*50 - 150*

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

Lab Sample ID: 200-54839-1 MS
Matrix: Water
Analysis Batch: 158242

Client Sample ID: EFFLUENT
Prep Type: Total/NA
Prep Batch: 158205

Isotope Dilution	MS %Recovery	MS Qualifier	Limits
13C2 PFDoA	*81*		*50 - 150*
13C2 PFTeDA	*72*		*50 - 150*
13C3 PFBS	*92*		*50 - 150*
18O2 PFHxS	*94*		*50 - 150*
13C4 PFOS	*74*		*50 - 150*
d3-NMeFOSAA	*67*		*50 - 150*
d5-NEtFOSAA	*70*		*50 - 150*
M2-6:2 FTS	*87*		*25 - 150*
M2-8:2 FTS	*71*		*25 - 150*

Lab Sample ID: 200-54839-1 MSD
Matrix: Water
Analysis Batch: 158242

Client Sample ID: EFFLUENT
Prep Type: Total/NA
Prep Batch: 158205

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluorobutanoic acid (PFBA)	2.4		34.8	38.4		ng/L		104	40 - 160	5	30
Perfluoropentanoic acid (PFPeA)	ND		34.8	36.1		ng/L		101	40 - 160	1	30
Perfluorohexanoic acid (PFHxA)	ND		34.8	37.6		ng/L		108	40 - 160	1	20
Perfluoroheptanoic acid (PFHpA)	ND		34.8	39.0		ng/L		112	40 - 160	1	20
Perfluorooctanoic acid (PFOA)	ND		34.8	40.3		ng/L		116	40 - 160	1	20
Perfluorononanoic acid (PFNA)	ND		34.8	36.3		ng/L		104	40 - 160	5	20
Perfluorodecanoic acid (PFDA)	ND		34.8	36.8		ng/L		106	40 - 160	11	20
Perfluoroundecanoic acid (PFUnA)	ND		34.8	38.5		ng/L		111	40 - 160	1	20
Perfluorododecanoic acid (PFDoA)	ND		34.8	41.8		ng/L		120	40 - 160	11	20
Perfluorotridecanoic acid (PFTriA)	ND		34.8	40.2		ng/L		116	40 - 160	7	20
Perfluorotetradecanoic acid (PFTeA)	ND		34.8	42.6		ng/L		123	40 - 160	2	20
Perfluorobutanesulfonic acid (PFBS)	ND		30.7	35.5		ng/L		116	40 - 160	0	20
Perfluorohexanesulfonic acid (PFHxS)	ND		31.6	35.3		ng/L		112	40 - 160	9	20
Perfluoroheptanesulfonic Acid (PFHpS)	ND		33.1	42.3		ng/L		128	40 - 160	9	30
Perfluorodecanesulfonic acid (PFDS)	ND		33.5	29.7		ng/L		89	40 - 160	17	30
Perfluorooctanesulfonic acid (PFOS)	ND		32.3	37.5		ng/L		116	40 - 160	10	20
Perfluorooctanesulfonamide (FOSA)	ND		34.8	38.3		ng/L		110	40 - 160	2	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND	F2	34.8	44.1	F2	ng/L		127	40 - 160	22	20
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		34.8	34.9		ng/L		100	40 - 160	6	20
6:2 FTS	ND		33.0	34.2		ng/L		87	40 - 160	4	30
8:2 FTS	ND		33.3	41.6		ng/L		125	40 - 160	14	30

Isotope Dilution	MSD %Recovery	MSD Qualifier	Limits
13C8 FOSA	*65*		*25 - 150*
13C4 PFBA	*113*		*25 - 150*

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

Lab Sample ID: 200-54839-1 MSD
Matrix: Water
Analysis Batch: 158242

Client Sample ID: EFFLUENT
Prep Type: Total/NA
Prep Batch: 158205

Isotope Dilution	MSD %Recovery	MSD Qualifier	Limits
13C5-PFPeA DNU	99		25 - 150
13C2 PFHxA	106		50 - 150
13C4 PFHpA	99		50 - 150
13C4 PFOA	93		50 - 150
13C5 PFNA	89		50 - 150
13C2 PFDA	84		50 - 150
13C2 PFUnA	69		50 - 150
13C2 PFDoA	72		50 - 150
13C2 PFTeDA	67		50 - 150
13C3 PFBS	93		50 - 150
18O2 PFHxS	89		50 - 150
13C4 PFOS	79		50 - 150
d3-NMeFOSAA	64		50 - 150
d5-NEtFOSAA	68		50 - 150
M2-6:2 FTS	84		25 - 150
M2-8:2 FTS	68		25 - 150

QC Association Summary

Client: New York State D.E.C.
Job ID: 200-54839-1
Project/Site: Stewart ANG Base #336089 Kroll Well

