NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation
625 Broadway, 12th Floor, Albany, New York 12233-7011
P: (518) 402-9706 | F: (518) 402-9020
www.dec.ny.gov

January 17, 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
Butterhill Wellfield, 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 **January 9, 2020** sampling of the temporary granular activated carbon (GAC) water treatment system by DEC representatives that was installed at the Town of New Windsor (Town) Butterhill Wellfield located at 181 Forge Hill Road.

No PFOS or PFOA was detected in the Butterhill temporary 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 6 PFAS list analysis has been attached. However, sampling data associated with the 21 PFAS list are still pending from the lab, and will be provided to the Town under separate letter after receipt and review by DEC and the New York State Department of Health (DOH).

During this event, sampling was conducted at eight locations:

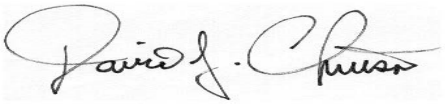
- pre-treatment (raw untreated water), which has a “BH20191205PRE-GAC” identifier in the Client Sample ID;
- mid-treatment (after the first GAC canister in Pair Train No. 1 and prior to the second GAC canister in Pair Train No.1), which has a “BH20191205-1 MID POINT” identifier in the Client Sample ID;
- post-treatment (after the GAC Pair Train 1), which has a “BH20191205-1 POST” identifier in the Client Sample ID;

- mid-treatment (after the first GAC canister in Pair Train No. 2 and prior to the second GAC canister in Pair Train No.2), which has a "BH20191205-2 MID POINT" identifier in the Client Sample ID;
- post-treatment (after the GAC Pair Train 2), which has a "BH20191205-2 POST" identifier in the Client Sample ID;
- mid-treatment (after the first GAC canister in Pair Train No. 3 and prior to the second GAC canister in Pair Train No.3), which has a "BH20191205-3 MID POINT" identifier in the Client Sample ID;
- post-treatment (after the GAC Pair Train 3), which has a BH20191205-3 POST" identifier in the Client Sample ID; and
- post-GAC treatment (treated water after all GAC Trains), which has a "BH20191205POST-GAC" identifier in the Client Sample ID.

The eight 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 Dana Bryant, P.E., Arcadis (DEC's Project Engineer) at (518) 250-7347 or dana.bryant@arcadis.com . For weekday or off hour / weekend emergency repair issues, please call DEC's contractor, Carl Aldrich of Aztech Environmental Services at (518) 470-3052 or Todd Rollend at (518) 365-3333. For questions regarding site-related health concerns, please contact Steve Gagnon of the Orange County DOH at (845) 291-2331 or Steve Gladding, P.E., Ph.D of the NYSDOH Bureau of Water Supply Protection at (518) 402-7650; email: steven.gladding@health.ny.gov .

Sincerely,



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

Enclosures

ec: w/enclosures
D. Zagon, Town of New Windsor
J. Egitto, Town of New Windsor
D. McGoey/M. Weeks, MHE
W. Gilday, NYSDOH
Dr. Kim, NYSDOH
S. Gladding, NYSDOH
S. Gagnon, OCDOH
M. Andersen, OCDOH
D. Bryant, Arcadis
F. Fina, Aztech
M. Cruden, NYSDEC
D. Bendell, Region 3 RHWRE
D. Harrington, NYSDEC

Town of New Windsor

Butterhill Wellfield Temporary GAC Operation and Maintenance Sampling Results ** (Parts Per Trillion (PPT))

Date (PW** sampled)	Analyte	Result[1] Raw Water	GAC Pair 1 MID	GAC Pair 1 POST	GAC Pair 2 MID	GAC Pair 2 POST	GAC Pair 3 MID	GAC Pair 3 POST	Treated Effluent	USEPA Drinking Water Health Advisory Guidance Value[3]	Proposed NYS MCLs[4]
December 2019 (PW-3)	PFOA	**2.4**	ND[2]	ND	ND	ND	ND	ND	ND	**70[3]**	**10[4]**
	PFOS	**2.9**	ND	ND	ND	ND	ND	ND	ND	**70[3]**	**10[4]**
January 2020 (PW-2)	PFOA	**3.6**	ND[2]	ND	ND	ND	ND	ND	ND	**70[3]**	**10[4]**
	PFOS	**2.3**	ND	ND	ND	ND	ND	ND	ND	**70[3]**	**10[4]**

Notes:

** 6 PFAS List Analysis.
** At the time of the January 9, 2020 sampling event Production Well (PW) No. 2 was in operation.

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. Guidance: USEPA Drinking Water Health Advisory guidance value is currently 70 ppt.
4. 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).