LCMS

Prep Batch: 158205

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
200-54839-1	EFFLUENT	Total/NA	Water	3535	
200-54839-2	MID POINT	Total/NA	Water	3535	
200-54839-3	RAW WATER	Total/NA	Water	3535	
200-54839-4	DUPLICATE	Total/NA	Water	3535	
200-54839-5	A-25	Total/NA	Water	3535	
200-54839-6	A-50	Total/NA	Water	3535	
200-54839-7	A-75	Total/NA	Water	3535	
200-54839-8	B-25	Total/NA	Water	3535	
200-54839-9	B-50	Total/NA	Water	3535	
200-54839-10	B-75	Total/NA	Water	3535	
MB 200-158205/1-A	Method Blank	Total/NA	Water	3535	
LCS 200-158205/2-A	Lab Control Sample	Total/NA	Water	3535	
200-54839-1 MS	EFFLUENT	Total/NA	Water	3535	
200-54839-1 MSD	EFFLUENT	Total/NA	Water	3535	

Analysis Batch: 158242

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
200-54839-1	EFFLUENT	Total/NA	Water	537 (modified)	158205
200-54839-2	MID POINT	Total/NA	Water	537 (modified)	158205
200-54839-3	RAW WATER	Total/NA	Water	537 (modified)	158205
200-54839-4	DUPLICATE	Total/NA	Water	537 (modified)	158205
200-54839-5	A-25	Total/NA	Water	537 (modified)	158205
200-54839-6	A-50	Total/NA	Water	537 (modified)	158205
200-54839-7	A-75	Total/NA	Water	537 (modified)	158205
200-54839-8	B-25	Total/NA	Water	537 (modified)	158205
200-54839-9	B-50	Total/NA	Water	537 (modified)	158205
200-54839-10	B-75	Total/NA	Water	537 (modified)	158205
MB 200-158205/1-A	Method Blank	Total/NA	Water	537 (modified)	158205
LCS 200-158205/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	158205
200-54839-1 MS	EFFLUENT	Total/NA	Water	537 (modified)	158205
200-54839-1 MSD	EFFLUENT	Total/NA	Water	537 (modified)	158205

Lab Chronicle

Client: New York State D.E.C.
Job ID: 200-54839-1
Project/Site: Stewart ANG Base #336089 Kroll Well

Client Sample ID: EFFLUENT
Lab Sample ID: 200-54839-1
Date Collected: 08/19/20 10:30
Matrix: Water
Date Received: 08/21/20 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			158205	08/24/20 17:08	ND	TAL BUR
Total/NA	Analysis	537 (modified)		1	158242	08/25/20 19:46	BWC	TAL BUR

Client Sample ID: MID POINT
Lab Sample ID: 200-54839-2
Date Collected: 08/19/20 10:50
Matrix: Water
Date Received: 08/21/20 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			158205	08/24/20 17:08	ND	TAL BUR
Total/NA	Analysis	537 (modified)		1	158242	08/25/20 20:19	BWC	TAL BUR

Client Sample ID: RAW WATER
Lab Sample ID: 200-54839-3
Date Collected: 08/19/20 11:10
Matrix: Water
Date Received: 08/21/20 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			158205	08/24/20 17:08	ND	TAL BUR
Total/NA	Analysis	537 (modified)		1	158242	08/25/20 20:28	BWC	TAL BUR

Client Sample ID: DUPLICATE
Lab Sample ID: 200-54839-4
Date Collected: 08/19/20 00:00
Matrix: Water
Date Received: 08/21/20 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			158205	08/24/20 17:08	ND	TAL BUR
Total/NA	Analysis	537 (modified)		1	158242	08/25/20 20:36	BWC	TAL BUR

Client Sample ID: A-25
Lab Sample ID: 200-54839-5
Date Collected: 08/19/20 11:05
Matrix: Water
Date Received: 08/21/20 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			158205	08/24/20 17:08	ND	TAL BUR
Total/NA	Analysis	537 (modified)		1	158242	08/25/20 20:44	BWC	TAL BUR

Client Sample ID: A-50
Lab Sample ID: 200-54839-6
Date Collected: 08/19/20 11:00
Matrix: Water
Date Received: 08/21/20 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			158205	08/24/20 17:08	ND	TAL BUR
Total/NA	Analysis	537 (modified)		1	158242	08/25/20 20:53	BWC	TAL BUR

Lab Chronicle

Client: New York State D.E.C.
Job ID: 200-54839-1
Project/Site: Stewart ANG Base #336089 Kroll Well