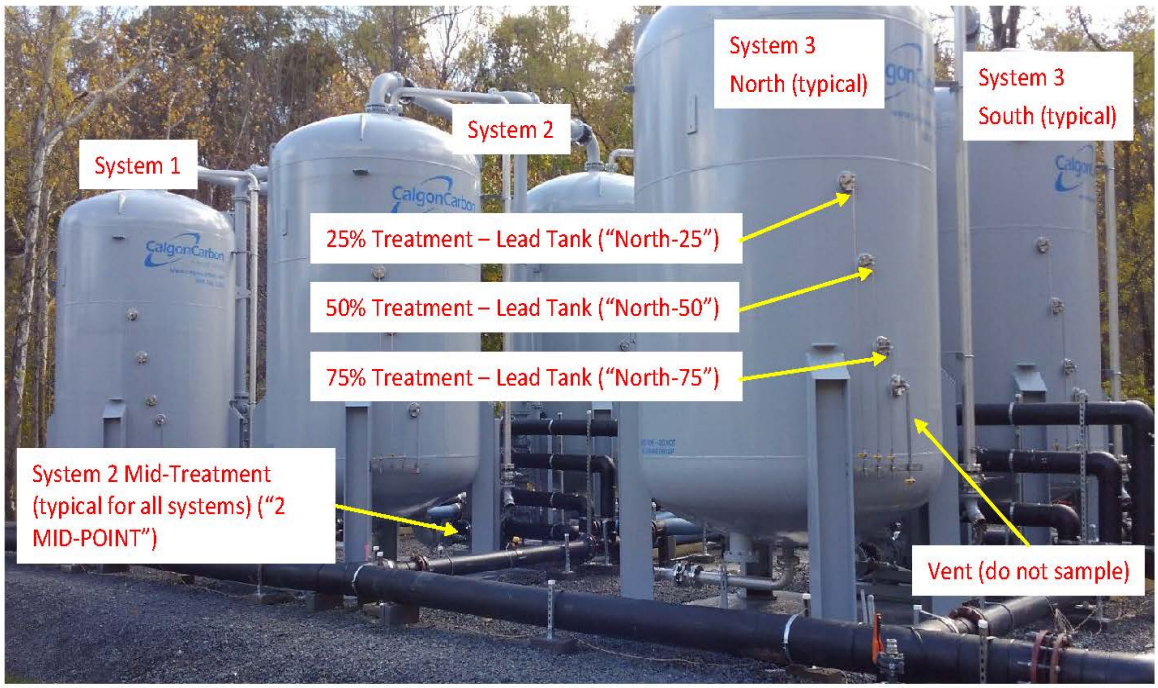
Inorganic Results:

- 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.

Figure 1
Sampling Locations

Butterhill Plant Temporary GAC Treatment System



Post-Filters, Pre-GAC ("PRE-GAC")

- 25%, 50%, 75% Treatment sample locations repeated on the current Lag "South" Tanks.
- Post-treatment samples for each individual System can be collected after each Lag Tank, mirrored sample location to MID-POINT sample location on Lead Tanks.

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

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

Laboratory Job ID: 320-57632-1
Client Project/Site: Stewart ANGB - Butterhill #336089

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:
1/16/2020 7:54:37 PM

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

Table of Contents

Definitions/Glossary

Client: New York State D.E.C.
Job ID: 320-57632-1
Project/Site: Stewart ANGB - Butterhill #336089

Glossary

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

Job ID: 320-57632-1

Laboratory: Eurofins TestAmerica, Sacramento

Narrative

Job Narrative
320-57632-1

Receipt
The samples were received on 1/10/2020 9:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.4º C.

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

Organic Prep
Method PFAS Prep: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 320-350425 and 320-350425.

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

Detection Summary

Client: New York State D.E.C.
Project/Site: Stewart ANGB - Butterhill #336089

Job ID: 320-57632-1

Client Sample ID: BH 2020-01-09 PRE-GAC — Lab Sample ID: 320-57632-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	2.2		2.0		ng/L	1		WS-LC-0025 Att1	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	3.3		2.0		ng/L	1		WS-LC-0025 Att1	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.3		2.0		ng/L	1		WS-LC-0025 Att1	Total/NA
Perfluorooctanoic acid (PFOA)	3.6		2.0		ng/L	1		WS-LC-0025 Att1	Total/NA

Client Sample ID: BH 20200109-1 MID-POINT — Lab Sample ID: 320-57632-2

No Detections.

Client Sample ID: BH 20200109-1 POST — Lab Sample ID: 320-57632-3

No Detections.

Client Sample ID: BH 20200109-2 MID-POINT — Lab Sample ID: 320-57632-4

No Detections.

Client Sample ID: BH 20200109-2 POST — Lab Sample ID: 320-57632-5

No Detections.

Client Sample ID: BH 20200109-3 MID-POINT — Lab Sample ID: 320-57632-6

No Detections.

Client Sample ID: BH 20200109-3 POST — Lab Sample ID: 320-57632-7

No Detections.

Client Sample ID: BH 20200109 POST-GAC — Lab Sample ID: 320-57632-8

No Detections.

Client Sample ID: BH 20200109 POST-GAC DUP — Lab Sample ID: 320-57632-9

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: BH 2020-01-09 PRE-GAC
Lab Sample ID: 320-57632-1
Date Collected: 01/09/20 09:32
Matrix: Water
Date Received: 01/10/20 09:15

Method: WS-LC-0025 Att1 - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	ND		2.0		ng/L		01/13/20 12:30	01/14/20 12:02	1
Perfluoroheptanoic acid (PFHpA)	**2.2**		2.0		ng/L		01/13/20 12:30	01/14/20 12:02	1
Perfluorohexanesulfonic acid (PFHxS)	**3.3**		2.0		ng/L		01/13/20 12:30	01/14/20 12:02	1
Perfluorononanoic acid (PFNA)	ND		2.0		ng/L		01/13/20 12:30	01/14/20 12:02	1
Perfluorooctanesulfonic acid (PFOS)	**2.3**		2.0		ng/L		01/13/20 12:30	01/14/20 12:02	1
Perfluorooctanoic acid (PFOA)	**3.6**		2.0		ng/L		01/13/20 12:30	01/14/20 12:02	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFHpA	*120*		*25 - 150*	*01/13/20 12:30*	*01/14/20 12:02*	*1*
13C5 PFNA	*113*		*25 - 150*	*01/13/20 12:30*	*01/14/20 12:02*	*1*
13C4 PFOA	*117*		*70 - 130*	*01/13/20 12:30*	*01/14/20 12:02*	*1*
13C4 PFOS	*110*		*70 - 130*	*01/13/20 12:30*	*01/14/20 12:02*	*1*
18O2 PFHxS	*113*		*25 - 150*	*01/13/20 12:30*	*01/14/20 12:02*	*1*
13C3 PFBS	*112*		*25 - 150*	*01/13/20 12:30*	*01/14/20 12:02*	*1*

Client Sample ID: BH 20200109-1 MID-POINT
Lab Sample ID: 320-57632-2
Date Collected: 01/09/20 10:25
Matrix: Water
Date Received: 01/10/20 09:15

Method: WS-LC-0025 Att1 - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	ND		2.0		ng/L		01/13/20 12:30	01/14/20 12:21	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0		ng/L		01/13/20 12:30	01/14/20 12:21	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0		ng/L		01/13/20 12:30	01/14/20 12:21	1
Perfluorononanoic acid (PFNA)	ND		2.0		ng/L		01/13/20 12:30	01/14/20 12:21	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0		ng/L		01/13/20 12:30	01/14/20 12:21	1
Perfluorooctanoic acid (PFOA)	ND		2.0		ng/L		01/13/20 12:30	01/14/20 12:21	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFHpA	*117*		*25 - 150*	*01/13/20 12:30*	*01/14/20 12:21*	*1*
13C5 PFNA	*111*		*25 - 150*	*01/13/20 12:30*	*01/14/20 12:21*	*1*
13C4 PFOA	*117*		*70 - 130*	*01/13/20 12:30*	*01/14/20 12:21*	*1*
13C4 PFOS	*107*		*70 - 130*	*01/13/20 12:30*	*01/14/20 12:21*	*1*
18O2 PFHxS	*112*		*25 - 150*	*01/13/20 12:30*	*01/14/20 12:21*	*1*
13C3 PFBS	*114*		*25 - 150*	*01/13/20 12:30*	*01/14/20 12:21*	*1*

Client Sample ID: BH 20200109-1 POST
Lab Sample ID: 320-57632-3
Date Collected: 01/09/20 10:40
Matrix: Water
Date Received: 01/10/20 09:15

Method: WS-LC-0025 Att1 - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	ND		2.0		ng/L		01/13/20 12:30	01/14/20 12:39	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0		ng/L		01/13/20 12:30	01/14/20 12:39	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0		ng/L		01/13/20 12:30	01/14/20 12:39	1
Perfluorononanoic acid (PFNA)	ND		2.0		ng/L		01/13/20 12:30	01/14/20 12:39	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0		ng/L		01/13/20 12:30	01/14/20 12:39	1
Perfluorooctanoic acid (PFOA)	ND		2.0		ng/L		01/13/20 12:30	01/14/20 12:39	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFHpA	*122*		*25 - 150*	*01/13/20 12:30*	*01/14/20 12:39*	*1*

Client Sample ID: BH 20200109-1 POST
Lab Sample ID: 320-57632-3
Date Collected: 01/09/20 10:40
Matrix: Water
Date Received: 01/10/20 09:15

Method: WS-LC-0025 Att1 - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C5 PFNA	*117*		*25 - 150*	*01/13/20 12:30*	*01/14/20 12:39*	*1*
13C4 PFOA	*122*		*70 - 130*	*01/13/20 12:30*	*01/14/20 12:39*	*1*
13C4 PFOS	*112*		*70 - 130*	*01/13/20 12:30*	*01/14/20 12:39*	*1*
18O2 PFHxS	*112*		*25 - 150*	*01/13/20 12:30*	*01/14/20 12:39*	*1*
13C3 PFBS	*119*		*25 - 150*	*01/13/20 12:30*	*01/14/20 12:39*	*1*

Client Sample ID: BH 20200109-2 MID-POINT
Lab Sample ID: 320-57632-4
Date Collected: 01/09/20 10:48
Matrix: Water
Date Received: 01/10/20 09:15