Client Sample ID: A-75
Lab Sample ID: 200-54839-7
Date Collected: 08/19/20 10:55
Matrix: Water
Date Received: 08/21/20 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			158205	08/24/20 17:08	ND	TAL BUR
Total/NA	Analysis	537 (modified)		1	158242	08/25/20 21:01	BWC	TAL BUR

Client Sample ID: B-25
Lab Sample ID: 200-54839-8
Date Collected: 08/19/20 10:45
Matrix: Water
Date Received: 08/21/20 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			158205	08/24/20 17:08	ND	TAL BUR
Total/NA	Analysis	537 (modified)		1	158242	08/25/20 21:09	BWC	TAL BUR

Client Sample ID: B-50
Lab Sample ID: 200-54839-9
Date Collected: 08/19/20 10:40
Matrix: Water
Date Received: 08/21/20 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			158205	08/24/20 17:08	ND	TAL BUR
Total/NA	Analysis	537 (modified)		1	158242	08/25/20 21:17	BWC	TAL BUR

Client Sample ID: B-75
Lab Sample ID: 200-54839-10
Date Collected: 08/19/20 10:35
Matrix: Water
Date Received: 08/21/20 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			158205	08/24/20 17:08	ND	TAL BUR
Total/NA	Analysis	537 (modified)		1	158242	08/25/20 21:26	BWC	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.
Job ID: 200-54839-1
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	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)

Method Summary

Client: New York State D.E.C.
Job ID: 200-54839-1
Project/Site: Stewart ANG Base #336089 Kroll Well

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.
Job ID: 200-54839-1
Project/Site: Stewart ANG Base #336089 Kroll Well

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
200-54839-1	EFFLUENT	Water	08/19/20 10:30	08/21/20 10:35	
200-54839-2	MID POINT	Water	08/19/20 10:50	08/21/20 10:35	
200-54839-3	RAW WATER	Water	08/19/20 11:10	08/21/20 10:35	
200-54839-4	DUPLICATE	Water	08/19/20 00:00	08/21/20 10:35	
200-54839-5	A-25	Water	08/19/20 11:05	08/21/20 10:35	
200-54839-6	A-50	Water	08/19/20 11:00	08/21/20 10:35	
200-54839-7	A-75	Water	08/19/20 10:55	08/21/20 10:35	
200-54839-8	B-25	Water	08/19/20 10:45	08/21/20 10:35	
200-54839-9	B-50	Water	08/19/20 10:40	08/21/20 10:35	
200-54839-10	B-75	Water	08/19/20 10:35	08/21/20 10:35	

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

Albany #224

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: Patrick Sokolowski	Lab PM: Stone, Judy L	Carrier Tracking No(s):	COC No: 480-142947-31043.1
Client Contact: Brian Neumann	Phone: 518-885-4399	E-Mail: judy.stone@testamericainc.com		Page: Page 1 of 2
Company: Precision Environmental Services Inc.				Job #:
Address: 831 State Route 67 Ste 38	Due Date Requested:			
City: Ballston Spa	TAT Requested (days): Standard (10-Day)			
State, Zip: NY, 12020				
Phone: 518-402-9813(Tel)	PO #: Callout ID: 137132			
Email: bneumann@pesnyinc.com	WO #:			
Project Name: Stewart ANG Base #336089 Kroll Well	Project #: 48020467			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA
M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2O3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - pH 4-5; Z - other (specify)
Other:

200-54839 Chain of Custody

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	PFC_IDA - PFAS, Standard List (21 Analytes) - Burl	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N		
Effluent	8-19-20	1030	Grab	Water	Yes		X	6	
Mid Point	↓	1050	↓	Water			↓	2	
Raw Water	↓	1110	↓	Water			↓	2	
Duplicate	↓		↓	Water			↓	2	
A-25	↓	1105	↓	Water			↓	2	
A-50	↓	1100	↓	Water			↓	2	
A-75	↓	1055	↓	Water			↓	2	
B-25	↓	1045	↓	Water			↓	2	
B-50	↓	1040	↓	Water			↓	2	
B-75	↓	1035	↓	Water			↓	2	
				Water					

Possible Hazard Identification
☐ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* ☐ *Poison B* ☒ *Unknown* ☐ *Radiological*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* ________ *Months*

Deliverable Requested: I, II, III, IV, Other (specify)