Method: WS-LC-0025 Att1 - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	ND		2.0		ng/L		01/13/20 12:30	01/14/20 12:58	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0		ng/L		01/13/20 12:30	01/14/20 12:58	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0		ng/L		01/13/20 12:30	01/14/20 12:58	1
Perfluorononanoic acid (PFNA)	ND		2.0		ng/L		01/13/20 12:30	01/14/20 12:58	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0		ng/L		01/13/20 12:30	01/14/20 12:58	1
Perfluorooctanoic acid (PFOA)	ND		2.0		ng/L		01/13/20 12:30	01/14/20 12:58	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFHpA	*119*		*25 - 150*	*01/13/20 12:30*	*01/14/20 12:58*	*1*
13C5 PFNA	*117*		*25 - 150*	*01/13/20 12:30*	*01/14/20 12:58*	*1*
13C4 PFOA	*115*		*70 - 130*	*01/13/20 12:30*	*01/14/20 12:58*	*1*
13C4 PFOS	*113*		*70 - 130*	*01/13/20 12:30*	*01/14/20 12:58*	*1*
18O2 PFHxS	*112*		*25 - 150*	*01/13/20 12:30*	*01/14/20 12:58*	*1*
13C3 PFBS	*114*		*25 - 150*	*01/13/20 12:30*	*01/14/20 12:58*	*1*

Client Sample ID: BH 20200109-2 POST
Lab Sample ID: 320-57632-5
Date Collected: 01/09/20 11:05
Matrix: Water
Date Received: 01/10/20 09:15

Method: WS-LC-0025 Att1 - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	ND		2.0		ng/L		01/13/20 12:30	01/14/20 13:16	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0		ng/L		01/13/20 12:30	01/14/20 13:16	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0		ng/L		01/13/20 12:30	01/14/20 13:16	1
Perfluorononanoic acid (PFNA)	ND		2.0		ng/L		01/13/20 12:30	01/14/20 13:16	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0		ng/L		01/13/20 12:30	01/14/20 13:16	1
Perfluorooctanoic acid (PFOA)	ND		2.0		ng/L		01/13/20 12:30	01/14/20 13:16	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFHpA	*115*		*25 - 150*	*01/13/20 12:30*	*01/14/20 13:16*	*1*
13C5 PFNA	*112*		*25 - 150*	*01/13/20 12:30*	*01/14/20 13:16*	*1*
13C4 PFOA	*117*		*70 - 130*	*01/13/20 12:30*	*01/14/20 13:16*	*1*
13C4 PFOS	*108*		*70 - 130*	*01/13/20 12:30*	*01/14/20 13:16*	*1*
18O2 PFHxS	*113*		*25 - 150*	*01/13/20 12:30*	*01/14/20 13:16*	*1*
13C3 PFBS	*116*		*25 - 150*	*01/13/20 12:30*	*01/14/20 13:16*	*1*

Client: New York State D.E.C.
Job ID: 320-57632-1
Project/Site: Stewart ANGB - Butterhill #336089

Client Sample ID: BH 20200109-3 MID-POINT
Lab Sample ID: 320-57632-6
Date Collected: 01/09/20 11:12
Matrix: Water
Date Received: 01/10/20 09:15

Method: WS-LC-0025 Att1 - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	ND		2.0		ng/L		01/13/20 12:30	01/14/20 13:35	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0		ng/L		01/13/20 12:30	01/14/20 13:35	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0		ng/L		01/13/20 12:30	01/14/20 13:35	1
Perfluorononanoic acid (PFNA)	ND		2.0		ng/L		01/13/20 12:30	01/14/20 13:35	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0		ng/L		01/13/20 12:30	01/14/20 13:35	1
Perfluorooctanoic acid (PFOA)	ND		2.0		ng/L		01/13/20 12:30	01/14/20 13:35	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFHpA	*117*		*25 - 150*	*01/13/20 12:30*	*01/14/20 13:35*	*1*
13C5 PFNA	*115*		*25 - 150*	*01/13/20 12:30*	*01/14/20 13:35*	*1*
13C4 PFOA	*111*		*70 - 130*	*01/13/20 12:30*	*01/14/20 13:35*	*1*
13C4 PFOS	*107*		*70 - 130*	*01/13/20 12:30*	*01/14/20 13:35*	*1*
18O2 PFHxS	*112*		*25 - 150*	*01/13/20 12:30*	*01/14/20 13:35*	*1*
13C3 PFBS	*117*		*25 - 150*	*01/13/20 12:30*	*01/14/20 13:35*	*1*

Client Sample ID: BH 20200109-3 POST
Lab Sample ID: 320-57632-7
Date Collected: 01/09/20 11:30
Matrix: Water
Date Received: 01/10/20 09:15

Method: WS-LC-0025 Att1 - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	ND		2.0		ng/L		01/13/20 12:30	01/14/20 13:53	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0		ng/L		01/13/20 12:30	01/14/20 13:53	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0		ng/L		01/13/20 12:30	01/14/20 13:53	1
Perfluorononanoic acid (PFNA)	ND		2.0		ng/L		01/13/20 12:30	01/14/20 13:53	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0		ng/L		01/13/20 12:30	01/14/20 13:53	1
Perfluorooctanoic acid (PFOA)	ND		2.0		ng/L		01/13/20 12:30	01/14/20 13:53	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFHpA	*128*		*25 - 150*	*01/13/20 12:30*	*01/14/20 13:53*	*1*
13C5 PFNA	*121*		*25 - 150*	*01/13/20 12:30*	*01/14/20 13:53*	*1*
13C4 PFOA	*123*		*70 - 130*	*01/13/20 12:30*	*01/14/20 13:53*	*1*
13C4 PFOS	*118*		*70 - 130*	*01/13/20 12:30*	*01/14/20 13:53*	*1*
18O2 PFHxS	*118*		*25 - 150*	*01/13/20 12:30*	*01/14/20 13:53*	*1*
13C3 PFBS	*121*		*25 - 150*	*01/13/20 12:30*	*01/14/20 13:53*	*1*

Client Sample ID: BH 20200109 POST-GAC
Lab Sample ID: 320-57632-8
Date Collected: 01/09/20 09:53
Matrix: Water
Date Received: 01/10/20 09:15

Method: WS-LC-0025 Att1 - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	ND		2.0		ng/L		01/13/20 12:30	01/14/20 14:30	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0		ng/L		01/13/20 12:30	01/14/20 14:30	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0		ng/L		01/13/20 12:30	01/14/20 14:30	1
Perfluorononanoic acid (PFNA)	ND		2.0		ng/L		01/13/20 12:30	01/14/20 14:30	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0		ng/L		01/13/20 12:30	01/14/20 14:30	1
Perfluorooctanoic acid (PFOA)	ND		2.0		ng/L		01/13/20 12:30	01/14/20 14:30	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFHpA	*127*		*25 - 150*	*01/13/20 12:30*	*01/14/20 14:30*	*1*
13C5 PFNA	*119*		*25 - 150*	*01/13/20 12:30*	*01/14/20 14:30*	*1*
13C4 PFOA	*124*		*70 - 130*	*01/13/20 12:30*	*01/14/20 14:30*	*1*

Client Sample ID: BH 20200109 POST-GAC
Lab Sample ID: 320-57632-8
Date Collected: 01/09/20 09:53
Matrix: Water
Date Received: 01/10/20 09:15

Method: WS-LC-0025 Att1 - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOS	111		70 - 130	01/13/20 12:30	01/14/20 14:30	1
18O2 PFHxS	117		25 - 150	01/13/20 12:30	01/14/20 14:30	1
13C3 PFBS	121		25 - 150	01/13/20 12:30	01/14/20 14:30	1

Client Sample ID: BH 20200109 POST-GAC DUP
Lab Sample ID: 320-57632-9
Date Collected: 01/09/20 09:56
Matrix: Water
Date Received: 01/10/20 09:15

Method: WS-LC-0025 Att1 - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	ND		2.0		ng/L		01/13/20 14:18	01/14/20 14:48	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0		ng/L		01/13/20 14:18	01/14/20 14:48	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0		ng/L		01/13/20 14:18	01/14/20 14:48	1
Perfluorononanoic acid (PFNA)	ND		2.0		ng/L		01/13/20 14:18	01/14/20 14:48	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0		ng/L		01/13/20 14:18	01/14/20 14:48	1
Perfluorooctanoic acid (PFOA)	ND		2.0		ng/L		01/13/20 14:18	01/14/20 14:48	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFHpA	121		25 - 150	01/13/20 14:18	01/14/20 14:48	1
13C5 PFNA	118		25 - 150	01/13/20 14:18	01/14/20 14:48	1
13C4 PFOA	119		70 - 130	01/13/20 14:18	01/14/20 14:48	1
13C4 PFOS	113		70 - 130	01/13/20 14:18	01/14/20 14:48	1
18O2 PFHxS	115		25 - 150	01/13/20 14:18	01/14/20 14:48	1
13C3 PFBS	120		25 - 150	01/13/20 14:18	01/14/20 14:48	1

Isotope Dilution Summary

Client: New York State D.E.C.
Job ID: 320-57632-1
Project/Site: Stewart ANGB - Butterhill #336089

Method: WS-LC-0025 Att1 - Fluorinated Alkyl Substances

Matrix: Water
Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFHpA (25-150)	PFNA (25-150)	PFOA (70-130)	PFOS (70-130)	PFHxS (25-150)	3C3-PFBS (25-150)		
320-57632-1	BH 2020-01-09 PRE-GAC	120	113	117	110	113	112		
320-57632-2	BH 20200109-1 MID-POINT	117	111	117	107	112	114		
320-57632-3	BH 20200109-1 POST	122	117	122	112	112	119		
320-57632-4	BH 20200109-2 MID-POINT	119	117	115	113	112	114		
320-57632-5	BH 20200109-2 POST	115	112	117	108	113	116		
320-57632-6	BH 20200109-3 MID-POINT	117	115	111	107	112	117		
320-57632-7	BH 20200109-3 POST	128	121	123	118	118	121		
320-57632-8	BH 20200109 POST-GAC	127	119	124	111	117	121		
320-57632-9	BH 20200109 POST-GAC DUP	121	118	119	113	115	120		
LCS 320-350425/2-A	Lab Control Sample	112	110	113	109	111	116		
LCSD 320-350425/3-A	Lab Control Sample Dup	120	114	115	112	116	118		
MB 320-350425/1-A	Method Blank	115	108	109	109	109	112		