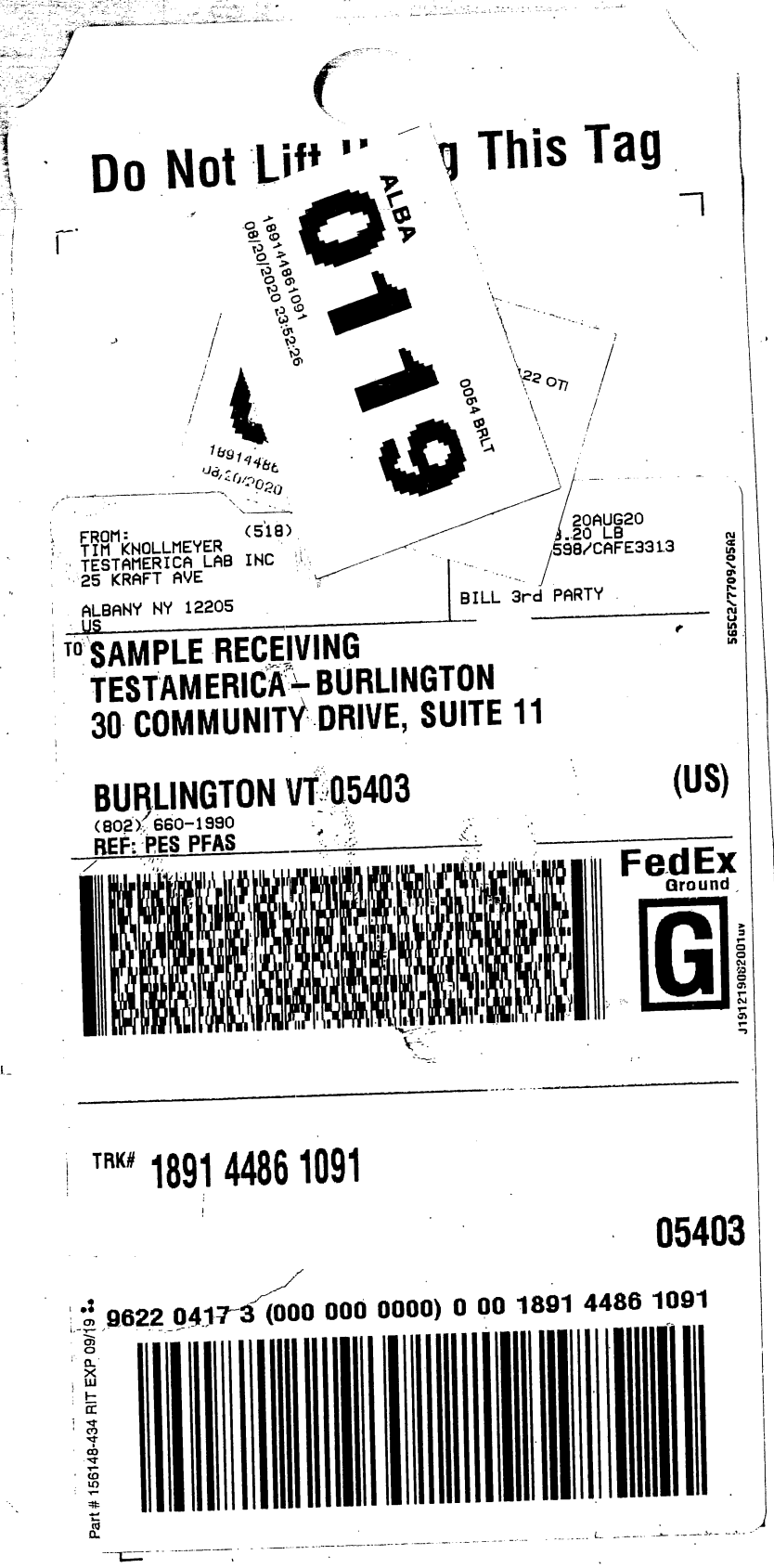
Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	8-19-20 1515	PES	[signature]	8/19/20 1515	Eurofins
[signature]	8/20/20 1700	Eurofins	[signature]	8/21/2020 10:35	TA Buf

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.: 1322395	Cooler Temperature(s) °C and Other Remarks: 1.2

Ver: 01/16/2019


Do Not Lift
This Tag
ALBA
0119
0064 BRLT
189144861091
08/20/2020 23:52:26
FROM:
TIM KNOLLMEYER
TESTAMERICA LAB INC
25 KRAFT AVE
ALBANY NY 12205
US
(518)
BILL 3rd PARTY
TO SAMPLE RECEIVING
TESTAMERICA - BURLINGTON
30 COMMUNITY DRIVE, SUITE 11
BURLINGTON VT 05403
(US)
(802) 660-1990
REF: PES PFAS
FedEx
Ground
TRK# 1891 4486 1091
05403
9622 0417 3 (000 000 0000) 0 00 1891 4486 1091
Part # 156148-434 RIT EXP 09/19

Login Sample Receipt Checklist

Client: New York State D.E.C. Job Number: 200-54839-1

Login Number: 54839 **List Source: Eurofins TestAmerica, Burlington**
List Number: 1
Creator: Jaffe, Nat S

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	Yes: Seals on cooler but date and time not filled out
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	1.2ºc
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	PS
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.	True	