Surrogate Legend

PFHpA = 13C4 PFHpA
PFNA = 13C5 PFNA
PFOA = 13C4 PFOA
PFOS = 13C4 PFOS
PFHxS = 18O2 PFHxS
13C3-PFBS = 13C3 PFBS

Method: WS-LC-0025 Att1 - Fluorinated Alkyl Substances

Lab Sample ID: MB 320-350425/1-A
Matrix: Water
Analysis Batch: 350666

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 350425

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	ND		2.0		ng/L		01/13/20 12:30	01/14/20 11:07	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0		ng/L		01/13/20 12:30	01/14/20 11:07	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0		ng/L		01/13/20 12:30	01/14/20 11:07	1
Perfluorononanoic acid (PFNA)	ND		2.0		ng/L		01/13/20 12:30	01/14/20 11:07	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0		ng/L		01/13/20 12:30	01/14/20 11:07	1
Perfluorooctanoic acid (PFOA)	ND		2.0		ng/L		01/13/20 12:30	01/14/20 11:07	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFHpA	*115*		*25 - 150*	*01/13/20 12:30*	*01/14/20 11:07*	*1*
13C5 PFNA	*108*		*25 - 150*	*01/13/20 12:30*	*01/14/20 11:07*	*1*
13C4 PFOA	*109*		*70 - 130*	*01/13/20 12:30*	*01/14/20 11:07*	*1*
13C4 PFOS	*109*		*70 - 130*	*01/13/20 12:30*	*01/14/20 11:07*	*1*
18O2 PFHxS	*109*		*25 - 150*	*01/13/20 12:30*	*01/14/20 11:07*	*1*
13C3 PFBS	*112*		*25 - 150*	*01/13/20 12:30*	*01/14/20 11:07*	*1*

Lab Sample ID: LCS 320-350425/2-A
Matrix: Water
Analysis Batch: 350666

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 350425

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorobutanesulfonic acid (PFBS)	17.7	16.7		ng/L		94	72 - 151
Perfluoroheptanoic acid (PFHpA)	20.0	18.4		ng/L		92	71 - 138
Perfluorohexanesulfonic acid (PFHxS)	18.2	17.1		ng/L		94	73 - 157
Perfluorononanoic acid (PFNA)	20.0	16.9		ng/L		84	73 - 147
Perfluorooctanesulfonic acid (PFOS)	18.6	15.3		ng/L		83	70 - 130
Perfluorooctanoic acid (PFOA)	20.0	18.5		ng/L		93	70 - 130

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C4 PFHpA	*112*		*25 - 150*
13C5 PFNA	*110*		*25 - 150*
13C4 PFOA	*113*		*70 - 130*
13C4 PFOS	*109*		*70 - 130*
18O2 PFHxS	*111*		*25 - 150*
13C3 PFBS	*116*		*25 - 150*

Lab Sample ID: LCSD 320-350425/3-A
Matrix: Water
Analysis Batch: 350666

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 350425

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluorobutanesulfonic acid (PFBS)	17.7	16.5		ng/L		93	72 - 151	1	30
Perfluoroheptanoic acid (PFHpA)	20.0	18.0		ng/L		90	71 - 138	2	30
Perfluorohexanesulfonic acid (PFHxS)	18.2	16.7		ng/L		92	73 - 157	2	30
Perfluorononanoic acid (PFNA)	20.0	17.2		ng/L		86	73 - 147	2	30

Method: WS-LC-0025 Att1 - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCSD 320-350425/3-A
Matrix: Water
Analysis Batch: 350666

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 350425

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluorooctanesulfonic acid (PFOS)			18.6	15.4		ng/L		83	70 - 130	1	20
Perfluorooctanoic acid (PFOA)			20.0	18.5		ng/L		92	70 - 130	0	20

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
13C4 PFHpA	*120*		*25 - 150*
13C5 PFNA	*114*		*25 - 150*
13C4 PFOA	*115*		*70 - 130*
13C4 PFOS	*112*		*70 - 130*
18O2 PFHxS	*116*		*25 - 150*
13C3 PFBS	*118*		*25 - 150*

QC Association Summary

Client: New York State D.E.C.
Project/Site: Stewart ANGB - Butterhill #336089

Job ID: 320-57632-1

LCMS

Prep Batch: 350425

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-57632-1	BH 2020-01-09 PRE-GAC	Total/NA	Water	PFAS Prep	
320-57632-2	BH 20200109-1 MID-POINT	Total/NA	Water	PFAS Prep	
320-57632-3	BH 20200109-1 POST	Total/NA	Water	PFAS Prep	
320-57632-4	BH 20200109-2 MID-POINT	Total/NA	Water	PFAS Prep	
320-57632-5	BH 20200109-2 POST	Total/NA	Water	PFAS Prep	
320-57632-6	BH 20200109-3 MID-POINT	Total/NA	Water	PFAS Prep	
320-57632-7	BH 20200109-3 POST	Total/NA	Water	PFAS Prep	
320-57632-8	BH 20200109 POST-GAC	Total/NA	Water	PFAS Prep	
320-57632-9	BH 20200109 POST-GAC DUP	Total/NA	Water	PFAS Prep	
MB 320-350425/1-A	Method Blank	Total/NA	Water	PFAS Prep	
LCS 320-350425/2-A	Lab Control Sample	Total/NA	Water	PFAS Prep	
LCSD 320-350425/3-A	Lab Control Sample Dup	Total/NA	Water	PFAS Prep	

Analysis Batch: 350666

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-57632-1	BH 2020-01-09 PRE-GAC	Total/NA	Water	WS-LC-0025 Att1	350425
320-57632-2	BH 20200109-1 MID-POINT	Total/NA	Water	WS-LC-0025 Att1	350425
320-57632-3	BH 20200109-1 POST	Total/NA	Water	WS-LC-0025 Att1	350425
320-57632-4	BH 20200109-2 MID-POINT	Total/NA	Water	WS-LC-0025 Att1	350425
320-57632-5	BH 20200109-2 POST	Total/NA	Water	WS-LC-0025 Att1	350425
320-57632-6	BH 20200109-3 MID-POINT	Total/NA	Water	WS-LC-0025 Att1	350425
320-57632-7	BH 20200109-3 POST	Total/NA	Water	WS-LC-0025 Att1	350425
320-57632-8	BH 20200109 POST-GAC	Total/NA	Water	WS-LC-0025 Att1	350425
320-57632-9	BH 20200109 POST-GAC DUP	Total/NA	Water	WS-LC-0025 Att1	350425
MB 320-350425/1-A	Method Blank	Total/NA	Water	WS-LC-0025 Att1	350425
LCS 320-350425/2-A	Lab Control Sample	Total/NA	Water	WS-LC-0025 Att1	350425
LCSD 320-350425/3-A	Lab Control Sample Dup	Total/NA	Water	WS-LC-0025 Att1	350425

Lab Chronicle

Client: New York State D.E.C.
Project/Site: Stewart ANGB - Butterhill #336089

Job ID: 320-57632-1

Client Sample ID: BH 2020-01-09 PRE-GAC
Lab Sample ID: 320-57632-1
Date Collected: 01/09/20 09:32
Matrix: Water
Date Received: 01/10/20 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			1.00 mL	1.66 mL	350425	01/13/20 12:30	SAD	TAL SAC
Total/NA	Analysis	WS-LC-0025 Att1		1			350666	01/14/20 12:02	AAR	TAL SAC

Client Sample ID: BH 20200109-1 MID-POINT
Lab Sample ID: 320-57632-2
Date Collected: 01/09/20 10:25
Matrix: Water
Date Received: 01/10/20 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			1.00 mL	1.66 mL	350425	01/13/20 12:30	SAD	TAL SAC
Total/NA	Analysis	WS-LC-0025 Att1		1			350666	01/14/20 12:21	AAR	TAL SAC

Client Sample ID: BH 20200109-1 POST
Lab Sample ID: 320-57632-3
Date Collected: 01/09/20 10:40
Matrix: Water
Date Received: 01/10/20 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			1.00 mL	1.66 mL	350425	01/13/20 12:30	SAD	TAL SAC
Total/NA	Analysis	WS-LC-0025 Att1		1			350666	01/14/20 12:39	AAR	TAL SAC

Client Sample ID: BH 20200109-2 MID-POINT
Lab Sample ID: 320-57632-4
Date Collected: 01/09/20 10:48
Matrix: Water
Date Received: 01/10/20 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			1.00 mL	1.66 mL	350425	01/13/20 12:30	SAD	TAL SAC
Total/NA	Analysis	WS-LC-0025 Att1		1			350666	01/14/20 12:58	AAR	TAL SAC

Client Sample ID: BH 20200109-2 POST
Lab Sample ID: 320-57632-5
Date Collected: 01/09/20 11:05
Matrix: Water
Date Received: 01/10/20 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			1.00 mL	1.66 mL	350425	01/13/20 12:30	SAD	TAL SAC
Total/NA	Analysis	WS-LC-0025 Att1		1			350666	01/14/20 13:16	AAR	TAL SAC

Client Sample ID: BH 20200109-3 MID-POINT
Lab Sample ID: 320-57632-6
Date Collected: 01/09/20 11:12
Matrix: Water
Date Received: 01/10/20 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			1.00 mL	1.66 mL	350425	01/13/20 12:30	SAD	TAL SAC
Total/NA	Analysis	WS-LC-0025 Att1		1			350666	01/14/20 13:35	AAR	TAL SAC

Lab Chronicle

Client: New York State D.E.C.
Job ID: 320-57632-1
Project/Site: Stewart ANGB - Butterhill #336089

Client Sample ID: BH 20200109-3 POST
Lab Sample ID: 320-57632-7
Date Collected: 01/09/20 11:30
Matrix: Water
Date Received: 01/10/20 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			1.00 mL	1.66 mL	350425	01/13/20 12:30	SAD	TAL SAC
Total/NA	Analysis	WS-LC-0025 Att1		1			350666	01/14/20 13:53	AAR	TAL SAC

Client Sample ID: BH 20200109 POST-GAC
Lab Sample ID: 320-57632-8
Date Collected: 01/09/20 09:53
Matrix: Water
Date Received: 01/10/20 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			1.00 mL	1.66 mL	350425	01/13/20 12:30	SAD	TAL SAC
Total/NA	Analysis	WS-LC-0025 Att1		1			350666	01/14/20 14:30	AAR	TAL SAC

Client Sample ID: BH 20200109 POST-GAC DUP
Lab Sample ID: 320-57632-9
Date Collected: 01/09/20 09:56
Matrix: Water
Date Received: 01/10/20 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			1.00 mL	1.66 mL	350425	01/13/20 14:18	SAD	TAL SAC
Total/NA	Analysis	WS-LC-0025 Att1		1			350666	01/14/20 14:48	AAR	TAL SAC

Laboratory References:

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

Accreditation/Certification Summary

Client: New York State D.E.C.
Job ID: 320-57632-1
Project/Site: Stewart ANGB - Butterhill #336089

Laboratory: Eurofins TestAmerica, Sacramento

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

Authority	Program	Identification Number	Expiration Date
New York	NELAP	11666	04-01-20

Laboratory: Eurofins TestAmerica, Buffalo

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

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-20

Method Summary

Client: New York State D.E.C.
Job ID: 320-57632-1
Project/Site: Stewart ANGB - Butterhill #336089

Method	Method Description	Protocol	Laboratory
WS-LC-0025 Att1	Fluorinated Alkyl Substances	TAL-SAC	TAL SAC
PFAS Prep	Preparation, Direct Inject PFAS	TAL-SAC	TAL SAC

Protocol References:

TAL-SAC = TestAmerica Laboratories, West Sacramento, Facility Standard Operating Procedure.

Laboratory References:

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

Sample Summary

Client: New York State D.E.C.
Job ID: 320-57632-1
Project/Site: Stewart ANGB - Butterhill #336089

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
320-57632-1	BH 2020-01-09 PRE-GAC	Water	01/09/20 09:32	01/10/20 09:15	
320-57632-2	BH 20200109-1 MID-POINT	Water	01/09/20 10:25	01/10/20 09:15	
320-57632-3	BH 20200109-1 POST	Water	01/09/20 10:40	01/10/20 09:15	
320-57632-4	BH 20200109-2 MID-POINT	Water	01/09/20 10:48	01/10/20 09:15	
320-57632-5	BH 20200109-2 POST	Water	01/09/20 11:05	01/10/20 09:15	
320-57632-6	BH 20200109-3 MID-POINT	Water	01/09/20 11:12	01/10/20 09:15	
320-57632-7	BH 20200109-3 POST	Water	01/09/20 11:30	01/10/20 09:15	
320-57632-8	BH 20200109 POST-GAC	Water	01/09/20 09:53	01/10/20 09:15	
320-57632-9	BH 20200109 POST-GAC DUP	Water	01/09/20 09:56	01/10/20 09:15	

Eurofins TestAmerica, Sacramento Albany #224
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: B. Powers	Lab PM: Stone, Judy L	Carrier Tracking No(s):	COC No: 480-140157-31228.1
Client Contact: Jeffrey Redfield	Phone: (815)-412-3479	E-Mail: judy.stone@testamericainc.com		Page: Page 1 of 1
Company: ARCADIS U.S. Inc				Job #:
Address: 855 Route 146 Suite 210	Due Date Requested:	Analysis Requested		
City: Clifton Park	TAT Requested (days): 3-day TAT			
State, Zip: NY, 12065				
Phone: 518-402-9813(Tel)	PO #: Callout ID: 137349			
Email: jeffrey.redfield@arcadis.com	WO #:			
Project Name: Stewart ANGB - Butterhill #336089	Project #: 48020960			
Site:	SSOW#:			

Preservation Codes:

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

Other:

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)	PFAS_DI_DW - PFAS, UCMR List	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
BH 2020-01-09 PRE-GAC	1/9/20	0932	G	Water	N	N	2		
BH 20200109-1 MID-POINT	1/9/20	1025	G	Water	N	N	2		
BH 20200109-1 POST	1/9/20	1040	G	Water	N	N	2		
BH 20200109-2 MID-POINT	1/9/20	1048	G	Water	N	N	2		
BH 20200109-2 POST	1/9/20	1105	G	Water	N	N	2		
BH 20200109-3 MID-POINT	1/9/20	1112	G	Water	N	N	2		
BH 20200109-3 POST	1/9/20	1130	G	Water	N	N	2		
BH 20200109 POST-GAC	1/9/20	0953	G	Water	N	N	2		
BH 20200109 POST-GAC DUP	1/9/20	0956	G	Water	N	N	2		Duplicate

320-57632 Chain of Custody

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
Benjamin Powers	1/9/2020 1525	Arcadis	Kal Ladin	1/9/20 1525	Eurofins
Relinquished by: Kal Ladin	Date/Time: 1/9/20 1700	Company Eurofins	Received by:	Date/Time: 1/10/20 915	Company Eurofins
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 1.0 11.4 °C SM11

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: New York State D.E.C. Job Number: 320-57632-1

Login Number: 57632 **List Source: Eurofins TestAmerica, Sacramento**
List Number: 1
Creator: Oropeza, Salvador

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	1138107
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	N/A	
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	